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REMEDIAL INVESTIGATION REPORT

Former Duofold Facility
7 Spruce Street
Ilion, New York 13357

Prepared For:

The Herkimer County Industrial Development Agency
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HRP #: HER1500.P2
Brownfields Assessment Cooperative Agreement: BF-96261019-0

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General Information

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Vice President

EP Certification:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR Part 312.

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Thomas S. Seguljic, P.G., P.E., Vice President

1.0 INTRODUCTION

HRP Associates, Inc. (HRP) was contracted by the Herkimer County Industrial Development Agency (HCIDA) to conduct a Remedial Investigation (RI) at the Former Duofold Facility, located at 7 Spruce Street, Ilion New York, under a United States Environmental Protection Agency (EPA) Brownfield Assessment Grant (Agreement: BF-96261019-0). The Site, which has a long history of industrial activities dating back to the early 1900s has been the subject of several previous investigations by others that determined:

- Several metals are present in the soils across the property with isolated areas of elevated metal concentrations.
- Low concentrations of chlorinated solvents are present in the Site's soil gas, groundwater and soils.

Based on the previous investigations the Site is listed on the NYSDEC "Registry of Inactive Hazardous Waste Disposal Sites" as a "P" Site which is designated by the NYSDEC as a Site where:

> *"preliminary information indicates that a Site may have contamination that makes it eligible for consideration for placement on the Registry of Inactive Hazardous Waste Disposal Sites (commonly referred to as the list of State Superfund Sites). Further information and/or investigation, in the form of a Site characterization, is needed to determine if a Class P Site qualifies for listing of the Site on the Registry. Generally, to qualify for placement on the Registry, there must be evidence that hazardous waste was disposed on the Site and that any resulting contamination presents a significant threat (or reasonably foreseeable threat) to public health or the environment."*

To address the NYSDEC concerns, the Village of Ilion (Site owner) entered into a NYSDEC Order on Consent and Administrative Settlement (6-20200103-1) which in summary stated that the Village would submit a Remedial Investigation Sampling and Analysis Plan (RISAP), conduct a Remedial Investigation (RI) in accordance with the approved plan and submit an Investigation Report to the NYSDEC. The purpose of the investigation was to:

- Confirm that no drinking water wells are located in the area
- Determine if dissolved phase VOC is present in the areas of elevated soil gas concentrations
- Evaluate the extent of detected lead contamination
- Evaluate if soil gas and /or groundwater contamination is migrating of-Site

Therefore in accordance with the Order on Consent and EPA Brownfield Assessment Grant requirements, HRP prepared and submitted to the NYSDEC Region 6 and the EPA Region 2 a RISAP prepared in accordance with NYSDEC Program Policy DER-10 (Technical Guidance for Site Investigation and Remediation) and EPA Region 2 Quality Assurance Project Plan (QAPP) requirements. The documents were approved by the NYSDEC and EPA on March 20, 2020 and August 12, 2020, respectively.

Once approval was obtained, HRP initiated the following field activities:

- Review of the area for drinking water wells
- Sampling and analysis of surface and subsurface soil for metals and VOCs
- Sampling and analysis of groundwater for VOCs from new and existing groundwater monitoring wells.
- Soil Vapor Investigation for analysis of TO-15 VOCs in accordance with the October 2006 NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York

1.1 Site Description

The Site, known as the former Duofold Manufacturing Facility is located at 7 Spruce Street, Ilion, New York, in a suburban setting bordered in all directions by residential and mixed-use properties. The irregular shaped 12.23-acre Site, which is zoned Planned Use District consists of three contiguous parcels identified by the Herkimer County tax assessor as Parcel IDs: 120.29-1-63, 120.29-2-74.1, and 120.29-1-26. The Site is occupied by three (3) buildings totaling approximately 134,500 ft^2, which were constructed in 1907, including:

- Building A, a 124,000 ft^2, four-story building with a basement that formerly housed manufacturing and office activities. The building appeared to be in general fair to good condition with some areas of deterioration from water damage.
- Building B, a 4,500 ft^2 former boiler house appeared to be in generally poor condition, with areas of collapsed roof and floors.
- Building C, a 6,000 ft^2 one-story building formerly used for storage appeared to be in generally poor condition, with areas of collapsed roof and floors.

The remainder of the Site consists of parking and driveway areas, overgrown areas, and a fenced secured area.

A Topographic Map depicting the Site, surrounding areas, and topographic gradient is provided as Figure 1 – Site Location Map. A summary of surrounding areas includes:

North: Private residences, followed by Carquest, an automotive supply store
East: Private residences, followed by Irr Supply Centers Inc., a plumbing supply store, followed by Central Ave.
South: Private residences, followed by W. River St. followed by residential properties
West: Vacant land, followed by Pleasant Ave, followed by 4 Seasons Tire and Auto Center

1.2 Site History

Based on a review of historical documents, the Site was used for commercial/industrial use since approximately 1907. The Site was originally owned by the Library Bureau and utilized to manufacture wood veneer and furniture. Multiple railroad tracks associated with the West Shore Railroad were located on-Site with railroad sidings that access the Site buildings. The Library Bureau owned the property until at least 1923. By the 1930s, the property was owned by Remington-Rand Corporation and utilized to manufacture adding machines and typewriters. By WWII, the facility was retooled to manufacture naval shells. Between 1947 and 1949, the company merged with Sperry to become

Sperry-Rand Corporation. The on-Site facility was used to assemble and test computers and was utilized as a school to train technicians. The company changed its name to Sperry-Univac at some time in the 1950s, and computer manufacturing operations ceased by 1968 when Sperry-Univac moved to Utica; the property remained vacant for some time. In the early 1970's, the property was sold to Donald J. Retile and he began leasing portions of the buildings to the Duofold Corporation for knitting operations. Duofold, or other business names that represent Duofold including Ilion Properties, owned the Site since 1979 and utilized the Site to cut and sew winter clothes and underwear from pretreated and pre-dyed materials. The Site has remained vacant since 2001. The property was purchased by the Village of Ilion on March 12, 2019, from Coolidge Ilion LLC.

1.3 Previous Investigations

Available previous Site investigation reports are summarized below:

Final Draft Site Inspection Report- Sperry Univac
Prepared by NUS Corporation – Prepared for USEPA – August 31, 1990.

- The report provides a background of Site tenants and operations that have occurred on-Site since the property was developed in 1910, however, available background information concerning specific manufacturing activities conducted on-Site was limited. No specific waste sources related to manufacturing activities could be identified from available information, however, a coal-fired power plant was utilized for many years on-Site to provide heat and power to on-Site structures. Cinder covered driveway/parking areas from historical coal burning were identified at least on the north, south, and northeast portions of the Site.
- On May 8, 1990, NUS Corporation performed a sampling Site inspection with collection of ten soil samples. Low concentrations of polycyclic aromatic hydrocarbons were detected throughout the Site shallow soils, likely from cinders found on-Site and historical use of coal. Significant concentrations of lead, arsenic, and antimony were detected in the northeast corner of the Site. Tetrachloroethylene and significant concentrations of copper were detected near the loading dock in the central portion of the property, and dibenzofuran was detected on the western portion of the property. The quantity and extent of the contamination was not well defined. Also, it was unknown if soil contamination that was detected extends to off-Site properties. The Site has EPA ID number of NYD980532592.
- The report states that the Site is situated on the flood plain of the Mohawk River within the 100-year flood zone.
- The report recommends that monitoring wells and additional soil samples be installed on-Site and off-Site to determine the extent of contamination.

Phase I ESA
Plumley Engineering – December 2009

This Phase I did not identify Recognized Environmental Conditions (RECs) associated with the Site, however, it does not appear that Plumley reviewed historical reports associated with the Site. The Plumley report lists conditions that "pose the potential for environmental concern". These conditions generally include the historical use of the Site since the early 1900's for manufacturing purposes, the Site's listing as a CERCLIS NFRAP and scheduled participation in the State's Environmental

Restoration Program (ERP), the presence of a 30,000-gallon fuel oil tank, and the presence of significant debris within the building that was observed during Site reconnaissance that would require proper disposal.

Subsurface Investigation Report, Duofold Corporation, NYSDEC Site #622030
Prepared by Nature's Way Environmental – Prepared for the NYSDEC Region 6 Division of Environmental Restoration – January 6, 2015 (Revised).

Nature's Way conducted a subsurface investigation through installation of soil borings and monitoring wells. The investigation was performed at the request of the NYSDEC in response to CVOC, SVOC, and metals contamination identified during previous limited investigation of the Site. In total, 24 surface soil samples, six sub-foundation soil samples, and 12 subsurface soil samples were advanced and collected, and 12 subsurface sampling locations were converted to groundwater monitoring wells for assessment of soil and groundwater across the Site. Findings of the investigation include the following:

Subsurface:

- Fill material with variable texture is present across the entire Site at depths ranging from 0.5 ft. – 13.0 ft. across the Site. In general, the groundwater table identified at approximately 6 – 8 ft. bg. VOC headspace screening readings above background of 0.0 ppm were not identified in surface soils and subsurface soils that were collected.

Soil Sample Analytical Findings:

- PBCs were identified in three surficial samples analyzed from 0.19 to 0.84 ppm. PBCs were identified in three subsurface samples analyzed from 0.19 to 0.73 ppm.
- Pesticides were not identified in surficial samples at concentrations exceeding Part 375-6.8(b) Protection of Groundwater, Commercial, and Industrial SCOs. One pesticide, Eledrin was identified in one subsurface sample analyzed at 91 ppm. Other pesticides were identified that were flagged which may be correlated with a laboratory contamination event.
- One VOC, acetone was identified in one surficial sample analyzed at 160 ppb. Acetone was identified in three subsurface samples analyzed from 79 to 90 ppb.
- Metals were reported in ten surficial samples analyzed. Reported constituents for samples secured from six of these locations exceed Industrial SCOs. Detected constituents identified include arsenic, barium, copper, lead, mercury, nickel, and selenium. One to two metals were reported in four subsurface samples analyzed. Reported constituents for samples secured from each of these locations have at least one constituent that exceeds Industrial SCOs. Detected constituents identified include arsenic and lead.

SVOCs were reported in nine surficial samples analyzed. Reported constituents for samples secured from each of these locations exceed Industrial SCOs. Four SVOC constituents were reported in two of the subsurface samples analyzed. One constituent, benzo(a)pyrene in one location exceeds Industrial SCOs.

Groundwater Sample Analytical Findings:

- One to five VOC constituents were reported in eight groundwater samples analyzed. Constituents including chlorinated solvents were reported above TOGS 1.1.1 guidance values in six wells. Constituents include chloroform, tetrachloroethene, cis-1,2 dichloroethene, trans-1,2 dichloroethene, and trichloroethene.
- One to three SVOC constituents were reported in eight groundwater samples analyzed.
- PCBs were not identified in any of the groundwater samples.
- Pesticides were not identified in samples from eleven of twelve wells. Two constituents were identified in one groundwater sample, but both do not have an established TOGS 1.1.1 guidance values.
- Numerous metals constituents were identified above TOGS 1.1.1. guidance values in samples secured from each monitoring well.

Phase II Environmental Site Assessment (Targeted Brownfield Assessment Prepared for EPA)
Prepared by CDM Smith – April 10, 2017

- This report was a Targeted Brownfields Assessment prepared for the USEPA as part of the Region 2 Remedial Action Contract. The CDM Smith Phase II ESA was performed to investigate and confirm the findings of previous investigation results.

Conclusions and Recommendations of the report include the following:

- The geophysical survey was successful in identifying the utilities leading to the subject property, as well as, confirming the location of a backfilled pond used for fire suppression to the northwest of the main building. The geophysical survey identified several unknown utilities that may need to be further investigated in the case of Site rehabilitation.
- Based on the data generated during this Phase II ESA, CDM Smith concluded that the contaminated soil and groundwater exist at the Site and the presence of contaminants is most likely the result of former activities at the Site. Arsenic, barium, cadmium, chromium, copper, lead, nickel, selenium and zinc were metals detected at concentrations above the Unrestricted Use SCOs. The highest metal concentrations were identified at 4 to 5 ft. bg in borings closest to the former smokestack and silo. VOC impacted groundwater was identified on the western portion of the Site downgradient of a previously identified area that had PCE impacted soil. The VOCs observed in groundwater are breakdown products of PCE and VOC contamination appears to be degrading by natural attenuation.
- On-Site buildings were identified as unsafe for access as well as difficult to access in regard to sampling equipment. Contamination within the building or underneath the building is unknown.

Based on the findings of the CDM Smith Phase II and prior investigations, CDM Smith made the following recommendations:

- VOC-impacted groundwater may be easily managed via natural attenuation at the relatively low levels identified if the proper conditions exist. TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl

chloride area all present in groundwater samples indicating that PCE is breaking down. PCE and TCE concentrations are lower than what was identified in previous investigations, and cis-DCE, trans-DEC and vinyl chloride are significantly higher than in previous investigations. This is consistent with the notion that PCE is following its breakdown pathway. Samples should be collected for dehalococcoides, the dechlorinating bacteria, in addition to their catalyzing enzymes BAV1 vinyl chloride reductase (BVC), tceA reductase (tceA), and vinyl chloride reductase (VCR) to determine if there is a strong potential for reductive dichlorination. If the bacteria and specific Site conditions are not present other remedial options may be considered.

- Metal concentrations exceed Industrial Use SCOs adjacent to Building A. At DF-SB-11 the lead concentration exceeds the Industrial Use SCO more than 20 times. It is recommended that the contaminated subsurface soil adjacent to Building A is excavated and disposed of off-Site at an appropriate State or Federally regulated landfill. Additional sampling is recommended in this area of high subsurface soil metal contamination adjacent to Building A to delineate the vertical and horizontal extent. If necessary, the soil from the delineated sample area should be excavated and disposed off-Site at a regulated landfill.
- Surface soil throughout the Site did exhibit metal contamination at concentrations Unrestricted Use SCOs. Depending on the future use of the Site, these concentrations are manageable at the residential level. However, it would still be recommended that either a surface scrape be conducted in some areas removing 6 to 12 inches of soil, or a cap be placed over these areas to reduce exposure to the general public.
- A comprehensive inventory of all contents of the on-Site structures and containers should be performed prior to removal. Development of a recycling/waste disposal recycling plan can assist with sustainable disposal of discarded and abandoned materials. All waste removal should be conducted in accordance with State and Federal regulations and guidance documents.
- When undertaking Site development, it is recommended that the developer enlist a professional engineer or scientist to prepare a health and safety plan, construction contingency plans, and a soils management plan in order to safely and appropriately remove (and control) impacted materials. It is recommended that any work performed at the Site be performed by an environmental professional (or if necessary, a professional engineer) following approved plans and a Site specific health and safety plan approved by a certified industrial hygienist (CIH).
- In the absence of excavation, engineering controls should be implemented. These controls would require (1) the installation of pavement or topsoil/vegetative cover or installation and maintenance of a perimeter fence; and (2) that any construction involving the disturbance of soils, fill materials, or demolition of uncharacterized structures located on-Site (including non-emergency excavation, which may be part of utility repair or maintenance, or construction) should not be performed without the involvement of a professional engineer, and must be conducted in accordance with local, State, and Federal rules and regulations and provide adequate engineering controls and worker protection. In the absence of remediation, the values of adjacent and surrounding properties may be (and currently be) negatively impacted. The loss of property value may represent some risk to the public welfare, yet this risk may not be considered a significant risk.

2019 - Phase I Environmental Site Assessment - HRP Associates, Inc. (HRP)

In August 2019, HRP conducted a Phase I ESA of the subject property. The assessment revealed no recognized environmental conditions in connection with the property with exception of the following:

- Based on the historical use of the Site for manufacturing purposes between 1907 and 2001, areas of the Site are documented to have been impacted with heavy metals, PCBs, SVOCs, pesticides, and chlorinated solvents in areas of surface soil, subsurface soil, and/or groundwater. Some areas may require remediation and/or other environmental controls prior to future usage/development of the Site.

This assessment has revealed evidence of the following Historical Recognized Environmental Conditions (HREC) in connection with the Site:

- A spill (#0650005) was reported on-Site. Notes indicate that a transformer was disconnected and leaking. The transformer, concrete pedestal, and soil in the vicinity of the pedestal were removed for off-Site disposal, and confirmatory soil samples were collected for analysis of PCBs. Two detections were identified in eight samples collected at trace levels below applicable SCOs of 1 mg/kg. The spill was closed by the NYSDEC on January 10, 2008. Based on removal of equipment and spill closures this spill is not considered a REC to the Site.

This assessment has identified the following Business Environmental Risks (BERs) in connection with the Site:

- Based on the Site's vacancy since 2001 with no apparent upkeep since that time, significant water damage and general degradation was observed throughout all Site buildings. Apparent structural damage was observed in portions of Building A.
- A hazardous material survey is required prior to any renovations or demolitions of Site buildings. Suspect asbestos containing materials were observed to be significantly damaged condition within portions of the Site building.
- Minor oil staining was observed beneath the boiler in Building B and near the coal silo. This observation is not considered a REC as observed minor staining is considered a de minimus condition.
- Prior environmental reports indicate that monitoring wells remain on-Site, and there is no indication that they have been decommissioned. Based on the overgrown nature of exterior surfaces on-Site, monitoring wells, if any, were not observed during Site reconnaissance.
- Few empty drums and other containers were observed throughout observed areas of Site buildings. If raw materials are identified during further inspection/demolition of the building, they will need to be sampled and properly disposed.
- Transformers with PCBs have been documented as being removed from the Site, however, transformers may remain on-Site. If additional transformers are identified during further inspection/demolition of the building, they will need to be sampled and properly disposed.

- Few gravel piles and construction equipment are located along the southern perimeter of the Site on Parcel B. The gravel piles and equipment should be removed from the Site if materials do not belong to the owner of the Site.
- The area to the east of Building A consists of concrete, asphalt, and wood surfaces at grade where the Site was historically developed with building structures. Areas have become overgrown with vegetation. Prior to future development on-Site, these areas should be assessed by a structural engineer to determine risks associated with development.
- A spill (#1808311) was reported on-Site. Notes indicate that this spill was opened administratively to facilitate the cleaning and removal of the 30,000-gallon fuel oil AST on November 5, 2018. The report states that there was no known release at the time of issuance of this spill. The spill remains open with the NYSDEC. As such, follow up should be conducted with the NYSDEC to close the spill.
- The Site is located in FEMA Flood Zone AE where base flood elevations have been determined.

Summary of Previous Investigations

The findings of previous investigations conducted at the Site between 1990 to 2017 indicate that on-Site soil is impacted with metals constituents primarily including lead, chromium, mercury, and arsenic that slightly exceed NYSDEC applicable standards. Although impacted soils are widespread across the Site, their occurrence is generally limited to the upper strata of soil on-Site (less than 2 feet below grade) and correlates with historical fill including demolished building materials and ash from historical burning of coal. At one location to the west of the boiler plant, elevated concentrations of lead exceeding industrial cleanup standards were identified at 4-5 feet below grade (ft. bg). Areas may require additional characterization to determine if soils would require removal and management as hazardous waste. Its possible limited soil removal and capping could be completed.

On-Site groundwater is impacted with relatively low concentrations of chlorinated solvents with breakdown products of TCE present on-Site. The majority of impacts are present on the eastern portion of the Site, with higher concentrations of breakdown products relative to parent materials (PCE, TCE). Minor detections of other VOC constituents such as benzene, toluene, and xylene are present, but at concentrations that generally do not exceed TOGS standards.

Based on the results of previous investigations, the following data gaps were identified as requiring further investigation:

- No source of contamination has been identified. The origin of contaminants may be from materials spilled in small quantities, chemical storage areas, etc. with weathering of materials based on older releases.
- Metals were identified across the property with isolated areas of elevated metal concentrations.
- Low concentrations of level chlorinated solvents detected within groundwater with higher concentrations of breakdown products identified indicating that materials are naturally breaking down (i.e. Natural Attenuation).

- Off-Site impacts to groundwater and soil gas were not investigated.
- Elevated concentrations of lead were noted in the vicinity of the former boiler house, their extent and characteristics need to be determined.

2.0 SITE CHARACTERISTICS

2.1 Land Use

The Site is currently zoned as Planned Development District, as directed by the Village of Ilion, Chapter 250, Zoning Schedule A. The regulations for planned development districts are intended to provide a means for the development of residential, business, commercial, manufacturing, or recreational subdivision, or combinations thereof.

2.2 Topography

Topography at the Site is generally flat, and consists of glacially induced regional geomorphology, according to the Ilion 7.5-minute Quadrangle Map, (2013). Notable features such as till, glaciolacustrine silt and clay, and glacial outwash are present in the rural areas surrounding the Village of Ilion.

The ground surface is covered with concrete in the eastern section of the Site and asphalt surrounding the existing Site building. A landscaped lawn covers the remaining ground surface not covered by the asphalt or concrete. The surrounding topography located within one-half mile to the north, south, and east is relatively flat at an elevation of approximately 400 feet above mean sea level (amsl).

2.3 Hydrology

2.3.1 Surface Water

The Mohawk River, a NYSDEC Class "B" waterbody, is located approximately 800 feet north of the Site. Steele Creek (#876-407), a Class C stream, is located approximately 1000 feet southwest of the Site. Surface water in the general area runs off to the northeast, and recharges to the Mohawk River.

2.3.2 Wetlands

No obvious wetlands were observed on-Site during the RI. According to the New York State Environmental Resource Mapper (ERM), no New York State regulated freshwater wetlands are present at, or adjacent to, the Site. The nearest NYSDEC regulated wetland is IN-5, located approximately 800 feet west of the Site. IN-5 is a class 2 wetland, and measures 132.3 acres according to the ERM.

According to the U.S. Fish and Wildlife Service Wetlands Inventory, there are no federally recognized wetlands identified on-Site. The nearest federal wetland, PF01-E is located approximately 2100 feet west of the Site. PF01-E measures 5.9994 acres and is described as a freshwater forested/shrub wetland.

2.3.3 Floodplains

The Site is located in an area designated as FEMA Flood Zone AE where base flood elevations have been determined. AE flood zones are areas that present a flooding and a 26% chance over the life of a 30-year mortgage, according to FEMA. These regions are clearly defined in Flood Insurance Rate Maps and are paired with detailed information about base flood elevations. Most AE flood zones are located in close proximity to floodplains, rivers and lakes, though low-lying regions without large bodies of water may also be classified under this designation.

2.4 Geology

2.4.1 Surficial Geology

The Site is located on a relatively flat parcel at 400 feet above sea level in the Mohawk River Valley of central New York. According to the Surficial Geologic Map of New York, Hudson Mohawk Sheet, surficial geology on-Site is classified as outwash sand and gravel. Materials are characterized as coarse to fine gravel with sand from proglacial fluvial deposition, well rounded and stratified, generally with finer materials away from ice border, with variable thickness of 2-20 meters.

Previous Site investigations indicated that fill materials were encountered at depths varying from form of 0 to 6.5 ft below grade throughout the Site, underlain by native lake deposited sediment, then predominantly sand and gravel. Depth to bedrock is unknown as previous investigations investigated to a maximum depth of 20 feet below ground surface, and bedrock was not encountered during investigation.

2.4.2 Bedrock Geology

According to the Geologic Map of New York, Hudson Mohawk Sheet, underlying bedrock is the Hamilton group. The Hamilton Group is described by the United States Geological Survey (USGS) as Middle Devonian siltstone, mudstone, and sandstone. The Hamilton Group consists of the Mahantango Formation, a gray, dark gray, brown, and olive laminated shale; siltstone; and very fine-grained sandstone or claystone containing marine fossils. It overlies the Marcellus Shale, a fissile gray-black to black, thinly laminated, pyritic, carbonaceous thin shale with sparse marine fauna and siderite concretions. In New York State, the Hamilton Group thickens from 250 feet near Lake Erie to over 2,500 feet in Ulster and Greene counties.

No bedrock outcrops were observed on the Site during the reconnaissance. Further, depth to bedrock is unknown as previous investigations investigated to a maximum depth of 20 ft. bg, and bedrock was not encountered.

2.4.3 Hydrogeology

Groundwater at the Site is generally shallow and was measured at approximately six to eight (6 to 8) ft. below grade during the RI, and previous investigations. The groundwater gradient at the Site is 0.0011 ft/ft to the east-northeast towards the Mohawk River.

The nearest known water supply well is a Federal USGS Well located approximately 1/4 to 1/2 mile north-northeast of the Site. No active water supply wells were reported by the Town of Ilion within 1.0 miles of the Site. Potable water at the Site is provided by a public water supply.

3.0 RI SCOPE OF WORK

The work completed for this RI was generally consistent with the scope of work described in the Remedial Investigation Sampling and Analysis Plan (RISAP) dated February 19, 2020 (approved by NYSDEC on March 20, 2020). The RI was also conducted according to procedures and protocols outlined in the Quality Assurance Project Plan (QAPP), approved by the United Stated Environmental Protection Agency (USEPA) on August 12, 2020. A copy of the RISAP, QAPP, and the corresponding NYSDEC & USEPA approval letters are presented in Appendix A. Tasks included in the RI included sampling, analysis, and evaluation of soil, groundwater, and soil vapor.

Field work for this RI was conducted in several mobilizations to the Site and included the following tasks:

- Installation of 12 soil borings, installed from August 26-27, and September 9-11, 2020.
- Collection of ten (10) subsurface soil samples from August 26-27 and September 9-11, 2020.
- Collection of 19 surface soil samples from September 9-10, 2020.
- Collection of ten (10) groundwater samples from September 21–September 23, 2020.
- Collection of seven (7) soil vapor probes installed from September 9-14, 2020.
- Installation of five (5) monitoring wells installed from September 9-14, 2020.

To evaluate the degree and extent of contamination and condition of the Site's subsurface soils, HRP and NW Contracting mobilized to the Site on August 26 to 27th, and September 9 to 11, 2020, to install a total of twelve (12) soil borings (HRPB-1 through HRPB-12), five (5) groundwater monitoring wells (HRPMW-1, HRPMW-2, HRPMW-3, TMW-1, TMW-2), and seven (7) soil vapor probes (SV-1. SV-2, SV-3, SV-4, SV-5, SV-6, SV-7). In addition, nineteen (19) surface soil samples were collected from ten locations to better understand the degree and extent of surface soil contamination at the Site.

3.1 Soil Investigations

Soil boring were installed in locations (see Figure 2) to further investigate the areas of elevated soil gas and lead detections, NW and HRP collected representative soil samples from each soil boring using a truck-mounted drill rig. Soil boring locations are described below in the Soil Boring Location Summary table. Soil boring logs can be found in Appendix B.

SOIL BORING LOCATION SUMMARY		
Soil Boring ID	**Location**	**Justification**
HRPB – 1	Central portion of Site, located on former building footprint, downwind of the coal silo.	Identify unknown source of previously documented CVOC impacts in groundwater and soil vapor. Determine degree and extent of metals impacts beneath previously documented fill layer.
HRPB – 2	Central portion of Site, located on former building footprint, downwind of the coal silo.	Identify unknown source of previously documented CVOC impacts in groundwater and soil vapor. Determine degree and extent of metals impacts beneath previously documented fill layer.

SOIL BORING LOCATION SUMMARY		
Soil Boring ID	**Location**	**Justification**
HRPB – 3	East-Central portion of Site, located on former building footprint, downwind of the coal silo.	Identify unknown source of previously documented CVOC impacts in groundwater and soil vapor. Determine degree and extent of metals impacts beneath previously documented fill layer.
HRPB – 4	North portion of Site, adjacent to former loading dock area.	Evaluate degree and extent of metals impacts beneath previously documented fill layer.
HRPB – 5	East portion of Site, near residential properties to the East of Site	Evaluate degree and extent of metals impacts beneath previously documented fill layer.
HRPB – 6	East portion of Site, near plumbing supply store to the East of Site	Evaluate degree and extent of metals impacts beneath previously documented fill layer.
HRPB – 7	West portion of the Site, upgradient, and upwind of the former coal silo.	Identify unknown source of previously documented CVOC impacts in groundwater and soil vapor. Determine degree and extent of metals impacts beneath previously documented fill layer.
HRPB – 8	West portion of the Site, upgradient, and upwind of the former coal silo.	Identify unknown source of previously documented CVOC impacts in groundwater and soil vapor. Determine degree and extent of metals impacts beneath previously documented fill layer.
HRPB – 9	Central portion of the Site, adjacent to the former coal silo.	Identify unknown source of previously documented CVOC impacts in groundwater and soil vapor. Determine degree and extent of metals impacts beneath previously documented fill layer.
HRPB - 10	West portion of the Site, upgradient, and upwind of the former coal silo.	Identify unknown source of previously documented CVOC impacts in groundwater and soil vapor. Determine degree and extent of metals impacts beneath previously documented fill layer.
HRPB – 11	Central portion of Site, located on former building footprint, downwind of the coal silo.	Evaluate degree and extent of previously documented CVOC impacts in subsurface soil by PID analysis.
HRPB - 12	Central portion of Site, located on former building footprint, downwind of the coal silo.	Evaluate degree and extent of previously documented CVOC impacts in subsurface soil by PID analysis.

During soil boring installation, soil samples were obtained in new acetate liners, using a 2.25-inch outer diameter (O.D.) macro core sampler at each soil boring. Samples were screened in five-foot increments, to a total depth of approximately 16 feet below ground surface, or refusal.

After sample collection, a small portion (1-2 oz.) of each sample was placed in a polyethylene bag and allowed to attain ambient temperature before PID headspace analysis. PID headspace measurements are collected by inserting the PID probe tip into the polyethylene bag. During PID headspace analysis, each sample is evaluated for obvious physical evidence of contamination (i.e.

odor, staining). each sample was placed in laboratory-provided containers, labeled, and preserved on ice in a cooler. PID headspace analysis measurements and soil descriptions are presented as Appendix B – Soil boring Logs.

All non-disposable soil sampling equipment was decontaminated between samples using an Alconox wash followed by a clean water rinse. Boreholes that were not completed as monitoring wells were abandoned (backfilled) using native material and bentonite chips. All abandoned borings were checked 24-48 hours following abandonment to confirm that subsidence had not occurred and to backfill further if subsidence had occurred.

Based on the results of the field screening and observations, HRP selected one soil sample, from the subsurface interval exhibiting the highest PID reading, from each soil boring for laboratory analysis. When no elevated PID readings were observed, the soil samples that are described in the RISAP, or areas of staining or fill material were selected. It should be noted that due to the presence of concrete only one sample was collected at SS-9 from 0 -2 feet from soil boring SS-9.

HRP collected twenty-nine (29) soil samples total from the ten (10) soil borings, and ten (10) surface soil samples. Seven (7) subsurface samples were analyzed for TCL VOCs via USEPA Method 8260B, and twenty-nine (29) surface and subsurface samples for NYSDEC part-375 Metals via EPA Method 6010. All nineteen (19) surface soil samples were analyzed for Toxicity Characteristic Leaching Procedures (TCLP). The soil samples that were collected and analyzed are listed below.

SUBSURFACE SOIL SAMPLE SUMMARY		
Sample ID	**Depth**	**Justification**
HRPB-1	15.0′ - 16.0′	Evaluate metals and CVOC impacts to deep subsurface soils in elevated soil gas areas, adjacent to CDM Smith Soil Gas Sample #42.
HRPB-2	16.0′ - 17.0′	Evaluate metals and CVOC impacts to deep subsurface soils in elevated soil gas areas, adjacent to CDM Smith Soil Gas Sample #62
HRPB-3	15.0′ - 16.0′	Evaluate metals and CVOCs impacts to deep subsurface soils in elevated soil gas areas, adjacent to CDM Smith Soil Gas Sample #53
HRPB-4	6.5′ - 7.5′	Evaluate metals impacts to subsurface soils beneath the impacted fill layer, adjacent to former loading dock.
HRPB-5	6.5′ - 7.5′	Evaluate soils downwind of the coal silo, to quantify impacts beneath fill layer, observed at CDM Smith boring DF-SB-16.
HRPB-6	6.5′ - 7.5′	Evaluate soils at the East portion of Site, beneath observed fill layer.
HRPB-7	15′ - 16′	Evaluate deep overburden soils at the West/Central to evaluate areas of elevated soil gas adjacent to CDM-Smith soil gas sample #36

Sample ID	Depth	Justification
HRPB-8	15′ - 16′	Evaluate deep overburden soils at the West/Central to evaluate areas of elevated soil gas adjacent to CDM-Smith soil gas sample #35
HRPB-9	15′ - 16′	Evaluate deep overburden soils adjacent to former building and coal silo, to evaluate condition of soil beneath elevated lead impacts observed at CDM Smith boring DF-SB-11.
HRPB-10	6.5′ - 7.5′	Evaluate condition of subsurface soils upgradient, and upwind of the former coal silo, adjacent to CDM Smith soil boring DF-SB-2.
SS-1A	0″ – 2″	Confirm degree and extent of metals impacts to shallow surface soil identified during previous investigations at locations DF-SS-2, and SB-25.
SS-1B	2″ – 24″	Confirm degree and extent of metals impacts to shallow surface soil identified during previous investigations at locations SS-2, and SB-25.
SS-2A	0″ – 2″	Confirm degree and extent of metals impacts to shallow surface soil identified during the NW Site characterization at locations SB-22 and SB-23
SS-2B	2″ – 24″	Confirm degree and extent of metals impacts identified in surface soil during the NW Site characterization at locations SB-22 and SB-23.
SS-3A	0″ – 2″	Confirm degree and extent of metals impacts to shallow surface soil identified during the NW Site characterization at locations SB-22 and SB-15.
SS-3B	2″ – 24″	Confirm degree and extent of metals impacts to shallow surface soil identified during the NW Site characterization at locations SB-22 and SB-15.
SS-4A	0″ – 2″	Confirm degree and extent of metals impacts to shallow surface soil identified during previous investigations at SB-19 and MW-12.
SS-4B	2″ – 24″	Confirm degree and extent of metals impacts to shallow surface soil identified during previous investigations at SB-19 and MW-12.
SS-5A	0″ – 2″	Confirm degree and extent of metals impacts to shallow surface soil identified during previous investigation by NW Contracting at SB-14.
SS-5B	2″ – 24″	Confirm degree and extent of metals impacts to shallow surface soil identified during previous investigation by NW Contracting at SB-14.
SS-6A	0″ – 2″	Confirm degree and extent of metals impacts to shallow surface soil identified during the NW Site characterization at SB-12 and SB-8.
SS-6B	2″ – 24″	Confirm degree and extent of metals impacts to shallow surface soil identified during the NW Site characterization at SB-12 and SB-8.
SS-7A	0″ – 2″	Confirm absence of metals impacts to shallow surface soil identified during the NW Site characterization at soil borings SB-10 and SB-11.
SS-7B	2″ – 24″	Confirm absence of metals impacts to shallow surface soil identified during previous investigations at locations SB-10 and SB-11.
SS-8A	0″ – 2″	Confirm degree and extent of metals impacts to shallow surface soil, unidentified during previous investigations.
SS-8B	2″ – 24″	Confirm degree and extent of metals impacts to shallow surface soil, unidentified during previous investigations.
SS-9	0″ – 24″	Confirm degree and extent of metals impacts to shallow surface soil identified during previous investigations at locations MW-9 and SB-8.
SS-10A	0″ – 2″	Confirm absence metals impacts to shallow surface soil identified during previous investigation by NW Contracting at SB-7 and SB-9.
SS-10B	2″ – 24″	Confirm absence metals impacts to shallow surface soil identified during previous investigations at SB-7 and SB-9.

3.2 Groundwater Monitoring: Overburden Monitoring Well Installation, Development, Sampling

To evaluate if the area of elevated soil gas concentration is the source of elevated groundwater VOC concentrations and if the groundwater contamination is migrating off-Site HRP and NW mobilized to the Site on August 26 to 27th, and September 9 to 14, 2020, to install (5) groundwater monitoring wells (HRPMW-1, HRPMW-2, HRPMW-3, TMW-1, TMW-2). Groundwater monitoring well sampling procedures were conducted as outlined in the RISAP. The locations of the monitoring wells are presented on Figure 3.

Monitoring well locations were chosen with approval from NYSDEC and NYSDOH and are described as follows.

Sample ID	Sample Location	Justification
HRPMW-1	Downgradient of former Duofold Facility	Evaluate condition of groundwater quality beneath former facility, evaluate groundwater in areas of previously documented CVOC impacts.
HRPMW-2	Downgradient of former Duofold Facility	
HRPMW-3	Downgradient of former Duofold Facility	
TMW-1	Downgradient of former Duofold Facility	Evaluate off-Site migration of contaminants.
TMW-2	Downgradient of former Duofold Facility	
ANALYSES		
All samples were analyzed for the following: TCL VOCS EPA 8260		

Overburden Monitoring Wells - Methods of Installation

Monitoring wells were installed at the Site within unconsolidated overburden material to enable the monitoring of groundwater elevation and acquisition of groundwater samples for laboratory testing. Five (5), 2-inch diameter, PVC monitoring wells were installed in the shallow saturated zone beneath the Site (see Appendix C for Monitoring Well Construction Details). The monitoring wells were installed using the procedures described below:

- Soil borings were advanced to the desired depth using a Geoprobe.
- The 2-inch diameter Schedule 40 PVC well screen (0.010-inch slot) and riser pipe were inserted and placed on the bottom of the borehole and extended to intersect the water table. The riser was capped to prevent well construction materials from entering the well.
- Washed silica was poured into the annular space between the well material and the borehole sidewall. The sand pack continued to at least 2 feet above the top of the screen section.

- Above the sand, a seal (bentonite pellets) was formed in the borehole. The bentonite seal extended at least 2 feet above the top of the sand pack section.
- Clean water was periodically added to the borehole to hydrate the pellets. The pellets were then allowed to hydrate for at least 30 minutes.
- The well risers were cut to approximately 2-inches below grade and a gripper plug was inserted onto the top of each well casing. Flush mount road boxes were then installed over each well riser for protection.

Overburden Monitoring Wells - Methods of Development

On September 14, 2020, HRP mobilized to the Site to develop the five (5) recently installed monitoring wells. HRP developed the wells utilizing a peristaltic pump and new polyethylene tubing. This method was chosen as the appropriate well development method based on water depth, well productivity, and sediment content of the water. Non-disposable equipment (i.e. water level indicator) was decontaminated prior to use in each well. Care was taken not to introduce contaminants to the equipment during installation.

Overburden Monitoring Wells - Methods of Sampling

To evaluate the groundwater quality beneath the Site, HRP mobilized to the Site on September 21-23, 2020, and groundwater samples were collected from all five (5) new monitoring wells. Five (5) existing monitoring wells (DF-MW-2, DF-MW,7, DF-MW-8, DF-MW-9, DF-MW-10) were also selected for sampling, according to the NYSDEC and EPA approved RISAP during field activities.

A minimum of 48 hours following development elapsed prior to commencing groundwater sampling. Groundwater samples were collected from each monitoring well in accordance with USEPA Low Flow purge and sample guidelines. Field parameters, including dissolved oxygen (DO), oxidation-reduction potential (ORP), hydrogen ion activity (pH), temperature, specific conductivity (SC), and turbidity, were measured using a multi-parameter meter with a flow-through cell connected directly to the pump discharge. Purging required removing water from the well at a rate of at least 250 milliliters per minute, but not exceeding 1 liter per minute for a sufficient length of time for water quality parameters to stabilize (a.t least 30 minutes). Drawdown did exceed ten percent of the standing water column due to poor recharge. Sampling commenced immediately after purging, without adjusting the flow rate or water intake depth. Groundwater purged during sampling activities was appropriately handled in accordance with DER-10 procedures and protocols. A copy of Groundwater Monitoring Well Sampling Logs is presented as Appendix D.

Groundwater samples from ten (10) selected monitoring wells (DF-MW-2, DF-MW-7, DF-MW-8, DF-MW-9, DF-MW-10, HRP-MW-1, HRP-MW-2, HRP-MW-3, TMW-1, TMW-2) were submitted to Hampton-Clarke, Inc. ELAP certified laboratory of Fairfield, New Jersey for analysis of 6 NYCRR Part 375 VOCs by USEPA Method 8260. Groundwater samples were decanted directly into laboratory-supplied containers and placed in a cooler with ice. All samples were delivered to the laboratory under chain of custody procedures in accordance with the QAPP.

3.3 Well Surveying and Water Levels

Groundwater monitoring well elevations were surveyed by Labella Associates (LaBella) on October 14, 2020 using a transit level. Monitoring well elevations surveyed during the RI were referenced to previously measured top-of-well elevations provided during previous investigations, and were measured to the nearest 0.01 foot, above mean sea level (Ft. AMSL).

Table 1 presents the depth to water measurements, date of measurement, corresponding water level elevations, and total well depth. The depth to groundwater was measured to the nearest 0.01 foot using an electronic water level meter at groundwater monitoring wells HRP-MW-1, HRP-MW-2, HRP-MW-2, TMW-1, TMW-2, DFMW-2, DFMW-7, DFMW-8, DFMW-9, and DFMW-10 on September 21, 2020. Depth to groundwater from the top-of-well casing ranged from 6.28 feet at TMW-1 to 11.98 feet at HRP-MW-3. Groundwater contour elevations calculated from the September 21, 2020 measurements are presented as Figure 3 – Groundwater Elevation Contour Map.

3.4 Soil Vapor Probe Installation

Installation and Sampling

To evaluate the shallow soil vapor conditions within the areas of detected soil gas and downgradient (presumed downgradient locations) seven (7) temporary soil vapor probe (SV-1 through SV-7) were installed at the locations summarized below and noted on Figure 4 . The selected locations were coordinated with the NYSDEC and NYSDOH and selected based on the results of previous investigations conducted at the Site. Each of the collected soil vapor samples was submitted to state certified laboratory for analysis of VOCs via Method TO-15.

Sample ID	Sample Location	Justification
SV-1	Central portion of Site, downgradient of former Duofold Facility, located in area of demolished factory building.	Evaluate soil vapor in areas of documented CVOC impacts, adjacent to CDM Smith sample location #42.
SV-2	Central portion of Site, downgradient of former Duofold Facility, located in area of demolished factory building.	Evaluate soil vapor in areas of documented CVOC impacts, adjacent to CDM Smith sample location #62.
SV-3	Central/east portion of Site, downgradient of former Duofold Facility, located in area of demolished factory building.	Evaluate soil vapor in areas of documented CVOC impacts, adjacent to CDM Smith sample locations #53 and #54.
SV-4	Central/north portion of Site, downgradient of former Duofold Facility, located in loading dock area.	Evaluate downgradient soil vapor concentrations adjacent to loading dock and confirm results of CDM Smith soil vapor sample #12.

Sample ID	Sample Location	Justification
SV-5	East portion of Site, downgradient of former Duofold Facility, located in area of demolished factory building.	Evaluate downgradient soil vapor concentrations adjacent to residential areas to the east of the Site, and to Confirm findings of CDM Smith sample #16, #31, and #45
SV-6	East portion of Site, downgradient of former Duofold Facility, located in area of demolished factory building.	Evaluate downgradient soil vapor concentrations adjacent to residential areas to the east of the Site, and to Confirm findings of CDM Smith sample #54 and #64.
SV-7	West portion of Site, downgradient of former Duofold Facility, located in area of demolished factory building.	Evaluate upgradient soil vapor in areas of documented CVOC impacts, adjacent to CDM Smith sample #36.
ANALYSES		
All samples were analyzed for the following: TCL VOCS TO-15		

Soil vapor sampling points were installed in accordance with New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006.

A direct push drill rig was used to facilitate the collection of the soil vapor samples by boring a hole into the ground to immediately above the water table. The following procedures were followed during soil vapor sampling:

- Soil vapor samples were collected using ½-inch diameter by 6-inch long plastic screen fitted with polyethylene tubing.
- Porous backfill material (quartz filtration media) was used to create a sampling zone 1 to 2 feet in length around the plastic screen.
- Soil vapor probes were sealed above the sampling zone with a bentonite slurry to prevent outdoor air infiltration. The remainder of the borehole was backfilled with sand.
- One to three volumes of air were purged from the soil vapor probe using a motorized air pump with a low flow module. Flow rate did not exceed 0.2 liters per minute to minimize outdoor air infiltration during sampling.
- Soil vapor samples were collected into 1-liter canisters provided by the analytical laboratory.
- A tracer gas, helium, was used during soil vapor sample collection to verify that adequate sampling techniques were being implemented.

When collecting soil vapor samples, a tracer gas serves as a quality assurance/quality control device to verify the integrity of the soil vapor probe seal. Without the use of a tracer gas, there is no way to verify that a soil vapor sample has not been diluted by surface air.

HRP used balloon-grade helium as a tracer gas for this RI. After the soil vapor probe was set and the surface bentonite seal was in place, a new plastic pail was placed over the implant tubing, while allowing the tubing to protrude from the enclosure. The enclosure was sealed to the ground surface and the effluent tubing using additional bentonite slurry. Next the tracer gas was introduced into the enclosure up to a concentration of 50% helium. Using a geo-pump, a one (1) Liter Tedlar bag was filled from the protruding implant tubing. If high concentrations of the tracer gas (>20%) were noted by the MGD-2002 helium detection meter, the seal of the probe would have been re-evaluated. When high concentrations of tracer gas did not exist within the implant, purging and sampling commenced.

The volume of the sample train (implant and tubing) was calculated and slowly removed (purged) using a syringe. After the purge was completed, a 1-liter canister was directly attached to the tubing. The summa canister valve was then opened and allowed to fill. When the pressure gauge on the canister neared ambient level or after a time of approximately 120 minutes had elapsed, the valve was closed.

All sampling equipment was removed from the borehole. The canisters were appropriately labeled and stored in a shipping container. Soil vapor boreholes were abandoned (backfilled) using bentonite chips. Soil vapor probe construction diagrams are presented in Appendix E.

3.5 Quality Control Sampling and Analysis

Field quality control samples are intended to help evaluate conditions resulting from field activities and are intended to accomplish two primary goals: assessment of field contamination, and assessment of sampling variability. The former looks for substances introduced in the field due to environmental or sampling equipment and are assessed using blanks of different types. The latter includes variability due to sampling technique and instrument performance as well as variability possibly caused by the heterogeneity of the matrix being sampled and are assessed using replicate sample collection.

Equipment blank (EB) samples are obtained by decanting laboratory supplied water over or through the decontaminated equipment used for sampling. EB samples provide a means of assessing potential contamination present in sampling equipment, ambient conditions, sample containers, transportation, and the laboratory. Field reagent blank samples (FRB) are sample containers directly filled in the field using laboratory supplied water. FRB samples determine potential contamination from ambient conditions, sample containers, transit, and the laboratory. Trip blanks (TB) are prepared by the laboratory and shipped to and from the field. TBs assess contamination from shipping and the laboratory and are generally only collected in tandem with VOC samples.

Duplicate, Matrix and Matrix Spike Duplicate for soil and groundwater samples were collected at a minimum frequency of one (1) per 20 samples. Aqueous trip blanks were submitted in conjunction with samples collected for analysis of VOCs at a frequency of one (1) per 20 samples. Field blank (FB) samples were analyzed as a quality control measure to evaluate whether contaminants are being introduced from equipment, environmental sources, or the laboratory (EB) samples collected

for QA/QC (EB, TB, FB) were analyzed in accordance with the approved QAPP -party data validator, for Data Usability.

4.0 REMEDIAL INVESTIGATION RESULTS

This section presents the results of the Analytical Samples collected during the RI. As described above, all samples were collected and handled in accordance with the NYSDEC and EPA approved Remedial Investigation Sampling and Analysis Plan (RISAP) and Quality Assurance Project Plan (QAPP).

Compounds detected in the various media tested during this RI were compared to the following New York State guidance documents and standards:

- NYSDEC Regulation, 6 NYCRR Subpart 375-6, "Remedial Program Soil Cleanup Objectives (SCO)" which applies to the development and implementation of the remedial programs for soil and other media set forth in subparts 375-2 through 375-4 [Inactive Hazardous Waste Disposal Site Remedial Program, Brownfield Cleanup Program, and Environmental Restoration Program] and includes the soil cleanup objective tables developed pursuant to ECL 27-1415(6). A summary of soil sample locations is provided at Table 2

- Groundwater: NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1); Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations dated October 1993; Revised June 1998; ERRATA Sheet dated January 1999; and Addendum dated April 2000. A summary of groundwater sample locations is provided at Table 3.

- NYSDOH Soil Vapor: Guidance for Evaluating Soil Vapor Intrusion in the State of New York prepared by the New York State Department of Health dated October 2006. A summary of soil vapor sample locations is provided as Table 4.

At the time of the RI, the intended future use for the Site was unknown. For purposes of this RI Report, possible industrial, commercial, residential, and restricted residential uses have been considered. Accordingly, soil analytical results for this investigation were compared against Unrestricted, Residential, Restricted Residential, Commercial and Industrial Soil Cleanup Objectives (SCOs). Analytical results are included in Appendix F, and the Data Usability Summary Report (Table 5, Appendix G), and discussed below.

4.1 Surface Soil Results

As described above, a total of twenty (20) surface soil samples were collected and submitted for laboratory analysis. Samples were analyzed for Part 375 Metals (Total and TCLP). Sample results are tabulated in Table 6, presented on Figure 5 and discussed below.

Analytical Results

Metals including Mercury, Barium, Copper, Lead, Chromium (Cr III), Nickel, Zinc, Arsenic, are constituents of soil, and were detected at concentrations exceeding Unrestricted SCOs in all samples collected during the RI.

Specific metals identified as contaminants of concern in the RISAP included lead and arsenic. Lead was detected at concentrations exceeding the Unrestricted SCOs at samples SS-1A, SS-1B, SS-2A, SS-2B, SS-3A, SS-3B, SS-4A, SS-4B, SS-5A, SS-5B, SS-6A, SS-6B, SS-8B, and SS-9. Figure 5 presents the surface soil analytical data depicting only compounds that exceeded the Unrestricted SCO. The highest detection of lead was detected in SS-9, at a concentration of 1000 mg/kg, above Commercial SCOs.

Arsenic was detected at concentrations exceeding the Industrial SCO at surface soil sample location SS-1B, and SS-6B, at concentrations of 27 mg/kg and 18 mg/kg, respectively. Soil sample SS-6A exceeded the Unrestricted SCO at concentration of 16 mg/kg. No other samples exceeded Part 375 UUSCOs during the RI.

TCLP RCRA 8 Metals were not detected above regulatory levels established by 40 CFR § 261.24.

4.2 Subsurface Soil Results

As described above, a total of ten (10) subsurface soil samples were collected and submitted for laboratory analysis. Samples were analyzed for Part 375 Metals and VOCs. Sample results are tabulated in Table 7, presented on Figure 6 and discussed below.

Analytical Results

Subsurface soil samples collected by HRP during the RI indicate the presence of metals, specifically Chromium (III), Lead, Nickel, and Zinc above Part 375 Unrestricted SCOs in all samples collected during the RI. Lead was detected at concentrations above Part 375 Unrestricted SCO at HRPB-3, HRPB-4, and HRPB-7. Lead was detected at concentrations above the Commercial SCO at a concentration of 440 mg/kg at soil boring HRPB-3.

Arsenic was not detected at concentrations above applicable SCOs in any of the subsurface samples collected during the RI.

With the exception of acetone in HRPB-2 and HRPB-10, no VOCs were detected at concentrations exceeding applicable SCOs in any of the subsurface samples collected during the RI.

4.3 Groundwater Results

As described above, a total of ten (10) groundwater samples were collected and submitted for laboratory analysis of VOCs by USEPA Method 8260. A summary of the groundwater analytical results is tabulated as Table 8 and presented with the in Figure 7.

Analytical Results

CVOCs including 1,1-Dichloroethene, cis-1,2-Dichloroethene, Tetrachloroethene, trans-1,2-Dichloroethene, Trichloroethene, and Vinyl chloride were detected above TOGS 1.1.1 groundwater standards and guidance values in all groundwater monitoring wells at the Site. Total VOC concentrations ranged from 6.4 micrograms per liter (µg/l) at DF-MW-7 to 550 µg/l at HRP-MW-1.

Degradation products such as Cis-1,2-Dichloroethane were generally reported at higher concentrations than associated parent compounds such as TCE.

No petroleum-derived constituents were reported any groundwater sample collected during the RI.

4.4 Soil Vapor Results

Seven (7) soil vapor samples (SV-1, SV-2, SV-3, SV-4, SV-5, SV-6, and SV-7) were collected from the Site on September 22, 2020, and submitted for laboratory analysis of VOCs by USEPA Method TO-15. Sample results are presented on Figure 8, tabulated in Table 9, and discussed below.

Analytical Results

VOCs were detected in each of the soil vapor samples at concentrations greater than the laboratory reporting limit (RL).

PCE and TCE were the most prevalent compounds reported in soil vapor samples. The highest TCE concentration reported during the RI was at HRP-SV-1 at a concentration of 17,100 µg/m^3. PCE was detected at 7,320 µg/m^3 HRP-SV-3 µg/m^3. PCE and/or TCE was reported in all samples collected during the RI. Degradation products such as Cis-1,2-Dichloroethane (Cis 1,2-DCE) and Vinyl Chloride were generally reported at lower concentrations than associated parent compounds such as TCE and PCE.

Cis 1,2-DCE was detected above the RL at SV-1, SV-2, SV-3, and SV-5. Cis 1,2-DCE was not detected above the RL at SV-4, SV-6, and SV-7. Degradation compound Cis 1,2-DCE was detected at HRP-SV-1 at 1650 µg/m^3 and represents the highest degradation compound concentration reported during the RI.

4.5 Data Validation and Usability

Analytical data obtained during the RI were validated to evaluate the usability of the data. Data Usability Summary Reports (DUSRs) are provided in Appendix G. The DUSRs indicate which data are subject to limitations and identify certain data that are flagged as rejected and should not be used. All data was qualified as usable with the following exceptions (table 5):

- The "not detected" volatile results for 2-butanone were qualified as rejected, unusable (R) in samples DF-MW-8 and TMW-1
- The "not detected" volatile results for dichlorodifluoromethane and chloromethane were qualified as rejected, unusable (R) in samples HRP-MW-2, TMW-2, and DUP
- The "not detected" volatile result for 2-chlorethylvinylether was qualified as rejected, unusable (R) in sample DF-MW-10
- The "not detected" volatile result for vinyl chloride was qualified as rejected, unusable (R) in sample HRP-MW-2

All data that are not qualified rejected, unusable (R) are considered usable, with estimated (J, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the DUSR, and included as Appendix G.

5.0 NATURE AND EXTENT OF CONTAMINATION

The following sections present a discussion of the nature and extent of contamination, based on the results of all environmental investigations completed to date.

5.1 Primary Contaminants of Concern

Based upon a review of the documented history, previous investigations conducted at the Site, and data obtained during this RI, Contaminants of Concern (COCs) for the Site include VOCs (chlorinated VOCs (cis-1,2-Dichloroethene, Tetrachloroethene, trans-12-dichloroethene, Trichloroethene, and Vinyl Chloride), and metal compounds (Lead and Arsenic). The following sections provide a discussion of the analytical results of the COCs in the soil, groundwater, and soil vapor.

5.2 Nature and Extent of Soil Impacts

5.2.1 Metals

Lead
Metals are a constituent of soil and were detected in all soil samples during all previous subsurface investigations at the Site. Contaminated fill is believed to be a source of metals impacted soil at the Site. A large, approximately 110,660 square foot portion of the former factory was demolished between 1982 and 1985 and was likely discarded on-Site. Another approximately 35,000 square foot structure located on the west portion of the Site was also demolished between 1974 and 1982 and was understood to be the paint spraying area of the factory. The source of lead in the fill material is believed to be lead paint, as lead was commonly added to paint to increase durability, drying time, and resistance to moisture.

Arsenic
Arsenic impacts to shallow surface soils were in close proximity and mostly downwind of the coal silo at the Site. Prevailing winds at the Site are historically documented to be from the northwest.

Cinder, ash, and coal were identified in soils logged by Nature's Way, CDM Smith, and HRP in the overlying fill layer, present between 0.0 and 6.5 ft. bg across the Site. The Site Arsenic impacts to shallow soil are most-likely attributed to historic Site use and operations.

While no specific documentation was identified through historic research to identify a specific source of onsite arsenic detections, it is probable the presence of arsenic in fill is due to the activities described below. No. 6 fuel oil and coal were historically used to heat the facility, and a coal silo was identified at the Site. Arsenic impacts to shallow surface soils were identified by CDM Smith and HRP in close proximity and mostly downwind of the coal silo at the Site. Cinder, ash, and coal were identified in boring logs provided by Nature's Way, CDM Smith, and HRP to be present in the overlying fill layer, present between 0.0 and 6.5 ft. bg across the Site, depicted in the Geologic Cross Sections provided as Figure 9, and Appendix H.

Metals including Mercury, Copper, Lead, Chromium (Cr III), Nickel, Zinc, Arsenic were recorded above Part 375 UUSCOs in all samples collected during the RI. Figure 10 presents the surface soil

analytical data, and compounds that exceeded the NYSDEC UUSCOs. Geologic cross section B-B' identifies the thickness of surficial fill material approximately 6.5 thickness adjacent to CDM Smith soil boring DF-SB-11A, and Nature's Way soil boring SB-12 (SF). Impacted fill material is most likely the source of lead and arsenic impacted soil at the Site, due to the lateral and vertical extent.

Soil analyzed for metals below 6.5 feet did not generally exceed Part-375 commercial use SCOs. A table of COCs and the range of reported concentrations during previous investigations is presented below.

Contaminant of Concern (COC)	Concentration Range
Lead	[84,280 mg/l (DF-SB-11A) to 8 mg/l (DF-SB-06)]
Arsenic	[284 mg/l (SB-12) to 2.4 mg/l (SS-5A)]
Mercury	[1.2 mg/l (SB-15) to Non-Detect (SS-5A)]
Copper	[295 mg/l (SB 3 SS) to 11 mg/l (SB 27)]

The analytical results for the subsurface soil samples collected during the RI are presented in Table 7 and compared to all Part 375 SCOs. Subsurface soil samples collected by HRP during the RI indicate the presence of metals, specifically Chromium (III), lead, nickel, and Zinc above Part 375 UUSCOs in all samples collected during the RI. Figure 7 presents the soil analytical data, and compounds that exceed Unrestricted Use Soil Cleanup Objectives, per 6 NYCRR Part 375, Table 375-6.8(a). Figures 10 and 11 illustrate the nature and extent of surface and subsurface soil impacts.

Toxicity Leaching Characteristic Procedures (TCLP)
TCLP are designed to replicate the leaching of contaminants in municipal landfills, and were performed during the RI, and during the CDM Smith investigation. No metals were reported above 40 CFR § 261.24 regulatory levels by TCLP analysis during the RI. TCLP metals results indicate metals are not leaching from soil.

5.2.2 PCBs

PCBs were not recorded above the method detection limit (MDL) in all soil and groundwater samples collected by CDM Smith during the 2017 Site investigation. Nature's Way detected PCBs below Part-375 Residential Use Cleanup Objectives (RUSCOs) in fill material at surficial samples SB-5 SS (0.5'-2.0') and MW-8 (0.5'-1.5') at concentrations of 0.4 mg/l of 0.19 mg/l, respectively. PCBs were not identified as a COC during previous investigations at the Site and were not evaluated as a part of the RI.

5.2.3 Pesticides & Herbicides

Pesticides and herbicides were not recorded above the method detection limit in any of the surface soil samples collected by CDM Smith. Pesticides and Herbicides were reported at concentrations below CUSCOs in all surficial and subsurface samples collected by Nature's Way. Agricultural products were not produced at the Site and were not documented during HRP's Phase I Investigation. Agricultural activities were not conducted at Site, and previous industrial Site activities did not include the use or manufacturing of pesticides or herbicides. Pesticides and Herbicides were

not identified as COCs during previous investigations and were not evaluated during as a part of this RIR.

5.2.4 Volatile Organic Compounds (VOCs)

No petroleum or CVOCs were detected above part 375 RUSCOs in all surficial and subsurface soil collected during investigations by Nature's Way, CDM Smith, and HRP, with the exception of Acetone. Acetone is not derived from TCE, PCE, or petroleum, and is understood to be a laboratory artifact.

Various CVOCs have been detected and are understood to have been attributed to historical surface cleaner and coating storage at the Site. Chlorinated VOCs were commonly used throughout various industries in manufacturing to degrease and maintain machinery. There are no known source areas at the Site, and no other potential sources (i.e. Underground Storage Tank (UST), Dry-well, etc.) were identified during a previous ground penetrating radar survey (GPR) conducted at the Site in October 2016 by Delta Geophysics Inc (Delta), or by Susan A. Anacker, P.C. in 2020.

5.3 Nature and Extent of Groundwater Impacts

5.3.1 SVOCs and Pesticides and Herbicides

As described in Section 5, groundwater impacts are limited to the presence of VOCs in limited areas. SVOCs were detected above the AWQSs only in one duplicate sample during previous investigations. and not adversely impacted groundwater quality. Pesticides and herbicides were not detected at concentrations greater than the AWQSs in any of the wells sampled and have not adversely affected groundwater quality.

5.3.2 PCBs and Metals in Groundwater

Total PCBs were not detected at concentrations greater than the AWQS in any of the wells sampled and 1,4-dioxane was not detected in any groundwater samples above the laboratory reporting limit. Neither of these compounds has adversely affected groundwater quality. The only metal routinely detected above the AWQS is manganese, which is a naturally occurring compound often found at elevated concentrations. Manganese was not identified as a contaminant of concern in soil samples. Manganese in groundwater is not considered to be a result of contamination at the Site on this basis.

5.3.3 VOCs in Groundwater

VOCs were detected in groundwater above the AWQS are attributable to historical operations at the Site. Concentrations of chlorinated solvents were detected in groundwater above AWQS in all samples collected during the RI. CVOCs understood to have been attributed to historical surface cleaner and coating storage at the Site. CVOCs were commonly used throughout various industries in manufacturing to degrease and maintain machinery. There are no known source areas at the Site, and no other potential sources (i.e. Underground Storage Tank (UST), Dry-well, etc.) were identified during a previous ground penetrating radar survey (GPR) conducted at the Site in October 2016 by Delta Geophysics Inc (Delta), or by Susan A. Anacker, P.C. in 2020.

Ten (10) groundwater samples were collected and sent for laboratory analysis of VOCs by USEPA Method 8260. CVOCs including 1,1-Dichloroethene, cis-1,2-Dichloroethene, Tetrachloroethene, trans-1,2-Dichloroethene, Trichloroethene, and Vinyl chloride were detected above TOGS 1.1.1 in all groundwater monitoring wells at the Site. Six (6) of twelve (12) monitoring wells sampled during the Nature's Way investigation recorded CVOCs above TOGS 1.1.1. Standards and Guidance Values.

Contaminant of Concern (COC)	Concentration Range
Tetrachloroethylene (PCE)	[6.7 µg/l (MW-7) to Non-Detect (DF-MW-3)]
Trichloroethylene (TCE)	[210 µg/l (HRP-MW-1) to Non-Detect (DF-MW-3)]
Cis-1,2-Dichloroethylene	[370 µg/l (DF-MW-8) to Non-detect (DF-MW-3)]
Trans-1,2-Dichloroethylene	[17 µg/l (DF-MW-2) to Non-Detect (HRP-MW-3)]
Vinyl Chloride (VC)	[38 µg/l (TMW-1) to Non-Detect (DF-MW-3)]

No petroleum-derived constituents were reported in any groundwater samples collected during the RI. A summary of the groundwater analytical results is provided as Table 8 and depicted as Figure 8. A figure that depicts all exceedances of TOGS 1.1.1 groundwater standards and guidance values during the Nature's Way, CDM Smith, and HRP investigations, is presented as Figure 12 – Nature and Extent of Groundwater Impacts.

Groundwater monitoring wells TMW-1 and TMW-2 were installed to evaluate offsite groundwater at the Site. Samples collected from each offsite monitoring well indicate VOCs above TOGS 1.1.1 groundwater standards and guidance values. PCE and TCE, and degradation compounds Cis-1,2-DCE were the most prominent CVOCs detected. Data analyzed during the RI indicates the offsite migration of dissolved-phase chlorinated solvents from the central portion of the Site to the East-Northeast. A map depicting the extent of groundwater impacts is provided as Figure 12.

5.4 Nature and Extent of Soil Vapor Impacts

Analytical results from the RI indicate that VOCs were detected in each of the soil vapor samples at concentrations greater than the laboratory reporting limit (RL). Locations of soil vapor probes and analytical results compared to the 2017 CDM Smith soil gas survey as Figure 13 – Nature and Extent of Soil Vapor Impacts.

PCE and TCE were the most prevalent compounds reported in soil vapor samples. PCE and/or TCE was reported in all samples collected during the RI. The highest TCE concentration reported during the RI was at HRP-SV-1 at a concentration of 17,100 µg/m^3. PCE was detected at 7,320 µg/m^3 HRP-SV-3 µg/m^3. Degradation products such as Cis-1,2-Dichloroethane (Cis 1,2-DCE) and Vinyl Chloride were generally reported at lower concentrations than associated parent compounds such as TCE and PCE.

Contaminant of Concern (COC)	Concentration Range
Perchloroethylene (PCE)	[7,320 µg/m^3 (SV-3) to 1.8 µg/m^3 (SV-7)]
Trichloroethylene (TCE)	[17,100 µg/m^3 (SV-1) to 1.2 µg/m^3 (SV-4)]
Cis-1,2-Dichloroethylene	[1,650 µg/m^3 (SV-1) to Non-Detect (SV-4, SV-6, SV-7)
Trans-1,2-Dichloroethylene	[84.8 µg/m^3 (SV-1) to Non-Detect (SV-2, SV-3, SV-5, SV-6, SV-7)

Vinyl Chloride (VC)	[2.4 µg/m^3 (SV-2) to Non-Detect (SV-1, SV-2, SV-3, SV-5, SV-6, and SV-7]

Cis 1,2-DCE was detected above the RL at SV-1, SV-2, SV-3, and SV-5. Cis 1,2-DCE was not detected above the RL at SV-4, SV-6, and SV-7. Degradation compound Cis 1,2-DCE was detected at HRP-SV-1 at 1650 µg/m^3, and represents the highest degradation compound concentration reported during the RI. A summary of soil vapor analytical data is presented at Table 9. Soil vapor sampling results indicate accumulation of contaminated soil vapor in the unsaturated zone from chlorinated solvents and associated degradation compounds in the subsurface.

6.0 QUALITATIVE HUMAN HEALTH EXPOSURE ASSESSMENT

A qualitative human health exposure assessment was performed to evaluate the potential risk (if present) to receptors from Site-related contaminants. This assessment was performed for current and future conditions. The current Site conditions consist of a vacant building that is locked and posted to prevent unauthorized access to the area. Outside areas adjacent to the building are generally paved. The anticipated future Site conditions include potential rehabilitation of the building that will occupy nearly all of the property with areas adjacent to the building being paved. Based on the evaluation of offsite soil and groundwater data, there are low level detections of chlorinated VOCs offsite. Five elements must be present for a human health exposure to exist. These include: 1) a source of contamination, 2) a contaminant release and transport mechanism, 3) a point of exposure, 4) a route of exposure, and 5) a receptor. The following sections evaluate these elements and the risk of exposure.

6.1 Contaminant Source and impacted Media

The COCs (i.e., chlorinated VOCs and metals) are present in Site soil, groundwater, and/or soil vapor, based on the results previous investigations performed by Nature's Way Environmental, CDM Smith, and HRP in 2014, 2016, and 2020 respectively.

The approximate areas of impact of the chlorinated VOCs and metals are shown on Figures 10-13. The primary concern for metals exposure is the presence of these compounds detected in the upper fill layer (Figure 9 - Geologic Cross Section, Appendix H – Nature's Way Cross Section). These impacted areas will be the focus of future remediation before Site redevelopment occurs. The objective of the remedial measures will be to cover and/or excavate surficial soil, and to evaluate CVOC contaminant concentrations in groundwater and soil vapor. The location of the coal silo, and demolished buildings are depicted as Figure 14 – Site Source Areas.

6.2 Release and Transport Mechanisms

Transport of Site COCs is affected by sorption potential to organic material in soil, solubility in groundwater, and ability to migrate through the subsurface as vapors in the unsaturated zone above the water table. Surface soil samples collected during the RI reported Metals at concentrations greater than the Part 375 UUSCOs. These compounds could potentially come into direct contact with potential receptors, be transported by wind, or exposed to precipitation until all Site areas are paved, or capped.

Groundwater at the Site flows to the east-northeast, as described in Section 4.4. The results of the previous investigations indicate that VOCs are not a primary source of contamination in the Site soil. Analysis of groundwater samples indicates that VOCs are present in the groundwater and soil vapor at the Site. Chlorinated VOCs in soil gas samples collected and analyzed during the RI indicate that soil vapors originating from the identified area of soil and groundwater impact have not migrated through, and accumulated within, the unsaturated zone within the building footprint. The potential for release and transport of contaminants will be significantly reduced or eliminated under the anticipated future Site conditions. There would be no potential for release or transport of contaminants if remediation successfully removes or destroys all contamination. Future Site

conditions would not change the potential for residual contamination remaining after remediation in groundwater and soil vapor. The presence of a building and pavement occupying most of the property, surrounded by paving, reduces the possibility of transport via wind, eliminates vertical infiltration of groundwater through the soil, and eliminates the potential for direct contact with residual contaminants.

6.3 Exposure Analysis

The human health risk associated with Site COCs depends on the potential for exposure to soil, groundwater, or soil vapor containing these contaminants. Exposure occurs if a completed exposure pathway exists. Potential exposure pathways include ingestion, inhalation or dermal contact with impacted media by onsite workers, visitors, or trespassers.

Offsite areas are occupied by dwellings, and/or are paved. The area is served by a public water supply. The risk of exposure for potential onsite receptors is expected to be absent or minimal because of Site control measures. The Site currently is vacant and configured to prevent unauthorized access to the area formerly occupied by the building, which includes most of the Site.

Potential exposure pathways are summarized and evaluated in Table 11 according to potential onsite and offsite exposure to Site-related contaminants. A potential exists for dust from the Site during periods of high winds; however, this potential is limited by the relatively limited exposed area of soil, and the Site building that helps minimize the wind.

Exposure to the surrounding community during remediation will be monitored and minimized or eliminated by implementing a community air monitoring plan (CAMP). An exposure to metals in the surficial soil exists only if the property is illegally breached, and if an exposure pathway exists (i.e., ingestion).

Future workers at the Site may be required to use personal protective equipment, as deemed necessary by monitoring. Visitors will be allowed only under controlled conditions and will be subject to the same health and safety requirements as Site workers if a potential for exposure exists. Trespassers will be deterred by the presence of adequate signage.

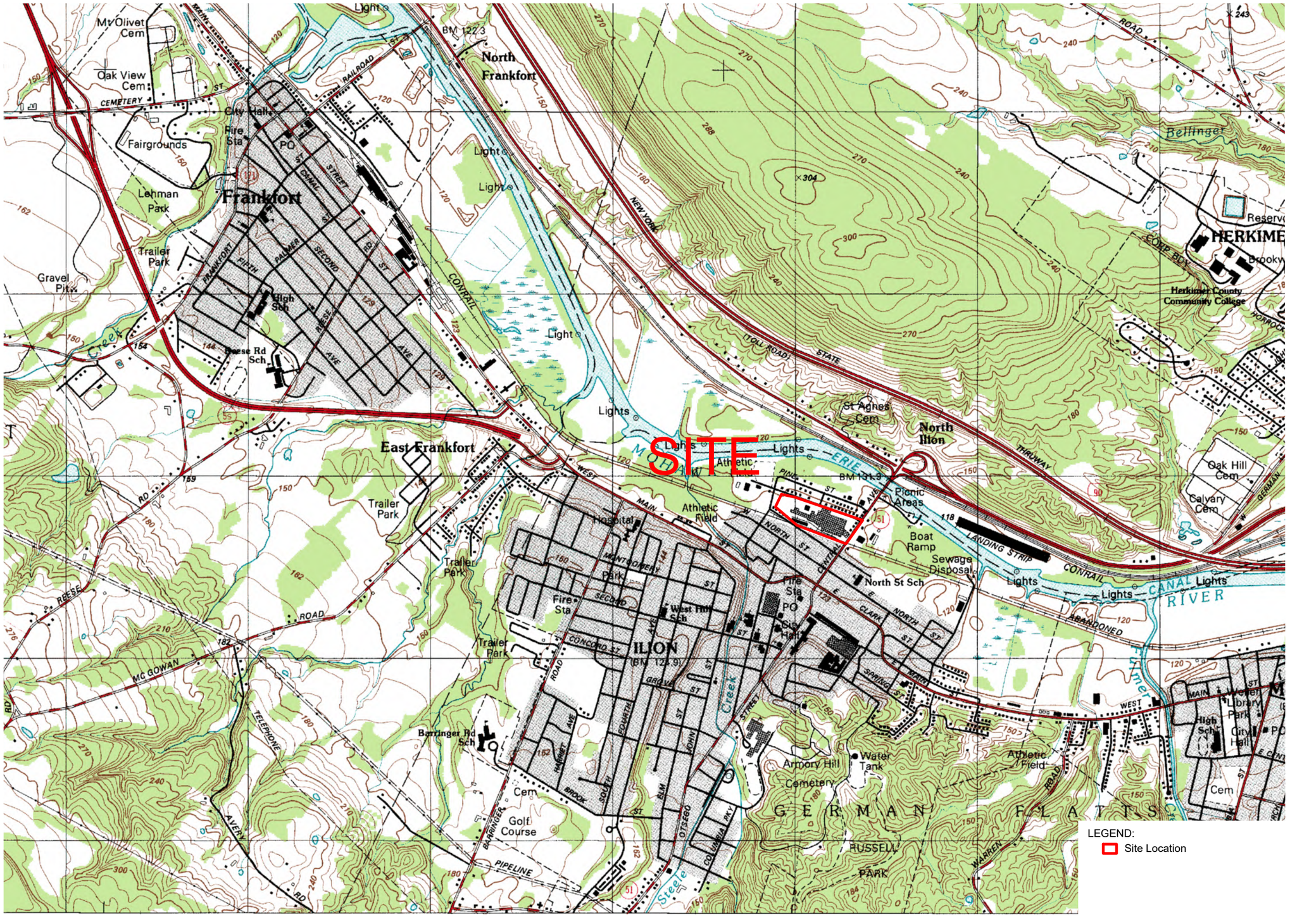
Other exposures do not exist because analytical data indicate that other Site-related COCs are absent in the upper 0 to 6-inches of soil, groundwater is not present at the surface, and there is nowhere for potentially impacted soil gas to accumulate since the building has been removed. There will be no potential for exposure under the anticipated future Site conditions. A building and surrounding pavement will prevent direct contact with soil. The Site is served by public water and there will be no contact with, or ingestion of groundwater. The potential for vapor intrusion into the future building will be eliminated by engineering controls (i.e. sub-slab depressurization system and/or vapor barrier) if the Site is developed. The results of this qualitative exposure assessment indicate that there a slight chance of exposure to metals in the surficial soil exists if the Site is illegally breached, until Site remediation and redevelopment occurs. There is no potential for exposure to onsite receptors under the future Site conditions.

7.0 FISH AND WILDLIFE RESOURCES IMPACT ANALYSIS

The Site is in an urban setting and currently consists of a vacant lot that is placarded to prevent unauthorized access to the area formerly occupied by the building. Areas outside of the Site are generally paved and/or covered with structures. Adjacent properties are generally paved and occupied by buildings or City streets and paved parking lots.

There are no ecological resources present on or in the vicinity of the Site, as determined pursuant to NYSDEC's DER-10 Section 3.10.1(c)(1), because the Site is in an urban area which is not proximate to a surface water body, wetland, or other ecologically significant area. As such, a Fish and Wildlife Resources Impact Analysis is not required, and therefore, was not performed.

FIGURES



HRP
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NORTH

0 250' 500'

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REVIEWED BY: TSS

ISSUE DATE: 10/05/2020
PROJECT NUMBER: HER1500.P2
SHEET SIZE: 11"x17"

Site Location Map

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
1

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Surface and Subsurface Soil Sample Locations

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
2

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Groundwater Elevation Contour Map

Former Duofold Manufacturing Facility
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Ilion, New york

Figure
3

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SHEET SIZE: 11"x17"

Soil Vapor Sample Locations

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Remedial Investigation

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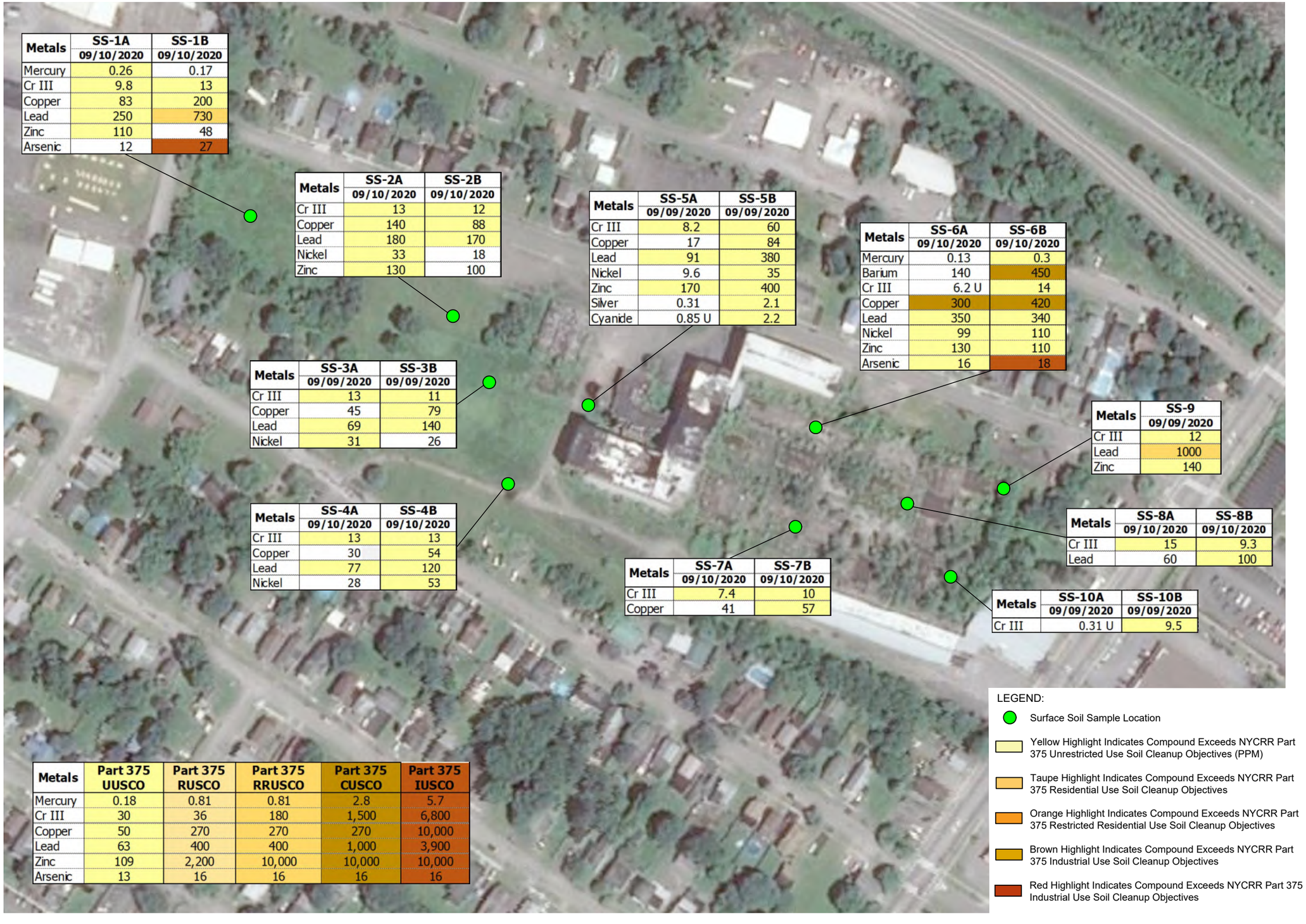
Ilion, New york

Figure
4



Metals	SS-1A 09/10/2020	SS-1B 09/10/2020
Mercury	0.26	0.17
Cr III	9.8	13
Copper	83	200
Lead	250	730
Zinc	110	48
Arsenic	12	27

Metals	SS-2A 09/10/2020	SS-2B 09/10/2020
Cr III	13	12
Copper	140	88
Lead	180	170
Nickel	33	18
Zinc	130	100

Metals	SS-3A 09/09/2020	SS-3B 09/09/2020
Cr III	13	11
Copper	45	79
Lead	69	140
Nickel	31	26

Metals	SS-4A 09/10/2020	SS-4B 09/10/2020
Cr III	13	13
Copper	30	54
Lead	77	120
Nickel	28	53

Metals	SS-5A 09/09/2020	SS-5B 09/09/2020
Cr III	8.2	60
Copper	17	84
Lead	91	380
Nickel	9.6	35
Zinc	170	400
Silver	0.31	2.1
Cyanide	0.85 U	2.2

Metals	SS-6A 09/10/2020	SS-6B 09/10/2020
Mercury	0.13	0.3
Barium	140	450
Cr III	6.2 U	14
Copper	300	420
Lead	350	340
Nickel	99	110
Zinc	130	110
Arsenic	16	18

Metals	SS-7A 09/10/2020	SS-7B 09/10/2020
Cr III	7.4	10
Copper	41	57

Metals	SS-8A 09/10/2020	SS-8B 09/10/2020
Cr III	15	9.3
Lead	60	100

Metals	SS-9 09/09/2020
Cr III	12
Lead	1000
Zinc	140

Metals	SS-10A 09/09/2020	SS-10B 09/09/2020
Cr III	0.31 U	9.5

Metals	Part 375 UUSCO	Part 375 RUSCO	Part 375 RRUSCO	Part 375 CUSCO	Part 375 IUSCO
Mercury	0.18	0.81	0.81	2.8	5.7
Cr III	30	36	180	1,500	6,800
Copper	50	270	270	270	10,000
Lead	63	400	400	1,000	3,900
Zinc	109	2,200	10,000	10,000	10,000
Arsenic	13	16	16	16	16

LEGEND:

- Surface Soil Sample Location
- Yellow Highlight Indicates Compound Exceeds NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (PPM)
- Taupe Highlight Indicates Compound Exceeds NYCRR Part 375 Residential Use Soil Cleanup Objectives
- Orange Highlight Indicates Compound Exceeds NYCRR Part 375 Restricted Residential Use Soil Cleanup Objectives
- Brown Highlight Indicates Compound Exceeds NYCRR Part 375 Industrial Use Soil Cleanup Objectives
- Red Highlight Indicates Compound Exceeds NYCRR Part 375 Industrial Use Soil Cleanup Objectives

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SHEET SIZE: 11"x17"

Surface Soil Analytical Data Summary

Former Duofold Manufacturing Facility
Remedial Investigation

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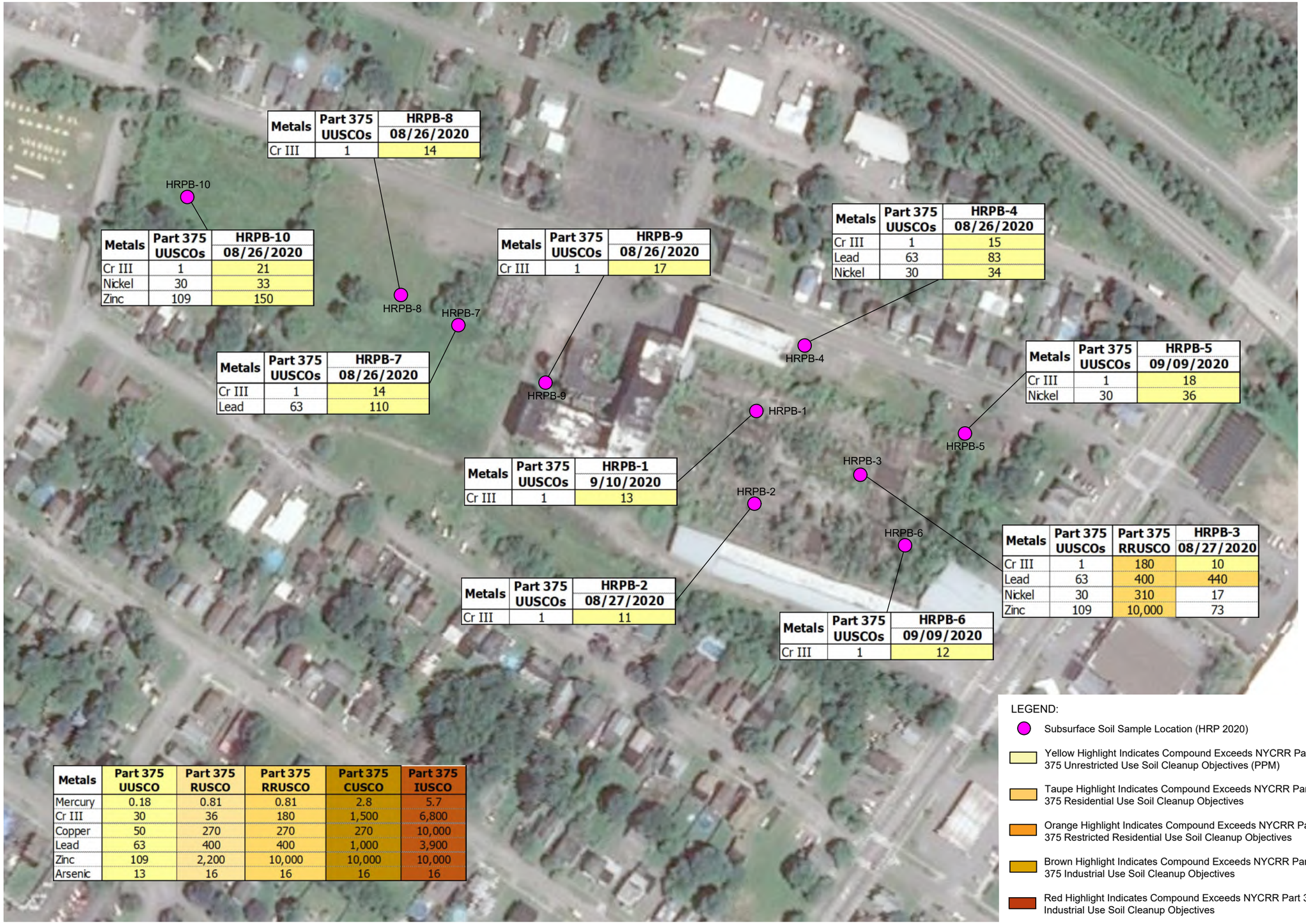
Figure
5



Metals	Part 375 UUSCOs	HRPB-8 08/26/2020
Cr III	1	14

Metals	Part 375 UUSCOs	HRPB-10 08/26/2020
Cr III	1	21
Nickel	30	33
Zinc	109	150

Metals	Part 375 UUSCOs	HRPB-9 08/26/2020
Cr III	1	17

Metals	Part 375 UUSCOs	HRPB-4 08/26/2020
Cr III	1	15
Lead	63	83
Nickel	30	34

Metals	Part 375 UUSCOs	HRPB-7 08/26/2020
Cr III	1	14
Lead	63	110

Metals	Part 375 UUSCOs	HRPB-5 09/09/2020
Cr III	1	18
Nickel	30	36

Metals	Part 375 UUSCOs	HRPB-1 9/10/2020
Cr III	1	13

Metals	Part 375 UUSCOs	Part 375 RRUSCO	HRPB-3 08/27/2020
Cr III	1	180	10
Lead	63	400	440
Nickel	30	310	17
Zinc	109	10,000	73

Metals	Part 375 UUSCOs	HRPB-2 08/27/2020
Cr III	1	11

Metals	Part 375 UUSCOs	HRPB-6 09/09/2020
Cr III	1	12

Metals	Part 375 UUSCO	Part 375 RUSCO	Part 375 RRUSCO	Part 375 CUSCO	Part 375 IUSCO
Mercury	0.18	0.81	0.81	2.8	5.7
Cr III	30	36	180	1,500	6,800
Copper	50	270	270	270	10,000
Lead	63	400	400	1,000	3,900
Zinc	109	2,200	10,000	10,000	10,000
Arsenic	13	16	16	16	16

LEGEND:

- Subsurface Soil Sample Location (HRP 2020)
- Yellow Highlight Indicates Compound Exceeds NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (PPM)
- Taupe Highlight Indicates Compound Exceeds NYCRR Part 375 Residential Use Soil Cleanup Objectives
- Orange Highlight Indicates Compound Exceeds NYCRR Part 375 Restricted Residential Use Soil Cleanup Objectives
- Brown Highlight Indicates Compound Exceeds NYCRR Part 375 Industrial Use Soil Cleanup Objectives
- Red Highlight Indicates Compound Exceeds NYCRR Part 375 Industrial Use Soil Cleanup Objectives

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REVIEWED BY: TSS

ISSUE DATE: 10/07/2020
PROJECT NUMBER: HER1500.P2
SHEET SIZE: 11"x17"

Subsurface Soil Analytical Data Summary

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
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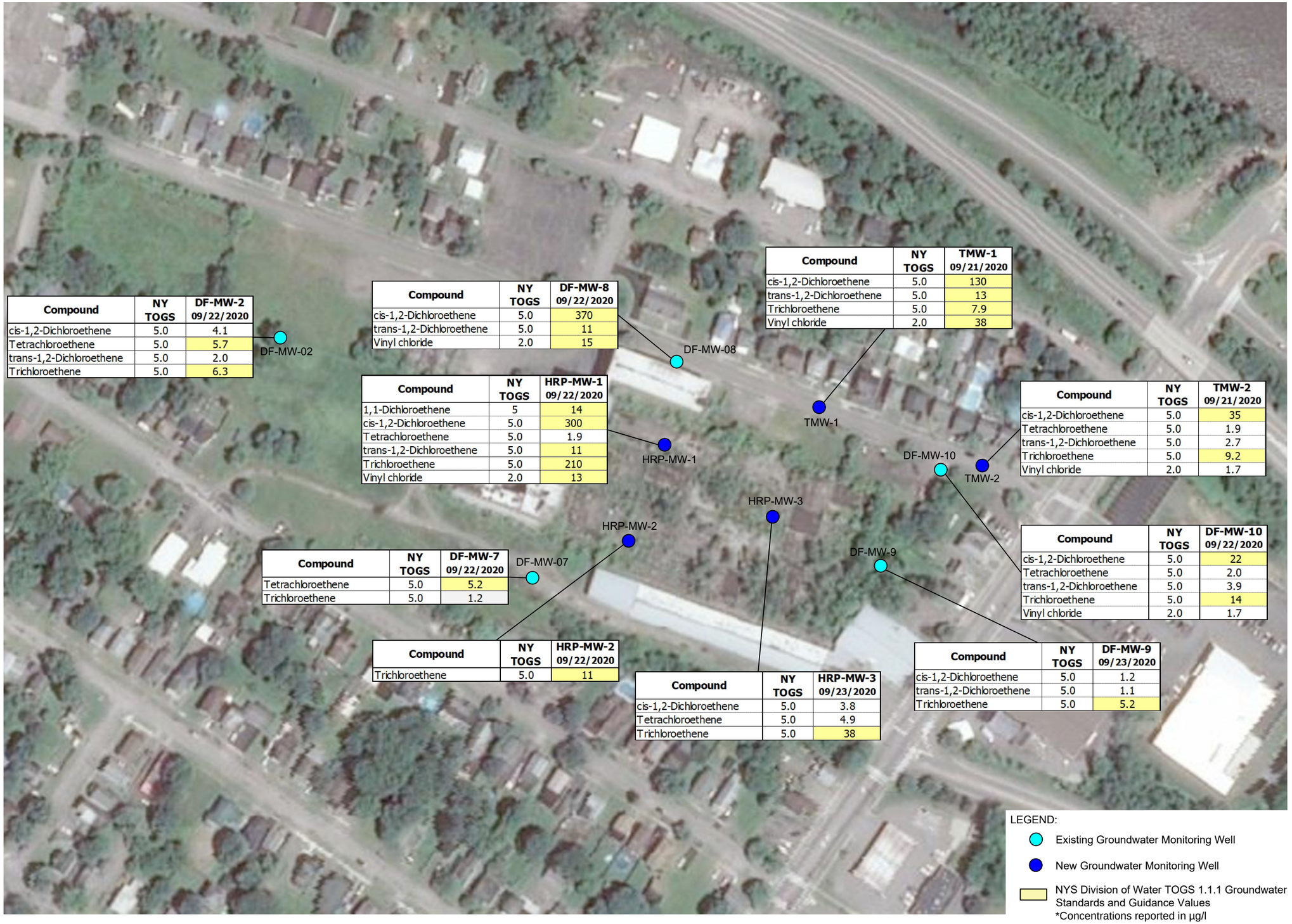
Figure
7



Compound	NY TOGS	DF-MW-2 09/22/2020
cis-1,2-Dichloroethene	5.0	4.1
Tetrachloroethene	5.0	5.7
trans-1,2-Dichloroethene	5.0	2.0
Trichloroethene	5.0	6.3

Compound	NY TOGS	DF-MW-8 09/22/2020
cis-1,2-Dichloroethene	5.0	370
trans-1,2-Dichloroethene	5.0	11
Vinyl chloride	2.0	15

Compound	NY TOGS	TMW-1 09/21/2020
cis-1,2-Dichloroethene	5.0	130
trans-1,2-Dichloroethene	5.0	13
Trichloroethene	5.0	7.9
Vinyl chloride	2.0	38

Compound	NY TOGS	HRP-MW-1 09/22/2020
1,1-Dichloroethene	5	14
cis-1,2-Dichloroethene	5.0	300
Tetrachloroethene	5.0	1.9
trans-1,2-Dichloroethene	5.0	11
Trichloroethene	5.0	210
Vinyl chloride	2.0	13

Compound	NY TOGS	TMW-2 09/21/2020
cis-1,2-Dichloroethene	5.0	35
Tetrachloroethene	5.0	1.9
trans-1,2-Dichloroethene	5.0	2.7
Trichloroethene	5.0	9.2
Vinyl chloride	2.0	1.7

Compound	NY TOGS	DF-MW-7 09/22/2020
Tetrachloroethene	5.0	5.2
Trichloroethene	5.0	1.2

Compound	NY TOGS	DF-MW-10 09/22/2020
cis-1,2-Dichloroethene	5.0	22
Tetrachloroethene	5.0	2.0
trans-1,2-Dichloroethene	5.0	3.9
Trichloroethene	5.0	14
Vinyl chloride	2.0	1.7

Compound	NY TOGS	HRP-MW-2 09/22/2020
Trichloroethene	5.0	11

Compound	NY TOGS	HRP-MW-3 09/23/2020
cis-1,2-Dichloroethene	5.0	3.8
Tetrachloroethene	5.0	4.9
Trichloroethene	5.0	38

Compound	NY TOGS	DF-MW-9 09/23/2020
cis-1,2-Dichloroethene	5.0	1.2
trans-1,2-Dichloroethene	5.0	1.1
Trichloroethene	5.0	5.2

LEGEND:

- Existing Groundwater Monitoring Well
- New Groundwater Monitoring Well
- NYS Division of Water TOGS 1.1.1 Groundwater Standards and Guidance Values
  *Concentrations reported in µg/l

HRP
MOVE YOUR ENVIRONMENT FORWARD

NORTH

0 75' 150'

REVISIONS

NO.	DATE

DESIGNED BY: SRT
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REVIEWED BY: TSS

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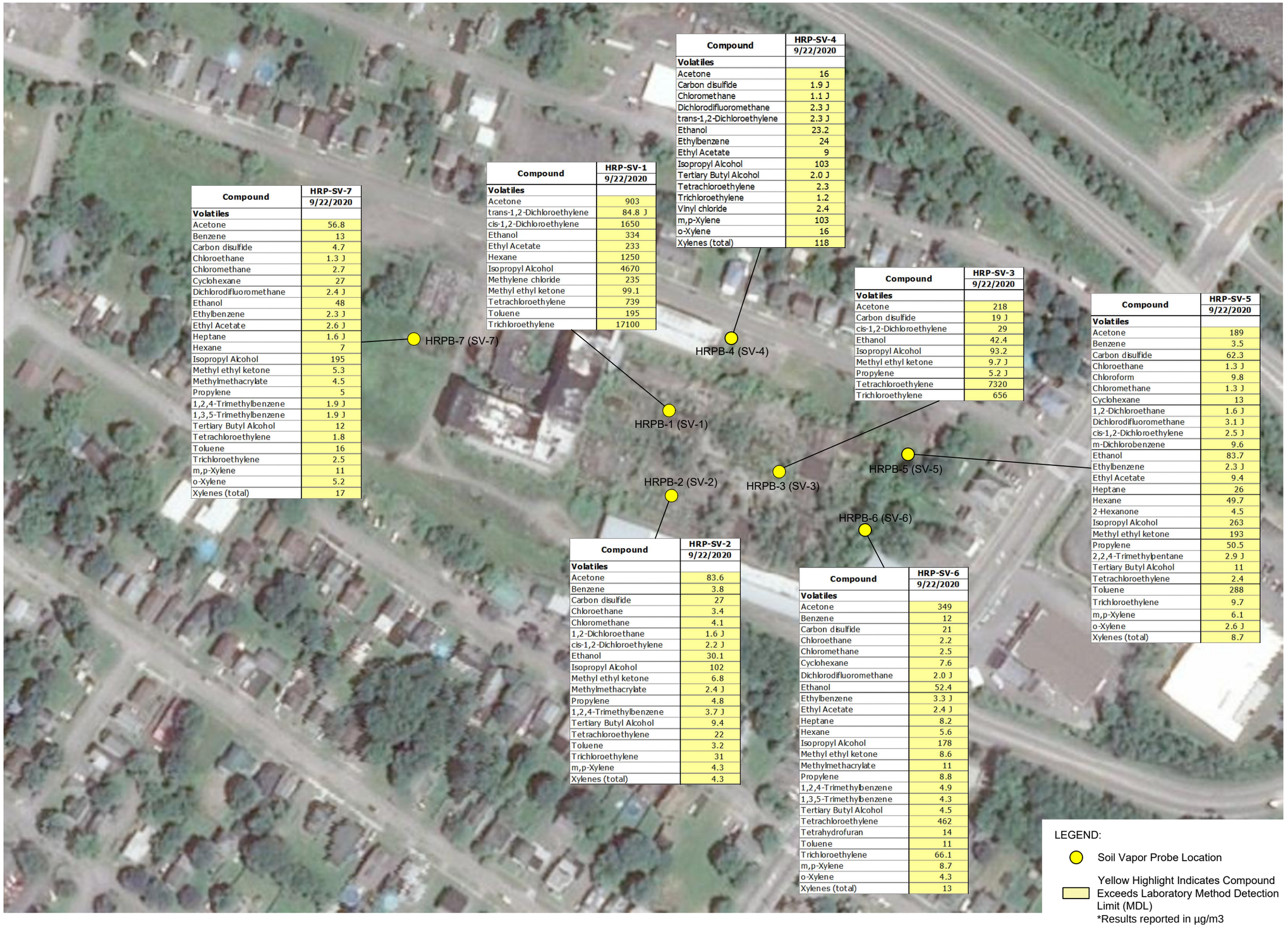
SHEET SIZE: 11"x17"

Groundwater Analytical Data Summary

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
8



Compound	HRP-SV-7 9/22/2020
Volatiles	
Acetone	56.8
Benzene	13
Carbon disulfide	4.7
Chloroethane	1.3 J
Chloromethane	2.7
Cyclohexane	27
Dichlorodifluoromethane	2.4 J
Ethanol	48
Ethylbenzene	2.3 J
Ethyl Acetate	2.6 J
Heptane	1.6 J
Hexane	7
Isopropyl Alcohol	195
Methyl ethyl ketone	5.3
Methylmethacrylate	4.5
Propylene	5
1,2,4-Trimethylbenzene	1.9 J
1,3,5-Trimethylbenzene	1.9 J
Tertiary Butyl Alcohol	12
Tetrachloroethylene	1.8
Toluene	16
Trichloroethylene	2.5
m,p-Xylene	11
o-Xylene	5.2
Xylenes (total)	17

Compound	HRP-SV-1 9/22/2020
Volatiles	
Acetone	903
trans-1,2-Dichloroethylene	84.8 J
cis-1,2-Dichloroethylene	1650
Ethanol	334
Ethyl Acetate	233
Hexane	1250
Isopropyl Alcohol	4670
Methylene chloride	235
Methyl ethyl ketone	99.1
Tetrachloroethylene	739
Toluene	195
Trichloroethylene	17100

Compound	HRP-SV-4 9/22/2020
Volatiles	
Acetone	16
Carbon disulfide	1.9 J
Chloromethane	1.1 J
Dichlorodifluoromethane	2.3 J
trans-1,2-Dichloroethylene	2.3 J
Ethanol	23.2
Ethylbenzene	24
Ethyl Acetate	9
Isopropyl Alcohol	103
Tertiary Butyl Alcohol	2.0 J
Tetrachloroethylene	2.3
Trichloroethylene	1.2
Vinyl chloride	2.4
m,p-Xylene	103
o-Xylene	16
Xylenes (total)	118

Compound	HRP-SV-3 9/22/2020
Volatiles	
Acetone	218
Carbon disulfide	19 J
cis-1,2-Dichloroethylene	29
Ethanol	42.4
Isopropyl Alcohol	93.2
Methyl ethyl ketone	9.7 J
Propylene	5.2 J
Tetrachloroethylene	7320
Trichloroethylene	656

Compound	HRP-SV-5 9/22/2020
Volatiles	
Acetone	189
Benzene	3.5
Carbon disulfide	62.3
Chloroethane	1.3 J
Chloroform	9.8
Chloromethane	1.3 J
Cyclohexane	13
1,2-Dichloroethane	1.6 J
Dichlorodifluoromethane	3.1 J
cis-1,2-Dichloroethylene	2.5 J
m-Dichlorobenzene	9.6
Ethanol	83.7
Ethylbenzene	2.3 J
Ethyl Acetate	9.4
Heptane	26
Hexane	49.7
2-Hexanone	4.5
Isopropyl Alcohol	263
Methyl ethyl ketone	193
Propylene	50.5
2,2,4-Trimethylpentane	2.9 J
Tertiary Butyl Alcohol	11
Tetrachloroethylene	2.4
Toluene	288
Trichloroethylene	9.7
m,p-Xylene	6.1
o-Xylene	2.6 J
Xylenes (total)	8.7

Compound	HRP-SV-2 9/22/2020
Volatiles	
Acetone	83.6
Benzene	3.8
Carbon disulfide	27
Chloroethane	3.4
Chloromethane	4.1
1,2-Dichloroethane	1.6 J
cis-1,2-Dichloroethylene	2.2 J
Ethanol	30.1
Isopropyl Alcohol	102
Methyl ethyl ketone	6.8
Methylmethacrylate	2.4 J
Propylene	4.8
1,2,4-Trimethylbenzene	3.7 J
Tertiary Butyl Alcohol	9.4
Tetrachloroethylene	22
Toluene	3.2
Trichloroethylene	31
m,p-Xylene	4.3
Xylenes (total)	4.3

Compound	HRP-SV-6 9/22/2020
Volatiles	
Acetone	349
Benzene	12
Carbon disulfide	21
Chloroethane	2.2
Chloromethane	2.5
Cyclohexane	7.6
Dichlorodifluoromethane	2.0 J
Ethanol	52.4
Ethylbenzene	3.3 J
Ethyl Acetate	2.4 J
Heptane	8.2
Hexane	5.6
Isopropyl Alcohol	178
Methyl ethyl ketone	8.6
Methylmethacrylate	11
Propylene	8.8
1,2,4-Trimethylbenzene	4.9
1,3,5-Trimethylbenzene	4.3
Tertiary Butyl Alcohol	4.5
Tetrachloroethylene	462
Tetrahydrofuran	14
Toluene	11
Trichloroethylene	66.1
m,p-Xylene	8.7
o-Xylene	4.3
Xylenes (total)	13

LEGEND:

- Soil Vapor Probe Location
- Yellow Highlight Indicates Compound Exceeds Laboratory Method Detection Limit (MDL)

*Results reported in µg/m3

HRP
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NORTH

0 75' 150'

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SHEET SIZE: 11"x17"

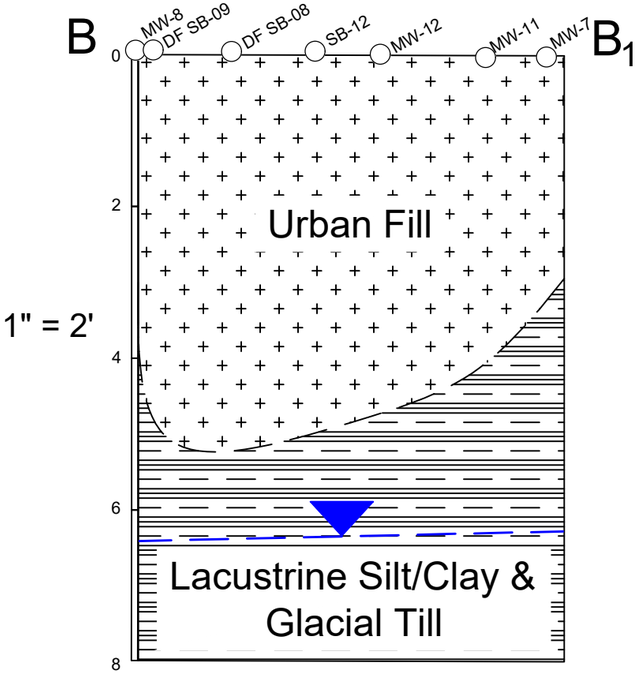
Soil Vapor Analytical Data Summary

Former Duofold Manufacturing Facility
Remedial Investigation

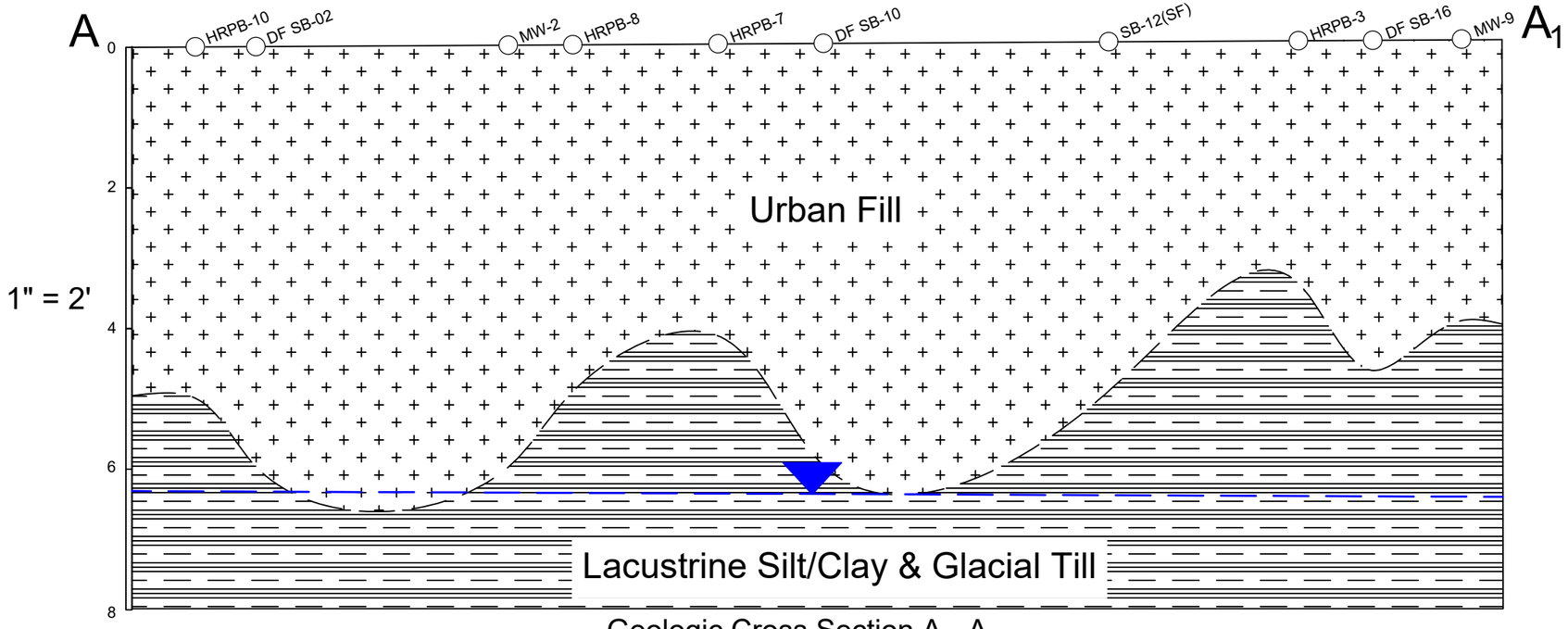
7 Spruce Street
Ilion, New york

Figure
9

Location of Geologic Cross Sections
1" = 300'



Geologic Cross Section B - B_1
1" = 150'



Geologic Cross Section A - A_1
1" = 150'

*Data Compiled from Nature's Way, CDM Smith, and HRP Investigations

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PROJECT NUMBER: HER1500.P2
SHEET SIZE: 11"x17"

Geologic Cross Sections

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
10

LEGEND:

- Surface Soil Sample Location
- No Highlight Indicates Compound is Below NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives
- Light Yellow Highlight Indicates Compound Exceeds NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (PPM)
- Yellow Highlight Indicates Compound Exceeds NYCRR Part 375 Residential Use Soil Cleanup Objectives
- Orange Highlight Indicates Compound Exceeds NYCRR Part 375 Restricted Residential Use Soil Cleanup Objectives
- Brown Highlight Indicates Compound Exceeds NYCRR Part 375 Industrial Use Soil Cleanup Objectives
- Red Highlight Indicates Compound Exceeds NYCRR Part 375 Industrial Use Soil Cleanup Objectives

HRP
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NORTH

0 75' 150'

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ISSUE DATE: 10/07/2020
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SHEET SIZE: 11"x17"

Nature and Extent of Surface Soil Impacts

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
11

HRP
MOVE YOUR ENVIRONMENT FORWARD

NORTH

0 75' 150'

REVISIONS

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REVIEWED BY: TSS

ISSUE DATE: 10/07/2020
PROJECT NUMBER: HER1500.P2
SHEET SIZE: 11"x17"

Nature and Extent of Subsurface Soil Impacts

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
12

HRP
MOVE YOUR ENVIRONMENT FORWARD

NORTH

0 75' 150'

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ISSUE DATE: 10/07/2020
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SHEET SIZE: 11"x17"

Nature and Extent of Groundwater Impacts

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
13

CDM SMITH PASSIVE SOIL VAPOR SURVEY (2017)

Pine St

Oak St

Spruce St

CVOCs & BTEX	HRP-SV-7 9/22/2020
Benzene	13
Ethylbenzene	2.3 J
Tetrachloroethylene	1.8
Toluene	16
Trichloroethylene	2.5
m,p-Xylene	11
o-Xylene	5.2
Xylenes (total)	17

SV-7

CVOCs & BTEX	HRP-SV-1 9/22/2020
trans-1,2-Dichloroethylene	84.8 J
cis-1,2-Dichloroethylene	1650
Tetrachloroethylene	739
Toluene	195
Trichloroethylene	17100

SV-1

CVOCs & BTEX	HRP-SV-4 9/22/2020
trans-1,2-Dichloroethylene	2.3 J
Ethylbenzene	24
Tetrachloroethylene	2.3
Trichloroethylene	1.2
Vinyl chloride	2.4
m,p-Xylene	103
o-Xylene	16
Xylenes (total)	118

SV-4

CVOCs & BTEX	HRP-SV-3 9/22/2020
Carbon disulfide	19 J
cis-1,2-Dichloroethylene	29
Tetrachloroethylene	7320
Trichloroethylene	656

SV-3

CVOCs & BTEX	HRP-SV-5 9/22/2020
Benzene	3.5
1,2-Dichloroethane	1.6 J
Dichlorodifluoromethane	3.1 J
cis-1,2-Dichloroethylene	2.5 J
m-Dichlorobenzene	9.6
Tetrachloroethylene	2.4
Toluene	288
Trichloroethylene	9.7
m,p-Xylene	6.1
o-Xylene	2.6 J
Xylenes (total)	8.7

SV-5

CVOCs & BTEX	HRP-SV-2 9/22/2020
Benzene	3.8
Chloroethane	3.4
Chloromethane	4.1
1,2-Dichloroethane	1.6 J
cis-1,2-Dichloroethylene	2.2 J
1,2,4-Trimethylbenzene	3.7 J
Tetrachloroethylene	22
Toluene	3.2
Trichloroethylene	31
m,p-Xylene	4.3
Xylenes (total)	4.3

SV-2

CVOCs & BTEX	HRP-SV-6 9/22/2020
Benzene	12
Ethylbenzene	3.3 J
1,2,4-Trimethylbenzene	4.9
1,3,5-Trimethylbenzene	4.3
Tetrachloroethylene	462
Toluene	11
Trichloroethylene	66.1
m,p-Xylene	8.7
o-Xylene	4.3
Xylenes (total)	13

SV-6

LEGEND:
- Soil Vapor Probe Location (HRP 2020)
- CDM Smith Invesigation Passive Soil Gas Sample Location (2017)

*Results Reported in µg/l

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0 75' 150'

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Nature and Extent of Soil Vapor Impacts

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
14

HRP
MOVE YOUR ENVIRONMENT FORWARD

NORTH

0 75' 150'

REVISIONS

NO.	DATE

DESIGNED BY: SRT
DRAWN BY: SRT
REVIEWED BY: TSS

ISSUE DATE: 11/10/2020
PROJECT NUMBER: HER1500.P2
SHEET SIZE: 11"x17"

Areas of Concern

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
15

TABLES

Table 1
Groundwater Elevation Summary
Former Duofold Facility
7 Spruce Street
Ilion, New York 13357
BF-92621019-0

Monitoring Well Designation		DF-MW-2	DF-MW-7	DF-MW-8	DF-MW-9	DF-MW-10	HRP-MW-1	HRP-MW-2	HRP-MW-3	TMW-1	TMW-2
Top of Casing Elevation		394.06	392.53	391.23	392.91	391.56	395.84	396.62	396.43	390.71	391.06
Top of Screen Elevation		388.06	388.53	387.23	386.91	386.56	390.84	391.62	391.43	385.71	386.06
Depth to Bottom Elevation		378.06	378.53	377.23	376.91	376.56	380.84	381.62	381.43	375.71	376.06
Measurement Date	**Gauging Data**	**GROUNDWATER ELEVATIONS**									
9/21/2020	Depth to Water (DTW)	8.86	7.30	6.65	8.55	7.44	11.21	11.68	11.98	6.28	7.03
	Depth to Bottom (DTB)	15.61	13.62	13.25	15.64	14.55	17.45	17.48	17.45	14.98	14.51
	Groundwater Elevation	385.20	385.23	384.58	384.36	384.12	384.63	384.94	384.45	384.43	384.03

Table 2
Soil Sample Analysis Summary
Former Duofold Facility
7 Spruce Street
Ilion, New York 13357
BF-92621019-0

Matrix	Sampling Location(s)	Depth (ft.)	Analytical Group
Surface Soil	HRP-SS-1A	0 - 0.2 ft.	6 NYCRR Part 375 Listed Metals by USEPA 3050B, and TCLP by USEPA SW846 Method 1311
	HRP-SS-1B	0.2 – 2 ft.	
	HRP-SS-2A	0 - 0.2 ft.	
	HRP-SS-2B	0.2 – 2 ft.	
	HRP-SS-3A	0 - 0.2 ft.	
	HRP-SS-3B	0.2 – 2 ft.	
	HRP-SS-4A	0 - 0.2 ft.	
	HRP-SS-4B	0.2 – 2 ft.	
	HRP-SS-5A	0 - 0.2 ft.	
	HRP-SS-5B	0.2 – 2 ft.	
	HRP-SS-6A	0 - 0.2 ft.	
	HRP-SS-6B	0.2 – 2 ft.	
	HRP-SS-7A	0 - 0.2 ft.	
	HRP-SS-7B	0.2 – 2 ft.	
	HRP-SS-8A	0 - 0.2 ft.	
	HRP-SS-8B	0.2 – 2 ft.	
	HRP-SS-9A	0 - 0.2 ft.	
	HRP-SS-9B	0.2 – 2 ft.	
	HRP-SS-10A	0 - 0.2 ft.	
	HRP-SS-10B	0.2 – 2 ft.	
	DUP	-	
	MS	-	
	MSD	-	
	Field Equipment Blank (EB)	-	
Subsurface Soil	HRPB-1	16 ft.	6 NYCRR Part 375 Listed Metals and Volatile Organic Compounds (VOCs) by USEPA Method 8260.
	HRPB-2	16 ft.	
	HRPB-3	16 ft.	
	HRPB-4	6.5 ft.	6 NYCRR Part 375 Listed Metals
	HRPB-5	6.5 ft.	
	HRPB-6	6.5 ft.	
	HRPB-7	16 ft.	6 NYCRR Part 375 Listed Metals & VOCs
	HRPB-8	16 ft.	
	HRPB-9	16 ft.	
	HRPB-10	6.5 ft.	
	DUP	-	
	MS	-	
	MSD	-	
	Field Blank (FB)	-	
	Trip Blank (TB)	-	

Table 3
Groundwater Analysis Summary
Former Duofold Facility
7 Spruce Street
Ilion, New York 13357
BF-92621019-0

Matrix	Sampling Location(s)	Depth (ft.)	Analytical Group
Groundwater	DF-MW-2	16 ft.	6 NYCRR Part 375 Listed Volatile Organic Compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260.
	DF-MW-7	14 ft.	
	DF-MW-8	14 ft.	
	DF-MW-9	16 ft.	
	DF-MW-10	16 ft.	
	HRP-MW-1	16 ft.	
	HRP-MW-2	16 ft.	
	HRP-MW-3	16 ft.	
	TMW-1	16 ft.	
	TMW-2	16 ft.	
	DUP	-	
	Field Blank (FB)	-	
	Trip Blank (TB)	-	
	Equipment Blank (EB)	-	
	MS	-	
	MSD	-	

Table 4
Soil Vapor Analysis Summary
Former Duofold Facility
7 Spruce Street
Ilion, New York 13357
BF-92621019-0

Matrix	Sampling Location(s)	Depth (ft.)	Analytical Group
Air	SV-1	6.5 ft.	Volatile Organic Compouinds (VOCs) by USEPA Method TO-15
	SV-2	6.5 ft.	
	SV-3	6.5 ft.	
	SV-4	6.5 ft.	
	SV-5	6.5 ft.	
	SV-6	6.5 ft.	
	SV-7	6.5 ft.	

Table 5
Data Usability Report Summary
Former Duofold Facility
7 Spruce Street
Ilion, New York 13357
BF-92621019-0

Media	Qualifier	Summary
Groundwater	"R"	The "not detected" volatile results for 2-butanone were qualified as rejected, unusable (R) in samples DF-MW-8 and TMW-1
Groundwater	"R"	The "not detected" volatile results for dichlorodifluoromethane and chloromethane were qualified as rejected, unusable (R) in samples HRP-MW-2, TMW-2, and DUP
Groundwater	"R"	The "not detected" volatile result for 2-chlorethylvinylether was qualified as rejected, unusable (R) in sample DF-MW-10
Groundwater	"R"	The "not detected" volatile result for vinyl chloride was qualified as rejected, unusable (R) in sample HRP-MW-2

*The DUSRs indicate which data are subject to limitations and identify certain data that are flagged as rejected and should not be used.

*All data that are not qualified rejected, unusable (R) are considered usable, with estimated (J, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the DUSR, and included as Appendix G.

Table 6
Summary of Surface Soil Analytical Results
Former Duofold Facility
7 Spruce Street
Ilion, New York 13357
BF-92621019-0

Compound	Part 375 Unrestricted Use SCOs	Part 375 Residential Use SCOs	Part 375 Restricted-Residential Use SCOs	Part 375 Commercial Use SCOs	Part 375 Industrial Use SCOs	SS-1A	SS-1B	SS-2A	SS-2B	SS-3A	SS-3B	SS-4A	SS-4B	SS-5A	SS-5B	SS-6A	SS-6B	SS-7A	SS-7B	SS-8A	SS-8B	SS-9	SS-10A	SS-10B
						09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/09/2020	09/09/2020	09/10/2020	09/10/2020	09/09/2020	09/09/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/09/2020	09/09/2020	09/09/2020
Metals																								
Arsenic	13	16	16	16	16	12	27	11	8.7	6.6	12	6	7.5	2.4	9.2	16	18	6.3	9.5	10	13	9.9	5.7	6.4
Barium	350	350	400	400	10,000	100	350	140	230	58	74	39	33	180	320	140	450	72	58	64	88	71	81	80
Beryllium	7.2	14	72	590	2,700	0.3	0.37	0.41	0.37	0.34	0.36	0.3	0.37	0.21 U	0.34	0.47	0.45	0.26	0.39	0.31	0.36	0.38	0.39	0.34
Copper	50	270	270	270	10,000	83	200	140	88	45	79	30	54	17	84	300	420	41	57	35	41	41	20	22
Chromium	30	36	180	1,500	6,800	9.8	13	13	12	13	11	13	13	8.2	60	6.2 U	14	7.4	10	15	9.3	12	ND U	9.5
Cyanide	1	22	110	400	800	0.54	0.28 U	0.51	0.28 U	0.42	0.28 U	0.27 U	0.26 U	0.26 U	0.27 U	1.8	0.29 U	0.44	0.36	0.29 U	0.28 U	0.31 U	0.37 U	0.35 U
Cr VI	27	27	27	27	10,000	0.86 U	0.92 U	1 U	0.93 U	0.99 U	0.92 U	0.89 U	0.88 U	0.85 U	2.2	0.99 U	0.98 U	0.99 U	0.96 U	0.98 U	0.94 U	1 U	1.2 U	1.2 U
Lead	63	400	400	1,000	3,900	250	730	180	170	69	140	77	120	91	380	350	340	35	41	60	100	1000	39	28
Manganese	1,600	2,000	2,000	10,000	10,000	250	130	300	380	430	460	240	250	210	340	91	120	47	660	390	310	470	120	160
Mercury	0.18	0.81	0.81	2.8	5.7	0.26	0.17	0.14	0.11	0.1 U	0.096 U	0.093 U	0.12	0.089 U	0.15	0.13	0.3	0.1 U	0.1 U	0.1 U	0.14	0.12	0.13 U	0.12 U
Nickel	30	140	310	310	10,000	19	18	33	18	31	26	28	53	9.6	35	99	110	19	22	18	19	17	17	20
Selenium	3.9	36	180	1,500	6,800	2.2 U	2.3 U	2.5 U	2.3 U	2.5 U	2.3 U	2.2 U	2.2 U	2.1 U	2.3 U	2.5 U	2.4 U	2.5 U	2.4 U	2.4 U	2.4 U	2.6 U	3.1 U	2.9 U
Silver	2	36	180	1,500	6,800	0.22 U	0.23 U	0.28	0.23 U	0.56	0.23 U	0.22 U	0.22 U	0.31	2.1	0.25 U	0.24 U	0.25 U	0.24 U	0.24 U	0.24 U	0.26 U	0.31 U	0.29 U
Zinc	109	2,200	10,000	10,000	10,000	110	48	130	100	95	99	75	73	170	400	130	110	25	83	87	62	140	79	63

Notes:
Values Highlighted in Light Yellow Indicate Exceedance of referenced New York State (NYS) Part-375 Soil Cleanup Objectives (SCOs).
U - Denotes Value Was Detected Below The Method Detection Limit (MDL)
3+4-Methylphenol- The lowest Criteria of the Individual Isomers is listed.
Total criteria is listed for the individual isomers (ex. Xylenes(m+p and O), 1,3-Dichloropropene(cis and trans), Chlordane(alpha and gamma), Demeton(S and O), 1,2-Dichloroethene(Cis and Trans).
Laboratory Analytical Results and SCOs are reported in milligrams per kilogram (mg/kg), or parts per million (ppm).

Table 7
Summary of Subsurface Soil Analytical Results
Former Duofold Facility
7 Spruce Street
Ilion, New York 13357
BF-92621019-0

Compound	Part 375 Unrestricted Use SCOs	Part 375 Residential SCOs	Part 375 Restricted-Residential	Part 375 Commercial SCOs	Part 375 Industrial Use SCOs	HRPB-1	HRPB-2	HRPB-3	HRPB-4	HRPB-5	HRPB-6	HRPB-7	HRPB-8	HRPB-9	HRPB-10
						9/10/2020	08/27/2020	08/27/2020	08/26/2020	09/09/2020	09/09/2020	08/26/2020	08/26/2020	08/26/2020	08/26/2020
Metals															
Mercury	0.18	0.81	0.81	2.8	5.7	0.13 U	0.12 U	0.17	0.11 U	0.14	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U
Barium	350	350	400	400	10,000	64	48	97	79	84	67	56	45	53	110
Cr III	30	36	180	1,500	6,800	13	11	10	15	18	12	14	14	17	21
Copper	50	270	270	270	10,000	25	40	29	43	43	21	23	24	30	25
Lead	63	400	400	1,000	3,900	14	46	440	83	25	6.7	110	16	8.8	21
Manganese	1,600	2,000	2,000	10,000	10,000	250	490	790	400	520	390	440	320	750	840
Nickel	30	140	310	310	10,000	25	20	17	34	36	25	22	25	23	33
Zinc	109	2,200	10,000	10,000	10,000	74	83	73	100	100	58	80	82	100	150
Arsenic	13	16	16	16	16	10	8.8	8.5	7.3	11	8.2	11	11	12	13
Beryllium	7.2	14	72	590	2,700	0.35	0.37	0.25 U	0.38	0.66	0.39	0.33	0.44	0.3	0.88
Selenium	3.9	36	180	1,500	6,800	3 U	2.8 U	2.5 U	2.6 U	3.1 U	2.6 U	2.5 U	2.7 U	2.5 U	2.6 U
Silver	2	36	180	1,500	6,800	0.3 U	0.28 U	0.25 U	0.26 U	0.31 U	0.26 U	0.25 U	0.27 U	0.25 U	0.26 U
Cyanide	27	27	27	27	10,000	0.36 U	0.33 U	0.3 U	0.36	1.20 U	1.00 U	0.3 U	0.32 U	0.3 U	0.32 U
Cr VI	1	22	110	400	800	1.20 U	1.1 U	0.99 U	1 U	0.37 U	0.31 U	1 U	1.1 U	1 U	1.1 U
Volatiles															
1,1,1-Trichloroethane	0.68	100	100	500	1,000	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
1,1,2,2-Tetrachloroethane	NA	35	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	100	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
1,1,2-Trichloroethane	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
1,1-Dichloroethane	0.27	19	26	240	480	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
1,1-Dichloroethene	0.33	100	100	500	1,000	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
1,2,3-Trichloropropane	NA	80	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
1,2,4-Trimethylbenzene	3.6	47	52	190	380	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
1,2-Dichlorobenzene	1.1	100	100	500	1,000	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
1,2-Dichloroethane	0.02	2.3	3.1	30	60	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
1,2-Dichloropropane	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
1,3,5-Trimethylbenzene	8.4	47	52	190	380	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
1,3-Dichlorobenzene	2.4	17	49	280	560	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
1,3-Dichloropropane	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
1,4-Dichlorobenzene	1.8	9.8	13	130	250	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
1,4-Dioxane	0.1	9.8	13	130	250	0.1300 U	0.1300 U	0.1000 U	-	-	-	0.0840 U	0.1000 U	0.0910 U	0.1100 U
2-Butanone	0.12	100	100	500	1,000	0.0026 U	0.0088	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0500
2-Chloroethylvinylether	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
2-Hexanone	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
4-Isopropyltoluene	10	NA	NA	NA	NA	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
4-Methyl-2-pentanone	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Acetone	0.05	100	100	500	1,000	0.0400	0.0540	0.0100 U	-	-	-	0.0084 U	0.0100 U	0.0091 U	0.1900
Acrolein	NA	NA	NA	NA	NA	0.0130 U	0.0130 U	0.0100 U	-	-	-	0.0084 U	0.0100 U	0.0091 U	0.0110 U
Acrylonitrile	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Benzene	0.06	2.9	4.8	44	89	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
Bromodichloromethane	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Bromoform	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Bromomethane	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Carbon disulfide	NA	100	NA	NA	NA	0.0044 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Carbon tetrachloride	0.76	1.4	2.4	22	44	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Chlorobenzene	1.1	100	100	500	1,000	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Chloroethane	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Chloroform	0.37	10	49	350	700	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0026	0.0022 U
Chloromethane	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
cis-1,2-Dichloroethene	0.25	59	100	500	1,000	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0075	0.0018 U	0.0022 U
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Dibromochloromethane	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Dichlorodifluoromethane	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Ethylbenzene	1	30	41	390	780	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
Isopropylbenzene	2.3	100	NA	NA	NA	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
m&p-Xylenes	0.26	100	100	500	1,000	0.0015 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
Methylene chloride	0.05	51	100	500	1,000	0.0029	0.0041	0.0052	-	-	-	0.0019	0.0021 U	0.0025	0.0051
Methyl-t-butyl ether	0.93	62	100	500	1,000	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
n-Butylbenzene	12	100	100	500	1,000	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
n-Propylbenzene	3.9	100	100	500	1,000	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
o-Xylene	0.26	100	100	500	1,000	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
sec-Butylbenzene	11	100	100	500	1,000	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
Styrene	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
t-Butyl Alcohol	NA	NA	NA	NA	NA	0.0130 U	0.0130 U	0.0100 U	-	-	-	0.0084 U	0.0100 U	0.0091 U	0.0110 U
t-Butylbenzene	5.9	100	100	500	1,000	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
Tetrachloroethene	1.3	5.5	19	150	300	0.0026 U	0.0025 U	0.0110	-	-	-	0.0036	0.0021 U	0.0018 U	0.0022 U
Toluene	0.7	100	100	500	1,000	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U
trans-1,2-Dichloroethene	0.19	100	100	500	1,000	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Trichloroethene	0.47	10	21	200	400	0.0026 U	0.0025 U	0.0220	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Trichlorofluoromethane	NA	NA	NA	NA	NA	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Vinyl chloride	0.02	0.21	0.9	13	27	0.0026 U	0.0025 U	0.0021 U	-	-	-	0.0017 U	0.0021 U	0.0018 U	0.0022 U
Xylenes (Total)	0.26	100	100	500	1,000	0.0013 U	0.0013 U	0.0010 U	-	-	-	0.0008 U	0.0010 U	0.0009 U	0.0011 U

Notes:
Values Highlighted in Light Yellow Indicate Exceedance of referenced New York State (NYS) Part-375 Soil Cleanup Objectives (SCOs).
U - Denotes Value Was Detected Below The Method Detection Limit (MDL)
NA - Not Applicable or No Criteria Listed in Regulatory Listing for Compound.
3+4-Methylphenol- The lowest Criteria of the Individual Isomers is listed.
Total criteria is listed for the individual isomers (ex. Xylenes(m+p and O), 1,3-Dichlropropene(cis and trans), Chlordane(alpha and gamma), Demeton(S and O), 1,2-Dichloroethene(Cis and Trans).
Laboratory Analytical Results and SCOs are reported in milligrams per kilogram (mg/kg), or parts per million (ppm).

Table 8
Groundwater Analytical Summary
Former Duofold Facility
7 Spruce Street
Ilion, New York 13357
BF-92621019-0

Compound	NY TOGS 1.1.1	DF-MW-10 09/22/2020	DF-MW-2 09/22/2020	DF-MW-7 09/22/2020	DF-MW-8 09/22/2020	DF-MW-9 09/23/2020	HRP-MW-1 09/22/2020	HRP-MW-2 09/22/2020	HRP-MW-3 09/23/2020	TMW-1 09/21/2020	TMW-2 09/21/2020
Volatiles											
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	14	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	0.04	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	5	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	0.6 U	0.6 U	0.6 U	3.2 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	5	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	5	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	NA	50 U	50 U	50 U	250 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Butanone	NA	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloroethylvinylether	NA	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	NA	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Isopropyltoluene	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone	NA	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	NA	5.0 U	5.0 U	5.0 U	25.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acrolein	5.0	5.0 U	5.0 U	5.0 U	25.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acrylonitrile	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	1.0	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.8	0.5 U	0.5 U	1.0	0.5 U
Bromodichloromethane	NA	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	NA	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	NA	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7.0	2.0 U	2.0 U	2.0 U	9.8 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U
Chloromethane	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5.0	22	4.1	1.0 U	370	1.2	300	1.0 U	3.8	130	35
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	NA	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylenes	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-t-butyl ether	NA	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Butylbenzene	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Propylbenzene	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
t-Butyl Alcohol	NA	5.0 U	5.0 U	5.0 U	25.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
t-Butylbenzene	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5.0	2.0	5.7	5.2	5.0 U	1.0 U	1.9	1.0 U	4.9	1.0 U	1.9
Toluene	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5.0	3.9	2.0	1.0 U	11	1.1	11	1.0 U	1.0 U	13	2.7
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5.0	14	6.3	1.2	5.0 U	5.2	210	11	38	7.9	9.2
Trichlorofluoromethane	5.0	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2.0	1.7	1.0 U	1.0 U	15	1.0 U	13	1.0 U	1.0 U	38	1.7
Total VOCs	-	30	18	6.4	400	7.5	550	11	47	190	51

Notes:
Values Highlighted in Yellow Indicate Exceedance of the Technical Guidance and Operations Series (TOGS 1.1.1) Water Quality Standards and Guidance Values.
U - Denotes Value Was Detected Below The Method Detection Limit (MDL)
NA - Not Applicable or No Criteria Listed in Regulatory Listing for Compound.
Laboratory Analytical Results and SCOs are reported in micrograms per liter (µg/l), or parts per billion (ppb).

Table 9
Soil Vapor Analytical Data Summary
Former Duofold Facility
7 Spruce Street
Ilion, New York 13357
BF-92621019-0

Compound	HRP-SV-1	HRP-SV-2	HRP-SV-3	HRP-SV-4	HRP-SV-5	HRP-SV-6	HRP-SV-7
	9/22/2020	9/22/2020	9/22/2020	9/22/2020	9/22/2020	9/22/2020	9/22/2020
Volatiles							
Acetone	903	83.6	218	16	189	349	56.8
1,3-Butadiene	13 U	0.4 U	3.5 U	0.4 U	0.4 U	0.4	0.4 U
Benzene	4.8 U	3.8	1.3 U	0.15 U	3.5	12	13
Bromodichloromethane	23 U	0.74 U	6.1 U	0.74 U	0.74 U	0.74 U	0.74 U
Bromoform	51 U	1.6 U	13 U	1.6 U	1.6 U	1.6 U	1.6 U
Bromomethane	11 U	0.34 U	2.9 U	0.34 U	0.34 U	0.34 U	0.34 U
Bromoethene	13 U	0.38 U	3.3 U	0.38 U	0.38 U	0.38 U	0.38 U
Benzyl Chloride	38 U	1.2 U	9.8 U	1.2 U	1.2 U	1.2 U	1.2 U
Carbon disulfide	9.7 U	27	19 J	1.9 J	62.3	21	4.7
Chlorobenzene	16 U	0.46 U	4.1 U	0.46	0.46	0.46	0.46 U
Chloroethane	17 U	3.4	4.2 U	0.5	1.3 J	2.2	1.3 J
Chloroform	13 U	0.39 U	3.3 U	0.39	9.8	0.39	0.39 U
Chloromethane	4.1 U	4.1	1.1 U	1.1 J	1.3 J	2.5	2.7
3-Chloropropene	16 U	0.5 U	4.1 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chlorotoluene	17 U	0.52 U	4.4 U	0.52 U	0.52 U	0.52 U	0.52 U
Carbon tetrachloride	20 U	0.59 U	5 U	0.59 U	0.59 U	0.59 U	0.59 U
Cyclohexane	10 U	0.3 U	2.6 U	0.3 U	13	7.6	27
1,1-Dichloroethane	6.1 U	0.19 U	1.6 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethylene	8.7 U	0.27 U	2.3 U	0.27 U	0.27 U	0.27 U	0.27 U
1,2-Dibromoethane	18 U	0.55 U	4.7 U	0.55 U	0.55 U	0.55 U	0.55 U
1,2-Dichloroethane	11 U	1.6 J	2.9 U	0.34 U	1.6 J	0.34 U	0.34 U
1,2-Dichloropropane	12 U	0.36 U	3 U	0.36 U	0.36 U	0.36 U	0.36 U
1,4-Dioxane	24 U	0.76 U	6.5 U	0.76 U	0.76 U	0.76 U	0.76 U
Dichlorodifluoromethane	10 U	0.33 U	2.8 U	2.3 J	3.1 J	2.0 J	2.4 J
Dibromochloromethane	37 U	1.1 U	9.4 U	1.1 U	1.1 U	1.1 U	1.1 U
trans-1,2-Dichloroethylene	84.8 J	0.11 U	0.99 U	2.3 J	0.11 U	0.11 U	0.11 U
cis-1,2-Dichloroethylene	1650	2.2 J	29	0.19 U	2.5 J	0.19 U	0.19 U
cis-1,3-Dichloropropene	11 U	0.35 U	3 U	0.35 U	0.35 U	0.34 U	0.35 U
m-Dichlorobenzene	15 U	0.46 U	3.8 U	0.46 U	9.6	0.46 U	0.46 U
o-Dichlorobenzene	17 U	0.52 U	4.4 U	0.52 U	0.52 U	0.52 U	0.52 U
p-Dichlorobenzene	14 U	0.42 U	3.6 U	0.42 U	0.42 U	0.42 U	0.42 U
trans-1,3-Dichloropropene	11 U	0.35 U	3 U	0.35 U	0.35 U	0.35 U	0.35 U
Ethanol	334	30.1	42.4	23.2	83.7	52.4	48
Ethylbenzene	8.7 U	0.26 U	2.2 U	24	2.3 J	3.3 J	2.3 J
Ethyl Acetate	233	0.54 U	4.7 U	9	9.4	2.4 J	2.6 J
4-Ethyltoluene	19 U	0.59 U	4.9 U	0.59 U	0.59 U	0.59 U	0.59 U
Freon 113	17 U	0.52 U	4.4 U	0.52 U	0.52 U	0.52 U	0.52 U
Freon 114	17 U	0.53 U	4.5 U	0.53 U	0.53 U	0.53 U	0.53 U
Heptane	9.4 U	0.29 U	2.5 U	0.29 U	26	8.2	1.6 J
Hexachlorobutadiene	63 U	1.9 U	17 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexane	1250	0.15 U	1.3 U	0.15 U	49.7	5.6	7
2-Hexanone	19 U	0.61 U	4.9 U	0.61 U	4.5	0.61 U	0.61 U
Isopropyl Alcohol	4670	102	93.2	103	263	178	195
Methylene chloride	235	0.2 U	1.7 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl ethyl ketone	99.1	6.8	9.7 J	0.5 U	193	8.6	5.3
Methyl Isobutyl Ketone	19 U	0.57 U	4.9 U	0.57 U	0.57 U	0.57 U	0.57 U
Methyl Tert Butyl Ether	9 U	0.28 U	2.3 U	0.28 U	0.28 U	0.28 U	0.28 U
Methylmethacrylate	17 U	2.4 J	4.5 U	0.53 U	0.53 U	11	4.5
Propylene	3.6 U	4.8	5.2 J	0.11 U	50.5	8.8	5
Styrene	11 U	0.32 U	2.7 U	0.32 U	0.32 U	0.32 U	0.32 U
1,1,1-Trichloroethane	23 U	0.71 U	6 U	0.71 U	0.71 U	0.71 U	0.71 U
1,1,2,2-Tetrachloroethane	24 U	0.76 U	3.6 U	0.76 U	0.76 U	0.76 U	0.76 U
1,1,2-Trichloroethane	22 U	0.65 U	5.5 U	0.65 U	0.65 U	0.65 U	0.65 U
1,2,4-Trichlorobenzene	89 U	2.6 U	22 U	2.6 U	2.6 U	2.6 U	2.6 U
1,2,4-Trimethylbenzene	21 U	3.7 J	5.4 U	0.64 U	0.64 U	4.9	1.9 J
1,3,5-Trimethylbenzene	22 U	0.64 U	5.4 U	0.64 U	0.64 U	4.3	1.9 J
2,2,4-Trimethylpentane	13 U	0.41 U	3.5 U	0.41 U	2.9 J	0.41 U	0.41 U
Tertiary Butyl Alcohol	5.5 U	9.4	1.4 U	2.0 J	11	4.5	12
Tetrachloroethylene	739	22	7320	2.3	2.4	462	1.8
Tetrahydrofuran	19 U	0.59 U	5 U	0.59 U	0.59 U	14	0.59 U
Toluene	195	3.2	1.8 U	0.22 U	288	11	16
Trichloroethylene	17100	31	656	1.2	9.7	66.1	2.5
Trichlorofluoromethane	21 U	0.62 U	5.4 U	0.62 U	0.62 U	0.62 U	0.62 U
Vinyl chloride	7.4 U	0.23 U	1.9 U	2.4	0.23 U	0.23 U	0.23 U
Vinyl Acetate	15 U	0.49 U	4.2 U	0.49 U	0.49 U	0.49 U	0.49 U
m,p-Xylene	19 U	4.3	5.2 U	103	6.1	8.7	11
o-Xylene	9.6 U	0.3 U	2.5 U	16	2.6 J	4.3	5.2
Xylenes (total)	9.6 U	4.3	2.5 U	118	8.7	13	17

Notes:

Values Highlighted in Yellow Indicate Exceedance Above Laboratory Method Detection Limit (MDL).

U - Denotes Value Was Detected Below The Method Detection Limit (MDL)

NA - Not Applicable or No Criteria Listed in Regulatory Listing for Compound.

Laboratory Analytical Results and SCOs are reported in micrograms per liter (µg/kg), or parts per billion (ppb).

Table 10
Toxicity Characteristic Leaching Procedure (TCLP) Results Summary
Former Duofold Facility
7 Spruce Street
Ilion, New York 13357
BF-92621019-0

Compound	40 CFR § 261.24	SS-1A	SS-1B	SS-2A	SS-2B	SS-3A	SS-3B	SS-4A	SS-4B	SS-5A	SS-5B	SS-6A	SS-6B	SS-7A	SS-7B	SS-8A	SS-8B	SS-9	SS-10A	SS-10B
		09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/09/2020	09/09/2020	09/10/2020	09/10/2020	09/09/2020	09/09/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/09/2020	09/09/2020	09/09/2020
Metals																				
Mercury	0.2	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Arsenic	5.0	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Barium	100.0	0.71	3.0	0.93	0.99	0.56	0.74	0.45	0.33	2.0	1.9	1.1	1.1	0.61	0.56	0.7	0.88	0.71	0.61	0.56
Cadmium	1.0	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.082	0.055	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Chromium	5.0	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Lead	5.0	0.05 U	0.29	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.52	0.3	0.05 U	0.05 U	0.05 U	0.05 U	0.24	0.05 U	0.05 U
Selenium	1.0	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U	0.4 U	0.1 U	0.2 U	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U	0.4 U	0.1 U	0.4 U
Silver	5.0	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Notes:
U - Denotes Value Was Detected Below The Method Detection Limit (MDL)
Laboratory Analytical Results and SCOs are reported in milligrams per kilogram (mg/kg), or parts per million (ppm).

Table 11
Potential Exposure Pathways
Former Duofold Facility
7 Spruce Street
Ilion, New York 13357
BF-92621019-0

Potential Receptor	Exposure Route, Contaminated Media, and Point of Exposure	Pathway Selected for Evaluation (Yes/No)	Reason for Selection or Exclusion
Offsite Residential/Offsite Workers	Ingestion or dermal contact with offsite soil	No	Adjacent properties are almost entirely paved or occupied by buildings. The existing conditions are not expected to change for the anticipated future site use. Analytical data indicate that offsite soil is not likely impacted with Site-related contaminants.
Offsite Residential/Offsite Workers	Ingestion or contact with off-site groundwater	No	Analytical data indicate that Site-related contaminants have not severely impacted offsite groundwater. Groundwater is not used for drinking water or other purposes and the area is served by public water supply. The depth to grounwater generally is 6 to 10 feet. Workers and the public are not exposed to groundwater. The existing conditions are not expected to change for the anticipated future site use.
Offsite Residential/Offsite Workers	Inhalation of impacted vapors	No	Analytical data indicate that soil vapor with Site-related contaminants are present within the footprint of the former building. Exposure to the general public to impacted soil vapor or air is considered negligible. The anticipated future use of this site includes construction of a mixed retail/residential use building that will include a vapor barrier and possibly a sub-slab venting system that will preclude exposure to residual VOCs in the soil vapor.
Onsite Workers	Ingestion or dermal contact with onsite soils	No	Onsite site soil is impacted above unrestricted use soil cleanup objectives. There is a potential for worker exposure to impacted soil during construction and remediation; however, exposure will be eliminated by the required use of personal protective equpment, if necessary, based on monitoring. Onsite workers will not be able to contact potentially impacted soil once a building is constructed as part of the anticipated future use
Onsite Workers	Ingestion or contact with onsite groundwater	No	Analytical data indicate that Site-related contaminants have not severely impacted offsite groundwater. Groundwater is not used for drinking water or other purposes and the area is served by public water supply. The depth to grounwater generally is 6 to 10 feet. Workers and the public are not exposed to groundwater. The existing conditions are not expected to change for the anticipated future site use.
Onsite Workers	Inhalation of impacted vapors or dust	No	Analytical data indicate that on-Site soil vapor contains Site-related contaminants; The removal/demolition of the building precludes accumulation of vapor. Dust generation is possible during construction. Onsite workers will be required to use appropriate personal protective equipment to prevent exposure, if necessary, based on monitoring. The anticipated future use of this site includes construction of a mixed retail/residential use building that will include a vapor barrier and possibly a sub-slab venting system that will preclude exposure to residual VOCs in the soil vapor
Trespassers/Visitors	Ingestion or dermal contact with onsite soil	No	Analytical data indicate that surficial soil (0"-6") contains certain metals and pesticides, but is not impacted by Site-related VOCs. There is a slight chance of exposre to ceratin metals and pesticides to trespassers who illegally breach the security fence. No contact with potentially impacted soil will be possible once a building is constructed as part of the anticipated future use
Trespassers/Visitors	Ingestion or contact with onsite groundwater	No	Analytical data indicate that Site-related contaminants have impacted groundwater; however, groundwater is not used for drinking water or other purposes and the area is served by public water supply. The depth to groundwater generally is 6 to 8 feet. Tresspassers/visitors are not exposed to groundwater. No contact with potentially impacted groundwater will be possible once a building is constructed as part of the anticipated future use.
Trespassers/Visitors	Inhalation of impacted vapors or dust	No	Analytical data indicate that on-Site soil vapor contains Site-related contaminants. The removal/demolition of the building precludes a vapor accumulation and the potential for exposure to the general public to impacted soil vapor or air is considered negligible. Dust will be controlled or eliminated during construction. The anticipated future use of this site includes construction of a mixed retail/residential use building that will include a vapor barrier and possibly a sub-slab venting system that will preclude exposure to residual VOCs in the soil vapor.

APPENDIX A
Approved Work Plan & Approval Letter

MOVE YOUR ENVIRONMENT FORWARD

REMEDIAL INVESTIGATION SAMPLING AND ANALYSIS PLAN

Vacant Industrial Property
Former Duofold Facility
7 Spruce Street
Ilion, New York 13357

Prepared For:

The Herkimer County Industrial Development Agency
Attn: John Piseck
420 E. German Street, Suite 101A
Herkimer, New York 13350

Prepared By:

HRP Associates, Inc.
Fairchild Square, Suite 110
Clifton Park, NY 12065

HRP #: HER1500.P2
Brownfields Assessment Cooperative Agreement: BF-96261019-0

Issued On: February 19, 2020

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General Information

Project/Site Information:

Vacant Industrial Property
Former Duofold Facility
7 Spruce Street
Ilion, New York 13357

Consultant Information:

HRP Associates, Inc. dba HRP Engineering, PC
1 Fairchild Square, Suite 110
Clifton Park, NY 12065
Phone: 518-877-7101
Fax: 518-877-8561
E-mail: tom.seguljic@hrpassociates.com
Project Number: HRP1500.P2
Brownfields Assessment Cooperative Agreement: BF-96261019-0

Client Information:

The Herkimer County Industrial Development Agency
Attn: John Piseck
420 E. German Street, Suite 101A
Herkimer, New York 13350

Report Date: 2/19/2020

Report Author:
Stefan R. Truex
Senior Project Geologist

Client Manager:
Thomas S. Seguljic
Vice President

EP Certification:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR Part 312.

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Thomas S. Seguljic – Vice President

1.0 INTRODUCTION

This remedial investigations sampling and analysis plan (RISAP) was developed to investigate the below-referenced Site in accordance with the requirements set forth in the EPA Brownfield Assessment Grant (Brownfields Assessment Cooperative Agreement: BF-96261019-0).

1.1 Site Name & Address

The subject site, known as the former Duofold Manufacuring Facility (DUOFOLD), is located at 7 Spruce Street, Ilion New York., and is referred to as "the Site" herein. A Topographic Map depicting the Site and surrounding areas is provided as **Figure 1** – Site Location Map. The Site is estimated to have been constructed in 1907, and has changed names at least five (5) times since the initial construction. A summary of the Site's history and historic operations is provided below in Section 2.2.

1.2 Site Location

The Site consists of three contiguous parcels of land identified by the Herkimer County tax assessor as Parcel IDs: 120.29-1-63, 120.29-2-74.1, and 120.29-1-26. The site measures 12.23 acres, and is located in a mixed commercial and residential use area. A figure depicting the Site and surrounding buildings is provided as **Figure 2**.

Three (3) buildings totaling approximately 134,500 square feet (ft^2) improve the Site and have been vacant since 2001. Building A is known as the primary manufacturing/office building, and the area measures approximately 124,000 ft^2. Building A consists of four-stories with a basement, and is located in the center of Parcel A. Building B is understood by HRP to be the former boiler house, and measures approximately 4,500 ft^2. Building B consists of one-story with a basement, and is also located in the center of Parcel A. Building C is known as a former storage building, and is situated the west-center portion of the site. Building C measures approximately 6,000 ft^2 in area, and consists of one-story with no basement. The remainder of the Site consists of parking and driveway areas, overgrown areas, and a fenced secured area. The nearest waterbody is the Mohawk River, which is located approximately 800 feet to the north of the Site.

1.3 Engineering and Geological Professional Services

HRP Associates, Inc. (HRP) was contracted by the Herkimer County Industrial Development Agency (IDA) to prepare this Remedial Investigation Sampling and Analysis Plan (RISAP). HRP is a New York State (NYS) licensed engineering and geology firm located at 1 Fairchild Square, Clifton Park, New York. HRP will be responsible for conducting the remedial investigation (RI), preparing the remedial action work plan (RAWP), and implementing the chosen remedy at the Site.

1.4 Project Organization

The HRP Project Team will implement the below-described scope of work. A summary of Key Project Personnel and Field Staff is provided below as **Table 1-1.**

Table 1-1 Key Project Personnel

Title	Name	Contact Information	Responsibilities
Village of Ilion Mayor	Brian D. Lamica	315-895-7449 ilion@ilionny.com	Town Coordination, Budget Oversight
EPA Project Manager	Yocasta DeJesus, Project Officer 290 Broadway 18th Floor New York, NY 10007	(212) 637-4340 dejesus.yocsata@epa.gov	Provide Technical Assistance Approve Sampling Plans
Grantee Project Manager	John Piseck Executive Director Herkimer County Industrial Development Agency 420 E. German Street, Suite 101A Herkimer, New York 13350	315-866-3000 (office) 315-868-4928 (cell) 315-866-2976 (fax) jpiseck@herkimercountyida.org	Project Management, Financial Oversight
Project Manager	Jesse Zahn, CHMM, P.G. HRP Associates, Inc. 1 Fairchild Square Clifton Park, NY	518-877-7101 x-1404 (518) 441-7588 Jesse.zahn@hrpassociates.com	Project Management,
QAO	Michael Varni HRP Associates	518-860-9570 x-1172 (860) 212-9886	Quality Assurance and Quality Control
Field Team Leader	Mark Wright, CHMM, CSP, P.G. HRP Associates, Inc. 1 Fairchild Square Clifton Park, NY	(518) 877-7101 x-1415 9203) 308-0983 Mark.wright@hrpassociates.com	Supervision and Field Activities, Health and Safety QA/QC

2.0 SITE BACKGROUND

2.1 Site or Sampling Area Description

The Site is situated in an urban setting, and is bordered in all directions by residential and mixed use properties. Overgrown vegetation, pavement, debris, and various structures are present within the confines of the Site.

The site is occupied by three (3) primary structures: a 106,000-square foot, 4-story brick structure that housed former manufacturing and office operations, A powerhouse building complex located adjacent to the west side of the main building, and a 5,600-square foot maintenance garage located to the west of the powerhouse.

The remainder of tax parcel 120.29-1-63 consists of former building foundations/slabs to the east and a grassed area to the west. The area north of main building (parcel 120.29-1-26) is a paved parking lot area, and the area south (parcel 120.29.2-74.1) is an open grassy area with a paved unnamed roadway that gives access to the main building. Aerial imagery of the site is provided in **Figure 2**.

2.2 Operational History

The Site is estimated to have been developed for commercial/industrial use in 1907, and was originally owned by the Library Bureau. The property and newly constructed buildings were used as a manufacturing facility for wood veneer and furniture, and owned by the Library Bureau until at least 1923. By the 1930s, the property was owned by Remington-Rand Corporation and was used to manufacture adding machines and typewriters. By WWII, the facility was retooled to manufacture naval shells. Between 1947 and 1949, the company merged with Sperry to become Sperry-Rand Corporation. The on-site facility was one of three facilities owned by Sperry-Rand Corporation in Ilion. The on-site facility was used to assemble and test computers and was utilized as a school to train technicians. It is possible that electroplating occurred on-site in the 1960s. The company changed its name to Sperry-Univac at some time in the 1950s, and computer manufacturing operations ceased by 1968 when Sperry-Univac moved to Utica; the property remained vacant for some time. In the early 1970's, the property was sold to Donald J. Reile and he began leasing portions of the Site buildings to the Duofold Corporation for knitting operations. Duofold, or other business names that represent Duofold including Ilion Properties, owned the Site since 1979 and utilized the Site to cut and sew winter clothes and underwear from pretreated and pre-dyed materials. The Site has remained vacant since 2001.

Various metals, petroleum products, and solvents were identified on-site in soil, soil-vapor, and groundwater during previous investigations, and were likely used as part of historical manufacturing operations. The Site is vacant, and no wastes are being generated or handled on-site.

2.3 Previous Investigations

Previous environmental investigation reports were provided to HRP by various agencies for this assessment. A brief summary of available previous investigation(s) reports is presented below.

1990 - Final Draft Site Inspection Report - NUS Corporation
2009 - Phase I ESA – Plumley Engineering
2012 - Remedial Investigation Work Plan - Barton & Lugidice (B&L)
2015 - Subsurface Investigation Report - Nature's Way Environmental (Nature's Way)
2017 - Phase II Environmental Site Assessment - CDM Smith (CDM)
2019 - Phase I Environmental Site Assessment - HRP Associates, Inc. (HRP)

A summary of documented environmental impacts derived from the above-referenced investigations is presented below in section 2.5 of this report.

2.4 Geological Information

The Site is located on a relatively flat parcel at 400 feet above sea level in the Mohawk River Valley of central New York. According to the Surficial Geologic Map of New York, Hudson Mohawk Sheet, surficial geology on-site is classified as outwash sand and gravel. Materials are characterized as coarse to fine gravel with sand from proglacial fluvial deposition, well rounded and stratified, generally with finer materials away from ice border, with variable thickness of 2-20 meters.

Previous site investigations indicated that fill materials were encountered at depths varying from throughout the site, underlain by native lake deposited sediment, then predominantly sand and gravel. Depth to bedrock is unknown as previous investigations investigated to a maximum depth of 20 feet below grade (fbg), and bedrock was not encountered.

Groundwater was measured at six to eight (6 to 8) feet below grade (fbg) during previous investigations. The groundwater gradient at the site is relatively flat, and is estimated to be approximately 0.14% east-northeast towards the Mohawk River which is located 800 feet to the north of the site.

2.5 Environmental and /or Human Impact

Previous investigations conducted at the site have identified surficial and shallow onsite impacts to soil, groundwater, and soil vapor. Metal constituents including lead, chromium, mercury, and arsenic have been previously reported in surficial and subsurface soil at concentrations that exceed the New York State Department of Environmental Conservation (NYSDEC) Part-375 Industrial Use Soil Cleanup Objectives (IUSCOs). Impacted soils are understood by HRP to be widespread and sporadic across the site, and have been generally identified by previous investigations to be present in the overlying fill layer. The impacts to historical fill material is most-likely related to demolished building materials from the former paint spray booth areas, ash from historical burning of coal, maintenance of machinery, and treatment of wood products.

Groundwater at the Site is understood to be impacted with chlorinated solvents and degradation products on the eastern portion of the Site. Groundwater monitoring data from previous investigations suggest on/offsite migration of chlorinated volatile organic compounds (CVOCs) to the east-northeast. No domestic water wells (DWWs) are understood to be active in the area, and potable water at the Site is provided by the municipality.

Soil gas was measured during a previous investigation, and generally correlates with CVOC impacts measured in groundwater in previous investigations. Interpretation of passive soil gas survey data collected by CDM Smith suggests impacts to soil gas are generally localized in extent, and are confined to areas east of the former Duofold facility.

Concentrations of organic petroleum derived constituents such as benzene, toluene, and xylene have been reported at the Site, but at concentrations that do not generally exceed Division of Water Technical and Operations Guidance Series (TOGS) 1.1.1 standards and guidance values.

Previous investigations have not identified a primary source of soil and groundwater impacts. The origin of CVOC impacts soil and groundwater impacts is understood to be from materials spilled in small quantities over several decades. Details outlining the proposed investigation of environmental and/or human health impacts are provided in this RISAP, and presented below.

2.6 Qualitative Human Health Exposure Assessment

A qualitative human health exposure assessment will be performed during the RI to evaluate the risk to potential receptors from site-related contaminants of concern (COCs). This assessment will be performed with regard to current site conditions which consist of a vacant industrial property consisting of three (3) former industrial structures.

Five elements must be present for a human health exposure to exist. These include: 1) a source of contamination, 2) a contaminant release and transport mechanism, 3) a point of exposure, 4) a route of exposure, and 5) a receptor. The following sections evaluate these elements and the risk of exposure.

The following exposure pathways for the current and anticipated future use conditions and the potentially exposed population are detailed below

- Construction and Outdoor Worker or Visitor - direct contact, incidental ingestion, and inhalation of COCs during ground-intrusive activities, and inhalation of COCs via outdoor air migration.
- Indoor Worker or Visitor - inhalation of volatile organics via indoor air migration. This exposure pathway is mitigated by potential future installation of a vapor mitigation system (VMS).
- Visitor/Passerby/Fish & Wildlife - direct contact, incidental ingestion, and inhalation of COCs in offsite surface water due to groundwater migration into surface water.

These exposure pathways can be mitigated by implementing proven remedial measures and engineering controls, and with maintenance and proper operation of proper soil/fill management

during intrusive activities; engineering controls including placement of asphalt or landscape cover; and construction of vapor barriers in future building construction. Risks to human health and safety precautions are outlined in Attachment A – Health and Safety Plan (HASP). Potential exposure to COCs in airborne dust will be monitored using specialized equipment, and is outlined in Attachment B – Community Air Monitoring Plan (CAMP). If airbourne dust is recorded above action levels outline in the CAMP, best practice measures will be taken to control and mitigate the fugitive emissions. Best practice measures are outlined in **Attachment C** – Fugitive Emissions Management Plan.

3.0 PROJECT DATA QUALITY OBJECTIVES

3.1 Project Objectives, Problem Definition, and Contaminants of Concern

The proposed RI is designed to further delineate contaminants of concern (COC) identified in surficial, shallow soil, and groundwater during the previous site investigation efforts provided in Section 2.3. A summary of COCs is provided below in **Table 3-1**: Contaminants of Concern and **Table 3-2**: Contaminants of Concern – Groundwater.

3.1.1 Surficial Soil Impacts

Metals are a constituent of soil, and were identified in concentrations exceeding NYS Part 375 IUSCOS in shallow surficial soil samples collected by Nature's Way and CDM Smith. Surficial soils will be sampled during the RI, and analyzed for part 375 metals, as well as for leaching potential using Toxicity Characteristics Leaching Procedures (TCLP) to delineate the degree and extent of previously identified COC impacts.

Previously collected surficial samples by CDM Smith did not indicate soil leaching characteristics through prior TCLP analysis. The results from the surficial sampling will confirm the results provided by CDM Smith, and will allow for a proper development of the conceptual site model (CSM) to aid in the design of a Remediation Action Work Plan (RAWP). Details are presented below in Section 4.0 – Sampling Rationale.

3.1.2 Subsurface Soil Impacts

Metals impacts to shallow subsurface soil be will sampled and analyzed for Part-375 metals, as well as for leachate potential using toxicity characteristics leaching procedures (TCLP) delineate the degree and extent of previously identified COC impacts.

Previously collected subsurface samples by CDM Smith did not indicate signs of leaching through prior TCLP analysis. The results from this proposed will RI will confirm the results provided by CDM Smith, and will aid in the preparation of a proper remediation design to address previously documented impacts.

Table 3-1: Contaminants of Concern (COCs) – Soil

Contaminant of Concern (COC)	Protection of Groundwater SCO (mg/kg)	Unrestricted Use SCO (mg/kg)	Commercial Use SCO (mg/kg)	Industrial Use SCO (mg/kg)
Arsenic	16	13	16	16
Barium	820	350	400	10,000
Chromium, Hexavalent	19	1	400	800
Chromium, Trivalent	No Standard	30	1,500	6,800
Lead	450	63	1,000	3,900
Total Mercury	0.73	0.18	2.8	5.7

Contaminant of Concern (COC)	Protection of Groundwater SCO (mg/kg)	Unrestricted Use SCO (mg/kg)	Commercial Use SCO (mg/kg)	Industrial Use SCO (mg/kg)
Copper	1,720	50	270	10,000
cis-1,2-DCE	0.25	0.25	500	1,000
trans-1,2-DCE	0.19	0.19	500	1.000
Trichloroethene	0.47	0.47	200	400
Vinyl chloride	0.02	0.02	13	27

3.1.3 Soil Vapor Impacts

Soil borings will be installed in areas of elevated soil gas, presented as Attachment D - Beacon Environmental – Passive Soil-Gas Survey to define the vertical extent of chlorinated VOC impacts soil vapor. Soil borings will be installed above the water table to an approximate depth of six (6) fbg, and converted into soil vapor probes by the drilling contractor.

3.1.4 Groundwater Impacts

To evaluate the condition and natural attenuation of CVOCs, low flow sampling of existing wells and newly installed monitoring wells will be completed to determine VOC concentrations, measure geochemical indicators, microbial populations and indicator parameters, calculate hydraulic conductivity and estimate ground water seepage velocity/gradients.

To identify potential off-site downgradient receptors a review of downgradient properties (visual and water supply company record review) within ½ mile downgradient of the site will be completed.

Table 3-2: Contaminants of Concern (COCs) – Groundwater

Contaminant of Concern	Groundwater Standard (µg/L)
cis-1,2-DCE	5
trans-1,2-DCE	5
Trichloroethene	5
Vinyl chloride	2

3.2 Data Quality Objectives (DQOs)

Provided below is a description of the data quality decisions to be made based on the collected data and criteria on which these decisions will be made with regards to the environmental media.

3.2.1 Soil Sampling and Analysis DQOs

Soil analytical results will be compared to 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted and Commercial Use Soil Clean-up Objectives (UUSCOS & CUSCOs). If COCs are detected below CUSCOs, no further action will be recommended. However if contaminant of

concerns are detected above commercial concentrations, then the collected date will be used in conjunction with the Conceptual Site Model (CSM), and will be included in the Remedial Action Work Plan (RAWP) in accordance with the procedures described in Chapter 4 Remedy selection of the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10).

Soil analytical results will additionally be compared to 6 NYCRR Part 375 Protection of Groundwater Soil Clean-up Objectives (PGWSCOs) to determine if COC concentrations present in soil continue to contribute to previously defined groundwater contamination. If the COC is detected below PGWSCOs, no further action will be recommended. However if COCs are detected above PGWSCOs, then the collected data will be used in conjunction with CSM to select a remedy in accordance with the procedures described in DER-10.

3.2.2 Groundwater Sampling and Analysis DQOs

Groundwater analytical results will be compared the Ambient Water Quality Standards (AWQS) and Guidance Values and Groundwater Effluent Limitations published as the Technical Operations and Guidance Series (TOGS 1.1.1). If the COC is not detected at concentrations above AWQS, no further action will be recommended. However, if contaminants are detected above AWQS then a remedy will be selected based on process outlined in DER-10. Monitored natural attenuation (MNA) is anticipated to be the selected remedy at the Site due to low concentrations of COCs noted during previous investigations completed at the Site. Additional parameters as outlined in 3.3(c)5 of DER-10 will be collected during the RI to support MNA.

3.2.3 Air Sampling and Analysis DQOs

Soil gas analytical results will be compared to the Decision Matrix Provided in the New York State Department of Health (NYSDOH) October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Soil gas analytical results will be used as a screening tool to determine if there is potential for off-site impact.

Reasonable and practical actions will be taken by HRP to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. If COCs are detected above no further action (NFA) criteria defined in the NYSDOH Guidance, then NFA will be recommended.

If COCs are measured exceeding "Monitor" criteria, monitoring on a recurring basis will be recommended to determine whether concentrations in the indoor air or sub-slab vapor are affected by temporal influences. If COCs are measured above "Mitigate" criteria, remediation and mitigation remedies will be recommended.

3.3 Data Quality Indicators (DQIs) and Measurement Quality Objectives (MQOs)

Data quality indicators (precision, accuracy, representativeness, completeness, comparability and sensitivity [i.e., PARCCS parameters]) refer to quality control criteria established for various

aspects of data gathering, sampling, and/or analyses. Definitions of specific DQIs and MQOs are provided below.

Precision - Precision has meaning only when applied to a group of measurements, never to a single measurement. It refers only to the reproducibility of the results of measurement.

Accuracy **-** Accuracy refers to the degree of which the measurement indicates the truth. It can pertain to a single measurement or the average of a group of measurements.

Representativeness is the expression of the degree to which data accurately and precisely represent a characteristic of an environmental condition or population and relates to the method of collecting samples and determining sampling locations.

Completeness is expressed as the percent of valid usable data obtained compared to the amount that was expected. Data collection may be inhibited by geologic conditions and/or underground utilities. The project goal is to collect at least 90% of the soil samples outlined in this SAP.

Comparability expresses the degree of confidence with which one data set can be compared to another. Sensitivity is defined by laboratory detection limits is generally expressed in terms of method detection limits (MDLs) or reporting limits (RLs).

Sensitivity The laboratory reporting limit for each analyte is summarized in Table 2. The reporting limits are well below the action levels and provisional action levels and are adequate for this investigation.

3.4 Data Review and Validation

Verification of objective field and technical data will be performed at different levels and at different stages of the project. The first level of data verification will be performed at the time of collection by following standard procedures and QC checks. Field work sheets will be reviewed by the HRP Project Manager or his/her discretion for completeness and accuracy for each task performed during the RI. The Project Manager or designee will make any necessary inquiries with field personnel regarding potential missing information or data or suspected inconsistencies or errors in the field reports within one to two days of identifying such issues. Field review will ensure that necessary corrections or changes will been made based upon identified issues.

Final review of field work sheets will be conducted following completion of the field sampling activities and prior to placement of the work sheets into the project file. The work sheets, including any necessary corrections, will be included in the final project report.

Auditing of field activities by the Project Manager, Project QA Officer, or a qualified designee will provide random checks of sampling and field conditions as the field activities are occurring.

3.5 Data Management

Once field data has been organized and, as appropriate, entered into an electronic database, the Project Manager or designee will then review the data to ensure that the correct codes and units have been included and will review data sets for anomalous values and other issues that might affect the quality of the field data generated for the project. This task will generally be conducted as soon as possible after data has been organized into tables, graphs, and/or figures, with the objective of reviewing the data within a time-frame that will permit additional data collection, if necessary, to obtain a dataset that will meet the project-specific DQOs.

Data collected during the investigation will be reported by the analytical laboratory in a Category B data package. Data will be submitted to a third-party data validator for data usability summary report (DUSR). Data failing QC criteria will be qualified as estimated, biased high, biased low, non-detected, or rejected during data validation. The validated data in the DUSR shall be considered definitive level data and, except for the rejected data. All definitive level data is usable for the intended purpose which is to determine the extent of VOC and metal contamination and to allow for the grantee to best determine the appropriate future use of the Site based on the nature of the contamination.

3.6 Assessment Oversight

Prior to commencing with field activities, the RISAP will be reviewed by the Project Team. The QA Officer will oversee QC of all field activities, and if modifications to the proposed sampling program are required due to field conditions, the Project Manager shall be notified for direction. Any modifications to the sampling plan will be documented reported to the Project Manager.

4.0 SAMPLING RATIONALE

Proposed soil sample locations are proposed in areas where contaminants are suspected to be present based on previously documented site history and environmental investigations. Professional judgment by HRP was used to select sampling locations that are most-likely to provide data to completely address project DQOs (Table 1) presented in section 3.2 of this RISAP.

Evaluation of Site geology and surficial soil data collected from previous site investigations is presented below. Decision statements are provided in the project DQOs to outline the below-proposed sampling rationale.

4.1 Metals

Metals are a constituent of soil, and were detected in various soil samples during all previous subsurface investigations at the site. Soil borings DF-SB-11A and SB-12 (SF) recorded lead concentrations of 84,280 micrograms per liter (mg/l) and 39,600 mg/l, respectively, and represent the highest known total Metal concentrations in surficial soils at the Site. Soil sample SB-12 SS (0.5'-2.0') and MW-12 (0.5'-2.0) recorded Arsenic at concentrations of 254 mg/l and 113 mg/l, respectively, and represents the highest reported arsenic concentration at the Site.

Toxicity Leaching Characteristic Procedures (TCLP) are designed to replicate the leaching of contaminants in municipal landfills, and were performed on all soil samples collected by CDM Smith. TCLP metals results indicated metals were not leaching from soil, and were considered non-hazardous, as results from all soil samples collected were reported under EPA Reportable Quantities.

Metals that exceed Part-375 IUSCOs at the site (including arsenic, barium, cadmium, chromium, copper, lead, nickel, selenium, and Zinc) have generally been confined in the upper 0.0 - 6.5 feet of "fill" material identified by Nature's Way (**Attachment E** – Nature's Way Geologic Cross Sections) in 2015. Soil analyzed for metals below 6.5 feet did not generally exceed Part-375 commercial use soil cleanup objectives (CUSCOs) with the exception of Arsenic identified in Nature's Way soil samples MW-1 (8.5'-10.5') and MW-12 (9.0'-11.0'), slightly above the IUSCO of 16 mg/l at concentrations of 17.1 mg/l and 17.5 mg/l, respectively.

Thickness of the overlying fill at the Site ranges from approximately 1.5 to 6.5 fbg according to the Geologic Cross Sections provided in **Attachment 5**. Geologic cross section B-B' identifies the thickness of surficial fill material approximately 6.5 thickness adjacent to CDM Smith soil boring DF-SB-11A, and Nature's Way soil boring SB-12 (SF). Impacted fill material is most-likely the source of lead impacted soil at the Site.

The source of Lead in the fill material is believed to be lead paint, as lead was commonly added to paint to increase durability, drying time, and resistance to moisture. Paint spaying areas were identified at the Site on the 1959 Sanborn Fire Insurance Map provided in **Attachment 7** - Phase I Environmental Site Assessment Report - HRP. Paint spray booths were identified in the central and western parts of the Site, adjacent to the former Remington Plant #2. The spray booths appear to have been demolished between 1974 and 1982 according to aerial imagery provided in

Attachment 6. The spray booths were demolished in close proximity to the highest recorded metals (lead) concentrations at soil borings DF-SB-11A and SB-12 (SF), and are likely the cause of impacts to shallow fill material at those locations. Lead-based paint materials are also likely located on site; due to the age and condition of paint observed by HRP during the 2019 Phase I investigation.

While no specific documentation was identified though historic research to identify a specific source of onsite arsenic detections, it is probable the presence of arsenic is due to the activities below. Most arsenic used in industrial processes is used to produce antifungal wood preservatives. Arsenic was commonly used in the manufacturing of arsenic-containing pigments, antifouling paint, and certain alloys. Arsenic is also a persistent toxin known to be present in coal. The Site was originally utilized for use as a wood veneer and furniture manufacturing facility, and has also been used to manufacture machines, typewriters, brass shells for the navy, computers, textiles from pretreated and pre-dyed materials. No. 6 fuel oil and coal were historically used to heat the facility, and a coal silo was identified at the Site. Arsenic impacts to shallow surface soils were identified by CDM smith in close proximity and mostly downwind of the coal silo at the Site. Cinder, ash, and coal were identified in boring logs provided by Nature's Way and CDM Smith to be present in the overlying fill layer, present between 0.0 and 6.5 fbg across the Site. The Site has remained vacant since 2001, and no wastes are currently being generated or handled on-site. Arsenic impacts to shallow soil are most-likely attributed to historic site use and operations.

Soils will be collected as a part of this RI from the surficial fill material, and analyzed for Part 375 Metals (including RCRA 8 Total Metals) and TCLP Metals to support remediation and mitigation at the Site through the use of Engineering and Institution Controls (EC/IC). Surficial and shallow subsurface soil samples will be collected from the fill material at the site to further delineate the degree and extent of metals impacts at the Site, and are outlined in section 2.3 of this RISAP.

4.2 Polychlorinated Biphenyls (PCBs)

PCBs were not recorded above the method detection limit (MDL) in all soil and groundwater samples collected by CDM Smith during the 2017 Site investigation. Nature's Way detected PCBs below Part-375 Residential Use Cleanup Objectives (RUSCOs) in fill material at surficial samples SB-5 SS (0.5'-2.0') and MW-8 (0.5'-1.5') at concentrations 0.4 mg/l of 0.19 mg/l, respectively.

PCBs were not identified as a COC during previous investigations at the site, and will not be evaluated as a part of this proposed investigation.

4.3 Pesticides & Herbicides

Agricultural products were not produced at the Site, and were not documented during previous Phase I Investigations performed at the Site. Pesticides and herbicides were not recorded above the method detection limit in any of the surface soil samples collected by CDM Smith. Shallow subsurface samples were not analyzed by CDM Smith during the 2017 investigation.

Pesticides and Herbicides were reported at concentrations below CUSCOs and IUSCOs in all surficial and subsurface samples collected by Nature's Way and CDM Smith.

Agricultural activities were not conducted at Site, and previous industrial site activities did not include the use of pesticides or herbicides. Pesticides and Herbicides were not identified as COCs during previous investigations, and will not be sampled during the RI.

4.4 Volatile Organic Compounds

No petroleum or chlorinated solvent derived volatile organic compounds were detected above part 375 RUSCOs in all surficial and subsurface soil collected during previous investigations by Nature's Way and CDM Smith. Concentrations of chlorinated solvents were detected in groundwater above AWQS.

Various chlorinated volatile organic compounds (CVOCs) compounds have been detected, and are understood to have been attributed to historical surface cleaner and coating storage at the Site. Chlorinated VOCs were commonly used throughout various industries in manufacturing to degrease and maintain machinery. There are no known source areas at the Site, and no other potential sources (i.e. Underground Storage Tank (UST), Dry-well, etc.) were identified during a previous ground penetrating radar survey (GPR) conducted at the Site in October 2016 by Delta Geophysics Inc (Delta). A report of findings provided by Delta is provided in **Attachment 5** – Delta Geophysics Report.

To assess the viability of monitored natural attenuation (MNA) of VOCs in groundwater, which appears to be occurring, select existing monitoring wells will be sampled during the RI to estimate contaminant mass and timeframe for degradation. Samples will be collected for dehalococcoides, a common dechlorinating bacteria, in addition to their catalyzing enzymes BAV1 vinyl chloride reductase (BVC), tceA reductase (tceA), and vinyl chloride reductase (VCR) to determine if there potential for reductive de-chlorination. If the bacteria and specific Site conditions are not present other remedial options will be evaluated in the Remedial Action Work Plan (RAWP).

To evaluate if soil gas is migrating off-site, soil vapor sampling points will be installed on the sites downgradient property line. Collected soil gas samples will be analyzed for VOCs.

Table 4-1: Surface Soil Sampling Design and Rationale

Sampling Location/ID Number	Total Depth (Inches)	Analytical Parameter	Rationale *
HRP-SS-1	0″ – 2″ 2″ – 24″	Metals	Confirm degree and extent of metals impacts identified during previous investigations.
HRP-SS-2	0″ – 2″ 2″ – 24″	Metals	Confirm degree and extent of metals impacts identified during previous investigations.
HRP-SS-3	0″ – 2″ 2″ – 24″	Metals	Confirm degree and extent of metals impacts identified during previous investigations.
HRP-SS-4	0″ – 2″	Metals	Confirm degree and extent of metals impacts

Sampling Location/ID Number	Total Depth (Inches)	Analytical Parameter	Rationale *
	2″ – 24″		identified during previous investigations...
HRP-SS-5	0″ – 2″ 2″ – 24″	Metals	Confirm degree and extent of metals impacts identified during previous investigations.
HRP-SS-6	0″ – 2″ 2″ – 24″	Metals	Confirm degree and extent of metals impacts identified during previous investigations.
HRP-SS-7	0″ – 2″ 2″ – 24″	Metals	Confirm degree and extent of metals impacts identified during previous investigations.
HRP-SS-8	0″ – 2″ 2″ – 24″	Metals	Confirm degree and extent of metals impacts identified during previous investigations.
HRP-SS-9	0″ – 2″ 2″ – 24″	Metals	Confirm degree and extent of metals impacts identified during previous investigations.
HRP-SS-10	0″ – 2″ 2″ – 24″	Metals	Confirm degree and extent of metals impacts identified during previous investigations.

Table 4-2: Subsurface Soil Sampling Design and Rationale

Sampling Location/ID Number	Total Depth (fbg)	Analytical Parameter	Rationale *
HRPB-1 (SV-1) HRP-MW-1	16′	Metals/VOCs	Determine degree and extent of detected Lead and Arsenic in Fill Material, confirm the presence/absence of a source area in areas of high soil gas cVOC concentrations
HRPB-2 (SV-2) HRP-MW-2	16′	Metals/VOCs	Determine degree and extent of detected Lead and Arsenic in Fill Material, confirm the presence/absence of a source area in areas of high soil gas cVOC concentrations
HRPB-3 (SV-3) HRP-MW-3	16′	Metals/VOCs	Determine degree and extent of detected Lead and Arsenic in Fill Material, Determine potential offsite migration of soil vapor. confirm the presence/absence of a source area in areas of high soil gas cVOC concentrations
HRPB-4 (SV-4)	6.5′	Metals	Determine degree and extent of detected Lead and Arsenic in Fill Material. Determine potential offsite migration of soil vapor.
HRPB-5 (SV-5)	6.5′	Metals	Determine degree and extent of detected Lead and Arsenic in Fill Material. Determine potential offsite migration of soil vapor.
HRPB-6 (SV-6)	6.5′	Metals	Determine degree and extent of detected Lead and Arsenic in Fill Material. Determine potential offsite migration of soil vapor.

HRPB-7 (SV-7)	16′	Metals/VOCs	Determine degree and extent of detected Lead and Arsenic in Fill Material, confirm the presence/absence of a source area in areas of high soil gas cVOC concentrations.
HRPB-8	16′	Metals/VOCs	Determine degree and extent of detected Lead and Arsenic in Fill Material, confirm the presence/absence of a source area in areas of high soil gas cVOC concentrations.
HRPB-9	16′	Metals/VOCs	Determine degree and extent of detected Lead and Arsenic in Fill Material, confirm the presence/absence of a source area in areas of high soil gas cVOC concentrations.
HRPB-10	6.5′	Metals/VOCs	Determine degree and extent of detected Lead and Arsenic in Fill Material.
HRPB-11	16′	PID	Determine degree and extent of high soil gas CVOC concentrations.
HRPB-12	16′	PID	Determine degree and extent of high soil gas CVOC concentrations.

SV - Denotes location may be converted to soil vapor probe.
MW - Denotes location may be converted to groundwater monitoring well.

Table 4-3: Groundwater Sampling Design and Rationale

Sampling Location/ID Number	Analytical Parameter	Rationale *
DF-MW-2	VOCs	Determine degree and extent of VOCs in groundwater.
DF-MW-7	VOCs	Determine degree and extent of VOCs in groundwater.
DF-MW-8	VOCs	Determine degree and extent of VOCs in groundwater.
DF-MW-9	VOCs	Determine degree and extent of VOCs in groundwater.
DF-MW-10	VOCs	Determine degree and extent of VOCs in groundwater.
HRP-MW-1	VOCs	Determine degree and extent of VOCs in groundwater.
HRP-MW-2	VOCs	Determine degree and extent of VOCs in groundwater.
HRP-MW-3	VOCs	Determine degree and extent of VOCs in groundwater.
TMW-1	VOCs	Determine dissolved phase VOC concentrations in the off-site areas.
TMW-2	VOCs	Determine dissolved phase VOC concentrations in the off-site areas.

DF - Denotes existing monitoring well.

5.0 REQUEST FOR ANALYSES

5.1 Analyses Narrative

Surficial Soil Sampling and Analysis

It is anticipated that approximately 10 surficial and near-surface soil samples will be collected from the below-described locations for analytical testing. The soil samples will be collected as described in Section 4 and summarized below in **Table 5-1** - Summary of Proposed Surficial Samples & Laboratory Analytical Analysis.

Table 5-1 – Summary of Proposed Surficial Samples & Analytical Analysis

Sampling Location/ID Number	Total Depth (fbg)	Analytical Parameter	Analytical Method
HRP-SS-1	0″ – 2″	Metals	Part 375 Metals - EPA SW-846 Method#6020 TCLP RCRA Metals - EPA SW-846 Method#1311
	2″ – 24″		
HRP-SS-2	0″ – 2″	Metals	
	2″ – 24″		
HRP-SS-3	0″ – 2″	Metals	
	2″ – 24″		
HRP-SS-4	0″ – 2″	Metals	
	2″ – 24″		
HRP-SS-5	0″ – 2″	Metals	
	2″ – 24″		
HRP-SS-6	0″ – 2″	Metals	
	2″ – 24″		
HRP-SS-7	0″ – 2″	Metals	
	2″ – 24″		
HRP-SS-8	0″ – 2″	Metals	
	2″ – 24″		
HRP-SS-9	0″ – 2″	Metals	
	2″ – 24″		
HRP-SS-10	0″ – 2″	Metals	
	2″ – 24″		

Subsurface Soil Sampling

Approximately 20 total soil samples will be collected from the below-described locations for analytical testing. The soil samples will be collected as described in Section 4 and summarized below in **Table 5-2** - Summary of Proposed Surficial Samples & Laboratory Analytical Analysis.

5.2 Analytical Laboratory

Analytical testing shall be conducted according to all applicable standard operating procedures (SOPs) by a New York State Environmental Laboratory Accreditation Program (ELAP) certified laboratory. Samples will be collected following SOPs, and using clean, sterile glassware provided by the laboratory. Details pertaining to sampling are presented below in this RISAP, and QA/QC procedures are outlined in the QAPP.

Table 5-3: Soil Analytical Method, Containers, Preservation, and Holding Times Requirements

Analytical Parameter	Analytical Method Number	Containers (number, type, size/volume)	Preservation Requirements	Maximum Holding Times
Part 375 Metals	EPA SW-846 Method#6020	One (1) 8oz Glass Jar	None	180 Days
TCLP Metals	EPA SW-846 Method#1311		None	180 Days
VOCs	EPA SW-846 Method#8260B	1 x MeOH vial (5mL), 2 x Sodium Bisulfate vials or 2x DI Water vials	14 day (if using DI vials - 48hr to freeze)	14 Days

Table 5-4: Groundwater Analytical Method, Containers, Preservation, and Holding Time Requirements

Analytical Parameter	Analytical Method Number	Containers (number, type, size/volume)	Preservation Requirements (chemical, temperature, light protection)	Maximum Holding Times
VOCs	EPA SW-846 Method#8260B	Three (3) x 40ml Vial	Hydrochloric Acid (HCL) Preservation	14 Day

Table 5-5: Air Analytical Method, Containers, and Holding Time Requirements

Analytical Parameter	Analytical Method Number	Containers (number, type, size/volume)	Maximum Holding Times
VOCs	EPA SW-846 Method#TO-15 LL	One (1) one liter (1L) Summa Canister	14 Day

6.0 FIELD METHODS AND PROCEDURES

6.1 Field Equipment

List of Equipment Needed

During the implementation of the field sampling plan field equipment, various scientific instruments will be used to collect data at the site. The proposed equipment to be used at the Site will include, but not be limited to, the following:

Table 6-1: Field Equipment

Equipment	Manufacturer	Purpose
MiniRAE 3000 - Photoionization Detector (PID)	Rae Systems	Soil Screening, Air Monitoring
Horiba U-52 - Water Quality Analyzer	YSI	Water Quality Parameters, Low Flow Sampling
Water Level Indicator	Solonist	Groundwater Gauging
PDR1500 - Particulate Meter	Thermoscientific	Air Monitoring

6.1.1 Calibration of Field Equipment

All field equipment will be properly calibrated prior to use in the field. The calibration procedures will follow the manufacturer's instructions or routine HRP procedures to ensure that the equipment is functioning properly. Field personnel will document all instrument calibration in HRP daily field reports. All records generated will be maintained by field personnel and are subject to audit by the QA Manager.

MiniRAE 3000 PIDs will be used to screen soils and to properly implement the community air monitoring (CAMP) (**Attachment 2** – Community Air Monitoring Plan). PIDs will be calibrated to background ambient air, and a calibration gas standard of 100 parts per million (ppm) isobutylene.

All Thermoscientifc particulate meters will be used to implement the CAMP, and will be calibrated each day prior to use using a particulate filter provided by the manufacturer. The Horiba U-52 Water Quality Meter will be calibrated using calibration standard solution(s) provided by the manufacturer. The standard solution includes a multi-purpose standard including pH, DO, ORP, turbidity, and conductivity.

The detailed calibration, operation, and maintenance procedures for field instrumentation routinely used by HRP personnel are specific to manufacturer's instructions, and will be documented by HRP. These calibration records become part of the individual project files as documentation of QA objectives.

6.2 Surface Soil Sampling

Soils will be collected from the two (2) feet of soil using a stainless steel hand auger and trowel. Samples will be mixed by hand and homogenized using a clean decontaminated trowel and stainless steel mixing bowl. All sampling equipment will be decontaminated using phosphate-free alconox soap and rinsed with deionized (DI) water before and after collecting surficial soils samples at each of the eight (8) proposed locations.

6.2.1 Field Screening

Soil samples retrieved from each soil boring will be field screened using a PID equipped with a 10.6 electron volt (eV) lamp. After the soil core sample is retrieved, representative portions of the soil core will be placed into sealed plastic bags and allowed to equilibrate. The PID probe will be inserted into the headspace of the sample bag and the maximum reading will be recorded on soil boring logs at least every five (5) feet.

6.2.2 Soil Boring Installation

Soil borings will be installed by a drilling contractor using a track-mounted direct-push drilling rig, or similar. The direct-push Macrocore© sampling device consists of a stainless steel tube that is hydraulically advanced by the drill rig into the subsurface. The locations of soil borings to be installed during the RI are provided as **Figure 3** - Surficial Soil Sampling Locations. Public utilities will be marked by the drilling contractor in prior to drilling activities using 811 Dig Safely New York (DSNY), in accordance with New York State law. Each soil boring location may be hand-cleared to a minimum depth of five (5) fbg to ensure no utilities are present.

Soil borings will be installed using a drill rig capable of sampling continuously every two (2) feet with a two-inch (2") diameter sampling device or similar. All surface and subsurface soil samples will be collected in accordance with DER-10 procedures, as applicable.

6.2.3 Subsurface Soil Sampling

Soil samples will be collected using a 1.75-inch diameter plastic (acetate liner) sampling tube that is evacuated from the borehole, and split to allow inspection and sample collection by the HRP geologist. Each soil boring will be advanced up to a depth of 16 fbg to supplement previously identified subsurface information from prior investigations.

A geologic description of the samples will be recorded by the onsite geologist. The geologic description will include the soil boring identification, geology, depth interval, color, moisture, photoionization detector (PID) measurements, visual and olfactory indications of contamination, and other notable features.

6.2.4 Soil Sampling and Laboratory Analysis

After soil samples are screened by and HRP geologist, Soil will be collected and placed into sterile glassware provided by the laboratory. A unique sample name including the soil boring identification

will be assigned to each sample. All sample collection dates, times, analysis, and sampling personnel will be marked on a chain of custody form, and will be relinquished properly by HRP and laboratory personnel.

Sediments were not defined as a problem area during previous investigations. As such, no sediment samples will be collected as a part of this investigation.

6.3 Water Sampling

CVOCs impacts have been identified above TOGS 1.1.1 standards and guidance values during previous subsurface investigations at the Site. As such, groundwater samples will be collected from various locations at the Site, and is outlined in **Table 4-3**. Surface water features are not currently present at the Site, and have not been identified during previous investigations at the Site. As such, no surface water samples will be collected as a part of this investigation.

6.3.1 Groundwater Sampling

Prior to groundwater sampling, all accessible groundwater monitoring wells will be gauged from the top of each monitoring well casing using a Solonist© water level meter, graduated in 0.01 foot intervals. Depth to groundwater measurements will be used to determine the groundwater flow direction and gradient at the Site. Measurements will be collected in accordance with the EPA Low Stress (Low Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells (2017).

All proposed monitoring wells will be purged using either a peristaltic suction, centrifugal, or bladder pump prior to sampling. The intake of the selected pump will be set in the center of each monitoring well screen to allow for representative water from the within the underlying geologic formation to enter the monitoring well screen. Pump rates will be adjusted to minimize drawdown of the water column, and will not be set to exceed the maximum drawdown of 0.3 feet. Groundwater will be pumped from the monitoring well into clear plastic flow cell, designed to allow the sampling team to see changes in groundwater quality through the cell. Groundwater will be pumped from the cell into a graduated bucket to determine the total purge volume at each monitoring well location.

Water quality parameters including temperature, pH, dissolved oxygen (DO), oxidation reduction potential (ORP), turbidity, and specific conductance will be collected every three (3) to five (5) minutes, and documented by HRP. Water quality is considered stable if for three consecutive readings:

- Turbidity (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized),
- Dissolved Oxygen (10% for values greater than 0.5 mg/L, if three Dissolved Oxygen values are less than 0.5 mg/L, consider the values as stabilized),
- Specific Conductance (3%)
- Temperature (3%)
- pH (± 0.1 unit)

- Oxidation/Reduction Potential (±10 millivolts).

If water quality parameters are not stable after 30 minutes, purging will be curtailed, and ground water samples will be collected. If a well is pumped until dry during purging, that well will be allowed to recharge up to 80% of the static water column and dewatered once more. After water levels have recharged to 80% of the static water column, groundwater samples will be collected.

At each sampling location, all bottles designated for a particular analysis (e.g., volatile organic compounds) will be filled sequentially before bottles designated for the next analysis are filled (e.g., semivolatile organic compounds). If a duplicate sample is to be collected at this location, all bottles designated for a particular analysis for both sample designations will be filled sequentially before bottles for another analysis are filled. In the filling sequence for duplicate samples, bottles with the two (2) different sample designations will alternate. Groundwater samples will be decanted directly into the sterile, laboratory-supplied sample containers with preservative, if required. All samples will be placed in a cooler with ice, and transported under chain-of-custody protocol for shipment to the laboratory.

If the measured turbidity of the groundwater from a well is above 5.0 Nephelometric Turbidity Units (NTUs), both a filtered and unfiltered sample for metals analysis will be collected, if required. A 5-micron filter will be used to remove larger particles that have been entrained in the water sample. A sample number appended with an "Fl" will represent a sample filtered with a 5-micron filter.

6.4 Air Sampling

Soil vapor probes will be installed in a separate boring adjacent to soil borings to characterize the quality of soil vapor in the unsaturated zone at the site. Soil vapor and air sampling and analysis shall be performed in accordance with the October 2006 NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York. The location of the soil vapor probes and the location of the ambient/outdoor air sample are shown on **Figure 4** – Proposed Air Sample Locations. A figure depicting all previous investigation sample locations is included for reference as **Figure 5** – Previous Site Investigation Sample Locations.

The soil vapor probes will be constructed in general accordance with Section 2.7.1 of the NYSDOH Soil Vapor Guidance and consist of approximately factory-slotted well screen and riser pipe that may extend above the ground surface.

The soil vapor and air samples will be collected using Summa® canisters provided by the laboratory. The actual soil vapor sample collection flow rate shall be below the maximum flow rate of 0.2 Liter per minute recommended by the NYSDOH Soil Vapor Guidance.

Prior to soil vapor sampling, each soil vapor probe shall be purged a minimum one (1) volume to ensure soil vapor is drawn into the probe. Once purging is completed, sample tubing from the top of the soil vapor probe will be attached directly to a Summa® canister. Field documentation will be collected for each sub-slab soil vapor sample to note the conditions during sampling.

Prior to collecting a soil vapor sample, a helium tracer test will be conducted to ensure that the sampling tubing and sample port were properly sealed. The helium tracer test will be conducted using a shroud, helium gas as a tracer, and a helium detector. A shroud shall be placed over the sampling port and tubing and completely sealed to preclude intrusion of outside air. Helium detector testing is used to test the sampling port and tubing for the presence of helium to verify that helium did not leak into the sampling port and tubing.

The Summa® canister samples will be submitted to an ELAP certified analytical laboratory for analysis of VOCs by USEPA Method TO-15.

6.5 Decontamination Procedures

To assure that no outside contamination will be introduced into the samples/data, the following protocols will apply for all equipment used to collect the samples during the RI:

- The equipment will be washed in laboratory detergent solution (Alconox) and water;
- The equipment will undergo a rinse of tap water;
- The equipment will undergo a final rinse using deionized water; and,
- The equipment will be wiped dry with a paper towel.

Equipment will be decontaminated in a predesignated area will be stored on new plastic sheeting in uncontaminated areas before and after use. All water generated during decontamination procedures will be containerized in a 55-gallon drum, and will be disposed of at a licensed facility. Investigation derived waste (IDW) is discussed in Section 8.0 – Disposal of Residual Materials.

Table 6-2: Field Equipment/Instrument Calibration, Maintenance, Testing, and Inspection

Analytical Parameter	Field Equipment/ Instrument	Calibration	Frequency	Acceptance Criteria	Corrective Action
Volatile Organic Compounds (PPM)	Photoionization Detector	100 PPM Isobutylene	Daily, or as needed.	±3%	Re-calibrate, if needed. Clean 11.7ev Lamp using Lense Paper
Turbidity (NTUs)	Water Quality Meter	Turbidity Calibration Fluid	Daily, or as needed.	±10%	Re-calibrate, if needed.
Dissolved Oxygen (mg/l)	Water Quality Meter	DO Liquid Standard	Daily, or as needed.	±5%	Re-calibrate, if needed.
Specific Conductance (µs/l)	Water Quality Meter	SC Liquid Standard	Daily, or as needed.	±5%	Re-calibrate, if needed.
Temperature (˚C)	Water Quality Meter	N/A	Daily, or as needed.	±5%	Re-calibrate, if needed.
pH (su)	Water Quality Meter	pH 4.0 pH 7.0 pH 10.0 Standard Solutions	Daily, or as needed.	±10%	Re-calibrate, if needed.
Oxidation Potential (mV)	Water Quality Meter	N/A	Daily, or as needed.	±5%	Re-calibrate, if needed.

7.0 PACKAGING AND SHIPPING

The number and type of sample containers, volumes, and preservatives are listed above in **Table 5-4**. The laboratory provided containers are pre-cleaned and will not be rinsed prior to sample collection. Preservatives, if required, will be added prior to sampling by the laboratory to the containers prior to shipment of the samples to HRP.

All sample containers will be placed in a strong-outside shipping container (a steel-belted cooler). The following outlines the packaging procedures that will be followed for low concentration samples.

1. When ice is used, pack it in zip-locked, double plastic bags. Seal the drain plug of the cooler with fiberglass tape to prevent melting ice from leaking out of the cooler.

2. The bottom of the cooler should be lined with bubble wrap to prevent breakage during shipment.

3. Check screw caps for tightness and, if not full, mark the sample volume level of liquid samples on the outside of the sample bottles with indelible ink.

4. Secure bottle/container tops with clear tape and custody seal all container tops.

5. Affix sample labels onto the containers with clear tape.

6. Wrap all glass sample containers in bubble wrap to prevent breakage.

7. Seal all sample containers in heavy duty plastic zip-lock bags. Write the sample numbers on the outside of the plastic bags with indelible ink.

8. Place samples in a sturdy cooler(s) lined with a large plastic trash bag. Enclose the appropriate COC(s) in a zip-lock plastic bag affixed to the underside of the cooler lid.

9. Fill empty space in the cooler with bubble wrap or Styrofoam peanuts to prevent movement and breakage during shipment.

10. Ice used to cool samples will be sealed in a zip lock plastic bag, and placed on top and around the samples to chill them to the correct temperature.

11. Each ice chest will be securely taped shut with fiberglass strapping tape, and custody seals will be affixed to the front, right and back of each cooler.

8.0 DISPOSAL OF RESIDUAL MATERIALS AND INVESITGATION DERIVED WASTE

In the process of collecting environmental samples, the sampling team will generate different types of potentially contaminated IDW that include the following:

- Used personal protective equipment (PPE)
- Disposable sampling equipment
- Decontamination fluids
- Soil cuttings from soil borings
- Purged groundwater and excess groundwater collected for sample container filling

Investigation derived waste (IDW) generated (if any) from the installation of monitoring wells and the development and sampling of monitoring wells will be handled in accordance with NYSDEC DER-10. Drill cuttings and spoils generated will be containerized in a 55-gallon drum, and disposed at a properly permitted treatment, storage, or disposal facility. Representative samples of cuttings and spoils will have to be analyzed to determine classification, treatment, and disposal.

The drilling contractor will be responsible for supplying the equipment and materials necessary for the proper handling and storage of the IDW, such as DOT-approved 55-gallon drums, roll-off containers and/or holding tanks. All containers will be labeled and stored properly.

Drill cuttings shall be handled and disposed of in a manner that does not pose a threat to health and the environment. If off-site disposal of IDW is required, it will be disposed of or treated according to applicable local, state, and federal regulations.

9.0 SAMPLE DOCUMENTATION

9.1 Field Notes

Field notes are an essential component of the RI and are important in providing real-time updates to the HRP Project Manager. Field notes will be collected each day, and will be collected by the HRP Field Team Leader. Field notes collected during the RI will include, but aren't limited to: daily field report, daily health and safety checklist, soil boring logs, low-flow sampling logs, and community air monitoring logs.

At a minimum, the following information will be recorded during the collection of each sample:

- Sample location and description
- Site or sampling area sketch showing sample location and measured distances
- Sampler's name(s)
- Date and time of sample collection
- Designation of sample as composite or grab
- Type of sample (soil, sediment or water)
- Type of sampling equipment used
- Field instrument readings and calibration
- Field observations and details related to analysis or integrity of samples (e.g., weather conditions, noticeable odors, colors, etc.)
- Preliminary sample descriptions (e.g., for soils: clay loam, very wet; for water: clear water with strong ammonia-like odor)
- Sample preservation (if any)
- Sample identification numbers and chain-of-custody form numbers
- Shipping arrangements (overnight air bill number)
- Name(s) of recipient laboratory

In addition to the sampling information, the following specific information will also be recorded in field notes for each day of sampling:

- Team members present on Site
- Time of arrival/entry on site and time of site departure
- Other personnel on Site
- Summary of any meetings or discussions with tribal, contractor, or federal agency personnel
- Deviations from sampling plans, site safety plans, and QAPP procedures
- Changes in personnel and responsibilities with reasons for the changes
- Calibration readings for any equipment used and equipment model and serial number

9.2 Photo Documentation

Photographs will be taken at the sampling locations and at other areas of interest on the site or sampling area. They will serve to verify information entered in the field logbook. The time, date, location, and weather conditions will be noted for each photograph collected. Each photograph will

include a description of the subject photographed, and the name of person taking the photograph. Photographs will be included in the report following the RI.

9.3 Labeling

All samples collected will be labeled in a clear and precise way for proper identification in the field and for tracking in the laboratory. The samples will have pre-assigned, identifiable, and unique numbers. At a minimum, the sample labels will contain the following information: date and time of collection, analytical parameter(s), and method of preservation. Sample parameters and preservation method are discussed in **Table 5-4**.

9.4 Sample Chain-Of-Custody Forms and Custody Seals

All sample shipments for analyses will be accompanied by a chain-of-custody record. Form(s) will be completed and sent with the samples for each laboratory and each shipment (i.e., each day). If multiple coolers are sent to a single laboratory on a single day, form(s) will be completed and sent with the samples for each cooler.

The chain-of-custody form will identify the contents of each shipment and maintain the custodial integrity of the samples. Generally, a sample is considered to be in someone's custody if it is either in someone's physical possession, in someone's view, locked up, or kept in a secured area that is restricted to authorize personnel. The sampling team leader or designee will sign the chain-of-custody form in the "relinquished by" box and note date, time, and air bill number.

A self-adhesive custody seal may be placed across the lid of each sample. For VOC samples, the seal may be wrapped around the cap. The shipping containers in which samples are stored (usually a sturdy picnic cooler or ice chest) will be sealed with self-adhesive custody seals any time they are not in someone's possession or view before shipping. All custody seals will be signed and dated.

10.0 QUALITY CONTROL

10.1 Field Quality Control Samples

Field quality control samples are intended to help evaluate conditions resulting from field activities and are intended to accomplish two primary goals: assessment of field contamination, and assessment of sampling variability. The former looks for substances introduced in the field due to environmental or sampling equipment and are assessed using blanks of different types. The latter includes variability due to sampling technique and instrument performance as well as variability possibly caused by the heterogeneity of the matrix being sampled and are assessed using replicate sample collection. The following subsections discuss the suggested QC samples to be collected during the RI.

10.1.1 Assessment of Field Contamination Equipment Blanks (Blanks)

Contamination of samples throughout the sampling process may be assessed through the collection of additional different types of samples.

Equipment blank (EB) samples are obtained by decanting laboratory supplied water over or through the decontaminated equipment used for sampling. EB samples provide a means of assessing potential contamination present in sampling equipment, ambient conditions, sample containers, transportation, and the laboratory.

Field reagent blank samples (FRB) are sample containers directly filled in the field using laboratory supplied water. FRB samples determine potential contamination from ambient conditions, sample containers, transit, and the laboratory.

Trip blanks (TB) are prepared by the laboratory and shipped to and from the field. TBs assess contamination from shipping and the laboratory, and are generally only collected in tandem with VOC samples.

A maximum of one (1) blank sample per matrix per day should be collected, but at a rate not to exceed one blank per 20 samples. If equipment rinsate blanks are collected, field blanks and trip blanks are not required under normal circumstances.

10.1.2 Equipment Blank Samples (EB)

Equipment blank samples will be collected to evaluate field sampling and decontamination procedures by pouring laboratory supplied water over the decontaminated sampling equipment. One equipment rinsate blank will be collected per matrix each day that sampling equipment is decontaminated in the field. Equipment rinsate blanks will be obtained by passing water through or over the decontaminated sampling devices used that day.

The equipment rinsate blanks will be preserved, packaged, and sealed in the manner described for the environmental samples. A separate sample number and station number will be assigned to each sample, and it will be submitted blind to the laboratory.

10.1.3 Field Reagent Blank Samples (FRB)

Field blanks will be collected to evaluate whether contaminants have been introduced into the samples during the sampling due to ambient conditions or from sample containers. Field blank samples will be obtained by laboratory supplied VOC & metal-free water into a sampling container at the sampling point. The field blanks that are collected will be analyzed for Part 375 Metals and VOCs.

The field blanks will be preserved, packaged, and sealed in accordance with the ELAP-certified laboratory. A separate sample number and station number will be assigned to each "FRB" sample, and it will be submitted to the laboratory.

10.1.4 Trip Blank

Trip blanks will be prepared to evaluate if the shipping and handling procedures are introducing contaminants into the samples, and if cross contamination in the form of VOC migration has occurred between the collected samples. A minimum of one (1) trip blank will be submitted to the laboratory for analysis with every shipment of samples for VOC analysis. Trip blanks are 40-mL vials that have been filled with HPLC-grade water that has been purged so it is VOC free and shipped with the empty sampling containers to the site or sampling area prior to sampling. The sealed trip blanks are not opened in the field and are shipped to the laboratory in the same cooler with the samples collected for volatile analyses. The trip blanks will be preserved, packaged, and sealed in the manner described for the environmental samples. A separate sample number and station number will be assigned to each trip sample and it will be submitted blind to the laboratory.

10.1.5 Temperature Blanks

For each cooler that is shipped or transported to an analytical laboratory a 40-mL VOA vial will be included that is marked "temperature blank." This blank will be used by the sample custodian to check the temperature of samples upon receipt.

10.2 Assessment of Field Variability (Field Duplicate or Co-located Samples)

Duplicate samples are collected simultaneously with a standard sample from the same source under identical conditions but are placed into separate sample containers. Field duplicates will consist of a homogenized sample divided in two or else a co-located sample. Each duplicate portion should be assigned its own sample number so that it will be blind to the laboratory. A duplicate sample is treated independently of its counterpart to enable assessment of laboratory performance through comparison of the results. At least 5% of samples collected per event will be field duplicates. At least one (1) duplicate should be collected for each sample matrix.

10.2.1 Field Duplicate (DUP)

Duplicate soils samples will be collected at sample locations chosen in the field by HRP sampling personnel based at a frequency of one (1) per 20 samples. Soil samples to be analyzed for laboratory analysis will be homogenized in a stainless steel mixing bowl. Homogenized material

from the bucket will then be transferred to the appropriate wide-mouth glass jars for both the regular and duplicate samples. Equivalent samples from a co-located location will be collected identically to the original samples, assigned unique sample numbers and sent blind to the laboratory.

Duplicate samples will be preserved, packaged, and sealed in the same manner as other samples of the same matrix. A separate sample number and station number will be assigned to each duplicate, and it will be submitted blind to the laboratory.

10.3 Laboratory Quality Control Samples

Laboratory quality control (QC) samples are analyzed as part of standard laboratory practice. The laboratory monitors the precision and accuracy of the results of its analytical procedures through analysis of QC samples. Typically, laboratory QC samples consist of matrix spike/matrix spike duplicate (MS/MSD) samples for organic analyses, and matrix spike and duplicate samples (MS/DS) for inorganic analyses. The term "matrix" refers to use of the actual media collected in the field (e.g., routine soil and water samples).

Laboratory QC samples are collected in the field, but prepared by the laboratory. They are not a separate sample, but an aliquot (subset) of an existing field sample. Matrix Spikes do not include laboratory QC checks, such as calibration standards or surrogates.

Soil sample (a full 8-oz sample jar or two 120-mL sample vials) collected during the RI contain sufficient volume for both routine sample analysis and additional laboratory QC analyses. Therefore, a separate soil sample for laboratory QC purposes will not be collected.

Soil samples for volatile organic compound analyses for laboratory QC purposes will be obtained by collecting double the number of equivalent samples from a co-located location in the same way as the original samples.

For water samples, double volumes of samples are supplied to the laboratory for its use for QC purposes. Two sets of water sample containers are filled and all containers are labeled with a single sample number with the designation "MS/MSD".

The laboratory should be alerted as to which sample is to be used for QC analysis by a notation on the sample container label and the chain-of-custody record or packing list.

At a minimum, one laboratory QC sample (MS/MSD) is required per 14 days or one per 20 samples (including blanks and duplicates), whichever is greater. If the sample event lasts longer than 14 days or involves collection of more than 20 samples per matrix, additional QC samples will be designated.

11.0 FIELD VARIANCES

As conditions in the field may vary, it may become necessary to implement modifications to the sampling plan and rationale as presented in this plan. As appropriate, the QA Officer and HRP Project Manager will be notified and a verbal approval will be obtained before implementing the changes. Modifications to the approved plan will be documented in the sampling project report. Field variances to the CAMP, HASP, and QAPP may also be implemented by the field team, and will be documented by field personnel.

12.0 FIELD HEALTH AND SAFETY PROCEDURES

A Health and Safety Plan (HASP) was prepared in accordance with 40 CFR 1910 and 1926. The Site HASP addresses general construction health and safety issues and potential health and safety concerns associated with exposure to airborne dust and site-specific COCs. The site-specific HASP is provided in **Attachment 1**.

13.0 COMMUNITY AIR MONITORING PLAN

A Community Air Monitoring Plan (CAMP) was developed for the remediation project based on NYSDOH guidelines provided in NYSDEC DER-10. The CAMP will provide for real-time air monitoring at the upwind and downwind perimeter of the work area during active construction. The site-specific CAMP is provided in **Attachment 2**.

14.0 FUGITIVE EMISSIONS MANAGEMENT PLAN

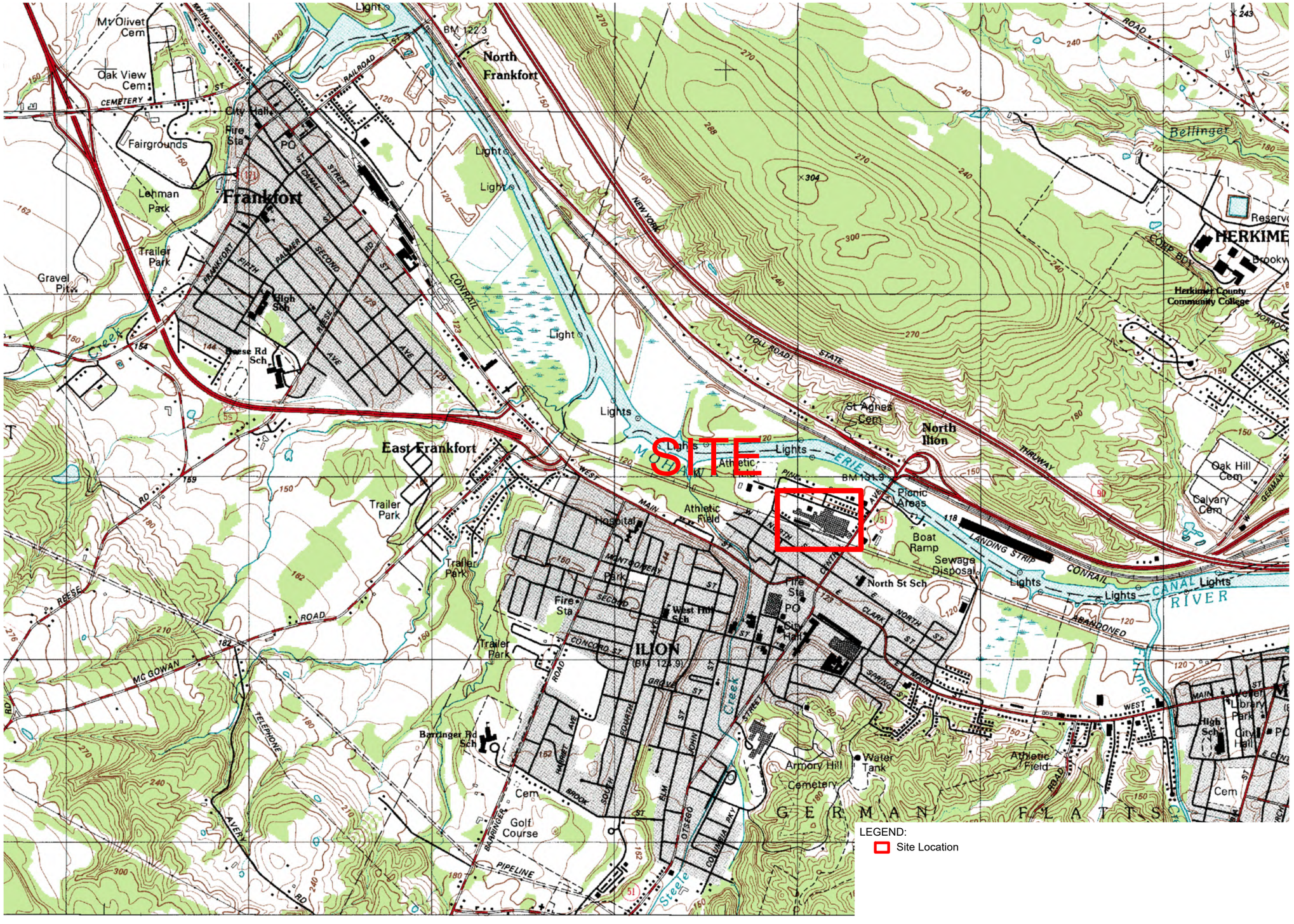
A Fugitive Emission Management Plan (FEMP) was developed to monitor and manage fugitive emissions that may occur during active site work (e.g., odor, noise, and dust). Proper implementation of a FEMP is essential due to the proximity of adjacent residences. The FEMP is provided in **Attachment 3**, and includes the following minimum measures during remedial construction:

- Installation and maintenance of a visual barrier on temporary perimeter construction fence for offsite dust mitigation.
- Active dust suppression as necessary through water application to the construction area (by hose, water cannon, or water truck).
- Covering inactive work areas, including stockpiles, with plastic sheeting.
- Application of odor suppressant foam, as necessary, to exposed surfaces of soil during excavation.
- Restricting work hours as required by local regulations for construction noise.

15.0 FISH AND WILDLIFE IMPACT ANALYSIS

The site is in an urban setting and currently consists of a vacant lot and building that is partially surrounded by perimeter fencing to prevent unauthorized access. Areas outside of the limited perimeter fence generally are paved. Adjacent properties generally are paved and occupied by buildings or City streets and paved parking lots. There are no ecological resources present on or in the vicinity of the site because the site is in an urban area. As such, a Fish and Wildlife Resources Impact Analysis will not be performed.

FIGURES



HRP	MOVE YOUR ENVIRONMENT FORWARD
	197 SCOTT SWAMP ROAD FARMINGTON, CT 06032 (860) 674-9570 HRPASSOCIATES.COM
NORTH	
0 250' 500'	

REVISIONS		
NO.	DATE	

DESIGNED BY: SRT	DRAWN BY: SRT	REVIEWED BY: TSS
ISSUE DATE: 11/11/2019	PROJECT NUMBER: HER1500.P2	SHEET SIZE: 11"x17"

Site Location Map

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
1

DRAWING NAME: S:\Data\HVHERCO - HERKIMER COUNTY IDA\HER1500P2\CAD\2019-11-11_HER1500.P2_Duofold RISAP - Figures 1 - Site Location Map.dwg LAYOUT: Figure 2 - Proposed Soil Sampling Locations PLOT DATE: Nov 12, 2019 - 8:59am
OPERATOR: $(GETVAR,?)

HRP
MOVE YOUR ENVIRONMENT FORWARD
197 SCOTT SWAMP ROAD
FARMINGTON, CT 06032
(860) 674-9570
HRPASSOCIATES.COM

NORTH

0 75' 150'

REVISIONS

NO.	DATE

DESIGNED BY: SRT
DRAWN BY: SRT
REVIEWED BY: TSS

ISSUE DATE: 11/11/2019
PROJECT NUMBER: HER1500.P2
SHEET SIZE: 11"x17"

Proposed Soil Sample Locations

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
2

DRAWING NAME: S:\Data\H\HERCO - HERKIMER COUNTY IDA\HER1500P2\CAD\2019-11-11_HER1500P2_Duofold RISAP - Figures 2-4.dwg LAYOUT: Figure 2 - Proposed Soil Sampling Locations PLOT DATE: Nov 13, 2019 - 11:17am OPERATOR: $(GETVAR,?)

HRP
MOVE YOUR ENVIRONMENT FORWARD
197 SCOTT SWAMP ROAD
FARMINGTON, CT 06032
(860) 674-9570
HRPASSOCIATES.COM

NORTH

0 75' 150'

REVISIONS

NO.	DATE

DESIGNED BY: SRT
DRAWN BY: SRT
REVIEWED BY: TSS

ISSUE DATE: 02/19/2020
PROJECT NUMBER: HER1500.P2
SHEET SIZE: 11"x17"

Proposed Groundwater Sample Locations

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
3

DRAWING NAME: S:\Data\H\HERCO - HERKIMER COUNTY IDA\HER1500P2\CAD\2019-11-11_HER1500P2_Duofold RISAP - Figures 2-5.dwg LAYOUT: Figure 3 - Proposed Groundwater Sampling Locations PLOT DATE: Feb 19, 2020 - 2:30pm
OPERATOR: $(GETVAR,?)

HRP
MOVE YOUR ENVIRONMENT FORWARD
197 SCOTT SWAMP ROAD
FARMINGTON, CT 06032
(860) 674-9570
HRPASSOCIATES.COM

NORTH

0 75' 150'

REVISIONS

NO.	DATE

DESIGNED BY: SRT
DRAWN BY: SRT
REVIEWED BY: TSS

ISSUE DATE: 11/11/2019
PROJECT NUMBER: HER1500.P2
SHEET SIZE: 11"x17"

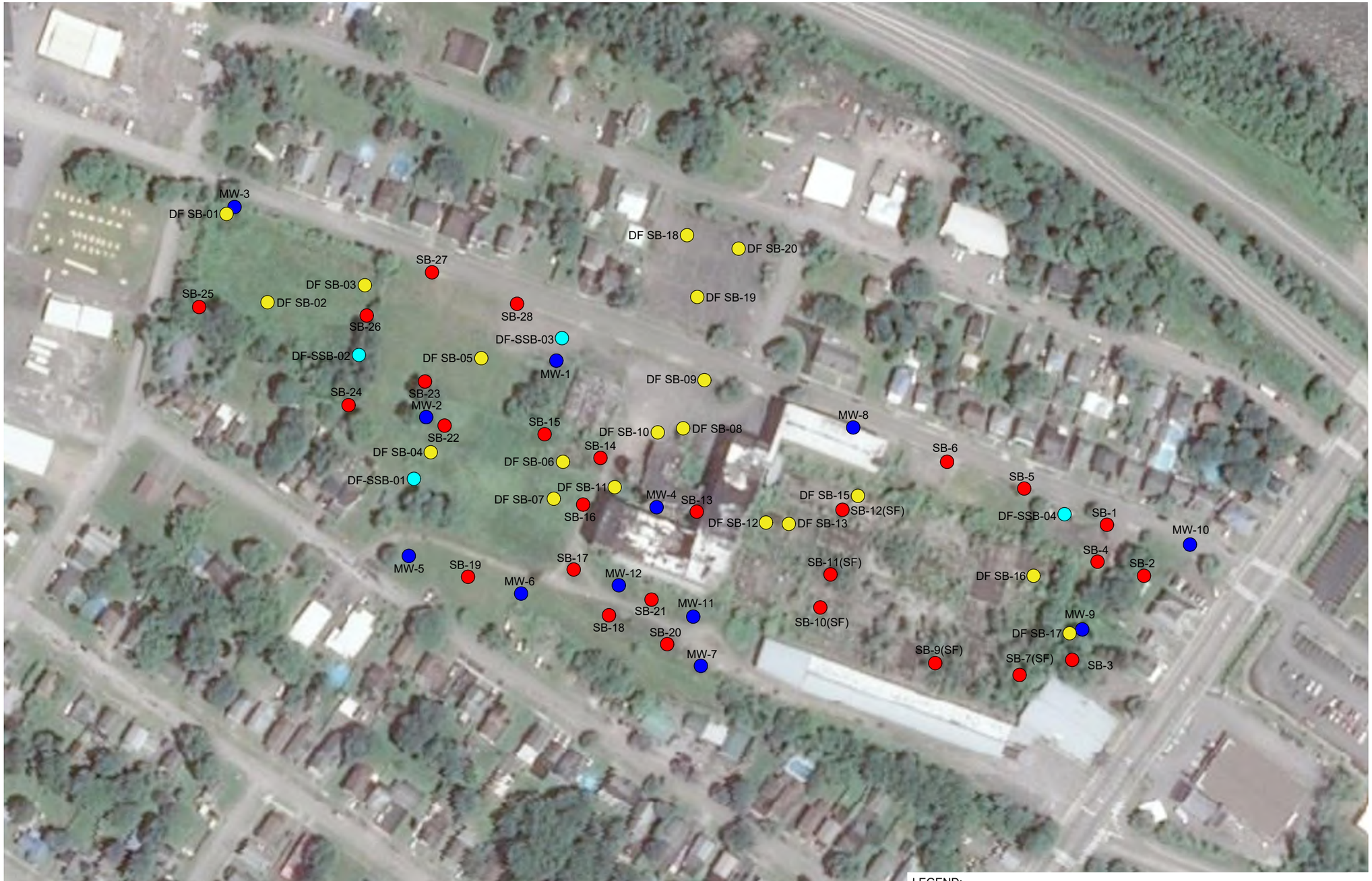
Proposed Air Sample Locations

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
4

DRAWING NAME: S:\Data\H\HERCO - HERKIMER COUNTY IDA\HER1500P2\CAD\2019-11-11_HER1500P2_Duofold RISAP - Figures 2-5.dwg LAYOUT: Figure 4 - Proposed Soil Vapor Sampling Locations PLOT DATE: Feb 18, 2020 - 11:38am
OPERATOR: $(GETVAR,?)



HRP
MOVE YOUR ENVIRONMENT FORWARD
197 SCOTT SWAMP ROAD
FARMINGTON, CT 06032
(860) 674-9570
HRPASSOCIATES.COM

NORTH

0 75' 150'

REVISIONS

NO.	DATE

DESIGNED BY: SRT
DRAWN BY: SRT
REVIEWED BY: TSS

ISSUE DATE: 02/18/2020
PROJECT NUMBER: HER1500.P2
SHEET SIZE: 11"x17"

Previous Site Investigation Sample Locations

Former Duofold Manufacturing Facility
Remedial Investigation

7 Spruce Street
Ilion, New york

Figure
5

DRAWING NAME: S:\Data\HV\HERCO - HERKIMER COUNTY IDA\HER1500P2\CAD\2019-11-11_HER1500P2_Duofold RISAP - Figures 2-5.dwg LAYOUT: Figure 5 - Previous Environmental Investigations PLOT DATE: Feb 18, 2020 - 11:42am OPERATOR: $(GETVAR,??)

ATTACHMENT 1
Health and Safety Plan (HASP)

MOVE YOUR ENVIRONMENT FORWARD

SITE-SPECIFIC HEALTH AND SAFETY PLAN (HASP)

Vacant Industrial Property
Former Duofold Site
7 Spruce Street
Ilion, New York 13357

Prepared For:

The Herkimer County Industrial Development Agency
Attn: John Piseck
420 E. German Street, Suite 101A
Herkimer, New York 13350

Prepared By:

HRP Associates, Inc.
1 Fairchild Square, Suite 110
Clifton Park, NY 12065

HRP #: HER1500.P2
Brownfields Assessment Cooperative Agreement: BF-96261019-0

Issued On: February 18, 2020

Addendum Number	Date Issued	Reason For Modification
1	5/19/2020	COVID-19 Pandemic

Disclaimer

HRP Associates does not guarantee the health or safety of any person entering this site. Due to the potential hazards of this site and the activity occurring thereon, it is not possible to discover, evaluate, and provide protection for all possible hazards which may be encountered. Strict adherence to the health and safety guidelines set forth herein will reduce, but not eliminate, the potential for injury at this site. The health and safety guidelines in this plan were prepared specifically for this site for use and should not be used on any other site.

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Appendix D Material Safety Data Sheets (for chemicals brought to the site)
Appendix E Daily Job Brief Record
Appendix F COVID-19 Addendum

1.0 EMERGENCY CONTACTS/PLANNING

The Health and Safety Officer will coordinate the entry and exit of response personnel in the event of an emergency. The following information, including directions to the nearest hospital shall be posted at the Site. When contacting the local authorities, be sure to provide: your name, facility name, full address, telephone number, and the nature of the emergency.

Emergency Phone Numbers 7 Spruce Sreet Ilion New York	
Emergency Contact	**Phone Number**
Fire, Ambulance, Police Emergency:	911
Ilion Police Department	315-894-9911
Ilion Fire Department	315-895-7424
Little Falls Hospital	315-823-1000
Poison Control Center	1-800-222-1222
NYS Spill Hotline:	1-800-457-7362
National Response Center:	800-424-8802
HRP Project Manager: Jesse Zahn	518-877-7101
Site H&S Officer: Mark Wright	203-308-0983

Map and directions to the following medical facilities are provided in **Figure 1**:

Little Falls Hospital
140 Burwell St, Little Falls, NY 13365
(approximately 10.6miles from the work site)

First Aid, Fire Protection, Emergency Response Equipment Storage Locations	
First Aid Kit:	In Vehicle
Fire Extinguisher:	In Vehicle
Eye Wash (Bottle):	In Vehicle

2.0 INTRODUCTION

2.1 Purpose and Scope

This Health and Safety Plan (HASP) addresses the health and safety practices that will be employed by HRP Associates, Inc. personnel and our subcontractors participating in the remedial site investigation activities including the installation of test borings, monitoring wells, and soil vapor probes.

This HASP has been developed in accordance with HRP's Company Safety and Health Program as required under OSHA's Hazardous Waste Operations Standard (29 CFR 1910.120). This Plan has been developed to establish minimum standards necessary for soil excavation activities to protect the health and safety of HRP personnel. HRP site personnel have received the required level of training and field experience as required under subpart (e) of the Standard, and have received medical examinations in accordance with HRP's medical surveillance program as required under subpart (f) of the Standard. No other personnel will be permitted in the Exclusion Zone unless they have received training and medical surveillance under the Standard.

HRP personnel and associated contractors shall be familiar with this HASP prior to conducting the proposed remedial investigation. This plan must be present on site and be available for reference/inspection when the subject site work is being conducted.

2.1.1 Site Information and Description

Site Name: Vacant Industrial Property **-** Former Duofold Site

Site Address: 7 Spruce Street - Ilion, New York 13357

Site Contact: John Piseck

Phone Number: 315-868-4928

2.2 Background and Project Description

The subject site, known as the former Duofold Manufacturing Facility (DUOFOLD), is located at 7 Spruce Street, Illion New York. The Site consists of three contiguous parcels of land identified by the Herkimer County tax assessor as Parcel IDs: 120.29-1-63, 120.29-2-74.1, and 120.29-1-26. The site measures 12.23 acres, and is located in a mixed commercial and residential use area.

Three (3) buildings totaling approximately 134,500 square feet (ft^2) improve the Site and have been vacant since 2001. Building A is known as the primary manufacturing/office building, and the area measures approximately 124,000 ft^2. Building A consists of four-stories with a basement, and is located in the center of Parcel A. Building B is understood by HRP to be the former boiler house, and measures approximately 4,500 ft^2. Building B consists of one-story with a basement, and is also located in the center of Parcel A. Building C is known as a former storage building, and is situated the west-center portion of the site. Building C measures approximately 6,000 ft^2 in area, and consists of one-story with no basement. The remainder of the Site consists of parking and driveway areas,

overgrown areas, and a fenced secured area. The nearest waterbody is the Mohawk River, which is located approximately 800 feet to the north of the Site.

Previous investigations conducted at the site have identified surficial and shallow onsite impacts to soil, groundwater, and soil vapor. Metal constituents including lead, chromium, mercury, and arsenic have been previously reported in surficial and subsurface soil at concentrations that exceed the New York State Department of Environmental Conservation (NYSDEC) Part-375 Industrial Use Soil Cleanup Objectives (IUSCOs). Impacted soils are understood by HRP to be widespread and sporadic across the site, and have been generally identified by previous investigations to be present in the overlying fill layer. The impacts to historical fill material is most-likely related to demolished building materials from the former paint spray booth areas, ash from historical burning of coal, maintenance of machinery, and treatment of wood products.

HRP will be responsible for conducting a remedial investigation (RI) at the Site, to further delinate environmental impacts identified during previous site characterizations.

2.2.1 Personnel Designations

The following personnel are designated to perform the stated project activities and to ensure that the requirements of this HASP are met. The same person may fill more than one role, and/or serve as an alternate in the absence of the designated team member.

The following personnel are designated to perform the stated project activities and to ensure that the requirements of this HASP are met. The same person may fill more than one role, and/or serve as an alternate in the absence of the designated team member. All subcontractors must have received the required level of training and field experience as required under subpart (e) of OSHA 29 CFR 1910.120 and OSHA 29 CFR 1926.65 for Hazardous Waste Operations and Emergency Response (HAZWOPER).

Project Team Member	Responsibilities and Tasks
Mark Wright, CHMM, CSP, P.G.	**HSO – HRP Associates, Inc.** - Ensuring all site work is being performed in accordance with HRP Associates, Inc. Safety Program, as well as in accordance with local, state and federal regulations. - Directing and implementing HRP's HASP. - Reviewing the Subcontractor's HASP and being aware of the hazards detailed therein. - Conduct a job orientation meeting and routine safety meetings for HRP Associates, Inc. employees and subcontractors, as applicable. - Provide copies of these inspections, recordkeeping/personnel logs to the engineer/contractor as required. - Ensuring all project personnel have been adequately trained in the recognition and avoidance of unsafe conditions. - Authorizing Stop Work Orders that shall be executed upon the determination of an imminent health and safety concern, and will notify the appropriate contacts upon issuance of this order. - Authorizing work to resume, upon approval from the Contractor. - Directing activities, as defined in the HRP's and the Contractor's written HASP, during emergency situations. - Providing personnel monitoring where applicable. - Ensuring that adequate personal protective equipment and first aid supplies are available. - Ensure site security, to the extent practicable. - Ensure accident victims are promptly cared for, and the incident is investigated and properly reported.
Jesse Zahn, CHMM, P.G Thomas Seguljik, P.E., P.G.	**Site Supervisor/Project Manager – HRP Associates, Inc.** - Monitor and assist the site Health and Safety officer. - Maintain appropriate rules, regulations and codes at the job site. - Provide advance safety planning for all activities through the use of scheduling and administrative controls. - Obtain site-specific health and safety information and communicate that information with the appropriate personnel (i.e. contractors, client, etc.) - Report all injuries, illnesses and other incidents to the Director of Safety. - Ensure all HRP personnel are trained and qualified to perform site work.
Site Workers (Subcontractors)	**Site Workers** - Read and work in accordance with this HASP. - Report all unsafe work practices to the HSO. - Report all incidents, including near-misses to the HSO. - Work in a safe manner. - Provide Designated Competent Person
A complete list of HRP employee and subcontractor responsibilities (as applicable) can be found in the HRP Corporate Health & Safety Plan.	

3.0 AREAS OF ENVIRONMENTAL CONCERN

3.1 Scope of Work

In general, the work to be performed by HRP and HRP's subcontractors during the remedial investigation will consists of soil boring installation, monitoring well construction, and multimedia sampling (soil, groundwater, air). Soil sample locations are proposed in areas where contaminants are suspected to be present based on previously documented site history and environmental investigations.

The investigation is comprised of numerous tasks that are detailed in the Remedial Investigation Sampling and Analysis Plan (RISAP). This HASP is included as Attachment 1 – Health and Safety Plan of the RISAP.

Investigation derived waste (IDW) generated (if any) from the installation of monitoring wells and the development and sampling of monitoring wells will be handled in accordance with NYSDEC DER-10. Drill cuttings and spoils generated will be containerized in a 55-gallon drum, and disposed at a properly permitted treatment, storage, or disposal facility. Representative samples of cuttings and spoils will have to be analyzed to determine classification, treatment, and disposal.

The drilling subcontractor will be retained by either HRP or the Herkimer County IDA. HRP has the authority to stop work if unsafe conditions are encountered.

4.0 HAZARD ANALYSIS

The project hazard analysis below identifies the hazards that are anticipated to be encountered by the project team.

Physical Hazards Present	☐ Electricity ☒ Trips/Falls/Floor openings ☐ Holes/Pits ☒ Inclement weather ☒ Heat ☒ Cold ☒ Vibration ☒ Flying particles	☐ Ionizing radiation ☐ Non-Ionizing radiation ☐ Lasers ☒ Overhead hazards ☒ Noise ☒ Visible dust ☐ Falling objects ☐ Other _____
Health/Chemical Hazards Present [1]	☒ Dust/Fumes/Particulates ☒ Flammable/Combustible ☒ Compressed gas ☐ Explosive ☐ Water reactive ☐ Unstable ☒ Contact with contaminated media	☐ Oxidizer ☒ Corrosive ☒ Toxic ☐ Highly Toxic ☒ Irritant ☐ Sensitizer ☒ Carcinogen/Mutagen ☐ Other _____
Environmental/Equipment Hazards Present	☒ Heavy machinery ☒ Drilling ☐ Water operations ☒ Mobile equipment ☐ Road work ☐ Railroad work ☐ Forklifts ☐ Power tools ☐ Welding ☒ Gas cylinders ☒ Overhead/underground utilities	☐ Trenching/excavation ☐ Elevated heights/man lifts ☐ Scaffolding ☐ Ladders ☐ Confined spaces ☒ Energized equipment ☒ Overhead hazards ☒ Drums/container handling ☒ Insects/rodents/snakes ☒ Biological hazards ☐ Other _____
Personal Safety Considerations	☒ Security Issues ☐ Remote setting ☐ Employees working alone ☒ Limited lighting	☐ Off hour shifts ☐ Dangerous wildlife/animals ☐ Limited cell phone service ☐ Other _____
[1] **Table 1** (following the text of this HASP) provides a list of chemical substances for reference, along with odor threshold, permissible exposure limit (PEL), threshold limit value (TLV), OSHA ceiling, IDLH concentration, route of exposure and symptoms of acute exposure, if any. Refer to the RISAP for contaminants concentration levels.		

Details of specific hazards associated with individual tasks will be discussed in the Daily Job Brief Record (**Appendix F**).

4.1 Hazard Analysis Summary/Minimization

HRP's Corporate Health & Safety Plan (in conjunction with this HASP) will be cross-referenced in order to obtain the safe work practice procedures for mitigating and preventing project site hazards identified in the table above. Job site hazard prevention and minimization information can be found in HRP's Corporate Health & Safety Plan.

Confined Spaces

Only properly trained HRP personnel are authorized to enter confined spaces. Confined space entry may be performed by subcontractors who have the proper training and experience to conduct this work. No confined space activities are anticipated during the remedial investigation.

4.2 Changes in Conditions or Scope

Should conditions or the scope of work described herein change significantly, a HASP Addendum will be completed.

4.3 Monitoring Procedures

Air monitoring will be used to determine the concentrations of various chemicals while working in the exclusion zone to evaluate worker exposure to contaminated media. In order to determine potential health hazards and to determine the level of personal protection needed during sampling activities within the areas of concern, a Photoionization Detector (PID) and Particulate Monitor will be periodically operated to monitor air quality for the purpose of ensuring minimal exposure to volatile organic compounds and dust. Monitoring of atmospheres adjacent to on-going excavations and around the treatment area shall also be conducted with a PID.

The following environmental monitoring instruments/procedures shall be used on-site at the specified intervals. Air monitoring processes and procedures are provided in the RISAP as Attachment # 2 – Community Air Monitoring Program (CAMP).

Instrument/Procedure	**Sampling Interval**
Photoionization Detector (PID)	Periodically as deemed by the CAMP & HSO
Particulate Monitor	Periodically as deemed by the CAMP & HSO

Background ambient air levels will be established outside the exclusion zone prior to commencement of site work. Ambient air sampling will occur in the breathing zone of site workers for comparison to the action levels (described below). Additionally, air sampling will be conducted in the vicinity of any intrusive exploration (i.e. near excavations, trenches, etc.) to determine if any contaminants are present.

The following *Action Levels* will be used:

Instrument	Action Level	Level of Protection or Action Required
PID	No reading above background	▪ No action required. ▪ Continue PID monitoring. ▪ (Modified) Level D protection.
PID	Up to 5 ppm above background	▪ Evacuate exclusion zone. ▪ Recheck levels after 15 minutes. ▪ If levels are sustained, reassess. ▪ Use engineering controls to lower breathing zone vapors. ▪ Level C protection (at the HSO direction).
PID	>5 ppm above background	▪ Evacuate exclusion zone. ▪ Recheck levels after 15 minutes. ▪ Use engineering controls to lower breathing zone vapors. ▪ If levels are sustained, contact Safety Manager, and re-evaluate HASP.
Dust Monitor	No reading above background	▪ No action required. ▪ Continue particulate monitoring. ▪ (Modified) Level D protection.
Dust Monitor	100 ug/m^3 greater than upwind (background) level	▪ Recheck levels after 15 minutes. ▪ If levels are sustained, reassess. ▪ Use engineering controls (dust suppression) to lower breathing zone dust levels.
Dust Monitor	150 ug/m^3 above the upwind (background) level	▪ Evacuate exclusion zone. ▪ Recheck levels after 15 minutes. ▪ Use engineering controls to lower breathing zone dust levels. ▪ If levels are sustained, contact Safety Manager, and re-evaluate HASP.

When an action level is equaled or exceeded, the work area should be evacuated and the area re-tested with the sampling device. If the appropriate action level continues to be exceeded, the HSO will have to assess the use of engineering controls to lower vapor levels or availability of required increased personal protection equipment before authorizing re-entry.

Calibration of all instruments will occur at least once per day, when in use. An equipment calibration log is included in **Appendix C**.

5.0 ENGINEERING CONTROL MEASURES/GENERAL SAFETY

5.1 Air Monitoring

In order to determine potential health hazards and to determine the level of personal protection needed during drilling and sampling activities within the areas of concern, a PID and Dust Monitor will be periodically operated to monitor air quality for the purpose of ensuring minimal exposure to volatile organic compounds. Please refer to Section 4.2 of this plan for specific air monitoring procedures/action levels.

5.2 Protective Zones

Prior to commencement of work in area of suspected contamination, protective zones specific for each phase of the Plan will be established by the HSO if necessary prior to the start of field work. The purpose of the protective zones is to prevent potential cross-contamination of adjacent areas as well as to protect project personnel from exposure to contaminated areas.

Protective zones shall be delineated as follows:

- Exclusion Zone: This is the contaminated area in which intrusive activities are performed. The "Area of Environmental Concern" (AOEC) is located within this area. A single access point for entrance and exit should be established and maintained, if possible. This zone should be delineated from the Contaminant Reduction Zone via perimeter cones or caution tape, or other applicable method. Work areas are shown in the RISAP in **Figure 2-4**. The Exclusion Zone delineation and any necessary modifications will be based on site conditions.

- Contaminant Reduction Zone: This zone is a transition zone located between the Exclusion Zone and the Support Zone and is utilized to decontaminate personnel and equipment.

- Support Zone: This zone will be utilized by equipment and vehicle storage and will be kept free of contaminated material. The HSO will determine the location of this zone. In the event of a site evacuation, the rally point will be the corner of Spruce Street and Central Avenue. The designated rally point may be relocated by the HSO based on project or site conditions. All site workers will be notified of any relocation prior to implementation.

6.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

6.1 Level of Protection

As identified in Section 4.0, the overall health and safety risk associated with chemical hazards for HRP and associated contractors is considered moderate due to noted metals and VOC concentrations present during previous environmental investigations conducted at the Site. Therefore, the minimal level of protection for HRP personnel during the conduct of all the environmental work performed at the site will be Level D PPE, and will generally consist of the PPE listed below:

- Steel toe/shank work boots
- Hard hat, as necessary
- Safety vest, as necessary
- Coveralls/Tyvek, as necessary
- Safety glasses/goggles/face shield, as necessary
- Hearing protection, as necessary

If site conditions warrant, an upgrade to Level C PPE may be required (refer to Section 4.2 for the appropriate *Action Levels*) then the drilling contractor will make Level C personal protective equipment (PPE) readily available. Level C PPE generally includes:

- Full face, air purifying respirator with organic vapor and particulate cartridges
- Same as Level D, but also includes Tyvek taped pant/boot and glove/shirt

If it is determined protection beyond Level C is required, HRP will re-evaluate the HASP as well as the site conditions, and will revise the HASP as required.

The following table provides a summary of the minimum level of PPE required on site:

Description	Level of Protection [1]	
	D	C
Body		
Work Clothes	R	R
Chemical Protective Suit (Tyvek)	O	R
Visibility Vest	O [2]	O [2]
Apron	O	O
Fall Protection	O [2]	O [2]
Head		
Hard Hat	R	R
Head Warmer	O	O
Eyes & Face		
Safety Glasses	R	R
Goggles (based on hazard)	O	R
Face Shield	O	O
Ears		
Plugs or Muffs	R [2]	R [2]
Hands & Arms		
Work Gloves	R	O [2]
Chemical Resistant Gloves (Nitrile)	O	R

Description	Level of Protection [1]	
	D	C
Insulated Gloves	O	O
Foot		
Work Boots/Steel Toe Boots	R	R
Chemical Resistant Boots	O	O
Disposable Boot Covers	O	O
Respiratory Protection [3]		
½ Mask Air Purifying Respirator (APR)	NA	R
Full face APR	NA	R
Dust Protection	O	NA
Powered APR	NA	NA
SCBA/Supplied Air Respirator	NA	NA

R = Required, **O** = Optional, **NA** = Not Applicable
[1] The level of protection identified here does not include the necessary equipment for entering confined spaces. Refer to Moran Environmental Recovery's Safety Manual Confined Space Program for atmospheric sampling protocols and breathing and rescue equipment necessary for those operations.
[2] The use of this PPE may or may not be required depending on site conditions/location and will be addressed at the time of task assignment by the HSO.
[3] Respiratory protection necessary to protect against VOC, dusts/particulates and not oxygen deficient atmospheres.

The following table provides a general description of potential field activity tasks to be performed and associated (recommended) PPE. The use of this PPE may or may not vary depending on site conditions and will be addressed at the time of task assignment by the HSO.

Task Description	Invasive (Y/N)	Protection Level
Site Mobilization - Surveying, fence and barrier installation, hay bale installation, deacon and work zone set up, soil staging areas preparation	N	Level D
Soil and Water Sampling - Drilling, sampling, soil moving as needed.	Y	Modified Level D or Level C – Respirator as needed based on monitoring. Eye protection required during collection of any liquid sample
Soil Excavation, Staging and Load-Out	Y	Modified Level D – or Upgrade to Level C dependent on monitoring
Decontamination - Truck dry sweeping, deacon pressure wash of equipment, PPE change out	Y	Modified Level D – or Upgrade to Level C dependent on monitoring
Waste Management - Soil load-out for off-site disposal, water removal for disposal, PPE disposal	Y	Modified Level D – or Upgrade to Level C dependent on monitoring
Site Control (Exclusion, Decontamination, Support Zones)	N	Modified Level D – or Upgrade to Level C dependent on monitoring
Communications - Use of hand signals, backup alarms, and voice	N	NA
Site Restoration	Y	Level D

7.0 DECONTAMINATION

7.1 Decontamination Procedures

All personnel and equipment leaving the exclusion zone must be properly cleaned and decontaminated. When there is evidence of chemical contamination during the site operations, all personnel will be decontaminated under the direction of the HSO. Clean-up and/or decontamination of personnel shall consist of washing off excessively soiled PPE with a disinfectant detergent scrub and water. At the very least, all personnel should wash their hands and face before leaving the exclusion zone. After washing, all disposable clothing (Tyvek, gloves, etc.) will be removed and placed in a double lined plastic bag.

Sampling tools and any other non-disposable items will be decontaminated between sampling points, and at the direction of HRP personnel, to prevent cross-contamination of work areas or environmental samples, as applicable.

7.2 Emergency Decontamination

If immediate medical attention is required in an emergency, decontamination will be performed after the victim has been stabilized. If a worker has been exposed to an extremely toxic or corrosive material, then emergency decontamination will consist of flushing with copious amounts of water. If the victim cannot be decontaminated because it will interfere with emergency medical aid being administered, then the victim should be wrapped with plastic or other available items (i.e. an uncontaminated coverall) to reduce potential contamination of other personnel or medical equipment.

If a site worker has been overcome by heat related illness, then any protective clothing should be removed immediately. In the case of non-medical emergency evacuation, decontamination should be performed as quickly as possible, unless instant evacuation is necessary to save life or prevent injury.

7.3 Personal Hygiene

All employees will be required to wash hands and face prior to eating, smoking, drinking and going to the bathroom. Workers will be required to remove contaminated PPE and clothing prior to leaving the Contaminant Reduction Zone. All field personnel should avoid contact with potentially contaminated substances such as puddles, pools, mud, etc.

8.0 EMERGENCY ACTION PLAN/SPILL RESPONSE

In the event of a worker injury, fire, explosion, spill, flood, or other emergency that threatens the safety and health of site workers, the following procedure will be followed:

1. If the emergency originates within the work area covered by this Plan, the HRP HSO shall act as the Emergency Coordinator. The emergency evacuation signal is an air horn or a loud yell. All emergency situations (including worker injuries, no matter how small) will be reported to the HSO, who will determine the appropriate emergency response, up to and including evacuation. Only the HSO may initiate evacuation of the work area. The HSO will be responsible for reporting any emergency situation to the appropriate authorities, using a telephone or other appropriate method.

2. In the case of an evacuation, site workers will exit the site along the safest route(s) and assemble with team members at a safe rally point. Those workers in the Exclusion Zone will follow the emergency decontamination procedures outlined in Section 7.2. Accounting of all site personnel will be conducted by the HSO using the personnel log at a location determined by the HSO.

3. HRP personnel are not permitted to participate in handling the emergency. Fire and medical emergencies will be handled by the local fire department and ambulance service. In the case of a spill of hazardous materials, one of the following commercial spill clean-up firms should be contacted, as applicable:

    - **Environmental Products and Services – Glenmont, New York**
      1-800-577-4557 – 24 Hours
      518-465-4000 – Glenmont

    - **Clean Harbors Environmental Services – Glenmont, New York**
      1-800-645-8265 – 24 Hours
      518-434-0149 - Glenmont

    In addition, the HSO/Project Manager must advise the site contact that the New York Spill Hotline 1-800-457-7362 should be contacted and, if the spill quantity is greater than the Reportable Quantity (RQ) under CERCLA and/or SARA, the National Response Center (NRC) and Local Emergency Planning Committee should also be contacted. Any oil or petroleum products, chemical liquid, chemical solid, liquid product, gaseous product, or hazardous waste that is released in any manner which constitutes a spill, and poses a potential threat to human health or the environment, must be immediately reported to the NYSDEC.

    If the spill begins to flow overland and threatens to contaminate a storm drain or surface water, HRP personnel may attempt to contain and isolate the spill using any available resources, but only if, in the judgment of the HSO, such action will not expose the workers to dangerous levels of hazardous substances and is necessary to preserve life or property. In the event that a spill of material of any amount threatens to reach navigable waters, the NRC shall be contacted.

4. Once initial emergency procedures to protect worker safety and health have been addressed, and control of emergency has been completed, the HSO will complete an Investigation Report and submit this form to the appropriate personnel (HRP and/or client contact).

5. All site workers will be familiarized with the above procedures during the pre-entry briefing to be conducted before site work begins.

9.0 TRAINING/MEDICAL SURVEILLANCE

9.1 Training Requirements

All HRP and HRP subcontractor personnel who enter the work zone and/or Exclusion Zone must have successfully completed the 40-hour or 24-hour training requirement outlined in 29 CFR 1910(e). If the 40-hour or 24-hour training of any person occurred more than 12 months prior to commencement of work, then that person must have attended an 8-hour refresher course within the 12 months prior to commencement of work. If respirators are in use in the Exclusion Zone, then all personnel must have undergone respirator training and a fit test within the last 12 months. Training certificates and records for HRP employee(s) are on file at HRP. All other contractors will be required to supply written proof of training before being allowed into the Exclusion Zone.

9.2 Pre-Entry Briefing

Prior to commencement of work in an area of suspected contamination, HRP's Health and Safety Officer will conduct a pre-entry briefing with on-site contractors, which will include the following:

- Name of the HSO and person responsible for the visitor log.
- Description of the parcel as well as location of emergency telephones and the location/boundaries of the Exclusion Zone, Contamination Reduction Zone, and Support Zone, if established.
- Review of hospital locations and directions.
- Review of tasks to be conducted within the parcel by the site workers.
- Review of the Emergency Action Plan and rally point, including the nearest emergency communications and telephone numbers.
- The nature, level, and degree of anticipated hazards (physical and chemical) involved in the site work.
- Required personal protective equipment.
- Decontamination procedures.

The HSO should also, at this time, ensure that all on-site HRP and HRP subcontractor personnel have read the HASP and signed the last page of the original (Section 11.0). If additional information on the site becomes available, the HSO will call additional briefings as necessary.

9.3 Morning Safety (Tailgate) Meeting

The HRP HSO will conduct a safety overview meeting at the beginning of each workday on the site. The meeting will be given in addition to any tailgate meetings that the subcontractor conducts. A summary of the meeting topics signed by the personnel attending the meeting is included in **Appendix F**.

9.4 Medical Surveillance

All HRP and HRP subcontractor personnel entering the Exclusion Zone must have had a physical within the 12 months prior to commencement of site work. A physician's written opinion regarding fitness for work for each employee including work limitations, if any, is on file at HRP, as applicable. A written opinion for all other site personnel must be supplied prior to commencement of site work to the HRP HSO. Any work limitations for site personnel, or relevant medical information (i.e. allergic reactions to medication) should be included in this Plan.

10.0 AUTHORIZATIONS

Personnel authorized to enter the Exclusion Zone include the personnel listed in Section 2.4. Persons not listed in Section 2.4 may enter the Exclusion Zone only if the appropriate training and medical fitness certifications have been supplied to either the HRP Project Manager or Health and Safety Manager and the HSO or his/her designee on site has approved site entry. All personnel entering or leaving the Exclusion Zone must sign in and sign out with the record-keeper.

11.0 FIELD TEAM REVIEW

All HRP personnel shall sign below after reading this HASP and shall agree with the following statement:

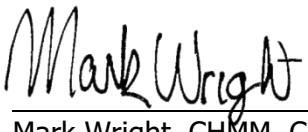
*"I have read and understand this site specific Health and Safety Plan.
I will comply with the provisions set forth therein."*

Printed Name	Signature	Date

12.0 APPROVALS

This plan meets the minimum requirements of 29 CFR 1910.120 and 29 CFR 1929.65 and has been written for specified site conditions, dates, and personnel, and must be amended if conditions change. By their signature, the undersigned certify that this HASP is approved and will be utilized during Site investigation activities.

11/18/2019
Jesse Zahn, CHMM, P.G. Date
Project Manager



11/18/2019
Mark Wright, CHMM, CSP, P.G. Date
Office Health and Safety Manager

Subcontractor:

I have been provided a copy of this HASP for review.

_____ _____
Date

Representing _____

The Designated Competent person representing _____ at the site will be

_____.

Any alternate Competent Person will be noted in the Daily Job Brief Record (**Appendix E**).

ADDITIONAL APPROVALS (or Re-Approvals)	
Name:	**Date:**

FIGURES

Figure 1 - Route and Map to Nearest Hospital and Medical Center

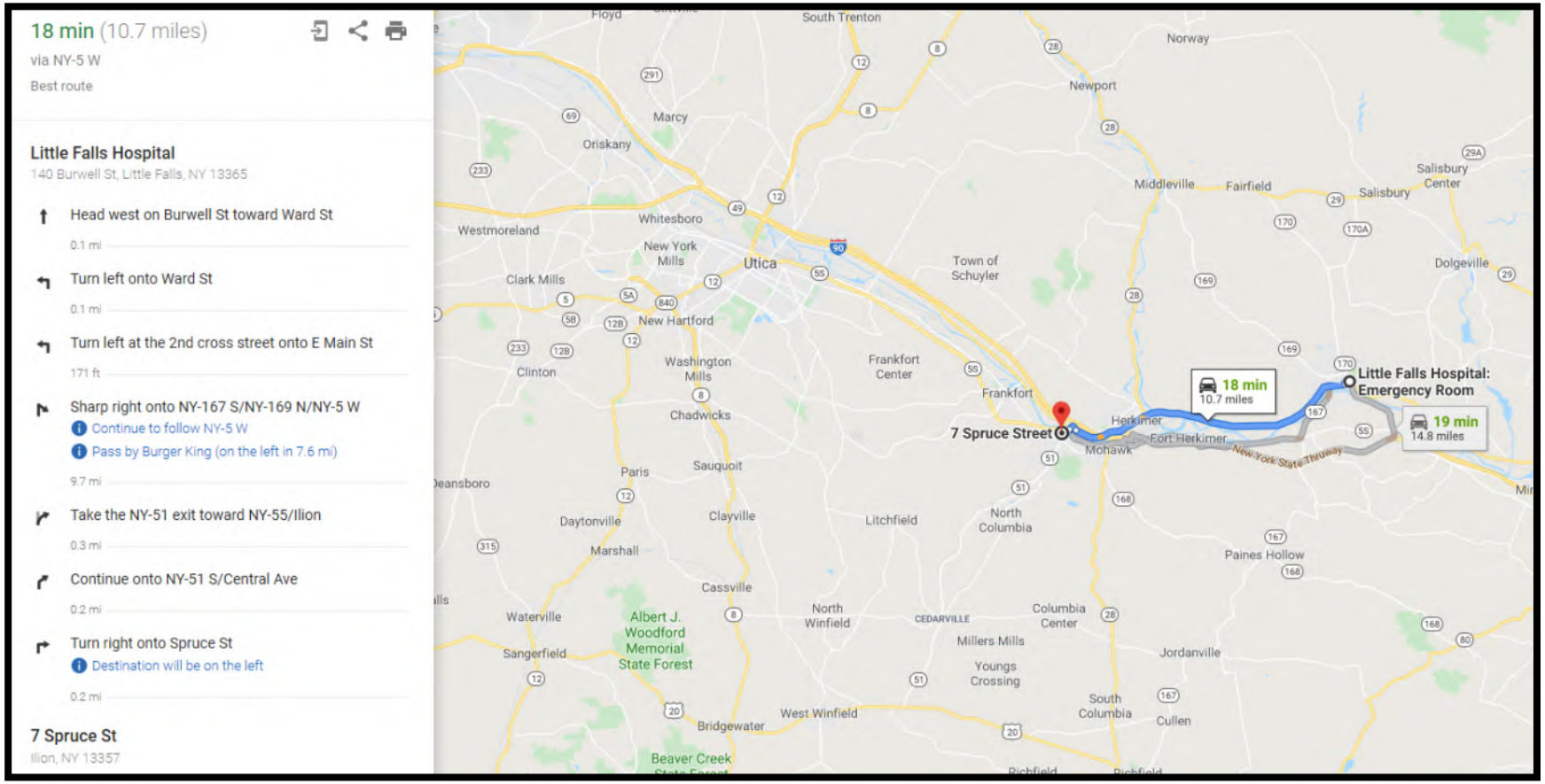


TABLE 1
CHEMICAL HAZARDS KNOWN OR SUSPECTED ON-SITE

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
1,1,1 Trichloroethane	44 ppm	350 ppm	350 ppm	---	700 ppm	Inh, Ing, Con	Head, Lass, CNS, Derm
1,1,2-Trichloroethane	---	10 ppm	10 ppm	----	[100 ppm]	Inh, Ing, Abs, Con	Eyes, Nose Irrit, Resp Irrit, CNS, Liver, Kidney Damage, Derm, [Carc]
1,2,4 Trimethylbenzene 1,3,5 Trimethylbenzene		25 mg/m^3	25 ppm	25 mg/m^3	ND	Inh, Ing, Con	Irrit Eyes, Skin, Nose, Throat, Resp Sys, Bron, Hyprochronic Anemia, Head, Drow, Ftg, Dizz, Nau, Inco, Vomit, Conf, Chemical Pneu (aspir lig)
1,1' Biphenyl	0.0062 mg/m^3	0.2 ppm	0.2 ppm	---	100 mg/m^3	Inh	
1,1-Dichloroethane	120 ppm	100 ppm	100 ppm	---	3,000 ppm	Inh, Ing, Con	CNS Depres, Skin Irrit, Liver, Lung and Kidney Damage
1,1-Dichloroethylene***	500 ppm	---	5 ppm	---	---	Inh, Con	CNS depress, Resp, [Carc]
1,2-Dichlorobenzene	50 ppm	50 ppm	25 ppm		200 ppm	Inh, Ing, Abs, Con	Irrit, Resp
1,2-Dichloroethylene	26-87 ppm	200 ppm	200 ppm	---	1,000 ppm	Inh, Ing, Con	Vomit, Irrit Eyes, Resp Sys; CNS Depres
1,2-Dichloropropane	130-190 ppm	75 ppm	75 ppm	---	[400 ppm]	Inh, Con, Ing	Eye irritation, Drow, light-headedness; irritated skin, [Carc]
1,3-Dichlorobenzene	---	----	---	----	---	----	----
1,4-Dichlorobenzene	20 ppm	75 ppm	10 ppm	----	[150 ppm]	Inh, Ing	[Carc], Eye Irrit, swelling around eye, headache, nausea, vomiting

TABLE 1
CHEMICAL HAZARDS KNOWN OR SUSPECTED ON-SITE

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
1-Methylnaphthalene	0.02 ppm	---	---	---	---	---	---
2,4-Dichlorophenol	1.4007 mg/m^3	---	---	---	---	---	---
2,4-Dimethylphenol	0.001 mg/m^3	---	---	---	---	---	---
2-Methylnaphthalene	0.01 ppm	---	---	---	---	---	---
2-Methylphenol (o-cresol) [skin]	1.4 mg/L	5 ppm	5 ppm	---	250 ppm	Inh, Abs, Ing, Con	Confusion, depression, Resp Fail; difficulty breathing, irregular rapid respiration, weak pulse; skin, eye burns; dermatitis
3, 3'-Dichlorobenzidine	---	None	**---**	---	---	Inh, Abs, Ing, Con	Sens, Derm, Head, Dizz, Burns, GI Upset, [Carc]
4-Isopropyltoluene	---	---	---	---	---	Con, Inh, Ing	Defat, Eryt
Acenephthene	0.5048 mg/m^3	---	---	---	---	---	---
Acenaphthylene	---	---	---	---	---	---	---
Acetone	47.5 mg/m^3	1,000 ppm	500 ppm		2,500 ppm	Ing, Inh, Con	Head, Dizz; Irrit Eyes, Nose, Throat; Derm, CNS, Depress, Derm
Acetonitrile	70 mg/m^3	40 ppm	20 ppm	---	500 ppm	Inh, Ing, Abs, Con	Asphy; Nau, Vomit; Chest Pain; Weak, Stupor, Convuls; Eye Irrit
Aldrin	---	0.25 mg/m^3	0.25 mg/m^3	---	25 mg/m^3	Inh, Abs, Ing, Con	Head, Dizz, Nau, Vomit, Mal, Myo, [Carc]
Anthracene (Coal Tar Pitch)	---	0.2 mg/m^3			[80 mg/m^3]	Inh, Con	Derm, bron, [carc]
Antifreeze		50 ppm	100 mg/m^3 (aerosol)	---	ND	Inh, Ing, Con	Irrit Eyes, Skin, Nose, Throat, Nau, Vomit, Abdom Pain, Lass, Dizz, Stup, Conv, CNS, Depres, Skin Sen
Arsenic	----	0.010 mg/m^3	0.01 mg/m^3	----	[5 mg/m^3]	Abs, Inh, Con, Ing	Derm; GI; Resp Irrit; ulceration of nasal septum; Resp, Irrit, Hyper Pig of Skin, [Carc]
Barium (elemental)	---	0.5 mg/m^3	0.5 mg/m^3		50 mg/m^3 (barium components)	Inh, Ing, Con	Resp. Irrit, GI, Muscle Spasm, Eye Irrit, Slow Pulse; skin burns

TABLE 1
CHEMICAL HAZARDS KNOWN OR SUSPECTED ON-SITE

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
Benzene*	4.7 ppm	1 ppm	0.5 ppm	5 ppm	[500 ppm]	Inh, Ing, Abs, Con	Irrit Eyes, Nose, Throat; Head, Nau, Derm, Ftg, Anor, Lass, [Carc]
Benzo(a)anthracene (coal tar pitch)	---	0.2 mg/m^3			[80 mg/m^3]	Inh, Con	[Carc], Derm, Bron
Benzo(a)pyrene (coal tar pitch)	---	0.2 mg/m^3	---		[80 mg/m^3]	Inh, Con	[Carc], Derm, Bron
Benzo(b)fluoranthene (coal tar pitch)	---	0.2 mg/m^3	---		[80 mg/m^3]	Inh, Con	[Carc], Derm, Bron
Benzo(g,h,i)perylene (coal tar pitch)	---	0.2 mg/m^3			[80 mg/m^3]	Inh, Con	[Carc], Derm, Bron
Benzo(k)fluoranthene (coal tar pitch)	---	0.2 mg/m^3			[80 mg/m^3]	Inh, Con	[Carc], Derm, Bron
Bis (2-ethylhexyl) Phthalate**	N/A	5 mg/m^3	5 mg/m^3	10 mg/m^3	[5,000 mg/m^3]	Inh, Ing, Con	[Carc], Irrit Eyes
Cadmium (dust)	---	0.005 mg/m^3	Lowest concentration feasible 0.01 mg/m^3	---	[9 mg/m^3]	Inh, Ing	CNS, Resp, Irrit, Vomit, Cough, Head, Chills, Nau, Diarr, Pulm Edema, Dysp, Chest Tight, [Carc]
Carbazole	---	---	---	---	---	Inh	---
Carbon disulfide	0.1-0.2 ppm	20 ppm	1 ppm	30 ppm	500 ppm	Inh, Abs, Ing, Con	Diz, Head,Ftg, Ner, anorexia, trembling hands, loss of fine motor coord, gastritis, eye, skin burns, Derm
Carbon Tetrachloride***	21.4 ppm	10 ppm	5 ppm	25 ppm	[200 ppm]	Inh, Abs, Con, Ing	CNS Depres, Nau, Vomit, Irrit, Irrit Eyes, Skin, Drow, Dizz, [Carc]
Chlorobenzene***	0.98 mg/m^3	75 ppm	10 ppm	---	1,000 ppm	Inh, Ing, Con	Irrit, Drow, CNS, Depres, Eyes, Skin, Nose, Inco.
Chloroform***	85 ppm	50 ppm	10 ppm	50 ppm	[500 ppm]	Inh, Ing. Con, Abs	Dizz, Dullness, Nau, Head, Ftg, Irrit Eyes, Skin, Conf, [Carc]
Chromium	---	1 mg/m^3	0.5 mg/m^3	---	250 mg/m^3	Inh, Ing, Con	Irrit Eyes, Sens Derm
Chrysene (coal tar pitch)		0.2 mg/m^3	---		[80 mg/m^3]	Inh, Con	Derm, Bron, [Carc]
Cis-1-2-Dichloroethylene	---	200 ppm	200 ppm	----	1000 ppm	Inh, Con, Ing	Irrit Eyes, Resp, CNS Depress

TABLE 1
CHEMICAL HAZARDS KNOWN OR SUSPECTED ON-SITE

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
Copper (dusts and mists) (fumes)		1 mg/m^3 0.1 mg/m^3	1 mg/m^3 0.2 mg/m^3	----	100 mg/m^3	Inh, Ing, Con	Vomit, Derm, CNS, Irrit, Derm, Nau, Taste (metallic)
Cyanide	0.9 mg/m^3	5 mg/m^3	5 mg/m^3 (10 min)	5 mg/m^3	25 mg/m^3	Inh, Ing, Abs, Con	Weak, Head, Nau, Conf, Cyan
Dibenzo(a,h)anthracene						Inh, Ing	
Dichloromethane	540 mg/m^3	25 ppm	50 ppm	125 ppm	[2,300 ppm]	Inh, Abs, Ing, Con	Irrit Eyes, Skin, lass, drow, dizz, Numb, tingl, Nau, [Carc]
Diethylphthalate**	---	None	5 mg/m^3	---	N.D.	Inh, Ing, Con	Irrit Eyes, Skin, Nose, Throat, Head, Dizz, Nau, Lac, Possible Polyneur, Vestibular Dysfunc, Pain, Numb, lass, Spasms in Arms and Legs
Di-n-octylphthalate	---	---	---	---	---	Inh, Ing, Con	---
Dimethylpthalate	---	5 mg/m^3	5 mg/m^3	---	2,000 mg/m^3	Inh, Ing, Con	Irrit, Resp, Abdom
Ethyl Benzene*	8.7 mg/m^3	100 ppm	100 ppm	125 ppm	700 ppm	Inh, Abs, Con	Head. Irrit, Derm, Narc., Irrit Eyes, Skin; Coma
Fluoranthene		0.2 mg/m^3	0.2 mg/m^3			Ing, Inh	[Carc]
Fluorine*	6 mg/m^3	0.1 ppm	1 ppm	2 ppm	25 ppm	Inh, Con	
Fuel Oil/#2	----	----	300 ppm	----		Inh, Abs, Ins, Con	Irrit Eyes, Skin, Derm, Head, Ftg, Blurred Vision, Dizz, Conf
Ideno(1,2,3-cd)pyrene		0.2 mg/m^3				Ing, Inh	
Lead (inorganic forms and dust as Pb)****		0.05 mg/m^3	0.05 mg/m^3		100 mg/m^3	Inh, Ing, Con	Irrit, Cns, Vomit, Narco, Weak, Pall, Insom, Lass, Abdom, Constip
Mercury (organic alkyl compounds) [skin]		0.01 mg/m^3	0.01 mg/m^3	0.03 mg/m^3	2 mg/m^3	Inh, Abs, Ing, Con	Irrit Eyes, Skin; Cough & Chest Pain, Bron Pneu, Tremor, Insom, Irrty, Indecision, Head, Ftg, Weak, Stomatitis, Salv, GI Dist, Anor, Low-wgt, Ataxia

TABLE 1
CHEMICAL HAZARDS KNOWN OR SUSPECTED ON-SITE

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
Mercury (compounds)	----	0.1 mg/m^3	0.025 mg/m^3	0.1 mg/m^3	10 mg/m^3	Inh, Abs, Ing, Con	Irrit Eyes, Skin; Cough & Chest Pain, Bron Pneu, Tremor, Insom, Irrty, Indecision, Head, Ftg, Weak, Stomatitis, Salv, GI Dist, Anor, Low-wgt, Ataxia
Methanol	13.1150 mg/m^3	200 ppm	200 ppm	---	6,000 ppm	Inh, Abs, Ing, Con	Irrit Eyes, Skin, Resp, Head, drow, dizz, Nau, Vomit, vis dist, Optic, derm
Methyl Ether	----	----	---	----	---	Inh	Poison
Methyl Ethyl Ketone (2-Butanone)***	0.7375 mg/m^3	200 ppm	200 ppm	300 ppm	3,000 ppm	Inh, Con, Ing	Irrit Eyes, Skin, Nose, Throat, Head, Dizz, Vomit, Derm
Methylene Chloride	540 mg/m^3	25 ppm	50 ppm	125 ppm	[2,300 ppm]	Inh, Ing, Con, Abs	Ftg, Weak, dizz, drow, Numb, Tingle [carc], Irrit Eyes, Skin, Nau
Mineral Spirit	20 ppm	500 ppm	100 ppm	---	20,000 mg/m^3	Inh, Ing, Con	Irrit Eyes, Nose, Throat, Dizz, Derm, Chemical pneu
Methyl tert butyl ether (MTBE)	---	---	50 ppm	---		Inh, Abs	
Naphtha	0.86 ppm	100 ppm	400 ppm	---	1,000 ppm	Inh, Con, Ing	Light Head, Drow, Irrit, Derm, Irrit Eyes, Skin, Nose
Naphthalene*	0.084 ppm	10 ppm	10 ppm	15 ppm	250 ppm	Inh, Abs, Ing, Con	Eye irritation; headache; confusion, excitement, malaise (vague feeling of ill-being); nausea, vomiting, abdominal pain; irritated bladder; profuse sweating; renal shutdown; dermatitis
Nickel (metal)	---	1 mg/m^3	1.5 mg/m^3	---	[10 mg/m^3]	Inh, Ing, Con	Head, Verti, Nau, Vomit, Pain, Cough, Weak, Convuls, Delirium, Pneu, ,[Carc]
Nitrobenzene	0.0235 mg/m^3	1 ppm	1 ppm	---	200 ppm	Inh, Abs, Ing, Con	Irrit Eyes, Skin, Anoxia, Derm, Anem, Methem
n-Butylbenzene	---	---	---	---	---	---	---

TABLE 1
CHEMICAL HAZARDS KNOWN OR SUSPECTED ON-SITE

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
n-Propylbenzene	---	---	---	---	---	---	---
PCBs 42% chlorine (Aroclor 1242)	---	1 mg/m^3 (skin)	1 mg/m^3 (skin)	---	[5 mg/m^3]	Inh, Abs, Ing, Con	Irrit Eyes, Chloracne, Liver Damage [carc]
PCBs 54% chlorine (Aroclor 1254)	---	0.5 mg/m^3 (skin)	0.5 mg/m^3 (skin)	---	[5 mg/m^3]	Inh, Abs, Ing, Con	Irrit Eyes; Chloracne, Liver Damage [carc]
Petroleum Distillates	---	500 ppm	100 ppm		[1,100 ppm]	Inh, Ing, Con	Dizz, Drow, Head, Dry Skin, Nau, Irrit Eyes, Nose, Throat, [Carc]
Phenanthrene (Coal Tar Pitch)		0.2 mg/m^3	0.2 mg/m^3		[80 mg/m^3]	Inh, Con	Derm, bron, (carc)
Phenol**	0.1786 mg/m^3	5 ppm	5 ppm	---	250 ppm	Inh, Abs, Ing, Con	Irrit Eyes, Nose, Throat, Anor, Low Wgt, Weak Musc Ache, Pain, Dark Urine, Cyan, Liver, Kidney Dam-age, Skin, Burns, Derm, Ochronosis, Tremor, Convuls, Twitch
Pyrene		0.2 mg/m^3			[80 mg/m^3]	Inh, Con	[Carc]
Sec-Butylbenzene	---	---	---	---	---	---	---
Selenium	N/A	0.2 mg/m^3	0.2 mg/m^3	Unknown	1 mg/m^3	Inh, Ing, Con	Irrit, Head, Fever, Chills, Skin/Eye Burns, Metallic Taste, GI, Dysp, Bron
Silver (metal and soluble compounds as Ag)	----	0.01 mg/m^3	Metal = 0.1 mg/m^3 Soluble 0.01 mg/m^3		10 mg/m^3	Inh, Ing, Con	Blue-gray Eyes, Nasal Septum, Throat, Skin; Irrit, Ulcer, Skin, GI Dist
Tetrachloroethylene (a.k.a. perchloroethylene)***	4.68 ppm	100 ppm	25 ppm	200 ppm	[150 ppm]	Inh, Ing, Con, Abs	Irrit Eyes, Skin, Nose, throat, Resp. Nau, flush face, Neck, dizz, inco, head, drow, eryth, [Carc]
Toluene*	2.14 ppm	200 ppm	50 ppm	300 ppm	500 ppm	Inh, Abs, Ins, Con	Resp, Irrit, Ftg, Conf, Dizz, Head, Derm, Euph, Head, Dilated Pupils, Lac, Ner, Musc FTg, Insom, Pares, Derm, lass

TABLE 1
CHEMICAL HAZARDS KNOWN OR SUSPECTED ON-SITE

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
Petroleum Distillates (naphtha)	10 ppm	100 ppm	400 ppm	---	1,000 ppm	Con, Inh, Ing	---
Trans 1,2-Dichloroethylene	0.3357 mg/m^3	200 ppm	200 ppm	---	1,000 ppm	Inh, Con	Irrit, Resp, CNS depress
Trichloroethylene***	21.4 ppm	100 ppm	50 ppm	200 ppm	[1,000 ppm]	Inh, Con, Abs, Ing	Head, Vert, Nau, Vomit, Derm, Vis Dist, Tremors, Som, Nau, Irrit Eyes, Skin, Card Acc., Ftg, [Carc]
Trichlorofluoromethane	28 mg/m^3	1,000 ppm	1,000 ppm		2,000 ppm	Inh, Con, Ing	Inco, trem, derm, card, asph, frost
Trichlorotrifluoroethane	45 ppm	1,000 ppm	1,000 ppm	1,250 ppm	2,000 ppm	Inh, Con, Ing	Irrit Skin, throat, Drow, Derm, CSN, Depress
Vinyl Chloride***	10-20 ppm	1 ppm	1 ppm	5 ppm	ND	Inh, Con	Lass, Abdom, Gi Bleeding; Hepatomegaly; Pallor or Cyan of Extremities; Liq: Frostbite; [Carc]
VM&P Naphtha (petroleum naphtha)	---	---	300 ppm	---	ND	Con, Ing, Inh	Irrit Eyes, Nose, Throat, Dizz, drow, head, nau, dry skin, chem. Pneumonitis
Xylene*	4.5 mg/m^3	100 ppm	100 ppm	150 ppm	900 ppm	Inh, Ing, Abs, Con	Dizz, Drow, Irrit, Excite, Nau, Vomit, Eyes, Skin, Nose, Throat
Zinc (oxide)	---	5 mg/m^3	2 mg/m^3	---	500 mg/m^3	Inh	Dry Throat, Cough, Chills, Tight Chest, Blurred Vision
4,4' DDD	---	---	---	---	---	Ing, Inh, Con	---
4,4' DDE	---	---	---	---	---	Ing, Inh, Con	---
4,4' DDT	5.0725 mg/m^3	1 mg/m^3	1 mg/m^3	---	[500 mg/m^3]	Inh, Abs, Ing, Con	Irrit Eyes, Skin, Pares, Tongue, Lips, Face, Trem, Anxi, Dizz, Conf, Mal, Head, Lass, Conv, Paresi Hands, Vomit, [Carc]
Aldrin		0.25 mg/m^3	0.25 mg/m^3	---	[25 mg/m^3]	Inh, Abs, Ing, Con	Head, Dizz, Nau, Vomit, Mal, Myo [Carc]
Chlordane [skin]	0.0084 mg/m^3	0.5 mg/m^3	0.5 mg/m^3		[100 mg/m^3]	Inh, Abs, Ing, Con	Blurred vision, confusion, delirium, cough; abdominal pian, nausea, vomiting diarrhea; irritability, tremor, convulsions [Carc]

TABLE 1
CHEMICAL HAZARDS KNOWN OR SUSPECTED ON-SITE

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
EDB	76.8 mg/m^3	20 ppm		30 ppm	[100 ppm]	Inh, Abs	Resp. Irr, Eye Irr. [Carc]
Endosulfan I Endosulfan II	---	0.1 mg/m^3	0.1 mg/m^3	---	N.D.	Inh, Abs, Ing, Con	Irrit, Skin, Nau, Conf, Agit, Flush, Dry, Trem, Conv, Head
Endosulfan Sulfate		---	0.1 mg/m^3	---	---	Ing, Con	---
Endrin	1.8 x 10^{-2} ppm	0.1 mg/m^3	0.1 mg/m^{-3}	---	2 mg/m^3	Inh, Abs, Ing, Con	Epil Conv, Stup, Head, Dizz, Abdom, Nau, Vomit, Insom, Agress, Conf, Drow, Lass, Anor
Endrin Aldehyde	1.8 x 10^{-2} ppm	---	---	---	---	Inh, Con	---
Endrin Ketone	---	---	---	---	---	---	---
Heptachlor	0.02 ppm	0.5 mg/m^3	0.05 mg/m^3	---	[35 mg/m^3]	Inh, Abs, Ing, Con	In animals, Trem, Conv, [Carc]
Heptachlor epoxide	0.02 ppm	---	0.05 mg/m^3	---	---	Ing, Inh	Trem, Conv, [Carc]
Hydrogen Cyanide(Hydrocyanic Acid)	0.9 mg/m^3	10 ppm (11 mg/m^3)	4.7 ppm	4.7 ppm	50 ppm	Con, Inh, Ing, Abs	Asphy & death at high levels; Weak, Head, Conf, Nau, Vomit, Incr. Rate and Depth of Respiration or Respiration Slow and Gasping

NOTES

* = Constituent found in ETPH
**=Constituent found in Acid/Base/Neutral Extractable Compounds
***=Constituent found in Volatile Organic Compounds
****=Constituent found in Leaching Lead

[1]PEL = Permissible Exposure Limit. If no PEL is available, then the NIOSH Threshold Limit Value (TLV) should be used, if available.
[2]Ceiling limit or Short Term Exposure Limit (STEL), if available. Again, the NIOSH TLV may be used if no OSHA standard exists.
[3]Abbreviations are contained on the next page

[ ] = Potential Occupational Carcinogen
ND = Not Been Determined

ABBREVIATIONS

abdom = Abdominal
abs = Absorption
aggress = Aggressiveness
agit = Agitation
anor = Anorexia
anos = Anosmia (loss of the sense of smell)
Anxi = anxiety
anem – Anemia
aspir = Aspiration
asph – asphyxia
bron = Bronchitis
bron pneu = Bronchitis pneumonitis
[carc] = Potential occupational carcinogen
Card = Cardiac arrhythmias
CNS = Central nervous system
conf = Confusion
constip = Constipation
con = Skin and/or eye contact
conv = Convulsions
corn = Corneal
cyan = Cyanosis
defat = Defatting
depres = Depressant/Depression
derm = Dermatitis
diarr = Diarrhea
dist = Disturbance
dizz = Dizziness
drow = Drowsiness
dry = Dry mouth
dysp = Dyspnea (breathing difficulty)
emphy = Emphysema
epil-conv = Epileptiform convulsions
eryth = Erythema
euph = Euphoria
fib = Fibrosis
frost = frostbite
ftg = Fatigue
flush = Flushing
GI = Gastrointestinal
head = Headache
hyperpig = Hyperpigmentation
inco = Incoordination
ing = Ingestion
inh = Inhalation
inj = Injury
insom = Insomnia
irrit = Irritation
irrty = Irritability
lac = Lacrimination (discharge of tears)
lass = Lassitude (weakness, exhaustion)
li-head = Lightheadedness
liq = Liquid
low-wgt = Weight loss
mal = Malaise (vague feeling of discomfort)
malnut = Malnutrition
methem = Methemoglobinemia
myo = Myochonic (jerks of limbs)
mg/m = milligrams/cubic meter
muc memb = Mucous membrane
mus ftg = Muscle fatigue
narco = Narcosis
nau = Nausea
ner = Nervousness
numb = Numbness
optic = Optic nerve damage (blindness)
pall = Facial pallor
parap = Paralysis
ppm = Parts per million
pares = Paresthesia
paresi = Paresis
peri neur = Peripheral neuropathy
pneu = Pneumonitis
prot = Proteinuria
pulm = Pulmonary
peri neur = Peripheral neuropathy
pneu = Pneumonia
prot = Proteinuria
pulm = Pulmonary
repro = Reproductive
resp = Respiratory
skin sen = skin sensitization
salv = Salvation
som = Somnolence (sleepiness unnatural drowsiness)
subs = Substernal (occurring beneath the sternum)
stup = Stupor
sys = System
tingle = tingle limbs
trem – Tremors
verti = Vertigo
vis dist = Visual disturbance
vomit = Vomiting
weak = Weakness

APPENDIX A
Personnel & Visitor Log

PERSONNEL & VISITOR LOG				
Name	**Representing**	**Date**	**Time In**	**Time Out**

APPENDIX B
Supervisor's Investigation Report

INCIDENT REPORT

Section 1.0: Complete By Employee and Project Manager

(provide to Human Resources Manager) Incident Case No. _____

Employee Name: Employee Title/Position:	Age: Sex: □ Female □ Male	Time employee began work: Date of Incident: Time of Incident:	Weather Conditions: Date of Report: Time Report Completed:
Department: Office Location: Supervisor:			
Employee Address: Street: City/Town: Zip Code: Phone Number:	Location of Incident: Address: City/Town: State:		

Type of Incident:
□ Motor Vehicle Accident or □ Near Miss or □ Injury occurred during routine work

□ Company or □ Personal Vehicle?

First-Aid performed on-site? Yes / No
Other Medical Attention Provided? Yes / No

Time lost from work? Yes / No Number of Hours: or Number of Days:

If injuries occurred, list names and describe nature, degree, and body part injured: Number of injured:_____

1.

2.

3.

4.

Complete Section 3.0

WITNESS STATEMENT: WHAT HAPPENED AND WHAT WAS THE EMPLOYEE DOING BEFORE THE INCIDENT OCCURRED? WHAT WAS THE EMPLOYEE DOING WHEN THE INCIDENT OCCURRED? WHAT WAS THE EMPLOYEE DOING AFTER THE INCIDENT OCCURRED?	Describe what took place? Who was at fault for vehicle accidents, citation? Was power equipment involved, if so, describe?

WHAT WAS THE NATURE OF THE INJURY OR ILLNESS?	Tell us the body part that was affected and how it was affected – be specific Examples: strained lower back; chemical burn on hand
WHAT WAS THE ROOT CAUSE OF THE INCIDENT? List other individual involved in Section 3. COULD INCIDENT HAVE BEEN AVOIDED? HOW?	Get all the facts by studying the Job and situation involved. Question by use of WHY - WHAT – WHERE – WHEN – WHO – HOW Were there other factors (e.g., noise, ventilation, illumination, fatigue, age, medical conditions) that contributed to the accident?
WAS TRAINING FOR THE WORK ACTIVITY PROVIDED: TYPE: DATES:	WERE WARNING SIGNS OR LABELS POSTED:
WHAT SHOULD BE DONE? HOW CAN INCIDENT BE AVOIDED IN THE FUTURE?	WAS PERSONAL PROTECTIVE EQUIPMENT USED? NEEDED: AVAILABLE: CONTRIBUTED TO INJURY:
WHAT HAVE YOU DONE THUS FAR?	Take or recommend action, depending upon your authority. Follow up – was action effective?
HOW WILL THIS IMPROVE OPERATIONS?	OBJECTIVE Eliminate job hindrances

Completed by:	Reviewed by:	Date

Section 2.0: Complete By Supervisor or Human Resources Manager

Name: Role (witness, observer, injured, participant, etc.):	Address: Phone Number
Name: Role:	Address: Phone Number
Name: Role:	Address: Phone Number
Name: Role:	Address: Phone Number
Name: Role:	Address: Phone Number
Name: Role:	Address: Phone Number

Section 3.0: Corrective Actions (To be Completed by OHSM and CHSO)

Are corrective actions warranted? □ Yes □ No If so, proceed with corrective action list

Corrective Actions. List long term actions to be taken as a result of incident (use additional sheets if needed)	How was the corrective action implemented?	Target date of completion

OHSM Name:	CHSO Name:
OHSM Signature:	CHSO Signature:

End of incident report. Section 4.0 is to be completed and maintained by the Human Resources Department.

Section 4.0: Complete By Human Resources Manager

Incident Report Case No. _____

The information on this page is considered CONFIDENTIAL and must be treated as such. This page will only be available to Human Resources Department or the employee's supervisor.

Insured Name:	Employee Hire Dates: Start at Company: Current Position:
Policy Number:	Is employee a company: Owner, Officer, Neither.
Employee Soc. Sec. No.:	Marital Status: Spouse Name:
Was Employee Pay Interrupted, or paid in full for time:	Employee Pay Period: Weekly, Bi-Weekly, Monthly, Other (specify)
Employee Compensated by hourly or salary? Wage Information: (tips, bonuses, commission)	Typical No. of hours worked per day____, hours per week____. Typical Start of day time_____, end of day time_____.
Date of Stop Work: Date Returned to Work:	How often has employee visited doctor/hospital?
Doctor: Authorized by Co.: Y / N Street: City/Town: Zip Code: Phone Number: Authorized by Co.: Y / N	Hospital: Street: City/Town: Zip Code: Phone Number: Authorized by Co.: Y /N
Was the employee treated in an emergency room? □ Yes □ No	Was employee hospitalized overnight as an in-patient? □ Yes □ No If so, for how many days? _____

APPENDIX C
Equipment Calibration Log

EQUIPMENT CALIBRATION LOG		
Instrument	**Calibration Date**	**Calibrated By**

APPENDIX D

Material Safety Data Sheets
(for chemicals brought to the site by HRP)

APPENDIX E
Daily Job Brief Record

APPENDIX F
COVID 19 ADDENDUM

JOB BRIEF RECORD

Person Conducting	Site Name/Address	HRP Client Name/Job #
Client Contact/Phone	HRP H&S Rep.	HRP Supervisor
Date/Time	Number Attending	Weather

Designated Competent Person: _____

Description of Work: _____

Attendees (use additional sheets as needed):

Name	Company	Signature

Emergency Telephone Numbers FIRE / POLICE / AMBULANCE: 911

Hospital Name & Location: _____

National Response Center: 800-424-8802

Health & Safety Manager: Mark Wright: 518-877-7101 X 1415

HAZARDS

- ☐ Toxic
- ☐ Corrosive
- ☐ Flammable
- ☐ Combustible
- ☐ Reactive
- ☐ Path Waste
- ☐ Asbestos
- ☐ Extreme Cold/Heat
- ☐ Drains/Sumps
- ☐ Sharp Objects
- ☐ Drilling in Soil
- ☐ Lighting
- ☐ Slips/Trips/Falls
- ☐ Lead
- ☐ Soil Excavation
- ☐ Tank Excavation
- ☐ Trenching
- ☐ Floor Holes
- ☐ Working on/near Water
- ☐ Underground/Overhead Utilities
- ☐ Vehicle Traffic
- ☐ Hot Work
- ☐ Vac Truck
- ☐ Ladders
- ☐ Noise
- ☐ Lifting
- ☐ Powerwashing
- ☐ Elevated Work Area
- ☐ Live Electrical Circuits
- ☐ Pneumatic Tools
- ☐ Drum Handling
- ☐ Abrasive Blasting

PERSONAL SAFETY

- ☐ Supplied Air Respirator
- ☐ Fully Encapsulating Suit
- ☐ Overboots
- ☐ Safety Glasses
- ☐ Reflective Vests
- ☐ Hearing Protection
- ☐ SAR w/Egress Bottle
- ☐ Flash Suit
- ☐ Lifebelt/Lanyard
- ☐ Chemical Goggles
- ☐ Eye Wash
- ☐ Evacuation Plan
- ☐ SCBA
- ☐ NOMEX (flam resistant)
- ☐ Hardhats
- ☐ Face Shield
- ☐ Safety Shower
- ☐ Communications
- ☐ Air Purifying Respirator Cartridge: _____
- ☐ Protected Coveralls, Type: _____
- ☐ Outer Gloves, Type: _____
- ☐ Inner Gloves, Type: _____
- ☐ First Aid Kit
- ☐ Properly Sloped Excavation/ Trench
- ☐ PFD's
- ☐ Ventilation

FIRE SAFETY

- ☐ Fire Extinguishers
- ☐ Hot Work Permit
- ☐ Fire Blanket
- ☐ Explosion-Proof Equipment
- ☐ Equipment Grounded & Bonded
- ☐ Non-Sparking Tools
- ☐ Eliminate Ignition Sources
- ☐ Area Kept Wet
- ☐ Smoking Area Designated Location: _____
- ☐ Alarm Box in Area, Location: _____
- ☐ Fire Hose Laid Out

ISOLATE EQUIPMENT

- ☐ Establish Exclusion Zone/Traffic Cones
- ☐ Work Signs
- ☐ Stop Transfers
- ☐ Caution Tape Area
- ☐ GFCIS
- ☐ Temporary Fencing

ELECTRICAL EQUIPMENT

- ☐ LockOut/TagOut
- ☐ Non-Conductive Tools
- ☐ Equipment Grounded
- ☐ FR Suits/Coveralls

AIR MONITORING

Type of Meter: _____ Date last calibrated: _____

SUBSTANCE	LEVEL B MAX.	ACTION LEVEL/LEVEL C MAX.	LEVEL D MAX.

Health & Safety Comments / Topics & Safety Rules Reviewed / Questions / Concerns:

Contaminants of Concern: _____

HEALTH & SAFETY SIGNATURE: _____ Date: _____

Is there a Site-Specific or Generic Health & Safety Plan available on-site? Yes ☐ No ☐

☐ HAZARD ZONES NOT APPLICABLE, GENERAL WORK AREA

Level D ☐ Modified Level D ☐ Level C ☐

Anything above Level C, foreman should use a Confined Space Permit/Form.

Note: HOT WORK requires a hot work permit and minimum 20# fire extinguisher. Foreman or HSM must record at least one contaminant of concern above. Toxic plants may be considered a COC if no chemical hazards are expected.

LEVEL C
Respirator Type: _____

Name	Zone	Time In	Time Out	Decon Type

Before performing Level C work, ALL employees must review HRP's Respiratory Protection Program - a copy of which must be on-site along with a HASP.

COVID19
SITE SPECIFIC HASP ADDENDUM

This addendum will remain in effect until what time the CDC, NIAID, and/or Surgeon General guidance is provided that removes the heightened awareness of social distancing, hand washing, and other protocols in response to COVID-19.

NECESSARY ADDITIONAL SUPPLIES

- Hand sanitizer (minimum 60% alcohol)
- Squeeze bottles of water (if no running water at job site)
- Soap
- Disinfectant (for tools, vehicles, common areas, etc.)
- Caution tape, cones or similar to set up social distancing boundaries as needed

EMPLOYEE HEALTH PROTECTION – ZERO TOLERANCE

The following applies to both HRP employees and contracted staff working on behalf of the HRP or the client.

- ZERO TOLERANCE FOR SICK WORKERS REPORTING TO WORK. IF YOU ARE SICK, STAY HOME! IF YOU FEEL SICK, GO HOME! IF YOU SEE SOMEONE SICK, SEND THEM HOME!
- If you are exhibiting any of the symptoms below, you are to report this to your supervisor (via phone, text or email) right away, and head home from the job site or stay home if already there.
  If you notice a co-worker showing signs or complaining about such symptoms, he or she should be directed to their supervisor (via phone, text or email) and asked to leave the project site immediately.
  COVID-19 Typical Symptoms:
    - Fever
    - Cough
    - Shortness of Breath
    - Sore Throat
    - Loss of taste or smell
- Prior to starting a shift, each employee will verbally self-certify to their supervisor that they:
    - Have no signs of a fever or a measured temperature above 100.3 degrees or greater, a cough or trouble breathing within the past 24 hours.
    - Have not had “close contact” with an individual diagnosed with COVID-19. “Close contact” means living in the same household as a person who has tested positive for COVID-19, caring for a person who has tested positive for COVID-19, being within 6 feet of a person who has tested positive for COVID-19 for about 15 minutes, or coming in direct contact with secretions (e.g., sharing utensils, being coughed on) from a person who has tested positive for COVID-19, while that person was symptomatic.
    - Have not been asked to self-isolate or quarantine by their doctor or a public health official.
    - These self-certifications may be documented at the request of the site owner
- Workers that are working in a confined space or inside a closed building envelope will have to be temperature screened by a Medical Professional or designated individual. Such screening shall be performed out of public view to respect privacy and results are kept private.
- Employees exhibiting symptoms or unable to self-certify should be directed to leave the work

site and seek medical attention and applicable testing by their health care provider. They are not to return to the work site until cleared by a medical professional.

GENERAL ON-THE-JOB GUIDANCE TO PREVENT EXPOSURE & LIMIT THE TRANSMISSION OF THE VIRUS

All Job Sites

- No touching or direct contact with other individuals, including handshaking.
- Wash hands often with soap and water for at least 20 seconds or alternatively when soap and water are not available, use an alcohol-based hand sanitizer with at least 60% ethanol or 70% isopropanol
- A "No Congregation" policy is in effect, individuals must implement social distancing by maintaining a minimum distance of 6-feet from all other individuals
- Avoid face to face meetings – critical situations requiring in-person discussion must follow social distancing
- Conduct all meetings via conference calls, if possible. Do not convene meetings of more than 10 people. Recommend use of cell phones, texting, web meeting sites and conference calls for project discussion
- Be sure to use your own water bottle, and do not share
- To avoid external contamination, bring food from home
- Maintain Social Distancing separation during breaks and lunch.
- To avoid sharing germs, please clean up after yourself. DO NOT make others responsible for moving, unpacking and packing up your personal belongings
- If you or a family member is feeling ill, stay home!

Multi-person job sites (i.e. HRP and subcontractors, etc.)

- Contractor and Field Offices are to be locked down to all but authorized personnel
- Each jobsite should develop cleaning and decontamination procedures that are posted and shared (if multi-person job site). These Procedures must cover all areas including trailers, gates, equipment, vehicles, etc. and shall be posted at all entry points to the sites, and throughout the project site.
- All individual work crew meetings/tailgate talks should be held outside and follow social distancing
- Please keep all crews a minimum of 6' apart at all times to eliminate the potential of cross contamination
- At each job briefing/tool box talk, employees are asked if they are experiencing any symptoms, and are sent home if they are
- Each jobsite should have laminated COVID-19 safety guidelines and handwashing instructions (last page of this addendum)
- All restroom facilities/porta-potties should be cleaned and handwashing stations must be provided with soap, hand sanitizer and paper towels
- All surfaces should be cleaned at least twice a day, including desk, work stations, door handles, laptops, etc.
- All common areas and meeting areas are to be regularly cleaned and disinfected at least once a day but preferably twice a day

- Single person job sites (just one HRP employee, no subs, vendors, etc.)
  - It is that person's responsibility to clean and disinfect all tools and reusable supplies upon return to the office

- Cover coughing or sneezing with a tissue, then throw the tissue in the trash and wash hands, if no tissue is available then cough into your elbow
- Avoid touching eyes, nose, and mouth with your hands

WORK SITE RISK PREVENTION PRACTICES

- At the start of each shift, confirm with all employees that they are healthy.
- All employees will be required to wear gloves (either latex or cut resistant depending on the task at hand)
- Use of eye protection is required (Safety glasses or googles at a minimum with or without face shields).
- In work conditions where required social distancing is impossible to achieve, affected employees shall be supplied PPE including as appropriate a standard face covering, gloves, and eye protection.
- All employees shall drive to work site/parking area in a single occupant vehicle. No one should ride together in the same vehicle
- When entering a machine or vehicle which you are not sure you were the last person to enter, make sure that you wipe down the interior and door handles with disinfectant prior to entry
- In instances where it is possible, workers should maintain separation of 6' from each other per CDC guidelines.
- Multi person activities will be limited where feasible (two person lifting activities)
- Large gathering places on the site such as shacks and break areas will be eliminated and instead small break areas will be used with seating limited to ensure social distancing.
- Contact the cleaning person for your office trailer or office space and ensure they have proper COVID- 19 sanitation processes. Increase their cleaning visits to daily
- Clean all high contact surfaces a minimum of twice a day in order to minimize the spread of germs in areas that people touch frequently. This includes but is not limited to desks, laptops and vehicles

Wash Stations: All sites without ready access to an indoor bathroom or running water MUST install Wash Stations or provide other means for handwashing

- Install hand wash stations with hot water, if possible, and soap at fire hydrants or other water sources to be used for frequent handwashing for all onsite employees.
- All onsite workers must help to maintain and keep stations clean
- If a worker notices soap or towels are running low or out, immediately notify supervisors
- Garbage barrels will be placed next to the hand wash station for disposal of tissues/towels
- If no other alternative exists, bring squeeze bottles with water and soap (only authorized for single employee job sites)

Please Note: This document is not intended to replace any formalized procedures currently in place within the site specific HASP or any job related contracts.

Where this guidance does not meet or exceed the standards put forth by the state, municipality, site owner, contractor or subcontractor, everyone shall abide by the most stringent procedure.

A site-specific COVID-19 Officer (also known as the Health and Safety Officer) shall be designated for every site.

Print and post at each job site

COVID-19/ Health and Safety Officer Name: Stefan Truex

Phone Number: 518-877-7101

Any issue of non-compliance with these guidelines shall be a basis for pausing the work. The Health and Safety Officer will address corrective actions with the subcontractor. Any additional issues of non-conformance may be subject to action against the subcontractor's prequalification and certification status.

ATTACHMENT 2
Community Air Monitoring Plan (CAMP)

MOVE YOUR ENVIRONMENT FORWARD

COMMUNITY AIR MONITORING PLAN (CAMP)

Vacant Industrial Property
Former Duofold Site
7 Spruce Street
Ilion, New York 13357

Prepared For:

The Herkimer County Industrial Development Agency
Attn: John Piseck
420 E. German Street, Suite 101A
Herkimer, New York 13350

Prepared By:

HRP Associates, Inc.
1 Fairchild Square, Suite 110
Clifton Park, New York 12065

HRP #: HER1500.P2
Brownfields Assessment Cooperative Agreement: BF-96261019-0

Issued On: February 19, 2020

1.0 PURPOSE AND SCOPE

This Community Air Monitoring Plan (CAMP) has been prepared for the former Duofold facility located at 7 Spruce Street, in Ilion New York. This CAMP is to be utilized in tandem with the Health and Safety Plan (HASP), and provides the methods and procedures for real-time air monitoring to be implemented during the remedial investigation.

This CAMP provides for real-time air monitoring of particulates at the downwind perimeter of each designated work area when remedial investigation activities (such as excavation or drilling) are implemented at the Site. The CAMP was developed from the New York State Department of Health (NYSDOH) Generic CAMP provided in the DER-10 Technical Guidance for Site Investigation and Remediation. This CAMP provides a measure of protection for the downwind community (potential receptors include residences, businesses, and personnel not directly involved with work activities) from potential airborne contaminant releases as a direct result of investigation activities. Contractors should implement common sense measures to minimize dust and odors during the remedial investigation.

Requirements and guidelines in this HASP are subject to modification by the Project Manager in response to additional information obtained during field work regarding the potential for exposure to hazards. Updates will be communicated to field personnel as they are made.

Implementing this CAMP is the responsibility of all personnel. The Project Manager is responsible for overall project administration, including health and safety. The Field Team Leader is responsible for ensuring this CAMP is implemented in the field and is the primary point of contact to the Project Manager.

2.0 GENERAL INFORMATION

Site Name: **Former Duofold Facility**

Site Address: **7 Spruce Street – Ilion, New York 13357**

Site Contact: **John Piseck**

Phone Number: **315-866-3000**

Project Description

In general, the work to be performed by HRP consists of performing a remedial investigation to define to degree and extent of subsurface VOC and metals impacts to soil, groundwater, and soil gas. HRP personnel on site will not be directly involved in the anticipated drilling or excavation operations.

Drilling and excavation activities will be performed by a contractor working under a separate contract, under the direction of HRP. All construction and contracted personnel onsite are not covered under this HASP. HRP employees at the site will be collecting samples and acting as an environmental advisor to the Herkimer County Industrial Development Agency.

Each contractor must provide their own site-specific HASP that addresses minimum training requirements and potential hazards for each aspect of this remedial investigation.

3.0 VOC MONITORING

Volatile organic compounds (VOCs) shall be monitored on a continuous basis or as otherwise specified with a photoionization detector (PID). The downwind perimeter of the immediate work area (i.e., the exclusion zone) will be monitored using a PID. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work will be performed using appropriate equipment, calibrated at least once daily for the contaminant(s) of concern using an appropriate calibration standard. The equipment will be capable of logging measurements in 15-minute intervals, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds five (5) parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of five (5) ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below five (5) ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area at any single point during the remedial investigation, activities must be curtailed.

4.0 PARTICULATE MONITORING

Monitoring for particulates will be required during remediation-related ground intrusive activities and will include monitoring the upwind and downwind perimeters of the exclusion zone or work area, at a minimum. The particulate monitoring must use real-time monitoring equipment capable of measuring particulate matter less than ten (10) micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level.

As outlined in NYSDEC DER-10 Appendix 1B: Fugitive Dust & Particulate Monitoring, the monitoring equipment must meet, at a minimum, the following performance standards:

- Objects to be measured: Dust, mists or aerosols;
- Measurement Ranges: 0.001 to 400 mg/m^3 (1 to 400,000 :ug/m^3);
- Precision (2-sigma) at constant temperature: +/- 10 :g/m^3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
- Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
- Resolution: 0.1% of reading or 1g/m3, whichever is larger;
- Particle Size Range of Maximum Response: 0.1-10;
- Total Number of Data Points in Memory: 10,000;
- Logged Data: Each data point with average concentration, time/date and data point number
- Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
- Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
- Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
- Operating Temperature: -10 to 50°C (14 to 122°F); and
- Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

The equipment will be equipped with an audible alarm to indicate exceedance of the action level. The action level is 150 micrograms per cubic meter (ug/m^3) measured as a 15 minutes average. In addition, fugitive dust migration will be visually assessed during all work activities. Calibration will be in accordance with the HASP and the instrument manufacturer's recommendations.

The upwind sampling station will be situated upwind of the largest dust producing activity occurring at the Site at the boundary of the work zone. Similarly, the downwind sampling station will be directly downwind of the largest dust producing activity at the boundary of the work zone.

If the downwind PM-10 particulate level is 100 ug/m^3 greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 ug/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 ug/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 ug/m^3 of the upwind level and in preventing visible dust migration.

Should the action level of 150 ug/m^3 continue to be exceeded, work must stop and DER must be notified. The notification shall include a description of the control measures implemented to prevent further exceedances. All readings must be recorded and be available for review by the NYSDOH, NYSDEC and Herkimer County Health Department, if requested.

The sampling locations will be periodically adjusted to account for observed changes in wind direction.

ATTACHMENT 3
Fugitive Emissions Work Plan (FEMP)

MOVE YOUR ENVIRONMENT FORWARD

FUGITIVE EMISSIONS MONITORING PLAN

Vacant Industrial Property
Former Duofold Site
7 Spruce Street
Ilion, New York 13357

Prepared For:

The Herkimer County Industrial Development Agency
Attn: John Piseck
420 E. German Street, Suite 101A
Herkimer, New York 13350

Prepared By:

HRP Associates, Inc.
1 Fairchild Square, Suite 110
Clifton Park, New York 12065

HRP #: HER1500.P2
Brownfields Assessment Cooperative Agreement: BF-96261019-0

Issued On: February 19, 2020

1.0 INTRODUCTION

This Fugitive Emission Management Plan (FEMP) sets forth control methods that will be implemented during the remedial investigation, including the excavation, drilling, and sampling of impacted soils at 7 Spruce Street (Site) in Ilion, New York. The FEMP follows guidelines provided in the New York State Department of Environmental Conservation (NYSDEC) DER-10 Technical Guidance for Site Investigation and Remediation and the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP).

1.1 SITE DESCRIPTION AND BACKGROUND

The Site totals approximately 12.23 acres, and is and is located in a mixed commercial and residential use area. This FEMP applies to the drilling and excavation activities to be performed by the selected contractor to implement the remedial investigation addressing contaminated soil and groundwater. The Site contains soil and groundwater impacted by chlorinated volatile organic compounds (cVOC) at concentrations above NYSDEC recognized Soil Cleanup Objectives (SCOs) and Ambient Groundwater Quality Standards (AWQS)

2.0 SCOPE OF WORK TO COMPLETE SELECTED REMEDY FOR THE SITE

The scope of work to complete the selected remedy for the Site will include the following tasks:

- Establishing perimeter erosion and sediment controls, if necessary.
- Excavation and disposal of asphalt pavement, if necessary.
- Installation of direct push boreholes.
- Excavation of test pits, if necessary.

3.0 POTENTIAL FUGITIVE DUST EMISSION SOURCES AND CONTROL METHODS PLAN

This FEMP will be implemented during excavation, backfill, and handling of soils with the potential to generate fugitive dust and odors. Fugitive dust and VOC levels will be monitored in accordance with the site-specific CAMP. CAMP will be impletmented during all ground intrusive activities, and will be used as a means of managing and preventing fugitive emissions from migrating offsite. **Table 1** describes potential dust sources and control methods to be used to suppress dust emissions on or offsite.

TABLE 1		
1.1 Potential Emission Source	**1.2 Control Method [1]**	**Frequency of Application [2]**
Drilling & Injection Areas	Dampen area (if dry) before Drilling.	As needed.
Paved Roads (on-site and public roads)	Street sweeper.	As needed.

[1] Each potential source of dust emission will be documented by HRP field personnel, if necessary. The type of control method used, the frequency of application, and comments with regards to the method's effectiveness will be noted.

[2] The frequency of application may increase based on CAMP monitoring results.

ATTACHMENT 4

Beacon Environmental Passive Soil-Gas Survey

CDM Smith
14 Wall Street, Suite 1702
New York, NY 10005
Attn: Ms. Tonya Bennett

Passive Soil Gas Survey – Analytical Report
Date: November 23, 2016

Beacon Project No. 3378

Project Reference:	Former Duofold Site, Herkimer, NY
Samplers Installed:	October 4 and 5, 2016
Samplers Retrieved:	October 20, 2016
Samples Received:	October 21, 2016
Analyses Completed:	October 26, 2016
Laboratory Data Issued:	November 2, 2016

EPA Method 8260C
All samples were successfully analyzed using thermal desorption-gas chromatography/mass spectrometry (TD-GC/MS) instrumentation to target a custom compound list following EPA Method 8260C. Laboratory results are reported in nanograms (ng) of specific compound per sample.

Laboratory QA/QC procedures included internal standards, surrogates, and blanks based on EPA Method 8260C. Analyses and reporting were in accordance with BEACON's Quality Assurance Project Plan.

Reporting limits
The reporting limit (RL) is 10 nanograms (ng) for vinyl chloride, 1,1-dichloroethene, trans-1,2-dichloroethene, cis-1,2-dichloroethene, trichloroethene, and tetrachloroethene; 25 ng for the remaining individual compounds; and 5,000 ng for Total Petroleum Hydrocarbons (TPH). **Table 1** provides survey results in nanograms per sampler by sample-point number and compound name. For the six (6) compounds listed above, measurements below the limit of quantitation (10 ng) but above the limit of detection (5 ng) are flagged with a "J." The RLs represent a baseline above which results exceed laboratory-determined limits of precision and accuracy. Any field sample measurements above the upper calibration standard are estimated; however, these values are reported without qualifiers because all reported measurements are relative to each other and are appropriate to meet the survey objectives of locating source areas and vapor intrusion pathways and defining the lateral extent of contamination.

Calibration Verification
The continuing calibration verification (CCV) values for the calibration check compounds were all within ±20% of the true values as defined by the initial five-point calibration and met the requirements specified in Beacon Environmental's Quality Assurance Project Plan.

Method Blanks/Trip Blanks
Laboratory method blanks are run with each sample batch to identify contamination present in the laboratory. If contamination is detected on a method blank, measurements of identical compounds in that sample batch are flagged in the laboratory report. The laboratory method blanks analyzed in connection with the present samples revealed no contamination.

The trip blank is a sampler prepared, transported, and analyzed with other samples but intentionally not exposed. Any target compounds identified on the trip blanks are reported in the laboratory data. The analyses of the trip blanks (Trip-1 through Trip-4 in **Table 1**) reported none of the targeted compounds.

Passive Soil-Gas Survey Notes

When sample locations are covered with or near the edge of an artificial surface (*e.g.*, asphalt or concrete), the concentrations of compounds in soil gas are often significantly higher than the concentrations would be if the surfacing were not present. Thus, a reading taken below or near an impermeable surface is much higher than it would be in the absence of such a cap. Therefore, the sample location conditions should be evaluated when comparing results between locations.

Survey findings are exclusive to this project and when the spatial relationships are compared with results of other BEACON Surveys it is necessary to incorporate survey and site information from both investigations (*e.g.*, depth to sources, soil types, porosity, soil moisture, presence of impervious surfacing, sample collection times). BEACON recommends the guidelines stated in **Attachment 1** to establish a relationship between reported soil-gas measurements and actual subsurface contaminant concentrations, which will indicate those measurements representing significant subsurface contamination.

BEACON's passive soil-gas samplers are prepared with two sets of adsorbent cartridges for subsequent duplicate or confirmatory sample analysis. At the client's request, duplicate analysis was performed for four (4) field samples. The field sample duplicates were designated "D" following the sample number. When comparing quantitative results, a duplicate correspondence should be considered when the relative percent difference (RPD) between the two samples is less than or equal to 100%. For the purpose of calculating correspondences, all non-detections should be assigned, as a baseline value, the RL for the specific contaminant. Based on these assumptions, a 100% correlation was found between the field sample duplicates and their base samples.

Project Details

Samplers were deployed on October 4 and 5, 2016, and were retrieved on October 20, 2016. **Attachment 2** describes standard field procedures. Individual deployment and retrieval times will be found in the Chain of Custody Form (**Attachment 3**).

Eighty (80) field samples, four (4) field sample duplicates, and four (4) trip blanks were received by BEACON on October 21, 2016. Adsorbent cartridges from the passive samplers were thermally desorbed, then analyzed using gas chromatography/mass spectrometry (GC/MS) equipment, in accordance with EPA Method 8260C, as described in **Attachment 4**. BEACON's laboratory analyzed each sample for the targeted compounds; analyses were completed on October 26, 2016. Following a laboratory review, results were provided on November 2, 2016.

Attachments:

- **-1-** Applying Results From Passive Soil-Gas Surveys
- **-2-** Field Procedures
- **-3-** Chain-of-Custody Form
- **-4-** Laboratory Procedures

ALL DATA MEET REQUIREMENTS AS SPECIFIED IN THE BEACON ENVIRONMENTAL SERVICES, INC. QUALITY ASSURANCE PROJECT PLAN AND THE RESULTS RELATE ONLY TO THE SAMPLES REPORTED. BEACON ENVIRONMENTAL SERVICES IS ACCREDITED TO ISO/IEC 17025:2005, AND THE WORK PERFORMED WAS IN ACCORDANCE WITH ISO/IEC 17025:2005 REQUIREMENTS, WITH THE EXCEPTION THAT SAMPLES WERE ANALYZED WITHIN A 24-HOUR TUNE WINDOW AND 2-METHYLNAPHTHALENE AND TPH C_4-C_9 AND TPH C_{10}-C_{15} ARE NOT INCLUDED IN BEACON'S SCOPE OF ACCREDITATION. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY. RELEASE OF THE DATA CONTAINED IN THIS DATA PACKAGE HAS BEEN AUTHORIZED BY THE LABORATORY DIRECTOR OR HIS SIGNEE, AS VERIFIED BY THE FOLLOWING SIGNATURES:

Steven C. Thornley
Laboratory Director

Patti J. Riggs
Quality Manager

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	Lb161024s	Trip-1	Trip-2	Trip-3	Trip-4	DFPGS-1
Project Number:		3378	3378	3378	3378	3378
Lab File ID:	S16102403	S16102405	S16102406	S16102407	S16102408	S16102409
Received Date:		10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/24/2016	10/24/2016	10/24/2016	10/24/2016	10/24/2016	10/24/2016
Analysis Time:	11:09	11:56	12:20	12:43	13:06	13:30
Matrix:						Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
Trichloroethene	<10	<10	<10	<10	<10	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<10	<10	<10	<10	<10	<10
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	<25
TPH C_4-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-2	DFPGS-3	DFPGS-4	DFPGS-5	DFPGS-6	DFPGS-7
Project Number:	3378	3378	3378	3378	3378	3378
Lab File ID:	S16102410	S16102411	S16102412	S16102413	S16102414	S16102415
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/24/2016	10/24/2016	10/24/2016	10/24/2016	10/24/2016	10/24/2016
Analysis Time:	13:53	14:16	14:40	15:03	15:26	15:50
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
Trichloroethene	<10	<10	<10	<10	<10	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<10	**9 J**	**174**	**25**	**7 J**	<10
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	<25
TPH C_4-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-8	DFPGS-9	DFPGS-10	DFPGS-11	DFPGS-12	DFPGS-13
Project Number:	3378	3378	3378	3378	3378	3378
Lab File ID:	S16102416	S16102417	S16102418	S16102419	S16102420	S16102421
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/24/2016	10/24/2016	10/24/2016	10/24/2016	10/24/2016	10/24/2016
Analysis Time:	16:13	16:37	17:00	17:23	17:46	18:09
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	**185**	<10
1,1-Dichloroethene	<10	<10	<10	<10	**11**	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	**10 J**	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	**242**	**17**
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	**147**	**38**
Trichloroethene	<10	<10	<10	<10	**214**	**8 J**
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	**33**
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<10	<10	<10	<10	**19**	**241**
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25	**30**
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	<25
TPH C_4-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-14	DFPGS-16	DFPGS-16-D	DFPGS-17	DFPGS-18	DFPGS-19
Project Number:	3378	3378	3378	3378	3378	3378
Lab File ID:	S16102422	S16102423	S16102424	S16102425	S16102426	S16102427
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/24/2016	10/24/2016	10/24/2016	10/24/2016	10/24/2016	10/24/2016
Analysis Time:	18:33	18:56	19:19	19:43	20:07	20:29
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
Trichloroethene	<10	<10	<10	<10	<10	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	**9 J**	<10	<10	<10	**13**	<10
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	<25
TPH C_4-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-20	DFPGS-21	DFPGS-22	DFPGS-23	DFPGS-24	DFPGS-24A
Project Number:	3378	3378	3378	3378	3378	3378
Lab File ID:	S16102428	S16102429	S16102430	S16102431	S16102432	S16102433
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/24/2016	10/24/2016	10/24/2016	10/24/2016	10/24/2016	10/24/2016
Analysis Time:	20:53	21:16	21:39	22:03	22:26	22:49
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	**26**	<25	<25
Trichloroethene	<10	<10	<10	<10	<10	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	**319**	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	**7 J**	<10	<10	**8 J**	<10	**100**
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	**27**	<25	<25	<25
p & m-Xylene	<25	<25	**101**	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	**37**	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	<25
TPH C_4-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-25	DFPGS-26	DFPGS-27	DFPGS-28	DFPGS-29	DFPGS-30
Project Number:	3378	3378	3378	3378	3378	3378
Lab File ID:	S16102434	S16102435	S16102436	S16102437	S16102438	S16102439
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/24/2016	10/24/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Analysis Time:	23:13	23:37	0:00	0:23	0:46	1:09
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	**245**	<10	<10	**35**	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	**172**	<10	<10	**50**	<10
Chloroform	<25	**102**	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	**6,562**	**28**	<25	**58**	**39**
Trichloroethene	**10**	<10	**287**	**12**	**12**	**15**
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	**440**	**55**	**30**	**35**	**38**
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	**44**	**7 J**	**46**	**658**	**564**	**595**
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	**40**	<25	<25	<25	<25
Ethylbenzene	<25	**165**	**50**	<25	<25	**269**
p & m-Xylene	<25	**658**	**219**	**34**	**77**	**1,793**
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	**444**	**114**	**29**	**79**	**1,872**
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	**2,149**	<25	<25	**59**	**704**
1,3,5-Trimethylbenzene	<25	**245**	<25	**275**	**423**	**8,865**
1,2,4-Trimethylbenzene	<25	**232**	<25	**611**	**1,164**	**14,604**
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	**1,060**	**31**	**121**	**154**	**4,818**
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	**1,161**	**30**	**58**	**49**	**1,236**
TPH C_4-C_9	<5,000	**270,956**	<5,000	**19,130**	**15,893**	**103,547**
TPH C_{10}-C_{15}	<5,000	**321,883**	**10,885**	**63,531**	**49,516**	**389,683**

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-31	DFPGS-32	DFPGS-33	DFPGS-34	DFPGS-35	DFPGS-35-D
Project Number:	3378	3378	3378	3378	3378	3378
Lab File ID:	S16102440	S16102441	S16102442	S16102443	S16102444	S16102445
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Analysis Time:	1:33	1:56	2:19	2:43	3:06	3:30
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	**27**	<25	<25	<25	<25
Trichloroethene	<10	<10	<10	<10	**504**	**363**
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<10	**8 J**	<10	<10	**6 J**	<10
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	**37**	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	**36**	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	**38**	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	**212**	**61**	**42**	**34**	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	**95**	<25	<25	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	**25**	<25	<25	<25	<25	<25
TPH C_4-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	**10,682**	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-36	DFPGS-37	DFPGS-38	DFPGS-39	DFPGS-39A	DFPGS-40
Project Number:	3378	3378	3378	3378	3378	3378
Lab File ID:	S16102446	S16102447	S16102448	S16102449	S16102450	S16102451
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Analysis Time:	3:53	4:17	4:40	5:03	5:27	5:50
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	**246**	<10	<10	<10	<10	<10
1,1-Dichloroethene	**42**	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	**45**	**57**	**729**	<25	<25	<25
trans-1,2-Dichloroethene	**34**	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	**21,543**	**64**	**6 J**	<10	<10	**13**
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	**41**	**34**	<25	<25	**171**
Trichloroethene	**6,703**	**32**	<10	<10	<10	**943**
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	**43**	**28**	<25	<25	**1,213**
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	**10,581**	**112**	**17**	**6 J**	**9 J**	**619**
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	**67**
p & m-Xylene	<25	**33**	<25	<25	<25	**238**
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	**28**	**38**	<25	<25	**115**
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	**2,504**
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	**104**
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	**159**
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	**3,171**
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	**4,393**
TPH C_4-C_9	<5,000	<5,000	**6,331**	<5,000	<5,000	**164,785**
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000	**341,895**

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-41	DFPGS-42	DFPGS-43	DFPGS-44	DFPGS-45	DFPGS-46
Project Number:	3378	3378	3378	3378	3378	3378
Lab File ID:	S16102452	S16102453	C16102540	C16102539	C16102538	S16102457
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/25/2016	10/25/2016	10/26/2016	10/26/2016	10/26/2016	10/25/2016
Analysis Time:	6:13	6:36	0:54	0:33	0:11	8:10
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	**12**	<10	<10	<10	<10
1,1-Dichloroethene	**9 J**	**232**	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	**175**	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	**8 J**	**143**	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	**9 J**	**5,803**	**5 J**	<10	<10	<10
Chloroform	**103**	**147**	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	**65**	**131**	<25	<25	<25	**44**
Trichloroethene	**1,797**	**253,885**	**205**	**10**	<10	**310**
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	**122**	**35**	**34**	<25	<25	**28**
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	**4,431**	**8,790**	**13,418**	**221**	<10	**21**
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	**68**	<25	**36**	<25	<25	**25**
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	**31**	<25	<25	<25	<25	**25**
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	**28**	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	**1,019**	**192**	<25	**25**	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	**542**	**122**	<25	<25	<25	<25
TPH C_4-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	**6,215**
TPH C_{10}-C_{15}	**14,024**	<5,000	**6,242**	**6,562**	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-47	DFPGS-48	DFPGS-49	DFPGS-50	DFPGS-51	LB161025c
Project Number:	3378	3378	3378	3378	3378	
Lab File ID:	S16102458	S16102459	S16102460	S16102461	S16102462	C16102503
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	
Analysis Date:	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Analysis Time:	8:33	8:57	9:20	9:43	10:07	10:53
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	**2,284**	**61**	**40**	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	**58**	**50**	<25
Trichloroethene	**28**	**23**	**17**	**496**	**69**	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	**35**	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	**779**	**135**	**8 J**	**1,894**	**2,384**	<10
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	**27**	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	**1,715**	**25**	**250**	**164**	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	**388**	<25	**109**	**50**	<25
TPH C_4-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-52	DFPGS-53	DFPGS-54	DFPGS-55	DFPGS-55-D	DFPGS-56
Project Number:	3378	3378	3378	3378	3378	3378
Lab File ID:	C16102505	C16102506	C16102507	C16102508	C16102509	C16102510
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Analysis Time:	11:36	11:58	12:19	12:41	13:37	13:59
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	**85**	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	**73**	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	**743**	**35**	<10	<10	<10	<10
Chloroform	**37**	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	**523**	**115**	**42**	<25	<25	<25
Trichloroethene	**52,465**	**386**	**78**	**37**	**22**	**15**
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	**193**	**30**	**26**	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	**1,257**	**2,037**	**229**	<10	<10	<10
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	**99**	<25	<25	<25	<25	<25
p & m-Xylene	**249**	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	**108**	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	**90**	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	**132**	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	**67**	**581**	**260**	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	**343**	**353**	<25	<25	<25
TPH C_4-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	**9,807**	**17,350**	**6,778**	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-57	DFPGS-58	DFPGS-59	DFPGS-60	DFPGS-61	DFPGS-62
Project Number:	3378	3378	3378	3378	3378	3378
Lab File ID:	C16102511	C16102512	C16102513	C16102514	C16102515	C16102516
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Analysis Time:	14:21	14:41	15:03	15:25	15:47	16:09
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	**43**	**658**	**39**	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	**40**	<25	<25	**60**	<25	<25
Carbon Tetrachloride	<25	**271**	**79**	<25	**53**	<25
Benzene	<25	<25	<25	**73**	**177**	**88**
Trichloroethene	**11**	**9 J**	**10 J**	**478**	**45**	**169**
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	**36**	**90**	**52**
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	**61**	<10	**1,491**	**72**	**3,121**	**3,197**
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	**66**	**37**
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	**29**	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	**39**	**35**
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	**173**	**424**	**139**
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	**78**	**78**	**30**
TPH C_4-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	**5,357**	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-63	DFPGS-64	DFPGS-65	DFPGS-66	DFPGS-67	DFPGS-68
Project Number:	3378	3378	3378	3378	3378	3378
Lab File ID:	C16102517	C16102518	C16102519	C16102520	C16102521	C16102522
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Analysis Time:	16:31	16:53	17:15	17:36	17:59	18:20
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	**28**	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	**29**	**28**	<25	<25	<25	<25
Trichloroethene	**137**	**27**	<10	<10	<10	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	**1,079**	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	**428**	**57**	<10	<10	<10	<10
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	**112**	<25	<25	<25	<25	<25
p & m-Xylene	**699**	**30**	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	**734**	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	**359**	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	**2,920**	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	**5,100**	**29**	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	**5,648**	**329**	<25	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	**9,261**	**514**	**80**	<25	<25	<25
TPH C_4-C_9	**182,661**	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	**326,850**	**10,012**	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-69	DFPGS-70	DFPGS-71	DFPGS-72	DFPGS-73	DFPGS-74
Project Number:	3378	3378	3378	3378	3378	3378
Lab File ID:	C16102523	C16102524	C16102525	C16102526	C16102527	C16102528
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Analysis Time:	18:42	19:04	19:27	19:49	20:10	20:32
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	**65**	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
Trichloroethene	<10	<10	<10	<10	<10	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<10	<10	<10	**15**	<10	**16**
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	<25
TPH C_4-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	DFPGS-75	DFPGS-75-D	DFPGS-76	DFPGS-77	DFPGS-78	DFPGS-79
Project Number:	3378	3378	3378	3378	3378	3378
Lab File ID:	C16102529	C16102530	C16102531	C16102532	C16102533	C16102534
Received Date:	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016	10/21/2016
Analysis Date:	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
Analysis Time:	20:54	21:16	21:38	21:59	22:21	22:43
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
Trichloroethene	<10	<10	<10	<10	<10	<10
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	**6 J**	<10	**88**	**321**	**7 J**	<10
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	**35**	**35**	<25	<25	<25	**28**
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	<25
TPH C_4-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

ATTACHMENT 5

Delta Geophysics, Inc.
Ground Penetrating Radar Report

DELTA Geophysics Inc.

GEOPHYSICAL INVESTIGATION REPORT

SITE LOCATION:

7 Spruce Street,
Ilion, New York

PREPARED FOR:

CDM Smith
14 Wall Street, Suite 1702,
New York, New York

PREPARED BY:

Joshua Hess
Delta Geophysics Inc.
738 Front Street
Catasauqua, PA 18032

October 6, 2016

Delta Geophysics, Inc. (Delta) is pleased to provide the results of the geophysical survey conducted at 7 Spruce Street, Ilion, New York.

1.0 INTRODUCTION

From October 3rd through October 6th, 2016 Delta Geophysics personnel performed a limited geophysical investigation at 7 Spruce Street, Ilion, New York. Field activities concluded on October 6th, 2016. Multiple areas throughout the site were to be surveyed and were specified by the client. Subsurface conditions were unknown at the time of survey. Surface conditions consisted of asphalt, concrete, grass, soil and dense vegetation.

2.0 SCOPE OF WORK

The survey was conducted to locate and mark detectable underground utilities and/or anomalies throughout the client specified survey areas.

3.0 METHODOLOGY

Selection of survey equipment is dependent site conditions and project objectives. For this project the technician utilized the following equipment to survey the area of concern:

- Geophysical Survey Systems Inc. SIR-3000 cart-mounted Ground Penetrating Radar (GPR) unit with a 400 Mhz antenna.
- Geonics EM-31 Terrain Conductivity meter
- Radiodetection RD7000 precision utility locator.
- Fisher M-Scope TW-6 pipe and cable locator.
- Trimble Pathfinder Pro XRS DGPS.

Ground penetrating radar (commonly called GPR) is a geophysical method that has been developed over the past thirty years for shallow, high-resolution, subsurface investigations of the earth. GPR uses high frequency pulsed electromagnetic waves (generally 10 MHz to 1,000 MHz) to acquire subsurface information. Energy is propagated downward into the ground and is reflected back to the surface from boundaries at which there are electrical property contrasts. GPR is a method that is commonly used for environmental, engineering, archeological, and other shallow investigations.

The GSSI SIR-3000 GPR can accept a wide variety of antennas which provide various depths of penetration and levels of resolution. The 400 MHz antenna can achieve depths

of penetration up to about 20 feet, but this depth may be greatly reduced due to site-specific conditions. Signal penetration decreases with increased soil conductivity. Conductive materials attenuate or absorb the GPR signal. As depth increases the return signal becomes weaker. Penetration is the greatest in unsaturated sands and fine gravels. Clayey, highly saline or saturated soils, areas covered by steel reinforced concrete, foundry slag, or other highly conductive materials significantly reduces GPR depth of penetration.

The GPR was configured to transmit to a depth of approximately 10 feet below the subsurface, but actual signal penetration was limited to approximately 1-2 feet below ground surface (bgs). The limiting factor was signal attenuation from near surface soils.

The electromagnetic (EM) method uses the principle of electromagnetic induction to measure the variability of electrical conductivity of subsurface materials. The large EM response to metal makes this technique particularly well suited to identifying buried metal objects such as underground storage tanks, buried drums, pipelines, reinforced building foundations, or other metal components of buried structures. It is, however, equally sensitive to metal objects on the ground surface, and it is important to take careful field notes that indicate the position of surface metal to avoid misinterpretation. Instruments of this type are more sensitive to near surface features i.e. reinforced concrete and this fact may sometimes mask features underneath.

The EM-31 is an electromagnetic surveying technique where the direct readout of the instrument is the bulk electrical conductivity of an equivalent homogeneous earth at that position referred to as “terrain conductivity”. Terrain conductivity is commonly used to detect lateral variations in electrical conductivity along a traverse or over a broad region. These variations can be due to conductive contaminant plumes in the groundwater, shallow discontinuous clay and silt horizons, shallow bedrock features such as voids, disturbed filled-in areas such as buried trenches, or buried metallic objects such as drums, tanks, or utility lines.

For the interpretation of high conductivity targets (like steel drums or metallic containers in this case), the in-phase component is the most discriminative. Lower contrast targets such as clay layers, contaminant plumes, and filled-in trenches are better indicated in the conductivity or quadrature data set. For this survey the EM-31 was set to record at 1 second intervals, a distance equivalent of approximately 2.5 feet. Survey line spacing was approximately 5 feet on center.

The RD7000 precision utility locator uses radio emission to trace the location of metal bearing utilities. This radio emission can be active or passive. Active tracing requires the attachment of a radio transmitter to the utility, passive tracing uses radio emissions that are present on the utility. Underground electrical utilities typically emit radio signals that this device can detect.

The TW-6 is designed to find pipes, cables and other metallic objects such as underground storage tanks. One surveyor can carry both the transmitter and receiver together, making it ideally suited for exploration type searches of ferrous metal masses.

Metal detectors of this type operate by generating a magnetic field at the transmitter which causes metallic objects in the subsurface to generate a secondary magnetic field. The induced secondary field is detected by the receiver, which generates an audible tone equal to the strength of the secondary field.

The Pathfinder Pro XRS Mapping System is a 12 channel differential beacon GPS receiver. The Pro XRS uses an integrated differential beacon receiver and antenna to receive real-time differential corrections from a subscription-based satellite correction service. This system provides for real-time sub-meter position data collection. This system is used in a wide range of applications, including utility asset management, environmental monitoring, and natural resource and land management. Feature and attribute data are input with a hand-held Asset Surveyor data logger. The GPS Pathfinder was used to tag each EM-61 reading with geographic coordinate for processing and mapping purposes.

4.0 SURVEY FINDINGS

All accessible areas within the survey areas were examined during this investigation. All areas were examined with the RD7000 for potential subsurface utilities then surveyed with GPR and TW-6 for other potential anomalies. EM data was collected where possible. Based on the data gathered, the following utilities were detected: water, gas, sanitary sewer and storm sewer. Additionally, a potential building foundation was detected. All detectable utilities were marked onsite with appropriate colors. Anomalous features and unknown utilities were marked onsite in pink paint. Site map (100316.1) is included with all located subsurface features.

5.0 SURVEY LIMITATIONS

GPR depth of penetration was limited to approximately 1-2 feet bgs. The limiting factor was due to conductive soils. Building walls, parked cars, dense vegetation, area fencing and debris limited equipment usage over portions of the survey area. Delta did not have access to buildings located adjacent to the property. Interior access may aid Delta in detecting unknown utilities or utilities otherwise not detectable without a direct connection to the pipe or conduit.

6.0 WARRANTIES AND DISCLAIMER

As with any geophysical method, it must be stressed that caution be used during any excavation or intrusive testing in proximity to any anomalies indicated in this report. In addition, the absence of detected signatures does not preclude the possibility that targets may exist. To the extent the client desires more definitive conclusions than are warranted by the currently available facts; it is specifically Delta's intent that the conclusions stated herein will be intended as guidance.

This report is based upon the application of scientific principles and professional judgment to certain facts with resultant subjective interpretations. Professional judgments expressed herein are based on the facts currently available within the limit or scope of work, budget and schedule. Delta represents that the services were performed in a manner consistent with currently accepted professional practices employed by geophysical/geological consultants under similar circumstances. No other representations to Client, express or implied, and no warranty or guarantee is included or intended in this agreement, or in any report, document, or otherwise.

This report was prepared pursuant to the contract Delta has with the Client. That contractual relationship included an exchange of information about the property that was unique and between Delta and its client and serves as the basis upon which this report was prepared. Because of the importance of the understandings between Delta and its client, reliance or any use of this report by anyone other than the Client, for whom it was prepared, is prohibited and therefore not foreseeable to Delta.

Reliance or use by any such third party without explicit authorization in the report does not make said third party a third party beneficiary to Delta's contract with the Client. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

NOTES:

This site plan was produced from data positioned by differential GPS measurments collected in the field. Due to the errors normally present in DGPS data, this document is not intended or represented to be of survey precision. Caution should be used in all field measurments based on this site plan.

As with any geophysical method, it must be stressed that caution be used during any excavation or intrusive testing in proximity of any anomalies indicated in this document The absence of detected signatures does not preclude the possibility that targets exist. The geophysical data and results presented in this site plan are based upon the application of scientific principles and professional judgements to certain facts with resultant subjective interpretations. Professional judgements expressed herein are based on the facts currently available within the limits of the existing data, scope of work, budget, and schedule.

Reliance or use by any such third party without explicit authorization in the document does not make said third party a third party benificiary to Delta's contract with the client. Any such unauthorized reliance on or use of this document, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this document, are made to any such third party.

DATE	10/6/16
SCALE	1'' = 120'
DWG NO.	100316.1
SHT NO.	1 OF 1
PROJECT.	

GEOPHYSICAL INVESTIGATION
7 SPRUCE STREET, ILION, NEW YORK
FOR
CDM SMITH

DELTA Geophysics Inc.
738 Front Street, Catasauqua, PA 18032
Phone: (610) 231-3701

ATTACHMENT 6

Nature's Way
Geologic Cross Sections

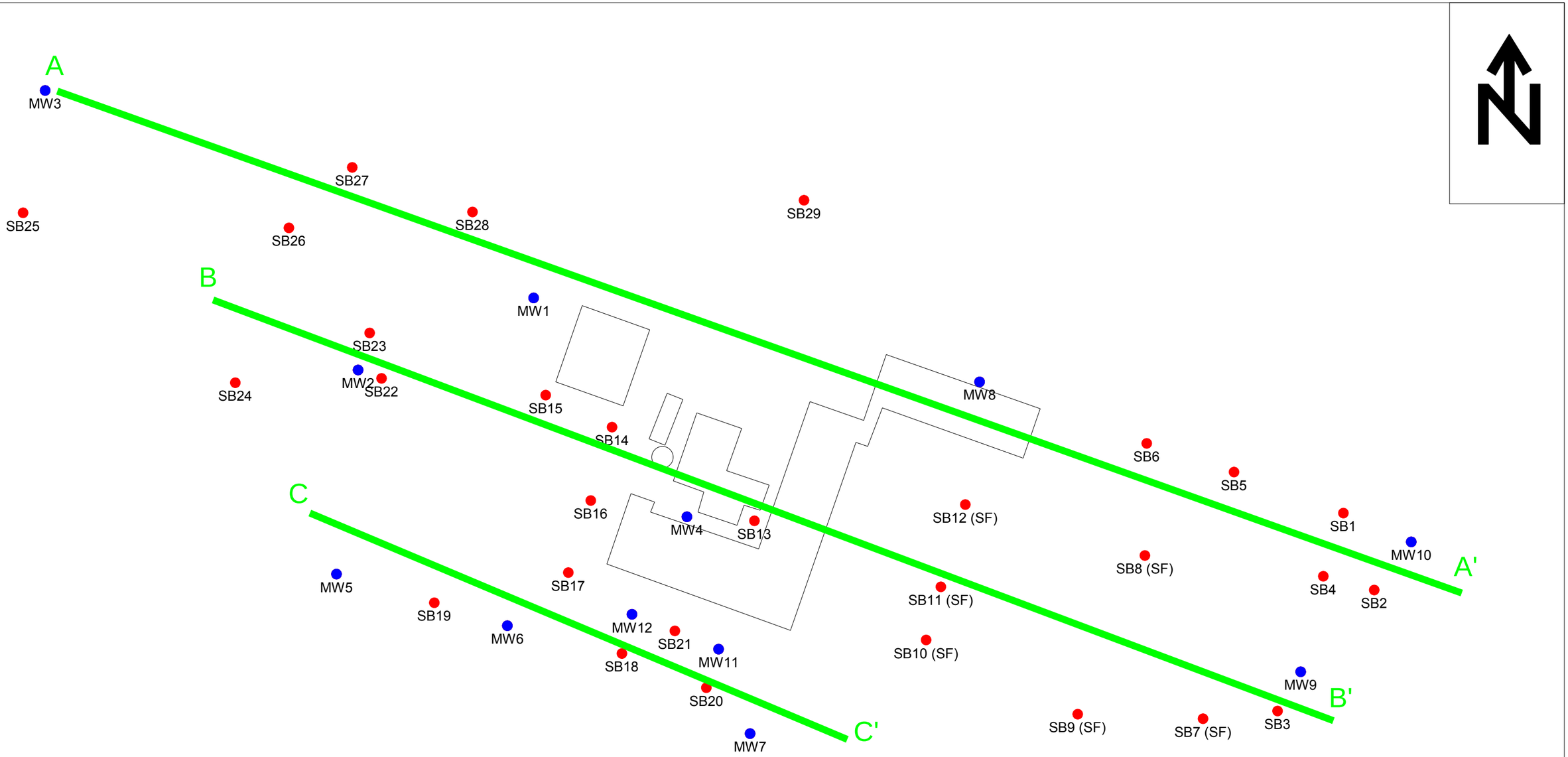


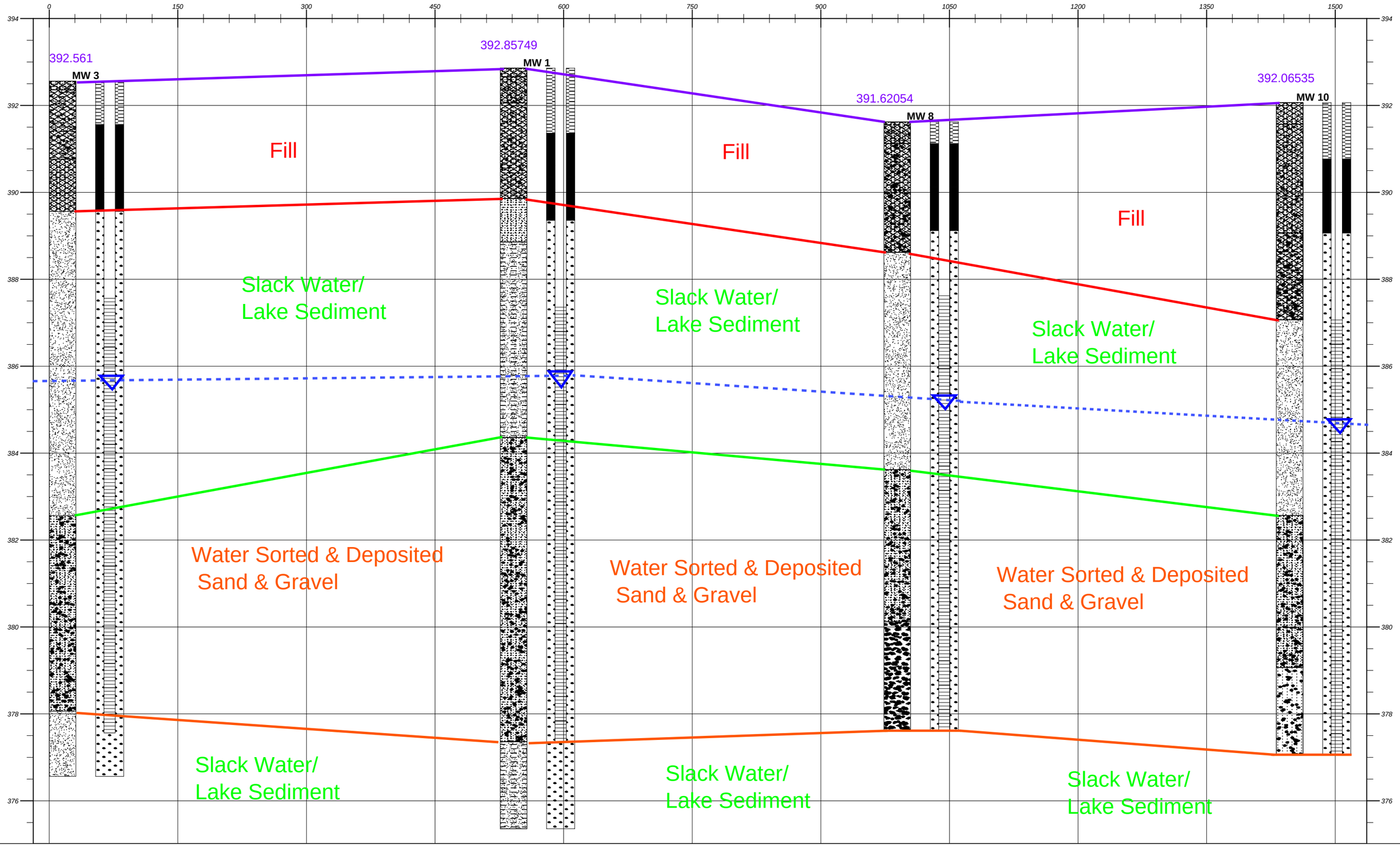
Figure 3 Soil Boring / Monitoring Well Cross Section

Duofold Corporation

NYSDEC Site # 622030

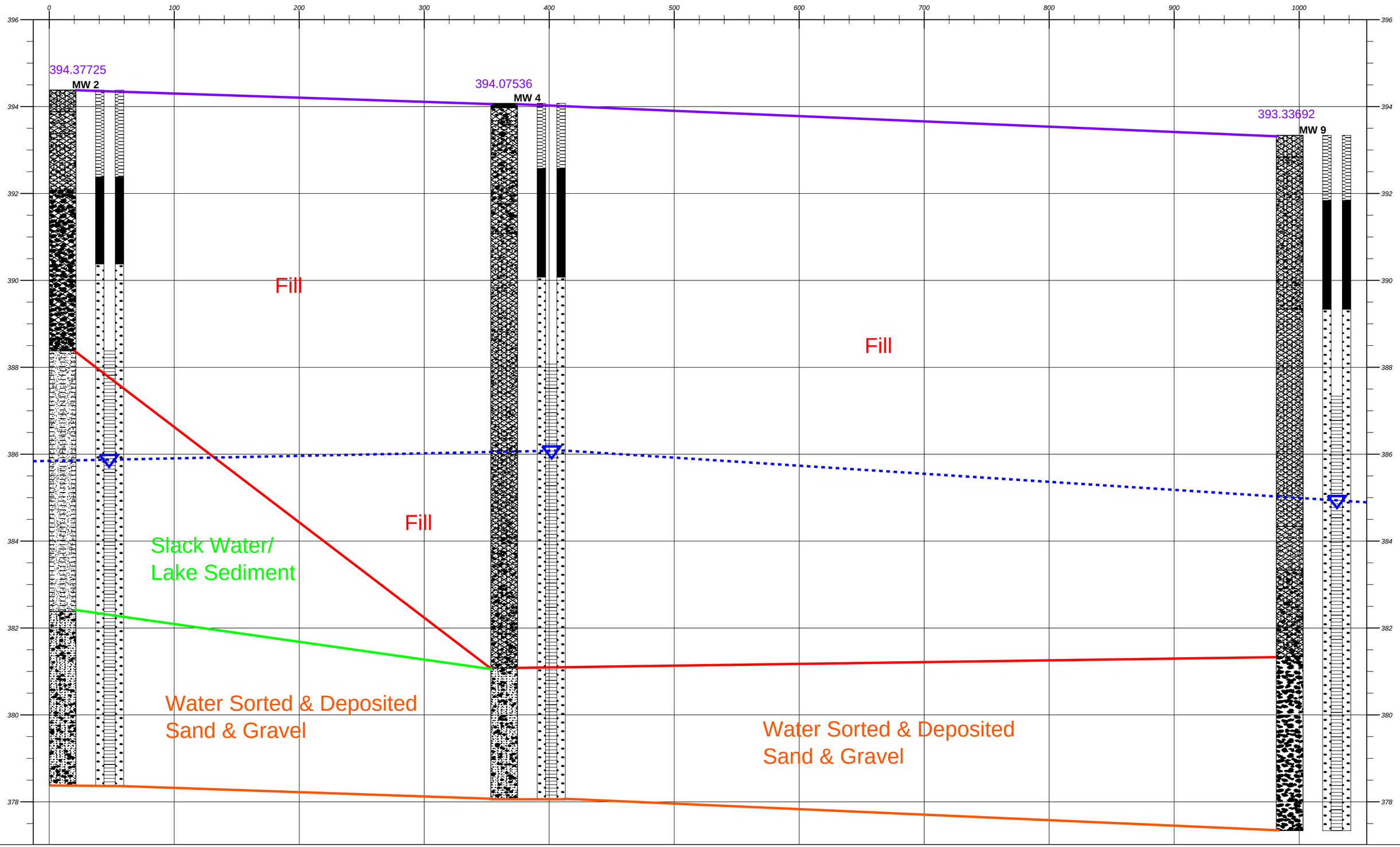
7 Spruce Street, Herkimer, NY

Subsurface Profile A-A'



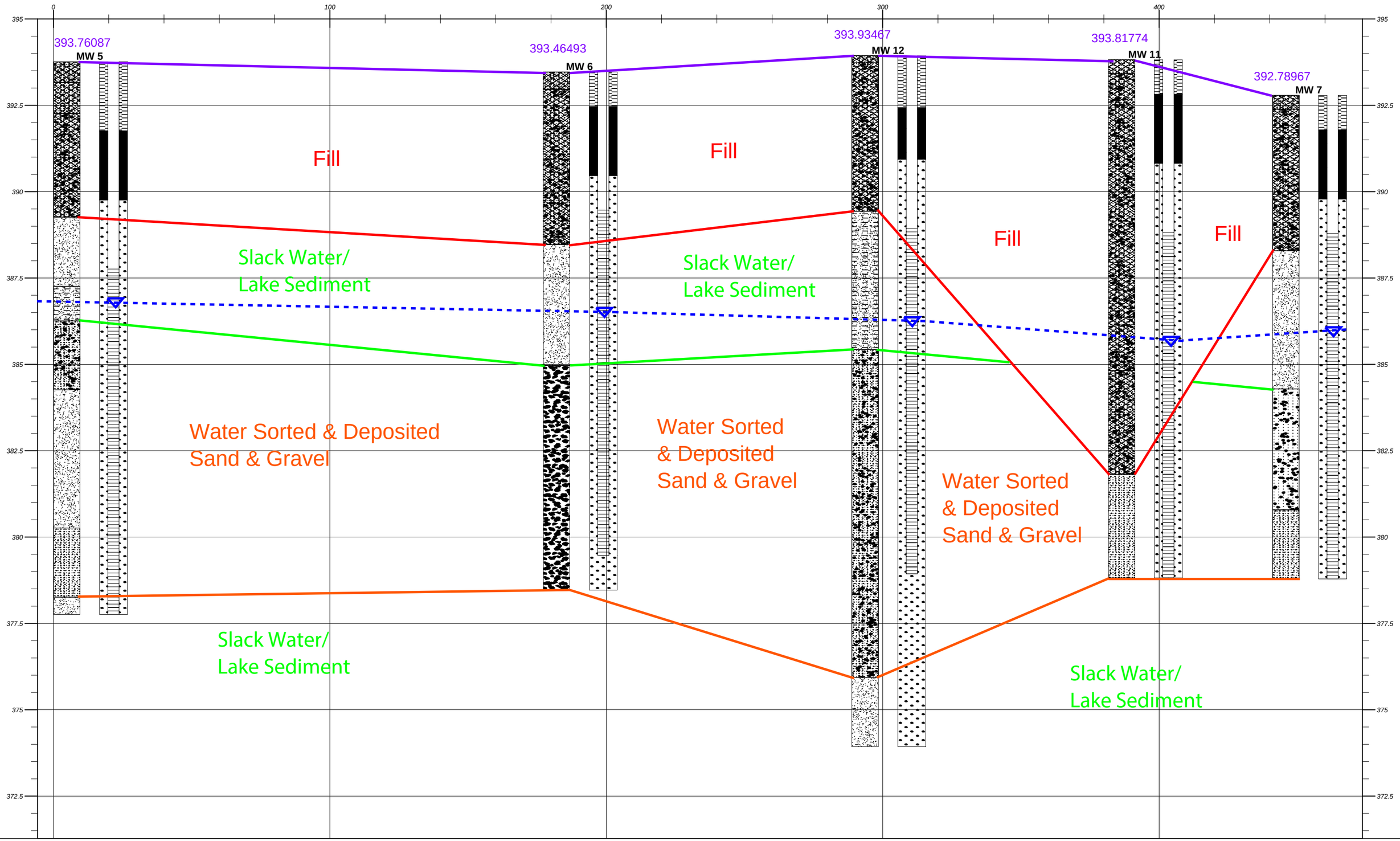
Subsurface Investigation at the Duofold Corporation NYSDEC Site#622030
7 Spruce Street, Ilion, NY

Subsurface Profile B-B'



Subsurface Investigation at the Duofold Corporation NYSDEC Site#622030
7 Spruce Street, Ilion, NY

Subsurface Profile C-C'



Subsurface Investigation at the Duofold Corporation NYSDEC Site#622030
7 Spruce Street, Ilion, NY

August 23, 2019

The Herkimer County Industrial Development Agency
Attn: John Piseck
420 E. German Street, Suite 101A
Herkimer, New York 13350

Subject: **Phase I Environmental Site Assessment Report**
Former Duofold Site
7 Spruce Street
Ilion, New York 13357
HRP Project Number: HER1500.P2
Brownfields Assessment Cooperative Agreement: BF-96261019-0

Dear Mr. Piseck,

HRP has completed a Phase I Environmental Site Assessment (ESA) of the Former Duofold Facility located at 7 Spruce Street in Ilion, New York (herein referred to as the "Site"). HRP completed this assessment in accordance with the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM E1527-13.

Please review the attached report in its entirety, and contact us if you have any questions. If you have any questions or require additional information, please feel free to contact HRP at (518) 877-7101.

Sincerely,

James K. Charter
Senior Project Scientist

Jesse Zahn, CHMM, PG
Regional Office Manager

APPENDIX B
Soil Boring Logs

MOVE YOUR ENVIRONMENT FORWARD

Project: Former Duofold Facility	**Boring I.D.: HRPB-1**
Job Number: HER1500.P2	**Date: 8/26/20**
Drilling Company: NW Contracting, Inc.	**Time: 3:15 PM**

Sample Interval (ftbg)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	**Bottom**				
0	4	0	Dry	Concrete Pad top 9”. Pushed to 2’ and got refusal on more concrete.	0.0
				End of Boring.	

Soil Samples Collected: None

Project: Former Duofold Facility				**Boring I.D.: HRPB-1**	
Job Number: HER1500.P2				**Date: 9/10/2020**	
Drilling Company: NW Contracting, Inc.				**Time: 12:15 PM**	
Sample Interval (ftbg)		**Recovery (ft)**	**Moisture**	**Description (grain size, color, compaction, staining, odor)**	**PID (PPM)**
Top	**Bottom**				
0	2	1.0	Dry to Moist	0 - 1.5': BRICK, SAND, and GRAVEL; c-f; some SILT; fine; Red and brown; No odor or staining 1.5 – 2.0': SILT; fine; some GRAVEL; medium; Gray to brown; No odor or staining.	0.0
2	4	2.0	Dry to Moist	2.0 – 2.5': SILT; fine; some SAND and GRAVEL; c-f; Red to brown; No odor or staining.	0.0
			Moist to wet	2.5 – 3.0': SAND and GRAVEL; c-f; Black; No odor or staining.	0.0
			Moist	3.0 – 4.0': SILT; fine; little GRAVEL; Gray; No odor or staining.	0.0`
6	8	1.5	Moist	6.0 – 7.5': SILT; fine; Black; little GRAVEL; fine; Gray; No odor or staining.	0.0
			Wet	7.5 – 8.0': SILT and GRAVEL; c-f; Black; No odor or staining.	0.0
8	10	6"	Wet	8.0 – 10.0': SILT; fine; little SAND and GRAVEL; c-f; Dark gray; No odor or staining.	0.0
10	12	2.0	Wet	10.0 – 11.5': SILT, SAND, and GRAVEL; c-f; some broken carbonate material; Gray; No odor or staining.	0.0
			Wet	11.5 - 12.0': SILT, SAND, and GRAVEL; c-f; some shell material; Dark gray; No odor or staining.	0.0
12	14	4"	Wet	12.0 – 14.0': SILT and SAND; c-f; some GRAVEL; coarse; Red and gray; some shell material; No odor or staining.	0.0
15	17	1.5	Moist to Wet	15.0 – 17.0': SILT; fine; little SAND; m-f; Gray; No odor or staining.	0.0
				End of Boring.	
Soil Samples Collected:					**Time**
Sample Interval 15.0 – 16.0'					12:15 PM
Sampling Method: Grab					
Description of Water: Depth to water @ ~5.0'					

Project: Former Duofold Facility				**Boring I.D.: HRPB-2**	
Job Number: HER1500.P2				**Date: 8/27/20**	
Drilling Company: NW Contracting, Inc.				**Time: 12:45 PM**	
Sample Interval (ftbg)		**Recovery (ft)**	**Moisture**	**Description (grain size, color, compaction, staining, odor)**	**PID (PPM)**
Top	**Bottom**				
0	4	1.5	Dry Dry	0 - 0.5': CONCRETE; white/gray; CINDER and ASH; some SAND; Brown; No odor or staining. 0.5 – 1.0': SAND; Brown; some SILT; c-f; No odor or staining.	0.0 0.0
4	8	0.5	Wet	4.0 – 8.0': SAND; fine; Brown; No odor or staining.	0.0
8	12	2.0	Wet Wet	8.0 – 10.0': SILT; fine; some SAND and GRAVEL; c-f; Gray to brown; No odor or staining. 10.0 – 12.0': SILT; fine; gray/ brown; some SAND; No odor or staining.	0.0 0.0
12	16	0		NO RECOVERY.	
16	20	1.0	Wet	16.0- 20.0': SILT; fine; Gray to brown; No odor or staining.	0.0
				End of Boring.	
Soil Samples Collected:					**Time**
Sample Interval 16.0 – 17.0'					12:45 PM
Sampling Method: Grab					

Project: Former Duofold Facility				**Boring I.D.: HRPB-3**	
Job Number: HER1500.P2				**Date: 8/27/20**	
Drilling Company: NW Contracting, Inc.				**Time: 11:00 AM**	
Sample Interval (ftbg)		**Recovery (ft)**	**Moisture**	**Description (grain size, color, compaction, staining, odor)**	**PID (PPM)**
Top	**Bottom**				
0	4	2.5	Dry	0 - 3.0": CONCRETE.	0.0
			Dry	3.0" - 3.0': SAND and GRAVEL; c-f; Gray, brown, black; little SILT; fine; brick and other fill materials present; No odor or staining.	0.0
			Dry	3.0 - 4.0': SILT; some SAND; Brown; No odor or staining.	0.0
4	8	3.0	Dry	4.0 - 5.0': SILT with SAND; Brown; No odor or staining.	0.0
			Moist	5.0 - 8.0': SAND and SILT; fine; Brown to gray; No odor or staining.	0.0
8	12	2.0	Moist	8.0 – 12.0': SILT and SAND; fine; Gray; No odor or staining.	0.0
12	16	1.5	Wet	12.0 – 16.0': SAND and GRAVEL; c-f; little SILT; fine; Brown; No odor or staining.	0.0
				End of Boring.	
Notes: BOG 16.0'					
Soil Samples Collected:					**Time**
Sample Interval 15-16'					11:00 AM
MS/MSD Collected Here					
Sampling Method: Grab					
Description of Water: Depth to water @ ~8.0'					

Project: Former Duofold Facility				**Boring I.D.: HRPB-4**	
Job Number: HER1500.P2				**Date: 8/26/20**	
Drilling Company: NW Contracting, Inc.				**Time: 2:00 PM**	
Sample Interval (ftbg)		**Recovery (ft)**	**Moisture**	**Description (grain size, color, compaction, staining, odor)**	**PID (PPM)**
Top	**Bottom**				
0	4	3.0	Moist Moist	0.0 – 4.0': SILT and SAND; m-f; Brown to dark brown; No odor or staining. @ 3.0' it changes to black silty m-f SAND with a slight petroleum odor.	1': 0.0 2': 0.0 3': 46.1
4	8	1.0	Wet	4.0 – 8.0': SILT and SAND; m-f; Black; Weathered petroleum odor.	5': 6.1 7': 0.0
8	12	2.5	Moist	8.0 - 9.0': SILT and SAND; m-f; Black; Weathered petroleum odor. 9.0 – 12.0': SAND; and GRAVEL; c-f; little SILT; Gray; No odor or staining.	9': 0.0 11': 0.0
12	16	1.5	Wet	12.0- 16.0': SAND; and GRAVEL; c-f; little SILT; Gray; No odor or staining.	0.0
				End of Boring.	
Soil Samples Collected:					**Time**
Sample Interval 6.5 - 7.5'					2:00 PM
Sampling Method: Grab					
Description of Water: Depth to Water ~4.0-5.0'					

MOVE YOUR ENVIRONMENT FORWARD

Project: Former Duofold Facility	**Boring I.D.: HRPB-5**
Job Number: HER1500.P2	**Date: 9/9/20**
Drilling Company: NW Contracting, Inc.	**Time: 12:30 PM**

Sample Interval (ftbg)		**Recovery (ft)**	**Moisture**	**Description (grain size, color, compaction, staining, odor)**	**PID (PPM)**
Top	**Bottom**				
0	2.5	2	Dry	CONCRETE.	ND
2.5	4.5	3”	Wet	0.0 – 2.0’ (30” – 54” below grade): SAND and GRAVEL; c-f; some SILT; Dark brown; No odor or staining.	0.0
4.5	6.5	1	Moist to Wet	4.5 – 5.5’: SILT; fine; some SAND and GRAVEL; c-f; Brown; No odor or staining.	0.0
			Moist to Wet	5.5 – 6.5’: SILT; fine; Brown to black; No odor or staining.	0.0
6	8	2	Moist to Wet	6.0 – 6.5’: SILT; fine; little SAND; Brown; No odor or staining.	0.0
			Moist	6.5 – 8.0’: SILT; fine; Black; No odor or staining.	0.0
8	10	1.5	Moist to Wet	8.0 – 10.0’: SILT; fine; Black; No odor or staining.	0.0
10	12	2	Moist to Wet	10.0 – 11.5’: SILT; fine; Black; No odor or staining.	0.0
			Moist to Wet	11.5 – 12.0’: SILT; fine; some GRAVEL; c-f; Gray to green; No odor or staining.	0.0
12	14	5”	Moist to Wet	12.0 – 13.0’: SILT; fine; Dark brown; No odor or staining.	0.0
			Moist to Wet	13.0 – 14.0’: SAND and GRAVEL; m-f; No odor or staining.	0.0
14	16	6”	Wet	14.0 – 16.0’: SILT, SAND, and GRAVEL; c-f; Brown; No odor or staining.	0.0
				End of Boring.	

Soil Samples Collected:	**Time**
HRPB-5 Sample Interval 6.5 – 7.5’	12:30 PM
Surface Soil SS-9 Interval 0.0 – 2.0’	12:00 PM
Sampling Method: Grab	
Description of Water: Depth to water ~ 9.0’	

Project: Former Duofold Facility				**Boring I.D.: HRPB-6**	
Job Number: HER1500.P2				**Date: 9/9/20**	
Drilling Company: NW Contracting, Inc.				**Time: 2:50 PM**	
Sample Interval (ftbg)		**Recovery (ft)**	**Moisture**	**Description (grain size, color, compaction, staining, odor)**	**PID (PPM)**
Top	**Bottom**				
0	6”	6”	Dry	Concrete Pad.	0.0
0	2	4”	Moist	Not enough recovery GRAVEL and BRICK; No odor or staining.	0.0
2	2.25	2”	Moist to Wet	Hit concrete, refusal SILT; some SAND and GRAVEL; c-f; Brown to gray; No odor or staining. Broke through at 2.7’.	
4	6	1	Moist	4.0 – 5.5’: SILT, SAND, and GRAVEL; c-f; Light to dark brown; No odor or staining. 5.5 – 6.0’: SILT; some SAND and GRAVEL; c-f; Brown; No odor or staining.	0.0 0.0
6	8	2	Moist	6.0 – 7.0’: SILT; fine; some SAND; m-f; little GRAVEL; m-f; Light brown; No odor or staining. 7.0 – 8.0’: SILT; some SAND; m-f; Brown to gray; No odor or staining.	0.0 0.0
10	12	2	Moist Moist to Wet	10.0 – 11.0’: SILT; fine; little GRAVEL; fine; Gray and brown; No odor or staining. 11.0 – 12.0’: SILT; fine; some SAND and GRAVEL; Gray; No odor or staining.	0.0 0.0
14	16	1	Very Wet	14.0 – 16.0’: SAND and GRAVEL; c-m; Brown; No odor or staining.	0.0
				End of Boring.	

Soil Samples Collected:	**Time**
HRPB-6 Sample interval 6.5 – 7.5’	2:50 PM
SS-10A Sample interval 6.0” – 8.0”	2:20 PM
SS-10B Sample interval 22” – 24”	2:25 PM
Sampling Method: Grab	
Description of Water: Depth to water 9.6’	

Project: Former Duofold Facility				**Boring I.D.: HRPB-7**	
Job Number: HER1500.P2				**Date: 8/26/20**	
Drilling Company: NW Contracting, Inc.				**Time: 12:15 PM**	
Sample Interval (ftbg)		**Recovery (ft)**	**Moisture**	**Description (grain size, color, compaction, staining, odor)**	**PID (PPM)**
Top	**Bottom**				
0	4	3	Dry Dry to Moist	0.0 1.0': Black cinder material; no odor or staining. 1.0 3.0': SILT and SAND; fine; Gray to brown; No odor or staining. 3.0 - 3.5': Black cinder lens. 3.5 - 4.0': SAND; m-f; Brown; No odor or staining.	1': 0.0 2': 0.0 3': 0.0 4': 0.0
4	8	2.5	Moist Moist	4.0 - 6.0': SILT and SAND; fine; Brown; No odor or staining. 6.0 – 8.0': SILT; fine; Gray; No odor or staining.	0.0 0.0
8	12	2	Moist Wet	8.0 – 10.0': SILT; fine; Gray; No odor or staining. 10.0 – 12.0': SAND and GRAVEL; c-f; little SILT; fine; Brown; No odor or staining.	0.0 0.0
12	16	1.5	Wet	12.0 – 16.0': SAND and GRAVEL; c-f; little SILT; fine; Brown; No odor or staining. Soft at 14'.	
				End of Boring.	
Soil Samples Collected:					**Time**
Sample Interval 15-16'					12:15 PM
Sampling Method: Grab					
Description of Water: Depth to Water @ ~10'					

MOVE YOUR ENVIRONMENT FORWARD

Project: Former Duofold Facility	**Boring I.D.: HRPB-8**
Job Number: HER1500.P2	**Date: 8/26/20**
Drilling Company: NW Contracting, Inc.	**Time: 11:30 AM**

Sample Interval (ftbg)		**Recovery (ft)**	**Moisture**	**Description (grain size, color, compaction, staining, odor)**	**PID (PPM)**
Top	**Bottom**				
0	4	2	Dry	0.0 – 4.0': SILT, SAND, AND GRAVEL; c-f; Dark brown to brown; some BRICK material; No odor or staining.	0.0
4	8	3.5	Dry	4.0 - 5.0': SILT, SAND, AND GRAVEL; c-f; Dark brown to brown; some BRICK material; No odor or staining.	0.0
				5.0 – 5.5': Gray ASH material.	
			Moist	5.5 – 8.0': SILT and CLAY; Gray; No odor or staining.	0.0
8	12	3	Wet	8.0 – 9.0': SILT and CLAY; Gray; No odor or staining.	0.0
			Wet	9.0 – 12.0': SILT, SAND, and GRAVEL; c-f; Brown; No odor or staining.	
12	16	2	Wet	12.0 – 14.5': SILT, SAND, and GRAVEL; c-f; Brown; No odor or staining.	0.0
				14.5 – 16.0': SILT and CLAY; Brown to Gray; No odor or staining.	0.0
				End of Boring.	

Soil Samples Collected:	**Time**
Sample Interval 15-16'	11:30 AM
Sampling Method: Grab	
Description of Water: Depth to Water ~5.5'	

Project: Former Duofold Facility				**Boring I.D.: HRPB-9**	
Job Number: HER1500.P2				**Date: 8/26/20**	
Drilling Company: NW Contracting, Inc.				**Time: 12:45 PM**	
Sample Interval (ftbg)		**Recovery (ft)**	**Moisture**	**Description (grain size, color, compaction, staining, odor)**	**PID (PPM)**
Top	**Bottom**				
0	4	2.5	Dry Dry	0.0 1.0': SAND; some SILT; m-f; Dark brown; No odor or staining. 1.0 2.5': FILL material; Black; some BRICK and ASH; No odor or staining.	1': 0.0 2': 0.0
4	8	1.5	Moist	4.0 - 8.0': SAND and GRAVEL; c-m; Dark brown; little SILT; No odor or staining.	6': 0.0 8': 0.0
8	12	3.0	Moist Wet	8.0 - 9.0': SILT; fine; Dark brown; little SAND; No odor or staining. 10.0 – 12.0': SAND and GRAVEL; c-f; Brown; little SILT; No odor or staining.	9': 0.0 11': 0.0
12	16	1.5	Very Wet	12.0 – 16.0': SAND and GRAVEL; c-f; Brown; No odor or staining.	13': 0.0 15':0.0
				End of Boring.	
Soil Samples Collected:					**Time**
Sample Interval 15-16'					12:45 PM
Sampling Method: NA					
Description of Water: Depth to water ~10'					

Project: Former Duofold Facility				**Boring I.D.: HRPB-10**	
Job Number: HER1500.P2				**Date: 8/26/20**	
Drilling Company: NW Contracting, Inc.				**Time: 10:30 AM**	
Sample Interval (ftbg)		**Recovery (ft)**	**Moisture**	**Description (grain size, color, compaction, staining, odor)**	**PID (PPM)**
Top	**Bottom**				
0	4	2	Dry	0.0 – 4.0': SAND; c-f; some GRAVEL; some FILL material with cinders and metal debris; little SILT; Brown to black; No odor or staining.	2': 0.0 4': 0.0
4	8	2	Moist	4.0 - 5.0': CINDERS and ASH; Gray. 5.0 - 5.5': Black organic layer. 5.5 - 8.0': SILT; fine; Gray; No odor or staining.	4': 0.0 5': 0.1 5.5-8': 0.0
8	12	14"	Moist	8.0 – 12.0': SILT, SAND and GRAVEL; c-f; Dark gray; No odor or staining.	0.0
12	16	2.5	Wet	12.0 – 16.0': SILT, SAND, and GRAVEL; c-f; Dark Gray; No odor or staining.	0.0
				End of Boring.	
Soil Samples Collected:					**Time**
Sample Interval 6.5-7.5					10:30 AM
Sampling Method: Grab					
Description of Water: Depth to Water ~5.0'					

MOVE YOUR ENVIRONMENT FORWARD

Project: Former Duofold Facility	**Boring I.D.: HRPB-12**
Job Number: HER1500.P2	**Date: 8/27/20**
Drilling Company: NW Contracting, Inc.	**Time: --**

Sample Interval (ftbg)		**Recovery (ft)**	**Moisture**	**Description (grain size, color, compaction, staining, odor)**	**PID (PPM)**
Top	**Bottom**				
0	4	3	Dry to Moist	0.0 – 4.0': SAND and SILT; c-f; some GRAVEL; c-f; Brown to gray; No odor or staining.	1': 0.0 3': 0.0
4	8	2.5	Dry	4.0 – 7.5': SAND and SILT; c-f; some GRAVEL; c-f; Brown to gray; No odor or staining. 7.5 - 8.0': SILT and CLAY; Gray.	5': 0.0 7': 0.0
8	12	2	Wet	8.0 – 12.0': Alternating layers; SAND / GRAVEL and SILT / CLAY; c-f; No odor or staining.	9': 0.0 10': 0.0
12	16	2.5	Wet	12.0 – 16.0': SAND and GRAVEL; c-f; Brown; No odor or staining; appears to be natural.	11': 0.0
				End of Boring.	

Soil Samples Collected:	**Time**
None	--

Sampling Method: NA			

Description of Water: Depth to Water ~8 ft

SURFACE SOIL SAMPLING LOG

Project Name: Former Duofold Facility (HER1500.P2) **Date:** 9/9/20 & 9/10/20

Weather: Sunny, 75°F **Personnel:** Jamey Charter & Casey Condon

Soil I.D.	Time	Depth	PID (ppm)	Description
SS-1A	9:45	0 – 2″	0.0	SAND; c-f; Dark brown; little SILT; little GRAVEL; c-f; little BRICK; No odor or staining; Dry
SS-1B	9:50	2″ – 24″	0.0	SAND; c-f; Dark brown; little SILT; little GRAVEL; c-f; little BRICK; No odor or staining; Dry
SS-2A	9:27	0 – 2″	0.0	SAND; m-f; some SILT; Dark brown; No odor or staining; Dry
SS-2B	9:30	2″ – 24″	0.0	2″ – 12″: SAND; m-f; some SILT; Black; No odor or staining; Dry 12″ – 24″: SILT, SAND, and GRAVEL; c-f; Brown; No odor or staining; Moist
SS-3A	14:15	0 – 2″	0.0	SAND; c-f; some SILT; Brown; No odor or staining; Dry
SS-3B	14:30	2″ – 24″	0.0	SAND; c-f; some SILT; Dark brown; Trace brick and coal fragments; No odor or staining; Moist
SS-4A	9:05	0 – 2″	0.0	SILT and SAND; fine; Brown; No odor or staining; Dry
SS-4B	9:10	2″ – 24″	0.0	2″ – 12″: SILT and SAND; fine; Brown; No odor or staining; Dry 12″ – 24″: SOIL and SAND; c-f; some GRAVEL and FILL; pieces of glass, coal, and brick; Dark black; No odor or staining; Dry
SS-5A	13:45	0 – 2″	0.0	SAND: some SILT; c-f; Dark brown; No odor or staining; Dry
SS-5B	14:00	2″ – 24″	0.0	SAND; c-f; some SILT; Dark brown; Trace brick and coal fragments; No odor or staining; Moist
SS-6A	10:30	0 – 2″	0.0	SAND and GRAVEL; c-f; Dark brown to black; No odor or staining; Moist
SS-6B	10:35	2″ – 24″	0.0	SAND and GRAVEL; c-f; Dark brown to black; No odor or staining; Moist
SS-7A	10:55	0 – 2″	0.0	SAND and GRAVEL; c-f; Black; No odor or staining; Moist

SS-7B	11:00	2″ – 12″	0.0	SILT, SAND, and GRAVEL; c-f; Brown; No odor or staining; Moist; Refusal @ 1.0′
SS-8A	11:05	0 – 2″	0.0	Top 2″ there is a concrete slab beneath 1.0′ of BRICK, SAND, and GRAVEL; c-f; some SILT; fine; Brown, black, and red; No odor or staining; Moist
SS-8B	11:10	2″ – 12″	0.0	SILT and SAND; c-f; some fill; Dark brown; No odor or staining; Dry to moist; Refusal @ 1.0′
SS-9	11:20	0 – 24″	0.0	SAND and GRAVEL; c-f; some SILT; Dark brown; No odor or staining; Dry
SS-10A	11:40	6″- 8″	0.0	SAND, BRICK, and GRAVEL; c-f; Red and black; No odor or staining; Moist
SS-10B	11:45	8″ – 24″	0.0	SAND, BRICK, and GRAVEL; c-f; Red and black; No odor or staining; Moist

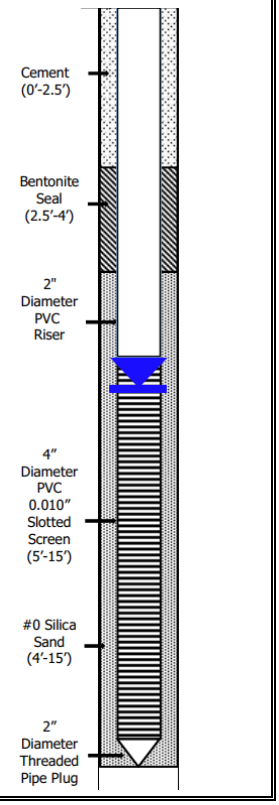
APPENDIX C
Monitoring Well Construction Details

HRP Associates, Inc.
Monitoring Well Installation Log

PAGE 1 OF 5

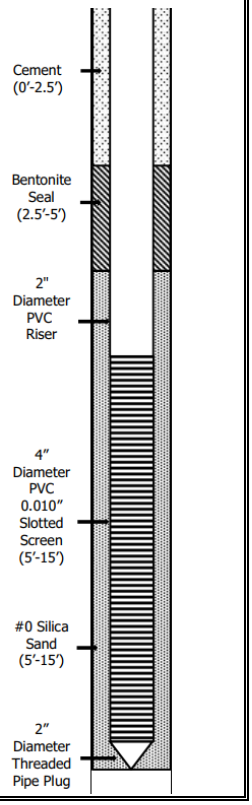
WELL NO.: MW-1	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 7.5'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 2.0"
DATE COMPLETED: 9/10/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 10.0'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 2.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Monitoring Well	**PACKING:**	
Static Water Level: 3.5 ft. bg	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Interval**: 15.0 ft. bg to 4.0 ft.bg	
Date: 9/10/20	**SEAL:**	
Total Well Depth: 15.0 ft. bg	**Type**: PureGold Medium Chips Bentonite	**Interval**: 4.0 ft. bg to 2.5 ft. bg
PROTECTIVE PLUG	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Instant Concrete	**Interval**: 2.5 ft. bg to grade
Diameter: 2.0"		

ADDITIONAL NOTES: Bentonite was hydrated.



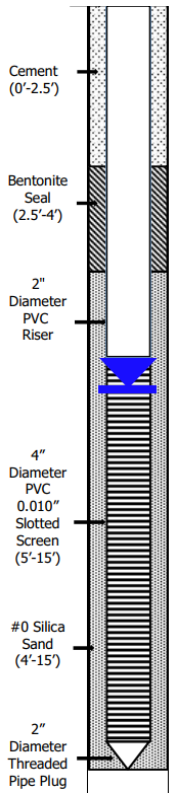
HRP Associates, Inc.
Monitoring Well Installation Log

WELL NO.: MW-2	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 7.5'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 2.0"
DATE COMPLETED: 9/11/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 10.0'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 2.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Monitoring Well	**PACKING:**	
Static Water Level: N/A	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Interval**: 15.0 ft. bg to 5.0 ft.bg	
Date: 9/11/2020	**SEAL:**	
Total Well Depth: 15.0 ft. bg	**Type**: PureGold Medium Chips Bentonite	**Interval**: 5.0 ft. bg to 2.5 ft. bg
PROTECTIVE PLUG	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Instant Concrete	**Interval**: 2.5 ft. bg to grade
Diameter: 2.0"		
ADDITIONAL NOTES: Bentonite was hydrated.		



HRP Associates, Inc.
Monitoring Well Installation Log

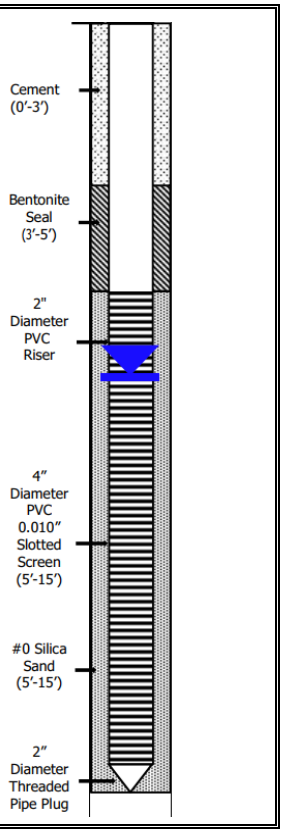
WELL NO.: MW-3	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 7.5'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 2.0"
DATE COMPLETED: 9/10/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 10.0'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 2.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Monitoring Well	**PACKING:**	
Static Water Level: N/A	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Interval**: 15.0 ft. bg to 4.0 ft.bg	
Date: 9/10/20	**SEAL:**	
Total Well Depth: 15.0 ft. bg	**Type**: PureGold Medium Chips Bentonite	**Interval**: 4.0 ft. bg to 2.5 ft. bg
PROTECTIVE PLUG	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Instant Concrete	**Interval**: 2.5 ft. bg to grade
Diameter: 2.0"		
ADDITIONAL NOTES: Bentonite was hydrated.		



HRP Associates, Inc.
Monitoring Well Installation Log

WELL NO.: TMW-1	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 7.5'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 2.0"
DATE COMPLETED: 9/14/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 10.0'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 2.0"
GENERAL NOTES:	**Stratigraphic Unit**: Grey fill; Moist; No odor	
Type of well: Monitoring Well	**PACKING:**	
Static Water Level: 6.5'	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Interval**: 15.0 ft. bg to 5.0 ft.bg	
Date: 9/14/2020	**SEAL:**	
Total Well Depth: 15.0 ft. bg	**Type**: PureGold Medium Chips Bentonite	**Interval**: 5.0 ft. bg to 3.0 ft. bg
PROTECTIVE PLUG	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Instant Concrete	**Interval**: 3.0 ft. bg to grade
Diameter: 2.0"		

ADDITIONAL NOTES: Bentonite was hydrated. 8' curbox installed in road.

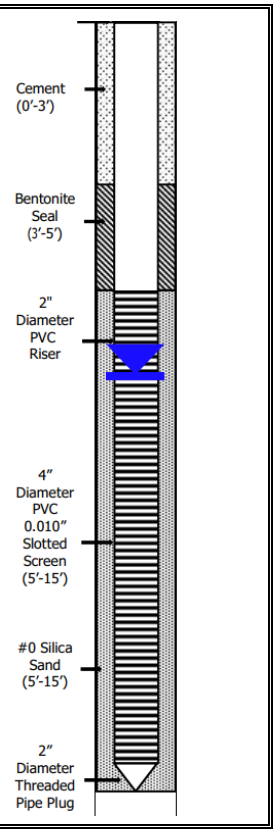


HRP Associates, Inc.
Monitoring Well Installation Log

PAGE 5 OF 5

WELL NO.: TMW-2	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 7.5'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 2.0"
DATE COMPLETED: 9/14/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 10.0'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 2.0"
GENERAL NOTES:	**Stratigraphic Unit**: Grey fill; Moist; No odor	
Type of well: Monitoring Well	**PACKING:**	
Static Water Level: 6.5'-7.0'	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Interval**: 15.0 ft. bg to 5.0 ft.bg	
Date: 9/14/2020	**SEAL:**	
Total Well Depth: 15.0 ft. bg	**Type**: PureGold Medium Chips Bentonite	**Interval**: 5.0 ft. bg to 3.0 ft. bg
PROTECTIVE PLUG	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Instant Concrete	**Interval**: 3.0 ft. bg to grade
Diameter: 2.0"		

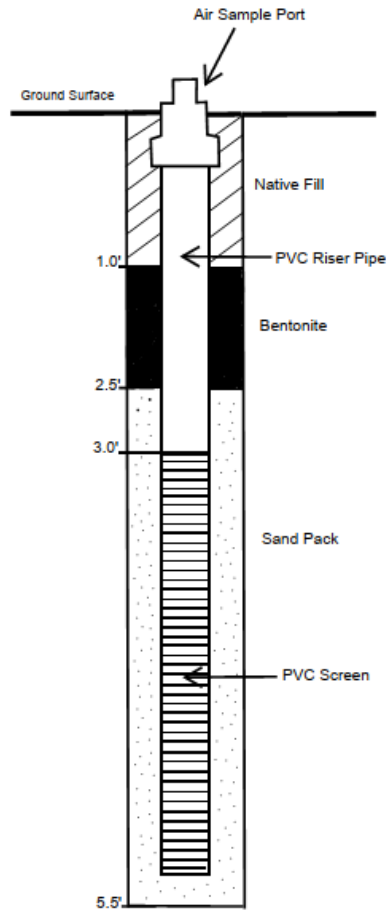
ADDITIONAL NOTES: Bentonite was hydrated. 8' curbox installed in road.



HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-6	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/9/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: N/A	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Amount**: 20 lbs	**Interval**: 5.0 ft. bg to 2.5 ft. bg
Date: 9/9/20	**SEAL:**	
Total Well Depth: 5.5'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.5 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

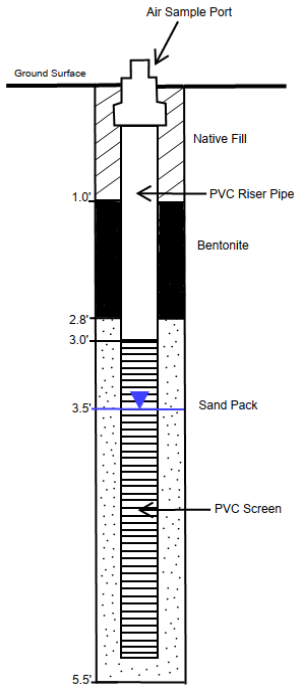
ADDITIONAL NOTES: Bentonite was hydrated. No Groundwater Observed During Drilling.



HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-1	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/10/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: 3.5 '	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: Top of casing	**Amount**: 20 lbs	**Interval**: 5.0 ft. bg to 2.8 ft. bg
Date: 9/10/20	**SEAL:**	
Total Well Depth: 5.5'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.8 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

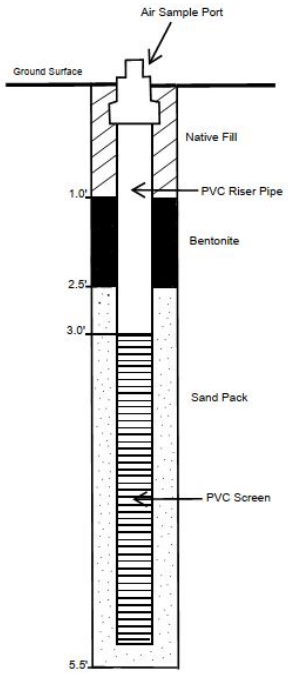
ADDITIONAL NOTES: Bentonite was hydrated.



HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-3	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/10/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: N/A	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Amount**: 20 lbs	**Interval**: 5.0 ft. bg to 2.5 ft. bg
Date: 9/10/20	**SEAL:**	
Total Well Depth: 5.5'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.5 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

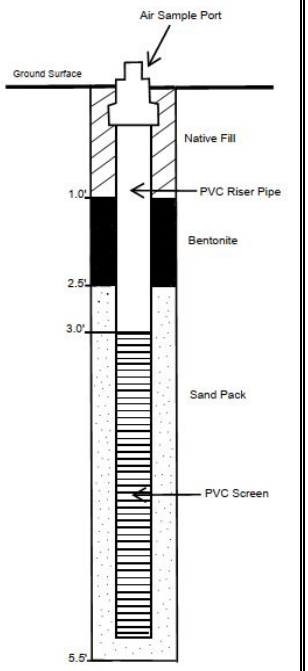
ADDITIONAL NOTES: Bentonite was hydrated. No Groundwater Observed During Drilling.



HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-2	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/11/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: N/A	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Amount**: 20 lbs	**Interval**: 5.0 ft. bg to 2.5 ft. bg
Date: 9/11/20	**SEAL:**	
Total Well Depth: 5.5'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.5 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

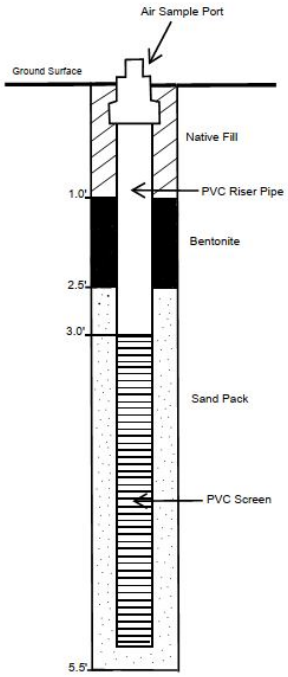
ADDITIONAL NOTES: Bentonite was hydrated. No Groundwater Observed During Drilling.



HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-4	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/11/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: N/A	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Amount**: 20 lbs	**Interval**: 5.0 ft. bg to 2.5 ft.bg
Date: 9/11/20	**SEAL:**	
Total Well Depth: 5.5'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.5 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

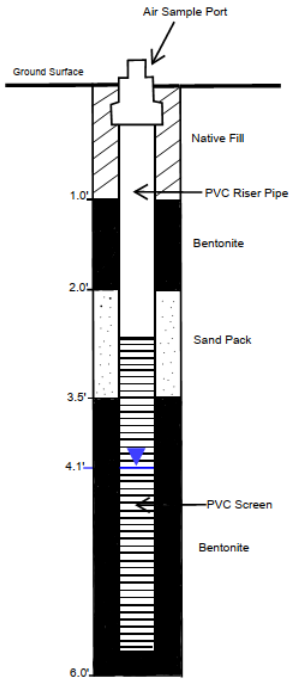
ADDITIONAL NOTES: Bentonite was hydrated. No Groundwater Observed During Drilling.



HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-5	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/11/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: 4.1'	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: Top of casing	**Amount**: 20 lbs	**Interval**: 3.5 ft. bg to 2.0 ft. bg
	SEAL:	
Date: 9/11/20	**Type**: PureGold Medium Chips Bentonite	**Interval**: 6.0 ft. bg to 3.5 ft. bg
Total Well Depth: 6.0'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.0 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

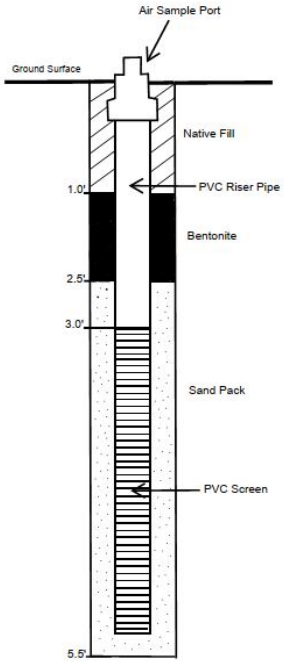
ADDITIONAL NOTES: Bentonite was hydrated.



HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-7	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/11/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: N/A	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Amount**: 20 lbs	**Interval**: 5.0 ft. bg to 2.5 ft. bg
Date: 9/11/20	**SEAL:**	
Total Well Depth: 5.5'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.5 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

ADDITIONAL NOTES: Bentonite was hydrated. No Groundwater Observed During Drilling.



APPENDIX D
Groundwater Sampling Logs

HRP Associates, Inc. 1 Fairchild Square Clifton Park, New York 12065 518-877-7101	**Monitor Well Data Sheet** Page 1 of 1	**Well ID:** OF-MW-02

Site Background Information

Site Location:	Spruce St - Duofold	**Sampling Dates:**	9/22/2020
Job Number:	HER-1500.82	**Field Team Leader:**	ST
Weather:	50s clear	**Team Personnel:**	KMA

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model		Depth to Water (ft)		Depth to Bottom (ft)	
9/22	0930	KMA	~~GeoTech~~ Solinst-101		uncorrected	8.86	uncorrected	15.61
			corr. factor	—	corrected	—	corrected	—
Measurement Point:		PVC			DTB - after sampling =		15.61	

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
good	yes	yes	good	no
Concrete Collar	**Ponded Water**	**Comments:**		
good	no	N/A		

Well Purging Data

Date	Time						Sampler Initials	Instrument Calibration Date
	Equipment Set-up		Purging		Sample Collection			
	Start	Finish	Start	Finish	Start	Finish		
	0920	0934	0935	1030	1035	1040	KMA	9/22/20

Instrument Mfg & Model

pH	YSI ProDSS - Serial #6614
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	YSI ProDSS - Serial #6614

Initial Water Depth (ft): 8.86 Time:

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
0935	8.86	—	—	STATIC	—	—		
0945	9.09	130	7.50	12.4	935	241.8	1.21	3399.73
1000	9.05	130	7.07	11.9	948	251.7	0.38	792
1015	9.03	130	6.99	11.8	947	145.8	0.36	100.03
1020	9.03	130	6.95	11.8	947	173.9	0.35	97.23
1025	9.03	130	6.94	11.9	949	179.1	0.36	96.89
1030	9.03	130	6.93	11.9	948	183.9	0.36	100.7
1035	SAMPLE	—	—	—	—			
Req. Limits for Last 3 Readings			+/- 0.1	3%	3%	+/- 10 mv	10% > 0.5	10% > 5

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
GeoControl Pro	cloudy	none	—	~10 FT

Sample Containers

Type & No.	Volume	Preservative		Type & No.	Volume	Preservative
3 VOA	40ML	HCL		—	—	—
—	—	—		—	—	—
—	—	—		—	—	—

Orange suspended particles observed during initial purge

HRP

HRP Associates, Inc. 1 Fairchild Square Clifton Park, New York 12065 518-877-7101	**Monitor Well Data Sheet** Page 1 of 1	**Well ID:** DF-MW-07

Site Background Information

Site Location:	Spruce St- Duofold	**Sampling Dates:**	9/22/2020
Job Number:	HER1500.P2	**Field Team Leader:**	ST
Weather:	60s clear	**Team Personnel:**	KMA

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model		Depth to Water (ft)		Depth to Bottom (ft)	
9/22/20	1112	KMA	~~Solinst-T015~~ GEOTECH		uncorrected	7.30	uncorrected	13.62
			corr. factor	—	corrected	—	corrected	—
Measurement Point:		PVC			DTB - after sampling = 13.62			

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
good		yes	good	no
Concrete Collar	**Ponded Water**	**Comments:**		
good	no	N/A		

Well Purging Data

Date	Time						Sampler Initials	Instrument Calibration Date
	Equipment Set-up		Purging		Sample Collection			
	Start	Finish	Start	Finish	Start	Finish		
9/22	1112	1120	1128	1233	1238	1233	KMA	9/22/20

Instrument Mfg & Model

pH	YSI ProDSS - Serial # 6614
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	YSI ProDSS - Serial # 6614

Initial Water Depth (ft): 7.31 Time: 1120

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
1128	7.31	static						
1138	7.38	120	7.34	18.5	1007	244	7.60	292.34
1143	7.38	120	7.19	16.4	1001	306.8	4.04	3559.2
1158	7.38	120	6.96	15.4	1000	323.7	4.03	854.23
1203	7.38	120	6.92	15.5	999	324.9	4.08	335.10
1213	7.38	120	6.90	15.4	1000	288.8	4.28	75.67
1223	7.38	120	6.88	15.4	1001	304.5	4.30	52.78
1228	7.38	120	6.88	15.4	1001	308.7	4.29	53.81
1233		120	6.88	15.4	1002	310.6	4.28	49.74
Req. Limits for Last 3 Readings			+/- 0.1	3%	3%	+/- 10 mv	10% > 0.5	10% > 5

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
Geo Control Pro	cloudy	none	—	~10 ft

Sample Containers

Type & No.	Volume	Preservative		Type & No.	Volume	Preservative
3 VOA	40mL	HCl		—	—	—
—	—	—		—	—	—
—	—	—		—	—	—

HRP

HRP Associates, Inc. 1 Fairchild Square Clifton Park, New York 12065 518-877-7101	**Monitor Well Data Sheet** Page 1 of 1	Well ID: DF-MW-8

Site Background Information

Site Location:	Spruce St Dunfold	Sampling Dates:	9/22/20
Job Number:	HER1500.P2	Field Team Leader:	ST
Weather:	30s / clear	Team Personnel:	KMA

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model	Depth to Water (ft)		Depth to Bottom (ft)	
9/22/20	0800	KMA	~~Solinst 101~~ GEOTECH corr. factor —	uncorrected	6.65	uncorrected	13.25
				corrected	—	corrected	—
Measurement Point:		PVC		DTB - after sampling = 13.25			

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
good	yes	yes	good	no
Concrete Collar	**Ponded Water**	**Comments:**		
good	no	N/A		

Well Purging Data

Date	Time: Equipment Set-up Start	Equipment Set-up Finish	Purging Start	Purging Finish	Sample Collection Start	Sample Collection Finish	Sampler Initials	Instrument Calibration Date
9/22	0800	0805	0806	0851	0856	0900	KMA	9/22/20

Instrument Mfg & Model

pH	YSI ProDSS - Serial # 6614
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	YSI Pro DSS - Serial # 6614

Initial Water Depth (ft): 6.65 Time: 0806

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
0806	6.65	STATIC	—	—	—	—	—	—
0816	6.51	115	7.76	11.9	936	225.6	5.64	81.97
0821	6.51	115	7.64	11.9	921	230.7	5.09	116.27
0826	6.51	115	7.53	12.0	912	237.0	5.21	127.97
0831	6.51	115	7.46	12.1	926	242.4	5.07	162.8
0836	6.51	115	7.41	12.2	915	207.4	4.83	130.91
0841	6.51	115	7.34	12.2	917	209.2	4.46	117.26
0846	6.51	115	7.32	12.2	913	212.2	4.49	114.23
0851	6.51	115	7.29	12.3	917	219.3	4.44	113.30
Req. Limits for Last 3 Readings			+/- 0.1	3%	3%	+/- 10 mv	10% > 0.5	10% > 5

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
Geo Control Pro	Clear	None	40	~10 ft

Sample Containers

Type & No.	Volume	Preservative		Type & No.	Volume	Preservative
3 VOA	40 mL	HCL		—	—	—
—	—	—		—	—	—
—	—	—		—	—	—

HRP

HRP Associates, Inc. 1 Fairchild Square Clifton Park, New York 12065 518-877-7101	**Monitor Well Data Sheet** Page 1 of 1	**Well ID:** DF-MW-9

Site Background Information

Site Location:	7 SPRUCE ST, GLEN NY	**Sampling Dates:**	9/23/20
Job Number:	HER1500.R2	**Field Team Leader:**	SRT
Weather:	CLOUDY, 50°F	**Team Personnel:**	KMA + SRT

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model		Depth to Water (ft)		Depth to Bottom (ft)	
9/23/20	1150	KMA	GEOTECH ~~Solinst-101~~		uncorrected	8.55	uncorrected	15.64
			corr. factor	—	corrected	—	corrected	—
Measurement Point:		PVC				DTB - after sampling = 15.64		

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
good	yes	yes	good	no
Concrete Collar	**Ponded Water**	**Comments:**		
good	no	N/A		

Well Purging Data

Date	Time: Equipment Set-up Start	Equipment Set-up Finish	Purging Start	Purging Finish	Sample Collection Start	Sample Collection Finish	Sampler Initials	Instrument Calibration Date
	1145	1200	1205	1245	1250	—	KMA	9/23/20

Instrument Mfg & Model

pH, Temp., Sp. Cond., ORP, DO	YSI PRO DSS - Serial #6614
Turbidity	YSI PRO DSS - Serial #6614

Initial Water Depth (ft): 8.71 Time: 1204

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
1205	8.71	Static	—	—	—	—	—	—
1220	8.73	110	6.70	12.5	1340	-38.2	0.51	124.36
1230	8.73	110	6.64	12.4	1261	-52.6	0.41	68.63
1235	8.73	110	6.67	12.4	1224	-47.2	0.40	57.41
1240	8.73	110	6.65	12.4	1213	-48.3	0.37	54.01
1245	8.73	110	6.65	12.4	1218	-48.8	0.35	57.61
1250	SAMPLE	—						
Req. Limits for Last 3 Readings			+/- 0.1	3%	3%	+/- 10 mv	10% > 0.5	10% > 5

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
GEOCONTROL PRO	CLEAR	NONE	40	10.5

Sample Containers

Type & No.	Volume	Preservative		Type & No.	Volume	Preservative
3 VOA	40 mL	HCL		—	—	—
—	—	—		—	—	—
—	—	—		—	—	—

iron staining

HRP

HRP Associates, Inc. 1 Fairchild Square Clifton Park, New York 12065 518-877-7101	**Monitor Well Data Sheet** Page 1 of 2	**Well ID:** DF-MW-[illegible]

Site Background Information

Site Location:	Spruce St - Divofold	**Sampling Dates:**	9/21/2020
Job Number:	HER1500.P2	**Field Team Leader:**	ST
Weather:	60s / Clear	**Team Personnel:**	KMA

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model		Depth to Water (ft)		Depth to Bottom (ft)	
9/21/20	1328	KMA	~~Geotech~~ Solinst-101		uncorrected	7.44	uncorrected	14.55
			corr. factor	—	corrected	—	corrected	—
Measurement Point:		PVC				DTB - after sampling =		14.55

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
Good	Yes	Yes	O.K.	No
Concrete Collar	**Ponded Water**	**Comments:**		
Yes	No	O.K.		

Well Purging Data

Date	Time						Sampler Initials	Instrument Calibration Date
	Equipment Set-up		Purging		Sample Collection			
	Start	Finish	Start	Finish	Start	Finish		
9/21/20	1330	1332	1332	1352	1457	1502	KMA	9/21/20

Instrument Mfg & Model

pH	YSI ProDSS - Serial # 6614
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	" - Serial # 6614

Initial Water Depth (ft): 7.55 Time: 1332

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
1332	7.55	—	STATIC					
1342	7.51	0.275	7.08	14.9	912	262.9	3.44	72.07
1347	7.52		6.95	14.6	895	270.4	1.90	65.10
1352	7.52		6.88	14.6	890	273.2	1.29	62.59
1357	7.52		6.86	14.6	888	274.6	1.23	58.21
1402	7.52		6.90	14.5	893	251.7	1.05	50.91
1407	7.52		6.83	14.6	891	230.9	0.91	46.44
1412	7.52		6.82	14.7	892	248.1	0.82	41.01
1417	7.52	↓	6.83	14.9	893	253.4	0.72	36.28
Req. Limits for Last 3 Readings			+/- 0.1	3%	3%	+/- 10 mv	10% > 0.5	10% > 5

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
Geo Control Pro	Clear	None	—	~10ft

Sample Containers

Type & No.	Volume	Preservative		Type & No.	Volume	Preservative
3 VOA	40mL	HCL		—	—	—
—	—	—		—	—	—
—	—	—		—	—	—

HRP

HRP Associates, Inc. 1 Fairchild Square Clifton Park, New York 12065 518-877-7101	**Monitor Well Data Sheet** Page 2 of 2	**Well ID:** DF-MW-10

Site Background Information

Site Location:	Spruce St - Duofold	**Sampling Dates:**	9/21/20
Job Number:	HER1900.P2	**Field Team Leader:**	SS
Weather:	60s/clear	**Team Personnel:**	KMA

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model		Depth to Water (ft)		Depth to Bottom (ft)	
9/21/20	1328	KMA	~~Solinst-101~~ GeoTech		uncorrected	7.44	uncorrected	141.55
			corr. factor	—	corrected		corrected	
Measurement Point:		PVC			DTB - after sampling = 141.55			

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
Concrete Collar	**Ponded Water**	**Comments:**		
		O.K.		

Well Purging Data

Date	Time						Sampler Initials	Instrument Calibration Date
	Equipment Set-up		Purging		Sample Collection			
	Start	Finish	Start	Finish	Start	Finish		

Instrument Mfg & Model

pH	YSI-PRO DSS - Serial # 6614
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	YSI-PRO DSS - Serial # 6614

Initial Water Depth (ft): — **Time:**

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
1422	7.52	0.275	6.83	14.8	892	257.1	0.71	30.32
1427	7.52	0.275	6.84	14.8	893	257.4	0.70	29.25
1432	7.53	↓	6.87	14.7	893	175.4	0.67	26.30
1437	7.53		6.84	14.8	894	202.8	0.66	27.98
1442	7.53		6.84	15.0	890	226.3	0.62	24.51
1447	7.53		6.83	15.2	891	232.6	0.62	23.91
1452	7.53	↓	6.83	15.3	894	235.8	0.62	22.09
1457	SAMPLE							
Req. Limits for Last 3 Readings			+/- 0.1	3%	3%	+/- 10 mv	10% > 0.5	10% > 5

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)

Sample Containers

Type & No.	Volume	Preservative		Type & No.	Volume	Preservative

HRP

HRP Associates, Inc. 1 Fairchild Square Clifton Park, New York 12065 518-877-7101	**Monitor Well Data Sheet** Page 1 of 1	Well ID: HRP-MW-1

Site Background Information

Site Location:	7 SPLICE STEEL	Sampling Dates:	9/22/20
Job Number:	HER500.P2	Field Team Leader:	ST
Weather:	60° / SUNNY	Team Personnel:	KMA

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model	Depth to Water (ft)		Depth to Bottom (ft)	
9/22/20	1443	KMA	~~Solinst-101~~ GEOTECH corr. factor —	uncorrected	11.24	uncorrected	17.45
				corrected	—	corrected	
Measurement Point:				DTB - after sampling =		17.45	

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
GOOD	YES	YES	GOOD	NO
Concrete Collar	**Ponded Water**	**Comments:**		
GOOD	NO	* DUPLICATE SAMPLE		

Well Purging Data

Date	Time: Equipment Set-up Start	Equipment Set-up Finish	Purging Start	Purging Finish	Sample Collection Start	Sample Collection Finish	Sampler Initials	Instrument Calibration Date
9/22/20	—	—	1455	1545	1550	—	ST/KMA	9/22/20

Instrument Mfg & Model

pH	YSI PRO DSS - Serial # 6614
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	- Serial # 6614

Initial Water Depth (ft): — Time: —

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
1455	11.24	150	—	— STATIC		—	—	—
1505	11.21	150	7.03	22.1	721	-25.7	2.10	120.57
1510	11.21	150	6.91	21.7	715	-27.1	1.58	61.42
1515	11.21	150	6.84	21.1	717	-44.7	0.91	32.61
1535	11.21	150	6.80	20.1	717	-53.1	0.62	4.11
1540	11.21	150	6.79	20.1	717	-53.7	0.60	4.49
1545	11.21	150	6.74	19.9	717	-55.0	0.57	4.07
1550	11.21	150	—	— SAMPLE	—	—	—	—
Req. Limits for Last 3 Readings			+/- 0.1	3%	3%	+/- 10 mv	10% > 0.5	10% > 5

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
GEOCONTROL PRO	CLOUDY	NONE	—	~13'

Sample Containers

Type & No.	Volume	Preservative		Type & No.	Volume	Preservative
3 VOA	40 ML	HCL	+RI	—	—	—
—	—	—		—	—	—
—	—	—		—	—	—

* DUPLICATE

HRP

HRP Associates, Inc. 1 Fairchild Square Clifton Park, New York 12065 518-877-7101	**Monitor Well Data Sheet** Page 1 of 1	**Well ID:**	HRP-MW-2

Site Background Information

Site Location:	Spruce St - Dunfold	**Sampling Dates:**	9/22/2020
Job Number:	HER1500.P2	**Field Team Leader:**	ST
Weather:	60s / clear	**Team Personnel:**	KMA

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model		Depth to Water (ft)		Depth to Bottom (ft)	
9/22	1305	KMA	~~Solinst-101~~ GeoTech	uncorrected	11.68	uncorrected	17.48	
			corr. factor —	corrected —		corrected —		

Measurement Point: Standpipe PVC — DTB - after sampling = 17.48

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
good	yes	yes	good	no

Concrete Collar	Ponded Water	Comments:
good	no	N/A

Well Purging Data

Date	Time: Equipment Set-up Start	Equipment Set-up Finish	Purging Start	Purging Finish	Sample Collection Start	Sample Collection Finish	Sampler Initials	Instrument Calibration Date
	1300	1305	1310	1400	1405	1410	KMA	9/22/20

Instrument Mfg & Model

pH, Temp., Sp. Cond., ORP, DO	YSI ProDSS - Serial # 6614
Turbidity	YSI PRO DSS - Serial # 6614

Initial Water Depth (ft): 11.66 — Time: 1310

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
1310	11.66	Static						
1320	11.7	100	7.01	18.7	975	253.1	0.76	55.97
1325	11.7	100	6.89	18.0	989	244.4	0.56	28.51
1330	11.7	100	6.86	18.0	994	239.1	0.54	22.68
1335	11.7	100	6.83	17.9	998	229.0	0.52	13.08
1340	11.7	100	6.81	17.9	998	220.4	0.53	8.21
1350	11.7	100	6.79	17.9	998	213.7	0.56	5.03
1355	11.7	100	6.78	17.9	998	207.3	0.57	4.57
1400	11.7	100	6.83	17.9	996	203.23	0.57	4.31
Req. Limits for Last 3 Readings			+/- 0.1	3%	3%	+/- 10 mv	10% > 0.5	10% > 5

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
GeoCentro Pro	Clear	None	—	14 ft

Sample Containers

Type & No.	Volume	Preservative		Type & No.	Volume	Preservative
3 VOA	40ml	HCl		—	—	—
—	—	—		—	—	—
—	—	—		—	—	—

HRP

HRP Associates, Inc.	Monitor Well Data Sheet	Well ID: HRP-MW-3
1 Fairchild Square		
Clifton Park, New York 12065		
518-877-7101	Page 2 of 2	

Site Background Information

Site Location:	SPRUCE ST. ROAD	Sampling Dates:	9/23/2020
Job Number:	HER1500.P2	Field Team Leader:	SRT
Weather:	50s CLOUDY	Team Personnel:	KMA

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model	Depth to Water (ft)		Depth to Bottom (ft)	
9/23/20	920	KMA	~~GEOTECH~~ Solinst-101	uncorrected	11.98	uncorrected	17.45
			corr. factor —	corrected	—	corrected	—
Measurement Point:		PVC	SLUGPIPE	DTB - after sampling = 17.45			

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
GOOD	YES	YES	GOOD	No
Concrete Collar	**Ponded Water**	**Comments:**		
GOOD	No	N/A		

Well Purging Data

Date	Time						Sampler Initials	Instrument Calibration Date
	Equipment Set-up		Purging		Sample Collection			
	Start	Finish	Start	Finish	Start	Finish		
—	—	—	—	—	—	—	—	—

Instrument Mfg & Model

pH	YSI PRO DSS - Serial # 6614
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	YSI PRO DSS - Serial # 6614

Initial Water Depth (ft): — Time: —

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
1110	11.91	130	6.91	15.5	~~442.5~~ 949	142.3	0.26	22.44
1115	SAMPLE							
Req. Limits for Last 3 Readings			+/- 0.1	3%	3%	+/- 10 mv	10% > 0.5	10% > 5

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
GEOCONTROL PRO	CLEAR	NONE	40	RS

Sample Containers

Type & No.	Volume	Preservative		Type & No.	Volume	Preservative
3 VOA	40 mL	HCL		—	—	—
—	—	—		—	—	—
—	—	—		—	—	—

HRP

HRP Associates, Inc.		Well ID: HRP-MW-3
1 Fairchild Square	**Monitor Well Data Sheet**	
Clifton Park, New York 12065		
518-877-7101	Page 1 of 2	

Site Background Information

Site Location:	Spruce St-Duofold	**Sampling Dates:**	9/23/2020
Job Number:	HRP4500.P2	**Field Team Leader:**	SRT
Weather:	50s Cloudy	**Team Personnel:**	KMA

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model		Depth to Water (ft)		Depth to Bottom (ft)	
9/23/20	0920	KMA	~~Geotech~~ Solinst 101	uncorrected	11.98	uncorrected	17.45	
			corr. factor —	corrected —		corrected —		

Measurement Point: Stand pipe - PVC — DTB - after sampling = 17.45

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
good	yes	yes	good	no

Concrete Collar	Ponded Water	Comments:
good	no	N/A

Well Purging Data

Date	Time: Equipment Set-up Start	Equipment Set-up Finish	Purging Start	Purging Finish	Sample Collection Start	Sample Collection Finish	Sampler Initials	Instrument Calibration Date
9/23/20	0920	0935	0936	1110	1115	1120	KMA	9/23/20

Instrument Mfg & Model

pH, Temp., Sp. Cond., ORP, DO	YSI ProDSS - Serial # 6614
Turbidity	YSI Pro DSS - Serial # 6614

Initial Water Depth (ft): 11.94 — **Time:** 0936

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
~~0936~~ 0940	11.94	Static						
0950	11.91	130	7.49	15.6	947	237.5	0.53	1587.32
1005	11.91	130	7.28	15.7	947	240.6	0.40	772.18
1010	11.91	130	7.17	15.5	947	241.4	0.35	360.64
1020	11.91	130	7.09	15.4	948	148.1	0.33	145.39
1030	11.91	130	7.02	15.5	946	178.3	0.30	72.72
1040	11.91	130	6.98	15.4	946	185.7	0.29	51.23
1100	11.91	130	6.93	15.4	944	140.8	0.27	23.14
1105	11.91	130	6.92	15.5	946	141.4	0.26	22.91
Req. Limits for Last 3 Readings			+/- 0.1	3%	3%	+/- 10 mv	10% > 0.5	10% > 5

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
geo control PRO	Clear	None	410	12.5

Sample Containers

Type & No.	Volume	Preservative		Type & No.	Volume	Preservative
3 VOA	40mL	HCL		—	—	—
—	—	—		—	—	—
—	—	—		—	—	—

HRP

HRP Associates, Inc. 1 Fairchild Square Clifton Park, New York 12065 518-877-7101	**Monitor Well Data Sheet** Page 1 of 1	**Well ID:** TMW-1

Site Background Information

Site Location:	Spruce St - Dunfold	**Sampling Dates:**	9/21/2020
Job Number:	HER500.82	**Field Team Leader:**	ST
Weather:	60s/clear	**Team Personnel:**	KMA

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model		Depth to Water (ft)		Depth to Bottom (ft)	
9/21	1520	KMA	~~Geotech~~ Solinst-101		uncorrected	6.28	uncorrected	14.98
			corr. factor	—	corrected	—	corrected	—

Measurement Point: PVC — DTB - after sampling = 14.98

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
good	yes	yes	good	no
Concrete Collar	**Ponded Water**	**Comments:**		
good	none	NA		

Well Purging Data

Date	Time: Equipment Set-up Start	Equipment Set-up Finish	Purging Start	Purging Finish	Sample Collection Start	Sample Collection Finish	Sampler Initials	Instrument Calibration Date
9/21/20	1540	1550	1553	1643	1648	1655	KMA	9/21/20

Instrument Mfg & Model

pH, Temp., Sp. Cond., ORP, DO	YSI ProDSS - Serial # 6614
Turbidity	YSI Pro DSS - Serial # 6614

Initial Water Depth (ft): 1553 — Time: 6.31

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
1553	6.31	—	Static					
1612	6.34	0.250	7.06	16.3	905	44.9	0.98	274.82
1622	6.34	↓	7.09	16.2	897	9.1	0.78	136.47
1633	6.34		6.99	16.2	893	0.9	0.62	137.8
1638	6.34		6.98	16.1	892	-1.4	0.58	139.24
1643	6.34		6.98	16.1	893	-1.4	0.55	134.57
1648	SAMPLE							
Req. Limits for Last 3 Readings			+/- 0.1	3%	3%	+/- 10 mv	10% > 0.5	10% > 5

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
GeoControl Pro	clear	none	40	~10 ft

Sample Containers

Type & No.	Volume	Preservative		Type & No.	Volume	Preservative
3 VOA	40 mL	HCL		—	—	—
—	—	—		—	—	—
—	—	—		—	—	—

HRP

HRP Associates, Inc.	Monitor Well Data Sheet	Well ID: TMW-2
1 Fairchild Square		
Clifton Park, New York 12065		
518-877-7101	Page 1 of 2	

Site Background Information

Site Location:	Spruce Street - Duofold	Sampling Dates:	9/21/2020
Job Number:	HER1500.P2	Field Team Leader:	ST
Weather:	60s / Clear	Team Personnel:	KMA

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model	Depth to Water (ft)	Depth to Bottom (ft)
9/21/20	1200	KMA	~~GeoTech Solinst 101S~~	uncorrected 7.03	uncorrected 14.51
			corr. factor —	corrected —	corrected —
Measurement Point:		PVC		DTB - after sampling = 14.51	

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
GOOD	Yes	yes	OK	no
Concrete Collar	**Ponded Water**	**Comments:**		
good	no	FLUSH MOUNT IN STREET		

Well Purging Data

Date	Time: Equipment Set-up Start	Equipment Set-up Finish	Purging Start	Purging Finish	Sample Collection Start	Sample Collection Finish	Sampler Initials	Instrument Calibration Date
9/21/20	1200	1210	1210	1300	1300	1305	KMA	9/21/20

Instrument Mfg & Model

pH	YSI ProDSS - Serial # 6614
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	YSI ProDSS - Serial # 6614

Initial Water Depth (ft): 1200 Time: 7.03

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
1200	7.03	← STATIC						→
1210	7.07	0.250	7.28	16.8	~~1078~~ 1078	-16.5	0.93	221.81
1215	7.09	↓	7.04	17.7	~~1077~~ 1077	-24.5	0.92	153.11
1220	7.04		6.91	17.8	1070	-28.9	0.89	116.58
1225	7.05		6.85	17.8	1059	-30.8	0.80	104.87
1230	7.05		6.83	17.8	1047	-32.8	0.75	87.72
1235	7.05		6.81	17.9	1041	-35.7	0.72	73.91
1240	7.05		6.84	17.9	1039	-37.9	0.75	68.93
1245	7.05	↓	6.80	18.1	1039	-37.4	0.71	63.08
Req. Limits for Last 3 Readings			+/- 0.1	3%	3%	+/- 10 mv	10% > 0.5	10% > 5

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
GeoControl Pro	Clear	none	—	~10 ft

Sample Containers

Type & No.	Volume	Preservative		Type & No.	Volume	Preservative
3 VOA	40 mL	HCL		—	—	—
—	—	—		—	—	—
—	—	—		—	—	—

HRP

HRP Associates, Inc.	Monitor Well Data Sheet	Well ID: TMW-2
1 Fairchild Square		
Clifton Park, New York 12065		
518-877-7101	Page 2 of 2	

Site Background Information

Site Location:	Spruce St - Roofold	Sampling Dates:	9/21/20
Job Number:	HRP1300.P2	Field Team Leader:	ST
Weather:	60s Clear	Team Personnel:	KMA

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model	Depth to Water (ft)		Depth to Bottom (ft)	
9/21/20	12^{00}	KMA	~~GEOTECH~~ Solinst-101	uncorrected	7.03	uncorrected	14.51
			corr. factor —	corrected	—	corrected	—

Measurement Point: PVC — DTB - after sampling = 14.51

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
Good	Yes	Yes	OK	No

Concrete Collar	Ponded Water	Comments:
Good	No	Flush Mount In Street

Well Purging Data

Date	Time: Equipment Set-up Start	Equipment Set-up Finish	Purging Start	Purging Finish	Sample Collection Start	Sample Collection Finish	Sampler Initials	Instrument Calibration Date
9/21/20	12^{00}	12^{00}	12^{10}	13^{00}	13^{00}	13^{05}	KMA	9/21/20

Instrument Mfg & Model

pH	YSI-PRO DSS - Serial # 6614
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	YSI PRO DSS - Serial # 6614

Initial Water Depth (ft): — Time:

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
1250	7.05	0.250	6.79	18.0	1037	-38.1	0.76	57.09
1255	7.05	↓	6.79	18.0	1034	-39.3	0.67	55.21
1300	7.05		6.79	18.1	1033	-40.5	0.63	54.81
Req. Limits for Last 3 Readings			+/- 0.1	3%	3%	+/- 10 mv	10% > 0.5	10% > 5

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
GeoControl Pro	Clear	None	—	10.5'

Sample Containers

Type & No.	Volume	Preservative		Type & No.	Volume	Preservative
3 VOA	40mL	HCL	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—

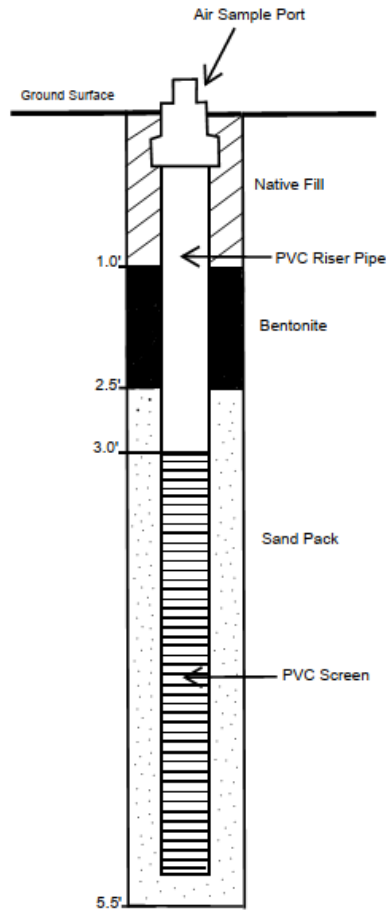
HRP

APPENDIX E
Soil Vapor Probe Construction Diagrams

HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-6	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/9/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: N/A	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Amount**: 20 lbs	**Interval**: 5.0 ft. bg to 2.5 ft. bg
Date: 9/9/20	**SEAL:**	
Total Well Depth: 5.5'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.5 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

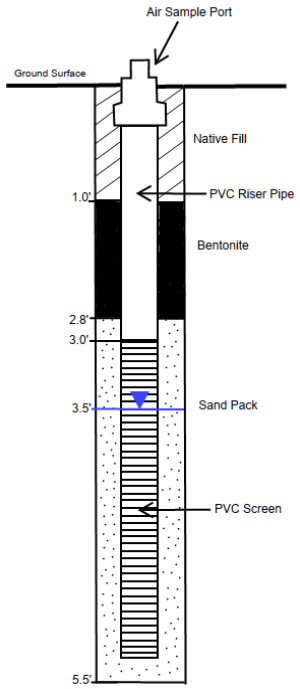
ADDITIONAL NOTES: Bentonite was hydrated. No Groundwater Observed During Drilling.



HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-1	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/10/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: 3.5 '	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: Top of casing	**Amount**: 20 lbs	**Interval**: 5.0 ft. bg to 2.8 ft. bg
Date: 9/10/20	**SEAL:**	
Total Well Depth: 5.5'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.8 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

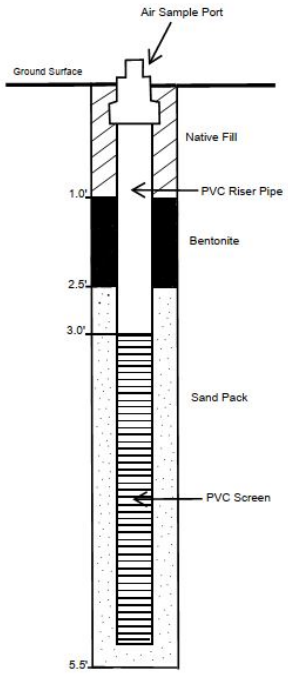
ADDITIONAL NOTES: Bentonite was hydrated.



HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-3	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/10/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: N/A	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Amount**: 20 lbs	**Interval**: 5.0 ft. bg to 2.5 ft. bg
Date: 9/10/20	**SEAL:**	
Total Well Depth: 5.5'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.5 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

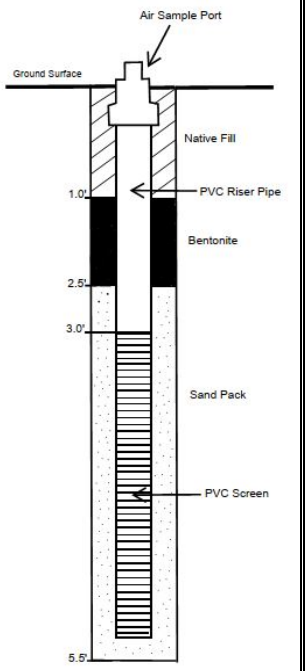
ADDITIONAL NOTES: Bentonite was hydrated. No Groundwater Observed During Drilling.



HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-2	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/11/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: N/A	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Amount**: 20 lbs	**Interval**: 5.0 ft. bg to 2.5 ft. bg
Date: 9/11/20	**SEAL:**	
Total Well Depth: 5.5'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.5 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

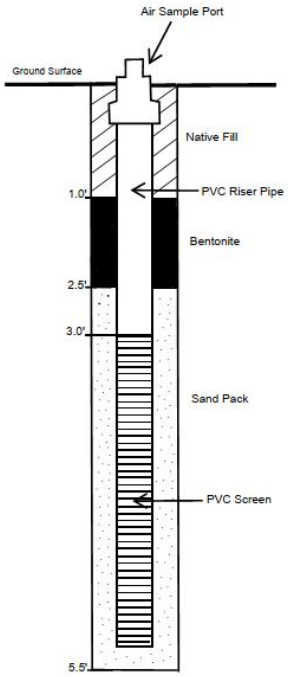
ADDITIONAL NOTES: Bentonite was hydrated. No Groundwater Observed During Drilling.



HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-4	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/11/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: N/A	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Amount**: 20 lbs	**Interval**: 5.0 ft. bg to 2.5 ft.bg
Date: 9/11/20	**SEAL:**	
Total Well Depth: 5.5'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.5 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

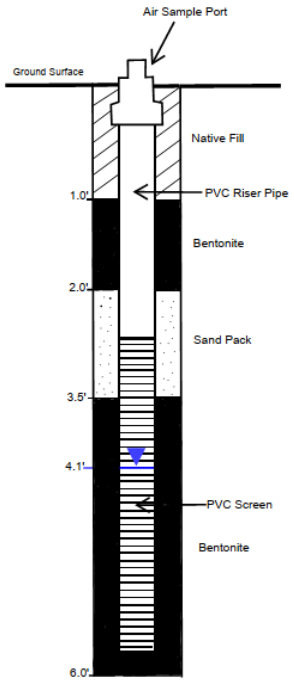
ADDITIONAL NOTES: Bentonite was hydrated. No Groundwater Observed During Drilling.



HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-5	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/11/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: 4.1'	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: Top of casing	**Amount**: 20 lbs	**Interval**: 3.5 ft. bg to 2.0 ft. bg
	SEAL:	
Date: 9/11/20	**Type**: PureGold Medium Chips Bentonite	**Interval**: 6.0 ft. bg to 3.5 ft. bg
Total Well Depth: 6.0'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.0 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

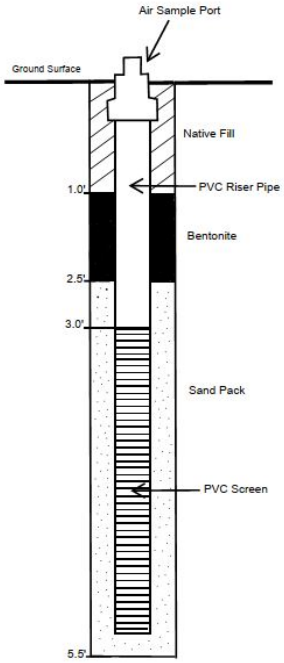
ADDITIONAL NOTES: Bentonite was hydrated.



HRP Associates, Inc.
Soil Vapor Probe Log

WELL NO.: HRPB-7	**RISER PIPE:**	
PROJECT: Former Duofold Facility	**Material**: PVC	**Length**: 3.0'
JOB NUMBER: HER1500.P2	**Joint Type**: N/A	**Diameter**: 1.0"
DATE COMPLETED: 9/11/2020	**SCREEN:**	
DRILLING COMPANY: NW Contracting, Inc.	**Material**: PVC	**Length**: 2.5'
RIG TYPE: CME-55	**Slot Size**: 0.010-inch	**Diameter**: 1.0"
GENERAL NOTES:	**Stratigraphic Unit**: Silt, Sand, and Gravel	
Type of well: Soil Vapor Probe	**PACKING:**	
Static Water Level: N/A	**Sand**: Superior Quartz Filtatration Media- FilPro	**Gravel**: N.A
Measuring Point: N/A	**Amount**: 20 lbs	**Interval**: 5.0 ft. bg to 2.5 ft. bg
Date: 9/11/20	**SEAL:**	
Total Well Depth: 5.5'	**Type**: PureGold Medium Chips Bentonite	**Interval**: 2.5 ft. bg to 1.0 ft. bg
PROTECTIVE COVER:	**FILL and CEMENT:**	
Yes ✓ No	**Type**: Native Fill	**Interval**: 1.0 ft. bg to 0.5 ft. bg
Diameter: 1.0"	**Type**: Instant Concrete	**Interval**: 0.5 ft. bg to grade

ADDITIONAL NOTES: Bentonite was hydrated. No Groundwater Observed During Drilling.



APPENDIX F
Laboratory Analytical Data

Hampton-Clarke
Analytical & Field Services

175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004
2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
FAX: 973-244-9787
WWW.HCVLAB.COM

Project: Duofold- 7 Spruce St.

Client PO: HER1500_P2

Report To: HRP Associates. Inc.
1 Fairchild Square
Suite 110
Clifton Park, NY 12065
Attn: Patrick Rodman

Received Date: 8/27/2020

Report Date: 9/16/2020

Deliverables: NYDOH-CatB

Lab ID: AD18934

Lab Project No: 0082707

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In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

Sean Berls - Quality Assurance Officer OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
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SDG Narrative

HC Case Narrative

Client: HRP Associates, Inc.
Project: Duofold - 7 Spruce St.

HC Project: 0082707

Hampton-Clarke (HC) received the following samples on 8/26/2020:

Client ID	HC Sample ID	Matrix	Analysis
HRPB-10	AD18934-001	Soil/Terracore	%Solids(SM2540G), Cyanide(Soil/Waste)(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D), Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals(6010B/6020B), TCLP Ext(1311), Volatile Organics(8260C)
HRPB-8	AD18934-002	Soil/Terracore	%Solids(SM2540G), Cyanide(Soil/Waste)(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D), Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals(6010B/6020B), TCLP Ext(1311), Volatile Organics(8260C)
HRPB-7	AD18934-003	Soil/Terracore	%Solids(SM2540G), Cyanide(Soil/Waste)(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D), Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals(6010B/6020B), TCLP Ext(1311), Volatile Organics(8260C)
HRPB-9	AD18934-004	Soil/Terracore	%Solids(SM2540G), Cyanide(Soil/Waste)(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D), Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals(6010B/6020B), TCLP Ext(1311), Volatile Organics(8260C)
HRPB-4	AD18934-005	Soil	%Solids(SM2540G), Cyanide(Soil/Waste)(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D), Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals(6010B/6020B), TCLP Ext(1311)
EB	AD18934-006	Aqueous	Cyanide(Water)(9012B), Cr3(CALC), Cr(Hexavalent)(SM3500-CrB11), Mercury(7470A), TAL Metals(6010D/6020B), Volatile Organics(8260C)
Trip Blank	AD18934-007	Aqueous	Volatile Organics (8260C)
FB	AD18934-008	Aqueous	Cyanide(Water)(9012B),Cr(Hexavalent)(SM3500-CrB11), Mercury(7470A), TAL Metals(6010D/6020B), Volatile Organics(8260C)

* - Indicates analysis was performed by a subcontracted laboratory.

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Volatile Organic Analysis:

Methylene chloride was recovered in samples AD18934-001, -003, -004, -006 due to possible laboratory contamination.

Chloroform was recovered in sample AD18934-006 due to possible laboratory contamination.

The Method Blank Spike for batches 87436, 87762 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD, Matrix Spike and/or Matrix Spike Duplicate for batch 87762 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Metals Analysis:

The Matrix Spike and/or Matrix Spike Duplicate for batch 85228 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The RPD between the QC sample and the Method Replicate had recoveries outside QC limits in batch 85228. Please refer to the applicable Form 6/9 for the recoveries.

The MS/MSD RPD had recoveries outside QC limits in batch 85228. Please refer to the applicable Form 6/9 for the recoveries.

The serial dilution for batch 85228 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

Wet Chemistry Analysis:

The MS Insoluble for Hexavalent Chromium, batch 779, recovered outside the QC limits. The batch was reset and recoveries confirmed. The results from first analysis are reported.

TCLP Metals Analysis:

Samples AD18934-002, -003, -004, -005 were reported at a dilution for Se due to Ca over linear range.

The serial dilution for batch 85218 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Sean Berls Quality Assurance Officer	Or	Jean Revolus Laboratory Director	9/17/20 Date

Reporting Limit Definitions

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

LCS = Laboratory Control Spike

MBS = Method Blank Spike

MS = Matrix Spike

MSD = Matrix Spike Duplicate

MDL = Method Detection Limit

NA = Not Applicable

ND = Not Detected

PS = Post Digestion Spike

RL* = Reporting Limit

RT = Retention Time

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Data Package Summary Forms

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0082707

Sample ID: HRPB-10
Lab#: AD18934-001
Matrix: Soil/Terracore

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		76

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.1	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.6	21

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.32	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		160

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		6.8
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	13	110
Chromium	1	mg/kg	6.6	21
Copper	1	mg/kg	6.6	25
Lead	1	mg/kg	6.6	21
Manganese	1	mg/kg	13	840
Nickel	1	mg/kg	6.6	33
Zinc	1	mg/kg	13	150

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.26	13
Beryllium	1	mg/kg	0.26	0.88
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result

Sample ID: HRPB-10
Lab#: AD18934-001
Matrix: Soil/Terracore

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Arsenic	1	mg/l	0.10	ND
Barium	**1**	**mg/l**	**0.25**	**0.79**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.847	mg/kg	0.0022	ND
1,1,2,2-Tetrachloroethane	0.847	mg/kg	0.0022	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.847	mg/kg	0.0022	ND
1,1,2-Trichloroethane	0.847	mg/kg	0.0022	ND
1,1-Dichloroethane	0.847	mg/kg	0.0022	ND
1,1-Dichloroethene	0.847	mg/kg	0.0022	ND
1,2,3-Trichloropropane	0.847	mg/kg	0.0022	ND
1,2,4-Trimethylbenzene	0.847	mg/kg	0.0011	ND
1,2-Dichlorobenzene	0.847	mg/kg	0.0022	ND
1,2-Dichloroethane	0.847	mg/kg	0.0022	ND
1,2-Dichloropropane	0.847	mg/kg	0.0022	ND
1,3,5-Trimethylbenzene	0.847	mg/kg	0.0011	ND
1,3-Dichlorobenzene	0.847	mg/kg	0.0022	ND
1,3-Dichloropropane	0.847	mg/kg	0.0022	ND
1,4-Dichlorobenzene	0.847	mg/kg	0.0022	ND
1,4-Dioxane	0.847	mg/kg	0.11	ND
2-Butanone	**0.847**	**mg/kg**	**0.0022**	**0.050**
2-Chloroethylvinylether	0.847	mg/kg	0.0022	ND
2-Hexanone	0.847	mg/kg	0.0022	ND
4-Isopropyltoluene	0.847	mg/kg	0.0011	ND
4-Methyl-2-pentanone	0.847	mg/kg	0.0022	ND
Acetone	**0.847**	**mg/kg**	**0.011**	**0.19**
Acrolein	0.847	mg/kg	0.011	ND
Acrylonitrile	0.847	mg/kg	0.0022	ND
Benzene	0.847	mg/kg	0.0011	ND
Bromodichloromethane	0.847	mg/kg	0.0022	ND
Bromoform	0.847	mg/kg	0.0022	ND
Bromomethane	0.847	mg/kg	0.0022	ND
Carbon disulfide	0.847	mg/kg	0.0022	ND
Carbon tetrachloride	0.847	mg/kg	0.0022	ND
Chlorobenzene	0.847	mg/kg	0.0022	ND
Chloroethane	0.847	mg/kg	0.0022	ND
Chloroform	0.847	mg/kg	0.0022	ND
Chloromethane	0.847	mg/kg	0.0022	ND
cis-1,2-Dichloroethene	0.847	mg/kg	0.0022	ND
cis-1,3-Dichloropropene	0.847	mg/kg	0.0022	ND
Dibromochloromethane	0.847	mg/kg	0.0022	ND
Dichlorodifluoromethane	0.847	mg/kg	0.0022	ND
Ethylbenzene	0.847	mg/kg	0.0011	ND
Isopropylbenzene	0.847	mg/kg	0.0011	ND
m&p-Xylenes	0.847	mg/kg	0.0011	ND
Methylene chloride	**0.847**	**mg/kg**	**0.0022**	**0.0051**
Methyl-t-butyl ether	0.847	mg/kg	0.0011	ND
n-Butylbenzene	0.847	mg/kg	0.0011	ND
n-Propylbenzene	0.847	mg/kg	0.0011	ND
o-Xylene	0.847	mg/kg	0.0011	ND

Sample ID: HRPB-10
Lab#: AD18934-001
Matrix: Soil/Terracore

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

sec-Butylbenzene	0.847	mg/kg	0.0011	ND
Styrene	0.847	mg/kg	0.0022	ND
t-Butyl Alcohol	0.847	mg/kg	0.011	ND
t-Butylbenzene	0.847	mg/kg	0.0011	ND
Tetrachloroethene	0.847	mg/kg	0.0022	ND
Toluene	0.847	mg/kg	0.0011	ND
trans-1,2-Dichloroethene	0.847	mg/kg	0.0022	ND
trans-1,3-Dichloropropene	0.847	mg/kg	0.0022	ND
Trichloroethene	0.847	mg/kg	0.0022	ND
Trichlorofluoromethane	0.847	mg/kg	0.0022	ND
Vinyl chloride	0.847	mg/kg	0.0022	ND
Xylenes (Total)	0.847	mg/kg	0.0011	ND

Sample ID: HRPB-8
Lab#: AD18934-002
Matrix: Soil/Terracore

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		75

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.1	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.7	14

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.32	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		190

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.2
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	13	45
Chromium	1	mg/kg	6.7	14
Copper	1	mg/kg	6.7	24
Lead	1	mg/kg	6.7	16
Manganese	1	mg/kg	13	320
Nickel	1	mg/kg	6.7	25
Zinc	1	mg/kg	13	82

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.27	11
Beryllium	1	mg/kg	0.27	0.44
Selenium	1	mg/kg	2.7	ND
Silver	1	mg/kg	0.27	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.57
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	5	mg/l	0.50	ND

Sample ID: HRPB-8 **Collection Date:** 8/26/2020
Lab#: AD18934-002 **Receipt Date:** 8/27/2020
Matrix: Soil/Terracore

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.772	mg/kg	0.0021	ND
1,1,2,2-Tetrachloroethane	0.772	mg/kg	0.0021	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.772	mg/kg	0.0021	ND
1,1,2-Trichloroethane	0.772	mg/kg	0.0021	ND
1,1-Dichloroethane	0.772	mg/kg	0.0021	ND
1,1-Dichloroethene	0.772	mg/kg	0.0021	ND
1,2,3-Trichloropropane	0.772	mg/kg	0.0021	ND
1,2,4-Trimethylbenzene	0.772	mg/kg	0.0010	ND
1,2-Dichlorobenzene	0.772	mg/kg	0.0021	ND
1,2-Dichloroethane	0.772	mg/kg	0.0021	ND
1,2-Dichloropropane	0.772	mg/kg	0.0021	ND
1,3,5-Trimethylbenzene	0.772	mg/kg	0.0010	ND
1,3-Dichlorobenzene	0.772	mg/kg	0.0021	ND
1,3-Dichloropropane	0.772	mg/kg	0.0021	ND
1,4-Dichlorobenzene	0.772	mg/kg	0.0021	ND
1,4-Dioxane	0.772	mg/kg	0.10	ND
2-Butanone	0.772	mg/kg	0.0021	ND
2-Chloroethylvinylether	0.772	mg/kg	0.0021	ND
2-Hexanone	0.772	mg/kg	0.0021	ND
4-Isopropyltoluene	0.772	mg/kg	0.0010	ND
4-Methyl-2-pentanone	0.772	mg/kg	0.0021	ND
Acetone	0.772	mg/kg	0.010	ND
Acrolein	0.772	mg/kg	0.010	ND
Acrylonitrile	0.772	mg/kg	0.0021	ND
Benzene	0.772	mg/kg	0.0010	ND
Bromodichloromethane	0.772	mg/kg	0.0021	ND
Bromoform	0.772	mg/kg	0.0021	ND
Bromomethane	0.772	mg/kg	0.0021	ND
Carbon disulfide	0.772	mg/kg	0.0021	ND
Carbon tetrachloride	0.772	mg/kg	0.0021	ND
Chlorobenzene	0.772	mg/kg	0.0021	ND
Chloroethane	0.772	mg/kg	0.0021	ND
Chloroform	0.772	mg/kg	0.0021	ND
Chloromethane	0.772	mg/kg	0.0021	ND
cis-1,2-Dichloroethene	**0.772**	**mg/kg**	**0.0021**	**0.0075**
cis-1,3-Dichloropropene	0.772	mg/kg	0.0021	ND
Dibromochloromethane	0.772	mg/kg	0.0021	ND
Dichlorodifluoromethane	0.772	mg/kg	0.0021	ND
Ethylbenzene	0.772	mg/kg	0.0010	ND
Isopropylbenzene	0.772	mg/kg	0.0010	ND
m&p-Xylenes	0.772	mg/kg	0.0010	ND
Methylene chloride	0.772	mg/kg	0.0021	ND
Methyl-t-butyl ether	0.772	mg/kg	0.0010	ND
n-Butylbenzene	0.772	mg/kg	0.0010	ND
n-Propylbenzene	0.772	mg/kg	0.0010	ND
o-Xylene	0.772	mg/kg	0.0010	ND
sec-Butylbenzene	0.772	mg/kg	0.0010	ND
Styrene	0.772	mg/kg	0.0021	ND
t-Butyl Alcohol	0.772	mg/kg	0.010	ND
t-Butylbenzene	0.772	mg/kg	0.0010	ND
Tetrachloroethene	0.772	mg/kg	0.0021	ND
Toluene	0.772	mg/kg	0.0010	ND
trans-1,2-Dichloroethene	0.772	mg/kg	0.0021	ND

Sample ID: HRPB-8 **Collection Date:** 8/26/2020
Lab#: AD18934-002 **Receipt Date:** 8/27/2020
Matrix: Soil/Terracore

trans-1,3-Dichloropropene	0.772	mg/kg	0.0021	ND
Trichloroethene	0.772	mg/kg	0.0021	ND
Trichlorofluoromethane	0.772	mg/kg	0.0021	ND
Vinyl chloride	0.772	mg/kg	0.0021	ND
Xylenes (Total)	0.772	mg/kg	0.0010	ND

Sample ID: HRPB-7
Lab#: AD18934-003
Matrix: Soil/Terracore

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		79

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.0	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.3	14

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		200

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.2
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	13	56
Chromium	1	mg/kg	6.3	14
Copper	1	mg/kg	6.3	23
Lead	1	mg/kg	6.3	110
Manganese	1	mg/kg	13	440
Nickel	1	mg/kg	6.3	22
Zinc	1	mg/kg	13	80

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.25	11
Beryllium	1	mg/kg	0.25	0.33
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.57
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	0.064
Nickel	1	mg/l	0.10	ND
Selenium	5	mg/l	0.50	ND

Sample ID: HRPB-7 **Collection Date:** 8/26/2020
Lab#: AD18934-003 **Receipt Date:** 8/27/2020
Matrix: Soil/Terracore

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.661	mg/kg	0.0017	ND
1,1,2,2-Tetrachloroethane	0.661	mg/kg	0.0017	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.661	mg/kg	0.0017	ND
1,1,2-Trichloroethane	0.661	mg/kg	0.0017	ND
1,1-Dichloroethane	0.661	mg/kg	0.0017	ND
1,1-Dichloroethene	0.661	mg/kg	0.0017	ND
1,2,3-Trichloropropane	0.661	mg/kg	0.0017	ND
1,2,4-Trimethylbenzene	0.661	mg/kg	0.00084	ND
1,2-Dichlorobenzene	0.661	mg/kg	0.0017	ND
1,2-Dichloroethane	0.661	mg/kg	0.0017	ND
1,2-Dichloropropane	0.661	mg/kg	0.0017	ND
1,3,5-Trimethylbenzene	0.661	mg/kg	0.00084	ND
1,3-Dichlorobenzene	0.661	mg/kg	0.0017	ND
1,3-Dichloropropane	0.661	mg/kg	0.0017	ND
1,4-Dichlorobenzene	0.661	mg/kg	0.0017	ND
1,4-Dioxane	0.661	mg/kg	0.084	ND
2-Butanone	0.661	mg/kg	0.0017	ND
2-Chloroethylvinylether	0.661	mg/kg	0.0017	ND
2-Hexanone	0.661	mg/kg	0.0017	ND
4-Isopropyltoluene	0.661	mg/kg	0.00084	ND
4-Methyl-2-pentanone	0.661	mg/kg	0.0017	ND
Acetone	0.661	mg/kg	0.0084	ND
Acrolein	0.661	mg/kg	0.0084	ND
Acrylonitrile	0.661	mg/kg	0.0017	ND
Benzene	0.661	mg/kg	0.00084	ND
Bromodichloromethane	0.661	mg/kg	0.0017	ND
Bromoform	0.661	mg/kg	0.0017	ND
Bromomethane	0.661	mg/kg	0.0017	ND
Carbon disulfide	0.661	mg/kg	0.0017	ND
Carbon tetrachloride	0.661	mg/kg	0.0017	ND
Chlorobenzene	0.661	mg/kg	0.0017	ND
Chloroethane	0.661	mg/kg	0.0017	ND
Chloroform	0.661	mg/kg	0.0017	ND
Chloromethane	0.661	mg/kg	0.0017	ND
cis-1,2-Dichloroethene	0.661	mg/kg	0.0017	ND
cis-1,3-Dichloropropene	0.661	mg/kg	0.0017	ND
Dibromochloromethane	0.661	mg/kg	0.0017	ND
Dichlorodifluoromethane	0.661	mg/kg	0.0017	ND
Ethylbenzene	0.661	mg/kg	0.00084	ND
Isopropylbenzene	0.661	mg/kg	0.00084	ND
m&p-Xylenes	0.661	mg/kg	0.00084	ND
Methylene chloride	**0.661**	**mg/kg**	**0.0017**	**0.0019**
Methyl-t-butyl ether	0.661	mg/kg	0.00084	ND
n-Butylbenzene	0.661	mg/kg	0.00084	ND
n-Propylbenzene	0.661	mg/kg	0.00084	ND
o-Xylene	0.661	mg/kg	0.00084	ND
sec-Butylbenzene	0.661	mg/kg	0.00084	ND
Styrene	0.661	mg/kg	0.0017	ND
t-Butyl Alcohol	0.661	mg/kg	0.0084	ND
t-Butylbenzene	0.661	mg/kg	0.00084	ND
Tetrachloroethene	**0.661**	**mg/kg**	**0.0017**	**0.0036**
Toluene	0.661	mg/kg	0.00084	ND
trans-1,2-Dichloroethene	0.661	mg/kg	0.0017	ND

Sample ID: HRPB-7 **Collection Date:** 8/26/2020
Lab#: AD18934-003 **Receipt Date:** 8/27/2020
Matrix: Soil/Terracore

trans-1,3-Dichloropropene	0.661	mg/kg	0.0017	ND
Trichloroethene	0.661	mg/kg	0.0017	ND
Trichlorofluoromethane	0.661	mg/kg	0.0017	ND
Vinyl chloride	0.661	mg/kg	0.0017	ND
Xylenes (Total)	0.661	mg/kg	0.00084	ND

Sample ID: HRPB-9
Lab#: AD18934-004
Matrix: Soil/Terracore

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		80

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.0	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.2	17

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		220

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.5
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	12	53
Chromium	1	mg/kg	6.2	17
Copper	1	mg/kg	6.2	30
Lead	1	mg/kg	6.2	8.8
Manganese	1	mg/kg	12	750
Nickel	1	mg/kg	6.2	23
Zinc	1	mg/kg	12	100

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.25	12
Beryllium	1	mg/kg	0.25	0.30
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.34
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	5	mg/l	0.50	ND

Sample ID: HRPB-9 **Collection Date:** 8/26/2020
Lab#: AD18934-004 **Receipt Date:** 8/27/2020
Matrix: Soil/Terracore

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.731	mg/kg	0.0018	ND
1,1,2,2-Tetrachloroethane	0.731	mg/kg	0.0018	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.731	mg/kg	0.0018	ND
1,1,2-Trichloroethane	0.731	mg/kg	0.0018	ND
1,1-Dichloroethane	0.731	mg/kg	0.0018	ND
1,1-Dichloroethene	0.731	mg/kg	0.0018	ND
1,2,3-Trichloropropane	0.731	mg/kg	0.0018	ND
1,2,4-Trimethylbenzene	0.731	mg/kg	0.00091	ND
1,2-Dichlorobenzene	0.731	mg/kg	0.0018	ND
1,2-Dichloroethane	0.731	mg/kg	0.0018	ND
1,2-Dichloropropane	0.731	mg/kg	0.0018	ND
1,3,5-Trimethylbenzene	0.731	mg/kg	0.00091	ND
1,3-Dichlorobenzene	0.731	mg/kg	0.0018	ND
1,3-Dichloropropane	0.731	mg/kg	0.0018	ND
1,4-Dichlorobenzene	0.731	mg/kg	0.0018	ND
1,4-Dioxane	0.731	mg/kg	0.091	ND
2-Butanone	0.731	mg/kg	0.0018	ND
2-Chloroethylvinylether	0.731	mg/kg	0.0018	ND
2-Hexanone	0.731	mg/kg	0.0018	ND
4-Isopropyltoluene	0.731	mg/kg	0.00091	ND
4-Methyl-2-pentanone	0.731	mg/kg	0.0018	ND
Acetone	0.731	mg/kg	0.0091	ND
Acrolein	0.731	mg/kg	0.0091	ND
Acrylonitrile	0.731	mg/kg	0.0018	ND
Benzene	0.731	mg/kg	0.00091	ND
Bromodichloromethane	0.731	mg/kg	0.0018	ND
Bromoform	0.731	mg/kg	0.0018	ND
Bromomethane	0.731	mg/kg	0.0018	ND
Carbon disulfide	0.731	mg/kg	0.0018	ND
Carbon tetrachloride	0.731	mg/kg	0.0018	ND
Chlorobenzene	0.731	mg/kg	0.0018	ND
Chloroethane	0.731	mg/kg	0.0018	ND
Chloroform	**0.731**	**mg/kg**	**0.0018**	**0.0026**
Chloromethane	0.731	mg/kg	0.0018	ND
cis-1,2-Dichloroethene	0.731	mg/kg	0.0018	ND
cis-1,3-Dichloropropene	0.731	mg/kg	0.0018	ND
Dibromochloromethane	0.731	mg/kg	0.0018	ND
Dichlorodifluoromethane	0.731	mg/kg	0.0018	ND
Ethylbenzene	0.731	mg/kg	0.00091	ND
Isopropylbenzene	0.731	mg/kg	0.00091	ND
m&p-Xylenes	0.731	mg/kg	0.00091	ND
Methylene chloride	**0.731**	**mg/kg**	**0.0018**	**0.0025**
Methyl-t-butyl ether	0.731	mg/kg	0.00091	ND
n-Butylbenzene	0.731	mg/kg	0.00091	ND
n-Propylbenzene	0.731	mg/kg	0.00091	ND
o-Xylene	0.731	mg/kg	0.00091	ND
sec-Butylbenzene	0.731	mg/kg	0.00091	ND
Styrene	0.731	mg/kg	0.0018	ND
t-Butyl Alcohol	0.731	mg/kg	0.0091	ND
t-Butylbenzene	0.731	mg/kg	0.00091	ND
Tetrachloroethene	0.731	mg/kg	0.0018	ND
Toluene	0.731	mg/kg	0.00091	ND
trans-1,2-Dichloroethene	0.731	mg/kg	0.0018	ND

Sample ID: HRPB-9 **Collection Date:** 8/26/2020
Lab#: AD18934-004 **Receipt Date:** 8/27/2020
Matrix: Soil/Terracore

trans-1,3-Dichloropropene	0.731	mg/kg	0.0018	ND
Trichloroethene	0.731	mg/kg	0.0018	ND
Trichlorofluoromethane	0.731	mg/kg	0.0018	ND
Vinyl chloride	0.731	mg/kg	0.0018	ND
Xylenes (Total)	0.731	mg/kg	0.00091	ND

Sample ID: HRPB-4
Lab#: AD18934-005
Matrix: Soil

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		77

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.0	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.5	15

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.31	0.36

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		-3.9

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		7.8
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	13	79
Chromium	1	mg/kg	6.5	15
Copper	1	mg/kg	6.5	43
Lead	1	mg/kg	6.5	83
Manganese	1	mg/kg	13	400
Nickel	1	mg/kg	6.5	34
Zinc	1	mg/kg	13	100

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.26	7.3
Beryllium	1	mg/kg	0.26	0.38
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.98
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	5	mg/l	0.50	ND

Sample ID: HRPB-4 **Collection Date:** 8/26/2020
Lab#: AD18934-005 **Receipt Date:** 8/27/2020
Matrix: Soil

Silver		1	mg/l	0.050	ND

Sample ID: EB
Lab#: AD18934-006
Matrix: Aqueous
Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Cr (Hexavalent) 3500-Cr B11

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.02	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	ug/l	50	ND

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	ug/l	50	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Silver	1	ug/l	20	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND

Sample ID: EB
Lab#: AD18934-006
Matrix: Aqueous

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	**1**	**ug/l**	**1.0**	**1.5**
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	**1**	**ug/l**	**1.0**	**5.9**
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: Trip Blank
Lab#: AD18934-007
Matrix: Aqueous

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: Trip Blank
Lab#: AD18934-007
Matrix: Aqueous
Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: FB
Lab#: AD18934-008
Matrix: Aqueous
Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Cr (Hexavalent) 3500-Cr B11

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.02	ND

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	ug/l	50	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Silver	1	ug/l	20	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND

Sample ID: FB
Lab#: AD18934-008
Matrix: Aqueous
Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-001
Client Id: HRPB-10
Data File: 6M131900.D
Analysis Date: 08/31/20 13:13
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5.9g
Final Vol: NA
Dilution: 0.847
Solids: 76

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0022	U	56-23-5	Carbon Tetrachloride	0.0022	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0022	U	108-90-7	Chlorobenzene	0.0022	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0022	U	75-00-3	Chloroethane	0.0022	U
79-00-5	1,1,2-Trichloroethane	0.0022	U	67-66-3	Chloroform	0.0022	U
75-34-3	1,1-Dichloroethane	0.0022	U	74-87-3	Chloromethane	0.0022	U
75-35-4	1,1-Dichloroethene	0.0022	U	156-59-2	cis-1,2-Dichloroethene	0.0022	U
96-18-4	1,2,3-Trichloropropane	0.0022	U	10061-01-5	cis-1,3-Dichloropropene	0.0022	U
95-63-6	1,2,4-Trimethylbenzene	0.0011	U	124-48-1	Dibromochloromethane	0.0022	U
95-50-1	1,2-Dichlorobenzene	0.0022	U	75-71-8	Dichlorodifluoromethane	0.0022	U
107-06-2	1,2-Dichloroethane	0.0022	U	100-41-4	Ethylbenzene	0.0011	U
78-87-5	1,2-Dichloropropane	0.0022	U	98-82-8	Isopropylbenzene	0.0011	U
108-67-8	1,3,5-Trimethylbenzene	0.0011	U	79601-23-1	m&p-Xylenes	0.0011	U
541-73-1	1,3-Dichlorobenzene	0.0022	U	**75-09-2**	**Methylene Chloride**	**0.0022**	**0.0051**
142-28-9	1,3-Dichloropropane	0.0022	U	1634-04-4	Methyl-t-butyl ether	0.0011	U
106-46-7	1,4-Dichlorobenzene	0.0022	U	104-51-8	n-Butylbenzene	0.0011	U
123-91-1	1,4-Dioxane	0.11	U	103-65-1	n-Propylbenzene	0.0011	U
78-93-3	**2-Butanone**	**0.0022**	**0.050**	95-47-6	o-Xylene	0.0011	U
110-75-8	2-Chloroethylvinylether	0.0022	U	135-98-8	sec-Butylbenzene	0.0011	U
591-78-6	2-Hexanone	0.0022	U	100-42-5	Styrene	0.0022	U
99-87-6	4-Isopropyltoluene	0.0011	U	75-65-0	t-Butyl Alcohol	0.011	U
108-10-1	4-Methyl-2-Pentanone	0.0022	U	98-06-6	t-Butylbenzene	0.0011	U
67-64-1	**Acetone**	**0.011**	**0.19**	127-18-4	Tetrachloroethene	0.0022	U
107-02-8	Acrolein	0.011	U	108-88-3	Toluene	0.0011	U
107-13-1	Acrylonitrile	0.0022	U	156-60-5	trans-1,2-Dichloroethene	0.0022	U
71-43-2	Benzene	0.0011	U	10061-02-6	trans-1,3-Dichloropropene	0.0022	U
75-27-4	Bromodichloromethane	0.0022	U	79-01-6	Trichloroethene	0.0022	U
75-25-2	Bromoform	0.0022	U	75-69-4	Trichlorofluoromethane	0.0022	U
74-83-9	Bromomethane	0.0022	U	75-01-4	Vinyl Chloride	0.0022	U
75-15-0	Carbon Disulfide	0.0022	U	1330-20-7	Xylenes (Total)	0.0011	U

Worksheet #: 565778

Total Target Concentration 0.25

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-002
Client Id: HRPB-8
Data File: 6M131901.D
Analysis Date: 08/31/20 13:34
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 6.48g
Final Vol: NA
Dilution: 0.772
Solids: 75

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0021	U	56-23-5	Carbon Tetrachloride	0.0021	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0021	U	108-90-7	Chlorobenzene	0.0021	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0021	U	75-00-3	Chloroethane	0.0021	U
79-00-5	1,1,2-Trichloroethane	0.0021	U	67-66-3	Chloroform	0.0021	U
75-34-3	1,1-Dichloroethane	0.0021	U	74-87-3	Chloromethane	0.0021	U
75-35-4	1,1-Dichloroethene	0.0021	U	**156-59-2**	**cis-1,2-Dichloroethene**	**0.0021**	**0.0075**
96-18-4	1,2,3-Trichloropropane	0.0021	U	10061-01-5	cis-1,3-Dichloropropene	0.0021	U
95-63-6	1,2,4-Trimethylbenzene	0.0010	U	124-48-1	Dibromochloromethane	0.0021	U
95-50-1	1,2-Dichlorobenzene	0.0021	U	75-71-8	Dichlorodifluoromethane	0.0021	U
107-06-2	1,2-Dichloroethane	0.0021	U	100-41-4	Ethylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0021	U	98-82-8	Isopropylbenzene	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	0.0010	U	79601-23-1	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0021	U	75-09-2	Methylene Chloride	0.0021	U
142-28-9	1,3-Dichloropropane	0.0021	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0021	U	104-51-8	n-Butylbenzene	0.0010	U
123-91-1	1,4-Dioxane	0.10	U	103-65-1	n-Propylbenzene	0.0010	U
78-93-3	2-Butanone	0.0021	U	95-47-6	o-Xylene	0.0010	U
110-75-8	2-Chloroethylvinylether	0.0021	U	135-98-8	sec-Butylbenzene	0.0010	U
591-78-6	2-Hexanone	0.0021	U	100-42-5	Styrene	0.0021	U
99-87-6	4-Isopropyltoluene	0.0010	U	75-65-0	t-Butyl Alcohol	0.010	U
108-10-1	4-Methyl-2-Pentanone	0.0021	U	98-06-6	t-Butylbenzene	0.0010	U
67-64-1	Acetone	0.010	U	127-18-4	Tetrachloroethene	0.0021	U
107-02-8	Acrolein	0.010	U	108-88-3	Toluene	0.0010	U
107-13-1	Acrylonitrile	0.0021	U	156-60-5	trans-1,2-Dichloroethene	0.0021	U
71-43-2	Benzene	0.0010	U	10061-02-6	trans-1,3-Dichloropropene	0.0021	U
75-27-4	Bromodichloromethane	0.0021	U	79-01-6	Trichloroethene	0.0021	U
75-25-2	Bromoform	0.0021	U	75-69-4	Trichlorofluoromethane	0.0021	U
74-83-9	Bromomethane	0.0021	U	75-01-4	Vinyl Chloride	0.0021	U
75-15-0	Carbon Disulfide	0.0021	U	1330-20-7	Xylenes (Total)	0.0010	U

Worksheet #: 565778

Total Target Concentration 0.0075

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-003
Client Id: HRPB-7
Data File: 6M131902.D
Analysis Date: 08/31/20 13:55
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 7.56g
Final Vol: NA
Dilution: 0.661
Solids: 79

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0017	U	56-23-5	Carbon Tetrachloride	0.0017	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0017	U	108-90-7	Chlorobenzene	0.0017	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0017	U	75-00-3	Chloroethane	0.0017	U
79-00-5	1,1,2-Trichloroethane	0.0017	U	67-66-3	Chloroform	0.0017	U
75-34-3	1,1-Dichloroethane	0.0017	U	74-87-3	Chloromethane	0.0017	U
75-35-4	1,1-Dichloroethene	0.0017	U	156-59-2	cis-1,2-Dichloroethene	0.0017	U
96-18-4	1,2,3-Trichloropropane	0.0017	U	10061-01-5	cis-1,3-Dichloropropene	0.0017	U
95-63-6	1,2,4-Trimethylbenzene	0.00084	U	124-48-1	Dibromochloromethane	0.0017	U
95-50-1	1,2-Dichlorobenzene	0.0017	U	75-71-8	Dichlorodifluoromethane	0.0017	U
107-06-2	1,2-Dichloroethane	0.0017	U	100-41-4	Ethylbenzene	0.00084	U
78-87-5	1,2-Dichloropropane	0.0017	U	98-82-8	Isopropylbenzene	0.00084	U
108-67-8	1,3,5-Trimethylbenzene	0.00084	U	79601-23-1	m&p-Xylenes	0.00084	U
541-73-1	1,3-Dichlorobenzene	0.0017	U	**75-09-2**	**Methylene Chloride**	**0.0017**	**0.0019**
142-28-9	1,3-Dichloropropane	0.0017	U	1634-04-4	Methyl-t-butyl ether	0.00084	U
106-46-7	1,4-Dichlorobenzene	0.0017	U	104-51-8	n-Butylbenzene	0.00084	U
123-91-1	1,4-Dioxane	0.084	U	103-65-1	n-Propylbenzene	0.00084	U
78-93-3	2-Butanone	0.0017	U	95-47-6	o-Xylene	0.00084	U
110-75-8	2-Chloroethylvinylether	0.0017	U	135-98-8	sec-Butylbenzene	0.00084	U
591-78-6	2-Hexanone	0.0017	U	100-42-5	Styrene	0.0017	U
99-87-6	4-Isopropyltoluene	0.00084	U	75-65-0	t-Butyl Alcohol	0.0084	U
108-10-1	4-Methyl-2-Pentanone	0.0017	U	98-06-6	t-Butylbenzene	0.00084	U
67-64-1	Acetone	0.0084	U	**127-18-4**	**Tetrachloroethene**	**0.0017**	**0.0036**
107-02-8	Acrolein	0.0084	U	108-88-3	Toluene	0.00084	U
107-13-1	Acrylonitrile	0.0017	U	156-60-5	trans-1,2-Dichloroethene	0.0017	U
71-43-2	Benzene	0.00084	U	10061-02-6	trans-1,3-Dichloropropene	0.0017	U
75-27-4	Bromodichloromethane	0.0017	U	79-01-6	Trichloroethene	0.0017	U
75-25-2	Bromoform	0.0017	U	75-69-4	Trichlorofluoromethane	0.0017	U
74-83-9	Bromomethane	0.0017	U	75-01-4	Vinyl Chloride	0.0017	U
75-15-0	Carbon Disulfide	0.0017	U	1330-20-7	Xylenes (Total)	0.00084	U

Worksheet #: 565778

Total Target Concentration 0.0055

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-004
Client Id: HRPB-9
Data File: 6M131903.D
Analysis Date: 08/31/20 14:15
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 6.84g
Final Vol: NA
Dilution: 0.731
Solids: 80

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0018	U	56-23-5	Carbon Tetrachloride	0.0018	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0018	U	108-90-7	Chlorobenzene	0.0018	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0018	U	75-00-3	Chloroethane	0.0018	U
79-00-5	1,1,2-Trichloroethane	0.0018	U	**67-66-3**	**Chloroform**	**0.0018**	**0.0026**
75-34-3	1,1-Dichloroethane	0.0018	U	74-87-3	Chloromethane	0.0018	U
75-35-4	1,1-Dichloroethene	0.0018	U	156-59-2	cis-1,2-Dichloroethene	0.0018	U
96-18-4	1,2,3-Trichloropropane	0.0018	U	10061-01-5	cis-1,3-Dichloropropene	0.0018	U
95-63-6	1,2,4-Trimethylbenzene	0.00091	U	124-48-1	Dibromochloromethane	0.0018	U
95-50-1	1,2-Dichlorobenzene	0.0018	U	75-71-8	Dichlorodifluoromethane	0.0018	U
107-06-2	1,2-Dichloroethane	0.0018	U	100-41-4	Ethylbenzene	0.00091	U
78-87-5	1,2-Dichloropropane	0.0018	U	98-82-8	Isopropylbenzene	0.00091	U
108-67-8	1,3,5-Trimethylbenzene	0.00091	U	79601-23-1	m&p-Xylenes	0.00091	U
541-73-1	1,3-Dichlorobenzene	0.0018	U	**75-09-2**	**Methylene Chloride**	**0.0018**	**0.0025**
142-28-9	1,3-Dichloropropane	0.0018	U	1634-04-4	Methyl-t-butyl ether	0.00091	U
106-46-7	1,4-Dichlorobenzene	0.0018	U	104-51-8	n-Butylbenzene	0.00091	U
123-91-1	1,4-Dioxane	0.091	U	103-65-1	n-Propylbenzene	0.00091	U
78-93-3	2-Butanone	0.0018	U	95-47-6	o-Xylene	0.00091	U
110-75-8	2-Chloroethylvinylether	0.0018	U	135-98-8	sec-Butylbenzene	0.00091	U
591-78-6	2-Hexanone	0.0018	U	100-42-5	Styrene	0.0018	U
99-87-6	4-Isopropyltoluene	0.00091	U	75-65-0	t-Butyl Alcohol	0.0091	U
108-10-1	4-Methyl-2-Pentanone	0.0018	U	98-06-6	t-Butylbenzene	0.00091	U
67-64-1	Acetone	0.0091	U	127-18-4	Tetrachloroethene	0.0018	U
107-02-8	Acrolein	0.0091	U	108-88-3	Toluene	0.00091	U
107-13-1	Acrylonitrile	0.0018	U	156-60-5	trans-1,2-Dichloroethene	0.0018	U
71-43-2	Benzene	0.00091	U	10061-02-6	trans-1,3-Dichloropropene	0.0018	U
75-27-4	Bromodichloromethane	0.0018	U	79-01-6	Trichloroethene	0.0018	U
75-25-2	Bromoform	0.0018	U	75-69-4	Trichlorofluoromethane	0.0018	U
74-83-9	Bromomethane	0.0018	U	75-01-4	Vinyl Chloride	0.0018	U
75-15-0	Carbon Disulfide	0.0018	U	1330-20-7	Xylenes (Total)	0.00091	U

Worksheet #: 565778

Total Target Concentration 0.0051

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-006
Client Id: EB
Data File: 2M141372.D
Analysis Date: 08/28/20 14:39
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	**67-66-3**	**Chloroform**	**1.0**	**1.5**
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	**75-09-2**	**Methylene Chloride**	**1.0**	**5.9**
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-007
Client Id: Trip Blank
Data File: 2M141373.D
Analysis Date: 08/28/20 14:59
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet # 565778

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-008
Client Id: FB
Data File: 2M141366.D
Analysis Date: 08/28/20 12:42
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet # 565778

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-001	% Solid:	76	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-10	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	110	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A
7440-47-3	Chromium	6.6	21	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A
7440-50-8	Copper	6.6	25	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A
7439-92-1	Lead	6.6	21	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A
7439-96-5	Manganese	13	840	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	08/31/20	85228	H26170S	20	CV	HGCV3A
7440-02-0	Nickel	6.6	33	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A
7440-66-6	Zinc	13	150	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-001	% Solid:	76	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-10	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.26	13	1	0.5	100	08/31/20	852293	120ANEW	44	MS	MS3_7700SWA
7440-41-7	Beryllium	0.26	0.88	1	0.5	100	08/31/20	852293	120ANEW	44	MS	MS3_7700SWA
7782-49-2	Selenium	2.6	ND	1	0.5	100	08/31/20	852293	120ANEW	44	MS	MS3_7700SWA
7440-22-4	Silver	0.26	ND	1	0.5	100	08/31/20	852293	120ANEW	44	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-002	% Solid:	75	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-8	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	45	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A
7440-47-3	Chromium	6.7	14	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A
7440-50-8	Copper	6.7	24	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A
7439-92-1	Lead	6.7	16	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A
7439-96-5	Manganese	13	320	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	08/31/20	85228	H26170S	23	CV	HGCV3A
7440-02-0	Nickel	6.7	25	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A
7440-66-6	Zinc	13	82	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-002	% Solid:	75	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-8	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.27	11	1	0.5	100	08/31/20	852293	120ANEW	45	MS	MS3_7700SWA
7440-41-7	Beryllium	0.27	0.44	1	0.5	100	08/31/20	852293	120ANEW	45	MS	MS3_7700SWA
7782-49-2	Selenium	2.7	ND	1	0.5	100	08/31/20	852293	120ANEW	45	MS	MS3_7700SWA
7440-22-4	Silver	0.27	ND	1	0.5	100	08/31/20	852293	120ANEW	45	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-003	% Solid:	79	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-7	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	56	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A
7440-47-3	Chromium	6.3	14	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A
7440-50-8	Copper	6.3	23	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A
7439-92-1	Lead	6.3	110	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A
7439-96-5	Manganese	13	440	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	08/31/20	85228	H26170S	24	CV	HGCV3A
7440-02-0	Nickel	6.3	22	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A
7440-66-6	Zinc	13	80	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-003	% Solid:	79	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-7	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	11	1	0.5	100	08/31/20	852293	120ANEW	46	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	0.33	1	0.5	100	08/31/20	852293	120ANEW	46	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	08/31/20	852293	120ANEW	46	MS	MS3_7700SWA
7440-22-4	Silver	0.25	ND	1	0.5	100	08/31/20	852293	120ANEW	46	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-004	% Solid:	80	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-9	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	53	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A
7440-47-3	Chromium	6.2	17	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A
7440-50-8	Copper	6.2	30	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A
7439-92-1	Lead	6.2	8.8	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A
7439-96-5	Manganese	12	750	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A
7439-97-6	Mercury	0.10	ND	1	0.15	25	08/31/20	85228	H26170S	25	CV	HGCV3A
7440-02-0	Nickel	6.2	23	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A
7440-66-6	Zinc	12	100	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-004	% Solid:	80	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-9	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	12	1	0.5	100	08/31/20	852293	120ANEW	47	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	0.30	1	0.5	100	08/31/20	852293	120ANEW	47	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	08/31/20	852293	120ANEW	47	MS	MS3_7700SWA
7440-22-4	Silver	0.25	ND	1	0.5	100	08/31/20	852293	120ANEW	47	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-005	% Solid:	77	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-4	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	79	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A
7440-47-3	Chromium	6.5	15	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A
7440-50-8	Copper	6.5	43	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A
7439-92-1	Lead	6.5	83	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A
7439-96-5	Manganese	13	400	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	08/31/20	85228	H26170S	26	CV	HGCV3A
7440-02-0	Nickel	6.5	34	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A
7440-66-6	Zinc	13	100	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-005	% Solid:	77	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-4	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.26	7.3	1	0.5	100	08/31/20	852293	120ANEW	48	MS	MS3_7700SWA
7440-41-7	Beryllium	0.26	0.38	1	0.5	100	08/31/20	852293	120ANEW	48	MS	MS3_7700SWA
7782-49-2	Selenium	2.6	ND	1	0.5	100	08/31/20	852293	120ANEW	48	MS	MS3_7700SWA
7440-22-4	Silver	0.26	ND	1	0.5	100	08/31/20	852293	120ANEW	48	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Cr-SOIL

Sample	Total Cr (mg/kg)	RL	Hexavalent Cr (mg/kg)	RL	Trivalent Cr (mg/kg)	RL
AD18934-001	21.0	6.58	ND	1.05	21.0	6.58
AD18934-002	14.3	6.67	ND	1.07	14.3	6.67
AD18934-003	13.8	6.33	ND	1.01	13.8	6.33
AD18934-004	16.9	6.25	ND	1.00	16.9	6.25
AD18934-005	15.3	6.49	ND	1.04	15.3	6.49

Calculated using 3 significant figures. Reported using 2 significant figures.

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	EB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	50	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/02/20	85230	H26172SW	18	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	EB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	2.0	ND	1	50	100	09/01/20	852300	120ANEW	30	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/01/20	852300	120ANEW	30	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/01/20	852300	120ANEW	30	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	09/01/20	852300	120ANEW	30	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	FB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	50	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/02/20	85230	H26172SW	19	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	FB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	2.0	ND	1	50	100	09/01/20	852300	120ANEW	31	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/01/20	852300	120ANEW	31	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/01/20	852300	120ANEW	31	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	09/01/20	852300	120ANEW	31	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Cr-AQUEOUS

Sample	Total Cr (ug/L)	RL	Hexavalent Cr (ug/L)	RL	Trivalent Cr (ug/L)	RL
AD18934-006	ND	50.0	ND	20.0	ND	50.0

Calculated using 3 significant figures. Reported using 2 significant figures.

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD18934-001 | Project Number: 0082707
Matrix: Soil/Terracore | Received Date: 8/27/2020
Client SampleID: HRPB-10 | Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.32	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	160	mV		08/31/20	08/31/20
pH	CR6-PH	1	6.8	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/31/20	08/31/20

Lab#: AD18934-002 | Project Number: 0082707
Matrix: Soil/Terracore | Received Date: 8/27/2020
Client SampleID: HRPB-8 | Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.32	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	190	mV		08/31/20	08/31/20
pH	CR6-PH	1	8.2	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/31/20	08/31/20

Lab#: AD18934-003 | Project Number: 0082707
Matrix: Soil/Terracore | Received Date: 8/27/2020
Client SampleID: HRPB-7 | Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.30	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	200	mV		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
pH	CR6-PH	1	8.2	pH		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.0	08/31/20	08/31/20

Lab#: AD18934-004 | Project Number: 0082707
Matrix: Soil/Terracore | Received Date: 8/27/2020
Client SampleID: HRPB-9 | Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.30	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	220	mV		08/31/20	08/31/20
pH	CR6-PH	1	8.5	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.0	08/31/20	08/31/20

Lab#: AD18934-005 | Project Number: 0082707
Matrix: Soil | Received Date: 8/27/2020
Client SampleID: HRPB-4 | Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.36	mg/Kg	0.31	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	-3.9	mV		08/31/20	08/31/20
pH	CR6-PH	1	7.8	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.0	08/31/20	08/31/20

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD18934-006
Matrix Aqueous
Client SampleID: EB

Project Number: 0082707
Received Date: 8/27/2020
Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-W-9012	1	ND	mg/L	0.020	09/02/20	09/02/20
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.02	08/31/20	08/31/20

Lab#: AD18934-008
Matrix Aqueous
Client SampleID: FB

Project Number: 0082707
Received Date: 8/27/2020
Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-W-9012	1	ND	mg/L	0.020	09/02/20	09/02/20
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.02	08/31/20	08/31/20

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 0082707**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD18934-001	HRPB-10	Soil/Terracore	1	76	Percent			08/28/20	08/27/20	08/26/20
AD18934-002	HRPB-8	Soil/Terracore	1	75	Percent			08/28/20	08/27/20	08/26/20
AD18934-003	HRPB-7	Soil/Terracore	1	79	Percent			08/28/20	08/27/20	08/26/20
AD18934-004	HRPB-9	Soil/Terracore	1	80	Percent			08/28/20	08/27/20	08/26/20
AD18934-005	HRPB-4	Soil	1	77	Percent			08/28/20	08/27/20	08/26/20

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-10	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7440-39-3	Barium	0.25	0.79	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	08/31/20	85218	H26161T	25	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	08/31/20	85218	T26161C4	29	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-8	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	08/28/20	85218	T26161A4	32	P	PEICP4A
7440-39-3	Barium	0.25	0.57	1	50	50	08/28/20	85218	T26161A4	32	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	32	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	08/28/20	85218	T26161A4	32	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	08/28/20	85218	T26161A4	32	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	08/31/20	85218	H26161T	26	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	08/28/20	85218	T26161A4	32	P	PEICP4A
7782-49-2	Selenium	0.50	ND	5	50	50	08/31/20	85218	T26161B4	19	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	08/31/20	85218	T26161C4	32	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-7	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	08/28/20	85218	T26161A4	33	P	PEICP4A
7440-39-3	Barium	0.25	0.57	1	50	50	08/28/20	85218	T26161A4	33	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	33	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	08/28/20	85218	T26161A4	33	P	PEICP4A
7439-92-1	Lead	0.050	0.064	1	50	50	08/28/20	85218	T26161A4	33	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	08/31/20	85218	H26161T	27	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	08/28/20	85218	T26161A4	33	P	PEICP4A
7782-49-2	Selenium	0.50	ND	5	50	50	08/31/20	85218	T26161B4	20	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	08/31/20	85218	T26161C4	33	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-9	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	08/28/20	85218	T26161A4	34	P	PEICP4A
7440-39-3	Barium	0.25	0.34	1	50	50	08/28/20	85218	T26161A4	34	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	34	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	08/28/20	85218	T26161A4	34	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	08/28/20	85218	T26161A4	34	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	08/31/20	85218	H26161T	28	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	08/28/20	85218	T26161A4	34	P	PEICP4A
7782-49-2	Selenium	0.50	ND	5	50	50	08/31/20	85218	T26161B4	21	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	08/31/20	85218	T26161C4	34	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-4	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	08/28/20	85218	T26161A4	35	P	PEICP4A
7440-39-3	Barium	0.25	0.98	1	50	50	08/28/20	85218	T26161A4	35	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	35	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	08/28/20	85218	T26161A4	35	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	08/28/20	85218	T26161A4	35	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	08/31/20	85218	H26161T	29	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	08/28/20	85218	T26161A4	35	P	PEICP4A
7782-49-2	Selenium	0.50	ND	5	50	50	08/31/20	85218	T26161B4	22	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	08/31/20	85218	T26161C4	35	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Chain of Custody Forms

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992
A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 0082707 | Page 1 of 1

0082707 0059

Customer Information

1a) Customer: HRP Associates
Address: 1 Fairchild Sq. Suite 110
Clifton Park, NY 12065
1b) Email/Cell/Fax/Ph: stefan.truex@hrpassociates.com
1c) Send Invoice to: Same ↑
1d) Send Report to: Same ↑

Project Information

2a) Project: Duofold - 7 Sprucе St.
Ilion NY
2b) Project Mgr: Stefan Truex
2c) Project Location (City/State): Ilion, NY
2d) Quote/PO # (If Applicable): HER1500.P2

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other: Standard		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓

Batch # AD18934

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water | S - Soil | A - Air
GW - Ground Water | SL - Sludge
WW - Waste Water | OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	Part 375 metals	TCLP RCRA metals	EPA 8260 VOCs	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001	HRPB-10	Soil	9/24/20	10:30		X	X	X	X	2				3				
002	HRPB-5			11:30		X	X	X	X	2				3				
003	HRPB-7			12:15		X	X	X	X	2				3				
004	HRPB-9			12:45		X	X	X	X	2				3				
005	HRPB-4	↓		14:05		X	X	X		2								
006	EB	water		16:00		X	X	X	X	1			1	3		1		
007	Triplblank	water	↓			X			X	~~2~~ 0				3		~~1~~ 0		
008	FB	water	↓	17:00		X	X	X	X	2				3		1		Ca in unpreserved bottle

10) Relinquished by:	Accepted by:	Date	Time
James Hunter	FedEx	9/26	19:00
FedEx		9/27/20	1100

11) Sampler (print name): James Hunter Date: 9/26/2020

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.9

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

CONDITION UPON RECEIPT

Batch Number AD18934 Entered By: Frantz

Date Entered 8/27/2020 11:25:00 AM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	Yes	Are the COC seals intact?
4	T-461	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.9
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	No	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify (TB date, sample matrix, any missing info, etc.)
14	Yes	Corrective actions (Specify item number and corrective action taken). FB- preserved at lab with NaOH for CN.
15	No	Were any samples for ortho-phosphate or dissolved ferrous iron field filtered?

PRESERVATION DOCUMENT

Batch Number AD18934 Entered By: Frantz

Date Entered 8/27/2020 11:26:00 AM

Lab#:	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD18934-001	NA	NA	NA	NA	NA	NA	NA
AD18934-002	NA	NA	NA	NA	NA	NA	NA
AD18934-003	NA	NA	NA	NA	NA	NA	NA
AD18934-004	NA	NA	NA	NA	NA	NA	NA
AD18934-005	NA	NA	NA	NA	NA	NA	NA
AD18934-006	40ML	G	VO	HCL	243992	1	HC727135
AD18934-006	120mlL	G	CN	NaOH	V-315293	1	HC727135
AD18934-006	1L	P	METALS	HNO3	352932	1	HC727135
AD18934-007	40ML	G	VO	HCL	243992	1	HC727135
AD18934-008	40ML	G	VO	HCL	243992	7	HC727135
AD18934-008	120mlL	G	CN	NaOH	V-315293	7/14	HC727135
AD18934-008	1L	P	METALS	HNO3	352932	1	HC727135

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD18934-001	08/27/20 11:00	FRAN	0	M	Received
AD18934-001	08/27/20 11:06	FRAN	0	M	Login
AD18934-001	08/27/20 14:50	EF	2	A	tclp
AD18934-001	08/27/20 14:51	EF	2	A	r12
AD18934-001	08/28/20 08:54	BCT	2	A	SOLIDS
AD18934-001	08/28/20 10:40	R12	2	A	NONE
AD18934-001	08/31/20 08:14	ANS	2	A	TDSI/Hg
AD18934-001	08/31/20 09:39	BCT	2	A	CR6SEHPH
AD18934-001	08/31/20 10:41	JW	2	A	CN
AD18934-001	08/31/20 13:51	R12	2	A	NONE
AD18934-001	08/27/20 11:25	R31	3	A	NONE
AD18934-001	08/28/20 08:20	RL	3	A	VOA
AD18934-001	08/28/20 08:22	RL	3	A	R31
AD18934-001	08/27/20 11:26	F19	4	A	NONE
AD18934-001	08/31/20 08:54	WP	4	A	VOA
AD18934-001	08/27/20 11:26	F19	5	A	NONE
AD18934-002	08/27/20 11:00	FRAN	0	M	Received
AD18934-002	08/27/20 11:06	FRAN	0	M	Login
AD18934-002	08/27/20 14:50	EF	2	A	tclp
AD18934-002	08/27/20 14:51	EF	2	A	r12
AD18934-002	08/28/20 08:54	BCT	2	A	SOLIDS
AD18934-002	08/28/20 10:40	R12	2	A	NONE
AD18934-002	08/31/20 08:14	ANS	2	A	TDSI/Hg
AD18934-002	08/31/20 09:39	BCT	2	A	CR6SEHPH
AD18934-002	08/31/20 10:41	JW	2	A	CN
AD18934-002	08/31/20 13:51	R12	2	A	NONE
AD18934-002	08/27/20 11:25	R31	3	A	NONE
AD18934-002	08/28/20 08:20	RL	3	A	VOA
AD18934-002	08/28/20 08:22	RL	3	A	R31
AD18934-002	08/27/20 11:26	F19	4	A	NONE
AD18934-002	08/31/20 08:54	WP	4	A	VOA
AD18934-002	08/27/20 11:26	F19	5	A	NONE
AD18934-003	08/27/20 11:00	FRAN	0	M	Received
AD18934-003	08/27/20 11:06	FRAN	0	M	Login
AD18934-003	08/27/20 14:50	EF	2	A	tclp
AD18934-003	08/27/20 14:51	EF	2	A	r12
AD18934-003	08/28/20 08:54	BCT	2	A	SOLIDS
AD18934-003	08/28/20 10:40	R12	2	A	NONE
AD18934-003	08/31/20 08:14	ANS	2	A	TDSI/Hg
AD18934-003	08/31/20 09:39	BCT	2	A	CR6SEHPH
AD18934-003	08/31/20 10:41	JW	2	A	CN
AD18934-003	08/31/20 13:51	R12	2	A	NONE
AD18934-003	08/27/20 11:25	R31	3	A	NONE
AD18934-003	08/28/20 08:20	RL	3	A	VOA
AD18934-003	08/28/20 08:22	RL	3	A	R31
AD18934-003	08/27/20 11:26	F19	4	A	NONE
AD18934-003	08/31/20 08:54	WP	4	A	VOA
AD18934-003	08/27/20 11:26	F19	5	A	NONE
AD18934-004	08/27/20 11:00	FRAN	0	M	Received
AD18934-004	08/27/20 11:06	FRAN	0	M	Login
AD18934-004	08/27/20 14:50	EF	2	A	tclp
AD18934-004	08/27/20 14:51	EF	2	A	r12
AD18934-004	08/28/20 08:54	BCT	2	A	SOLIDS
AD18934-004	08/28/20 10:40	R12	2	A	NONE
AD18934-004	08/31/20 08:14	ANS	2	A	TDSI/Hg
AD18934-004	08/31/20 09:39	BCT	2	A	CR6SEHPH
AD18934-004	08/31/20 10:41	JW	2	A	CN
AD18934-004	08/31/20 13:51	R12	2	A	NONE
AD18934-004	08/27/20 11:25	R31	3	A	NONE
AD18934-004	08/28/20 08:20	RL	3	A	VOA
AD18934-004	08/28/20 08:22	RL	3	A	R31
AD18934-004	08/27/20 11:26	F19	4	A	NONE
AD18934-004	08/31/20 08:54	WP	4	A	VOA
AD18934-004	08/27/20 11:26	F19	5	A	NONE
AD18934-005	08/27/20 11:00	FRAN	0	M	Received
AD18934-005	08/27/20 11:06	FRAN	0	M	Login
AD18934-005	08/27/20 14:50	EF	2	A	tclp
AD18934-005	08/27/20 14:51	EF	2	A	r12
AD18934-005	08/28/20 08:54	BCT	2	A	SOLIDS
AD18934-005	08/28/20 10:40	R12	2	A	NONE
AD18934-005	08/31/20 08:14	ANS	2	A	TDSI/Hg
AD18934-005	08/31/20 09:39	BCT	2	A	CR6SEHPH
AD18934-005	08/31/20 10:41	JW	2	A	CN
AD18934-005	08/31/20 13:51	R12	2	A	NONE
AD18934-006	08/27/20 11:00	FRAN	0	M	Received

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD18934-006	08/27/20 11:06	FRAN	0	M	Login
AD18934-006	08/27/20 12:14	JMP	2	A	CR6 F-P
AD18934-006	08/27/20 15:27	R12	2	A	NONE
AD18934-006	09/01/20 08:05	ANS	2	A	TDWI/Hg
AD18934-006	09/01/20 08:05	R12	2	A	NONE
AD18934-006	09/02/20 12:34	JW	3	A	CN
AD18934-006	09/02/20 15:44	R12	3	A	NONE
AD18934-006	08/27/20 12:21	R31	4	A	NONE
AD18934-006	08/28/20 12:42	RL	4	A	VOA
AD18934-006	08/27/20 12:21	R31	5	A	NONE
AD18934-006	09/08/20 14:07	WP	5	A	VOA
AD18934-006	08/27/20 12:21	R31P	6	A	NONE
AD18934-007	08/27/20 11:00	FRAN	0	M	Received
AD18934-007	08/27/20 11:06	FRAN	0	M	Login
AD18934-007	08/27/20 12:21	R31	1	A	NONE
AD18934-007	08/27/20 12:21	R31	2	A	NONE
AD18934-007	08/28/20 12:42	RL	2	A	VOA
AD18934-007	08/27/20 12:21	R31P	3	A	NONE
AD18934-008	08/27/20 11:00	FRAN	0	M	Received
AD18934-008	08/27/20 11:06	FRAN	0	M	Login
AD18934-008	08/27/20 12:14	JMP	2	A	CR6 F-P
AD18934-008	08/27/20 15:27	R12	2	A	NONE
AD18934-008	09/01/20 08:05	ANS	2	A	TDWI/Hg
AD18934-008	09/01/20 08:05	R12	2	A	NONE
AD18934-008	08/27/20 12:21	R31	3	A	NONE
AD18934-008	08/27/20 12:21	R31	4	A	NONE
AD18934-008	08/28/20 12:20	SG	4	A	VOA
AD18934-008	08/27/20 12:21	R31P	5	A	NONE
AD18934-008	09/02/20 12:34	JW	6	A	CN
AD18934-008	09/02/20 15:44	R12	6	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

GC/MS Volatile Data

GC/MS Volatile Data
QC Summary

FORM2

Surrogate Recovery

Method: EPA 8260C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
2M141355.D	DAILY BLANK	A	08/28/20 09:07	1		103	98	101	107		
6M131886.D	DAILY BLANK	S	08/31/20 08:25	1		107	104	94	98		
6M131900.D	AD18934-001	S	08/31/20 13:13	1		108	109	95	105		
6M131901.D	AD18934-002	S	08/31/20 13:34	1		108	102	106	108		
6M131902.D	AD18934-003	S	08/31/20 13:55	1		107	107	93	99		
6M131903.D	AD18934-004	S	08/31/20 14:15	1		107	107	94	100		
2M141372.D	AD18934-006	A	08/28/20 14:39	1		97	96	106	110		
2M141373.D	AD18934-007	A	08/28/20 14:59	1		101	96	103	108		
2M141366.D	AD18934-008	A	08/28/20 12:42	1		100	95	101	109		
2M141360.D	MBS87436	A	08/28/20 10:45	1		101	98	104	105		
6M131888.D	MBS87762	S	08/31/20 09:07	1		103	104	96	97		
6M131889.D	AD18955-002(MS:AD18	S	08/31/20 09:27	1		106	99	96	100		
6M131890.D	AD18955-003(MSD:AD1	S	08/31/20 09:48	1		106	100	95	95		
6M131892.D	AD18955-001	S	08/31/20 10:29	1		106	102	91	98		

Flags: SD=Surrogate diluted out

*=Surrogate out

Method: EPA 8260C

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	73-131
S2=1,2-Dichloroethane-d4	30	78-128
S3=Toluene-d8	30	79-111
S4=Bromofluorobenzene	30	82-112

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87436

Data File	Sample ID:	Analysis Date
Spike or Dup: 2M141360.D	MBS87436	8/28/2020 10:45:00 AM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.2675	0	20	106	50	150
Dichlorodifluoromethane	**1**	**22.7236**	**0**	**20**	**114**	**50**	**150**
Chloromethane	**1**	**18.4306**	**0**	**20**	**92**	**50**	**150**
Bromomethane	**1**	**14.3735**	**0**	**20**	**72**	**50**	**150**
Vinyl Chloride	**1**	**25.0891**	**0**	**20**	**125**	**50**	**150**
Chloroethane	**1**	**22.7761**	**0**	**20**	**114**	**50**	**150**
Trichlorofluoromethane	**1**	**22.7392**	**0**	**20**	**114**	**50**	**150**
Ethyl ether	1	19.6488	0	20	98	50	150
Furan	1	19.5616	0	20	98	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**20.8871**	**0**	**20**	**104**	**50**	**150**
Methylene Chloride	**1**	**18.3046**	**0**	**20**	**92**	**70**	**130**
Acrolein	**1**	**107.2197**	**0**	**100**	**107**	**50**	**150**
Acrylonitrile	**1**	**17.0179**	**0**	**20**	**85**	**50**	**150**
Iodomethane	1	22.2018	0	20	111	50	150
Acetone	**1**	**96.4093**	**0**	**100**	**96**	**50**	**150**
Carbon Disulfide	**1**	**20.0831**	**0**	**20**	**100**	**50**	**150**
t-Butyl Alcohol	**1**	**93.0556**	**0**	**100**	**93**	**50**	**150**
n-Hexane	1	19.8094	0	20	99	70	130
Di-isopropyl-ether	1	18.089	0	20	90	70	130
1,1-Dichloroethene	**1**	**19.5922**	**0**	**20**	**98**	**70**	**130**
Methyl Acetate	1	26.9278	0	20	135	50	150
Methyl-t-butyl ether	**1**	**17.8912**	**0**	**20**	**89**	**70**	**130**
1,1-Dichloroethane	**1**	**17.7773**	**0**	**20**	**89**	**70**	**130**
trans-1,2-Dichloroethene	**1**	**18.4548**	**0**	**20**	**92**	**70**	**130**
Ethyl-t-butyl ether	1	17.6027	0	20	88	70	130
cis-1,2-Dichloroethene	**1**	**18.0527**	**0**	**20**	**90**	**70**	**130**
Bromochloromethane	1	18.1107	0	20	91	70	130
2,2-Dichloropropane	1	19.8298	0	20	99	70	130
Ethyl acetate	1	16.9551	0	20	85	50	150
1,4-Dioxane	**1**	**892.9153**	**0**	**1000**	**89**	**50**	**150**
1,1-Dichloropropene	1	18.6584	0	20	93	70	130
Chloroform	**1**	**18.0644**	**0**	**20**	**90**	**70**	**130**
Cyclohexane	1	19.515	0	20	98	70	130
1,2-Dichloroethane	**1**	**16.4548**	**0**	**20**	**82**	**70**	**130**
2-Butanone	**1**	**17.666**	**0**	**20**	**88**	**50**	**150**
1,1,1-Trichloroethane	**1**	**17.9776**	**0**	**20**	**90**	**70**	**130**
Carbon Tetrachloride	**1**	**18.2184**	**0**	**20**	**91**	**50**	**150**
Vinyl Acetate	1	12.3208	0	20	62	50	150
Bromodichloromethane	**1**	**18.0214**	**0**	**20**	**90**	**70**	**130**
Methylcyclohexane	1	19.2208	0	20	96	70	130
Dibromomethane	1	14.7889	0	20	74	70	130
1,2-Dichloropropane	**1**	**17.2486**	**0**	**20**	**86**	**70**	**130**
Trichloroethene	**1**	**18.3967**	**0**	**20**	**92**	**70**	**130**
Benzene	**1**	**17.3993**	**0**	**20**	**87**	**70**	**130**
tert-Amyl methyl ether	1	18.6574	0	20	93	70	130
Iso-propylacetate	1	20.4617	0	20	102	70	130
Methyl methacrylate	1	21.0823	0	20	105	70	130
Dibromochloromethane	**1**	**18.3145**	**0**	**20**	**92**	**70**	**130**
2-Chloroethylvinylether	**1**	**46.1501**	**0**	**20**	**231***	**70**	**130**
cis-1,3-Dichloropropene	**1**	**18.7581**	**0**	**20**	**94**	**70**	**130**
trans-1,3-Dichloropropene	**1**	**17.5576**	**0**	**20**	**88**	**70**	**130**
Ethyl methacrylate	1	18.6975	0	20	93	70	130
1,1,2-Trichloroethane	**1**	**18.6489**	**0**	**20**	**93**	**70**	**130**
1,2-Dibromoethane	1	17.7203	0	20	89	70	130
1,3-Dichloropropane	**1**	**17.9362**	**0**	**20**	**90**	**70**	**130**
4-Methyl-2-Pentanone	**1**	**19.746**	**0**	**20**	**99**	**50**	**150**
2-Hexanone	**1**	**20.1732**	**0**	**20**	**101**	**50**	**150**
Tetrachloroethene	**1**	**16.7166**	**0**	**20**	**84**	**50**	**150**
Toluene	**1**	**18.2453**	**0**	**20**	**91**	**70**	**130**
1,1,1,2-Tetrachloroethane	1	17.6114	0	20	88	70	130
Chlorobenzene	**1**	**17.9815**	**0**	**20**	**90**	**70**	**130**

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87436

Method: 8260C | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	17.2972	0	20	86	70	130
n-Amyl acetate	1	17.4637	0	20	87	70	130
Bromoform	**1**	**18.0974**	**0**	**20**	**90**	**70**	**130**
Ethylbenzene	**1**	**18.9374**	**0**	**20**	**95**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**19.0494**	**0**	**20**	**95**	**70**	**130**
Styrene	**1**	**17.84**	**0**	**20**	**89**	**70**	**130**
m&p-Xylenes	**1**	**37.295**	**0**	**40**	**93**	**70**	**130**
o-Xylene	**1**	**17.6421**	**0**	**20**	**88**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	18.4787	0	20	92	50	150
1,3-Dichlorobenzene	**1**	**18.0218**	**0**	**20**	**90**	**70**	**130**
1,4-Dichlorobenzene	**1**	**18.1332**	**0**	**20**	**91**	**70**	**130**
1,2-Dichlorobenzene	**1**	**17.4709**	**0**	**20**	**87**	**70**	**130**
Isopropylbenzene	**1**	**18.9892**	**0**	**20**	**95**	**70**	**130**
Cyclohexanone	1	96.0529	0	100	96	50	150
Camphene	1	19.1377	0	20	96	70	130
1,2,3-Trichloropropane	**1**	**18.8351**	**0**	**20**	**94**	**70**	**130**
2-Chlorotoluene	1	17.7736	0	20	89	70	130
p-Ethyltoluene	1	18.7101	0	20	94	70	130
4-Chlorotoluene	1	17.3297	0	20	87	70	130
n-Propylbenzene	**1**	**18.9986**	**0**	**20**	**95**	**70**	**130**
Bromobenzene	1	18.6561	0	20	93	70	130
1,3,5-Trimethylbenzene	**1**	**18.3839**	**0**	**20**	**92**	**70**	**130**
Butyl methacrylate	1	16.7391	0	20	84	70	130
t-Butylbenzene	**1**	**17.5446**	**0**	**20**	**88**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**17.0672**	**0**	**20**	**85**	**70**	**130**
sec-Butylbenzene	**1**	**18.8416**	**0**	**20**	**94**	**70**	**130**
4-Isopropyltoluene	**1**	**18.2005**	**0**	**20**	**91**	**70**	**130**
n-Butylbenzene	**1**	**18.4142**	**0**	**20**	**92**	**70**	**130**
p-Diethylbenzene	1	18.9418	0	20	95	70	130
1,2,4,5-Tetramethylbenzene	1	19.1662	0	20	96	70	130
1,2-Dibromo-3-Chloropropane	1	19.9389	0	20	100	50	150
Camphor	1	152.917	0	200	76	20	150
Hexachlorobutadiene	1	17.16	0	20	86	50	150
1,2,4-Trichlorobenzene	1	18.8606	0	20	94	70	130
1,2,3-Trichlorobenzene	1	17.5038	0	20	88	70	130
Naphthalene	1	18.0371	0	20	90	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Data File	Sample ID:	Analysis Date
Spike or Dup: 6M131888.D	MBS87762	8/31/2020 9:07:00 AM
Non Spike(If applicable):		
Inst Blank(If applicable):		
Method: 8260C	Matrix: Soil	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	77.0435	0	50	154*	20	130
Dichlorodifluoromethane	1	71.9361	0	50	144*	20	130
Chloromethane	1	63.4485	0	50	127	20	130
Bromomethane	1	50.5524	0	50	101	20	130
Vinyl Chloride	1	60.9187	0	50	122	20	130
Chloroethane	1	56.196	0	50	112	20	130
Trichlorofluoromethane	1	53.2772	0	50	107	20	130
Ethyl ether	1	45.2954	0	50	91	50	130
Furan	1	48.3651	0	50	97	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	53.8862	0	50	108	50	130
Methylene Chloride	1	46.9147	0	50	94	50	130
Acrolein	1	291.8958	0	200	146*	20	130
Acrylonitrile	1	41.0821	0	50	82	20	130
Iodomethane	1	65.371	0	50	131*	50	130
Acetone	1	191.2286	0	200	96	20	130
Carbon Disulfide	1	49.1955	0	50	98	50	130
t-Butyl Alcohol	1	145.0596	0	200	73	20	130
n-Hexane	1	55.5732	0	50	111	50	130
Di-isopropyl-ether	1	50.9804	0	50	102	50	130
1,1-Dichloroethene	1	54.7368	0	50	109	50	130
Methyl Acetate	1	56.1536	0	50	112	50	130
Methyl-t-butyl ether	1	53.4186	0	50	107	50	130
1,1-Dichloroethane	1	51.3318	0	50	103	50	130
trans-1,2-Dichloroethene	1	52.6015	0	50	105	50	130
Ethyl-t-butyl ether	1	46.2693	0	50	93	50	130
cis-1,2-Dichloroethene	1	50.5797	0	50	101	50	130
Bromochloromethane	1	50.2529	0	50	101	50	130
2,2-Dichloropropane	1	58.6043	0	50	117	50	130
Ethyl acetate	1	42.8638	0	50	86	50	130
1,4-Dioxane	1	1557.786	0	2500	62	50	130
1,1-Dichloropropene	1	50.9925	0	50	102	50	130
Chloroform	1	51.042	0	50	102	50	130
Cyclohexane	1	51.9312	0	50	104	50	130
1,2-Dichloroethane	1	51.3951	0	50	103	50	130
2-Butanone	1	41.0564	0	50	82	20	130
1,1,1-Trichloroethane	1	52.0174	0	50	104	50	130
Carbon Tetrachloride	1	52.2009	0	50	104	50	130
Vinyl Acetate	1	38.9192	0	50	78	50	130
Bromodichloromethane	1	50.6791	0	50	101	50	130
Methylcyclohexane	1	49.9512	0	50	100	50	130
Dibromomethane	1	51.026	0	50	102	50	130
1,2-Dichloropropane	1	50.2056	0	50	100	50	130
Trichloroethene	1	49.277	0	50	99	50	130
Benzene	1	49.4058	0	50	99	50	130
tert-Amyl methyl ether	1	49.7989	0	50	100	50	130
Iso-propylacetate	1	44.3314	0	50	89	50	130
Methyl methacrylate	1	42.8021	0	50	86	50	130
Dibromochloromethane	1	48.2256	0	50	96	50	130
2-Chloroethylvinylether	1	103.4236	0	50	207*	50	130
cis-1,3-Dichloropropene	1	48.2806	0	50	97	50	130
trans-1,3-Dichloropropene	1	49.4282	0	50	99	50	130
Ethyl methacrylate	1	45.9704	0	50	92	50	130
1,1,2-Trichloroethane	1	46.6959	0	50	93	50	130
1,2-Dibromoethane	1	46.967	0	50	94	50	130
1,3-Dichloropropane	1	46.3203	0	50	93	50	130
4-Methyl-2-Pentanone	1	39.3965	0	50	79	20	130
2-Hexanone	1	39.3843	0	50	79	20	130
Tetrachloroethene	1	45.5631	0	50	91	50	130
Toluene	1	44.3318	0	50	89	50	130
1,1,1,2-Tetrachloroethane	1	45.9037	0	50	92	50	130
Chlorobenzene	1	44.3688	0	50	89	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	44.6065	0	50	89	50	130
n-Amyl acetate	1	44.5516	0	50	89	50	130
Bromoform	**1**	**68.5695**	**0**	**50**	**137***	**20**	**130**
Ethylbenzene	**1**	**44.6076**	**0**	**50**	**89**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**43.792**	**0**	**50**	**88**	**50**	**130**
Styrene	**1**	**43.4477**	**0**	**50**	**87**	**50**	**130**
m&p-Xylenes	**1**	**87.0434**	**0**	**100**	**87**	**50**	**130**
o-Xylene	**1**	**41.9207**	**0**	**50**	**84**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	44.7106	0	50	89	20	130
1,3-Dichlorobenzene	**1**	**43.7558**	**0**	**50**	**88**	**50**	**130**
1,4-Dichlorobenzene	**1**	**42.9135**	**0**	**50**	**86**	**50**	**130**
1,2-Dichlorobenzene	**1**	**43.5856**	**0**	**50**	**87**	**50**	**130**
Isopropylbenzene	**1**	**43.989**	**0**	**50**	**88**	**50**	**130**
Cyclohexanone	1	183.5002	0	250	73	50	130
Camphene	1	46.1519	0	50	92	50	130
1,2,3-Trichloropropane	**1**	**42.6801**	**0**	**50**	**85**	**50**	**130**
2-Chlorotoluene	1	44.5685	0	50	89	50	130
p-Ethyltoluene	1	43.0244	0	50	86	50	130
4-Chlorotoluene	1	46.4898	0	50	93	50	130
n-Propylbenzene	**1**	**44.8788**	**0**	**50**	**90**	**50**	**130**
Bromobenzene	1	43.9032	0	50	88	50	130
1,3,5-Trimethylbenzene	**1**	**49.1502**	**0**	**50**	**98**	**50**	**130**
Butyl methacrylate	1	41.7019	0	50	83	50	130
t-Butylbenzene	**1**	**45.1207**	**0**	**50**	**90**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**45.2927**	**0**	**50**	**91**	**50**	**130**
sec-Butylbenzene	**1**	**47.7034**	**0**	**50**	**95**	**50**	**130**
4-Isopropyltoluene	**1**	**47.9029**	**0**	**50**	**96**	**50**	**130**
n-Butylbenzene	**1**	**49.0503**	**0**	**50**	**98**	**50**	**130**
p-Diethylbenzene	1	48.4126	0	50	97	50	130
1,2,4,5-Tetramethylbenzene	1	48.3684	0	50	97	50	130
1,2-Dibromo-3-Chloropropane	1	38.5331	0	50	77	50	130
Camphor	1	555.9057	0	500	111	50	130
Hexachlorobutadiene	1	45.011	0	50	90	50	130
1,2,4-Trichlorobenzene	1	43.352	0	50	87	50	130
1,2,3-Trichlorobenzene	1	42.4155	0	50	85	50	130
Naphthalene	1	39.7835	0	50	80	50	130

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Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Non Spike(If applicable):	6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	56.9035	0	50	114	20	130
Dichlorodifluoromethane	1	62.8668	0	50	126	20	130
Chloromethane	1	56.1541	0	50	112	20	130
Bromomethane	1	50.2121	0	50	100	20	130
Vinyl Chloride	1	56.1453	0	50	112	20	130
Chloroethane	1	51.908	0	50	104	20	130
Trichlorofluoromethane	1	51.1041	0	50	102	20	130
Ethyl ether	1	46.2834	0	50	93	50	130
Furan	1	46.2299	0	50	92	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	52.3408	0	50	105	50	130
Methylene Chloride	1	52.7897	5.0839	50	95	50	130
Acrolein	1	248.918	0	200	124	20	130
Acrylonitrile	1	34.3463	0	50	69	20	130
Iodomethane	1	64.5939	0	50	129	50	130
Acetone	1	157.3904	0	200	79	20	130
Carbon Disulfide	1	47.3944	0	50	95	50	130
t-Butyl Alcohol	1	116.3514	0	200	58	20	130
n-Hexane	1	54.7434	0	50	109	50	130
Di-isopropyl-ether	1	54.2364	0	50	108	50	130
1,1-Dichloroethene	1	52.2403	0	50	104	50	130
Methyl Acetate	1	46.8893	0	50	94	50	130
Methyl-t-butyl ether	1	54.3286	0	50	109	50	130
1,1-Dichloroethane	1	49.0593	0	50	98	50	130
trans-1,2-Dichloroethene	1	49.6338	0	50	99	50	130
Ethyl-t-butyl ether	1	49.3762	0	50	99	50	130
cis-1,2-Dichloroethene	1	49.1894	0	50	98	50	130
Bromochloromethane	1	50.2977	0	50	101	50	130
2,2-Dichloropropane	1	57.0601	0	50	114	50	130
Ethyl acetate	1	36.7433	0	50	73	50	130
1,4-Dioxane	1	1274.773	0	2500	51	50	130
1,1-Dichloropropene	1	48.5605	0	50	97	50	130
Chloroform	1	49.9443	0	50	100	50	130
Cyclohexane	1	50.8219	0	50	102	50	130
1,2-Dichloroethane	1	50.2019	0	50	100	50	130
2-Butanone	1	33.5103	0	50	67	20	130
1,1,1-Trichloroethane	1	49.0659	0	50	98	50	130
Carbon Tetrachloride	1	51.644	0	50	103	50	130
Vinyl Acetate	1	37.6728	0	50	75	50	130
Bromodichloromethane	1	50.2178	0	50	100	50	130
Methylcyclohexane	1	50.4394	0	50	101	50	130
Dibromomethane	1	47.858	0	50	96	50	130
1,2-Dichloropropane	1	48.2694	0	50	97	50	130
Trichloroethene	1	73.1622	21.8	50	103	50	130
Benzene	1	48.4836	0	50	97	50	130
tert-Amyl methyl ether	1	52.4065	0	50	105	50	130
Iso-propylacetate	1	41.66	0	50	83	50	130
Methyl methacrylate	1	39.8495	0	50	80	50	130
Dibromochloromethane	1	45.6697	0	50	91	50	130
2-Chloroethylvinylether	1	95.5322	0	50	191*	50	130
cis-1,3-Dichloropropene	1	45.5903	0	50	91	50	130
trans-1,3-Dichloropropene	1	44.067	0	50	88	50	130
Ethyl methacrylate	1	43.1348	0	50	86	50	130
1,1,2-Trichloroethane	1	44.5196	0	50	89	50	130
1,2-Dibromoethane	1	41.0321	0	50	82	50	130
1,3-Dichloropropane	1	42.8237	0	50	86	50	130
4-Methyl-2-Pentanone	1	33.7094	0	50	67	20	130
2-Hexanone	1	30.8066	0	50	62	20	130
Tetrachloroethene	1	50.6666	10.8224	50	80	50	130
Toluene	1	41.0645	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.0505	0	50	90	50	130
Chlorobenzene	1	39.6054	0	50	79	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C		Matrix: Soil		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	41.0364	0	50	82	50	130
n-Amyl acetate	1	38.5687	0	50	77	50	130
Bromoform	**1**	**65.2935**	**0**	**50**	**131***	**20**	**130**
Ethylbenzene	**1**	**42.9713**	**0**	**50**	**86**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**40.0258**	**0**	**50**	**80**	**50**	**130**
Styrene	**1**	**37.9266**	**0**	**50**	**76**	**50**	**130**
m&p-Xylenes	**1**	**78.4306**	**0**	**100**	**78**	**50**	**130**
o-Xylene	**1**	**39.2014**	**0**	**50**	**78**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	36.9711	0	50	74	20	130
1,3-Dichlorobenzene	**1**	**35.471**	**0**	**50**	**71**	**50**	**130**
1,4-Dichlorobenzene	**1**	**33.9467**	**0**	**50**	**68**	**50**	**130**
1,2-Dichlorobenzene	**1**	**35.8729**	**0**	**50**	**72**	**50**	**130**
Isopropylbenzene	**1**	**40.7636**	**0**	**50**	**82**	**50**	**130**
Cyclohexanone	1	125.4322	0	250	50	50	130
Camphene	1	41.718	0	50	83	50	130
1,2,3-Trichloropropane	**1**	**36.3643**	**0**	**50**	**73**	**50**	**130**
2-Chlorotoluene	1	40.2726	0	50	81	50	130
p-Ethyltoluene	1	36.6825	0	50	73	50	130
4-Chlorotoluene	1	37.6433	0	50	75	50	130
n-Propylbenzene	**1**	**38.3835**	**0**	**50**	**77**	**50**	**130**
Bromobenzene	1	38.8818	0	50	78	50	130
1,3,5-Trimethylbenzene	**1**	**43.2564**	**0**	**50**	**87**	**50**	**130**
Butyl methacrylate	1	41.2717	0	50	83	50	130
t-Butylbenzene	**1**	**40.0099**	**0**	**50**	**80**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**38.5263**	**0**	**50**	**77**	**50**	**130**
sec-Butylbenzene	**1**	**40.366**	**0**	**50**	**81**	**50**	**130**
4-Isopropyltoluene	**1**	**39.5065**	**0**	**50**	**79**	**50**	**130**
n-Butylbenzene	**1**	**36.1879**	**0**	**50**	**72**	**50**	**130**
p-Diethylbenzene	1	36.9323	0	50	74	50	130
1,2,4,5-Tetramethylbenzene	1	37.6781	0	50	75	50	130
1,2-Dibromo-3-Chloropropane	1	31.3599	0	50	63	50	130
Camphor	1	473.298	0	500	95	50	130
Hexachlorobutadiene	1	35.1542	0	50	70	50	130
1,2,4-Trichlorobenzene	1	28.2306	0	50	56	50	130
1,2,3-Trichlorobenzene	1	30.0156	0	50	60	50	130
Naphthalene	1	30.4916	0	50	61	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Non Spike(If applicable):	6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	53.7847	0	50	108	20	130
Dichlorodifluoromethane	1	65.4838	0	50	131*	20	130
Chloromethane	1	56.6472	0	50	113	20	130
Bromomethane	1	51.6003	0	50	103	20	130
Vinyl Chloride	1	56.8458	0	50	114	20	130
Chloroethane	1	52.3136	0	50	105	20	130
Trichlorofluoromethane	1	52.2935	0	50	105	20	130
Ethyl ether	1	49.7009	0	50	99	50	130
Furan	1	47.2611	0	50	95	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	56.3197	0	50	113	50	130
Methylene Chloride	1	54.1757	5.0839	50	98	50	130
Acrolein	1	259.5406	0	200	130	20	130
Acrylonitrile	1	35.0489	0	50	70	20	130
Iodomethane	1	65.8217	0	50	132*	50	130
Acetone	1	162.1024	0	200	81	20	130
Carbon Disulfide	1	49.643	0	50	99	50	130
t-Butyl Alcohol	1	127.633	0	200	64	20	130
n-Hexane	1	58.3019	0	50	117	50	130
Di-isopropyl-ether	1	55.5257	0	50	111	50	130
1,1-Dichloroethene	1	53.6783	0	50	107	50	130
Methyl Acetate	1	50.8647	0	50	102	50	130
Methyl-t-butyl ether	1	57.9525	0	50	116	50	130
1,1-Dichloroethane	1	52.194	0	50	104	50	130
trans-1,2-Dichloroethene	1	49.8849	0	50	100	50	130
Ethyl-t-butyl ether	1	51.0834	0	50	102	50	130
cis-1,2-Dichloroethene	1	51.2312	0	50	102	50	130
Bromochloromethane	1	53.4537	0	50	107	50	130
2,2-Dichloropropane	1	58.147	0	50	116	50	130
Ethyl acetate	1	33.6297	0	50	67	50	130
1,4-Dioxane	1	1315.993	0	2500	53	50	130
1,1-Dichloropropene	1	50.4388	0	50	101	50	130
Chloroform	1	51.9592	0	50	104	50	130
Cyclohexane	1	52.7667	0	50	106	50	130
1,2-Dichloroethane	1	52.776	0	50	106	50	130
2-Butanone	1	34.6742	0	50	69	20	130
1,1,1-Trichloroethane	1	52.2007	0	50	104	50	130
Carbon Tetrachloride	1	53.6249	0	50	107	50	130
Vinyl Acetate	1	39.662	0	50	79	50	130
Bromodichloromethane	1	52.8916	0	50	106	50	130
Methylcyclohexane	1	51.9779	0	50	104	50	130
Dibromomethane	1	50.6971	0	50	101	50	130
1,2-Dichloropropane	1	49.6665	0	50	99	50	130
Trichloroethene	1	75.2922	21.8	50	107	50	130
Benzene	1	50.3163	0	50	101	50	130
tert-Amyl methyl ether	1	56.2173	0	50	112	50	130
Iso-propylacetate	1	42.6062	0	50	85	50	130
Methyl methacrylate	1	41.2272	0	50	82	50	130
Dibromochloromethane	1	48.1401	0	50	96	50	130
2-Chloroethylvinylether	1	100.3461	0	50	201*	50	130
cis-1,3-Dichloropropene	1	46.6773	0	50	93	50	130
trans-1,3-Dichloropropene	1	47.5296	0	50	95	50	130
Ethyl methacrylate	1	46.9747	0	50	94	50	130
1,1,2-Trichloroethane	1	46.8811	0	50	94	50	130
1,2-Dibromoethane	1	44.9778	0	50	90	50	130
1,3-Dichloropropane	1	46.3511	0	50	93	50	130
4-Methyl-2-Pentanone	1	36.7572	0	50	74	20	130
2-Hexanone	1	34.1195	0	50	68	20	130
Tetrachloroethene	1	52.4352	10.8224	50	83	50	130
Toluene	1	40.7723	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.2612	0	50	91	50	130
Chlorobenzene	1	40.3151	0	50	81	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	45.4686	0	50	91	50	130
n-Amyl acetate	1	44.7211	0	50	89	50	130
Bromoform	**1**	**70.4273**	**0**	**50**	**141***	**20**	**130**
Ethylbenzene	**1**	**42.7105**	**0**	**50**	**85**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**44.1548**	**0**	**50**	**88**	**50**	**130**
Styrene	**1**	**40.2637**	**0**	**50**	**81**	**50**	**130**
m&p-Xylenes	**1**	**78.8436**	**0**	**100**	**79**	**50**	**130**
o-Xylene	**1**	**39.4447**	**0**	**50**	**79**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	40.8268	0	50	82	20	130
1,3-Dichlorobenzene	**1**	**37.8242**	**0**	**50**	**76**	**50**	**130**
1,4-Dichlorobenzene	**1**	**36.8102**	**0**	**50**	**74**	**50**	**130**
1,2-Dichlorobenzene	**1**	**39.293**	**0**	**50**	**79**	**50**	**130**
Isopropylbenzene	**1**	**40.7047**	**0**	**50**	**81**	**50**	**130**
Cyclohexanone	1	135.2346	0	250	54	50	130
Camphene	1	42.2018	0	50	84	50	130
1,2,3-Trichloropropane	**1**	**41.2923**	**0**	**50**	**83**	**50**	**130**
2-Chlorotoluene	1	41.5022	0	50	83	50	130
p-Ethyltoluene	1	37.3405	0	50	75	50	130
4-Chlorotoluene	1	39.557	0	50	79	50	130
n-Propylbenzene	**1**	**39.5838**	**0**	**50**	**79**	**50**	**130**
Bromobenzene	1	39.8882	0	50	80	50	130
1,3,5-Trimethylbenzene	**1**	**44.2606**	**0**	**50**	**89**	**50**	**130**
Butyl methacrylate	1	44.8847	0	50	90	50	130
t-Butylbenzene	**1**	**40.8828**	**0**	**50**	**82**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**39.8077**	**0**	**50**	**80**	**50**	**130**
sec-Butylbenzene	**1**	**41.2564**	**0**	**50**	**83**	**50**	**130**
4-Isopropyltoluene	**1**	**40.7458**	**0**	**50**	**81**	**50**	**130**
n-Butylbenzene	**1**	**38.6688**	**0**	**50**	**77**	**50**	**130**
p-Diethylbenzene	1	38.5083	0	50	77	50	130
1,2,4,5-Tetramethylbenzene	1	41.4972	0	50	83	50	130
1,2-Dibromo-3-Chloropropane	1	36.9535	0	50	74	50	130
Camphor	1	547.1421	0	500	109	50	130
Hexachlorobutadiene	1	36.7858	0	50	74	50	130
1,2,4-Trichlorobenzene	1	33.9584	0	50	68	50	130
1,2,3-Trichlorobenzene	1	34.7254	0	50	69	50	130
Naphthalene	1	35.4652	0	50	71	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Duplicate(If applicable):	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	53.7847	56.9035	5.6	30
Dichlorodifluoromethane	**1**	**65.4838**	**62.8668**	**4.1**	**30**
Chloromethane	**1**	**56.6472**	**56.1541**	**0.87**	**30**
Bromomethane	**1**	**51.6003**	**50.2121**	**2.7**	**30**
Vinyl Chloride	**1**	**56.8458**	**56.1453**	**1.2**	**40**
Chloroethane	**1**	**52.3136**	**51.908**	**0.78**	**30**
Trichlorofluoromethane	**1**	**52.2935**	**51.1041**	**2.3**	**30**
Ethyl ether	1	49.7009	46.2834	7.1	30
Furan	1	47.2611	46.2299	2.2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**56.3197**	**52.3408**	**7.3**	**30**
Methylene Chloride	**1**	**54.1757**	**52.7897**	**2.6**	**30**
Acrolein	**1**	**259.5406**	**248.918**	**4.2**	**30**
Acrylonitrile	**1**	**35.0489**	**34.3463**	**2**	**30**
Iodomethane	1	65.8217	64.5939	1.9	30
Acetone	**1**	**162.1024**	**157.3904**	**2.9**	**30**
Carbon Disulfide	**1**	**49.643**	**47.3944**	**4.6**	**30**
t-Butyl Alcohol	**1**	**127.633**	**116.3514**	**9.2**	**30**
n-Hexane	1	58.3019	54.7434	6.3	30
Di-isopropyl-ether	1	55.5257	54.2364	2.3	30
1,1-Dichloroethene	**1**	**53.6783**	**52.2403**	**2.7**	**40**
Methyl Acetate	1	50.8647	46.8893	8.1	30
Methyl-t-butyl ether	**1**	**57.9525**	**54.3286**	**6.5**	**30**
1,1-Dichloroethane	**1**	**52.194**	**49.0593**	**6.2**	**40**
trans-1,2-Dichloroethene	**1**	**49.8849**	**49.6338**	**0.5**	**30**
Ethyl-t-butyl ether	1	51.0834	49.3762	3.4	30
cis-1,2-Dichloroethene	**1**	**51.2312**	**49.1894**	**4.1**	**30**
Bromochloromethane	1	53.4537	50.2977	6.1	30
2,2-Dichloropropane	1	58.147	57.0601	1.9	30
Ethyl acetate	1	33.6297	36.7433	8.8	30
1,4-Dioxane	**1**	**1315.993**	**1274.773**	**3.2**	**30**
1,1-Dichloropropene	1	50.4388	48.5605	3.8	30
Chloroform	**1**	**51.9592**	**49.9443**	**4**	**40**
Cyclohexane	1	52.7667	50.8219	3.8	30
1,2-Dichloroethane	**1**	**52.776**	**50.2019**	**5**	**40**
2-Butanone	**1**	**34.6742**	**33.5103**	**3.4**	**40**
1,1,1-Trichloroethane	**1**	**52.2007**	**49.0659**	**6.2**	**30**
Carbon Tetrachloride	**1**	**53.6249**	**51.644**	**3.8**	**40**
Vinyl Acetate	1	39.662	37.6728	5.1	30
Bromodichloromethane	**1**	**52.8916**	**50.2178**	**5.2**	**30**
Methylcyclohexane	1	51.9779	50.4394	3	30
Dibromomethane	1	50.6971	47.858	5.8	30
1,2-Dichloropropane	**1**	**49.6665**	**48.2694**	**2.9**	**30**
Trichloroethene	**1**	**75.2922**	**73.1622**	**2.9**	**40**
Benzene	**1**	**50.3163**	**48.4836**	**3.7**	**40**
tert-Amyl methyl ether	1	56.2173	52.4065	7	30
Iso-propylacetate	1	42.6062	41.66	2.2	30
Methyl methacrylate	1	41.2272	39.8495	3.4	30
Dibromochloromethane	**1**	**48.1401**	**45.6697**	**5.3**	**30**
2-Chloroethylvinylether	**1**	**100.3461**	**95.5322**	**4.9**	**30**
cis-1,3-Dichloropropene	**1**	**46.6773**	**45.5903**	**2.4**	**30**
trans-1,3-Dichloropropene	**1**	**47.5296**	**44.067**	**7.6**	**30**
Ethyl methacrylate	1	46.9747	43.1348	8.5	30
1,1,2-Trichloroethane	**1**	**46.8811**	**44.5196**	**5.2**	**30**
1,2-Dibromoethane	1	44.9778	41.0321	9.2	30
1,3-Dichloropropane	**1**	**46.3511**	**42.8237**	**7.9**	**30**
4-Methyl-2-Pentanone	**1**	**36.7572**	**33.7094**	**8.7**	**30**
2-Hexanone	**1**	**34.1195**	**30.8066**	**10**	**30**
Tetrachloroethene	**1**	**52.4352**	**50.6666**	**3.4**	**40**
Toluene	**1**	**40.7723**	**41.0645**	**0.71**	**40**
1,1,1,2-Tetrachloroethane	1	45.2612	45.0505	0.47	30
Chlorobenzene	**1**	**40.3151**	**39.6054**	**1.8**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	45.4686	41.0364	10	30
n-Amyl acetate	1	44.7211	38.5687	15	30
Bromoform	**1**	**70.4273**	**65.2935**	**7.6**	**30**
Ethylbenzene	**1**	**42.7105**	**42.9713**	**0.61**	**30**
1,1,2,2-Tetrachloroethane	**1**	**44.1548**	**40.0258**	**9.8**	**30**
Styrene	**1**	**40.2637**	**37.9266**	**6**	**30**
m&p-Xylenes	**1**	**78.8436**	**78.4306**	**0.53**	**30**
o-Xylene	**1**	**39.4447**	**39.2014**	**0.62**	**30**
trans-1,4-Dichloro-2-butene	1	40.8268	36.9711	9.9	30
1,3-Dichlorobenzene	**1**	**37.8242**	**35.471**	**6.4**	**30**
1,4-Dichlorobenzene	**1**	**36.8102**	**33.9467**	**8.1**	**40**
1,2-Dichlorobenzene	**1**	**39.293**	**35.8729**	**9.1**	**40**
Isopropylbenzene	**1**	**40.7047**	**40.7636**	**0.14**	**30**
Cyclohexanone	1	135.2346	125.4322	7.5	30
Camphene	1	42.2018	41.718	1.2	30
1,2,3-Trichloropropane	**1**	**41.2923**	**36.3643**	**13**	**30**
2-Chlorotoluene	1	41.5022	40.2726	3	30
p-Ethyltoluene	1	37.3405	36.6825	1.8	30
4-Chlorotoluene	1	39.557	37.6433	5	30
n-Propylbenzene	**1**	**39.5838**	**38.3835**	**3.1**	**40**
Bromobenzene	1	39.8882	38.8818	2.6	30
1,3,5-Trimethylbenzene	**1**	**44.2606**	**43.2564**	**2.3**	**30**
Butyl methacrylate	1	44.8847	41.2717	8.4	30
t-Butylbenzene	**1**	**40.8828**	**40.0099**	**2.2**	**30**
1,2,4-Trimethylbenzene	**1**	**39.8077**	**38.5263**	**3.3**	**30**
sec-Butylbenzene	**1**	**41.2564**	**40.366**	**2.2**	**40**
4-Isopropyltoluene	**1**	**40.7458**	**39.5065**	**3.1**	**30**
n-Butylbenzene	**1**	**38.6688**	**36.1879**	**6.6**	**30**
p-Diethylbenzene	1	38.5083	36.9323	4.2	30
1,2,4,5-Tetramethylbenzene	1	41.4972	37.6781	9.6	30
1,2-Dibromo-3-Chloropropane	1	36.9535	31.3599	16	30
Camphor	1	547.1421	473.298	14	30
Hexachlorobutadiene	1	36.7858	35.1542	4.5	30
1,2,4-Trichlorobenzene	1	33.9584	28.2306	18	30
1,2,3-Trichlorobenzene	1	34.7254	30.0156	15	30
Naphthalene	1	35.4652	30.4916	15	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 2M141355.D
Matrix: Aqueous

Blank Analysis Date: 08/28/20 09:07
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD18934-006	2M141372.D	08/28/20 14:39
AD18934-007	2M141373.D	08/28/20 14:59
AD18934-008	2M141366.D	08/28/20 12:42
MBS87436	2M141360.D	08/28/20 10:45

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M131886.D
Matrix: Soil

Blank Analysis Date: 08/31/20 08:25
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD18934-001	6M131900.D	08/31/20 13:13
AD18934-002	6M131901.D	08/31/20 13:34
AD18934-003	6M131902.D	08/31/20 13:55
AD18934-004	6M131903.D	08/31/20 14:15
AD18955-001	6M131892.D	08/31/20 10:29
AD18955-003(MSD	6M131890.D	08/31/20 09:48
AD18955-002(MS:	6M131889.D	08/31/20 09:27
MBS87762	6M131888.D	08/31/20 09:07

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6
Data File: 6M130900.D
Analysis Date: 08/01/20 11:54
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.385 to 7.397 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.5	16321	PASS
75	95	30	60	51.1	42800	PASS
95	95	100	100	100.0	83807	PASS
96	95	5	9	7.3	6128	PASS
173	174	0.00	2	1.7	1176	PASS
174	95	50	100	84.9	71135	PASS
175	174	5	9	7.4	5277	PASS
176	174	95	101	98.8	70251	PASS
177	176	5	9	6.4	4486	PASS

Data File	Sample Number	Analysis Date:
6M130901.D	BLK	08/01/20 12:09
6M130902.D	BLK	08/01/20 12:30
6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51
6M130904.D	CAL @ 1 PPB	08/01/20 13:11
6M130905.D	CAL @ 2 PPB	08/01/20 13:32
6M130906.D	CAL @ 5 PPB	08/01/20 13:52
6M130907.D	CAL @ 20 PPB	08/01/20 14:13
6M130908.D	CAL @ 50 PPB	08/01/20 14:34
6M130909.D	CAL @ 100 PPB	08/01/20 14:54
6M130910.D	BLK	08/01/20 15:15
6M130911.D	CAL @ 250 PPB	08/01/20 15:36
6M130912.D	BLK	08/01/20 15:56
6M130913.D	CAL @ 500 PPB	08/01/20 16:17
6M130914.D	BLK	08/01/20 16:37
6M130915.D	BLK	08/01/20 16:58
6M130916.D	BLK	08/01/20 17:19
6M130917.D	500 PPB	08/01/20 17:39
6M130918.D	BLK	08/01/20 18:00
6M130919.D	BLK	08/01/20 18:21
6M130920.D	250 PPB	08/01/20 18:41
6M130921.D	BLK	08/01/20 19:02
6M130922.D	BLK	08/01/20 19:22
6M130923.D	BLK	08/01/20 19:43
6M130924.D	BLK	08/01/20 20:04
6M130925.D	ICV	08/01/20 20:24
6M130926.D	BLK	08/01/20 20:45
6M130927.D	CCV	08/01/20 21:05
6M130928.D	BLK	08/01/20 21:26
6M130929.D	BLK	08/01/20 21:47
6M130930.D	BLK	08/01/20 22:07
6M130931.D	BLK	08/01/20 22:28
6M130932.D	BLK	08/01/20 22:49
6M130933.D	DAILY BLANK	08/01/20 23:09

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 2
Data File: 2M141271.D
Analysis Date: 08/26/20 11:49
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.342 to 7.354 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.7	4477	PASS
75	95	30	60	48.9	13991	PASS
95	95	100	100	100.0	28597	PASS
96	95	5	9	7.9	2261	PASS
173	174	0.00	2	1.1	203	PASS
174	95	50	100	65.5	18730	PASS
175	174	5	9	8.1	1521	PASS
176	174	95	101	95.4	17875	PASS
177	176	5	9	7.3	1297	PASS

Data File	Sample Number	Analysis Date:
2M141273.D	CAL @ 0.5 PPB	08/26/20 12:25
2M141274.D	CAL @ 1 PPB	08/26/20 12:44
2M141275.D	CAL @ 5 PPB	08/26/20 13:04
2M141276.D	CAL @ 10 PPB	08/26/20 13:23
2M141277.D	CAL @ 20 PPB	08/26/20 13:43
2M141279.D	CAL @ 50 PPB	08/26/20 14:22
2M141280.D	CAL @ 500 PPB	08/26/20 14:42
2M141283.D	CAL @ 250 PPB	08/26/20 15:40
2M141286.D	CAL @ 100 PPB	08/26/20 16:39
2M141290.D	ICV	08/26/20 17:57
2M141291.D	STD	08/26/20 18:16

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 2
Data File: 2M141348.D
Analysis Date: 08/28/20 06:55
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.342 to 7.354 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.3	7326	PASS
75	95	30	60	52.6	21085	PASS
95	95	100	100	100.0	40094	PASS
96	95	5	9	6.0	2408	PASS
173	174	0.00	2	1.4	508	PASS
174	95	50	100	88.1	35337	PASS
175	174	5	9	8.1	2866	PASS
176	174	95	101	100.5	35511	PASS
177	176	5	9	6.9	2440	PASS

Data File	Sample Number	Analysis Date:
2M141350.D	CAL @ 20 PPB	08/28/20 07:30
2M141352.D	BLK-1	08/28/20 08:09
2M141353.D	BLK-2	08/28/20 08:28
2M141354.D	BLK	08/28/20 08:48
2M141355.D	DAILY BLANK	08/28/20 09:07
2M141356.D	BLK	08/28/20 09:27
2M141357.D	AD18867-001(T)	08/28/20 09:46
2M141358.D	AD18896-001(T)	08/28/20 10:06
2M141359.D	BLK	08/28/20 10:26
2M141360.D	MBS87436	08/28/20 10:45
2M141361.D	AD18785-004	08/28/20 11:05
2M141362.D	AD18867-001(T:M	08/28/20 11:24
2M141363.D	AD18867-001(T:M	08/28/20 11:43
2M141364.D	EF-1V-333199(082	08/28/20 12:03
2M141365.D	BLK	08/28/20 12:22
2M141366.D	AD18934-008	08/28/20 12:42
2M141367.D	AD18907-003	08/28/20 13:01
2M141368.D	AD18907-005	08/28/20 13:21
2M141369.D	BLK	08/28/20 13:41
2M141370.D	AD18941-009	08/28/20 14:00
2M141371.D	AD18941-008	08/28/20 14:20
2M141372.D	AD18934-006	08/28/20 14:39
2M141373.D	AD18934-007	08/28/20 14:59
2M141374.D	AD18914-007	08/28/20 15:19
2M141375.D	AD18941-001	08/28/20 15:38
2M141376.D	AD18941-002	08/28/20 15:58
2M141377.D	AD18941-003	08/28/20 16:17
2M141378.D	AD18941-004	08/28/20 16:37
2M141379.D	AD18941-005	08/28/20 16:56
2M141380.D	AD18941-006	08/28/20 17:16
2M141381.D	AD18941-007	08/28/20 17:35
2M141382.D	BLK	08/28/20 17:55
2M141383.D	AD18914-001	08/28/20 18:14
2M141384.D	AD18914-003	08/28/20 18:34
2M141385.D	AD18914-005	08/28/20 18:53
2M141386.D	BLK	08/28/20 19:13
2M141387.D	BLK	08/28/20 19:32
2M141388.D	BLK	08/28/20 19:52
2M141389.D	BLK	08/28/20 20:11
2M141390.D	BLK	08/28/20 20:31
2M141391.D	BLK	08/28/20 20:51
2M141392.D	BLK	08/28/20 21:11
2M141393.D	BLK	08/28/20 21:30
2M141394.D	BLK	08/28/20 21:50
2M141395.D	BLK	08/28/20 22:09

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6
Data File: 6M131881.D
Analysis Date: 08/31/20 06:48
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.385 to 7.391 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	21.9	10471	PASS
75	95	30	60	52.9	25316	PASS
95	95	100	100	100.0	47820	PASS
96	95	5	9	6.3	3008	PASS
173	174	0.00	2	2.0	804	PASS
174	95	50	100	86.0	41140	PASS
175	174	5	9	7.2	2963	PASS
176	174	95	101	97.0	39908	PASS
177	176	5	9	6.5	2588	PASS

Data File	Sample Number	Analysis Date:
6M131882.D	CAL @ 50 PPB	08/31/20 07:03
6M131883.D	50 PPB	08/31/20 07:24
6M131884.D	BLK	08/31/20 07:44
6M131885.D	BLK	08/31/20 08:05
6M131886.D	DAILY BLANK	08/31/20 08:25
6M131887.D	AD18861-008(%SO	08/31/20 08:46
6M131888.D	MBS87762	08/31/20 09:07
6M131889.D	AD18955-002(MS:	08/31/20 09:27
6M131890.D	AD18955-003(MSD	08/31/20 09:48
6M131891.D	BLK	08/31/20 10:08
6M131892.D	AD18955-001	08/31/20 10:29
6M131893.D	AD18955-004	08/31/20 10:49
6M131894.D	AD18955-005	08/31/20 11:10
6M131895.D	AD18908-001	08/31/20 11:31
6M131896.D	AD18908-005	08/31/20 11:51
6M131897.D	AD18926-011	08/31/20 12:12
6M131898.D	AD18926-014	08/31/20 12:32
6M131899.D	AD18926-010	08/31/20 12:53
6M131900.D	AD18934-001	08/31/20 13:13
6M131901.D	AD18934-002	08/31/20 13:34
6M131902.D	AD18934-003	08/31/20 13:55
6M131903.D	AD18934-004	08/31/20 14:15
6M131904.D	AD18927-009	08/31/20 14:36
6M131905.D	AD18927-010	08/31/20 14:56
6M131906.D	AD18927-011	08/31/20 15:17
6M131907.D	AD18949-014	08/31/20 15:38
6M131908.D	AD18929-001	08/31/20 15:58
6M131909.D	AD18956-001	08/31/20 16:19
6M131910.D	AD18956-002	08/31/20 16:39
6M131911.D	AD18956-003	08/31/20 17:00
6M131912.D	AD18922-001	08/31/20 17:21
6M131913.D	AD18927-012	08/31/20 17:41
6M131914.D	BLK	08/31/20 18:02
6M131915.D	AD18917-001(5X)	08/31/20 18:22

0082707 0082

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M130907.D Method: EPA 8260C

Analysis Date/Time: 08/01/20 14:13

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	391232	5.12	322837	6.76	175394	8.06								
Eval File Area Limit:	195616-782464		161418-645674		87697-350788									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.56-8.56									

Data File	Sample#													
6M130901.D	BLK	647108	5.13	584956	6.76	321998	8.06							
6M130902.D	BLK	662673	5.13	568512	6.76	315208	8.06							
6M130903.D	CAL @ 0.5 PPB	423816	5.13	356268	6.76	199185	8.06							
6M130904.D	CAL @ 1 PPB	378400	5.13	324090	6.76	180373	8.06							
6M130905.D	CAL @ 2 PPB	388738	5.13	331679	6.76	184301	8.06							
6M130906.D	CAL @ 5 PPB	368139	5.13	310453	6.76	178697	8.06							
6M130907.D	CAL @ 20 PPB	391232	5.12	322837	6.76	175394	8.06							
6M130908.D	CAL @ 50 PPB	376294	5.12	318043	6.76	177889	8.06							
6M130909.D	CAL @ 100 PPB	460018	5.13	373585	6.76	219087	8.06							
6M130910.D	BLK	671229	5.13	569352	6.76	321567	8.06							
6M130911.D	CAL @ 250 PPB	432672	5.13	358455	6.76	285114	8.06							
6M130912.D	BLK	642212	5.13	553729	6.76	305240	8.06							
6M130913.D	CAL @ 500 PPB	502146	5.13	414316	6.76	281684	8.06							
6M130914.D	BLK	668873	5.13	580830	6.76	327121	8.06							
6M130915.D	BLK	614880	5.13	527669	6.76	274397	8.06							
6M130916.D	BLK	617160	5.13	513148	6.76	280171	8.06							
6M130917.D	500 PPB	679447	5.13	571293	6.76	417829A	8.06							
6M130918.D	BLK	642734	5.13	541838	6.76	297229	8.06							
6M130919.D	BLK	626881	5.13	524938	6.76	282166	8.06							
6M130920.D	250 PPB	398719	5.13	331004	6.76	292306	8.06							
6M130921.D	BLK	678500	5.13	566061	6.76	310563	8.06							
6M130922.D	BLK	611781	5.13	511917	6.76	276307	8.06							
6M130923.D	BLK	645653	5.12	562098	6.76	314533	8.06							
6M130924.D	BLK	637312	5.13	544069	6.76	302683	8.06							
6M130925.D	ICV	562401	5.13	479620	6.76	275791	8.06							
6M130926.D	BLK	612242	5.13	532032	6.76	296223	8.06							
6M130927.D	CCV	479371	5.13	395051	6.76	229839	8.06							
6M130928.D	BLK	626008	5.13	553278	6.76	305603	8.06							
6M130929.D	BLK	653466	5.13	560376	6.76	310169	8.06							
6M130930.D	BLK	636660	5.13	557215	6.76	311910	8.06							
6M130931.D	BLK	624066	5.13	544071	6.76	305600	8.06							
6M130932.D	BLK	577281	5.13	502367	6.76	285043	8.06							

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0082707 0083

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M130907.D Method: EPA 8260C

Analysis Date/Time: 08/01/20 14:13

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	391232	5.12	322837	6.76	175394	8.06								
Eval File Area Limit:	195616-782464		161418-645674		87697-350788									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.56-8.56									
Data File Sample#														
6M130933.D DAILY BLANK	622512	5.13	537053	6.76	299436	8.06								

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0082707 0084

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M141277.D Method: EPA 8260C

Analysis Date/Time: 08/26/20 13:43

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	395310	5.10	387571	6.73	232817	8.02								
Eval File Area Limit:	197655-790620		193786-775142		116408-465634									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									
Data File Sample#														
2M141273.D CAL @ 0.5 PPB	434338	5.10	301525	6.73	136814	8.02								
2M141274.D CAL @ 1 PPB	403036	5.10	291234	6.73	211233	8.02								
2M141275.D CAL @ 5 PPB	387013	5.10	443979	6.73	238169	8.02								
2M141276.D CAL @ 10 PPB	459068	5.10	325926	6.73	163941	8.02								
2M141277.D CAL @ 20 PPB	395310	5.10	387571	6.73	232817	8.02								
2M141279.D CAL @ 50 PPB	398700	5.10	338899	6.73	258685	8.02								
2M141280.D CAL @ 500 PPB	441996	5.10	416584	6.73	342055	8.03								
2M141283.D CAL @ 250 PPB	435348	5.10	421564	6.73	241847	8.02								
2M141286.D CAL @ 100 PPB	572099	5.10	501894	6.73	305508	8.02								
2M141290.D ICV	524429	5.10	452147	6.73	241637	8.02								
2M141291.D STD	546837	5.10	487126	6.73	258179	8.02								

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0082707 0085

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M141350.D Method: EPA 8260C

Analysis Date/Time: 08/28/20 07:30

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	527926	5.10	454151	6.73	257684	8.02								
Eval File Area Limit:	263963-1055852		227076-908302		128842-515368									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									
Data File	Sample#													
2M141352.D	BLK-1	707999	5.10	546250	6.73	143087	8.02							
2M141353.D	BLK-2	631202	5.10	506750	6.73	267811	8.02							
2M141354.D	BLK	564708	5.10	487790	6.73	263932	8.02							
2M141355.D	DAILY BLANK	558744	5.10	483457	6.73	252545	8.02							
2M141356.D	BLK	646794	5.10	557956	6.73	281189	8.02							
2M141357.D	AD18867-001(T)	664805	5.10	562207	6.73	296071	8.02							
2M141358.D	AD18896-001(T)	616119	5.10	507096	6.73	267320	8.02							
2M141359.D	BLK	652127	5.10	572936	6.73	302352	8.02							
2M141360.D	MBS87436	567792	5.10	487191	6.73	274678	8.02							
2M141361.D	AD18785-004	659185	5.10	563062	6.73	302047	8.02							
2M141362.D	AD18867-001(T:MS)	537428	5.10	465862	6.73	261207	8.02							
2M141363.D	AD18867-001(T:MSD)	569537	5.10	500222	6.73	279581	8.02							
2M141364.D	EF-1V-333199(082720	627677	5.10	538530	6.73	286780	8.02							
2M141365.D	BLK	690911	5.10	577628	6.73	283325	8.02							
2M141366.D	AD18934-008	654438	5.10	541560	6.73	272713	8.02							
2M141367.D	AD18907-003	581904	5.10	498821	6.73	259194	8.02							
2M141368.D	AD18907-005	578622	5.10	495313	6.73	251923	8.02							
2M141369.D	BLK	578009	5.10	496855	6.73	258989	8.02							
2M141370.D	AD18941-009	583823	5.10	502394	6.73	260846	8.02							
2M141371.D	AD18941-008	691252	5.10	586350	6.73	299094	8.02							
2M141372.D	AD18934-006	673701	5.10	550655	6.73	278179	8.02							
2M141373.D	AD18934-007	585506	5.10	499979	6.73	260128	8.02							
2M141374.D	AD18914-007	599050	5.10	503641	6.73	263357	8.02							
2M141375.D	AD18941-001	684890	5.10	585565	6.73	303188	8.02							
2M141376.D	AD18941-002	700496	5.10	593075	6.73	298647	8.02							
2M141377.D	AD18941-003	660678	5.10	562470	6.73	279591	8.02							
2M141378.D	AD18941-004	711264	5.10	597056	6.73	299974	8.02							
2M141379.D	AD18941-005	669911	5.10	569655	6.73	289176	8.02							
2M141380.D	AD18941-006	718175	5.10	609748	6.73	315355	8.02							
2M141381.D	AD18941-007	675550	5.10	561071	6.73	293448	8.02							
2M141382.D	BLK	684872	5.10	575871	6.73	282956	8.02							
2M141383.D	AD18914-001	661337	5.10	554335	6.73	278976	8.02							

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0082707 0086

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M141350.D Method: EPA 8260C

Analysis Date/Time: 08/28/20 07:30

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	527926	5.10	454151	6.73	257684	8.02								
Eval File Area Limit:	263963-1055852		227076-908302		128842-515368									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									
Data File Sample#														
2M141384.D AD18914-003	665475	5.10	553306	6.73	315966	8.02								
2M141385.D AD18914-005	820635	5.10	686085	6.73	408394	8.02								
2M141386.D BLK	719217	5.10	603291	6.73	326752	8.02								
2M141387.D BLK	798273	5.10	669710	6.73	326686	8.02								
2M141388.D BLK	688859	5.10	573040	6.73	300148	8.02								
2M141389.D BLK	671262	5.10	563396	6.73	287431	8.02								
2M141390.D BLK	800488	5.10	666258	6.73	327943	8.02								
2M141391.D BLK	678399	5.10	562068	6.73	277864	8.02								
2M141392.D BLK	818926	5.10	698262	6.73	357367	8.02								
2M141393.D BLK	750675	5.10	642183	6.73	321315	8.02								
2M141394.D BLK	716449	5.10	610014	6.73	306798	8.02								
2M141395.D BLK	683878	5.10	557353	6.73	281814	8.02								

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0082707 0087

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M131882.D Method: EPA 8260C

Analysis Date/Time: 08/31/20 07:03

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	294420	5.13	268587	6.76	163179	8.05								
Eval File Area Limit:	147210-588840		134294-537174		81590-326358									
Eval File Rt Limit:	4.63-5.63		6.26-7.26		7.55-8.55									
Data File	Sample#													
6M131883.D	50 PPB	289410	5.12	257133	6.76	153705	8.05							
6M131884.D	BLK	303504	5.13	285373	6.76	161014	8.05							
6M131885.D	BLK	300511	5.12	280208	6.76	155502	8.05							
6M131886.D	DAILY BLANK	325455	5.13	300945	6.76	168512	8.05							
6M131887.D	AD18861-008(%SOLI	294124	5.12	208592	6.76	83353	8.05							
6M131888.D	MBS87762	357661	5.13	320865	6.76	194278	8.05							
6M131889.D	AD18955-002(MS:AD	404386	5.12	365118	6.76	216510	8.06							
6M131890.D	AD18955-003(MSD:A	402783	5.12	369710	6.76	220478	8.05							
6M131891.D	BLK	370169	5.12	346259	6.76	197195	8.05							
6M131892.D	AD18955-001	369414	5.13	347677	6.76	186441	8.05							
6M131893.D	AD18955-004	318382	5.12	297989	6.76	163221	8.06							
6M131894.D	AD18955-005	352772	5.12	325778	6.76	172436	8.05							
6M131895.D	AD18908-001	341089	5.13	268680	6.76	105541	8.05							
6M131896.D	AD18908-005	172778	5.13	149525	6.76	60996A	8.05							
6M131897.D	AD18926-011	370213	5.12	327052	6.76	163398	8.05							
6M131898.D	AD18926-014	355619	5.12	326697	6.76	172564	8.05							
6M131899.D	AD18926-010	351609	5.12	308727	6.76	154454	8.05							
6M131900.D	AD18934-001	319340	5.12	284398	6.76	131424	8.05							
6M131901.D	AD18934-002	302868	5.12	242110	6.76	108250	8.05							
6M131902.D	AD18934-003	355120	5.13	327931	6.76	173297	8.05							
6M131903.D	AD18934-004	348242	5.13	325392	6.76	167088	8.05							
6M131904.D	AD18927-009	339553	5.13	316325	6.76	156718	8.05							
6M131905.D	AD18927-010	351364	5.12	316309	6.76	149290	8.05							
6M131906.D	AD18927-011	331560	5.12	324229	6.76	176659	8.05							
6M131907.D	AD18949-014	341456	5.12	320988	6.76	167806	8.05							
6M131908.D	AD18929-001	341874	5.12	309360	6.76	153369	8.05							
6M131909.D	AD18956-001	342209	5.12	313138	6.76	160659	8.05							
6M131910.D	AD18956-002	314886	5.12	281611	6.76	138568	8.05							
6M131911.D	AD18956-003	330608	5.12	302966	6.76	152935	8.05							
6M131912.D	AD18922-001	323296	5.12	260757	6.76	94829	8.05							
6M131913.D	AD18927-012	309932	5.12	235908	6.76	130257	8.06							
6M131914.D	BLK	378432	5.12	378555	6.76	215348	8.05							

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0082707 0088

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M131882.D Method: EPA 8260C

Analysis Date/Time: 08/31/20 07:03

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	294420	5.13	268587	6.76	163179	8.05								
Eval File Area Limit:	147210-588840		134294-537174		81590-326358									
Eval File Rt Limit:	4.63-5.63		6.26-7.26		7.55-8.55									
Data File Sample#														
6M131915.D AD18917-001(5X)	338921	5.12	269470	6.76	56184A	8.06								

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

GC/MS Volatile Data
Sample Data

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-001
Client Id: HRPB-10
Data File: 6M131900.D
Analysis Date: 08/31/20 13:13
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5.9g
Final Vol: NA
Dilution: 0.847
Solids: 76

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0022	U	56-23-5	Carbon Tetrachloride	0.0022	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0022	U	108-90-7	Chlorobenzene	0.0022	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0022	U	75-00-3	Chloroethane	0.0022	U
79-00-5	1,1,2-Trichloroethane	0.0022	U	67-66-3	Chloroform	0.0022	U
75-34-3	1,1-Dichloroethane	0.0022	U	74-87-3	Chloromethane	0.0022	U
75-35-4	1,1-Dichloroethene	0.0022	U	156-59-2	cis-1,2-Dichloroethene	0.0022	U
96-18-4	1,2,3-Trichloropropane	0.0022	U	10061-01-5	cis-1,3-Dichloropropene	0.0022	U
95-63-6	1,2,4-Trimethylbenzene	0.0011	U	124-48-1	Dibromochloromethane	0.0022	U
95-50-1	1,2-Dichlorobenzene	0.0022	U	75-71-8	Dichlorodifluoromethane	0.0022	U
107-06-2	1,2-Dichloroethane	0.0022	U	100-41-4	Ethylbenzene	0.0011	U
78-87-5	1,2-Dichloropropane	0.0022	U	98-82-8	Isopropylbenzene	0.0011	U
108-67-8	1,3,5-Trimethylbenzene	0.0011	U	79601-23-1	m&p-Xylenes	0.0011	U
541-73-1	1,3-Dichlorobenzene	0.0022	U	**75-09-2**	**Methylene Chloride**	**0.0022**	**0.0051**
142-28-9	1,3-Dichloropropane	0.0022	U	1634-04-4	Methyl-t-butyl ether	0.0011	U
106-46-7	1,4-Dichlorobenzene	0.0022	U	104-51-8	n-Butylbenzene	0.0011	U
123-91-1	1,4-Dioxane	0.11	U	103-65-1	n-Propylbenzene	0.0011	U
78-93-3	**2-Butanone**	**0.0022**	**0.050**	95-47-6	o-Xylene	0.0011	U
110-75-8	2-Chloroethylvinylether	0.0022	U	135-98-8	sec-Butylbenzene	0.0011	U
591-78-6	2-Hexanone	0.0022	U	100-42-5	Styrene	0.0022	U
99-87-6	4-Isopropyltoluene	0.0011	U	75-65-0	t-Butyl Alcohol	0.011	U
108-10-1	4-Methyl-2-Pentanone	0.0022	U	98-06-6	t-Butylbenzene	0.0011	U
67-64-1	**Acetone**	**0.011**	**0.19**	127-18-4	Tetrachloroethene	0.0022	U
107-02-8	Acrolein	0.011	U	108-88-3	Toluene	0.0011	U
107-13-1	Acrylonitrile	0.0022	U	156-60-5	trans-1,2-Dichloroethene	0.0022	U
71-43-2	Benzene	0.0011	U	10061-02-6	trans-1,3-Dichloropropene	0.0022	U
75-27-4	Bromodichloromethane	0.0022	U	79-01-6	Trichloroethene	0.0022	U
75-25-2	Bromoform	0.0022	U	75-69-4	Trichlorofluoromethane	0.0022	U
74-83-9	Bromomethane	0.0022	U	75-01-4	Vinyl Chloride	0.0022	U
75-15-0	Carbon Disulfide	0.0022	U	1330-20-7	Xylenes (Total)	0.0011	U

Worksheet #: 565778

Total Target Concentration 0.25

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

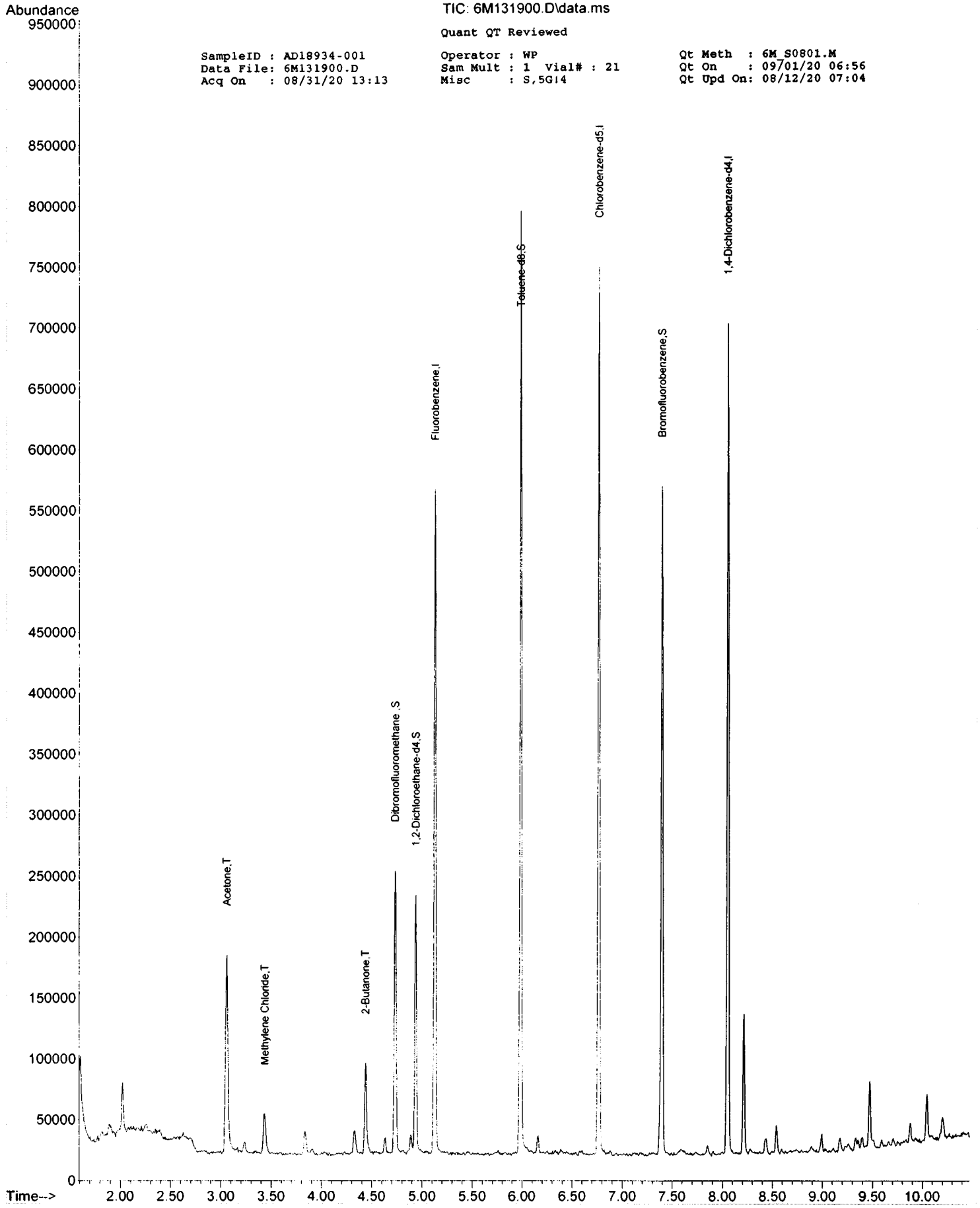
Quantitation Report (QT Reviewed)

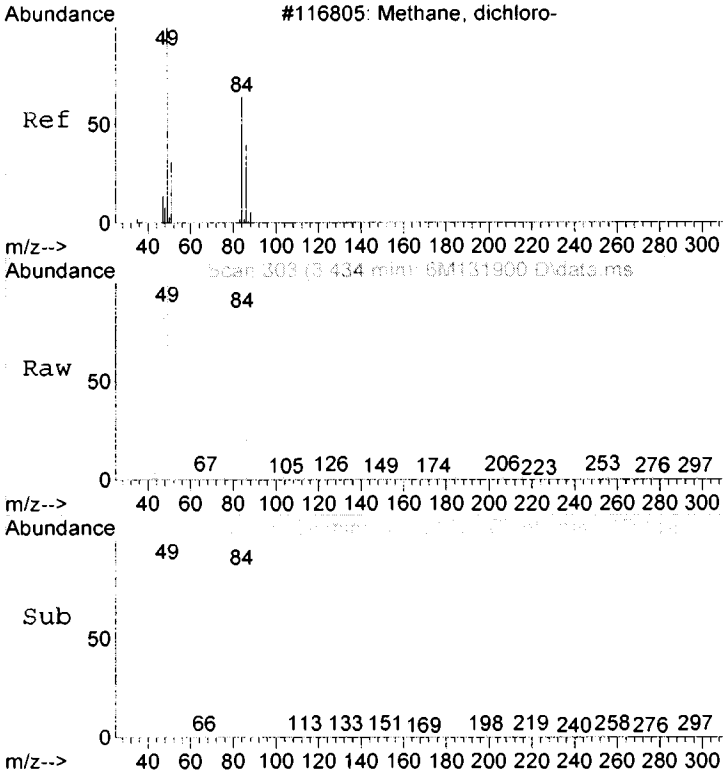
SampleID : AD18934-001 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131900.D Sam Mult : 1 Vial# : 21 Qt On : 09/01/20 06:56
Acq On : 08/31/20 13:13 Misc : S,5G!4 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	319340	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	284398	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.050	152	131424	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	91842	32.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.87%			
39) 1,2-Dichloroethane-d4	4.934	67	49912	32.61	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.70%			
66) Toluene-d8	5.983	98	334656	28.52	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.07%			
76) Bromofluorobenzene	7.391	174	109449	31.64	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.47%			
Target Compounds						Qvalue
15) Methylene Chloride	3.434	84	13152	4.5531	ug/l	97
19) Acetone	3.057	43	180790	166.8739	ug/l	94
41) 2-Butanone	4.434	43	70557	44.5187	ug/l	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

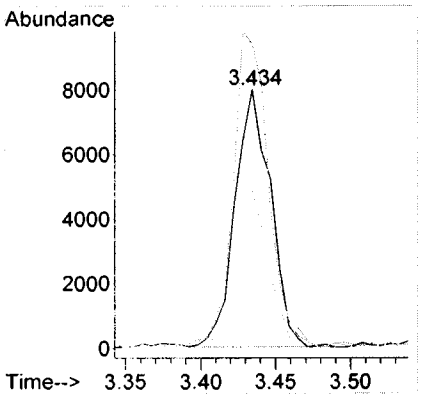

Abundance
TIC: 6M131900.D\data.ms
Quant QT Reviewed
SampleID : AD18934-001
Data File: 6M131900.D
Acq On : 08/31/20 13:13
Operator : WP
Sam Mult : 1 Vial# : 21
Misc : S,5G14
Qt Meth : 6M_S0801.M
Qt On : 09/01/20 06:56
Qt Upd On: 08/12/20 07:04
Acetone,T
Methylene Chloride,T
2-Butanone,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

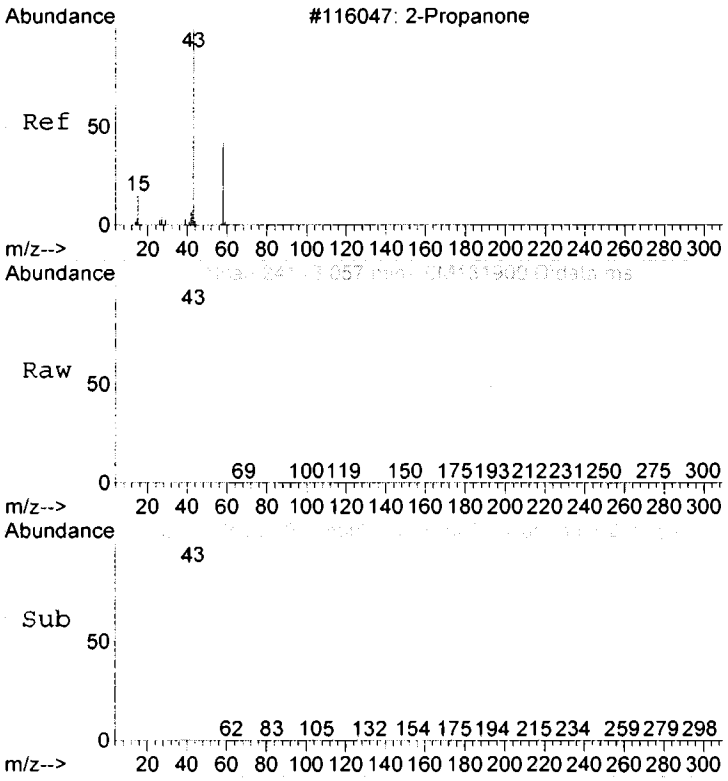


#15
Methylene Chloride
Concen: 4.55 ug/l
RT: 3.434 min Scan# 303
Delta R.T. 0.000 min
Lab File: 6M131900.D
Acq: 31 Aug 2020 13:13

Tgt Ion: 84 Resp: 13152

Ion	Ratio	Lower	Upper
84	100		
49	116.5	47.0	188.0
86	59.0	25.7	102.7

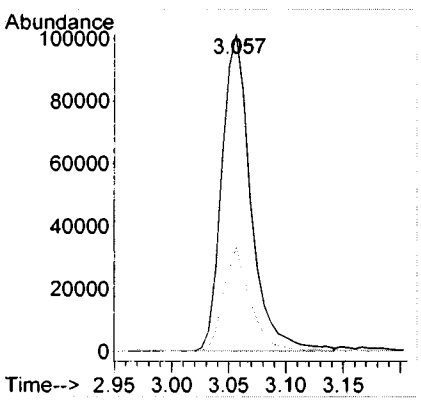


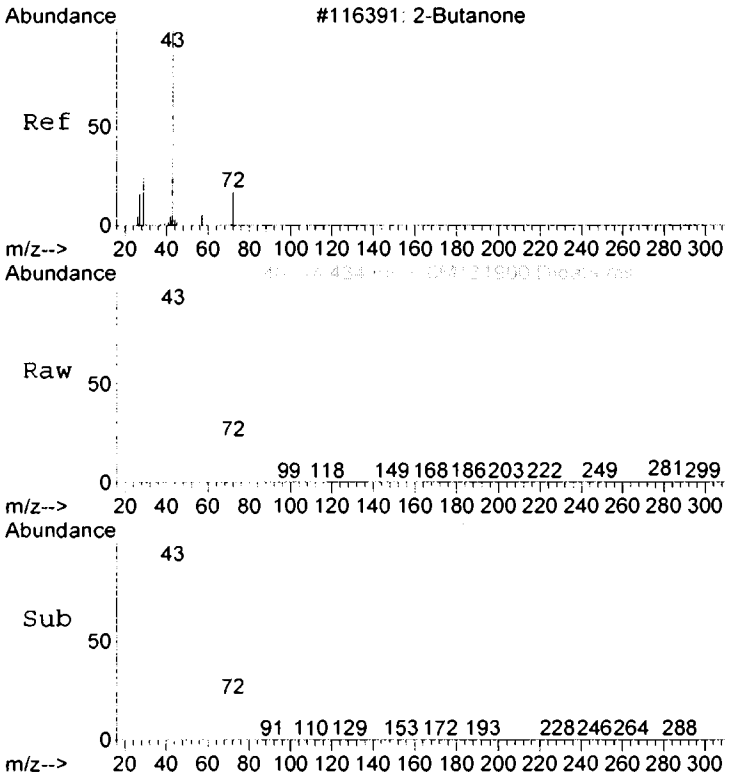


#19
Acetone
Concen: 166.87 ug/l
RT: 3.057 min Scan# 241
Delta R.T. 0.000 min
Lab File: 6M131900.D
Acq: 31 Aug 2020 13:13

Tgt Ion: 43 Resp: 180790

Ion	Ratio	Lower	Upper
43	100		
58	33.0	0.0	69.9

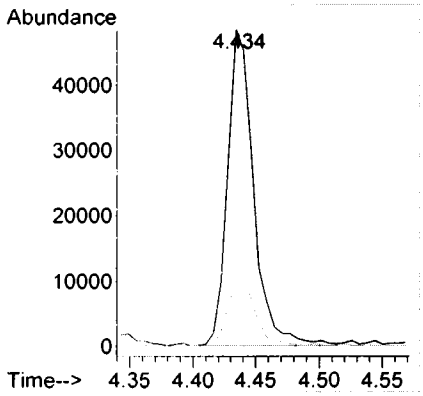




#41
2-Butanone
Concen: 44.52 ug/l
RT: 4.434 min Scan# 467
Delta R.T. 0.000 min
Lab File: 6M131900.D
Acq: 31 Aug 2020 13:13

Tgt Ion: 43 Resp: 70557

Ion	Ratio	Lower	Upper
43	100		
72	20.9	6.2	56.2



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-002
Client Id: HRPB-8
Data File: 6M131901.D
Analysis Date: 08/31/20 13:34
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 6.48g
Final Vol: NA
Dilution: 0.772
Solids: 75

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0021	U	56-23-5	Carbon Tetrachloride	0.0021	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0021	U	108-90-7	Chlorobenzene	0.0021	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0021	U	75-00-3	Chloroethane	0.0021	U
79-00-5	1,1,2-Trichloroethane	0.0021	U	67-66-3	Chloroform	0.0021	U
75-34-3	1,1-Dichloroethane	0.0021	U	74-87-3	Chloromethane	0.0021	U
75-35-4	1,1-Dichloroethene	0.0021	U	**156-59-2**	**cis-1,2-Dichloroethene**	**0.0021**	**0.0075**
96-18-4	1,2,3-Trichloropropane	0.0021	U	10061-01-5	cis-1,3-Dichloropropene	0.0021	U
95-63-6	1,2,4-Trimethylbenzene	0.0010	U	124-48-1	Dibromochloromethane	0.0021	U
95-50-1	1,2-Dichlorobenzene	0.0021	U	75-71-8	Dichlorodifluoromethane	0.0021	U
107-06-2	1,2-Dichloroethane	0.0021	U	100-41-4	Ethylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0021	U	98-82-8	Isopropylbenzene	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	0.0010	U	79601-23-1	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0021	U	75-09-2	Methylene Chloride	0.0021	U
142-28-9	1,3-Dichloropropane	0.0021	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0021	U	104-51-8	n-Butylbenzene	0.0010	U
123-91-1	1,4-Dioxane	0.10	U	103-65-1	n-Propylbenzene	0.0010	U
78-93-3	2-Butanone	0.0021	U	95-47-6	o-Xylene	0.0010	U
110-75-8	2-Chloroethylvinylether	0.0021	U	135-98-8	sec-Butylbenzene	0.0010	U
591-78-6	2-Hexanone	0.0021	U	100-42-5	Styrene	0.0021	U
99-87-6	4-Isopropyltoluene	0.0010	U	75-65-0	t-Butyl Alcohol	0.010	U
108-10-1	4-Methyl-2-Pentanone	0.0021	U	98-06-6	t-Butylbenzene	0.0010	U
67-64-1	Acetone	0.010	U	127-18-4	Tetrachloroethene	0.0021	U
107-02-8	Acrolein	0.010	U	108-88-3	Toluene	0.0010	U
107-13-1	Acrylonitrile	0.0021	U	156-60-5	trans-1,2-Dichloroethene	0.0021	U
71-43-2	Benzene	0.0010	U	10061-02-6	trans-1,3-Dichloropropene	0.0021	U
75-27-4	Bromodichloromethane	0.0021	U	79-01-6	Trichloroethene	0.0021	U
75-25-2	Bromoform	0.0021	U	75-69-4	Trichlorofluoromethane	0.0021	U
74-83-9	Bromomethane	0.0021	U	75-01-4	Vinyl Chloride	0.0021	U
75-15-0	Carbon Disulfide	0.0021	U	1330-20-7	Xylenes (Total)	0.0010	U

Worksheet # 565778

Total Target Concentration 0.0075

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

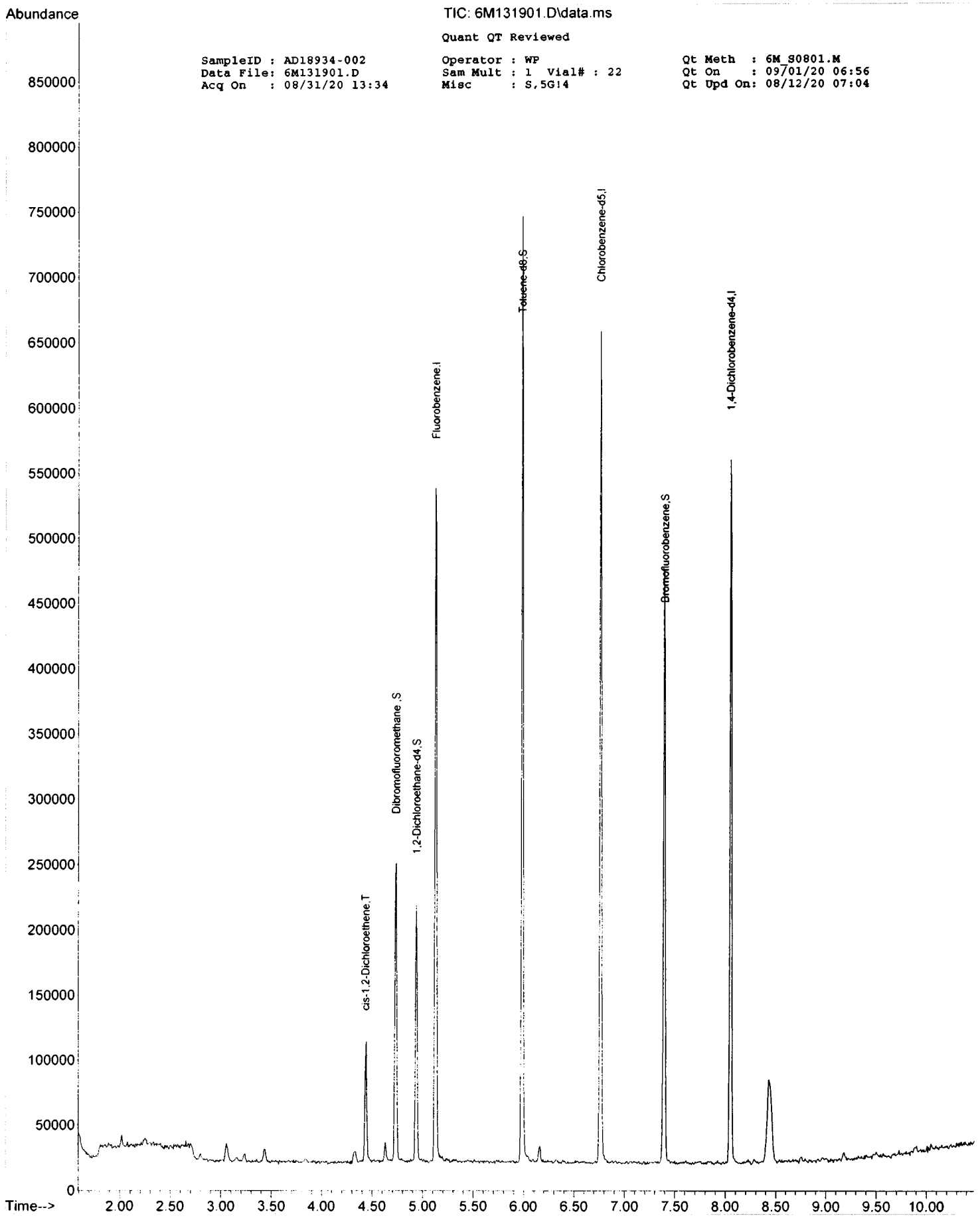
Quantitation Report (QT Reviewed)

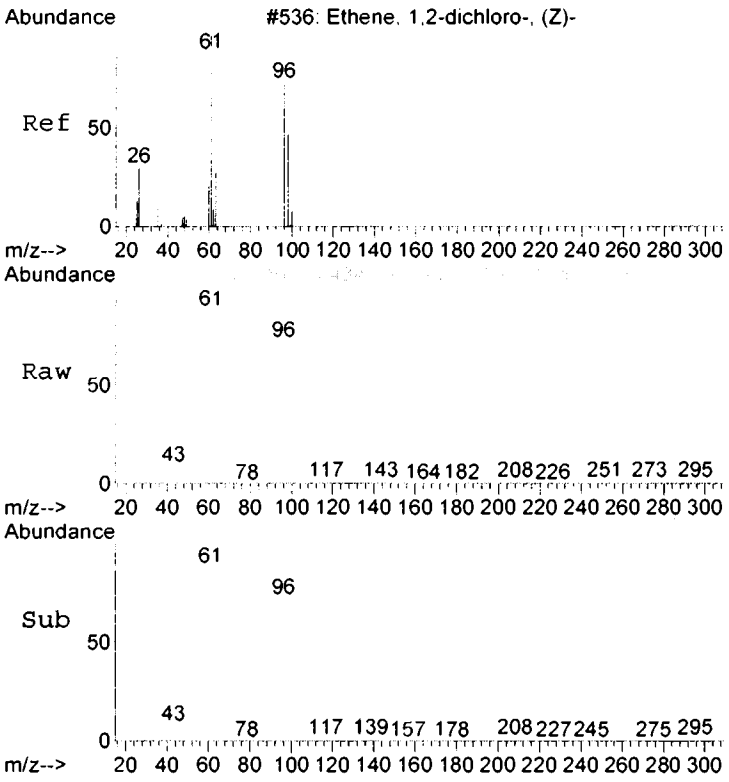
SampleID : AD18934-002 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131901.D Sam Mult : 1 Vial# : 22 Qt On : 09/01/20 06:56
Acq On : 08/31/20 13:34 Misc : S,5G!4 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	302868	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	242110	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	108250	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	87093	32.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.87%			
39) 1,2-Dichloroethane-d4	4.934	67	44395	30.59	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.97%			
66) Toluene-d8	5.983	98	316583	31.69	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.63%			
76) Bromofluorobenzene	7.397	174	92038	32.30	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.67%			
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	4.434	61	32766	7.2915	ug/l	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

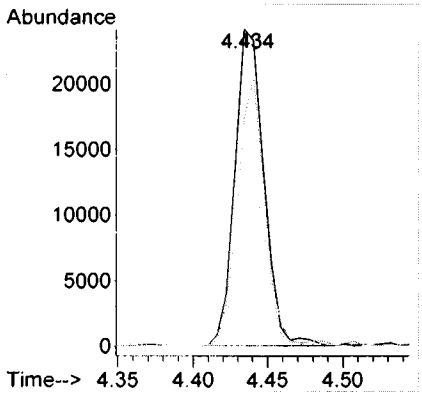

Abundance
TIC: 6M131901.D\data.ms
Quant QT Reviewed
SampleID : AD18934-002
Data File: 6M131901.D
Acq On : 08/31/20 13:34
Operator : WP
Sam Mult : 1 Vial# : 22
Misc : S,5G!4
Qt Meth : 6M_S0801.M
Qt On : 09/01/20 06:56
Qt Upd On: 08/12/20 07:04
cis-1,2-Dichloroethene,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->



#30
cis-1,2-Dichloroethene
Concen: 7.29 ug/l
RT: 4.434 min Scan# 467
Delta R.T. -0.006 min
Lab File: 6M131901.D
Acq: 31 Aug 2020 13:34

Tgt Ion: 61 Resp: 32766

Ion	Ratio	Lower	Upper
61	100		
96	71.7	0.0	154.4
98	40.8	4.3	84.3



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-003
Client Id: HRPB-7
Data File: 6M131902.D
Analysis Date: 08/31/20 13:55
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 7.56g
Final Vol: NA
Dilution: 0.661
Solids: 79

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0017	U	56-23-5	Carbon Tetrachloride	0.0017	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0017	U	108-90-7	Chlorobenzene	0.0017	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0017	U	75-00-3	Chloroethane	0.0017	U
79-00-5	1,1,2-Trichloroethane	0.0017	U	67-66-3	Chloroform	0.0017	U
75-34-3	1,1-Dichloroethane	0.0017	U	74-87-3	Chloromethane	0.0017	U
75-35-4	1,1-Dichloroethene	0.0017	U	156-59-2	cis-1,2-Dichloroethene	0.0017	U
96-18-4	1,2,3-Trichloropropane	0.0017	U	10061-01-5	cis-1,3-Dichloropropene	0.0017	U
95-63-6	1,2,4-Trimethylbenzene	0.00084	U	124-48-1	Dibromochloromethane	0.0017	U
95-50-1	1,2-Dichlorobenzene	0.0017	U	75-71-8	Dichlorodifluoromethane	0.0017	U
107-06-2	1,2-Dichloroethane	0.0017	U	100-41-4	Ethylbenzene	0.00084	U
78-87-5	1,2-Dichloropropane	0.0017	U	98-82-8	Isopropylbenzene	0.00084	U
108-67-8	1,3,5-Trimethylbenzene	0.00084	U	79601-23-1	m&p-Xylenes	0.00084	U
541-73-1	1,3-Dichlorobenzene	0.0017	U	**75-09-2**	**Methylene Chloride**	**0.0017**	**0.0019**
142-28-9	1,3-Dichloropropane	0.0017	U	1634-04-4	Methyl-t-butyl ether	0.00084	U
106-46-7	1,4-Dichlorobenzene	0.0017	U	104-51-8	n-Butylbenzene	0.00084	U
123-91-1	1,4-Dioxane	0.084	U	103-65-1	n-Propylbenzene	0.00084	U
78-93-3	2-Butanone	0.0017	U	95-47-6	o-Xylene	0.00084	U
110-75-8	2-Chloroethylvinylether	0.0017	U	135-98-8	sec-Butylbenzene	0.00084	U
591-78-6	2-Hexanone	0.0017	U	100-42-5	Styrene	0.0017	U
99-87-6	4-Isopropyltoluene	0.00084	U	75-65-0	t-Butyl Alcohol	0.0084	U
108-10-1	4-Methyl-2-Pentanone	0.0017	U	98-06-6	t-Butylbenzene	0.00084	U
67-64-1	Acetone	0.0084	U	**127-18-4**	**Tetrachloroethene**	**0.0017**	**0.0036**
107-02-8	Acrolein	0.0084	U	108-88-3	Toluene	0.00084	U
107-13-1	Acrylonitrile	0.0017	U	156-60-5	trans-1,2-Dichloroethene	0.0017	U
71-43-2	Benzene	0.00084	U	10061-02-6	trans-1,3-Dichloropropene	0.0017	U
75-27-4	Bromodichloromethane	0.0017	U	79-01-6	Trichloroethene	0.0017	U
75-25-2	Bromoform	0.0017	U	75-69-4	Trichlorofluoromethane	0.0017	U
74-83-9	Bromomethane	0.0017	U	75-01-4	Vinyl Chloride	0.0017	U
75-15-0	Carbon Disulfide	0.0017	U	1330-20-7	Xylenes (Total)	0.00084	U

Worksheet #: 565778

Total Target Concentration 0.0055

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

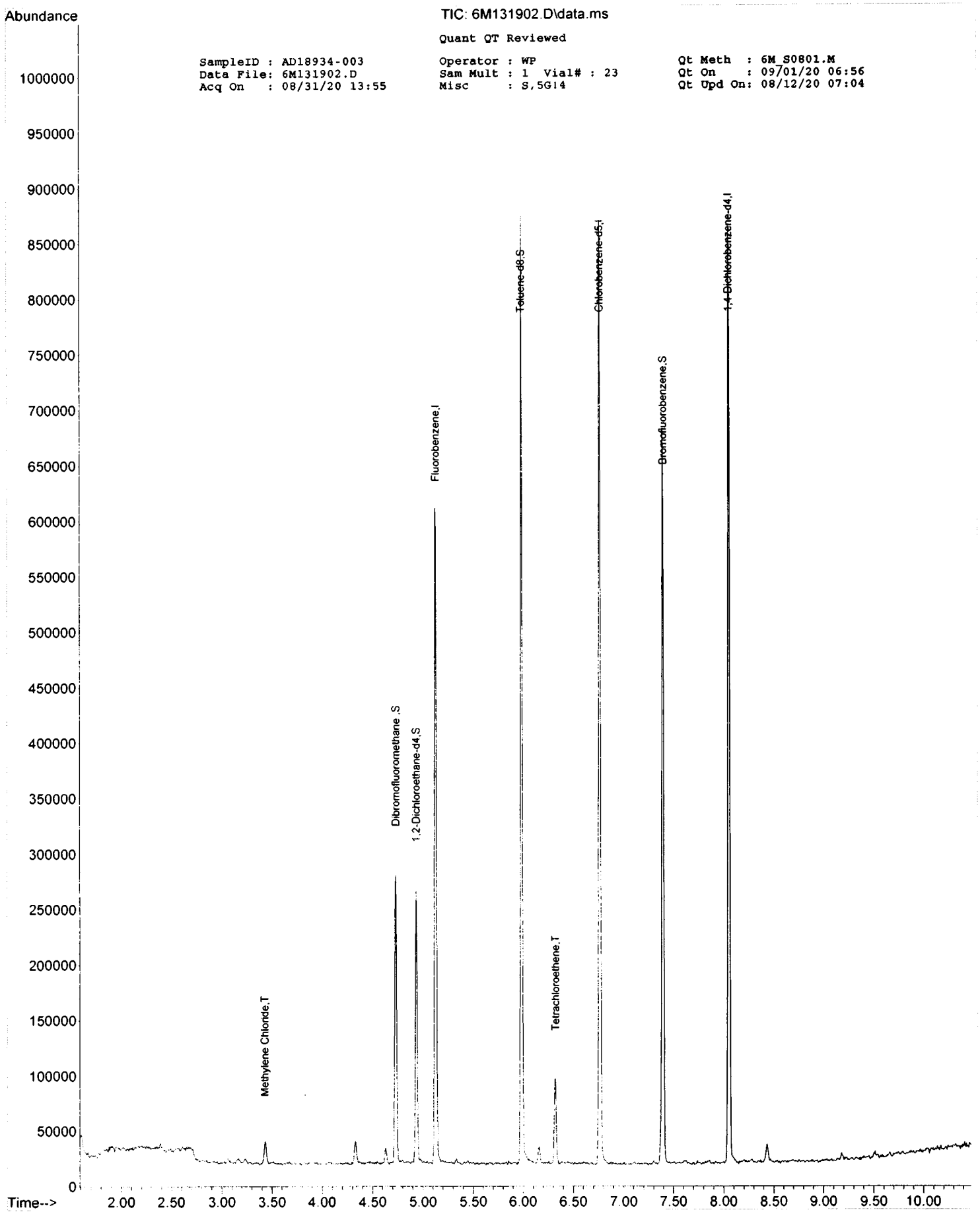
Quantitation Report (QT Reviewed)

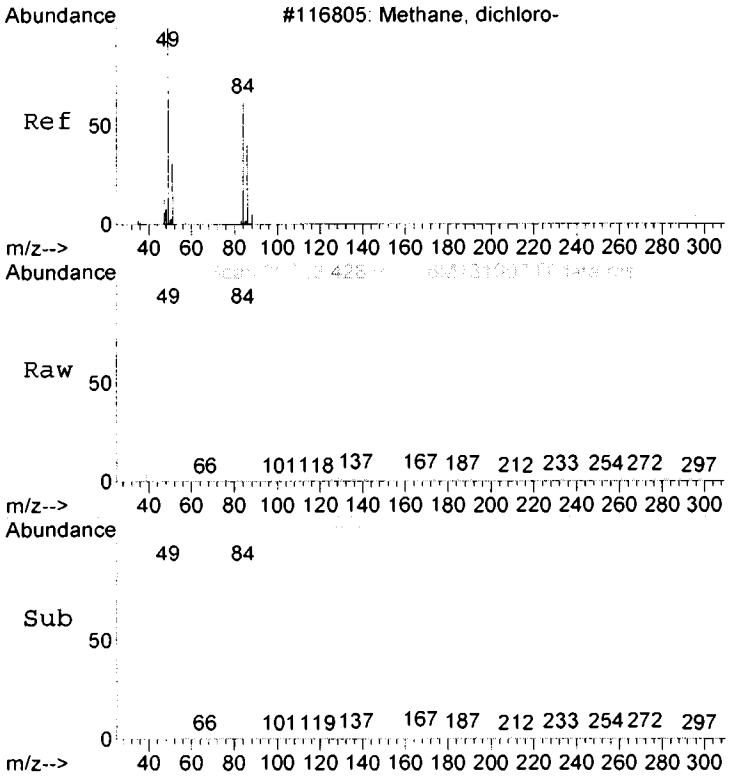
SampleID : AD18934-003 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131902.D Sam Mult : 1 Vial# : 23 Qt On : 09/01/20 06:56
Acq On : 08/31/20 13:55 Misc : S,5G!4 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	355120	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	327931	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	173297	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	101237	32.08	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.93%			
39) 1,2-Dichloroethane-d4	4.934	67	54845	32.23	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.43%			
66) Toluene-d8	5.983	98	377206	27.88	ug/l	0.00
Spiked Amount 30.000			Recovery = 92.93%			
76) Bromofluorobenzene	7.397	174	135851	29.78	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.27%			
Target Compounds						Qvalue
15) Methylene Chloride	3.428	84	7269	2.2629	ug/l	81
65) Tetrachloroethene	6.324	164	13234	4.3557	ug/l	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

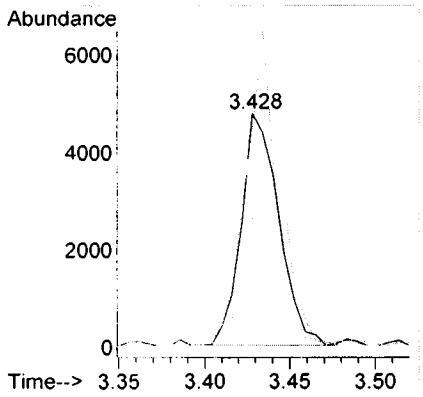

Abundance
TIC: 6M131902.D\data.ms
Quant QT Reviewed
SampleID : AD18934-003
Data File: 6M131902.D
Acq On : 08/31/20 13:55
Operator : WP
Sam Mult : 1 Vial# : 23
Misc : S,5G14
Qt Meth : 6M_S0801.M
Qt On : 09/01/20 06:56
Qt Upd On: 08/12/20 07:04
Methylene Chloride,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

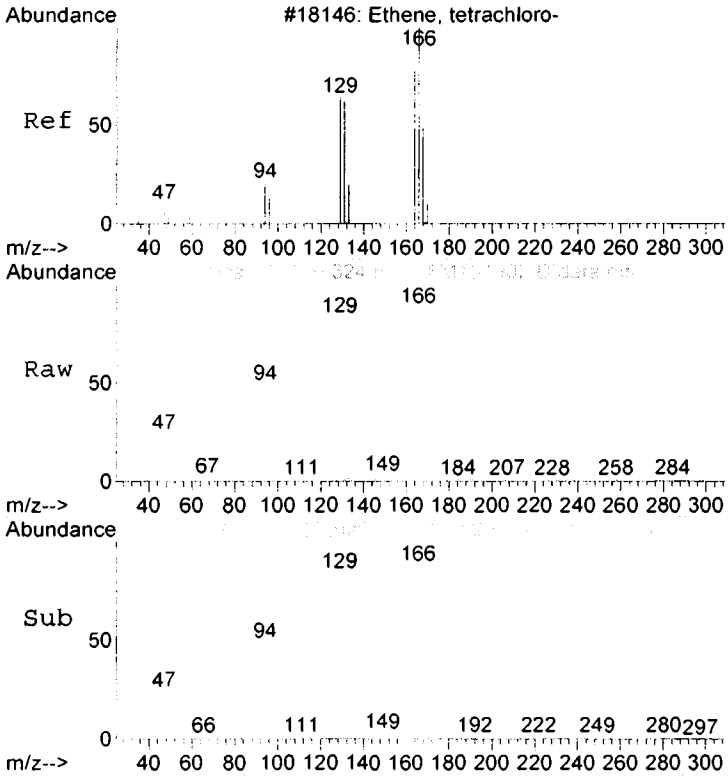


#15
Methylene Chloride
Concen: 2.26 ug/l
RT: 3.428 min Scan# 302
Delta R.T. -0.006 min
Lab File: 6M131902.D
Acq: 31 Aug 2020 13:55

Tgt Ion: 84 Resp: 7269

Ion	Ratio	Lower	Upper
84	100		
49	92.0	47.0	188.0
86	54.9	25.7	102.7

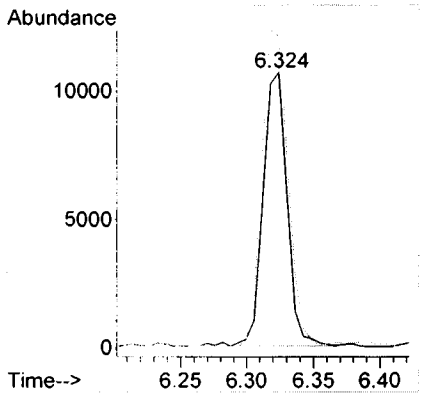




#65
Tetrachloroethene
Concen: 4.36 ug/l
RT: 6.324 min Scan# 777
Delta R.T. -0.000 min
Lab File: 6M131902.D
Acq: 31 Aug 2020 13:55

Tgt Ion:164 Resp: 13234

Ion	Ratio	Lower	Upper
164	100		
166	112.6	60.6	200.6



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-004
Client Id: HRPB-9
Data File: 6M131903.D
Analysis Date: 08/31/20 14:15
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 6.84g
Final Vol: NA
Dilution: 0.731
Solids: 80

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0018	U	56-23-5	Carbon Tetrachloride	0.0018	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0018	U	108-90-7	Chlorobenzene	0.0018	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0018	U	75-00-3	Chloroethane	0.0018	U
79-00-5	1,1,2-Trichloroethane	0.0018	U	**67-66-3**	**Chloroform**	**0.0018**	**0.0026**
75-34-3	1,1-Dichloroethane	0.0018	U	74-87-3	Chloromethane	0.0018	U
75-35-4	1,1-Dichloroethene	0.0018	U	156-59-2	cis-1,2-Dichloroethene	0.0018	U
96-18-4	1,2,3-Trichloropropane	0.0018	U	10061-01-5	cis-1,3-Dichloropropene	0.0018	U
95-63-6	1,2,4-Trimethylbenzene	0.00091	U	124-48-1	Dibromochloromethane	0.0018	U
95-50-1	1,2-Dichlorobenzene	0.0018	U	75-71-8	Dichlorodifluoromethane	0.0018	U
107-06-2	1,2-Dichloroethane	0.0018	U	100-41-4	Ethylbenzene	0.00091	U
78-87-5	1,2-Dichloropropane	0.0018	U	98-82-8	Isopropylbenzene	0.00091	U
108-67-8	1,3,5-Trimethylbenzene	0.00091	U	79601-23-1	m&p-Xylenes	0.00091	U
541-73-1	1,3-Dichlorobenzene	0.0018	U	**75-09-2**	**Methylene Chloride**	**0.0018**	**0.0025**
142-28-9	1,3-Dichloropropane	0.0018	U	1634-04-4	Methyl-t-butyl ether	0.00091	U
106-46-7	1,4-Dichlorobenzene	0.0018	U	104-51-8	n-Butylbenzene	0.00091	U
123-91-1	1,4-Dioxane	0.091	U	103-65-1	n-Propylbenzene	0.00091	U
78-93-3	2-Butanone	0.0018	U	95-47-6	o-Xylene	0.00091	U
110-75-8	2-Chloroethylvinylether	0.0018	U	135-98-8	sec-Butylbenzene	0.00091	U
591-78-6	2-Hexanone	0.0018	U	100-42-5	Styrene	0.0018	U
99-87-6	4-Isopropyltoluene	0.00091	U	75-65-0	t-Butyl Alcohol	0.0091	U
108-10-1	4-Methyl-2-Pentanone	0.0018	U	98-06-6	t-Butylbenzene	0.00091	U
67-64-1	Acetone	0.0091	U	127-18-4	Tetrachloroethene	0.0018	U
107-02-8	Acrolein	0.0091	U	108-88-3	Toluene	0.00091	U
107-13-1	Acrylonitrile	0.0018	U	156-60-5	trans-1,2-Dichloroethene	0.0018	U
71-43-2	Benzene	0.00091	U	10061-02-6	trans-1,3-Dichloropropene	0.0018	U
75-27-4	Bromodichloromethane	0.0018	U	79-01-6	Trichloroethene	0.0018	U
75-25-2	Bromoform	0.0018	U	75-69-4	Trichlorofluoromethane	0.0018	U
74-83-9	Bromomethane	0.0018	U	75-01-4	Vinyl Chloride	0.0018	U
75-15-0	Carbon Disulfide	0.0018	U	1330-20-7	Xylenes (Total)	0.00091	U

Worksheet #: 565778

Total Target Concentration 0.0051

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

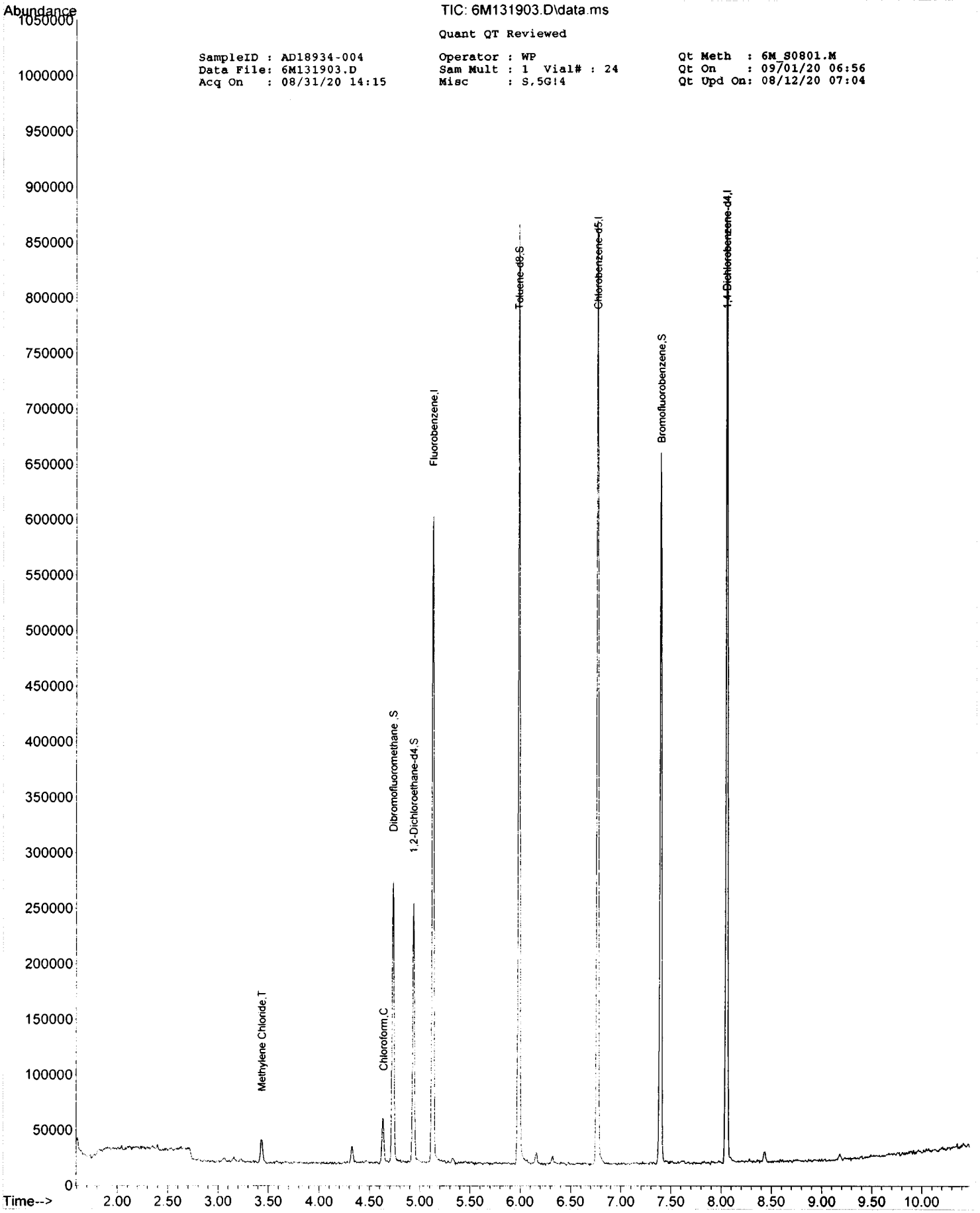
Quantitation Report (QT Reviewed)

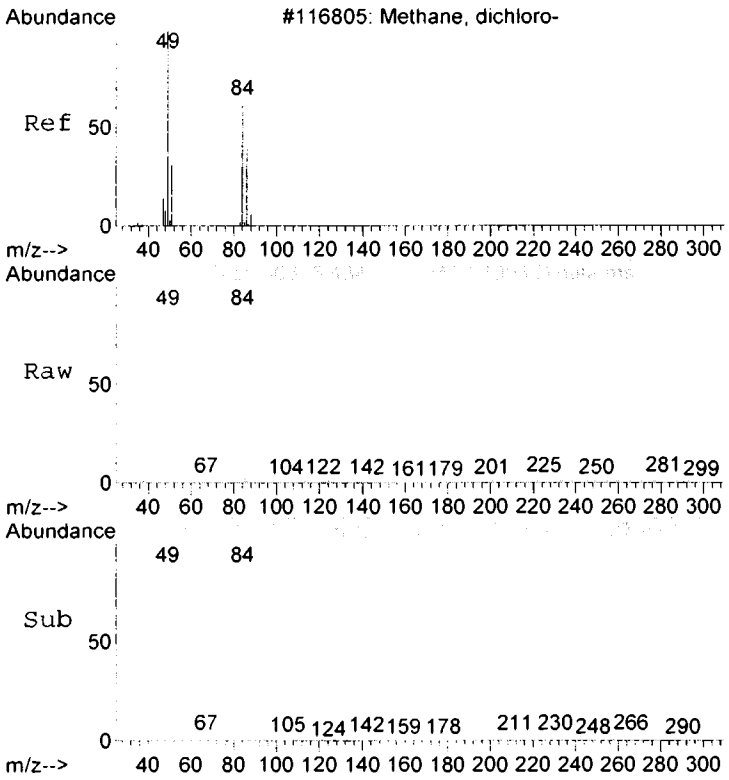
SampleID : AD18934-004 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131903.D Sam Mult : 1 Vial# : 24 Qt On : 09/01/20 06:56
Acq On : 08/31/20 14:15 Misc : S,5G!4 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	348242	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	325392	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	167088	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	99305	32.09	ug/l	0.00
Spiked Amount 30.000			Recovery =	106.97%		
39) 1,2-Dichloroethane-d4	4.934	67	53451	32.03	ug/l	0.00
Spiked Amount 30.000			Recovery =	106.77%		
66) Toluene-d8	5.982	98	378152	28.16	ug/l	0.00
Spiked Amount 30.000			Recovery =	93.87%		
76) Bromofluorobenzene	7.397	174	132511	30.13	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.43%		
Target Compounds						Qvalue
15) Methylene Chloride	3.434	84	8715	2.7667	ug/l	89
36) Chloroform	4.635	83	15099	2.7999	ug/l	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

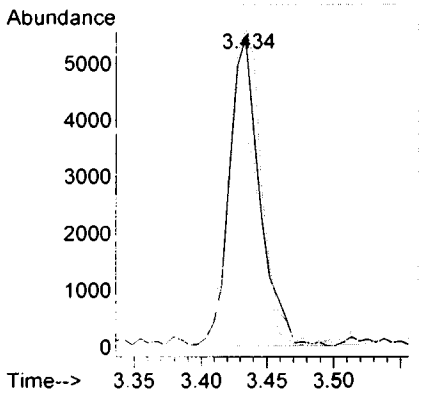

Abundance
TIC: 6M131903.D\data.ms
Quant QT Reviewed
SampleID : AD18934-004
Data File: 6M131903.D
Acq On : 08/31/20 14:15
Operator : WP
Sam Mult : 1 Vial# : 24
Misc : S,5G!4
Qt Meth : 6M_S0801.M
Qt On : 09/01/20 06:56
Qt Upd On: 08/12/20 07:04
Methylene Chloride,T
Chloroform,C
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

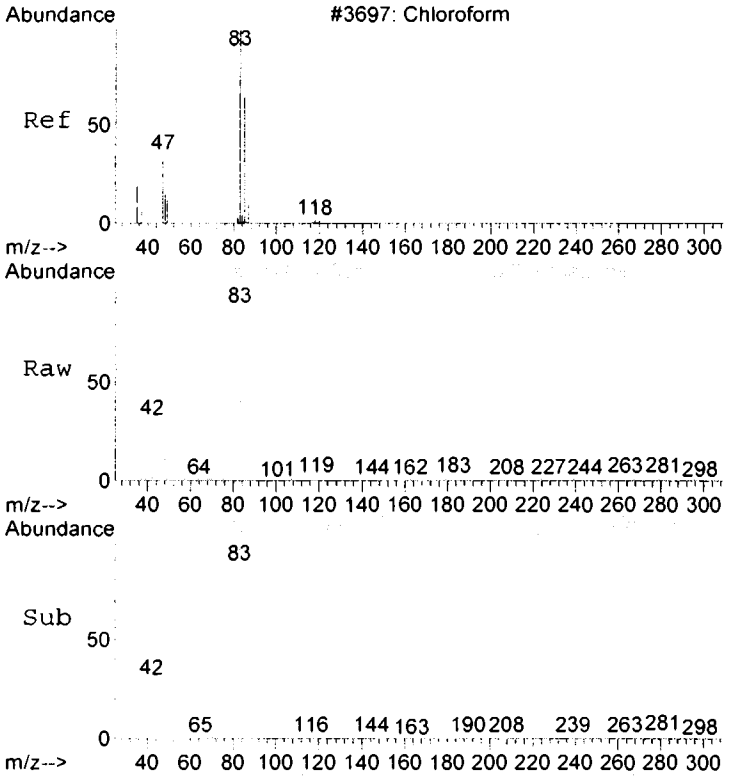


#15
Methylene Chloride
Concen: 2.77 ug/l
RT: 3.434 min Scan# 303
Delta R.T. -0.000 min
Lab File: 6M131903.D
Acq: 31 Aug 2020 14:15

Tgt Ion: 84 Resp: 8715

Ion	Ratio	Lower	Upper
84	100		
49	102.0	47.0	188.0
86	67.8	25.7	102.7

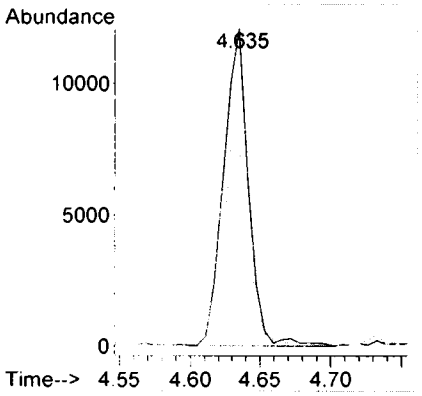




#36
Chloroform
Concen: 2.80 ug/l
RT: 4.635 min Scan# 500
Delta R.T. -0.000 min
Lab File: 6M131903.D
Acq: 31 Aug 2020 14:15

Tgt Ion: 83 Resp: 15099

Ion	Ratio	Lower	Upper
83	100		
85	63.1	23.6	103.6



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-006
Client Id: EB
Data File: 2M141372.D
Analysis Date: 08/28/20 14:39
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1 1,2-Trichloroethane	1.0	U	**67-66-3**	**Chloroform**	**1.0**	**1.5**
75-34-3	1 1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	**75-09-2**	**Methylene Chloride**	**1.0**	**5.9**
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

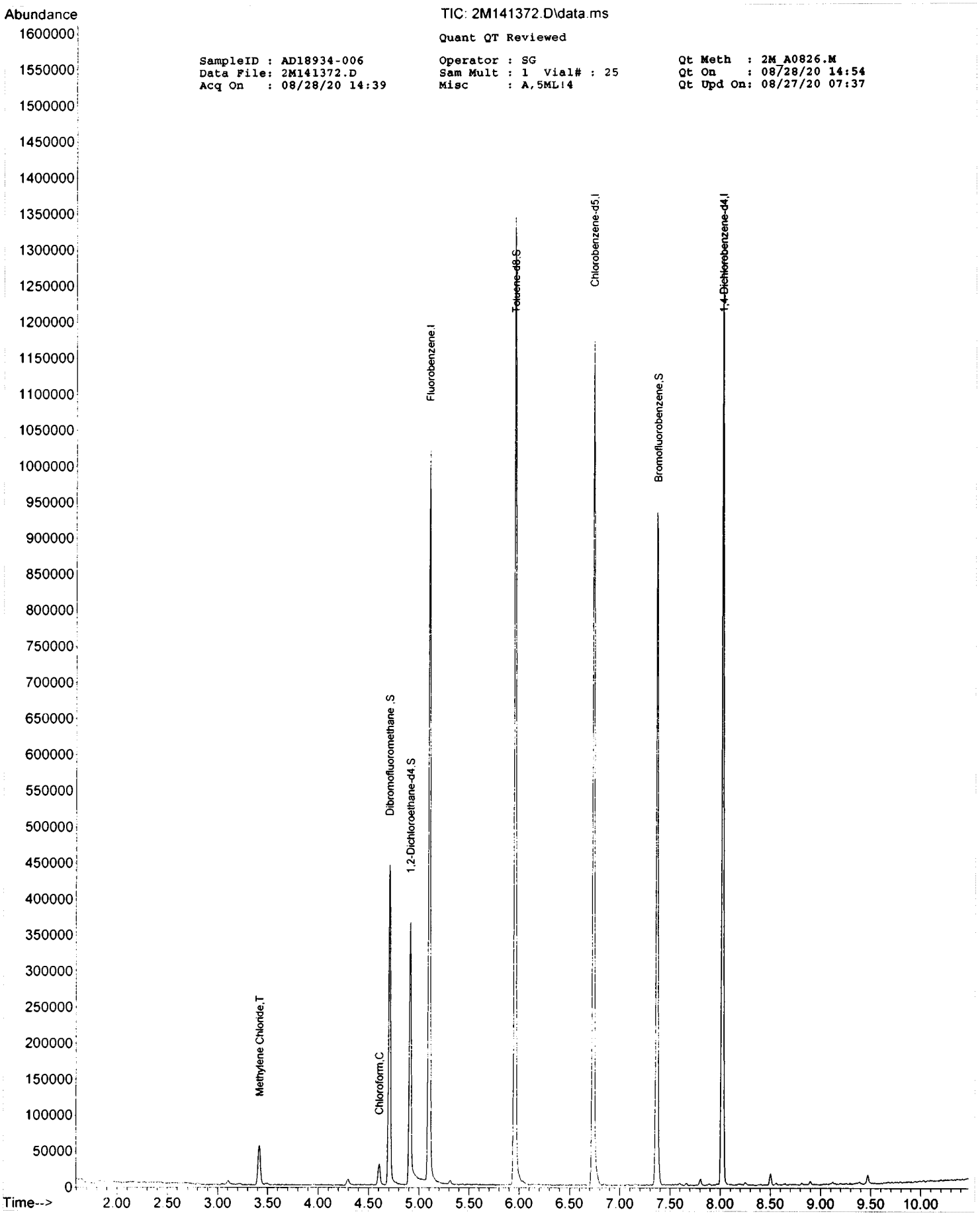
Quantitation Report (QT Reviewed)

SampleID : AD18934-006 Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141372.D Sam Mult : 1 Vial# : 25 Qt On : 08/28/20 14:54
Acq On : 08/28/20 14:39 Misc : A,5ML!4 Qt Upd On: 08/27/20 07:37

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-28-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	673701	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	550655	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	278179	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.703	111	187161	29.23	ug/l	0.00
Spiked Amount 30.000			Recovery =	97.43%		
39) 1,2-Dichloroethane-d4	4.910	67	85160	28.91	ug/l	0.00
Spiked Amount 30.000			Recovery =	96.37%		
66) Toluene-d8	5.952	98	692205	31.76	ug/l	0.00
Spiked Amount 30.000			Recovery =	105.87%		
76) Bromofluorobenzene	7.367	174	249353	33.11	ug/l	0.00
Spiked Amount 30.000			Recovery =	110.37%		
Target Compounds						Qvalue
15) Methylene Chloride	3.416	84	28862	5.9315	ug/l	81
36) Chloroform	4.605	83	13398	1.4988	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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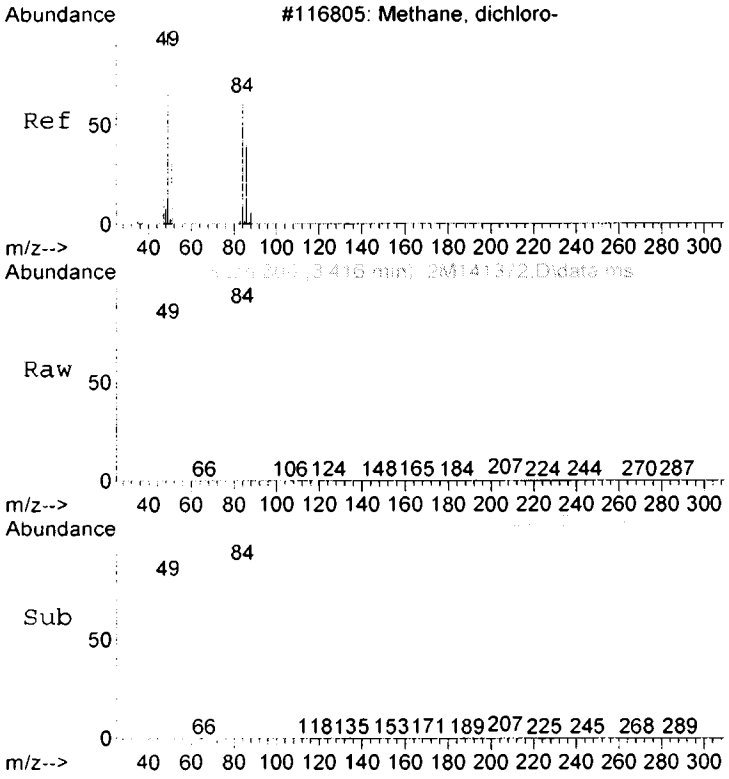
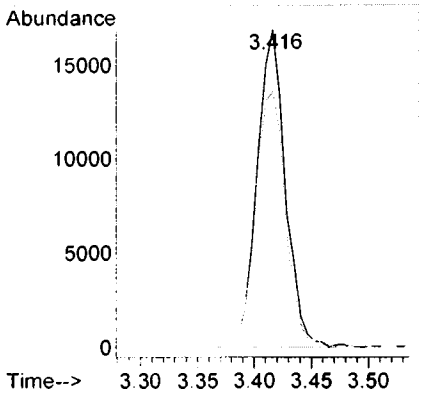
TIC: 2M141372.D\data.ms
Quant QT Reviewed
SampleID : AD18934-006
Data File: 2M141372.D
Acq On : 08/28/20 14:39
Operator : SG
Sam Mult : 1 Vial# : 25
Misc : A,5ML!4
Qt Meth : 2M_A0826.M
Qt On : 08/28/20 14:54
Qt Upd On: 08/27/20 07:37
Methylene Chloride,T
Chloroform,C
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

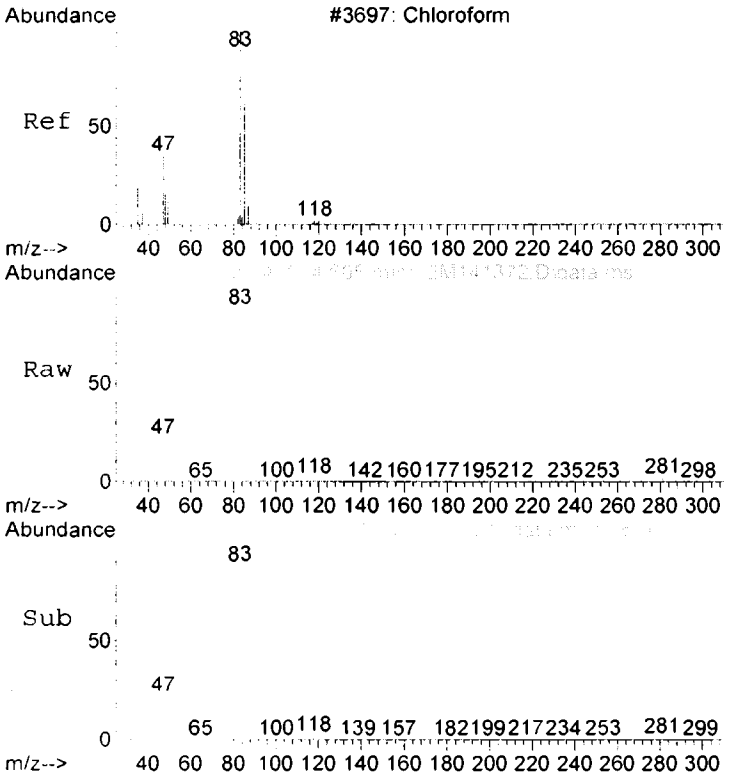


#15
Methylene Chloride
Concen: 5.93 ug/l
RT: 3.416 min Scan# 300
Delta R.T. 0.000 min
Lab File: 2M141372.D
Acq: 28 Aug 2020 14:39

Tgt Ion: 84 Resp: 28862

Ion	Ratio	Lower	Upper
84	100		
49	80.4	44.6	178.2
86	64.3	26.0	104.2

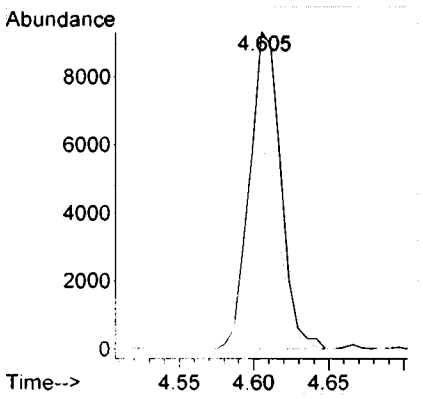




#36
Chloroform
Concen: 1.50 ug/l
RT: 4.605 min Scan# 495
Delta R.T. 0.000 min
Lab File: 2M141372.D
Acq: 28 Aug 2020 14:39

Tgt Ion: 83 Resp: 13398

Ion	Ratio	Lower	Upper
83	100		
85	64.3	24.6	104.6



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-007
Client Id: Trip Blank
Data File: 2M141373.D
Analysis Date: 08/28/20 14:59
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 565778

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

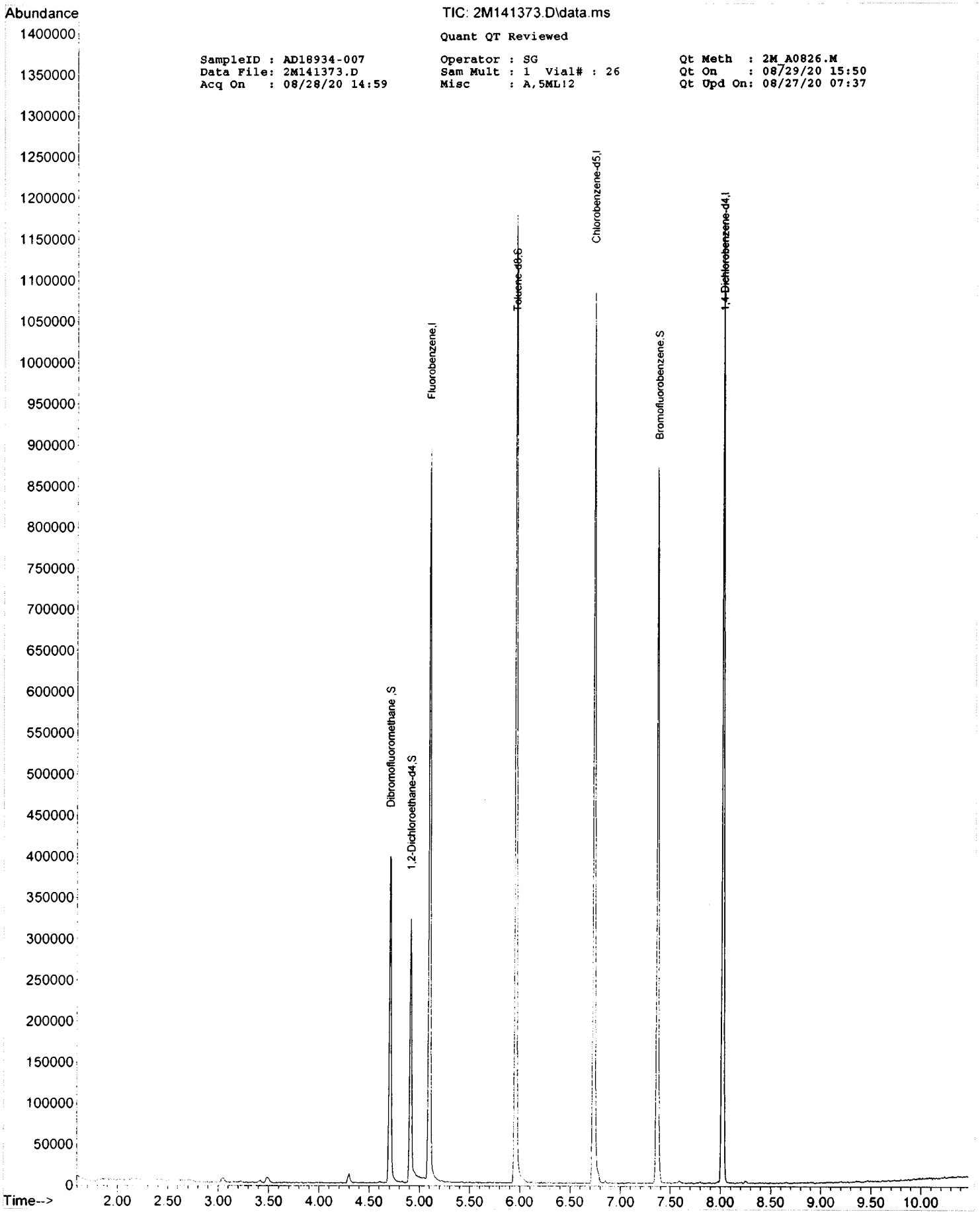
Quantitation Report (QT Reviewed)

SampleID : AD18934-007 Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141373.D Sam Mult : 1 Vial# : 26 Qt On : 08/29/20 15:50
Acq On : 08/28/20 14:59 Misc : A,5ML!2 Qt Upd On: 08/27/20 07:37

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-28-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	585506	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	499979	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	260128	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	168916	30.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.20%			
39) 1,2-Dichloroethane-d4	4.910	67	73446	28.69	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.63%			
66) Toluene-d8	5.952	98	610656	30.86	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.87%			
76) Bromofluorobenzene	7.367	174	228011	32.37	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.90%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M141373.D\data.ms
Quant QT Reviewed
SampleID : AD18934-007
Data File: 2M141373.D
Acq On : 08/28/20 14:59
Operator : SG
Sam Mult : 1 Vial# : 26
Misc : A,5ML!2
Qt Meth : 2M_A0826.M
Qt On : 08/29/20 15:50
Qt Upd On: 08/27/20 07:37
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18934-008
Client Id: FB
Data File: 2M141366.D
Analysis Date: 08/28/20 12:42
Date Rec/Extracted: 08/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 565778

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

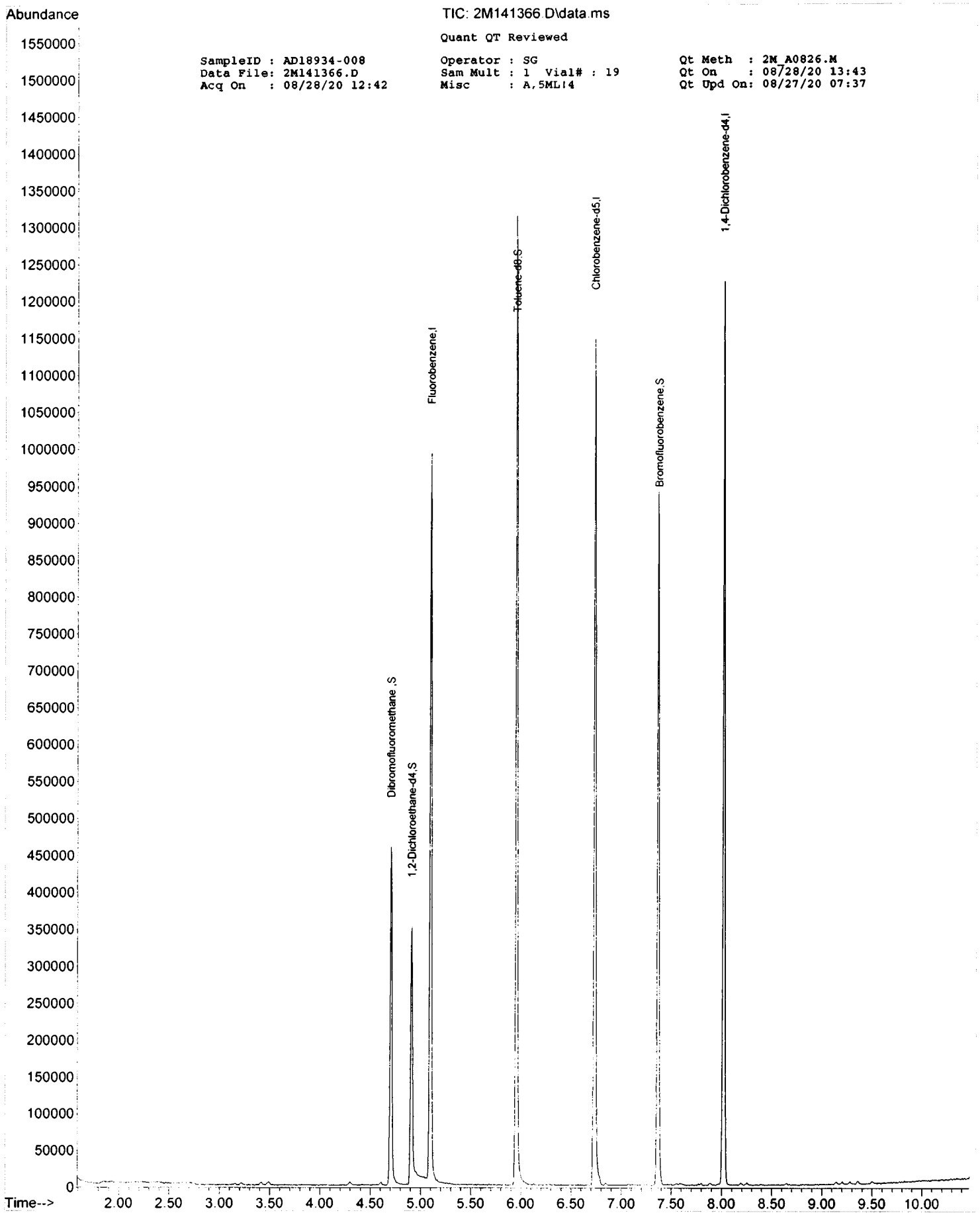
Quantitation Report (QT Reviewed)

Sample ID : AD18934-008 Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141366.D Sam Mult : 1 Vial# : 19 Qt On : 08/28/20 13:43
Acq On : 08/28/20 12:42 Misc : A,5ML!4 Qt Upd On: 08/27/20 07:37

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-28-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	654438	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	541560	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	272713	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.703	111	187190	30.10	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.33%		
39) 1,2-Dichloroethane-d4	4.910	67	81932	28.64	ug/l	0.00
Spiked Amount 30.000			Recovery =	95.47%		
66) Toluene-d8	5.952	98	649616	30.31	ug/l	0.00
Spiked Amount 30.000			Recovery =	101.03%		
76) Bromofluorobenzene	7.367	174	242205	32.80	ug/l	0.00
Spiked Amount 30.000			Recovery =	109.33%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M141366.D\data.ms
Quant QT Reviewed
SampleID : AD18934-008
Data File: 2M141366.D
Acq On : 08/28/20 12:42
Operator : SG
Sam Mult : 1 Vial# : 19
Misc : A,5ML!4
Qt Meth : 2M_A0826.M
Qt On : 08/28/20 13:43
Qt Upd On: 08/27/20 07:37
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

GC/MS Volatile Data
Standards Data

0082707 0118

Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M130907.D	CAL @ 20 PPB	08/01/20 14:13	2	6M130906.D	CAL @ 5 PPB	08/01/20 13:52
3	6M130905.D	CAL @ 2 PPB	08/01/20 13:32	4	6M130908.D	CAL @ 50 PPB	08/01/20 14:34
5	6M130909.D	CAL @ 100 PPB	08/01/20 14:54	6	6M130911.D	CAL @ 250 PPB	08/01/20 15:36
7	6M130913.D	CAL @ 500 PPB	08/01/20 16:17	8	6M130904.D	CAL @ 1 PPB	08/01/20 13:11
9	6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.3242	0.3766	0.3696	0.3486	0.2749	0.2732	0.2410	-----	-----	0.315	1.65	0.995	0.999	17	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dichlorodifluorometha	1	0	Avg	0.2181	0.2387	0.2337	0.2248	0.1825	0.1780	0.1623	-----	-----	0.205	1.64	0.997	1.00	15	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloromethane	1	0	Qua	0.3039	0.3449	0.3821	0.3138	0.2351	0.2269	0.1945	-----	-----	0.286	1.81	0.993	0.999	24	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromomethane	1	0	Avg	0.1809	0.2145	0.2351	0.1978	0.1570	0.1692	0.1689	-----	-----	0.189	2.23	0.999	0.999	15	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Chloride	1	0	Avg	0.3041	0.3528	0.3432	0.3247	0.2577	0.2580	0.2226	-----	-----	0.295	1.92	0.994	0.999	17	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroethane	1	0	Avg	0.2054	0.2373	0.2413	0.2180	0.1754	0.1741	0.1521	-----	-----	0.201	2.32	0.995	0.999	17	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichlorofluoromethan	1	0	Avg	0.4975	0.5513	0.5623	0.5308	0.4347	0.4376	0.3824	-----	-----	0.485	2.56	0.995	0.999	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl ether	1	0	Avg	0.1791	0.1884	0.2074	0.1831	0.1704	0.1672	0.1542	-----	-----	0.179	2.81	0.998	1.00	9.5	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Furan	1	0	Avg	0.4160	0.4753	0.4342	0.4353	0.3687	0.3632	0.3190	-----	-----	0.402	2.84	0.995	1.00	13	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1877	0.2097	0.2168	0.1972	0.1669	0.1668	0.1470	-----	-----	0.185	3.01	0.996	1.00	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methylene Chloride	1	0	Avg	0.2634	0.2964	0.3739	0.2832	0.2412	0.2330	0.2082	-----	-----	0.271	3.43	0.996	1.00	20	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acrolein	1	0	Avg	0.0358	0.0333	0.0349	0.0362	0.0361	0.0354	0.0332	-----	-----	0.0350	2.92	0.999	1.00	3.6		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Acrylonitrile	1	0	Avg	0.1111	0.1181	0.1223	0.1092	0.0967	0.0957	0.0891	-----	-----	0.106	3.64	0.999	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iodomethane	1	0	Qua	0.1647	0.1243	0.1405	0.2321	0.2322	0.2466	0.2599	-----	-----	0.200	3.17	0.999	1.00	28		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acetone	1	0	Avg	0.1057	0.1116	0.1275	0.1053	0.0914	0.0888	0.0818	-----	-----	0.102	3.06	0.998	1.00	15	0.10 a	100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Carbon Disulfide	1	0	Avg	0.6817	0.7408	0.7938	0.7350	0.6089	0.6217	0.5554	-----	-----	0.677	3.23	0.997	0.999	13	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butyl Alcohol	1	0	Avg	0.0520	0.0491	0.0522	0.0533	0.0466	0.0468	0.0450	-----	-----	0.0493	3.51	0.999	1.00	6.6		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
n-Hexane	1	0	Avg	0.2730	0.2774	0.2687	0.3058	0.2514	0.2497	0.2193	-----	-----	0.264	3.91	0.995	0.999	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Di-isopropyl-ether	1	0	Avg	0.6172	0.6209	0.6923	0.6771	0.6140	0.6071	0.5681	-----	-----	0.628	4.06	0.999	1.00	6.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1-Dichloroethene	1	0	Avg	0.3631	0.3650	0.3598	0.3828	0.3109	0.3145	0.2826	-----	-----	0.340	3.02	0.997	0.999	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl Acetate	1	0	Avg	0.2296	0.2172	0.2345	0.2212	0.1951	0.1905	0.1798	-----	-----	0.210	3.34	0.999	1.00	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl-t-butyl ether	1	0	Avg	0.5441	0.5269	0.5497	0.5497	0.5258	0.5118	0.4857	0.6095	-----	0.538	3.67	0.999	1.00	6.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethane	1	0	Avg	0.4524	0.4817	0.4543	0.4897	0.4207	0.4154	0.3666	-----	-----	0.440	4.03	0.996	1.00	9.7	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,2-Dichloroethe	1	0	Avg	0.2771	0.2919	0.2503	0.2893	0.2345	0.2378	0.2097	-----	-----	0.256	3.68	0.996	0.999	12	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl-t-butyl ether	1	0	Avg	0.6879	0.6910	0.7240	0.7260	0.6762	0.6746	0.6340	-----	-----	0.688	4.32	0.999	1.00	4.6	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,2-Dichloroethene	1	0	Avg	0.4552	0.4622	0.4795	0.4939	0.4227	0.4185	0.3835	-----	-----	0.445	4.44	0.998	1.00	8.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromochloromethane	1	0	Avg	0.2197	0.2330	0.2181	0.2191	0.1940	0.1829	0.1666	-----	-----	0.205	4.59	0.997	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2,2-Dichloropropane	1	0	Avg	0.3659	0.3861	0.3672	0.4074	0.3327	0.3418	0.3095	-----	-----	0.359	4.45	0.997	0.999	9.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl acetate	1	0	Avg	0.3062	0.3178	0.3838	0.3336	0.3021	0.2881	0.2736	-----	-----	0.315	4.46	0.999	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dioxane	1	0	Avg	0.0058	0.0051	0.0064	0.0058	0.0051	0.0054	0.0049	-----	-----	0.00553	5.52	0.998	1.00	9.3		1000.	250.0	100.0	2500.	5000.	12500	25000		
1,1-Dichloropropene	1	0	Avg	0.3662	0.3927	0.3913	0.4002	0.3336	0.3302	0.2997	-----	-----	0.359	4.85	0.997	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroform	1	0	Avg	0.4886	0.5029	0.4794	0.5092	0.4406	0.4384	0.3926	-----	-----	0.465	4.64	0.997	1.00	9.1	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromofluoromethan	1	0	Avg	0.2654	0.2692	0.2716	0.2701	0.2644	0.2586	0.2612	0.2768	0.2618	0.267	4.73	-1	-1	2.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.3863	0.3848	0.3951	0.4084	0.3448	0.3457	0.3093	-----	-----	0.368	4.80	0.997	1.00	9.6	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichloroethane-d4	1	0	Avg	0.1444	0.1461	0.1472	0.1512	0.1397	0.1348	0.1341	0.1492	0.1468	0.144	4.93	-1	-1	4.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3539	0.3790	0.3721	0.3639	0.3333	0.3213	0.3070	-----	-----	0.347	4.98	0.999	1.00	7.8	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Butanone	1	0	Avg	0.1524	0.1380	0.1574	0.1565	0.1473	0.1471	0.1433	-----	-----	0.149	4.43	1.00	1.00	4.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,1-Trichloroethane	1	0	Avg	0.4225	0.4503	0.4378	0.4587	0.3901	0.3949	0.3565	-----	-----	0.416	4.76	0.997	1.00	8.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Carbon Tetrachloride	1	0	Avg	0.3596	0.3680	0.3514	0.4003	0.3368	0.3523	0.3172	-----	-----	0.355	4.86	0.997	0.999	7.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Acetate	1	0	Avg	0.7402	0.7749	0.7104	0.7905	0.7601	0.7527	0.7183	-----	-----	0.750	4.05	0.999	1.00	3.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromodichloromethan	1	0	Avg	0.3293	0.3098	0.3224	0.3483	0.3290	0.3283	0.3129	-----	-----	0.326	5.60	0.999	1.00	3.9	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.17

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M130907.D	CAL @ 20 PPB	08/01/20 14:13	2	6M130906.D	CAL @ 5 PPB	08/01/20 13:52
3	6M130905.D	CAL @ 2 PPB	08/01/20 13:32	4	6M130908.D	CAL @ 50 PPB	08/01/20 14:34
5	6M130909.D	CAL @ 100 PPB	08/01/20 14:54	6	6M130911.D	CAL @ 250 PPB	08/01/20 15:36
7	6M130913.D	CAL @ 500 PPB	08/01/20 16:17	8	6M130904.D	CAL @ 1 PPB	08/01/20 13:11
9	6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.3627	0.4137	0.4004	0.4215	0.3570	0.3594	0.3249	-----	-----	0.377	5.45	0.997	1.00	9.4	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromomethane	1	0	Avg	0.1687	0.1700	0.1803	0.1759	0.1694	0.1629	0.1594	-----	-----	0.170	5.53	1.00	1.00	4.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichloropropane	1	0	Avg	0.2580	0.2704	0.2913	0.2775	0.2467	0.2412	0.2261	-----	-----	0.259	5.46	0.999	1.00	8.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichloroethene	1	0	Avg	0.2951	0.3150	0.3303	0.3244	0.2707	0.2719	0.2454	-----	-----	0.293	5.33	0.997	1.00	11	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Benzene	1	0	Avg	1.0575	1.1184	1.1183	1.1238	0.9451	0.9413	0.8289	0.9677	-----	1.01	4.98	0.996	1.00	11	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
tert-Amyl methyl ether	1	0	Avg	0.5832	0.6371	0.5915	0.6130	0.5853	0.5828	0.5504	-----	-----	0.592	5.02	0.999	1.00	4.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iso-propylacetate	1	0	Avg	0.5311	0.4961	0.5080	0.5336	0.5416	0.5296	0.5171	-----	-----	0.522	4.98	1.00	1.00	3.1	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl methacrylate	1	0	Avg	0.2673	0.2618	0.2320	0.2661	0.2667	0.2615	0.2311	-----	-----	0.255	5.48	0.996	1.00	6.4	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromochloromethan	1	0	Avg	0.2800	0.2445	0.2470	0.2892	0.3050	0.3043	0.3006	-----	-----	0.282	6.45	1.00	1.00	9.2	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chloroethylvinylethe	1	0	Avg	0.0776	0.0757	0.0963	0.0795	0.0771	0.0749	0.0744	-----	-----	0.0794	5.73	1.00	1.00	9.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,3-Dichloropropen	1	0	Avg	0.4359	0.4419	0.4185	0.4810	0.4596	0.4608	0.4319	-----	-----	0.447	5.83	0.999	1.00	4.7	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,3-Dichloroprop	1	0	Avg	0.3907	0.3619	0.3471	0.4109	0.4138	0.4154	0.3997	-----	-----	0.391	6.12	1.00	1.00	6.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl methacrylate	1	0	Avg	0.2547	0.2517	0.2586	0.2542	0.2549	0.2499	0.2490	-----	-----	0.253	6.14	1.00	1.00	1.3	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloroethane	1	0	Avg	0.2652	0.2614	0.2671	0.2643	0.2569	0.2494	0.2383	-----	-----	0.258	6.22	0.999	1.00	4.0	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromoethane	1	0	Avg	0.2662	0.2400	0.2701	0.2841	0.2789	0.2673	0.2570	0.2749	-----	0.267	6.53	0.999	1.00	5.2	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.4699	0.4626	0.4806	0.4712	0.4484	0.4353	0.4219	-----	-----	0.456	6.32	1.00	1.00	4.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Methyl-2-Pentanone	1	0	Avg	0.3436	0.3517	0.4208	0.3380	0.3387	0.3326	0.3239	-----	-----	0.350	5.90	1.00	1.00	9.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Hexanone	1	0	Avg	0.2619	0.2833	0.3365	0.2716	0.2648	0.2576	0.2538	-----	-----	0.276	6.33	1.00	1.00	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Tetrachloroethene	1	0	Avg	0.2857	0.3011	0.2675	0.3048	0.2708	0.2651	0.2503	-----	-----	0.278	6.32	0.999	1.00	7.2	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Toluene-d8	1	0	Avg	1.2292	1.2646	1.2327	1.2146	1.2462	1.2572	1.2415	1.2297	1.2250	1.24	5.98	-1	-1	1.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.8244	0.8979	0.8864	0.8420	0.7512	0.7357	0.6785	0.8725	-----	0.811	6.02	0.998	1.00	9.9	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2781	0.2929	0.2887	0.2970	0.2921	0.2946	0.2849	-----	-----	0.290	6.81	1.00	1.00	2.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chlorobenzene	1	0	Avg	0.9025	0.9069	1.0477	0.9388	0.8438	0.8162	0.7483	-----	-----	0.886	6.78	0.998	1.00	11	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Butyl acrylate	1	0	Avg	0.8717	0.8120	0.9465	0.8808	0.8809	0.6395	0.9670	-----	-----	0.857	7.02	0.972	0.993	13	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Amyl acetate	1	0	Avg	0.8056	0.8074	0.9907	0.8273	0.8238	0.6002	0.8169	-----	-----	0.810	7.14	0.982	0.993	14	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromoform	1	0	Qua	0.3481	0.2725	0.2796	0.3608	0.3695	0.2812	0.4845	-----	-----	0.342	7.23	0.958	0.993	22	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethylbenzene	1	0	Avg	0.7583	0.7104	0.7448	0.7496	0.6512	0.4819	0.5397	0.6651	-----	0.663	6.82	0.994	0.994	15	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.6681	0.6039	0.6618	0.6727	0.6455	0.4629	0.7579	-----	-----	0.639	7.45	0.963	0.992	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromofluorobenzene	1	0	Avg	0.8262	0.7768	0.7943	0.8047	0.7807	0.5882	0.9826	0.7831	0.7704	0.790	7.40	-1	-1	13		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.7406	1.6391	1.8008	1.7771	1.6199	1.1577	1.7402	-----	-----	1.64	7.10	0.971	0.992	14	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
m&p-Xylenes	1	0	Avg	1.1026	1.0390	1.0764	1.1126	0.9605	0.6838	0.8126	1.0673	1.0909	0.994	6.88	0.991	0.992	15	0.10	40.00	10.00	4.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	1.0546	1.0286	1.0198	1.0630	0.9245	0.6814	1.0385	1.0303	-----	0.980	7.10	0.971	0.992	13	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.3183	0.2869	0.3284	0.3315	0.3173	0.2377	0.3554	-----	-----	0.311	7.47	0.973	0.993	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3-Dichlorobenzene	1	0	Avg	1.3539	1.3149	1.3399	1.3406	1.2277	1.1154	0.8935	-----	-----	1.23	8.02	0.985	1.00	14	0.60	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dichlorobenzene	1	0	Avg	1.3562	1.2893	1.3347	1.3502	1.2004	1.1148	1.2116	-----	-----	1.27	8.07	0.998	0.999	7.3	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichlorobenzene	1	0	Avg	1.2632	1.1702	1.2919	1.2264	1.1316	1.0451	0.8904	-----	-----	1.15	8.29	0.992	1.00	12	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Isopropylbenzene	1	0	Avg	2.8283	2.7057	2.6028	2.8658	2.4675	1.7756	2.3961	2.7365	-----	2.55	7.29	0.982	0.992	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Avg	0.0364	0.0407	0.0421	0.0347	0.0307	0.0238	0.0374	-----	-----	0.0352	7.37	0.967	0.994	18		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Camphene	1	0	Avg	0.9815	0.9204	0.9144	1.0342	0.9031	0.6618	1.0731	-----	-----	0.927	7.47	0.963	0.992	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichloropropane	1	0	Avg	0.8311	0.7429	0.8871	0.8547	0.8368	0.6162	1.0008	-----	-----	0.824	7.48	0.964	0.992	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chlorotoluene	1	0	Avg	1.7343	1.7104	1.6176	1.7691	1.4984	1.1491	1.2078	-----	-----	1.53	7.59	0.995	0.995	17		20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.17
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M130907.D	CAL @ 20 PPB	08/01/20 14:13	2	6M130906.D	CAL @ 5 PPB	08/01/20 13:52
3	6M130905.D	CAL @ 2 PPB	08/01/20 13:32	4	6M130908.D	CAL @ 50 PPB	08/01/20 14:34
5	6M130909.D	CAL @ 100 PPB	08/01/20 14:54	6	6M130911.D	CAL @ 250 PPB	08/01/20 15:36
7	6M130913.D	CAL @ 500 PPB	08/01/20 16:17	8	6M130904.D	CAL @ 1 PPB	08/01/20 13:11
9	6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.9956	2.9458	2.4822	3.0340	2.6456	1.9674	2.2278	-----	-----	2.61	7.58	0.993	0.994	16		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Chlorotoluene	1	0	Avg	1.5729	1.5218	1.6109	1.6736	1.5502	1.3150	1.2372	-----	-----	1.50	7.65	0.997	0.999	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Propylbenzene	1	0	Avg	3.3894	3.2596	3.1553	3.4264	2.9464	2.1450	2.5093	3.0701	-----	2.99	7.53	0.991	0.993	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.6614	1.6731	1.5856	1.6780	1.5225	1.1020	1.7438	-----	-----	1.57	7.50	0.966	0.992	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3,5-Trimethylbenzen	1	0	Avg	1.9399	1.7872	2.2533	2.0330	1.8000	1.4687	1.5255	1.8343	-----	1.83	7.61	0.997	0.998	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	Qua	0.7160	0.7673	0.9715	0.7526	0.7082	0.5933	0.4857	-----	-----	0.714	7.61	0.985	1.00	21	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butylbenzene	1	0	Avg	2.2902	2.1506	2.1850	2.3903	2.0781	1.7941	1.4738	2.2964	-----	2.08	7.81	0.986	1.00	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Avg	2.2405	2.1697	2.2022	2.3099	2.0717	1.8591	1.2418	2.4344	-----	2.07	7.83	0.947	1.00	18		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	2.9235	2.8882	2.9996	3.1139	2.7230	2.4227	1.5196	2.6104	-----	2.65	7.93	0.928	0.999	19		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	2.4648	2.4179	2.3575	2.6286	2.3029	2.1137	1.2793	2.2205	-----	2.22	8.00	0.918	0.999	19		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	2.7542	2.6145	2.6688	2.9447	2.6177	2.4359	1.4395	2.7992	-----	2.53	8.24	0.910	0.998	18		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	1.4215	1.2987	1.4488	1.5173	1.3414	1.2496	0.9511	-----	-----	1.32	8.22	0.977	1.00	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4,5-Tetramethylbe	1	0	Avg	2.0569	1.9763	1.8620	2.2325	2.0312	1.5781	1.3085	-----	-----	1.86	8.68	0.983	0.998	17		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromo-3-Chloro	1	0	Avg	0.1759	0.1613	0.1976	0.1835	0.1725	0.1439	0.1495	-----	-----	0.169	8.74	0.998	0.998	11	0.05	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Camphor	1	0	Qua	0.1089	0.1137	0.1664	0.1048	0.0953	0.0717	0.1169	-----	-----	0.111	9.18	0.963	0.993	26		200.0	50.00	20.00	500.0	1000.	2500.	5000.		
Hexachlorobutadiene	1	0	Avg	0.4664	0.4663	0.4676	0.5144	0.4447	0.3336	0.5307	-----	-----	0.461	9.32	0.965	0.992	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4-Trichlorobenzen	1	0	Avg	0.8615	0.8585	0.9148	0.8672	0.8060	0.5757	0.9312	-----	-----	0.831	9.24	0.964	0.991	14	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichlorobenzen	1	0	Avg	0.7435	0.7439	0.8641	0.7774	0.7497	0.5255	0.8879	-----	-----	0.756	9.54	0.959	0.991	16		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Naphthalene	1	0	Avg	2.1328	2.0494	2.3504	2.0685	1.9919	1.4412	2.2041	2.3993	-----	2.08	9.40	0.971	0.992	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.17

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130907.D Sam Mult : 1 Vial# : 8 Qt On : 08/01/20 15:34
Acq On : 08/01/20 14:13 Misc : S,5G Qt Upd On: 08/01/20 15:33

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	391232	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	322837	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.055	152	175394	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	103838	29.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.30%			
39) 1,2-Dichloroethane-d4	4.934	67	56519	29.25	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.50%			
66) Toluene-d8	5.983	98	396832	29.90	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.67%			
76) Bromofluorobenzene	7.397	174	144919	31.54	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.13%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	84558	17.7661	ug/l	96
6) Dichlorodifluoromethane	1.636	85	56901	18.7722	ug/l	93
7) Chloromethane	1.813	50	79283	17.5213	ug/l	95
8) Bromomethane	2.233	94	47193	17.0583	ug/l	95
9) Vinyl Chloride	1.916	62	79323	17.8747	ug/l	98
10) Chloroethane	2.319	64	53595	17.6959	ug/l	97
11) Trichlorofluoromethane	2.556	101	129761	18.1514	ug/l	96
12) Ethyl ether	2.806	59	46724	18.5600	ug/l	99
13) Furan	2.843	39	108525	18.5616	ug/l	99
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	48955	18.0515	ug/l	96
15) Methylene Chloride	3.434	84	68717	16.5767	ug/l	98
16) Acrolein	2.922	56	46711	102.8732	ug/l	96
17) Acrylonitrile	3.642	53	28976	19.0572	ug/l	98
18) Iodomethane	3.166	142	42958	20.2068	ug/l	97
19) Acetone	3.056	43	137928	92.0988	ug/l	92
20) Carbon Disulfide	3.233	76	177825	18.0230	ug/l	100
21) t-Butyl Alcohol	3.508	59	67875	100.9541	ug/l	90
22) n-Hexane	3.910	57	71226	19.1190	ug/l	96
23) Di-isopropyl-ether	4.062	45	160985	18.6061	ug/l	95
24) 1,1-Dichloroethene	3.020	61	94725	19.6713	ug/l	98
25) Methyl Acetate	3.337	43	59896	20.4704	ug/l	100
26) Methyl-t-butyl ether	3.672	73	141918	19.4677	ug/l	98
27) 1,1-Dichloroethane	4.032	63	117998	19.0378	ug/l	96
28) trans-1,2-Dichloroethene	3.678	96	72289	19.9972	ug/l	94
29) Ethyl-t-butyl ether	4.324	59	179437	19.2789	ug/l	98
30) cis-1,2-Dichloroethene	4.440	61	118749	19.0268	ug/l	93
31) Bromochloromethane	4.593	49	57312	19.6714	ug/l	96
32) 2,2-Dichloropropane	4.446	77	95435	18.9123	ug/l	98
33) Ethyl acetate	4.465	43	79863	17.7447	ug/l	99
34) 1,4-Dioxane	5.519	88	76235	1008.9834	ug/l	91
35) 1,1-Dichloropropene	4.855	75	95518	18.5519	ug/l	99
36) Chloroform	4.635	83	127440	19.6540	ug/l	95
38) Cyclohexane	4.806	56	100760	19.5038	ug/l	98
40) 1,2-Dichloroethane	4.977	62	92329	19.0471	ug/l	99
41) 2-Butanone	4.440	43	39753	20.2319	ug/l	87
42) 1,1,1-Trichloroethane	4.763	97	110211	18.8215	ug/l	94
43) Carbon Tetrachloride	4.861	117	93792	19.2681	ug/l	98
44) Vinyl Acetate	4.050	43	193064	19.5138	ug/l	100
45) Bromodichloromethane	5.593	83	85912	20.1548	ug/l	94
46) Methylcyclohexane	5.446	83	94599	17.6108	ug/l	94
47) Dibromomethane	5.525	174	44017	19.2374	ug/l	94
48) 1,2-Dichloropropane	5.458	63	67307	18.4460	ug/l	100
49) Trichloroethene	5.330	130	76976	18.2584	ug/l	95
50) Benzene	4.977	78	275833	19.5467	ug/l	100
51) tert-Amyl methyl ether	5.019	73	152132	19.0020	ug/l	98
53) Iso-propylacetate	4.977	43	114307	20.7224	ug/l	100
54) Methyl methacrylate	5.483	41	57546	21.1076	ug/l	94
55) Dibromochloromethane	6.446	129	60268	21.5178	ug/l	84
56) 2-Chloroethylvinylether	5.733	63	16721	18.5311	ug/l	88
57) cis-1,3-Dichloropropene	5.830	75	93817	19.4965	ug/l	92
58) trans-1,3-Dichloropropene	6.117	75	84092	20.9293	ug/l	96
59) Ethyl methacrylate	6.135	41	54829	19.9897	ug/l	95
60) 1,1,2-Trichloroethane	6.220	97	57081	20.0678	ug/l	98
61) 1,2-Dibromoethane	6.525	107	57308	19.9204	ug/l	95
62) 1,3-Dichloropropane	6.318	76	101146	19.9333	ug/l	89
63) 4-Methyl-2-Pentanone	5.897	43	73965	18.5655	ug/l	99
64) 2-Hexanone	6.330	43	56370	17.6270	ug/l	98
65) Tetrachloroethene	6.324	164	61501	19.6257	ug/l	90
67) Toluene	6.019	92	177449	18.8502	ug/l	98

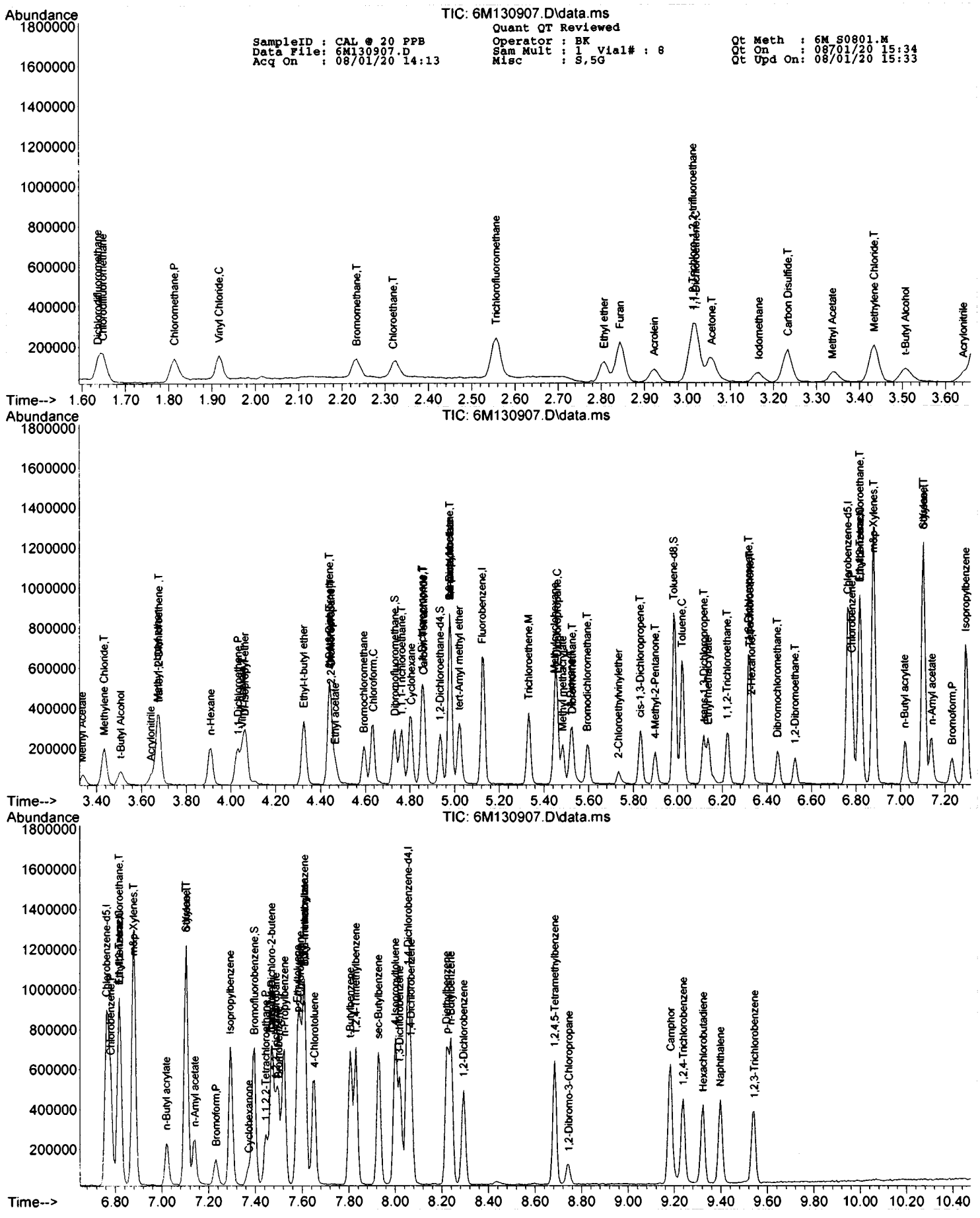
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130907.D Sam Mult : 1 Vial# : 8 Qt On : 08/01/20 15:34
Acq On : 08/01/20 14:13 Misc : S,5G Qt Upd On: 08/01/20 15:33

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.818	133	59870	18.9945	ug/l	88
69)	Chlorobenzene	6.781	112	194254	18.7150	ug/l	98
71)	n-Butyl acrylate	7.019	55	101934	19.8170	ug/l	99
72)	n-Amyl acetate	7.141	43	94198	19.3667	ug/l	99
73)	Bromoform	7.232	173	40708	22.8783	ug/l	95
74)	Ethylbenzene	6.818	106	88670	21.1374	ug/l	96
75)	1,1,2,2-Tetrachloroethane	7.446	83	78122	20.6788	ug/l	97
77)	Styrene	7.104	104	203535	20.0188	ug/l	99
78)	m&p-Xylenes	6.879	106	257871	40.9426	ug/l	95
79)	o-Xylene	7.104	106	123316	20.3700	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.470	53	37221	20.1680	ug/l	92
81)	1,3-Dichlorobenzene	8.019	146	158315	20.3315	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	158582	20.4745	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	147705	20.5475	ug/l	98
84)	Isopropylbenzene	7.293	105	330713	20.7374	ug/l	99
85)	Cyclohexanone	7.373	55	21285	93.2209	ug/l	95
86)	Camphene	7.470	93	114775	20.5267	ug/l	98
87)	1,2,3-Trichloropropane	7.489	75	97186	20.0697	ug/l	96
88)	2-Chlorotoluene	7.592	91	202790	20.4144	ug/l	98
89)	p-Ethyltoluene	7.580	105	350282	21.2404	ug/l	99
90)	4-Chlorotoluene	7.653	91	183924	19.6356	ug/l	99
91)	n-Propylbenzene	7.525	91	396325	21.0009	ug/l	100
92)	Bromobenzene	7.501	77	194274	20.1927	ug/l	99
93)	1,3,5-Trimethylbenzene	7.610	105	226831	19.6248	ug/l	98
94)	Butyl methacrylate	7.610	41	83727	18.2741	ug/l	94
95)	t-Butylbenzene	7.806	119	267791	20.3067	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	261988	19.6620	ug/l	99
97)	sec-Butylbenzene	7.927	105	341850	19.7027	ug/l	99
98)	4-Isopropyltoluene	8.001	119	288211	20.4877	ug/l	98
99)	n-Butylbenzene	8.238	91	322053	19.9811	ug/l	100
100)	p-Diethylbenzene	8.220	119	166225	19.9995	ug/l	100
101)	1,2,4,5-Tetramethylben...	8.683	119	240512	20.3289	ug/l	97
102)	1,2-Dibromo-3-Chloropr...	8.744	157	20569	19.4549	ug/l	98
103)	Camphor	9.183	95	127332	187.3083	ug/l	98
104)	Hexachlorobutadiene	9.324	225	54540	19.3222	ug/l	99
105)	1,2,4-Trichlorobenzene	9.238	180	100742	19.5756	ug/l	97
106)	1,2,3-Trichlorobenzene	9.543	180	86945	18.7025	ug/l	96
107)	Naphthalene	9.397	128	249397	19.2416	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 6M130907.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 6M130907.D
Acq On : 08/01/20 14:13
Operator : BK
Sam Mult : 1 Vial# : 8
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:34
Qt Upd On: 08/01/20 15:33
Abundance
Time-->
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Chlorobenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
p-Diethylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene

Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB
Data File: 6M130906.D
Acq On : 08/01/20 13:52

Operator : BK
Sam Mult : 1 Vial# : 7
Misc : S,5G

Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:33
Qt Upd On: 08/01/20 15:33

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	368139	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	310453	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	178697	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	99130	29.90	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.67%			
39) 1,2-Dichloroethane-d4	4.934	67	53818	29.51	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.37%			
66) Toluene-d8	5.983	98	392605	30.96	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.20%			
76) Bromofluorobenzene	7.397	174	138818	29.57	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.57%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	23110	5.2441	ug/l	99
6) Dichlorodifluoromethane	1.636	85	14650	5.2074	ug/l	94
7) Chloromethane	1.813	50	21164	4.9560	ug/l	100
8) Bromomethane	2.233	94	13164	4.6016	ug/l	99
9) Vinyl Chloride	1.916	62	21651	5.2826	ug/l	97
10) Chloroethane	2.325	64	14564	5.1674	ug/l	90
11) Trichlorofluoromethane	2.557	101	33830	5.0438	ug/l	93
12) Ethyl ether	2.806	59	11565	4.8252	ug/l	94
13) Furan	2.843	39	29165	5.4657	ug/l	96
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	12868	5.0641	ug/l	95
15) Methylene Chloride	3.434	84	18187	4.5103	ug/l	92
16) Acrolein	2.922	56	10217	23.4038	ug/l	84
17) Acrylonitrile	3.642	53	7250	5.1017	ug/l	84
18) Iodomethane	3.160	142	7630	4.2899	ug/l	90
19) Acetone	3.056	43	34247	23.9678	ug/l	95
20) Carbon Disulfide	3.233	76	45458	4.8460	ug/l	100
21) t-Butyl Alcohol	3.508	59	15065	23.2601	ug/l	97
22) n-Hexane	3.910	57	17022	5.1162	ug/l	82
23) Di-isopropyl-ether	4.062	45	38096	4.5338	ug/l	100
24) 1,1-Dichloroethene	3.020	61	22395	4.9142	ug/l	95
25) Methyl Acetate	3.343	43	13329	4.7655	ug/l	100
26) Methyl-t-butyl ether	3.672	73	32329	4.6244	ug/l	94
27) 1,1-Dichloroethane	4.032	63	29557	5.1025	ug/l	93
28) trans-1,2-Dichloroethene	3.678	96	17911	5.4091	ug/l	90
29) Ethyl-t-butyl ether	4.324	59	42399	4.7655	ug/l	98
30) cis-1,2-Dichloroethene	4.440	61	28363	4.7487	ug/l	96
31) Bromochloromethane	4.593	49	14296	5.3291	ug/l	98
32) 2,2-Dichloropropane	4.446	77	23694	4.9850	ug/l	93
33) Ethyl acetate	4.465	43	19504	4.4306	ug/l	92
34) 1,4-Dioxane	5.519	88	15873	211.9264	ug/l	89
35) 1,1-Dichloropropene	4.855	75	24100	4.9617	ug/l	96
36) Chloroform	4.635	83	30856	5.0862	ug/l	88
38) Cyclohexane	4.800	56	23614	4.7894	ug/l	94
40) 1,2-Dichloroethane	4.983	62	23255	5.1490	ug/l	94
41) 2-Butanone	4.440	43	8467	4.3947	ug/l	94
42) 1,1,1-Trichloroethane	4.763	97	27633	5.0227	ug/l	97
43) Carbon Tetrachloride	4.867	117	22583	4.8962	ug/l	98
44) Vinyl Acetate	4.050	43	47550	5.1631	ug/l	100
45) Bromodichloromethane	5.593	83	19011	4.6195	ug/l	98
46) Methylcyclohexane	5.446	83	25385	5.0333	ug/l	94
47) Dibromomethane	5.526	174	10433	4.7721	ug/l	93
48) 1,2-Dichloropropane	5.458	63	16593	4.7532	ug/l	96
49) Trichloroethene	5.330	130	19327	4.8102	ug/l	96
50) Benzene	4.983	78	68625	5.2267	ug/l	100
51) tert-Amyl methyl ether	5.019	73	39096	5.2899	ug/l	98
53) Iso-propylacetate	4.977	43	25670	4.7627	ug/l	96
54) Methyl methacrylate	5.483	41	13551	5.2574	ug/l	99
55) Dibromochloromethane	6.452	129	12653	4.5599	ug/l	90
56) 2-Chloroethylvinylether	5.733	63	3917	4.3050	ug/l	95
57) cis-1,3-Dichloropropene	5.830	75	22865	4.9123	ug/l	96
58) trans-1,3-Dichloropropene	6.117	75	18728	4.7741	ug/l	84
59) Ethyl methacrylate	6.135	41	13028	4.9094	ug/l	96
60) 1,1,2-Trichloroethane	6.227	97	13529	4.9196	ug/l	92
61) 1,2-Dibromoethane	6.525	107	12421	4.3421	ug/l	88
62) 1,3-Dichloropropane	6.318	76	23940	4.8605	ug/l	100
63) 4-Methyl-2-Pentanone	5.897	43	18201	4.6352	ug/l	95
64) 2-Hexanone	6.330	43	14660	4.6585	ug/l	85
65) Tetrachloroethene	6.324	164	15584	5.2616	ug/l	78
67) Toluene	6.025	92	46464	5.1785	ug/l	96

Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB
Data File: 6M130906.D
Acq On : 08/01/20 13:52

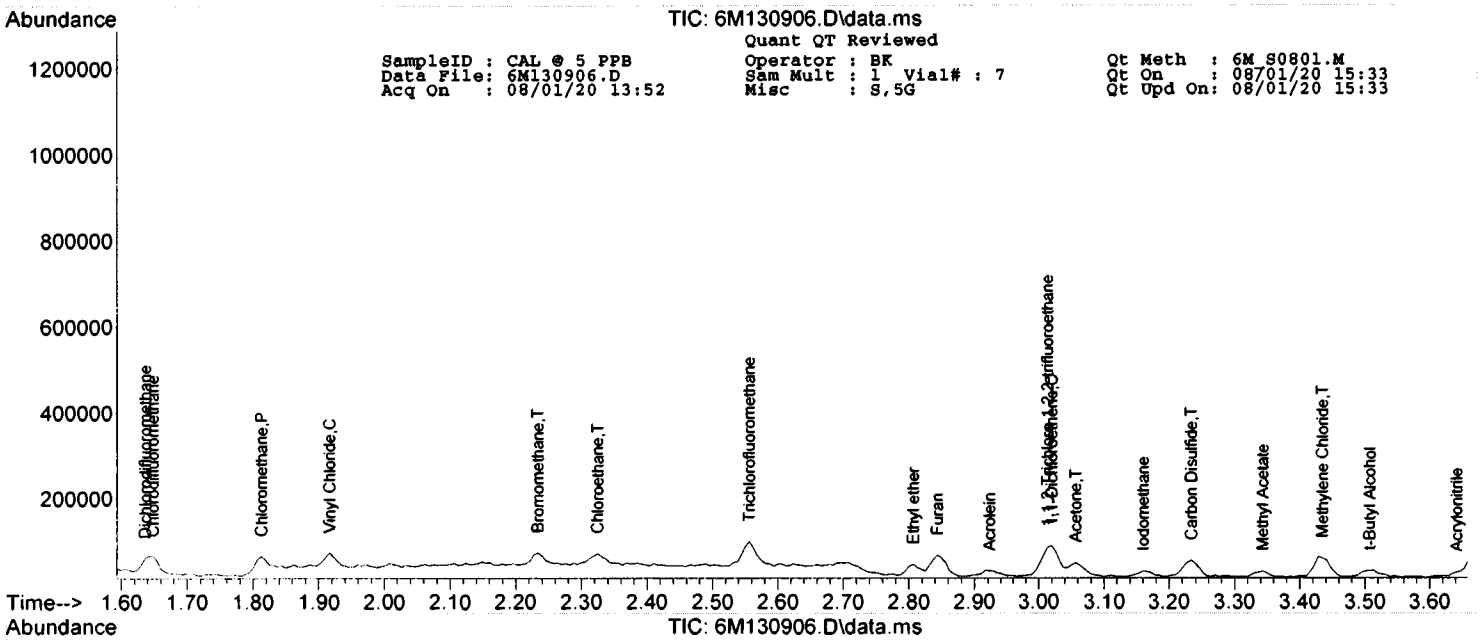
Operator : BK
Sam Mult : 1 Vial# : 7
Misc : S,5G

Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:33
Qt Upd On: 08/01/20 15:33

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	15156	5.0004	ug/l	90
69)	Chlorobenzene	6.781	112	46928	4.5653	ug/l	95
71)	n-Butyl acrylate	7.019	55	24184	4.4435	ug/l	97
72)	n-Amyl acetate	7.141	43	24048	4.1046	ug/l	92
73)	Bromoform	7.233	173	8116	4.2544	ug/l	96
74)	Ethylbenzene	6.824	106	21159	4.9345	ug/l	99
75)	1,1,2,2-Tetrachloroethane	7.446	83	17986	4.5248	ug/l	88
77)	Styrene	7.104	104	48818	4.5812	ug/l	99
78)	m&p-Xylenes	6.879	106	61892	9.5602	ug/l	86
79)	o-Xylene	7.104	106	30636	4.9562	ug/l	96
80)	trans-1,4-Dichloro-2-b...	7.470	53	8546	4.3472	ug/l	83
81)	1,3-Dichlorobenzene	8.019	146	39162	4.9052	ug/l	94
82)	1,4-Dichlorobenzene	8.068	146	38399	4.8018	ug/l	92
83)	1,2-Dichlorobenzene	8.293	146	34852	4.6466	ug/l	94
84)	Isopropylbenzene	7.293	105	80586	4.9465	ug/l	96
85)	Cyclohexanone	7.373	55	6072	24.4457	ug/l	97
86)	Camphene	7.470	93	27414	4.7235	ug/l	95
87)	1,2,3-Trichloropropane	7.489	75	22127	4.2653	ug/l	90
88)	2-Chlorotoluene	7.592	91	50942	5.0503	ug/l	95
89)	p-Ethyltoluene	7.580	105	87735	5.3402	ug/l	100
90)	4-Chlorotoluene	7.653	91	45326	4.6335	ug/l	98
91)	n-Propylbenzene	7.525	91	97082	5.0658	ug/l	100
92)	Bromobenzene	7.495	77	49830	5.1264	ug/l	97
93)	1,3,5-Trimethylbenzene	7.610	105	53230	4.3801	ug/l	94
94)	Butyl methacrylate	7.610	41	22853	3.9862	ug/l	99
95)	t-Butylbenzene	7.806	119	64053	4.6946	ug/l	96
96)	1,2,4-Trimethylbenzene	7.830	105	64621	4.6852	ug/l	99
97)	sec-Butylbenzene	7.928	105	86020	4.9236	ug/l	99
98)	4-Isopropyltoluene	8.001	119	72012	5.0326	ug/l	99
99)	n-Butylbenzene	8.238	91	77870	4.6618	ug/l	94
100)	p-Diethylbenzene	8.220	119	38679	4.3784	ug/l	92
101)	1,2,4,5-Tetramethylben...	8.683	119	58861	4.8268	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.744	157	4804	4.2312	ug/l	93
103)	Camphor	9.177	95	33889	34.5610	ug/l	100
104)	Hexachlorobutadiene	9.324	225	13888	4.7482	ug/l	97
105)	1,2,4-Trichlorobenzene	9.238	180	25571	4.8177	ug/l	97
106)	1,2,3-Trichlorobenzene	9.543	180	22156	4.5318	ug/l	97
107)	Naphthalene	9.397	128	61039	4.5087	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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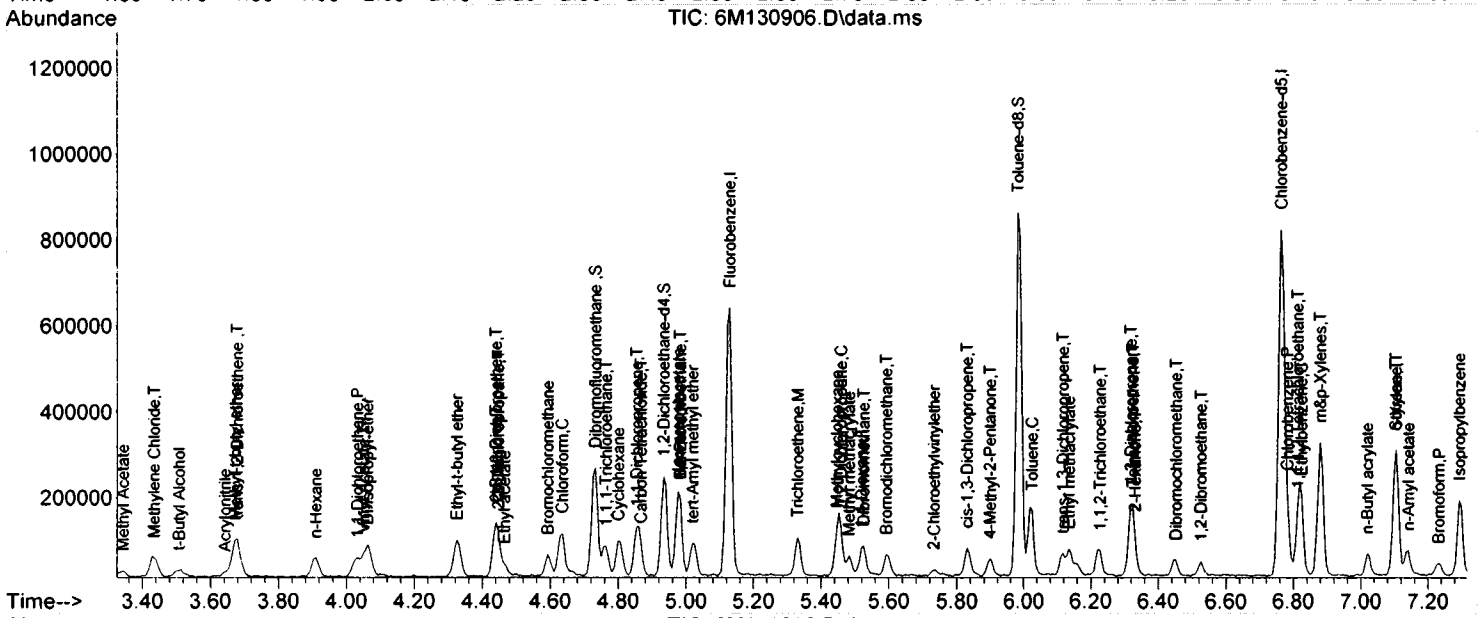
Quant QT Reviewed
SampleID : CAL @ 5 PPB
Data File: 6M130906.D
Acq On : 08/01/20 13:52
Operator : BK
Sam Mult : 1 Vial# : 7
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:33
Qt Upd On: 08/01/20 15:33
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
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Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
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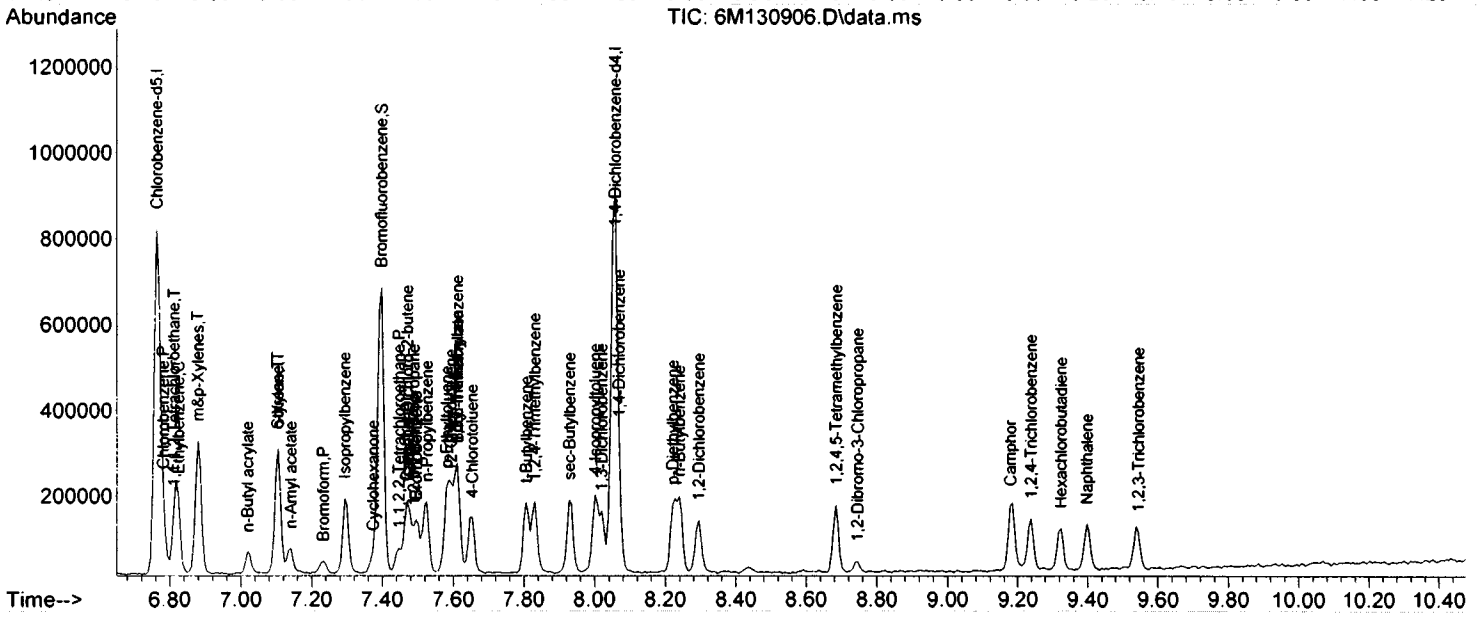
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 6M130906.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
n-Propylbenzene
4-Chlorotoluene
1,4-Dichlorobenzene-d4,I
sec-Butylbenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 2 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130905.D Sam Mult : 1 Vial# : 6 Qt On : 08/01/20 15:32
Acq On : 08/01/20 13:32 Misc : S,5G Qt Upd On: 08/01/20 15:24

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	388738	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	331679	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	184301	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	105591	30.22	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.73%			
39) 1,2-Dichloroethane-d4	4.934	67	57252	29.63	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.77%			
66) Toluene-d8	5.983	98	408874	30.24	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.80%			
76) Bromofluorobenzene	7.397	174	146390	30.31	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.03%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	9579	2.1205	ug/l	98
6) Dichlorodifluoromethane	1.636	85	6057	2.0793	ug/l	98
7) Chloromethane	1.813	50	9903	2.4349	ug/l	90
8) Bromomethane	2.233	94	6094	No Calib		
9) Vinyl Chloride	1.916	62	8896	2.1142	ug/l	90
10) Chloroethane	2.325	64	6254	2.2136	ug/l	99
11) Trichlorofluoromethane	2.557	101	14574	2.1189	ug/l	91
12) Ethyl ether	2.800	59	5377	2.2656	ug/l	96
13) Furan	2.843	39	11255	1.9950	ug/l	100
14) 1,1,2-Trichloro-1,2,2-...	3.020	101	5620	2.1984	ug/l	96
15) Methylene Chloride	3.434	84	9692	2.6409	ug/l	78
16) Acrolein	2.922	56	4526	9.6429	ug/l	83
17) Acrylonitrile	3.642	53	3170	2.2384	ug/l	81
18) Iodomethane	3.160	142	3643	No Calib		
19) Acetone	3.057	43	16529	12.1113	ug/l	97
20) Carbon Disulfide	3.233	76	20572	2.1599	ug/l	100
21) t-Butyl Alcohol	3.514	59	6764	9.7826	ug/l	61
22) n-Hexane	3.910	57	6964	No Calib		
23) Di-isopropyl-ether	4.062	45	17944	2.0452	ug/l	91
24) 1,1-Dichloroethene	3.014	61	9326	1.8797	ug/l	83
25) Methyl Acetate	3.337	43	6079	2.1200	ug/l	100
26) Methyl-t-butyl ether	3.672	73	14247	1.8967	ug/l	90
27) 1,1-Dichloroethane	4.032	63	11776	1.8558	ug/l	97
28) trans-1,2-Dichloroethene	3.678	96	6488	1.7306	ug/l	71
29) Ethyl-t-butyl ether	4.325	59	18764	1.9945	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	12428	1.9419	ug/l	89
31) Bromochloromethane	4.593	49	5653	1.9912	ug/l	83
32) 2,2-Dichloropropane	4.440	77	9518	1.8030	ug/l	96
33) Ethyl acetate	4.465	43	9948	2.3013	ug/l	82
34) 1,4-Dioxane	5.526	88	8302	110.4590	ug/l	89
35) 1,1-Dichloropropene	4.855	75	10142	1.9553	ug/l	91
36) Chloroform	4.629	83	12426	1.8830	ug/l	99
38) Cyclohexane	4.806	56	10241	1.9351	ug/l	95
40) 1,2-Dichloroethane	4.977	62	9645	2.0453	ug/l	73
41) 2-Butanone	4.440	43	4080	2.0110	ug/l	91
42) 1,1,1-Trichloroethane	4.764	97	11348	1.9089	ug/l	92
43) Carbon Tetrachloride	4.861	117	9107	1.7556	ug/l	87
44) Vinyl Acetate	4.062	43	18411	1.7972	ug/l	100
45) Bromodichloromethane	5.599	83	8356	1.8514	ug/l	83
46) Methylcyclohexane	5.446	83	10378	1.9000	ug/l	96
47) Dibromomethane	5.519	174	4674	2.0498	ug/l	81
48) 1,2-Dichloropropane	5.459	63	7551	2.0992	ug/l	85
49) Trichloroethene	5.330	130	8562	2.0364	ug/l	79
50) Benzene	4.977	78	28983	2.1388	ug/l	100
51) tert-Amyl methyl ether	5.020	73	15330	1.9299	ug/l	94
53) Iso-propylacetate	4.977	43	11233	1.9039	ug/l	94
54) Methyl methacrylate	5.483	41	5131	1.7441	ug/l	88
55) Dibromochloromethane	6.446	129	5463	1.7085	ug/l	91
56) 2-Chloroethylvinylether	5.739	63	2130	2.4228	ug/l	63
57) cis-1,3-Dichloropropene	5.837	75	9254	1.7399	ug/l	96
58) trans-1,3-Dichloropropene	6.117	75	7677	1.6896	ug/l	86
59) Ethyl methacrylate	6.135	41	5719	2.0347	ug/l	89
60) 1,1,2-Trichloroethane	6.221	97	5906	2.0204	ug/l	90
61) 1,2-Dibromoethane	6.525	107	5974	1.9329	ug/l	77
62) 1,3-Dichloropropane	6.318	76	10629	2.0402	ug/l	100
63) 4-Methyl-2-Pentanone	5.897	43	9306	2.4901	ug/l	79
64) 2-Hexanone	6.330	43	7441	2.4773	ug/l	86
65) Tetrachloroethene	6.324	164	5916	1.7551	ug/l	100
67) Toluene	6.026	92	19602	2.0681	ug/l	71

Quantitation Report (QT Reviewed)

SampleID : CAL @ 2 PPB
Data File: 6M130905.D
Acq On : 08/01/20 13:32

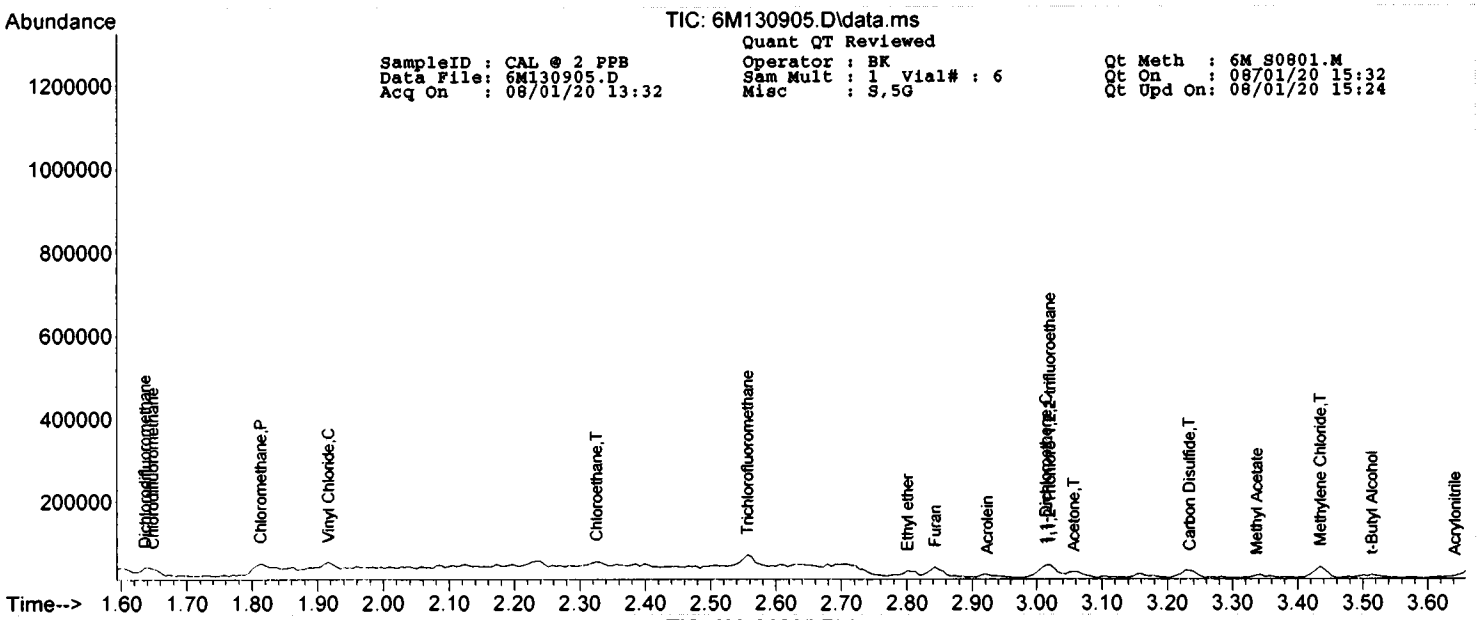
Operator : BK
Sam Mult : 1 Vial# : 6
Misc : S,5G

Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:32
Qt Upd On: 08/01/20 15:24

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.818	133	6384	1.9437	ug/l	98
69)	Chlorobenzene	6.781	112	23168	2.2319	ug/l	98
71)	n-Butyl acrylate	7.019	55	11630	2.1492	ug/l	86
72)	n-Amyl acetate	7.141	43	12173	No Calib		
73)	Bromoform	7.233	173	3436	1.5499	ug/l	95
74)	Ethylbenzene	6.824	106	9152	2.1060	ug/l	100
75)	1,1,2,2-Tetrachloroethane	7.446	83	8132	1.9675	ug/l	91
77)	Styrene	7.105	104	22126	2.0266	ug/l	88
78)	m&p-Xylenes	6.879	106	26453	3.9493	ug/l	95
79)	o-Xylene	7.098	106	12530	1.9486	ug/l	96
80)	trans-1,4-Dichloro-2-b...	7.470	53	4036	1.9813	ug/l	80
81)	1,3-Dichlorobenzene	8.019	146	16464	1.9989	ug/l	96
82)	1,4-Dichlorobenzene	8.068	146	16400	1.9770	ug/l	88
83)	1,2-Dichlorobenzene	8.293	146	15874	2.1068	ug/l	95
84)	Isopropylbenzene	7.294	105	31980	1.8584	ug/l	98
85)	Cyclohexanone	7.367	55	2589	No Calib		
86)	Camphene	7.470	93	11236	1.7684	ug/l	89
87)	1,2,3-Trichloropropane	7.483	75	10900	2.0759	ug/l	98
88)	2-Chlorotoluene	7.592	91	19876	1.8288	ug/l	97
89)	p-Ethyltoluene	7.580	105	30499	1.6363	ug/l	80
90)	4-Chlorotoluene	7.653	91	19793	1.9251	ug/l	96
91)	n-Propylbenzene	7.519	91	38769	1.9428	ug/l	99
92)	Bromobenzene	7.501	77	19483	1.8900	ug/l	93
93)	1,3,5-Trimethylbenzene	7.611	105	27686	2.3306	ug/l	78
94)	Butyl methacrylate	7.611	41	11937	No Calib		
95)	t-Butylbenzene	7.806	119	26847	1.8649	ug/l	95
96)	1,2,4-Trimethylbenzene	7.830	105	27058	1.8567	ug/l	97
97)	sec-Butylbenzene	7.928	105	36856	2.2866	ug/l	99
98)	4-Isopropyltoluene	8.001	119	28967	1.9447	ug/l	96
99)	n-Butylbenzene	8.239	91	32792	1.8586	ug/l	99
100)	p-Diethylbenzene	8.220	119	17801	1.9096	ug/l	94
101)	1,2,4,5-Tetramethylben...	8.684	119	22878	1.6681	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.745	157	2429	2.1544	ug/l	87
103)	Camphor	9.183	95	20456	No Calib		
104)	Hexachlorobutadiene	9.324	225	5746	1.8182	ug/l	93
105)	1,2,4-Trichlorobenzene	9.238	180	11241	2.1098	ug/l	91
106)	1,2,3-Trichlorobenzene	9.537	180	10617	2.2230	ug/l	96
107)	Naphthalene	9.397	128	28879	2.1043	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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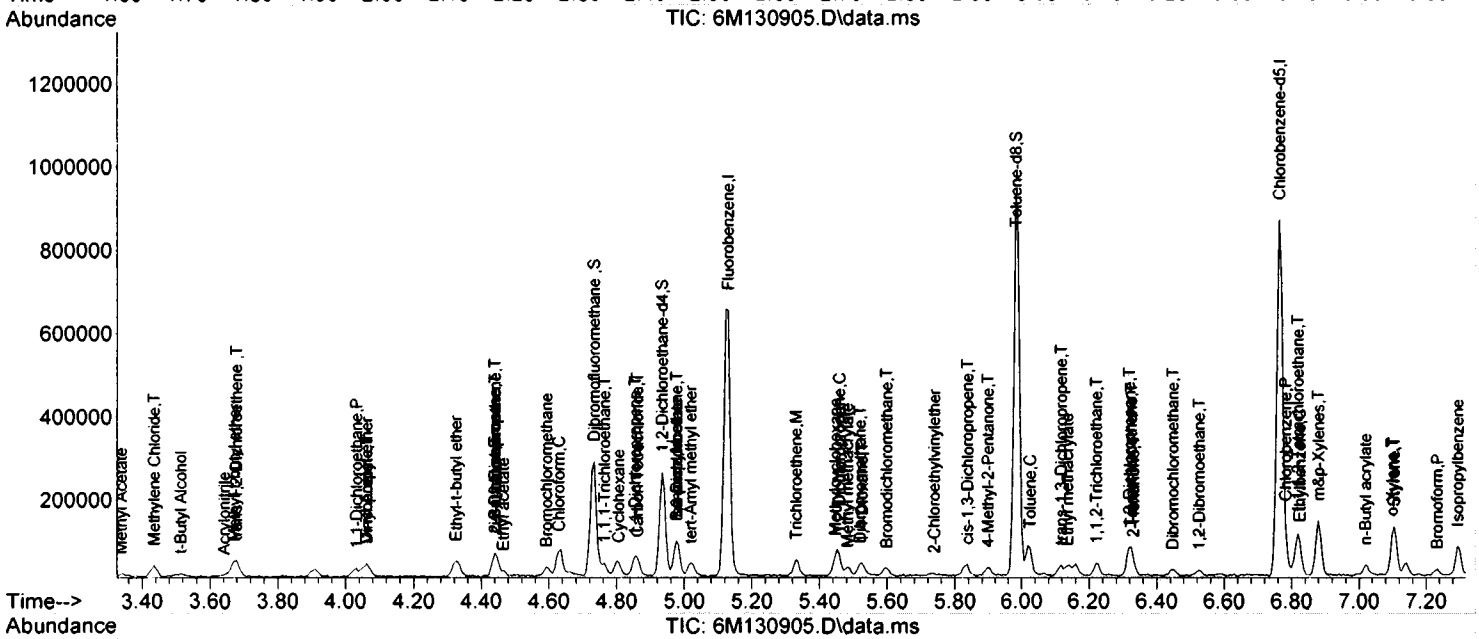
Acq On : 08/01/20 13:32
Operator : BK
Sam Mult : 1 Vial# : 6
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:32
Qt Upd On: 08/01/20 15:24
Chloromethane,P
Vinyl Chloride,C
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->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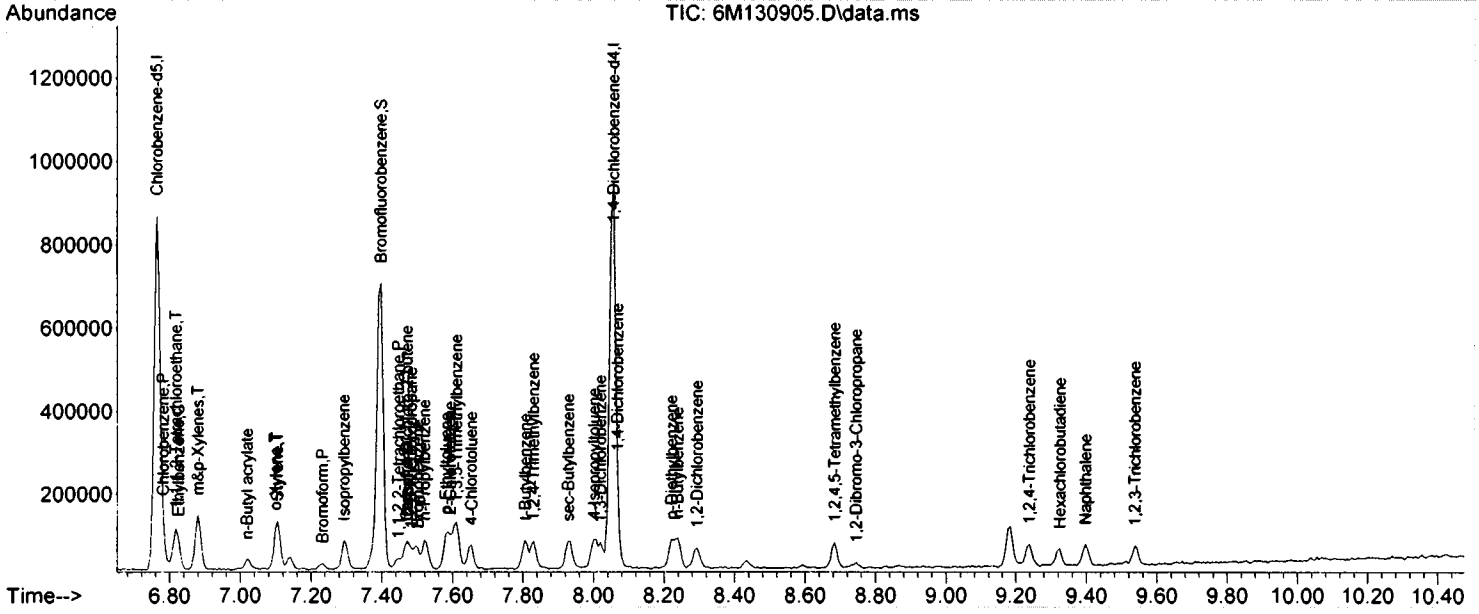
Methylene Chloride,T
t-Butyl Alcohol
Bromochloromethane
Chloroform,C
Dibromofluoromethane,S
1,1,1-Trichloroethane,I
Cyclohexane
1,2-Dichloroethane-d4,S
Ethyl-t-butyl ether
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 6M130905.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
4-Chlorotoluene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,4-Dichlorobenzene
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130908.D Sam Mult : 1 Vial# : 9 Qt On : 08/01/20 15:16
Acq On : 08/01/20 14:34 Misc : S,5G Qt Upd On: 07/26/20 16:16

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	376294	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	318043	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	177889	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	101661	29.71	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.03%			
39) 1,2-Dichloroethane-d4	4.934	67	56916	31.76	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.87%			
66) Toluene-d8	5.983	98	386315	29.13	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.10%			
76) Bromofluorobenzene	7.397	174	143155	32.31	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.70%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	218638	74.6540	ug/l	44
6) Dichlorodifluoromethane	1.636	85	140986	143.9245	ug/l	96
7) Chloromethane	1.813	50	196849	74.3520	ug/l	98
8) Bromomethane	2.227	94	124105	85.7440	ug/l	96
9) Vinyl Chloride	1.916	62	203655	78.1911	ug/l	97
10) Chloroethane	2.319	64	136743	68.9674	ug/l	97
11) Trichlorofluoromethane	2.557	101	332898	103.1225	ug/l	96
12) Ethyl ether	2.807	59	114866	57.2639	ug/l	98
13) Furan	2.843	39	273050	72.8969	ug/l	95
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	123730	151.8356	ug/l	97
15) Methylene Chloride	3.434	84	177624	60.6079	ug/l	92
16) Acrolein	2.922	56	113584	280.6000	ug/l	94
17) Acrylonitrile	3.642	53	68544	66.9078	ug/l	99
18) Iodomethane	3.166	142	145593	50.7653	ug/l	99
19) Acetone	3.056	43	330267	372.9779	ug/l	97
20) Carbon Disulfide	3.233	76	460989	67.3753	ug/l	100
21) t-Butyl Alcohol	3.508	59	167324	372.8191	ug/l	92
22) n-Hexane	3.910	57	191811	252.5697	ug/l	98
23) Di-isopropyl-ether	4.062	45	424645	62.6465	ug/l	95
24) 1,1-Dichloroethene	3.020	61	240131	78.8354	ug/l	96
25) Methyl Acetate	3.337	43	138786	67.8218	ug/l	100
26) Methyl-t-butyl ether	3.672	73	344781	53.9105	ug/l	96
27) 1,1-Dichloroethane	4.026	63	307121	67.7664	ug/l	97
28) trans-1,2-Dichloroethene	3.678	96	181453	72.6643	ug/l	100
29) Ethyl-t-butyl ether	4.325	59	455339	57.3239	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	309760	68.0787	ug/l	98
31) Bromochloromethane	4.593	49	137407	59.8470	ug/l	92
32) 2,2-Dichloropropane	4.446	77	255504	72.1930	ug/l	98
33) Ethyl acetate	4.465	43	209223	64.0788	ug/l	99
34) 1,4-Dioxane	5.519	88	181883	3750.5667	ug/l	95
35) 1,1-Dichloropropene	4.855	75	251043	75.2067	ug/l	100
36) Chloroform	4.635	83	319389	65.3579	ug/l	98
38) Cyclohexane	4.800	56	256136	129.9372	ug/l	98
40) 1,2-Dichloroethane	4.977	62	228241	59.1286	ug/l	98
41) 2-Butanone	4.440	43	98196	66.3149	ug/l	92
42) 1,1,1-Trichloroethane	4.763	97	287731	71.3964	ug/l	96
43) Carbon Tetrachloride	4.861	117	251063	75.1221	ug/l	100
44) Vinyl Acetate	4.050	43	495819	61.7704	ug/l	100
45) Bromodichloromethane	5.599	83	218445	58.1208	ug/l	98
46) Methylcyclohexane	5.452	83	264366	160.5965	ug/l	98
47) Dibromomethane	5.526	174	110359	53.6127	ug/l	99
48) 1,2-Dichloropropane	5.458	63	174094	63.9940	ug/l	98
49) Trichloroethene	5.330	130	203492	68.9152	ug/l	99
50) Benzene	4.977	78	704807	68.8165	ug/l	100
51) tert-Amyl methyl ether	5.020	73	384462	55.5815	ug/l	97
53) Iso-propylacetate	4.977	43	282874	52.9751	ug/l	99
54) Methyl methacrylate	5.483	41	141051	55.3821	ug/l	93
55) Dibromochloromethane	6.446	129	153305	49.2399	ug/l	92
56) 2-Chloroethylvinylether	5.733	63	42150	55.9807	ug/l	96
57) cis-1,3-Dichloropropene	5.830	75	255001	56.7488	ug/l	99
58) trans-1,3-Dichloropropene	6.117	75	217842	52.0913	ug/l	100
59) Ethyl methacrylate	6.135	41	134758	51.6999	ug/l	95
60) 1,1,2-Trichloroethane	6.227	97	140147	52.7004	ug/l	94
61) 1,2-Dibromoethane	6.525	107	150641	53.7348	ug/l	97
62) 1,3-Dichloropropane	6.318	76	249778	55.2768	ug/l	99
63) 4-Methyl-2-Pentanone	5.897	43	179180	54.9350	ug/l	98
64) 2-Hexanone	6.330	43	144007	59.1280	ug/l	92
65) Tetrachloroethene	6.324	164	161604	70.2092	ug/l	94
67) Toluene	6.019	92	446363	64.3948	ug/l	100

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB
Data File: 6M130908.D
Acq On : 08/01/20 14:34

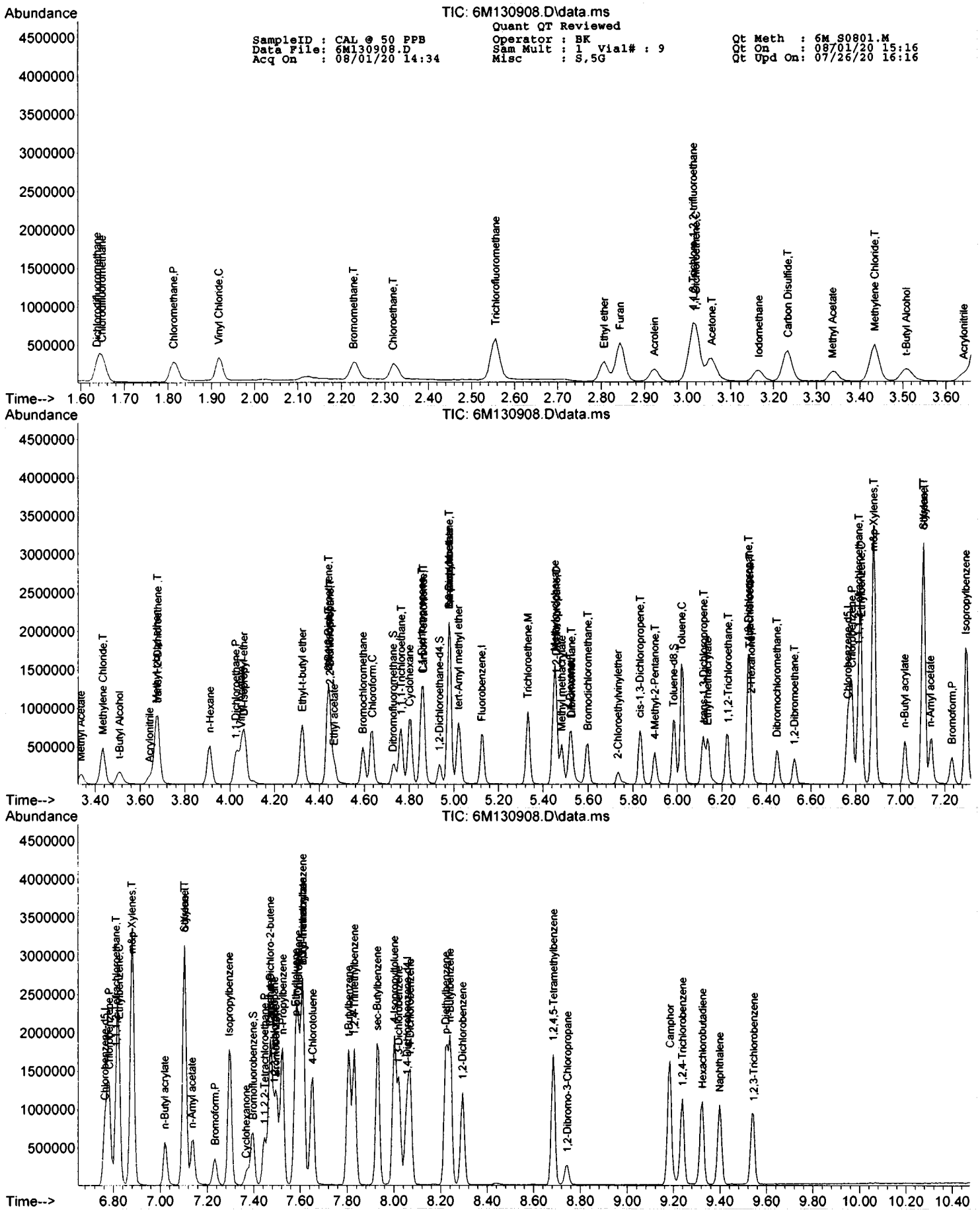
Operator : BK
Sam Mult : 1 Vial# : 9
Misc : S,5G

Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:16
Qt Upd On: 07/26/20 16:16

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	157470	56.2443	ug/l	99
69)	Chlorobenzene	6.781	112	497677	63.5639	ug/l	96
71)	n-Butyl acrylate	7.019	55	261158	49.9243	ug/l	98
72)	n-Amyl acetate	7.135	43	245295	49.4772	ug/l	97
73)	Bromoform	7.233	173	106991	50.3241	ug/l	98
74)	Ethylbenzene	6.824	106	222252	68.0400	ug/l	91
75)	1,1,2,2-Tetrachloroethane	7.446	83	199470	54.0478	ug/l	96
77)	Styrene	7.105	104	526893	66.3205	ug/l	98
78)	m&p-Xylenes	6.879	106	659766	139.6413	ug/l	100
79)	o-Xylene	7.105	106	315175	65.6245	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.470	53	98307	68.0750	ug/l	80
81)	1,3-Dichlorobenzene	8.019	146	397491	65.5108	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	400336	63.1047	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	363623	61.9760	ug/l	97
84)	Isopropylbenzene	7.294	105	849685	72.8055	ug/l	100
85)	Cyclohexanone	7.367	55	51555	429.0829	ug/l	98
86)	Camphene	7.470	93	306627	95.4588	ug/l	100
87)	1,2,3-Trichloropropane	7.489	75	253408	53.0946	ug/l	99
88)	2-Chlorotoluene	7.592	91	524517	70.7874	ug/l	99
89)	p-Ethyltoluene	7.580	105	899550	72.4308	ug/l	99
90)	4-Chlorotoluene	7.653	91	496193	69.2146	ug/l	99
91)	n-Propylbenzene	7.525	91	1015885	75.5015	ug/l	99
92)	Bromobenzene	7.495	77	497504	63.7816	ug/l	97
93)	1,3,5-Trimethylbenzene	7.611	105	602748	69.2292	ug/l	100
94)	Butyl methacrylate	7.611	41	223146	53.7746	ug/l	88
95)	t-Butylbenzene	7.806	119	708688	72.4621	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	684846	68.4959	ug/l	100
97)	sec-Butylbenzene	7.928	105	923242	65.8154	ug/l	99
98)	4-Isopropyltoluene	8.001	119	779331	75.7200	ug/l	99
99)	n-Butylbenzene	8.238	91	873067	78.5539	ug/l	98
100)	p-Diethylbenzene	8.220	119	449869	72.0018	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.684	119	661902	70.3800	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.745	157	54411	56.4470	ug/l	99
103)	Camphor	9.183	95	310756	892.3223	ug/l	97
104)	Hexachlorobutadiene	9.324	225	152518	77.8194	ug/l	100
105)	1,2,4-Trichlorobenzene	9.238	180	257126	62.6469	ug/l	97
106)	1,2,3-Trichlorobenzene	9.543	180	230496	58.9371	ug/l	99
107)	Naphthalene	9.397	128	613296	56.7327	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 6M130908.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 50 PPB
Data File: 6M130908.D
Acq On : 08/01/20 14:34
Operator : BK
Sam Mult : 1 Vial# : 9
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:16
Qt Upd On: 07/26/20 16:16
Abundance
Time-->
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Methyl Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Chlorobenzene-d5,I
Chlorobenzene,T
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone,S
Bromofluorobenzene,S
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene

Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130909.D Sam Mult : 1 Vial# : 10 Qt On : 08/01/20 15:35
Acq On : 08/01/20 14:54 Misc : S,5G Qt Upd On: 08/01/20 15:34

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	460018	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	373585	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	219087	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	121665	29.47	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.23%			
39) 1,2-Dichloroethane-d4	4.934	67	64263	28.41	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.70%			
66) Toluene-d8	5.983	98	465561	30.33	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.10%			
76) Bromofluorobenzene	7.397	174	171060	29.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.50%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	421537	77.4878	ug/l	98
6) Dichlorodifluoromethane	1.636	85	279945	79.7710	ug/l	100
7) Chloromethane	1.813	50	360588	69.9400	ug/l	95
8) Bromomethane	2.233	94	240777	75.4167	ug/l	99
9) Vinyl Chloride	1.916	62	395238	77.8129	ug/l	95
10) Chloroethane	2.325	64	269095	77.8046	ug/l	96
11) Trichlorofluoromethane	2.557	101	666570	81.1754	ug/l	98
12) Ethyl ether	2.806	59	261302	89.8937	ug/l	98
13) Furan	2.843	39	565412	83.7508	ug/l	97
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	256069	82.3078	ug/l	98
15) Methylene Chloride	3.434	84	369903	79.2821	ug/l	97
16) Acrolein	2.922	56	277148	515.4018	ug/l	100
17) Acrylonitrile	3.642	53	148340	83.9628	ug/l	96
18) Iodomethane	3.166	142	356076	78.3795	ug/l	99
19) Acetone	3.056	43	700850	406.0230	ug/l	100
20) Carbon Disulfide	3.233	76	933745	82.5257	ug/l	100
21) t-Butyl Alcohol	3.508	59	357788	451.5073	ug/l	95
22) n-Hexane	3.910	57	385523	75.7017	ug/l	99
23) Di-isopropyl-ether	4.062	45	941585	94.1940	ug/l	100
24) 1,1-Dichloroethene	3.020	61	476828	84.5626	ug/l	97
25) Methyl Acetate	3.337	43	299300	86.4866	ug/l	100
26) Methyl-t-butyl ether	3.672	73	806267	94.5656	ug/l	99
27) 1,1-Dichloroethane	4.026	63	645155	89.6027	ug/l	98
28) trans-1,2-Dichloroethene	3.678	96	359672	84.6212	ug/l	95
29) Ethyl-t-butyl ether	4.324	59	1036950	95.6138	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	648265	89.4259	ug/l	96
31) Bromochloromethane	4.593	49	297479	87.1952	ug/l	97
32) 2,2-Dichloropropane	4.446	77	510173	87.1685	ug/l	98
33) Ethyl acetate	4.465	43	463245	90.0768	ug/l	97
34) 1,4-Dioxane	5.519	88	394241	4427.6846	ug/l	96
35) 1,1-Dichloropropene	4.855	75	511613	86.0672	ug/l	99
36) Chloroform	4.635	83	675674	89.0070	ug/l	100
38) Cyclohexane	4.800	56	528815	87.5986	ug/l	95
40) 1,2-Dichloroethane	4.977	62	511201	90.7707	ug/l	97
41) 2-Butanone	4.434	43	225895	97.4936	ug/l	92
42) 1,1,1-Trichloroethane	4.763	97	598231	88.1868	ug/l	100
43) Carbon Tetrachloride	4.861	117	516470	91.0686	ug/l	98
44) Vinyl Acetate	4.050	43	1165639	100.8119	ug/l	100
45) Bromodichloromethane	5.599	83	504501	100.4630	ug/l	93
46) Methylcyclohexane	5.446	83	547474	89.3475	ug/l	96
47) Dibromomethane	5.526	174	259827	97.5056	ug/l	97
48) 1,2-Dichloropropane	5.458	63	378407	89.9456	ug/l	100
49) Trichloroethene	5.330	130	415159	85.6133	ug/l	97
50) Benzene	4.977	78	1449238	87.7402	ug/l	100
51) tert-Amyl methyl ether	5.019	73	897603	96.5548	ug/l	98
53) Iso-propylacetate	4.977	43	674511	104.7239	ug/l	99
54) Methyl methacrylate	5.483	41	332129	103.8371	ug/l	99
55) Dibromochloromethane	6.446	129	379809	115.0025	ug/l	97
56) 2-Chloroethylvinylether	5.733	63	96115	93.7717	ug/l	92
57) cis-1,3-Dichloropropene	5.830	75	572406	103.4464	ug/l	100
58) trans-1,3-Dichloropropene	6.117	75	515357	109.5688	ug/l	97
59) Ethyl methacrylate	6.135	41	317420	100.0184	ug/l	99
60) 1,1,2-Trichloroethane	6.221	97	319973	97.1288	ug/l	94
61) 1,2-Dibromoethane	6.525	107	347371	104.4277	ug/l	99
62) 1,3-Dichloropropane	6.318	76	558422	95.1807	ug/l	99
63) 4-Methyl-2-Pentanone	5.897	43	421800	93.1622	ug/l	95
64) 2-Hexanone	6.330	43	329750	91.8302	ug/l	98
65) Tetrachloroethene	6.324	164	337307	93.4544	ug/l	99
67) Toluene	6.019	92	935463	86.8730	ug/l	99

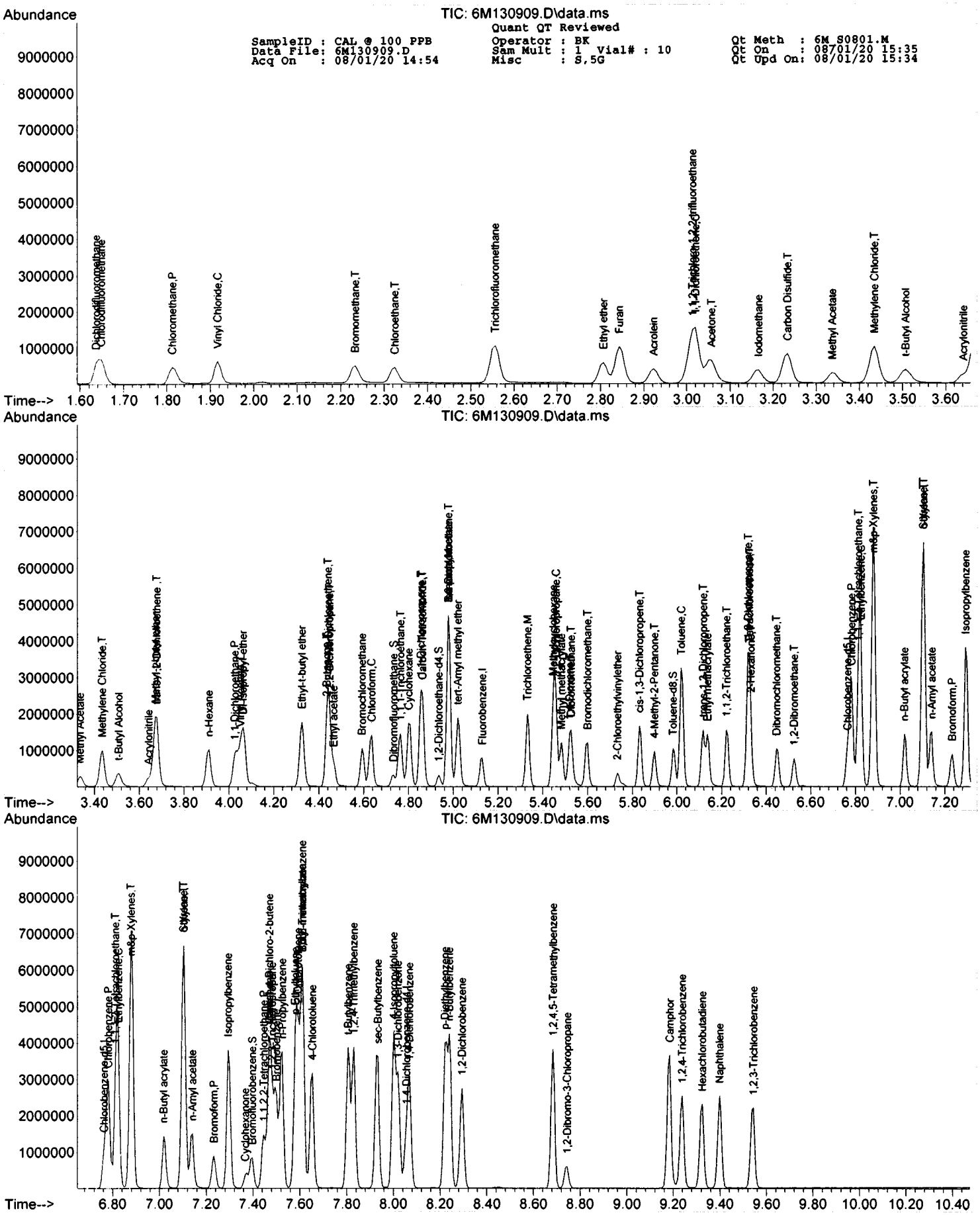
Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130909.D Sam Mult : 1 Vial# : 10 Qt On : 08/01/20 15:35
Acq On : 08/01/20 14:54 Misc : S,5G Qt Upd On: 08/01/20 15:34

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	363747	100.9962	ug/l	99
69)	Chlorobenzene	6.781	112	1050878	88.9198	ug/l	99
71)	n-Butyl acrylate	7.019	55	643371	100.3630	ug/l	99
72)	n-Amyl acetate	7.141	43	601633	96.3918	ug/l	99
73)	Bromoform	7.232	173	269870	117.2050	ug/l	97
74)	Ethylbenzene	6.824	106	475580	89.7397	ug/l	93
75)	1,1,2,2-Tetrachloroethane	7.446	83	471457	99.0655	ug/l	98
77)	Styrene	7.104	104	1183035	93.1307	ug/l	100
78)	m&p-Xylenes	6.879	106	1402903	177.6217	ug/l	99
79)	o-Xylene	7.104	106	675220	88.9632	ug/l	98
80)	trans-1,4-Dichloro-2-b...	7.470	53	231731	100.3104	ug/l	96
81)	1,3-Dichlorobenzene	8.019	146	896612	91.8023	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	876704	90.0830	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	826443	91.4139	ug/l	99
84)	Isopropylbenzene	7.293	105	1802004	89.7978	ug/l	100
85)	Cyclohexanone	7.367	55	112400	487.0385	ug/l	98
86)	Camphene	7.470	93	659522	93.8101	ug/l	99
87)	1,2,3-Trichloropropane	7.482	75	611120	100.9446	ug/l	98
88)	2-Chlorotoluene	7.592	91	1094292	87.7360	ug/l	99
89)	p-Ethyltoluene	7.580	105	1932089	92.3610	ug/l	91
90)	4-Chlorotoluene	7.653	91	1132117	97.2028	ug/l	99
91)	n-Propylbenzene	7.525	91	2151726	90.3744	ug/l	99
92)	Bromobenzene	7.501	77	1111907	92.2999	ug/l	99
93)	1,3,5-Trimethylbenzene	7.610	105	1314538	91.3915	ug/l	91
94)	Butyl methacrylate	7.610	41	517218	89.9185	ug/l	94
95)	t-Butylbenzene	7.806	119	1517655	91.8510	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	1512976	91.2111	ug/l	99
97)	sec-Butylbenzene	7.934	105	1988625	82.2493	ug/l	99
98)	4-Isopropyltoluene	8.001	119	1681838	95.2470	ug/l	99
99)	n-Butylbenzene	8.238	91	1911706	94.9714	ug/l	100
100)	p-Diethylbenzene	8.220	119	979638	94.3604	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.683	119	1483371	99.9638	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.744	157	126002	96.0639	ug/l	99
103)	Camphor	9.183	95	696562	989.4510	ug/l	99
104)	Hexachlorobutadiene	9.324	225	324785	92.9031	ug/l	98
105)	1,2,4-Trichlorobenzene	9.238	180	588616	92.0544	ug/l	98
106)	1,2,3-Trichlorobenzene	9.543	180	547555	95.8480	ug/l	99
107)	Naphthalene	9.397	128	1454703	90.5374	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M130909.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 100 PPB
Data File: 6M130909.D
Acq On : 08/01/20 14:54
Operator : BK
Sam Mult : 1 Vial# : 10
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:35
Qt Upd On: 08/01/20 15:34
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 6M130909.D\data.ms
Methyl acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 6M130909.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
sec-Butylbenzene
p-Diethylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 250 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130911.D Sam Mult : 1 Vial# : 12 Qt On : 08/01/20 15:49
Acq On : 08/01/20 15:36 Misc : S,5G Qt Upd On: 08/01/20 15:35

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	432672	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	358455	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.055	152	285114	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	111891	28.89	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.30%			
39) 1,2-Dichloroethane-d4	4.934	67	58340	27.63	ug/l	0.00
Spiked Amount 30.000			Recovery = 92.10%			
66) Toluene-d8	5.989	98	450656	30.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.83%			
76) Bromofluorobenzene	7.397	174	167719	22.31	ug/l	0.00
Spiked Amount 30.000			Recovery = 74.37%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	985196	201.6247	ug/l	99
6) Dichlorodifluoromethane	1.636	85	642012	202.7064	ug/l	97
7) Chloromethane	1.813	50	818268	179.5369	ug/l	98
9) Vinyl Chloride	1.916	62	930481	203.8116	ug/l	96
10) Chloroethane	2.319	64	627863	201.9762	ug/l	99
11) Trichlorofluoromethane	2.556	101	1577987	212.3072	ug/l	99
12) Ethyl ether	2.806	59	603055	225.1270	ug/l	98
13) Furan	2.843	39	1309849	213.2110	ug/l	99
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	601502	213.0997	ug/l	98
15) Methylene Chloride	3.434	84	840087	199.7131	ug/l	95
16) Acrolein	2.922	56	639003	1255.6995	ug/l	99
17) Acrylonitrile	3.642	53	345385	214.7367	ug/l	97
18) Iodomethane	3.166	142	889253	227.5217	ug/l	98
19) Acetone	3.056	43	1602135	1025.3708	ug/l	99
20) Carbon Disulfide	3.233	76	2241594	218.2648	ug/l	100
21) t-Butyl Alcohol	3.507	59	844887	1156.0071	ug/l	93
23) Di-isopropyl-ether	4.062	45	2189058	235.5644	ug/l	97
24) 1,1-Dichloroethene	3.020	61	1134260	220.6812	ug/l	99
25) Methyl Acetate	3.337	43	687039	216.9396	ug/l	100
26) Methyl-t-butyl ether	3.672	73	1845504	232.2400	ug/l	99
27) 1,1-Dichloroethane	4.026	63	1498061	225.9066	ug/l	98
28) trans-1,2-Dichloroethene	3.678	96	857564	221.3210	ug/l	98
29) Ethyl-t-butyl ether	4.324	59	2432510	240.5804	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	1509155	226.1225	ug/l	98
31) Bromochloromethane	4.593	49	659504	210.9291	ug/l	96
32) 2,2-Dichloropropane	4.446	77	1232415	229.7767	ug/l	98
33) Ethyl acetate	4.465	43	1038785	219.1038	ug/l	99
34) 1,4-Dioxane	5.519	88	972723	11887.1518	ug/l	99
35) 1,1-Dichloropropene	4.855	75	1190638	219.0613	ug/l	98
36) Chloroform	4.635	83	1580979	226.4040	ug/l	99
38) Cyclohexane	4.806	56	1246540	225.1247	ug/l	97
40) 1,2-Dichloroethane	4.977	62	1158559	222.8331	ug/l	100
41) 2-Butanone	4.434	43	530517	244.6625	ug/l	91
42) 1,1,1-Trichloroethane	4.763	97	1424064	228.5936	ug/l	98
43) Carbon Tetrachloride	4.861	117	1270393	242.4966	ug/l	97
44) Vinyl Acetate	4.050	43	2714040	249.1582	ug/l	100
45) Bromodichloromethane	5.599	83	1183966	250.4363	ug/l	97
46) Methylcyclohexane	5.452	83	1295970	229.7644	ug/l	98
47) Dibromomethane	5.525	174	587657	235.6445	ug/l	96
48) 1,2-Dichloropropane	5.458	63	870004	224.3780	ug/l	96
49) Trichloroethene	5.330	130	980410	221.3247	ug/l	98
50) Benzene	4.977	78	3394218	223.0390	ug/l	100
51) tert-Amyl methyl ether	5.019	73	2101456	242.0075	ug/l	98
53) Iso-propylacetate	4.977	43	1582113	253.6094	ug/l	99
54) Methyl methacrylate	5.483	41	781400	252.6700	ug/l	99
55) Dibromochloromethane	6.446	129	909174	278.5508	ug/l	96
56) 2-Chloroethylvinylether	5.733	63	223990	230.6258	ug/l	98
57) cis-1,3-Dichloropropene	5.830	75	1376499	257.4890	ug/l	98
58) trans-1,3-Dichloropropene	6.117	75	1240876	269.7920	ug/l	99
59) Ethyl methacrylate	6.135	41	746658	245.1919	ug/l	99
60) 1,1,2-Trichloroethane	6.220	97	745069	237.0758	ug/l	93
61) 1,2-Dibromoethane	6.525	107	798591	248.3751	ug/l	99
62) 1,3-Dichloropropane	6.318	76	1300379	233.2477	ug/l	98
63) 4-Methyl-2-Pentanone	5.897	43	993721	231.9170	ug/l	97
64) 2-Hexanone	6.330	43	769708	227.1100	ug/l	97
65) Tetrachloroethene	6.324	164	791972	231.7191	ug/l	97
67) Toluene	6.025	92	2197745	217.4691	ug/l	97
68) 1,1,1,2-Tetrachloroethane	6.812	133	880220	254.2068	ug/l	98
69) Chlorobenzene	6.781	112	2438263	219.8943	ug/l	98

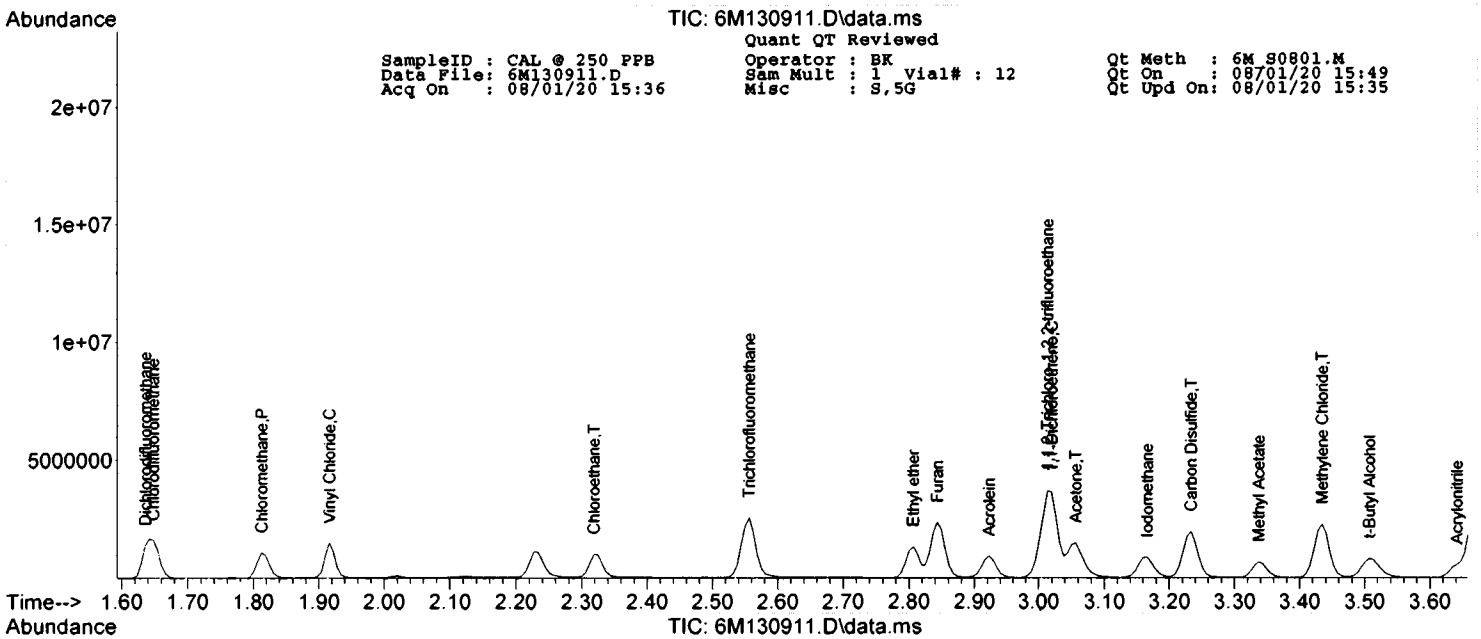
Quantitation Report (QT Reviewed)

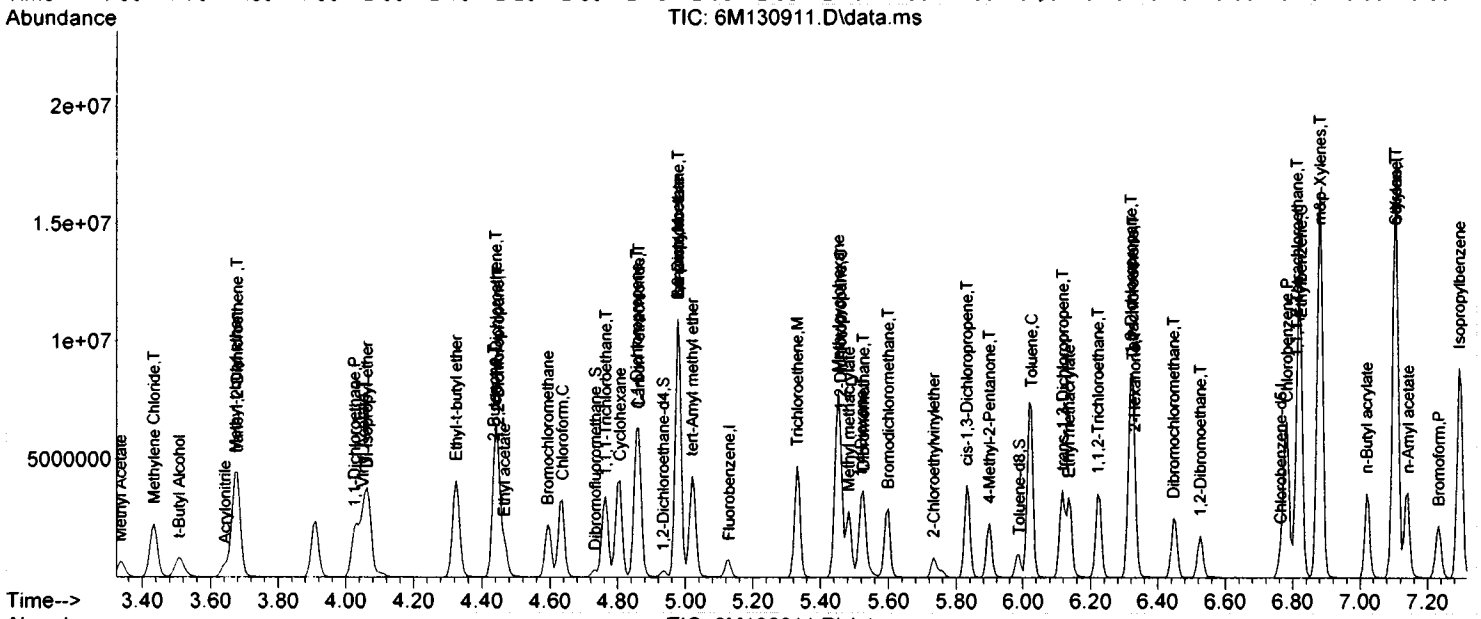
SampleID : CAL @ 250 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130911.D Sam Mult : 1 Vial# : 12 Qt On : 08/01/20 15:49
Acq On : 08/01/20 15:36 Misc : S,5G Qt Upd On: 08/01/20 15:35

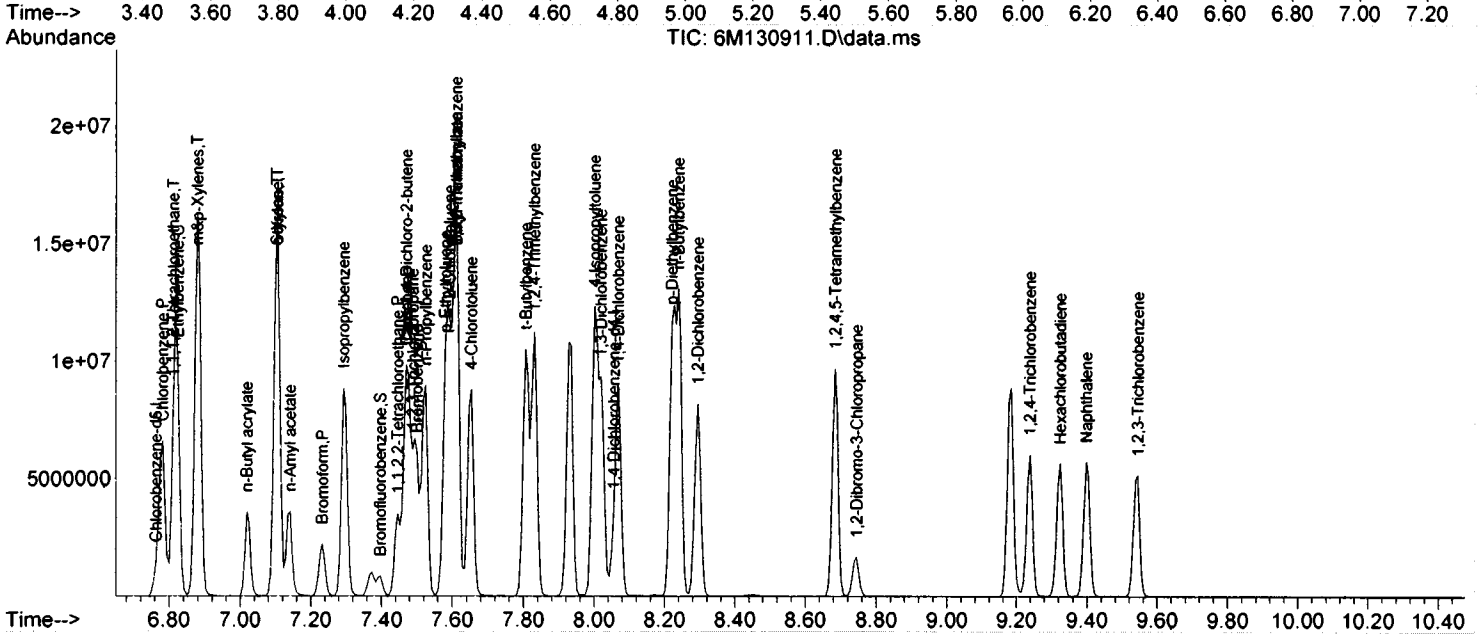
Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
71)	n-Butyl acrylate	7.019	55	1519580	182.0198	ug/l	100
72)	n-Amyl acetate	7.141	43	1426151	181.7170	ug/l	100
73)	Bromoform	7.232	173	668213	215.5817	ug/l	98
74)	Ethylbenzene	6.824	106	1144973	168.9061	ug/l	91
75)	1,1,2,2-Tetrachloroethane	7.446	83	1099857	177.9209	ug/l	96
77)	Styrene	7.104	104	2750824	168.7191	ug/l	99
78)	m&p-Xylenes	6.879	106	3249527	321.2807	ug/l	96
79)	o-Xylene	7.104	106	1619109	166.9946	ug/l	99
80)	trans-1,4-Dichloro-2-b...	7.470	53	564795	187.7505	ug/l	95
81)	1,3-Dichlorobenzene	8.019	146	2650262	211.9899	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	2648802	213.3722	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	2483223	214.7512	ug/l	97
84)	Isopropylbenzene	7.293	105	4218802	164.3408	ug/l	99
86)	Camphene	7.470	93	1572545	174.0330	ug/l	100
87)	1,2,3-Trichloropropane	7.488	75	1464114	185.4855	ug/l	98
88)	2-Chlorotoluene	7.592	91	2730208	172.4343	ug/l	99
89)	p-Ethyltoluene	7.580	105	4674667	174.3800	ug/l	99
90)	4-Chlorotoluene	7.653	91	3124453	207.2984	ug/l	99
91)	n-Propylbenzene	7.525	91	5096605	167.1712	ug/l	99
92)	Bromobenzene	7.501	77	2618496	169.6380	ug/l	98
93)	1,3,5-Trimethylbenzene	7.610	105	3489758	189.1482	ug/l	99
94)	Butyl methacrylate	7.610	41	1409772	239.7873	ug/l	93
95)	t-Butylbenzene	7.806	119	4262859	200.9781	ug/l	98
96)	1,2,4-Trimethylbenzene	7.830	105	4417200	207.6678	ug/l	100
98)	4-Isopropyltoluene	8.001	119	5022133	220.2964	ug/l	99
99)	n-Butylbenzene	8.238	91	5787615	222.8049	ug/l	99
100)	p-Diethylbenzene	8.220	119	2969179	222.2720	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.683	119	3749662	194.1846	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.744	157	342093	202.0028	ug/l	96
104)	Hexachlorobutadiene	9.324	225	792653	176.7356	ug/l	99
105)	1,2,4-Trichlorobenzene	9.238	180	1368042	167.0578	ug/l	98
106)	1,2,3-Trichlorobenzene	9.543	180	1248740	169.3740	ug/l	100
107)	Naphthalene	9.397	128	3424245	166.3874	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M130911.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 250 PPB
Data File: 6M130911.D
Acq On : 08/01/20 15:36
Operator : BK
Sam Mult : 1 Vial# : 12
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:49
Qt Upd On: 08/01/20 15:35
2e+07
1.5e+07
1e+07
5000000
Chloromethane,P
Vinyl Chloride,C
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->
1.60 1.70 1.80 1.90 2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80 2.90 3.00 3.10 3.20 3.30 3.40 3.50 3.60


Abundance
TIC: 6M130911.D\data.ms
2e+07
1.5e+07
1e+07
5000000
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
1,1-Dichloroethane,P
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->
3.40 3.60 3.80 4.00 4.20 4.40 4.60 4.80 5.00 5.20 5.40 5.60 5.80 6.00 6.20 6.40 6.60 6.80 7.00 7.20


Abundance
TIC: 6M130911.D\data.ms
2e+07
1.5e+07
1e+07
5000000
Chlorobenzene-d5
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->
6.80 7.00 7.20 7.40 7.60 7.80 8.00 8.20 8.40 8.60 8.80 9.00 9.20 9.40 9.60 9.80 10.00 10.20 10.40

Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130913.D Sam Mult : 1 Vial# : 14 Qt On : 08/01/20 16:56
Acq On : 08/01/20 16:17 Misc : S,5G Qt Upd On: 08/01/20 15:35

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	502146	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	414316	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	281684	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	131190	29.19	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.30%			
39) 1,2-Dichloroethane-d4	4.934	67	67370	27.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 91.63%			
66) Toluene-d8	5.983	98	514407	30.17	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.57%			
76) Bromofluorobenzene	7.397	174	276800	37.27	ug/l	0.00
Spiked Amount 30.000			Recovery = 124.23%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	2017437	355.7541	ug/l	96
6) Dichlorodifluoromethane	1.636	85	1359022	369.7256	ug/l	99
7) Chloromethane	1.813	50	1627867	307.7555	ug/l	100
9) Vinyl Chloride	1.916	62	1863358	351.6790	ug/l	97
10) Chloroethane	2.319	64	1273592	353.0161	ug/l	98
11) Trichlorofluoromethane	2.550	101	3201080	371.0964	ug/l	98
12) Ethyl ether	2.806	59	1290886	415.2287	ug/l	96
13) Furan	2.843	39	2669772	374.4478	ug/l	100
14) 1,1,2-Trichloro-1,2,2-...	3.008	101	1230898	375.7479	ug/l	98
15) Methylene Chloride	3.434	84	1742681	356.9677	ug/l	96
16) Acrolein	2.922	56	1390669	2354.6989	ug/l	99
17) Acrylonitrile	3.642	53	746179	399.7372	ug/l	99
18) Iodomethane	3.160	142	2175914m	402.9896	ug/l	
19) Acetone	3.056	43	3426606	1889.6214	ug/l	100
20) Carbon Disulfide	3.233	76	4648210	389.9790	ug/l	100
21) t-Butyl Alcohol	3.508	59	1885362	2222.7233	ug/l	97
23) Di-isopropyl-ether	4.062	45	4754672	440.8611	ug/l	98
24) 1,1-Dichloroethene	3.020	61	2365634	396.5784	ug/l	100
25) Methyl Acetate	3.337	43	1505018	409.4754	ug/l	100
26) Methyl-t-butyl ether	3.672	73	4065332	440.8052	ug/l	99
27) 1,1-Dichloroethane	4.026	63	3068416	398.6965	ug/l	100
28) trans-1,2-Dichloroethene	3.678	96	1755462	390.3699	ug/l	97
29) Ethyl-t-butyl ether	4.324	59	5306374	452.2017	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	3209532	414.3624	ug/l	97
31) Bromochloromethane	4.593	49	1394482	384.2916	ug/l	96
32) 2,2-Dichloropropane	4.446	77	2590518	416.1639	ug/l	98
33) Ethyl acetate	4.465	43	2290157	416.2156	ug/l	99
34) 1,4-Dioxane	5.519	88	2065005	21743.9538	ug/l	99
35) 1,1-Dichloropropene	4.855	75	2508995	397.7539	ug/l	99
36) Chloroform	4.635	83	3285794	405.4405	ug/l	97
38) Cyclohexane	4.800	56	2588921	402.8696	ug/l	97
40) 1,2-Dichloroethane	4.977	62	2570104	425.9327	ug/l	99
41) 2-Butanone	4.434	43	1199777	476.7573	ug/l	90
42) 1,1,1-Trichloroethane	4.763	97	2984050	412.7333	ug/l	98
43) Carbon Tetrachloride	4.861	117	2655147	436.7017	ug/l	98
44) Vinyl Acetate	4.050	43	6011931	475.5561	ug/l	100
45) Bromodichloromethane	5.599	83	2618931	477.3214	ug/l	98
46) Methylcyclohexane	5.446	83	2719250	415.3992	ug/l	98
47) Dibromomethane	5.525	174	1334234	460.9928	ug/l	98
48) 1,2-Dichloropropane	5.458	63	1892419	420.5378	ug/l	98
49) Trichloroethene	5.330	130	2054440	399.6174	ug/l	99
50) Benzene	4.977	78	6937186	392.7834	ug/l	100
51) tert-Amyl methyl ether	5.019	73	4606930	457.1397	ug/l	98
53) Iso-propylacetate	4.977	43	3570890	495.2304	ug/l	100
54) Methyl methacrylate	5.483	41	1596018	446.4995	ug/l	92
55) Dibromochloromethane	6.446	129	2076290	550.3619	ug/l	95
56) 2-Chloroethylvinylether	5.733	63	514111	457.9723	ug/l	99
57) cis-1,3-Dichloropropene	5.830	75	2982708	482.7213	ug/l	99
58) trans-1,3-Dichloropropene	6.117	75	2760003	519.1744	ug/l	97
59) Ethyl methacrylate	6.135	41	1720007	488.6720	ug/l	98
60) 1,1,2-Trichloroethane	6.220	97	1646133	453.1673	ug/l	92
61) 1,2-Dibromoethane	6.525	107	1774649	477.5283	ug/l	99
62) 1,3-Dichloropropane	6.318	76	2913563	452.1420	ug/l	99
63) 4-Methyl-2-Pentanone	5.897	43	2237200	451.7268	ug/l	98
64) 2-Hexanone	6.330	43	1752811	447.4538	ug/l	95
65) Tetrachloroethene	6.324	164	1728602	437.5725	ug/l	99
67) Toluene	6.019	92	4685665	401.1386	ug/l	91
68) 1,1,1,2-Tetrachloroethane	6.812	133	1967779	491.6718	ug/l	100
69) Chlorobenzene	6.781	112	5167591	403.2037	ug/l	95

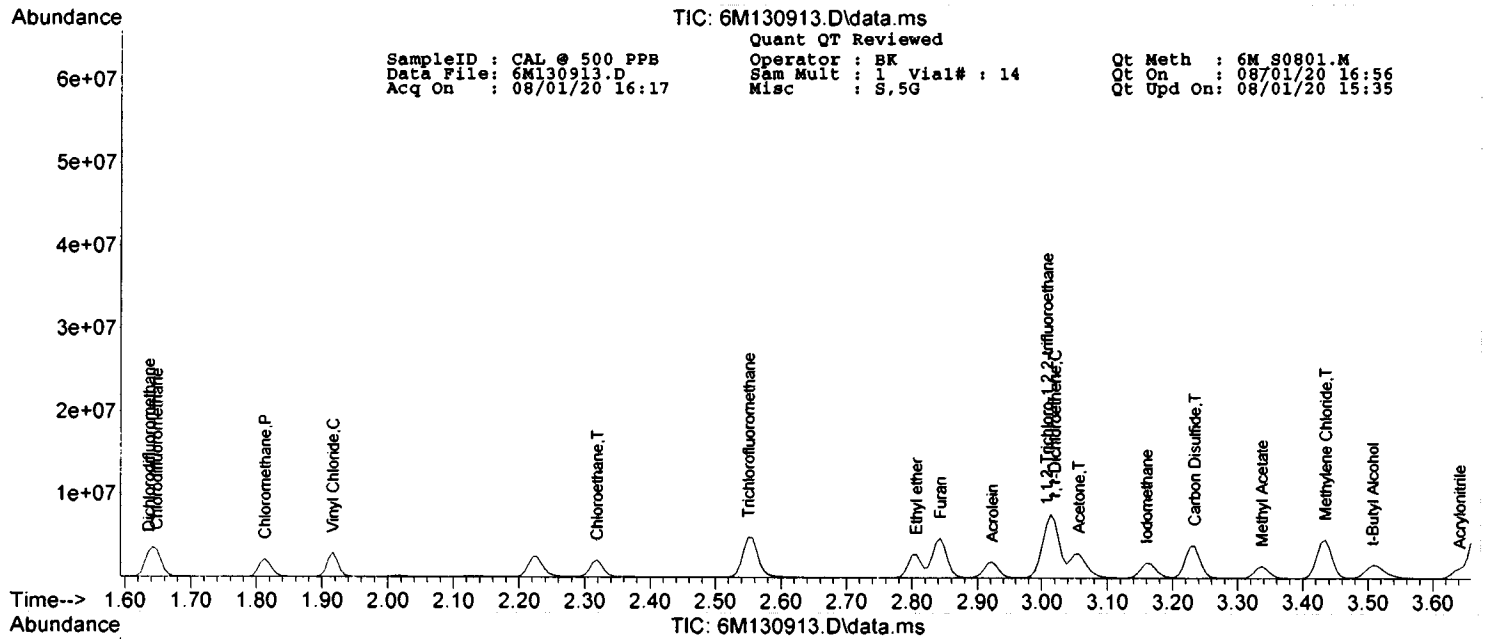
Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130913.D Sam Mult : 1 Vial# : 14 Qt On : 08/01/20 16:56
Acq On : 08/01/20 16:17 Misc : S,5G Qt Upd On: 08/01/20 15:35

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
71)	n-Butyl acrylate	7.019	55	4540242	550.4659	ug/l	100
72)	n-Amyl acetate	7.141	43	3835146	491.0376	ug/l	93
73)	Bromoform	7.232	173	2274753	742.8269	ug/l	99
74)	Ethylbenzene	6.824	106	2533762	378.3313	ug/l	79
75)	1,1,2,2-Tetrachloroethane	7.446	83	3558315	582.6282	ug/l	96
77)	Styrene	7.104	104	8169893	507.1941	ug/l	95
78)	m&p-Xylenes	6.879	106	7630447	763.6086	ug/l	58
79)	o-Xylene	7.104	106	4875760	509.0086	ug/l	85
80)	trans-1,4-Dichloro-2-b...	7.470	53	1668807	561.5039	ug/l	84
81)	1,3-Dichlorobenzene	8.025	146	4194808	339.6213	ug/l	96
82)	1,4-Dichlorobenzene	8.068	146	5688478	463.8107	ug/l	98
83)	1,2-Dichlorobenzene	8.293	146	4180484	365.9341	ug/l	96
84)	Isopropylbenzene	7.293	105	11249143	443.5392	ug/l	94
86)	Camphene	7.470	93	5038232	564.3688	ug/l	97
87)	1,2,3-Trichloropropane	7.482	75	4698878	602.5396	ug/l	98
88)	2-Chlorotoluene	7.598	91	5670598	362.5043	ug/l	93
89)	p-Ethyltoluene	7.580	105	10458943	394.9027	ug/l	94
90)	4-Chlorotoluene	7.653	91	5808725	390.0848	ug/l	95
91)	n-Propylbenzene	7.519	91	11780786	391.1210	ug/l	85
92)	Bromobenzene	7.501	77	8186911	536.8433	ug/l	97
93)	1,3,5-Trimethylbenzene	7.610	105	7162160	392.9229	ug/l	93
95)	t-Butylbenzene	7.806	119	6919225	330.1882	ug/l	94
96)	1,2,4-Trimethylbenzene	7.830	105	5830275	277.4391	ug/l	94
98)	4-Isopropyltoluene	8.001	119	6006253	266.6731	ug/l	96
99)	n-Butylbenzene	8.238	91	6758216	263.3380	ug/l	92
100)	p-Diethylbenzene	8.220	119	4465320	338.3431	ug/l	94
101)	1,2,4,5-Tetramethylben...	8.683	119	6143498	322.0288	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.744	157	702078	419.6187	ug/l	79
104)	Hexachlorobutadiene	9.324	225	2491481	562.2829	ug/l	99
105)	1,2,4-Trichlorobenzene	9.238	180	4371738	540.3533	ug/l	97
106)	1,2,3-Trichlorobenzene	9.543	180	4168590	572.2955	ug/l	99
107)	Naphthalene	9.397	128	10347976	508.9408	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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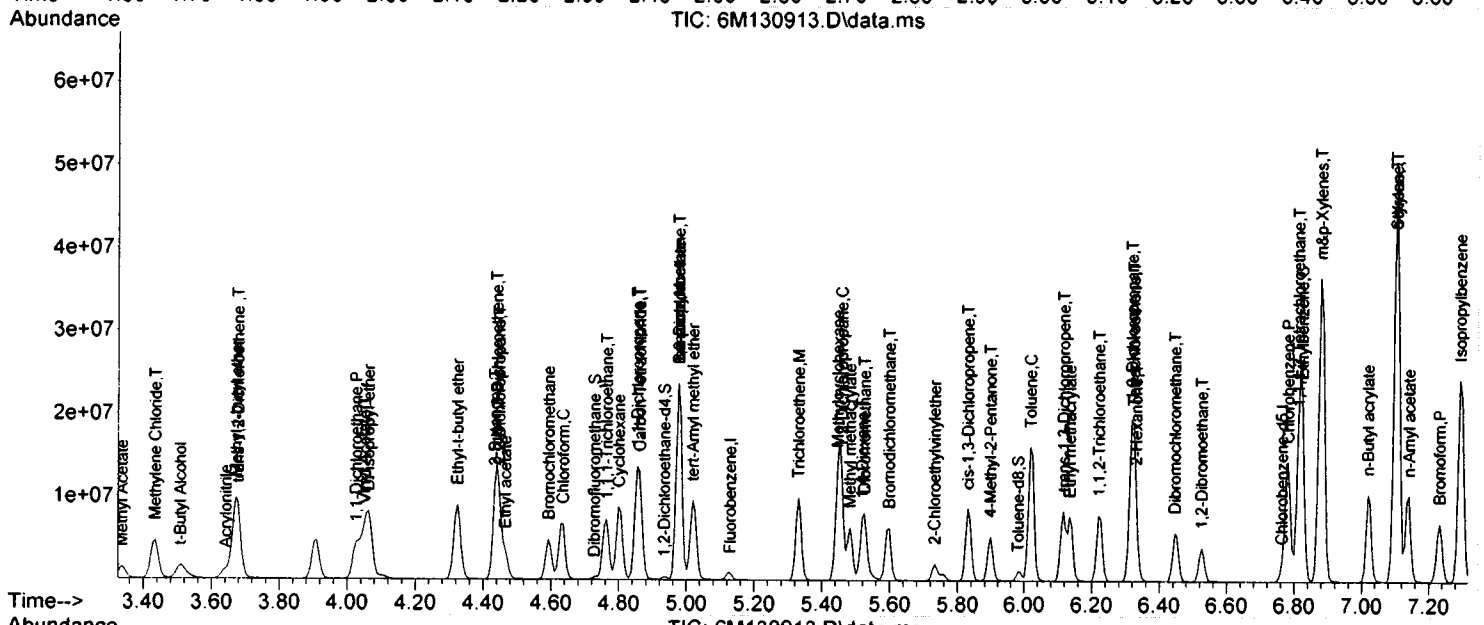
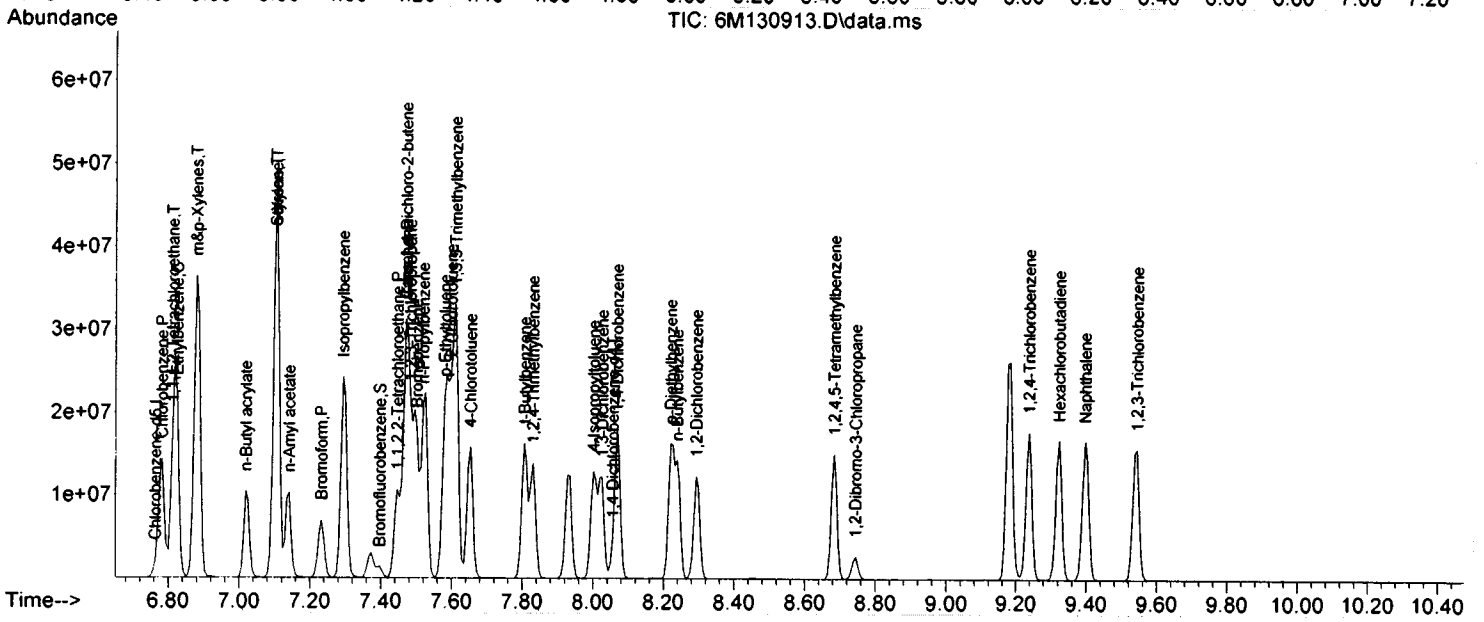
SampleID : CAL @ 500 PPB
Data File: 6M130913.D
Acq On : 08/01/20 16:17
Quant QT Reviewed
Operator : BK
Sam Mult : 1 Vial# : 14
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 16:56
Qt Upd On: 08/01/20 15:35
Chloromethane,P
Vinyl Chloride,C
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 6M130913.D\data.ms
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 6M130913.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
4-Chlorotoluene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130904.D Sam Mult : 1 Vial# : 5 Qt On : 08/01/20 15:19
Acq On : 08/01/20 13:11 Misc : S,5G Qt Upd On: 08/01/20 15:19

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	378400	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	324090	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	180373	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	104773	31.23	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.10%			
39) 1,2-Dichloroethane-d4	4.934	67	56460	30.03	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.10%			
66) Toluene-d8	5.983	98	398534	30.24	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.80%			
76) Bromofluorobenzene	7.397	174	141258	29.83	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.43%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	0.000		0	N.D. d		
6) Dichlorodifluoromethane	0.000		0	N.D. d		
7) Chloromethane	0.000		0	N.D. d		
8) Bromomethane	0.000		0	N.D. d		
9) Vinyl Chloride	0.000		0	N.D. d		
10) Chloroethane	0.000		0	N.D. d		
11) Trichlorofluoromethane	0.000		0	N.D. d		
12) Ethyl ether	0.000		0	N.D. d		
13) Furan	0.000		0	N.D. d		
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D. d		
15) Methylene Chloride	0.000		0	N.D. d		
16) Acrolein	0.000		0	N.D. d		
17) Acrylonitrile	0.000		0	N.D. d		
18) Iodomethane	0.000		0	N.D. d		
19) Acetone	0.000		0	N.D. d		
20) Carbon Disulfide	0.000		0	N.D. d		
21) t-Butyl Alcohol	0.000		0	N.D. d		
22) n-Hexane	0.000		0	N.D. d		
23) Di-isopropyl-ether	0.000		0	N.D. d		
24) 1,1-Dichloroethene	0.000		0	N.D. d		
25) Methyl Acetate	0.000		0	N.D. d		
26) Methyl-t-butyl ether	3.672	73	7689	1.1088	ug/l	85
27) 1,1-Dichloroethane	0.000		0	N.D. d		
28) trans-1,2-Dichloroethene	0.000		0	N.D. d		
29) Ethyl-t-butyl ether	0.000		0	N.D. d		
30) cis-1,2-Dichloroethene	0.000		0	N.D. d		
31) Bromochloromethane	0.000		0	N.D. d		
32) 2,2-Dichloropropane	0.000		0	N.D. d		
33) Ethyl acetate	0.000		0	N.D. d		
34) 1,4-Dioxane	0.000		0	N.D. d		
35) 1,1-Dichloropropene	0.000		0	N.D. d		
36) Chloroform	0.000		0	N.D. d		
38) Cyclohexane	0.000		0	N.D. d		
40) 1,2-Dichloroethane	0.000		0	N.D. d		
41) 2-Butanone	0.000		0	N.D. d		
42) 1,1,1-Trichloroethane	0.000		0	N.D. d		
43) Carbon Tetrachloride	0.000		0	N.D. d		
44) Vinyl Acetate	0.000		0	N.D. d		
45) Bromodichloromethane	0.000		0	N.D. d		
46) Methylcyclohexane	0.000		0	N.D. d		
47) Dibromomethane	0.000		0	N.D. d		
48) 1,2-Dichloropropane	0.000		0	N.D. d		
49) Trichloroethene	0.000		0	N.D. d		
50) Benzene	4.977	78	12206	0.8611	ug/l	100
51) tert-Amyl methyl ether	0.000		0	N.D. d		
53) Iso-propylacetate	0.000		0	N.D. d		
54) Methyl methacrylate	0.000		0	N.D. d		
55) Dibromochloromethane	0.000		0	N.D. d		
56) 2-Chloroethylvinylether	0.000		0	N.D. d		
57) cis-1,3-Dichloropropene	0.000		0	N.D. d		
58) trans-1,3-Dichloropropene	0.000		0	N.D. d		
59) Ethyl methacrylate	0.000		0	N.D. d		
60) 1,1,2-Trichloroethane	0.000		0	N.D. d		
61) 1,2-Dibromoethane	6.531	107	2970	0.9674	ug/l	81
62) 1,3-Dichloropropane	0.000		0	N.D. d		
63) 4-Methyl-2-Pentanone	0.000		0	N.D. d		
64) 2-Hexanone	0.000		0	N.D. d		
65) Tetrachloroethene	0.000		0	N.D. d		
67) Toluene	6.019	92	9426	1.0362	ug/l	92

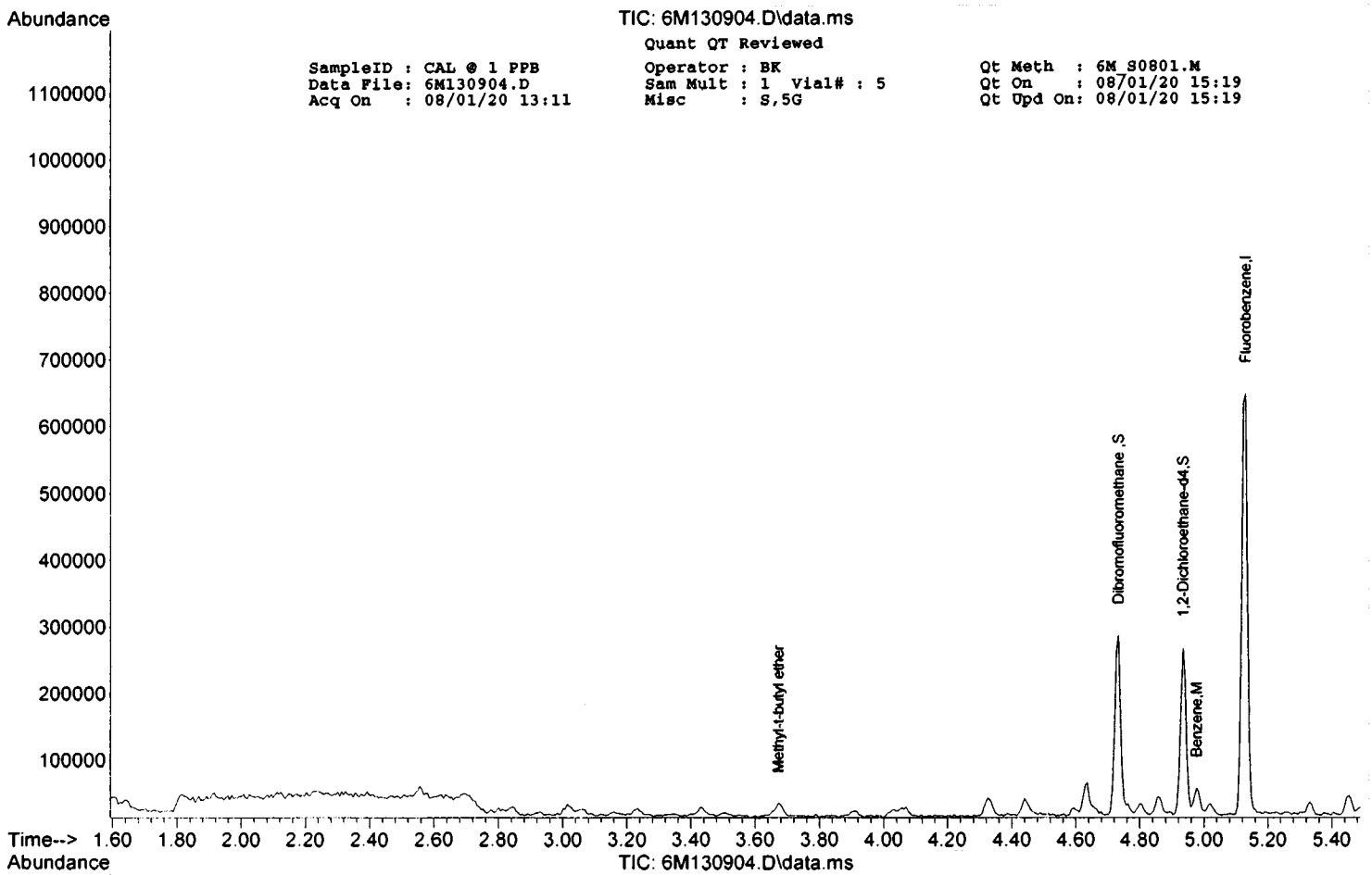
Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130904.D Sam Mult : 1 Vial# : 5 Qt On : 08/01/20 15:19
Acq On : 08/01/20 13:11 Misc : S,5G Qt Upd On: 08/01/20 15:19

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	0.000		0	N.D. d		
69)	Chlorobenzene	0.000		0	N.D. d		
71)	n-Butyl acrylate	0.000		0	N.D. d		
72)	n-Amyl acetate	0.000		0	N.D. d		
73)	Bromoform	0.000		0	N.D. d		
74)	Ethylbenzene	6.824	106	3999	0.8873	ug/l	98
75)	1,1,2,2-Tetrachloroethane	0.000		0	N.D. d		
77)	Styrene	0.000		0	N.D. d		
78)	m&p-Xylenes	6.879	106	12835	1.9375	ug/l	93
79)	o-Xylene	7.104	106	6195	0.9693	ug/l	94
80)	trans-1,4-Dichloro-2-b...	0.000		0	N.D. d		
81)	1,3-Dichlorobenzene	0.000		0	N.D. d		
82)	1,4-Dichlorobenzene	0.000		0	N.D. d		
83)	1,2-Dichlorobenzene	0.000		0	N.D. d		
84)	Isopropylbenzene	7.293	105	16453	0.9548	ug/l	91
85)	Cyclohexanone	0.000		0	N.D. d		
86)	Camphene	0.000		0	N.D. d		
87)	1,2,3-Trichloropropane	0.000		0	N.D. d		
88)	2-Chlorotoluene	0.000		0	N.D. d		
89)	p-Ethyltoluene	0.000		0	N.D. d		
90)	4-Chlorotoluene	0.000		0	N.D. d		
91)	n-Propylbenzene	7.525	91	18459	0.8960	ug/l	96
92)	Bromobenzene	0.000		0	N.D. d		
93)	1,3,5-Trimethylbenzene	7.610	105	11029	0.9023	ug/l	83
94)	Butyl methacrylate	0.000		0	N.D. d		
95)	t-Butylbenzene	7.806	119	13807	0.9607	ug/l	98
96)	1,2,4-Trimethylbenzene	7.830	105	14637	1.0539	ug/l	81
97)	sec-Butylbenzene	7.934	105	15695	No Calib		
98)	4-Isopropyltoluene	8.001	119	13351	0.8448	ug/l	98
99)	n-Butylbenzene	8.238	91	16830	0.9506	ug/l	97
100)	p-Diethylbenzene	0.000		0	N.D. d		
101)	1,2,4,5-Tetramethylben...	0.000		0	N.D. d		
102)	1,2-Dibromo-3-Chloropr...	0.000		0	N.D. d		
103)	Camphor	0.000		0	N.D. d		
104)	Hexachlorobutadiene	0.000		0	N.D. d		
105)	1,2,4-Trichlorobenzene	0.000		0	N.D. d		
106)	1,2,3-Trichlorobenzene	0.000		0	N.D. d		
107)	Naphthalene	9.397	128	14426	1.1599	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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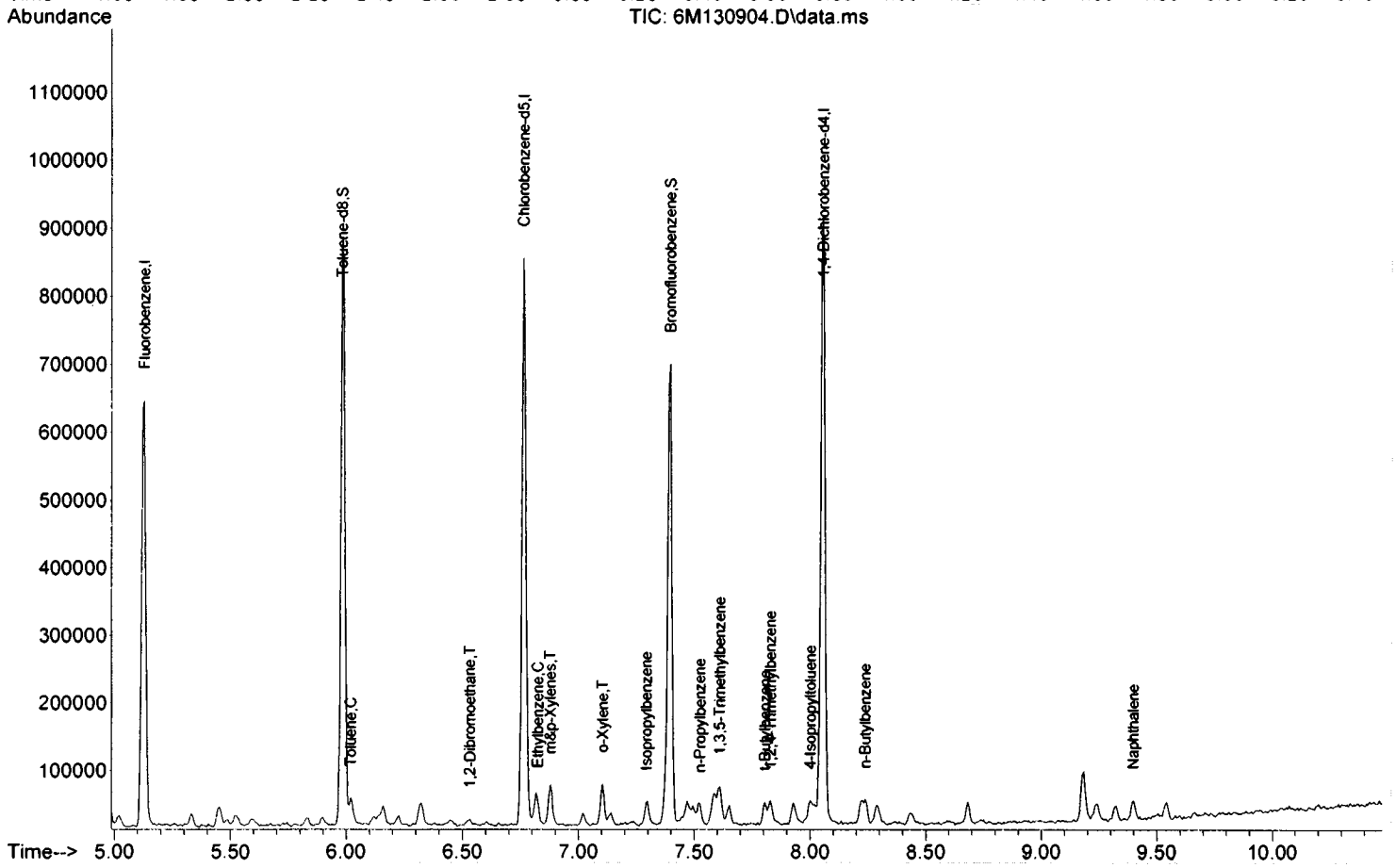
Quant QT Reviewed
SampleID : CAL @ 1 PPB
Data File: 6M130904.D
Acq On : 08/01/20 13:11
Operator : BK
Sam Mult : 1 Vial# : 5
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:19
Qt Upd On: 08/01/20 15:19
Methyl-t-butyl ether
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Benzene,M
Fluorobenzene,I
Time-->


Abundance
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Fluorobenzene,I
Toluene-d8,S
Toluene,C
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Ethylbenzene,C
m&p-Xylenes,T
o-Xylene,T
Isopropylbenzene
Bromofluorobenzene,S
n-Propylbenzene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,4-Dichlorobenzene-d4,I
4-Isopropyltoluene
n-Butylbenzene
Naphthalene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130903.D Sam Mult : 1 Vial# : 4 Qt On : 08/01/20 15:17
Acq On : 08/01/20 12:51 Misc : S,5G Qt Upd On: 08/01/20 15:17

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	423816	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	356268	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	199185	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	110986	29.08	ug/l	0.00
Spiked Amount 30.000			Recovery =	96.93%		
39) 1,2-Dichloroethane-d4	4.934	67	62223	29.12	ug/l	0.00
Spiked Amount 30.000			Recovery =	97.07%		
66) Toluene-d8	5.983	98	436450	30.26	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.87%		
76) Bromofluorobenzene	7.397	174	153460	28.72	ug/l	0.00
Spiked Amount 30.000			Recovery =	95.73%		
Target Compounds						Qvalue
5) Chlorodifluoromethane	0.000		0	N.D.	d	
6) Dichlorodifluoromethane	0.000		0	N.D.	d	
7) Chloromethane	0.000		0	N.D.	d	
8) Bromomethane	0.000		0	N.D.	d	
9) Vinyl Chloride	0.000		0	N.D.	d	
10) Chloroethane	0.000		0	N.D.	d	
11) Trichlorofluoromethane	0.000		0	N.D.	d	
12) Ethyl ether	0.000		0	N.D.	d	
13) Furan	0.000		0	N.D.	d	
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D.	d	
15) Methylene Chloride	0.000		0	N.D.	d	
16) Acrolein	0.000		0	N.D.	d	
17) Acrylonitrile	0.000		0	N.D.	d	
18) Iodomethane	0.000		0	N.D.	d	
19) Acetone	0.000		0	N.D.	d	
20) Carbon Disulfide	0.000		0	N.D.	d	
21) t-Butyl Alcohol	0.000		0	N.D.	d	
22) n-Hexane	0.000		0	N.D.	d	
23) Di-isopropyl-ether	0.000		0	N.D.	d	
24) 1,1-Dichloroethene	0.000		0	N.D.	d	
25) Methyl Acetate	0.000		0	N.D.	d	
26) Methyl-t-butyl ether	0.000		0	N.D.	d	
27) 1,1-Dichloroethane	0.000		0	N.D.	d	
28) trans-1,2-Dichloroethene	0.000		0	N.D.	d	
29) Ethyl-t-butyl ether	0.000		0	N.D.	d	
30) cis-1,2-Dichloroethene	0.000		0	N.D.	d	
31) Bromochloromethane	0.000		0	N.D.	d	
32) 2,2-Dichloropropane	0.000		0	N.D.	d	
33) Ethyl acetate	0.000		0	N.D.	d	
34) 1,4-Dioxane	0.000		0	N.D.	d	
35) 1,1-Dichloropropene	0.000		0	N.D.	d	
36) Chloroform	0.000		0	N.D.	d	
38) Cyclohexane	0.000		0	N.D.	d	
40) 1,2-Dichloroethane	0.000		0	N.D.	d	
41) 2-Butanone	0.000		0	N.D.	d	
42) 1,1,1-Trichloroethane	0.000		0	N.D.	d	
43) Carbon Tetrachloride	0.000		0	N.D.	d	
44) Vinyl Acetate	0.000		0	N.D.	d	
45) Bromodichloromethane	0.000		0	N.D.	d	
46) Methylcyclohexane	0.000		0	N.D.	d	
47) Dibromomethane	0.000		0	N.D.	d	
48) 1,2-Dichloropropane	0.000		0	N.D.	d	
49) Trichloroethene	0.000		0	N.D.	d	
50) Benzene	0.000		0	N.D.	d	
51) tert-Amyl methyl ether	0.000		0	N.D.	d	
53) Iso-propylacetate	0.000		0	N.D.	d	
54) Methyl methacrylate	0.000		0	N.D.	d	
55) Dibromochloromethane	0.000		0	N.D.	d	
56) 2-Chloroethylvinylether	0.000		0	N.D.	d	
57) cis-1,3-Dichloropropene	0.000		0	N.D.	d	
58) trans-1,3-Dichloropropene	0.000		0	N.D.	d	
59) Ethyl methacrylate	0.000		0	N.D.	d	
60) 1,1,2-Trichloroethane	0.000		0	N.D.	d	
61) 1,2-Dibromoethane	0.000		0	N.D.	d	
62) 1,3-Dichloropropane	0.000		0	N.D.	d	
63) 4-Methyl-2-Pentanone	0.000		0	N.D.	d	
64) 2-Hexanone	0.000		0	N.D.	d	
65) Tetrachloroethene	0.000		0	N.D.	d	
67) Toluene	0.000		0	N.D.	d	

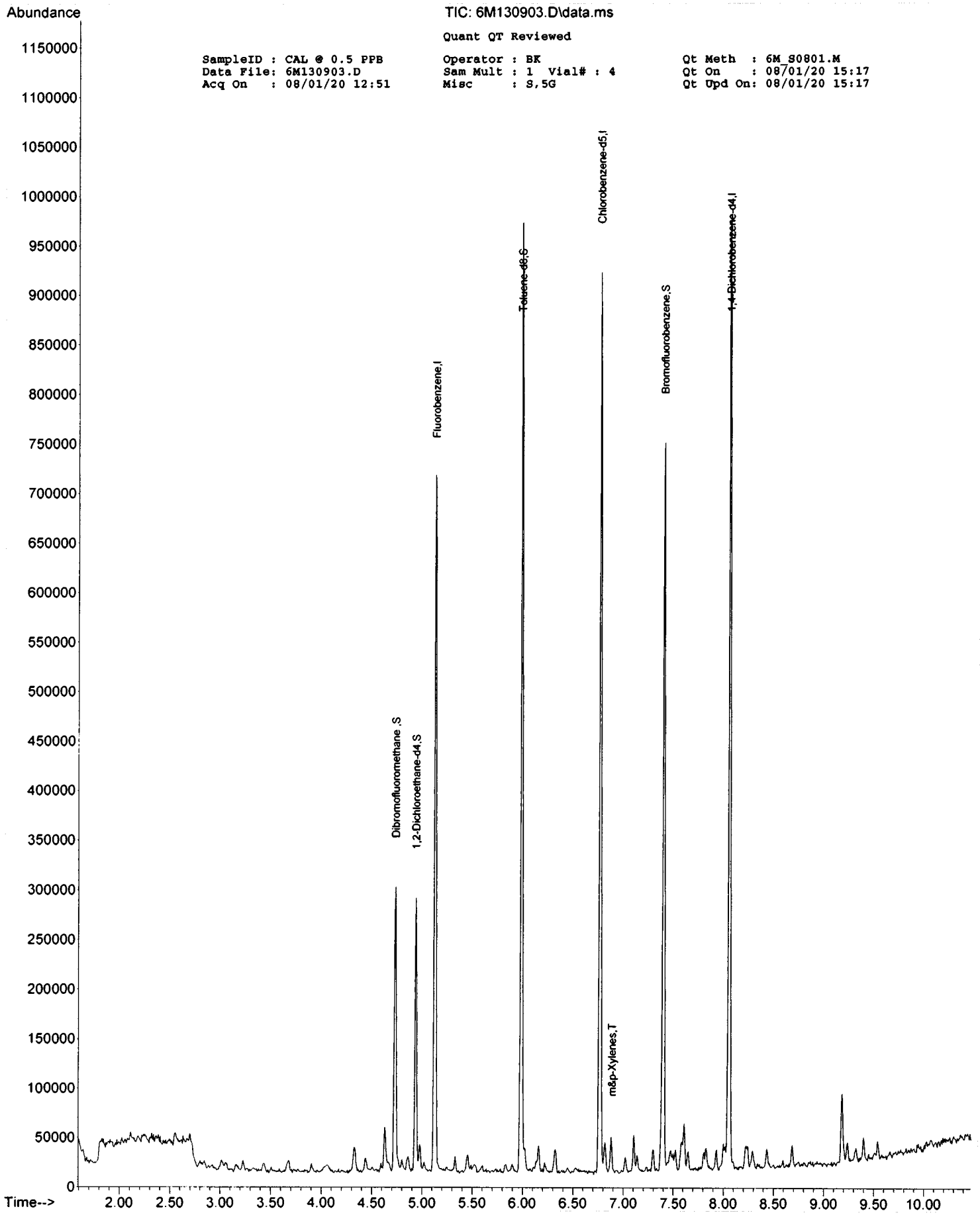
Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130903.D Sam Mult : 1 Vial# : 4 Qt On : 08/01/20 15:17
Acq On : 08/01/20 12:51 Misc : S,5G Qt Upd On: 08/01/20 15:17

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	0.000		0	N.D. d		
69)	Chlorobenzene	0.000		0	N.D. d		
71)	n-Butyl acrylate	0.000		0	N.D. d		
72)	n-Amyl acetate	0.000		0	N.D. d		
73)	Bromoform	0.000		0	N.D. d		
74)	Ethylbenzene	0.000		0	N.D. d		
75)	1,1,2,2-Tetrachloroethane	0.000		0	N.D. d		
77)	Styrene	0.000		0	N.D. d		
78)	m&p-Xylenes	6.885	106	7243	0.9804	ug/l	71
79)	o-Xylene	0.000		0	N.D. d		
80)	trans-1,4-Dichloro-2-b...	0.000		0	N.D. d		
81)	1,3-Dichlorobenzene	0.000		0	N.D. d		
82)	1,4-Dichlorobenzene	0.000		0	N.D. d		
83)	1,2-Dichlorobenzene	0.000		0	N.D. d		
84)	Isopropylbenzene	0.000		0	N.D. d		
85)	Cyclohexanone	0.000		0	N.D. d		
86)	Camphene	0.000		0	N.D. d		
87)	1,2,3-Trichloropropane	0.000		0	N.D. d		
88)	2-Chlorotoluene	0.000		0	N.D. d		
89)	p-Ethyltoluene	0.000		0	N.D. d		
90)	4-Chlorotoluene	0.000		0	N.D. d		
91)	n-Propylbenzene	0.000		0	N.D. d		
92)	Bromobenzene	0.000		0	N.D. d		
93)	1,3,5-Trimethylbenzene	0.000		0	N.D. d		
94)	Butyl methacrylate	0.000		0	N.D. d		
95)	t-Butylbenzene	0.000		0	N.D. d		
96)	1,2,4-Trimethylbenzene	0.000		0	N.D. d		
97)	sec-Butylbenzene	0.000		0	N.D. d		
98)	4-Isopropyltoluene	0.000		0	N.D. d		
99)	n-Butylbenzene	0.000		0	N.D. d		
100)	p-Diethylbenzene	0.000		0	N.D. d		
101)	1,2,4,5-Tetramethylben...	0.000		0	N.D. d		
102)	1,2-Dibromo-3-Chloropr...	0.000		0	N.D. d		
103)	Camphor	0.000		0	N.D. d		
104)	Hexachlorobutadiene	0.000		0	N.D. d		
105)	1,2,4-Trichlorobenzene	0.000		0	N.D. d		
106)	1,2,3-Trichlorobenzene	0.000		0	N.D. d		
107)	Naphthalene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M130903.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 0.5 PPB
Data File: 6M130903.D
Acq On : 08/01/20 12:51
Operator : BK
Sam Mult : 1 Vial# : 4
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:17
Qt Upd On: 08/01/20 15:17
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
m&p-Xylenes,T
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

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Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2M141277.D	CAL @ 20 PPB	08/26/20 13:43	2	2M141275.D	CAL @ 5 PPB	08/26/20 13:04
3	2M141276.D	CAL @ 10 PPB	08/26/20 13:23	4	2M141279.D	CAL @ 50 PPB	08/26/20 14:22
5	2M141286.D	CAL @ 100 PPB	08/26/20 16:39	6	2M141283.D	CAL @ 250 PPB	08/26/20 15:40
7	2M141280.D	CAL @ 500 PPB	08/26/20 14:42	8	2M141274.D	CAL @ 1 PPB	08/26/20 12:44
9	2M141273.D	CAL @ 0.5 PPB	08/26/20 12:25				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.2125	0.1448	0.1446	0.1973	0.2170	0.2301	0.2223	0.1551	-----	0.191	1.69	1.00	1.00	19	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dichlorodifluorometha	1	0	Avg	0.1978	0.1812	0.1557	0.1929	0.2220	0.2106	0.2114	0.1711	-----	0.193	1.68	1.00	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloromethane	1	0	Avg	0.1028	0.0998	0.0765	0.1080	0.1226	0.1344	0.1332	0.1185	-----	0.112	1.85	1.00	1.00	17	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromomethane	1	0	Qua	0.1017	0.0962	0.0830	0.0996	0.1383	0.1519	0.1574	0.1036	-----	0.117	2.25	0.999	0.999	24	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Chloride	1	0	Avg	0.1927	0.1865	0.1683	0.1930	0.2101	0.1978	0.1878	0.1808	-----	0.190	1.95	0.999	1.00	6.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroethane	1	0	Avg	0.1357	0.1415	0.1129	0.1340	0.1477	0.1589	0.1609	0.1534	-----	0.143	2.34	1.00	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichlorofluoromethan	1	0	Avg	0.3715	0.3789	0.3275	0.3740	0.4024	0.4280	0.3895	0.3491	-----	0.378	2.57	0.998	0.999	8.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl ether	1	0	Avg	0.1260	0.1216	0.1100	0.1281	0.1324	0.1400	0.1317	0.1030	-----	0.124	2.80	0.999	1.00	9.9	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Furan	1	0	Avg	0.1862	0.1822	0.1554	0.1813	0.1839	0.2018	0.1708	0.1979	-----	0.182	2.84	0.993	0.999	8.0	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1503	0.1653	0.1454	0.1660	0.1755	0.1884	0.1871	0.1563	-----	0.167	3.00	1.00	1.00	9.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methylene Chloride	1	0	Avg	0.2174	0.2186	0.1878	0.2125	0.2170	0.2368	0.2328	0.2101	-----	0.217	3.42	1.00	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acrolein	1	0	Avg	0.0262	0.0247	0.0213	0.0262	0.0267	0.0285	0.0274	0.0254	-----	0.0259	2.92	1.00	1.00	8.3		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Acrylonitrile	1	0	Avg	0.0659	0.0643	0.0569	0.0636	0.0609	0.0671	0.0643	0.0691	-----	0.0640	3.62	0.999	1.00	5.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iodomethane	1	0	Qua	0.1670	0.1331	0.1185	0.1846	0.2746	-----	-----	0.1482	0.1764	0.172	3.15	0.947	0.998	30		20.00	5.00	10.00	50.00	100.0			1.00	0.50
Acetone	1	0	Avg	0.0468	0.0478	0.0415	0.0433	0.0418	0.0435	0.0403	0.0445	-----	0.0438	3.04	0.999	1.00	5.9	0.10 a	100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Carbon Disulfide	1	0	Avg	0.5620	0.5740	0.4811	0.5709	0.5639	0.6099	0.5937	0.5666	-----	0.565	3.21	1.00	1.00	6.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butyl Alcohol	1	0	Avg	0.0195	0.0179	0.0163	0.0178	0.0175	0.0193	0.0188	0.0216	-----	0.0186	3.48	1.00	1.00	8.6		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
n-Hexane	1	0	Avg	0.1323	0.1540	0.1349	0.1563	0.1547	0.1645	0.1614	0.1927	-----	0.156	3.87	1.00	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Di-isopropyl-ether	1	0	Avg	0.3887	0.3755	0.3324	0.3987	0.3857	0.4005	0.3799	0.3258	-----	0.373	4.03	0.999	1.00	7.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethene	1	0	Avg	0.2599	0.2680	0.2239	0.2621	0.2571	0.2741	0.2600	0.2437	-----	0.256	3.01	0.999	1.00	6.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl Acetate	1	0	Avg	0.1065	0.1084	0.0947	0.1009	0.0966	0.1034	0.0975	0.1035	-----	0.101	3.32	0.999	1.00	4.8	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl-t-butyl ether	1	0	Avg	0.5429	0.5116	0.4719	0.5496	0.5592	0.5993	0.5775	0.4726	0.4774	0.529	3.64	1.00	1.00	9.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.3317	0.3304	0.2783	0.3286	0.3149	0.3448	0.3314	0.3061	-----	0.321	4.00	0.999	1.00	6.5	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2192	0.2114	0.1928	0.2268	0.2421	0.2596	0.2573	0.1863	-----	0.224	3.65	1.00	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl-t-butyl ether	1	0	Avg	0.5196	0.5013	0.4405	0.5138	0.5066	0.5431	0.5144	0.4629	-----	0.500	4.29	0.999	1.00	6.6	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.3242	0.2990	0.2775	0.3260	0.3168	0.3387	0.3224	0.3246	-----	0.316	4.41	0.999	1.00	6.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromochloromethane	1	0	Avg	0.1386	0.1403	0.1232	0.1365	0.1245	0.1296	0.1203	0.1321	-----	0.131	4.57	0.999	1.00	5.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2,2-Dichloropropane	1	0	Avg	0.3178	0.3231	0.2688	0.3179	0.3033	0.3302	0.2967	0.3100	-----	0.309	4.42	0.997	0.999	6.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl acetate	1	0	Avg	0.1402	0.1433	0.1400	0.1531	0.1470	0.1550	0.1491	0.1239	-----	0.144	4.43	1.00	1.00	6.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dioxane	1	0	Avg	0.0031	0.0025	0.0025	0.0029	0.0029	0.0034	0.0031	0.0027	-----	0.00293	5.50	0.997	0.998	11		1000.	250.0	500.0	2500.	5000.	12500	25000	50.00	
1,1-Dichloropropene	1	0	Avg	0.2887	0.2838	0.2796	0.3003	0.2942	0.3146	0.3093	0.2533	-----	0.291	4.82	1.00	1.00	6.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroform	1	0	Avg	0.4004	0.3963	0.3742	0.4076	0.3965	0.4280	0.4108	0.3705	-----	0.398	4.60	1.00	1.00	4.7	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromofluoromethan	1	0	Avg	0.2846	0.2870	0.2875	0.2828	0.2872	0.2947	0.2866	0.2709	0.2842	0.285	4.70	-1	-1	2.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.2023	0.2149	0.2083	0.2365	0.2259	0.2445	0.2350	0.2237	-----	0.224	4.77	0.999	1.00	6.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1336	0.1389	0.1291	0.1322	0.1234	0.1263	0.1255	0.1298	0.1412	0.131	4.91	-1	-1	4.6		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.2905	0.2938	0.2894	0.2893	0.2575	0.2910	0.2923	0.2617	0.3843	0.294	4.95	0.999	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
2-Butanone	1	0	Avg	0.0764	0.0943	0.0682	0.0775	0.0761	0.0799	0.0734	0.0525	-----	0.0748	4.40	0.998	1.00	16	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1-Trichloroethane	1	0	Avg	0.3823	0.3558	0.3703	0.3776	0.3754	0.4086	0.3830	0.3782	-----	0.379	4.73	0.999	0.999	3.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Carbon Tetrachloride	1	0	Avg	0.2978	0.2992	0.3094	0.3108	0.3304	0.3685	0.3104	0.3085	-----	0.317	4.83	0.993	0.998	7.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Acetate	1	0	Avg	0.4916	0.4729	0.3993	0.4999	0.4947	0.5125	0.4883	0.4304	-----	0.474	4.02	0.999	1.00	8.2		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromodichloromethan	1	0	Avg	0.3246	0.3288	0.2685	0.3320	0.3249	0.3645	0.3248	0.2801	-----	0.319	5.57	0.997	0.999	9.6	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.02

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2M141277.D	CAL @ 20 PPB	08/26/20 13:43	2	2M141275.D	CAL @ 5 PPB	08/26/20 13:04
3	2M141276.D	CAL @ 10 PPB	08/26/20 13:23	4	2M141279.D	CAL @ 50 PPB	08/26/20 14:22
5	2M141286.D	CAL @ 100 PPB	08/26/20 16:39	6	2M141283.D	CAL @ 250 PPB	08/26/20 15:40
7	2M141280.D	CAL @ 500 PPB	08/26/20 14:42	8	2M141274.D	CAL @ 1 PPB	08/26/20 12:44
9	2M141273.D	CAL @ 0.5 PPB	08/26/20 12:25				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.2187	0.2468	0.2151	0.2629	0.2712	0.3134	0.2926	0.2399	-----	0.258	5.42	0.998	0.999	13	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromomethane	1	0	Qua	0.1687	0.1673	0.1428	0.1761	0.2259	0.2560	0.2225	0.1659	-----	0.191	5.50	0.994	0.998	20		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloropropane	1	0	Avg	0.1948	0.2043	0.1559	0.1923	0.1914	0.2152	0.2012	0.1706	-----	0.191	5.43	0.999	0.999	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichloroethene	1	0	Avg	0.2834	0.2601	0.2641	0.2687	0.3042	0.3687	0.3246	0.2920	-----	0.296	5.30	0.995	0.997	12	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Benzene	1	0	Avg	0.8424	0.8360	0.8845	0.8684	0.8068	0.9376	0.9359	0.7922	0.9313	0.871	4.95	0.999	0.999	6.4	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.5605	0.5277	0.5834	0.5688	0.5194	0.6201	0.5810	0.5471	-----	0.564	4.99	0.998	0.999	5.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iso-propylacetate	1	0	Avg	0.2759	0.2295	0.3941	0.3231	0.2887	0.2949	0.3036	0.3655	-----	0.309	4.95	1.00	1.00	17	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl methacrylate	1	0	Avg	0.1322	0.1134	0.1578	0.1579	0.1455	0.1426	0.1303	0.1744	-----	0.144	5.45	0.998	1.00	13	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromochloromethan	1	0	Avg	0.3577	0.2379	0.3393	0.3536	0.3707	0.3881	0.3730	0.3056	-----	0.341	6.42	1.00	1.00	14	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chloroethylvinylethe	1	0	Avg	0.0512	0.0398	0.0580	0.0605	0.0575	0.0619	0.0570	0.0376	-----	0.0530	5.71	0.998	1.00	18		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.3527	0.2960	0.4064	0.4147	0.4014	0.4351	0.3903	0.4306	-----	0.391	5.81	0.997	0.999	12	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,3-Dichloroprop	1	0	Avg	0.3579	0.2711	0.4143	0.4125	0.3994	0.4047	0.3885	0.4705	-----	0.390	6.09	1.00	1.00	15	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl methacrylate	1	0	Avg	0.1361	0.1089	0.1540	0.1577	0.1595	0.1476	0.1391	0.1546	-----	0.145	6.10	0.999	1.00	12	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2293	0.1894	0.2498	0.2724	0.2698	0.2762	0.2675	0.2686	-----	0.253	6.20	1.00	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromoethane	1	0	Avg	0.3092	0.2323	0.2928	0.3020	0.2994	0.3120	0.3003	0.2849	-----	0.292	6.49	1.00	1.00	8.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.3796	0.3105	0.4193	0.4260	0.4104	0.4215	0.4082	0.4644	-----	0.405	6.29	1.00	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.1606	0.1236	0.1772	0.1766	0.1665	0.1685	0.1602	0.1913	-----	0.166	5.87	0.999	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Hexanone	1	0	Avg	0.1113	0.0891	0.1263	0.1256	0.1213	0.1197	0.1138	0.1293	-----	0.117	6.30	0.999	1.00	11	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Tetrachloroethene	1	0	Qua	0.2177	0.1656	0.2412	0.2432	0.3053	0.3275	0.3233	0.2403	-----	0.258	6.29	0.999	0.999	22	0.20 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Toluene-d8	1	0	Avg	1.0751	0.9137	1.2736	1.2436	1.1911	1.1883	1.1358	1.2990	1.3644	1.19	5.95	-1	-1	11		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.5967	0.4981	0.7176	0.7205	0.7038	0.7273	0.7058	0.7710	-----	0.680	5.99	1.00	1.00	13	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.3094	0.2903	0.2842	0.2996	0.3309	0.3443	0.3561	0.2768	-----	0.312	6.78	1.00	1.00	9.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chlorobenzene	1	0	Avg	0.8311	0.7946	0.7868	0.8425	0.8607	0.8767	0.8502	0.8190	-----	0.833	6.75	1.00	1.00	3.8	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butyl acrylate	1	0	Avg	0.7974	0.6270	0.8213	0.5648	0.7172	0.7405	0.8119	0.5663	-----	0.706	6.99	0.998	1.00	15	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Amyl acetate	1	0	Avg	0.5895	0.4172	0.6076	0.4213	0.5448	0.5994	0.5854	0.4105	-----	0.522	7.11	0.999	0.999	17	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromoform	1	0	Avg	0.5545	0.4710	0.4558	0.4950	0.5080	0.5252	0.5856	0.3268	-----	0.490	7.20	0.997	1.00	16	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethylbenzene	1	0	Avg	0.5452	0.5659	0.6853	0.4987	0.6530	0.7086	0.5249	0.4932	-----	0.584	6.79	0.975	0.995	15	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.7054	0.6019	0.7494	0.6271	0.5964	0.5983	0.4453	0.5413	-----	0.608	7.42	0.976	0.999	15	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromofluorobenzene	1	0	Avg	0.9432	0.8652	0.7887	0.8893	0.8283	0.7873	0.8447	0.5321	0.8310	0.812	7.37	-1	-1	14		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.7587	1.3490	1.7222	1.3103	1.6360	1.8785	1.8298	1.1672	-----	1.58	7.07	0.999	0.999	17	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
m&p-Xylenes	1	0	Avg	1.0364	0.9208	1.0358	0.7264	0.9270	1.0295	0.8325	0.6540	1.1709	0.926	6.85	0.989	0.997	18	0.10	40.00	10.00	20.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	1.0219	0.8053	1.0136	0.7481	0.9302	1.0662	1.1207	0.7243	-----	0.929	7.07	0.998	0.999	16	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.1872	0.1733	0.2249	0.1835	0.1831	0.1717	0.1446	0.1701	-----	0.180	7.44	0.992	1.00	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichlorobenzene	1	0	Avg	1.1204	1.1429	1.2262	1.2517	1.2475	1.3101	1.2828	1.1829	-----	1.22	7.99	1.00	1.00	5.5	0.60	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dichlorobenzene	1	0	Avg	1.2413	1.2578	1.2155	1.2280	1.2553	1.2971	1.1590	1.1755	-----	1.23	8.04	0.997	1.00	3.7	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichlorobenzene	1	0	Avg	1.1408	1.1626	1.1692	1.0252	1.1676	1.1724	1.1515	1.2215	-----	1.15	8.26	1.00	1.00	4.9	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Isopropylbenzene	1	0	Avg	2.3737	2.1721	2.4472	1.9705	2.2249	2.2283	2.0740	1.6707	-----	2.15	7.26	0.999	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Avg	0.0175	0.0165	0.0194	0.0132	0.0123	0.0122	0.0138	0.0178	-----	0.0154	7.34	0.996	1.00	18		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Camphene	1	0	Avg	0.5070	0.5374	0.6652	0.5507	0.5535	0.5740	0.4447	0.4499	-----	0.535	7.43	0.983	0.998	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichloropropane	1	0	Avg	0.7929	0.6898	0.8669	0.7249	0.7199	0.7104	0.5643	0.5940	-----	0.708	7.46	0.986	0.999	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chlorotoluene	1	0	Avg	1.3063	1.2836	1.5005	1.2855	1.3109	1.3467	1.3084	0.8825	-----	1.28	7.56	1.00	1.00	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Avg Rsd: 11.02

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0082707 0150

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2M141277.D	CAL @ 20 PPB	08/26/20 13:43	2	2M141275.D	CAL @ 5 PPB	08/26/20 13:04
3	2M141276.D	CAL @ 10 PPB	08/26/20 13:23	4	2M141279.D	CAL @ 50 PPB	08/26/20 14:22
5	2M141286.D	CAL @ 100 PPB	08/26/20 16:39	6	2M141283.D	CAL @ 250 PPB	08/26/20 15:40
7	2M141280.D	CAL @ 500 PPB	08/26/20 14:42	8	2M141274.D	CAL @ 1 PPB	08/26/20 12:44
9	2M141273.D	CAL @ 0.5 PPB	08/26/20 12:25				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.2154	2.0523	2.3719	2.1944	2.1797	2.1946	2.1945	1.6087	-----	2.13	7.55	1.00	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Chlorotoluene	1	0	Avg	1.3882	1.2666	1.4595	1.3337	1.3550	1.7327	1.2568	1.0248	-----	1.35	7.62	0.972	0.992	15		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Propylbenzene	1	0	Avg	2.5298	2.3822	2.8563	2.5247	2.4324	2.3818	1.9532	1.9150	-----	2.37	7.49	0.990	1.00	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.2920	1.1588	1.4096	1.2188	1.2179	1.1895	0.9590	1.0896	-----	1.19	7.46	0.988	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3,5-Trimethylbenzen	1	0	Avg	1.7914	1.6626	1.9561	1.8148	1.7954	2.1252	1.5869	1.3407	-----	1.76	7.57	0.978	0.995	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	Avg	0.4425	0.3791	0.4596	0.4321	0.4488	0.5509	0.4456	0.2979	-----	0.432	7.58	0.988	0.996	17	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butylbenzene	1	0	Avg	1.7073	1.7517	1.8747	1.7898	1.7911	2.0911	2.0754	1.5243	-----	1.83	7.78	0.999	0.999	10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Avg	1.8198	1.7533	2.0491	1.8767	1.8634	2.3155	1.9426	1.6217	-----	1.91	7.80	0.992	0.996	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	1.8792	2.0035	2.2666	2.0843	2.0804	2.1706	2.0890	1.6869	-----	2.03	7.90	1.00	1.00	8.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	1.6176	1.7553	1.9208	1.8338	1.8596	1.9328	1.9323	1.7118	-----	1.82	7.96	1.00	1.00	6.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	1.5353	1.6377	1.9381	1.5898	1.7147	1.6770	1.8470	1.5925	-----	1.69	8.20	0.998	1.00	8.2		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	0.9053	0.9451	1.0179	0.9377	1.0049	1.0111	1.1375	0.9127	-----	0.984	8.19	0.997	1.00	7.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	1.3487	1.3618	1.4554	1.2647	1.4321	1.5207	1.0874	1.1647	-----	1.33	8.65	0.969	0.996	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1507	0.1717	0.1620	0.1462	0.1691	0.1878	0.1346	0.1602	-----	0.160	8.71	0.970	0.995	10	0.05	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Camphor	1	0	Qua	0.0514	0.0549	0.0672	0.0619	0.0608	0.0741	0.0634	0.0510	0.1017	0.0652	9.15	0.994	0.997	24		200.0	50.00	100.0	500.0	1000.	2500.	5000.	10.00	5.00
Hexachlorobutadiene	1	0	Qua	0.1353	0.2328	0.1933	0.2630	0.2494	0.2639	0.2581	0.2861	-----	0.235	9.28	0.999	1.00	21		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.3889	0.5811	0.5234	0.6359	0.6114	0.6780	0.6583	0.5000	-----	0.572	9.20	0.999	0.999	17	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.3474	0.4993	0.6296	0.4917	0.5282	0.5701	0.5389	0.5435	-----	0.519	9.50	0.999	0.999	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Naphthalene	1	0	Avg	1.2516	1.4730	1.6484	1.6177	1.6521	1.7719	1.7238	1.3493	-----	1.56	9.36	1.00	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags	*Note:* Avg Rsd: 11.02
a - failed the min rf criteria	*Corr 1 = Correlation Coefficient for linear Eq.*
c - failed the minimum correlation coeff criteria(if applicable)	*Corr 2 = Correlation Coefficient for quad Eq.*
	Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141277.D Sam Mult : 1 Vial# : 21 Qt On : 08/26/20 14:01
Acq On : 08/26/20 13:43 Misc : A,5ML Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	395310	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	387571	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	232817	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	112506	29.33	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.77%			
39) 1,2-Dichloroethane-d4	4.910	67	52819	32.56	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.53%			
66) Toluene-d8	5.952	98	416686	27.87	ug/l	0.00
Spiked Amount 30.000			Recovery = 92.90%			
76) Bromofluorobenzene	7.367	174	219607	35.28	ug/l	0.00
Spiked Amount 30.000			Recovery = 117.60%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.691	51	56024	16.8384	ug/l	97
6) Dichlorodifluoromethane	1.679	85	52127	19.5218	ug/l	98
7) Chloromethane	1.849	50	27101	12.7786	ug/l	98
8) Bromomethane	2.252	94	26805m	18.3281	ug/l	
9) Vinyl Chloride	1.953	62	50797	17.1524	ug/l	93
10) Chloroethane	2.343	64	35770	17.1796	ug/l	99
11) Trichlorofluoromethane	2.563	101	97909	16.6384	ug/l	99
12) Ethyl ether	2.800	59	33227	14.7563	ug/l	88
13) Furan	2.843	39	49084	14.2106	ug/l	63
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	39611	14.5843	ug/l	94
15) Methylene Chloride	3.416	84	57316	15.9908	ug/l	84
16) Acrolein	2.916	56	34592	127.2981	ug/l	97
17) Acrylonitrile	3.617	53	17382	23.4538	ug/l	95
18) Iodomethane	3.148	142	44016	11.7590	ug/l	99
19) Acetone	3.044	43	61768	127.8478	ug/l	87
20) Carbon Disulfide	3.215	76	148129	15.2401	ug/l	100
21) t-Butyl Alcohol	3.477	59	25780	128.4174	ug/l	99
22) n-Hexane	3.873	57	34890	13.8988	ug/l	89
23) Di-isopropyl-ether	4.026	45	102461	15.6802	ug/l	80
24) 1,1-Dichloroethene	3.008	61	68518	16.2943	ug/l	95
25) Methyl Acetate	3.318	43	28092	24.2204	ug/l	100
26) Methyl-t-butyl ether	3.635	73	143082	17.6061	ug/l	93
27) 1,1-Dichloroethane	4.001	63	87420	16.5687	ug/l	92
28) trans-1,2-Dichloroethene	3.648	96	57787	15.3465	ug/l	90
29) Ethyl-t-butyl ether	4.288	59	136955	15.5325	ug/l	96
30) cis-1,2-Dichloroethene	4.410	61	85444	16.7173	ug/l	88
31) Bromochloromethane	4.568	49	36534	16.8904	ug/l	67
32) 2,2-Dichloropropane	4.416	77	83764	16.5746	ug/l	98
33) Ethyl acetate	4.434	43	36969m	22.9273	ug/l	
34) 1,4-Dioxane	5.495	88	41888	1311.5652	ug/l	85
35) 1,1-Dichloropropene	4.824	75	76085	15.6593	ug/l	96
36) Chloroform	4.605	83	105533	15.8188	ug/l	100
38) Cyclohexane	4.769	56	53339	13.6982	ug/l	86
40) 1,2-Dichloroethane	4.952	62	76565	16.7124	ug/l	98
41) 2-Butanone	4.410	43	20146m	24.6194	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	100752	16.3306	ug/l	96
43) Carbon Tetrachloride	4.830	117	78483	15.5244	ug/l	97
44) Vinyl Acetate	4.020	43	129571	18.4075	ug/l	100
45) Bromodichloromethane	5.568	83	85565	16.0639	ug/l	97
46) Methylcyclohexane	5.416	83	57637	13.1258	ug/l	93
47) Dibromomethane	5.495	174	44473	17.0923	ug/l	95
48) 1,2-Dichloropropane	5.428	63	51362	16.2402	ug/l	98
49) Trichloroethene	5.300	130	74689	16.4784	ug/l	100
50) Benzene	4.952	78	222011	15.8163	ug/l	100
51) tert-Amyl methyl ether	4.989	73	147733	16.1853	ug/l	98
53) Iso-propylacetate	4.946	43	71288	19.5954	ug/l	87
54) Methyl methacrylate	5.452	41	34158m	20.3745	ug/l	
55) Dibromochloromethane	6.422	129	92427	20.2975	ug/l	95
56) 2-Chloroethylvinylether	5.708	63	13251	23.0961	ug/l	97
57) cis-1,3-Dichloropropene	5.806	75	91148	16.1813	ug/l	99
58) trans-1,3-Dichloropropene	6.086	75	92488	17.1165	ug/l	99
59) Ethyl methacrylate	6.111	41	35189	17.9365	ug/l	62
60) 1,1,2-Trichloroethane	6.196	97	59248	17.6325	ug/l	96
61) 1,2-Dibromoethane	6.495	107	79893	22.3206	ug/l	100
62) 1,3-Dichloropropane	6.287	76	98103	18.6215	ug/l	100
63) 4-Methyl-2-Pentanone	5.867	43	41517	24.1733	ug/l	86
64) 2-Hexanone	6.300	43	28766	24.5889	ug/l	88
65) Tetrachloroethene	6.287	164	56264	15.4196	ug/l	94
67) Toluene	5.989	92	154198	15.1986	ug/l	97

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB
Data File: 2M141277.D
Acq On : 08/26/20 13:43

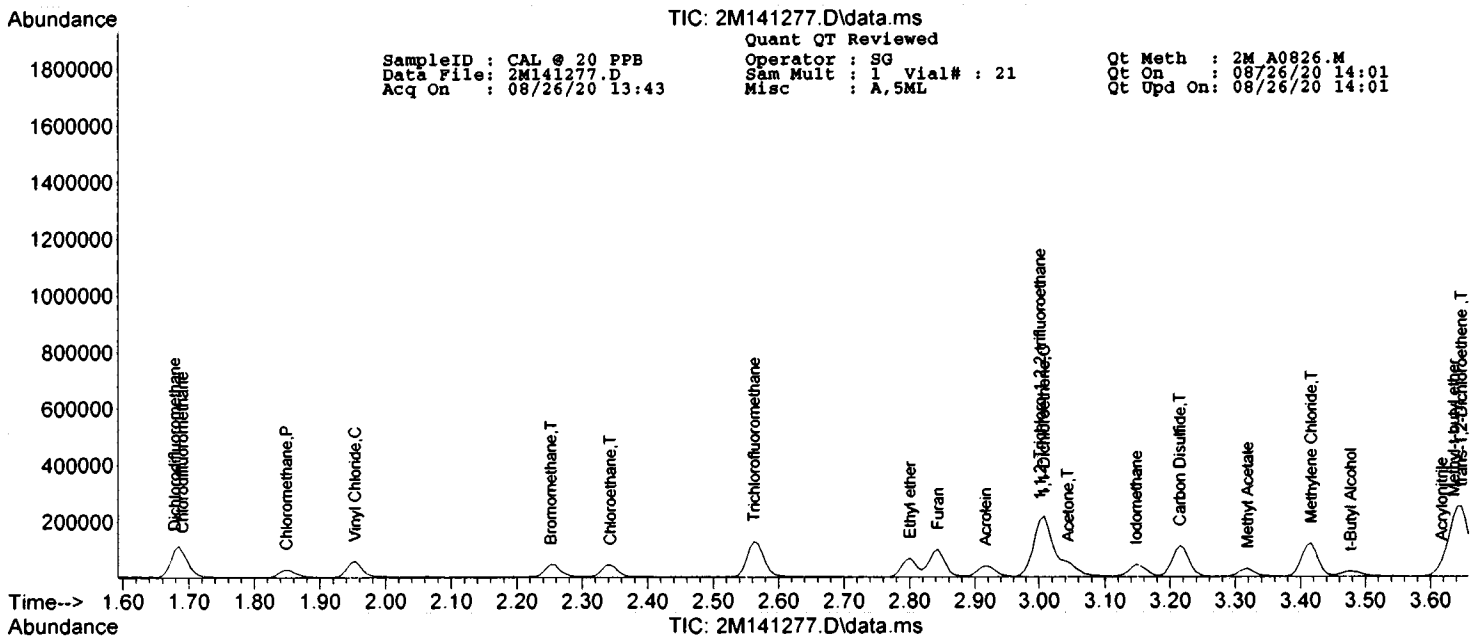
Operator : SG
Sam Mult : 1 Vial# : 21
Misc : A,5ML

Qt Meth : 2M_A0826.M
Qt On : 08/26/20 14:01
Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	79966	18.3958	ug/l	96
69)	Chlorobenzene	6.751	112	214753	18.1281	ug/l	99
71)	n-Butyl acrylate	6.995	55	123778	21.2517	ug/l	96
72)	n-Amyl acetate	7.110	43	91506	22.5091	ug/l	85
73)	Bromoform	7.202	173	86079	26.1557	ug/l	99
74)	Ethylbenzene	6.793	106	84628	15.1774	ug/l	98
75)	1,1,2,2-Tetrachloroethane	7.415	83	109491	26.0705	ug/l	98
77)	Styrene	7.074	104	272978	18.9911	ug/l	96
78)	m&p-Xylenes	6.848	106	321747	39.0222	ug/l	98
79)	o-Xylene	7.074	106	158612	18.8870	ug/l	90
80)	trans-1,4-Dichloro-2-b...	7.446	53	29065	22.1189	ug/l	82
81)	1,3-Dichlorobenzene	7.988	146	173912	17.0038	ug/l	96
82)	1,4-Dichlorobenzene	8.037	146	192666	18.9883	ug/l	99
83)	1,2-Dichlorobenzene	8.257	146	177073	19.5328	ug/l	97
84)	Isopropylbenzene	7.263	105	368434	18.2912	ug/l	97
85)	Cyclohexanone	7.342	55	13615	109.0919	ug/l	87
86)	Camphene	7.434	93	78693	14.7394	ug/l	93
87)	1,2,3-Trichloropropane	7.458	75	123078	25.2453	ug/l	95
88)	2-Chlorotoluene	7.562	91	202755	16.9817	ug/l	94
89)	p-Ethyltoluene	7.549	105	343862	15.8831	ug/l	99
90)	4-Chlorotoluene	7.616	91	215470	17.4505	ug/l	98
91)	n-Propylbenzene	7.488	91	392665	17.9545	ug/l	96
92)	Bromobenzene	7.464	77	200542	19.2454	ug/l	85
93)	1,3,5-Trimethylbenzene	7.574	105	278060	17.3685	ug/l	98
94)	Butyl methacrylate	7.580	41	68682	16.7747	ug/l	67
95)	t-Butylbenzene	7.775	119	264998	16.5419	ug/l	93
96)	1,2,4-Trimethylbenzene	7.793	105	282458	16.6306	ug/l	96
97)	sec-Butylbenzene	7.897	105	291679	15.9562	ug/l	95
98)	4-Isopropyltoluene	7.964	119	251075	15.8881	ug/l	98
99)	n-Butylbenzene	8.202	91	238307	15.5390	ug/l	97
100)	p-Diethylbenzene	8.190	119	140524	14.6010	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	209348	16.0206	ug/l	97
102)	1,2-Dibromo-3-Chloropr...	8.708	157	23405	28.8865	ug/l	98
103)	Camphor	9.141	95	79848	231.9152	ug/l	97
104)	Hexachlorobutadiene	9.281	225	21009	13.6075	ug/l	99
105)	1,2,4-Trichlorobenzene	9.202	180	60368	15.9373	ug/l	99
106)	1,2,3-Trichlorobenzene	9.500	180	53927	18.8739	ug/l	97
107)	Naphthalene	9.360	128	194271	22.5633	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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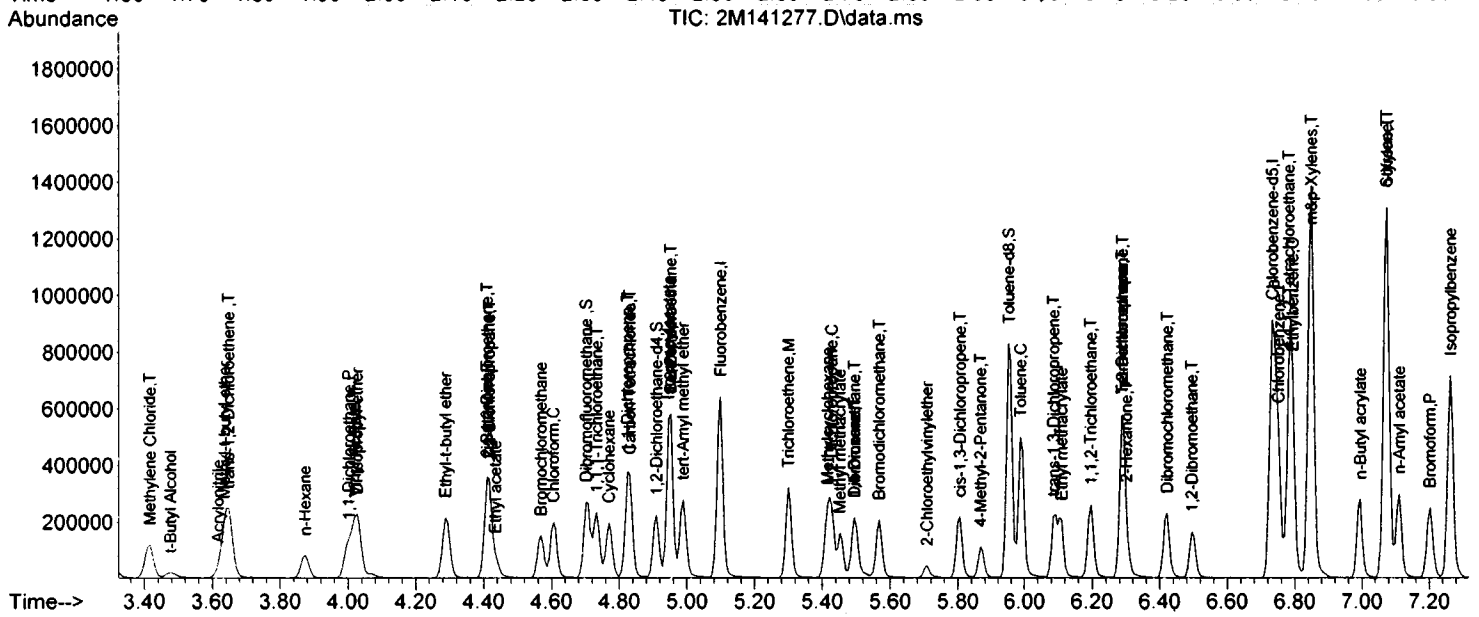
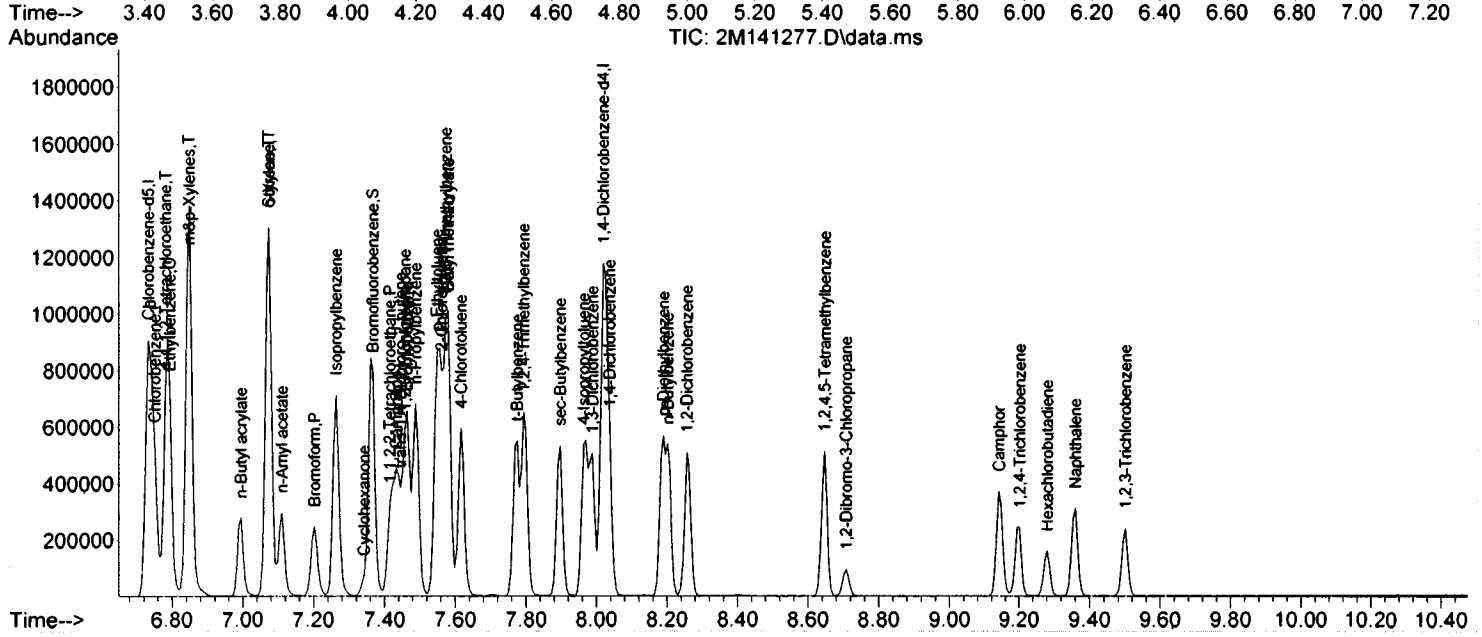
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 2M141277.D
Acq On : 08/26/20 13:43
Operator : SG
Sam Mult : 1 Vial# : 21
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08/26/20 14:01
Qt Upd On: 08/26/20 14:01
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 2M141277.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M141277.D\data.ms
Chlorobenzene-d5,I
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

Data File: 2M141275.D
Acq On : 08/26/20 13:04
SampleID : CAL @ 5 PPB
Operator : SG
Sam Mult : 1 Vial# : 19
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08/26/20 14:03
Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	387013	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	443979	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	238169	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	111076	29.58	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.60%			
39) 1,2-Dichloroethane-d4	4.910	67	53769	33.85	ug/l	0.00
Spiked Amount 30.000			Recovery = 112.83%			
66) Toluene-d8	5.952	98	405671	23.69	ug/l	0.00
Spiked Amount 30.000			Recovery = 78.97%			
76) Bromofluorobenzene	7.367	174	206071	32.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.87%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.691	51	9343	2.8683	ug/l	70
6) Dichlorodifluoromethane	1.679	85	11690	4.4718	ug/l	98
7) Chloromethane	1.849	50	6441	3.1021	ug/l	85
8) Bromomethane	2.258	94	6209m	4.3365	ug/l	
9) Vinyl Chloride	1.953	62	12030	4.1492	ug/l	83
10) Chloroethane	2.343	64	9132	4.4800	ug/l	98
11) Trichlorofluoromethane	2.563	101	24445	4.2432	ug/l	96
12) Ethyl ether	2.794	59	7849	3.5605	ug/l	81
13) Furan	2.843	39	11754	3.4759	ug/l	64
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	10662	4.0098	ug/l	92
15) Methylene Chloride	3.416	84	14103	4.0190	ug/l	78
16) Acrolein	2.916	56	7982	30.0034	ug/l	94
17) Acrylonitrile	3.617	53	4149	5.7183	ug/l	83
18) Iodomethane	3.148	142	8587	2.3432	ug/l	88
19) Acetone	3.044	43	15427	32.6155	ug/l	94
20) Carbon Disulfide	3.215	76	37027	3.8912	ug/l	100
21) t-Butyl Alcohol	3.483	59	5791	29.4650	ug/l	97
22) n-Hexane	3.873	57	9939	4.0442	ug/l	89
23) Di-isopropyl-ether	4.026	45	24221	3.7862	ug/l	81
24) 1,1-Dichloroethene	3.008	61	17290	4.1999	ug/l	96
25) Methyl Acetate	3.318	43	6996	6.1611	ug/l	100
26) Methyl-t-butyl ether	3.642	73	33001	4.1478	ug/l	96
27) 1,1-Dichloroethane	3.995	63	21316	4.1266	ug/l	100
28) trans-1,2-Dichloroethene	3.654	96	13640	3.7000	ug/l	77
29) Ethyl-t-butyl ether	4.294	59	32339	3.7463	ug/l	94
30) cis-1,2-Dichloroethene	4.416	61	19289	3.8549	ug/l	80
31) Bromochloromethane	4.568	49	9050	4.2737	ug/l	62
32) 2,2-Dichloropropane	4.416	77	20845	4.2131	ug/l	99
33) Ethyl acetate	4.440	43	9243m	5.8552	ug/l	
34) 1,4-Dioxane	5.495	88	8105	259.2182	ug/l	90
35) 1,1-Dichloropropene	4.824	75	18307	3.8486	ug/l	94
36) Chloroform	4.605	83	25562	3.9137	ug/l	93
38) Cyclohexane	4.769	56	13862	3.6363	ug/l	86
40) 1,2-Dichloroethane	4.952	62	18954	4.2259	ug/l	88
41) 2-Butanone	4.428	43	6085m	7.5956	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	22953	3.8002	ug/l	86
43) Carbon Tetrachloride	4.830	117	19301	3.8997	ug/l	85
44) Vinyl Acetate	4.020	43	30508	4.4270	ug/l	100
45) Bromodichloromethane	5.568	83	21210	4.0673	ug/l	99
46) Methylcyclohexane	5.416	83	15919	3.7030	ug/l	91
47) Dibromomethane	5.501	174	10791	4.2362	ug/l	93
48) 1,2-Dichloropropane	5.428	63	13182	4.2574	ug/l	97
49) Trichloroethene	5.300	130	16782	3.7819	ug/l	89
50) Benzene	4.946	78	53924	3.9240	ug/l	100
51) tert-Amyl methyl ether	4.989	73	34041	3.8094	ug/l	100
53) Iso-propylacetate	4.946	43	16984	4.0754	ug/l	90
54) Methyl methacrylate	5.452	41	8398m	4.3728	ug/l	
55) Dibromochloromethane	6.422	129	17605	3.3750	ug/l	98
56) 2-Chloroethylvinylether	5.708	63	2950	4.4885	ug/l	96
57) cis-1,3-Dichloropropene	5.806	75	21904	3.3945	ug/l	96
58) trans-1,3-Dichloropropene	6.092	75	20067	3.2419	ug/l	91
59) Ethyl methacrylate	6.111	41	8059	3.5859	ug/l	59
60) 1,1,2-Trichloroethane	6.196	97	14019	3.6420	ug/l	99
61) 1,2-Dibromoethane	6.495	107	17192	4.1929	ug/l	98
62) 1,3-Dichloropropane	6.287	76	22978	3.8074	ug/l	99
63) 4-Methyl-2-Pentanone	5.873	43	9150	4.6507	ug/l	92
64) 2-Hexanone	6.306	43	6593	4.9196	ug/l	89
65) Tetrachloroethene	6.287	164	12256	2.9321	ug/l	88
67) Toluene	5.989	92	36864	3.1719	ug/l	94

Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB
Data File: 2M141275.D
Acq On : 08/26/20 13:04

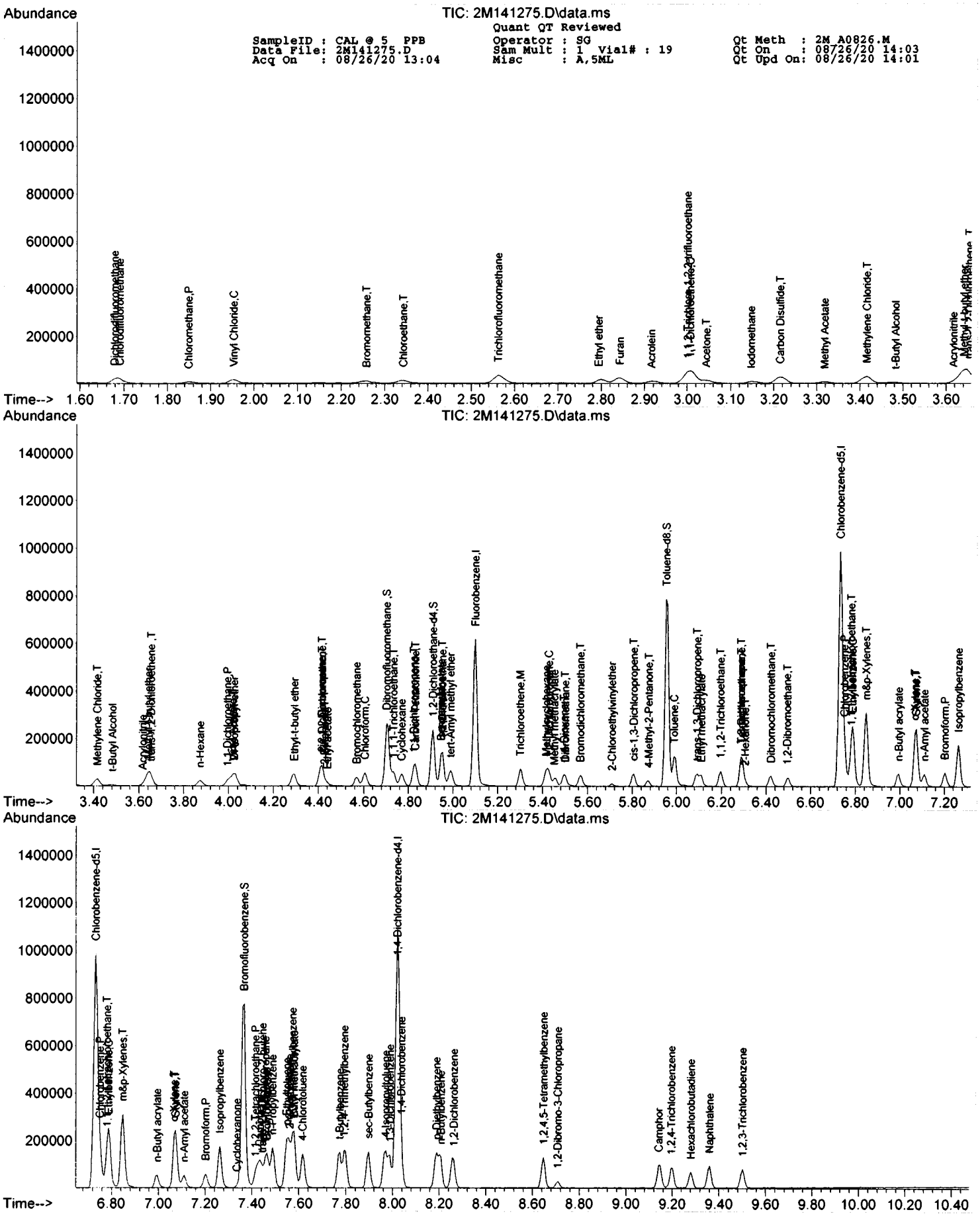
Operator : SG
Sam Mult : 1 Vial# : 19
Misc : A,5ML

Qt Meth : 2M_A0826.M
Qt On : 08/26/20 14:03
Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	21482	4.3140	ug/l	95
69)	Chlorobenzene	6.751	112	58804	4.3332	ug/l	95
71)	n-Butyl acrylate	6.995	55	24892	4.1777	ug/l	91
72)	n-Amyl acetate	7.110	43	16561	3.9822	ug/l	86
73)	Bromoform	7.202	173	18700	5.5544	ug/l	98
74)	Ethylbenzene	6.787	106	22466	3.9386	ug/l	96
75)	1,1,2,2-Tetrachloroethane	7.415	83	23896	5.5619	ug/l	90
77)	Styrene	7.074	104	53552	3.6419	ug/l	99
78)	m&p-Xylenes	6.848	106	73106	8.6672	ug/l	91
79)	o-Xylene	7.068	106	31969	3.7212	ug/l	85
80)	trans-1,4-Dichloro-2-b...	7.446	53	6882	5.1196	ug/l	81
81)	1,3-Dichlorobenzene	7.988	146	45369	4.3362	ug/l	97
82)	1,4-Dichlorobenzene	8.037	146	49929	4.8102	ug/l	98
83)	1,2-Dichlorobenzene	8.263	146	46151	4.9765	ug/l	96
84)	Isopropylbenzene	7.263	105	86224	4.1845	ug/l	97
85)	Cyclohexanone	7.336	55	3279	25.6830	ug/l	88
86)	Camphene	7.434	93	21335	3.9063	ug/l	95
87)	1,2,3-Trichloropropane	7.458	75	27382	5.4903	ug/l	94
88)	2-Chlorotoluene	7.562	91	50955	4.1718	ug/l	96
89)	p-Ethyltoluene	7.549	105	81466	3.6784	ug/l	99
90)	4-Chlorotoluene	7.616	91	50280	3.9806	ug/l	95
91)	n-Propylbenzene	7.488	91	94564	4.2267	ug/l	97
92)	Bromobenzene	7.464	77	46002	4.3155	ug/l	86
93)	1,3,5-Trimethylbenzene	7.574	105	66000	4.0299	ug/l	96
94)	Butyl methacrylate	7.580	41	15051	3.5934	ug/l	66
95)	t-Butylbenzene	7.775	119	69536	4.2431	ug/l	93
96)	1,2,4-Trimethylbenzene	7.793	105	69600	4.0058	ug/l	97
97)	sec-Butylbenzene	7.897	105	79530	4.2529	ug/l	97
98)	4-Isopropyltoluene	7.970	119	69677	4.3101	ug/l	99
99)	n-Butylbenzene	8.208	91	65009	4.1437	ug/l	98
100)	p-Diethylbenzene	8.190	119	37516	3.8105	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	54057	4.0438	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.708	157	6816	8.2233	ug/l	86
103)	Camphor	9.141	95	21809	61.9199	ug/l	95
104)	Hexachlorobutadiene	9.281	225	9244	5.8528	ug/l	86
105)	1,2,4-Trichlorobenzene	9.195	180	23068	5.9531	ug/l	98
106)	1,2,3-Trichlorobenzene	9.500	180	19820	6.7809	ug/l	95
107)	Naphthalene	9.360	128	58471	6.6384	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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TIC: 2M141275.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 5 PPB
Data File: 2M141275.D
Acq On : 08/26/20 13:04
Operator : SG
Sam Mult : 1 Vial# : 19
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08/26/20 14:03
Qt Upd On: 08/26/20 14:01
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 2M141275.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Dibromofluoromethane,S
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 2M141275.D\data.ms
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,4-Dichlorobenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141276.D Sam Mult : 1 Vial# : 20 Qt On : 08/26/20 14:02
Acq On : 08/26/20 13:23 Misc : A,5ML Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	459068	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	325926	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	163941	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	132013	29.63	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.77%			
39) 1,2-Dichloroethane-d4	4.910	67	59269	31.46	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.87%			
66) Toluene-d8	5.952	98	415115	33.02	ug/l	0.00
Spiked Amount 30.000			Recovery = 110.07%			
76) Bromofluorobenzene	7.367	174	129300	29.50	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.33%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.691	51	22129	5.7273	ug/l	88
6) Dichlorodifluoromethane	1.679	85	23826	7.6837	ug/l	96
7) Chloromethane	1.843	50	11714	4.7562	ug/l	96
8) Bromomethane	2.252	94	12703	7.4794	ug/l	89
9) Vinyl Chloride	1.947	62	25756	7.4890	ug/l	99
10) Chloroethane	2.343	64	17280	7.1466	ug/l	98
11) Trichlorofluoromethane	2.569	101	50127	7.3354	ug/l	97
12) Ethyl ether	2.800	59	16842	6.4408	ug/l	92
13) Furan	2.837	39	23794	5.9320	ug/l	57
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	22252	7.0550	ug/l	94
15) Methylene Chloride	3.410	84	28746	6.9061	ug/l	89
16) Acrolein	2.916	56	16357	51.8335	ug/l	83
17) Acrylonitrile	3.617	53	8707	10.1168	ug/l	75
18) Iodomethane	3.148	142	18140	4.1731	ug/l	89
19) Acetone	3.038	43	31812	56.6998	ug/l	83
20) Carbon Disulfide	3.215	76	73625	6.5228	ug/l	100
21) t-Butyl Alcohol	3.471	59	12525	53.7254	ug/l	97
22) n-Hexane	3.873	57	20649	7.0833	ug/l	86
23) Di-isopropyl-ether	4.026	45	50864	6.7029	ug/l	82
24) 1,1-Dichloroethene	3.008	61	34262	7.0162	ug/l	93
25) Methyl Acetate	3.313	43	14496	10.7623	ug/l	100
26) Methyl-t-butyl ether	3.636	73	72211	7.6514	ug/l	94
27) 1,1-Dichloroethane	4.001	63	42600	6.9526	ug/l	99
28) trans-1,2-Dichloroethene	3.648	96	29507	6.7478	ug/l	93
29) Ethyl-t-butyl ether	4.288	59	67415	6.5839	ug/l	94
30) cis-1,2-Dichloroethene	4.410	61	42474	7.1560	ug/l	95
31) Bromochloromethane	4.562	49	18861	7.5088	ug/l	79
32) 2,2-Dichloropropane	4.416	77	41140	7.0099	ug/l	98
33) Ethyl acetate	4.434	43	21435m	11.4472	ug/l	
34) 1,4-Dioxane	5.495	88	19117	515.4432	ug/l	98
35) 1,1-Dichloropropene	4.824	75	42791	7.5838	ug/l	96
36) Chloroform	4.605	83	57265	7.3915	ug/l	98
38) Cyclohexane	4.770	56	31886	7.0515	ug/l	79
40) 1,2-Dichloroethane	4.952	62	44294	8.3256	ug/l	97
41) 2-Butanone	4.410	43	10447m	10.9936	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	56667	7.9093	ug/l	98
43) Carbon Tetrachloride	4.831	117	47353	8.0658	ug/l	92
44) Vinyl Acetate	4.026	43	61110	7.4758	ug/l	100
45) Bromodichloromethane	5.568	83	41097	6.6439	ug/l	100
46) Methylcyclohexane	5.416	83	32919	6.4555	ug/l	94
47) Dibromomethane	5.501	174	21852	7.2320	ug/l	96
48) 1,2-Dichloropropane	5.428	63	23863	6.4973	ug/l	90
49) Trichloroethene	5.300	130	40422	7.6796	ug/l	93
50) Benzene	4.946	78	135350	8.3033	ug/l	100
51) tert-Amyl methyl ether	4.989	73	89282	8.4230	ug/l	98
53) Iso-propylacetate	4.946	43	42818	13.9957	ug/l	87
54) Methyl methacrylate	5.452	41	17152	12.1658	ug/l	72
55) Dibromochloromethane	6.422	129	36867	9.6275	ug/l	99
56) 2-Chloroethylvinylether	5.708	63	6310	13.0783	ug/l	88
57) cis-1,3-Dichloropropene	5.806	75	44155	9.3214	ug/l	99
58) trans-1,3-Dichloropropene	6.086	75	45015	9.9065	ug/l	100
59) Ethyl methacrylate	6.111	41	16734	10.1429	ug/l	62
60) 1,1,2-Trichloroethane	6.196	97	27145	9.6064	ug/l	95
61) 1,2-Dibromoethane	6.495	107	31815	10.5697	ug/l	100
62) 1,3-Dichloropropane	6.288	76	45560	10.2837	ug/l	94
63) 4-Methyl-2-Pentanone	5.867	43	19261	13.3359	ug/l	98
64) 2-Hexanone	6.300	43	13721	13.9469	ug/l	90
65) Tetrachloroethene	6.288	164	26212	8.5423	ug/l	99
67) Toluene	5.989	92	77964	9.1380	ug/l	93

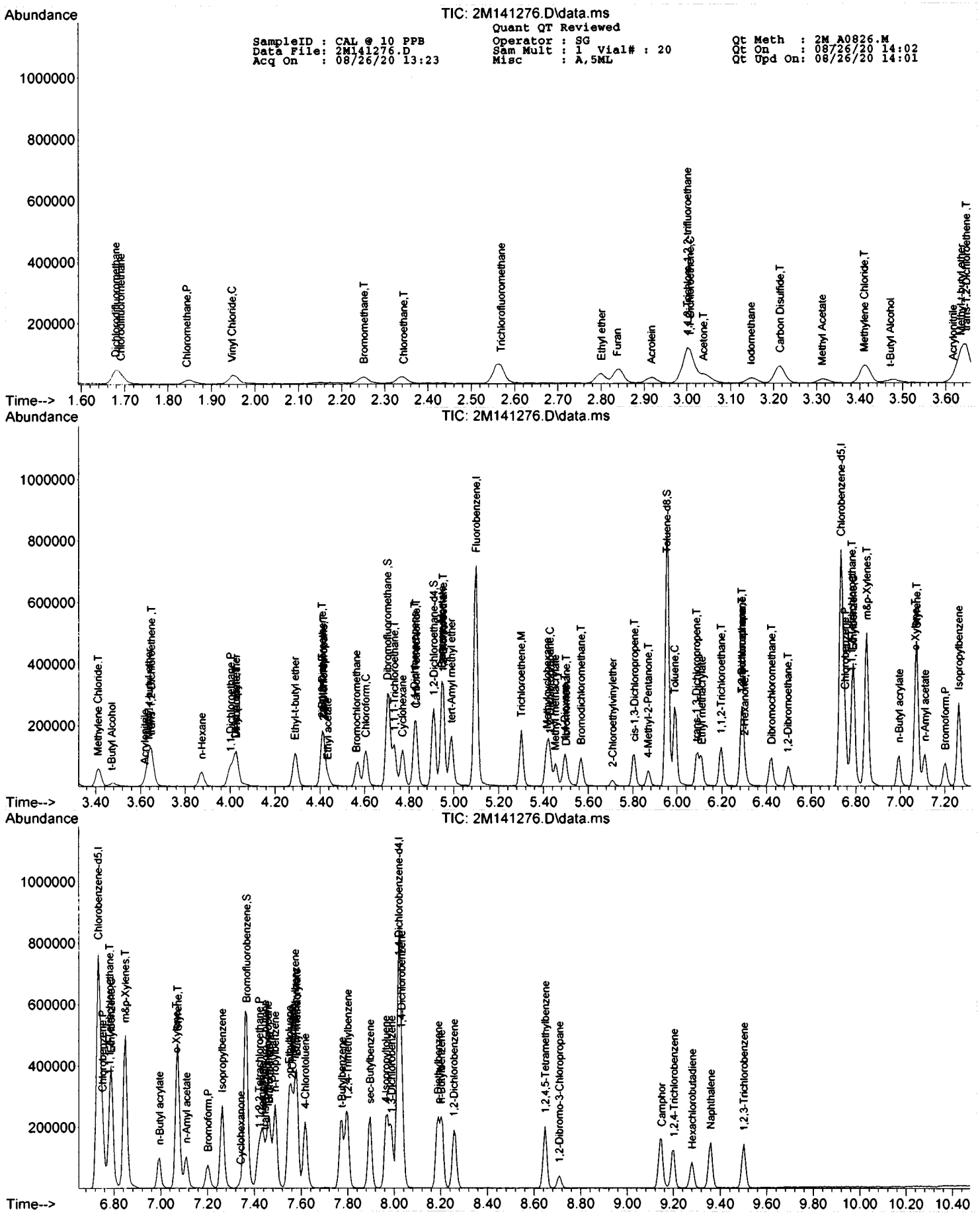
Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141276.D Sam Mult : 1 Vial# : 20 Qt On : 08/26/20 14:02
Acq On : 08/26/20 13:23 Misc : A,5ML Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	30880	8.4474	ug/l	91
69)	Chlorobenzene	6.751	112	85489	8.5814	ug/l	97
71)	n-Butyl acrylate	6.995	55	44882	10.9433	ug/l	97
72)	n-Amyl acetate	7.111	43	33204	11.5992	ug/l	88
73)	Bromoform	7.202	173	24911	10.7495	ug/l	98
74)	Ethylbenzene	6.787	106	37454	9.5391	ug/l	98
75)	1,1,2,2-Tetrachloroethane	7.422	83	40957	13.8493	ug/l	98
77)	Styrene	7.074	104	94115	9.2984	ug/l	99
78)	m&p-Xylenes	6.848	106	113217	19.5000	ug/l	99
79)	o-Xylene	7.068	106	55391	9.3669	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.446	53	12295	13.2877	ug/l	99
81)	1,3-Dichlorobenzene	7.989	146	67008	9.3040	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	66427	9.2972	ug/l	96
83)	1,2-Dichlorobenzene	8.257	146	63894	10.0092	ug/l	98
84)	Isopropylbenzene	7.263	105	133735	9.4287	ug/l	99
85)	Cyclohexanone	7.342	55	5322	60.5587	ug/l	91
86)	Camphene	7.434	93	36356	9.6705	ug/l	94
87)	1,2,3-Trichloropropane	7.458	75	47374	13.7996	ug/l	99
88)	2-Chlorotoluene	7.562	91	81998	9.7530	ug/l	97
89)	p-Ethyltoluene	7.550	105	129621	8.5026	ug/l	99
90)	4-Chlorotoluene	7.617	91	79759	9.1734	ug/l	99
91)	n-Propylbenzene	7.489	91	156088	10.1355	ug/l	100
92)	Bromobenzene	7.464	77	77034	10.4986	ug/l	97
93)	1,3,5-Trimethylbenzene	7.574	105	106898	9.4825	ug/l	99
94)	Butyl methacrylate	7.580	41	25118	8.7121	ug/l	67
95)	t-Butylbenzene	7.775	119	102447	9.0817	ug/l	99
96)	1,2,4-Trimethylbenzene	7.800	105	111977	9.3629	ug/l	99
97)	sec-Butylbenzene	7.897	105	123866	9.6228	ug/l	99
98)	4-Isopropyltoluene	7.964	119	104967	9.4330	ug/l	98
99)	n-Butylbenzene	8.202	91	105913	9.8076	ug/l	99
100)	p-Diethylbenzene	8.190	119	55626	8.2080	ug/l	94
101)	1,2,4,5-Tetramethylben...	8.647	119	79538	8.6439	ug/l	94
102)	1,2-Dibromo-3-Chloropr...	8.708	157	8857	15.5239	ug/l	84
103)	Camphor	9.147	95	36729	151.4961	ug/l	95
104)	Hexachlorobutadiene	9.281	225	10566	9.7188	ug/l	97
105)	1,2,4-Trichlorobenzene	9.202	180	28602	10.7234	ug/l	95
106)	1,2,3-Trichlorobenzene	9.500	180	34408	17.1018	ug/l	96
107)	Naphthalene	9.360	128	90082	14.8580	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 2M141276.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 10 PPB
Data File: 2M141276.D
Acq On : 08/26/20 13:23
Operator : SG
Sam Mult : 1 Vial# : 20
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08/26/20 14:02
Qt Upd On: 08/26/20 14:01
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141279.D Sam Mult : 1 Vial# : 23 Qt On : 08/26/20 14:47
Acq On : 08/26/20 14:22 Misc : A,5ML Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	398700	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	338899	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	258685	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	112790	29.15	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.17%			
39) 1,2-Dichloroethane-d4	4.910	67	52721	32.22	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.40%			
66) Toluene-d8	5.952	98	421473	32.24	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.47%			
76) Bromofluorobenzene	7.367	174	230067	33.26	ug/l	0.00
Spiked Amount 30.000			Recovery = 110.87%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.691	51	131164	39.0871	ug/l	98
6) Dichlorodifluoromethane	1.679	85	128193	47.6007	ug/l	99
7) Chloromethane	1.849	50	71794	33.5642	ug/l	95
8) Bromomethane	2.252	94	66213	44.8885	ug/l	100
9) Vinyl Chloride	1.953	62	128291	42.9511	ug/l	99
10) Chloroethane	2.343	64	89076	42.4177	ug/l	98
11) Trichlorofluoromethane	2.563	101	248542	41.8775	ug/l	99
12) Ethyl ether	2.800	59	85153	37.4954	ug/l	89
13) Furan	2.843	39	120476	34.5832	ug/l	57
14) 1,1,2-Trichloro-1,2,2-...	2.995	101	110365	40.2895	ug/l	93
15) Methylene Chloride	3.410	84	141229	39.0670	ug/l	89
16) Acrolein	2.916	56	87342	318.6844	ug/l	90
17) Acrylonitrile	3.617	53	42259	56.5358	ug/l	92
18) Iodomethane	3.148	142	122722	32.5066	ug/l	100
19) Acetone	3.038	43	144099	295.7211	ug/l	90
20) Carbon Disulfide	3.215	76	379389	38.7011	ug/l	100
21) t-Butyl Alcohol	3.477	59	59197	292.3696	ug/l	97
22) n-Hexane	3.873	57	103881	41.0303	ug/l	89
23) Di-isopropyl-ether	4.026	45	264950	40.2022	ug/l	76
24) 1,1-Dichloroethene	3.008	61	174181	41.0699	ug/l	93
25) Methyl Acetate	3.312	43	67097	57.3578	ug/l	100
26) Methyl-t-butyl ether	3.636	73	365238	44.5602	ug/l	93
27) 1,1-Dichloroethane	4.001	63	218417	41.0445	ug/l	97
28) trans-1,2-Dichloroethene	3.648	96	150761	39.6972	ug/l	86
29) Ethyl-t-butyl ether	4.288	59	341464	38.3972	ug/l	94
30) cis-1,2-Dichloroethene	4.410	61	216680	42.0336	ug/l	87
31) Bromochloromethane	4.568	49	90741	41.5948	ug/l	63
32) 2,2-Dichloropropane	4.416	77	211293	41.4535	ug/l	97
33) Ethyl acetate	4.434	43	101790m	62.5910	ug/l	
34) 1,4-Dioxane	5.495	88	96682	3001.4939	ug/l	83
35) 1,1-Dichloropropene	4.824	75	199553	40.7214	ug/l	96
36) Chloroform	4.605	83	270913	40.2630	ug/l	97
38) Cyclohexane	4.769	56	157195	40.0265	ug/l	87
40) 1,2-Dichloroethane	4.952	62	192287	41.6149	ug/l	100
41) 2-Butanone	4.422	43	51531m	62.4381	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	250937	40.3279	ug/l	97
43) Carbon Tetrachloride	4.830	117	206580	40.5153	ug/l	96
44) Vinyl Acetate	4.020	43	332227	46.7964	ug/l	100
45) Bromodichloromethane	5.568	83	220659	41.0741	ug/l	98
46) Methylcyclohexane	5.416	83	174695	39.4455	ug/l	93
47) Dibromomethane	5.495	174	117048	44.6026	ug/l	97
48) 1,2-Dichloropropane	5.428	63	127816	40.0705	ug/l	99
49) Trichloroethene	5.300	130	178611	39.0714	ug/l	96
50) Benzene	4.952	78	577056	40.7604	ug/l	100
51) tert-Amyl methyl ether	4.989	73	378016	41.0625	ug/l	98
53) Iso-propylacetate	4.946	43	182505	57.3710	ug/l	87
54) Methyl methacrylate	5.452	41	89231	60.8684	ug/l	67
55) Dibromochloromethane	6.422	129	199747	50.1655	ug/l	99
56) 2-Chloroethylvinylether	5.702	63	34208	68.1864	ug/l	96
57) cis-1,3-Dichloropropene	5.806	75	234236	47.5556	ug/l	100
58) trans-1,3-Dichloropropene	6.086	75	233031	49.3202	ug/l	99
59) Ethyl methacrylate	6.111	41	89074	51.9235	ug/l	57
60) 1,1,2-Trichloroethane	6.196	97	153900	52.3792	ug/l	96
61) 1,2-Dibromoethane	6.495	107	170579	54.5010	ug/l	99
62) 1,3-Dichloropropane	6.287	76	240657	52.2411	ug/l	96
63) 4-Methyl-2-Pentanone	5.867	43	99796	66.4515	ug/l	89
64) 2-Hexanone	6.300	43	70954	69.3614	ug/l	90
65) Tetrachloroethene	6.287	164	137382	43.0580	ug/l	95
67) Toluene	5.989	92	406990	45.8764	ug/l	98

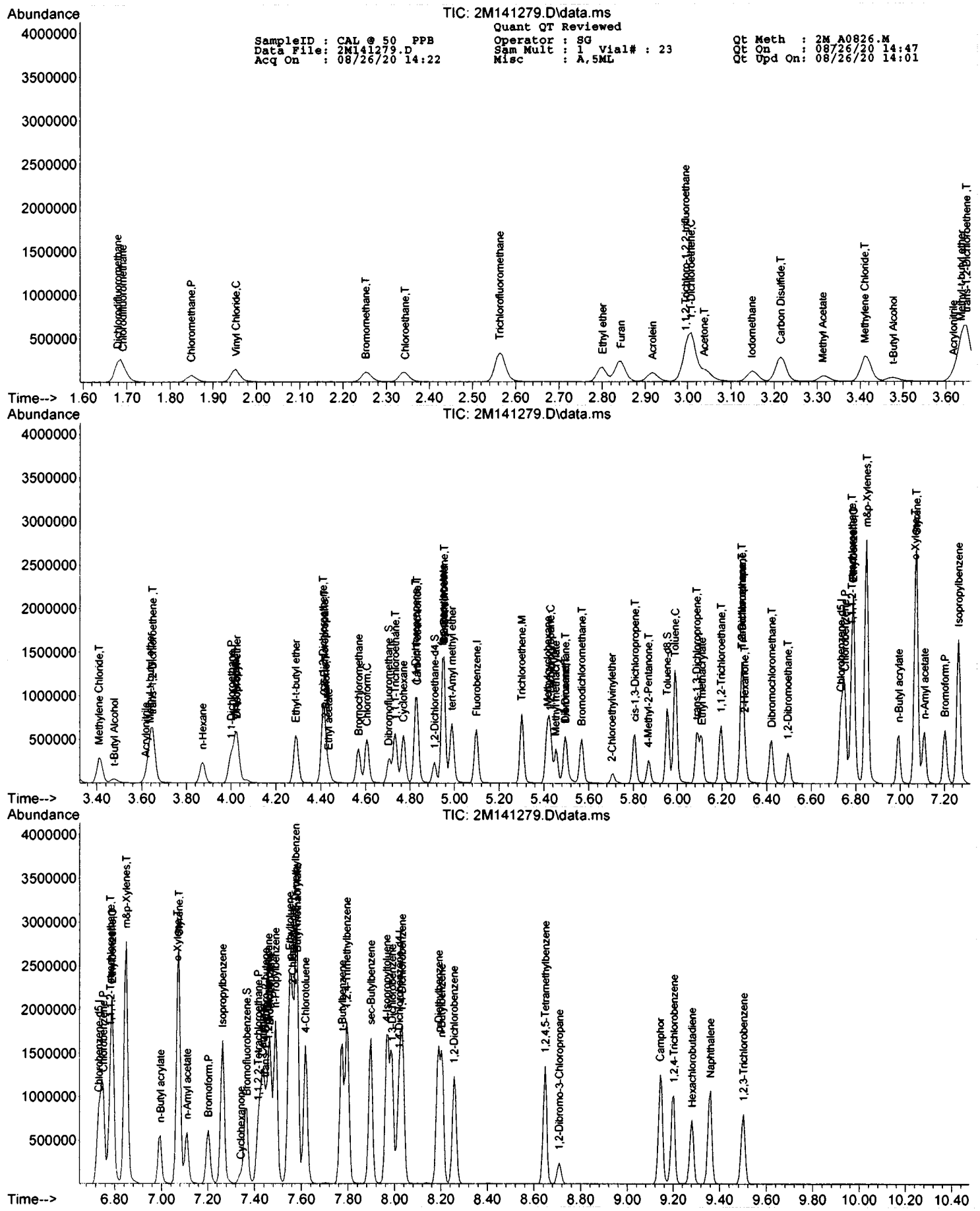
Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141279.D Sam Mult : 1 Vial# : 23 Qt On : 08/26/20 14:47
Acq On : 08/26/20 14:22 Misc : A,5ML Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	169257	44.5289	ug/l	96
69)	Chlorobenzene	6.751	112	475920	45.9439	ug/l	99
71)	n-Butyl acrylate	6.995	55	243549	37.6340	ug/l	95
72)	n-Amyl acetate	7.111	43	181667	40.2187	ug/l	82
73)	Bromoform	7.202	173	213428	58.3666	ug/l	100
74)	Ethylbenzene	6.787	106	215035	34.7084	ug/l	96
75)	1,1,2,2-Tetrachloroethane	7.415	83	270382	57.9419	ug/l	95
77)	Styrene	7.074	104	564935	35.3723	ug/l	94
78)	m&p-Xylenes	6.848	106	626365	68.3703	ug/l	98
79)	o-Xylene	7.068	106	322547	34.5672	ug/l	95
80)	trans-1,4-Dichloro-2-b...	7.446	53	79115	54.1871	ug/l	83
81)	1,3-Dichlorobenzene	7.988	146	539683	47.4895	ug/l	96
82)	1,4-Dichlorobenzene	8.031	146	529448	46.9621	ug/l	97
83)	1,2-Dichlorobenzene	8.257	146	442005	43.8817	ug/l	96
84)	Isopropylbenzene	7.263	105	849568	37.9597	ug/l	97
85)	Cyclohexanone	7.342	55	28489	205.4449	ug/l	85
86)	Camphene	7.434	93	237456	40.0287	ug/l	92
87)	1,2,3-Trichloropropane	7.458	75	312550	57.6984	ug/l	97
88)	2-Chlorotoluene	7.562	91	554248	41.7789	ug/l	95
89)	p-Ethyltoluene	7.549	105	946099	39.3305	ug/l	98
90)	4-Chlorotoluene	7.617	91	575038	41.9143	ug/l	96
91)	n-Propylbenzene	7.489	91	1088508	44.7946	ug/l	96
92)	Bromobenzene	7.464	77	525482	45.3861	ug/l	85
93)	1,3,5-Trimethylbenzene	7.574	105	782451	43.9871	ug/l	97
94)	Butyl methacrylate	7.580	41	186314	40.9544	ug/l	61
95)	t-Butylbenzene	7.775	119	771677	43.3533	ug/l	94
96)	1,2,4-Trimethylbenzene	7.793	105	809122	42.8758	ug/l	97
97)	sec-Butylbenzene	7.897	105	898666	44.2451	ug/l	95
98)	4-Isopropyltoluene	7.964	119	790660	45.0301	ug/l	97
99)	n-Butylbenzene	8.202	91	685456	40.2263	ug/l	97
100)	p-Diethylbenzene	8.190	119	404306	37.8081	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	545289	37.5560	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.708	157	63068	70.0550	ug/l	93
103)	Camphor	9.141	95	267092	698.1835	ug/l	97
104)	Hexachlorobutadiene	9.281	225	113396	66.1021	ug/l	95
105)	1,2,4-Trichlorobenzene	9.202	180	274173	65.1441	ug/l	99
106)	1,2,3-Trichlorobenzene	9.500	180	211998	66.7776	ug/l	97
107)	Naphthalene	9.360	128	697469	72.9059	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 2M141279.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 50 PPB
Data File: 2M141279.D
Acq On : 08/26/20 14:22
Operator : SG
Sam Mult : 1 Vial# : 23
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08/26/20 14:47
Qt Upd On: 08/26/20 14:01
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141286.D Sam Mult : 1 Vial# : 30 Qt On : 08/27/20 07:24
Acq On : 08/26/20 16:39 Misc : A,5ML Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	572099	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	501894	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	305508	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.703	111	164338	29.60	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.67%			
39) 1,2-Dichloroethane-d4	4.910	67	70644	30.09	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.30%			
66) Toluene-d8	5.952	98	597853	30.88	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.93%			
76) Bromofluorobenzene	7.367	174	253070	30.98	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.27%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.691	51	413868	85.9519	ug/l	94
6) Dichlorodifluoromethane	1.679	85	423527	109.5987	ug/l	100
7) Chloromethane	1.849	50	233863	76.1947	ug/l	99
8) Bromomethane	2.252	94	263846	124.6573	ug/l	98
9) Vinyl Chloride	1.953	62	400665	93.4834	ug/l	97
10) Chloroethane	2.337	64	281674	93.4778	ug/l	96
11) Trichlorofluoromethane	2.563	101	767544	90.1279	ug/l	96
12) Ethyl ether	2.800	59	252547	77.4989	ug/l	88
13) Furan	2.837	39	350785	70.1748	ug/l	57
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	334714	85.1549	ug/l	94
15) Methylene Chloride	3.410	84	413930	79.7974	ug/l	83
16) Acrolein	2.916	56	255202	648.9285	ug/l	98
17) Acrylonitrile	3.617	53	116238	108.3746	ug/l	98
18) Iodomethane	3.148	142	523782	96.6886	ug/l	90
19) Acetone	3.038	43	399358	571.1613	ug/l	86
20) Carbon Disulfide	3.215	76	1075409	76.4518	ug/l	100
21) t-Butyl Alcohol	3.477	59	167061	575.0196	ug/l	98
22) n-Hexane	3.873	57	295160	81.2459	ug/l	86
23) Di-isopropyl-ether	4.026	45	735564	77.7823	ug/l	70
24) 1,1-Dichloroethene	3.008	61	490417	80.5867	ug/l	85
25) Methyl Acetate	3.313	43	184268	109.7778	ug/l	100
26) Methyl-t-butyl ether	3.636	73	1066500	90.6790	ug/l	92
27) 1,1-Dichloroethane	4.001	63	600555	78.6495	ug/l	96
28) trans-1,2-Dichloroethene	3.648	96	461849	84.7511	ug/l	85
29) Ethyl-t-butyl ether	4.288	59	966117	75.7111	ug/l	92
30) cis-1,2-Dichloroethene	4.410	61	604213	81.6850	ug/l	80
31) Bromochloromethane	4.568	49	237505	75.8722	ug/l	37
32) 2,2-Dichloropropane	4.416	77	578406	79.0832	ug/l	97
33) Ethyl acetate	4.434	43	280418m	120.1678	ug/l	
34) 1,4-Dioxane	5.495	88	280767	6074.5337	ug/l	85
35) 1,1-Dichloropropene	4.824	75	561219	79.8127	ug/l	93
36) Chloroform	4.605	83	756200	78.3228	ug/l	100
38) Cyclohexane	4.770	56	430926	76.4693	ug/l	79
40) 1,2-Dichloroethane	4.952	62	491179	74.0822	ug/l	98
41) 2-Butanone	4.422	43	145274m	122.6716	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	715900	80.1805	ug/l	98
43) Carbon Tetrachloride	4.831	117	630241	86.1415	ug/l	99
44) Vinyl Acetate	4.020	43	943446	92.6126	ug/l	100
45) Bromodichloromethane	5.568	83	619690	80.3889	ug/l	99
46) Methylcyclohexane	5.416	83	517275	81.3979	ug/l	88
47) Dibromomethane	5.495	174	430885	114.4281	ug/l	99
48) 1,2-Dichloropropane	5.428	63	365159	79.7805	ug/l	99
49) Trichloroethene	5.300	130	580245	88.4581	ug/l	95
50) Benzene	4.946	78	1538619	75.7403	ug/l	100
51) tert-Amyl methyl ether	4.989	73	990643	74.9942	ug/l	95
53) Iso-propylacetate	4.946	43	483067	102.5377	ug/l	87
54) Methyl methacrylate	5.452	41	243445	112.1335	ug/l	58
55) Dibromochloromethane	6.422	129	620227	105.1801	ug/l	98
56) 2-Chloroethylvinylether	5.708	63	96340	129.6687	ug/l	88
57) cis-1,3-Dichloropropene	5.806	75	671576	92.0665	ug/l	100
58) trans-1,3-Dichloropropene	6.086	75	668344	95.5146	ug/l	100
59) Ethyl methacrylate	6.111	41	266957	105.0782	ug/l	62
60) 1,1,2-Trichloroethane	6.196	97	451397	103.7378	ug/l	96
61) 1,2-Dibromoethane	6.495	107	501041	108.0962	ug/l	99
62) 1,3-Dichloropropane	6.288	76	686673	100.6519	ug/l	99
63) 4-Methyl-2-Pentanone	5.867	43	278664	125.2941	ug/l	92
64) 2-Hexanone	6.300	43	203013	134.0056	ug/l	86
65) Tetrachloroethene	6.288	164	510777	108.0970	ug/l	99
67) Toluene	5.989	92	1177588	89.6309	ug/l	99

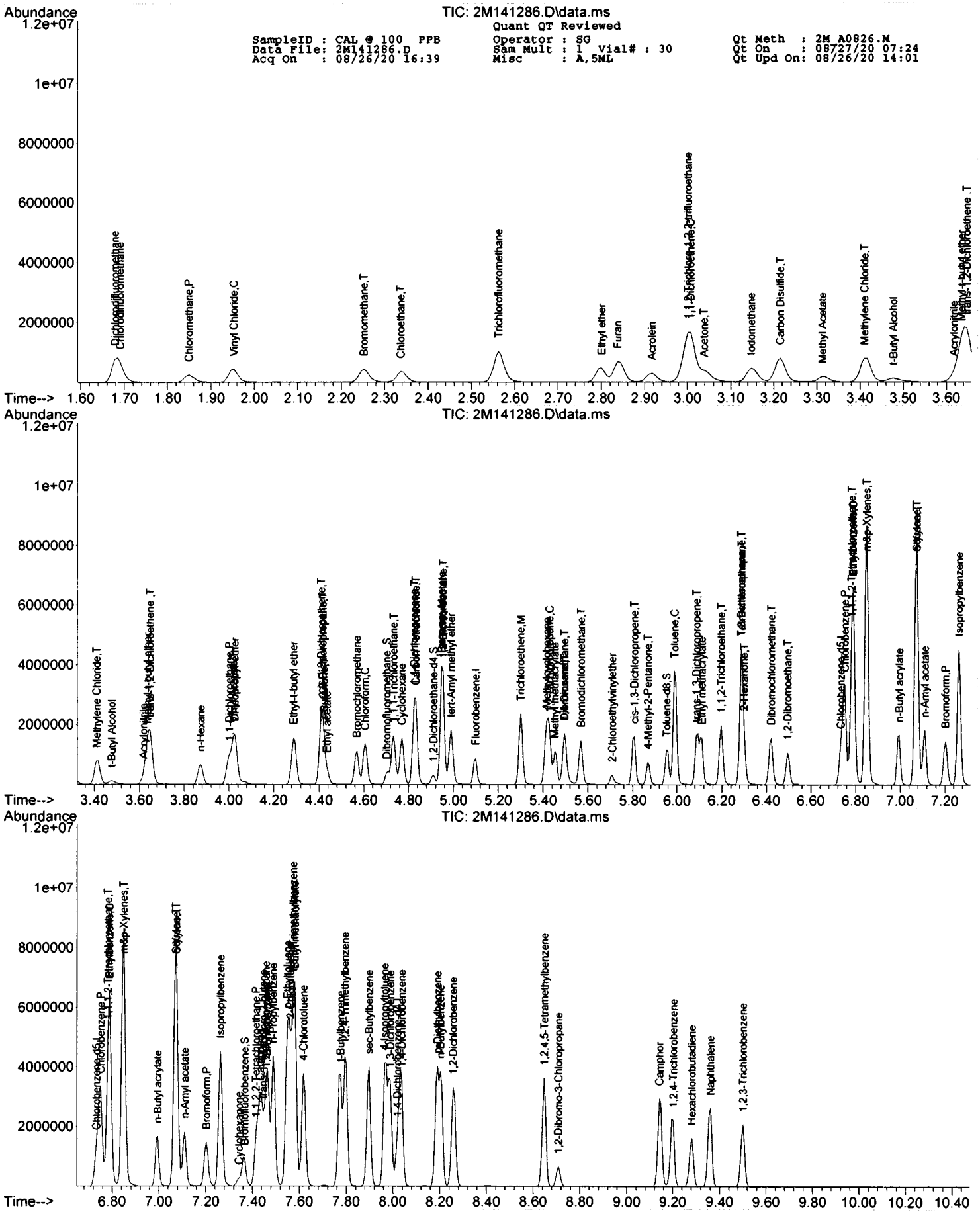
Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141286.D Sam Mult : 1 Vial# : 30 Qt On : 08/27/20 07:24
Acq On : 08/26/20 16:39 Misc : A,5ML Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	553625	98.3489	ug/l	99
69)	Chlorobenzene	6.751	112	1440050	93.8707	ug/l	98
71)	n-Butyl acrylate	6.995	55	730383	95.5638	ug/l	94
72)	n-Amyl acetate	7.111	43	554869	104.0139	ug/l	85
73)	Bromoform	7.202	173	517404	119.8095	ug/l	100
74)	Ethylbenzene	6.788	106	665056	90.8934	ug/l	91
75)	1,1,2,2-Tetrachloroethane	7.415	83	607366	110.2083	ug/l	98
77)	Styrene	7.074	104	1666043	88.3283	ug/l	95
78)	m&p-Xylenes	6.848	106	1888120	174.5093	ug/l	93
79)	o-Xylene	7.074	106	947295	85.9617	ug/l	89
80)	trans-1,4-Dichloro-2-b...	7.446	53	186462	108.1374	ug/l	81
81)	1,3-Dichlorobenzene	7.989	146	1270443	94.6593	ug/l	96
82)	1,4-Dichlorobenzene	8.037	146	1278374	96.0132	ug/l	97
83)	1,2-Dichlorobenzene	8.257	146	1189128	99.9616	ug/l	96
84)	Isopropylbenzene	7.263	105	2265772	85.7215	ug/l	97
85)	Cyclohexanone	7.342	55	62666	382.6475	ug/l	87
86)	Camphene	7.434	93	563739	80.4664	ug/l	94
87)	1,2,3-Trichloropropane	7.458	75	733135	114.5979	ug/l	97
88)	2-Chlorotoluene	7.562	91	1335054	85.2119	ug/l	96
89)	p-Ethyltoluene	7.550	105	2219756	78.1353	ug/l	97
90)	4-Chlorotoluene	7.617	91	1379953	85.1684	ug/l	97
91)	n-Propylbenzene	7.489	91	2477136	86.3162	ug/l	95
92)	Bromobenzene	7.464	77	1240311	90.7077	ug/l	87
93)	1,3,5-Trimethylbenzene	7.574	105	1828377	87.0328	ug/l	96
94)	Butyl methacrylate	7.580	41	457067	85.0714	ug/l	61
95)	t-Butylbenzene	7.775	119	1824013	86.7687	ug/l	94
96)	1,2,4-Trimethylbenzene	7.793	105	1897638	85.1453	ug/l	96
97)	sec-Butylbenzene	7.897	105	2118659	88.3235	ug/l	95
98)	4-Isopropyltoluene	7.964	119	1893829	91.3277	ug/l	97
99)	n-Butylbenzene	8.202	91	1746234	86.7724	ug/l	97
100)	p-Diethylbenzene	8.190	119	1023374	81.0322	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	1458469	85.0548	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.708	157	172297	162.0527	ug/l	93
103)	Camphor	9.141	95	619548	1371.2995	ug/l	96
104)	Hexachlorobutadiene	9.281	225	254031	125.3871	ug/l	96
105)	1,2,4-Trichlorobenzene	9.202	180	622666	125.2721	ug/l	98
106)	1,2,3-Trichlorobenzene	9.500	180	537985	143.4888	ug/l	97
107)	Naphthalene	9.360	128	1682466	148.9130	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M141286.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 100 PPB
Data File: 2M141286.D
Acq On : 08/26/20 16:39
Operator : SG
Sam Mult : 1 Vial# : 30
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08727/20 07:24
Qt Upd On: 08/26/20 14:01
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->

Abundance
TIC: 2M141286.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 2M141286.D\data.ms
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone,S
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

Data File: 2M141283.D
Acq On : 08/26/20 15:40
SampleID : CAL @ 250 PPB
Operator : SG
Sam Mult : 1 Vial# : 27
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08/27/20 07:23
Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	435348	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	421564	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	241847	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	128296	30.37	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.23%			
39) 1,2-Dichloroethane-d4	4.910	67	55021	30.80	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.67%			
66) Toluene-d8	5.952	98	500977	30.81	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.70%			
76) Bromofluorobenzene	7.367	174	190428	29.45	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.17%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.691	51	835098	227.9112	ug/l	95
6) Dichlorodifluoromethane	1.679	85	764255	259.8946	ug/l	97
7) Chloromethane	1.849	50	487793	208.8495	ug/l	99
8) Bromomethane	2.245	94	551315	342.2958	ug/l	99
9) Vinyl Chloride	1.953	62	717877	220.1089	ug/l	95
10) Chloroethane	2.337	64	576810	251.5528	ug/l	96
11) Trichlorofluoromethane	2.563	101	1553050	239.6492	ug/l	97
12) Ethyl ether	2.794	59	508108	204.9009	ug/l	87
13) Furan	2.837	39	732157m	192.4771	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.995	101	683815	228.6172	ug/l	99
15) Methylene Chloride	3.410	84	859326	217.6980	ug/l	83
16) Acrolein	2.916	56	517694	1729.8982	ug/l	99
17) Acrylonitrile	3.617	53	243553	298.4060	ug/l	100
18) Iodomethane	3.148	142	973004	236.0337	ug/l	94
19) Acetone	3.038	43	790313	1485.3547	ug/l	87
20) Carbon Disulfide	3.215	76	2212914	206.7346	ug/l	100
21) t-Butyl Alcohol	3.477	59	350025	1583.2199	ug/l	91
22) n-Hexane	3.873	57	596901	215.9141	ug/l	85
23) Di-isopropyl-ether	4.026	45	1453301	201.9532	ug/l	69
24) 1,1-Dichloroethene	3.008	61	994631	214.7802	ug/l	83
25) Methyl Acetate	3.312	43	375150	293.7001	ug/l	100
26) Methyl-t-butyl ether	3.635	73	2174193	242.9286	ug/l	90
27) 1,1-Dichloroethane	4.001	63	1250974	215.2911	ug/l	97
28) trans-1,2-Dichloroethene	3.648	96	941793	227.1097	ug/l	84
29) Ethyl-t-butyl ether	4.288	59	1970634	202.9414	ug/l	92
30) cis-1,2-Dichloroethene	4.410	61	1229093	218.3593	ug/l	75
31) Bromochloromethane	4.568	49	470415	197.4813	ug/l	39
32) 2,2-Dichloropropane	4.416	77	1198208	215.2871	ug/l	97
33) Ethyl acetate	4.434	43	562621m	316.8347	ug/l	
34) 1,4-Dioxane	5.495	88	626318	17807.2318	ug/l	83
35) 1,1-Dichloropropene	4.824	75	1141451	213.3199	ug/l	92
36) Chloroform	4.605	83	1552784	211.3475	ug/l	99
38) Cyclohexane	4.769	56	887263	206.9052	ug/l	80
40) 1,2-Dichloroethane	4.952	62	1055929	209.2877	ug/l	98
41) 2-Butanone	4.410	43	290144m	321.9617	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	1482348	218.1731	ug/l	97
43) Carbon Tetrachloride	4.830	117	1337216	240.1827	ug/l	95
44) Vinyl Acetate	4.020	43	1859490	239.8730	ug/l	100
45) Bromodichloromethane	5.568	83	1322420	225.4372	ug/l	99
46) Methylcyclohexane	5.416	83	1137273	235.1751	ug/l	88
47) Dibromomethane	5.495	174	928912	324.1757	ug/l	98
48) 1,2-Dichloropropane	5.428	63	780883	224.2000	ug/l	99
49) Trichloroethene	5.300	130	1337875	268.0257	ug/l	96
50) Benzene	4.946	78	3401847	220.0622	ug/l	100
51) tert-Amyl methyl ether	4.989	73	2249662	223.8011	ug/l	95
53) Iso-propylacetate	4.946	43	1036068	261.8261	ug/l	83
54) Methyl methacrylate	5.452	41	501033m	274.7573	ug/l	
55) Dibromochloromethane	6.422	129	1363732	275.3345	ug/l	99
56) 2-Chloroethylvinylether	5.708	63	217555	348.6149	ug/l	89
57) cis-1,3-Dichloropropene	5.806	75	1528775	249.5160	ug/l	100
58) trans-1,3-Dichloropropene	6.092	75	1421978	241.9418	ug/l	97
59) Ethyl methacrylate	6.111	41	518758	243.0997	ug/l	48
60) 1,1,2-Trichloroethane	6.196	97	970367	265.4991	ug/l	95
61) 1,2-Dibromoethane	6.495	107	1096094	281.5357	ug/l	99
62) 1,3-Dichloropropane	6.287	76	1480745	258.4050	ug/l	99
63) 4-Methyl-2-Pentanone	5.867	43	592246	317.0300	ug/l	87
64) 2-Hexanone	6.306	43	420542	330.4890	ug/l	78
65) Tetrachloroethene	6.287	164	1150828	289.9622	ug/l	98
67) Toluene	5.989	92	2555167	231.5432	ug/l	98

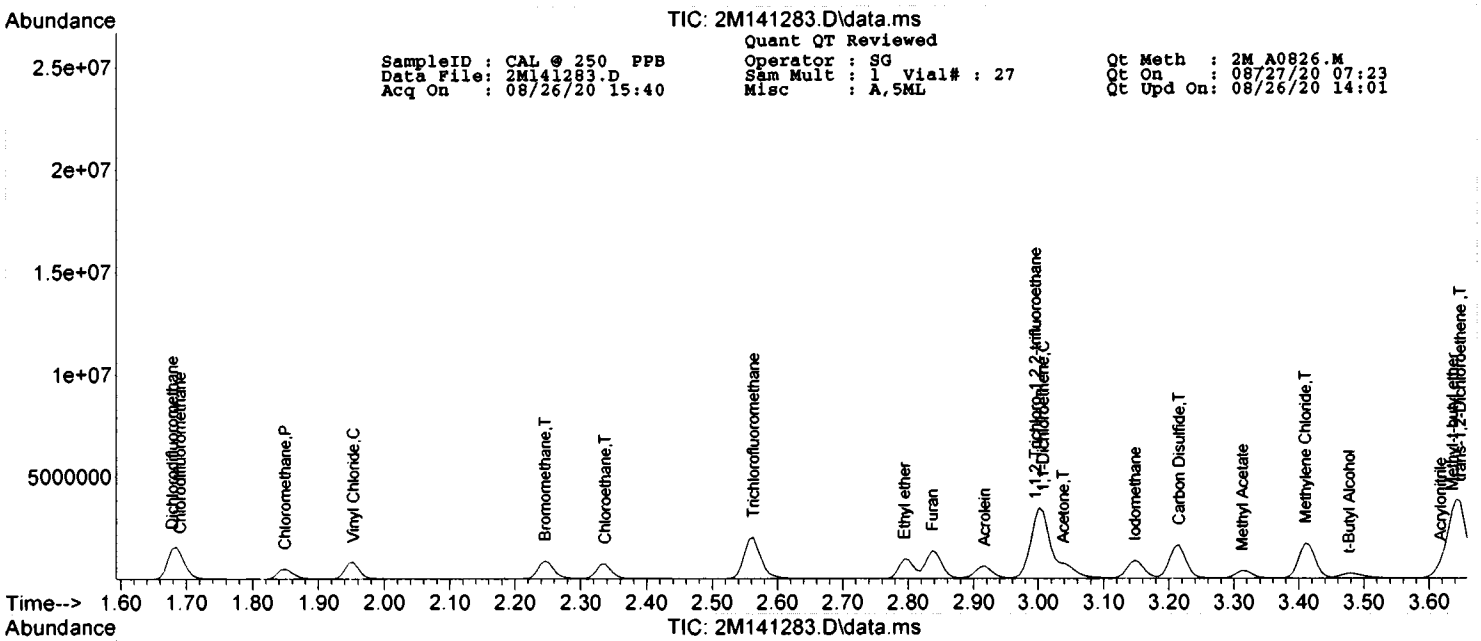
Quantitation Report (QT Reviewed)

SampleID : CAL @ 250 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141283.D Sam Mult : 1 Vial# : 27 Qt On : 08/27/20 07:23
Acq On : 08/26/20 15:40 Misc : A,5ML Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	1209682	255.8429	ug/l	99
69)	Chlorobenzene	6.751	112	3079934	239.0245	ug/l	98
71)	n-Butyl acrylate	6.995	55	1492588	246.6973	ug/l	94
72)	n-Amyl acetate	7.110	43	1208098	286.0784	ug/l	85
73)	Bromoform	7.202	173	1058594	309.6513	ug/l	99
74)	Ethylbenzene	6.787	106	1428244	246.5803	ug/l	83
75)	1,1,2,2-Tetrachloroethane	7.421	83	1205808	276.3909	ug/l	97
77)	Styrene	7.074	104	3785975	253.5557	ug/l	96
78)	m&p-Xylenes	6.848	106	4149855	484.5111	ug/l	85
79)	o-Xylene	7.074	106	2148992	246.3407	ug/l	86
80)	trans-1,4-Dichloro-2-b...	7.446	53	346115	253.5642	ug/l	70
81)	1,3-Dichlorobenzene	7.988	146	2640398	248.5188	ug/l	96
82)	1,4-Dichlorobenzene	8.037	146	2614303	248.0337	ug/l	97
83)	1,2-Dichlorobenzene	8.263	146	2363027	250.9314	ug/l	96
84)	Isopropylbenzene	7.263	105	4491021	214.6351	ug/l	96
85)	Cyclohexanone	7.342	55	123541	952.9276	ug/l	81
86)	Camphene	7.434	93	1156835	208.5883	ug/l	93
87)	1,2,3-Trichloropropane	7.458	75	1431815	282.7233	ug/l	96
88)	2-Chlorotoluene	7.562	91	2714272	218.8449	ug/l	94
89)	p-Ethyltoluene	7.549	105	4423154	196.6781	ug/l	96
90)	4-Chlorotoluene	7.616	91	3492099	272.2591	ug/l	96
91)	n-Propylbenzene	7.488	91	4800354	211.2992	ug/l	93
92)	Bromobenzene	7.464	77	2397378	221.4787	ug/l	83
93)	1,3,5-Trimethylbenzene	7.580	105	4283300	257.5594	ug/l	95
94)	Butyl methacrylate	7.586	41	1110387m	261.0718	ug/l	
95)	t-Butylbenzene	7.775	119	4214468	253.2560	ug/l	94
96)	1,2,4-Trimethylbenzene	7.799	105	4666756	264.5113	ug/l	96
97)	sec-Butylbenzene	7.897	105	4374638	230.3771	ug/l	92
98)	4-Isopropyltoluene	7.970	119	3895502	237.3051	ug/l	96
99)	n-Butylbenzene	8.208	91	3379899	212.1607	ug/l	94
100)	p-Diethylbenzene	8.190	119	2037920	203.8413	ug/l	96
101)	1,2,4,5-Tetramethylben...	8.647	119	3064829	225.7822	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.708	157	378630	449.8581	ug/l	87
103)	Camphor	9.141	95	1495196	4180.5880	ug/l	96
104)	Hexachlorobutadiene	9.281	225	532000	331.7107	ug/l	96
105)	1,2,4-Trichlorobenzene	9.202	180	1366466	347.2800	ug/l	98
106)	1,2,3-Trichlorobenzene	9.500	180	1148993	387.1213	ug/l	97
107)	Naphthalene	9.360	128	3571240	399.2889	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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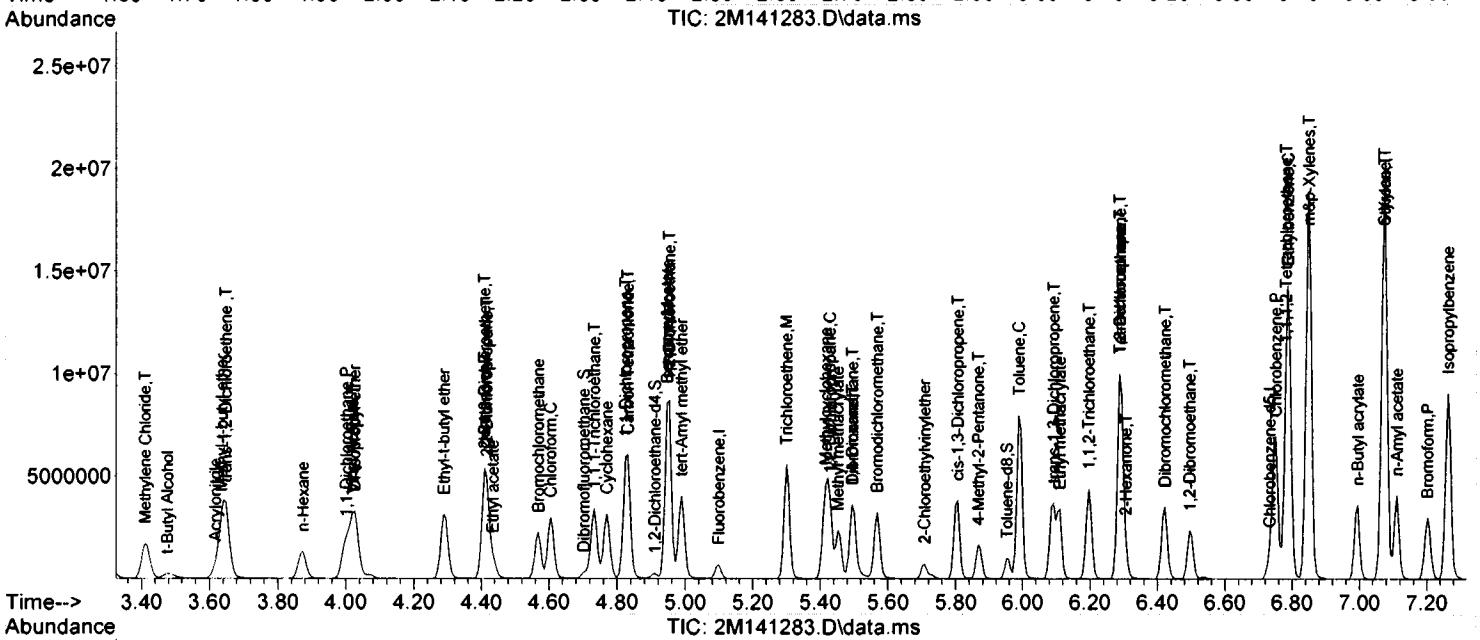
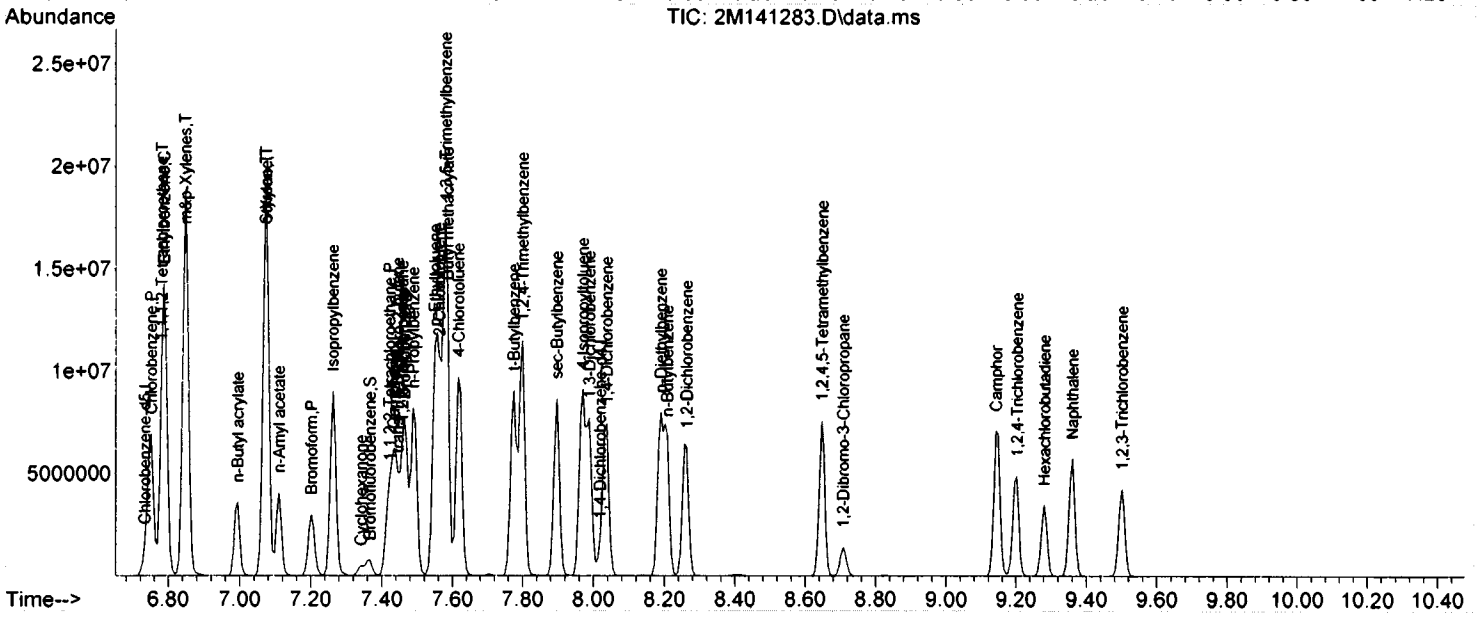
Quant QT Reviewed
SampleID : CAL @ 250 PPB
Data File: 2M141283.D
Acq On : 08/26/20 15:40
Operator : SG
Sam Mult : 1 Vial# : 27
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08/27/20 07:23
Qt Upd On: 08/26/20 14:01
2.5e+07
2e+07
1.5e+07
1e+07
5000000
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time--> 1.60 1.70 1.80 1.90 2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80 2.90 3.00 3.10 3.20 3.30 3.40 3.50 3.60


Abundance
TIC: 2M141283.D\data.ms
2.5e+07
2e+07
1.5e+07
1e+07
5000000
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time--> 3.40 3.60 3.80 4.00 4.20 4.40 4.60 4.80 5.00 5.20 5.40 5.60 5.80 6.00 6.20 6.40 6.60 6.80 7.00 7.20


Abundance
TIC: 2M141283.D\data.ms
2.5e+07
2e+07
1.5e+07
1e+07
5000000
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time--> 6.80 7.00 7.20 7.40 7.60 7.80 8.00 8.20 8.40 8.60 8.80 9.00 9.20 9.40 9.60 9.80 10.00 10.20 10.40

Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141280.D Sam Mult : 1 Vial# : 24 Qt On : 08/26/20 14:57
Acq On : 08/26/20 14:42 Misc : A,5ML Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	441996	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	416584	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.025	152	342055	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.703	111	126713	29.54	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.47%			
39) 1,2-Dichloroethane-d4	4.910	67	55483	30.59	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.97%			
66) Toluene-d8	5.952	98	473186	29.45	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.17%			
76) Bromofluorobenzene	7.367	174	288934	31.59	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.30%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.691	51	1638207	440.3675	ug/l	99
6) Dichlorodifluoromethane	1.679	85	1557449	521.6642	ug/l	98
7) Chloromethane	1.849	50	981745	414.0138	ug/l	98
8) Bromomethane	2.240	94	1159880	709.3051	ug/l	100
9) Vinyl Chloride	1.947	62	1383948	417.9512	ug/l	97
10) Chloroethane	2.331	64	1185510	509.2368	ug/l	96
11) Trichlorofluoromethane	2.557	101	2869989	436.2034	ug/l	98
12) Ethyl ether	2.794	59	970574	385.5092	ug/l	86
13) Furan	2.837	39	1258721m	325.9287	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.996	101	1378698	454.0018	ug/l	96
15) Methylene Chloride	3.410	84	1715302	428.0113	ug/l	81
16) Acrolein	2.916	56	1012694	3333.0656	ug/l	100
17) Acrylonitrile	3.617	53	473652	571.5993	ug/l	98
18) Iodomethane	3.148	142	1828659	436.9285	ug/l	92
19) Acetone	3.044	43	1487064	2752.8270	ug/l	84
20) Carbon Disulfide	3.209	76	4374075	402.4881	ug/l	100
21) t-Butyl Alcohol	3.483	59	693879	3091.3212	ug/l	95
22) n-Hexane	3.867	57	1189106	423.6601	ug/l	83
23) Di-isopropyl-ether	4.026	45	2798605	383.0496	ug/l	65
24) 1,1-Dichloroethene	3.002	61	1915746	407.4632	ug/l	79
25) Methyl Acetate	3.313	43	718866	554.3261	ug/l	100
26) Methyl-t-butyl ether	3.636	73	4254309	468.1961	ug/l	90
27) 1,1-Dichloroethane	4.001	63	2441399	413.8422	ug/l	97
28) trans-1,2-Dichloroethene	3.648	96	1895941	450.3220	ug/l	82
29) Ethyl-t-butyl ether	4.288	59	3790019	384.4362	ug/l	90
30) cis-1,2-Dichloroethene	4.410	61	2375344	415.6537	ug/l	71
31) Bromochloromethane	4.568	49	886280	366.4662	ug/l	29
32) 2,2-Dichloropropane	4.416	77	2185901	386.8429	ug/l	97
33) Ethyl acetate	4.434	43	1098635m	609.3803	ug/l	
34) 1,4-Dioxane	5.495	88	1158920	32454.3706	ug/l	82
35) 1,1-Dichloropropene	4.825	75	2279112	419.5252	ug/l	91
36) Chloroform	4.605	83	3026442	405.7295	ug/l	98
38) Cyclohexane	4.770	56	1731764	397.7644	ug/l	78
40) 1,2-Dichloroethane	4.953	62	2153613	420.4311	ug/l	96
41) 2-Butanone	4.422	43	540978m	591.2735	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	2822048	409.1039	ug/l	97
43) Carbon Tetrachloride	4.831	117	2286647	404.5363	ug/l	97
44) Vinyl Acetate	4.020	43	3597475	457.0919	ug/l	100
45) Bromodichloromethane	5.568	83	2393224	401.8443	ug/l	99
46) Methylcyclohexane	5.416	83	2155895	439.1090	ug/l	87
47) Dibromomethane	5.495	174	1639683	563.6168	ug/l	99
48) 1,2-Dichloropropane	5.428	63	1482583	419.2633	ug/l	100
49) Trichloroethene	5.300	130	2391678	471.9345	ug/l	96
50) Benzene	4.946	78	6894528	439.2921	ug/l	100
51) tert-Amyl methyl ether	4.989	73	4279980	419.3772	ug/l	94
53) Iso-propylacetate	4.946	43	2108077	539.1034	ug/l	80
54) Methyl methacrylate	5.452	41	905143m	502.2976	ug/l	
55) Dibromochloromethane	6.422	129	2590387	529.2455	ug/l	100
56) 2-Chloroethylvinylether	5.708	63	395758	641.7525	ug/l	87
57) cis-1,3-Dichloropropene	5.806	75	2710209	447.6293	ug/l	99
58) trans-1,3-Dichloropropene	6.093	75	2697384	464.4315	ug/l	97
59) Ethyl methacrylate	6.111	41	965949	458.0731	ug/l	44
60) 1,1,2-Trichloroethane	6.196	97	1857425	514.2795	ug/l	94
61) 1,2-Dibromoethane	6.495	107	2085134	541.9766	ug/l	99
62) 1,3-Dichloropropane	6.294	76	2834623	500.5838	ug/l	98
63) 4-Methyl-2-Pentanone	5.867	43	1112637	602.7158	ug/l	86
64) 2-Hexanone	6.306	43	790469	628.6276	ug/l	77
65) Tetrachloroethene	6.288	164	2245021	572.4167	ug/l	99
67) Toluene	5.995	92	4900780	449.4061	ug/l	90

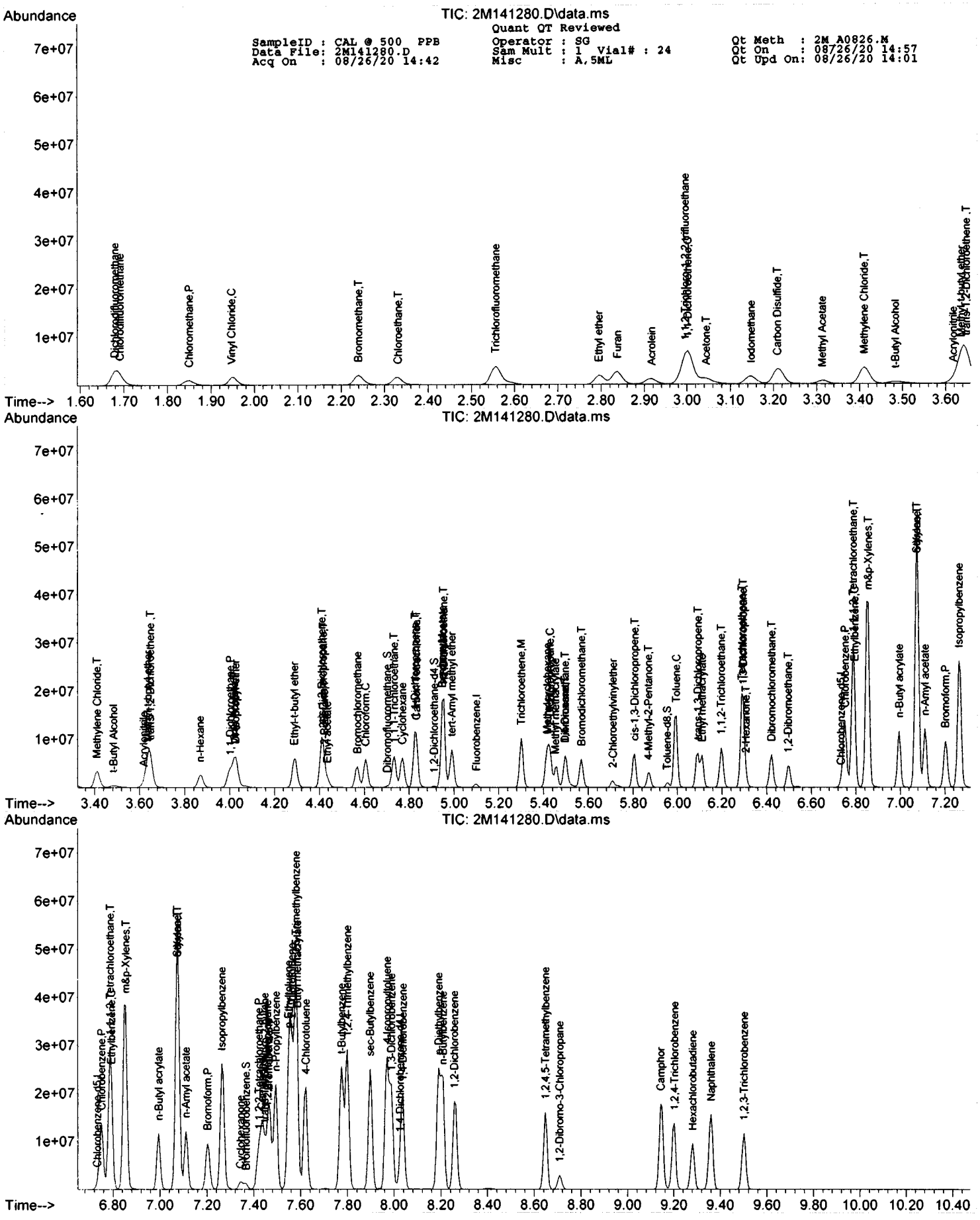
Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141280.D Sam Mult : 1 Vial# : 24 Qt On : 08/26/20 14:57
Acq On : 08/26/20 14:42 Misc : A,5ML Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.788	133	2472539	529.1834	ug/l	99
69)	Chlorobenzene	6.751	112	5903416	463.6234	ug/l	95
71)	n-Butyl acrylate	6.995	55	4629099	540.9607	ug/l	93
72)	n-Amyl acetate	7.111	43	3337395	558.7728	ug/l	72
73)	Bromoform	7.202	173	3338549	690.4718	ug/l	99
74)	Ethylbenzene	6.794	106	2992823	365.3270	ug/l	66
75)	1,1,2,2-Tetrachloroethane	7.422	83	2538981	411.4810	ug/l	97
77)	Styrene	7.074	104	10431644	493.9615	ug/l	93
78)	m&p-Xylenes	6.855	106	9492083m	783.5687	ug/l	
79)	o-Xylene	7.074	106	6389376	517.8508	ug/l	61
80)	trans-1,4-Dichloro-2-b...	7.446	53	824432	427.0386	ug/l	75
81)	1,3-Dichlorobenzene	7.989	146	7313143	486.6746	ug/l	96
82)	1,4-Dichlorobenzene	8.037	146	6607608	443.2449	ug/l	98
83)	1,2-Dichlorobenzene	8.257	146	6564638	492.8808	ug/l	97
84)	Isopropylbenzene	7.263	105	11823989	399.5438	ug/l	86
85)	Cyclohexanone	7.342	55	395320	2155.9682	ug/l	84
86)	Camphene	7.434	93	2535539	323.2464	ug/l	92
87)	1,2,3-Trichloropropane	7.458	75	3217556	449.2061	ug/l	97
88)	2-Chlorotoluene	7.562	91	7459179	425.2251	ug/l	91
89)	p-Ethyltoluene	7.550	105	12511111	393.3368	ug/l	91
90)	4-Chlorotoluene	7.623	91	7165349	394.9827	ug/l	88
91)	n-Propylbenzene	7.495	91	11135073	346.5471	ug/l	83
92)	Bromobenzene	7.464	77	5467252	357.1159	ug/l	81
93)	1,3,5-Trimethylbenzene	7.580	105	9047213	384.6436	ug/l	73
94)	Butyl methacrylate	7.586	41	2540503m	422.3282	ug/l	
95)	t-Butylbenzene	7.775	119	11832191	502.7209	ug/l	94
96)	1,2,4-Trimethylbenzene	7.800	105	11075140	443.8366	ug/l	84
97)	sec-Butylbenzene	7.897	105	11909394	443.4367	ug/l	81
98)	4-Isopropyltoluene	7.970	119	11015874	474.4685	ug/l	91
99)	n-Butylbenzene	8.208	91	10529830	467.3340	ug/l	89
100)	p-Diethylbenzene	8.190	119	6484975	458.6254	ug/l	95
101)	1,2,4,5-Tetramethylben...	8.647	119	6199338	322.9040	ug/l	97
102)	1,2-Dibromo-3-Chloropr...	8.708	157	767430	644.6799	ug/l	87
103)	Camphor	9.141	95	3616644	7149.7320	ug/l	96
104)	Hexachlorobutadiene	9.281	225	1471599	648.7571	ug/l	95
105)	1,2,4-Trichlorobenzene	9.202	180	3753205	674.4162	ug/l	98
106)	1,2,3-Trichlorobenzene	9.501	180	3072760	731.9866	ug/l	97
107)	Naphthalene	9.360	128	9827326	776.8700	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 500 PPB
Data File: 2M141280.D
Acq On : 08/26/20 14:42
Operator : SG
Sam Mult : 1 Vial# : 24
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08/26/20 14:57
Qt Upd On: 08/26/20 14:01
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 2M141280.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
m&p-Xylenes,T
Time-->

Abundance
TIC: 2M141280.D\data.ms
Chlorobenzene-d5,I
Ethylbenzene,P
1,1,2,2-Tetrachloroethane,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone,S
n-Propylbenzene
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB
Data File: 2M141274.D
Acq On : 08/26/20 12:44

Operator : SG
Sam Mult : 1 Vial# : 18
Misc : A,5ML

Qt Meth : 2M_A0826.M
Qt On : 08/26/20 14:04
Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	403036	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	291234	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	211233	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	109193	27.92	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.07%			
39) 1,2-Dichloroethane-d4	4.910	67	52330	31.64	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.47%			
66) Toluene-d8	5.952	98	378332	33.68	ug/l	0.00
Spiked Amount 30.000			Recovery = 112.27%			
76) Bromofluorobenzene	7.366	174	112400	19.90	ug/l	0.00
Spiked Amount 30.000			Recovery = 66.33%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.691	51	2084	0.6144	ug/l	85
6) Dichlorodifluoromethane	1.678	85	2299	0.8445	ug/l	94
7) Chloromethane	1.849	50	1593	0.7367	ug/l	90
8) Bromomethane	2.252	94	1393	0.9342	ug/l	64
9) Vinyl Chloride	1.953	62	2430	0.8048	ug/l	82
10) Chloroethane	2.343	64	2062	0.9714	ug/l	84
11) Trichlorofluoromethane	2.562	101	4691	0.7819	ug/l	95
12) Ethyl ether	2.800	59	1385	0.6033	ug/l	56
13) Furan	2.843	39	2659	0.7551	ug/l	77
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	2100	0.7584	ug/l	88
15) Methylene Chloride	3.422	84	2823	0.7725	ug/l	74
16) Acrolein	2.922	56	1711	6.1758	ug/l	65
17) Acrylonitrile	3.623	53	929	1.2295	ug/l	82
18) Iodomethane	3.154	142	1992m	0.5220	ug/l	
19) Acetone	3.050	43	2993	6.0762	ug/l	95
20) Carbon Disulfide	3.221	76	7613	0.7682	ug/l	100
21) t-Butyl Alcohol	3.471	59	1456	7.1137	ug/l	68
22) n-Hexane	3.867	57	2589	1.0116	ug/l	88
23) Di-isopropyl-ether	4.026	45	4378	0.6571	ug/l	73
24) 1,1-Dichloroethene	3.007	61	3274	0.7637	ug/l	78
25) Methyl Acetate	3.318	43	1391	1.1763	ug/l	100
26) Methyl-t-butyl ether	3.642	73	6350	0.7664	ug/l	96
27) 1,1-Dichloroethane	4.001	63	4113	0.7646	ug/l	82
28) trans-1,2-Dichloroethene	3.648	96	2503	0.6520	ug/l	91
29) Ethyl-t-butyl ether	4.288	59	6219	0.6918	ug/l	91
30) cis-1,2-Dichloroethene	4.416	61	4362	0.8371	ug/l	98
31) Bromochloromethane	4.574	49	1775	0.8049	ug/l	70
32) 2,2-Dichloropropane	4.416	77	4165	0.8083	ug/l	90
33) Ethyl acetate	4.440	43	1665	1.0128	ug/l	74
34) 1,4-Dioxane	5.495	88	1877	57.6446	ug/l	81
35) 1,1-Dichloropropene	4.830	75	3404	0.6872	ug/l	77
36) Chloroform	4.605	83	4978	0.7319	ug/l	84
38) Cyclohexane	4.769	56	3006	0.7572	ug/l	88
40) 1,2-Dichloroethane	4.958	62	3516	0.7527	ug/l	95
41) 2-Butanone	4.410	43	706m	0.8462	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	5082	0.8079	ug/l	87
43) Carbon Tetrachloride	4.830	117	4145	0.8042	ug/l	84
44) Vinyl Acetate	4.026	43	5783	0.8058	ug/l	100
45) Bromodichloromethane	5.568	83	3763	0.6929	ug/l	96
46) Methylcyclohexane	5.416	83	3224	0.7201	ug/l	96
47) Dibromomethane	5.495	174	2229	0.8403	ug/l	81
48) 1,2-Dichloropropane	5.428	63	2292	0.7108	ug/l	97
49) Trichloroethene	5.300	130	3923	0.8489	ug/l	72
50) Benzene	4.952	78	10644	0.7438	ug/l	100
51) tert-Amyl methyl ether	4.983	73	7351	0.7899	ug/l	96
53) Iso-propylacetate	4.946	43	3549	1.2982	ug/l	76
54) Methyl methacrylate	5.452	41	1693	1.3439	ug/l	73
55) Dibromochloromethane	6.422	129	2967	0.8671	ug/l	98
56) 2-Chloroethylvinylether	5.708	63	365	0.8466	ug/l	95
57) cis-1,3-Dichloropropene	5.800	75	4181	0.9878	ug/l	81
58) trans-1,3-Dichloropropene	6.086	75	4568	1.1250	ug/l	84
59) Ethyl methacrylate	6.111	41	1501	1.0182	ug/l	76
60) 1,1,2-Trichloroethane	6.196	97	2608	1.0329	ug/l	94
61) 1,2-Dibromoethane	6.495	107	2766	1.0284	ug/l	66
62) 1,3-Dichloropropane	6.293	76	4509	1.1390	ug/l	97
63) 4-Methyl-2-Pentanone	5.867	43	1858	1.4397	ug/l	85
64) 2-Hexanone	6.306	43	1256	1.4288	ug/l	94
65) Tetrachloroethene	6.287	164	2333	0.8509	ug/l	98
67) Toluene	5.989	92	7485	0.9818	ug/l	97

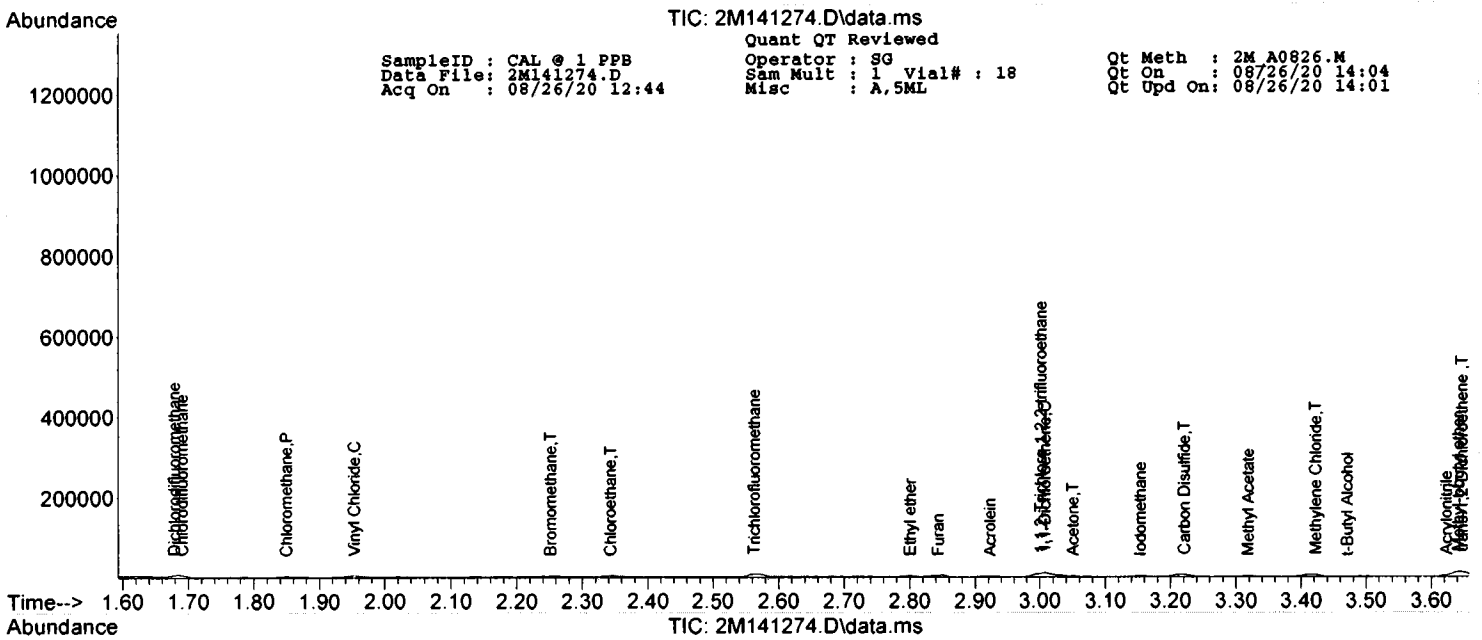
Quantitation Report (QT Reviewed)

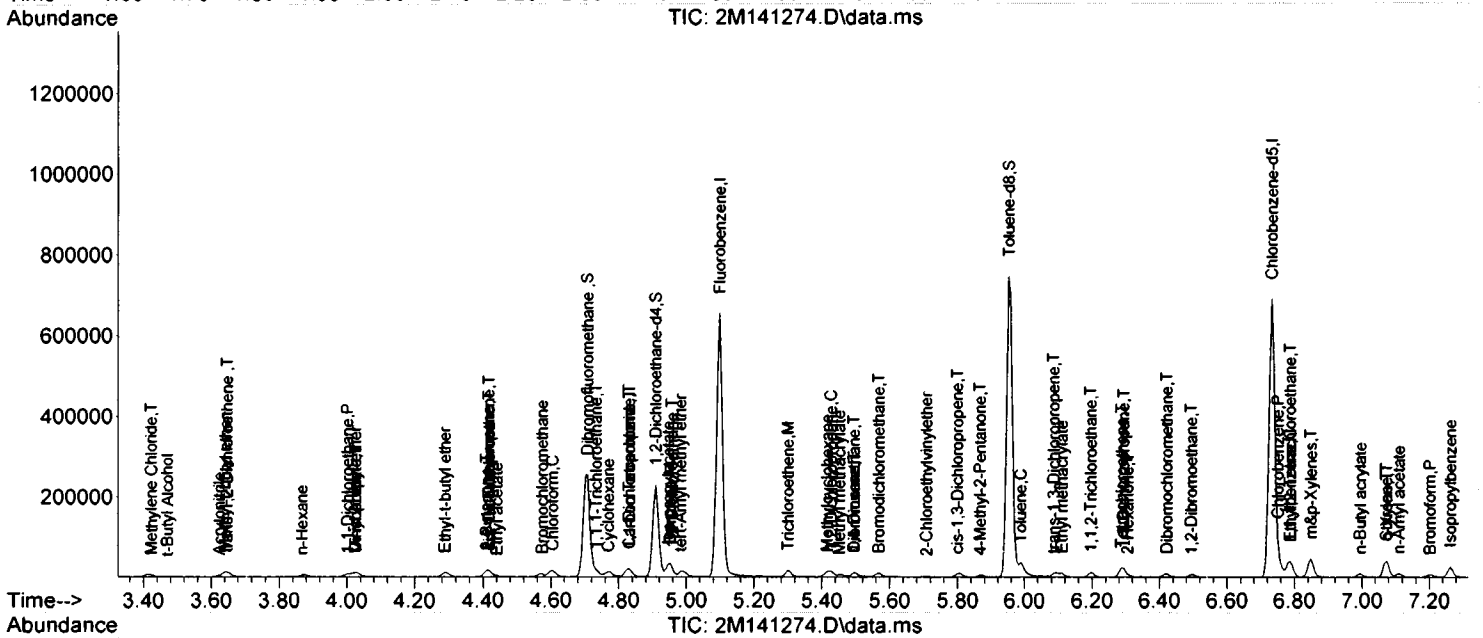
SampleID : CAL @ 1 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141274.D Sam Mult : 1 Vial# : 18 Qt On : 08/26/20 14:04
Acq On : 08/26/20 12:44 Misc : A,5ML Qt Upd On: 08/26/20 14:01

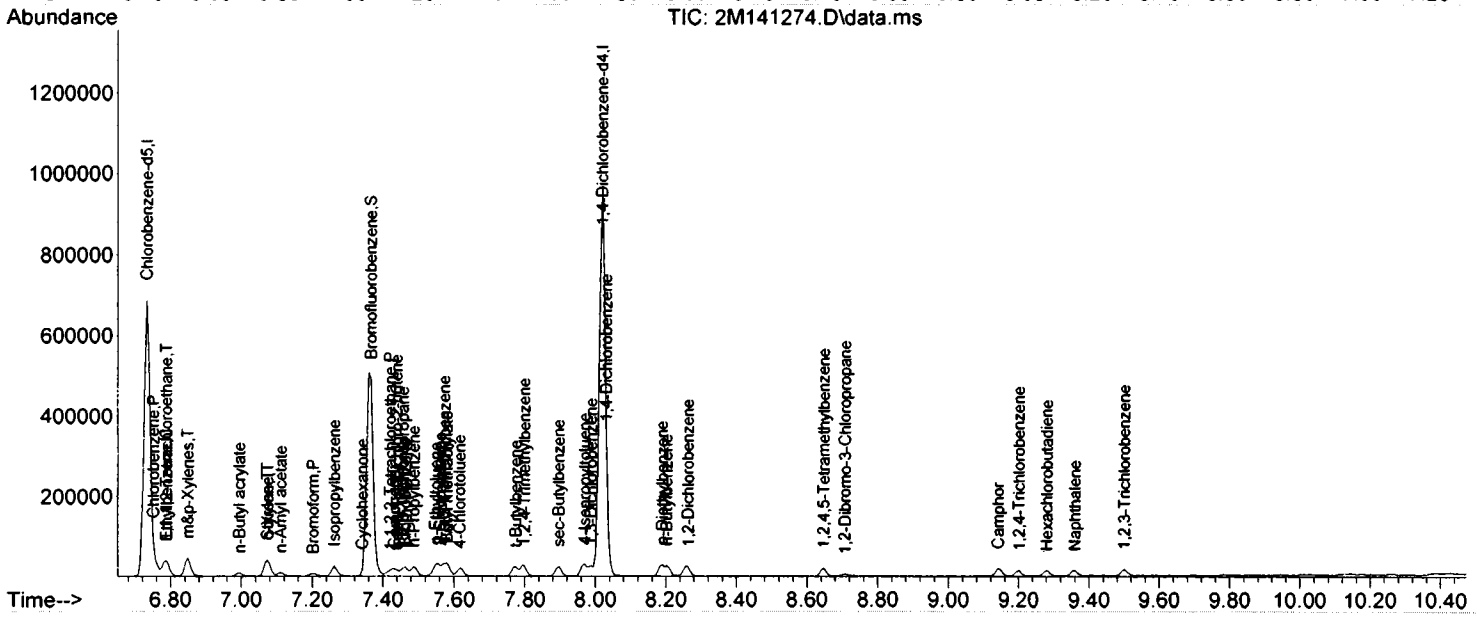
Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.787	133	2688	0.8229	ug/l	76
69)	Chlorobenzene	6.751	112	7951	0.8932	ug/l	95
71)	n-Butyl acrylate	6.995	55	3988	0.7547	ug/l	96
72)	n-Amyl acetate	7.110	43	2891	0.7838	ug/l	87
73)	Bromoform	7.202	173	2301	0.7706	ug/l	98
74)	Ethylbenzene	6.787	106	3473	0.6865	ug/l	80
75)	1,1,2,2-Tetrachloroethane	7.421	83	3812	1.0004	ug/l	88
77)	Styrene	7.074	104	8219	0.6302	ug/l	92
78)	m&p-Xylenes	6.848	106	9210	1.2311	ug/l	81
79)	o-Xylene	7.074	106	5100	0.6693	ug/l	83
80)	trans-1,4-Dichloro-2-b...	7.440	53	1198	1.0049	ug/l	98
81)	1,3-Dichlorobenzene	7.988	146	8329m	0.8976	ug/l	
82)	1,4-Dichlorobenzene	8.031	146	8277	0.8991	ug/l	70
83)	1,2-Dichlorobenzene	8.263	146	8601	1.0457	ug/l	96
84)	Isopropylbenzene	7.263	105	11764	0.6437	ug/l	99
85)	Cyclohexanone	7.342	55	627m	5.5373	ug/l	
86)	Camphene	7.434	93	3168	0.6540	ug/l	98
87)	1,2,3-Trichloropropane	7.458	75	4183	0.9457	ug/l	93
88)	2-Chlorotoluene	7.562	91	6214	0.5736	ug/l	93
89)	p-Ethyltoluene	7.549	105	11327	0.5767	ug/l	98
90)	4-Chlorotoluene	7.616	91	7216	0.6441	ug/l	92
91)	n-Propylbenzene	7.488	91	13484	0.6796	ug/l	96
92)	Bromobenzene	7.464	77	7672	0.8115	ug/l	92
93)	1,3,5-Trimethylbenzene	7.574	105	9440	0.6499	ug/l	99
94)	Butyl methacrylate	7.580	41	2098	0.5648	ug/l	73
95)	t-Butylbenzene	7.775	119	10733	0.7384	ug/l	99
96)	1,2,4-Trimethylbenzene	7.799	105	11419	0.7410	ug/l	98
97)	sec-Butylbenzene	7.897	105	11878	0.7162	ug/l	94
98)	4-Isopropyltoluene	7.970	119	12053	0.8407	ug/l	98
99)	n-Butylbenzene	8.202	91	11213	0.8059	ug/l	92
100)	p-Diethylbenzene	8.189	119	6427	0.7360	ug/l	91
101)	1,2,4,5-Tetramethylben...	8.647	119	8201	0.6917	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.708	157	1128	1.5344	ug/l	92
103)	Camphor	9.141	95	3592	11.4989	ug/l	97
104)	Hexachlorobutadiene	9.281	225	2015	1.4385	ug/l	99
105)	1,2,4-Trichlorobenzene	9.201	180	3521	1.0245	ug/l	94
106)	1,2,3-Trichlorobenzene	9.500	180	3827	1.4763	ug/l	88
107)	Naphthalene	9.360	128	9501	1.2162	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M141274.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 1 PPB
Data File: 2M141274.D
Acq On : 08/26/20 12:44
Operator : SG
Sam Mult : 1 Vial# : 18
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08/26/20 14:04
Qt Upd On: 08/26/20 14:01
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->


Abundance
TIC: 2M141274.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M141274.D\data.ms
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
4-Chlorotoluene
sec-Butylbenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

Sample ID : CAL @ 0.5 PPB
Data File: 2M141273.D
Acq On : 08/26/20 12:25

Operator : SG
Sam Mult : 1 Vial# : 17
Misc : A,5ML

Qt Meth : 2M_A0826.M
Qt On : 08/26/20 14:06
Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	434338	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	301525	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	136814	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	123472	29.29	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.63%			
39) 1,2-Dichloroethane-d4	4.910	67	61348	34.42	ug/l	0.00
Spiked Amount 30.000			Recovery = 114.73%			
66) Toluene-d8	5.952	98	411403	35.37	ug/l	0.00
Spiked Amount 30.000			Recovery = 117.90%			
76) Bromofluorobenzene	7.367	174	113698	31.08	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.60%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	0.000		0	N.D.	d	
6) Dichlorodifluoromethane	0.000		0	N.D.	d	
7) Chloromethane	0.000		0	N.D.	d	
8) Bromomethane	0.000		0	N.D.	d	
9) Vinyl Chloride	0.000		0	N.D.	d	
10) Chloroethane	0.000		0	N.D.	d	
11) Trichlorofluoromethane	0.000		0	N.D.	d	
12) Ethyl ether	0.000		0	N.D.	d	
13) Furan	0.000		0	N.D.	d	
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D.	d	
15) Methylene Chloride	0.000		0	N.D.	d	
16) Acrolein	0.000		0	N.D.	d	
17) Acrylonitrile	0.000		0	N.D.	d	
18) Iodomethane	3.142	142	1277m	0.3105	ug/l	
19) Acetone	0.000		0	N.D.	d	
20) Carbon Disulfide	0.000		0	N.D.	d	
21) t-Butyl Alcohol	0.000		0	N.D.	d	
22) n-Hexane	0.000		0	N.D.	d	
23) Di-isopropyl-ether	0.000		0	N.D.	d	
24) 1,1-Dichloroethene	0.000		0	N.D.	d	
25) Methyl Acetate	0.000		0	N.D.	d	
26) Methyl-t-butyl ether	3.636	73	3456	0.3870	ug/l	95
27) 1,1-Dichloroethane	0.000		0	N.D.	d	
28) trans-1,2-Dichloroethene	0.000		0	N.D.	d	
29) Ethyl-t-butyl ether	0.000		0	N.D.	d	
30) cis-1,2-Dichloroethene	0.000		0	N.D.	d	
31) Bromochloromethane	0.000		0	N.D.	d	
32) 2,2-Dichloropropane	0.000		0	N.D.	d	
33) Ethyl acetate	0.000		0	N.D.	d	
34) 1,4-Dioxane	0.000		0	N.D.	d	
35) 1,1-Dichloropropene	0.000		0	N.D.	d	
36) Chloroform	0.000		0	N.D.	d	
38) Cyclohexane	0.000		0	N.D.	d	
40) 1,2-Dichloroethane	4.952	62	2782	0.5527	ug/l	75
41) 2-Butanone	0.000		0	N.D.	d	
42) 1,1,1-Trichloroethane	0.000		0	N.D.	d	
43) Carbon Tetrachloride	0.000		0	N.D.	d	
44) Vinyl Acetate	0.000		0	N.D.	d	
45) Bromodichloromethane	0.000		0	N.D.	d	
46) Methylcyclohexane	0.000		0	N.D.	d	
47) Dibromomethane	0.000		0	N.D.	d	
48) 1,2-Dichloropropane	0.000		0	N.D.	d	
49) Trichloroethene	0.000		0	N.D.	d	
50) Benzene	4.952	78	6742	0.4371	ug/l	100
51) tert-Amyl methyl ether	0.000		0	N.D.	d	
53) Iso-propylacetate	0.000		0	N.D.	d	
54) Methyl methacrylate	0.000		0	N.D.	d	
55) Dibromochloromethane	0.000		0	N.D.	d	
56) 2-Chloroethylvinylether	0.000		0	N.D.	d	
57) cis-1,3-Dichloropropene	0.000		0	N.D.	d	
58) trans-1,3-Dichloropropene	0.000		0	N.D.	d	
59) Ethyl methacrylate	0.000		0	N.D.	d	
60) 1,1,2-Trichloroethane	0.000		0	N.D.	d	
61) 1,2-Dibromoethane	0.000		0	N.D.	d	
62) 1,3-Dichloropropane	0.000		0	N.D.	d	
63) 4-Methyl-2-Pentanone	0.000		0	N.D.	d	
64) 2-Hexanone	0.000		0	N.D.	d	
65) Tetrachloroethene	0.000		0	N.D.	d	
67) Toluene	0.000		0	N.D.	d	

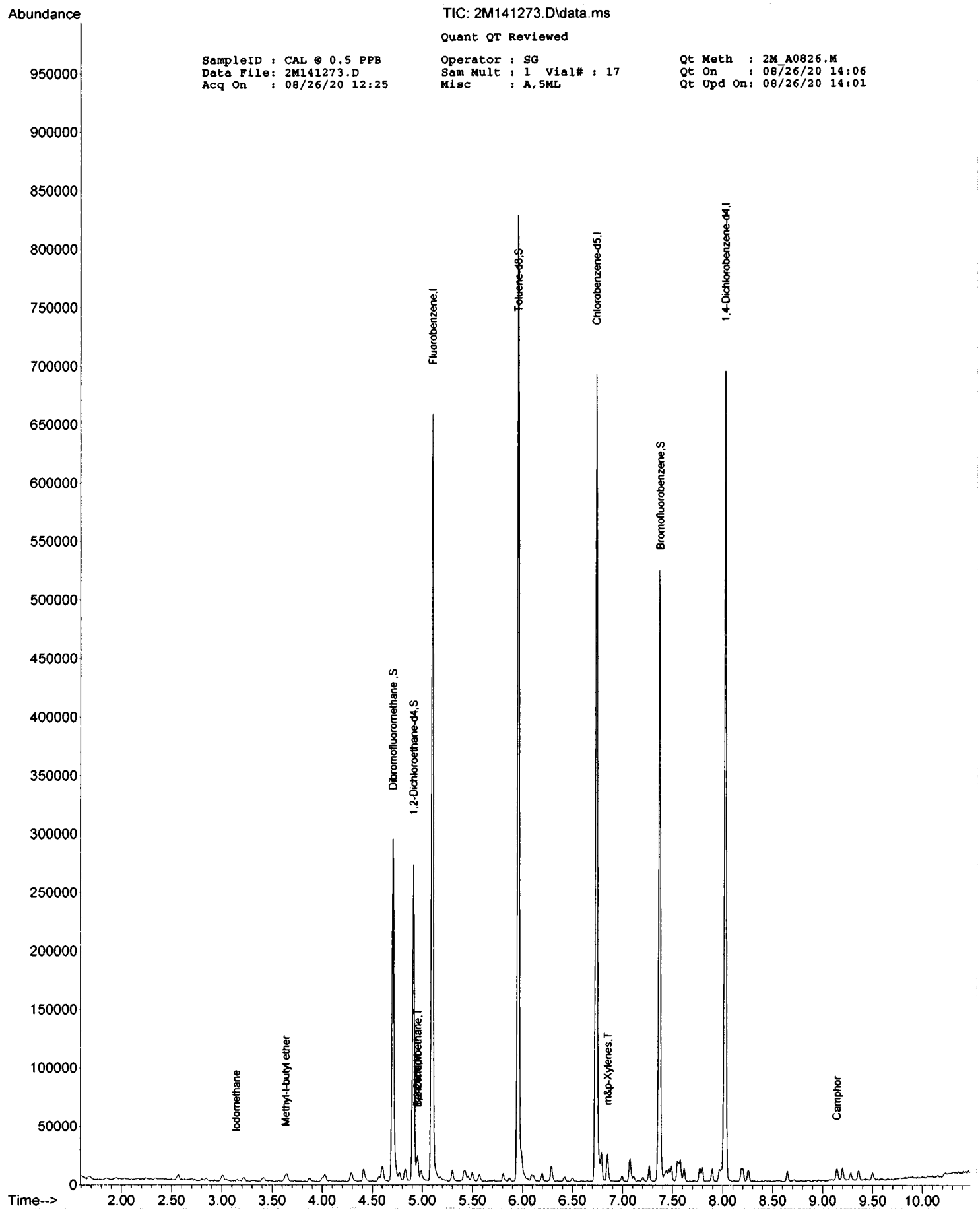
Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141273.D Sam Mult : 1 Vial# : 17 Qt On : 08/26/20 14:06
Acq On : 08/26/20 12:25 Misc : A,5ML Qt Upd On: 08/26/20 14:01

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	0.000		0	N.D. d		
69)	Chlorobenzene	0.000		0	N.D. d		
71)	n-Butyl acrylate	0.000		0	N.D. d		
72)	n-Amyl acetate	0.000		0	N.D. d		
73)	Bromoform	0.000		0	N.D. d		
74)	Ethylbenzene	0.000		0	N.D. d		
75)	1,1,2,2-Tetrachloroethane	0.000		0	N.D. d		
77)	Styrene	0.000		0	N.D. d		
78)	m&p-Xylenes	6.848	106	5340	1.1021	ug/l	97
79)	o-Xylene	0.000		0	N.D. d		
80)	trans-1,4-Dichloro-2-b...	0.000		0	N.D. d		
81)	1,3-Dichlorobenzene	0.000		0	N.D. d		
82)	1,4-Dichlorobenzene	0.000		0	N.D. d		
83)	1,2-Dichlorobenzene	0.000		0	N.D. d		
84)	Isopropylbenzene	0.000		0	N.D. d		
85)	Cyclohexanone	0.000		0	N.D. d		
86)	Camphene	0.000		0	N.D. d		
87)	1,2,3-Trichloropropane	0.000		0	N.D. d		
88)	2-Chlorotoluene	0.000		0	N.D. d		
89)	p-Ethyltoluene	0.000		0	N.D. d		
90)	4-Chlorotoluene	0.000		0	N.D. d		
91)	n-Propylbenzene	0.000		0	N.D. d		
92)	Bromobenzene	0.000		0	N.D. d		
93)	1,3,5-Trimethylbenzene	0.000		0	N.D. d		
94)	Butyl methacrylate	0.000		0	N.D. d		
95)	t-Butylbenzene	0.000		0	N.D. d		
96)	1,2,4-Trimethylbenzene	0.000		0	N.D. d		
97)	sec-Butylbenzene	0.000		0	N.D. d		
98)	4-Isopropyltoluene	0.000		0	N.D. d		
99)	n-Butylbenzene	0.000		0	N.D. d		
100)	p-Diethylbenzene	0.000		0	N.D. d		
101)	1,2,4,5-Tetramethylben...	0.000		0	N.D. d		
102)	1,2-Dibromo-3-Chloropr...	0.000		0	N.D. d		
103)	Camphor	9.141	95	2319	11.4617	ug/l	81
104)	Hexachlorobutadiene	0.000		0	N.D. d		
105)	1,2,4-Trichlorobenzene	0.000		0	N.D. d		
106)	1,2,3-Trichlorobenzene	0.000		0	N.D. d		
107)	Naphthalene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 0.5 PPB
Data File: 2M141273.D
Acq On : 08/26/20 12:25
Operator : SG
Sam Mult : 1 Vial# : 17
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08/26/20 14:06
Qt Upd On: 08/26/20 14:01
950000
900000
850000
800000
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
Time-->
2.00
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50
10.00
Iodomethane
Methyl-t-butyl ether
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
m&p-Xylenes,T
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Camphor

TxtDfile: 2M141290.D ICV FORM Date/Time: 08/26/20 17:57

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
Chlorodifluoromethane	1	0		18.166	20	91		70	130
Dichlorodifluoromethane	1	0		20.6417	20	103		50	150
Chloromethane	1	0		24.225	20	121		70	130
Bromomethane	1	0		18.8981	20	94		70	130
Vinyl Chloride	1	0		22.4248	20	112		70	130
Chloroethane	1	0		21.5301	20	108		70	130
Trichlorofluoromethane	1	0		21.7589	20	109		70	130
Ethyl ether	1	0		22.5962	20	113		70	130
Furan	1	0		20.7584	20	104		70	130
1.1.2-Trichloro-1.2.2-trifluoroethane	1	0		21.2748	20	106		70	130
Methylene Chloride	1	0		21.6016	20	108		70	130
Acrolein	1	0		100.2643	100	100		50	150
Acrylonitrile	1	0		19.6872	20	98		50	150
Iodomethane	1	0		28.8131	20	144	*	70	130
Acetone	1	0		99.6717	100	100		50	150
Carbon Disulfide	1	0		21.7574	20	109		70	130
t-Butyl Alcohol	1	0		110.5791	100	111		50	150
n-Hexane	1	0		19.0977	20	95		70	130
Di-isopropyl-ether	1	0		20.4756	20	102		70	130
1.1-Dichloroethene	1	0		20.5585	20	103		70	130
Methyl Acetate	1	0		20.8456	20	104		70	130
Methyl-t-butyl ether	1	0		21.1165	20	106		70	130
1.1-Dichloroethane	1	0		19.8633	20	99		70	130
trans-1.2-Dichloroethene	1	0		21.2931	20	106		70	130
Ethyl-t-butyl ether	1	0		21.2247	20	106		70	130
cis-1.2-Dichloroethene	1	0		20.4286	20	102		70	130
Bromochloromethane	1	0		20.5862	20	103		70	130
2.2-Dichloropropane	1	0		18.9507	20	95		70	130
Ethyl acetate	1	0		21.3396	20	107		70	130
1.4-Dioxane	1	0		996.4838	1000	100		70	130
1.1-Dichloropropene	1	0		20.1663	20	101		70	130
Chloroform	1	0		20.528	20	103		70	130
Cyclohexane	1	0		21.0997	20	105		70	130
1.2-Dichloroethane	1	0		19.5955	20	98		70	130
2-Butanone	1	0		19.4905	20	97		70	130
1.1.1-Trichloroethane	1	0		20.981	20	105		70	130
Carbon Tetrachloride	1	0		21.0318	20	105		70	130
Vinyl Acetate	1	0		19.5646	20	98		70	130
Bromodichloromethane	1	0		21.153	20	106		70	130
Methylcyclohexane	1	0		21.0042	20	105		70	130
Dibromomethane	1	0		17.6742	20	88		70	130
1.2-Dichloropropane	1	0		20.2195	20	101		70	130
Trichloroethene	1	0		20.5911	20	103		70	130
Benzene	1	0		19.4768	20	97		70	130
Iso-propylacetate	1	0		20.165	20	101		70	130
Methyl methacrylate	1	0		21.45	20	107		70	130
Dibromochloromethane	1	0		21.8702	20	109		70	130
2-Chloroethylvinylether	1	0		21.6448	20	108		70	130
cis-1.3-Dichloropropene	1	0		21.0997	20	105		70	130
trans-1.3-Dichloropropene	1	0		20.025	20	100		70	130
Ethyl methacrylate	1	0		20.1036	20	101		70	130
1.1.2-Trichloroethane	1	0		20.406	20	102		70	130
1.2-Dibromoethane	1	0		21.1931	20	106		70	130
1.3-Dichloropropane	1	0		19.74	20	99		70	130
4-Methyl-2-Pentanone	1	0		19.4915	20	97		70	130
2-Hexanone	1	0		20.0162	20	100		70	130
Tetrachloroethene	1	0		18.3542	20	92		70	130
Toluene	1	0		19.9453	20	100		70	130
1.1.1.2-Tetrachloroethane	1	0		20.7109	20	104		70	130
Chlorobenzene	1	0		20.8269	20	104		70	130
n-Butyl acrylate	1	0		21.6948	20	108		70	130
n-Amyl acetate	1	0		21.9616	20	110		70	130
Bromoform	1	0		23.9718	20	120		70	130
Ethylbenzene	1	0		24.1968	20	121		70	130
1.1.2.2-Tetrachloroethane	1	0		22.4009	20	112		70	130
Styrene	1	0		22.4042	20	112		70	130
m&p-Xylenes	1	0		44.806	40	112		70	130
o-Xylene	1	0		21.7803	20	109		70	130
trans-1.4-Dichloro-2-butene	1	0		21.3748	20	107		70	130
1.3-Dichlorobenzene	1	0		21.2965	20	106		70	130
1.4-Dichlorobenzene	1	0		21.1147	20	106		70	130
1.2-Dichlorobenzene	1	0		21.0825	20	105		70	130
Isopropylbenzene	1	0		23.4045	20	117		70	130
1.2.3-Trichloropropane	1	0		21.9325	20	110		70	130
2-Chlorotoluene	1	0		21.4727	20	107		70	130
4-Chlorotoluene	1	0		20.2504	20	101		70	130
n-Propylbenzene	1	0		22.354	20	112		70	130
Bromobenzene	1	0		22.0348	20	110		70	130
1.3.5-Trimethylbenzene	1	0		21.6924	20	108		70	130
Butyl methacrylate	1	0		21.0978	20	105		70	130
t-Butylbenzene	1	0		21.1213	20	106		70	130
1.2.4-Trimethylbenzene	1	0		20.6843	20	103		70	130
sec-Butylbenzene	1	0		21.7163	20	109		70	130
4-Isopropyltoluene	1	0		20.8462	20	104		70	130
n-Butylbenzene	1	0		20.5111	20	103		70	130
1.2-Dibromo-3-Chloropropane	1	0		24.1504	20	121		70	130
Hexachlorobutadiene	1	0		22.2173	20	111		70	130
1.2.4-Trichlorobenzene	1	0		23.1848	20	116		70	130
1.2.3-Trichlorobenzene	1	0		21.5416	20	108		70	130
Naphthalene	1	0		21.7676	20	109		70	130

TxtDfile: 6M130925.D ICV FORM Date/Time: 08/01/20 20:24

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
Chlorodifluoromethane	1	0		37.918	50	76		70	130
Dichlorodifluoromethane	1	0		39.1803	50	78		50	150
Chloromethane	1	0		44.394	50	89		70	130
Bromomethane	1	0		40.5538	50	81		70	130
Vinyl Chloride	1	0		39.5923	50	79		70	130
Chloroethane	1	0		40.9182	50	82		70	130
Trichlorofluoromethane	1	0		39.7508	50	80		70	130
Ethyl ether	1	0		51.275	50	103		70	130
Furan	1	0		43.3933	50	87		70	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	0		39.7696	50	80		70	130
Methylene Chloride	1	0		43.643	50	87		70	130
Acrolein	1	0		238.0012	250	95		50	150
Acrylonitrile	1	0		43.5884	50	87		50	150
Iodomethane	1	0		35.7703	50	72		70	130
Acetone	1	0		193.2655	250	77		50	150
Carbon Disulfide	1	0		39.3224	50	79		70	130
t-Butyl Alcohol	1	0		200.2267	250	80		50	150
n-Hexane	1	0		43.1493	50	86		70	130
Di-isopropyl-ether	1	0		48.6109	50	97		70	130
1,1-Dichloroethene	1	0		41.2049	50	82		70	130
Methyl Acetate	1	0		46.1041	50	92		70	130
Methyl-t-butyl ether	1	0		51.7942	50	104		70	130
1,1-Dichloroethane	1	0		44.9087	50	90		70	130
trans-1,2-Dichloroethene	1	0		42.5709	50	85		70	130
Ethyl-t-butyl ether	1	0		51.2088	50	102		70	130
cis-1,2-Dichloroethene	1	0		45.1238	50	90		70	130
Bromochloromethane	1	0		50.3967	50	101		70	130
2,2-Dichloropropane	1	0		40.2065	50	80		70	130
Ethyl acetate	1	0		47.4794	50	95		70	130
1,4-Dioxane	1	0		1938.123	2500	78		70	130
1,1-Dichloropropene	1	0		41.5888	50	83		70	130
Chloroform	1	0		45.6177	50	91		70	130
Cyclohexane	1	0		41.7667	50	84		70	130
1,2-Dichloroethane	1	0		49.1215	50	98		70	130
2-Butanone	1	0		45.0879	50	90		70	130
1,1,1-Trichloroethane	1	0		41.7542	50	84		70	130
Carbon Tetrachloride	1	0		41.077	50	82		70	130
Vinyl Acetate	1	0		50.0722	50	100		70	130
Bromodichloromethane	1	0		47.8771	50	96		70	130
Methylcyclohexane	1	0		41.3787	50	83		70	130
Dibromomethane	1	0		51.5226	50	103		70	130
1,2-Dichloropropane	1	0		46.336	50	93		70	130
Trichloroethene	1	0		42.6422	50	85		70	130
Benzene	1	0		44.6377	50	89		70	130
Iso-propylacetate	1	0		51.0665	50	102		70	130
Methyl methacrylate	1	0		51.3283	50	103		70	130
Dibromochloromethane	1	0		50.7612	50	102		70	130
2-Chloroethylvinylether	1	0		48.8669	50	98		70	130
cis-1,3-Dichloropropene	1	0		47.1282	50	94		70	130
trans-1,3-Dichloropropene	1	0		48.5633	50	97		70	130
Ethyl methacrylate	1	0		51.8854	50	104		70	130
1,1,2-Trichloroethane	1	0		50.0265	50	100		70	130
1,2-Dibromoethane	1	0		51.3066	50	103		70	130
1,3-Dichloropropane	1	0		49.8571	50	100		70	130
4-Methyl-2-Pentanone	1	0		47.1566	50	94		70	130
2-Hexanone	1	0		45.5462	50	91		70	130
Tetrachloroethene	1	0		40.2801	50	81		70	130
Toluene	1	0		40.6851	50	81		70	130
1,1,1,2-Tetrachloroethane	1	0		47.0273	50	94		70	130
Chlorobenzene	1	0		43.0866	50	86		70	130
n-Butyl acrylate	1	0		53.7694	50	108		70	130
n-Amyl acetate	1	0		51.7786	50	104		70	130
Bromoform	1	0		78.182	50	156	*	70	130
Ethylbenzene	1	0		42.5621	50	85		70	130
1,1,2,2-Tetrachloroethane	1	0		50.4899	50	101		70	130
Styrene	1	0		44.933	50	90		70	130
m&p-Xylenes	1	0		86.9129	100	87		70	130
o-Xylene	1	0		43.3808	50	87		70	130
trans-1,4-Dichloro-2-butene	1	0		45.3098	50	91		70	130
1,3-Dichlorobenzene	1	0		45.5343	50	91		70	130
1,4-Dichlorobenzene	1	0		44.2284	50	88		70	130
1,2-Dichlorobenzene	1	0		46.8081	50	94		70	130
Isopropylbenzene	1	0		43.0828	50	86		70	130
1,2,3-Trichloropropane	1	0		47.9691	50	96		70	130
2-Chlorotoluene	1	0		44.8774	50	90		70	130
4-Chlorotoluene	1	0		43.4518	50	87		70	130
n-Propylbenzene	1	0		43.1464	50	86		70	130
Bromobenzene	1	0		44.8991	50	90		70	130
1,3,5-Trimethylbenzene	1	0		42.423	50	85		70	130
Butyl methacrylate	1	0		49.8923	50	100		70	130
t-Butylbenzene	1	0		43.9705	50	88		70	130
1,2,4-Trimethylbenzene	1	0		44.5312	50	89		70	130
sec-Butylbenzene	1	0		44.523	50	89		70	130
4-Isopropyltoluene	1	0		44.3629	50	89		70	130
n-Butylbenzene	1	0		42.8821	50	86		70	130
1,2-Dibromo-3-Chloropropane	1	0		48.9612	50	98		70	130
Hexachlorobutadiene	1	0		41.3306	50	83		70	130
1,2,4-Trichlorobenzene	1	0		44.0053	50	88		70	130
1,2,3-Trichlorobenzene	1	0		46.9252	50	94		70	130
Naphthalene	1	0		47.291	50	95		70	130

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M141350.D **Instrument:** GCMS 2

Cont Calibration Date/Time 8/28/2020 7:30:00 A Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.10	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.69	24.30	20	20	0.1	0.191	0.232	21.52	C1
Dichlorodifluoromethane	1	0		1.68	24.73	20	20	0.1	0.193	0.238	23.65	C1
Chloromethane	1	0		1.85	18.15	20	20	0.1	0.112	0.102	9.25	
Bromomethane	1	0		2.25	13.88	20	20	0.1	0.117	0.096	30.58	C1
Vinyl Chloride	1	0		1.95	25.64	20	20	0.1	0.190	0.243	28.22	C1
Chloroethane	1	0		2.34	22.93	20	20	0.1	0.143	0.164	14.65	
Trichlorofluoromethane	1	0		2.56	22.66	20	20	0.1	0.378	0.428	13.29	
Ethyl ether	1	0		2.80	21.81	20	20	0.5	0.124	0.135	9.07	
Furan	1	0		2.84	21.95	20	20	0.5	0.182	0.200	9.73	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.00	21.75	20	20	0.1	0.167	0.181	8.77	
Methylene Chloride	1	0		3.41	20.62	20	20	0.1	0.217	0.223	3.08	
Acrolein	1	0		2.92	103.32	100	20		0.026	0.027	3.32	
Acrylonitrile	1	0		3.62	19.78	20	20		0.064	0.063	1.09	
Iodomethane	1	0		3.15	21.76	20	20		0.172	0.165	8.79	
Acetone	1	0		3.04	105.20	100	20	0.1	0.044	0.046	5.20	
Carbon Disulfide	1	0		3.21	21.23	20	20	0.1	0.565	0.600	6.13	
t-Butyl Alcohol	1	0		3.48	95.39	100	20		0.019	0.018	4.61	
n-Hexane	1	0		3.87	21.68	20	20		0.156	0.170	8.41	
Di-isopropyl-ether	1	0		4.03	20.82	20	20		0.373	0.389	4.08	
1,1-Dichloroethene	1	0		3.01	20.70	20	20	0.1	0.256	0.265	3.50	
Methyl Acetate	1	0		3.31	20.35	20	20	0.1	0.101	0.103	1.74	
Methyl-t-butyl ether	1	0		3.64	19.95	20	20	0.1	0.529	0.528	0.27	
1,1-Dichloroethane	1	0		4.00	20.24	20	20	0.2	0.321	0.325	1.19	
trans-1,2-Dichloroethene	1	0		3.65	20.46	20	20	0.1	0.224	0.230	2.28	
Ethyl-t-butyl ether	1	0		4.29	19.87	20	20	0.5	0.500	0.497	0.67	
cis-1,2-Dichloroethene	1	0		4.41	20.00	20	20	0.1	0.316	0.316	0.00	
Bromochloromethane	1	0		4.57	20.13	20	20		0.131	0.132	0.67	
2,2-Dichloropropane	1	0		4.42	21.54	20	20		0.309	0.332	7.68	
Ethyl acetate	1	0		4.43	18.55	20	20		0.144	0.134	7.24	
1,4-Dioxane	1	0		5.49	1066.71	1000	20		0.003	0.003	6.67	
1,1-Dichloropropene	1	0		4.82	20.15	20	20		0.291	0.293	0.73	
Chloroform	1	0		4.60	20.33	20	20	0.2	0.398	0.405	1.65	
Dibromofluoromethane	1	0	S	4.70	30.45	30	**		0.285	0.289	1.49	
Cyclohexane	1	0		4.77	20.93	20	20	0.1	0.224	0.234	4.67	
1,2-Dichloroethane-d4	1	0	S	4.91	29.40	30	**		0.131	0.129	2.00	
1,2-Dichloroethane	1	0		4.95	18.74	20	20	0.1	0.294	0.276	6.29	
2-Butanone	1	0		4.42	19.84	20	20	0.1	0.075	0.074	0.79	
1,1,1-Trichloroethane	1	0		4.73	19.69	20	20	0.1	0.379	0.373	1.55	
Carbon Tetrachloride	1	0		4.83	19.51	20	20	0.1	0.317	0.309	2.46	
Vinyl Acetate	1	0		4.02	21.15	20	20		0.474	0.501	5.75	
Bromodichloromethane	1	0		5.57	19.70	20	20	0.2	0.319	0.314	1.52	
Methylcyclohexane	1	0		5.42	21.44	20	20	0.1	0.258	0.276	7.18	
Dibromomethane	1	0		5.49	16.68	20	20		0.191	0.216	16.61	
1,2-Dichloropropane	1	0		5.43	20.08	20	20	0.1	0.191	0.192	0.41	
Trichloroethene	1	0		5.30	19.92	20	20	0.2	0.296	0.295	0.42	
Benzene	1	0		4.95	19.24	20	20	0.5	0.871	0.837	3.81	
tert-Amyl methyl ether	1	0		4.99	19.18	20	20		0.564	0.540	4.11	
Chlorobenzene-d5	1	0	I	6.73	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.95	20.09	20	20	0.5	0.309	0.311	0.43	
Methyl methacrylate	1	0		5.45	20.78	20	20	0.5	0.144	0.150	3.89	
Dibromochloromethane	1	0		6.42	20.54	20	20	0.1	0.341	0.350	2.71	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M141350.D **Instrument:** GCMS 2

Cont Calibration Date/Time 8/28/2020 7:30:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.71	18.68	20	20		0.053	0.049	6.62	
cis-1,3-Dichloropropene	1	0		5.81	20.54	20	20	0.2	0.391	0.402	2.71	
trans-1,3-Dichloropropene	1	0		6.09	20.08	20	20	0.1	0.390	0.392	0.41	
Ethyl methacrylate	1	0		6.10	20.84	20	20	0.5	0.145	0.151	4.18	
1,1,2-Trichloroethane	1	0		6.20	20.85	20	20	0.1	0.253	0.264	4.23	
1,2-Dibromoethane	1	0		6.49	19.81	20	20	0.1	0.292	0.289	0.94	
1,3-Dichloropropane	1	0		6.29	20.13	20	20		0.405	0.408	0.66	
4-Methyl-2-Pentanone	1	0		5.87	20.82	20	20	0.1	0.166	0.172	4.10	
2-Hexanone	1	0		6.30	21.38	20	20	0.1	0.117	0.125	6.90	
Tetrachloroethene	1	0		6.29	19.14	20	20	0.2	0.258	0.300	4.30	
Toluene-d8	1	0	S	5.95	30.33	30	**		1.187	1.200	1.11	
Toluene	1	0		5.99	20.04	20	20	0.4	0.680	0.682	0.21	
1,1,1,2-Tetrachloroethane	1	0		6.78	19.71	20	20		0.312	0.307	1.46	
Chlorobenzene	1	0		6.75	19.80	20	20	0.5	0.833	0.824	1.00	
1,4-Dichlorobenzene-d4	1	0	I	8.02	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.99	20.06	20	20	0.5	0.706	0.708	0.32	
n-Amyl acetate	1	0		7.11	20.02	20	20	0.5	0.522	0.522	0.08	
Bromoform	1	0		7.20	20.10	20	20	0.1	0.490	0.493	0.48	
Ethylbenzene	1	0		6.79	21.81	20	20	0.1	0.584	0.637	9.04	
1,1,2,2-Tetrachloroethane	1	0		7.42	20.24	20	20	0.1	0.608	0.615	1.20	
Bromofluorobenzene	1	0	S	7.37	30.97	30	**		0.812	0.839	3.25	
Styrene	1	0		7.07	20.01	20	20	0.3	1.582	1.582	0.04	
m&p-Xylenes	1	0		6.85	40.61	40	20	0.1	0.926	0.940	1.53	
o-Xylene	1	0		7.07	19.41	20	20	0.3	0.929	0.901	2.95	
trans-1,4-Dichloro-2-butene	1	0		7.45	20.65	20	20		0.180	0.186	3.24	
1,3-Dichlorobenzene	1	0		7.99	19.55	20	20	0.6	1.221	1.193	2.26	
1,4-Dichlorobenzene	1	0		8.03	19.28	20	20	0.5	1.229	1.184	3.62	
1,2-Dichlorobenzene	1	0		8.26	19.45	20	20	0.4	1.151	1.120	2.75	
Isopropylbenzene	1	0		7.26	20.82	20	20	0.1	2.145	2.233	4.10	
Cyclohexanone	1	0		7.34	99.31	100	20		0.015	0.015	0.69	
Camphene	1	0		7.43	21.55	20	20		0.535	0.577	7.74	
1,2,3-Trichloropropane	1	0		7.46	19.95	20	20		0.708	0.706	0.24	
2-Chlorotoluene	1	0		7.56	19.97	20	20		1.278	1.276	0.13	
p-Ethyltoluene	1	0		7.55	20.06	20	20		2.126	2.133	0.31	
4-Chlorotoluene	1	0		7.62	18.66	20	20		1.352	1.262	6.68	
n-Propylbenzene	1	0		7.49	20.74	20	20		2.372	2.460	3.71	
Bromobenzene	1	0		7.46	20.29	20	20		1.192	1.209	1.47	
1,3,5-Trimethylbenzene	1	0		7.57	19.88	20	20		1.759	1.749	0.60	
Butyl methacrylate	1	0		7.58	19.25	20	20	0.5	0.432	0.416	3.76	
t-Butylbenzene	1	0		7.78	19.03	20	20		1.826	1.737	4.86	
1,2,4-Trimethylbenzene	1	0		7.79	19.12	20	20		1.905	1.821	4.41	
sec-Butylbenzene	1	0		7.90	20.51	20	20		2.033	2.084	2.54	
4-Isopropyltoluene	1	0		7.96	19.91	20	20		1.821	1.812	0.46	
n-Butylbenzene	1	0		8.20	20.01	20	20		1.692	1.692	0.05	
p-Diethylbenzene	1	0		8.19	19.37	20	20		0.984	0.953	3.16	
1,2,4,5-Tetramethylbenzene	1	0		8.65	20.78	20	20		1.329	1.381	3.88	
1,2-Dibromo-3-Chloropropane	1	0		8.71	20.50	20	20	0.05	0.160	0.164	2.52	
Camphor	1	0		9.14	157.77	200	20		0.065	0.059	21.12	C1
Hexachlorobutadiene	1	0		9.28	20.24	20	20		0.235	0.264	1.19	
1,2,4-Trichlorobenzene	1	0		9.20	20.97	20	20	0.2	0.572	0.600	4.84	
1,2,3-Trichlorobenzene	1	0		9.50	19.95	20	20		0.519	0.517	0.25	
Naphthalene	1	0		9.36	19.83	20	20		1.561	1.548	0.85	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141350.D Sam Mult : 1 Vial# : 3 Qt On : 08/28/20 07:58
Acq On : 08/28/20 07:30 Misc : A,5ML Qt Upd On: 08/27/20 07:37

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-28-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	527926	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	454151	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	257684	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	152748	30.45	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.50%			
39) 1,2-Dichloroethane-d4	4.910	67	67856	29.40	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.00%			
66) Toluene-d8	5.952	98	545144	30.33	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.10%			
76) Bromofluorobenzene	7.367	174	216094	30.97	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.23%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.691	51	81483	24.3040	ug/l	93
6) Dichlorodifluoromethane	1.679	85	83935	24.7304	ug/l	98
7) Chloromethane	1.849	50	35782	18.1505	ug/l	97
8) Bromomethane	2.252	94	33703	13.8842	ug/l	99
9) Vinyl Chloride	1.953	62	85594	25.6445	ug/l	99
10) Chloroethane	2.337	64	57774	22.9306	ug/l	95
11) Trichlorofluoromethane	2.563	101	150587	22.6574	ug/l	96
12) Ethyl ether	2.800	59	47664	21.8145	ug/l	90
13) Furan	2.837	39	70475	21.9469	ug/l	63
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	63862	21.7539	ug/l	94
15) Methylene Chloride	3.410	84	78606	20.6153	ug/l	80
16) Acrolein	2.916	56	47032	103.3216	ug/l	95
17) Acrylonitrile	3.623	53	22293	19.7822	ug/l	95
18) Iodomethane	3.148	142	57919	21.7574	ug/l	88
19) Acetone	3.044	43	81004	105.2026	ug/l	94
20) Carbon Disulfide	3.215	76	211170	21.2270	ug/l	100
21) t-Butyl Alcohol	3.477	59	31273	95.3913	ug/l	97
22) n-Hexane	3.873	57	59672	21.6814	ug/l	88
23) Di-isopropyl-ether	4.026	45	136795	20.8162	ug/l	79
24) 1,1-Dichloroethene	3.008	61	93306	20.7001	ug/l	91
25) Methyl Acetate	3.312	43	36340	20.3475	ug/l	100
26) Methyl-t-butyl ether	3.636	73	185729	19.9462	ug/l	93
27) 1,1-Dichloroethane	4.001	63	114260	20.2385	ug/l	100
28) trans-1,2-Dichloroethene	3.648	96	80813	20.4567	ug/l	86
29) Ethyl-t-butyl ether	4.288	59	174906	19.8652	ug/l	94
30) cis-1,2-Dichloroethene	4.410	61	111292	20.0004	ug/l	86
31) Bromochloromethane	4.568	49	46297	20.1332	ug/l	40
32) 2,2-Dichloropropane	4.416	77	116922	21.5357	ug/l	96
33) Ethyl acetate	4.434	43	47015m	18.5528	ug/l	
34) 1,4-Dioxane	5.495	88	54997	1066.7097	ug/l	87
35) 1,1-Dichloropropene	4.824	75	102999	20.1468	ug/l	92
36) Chloroform	4.605	83	142411	20.3296	ug/l	99
38) Cyclohexane	4.769	56	82499	20.9336	ug/l	81
40) 1,2-Dichloroethane	4.952	62	97119	18.7420	ug/l	96
41) 2-Butanone	4.422	43	26134m	19.8428	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	131304	19.6908	ug/l	95
43) Carbon Tetrachloride	4.830	117	108798	19.5081	ug/l	97
44) Vinyl Acetate	4.020	43	176323	21.1497	ug/l	100
45) Bromodichloromethane	5.568	83	110418	19.6961	ug/l	98
46) Methylcyclohexane	5.416	83	97178	21.4364	ug/l	90
47) Dibromomethane	5.495	174	75892	16.6781	ug/l	95
48) 1,2-Dichloropropane	5.428	63	67417	20.0823	ug/l	99
49) Trichloroethene	5.300	130	103659	19.9152	ug/l	94
50) Benzene	4.952	78	294730	19.2377	ug/l	100
51) tert-Amyl methyl ether	4.989	73	190187	19.1777	ug/l	98
53) Iso-propylacetate	4.946	43	94093	20.0863	ug/l	91
54) Methyl methacrylate	5.452	41	45392	20.7786	ug/l	65
55) Dibromochloromethane	6.422	129	105972	20.5416	ug/l	98
56) 2-Chloroethylvinylether	5.708	63	14981	18.6758	ug/l	88
57) cis-1,3-Dichloropropene	5.806	75	121567	20.5411	ug/l	100
58) trans-1,3-Dichloropropene	6.092	75	118542	20.0825	ug/l	99
59) Ethyl methacrylate	6.105	41	45651	20.8365	ug/l	61
60) 1,1,2-Trichloroethane	6.196	97	79812	20.8459	ug/l	96
61) 1,2-Dibromoethane	6.495	107	87465	19.8110	ug/l	98
62) 1,3-Dichloropropane	6.287	76	123443	20.1321	ug/l	99
63) 4-Methyl-2-Pentanone	5.867	43	52208	20.8208	ug/l	87
64) 2-Hexanone	6.300	43	37895	21.3808	ug/l	96
65) Tetrachloroethene	6.287	164	90726	19.1396	ug/l	98
67) Toluene	5.989	92	206360	20.0418	ug/l	98

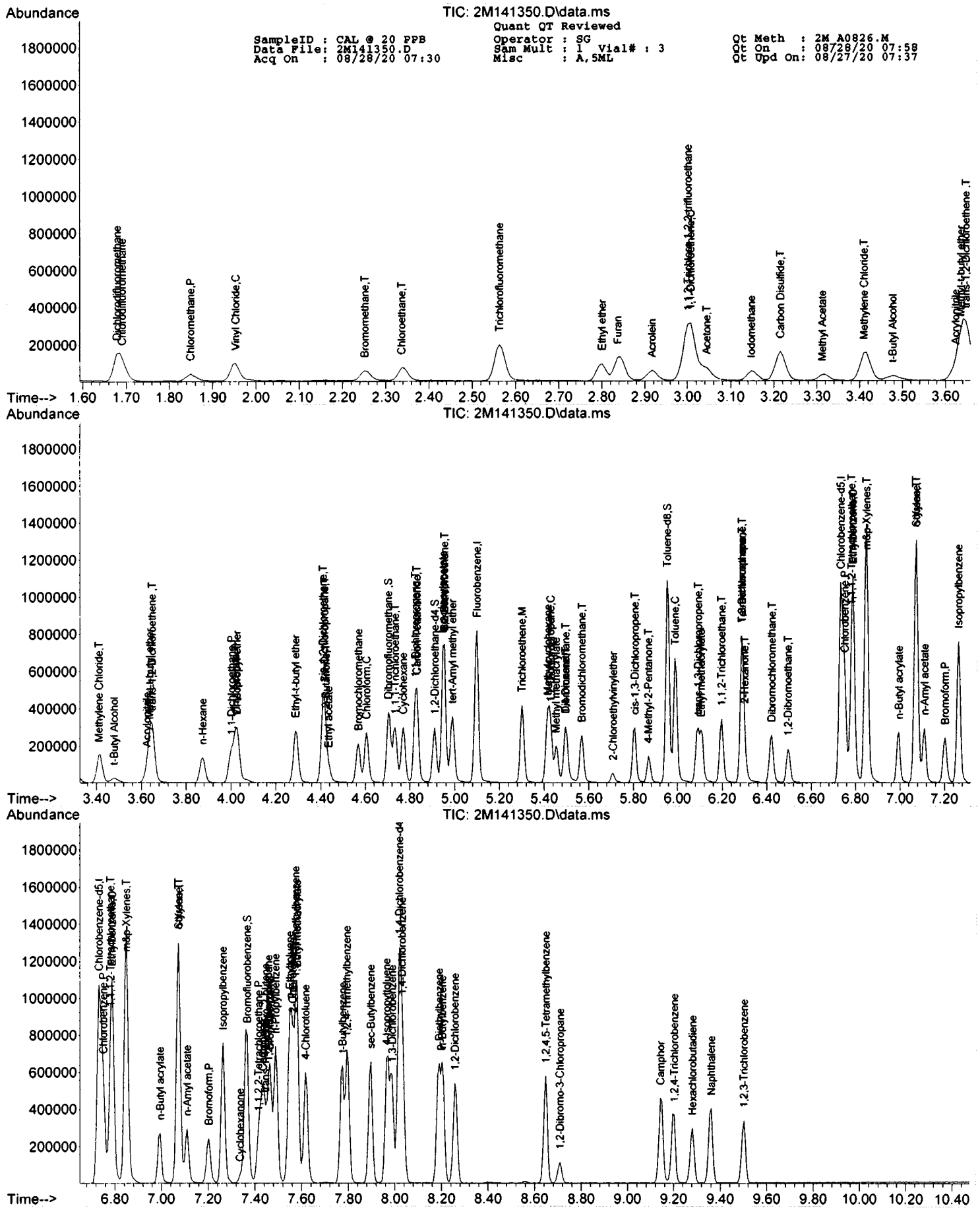
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141350.D Sam Mult : 1 Vial# : 3 Qt On : 08/28/20 07:58
Acq On : 08/28/20 07:30 Misc : A,5ML Qt Upd On: 08/27/20 07:37

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-28-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	92936	19.7085	ug/l	97
69)	Chlorobenzene	6.751	112	249603	19.7993	ug/l	99
71)	n-Butyl acrylate	6.995	55	121654	20.0648	ug/l	96
72)	n-Amyl acetate	7.111	43	89750	20.0167	ug/l	85
73)	Bromoform	7.202	173	84627	20.0951	ug/l	100
74)	Ethylbenzene	6.787	106	109473	21.8083	ug/l	94
75)	1,1,2,2-Tetrachloroethane	7.415	83	105736	20.2404	ug/l	97
77)	Styrene	7.074	104	271802	20.0086	ug/l	94
78)	m&p-Xylenes	6.848	106	323005	40.6116	ug/l	96
79)	o-Xylene	7.074	106	154849	19.4092	ug/l	95
80)	trans-1,4-Dichloro-2-b...	7.446	53	31896	20.6483	ug/l	86
81)	1,3-Dichlorobenzene	7.988	146	204937	19.5471	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	203450	19.2769	ug/l	99
83)	1,2-Dichlorobenzene	8.257	146	192365	19.4508	ug/l	96
84)	Isopropylbenzene	7.263	105	383644	20.8204	ug/l	98
85)	Cyclohexanone	7.336	55	13116	99.3133	ug/l	90
86)	Camphene	7.434	93	99085	21.5479	ug/l	96
87)	1,2,3-Trichloropropane	7.458	75	121324	19.9521	ug/l	97
88)	2-Chlorotoluene	7.562	91	219283	19.9745	ug/l	95
89)	p-Ethyltoluene	7.549	105	366420	20.0610	ug/l	97
90)	4-Chlorotoluene	7.617	91	216783	18.6644	ug/l	97
91)	n-Propylbenzene	7.488	91	422607	20.7425	ug/l	97
92)	Bromobenzene	7.464	77	207777	20.2944	ug/l	88
93)	1,3,5-Trimethylbenzene	7.574	105	300401	19.8802	ug/l	98
94)	Butyl methacrylate	7.580	41	71443	19.2489	ug/l	66
95)	t-Butylbenzene	7.775	119	298390	19.0276	ug/l	94
96)	1,2,4-Trimethylbenzene	7.793	105	312893	19.1190	ug/l	97
97)	sec-Butylbenzene	7.897	105	358043	20.5076	ug/l	97
98)	4-Isopropyltoluene	7.964	119	311310	19.9080	ug/l	98
99)	n-Butylbenzene	8.202	91	290724	20.0092	ug/l	96
100)	p-Diethylbenzene	8.190	119	163716	19.3686	ug/l	95
101)	1,2,4,5-Tetramethylben...	8.647	119	237245	20.7753	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.708	157	28239	20.5038	ug/l	98
103)	Camphor	9.141	95	102010	157.7651	ug/l	96
104)	Hexachlorobutadiene	9.281	225	45297	20.2384	ug/l	98
105)	1,2,4-Trichlorobenzene	9.202	180	103052	20.9688	ug/l	98
106)	1,2,3-Trichlorobenzene	9.500	180	88874	19.9505	ug/l	97
107)	Naphthalene	9.360	128	265883	19.8297	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M141350.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 2M141350.D
Acq On : 08/28/20 07:30
Operator : SG
Sam Mult : 1 Vial# : 3
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08/28/20 07:58
Qt Upd On: 08/27/20 07:37
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->

Abundance
TIC: 2M141350.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Chlorobenzene,P
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 2M141350.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4
1,4-Dichlorobenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M131882.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/31/2020 7:03:00 A Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.13	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.64	57.14	50	20	0.1	0.315	0.361	14.28	
Dichlorodifluoromethane	1	0		1.64	65.84	50	20	0.1	0.205	0.271	31.68	C1
Chloromethane	1	0		1.81	58.20	50	20	0.1	0.286	0.296	16.39	
Bromomethane	1	0		2.23	58.75	50	20	0.1	0.189	0.222	17.49	
Vinyl Chloride	1	0		1.92	57.71	50	20	0.1	0.295	0.340	15.42	
Chloroethane	1	0		2.32	53.03	50	20	0.1	0.201	0.213	6.07	
Trichlorofluoromethane	1	0		2.56	52.36	50	20	0.1	0.485	0.508	4.72	
Ethyl ether	1	0		2.81	44.71	50	20	0.5	0.179	0.160	10.58	
Furan	1	0		2.84	51.52	50	20	0.5	0.402	0.414	3.04	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.01	61.87	50	20	0.1	0.185	0.228	23.74	C1
Methylene Chloride	1	0		3.43	50.65	50	20	0.1	0.271	0.275	1.29	
Acrolein	1	0		2.92	300.15	250	20		0.035	0.042	20.06	
Acrylonitrile	1	0		3.64	49.35	50	20		0.106	0.105	1.29	
Iodomethane	1	0		3.16	71.52	50	20		0.200	0.335	43.05	C1
Acetone	1	0		3.05	247.69	250	20	0.1	0.102	0.101	0.92	
Carbon Disulfide	1	0		3.23	57.08	50	20	0.1	0.677	0.773	14.16	
t-Butyl Alcohol	1	0		3.50	189.41	250	20		0.049	0.037	24.23	C1
n-Hexane	1	0		3.91	65.90	50	20		0.264	0.348	31.81	C1
Di-isopropyl-ether	1	0		4.06	50.38	50	20		0.628	0.633	0.76	
1,1-Dichloroethene	1	0		3.02	61.57	50	20	0.1	0.340	0.419	23.14	C1
Methyl Acetate	1	0		3.34	48.18	50	20	0.1	0.210	0.202	3.64	
Methyl-t-butyl ether	1	0		3.67	53.01	50	20	0.1	0.538	0.570	6.03	
1,1-Dichloroethane	1	0		4.03	55.82	50	20	0.2	0.440	0.491	11.64	
trans-1,2-Dichloroethene	1	0		3.68	57.41	50	20	0.1	0.256	0.294	14.82	
Ethyl-t-butyl ether	1	0		4.32	43.55	50	20	0.5	0.688	0.599	12.91	
cis-1,2-Dichloroethene	1	0		4.44	55.26	50	20	0.1	0.445	0.492	10.52	
Bromochloromethane	1	0		4.59	55.33	50	20		0.205	0.227	10.66	
2,2-Dichloropropane	1	0		4.45	61.95	50	20		0.359	0.444	23.91	C1
Ethyl acetate	1	0		4.46	44.61	50	20		0.315	0.281	10.79	
1,4-Dioxane	1	0		5.52	1954.73	2500	20		0.006	0.004	21.81	C1
1,1-Dichloropropene	1	0		4.85	56.34	50	20		0.359	0.405	12.67	
Chloroform	1	0		4.64	54.29	50	20	0.2	0.465	0.504	8.59	
Dibromofluoromethane	1	0	S	4.73	32.05	75	**		0.267	0.285	6.84	
Cyclohexane	1	0		4.80	60.08	50	20	0.1	0.368	0.442	20.17	
1,2-Dichloroethane-d4	1	0	S	4.93	32.12	75	**		0.144	0.154	7.07	
1,2-Dichloroethane	1	0		4.98	53.73	50	20	0.1	0.347	0.373	7.47	
2-Butanone	1	0		4.43	47.50	50	20	0.1	0.149	0.141	5.01	
1,1,1-Trichloroethane	1	0		4.76	57.80	50	20	0.1	0.416	0.481	15.60	
Carbon Tetrachloride	1	0		4.86	59.99	50	20	0.1	0.355	0.426	19.97	
Vinyl Acetate	1	0		4.05	51.53	50	20		0.750	0.773	3.07	
Bromodichloromethane	1	0		5.59	52.93	50	20	0.2	0.326	0.345	5.86	
Methylcyclohexane	1	0		5.45	57.65	50	20	0.1	0.377	0.435	15.31	
Dibromomethane	1	0		5.53	53.51	50	20		0.170	0.181	7.02	
1,2-Dichloropropane	1	0		5.46	50.63	50	20	0.1	0.259	0.262	1.26	
Trichloroethene	1	0		5.33	52.21	50	20	0.2	0.293	0.306	4.41	
Benzene	1	0		4.98	52.99	50	20	0.5	1.013	1.073	5.99	
tert-Amyl methyl ether	1	0		5.02	46.61	50	20		0.592	0.552	6.78	
Chlorobenzene-d5	1	0	I	6.76	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.98	43.04	50	20	0.5	0.522	0.450	13.92	
Methyl methacrylate	1	0		5.48	45.69	50	20	0.5	0.255	0.233	8.62	
Dibromochloromethane	1	0		6.45	48.24	50	20	0.1	0.282	0.272	3.53	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M131882.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/31/2020 7:03:00 A Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.73	41.39	50	20		0.079	0.066	17.21	
cis-1,3-Dichloropropene	1	0		5.83	46.02	50	20	0.2	0.447	0.412	7.96	
trans-1,3-Dichloropropene	1	0		6.12	48.35	50	20	0.1	0.391	0.378	3.31	
Ethyl methacrylate	1	0		6.14	45.30	50	20	0.5	0.253	0.230	9.40	
1,1,2-Trichloroethane	1	0		6.22	45.12	50	20	0.1	0.258	0.232	9.77	
1,2-Dibromoethane	1	0		6.53	46.83	50	20	0.1	0.267	0.250	6.33	
1,3-Dichloropropane	1	0		6.32	46.13	50	20		0.456	0.420	7.74	
4-Methyl-2-Pentanone	1	0		5.90	40.12	50	20	0.1	0.350	0.281	19.77	
2-Hexanone	1	0		6.33	40.16	50	20	0.1	0.276	0.221	19.67	
Tetrachloroethene	1	0		6.32	50.18	50	20	0.2	0.278	0.279	0.37	
Toluene-d8	1	0	S	5.98	28.47	75	**		1.238	1.175	5.10	
Toluene	1	0		6.02	45.23	50	20	0.4	0.811	0.734	9.54	
1,1,1,2-Tetrachloroethane	1	0		6.81	45.46	50	20		0.290	0.263	9.08	
Chlorobenzene	1	0		6.78	45.00	50	20	0.5	0.886	0.798	10.00	
1,4-Dichlorobenzene-d4	1	0	I	8.05	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.02	42.48	50	20	0.5	0.857	0.728	15.05	
n-Amyl acetate	1	0		7.13	42.72	50	20	0.5	0.810	0.692	14.55	
Bromoform	1	0		7.23	67.90	50	20	0.1	0.342	0.296	35.80	C1
Ethylbenzene	1	0		6.82	48.01	50	20	0.1	0.663	0.636	3.98	
1,1,2,2-Tetrachloroethane	1	0		7.45	44.28	50	20	0.1	0.639	0.566	11.44	
Bromofluorobenzene	1	0	S	7.39	28.30	75	**		0.790	0.745	5.67	
Styrene	1	0		7.10	43.62	50	20	0.3	1.639	1.430	12.75	
m&p-Xylenes	1	0		6.88	90.27	100	20	0.1	0.994	0.897	9.73	
o-Xylene	1	0		7.10	43.40	50	20	0.3	0.980	0.851	13.21	
trans-1,4-Dichloro-2-butene	1	0		7.47	47.75	50	20		0.311	0.297	4.51	
1,3-Dichlorobenzene	1	0		8.02	45.16	50	20	0.6	1.227	1.108	9.67	
1,4-Dichlorobenzene	1	0		8.07	44.18	50	20	0.5	1.265	1.118	11.65	
1,2-Dichlorobenzene	1	0		8.29	44.71	50	20	0.4	1.146	1.024	10.57	
Isopropylbenzene	1	0		7.29	46.66	50	20	0.1	2.547	2.377	6.68	
Cyclohexanone	1	0		7.37	170.58	250	20		0.035	0.024	31.77	C1
Camphene	1	0		7.47	48.28	50	20		0.927	0.895	3.45	
1,2,3-Trichloropropane	1	0		7.48	44.04	50	20		0.824	0.726	11.92	
2-Chlorotoluene	1	0		7.59	47.11	50	20		1.527	1.439	5.77	
p-Ethyltoluene	1	0		7.58	44.71	50	20		2.614	2.338	10.57	
4-Chlorotoluene	1	0		7.65	50.30	50	20		1.497	1.506	0.59	
n-Propylbenzene	1	0		7.52	47.94	50	20		2.988	2.865	4.12	
Bromobenzene	1	0		7.49	44.92	50	20		1.567	1.407	10.17	
1,3,5-Trimethylbenzene	1	0		7.60	49.79	50	20		1.830	1.823	0.41	
Butyl methacrylate	1	0		7.61	42.99	50	20	0.5	0.714	0.606	14.02	
t-Butylbenzene	1	0		7.81	46.79	50	20		2.082	1.949	6.42	
1,2,4-Trimethylbenzene	1	0		7.83	45.36	50	20		2.066	1.874	9.28	
sec-Butylbenzene	1	0		7.93	49.91	50	20		2.650	2.645	0.18	
4-Isopropyltoluene	1	0		8.00	49.40	50	20		2.223	2.196	1.20	
n-Butylbenzene	1	0		8.24	50.56	50	20		2.534	2.563	1.13	
p-Diethylbenzene	1	0		8.22	46.09	50	20		1.318	1.215	7.82	
1,2,4,5-Tetramethylbenzene	1	0		8.68	45.70	50	20		1.864	1.703	8.59	
1,2-Dibromo-3-Chloropropane	1	0		8.74	42.81	50	20	0.05	0.169	0.145	14.37	
Camphor	1	0		9.18	624.34	500	20		0.111	0.075	24.87	C1
Hexachlorobutadiene	1	0		9.32	45.35	50	20		0.461	0.418	9.29	
1,2,4-Trichlorobenzene	1	0		9.24	43.63	50	20	0.2	0.831	0.725	12.75	
1,2,3-Trichlorobenzene	1	0		9.54	42.15	50	20		0.756	0.637	15.70	
Naphthalene	1	0		9.40	39.50	50	20		2.080	1.643	20.99	C1

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131882.D Sam Mult : 1 Vial# : 3 Qt On : 08/31/20 07:26
Acq On : 08/31/20 07:03 Misc : S,5G:.4 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	294420	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	268587	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	163179	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	83871	32.05	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.83%			
39) 1,2-Dichloroethane-d4	4.934	67	45319	32.12	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.07%			
66) Toluene-d8	5.983	98	315526	28.47	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.90%			
76) Bromofluorobenzene	7.391	174	121562	28.30	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.33%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.642	51	176913	57.1420	ug/l	87
6) Dichlorodifluoromethane	1.636	85	132785	65.8420	ug/l	95
7) Chloromethane	1.807	50	145298	58.1973	ug/l	97
8) Bromomethane	2.227	94	109020	58.7468	ug/l	95
9) Vinyl Chloride	1.916	62	166947	57.7078	ug/l	94
10) Chloroethane	2.325	64	104392	53.0333	ug/l	95
11) Trichlorofluoromethane	2.556	101	249350	52.3578	ug/l	98
12) Ethyl ether	2.806	59	78365	44.7100	ug/l	94
13) Furan	2.843	39	203124	51.5206	ug/l	98
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	112108	61.8688	ug/l	98
15) Methylene Chloride	3.434	84	134877	50.6457	ug/l	95
16) Acrolein	2.922	56	103140	300.1492	ug/l	98
17) Acrylonitrile	3.635	53	51381	49.3541	ug/l	99
18) Iodomethane	3.160	142	164158	71.5248	ug/l	97
19) Acetone	3.050	43	247409	247.6940	ug/l	98
20) Carbon Disulfide	3.233	76	379131	57.0804	ug/l	100
21) t-Butyl Alcohol	3.501	59	91697m	189.4136	ug/l	
22) n-Hexane	3.910	57	170525	65.9048	ug/l	97
23) Di-isopropyl-ether	4.062	45	310555	50.3782	ug/l	99
24) 1,1-Dichloroethene	3.020	61	205365	61.5687	ug/l	97
25) Methyl Acetate	3.337	43	99187	48.1825	ug/l	100
26) Methyl-t-butyl ether	3.672	73	279879	53.0141	ug/l	99
27) 1,1-Dichloroethane	4.026	63	241116	55.8180	ug/l	100
28) trans-1,2-Dichloroethene	3.678	96	144144	57.4084	ug/l	96
29) Ethyl-t-butyl ether	4.324	59	293901	43.5458	ug/l	100
30) cis-1,2-Dichloroethene	4.440	61	241405	55.2616	ug/l	94
31) Bromochloromethane	4.593	49	111197	55.3285	ug/l	94
32) 2,2-Dichloropropane	4.446	77	218086	61.9541	ug/l	99
33) Ethyl acetate	4.465	43	137919	44.6057	ug/l	97
34) 1,4-Dioxane	5.519	88	106057	1954.7292	ug/l	92
35) 1,1-Dichloropropene	4.855	75	198587	56.3360	ug/l	97
36) Chloroform	4.635	83	247540	54.2938	ug/l	99
38) Cyclohexane	4.800	56	216881m	60.0826	ug/l	
40) 1,2-Dichloroethane	4.977	62	183130	53.7334	ug/l	96
41) 2-Butanone	4.434	43	69402	47.4964	ug/l	85
42) 1,1,1-Trichloroethane	4.763	97	235922	57.8020	ug/l	97
43) Carbon Tetrachloride	4.861	117	209061	59.9872	ug/l	100
44) Vinyl Acetate	4.050	43	379126	51.5333	ug/l	100
45) Bromodichloromethane	5.592	83	169219	52.9313	ug/l	92
46) Methylcyclohexane	5.446	83	213374	57.6533	ug/l	97
47) Dibromomethane	5.525	174	89045	53.5081	ug/l	96
48) 1,2-Dichloropropane	5.458	63	128601	50.6319	ug/l	97
49) Trichloroethene	5.330	130	150270	52.2051	ug/l	99
50) Benzene	4.977	78	526653	52.9925	ug/l	100
51) tert-Amyl methyl ether	5.019	73	270788	46.6115	ug/l	99
53) Iso-propylacetate	4.977	43	201329	43.0408	ug/l	97
54) Methyl methacrylate	5.483	41	104418	45.6902	ug/l	99
55) Dibromochloromethane	6.446	129	121592	48.2368	ug/l	95
56) 2-Chloroethylvinylether	5.733	63	29428m	41.3933	ug/l	
57) cis-1,3-Dichloropropene	5.830	75	184215	46.0196	ug/l	100
58) trans-1,3-Dichloropropene	6.117	75	169416	48.3475	ug/l	99
59) Ethyl methacrylate	6.135	41	102743	45.2994	ug/l	98
60) 1,1,2-Trichloroethane	6.220	97	104034	45.1159	ug/l	94
61) 1,2-Dibromoethane	6.525	107	112103	46.8330	ug/l	97
62) 1,3-Dichloropropane	6.318	76	188222	46.1299	ug/l	99
63) 4-Methyl-2-Pentanone	5.897	43	125687	40.1157	ug/l	98
64) 2-Hexanone	6.330	43	99126	40.1627	ug/l	96
65) Tetrachloroethene	6.318	164	124885	50.1848	ug/l	100
67) Toluene	6.019	92	328473	45.2316	ug/l	100

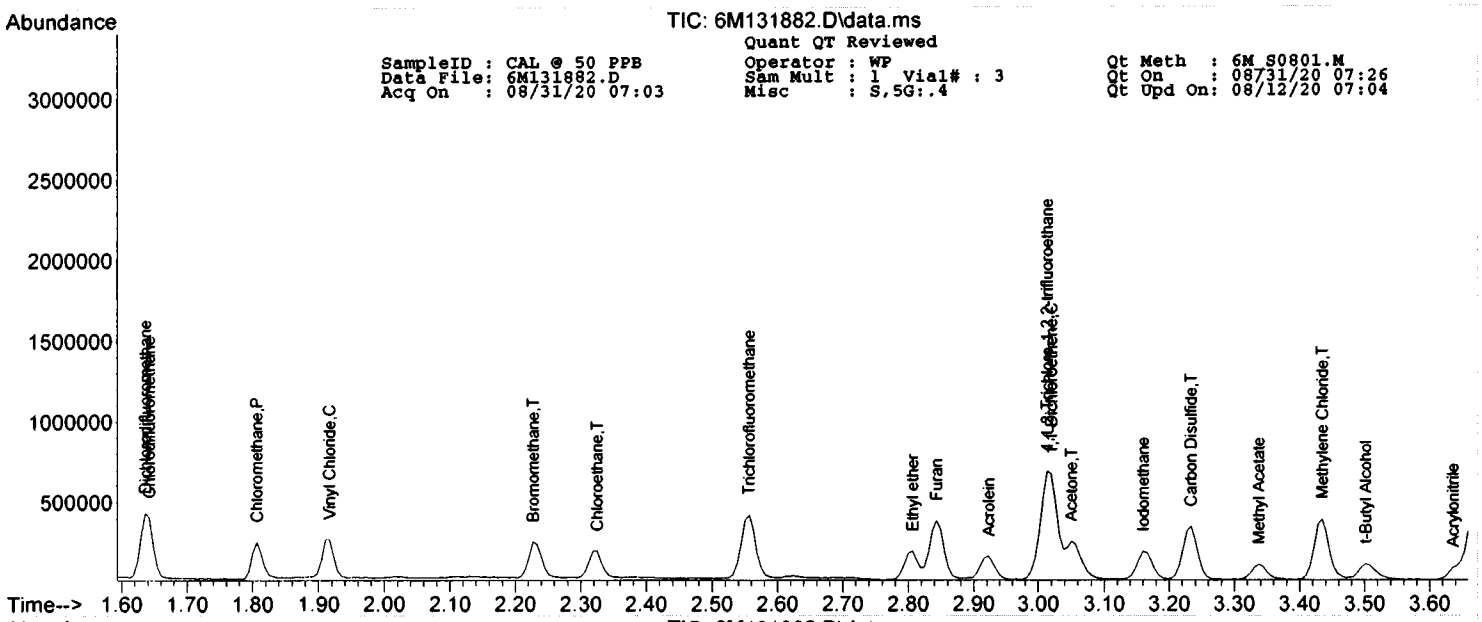
Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131882.D Sam Mult : 1 Vial# : 3 Qt On : 08/31/20 07:26
Acq On : 08/31/20 07:03 Misc : S,5G:.4 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	117951	45.4608	ug/l	97
69)	Chlorobenzene	6.781	112	357089	44.9979	ug/l	98
71)	n-Butyl acrylate	7.019	55	197992	42.4754	ug/l	97
72)	n-Amyl acetate	7.135	43	188301	42.7231	ug/l	97
73)	Bromoform	7.232	173	80431	67.8996	ug/l	98
74)	Ethylbenzene	6.818	106	173047	48.0105	ug/l	98
75)	1,1,2,2-Tetrachloroethane	7.446	83	153910	44.2807	ug/l	98
77)	Styrene	7.104	104	389003	43.6243	ug/l	96
78)	m&p-Xylenes	6.879	106	488055	90.2676	ug/l	97
79)	o-Xylene	7.098	106	231359	43.3967	ug/l	93
80)	trans-1,4-Dichloro-2-b...	7.470	53	80724	47.7458	ug/l	98
81)	1,3-Dichlorobenzene	8.019	146	301323	45.1631	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	304054	44.1764	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	278616	44.7132	ug/l	98
84)	Isopropylbenzene	7.293	105	646528	46.6617	ug/l	99
85)	Cyclohexanone	7.367	55	32640	170.5760	ug/l	98
86)	Camphene	7.470	93	243417	48.2767	ug/l	97
87)	1,2,3-Trichloropropane	7.482	75	197446	44.0390	ug/l	99
88)	2-Chlorotoluene	7.592	91	391250	47.1146	ug/l	99
89)	p-Ethyltoluene	7.580	105	635773	44.7131	ug/l	93
90)	4-Chlorotoluene	7.647	91	409653	50.2957	ug/l	97
91)	n-Propylbenzene	7.519	91	779065	47.9389	ug/l	99
92)	Bromobenzene	7.495	77	382761	44.9162	ug/l	98
93)	1,3,5-Trimethylbenzene	7.604	105	495720	49.7939	ug/l	91
94)	Butyl methacrylate	7.610	41	164807	42.9920	ug/l	98
95)	t-Butylbenzene	7.805	119	529960	46.7893	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	509772	45.3586	ug/l	100
97)	sec-Butylbenzene	7.927	105	719469	49.9111	ug/l	100
98)	4-Isopropyltoluene	8.001	119	597370	49.3996	ug/l	98
99)	n-Butylbenzene	8.238	91	697033	50.5641	ug/l	98
100)	p-Diethylbenzene	8.220	119	330498	46.0875	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.683	119	463292	45.7026	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.738	157	39406	42.8140	ug/l	100
103)	Camphor	9.177	95	202954	624.3422	ug/l	98
104)	Hexachlorobutadiene	9.317	225	113616	45.3541	ug/l	97
105)	1,2,4-Trichlorobenzene	9.238	180	197137	43.6267	ug/l	98
106)	1,2,3-Trichlorobenzene	9.537	180	173332	42.1491	ug/l	99
107)	Naphthalene	9.397	128	446873	39.5029	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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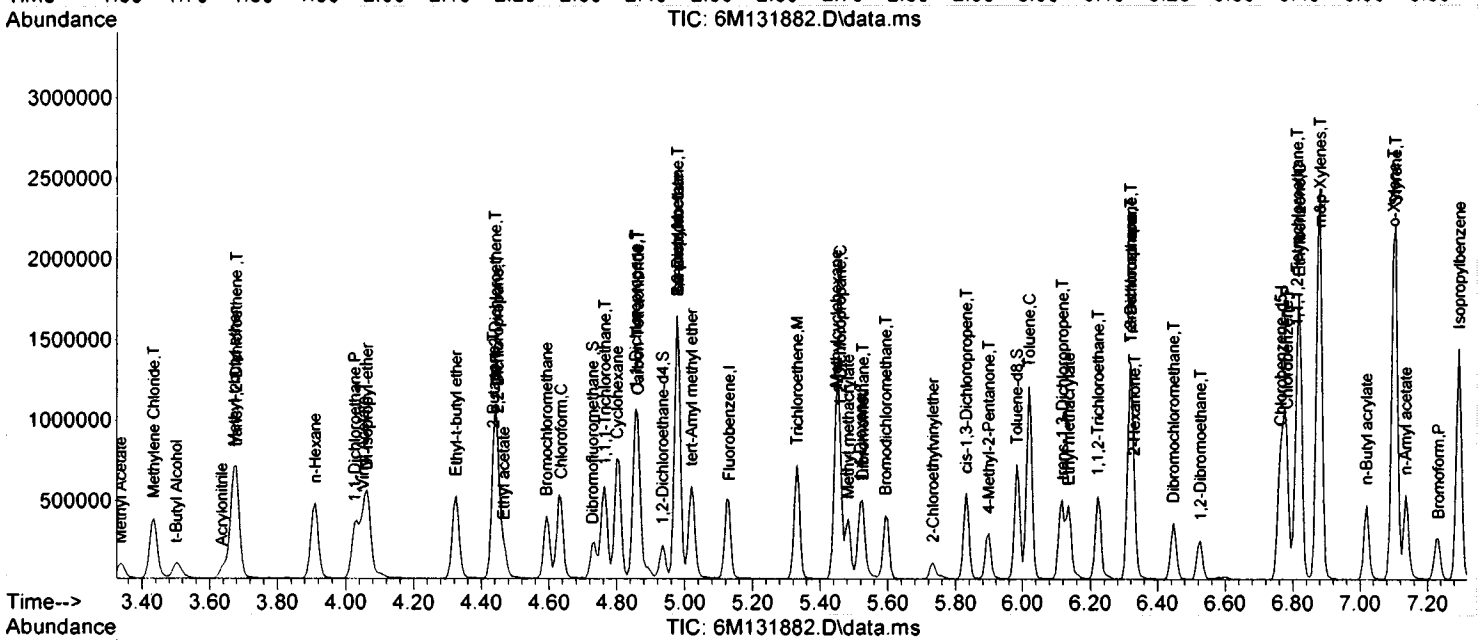
Quant QT Reviewed
SampleID : CAL @ 50 PPB
Data File: 6M131882.D
Acq On : 08/31/20 07:03
Operator : WP
Sam Mult : 1 Vial# : 3
Misc : S,5G:.4
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 07:26
Qt Upd On: 08/12/20 07:04
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
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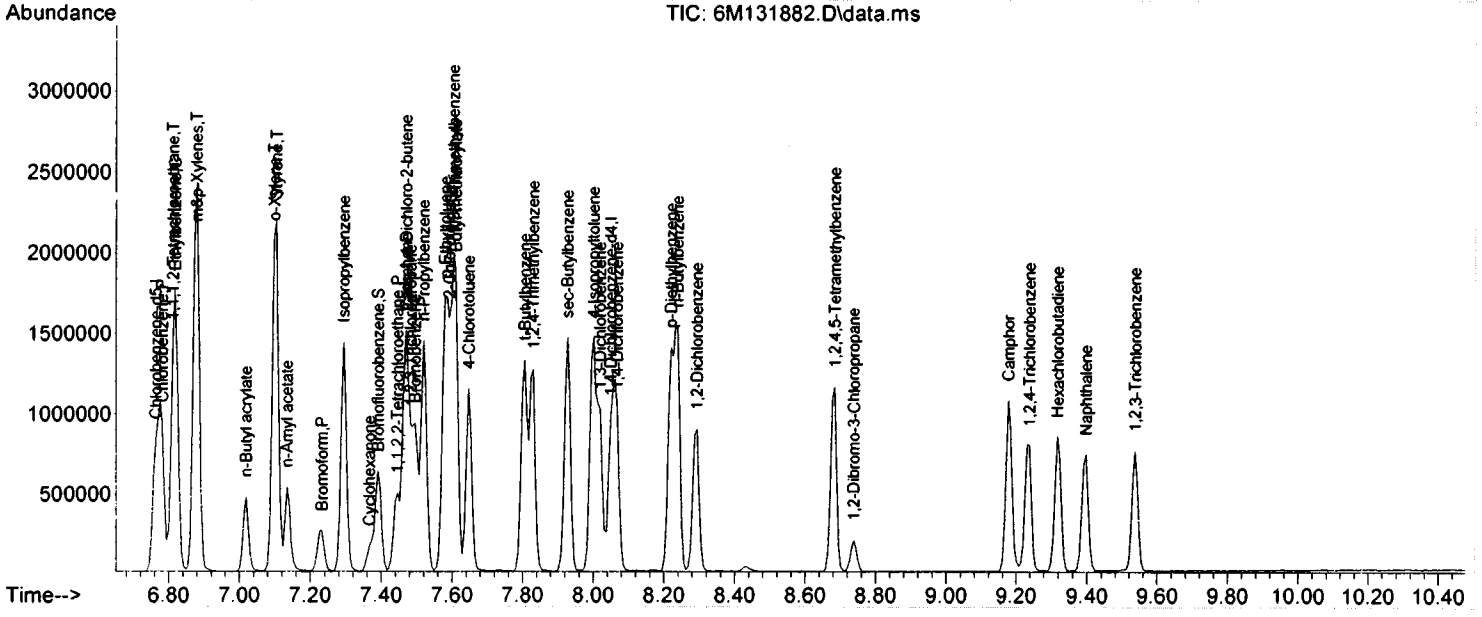
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 6M131882.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,T
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone,S
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

GC/MS Volatile Data
Raw QC Data

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6
Data File: 6M130900.D
Analysis Date: 08/01/20 11:54
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.385 to 7.397 min

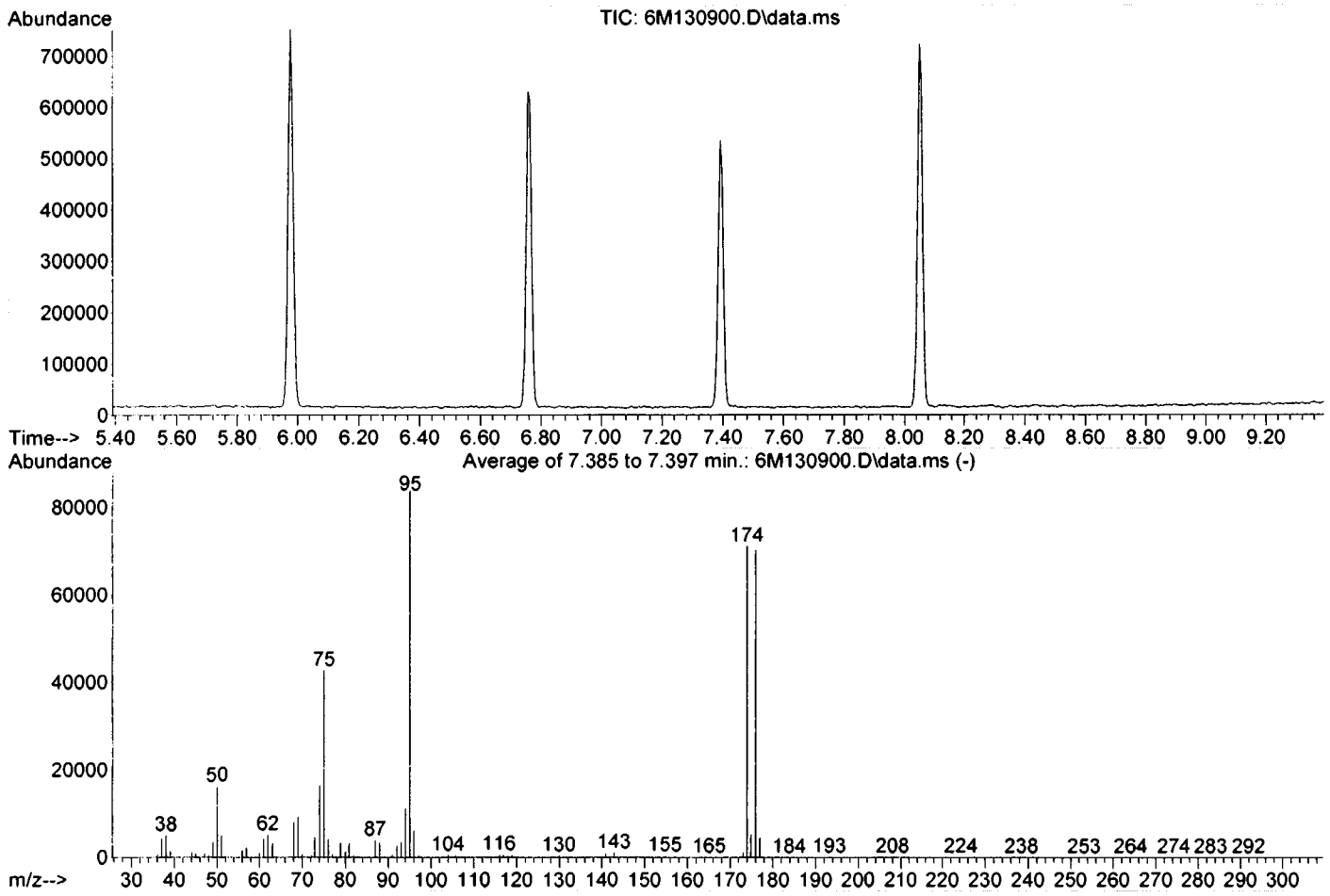
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.5	16321	PASS
75	95	30	60	51.1	42800	PASS
95	95	100	100	100.0	83807	PASS
96	95	5	9	7.3	6128	PASS
173	174	0.00	2	1.7	1176	PASS
174	95	50	100	84.9	71135	PASS
175	174	5	9	7.4	5277	PASS
176	174	95	101	98.8	70251	PASS
177	176	5	9	6.4	4486	PASS

Data File	Sample Number	Analysis Date:
6M130901.D	BLK	08/01/20 12:09
6M130902.D	BLK	08/01/20 12:30
6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51
6M130904.D	CAL @ 1 PPB	08/01/20 13:11
6M130905.D	CAL @ 2 PPB	08/01/20 13:32
6M130906.D	CAL @ 5 PPB	08/01/20 13:52
6M130907.D	CAL @ 20 PPB	08/01/20 14:13
6M130908.D	CAL @ 50 PPB	08/01/20 14:34
6M130909.D	CAL @ 100 PPB	08/01/20 14:54
6M130910.D	BLK	08/01/20 15:15
6M130911.D	CAL @ 250 PPB	08/01/20 15:36
6M130912.D	BLK	08/01/20 15:56
6M130913.D	CAL @ 500 PPB	08/01/20 16:17
6M130914.D	BLK	08/01/20 16:37
6M130915.D	BLK	08/01/20 16:58
6M130916.D	BLK	08/01/20 17:19
6M130917.D	500 PPB	08/01/20 17:39
6M130918.D	BLK	08/01/20 18:00
6M130919.D	BLK	08/01/20 18:21
6M130920.D	250 PPB	08/01/20 18:41
6M130921.D	BLK	08/01/20 19:02
6M130922.D	BLK	08/01/20 19:22
6M130923.D	BLK	08/01/20 19:43
6M130924.D	BLK	08/01/20 20:04
6M130925.D	ICV	08/01/20 20:24
6M130926.D	BLK	08/01/20 20:45
6M130927.D	CCV	08/01/20 21:05
6M130928.D	BLK	08/01/20 21:26
6M130929.D	BLK	08/01/20 21:47
6M130930.D	BLK	08/01/20 22:07
6M130931.D	BLK	08/01/20 22:28
6M130932.D	BLK	08/01/20 22:49
6M130933.D	DAILY BLANK	08/01/20 23:09

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Data File : 6M130900.D
Acq On : 01 Aug 2020 11:54
Operator : BK
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_6\METHODQT\6M_S0801.M
Title : @GCMS_6,ug,624,8260
Last Update : Sun Aug 02 08:55:28 2020



Spectrum Information: Average of 7.385 to 7.397 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	16321	PASS
75	95	30	60	51.1	42800	PASS
95	95	100	100	100.0	83807	PASS
96	95	5	9	7.3	6128	PASS
173	174	0.00	2	1.7	1176	PASS
174	95	50	100	84.9	71135	PASS
175	174	5	9	7.4	5277	PASS
176	174	95	101	98.8	70251	PASS
177	176	5	9	6.4	4486	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 2
Data File: 2M141271.D
Analysis Date: 08/26/20 11:49
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.342 to 7.354 min

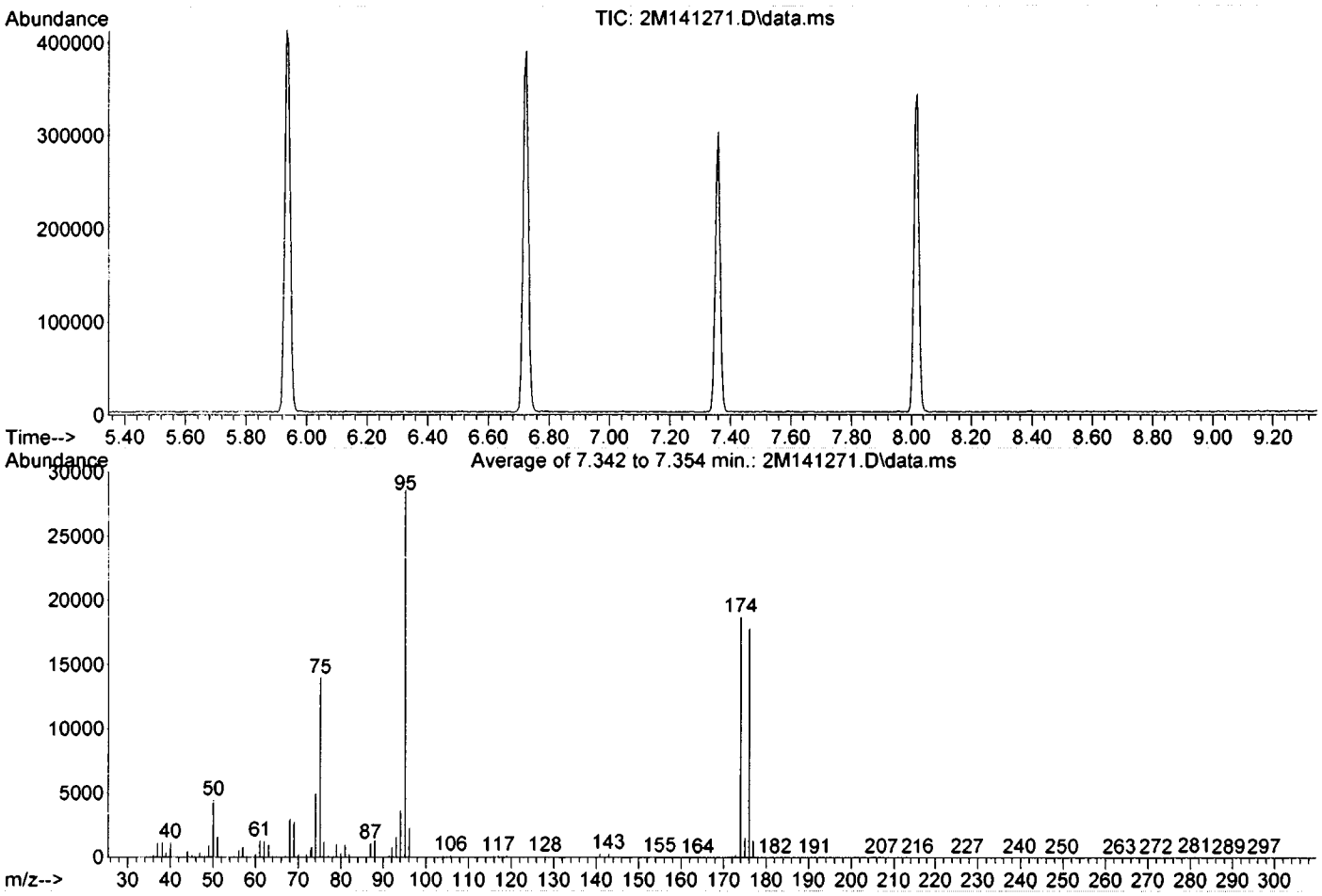
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.7	4477	PASS
75	95	30	60	48.9	13991	PASS
95	95	100	100	100.0	28597	PASS
96	95	5	9	7.9	2261	PASS
173	174	0.00	2	1.1	203	PASS
174	95	50	100	65.5	18730	PASS
175	174	5	9	8.1	1521	PASS
176	174	95	101	95.4	17875	PASS
177	176	5	9	7.3	1297	PASS

Data File	Sample Number	Analysis Date:
2M141273.D	CAL @ 0.5 PPB	08/26/20 12:25
2M141274.D	CAL @ 1 PPB	08/26/20 12:44
2M141275.D	CAL @ 5 PPB	08/26/20 13:04
2M141276.D	CAL @ 10 PPB	08/26/20 13:23
2M141277.D	CAL @ 20 PPB	08/26/20 13:43
2M141279.D	CAL @ 50 PPB	08/26/20 14:22
2M141280.D	CAL @ 500 PPB	08/26/20 14:42
2M141283.D	CAL @ 250 PPB	08/26/20 15:40
2M141286.D	CAL @ 100 PPB	08/26/20 16:39
2M141290.D	ICV	08/26/20 17:57
2M141291.D	STD	08/26/20 18:16

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-26-20\
Data File : 2M141271.D
Acq On : 26 Aug 2020 11:49
Operator : SG
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 15 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_2\METHODQT\2M_A0818.M
Title : @GCMS_2,ug,624,8260
Last Update : Wed Aug 19 08:20:28 2020



Spectrum Information: Average of 7.342 to 7.354 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.7	4477	PASS
75	95	30	60	48.9	13991	PASS
95	95	100	100	100.0	28597	PASS
96	95	5	9	7.9	2261	PASS
173	174	0.00	2	1.1	203	PASS
174	95	50	100	65.5	18730	PASS
175	174	5	9	8.1	1521	PASS
176	174	95	101	95.4	17875	PASS
177	176	5	9	7.3	1297	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 2
Data File: 2M141348.D
Analysis Date: 08/28/20 06:55
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.342 to 7.354 min

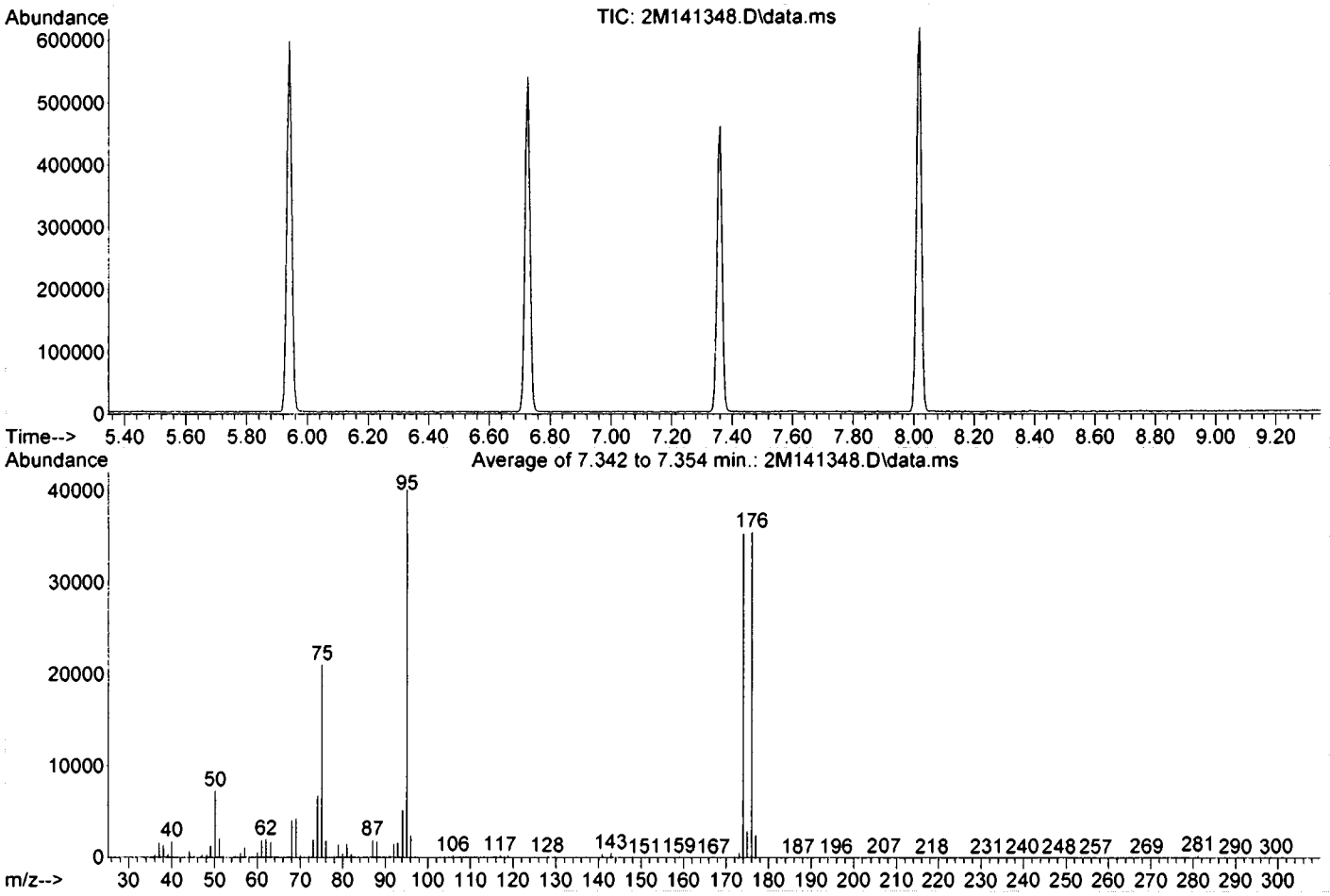
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.3	7326	PASS
75	95	30	60	52.6	21085	PASS
95	95	100	100	100.0	40094	PASS
96	95	5	9	6.0	2408	PASS
173	174	0.00	2	1.4	508	PASS
174	95	50	100	88.1	35337	PASS
175	174	5	9	8.1	2866	PASS
176	174	95	101	100.5	35511	PASS
177	176	5	9	6.9	2440	PASS

Data File	Sample Number	Analysis Date:
2M141350.D	CAL @ 20 PPB	08/28/20 07:30
2M141352.D	BLK-1	08/28/20 08:09
2M141353.D	BLK-2	08/28/20 08:28
2M141354.D	BLK	08/28/20 08:48
2M141355.D	DAILY BLANK	08/28/20 09:07
2M141356.D	BLK	08/28/20 09:27
2M141357.D	AD18867-001(T)	08/28/20 09:46
2M141358.D	AD18896-001(T)	08/28/20 10:06
2M141359.D	BLK	08/28/20 10:26
2M141360.D	MBS87436	08/28/20 10:45
2M141361.D	AD18785-004	08/28/20 11:05
2M141362.D	AD18867-001(T:M	08/28/20 11:24
2M141363.D	AD18867-001(T:M	08/28/20 11:43
2M141364.D	EF-1V-333199(082	08/28/20 12:03
2M141365.D	BLK	08/28/20 12:22
2M141366.D	AD18934-008	08/28/20 12:42
2M141367.D	AD18907-003	08/28/20 13:01
2M141368.D	AD18907-005	08/28/20 13:21
2M141369.D	BLK	08/28/20 13:41
2M141370.D	AD18941-009	08/28/20 14:00
2M141371.D	AD18941-008	08/28/20 14:20
2M141372.D	AD18934-006	08/28/20 14:39
2M141373.D	AD18934-007	08/28/20 14:59
2M141374.D	AD18914-007	08/28/20 15:19
2M141375.D	AD18941-001	08/28/20 15:38
2M141376.D	AD18941-002	08/28/20 15:58
2M141377.D	AD18941-003	08/28/20 16:17
2M141378.D	AD18941-004	08/28/20 16:37
2M141379.D	AD18941-005	08/28/20 16:56
2M141380.D	AD18941-006	08/28/20 17:16
2M141381.D	AD18941-007	08/28/20 17:35
2M141382.D	BLK	08/28/20 17:55
2M141383.D	AD18914-001	08/28/20 18:14
2M141384.D	AD18914-003	08/28/20 18:34
2M141385.D	AD18914-005	08/28/20 18:53
2M141386.D	BLK	08/28/20 19:13
2M141387.D	BLK	08/28/20 19:32
2M141388.D	BLK	08/28/20 19:52
2M141389.D	BLK	08/28/20 20:11
2M141390.D	BLK	08/28/20 20:31
2M141391.D	BLK	08/28/20 20:51
2M141392.D	BLK	08/28/20 21:11
2M141393.D	BLK	08/28/20 21:30
2M141394.D	BLK	08/28/20 21:50
2M141395.D	BLK	08/28/20 22:09

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-28-20\
Data File : 2M141348.D
Acq On : 28 Aug 2020 06:55
Operator : SG
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_2\METHODQT\2M_A0826.M
Title : @GCMS_2,ug,624,8260
Last Update : Thu Aug 27 07:28:02 2020



Spectrum Information: Average of 7.342 to 7.354 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.3	7326	PASS
75	95	30	60	52.6	21085	PASS
95	95	100	100	100.0	40094	PASS
96	95	5	9	6.0	2408	PASS
173	174	0.00	2	1.4	508	PASS
174	95	50	100	88.1	35337	PASS
175	174	5	9	8.1	2866	PASS
176	174	95	101	100.5	35511	PASS
177	176	5	9	6.9	2440	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6
Data File: 6M131881.D
Analysis Date: 08/31/20 06:48
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.385 to 7.391 min

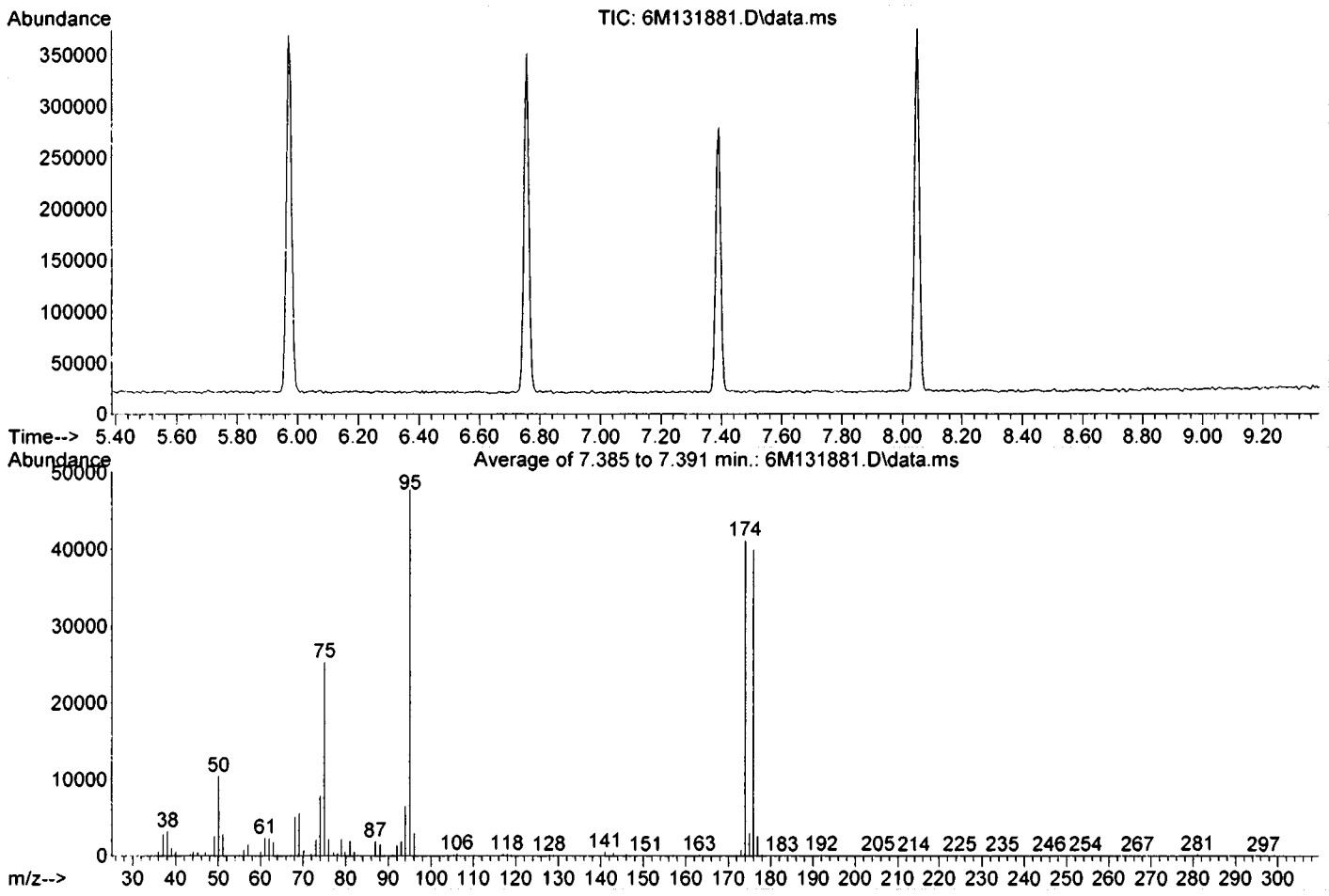
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	21.9	10471	PASS
75	95	30	60	52.9	25316	PASS
95	95	100	100	100.0	47820	PASS
96	95	5	9	6.3	3008	PASS
173	174	0.00	2	2.0	804	PASS
174	95	50	100	86.0	41140	PASS
175	174	5	9	7.2	2963	PASS
176	174	95	101	97.0	39908	PASS
177	176	5	9	6.5	2588	PASS

Data File	Sample Number	Analysis Date:
6M131882.D	CAL @ 50 PPB	08/31/20 07:03
6M131883.D	50 PPB	08/31/20 07:24
6M131884.D	BLK	08/31/20 07:44
6M131885.D	BLK	08/31/20 08:05
6M131886.D	DAILY BLANK	08/31/20 08:25
6M131887.D	AD18861-008(%SO	08/31/20 08:46
6M131888.D	MBS87762	08/31/20 09:07
6M131889.D	AD18955-002(MS:	08/31/20 09:27
6M131890.D	AD18955-003(MSD	08/31/20 09:48
6M131891.D	BLK	08/31/20 10:08
6M131892.D	AD18955-001	08/31/20 10:29
6M131893.D	AD18955-004	08/31/20 10:49
6M131894.D	AD18955-005	08/31/20 11:10
6M131895.D	AD18908-001	08/31/20 11:31
6M131896.D	AD18908-005	08/31/20 11:51
6M131897.D	AD18926-011	08/31/20 12:12
6M131898.D	AD18926-014	08/31/20 12:32
6M131899.D	AD18926-010	08/31/20 12:53
6M131900.D	AD18934-001	08/31/20 13:13
6M131901.D	AD18934-002	08/31/20 13:34
6M131902.D	AD18934-003	08/31/20 13:55
6M131903.D	AD18934-004	08/31/20 14:15
6M131904.D	AD18927-009	08/31/20 14:36
6M131905.D	AD18927-010	08/31/20 14:56
6M131906.D	AD18927-011	08/31/20 15:17
6M131907.D	AD18949-014	08/31/20 15:38
6M131908.D	AD18929-001	08/31/20 15:58
6M131909.D	AD18956-001	08/31/20 16:19
6M131910.D	AD18956-002	08/31/20 16:39
6M131911.D	AD18956-003	08/31/20 17:00
6M131912.D	AD18922-001	08/31/20 17:21
6M131913.D	AD18927-012	08/31/20 17:41
6M131914.D	BLK	08/31/20 18:02
6M131915.D	AD18917-001(5X)	08/31/20 18:22

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Data File : 6M131881.D
Acq On : 31 Aug 2020 06:48
Operator : WP
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_6\METHODQT\6M_S0801.M
Title : @GCMS_6,ug,624,8260
Last Update : Sun Aug 02 08:55:28 2020



Spectrum Information: Average of 7.385 to 7.391 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.9	10471	PASS
75	95	30	60	52.9	25316	PASS
95	95	100	100	100.0	47820	PASS
96	95	5	9	6.3	3008	PASS
173	174	0.00	2	2.0	804	PASS
174	95	50	100	86.0	41140	PASS
175	174	5	9	7.2	2963	PASS
176	174	95	101	97.0	39908	PASS
177	176	5	9	6.5	2588	PASS

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 2M141355.D
Analysis Date: 08/28/20 09:07
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U				

Worksheet #: 565778

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

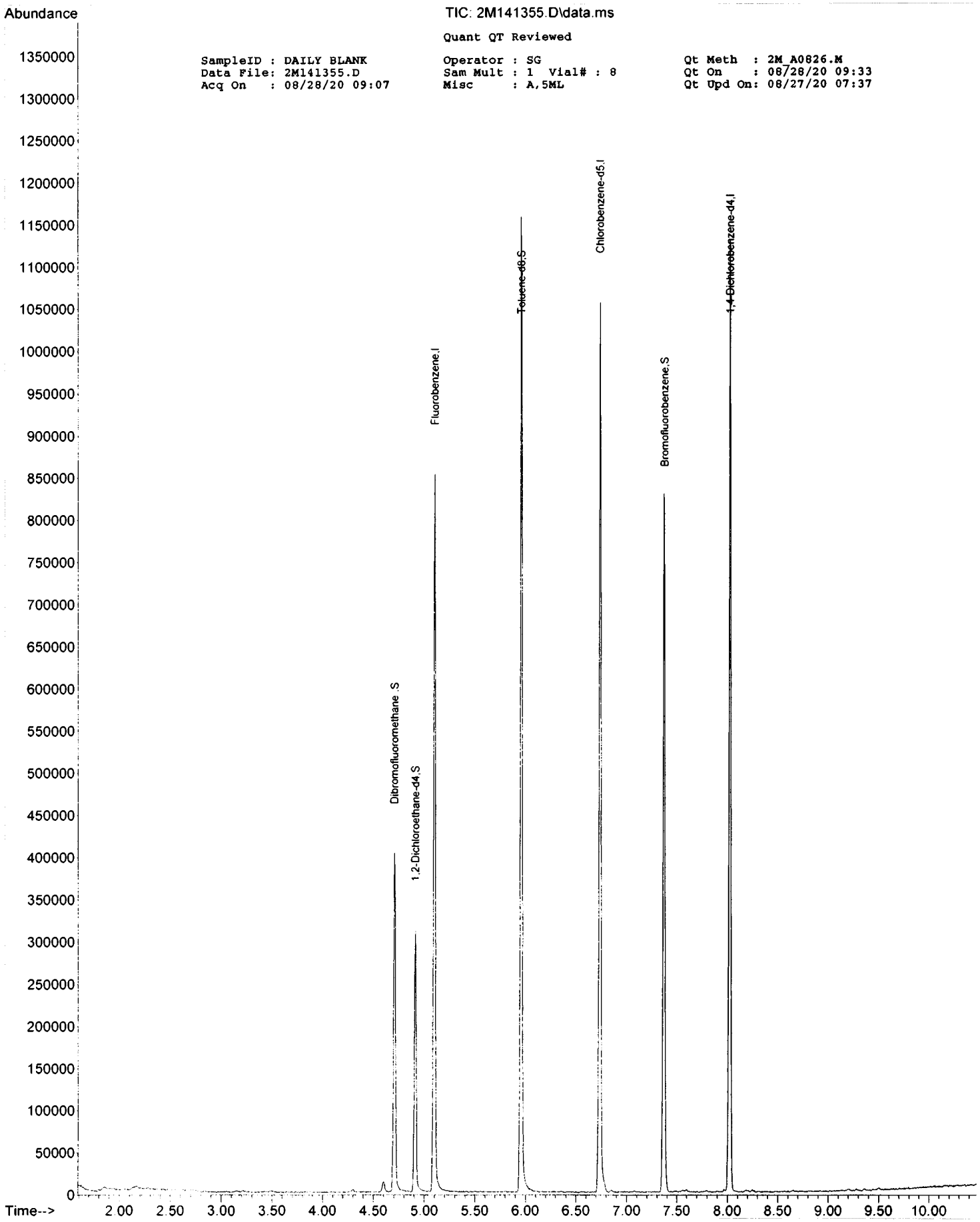
Quantitation Report (QT Reviewed)

SampleID : DAILY BLANK Operator : SG Qt Meth : 2M_A0826.M
Data File: 2M141355.D Sam Mult : 1 Vial# : 8 Qt On : 08/28/20 09:33
Acq On : 08/28/20 09:07 Misc : A,5ML Qt Upd On: 08/27/20 07:37

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-28-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	558744	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	483457	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	252545	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.703	111	164351	30.95	ug/l	0.00
Spiked Amount 30.000			Recovery =	103.17%		
39) 1,2-Dichloroethane-d4	4.910	67	72047	29.50	ug/l	0.00
Spiked Amount 30.000			Recovery =	98.33%		
66) Toluene-d8	5.952	98	582492	30.45	ug/l	0.00
Spiked Amount 30.000			Recovery =	101.50%		
76) Bromofluorobenzene	7.367	174	219221	32.06	ug/l	0.00
Spiked Amount 30.000			Recovery =	106.87%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M141355.D\data.ms
Quant QT Reviewed
SampleID : DAILY BLANK
Data File: 2M141355.D
Acq On : 08/28/20 09:07
Operator : SG
Sam Mult : 1 Vial# : 8
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08/28/20 09:33
Qt Upd On: 08/27/20 07:37
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 6M131886.D
Analysis Date: 08/31/20 08:25
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0020	U	56-23-5	Carbon Tetrachloride	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0020	U	108-90-7	Chlorobenzene	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0020	U	75-00-3	Chloroethane	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.0020	U	67-66-3	Chloroform	0.0020	U
75-34-3	1,1-Dichloroethane	0.0020	U	74-87-3	Chloromethane	0.0020	U
75-35-4	1,1-Dichloroethene	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.0020	U
96-18-4	1,2,3-Trichloropropane	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.0020	U
95-63-6	1,2,4-Trimethylbenzene	0.0010	U	124-48-1	Dibromochloromethane	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.0020	U	75-71-8	Dichlorodifluoromethane	0.0020	U
107-06-2	1,2-Dichloroethane	0.0020	U	100-41-4	Ethylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0020	U	98-82-8	Isopropylbenzene	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	0.0010	U	79601-23-1	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0020	U	75-09-2	Methylene Chloride	0.0020	U
142-28-9	1,3-Dichloropropane	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0020	U	104-51-8	n-Butylbenzene	0.0010	U
123-91-1	1,4-Dioxane	0.10	U	103-65-1	n-Propylbenzene	0.0010	U
78-93-3	2-Butanone	0.0020	U	95-47-6	o-Xylene	0.0010	U
110-75-8	2-Chloroethylvinylether	0.0020	U	135-98-8	sec-Butylbenzene	0.0010	U
591-78-6	2-Hexanone	0.0020	U	100-42-5	Styrene	0.0020	U
99-87-6	4-Isopropyltoluene	0.0010	U	75-65-0	t-Butyl Alcohol	0.010	U
108-10-1	4-Methyl-2-Pentanone	0.0020	U	98-06-6	t-Butylbenzene	0.0010	U
67-64-1	Acetone	0.010	U	127-18-4	Tetrachloroethene	0.0020	U
107-02-8	Acrolein	0.010	U	108-88-3	Toluene	0.0010	U
107-13-1	Acrylonitrile	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0020	U
71-43-2	Benzene	0.0010	U	10061-02-6	trans-1,3-Dichloropropene	0.0020	U
75-27-4	Bromodichloromethane	0.0020	U	79-01-6	Trichloroethene	0.0020	U
75-25-2	Bromoform	0.0020	U	75-69-4	Trichlorofluoromethane	0.0020	U
74-83-9	Bromomethane	0.0020	U	75-01-4	Vinyl Chloride	0.0020	U
75-15-0	Carbon Disulfide	0.0020	U				

Worksheet #: 565778

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

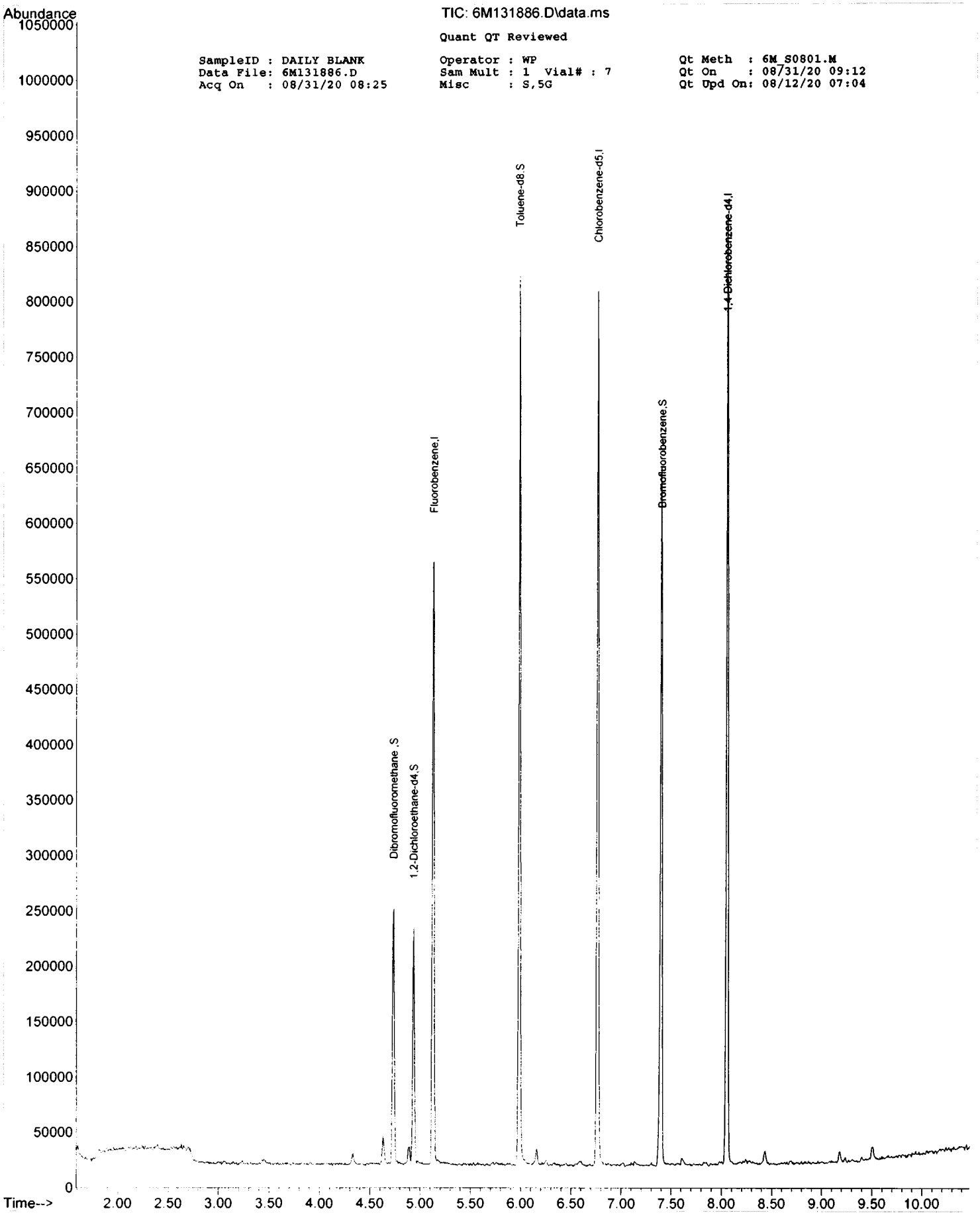
Quantitation Report (QT Reviewed)

SampleID : DAILY BLANK Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131886.D Sam Mult : 1 Vial# : 7 Qt On : 08/31/20 09:12
Acq On : 08/31/20 08:25 Misc : S,5G Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	325455	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	300945	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	168512	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	93003	32.15	ug/l	0.00
Spiked Amount 30.000			Recovery =	107.17%		
39) 1,2-Dichloroethane-d4	4.934	67	48573	31.14	ug/l	0.00
Spiked Amount 30.000			Recovery =	103.80%		
66) Toluene-d8	5.983	98	349765	28.17	ug/l	0.00
Spiked Amount 30.000			Recovery =	93.90%		
76) Bromofluorobenzene	7.397	174	129990	29.30	ug/l	0.00
Spiked Amount 30.000			Recovery =	97.67%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M131886.D\data.ms
Quant QT Reviewed
SampleID : DAILY BLANK
Data File: 6M131886.D
Acq On : 08/31/20 08:25
Operator : WP
Sam Mult : 1 Vial# : 7
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 09:12
Qt Upd On: 08/12/20 07:04
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87436

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M141360.D	MBS87436	8/28/2020 10:45:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.2675	0	20	106	50	150
Dichlorodifluoromethane	**1**	**22.7236**	**0**	**20**	**114**	**50**	**150**
Chloromethane	**1**	**18.4306**	**0**	**20**	**92**	**50**	**150**
Bromomethane	**1**	**14.3735**	**0**	**20**	**72**	**50**	**150**
Vinyl Chloride	**1**	**25.0891**	**0**	**20**	**125**	**50**	**150**
Chloroethane	**1**	**22.7761**	**0**	**20**	**114**	**50**	**150**
Trichlorofluoromethane	**1**	**22.7392**	**0**	**20**	**114**	**50**	**150**
Ethyl ether	1	19.6488	0	20	98	50	150
Furan	1	19.5616	0	20	98	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**20.8871**	**0**	**20**	**104**	**50**	**150**
Methylene Chloride	**1**	**18.3046**	**0**	**20**	**92**	**70**	**130**
Acrolein	**1**	**107.2197**	**0**	**100**	**107**	**50**	**150**
Acrylonitrile	**1**	**17.0179**	**0**	**20**	**85**	**50**	**150**
Iodomethane	1	22.2018	0	20	111	50	150
Acetone	**1**	**96.4093**	**0**	**100**	**96**	**50**	**150**
Carbon Disulfide	**1**	**20.0831**	**0**	**20**	**100**	**50**	**150**
t-Butyl Alcohol	**1**	**93.0556**	**0**	**100**	**93**	**50**	**150**
n-Hexane	1	19.8094	0	20	99	70	130
Di-isopropyl-ether	1	18.089	0	20	90	70	130
1,1-Dichloroethene	**1**	**19.5922**	**0**	**20**	**98**	**70**	**130**
Methyl Acetate	1	26.9278	0	20	135	50	150
Methyl-t-butyl ether	**1**	**17.8912**	**0**	**20**	**89**	**70**	**130**
1,1-Dichloroethane	**1**	**17.7773**	**0**	**20**	**89**	**70**	**130**
trans-1,2-Dichloroethene	**1**	**18.4548**	**0**	**20**	**92**	**70**	**130**
Ethyl-t-butyl ether	1	17.6027	0	20	88	70	130
cis-1,2-Dichloroethene	**1**	**18.0527**	**0**	**20**	**90**	**70**	**130**
Bromochloromethane	1	18.1107	0	20	91	70	130
2,2-Dichloropropane	1	19.8298	0	20	99	70	130
Ethyl acetate	1	16.9551	0	20	85	50	150
1,4-Dioxane	**1**	**892.9153**	**0**	**1000**	**89**	**50**	**150**
1,1-Dichloropropene	1	18.6584	0	20	93	70	130
Chloroform	**1**	**18.0644**	**0**	**20**	**90**	**70**	**130**
Cyclohexane	1	19.515	0	20	98	70	130
1,2-Dichloroethane	**1**	**16.4548**	**0**	**20**	**82**	**70**	**130**
2-Butanone	**1**	**17.666**	**0**	**20**	**88**	**50**	**150**
1,1,1-Trichloroethane	**1**	**17.9776**	**0**	**20**	**90**	**70**	**130**
Carbon Tetrachloride	**1**	**18.2184**	**0**	**20**	**91**	**50**	**150**
Vinyl Acetate	1	12.3208	0	20	62	50	150
Bromodichloromethane	**1**	**18.0214**	**0**	**20**	**90**	**70**	**130**
Methylcyclohexane	1	19.2208	0	20	96	70	130
Dibromomethane	1	14.7889	0	20	74	70	130
1,2-Dichloropropane	**1**	**17.2486**	**0**	**20**	**86**	**70**	**130**
Trichloroethene	**1**	**18.3967**	**0**	**20**	**92**	**70**	**130**
Benzene	**1**	**17.3993**	**0**	**20**	**87**	**70**	**130**
tert-Amyl methyl ether	1	18.6574	0	20	93	70	130
Iso-propylacetate	1	20.4617	0	20	102	70	130
Methyl methacrylate	1	21.0823	0	20	105	70	130
Dibromochloromethane	**1**	**18.3145**	**0**	**20**	**92**	**70**	**130**
2-Chloroethylvinylether	**1**	**46.1501**	**0**	**20**	**231***	**70**	**130**
cis-1,3-Dichloropropene	**1**	**18.7581**	**0**	**20**	**94**	**70**	**130**
trans-1,3-Dichloropropene	**1**	**17.5576**	**0**	**20**	**88**	**70**	**130**
Ethyl methacrylate	1	18.6975	0	20	93	70	130
1,1,2-Trichloroethane	**1**	**18.6489**	**0**	**20**	**93**	**70**	**130**
1,2-Dibromoethane	1	17.7203	0	20	89	70	130
1,3-Dichloropropane	**1**	**17.9362**	**0**	**20**	**90**	**70**	**130**
4-Methyl-2-Pentanone	**1**	**19.746**	**0**	**20**	**99**	**50**	**150**
2-Hexanone	**1**	**20.1732**	**0**	**20**	**101**	**50**	**150**
Tetrachloroethene	**1**	**16.7166**	**0**	**20**	**84**	**50**	**150**
Toluene	**1**	**18.2453**	**0**	**20**	**91**	**70**	**130**
1,1,1,2-Tetrachloroethane	1	17.6114	0	20	88	70	130
Chlorobenzene	**1**	**17.9815**	**0**	**20**	**90**	**70**	**130**

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87436

Method: 8260C | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	17.2972	0	20	86	70	130
n-Amyl acetate	1	17.4637	0	20	87	70	130
Bromoform	**1**	**18.0974**	**0**	**20**	**90**	**70**	**130**
Ethylbenzene	**1**	**18.9374**	**0**	**20**	**95**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**19.0494**	**0**	**20**	**95**	**70**	**130**
Styrene	**1**	**17.84**	**0**	**20**	**89**	**70**	**130**
m&p-Xylenes	**1**	**37.295**	**0**	**40**	**93**	**70**	**130**
o-Xylene	**1**	**17.6421**	**0**	**20**	**88**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	18.4787	0	20	92	50	150
1,3-Dichlorobenzene	**1**	**18.0218**	**0**	**20**	**90**	**70**	**130**
1,4-Dichlorobenzene	**1**	**18.1332**	**0**	**20**	**91**	**70**	**130**
1,2-Dichlorobenzene	**1**	**17.4709**	**0**	**20**	**87**	**70**	**130**
Isopropylbenzene	**1**	**18.9892**	**0**	**20**	**95**	**70**	**130**
Cyclohexanone	1	96.0529	0	100	96	50	150
Camphene	1	19.1377	0	20	96	70	130
1,2,3-Trichloropropane	**1**	**18.8351**	**0**	**20**	**94**	**70**	**130**
2-Chlorotoluene	1	17.7736	0	20	89	70	130
p-Ethyltoluene	1	18.7101	0	20	94	70	130
4-Chlorotoluene	1	17.3297	0	20	87	70	130
n-Propylbenzene	**1**	**18.9986**	**0**	**20**	**95**	**70**	**130**
Bromobenzene	1	18.6561	0	20	93	70	130
1,3,5-Trimethylbenzene	**1**	**18.3839**	**0**	**20**	**92**	**70**	**130**
Butyl methacrylate	1	16.7391	0	20	84	70	130
t-Butylbenzene	**1**	**17.5446**	**0**	**20**	**88**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**17.0672**	**0**	**20**	**85**	**70**	**130**
sec-Butylbenzene	**1**	**18.8416**	**0**	**20**	**94**	**70**	**130**
4-Isopropyltoluene	**1**	**18.2005**	**0**	**20**	**91**	**70**	**130**
n-Butylbenzene	**1**	**18.4142**	**0**	**20**	**92**	**70**	**130**
p-Diethylbenzene	1	18.9418	0	20	95	70	130
1,2,4,5-Tetramethylbenzene	1	19.1662	0	20	96	70	130
1,2-Dibromo-3-Chloropropane	1	19.9389	0	20	100	50	150
Camphor	1	152.917	0	200	76	20	150
Hexachlorobutadiene	1	17.16	0	20	86	50	150
1,2,4-Trichlorobenzene	1	18.8606	0	20	94	70	130
1,2,3-Trichlorobenzene	1	17.5038	0	20	88	70	130
Naphthalene	1	18.0371	0	20	90	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Quantitation Report (QT Reviewed)

Sample ID : MBS
Data File: 2M141360.D
Acq On : 08/28/20 10:45

Operator : SG
Sam Mult : 1 Vial# : 13
Misc : A,5ML

Qt Meth : 2M_A0826.M
Qt On : 08/28/20 11:37
Qt Upd On: 08/27/20 07:37

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-28-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	567792	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	487191	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	274678	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	163642	30.33	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.10%			
39) 1,2-Dichloroethane-d4	4.910	67	73239	29.51	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.37%			
66) Toluene-d8	5.952	98	600023	31.12	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.73%			
76) Bromofluorobenzene	7.367	174	233442	31.39	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.63%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.691	51	76687	21.2675	ug/l	88
6) Dichlorodifluoromethane	1.679	85	82948	22.7236	ug/l	98
7) Chloromethane	1.849	50	39078	18.4306	ug/l	100
8) Bromomethane	2.252	94	37531	14.3735	ug/l	93
9) Vinyl Chloride	1.953	62	90064	25.0891	ug/l	100
10) Chloroethane	2.337	64	61718	22.7761	ug/l	97
11) Trichlorofluoromethane	2.563	101	162543	22.7392	ug/l	98
12) Ethyl ether	2.800	59	46174	19.6488	ug/l	89
13) Furan	2.843	39	67559	19.5616	ug/l	64
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	65948	20.8871	ug/l	95
15) Methylene Chloride	3.416	84	75066	18.3046	ug/l	79
16) Acrolein	2.916	56	52492	107.2197	ug/l	94
17) Acrylonitrile	3.617	53	20626	17.0179	ug/l	99
18) Iodomethane	3.148	142	63855	22.2018	ug/l	92
19) Acetone	3.044	43	79839	96.4093	ug/l	85
20) Carbon Disulfide	3.215	76	214878	20.0831	ug/l	100
21) t-Butyl Alcohol	3.477	59	32811	93.0556	ug/l	99
22) n-Hexane	3.873	57	58637	19.8094	ug/l	84
23) Di-isopropyl-ether	4.026	45	127850	18.0890	ug/l	77
24) 1,1-Dichloroethene	3.008	61	94981	19.5922	ug/l	88
25) Methyl Acetate	3.318	43	51724m	26.9278	ug/l	
26) Methyl-t-butyl ether	3.635	73	179174	17.8912	ug/l	94
27) 1,1-Dichloroethane	4.001	63	107944	17.7773	ug/l	96
28) trans-1,2-Dichloroethene	3.648	96	78410	18.4548	ug/l	85
29) Ethyl-t-butyl ether	4.288	59	166689	17.6027	ug/l	93
30) cis-1,2-Dichloroethene	4.410	61	108040	18.0527	ug/l	83
31) Bromochloromethane	4.568	49	44791	18.1107	ug/l	53
32) 2,2-Dichloropropane	4.416	77	115790	19.8298	ug/l	97
33) Ethyl acetate	4.434	43	46211m	16.9551	ug/l	
34) 1,4-Dioxane	5.495	88	49513	892.9153	ug/l	86
35) 1,1-Dichloropropene	4.824	75	102593	18.6584	ug/l	95
36) Chloroform	4.605	83	136099	18.0644	ug/l	99
38) Cyclohexane	4.769	56	82716	19.5150	ug/l	85
40) 1,2-Dichloroethane	4.952	62	91706	16.4548	ug/l	100
41) 2-Butanone	4.410	43	25024m	17.6660	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	128933	17.9776	ug/l	98
43) Carbon Tetrachloride	4.830	117	109278	18.2184	ug/l	94
44) Vinyl Acetate	4.026	43	110474	12.3208	ug/l	100
45) Bromodichloromethane	5.568	83	108659	18.0214	ug/l	100
46) Methylcyclohexane	5.416	83	93714	19.2208	ug/l	89
47) Dibromomethane	5.495	174	72415	14.7889	ug/l	98
48) 1,2-Dichloropropane	5.428	63	62277	17.2486	ug/l	96
49) Trichloroethene	5.300	130	102986	18.3967	ug/l	98
50) Benzene	4.946	78	286695	17.3993	ug/l	100
51) tert-Amyl methyl ether	4.989	73	198999	18.6574	ug/l	97
53) Iso-propylacetate	4.946	43	102825	20.4617	ug/l	96
54) Methyl methacrylate	5.452	41	49406	21.0823	ug/l	64
55) Dibromochloromethane	6.422	129	101356	18.3145	ug/l	95
56) 2-Chloroethylvinylether	5.708	63	39713m	46.1501	ug/l	
57) cis-1,3-Dichloropropene	5.806	75	119091	18.7581	ug/l	99
58) trans-1,3-Dichloropropene	6.092	75	111178	17.5576	ug/l	98
59) Ethyl methacrylate	6.105	41	43945	18.6975	ug/l	70
60) 1,1,2-Trichloroethane	6.196	97	76595	18.6489	ug/l	97
61) 1,2-Dibromoethane	6.495	107	83926	17.7203	ug/l	100
62) 1,3-Dichloropropane	6.287	76	117980	17.9362	ug/l	98
63) 4-Methyl-2-Pentanone	5.867	43	53115	19.7460	ug/l	88
64) 2-Hexanone	6.306	43	38356	20.1732	ug/l	89
65) Tetrachloroethene	6.287	164	84990	16.7166	ug/l	97
67) Toluene	5.989	92	201529	18.2453	ug/l	99

Quantitation Report (QT Reviewed)

SampleID : MBS
Data File: 2M141360.D
Acq On : 08/28/20 10:45

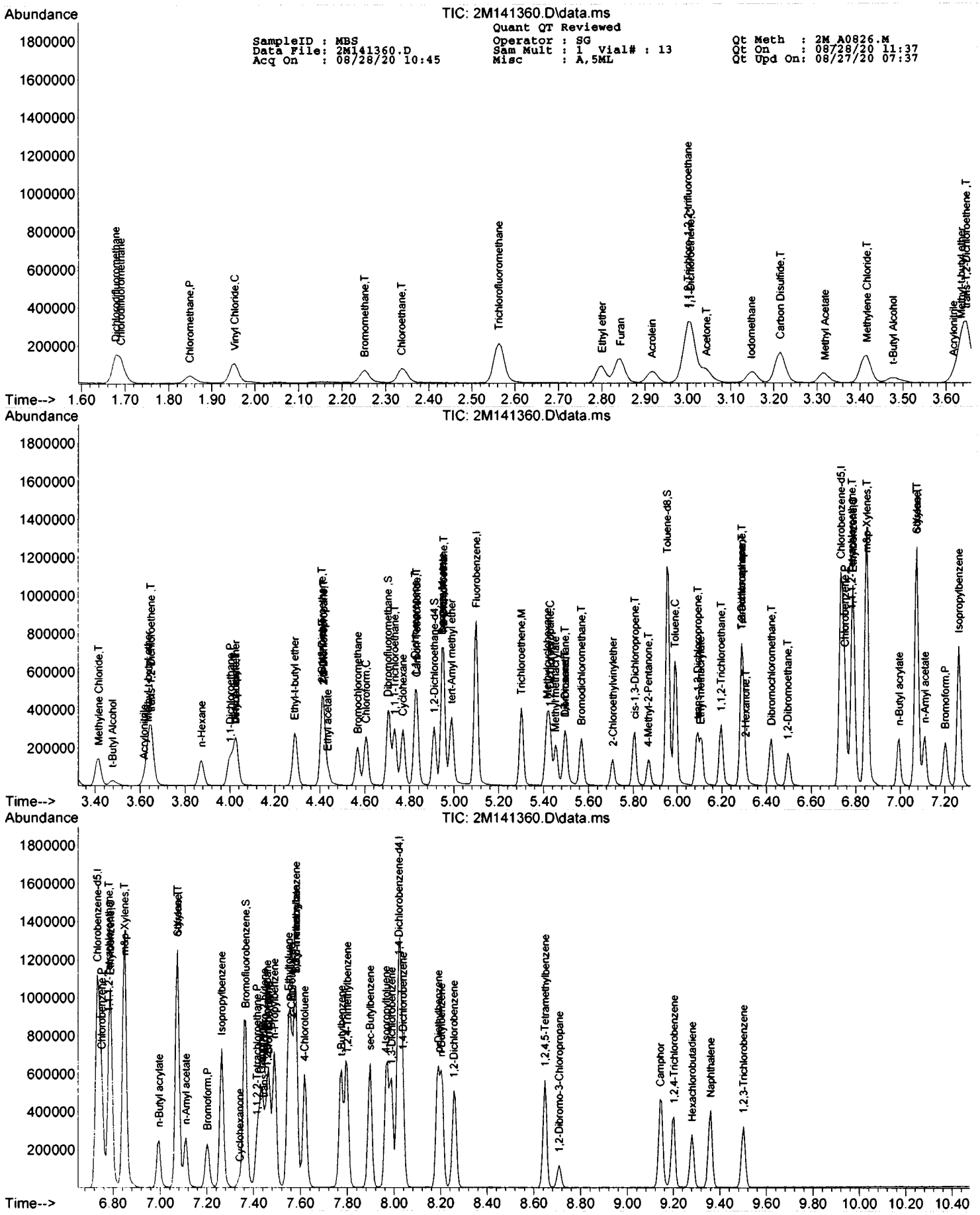
Operator : SG
Sam Mult : 1 Vial# : 13
Misc : A,5ML

Qt Meth : 2M_A0826.M
Qt On : 08/28/20 11:37
Qt Upd On: 08/27/20 07:37

Data Path : G:\GcMsData\2020\GCMS_2\Data\08-28-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	89089	17.6114	ug/l	100
69)	Chlorobenzene	6.751	112	243178	17.9815	ug/l	98
71)	n-Butyl acrylate	6.995	55	111790	17.2972	ug/l	96
72)	n-Amyl acetate	7.110	43	83467	17.4637	ug/l	88
73)	Bromoform	7.202	173	81240	18.0974	ug/l	99
74)	Ethylbenzene	6.787	106	101331	18.9374	ug/l	97
75)	1,1,2,2-Tetrachloroethane	7.415	83	106077	19.0494	ug/l	98
77)	Styrene	7.074	104	258326	17.8400	ug/l	94
78)	m&p-Xylenes	6.848	106	316189	37.2950	ug/l	96
79)	o-Xylene	7.074	106	150033	17.6421	ug/l	89
80)	trans-1,4-Dichloro-2-b...	7.446	53	30427	18.4787	ug/l	85
81)	1,3-Dichlorobenzene	7.988	146	201406	18.0218	ug/l	96
82)	1,4-Dichlorobenzene	8.037	146	204000	18.1332	ug/l	97
83)	1,2-Dichlorobenzene	8.257	146	184179	17.4709	ug/l	97
84)	Isopropylbenzene	7.263	105	372977	18.9892	ug/l	98
85)	Cyclohexanone	7.342	55	13522	96.0529	ug/l	89
86)	Camphene	7.434	93	93806	19.1377	ug/l	93
87)	1,2,3-Trichloropropane	7.458	75	122085	18.8351	ug/l	97
88)	2-Chlorotoluene	7.562	91	207989	17.7736	ug/l	97
89)	p-Ethyltoluene	7.549	105	364284	18.7101	ug/l	99
90)	4-Chlorotoluene	7.616	91	214555	17.3297	ug/l	97
91)	n-Propylbenzene	7.488	91	412604	18.9986	ug/l	97
92)	Bromobenzene	7.464	77	203600	18.6561	ug/l	88
93)	1,3,5-Trimethylbenzene	7.580	105	296110	18.3839	ug/l	98
94)	Butyl methacrylate	7.580	41	66225	16.7391	ug/l	71
95)	t-Butylbenzene	7.775	119	293278	17.5446	ug/l	95
96)	1,2,4-Trimethylbenzene	7.799	105	297734	17.0672	ug/l	98
97)	sec-Butylbenzene	7.897	105	350650	18.8416	ug/l	96
98)	4-Isopropyltoluene	7.964	119	303380	18.2005	ug/l	98
99)	n-Butylbenzene	8.202	91	285195	18.4142	ug/l	97
100)	p-Diethylbenzene	8.190	119	170667	18.9418	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	233304	19.1662	ug/l	98
102)	1,2-Dibromo-3-Chloropr...	8.708	157	29272	19.9389	ug/l	94
103)	Camphor	9.141	95	105412m	152.9170	ug/l	
104)	Hexachlorobutadiene	9.281	225	40942	17.1600	ug/l	93
105)	1,2,4-Trichlorobenzene	9.202	180	98804	18.8606	ug/l	99
106)	1,2,3-Trichlorobenzene	9.500	180	83117	17.5038	ug/l	98
107)	Naphthalene	9.360	128	257796	18.0371	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M141360.D\data.ms
Quant QT Reviewed
SampleID : MBS
Data File: 2M141360.D
Acq On : 08/28/20 10:45
Operator : SG
Sam Mult : 1 Vial# : 13
Misc : A,5ML
Qt Meth : 2M_A0826.M
Qt On : 08/28/20 11:37
Qt Upd On: 08/27/20 07:37
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 2M141360.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Chlorobenzene,P
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 2M141360.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Data File	Sample ID:	Analysis Date
Spike or Dup: 6M131888.D	MBS87762	8/31/2020 9:07:00 AM
Non Spike(If applicable):		
Inst Blank(If applicable):		
Method: 8260C	Matrix: Soil	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	77.0435	0	50	154*	20	130
Dichlorodifluoromethane	1	71.9361	0	50	144*	20	130
Chloromethane	1	63.4485	0	50	127	20	130
Bromomethane	1	50.5524	0	50	101	20	130
Vinyl Chloride	1	60.9187	0	50	122	20	130
Chloroethane	1	56.196	0	50	112	20	130
Trichlorofluoromethane	1	53.2772	0	50	107	20	130
Ethyl ether	1	45.2954	0	50	91	50	130
Furan	1	48.3651	0	50	97	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	53.8862	0	50	108	50	130
Methylene Chloride	1	46.9147	0	50	94	50	130
Acrolein	1	291.8958	0	200	146*	20	130
Acrylonitrile	1	41.0821	0	50	82	20	130
Iodomethane	1	65.371	0	50	131*	50	130
Acetone	1	191.2286	0	200	96	20	130
Carbon Disulfide	1	49.1955	0	50	98	50	130
t-Butyl Alcohol	1	145.0596	0	200	73	20	130
n-Hexane	1	55.5732	0	50	111	50	130
Di-isopropyl-ether	1	50.9804	0	50	102	50	130
1,1-Dichloroethene	1	54.7368	0	50	109	50	130
Methyl Acetate	1	56.1536	0	50	112	50	130
Methyl-t-butyl ether	1	53.4186	0	50	107	50	130
1,1-Dichloroethane	1	51.3318	0	50	103	50	130
trans-1,2-Dichloroethene	1	52.6015	0	50	105	50	130
Ethyl-t-butyl ether	1	46.2693	0	50	93	50	130
cis-1,2-Dichloroethene	1	50.5797	0	50	101	50	130
Bromochloromethane	1	50.2529	0	50	101	50	130
2,2-Dichloropropane	1	58.6043	0	50	117	50	130
Ethyl acetate	1	42.8638	0	50	86	50	130
1,4-Dioxane	1	1557.786	0	2500	62	50	130
1,1-Dichloropropene	1	50.9925	0	50	102	50	130
Chloroform	1	51.042	0	50	102	50	130
Cyclohexane	1	51.9312	0	50	104	50	130
1,2-Dichloroethane	1	51.3951	0	50	103	50	130
2-Butanone	1	41.0564	0	50	82	20	130
1,1,1-Trichloroethane	1	52.0174	0	50	104	50	130
Carbon Tetrachloride	1	52.2009	0	50	104	50	130
Vinyl Acetate	1	38.9192	0	50	78	50	130
Bromodichloromethane	1	50.6791	0	50	101	50	130
Methylcyclohexane	1	49.9512	0	50	100	50	130
Dibromomethane	1	51.026	0	50	102	50	130
1,2-Dichloropropane	1	50.2056	0	50	100	50	130
Trichloroethene	1	49.277	0	50	99	50	130
Benzene	1	49.4058	0	50	99	50	130
tert-Amyl methyl ether	1	49.7989	0	50	100	50	130
Iso-propylacetate	1	44.3314	0	50	89	50	130
Methyl methacrylate	1	42.8021	0	50	86	50	130
Dibromochloromethane	1	48.2256	0	50	96	50	130
2-Chloroethylvinylether	1	103.4236	0	50	207*	50	130
cis-1,3-Dichloropropene	1	48.2806	0	50	97	50	130
trans-1,3-Dichloropropene	1	49.4282	0	50	99	50	130
Ethyl methacrylate	1	45.9704	0	50	92	50	130
1,1,2-Trichloroethane	1	46.6959	0	50	93	50	130
1,2-Dibromoethane	1	46.967	0	50	94	50	130
1,3-Dichloropropane	1	46.3203	0	50	93	50	130
4-Methyl-2-Pentanone	1	39.3965	0	50	79	20	130
2-Hexanone	1	39.3843	0	50	79	20	130
Tetrachloroethene	1	45.5631	0	50	91	50	130
Toluene	1	44.3318	0	50	89	50	130
1,1,1,2-Tetrachloroethane	1	45.9037	0	50	92	50	130
Chlorobenzene	1	44.3688	0	50	89	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	44.6065	0	50	89	50	130
n-Amyl acetate	1	44.5516	0	50	89	50	130
Bromoform	**1**	**68.5695**	**0**	**50**	**137***	**20**	**130**
Ethylbenzene	**1**	**44.6076**	**0**	**50**	**89**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**43.792**	**0**	**50**	**88**	**50**	**130**
Styrene	**1**	**43.4477**	**0**	**50**	**87**	**50**	**130**
m&p-Xylenes	**1**	**87.0434**	**0**	**100**	**87**	**50**	**130**
o-Xylene	**1**	**41.9207**	**0**	**50**	**84**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	44.7106	0	50	89	20	130
1,3-Dichlorobenzene	**1**	**43.7558**	**0**	**50**	**88**	**50**	**130**
1,4-Dichlorobenzene	**1**	**42.9135**	**0**	**50**	**86**	**50**	**130**
1,2-Dichlorobenzene	**1**	**43.5856**	**0**	**50**	**87**	**50**	**130**
Isopropylbenzene	**1**	**43.989**	**0**	**50**	**88**	**50**	**130**
Cyclohexanone	1	183.5002	0	250	73	50	130
Camphene	1	46.1519	0	50	92	50	130
1,2,3-Trichloropropane	**1**	**42.6801**	**0**	**50**	**85**	**50**	**130**
2-Chlorotoluene	1	44.5685	0	50	89	50	130
p-Ethyltoluene	1	43.0244	0	50	86	50	130
4-Chlorotoluene	1	46.4898	0	50	93	50	130
n-Propylbenzene	**1**	**44.8788**	**0**	**50**	**90**	**50**	**130**
Bromobenzene	1	43.9032	0	50	88	50	130
1,3,5-Trimethylbenzene	**1**	**49.1502**	**0**	**50**	**98**	**50**	**130**
Butyl methacrylate	1	41.7019	0	50	83	50	130
t-Butylbenzene	**1**	**45.1207**	**0**	**50**	**90**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**45.2927**	**0**	**50**	**91**	**50**	**130**
sec-Butylbenzene	**1**	**47.7034**	**0**	**50**	**95**	**50**	**130**
4-Isopropyltoluene	**1**	**47.9029**	**0**	**50**	**96**	**50**	**130**
n-Butylbenzene	**1**	**49.0503**	**0**	**50**	**98**	**50**	**130**
p-Diethylbenzene	1	48.4126	0	50	97	50	130
1,2,4,5-Tetramethylbenzene	1	48.3684	0	50	97	50	130
1,2-Dibromo-3-Chloropropane	1	38.5331	0	50	77	50	130
Camphor	1	555.9057	0	500	111	50	130
Hexachlorobutadiene	1	45.011	0	50	90	50	130
1,2,4-Trichlorobenzene	1	43.352	0	50	87	50	130
1,2,3-Trichlorobenzene	1	42.4155	0	50	85	50	130
Naphthalene	1	39.7835	0	50	80	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Quantitation Report (QT Reviewed)

SampleID : MBS
Data File: 6M131888.D
Acq On : 08/31/20 09:07

Operator : WP
Sam Mult : 1 Vial# : 9
Misc : S,5G

Qt Meth : 6M_S0801.M
Qt On : 08/31/20 10:00
Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	357661	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	320865	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.050	152	194278m	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	98633	31.03	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.43%			
39) 1,2-Dichloroethane-d4	4.934	67	53588m	31.26	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.20%			
66) Toluene-d8	5.983	98	380357	28.73	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.77%			
76) Bromofluorobenzene	7.391	174	148427m	29.02	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.73%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	289764	77.0435	ug/l	95
6) Dichlorodifluoromethane	1.636	85	176237	71.9361	ug/l	98
7) Chloromethane	1.813	50	191894	63.4485	ug/l	98
8) Bromomethane	2.233	94	113964	50.5524	ug/l	96
9) Vinyl Chloride	1.916	62	214091	60.9187	ug/l	96
10) Chloroethane	2.325	64	134378	56.1960	ug/l	99
11) Trichlorofluoromethane	2.557	101	308229	53.2772	ug/l	99
12) Ethyl ether	2.807	59	96444m	45.2954	ug/l	
13) Furan	2.843	39	231642m	48.3651	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	118617	53.8862	ug/l	97
15) Methylene Chloride	3.434	84	151778	46.9147	ug/l	99
16) Acrolein	2.922	56	121849m	291.8958	ug/l	
17) Acrylonitrile	3.642	53	51956m	41.0821	ug/l	
18) Iodomethane	3.160	142	181967m	65.3710	ug/l	
19) Acetone	3.050	43	232037m	191.2286	ug/l	
20) Carbon Disulfide	3.233	76	396947m	49.1955	ug/l	
21) t-Butyl Alcohol	3.508	59	85309m	145.0596	ug/l	
22) n-Hexane	3.910	57	174679m	55.5732	ug/l	
23) Di-isopropyl-ether	4.062	45	381771m	50.9804	ug/l	
24) 1,1-Dichloroethene	3.020	61	221794	54.7368	ug/l	99
25) Methyl Acetate	3.337	43	140426m	56.1536	ug/l	
26) Methyl-t-butyl ether	3.672	73	342591	53.4186	ug/l	99
27) 1,1-Dichloroethane	4.026	63	269366	51.3318	ug/l	97
28) trans-1,2-Dichloroethene	3.678	96	160444m	52.6015	ug/l	
29) Ethyl-t-butyl ether	4.325	59	379360	46.2693	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	268413	50.5797	ug/l	96
31) Bromochloromethane	4.593	49	122690	50.2529	ug/l	93
32) 2,2-Dichloropropane	4.446	77	250606	58.6043	ug/l	97
33) Ethyl acetate	4.465	43	161001m	42.8638	ug/l	
34) 1,4-Dioxane	5.519	88	102675m	1557.7857	ug/l	
35) 1,1-Dichloropropene	4.855	75	218361	50.9925	ug/l	98
36) Chloroform	4.635	83	282701m	51.0420	ug/l	
38) Cyclohexane	4.800	56	227722	51.9312	ug/l	97
40) 1,2-Dichloroethane	4.977	62	212785	51.3951	ug/l	96
41) 2-Butanone	4.434	43	72878m	41.0564	ug/l	
42) 1,1,1-Trichloroethane	4.763	97	257916m	52.0174	ug/l	
43) Carbon Tetrachloride	4.861	117	221002m	52.2009	ug/l	
44) Vinyl Acetate	4.056	43	347827m	38.9192	ug/l	
45) Bromodichloromethane	5.593	83	196820m	50.6791	ug/l	
46) Methylcyclohexane	5.446	83	224578	49.9512	ug/l	96
47) Dibromomethane	5.526	174	103154	51.0260	ug/l	96
48) 1,2-Dichloropropane	5.458	63	154909	50.2056	ug/l	99
49) Trichloroethene	5.330	130	172309m	49.2770	ug/l	
50) Benzene	4.977	78	596475m	49.4058	ug/l	
51) tert-Amyl methyl ether	5.020	73	351447	49.7989	ug/l	99
53) Iso-propylacetate	4.977	43	247728m	44.3314	ug/l	
54) Methyl methacrylate	5.483	41	116857m	42.8021	ug/l	
55) Dibromochloromethane	6.446	129	145225m	48.2256	ug/l	
56) 2-Chloroethylvinylether	5.733	63	87839	103.4236	ug/l	97
57) cis-1,3-Dichloropropene	5.830	75	230883	48.2806	ug/l	98
58) trans-1,3-Dichloropropene	6.117	75	206915	49.4282	ug/l	100
59) Ethyl methacrylate	6.135	41	124559m	45.9704	ug/l	
60) 1,1,2-Trichloroethane	6.221	97	128636m	46.6959	ug/l	
61) 1,2-Dibromoethane	6.525	107	134306m	46.9670	ug/l	
62) 1,3-Dichloropropane	6.318	76	225786	46.3203	ug/l	100
63) 4-Methyl-2-Pentanone	5.897	43	147459m	39.3965	ug/l	
64) 2-Hexanone	6.330	43	116125m	39.3843	ug/l	
65) Tetrachloroethene	6.318	164	135453m	45.5631	ug/l	
67) Toluene	6.019	92	384601	44.3318	ug/l	100

Quantitation Report (QT Reviewed)

SampleID : MBS
Data File: 6M131888.D
Acq On : 08/31/20 09:07

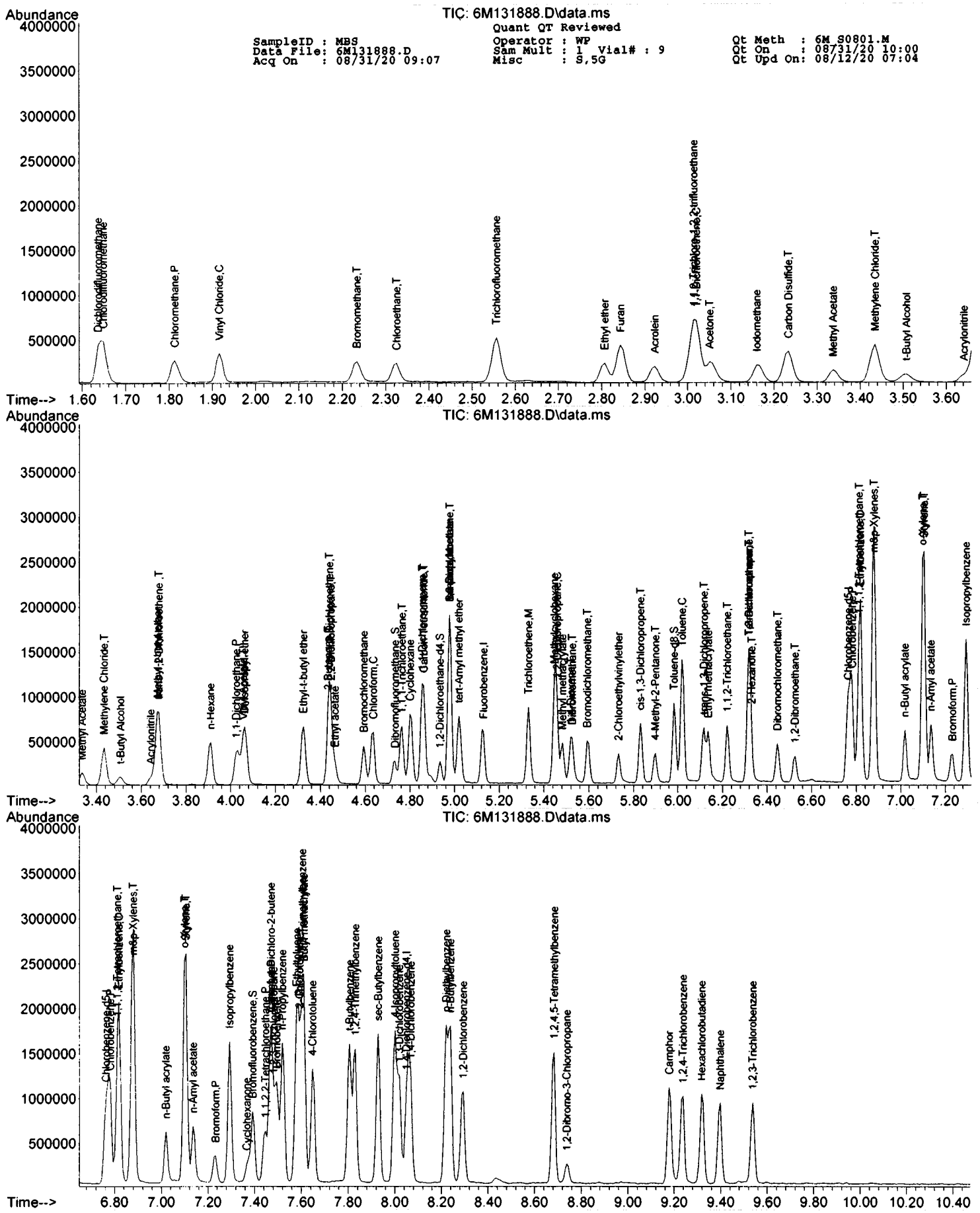
Operator : WP
Sam Mult : 1 Vial# : 9
Misc : S,5G

Qt Meth : 6M_S0801.M
Qt On : 08/31/20 10:00
Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	142282m	45.9037	ug/l	
69)	Chlorobenzene	6.781	112	420629m	44.3688	ug/l	
71)	n-Butyl acrylate	7.019	55	247553m	44.6065	ug/l	
72)	n-Amyl acetate	7.135	43	233783m	44.5516	ug/l	
73)	Bromoform	7.233	173	96885m	68.5695	ug/l	
74)	Ethylbenzene	6.818	106	191424m	44.6076	ug/l	
75)	1,1,2,2-Tetrachloroethane	7.446	83	181220m	43.7920	ug/l	
77)	Styrene	7.105	104	461265	43.4477	ug/l	98
78)	m&p-Xylenes	6.879	106	560315	87.0434	ug/l	99
79)	o-Xylene	7.098	106	266083m	41.9207	ug/l	
80)	trans-1,4-Dichloro-2-b...	7.470	53	89999m	44.7106	ug/l	
81)	1,3-Dichlorobenzene	8.019	146	347571m	43.7558	ug/l	
82)	1,4-Dichlorobenzene	8.068	146	351652m	42.9135	ug/l	
83)	1,2-Dichlorobenzene	8.293	146	323350m	43.5856	ug/l	
84)	Isopropylbenzene	7.294	105	725655m	43.9890	ug/l	
85)	Cyclohexanone	7.367	55	41805m	183.5002	ug/l	
86)	Camphene	7.470	93	277053m	46.1519	ug/l	
87)	1,2,3-Trichloropropane	7.483	75	227822m	42.6801	ug/l	
88)	2-Chlorotoluene	7.592	91	440643m	44.5685	ug/l	
89)	p-Ethyltoluene	7.580	105	728352m	43.0244	ug/l	
90)	4-Chlorotoluene	7.647	91	450819m	46.4898	ug/l	
91)	n-Propylbenzene	7.519	91	868332m	44.8788	ug/l	
92)	Bromobenzene	7.495	77	445430	43.9032	ug/l	98
93)	1,3,5-Trimethylbenzene	7.604	105	582566m	49.1502	ug/l	
94)	Butyl methacrylate	7.611	41	190496m	41.7019	ug/l	
95)	t-Butylbenzene	7.806	119	608460m	45.1207	ug/l	
96)	1,2,4-Trimethylbenzene	7.830	105	606044m	45.2927	ug/l	
97)	sec-Butylbenzene	7.928	105	818697m	47.7034	ug/l	
98)	4-Isopropyltoluene	8.001	119	689670	47.9029	ug/l	99
99)	n-Butylbenzene	8.238	91	805030	49.0503	ug/l	99
100)	p-Diethylbenzene	8.220	119	413336	48.4126	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.684	119	583761	48.3684	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.738	157	42225m	38.5331	ug/l	
103)	Camphor	9.177	95	211996m	555.9057	ug/l	
104)	Hexachlorobutadiene	9.318	225	134246m	45.0110	ug/l	
105)	1,2,4-Trichlorobenzene	9.238	180	233230m	43.3520	ug/l	
106)	1,2,3-Trichlorobenzene	9.537	180	207670m	42.4155	ug/l	
107)	Naphthalene	9.397	128	535818m	39.7835	ug/l	

(#) = qualifier out of range (m) = manual integration (+) = signals summed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SampleID : MBS
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Acq On : 08/31/20 09:07
Operator : WP
Sam Mult : 1 Vial# : 9
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 10:00
Qt Upd On: 08/12/20 07:04
Abundance
Time-->
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
TIC: 6M131888.D\data.ms
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
TIC: 6M131888.D\data.ms
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone,S
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Non Spike(If applicable):	6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	56.9035	0	50	114	20	130
Dichlorodifluoromethane	1	62.8668	0	50	126	20	130
Chloromethane	1	56.1541	0	50	112	20	130
Bromomethane	1	50.2121	0	50	100	20	130
Vinyl Chloride	1	56.1453	0	50	112	20	130
Chloroethane	1	51.908	0	50	104	20	130
Trichlorofluoromethane	1	51.1041	0	50	102	20	130
Ethyl ether	1	46.2834	0	50	93	50	130
Furan	1	46.2299	0	50	92	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	52.3408	0	50	105	50	130
Methylene Chloride	1	52.7897	5.0839	50	95	50	130
Acrolein	1	248.918	0	200	124	20	130
Acrylonitrile	1	34.3463	0	50	69	20	130
Iodomethane	1	64.5939	0	50	129	50	130
Acetone	1	157.3904	0	200	79	20	130
Carbon Disulfide	1	47.3944	0	50	95	50	130
t-Butyl Alcohol	1	116.3514	0	200	58	20	130
n-Hexane	1	54.7434	0	50	109	50	130
Di-isopropyl-ether	1	54.2364	0	50	108	50	130
1,1-Dichloroethene	1	52.2403	0	50	104	50	130
Methyl Acetate	1	46.8893	0	50	94	50	130
Methyl-t-butyl ether	1	54.3286	0	50	109	50	130
1,1-Dichloroethane	1	49.0593	0	50	98	50	130
trans-1,2-Dichloroethene	1	49.6338	0	50	99	50	130
Ethyl-t-butyl ether	1	49.3762	0	50	99	50	130
cis-1,2-Dichloroethene	1	49.1894	0	50	98	50	130
Bromochloromethane	1	50.2977	0	50	101	50	130
2,2-Dichloropropane	1	57.0601	0	50	114	50	130
Ethyl acetate	1	36.7433	0	50	73	50	130
1,4-Dioxane	1	1274.773	0	2500	51	50	130
1,1-Dichloropropene	1	48.5605	0	50	97	50	130
Chloroform	1	49.9443	0	50	100	50	130
Cyclohexane	1	50.8219	0	50	102	50	130
1,2-Dichloroethane	1	50.2019	0	50	100	50	130
2-Butanone	1	33.5103	0	50	67	20	130
1,1,1-Trichloroethane	1	49.0659	0	50	98	50	130
Carbon Tetrachloride	1	51.644	0	50	103	50	130
Vinyl Acetate	1	37.6728	0	50	75	50	130
Bromodichloromethane	1	50.2178	0	50	100	50	130
Methylcyclohexane	1	50.4394	0	50	101	50	130
Dibromomethane	1	47.858	0	50	96	50	130
1,2-Dichloropropane	1	48.2694	0	50	97	50	130
Trichloroethene	1	73.1622	21.8	50	103	50	130
Benzene	1	48.4836	0	50	97	50	130
tert-Amyl methyl ether	1	52.4065	0	50	105	50	130
Iso-propylacetate	1	41.66	0	50	83	50	130
Methyl methacrylate	1	39.8495	0	50	80	50	130
Dibromochloromethane	1	45.6697	0	50	91	50	130
2-Chloroethylvinylether	1	95.5322	0	50	191*	50	130
cis-1,3-Dichloropropene	1	45.5903	0	50	91	50	130
trans-1,3-Dichloropropene	1	44.067	0	50	88	50	130
Ethyl methacrylate	1	43.1348	0	50	86	50	130
1,1,2-Trichloroethane	1	44.5196	0	50	89	50	130
1,2-Dibromoethane	1	41.0321	0	50	82	50	130
1,3-Dichloropropane	1	42.8237	0	50	86	50	130
4-Methyl-2-Pentanone	1	33.7094	0	50	67	20	130
2-Hexanone	1	30.8066	0	50	62	20	130
Tetrachloroethene	1	50.6666	10.8224	50	80	50	130
Toluene	1	41.0645	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.0505	0	50	90	50	130
Chlorobenzene	1	39.6054	0	50	79	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	41.0364	0	50	82	50	130
n-Amyl acetate	1	38.5687	0	50	77	50	130
Bromoform	1	65.2935	0	50	131*	20	130
Ethylbenzene	1	42.9713	0	50	86	50	130
1,1,2,2-Tetrachloroethane	1	40.0258	0	50	80	50	130
Styrene	1	37.9266	0	50	76	50	130
m&p-Xylenes	1	78.4306	0	100	78	50	130
o-Xylene	1	39.2014	0	50	78	50	130
trans-1,4-Dichloro-2-butene	1	36.9711	0	50	74	20	130
1,3-Dichlorobenzene	1	35.471	0	50	71	50	130
1,4-Dichlorobenzene	1	33.9467	0	50	68	50	130
1,2-Dichlorobenzene	1	35.8729	0	50	72	50	130
Isopropylbenzene	1	40.7636	0	50	82	50	130
Cyclohexanone	1	125.4322	0	250	50	50	130
Camphene	1	41.718	0	50	83	50	130
1,2,3-Trichloropropane	1	36.3643	0	50	73	50	130
2-Chlorotoluene	1	40.2726	0	50	81	50	130
p-Ethyltoluene	1	36.6825	0	50	73	50	130
4-Chlorotoluene	1	37.6433	0	50	75	50	130
n-Propylbenzene	1	38.3835	0	50	77	50	130
Bromobenzene	1	38.8818	0	50	78	50	130
1,3,5-Trimethylbenzene	1	43.2564	0	50	87	50	130
Butyl methacrylate	1	41.2717	0	50	83	50	130
t-Butylbenzene	1	40.0099	0	50	80	50	130
1,2,4-Trimethylbenzene	1	38.5263	0	50	77	50	130
sec-Butylbenzene	1	40.366	0	50	81	50	130
4-Isopropyltoluene	1	39.5065	0	50	79	50	130
n-Butylbenzene	1	36.1879	0	50	72	50	130
p-Diethylbenzene	1	36.9323	0	50	74	50	130
1,2,4,5-Tetramethylbenzene	1	37.6781	0	50	75	50	130
1,2-Dibromo-3-Chloropropane	1	31.3599	0	50	63	50	130
Camphor	1	473.298	0	500	95	50	130
Hexachlorobutadiene	1	35.1542	0	50	70	50	130
1,2,4-Trichlorobenzene	1	28.2306	0	50	56	50	130
1,2,3-Trichlorobenzene	1	30.0156	0	50	60	50	130
Naphthalene	1	30.4916	0	50	61	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Non Spike(If applicable):	6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	53.7847	0	50	108	20	130
Dichlorodifluoromethane	1	65.4838	0	50	131*	20	130
Chloromethane	1	56.6472	0	50	113	20	130
Bromomethane	1	51.6003	0	50	103	20	130
Vinyl Chloride	1	56.8458	0	50	114	20	130
Chloroethane	1	52.3136	0	50	105	20	130
Trichlorofluoromethane	1	52.2935	0	50	105	20	130
Ethyl ether	1	49.7009	0	50	99	50	130
Furan	1	47.2611	0	50	95	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	56.3197	0	50	113	50	130
Methylene Chloride	1	54.1757	5.0839	50	98	50	130
Acrolein	1	259.5406	0	200	130	20	130
Acrylonitrile	1	35.0489	0	50	70	20	130
Iodomethane	1	65.8217	0	50	132*	50	130
Acetone	1	162.1024	0	200	81	20	130
Carbon Disulfide	1	49.643	0	50	99	50	130
t-Butyl Alcohol	1	127.633	0	200	64	20	130
n-Hexane	1	58.3019	0	50	117	50	130
Di-isopropyl-ether	1	55.5257	0	50	111	50	130
1,1-Dichloroethene	1	53.6783	0	50	107	50	130
Methyl Acetate	1	50.8647	0	50	102	50	130
Methyl-t-butyl ether	1	57.9525	0	50	116	50	130
1,1-Dichloroethane	1	52.194	0	50	104	50	130
trans-1,2-Dichloroethene	1	49.8849	0	50	100	50	130
Ethyl-t-butyl ether	1	51.0834	0	50	102	50	130
cis-1,2-Dichloroethene	1	51.2312	0	50	102	50	130
Bromochloromethane	1	53.4537	0	50	107	50	130
2,2-Dichloropropane	1	58.147	0	50	116	50	130
Ethyl acetate	1	33.6297	0	50	67	50	130
1,4-Dioxane	1	1315.993	0	2500	53	50	130
1,1-Dichloropropene	1	50.4388	0	50	101	50	130
Chloroform	1	51.9592	0	50	104	50	130
Cyclohexane	1	52.7667	0	50	106	50	130
1,2-Dichloroethane	1	52.776	0	50	106	50	130
2-Butanone	1	34.6742	0	50	69	20	130
1,1,1-Trichloroethane	1	52.2007	0	50	104	50	130
Carbon Tetrachloride	1	53.6249	0	50	107	50	130
Vinyl Acetate	1	39.662	0	50	79	50	130
Bromodichloromethane	1	52.8916	0	50	106	50	130
Methylcyclohexane	1	51.9779	0	50	104	50	130
Dibromomethane	1	50.6971	0	50	101	50	130
1,2-Dichloropropane	1	49.6665	0	50	99	50	130
Trichloroethene	1	75.2922	21.8	50	107	50	130
Benzene	1	50.3163	0	50	101	50	130
tert-Amyl methyl ether	1	56.2173	0	50	112	50	130
Iso-propylacetate	1	42.6062	0	50	85	50	130
Methyl methacrylate	1	41.2272	0	50	82	50	130
Dibromochloromethane	1	48.1401	0	50	96	50	130
2-Chloroethylvinylether	1	100.3461	0	50	201*	50	130
cis-1,3-Dichloropropene	1	46.6773	0	50	93	50	130
trans-1,3-Dichloropropene	1	47.5296	0	50	95	50	130
Ethyl methacrylate	1	46.9747	0	50	94	50	130
1,1,2-Trichloroethane	1	46.8811	0	50	94	50	130
1,2-Dibromoethane	1	44.9778	0	50	90	50	130
1,3-Dichloropropane	1	46.3511	0	50	93	50	130
4-Methyl-2-Pentanone	1	36.7572	0	50	74	20	130
2-Hexanone	1	34.1195	0	50	68	20	130
Tetrachloroethene	1	52.4352	10.8224	50	83	50	130
Toluene	1	40.7723	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.2612	0	50	91	50	130
Chlorobenzene	1	40.3151	0	50	81	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	45.4686	0	50	91	50	130
n-Amyl acetate	1	44.7211	0	50	89	50	130
Bromoform	**1**	**70.4273**	**0**	**50**	**141***	**20**	**130**
Ethylbenzene	**1**	**42.7105**	**0**	**50**	**85**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**44.1548**	**0**	**50**	**88**	**50**	**130**
Styrene	**1**	**40.2637**	**0**	**50**	**81**	**50**	**130**
m&p-Xylenes	**1**	**78.8436**	**0**	**100**	**79**	**50**	**130**
o-Xylene	**1**	**39.4447**	**0**	**50**	**79**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	40.8268	0	50	82	20	130
1,3-Dichlorobenzene	**1**	**37.8242**	**0**	**50**	**76**	**50**	**130**
1,4-Dichlorobenzene	**1**	**36.8102**	**0**	**50**	**74**	**50**	**130**
1,2-Dichlorobenzene	**1**	**39.293**	**0**	**50**	**79**	**50**	**130**
Isopropylbenzene	**1**	**40.7047**	**0**	**50**	**81**	**50**	**130**
Cyclohexanone	1	135.2346	0	250	54	50	130
Camphene	1	42.2018	0	50	84	50	130
1,2,3-Trichloropropane	**1**	**41.2923**	**0**	**50**	**83**	**50**	**130**
2-Chlorotoluene	1	41.5022	0	50	83	50	130
p-Ethyltoluene	1	37.3405	0	50	75	50	130
4-Chlorotoluene	1	39.557	0	50	79	50	130
n-Propylbenzene	**1**	**39.5838**	**0**	**50**	**79**	**50**	**130**
Bromobenzene	1	39.8882	0	50	80	50	130
1,3,5-Trimethylbenzene	**1**	**44.2606**	**0**	**50**	**89**	**50**	**130**
Butyl methacrylate	1	44.8847	0	50	90	50	130
t-Butylbenzene	**1**	**40.8828**	**0**	**50**	**82**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**39.8077**	**0**	**50**	**80**	**50**	**130**
sec-Butylbenzene	**1**	**41.2564**	**0**	**50**	**83**	**50**	**130**
4-Isopropyltoluene	**1**	**40.7458**	**0**	**50**	**81**	**50**	**130**
n-Butylbenzene	**1**	**38.6688**	**0**	**50**	**77**	**50**	**130**
p-Diethylbenzene	1	38.5083	0	50	77	50	130
1,2,4,5-Tetramethylbenzene	1	41.4972	0	50	83	50	130
1,2-Dibromo-3-Chloropropane	1	36.9535	0	50	74	50	130
Camphor	1	547.1421	0	500	109	50	130
Hexachlorobutadiene	1	36.7858	0	50	74	50	130
1,2,4-Trichlorobenzene	1	33.9584	0	50	68	50	130
1,2,3-Trichlorobenzene	1	34.7254	0	50	69	50	130
Naphthalene	1	35.4652	0	50	71	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Duplicate(If applicable):	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	53.7847	56.9035	5.6	30
Dichlorodifluoromethane	1	65.4838	62.8668	4.1	30
Chloromethane	1	56.6472	56.1541	0.87	30
Bromomethane	1	51.6003	50.2121	2.7	30
Vinyl Chloride	1	56.8458	56.1453	1.2	40
Chloroethane	1	52.3136	51.908	0.78	30
Trichlorofluoromethane	1	52.2935	51.1041	2.3	30
Ethyl ether	1	49.7009	46.2834	7.1	30
Furan	1	47.2611	46.2299	2.2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	56.3197	52.3408	7.3	30
Methylene Chloride	1	54.1757	52.7897	2.6	30
Acrolein	1	259.5406	248.918	4.2	30
Acrylonitrile	1	35.0489	34.3463	2	30
Iodomethane	1	65.8217	64.5939	1.9	30
Acetone	1	162.1024	157.3904	2.9	30
Carbon Disulfide	1	49.643	47.3944	4.6	30
t-Butyl Alcohol	1	127.633	116.3514	9.2	30
n-Hexane	1	58.3019	54.7434	6.3	30
Di-isopropyl-ether	1	55.5257	54.2364	2.3	30
1,1-Dichloroethene	1	53.6783	52.2403	2.7	40
Methyl Acetate	1	50.8647	46.8893	8.1	30
Methyl-t-butyl ether	1	57.9525	54.3286	6.5	30
1,1-Dichloroethane	1	52.194	49.0593	6.2	40
trans-1,2-Dichloroethene	1	49.8849	49.6338	0.5	30
Ethyl-t-butyl ether	1	51.0834	49.3762	3.4	30
cis-1,2-Dichloroethene	1	51.2312	49.1894	4.1	30
Bromochloromethane	1	53.4537	50.2977	6.1	30
2,2-Dichloropropane	1	58.147	57.0601	1.9	30
Ethyl acetate	1	33.6297	36.7433	8.8	30
1,4-Dioxane	1	1315.993	1274.773	3.2	30
1,1-Dichloropropene	1	50.4388	48.5605	3.8	30
Chloroform	1	51.9592	49.9443	4	40
Cyclohexane	1	52.7667	50.8219	3.8	30
1,2-Dichloroethane	1	52.776	50.2019	5	40
2-Butanone	1	34.6742	33.5103	3.4	40
1,1,1-Trichloroethane	1	52.2007	49.0659	6.2	30
Carbon Tetrachloride	1	53.6249	51.644	3.8	40
Vinyl Acetate	1	39.662	37.6728	5.1	30
Bromodichloromethane	1	52.8916	50.2178	5.2	30
Methylcyclohexane	1	51.9779	50.4394	3	30
Dibromomethane	1	50.6971	47.858	5.8	30
1,2-Dichloropropane	1	49.6665	48.2694	2.9	30
Trichloroethene	1	75.2922	73.1622	2.9	40
Benzene	1	50.3163	48.4836	3.7	40
tert-Amyl methyl ether	1	56.2173	52.4065	7	30
Iso-propylacetate	1	42.6062	41.66	2.2	30
Methyl methacrylate	1	41.2272	39.8495	3.4	30
Dibromochloromethane	1	48.1401	45.6697	5.3	30
2-Chloroethylvinylether	1	100.3461	95.5322	4.9	30
cis-1,3-Dichloropropene	1	46.6773	45.5903	2.4	30
trans-1,3-Dichloropropene	1	47.5296	44.067	7.6	30
Ethyl methacrylate	1	46.9747	43.1348	8.5	30
1,1,2-Trichloroethane	1	46.8811	44.5196	5.2	30
1,2-Dibromoethane	1	44.9778	41.0321	9.2	30
1,3-Dichloropropane	1	46.3511	42.8237	7.9	30
4-Methyl-2-Pentanone	1	36.7572	33.7094	8.7	30
2-Hexanone	1	34.1195	30.8066	10	30
Tetrachloroethene	1	52.4352	50.6666	3.4	40
Toluene	1	40.7723	41.0645	0.71	40
1,1,1,2-Tetrachloroethane	1	45.2612	45.0505	0.47	30
Chlorobenzene	1	40.3151	39.6054	1.8	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits

QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	45.4686	41.0364	10	30
n-Amyl acetate	1	44.7211	38.5687	15	30
Bromoform	**1**	**70.4273**	**65.2935**	**7.6**	**30**
Ethylbenzene	**1**	**42.7105**	**42.9713**	**0.61**	**30**
1,1,2,2-Tetrachloroethane	**1**	**44.1548**	**40.0258**	**9.8**	**30**
Styrene	**1**	**40.2637**	**37.9266**	**6**	**30**
m&p-Xylenes	**1**	**78.8436**	**78.4306**	**0.53**	**30**
o-Xylene	**1**	**39.4447**	**39.2014**	**0.62**	**30**
trans-1,4-Dichloro-2-butene	1	40.8268	36.9711	9.9	30
1,3-Dichlorobenzene	**1**	**37.8242**	**35.471**	**6.4**	**30**
1,4-Dichlorobenzene	**1**	**36.8102**	**33.9467**	**8.1**	**40**
1,2-Dichlorobenzene	**1**	**39.293**	**35.8729**	**9.1**	**40**
Isopropylbenzene	**1**	**40.7047**	**40.7636**	**0.14**	**30**
Cyclohexanone	1	135.2346	125.4322	7.5	30
Camphene	1	42.2018	41.718	1.2	30
1,2,3-Trichloropropane	**1**	**41.2923**	**36.3643**	**13**	**30**
2-Chlorotoluene	1	41.5022	40.2726	3	30
p-Ethyltoluene	1	37.3405	36.6825	1.8	30
4-Chlorotoluene	1	39.557	37.6433	5	30
n-Propylbenzene	**1**	**39.5838**	**38.3835**	**3.1**	**40**
Bromobenzene	1	39.8882	38.8818	2.6	30
1,3,5-Trimethylbenzene	**1**	**44.2606**	**43.2564**	**2.3**	**30**
Butyl methacrylate	1	44.8847	41.2717	8.4	30
t-Butylbenzene	**1**	**40.8828**	**40.0099**	**2.2**	**30**
1,2,4-Trimethylbenzene	**1**	**39.8077**	**38.5263**	**3.3**	**30**
sec-Butylbenzene	**1**	**41.2564**	**40.366**	**2.2**	**40**
4-Isopropyltoluene	**1**	**40.7458**	**39.5065**	**3.1**	**30**
n-Butylbenzene	**1**	**38.6688**	**36.1879**	**6.6**	**30**
p-Diethylbenzene	1	38.5083	36.9323	4.2	30
1,2,4,5-Tetramethylbenzene	1	41.4972	37.6781	9.6	30
1,2-Dibromo-3-Chloropropane	1	36.9535	31.3599	16	30
Camphor	1	547.1421	473.298	14	30
Hexachlorobutadiene	1	36.7858	35.1542	4.5	30
1,2,4-Trichlorobenzene	1	33.9584	28.2306	18	30
1,2,3-Trichlorobenzene	1	34.7254	30.0156	15	30
Naphthalene	1	35.4652	30.4916	15	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Quantitation Report (QT Reviewed)

SampleID : AD18955-002(MS:AD18 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131889.D Sam Mult : 1 Vial# : 10 Qt On : 08/31/20 10:14
Acq On : 08/31/20 09:27 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	404386m	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	365118m	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.055	152	216510m	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	114161m	31.77	ug/l	0.00
Spiked Amount 30.000			Recovery =	105.90%		
39) 1,2-Dichloroethane-d4	4.934	67	57432m	29.64	ug/l	0.00
Spiked Amount 30.000			Recovery =	98.80%		
66) Toluene-d8	5.983	98	436041m	28.94	ug/l	0.00
Spiked Amount 30.000			Recovery =	96.47%		
76) Bromofluorobenzene	7.397	174	171115m	30.02	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.07%		
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	241976m	56.9035	ug/l	
6) Dichlorodifluoromethane	1.636	85	174139m	62.8668	ug/l	
7) Chloromethane	1.813	50	192771m	56.1541	ug/l	
8) Bromomethane	2.233	94	127985m	50.2121	ug/l	
9) Vinyl Chloride	1.916	62	223093m	56.1453	ug/l	
10) Chloroethane	2.325	64	140340m	51.9080	ug/l	
11) Trichlorofluoromethane	2.556	101	334282m	51.1041	ug/l	
12) Ethyl ether	2.806	59	111422m	46.2834	ug/l	
13) Furan	2.843	39	250341m	46.2299	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	130267m	52.3408	ug/l	
15) Methylene Chloride	3.434	84	193096	52.7897	ug/l	96
16) Acrolein	2.922	56	117483m	248.9180	ug/l	
17) Acrylonitrile	3.642	53	49112m	34.3463	ug/l	
18) Iodomethane	3.166	142	203252m	64.5939	ug/l	
19) Acetone	3.056	43	215927m	157.3904	ug/l	
20) Carbon Disulfide	3.233	76	432373m	47.3944	ug/l	
21) t-Butyl Alcohol	3.507	59	77365m	116.3514	ug/l	
22) n-Hexane	3.910	57	194550m	54.7434	ug/l	
23) Di-isopropyl-ether	4.062	45	459214m	54.2364	ug/l	
24) 1,1-Dichloroethene	3.020	61	239332m	52.2403	ug/l	
25) Methyl Acetate	3.337	43	132577m	46.8893	ug/l	
26) Methyl-t-butyl ether	3.672	73	393946m	54.3286	ug/l	
27) 1,1-Dichloroethane	4.026	63	291073m	49.0593	ug/l	
28) trans-1,2-Dichloroethene	3.678	96	171170	49.6338	ug/l	96
29) Ethyl-t-butyl ether	4.324	59	457721	49.3762	ug/l	98
30) cis-1,2-Dichloroethene	4.440	61	295137	49.1894	ug/l	96
31) Bromochloromethane	4.593	49	138842	50.2977	ug/l	95
32) 2,2-Dichloropropane	4.446	77	275879	57.0601	ug/l	98
33) Ethyl acetate	4.465	43	156042m	36.7433	ug/l	
34) 1,4-Dioxane	5.519	88	94998m	1274.7732	ug/l	
35) 1,1-Dichloropropene	4.855	75	235113m	48.5605	ug/l	
36) Chloroform	4.635	83	312759m	49.9443	ug/l	
38) Cyclohexane	4.800	56	251972m	50.8219	ug/l	
40) 1,2-Dichloroethane	4.977	62	234998m	50.2019	ug/l	
41) 2-Butanone	4.434	43	67254m	33.5103	ug/l	
42) 1,1,1-Trichloroethane	4.763	97	275064m	49.0659	ug/l	
43) Carbon Tetrachloride	4.861	117	247208	51.6440	ug/l	99
44) Vinyl Acetate	4.056	43	380673m	37.6728	ug/l	
45) Bromodichloromethane	5.592	83	220507m	50.2178	ug/l	
46) Methylcyclohexane	5.446	83	256399m	50.4394	ug/l	
47) Dibromomethane	5.525	174	109389m	47.8580	ug/l	
48) 1,2-Dichloropropane	5.458	63	168392m	48.2694	ug/l	
49) Trichloroethene	5.330	130	289251m	73.1622	ug/l	
50) Benzene	4.977	78	661811m	48.4836	ug/l	
51) tert-Amyl methyl ether	5.019	73	418167m	52.4065	ug/l	
53) Iso-propylacetate	4.977	43	264907m	41.6600	ug/l	
54) Methyl methacrylate	5.483	41	123801m	39.8495	ug/l	
55) Dibromochloromethane	6.446	129	156496m	45.6697	ug/l	
56) 2-Chloroethylvinylether	5.733	63	92327m	95.5322	ug/l	
57) cis-1,3-Dichloropropene	5.830	75	248086m	45.5903	ug/l	
58) trans-1,3-Dichloropropene	6.117	75	209914	44.0670	ug/l	96
59) Ethyl methacrylate	6.135	41	132995m	43.1348	ug/l	
60) 1,1,2-Trichloroethane	6.220	97	139555m	44.5196	ug/l	
61) 1,2-Dibromoethane	6.525	107	133517m	41.0321	ug/l	
62) 1,3-Dichloropropane	6.318	76	237531m	42.8237	ug/l	
63) 4-Methyl-2-Pentanone	5.897	43	143574m	33.7094	ug/l	
64) 2-Hexanone	6.330	43	103361m	30.8066	ug/l	
65) Tetrachloroethene	6.318	164	171399m	50.6666	ug/l	
67) Toluene	6.019	92	405389m	41.0645	ug/l	

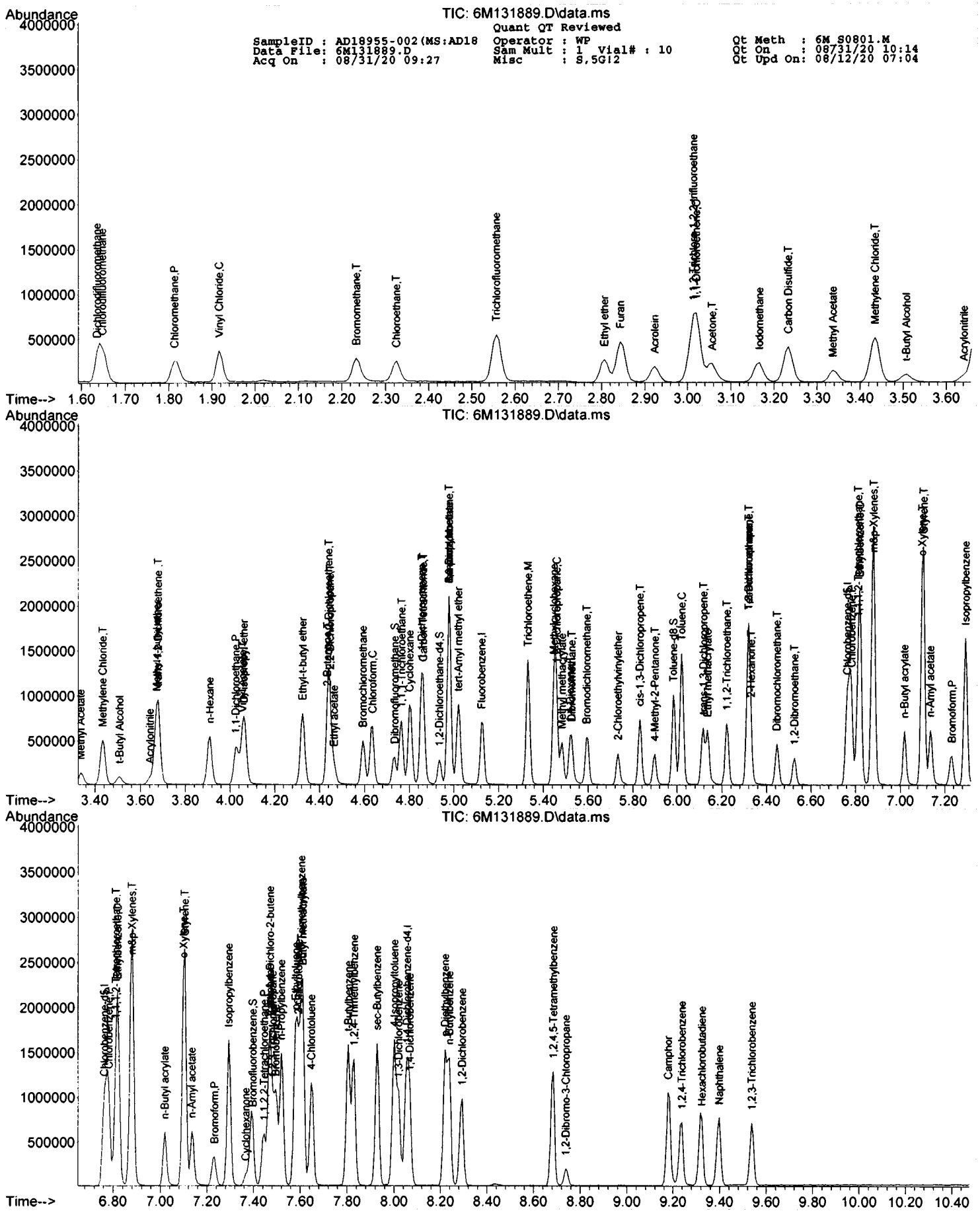
Quantitation Report (QT Reviewed)

SampleID : AD18955-002(MS:AD18 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131889.D Sam Mult : 1 Vial# : 10 Qt On : 08/31/20 10:14
Acq On : 08/31/20 09:27 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	158896m	45.0505	ug/l	
69)	Chlorobenzene	6.781	112	427255m	39.6054	ug/l	
71)	n-Butyl acrylate	7.019	55	253801m	41.0364	ug/l	
72)	n-Amyl acetate	7.135	43	225548m	38.5687	ug/l	
73)	Bromoform	7.232	173	101877m	65.2935	ug/l	
74)	Ethylbenzene	6.818	106	205504m	42.9713	ug/l	
75)	1,1,2,2-Tetrachloroethane	7.446	83	184589m	40.0258	ug/l	
77)	Styrene	7.104	104	448727m	37.9266	ug/l	
78)	m&p-Xylenes	6.879	106	562647m	78.4306	ug/l	
79)	o-Xylene	7.098	106	277297m	39.2014	ug/l	
80)	trans-1,4-Dichloro-2-b...	7.470	53	82936m	36.9711	ug/l	
81)	1,3-Dichlorobenzene	8.019	146	314004m	35.4710	ug/l	
82)	1,4-Dichlorobenzene	8.068	146	310007m	33.9467	ug/l	
83)	1,2-Dichlorobenzene	8.293	146	296586m	35.8729	ug/l	
84)	Isopropylbenzene	7.293	105	749398m	40.7636	ug/l	
85)	Cyclohexanone	7.367	55	31846m	125.4322	ug/l	
86)	Camphene	7.470	93	279094m	41.7180	ug/l	
87)	1,2,3-Trichloropropane	7.482	75	216322m	36.3643	ug/l	
88)	2-Chlorotoluene	7.592	91	443734m	40.2726	ug/l	
89)	p-Ethyltoluene	7.580	105	692055m	36.6825	ug/l	
90)	4-Chlorotoluene	7.647	91	406806m	37.6433	ug/l	
91)	n-Propylbenzene	7.519	91	827645m	38.3835	ug/l	
92)	Bromobenzene	7.495	77	439627m	38.8818	ug/l	
93)	1,3,5-Trimethylbenzene	7.604	105	571379m	43.2564	ug/l	
94)	Butyl methacrylate	7.610	41	210167m	41.2717	ug/l	
95)	t-Butylbenzene	7.805	119	601281m	40.0099	ug/l	
96)	1,2,4-Trimethylbenzene	7.830	105	574497m	38.5263	ug/l	
97)	sec-Butylbenzene	7.927	105	772048m	40.3660	ug/l	
98)	4-Isopropyltoluene	8.001	119	633873m	39.5065	ug/l	
99)	n-Butylbenzene	8.238	91	661894m	36.1879	ug/l	
100)	p-Diethylbenzene	8.220	119	351403m	36.9323	ug/l	
101)	1,2,4,5-Tetramethylben...	8.683	119	506777m	37.6781	ug/l	
102)	1,2-Dibromo-3-Chloropr...	8.738	157	38297m	31.3599	ug/l	
103)	Camphor	9.177	95	197539m	473.2980	ug/l	
104)	Hexachlorobutadiene	9.323	225	116846m	35.1542	ug/l	
105)	1,2,4-Trichlorobenzene	9.238	180	169258m	28.2306	ug/l	
106)	1,2,3-Trichlorobenzene	9.537	180	163776m	30.0156	ug/l	
107)	Naphthalene	9.397	128	457667	30.4916	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 6M131889.D\data.ms
Quant QT Reviewed
SampleID : AD18955-002(MS:AD18
Data File: 6M131889.D
Acq On : 08/31/20 09:27
Operator : WP
Sam Mult : 1 Vial# : 10
Misc : S,5G12
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 10:14
Qt Upd On: 08/12/20 07:04
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : AD18955-003(MSD:AD1 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131890.D Sam Mult : 1 Vial# : 11 Qt On : 08/31/20 10:30
Acq On : 08/31/20 09:48 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	402783m	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	369710m	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	220478m	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	113499m	31.71	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.70%			
39) 1,2-Dichloroethane-d4	4.934	67	57745m	29.92	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.73%			
66) Toluene-d8	5.983	98	434456m	28.48	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.93%			
76) Bromofluorobenzene	7.397	174	165521m	28.52	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.07%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	227807m	53.7847	ug/l	
6) Dichlorodifluoromethane	1.636	85	180669m	65.4838	ug/l	
7) Chloromethane	1.813	50	193642m	56.6472	ug/l	
8) Bromomethane	2.233	94	131002m	51.6003	ug/l	
9) Vinyl Chloride	1.916	62	224981m	56.8458	ug/l	
10) Chloroethane	2.325	64	140876m	52.3136	ug/l	
11) Trichlorofluoromethane	2.556	101	340706m	52.2935	ug/l	
12) Ethyl ether	2.806	59	119175m	49.7009	ug/l	
13) Furan	2.843	39	254911m	47.2611	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	139614m	56.3197	ug/l	
15) Methylene Chloride	3.434	84	197380m	54.1757	ug/l	
16) Acrolein	2.922	56	122011m	259.5406	ug/l	
17) Acrylonitrile	3.642	53	49918m	35.0489	ug/l	
18) Iodomethane	3.166	142	206361m	65.8217	ug/l	
19) Acetone	3.050	43	221510m	162.1024	ug/l	
20) Carbon Disulfide	3.233	76	451091m	49.6430	ug/l	
21) t-Butyl Alcohol	3.507	59	84530m	127.6330	ug/l	
22) n-Hexane	3.910	57	206375m	58.3019	ug/l	
23) Di-isopropyl-ether	4.062	45	468267m	55.5257	ug/l	
24) 1,1-Dichloroethene	3.020	61	244945m	53.6783	ug/l	
25) Methyl Acetate	3.337	43	143247m	50.8647	ug/l	
26) Methyl-t-butyl ether	3.672	73	418558m	57.9525	ug/l	
27) 1,1-Dichloroethane	4.026	63	308444m	52.1940	ug/l	
28) trans-1,2-Dichloroethene	3.678	96	171354m	49.8849	ug/l	
29) Ethyl-t-butyl ether	4.324	59	471670m	51.0834	ug/l	
30) cis-1,2-Dichloroethene	4.440	61	306169m	51.2312	ug/l	
31) Bromochloromethane	4.593	49	146969m	53.4537	ug/l	
32) 2,2-Dichloropropane	4.446	77	280020m	58.1470	ug/l	
33) Ethyl acetate	4.465	43	142253m	33.6297	ug/l	
34) 1,4-Dioxane	5.519	88	97681m	1315.9929	ug/l	
35) 1,1-Dichloropropene	4.855	75	243239m	50.4388	ug/l	
36) Chloroform	4.629	83	324087m	51.9592	ug/l	
38) Cyclohexane	4.800	56	260577m	52.7667	ug/l	
40) 1,2-Dichloroethane	4.977	62	246068m	52.7760	ug/l	
41) 2-Butanone	4.434	43	69314m	34.6742	ug/l	
42) 1,1,1-Trichloroethane	4.763	97	291478m	52.2007	ug/l	
43) Carbon Tetrachloride	4.861	117	255673m	53.6249	ug/l	
44) Vinyl Acetate	4.056	43	399185m	39.6620	ug/l	
45) Bromodichloromethane	5.592	83	231327m	52.8916	ug/l	
46) Methylcyclohexane	5.446	83	263172m	51.9779	ug/l	
47) Dibromomethane	5.525	174	115419m	50.6971	ug/l	
48) 1,2-Dichloropropane	5.458	63	172579m	49.6665	ug/l	
49) Trichloroethene	5.330	130	296492m	75.2922	ug/l	
50) Benzene	4.977	78	684105m	50.3163	ug/l	
51) tert-Amyl methyl ether	5.019	73	446797m	56.2173	ug/l	
53) Iso-propylacetate	4.977	43	274331m	42.6062	ug/l	
54) Methyl methacrylate	5.483	41	129692m	41.2272	ug/l	
55) Dibromochloromethane	6.446	129	167036m	48.1401	ug/l	
56) 2-Chloroethylvinylether	5.733	63	98199m	100.3461	ug/l	
57) cis-1,3-Dichloropropene	5.830	75	257196m	46.6773	ug/l	
58) trans-1,3-Dichloropropene	6.117	75	229256m	47.5296	ug/l	
59) Ethyl methacrylate	6.135	41	146656m	46.9747	ug/l	
60) 1,1,2-Trichloroethane	6.220	97	148806m	46.8811	ug/l	
61) 1,2-Dibromoethane	6.525	107	148197m	44.9778	ug/l	
62) 1,3-Dichloropropane	6.318	76	260330m	46.3511	ug/l	
63) 4-Methyl-2-Pentanone	5.897	43	158524m	36.7572	ug/l	
64) 2-Hexanone	6.330	43	115916m	34.1195	ug/l	
65) Tetrachloroethene	6.318	164	179613m	52.4352	ug/l	
67) Toluene	6.019	92	407567m	40.7723	ug/l	

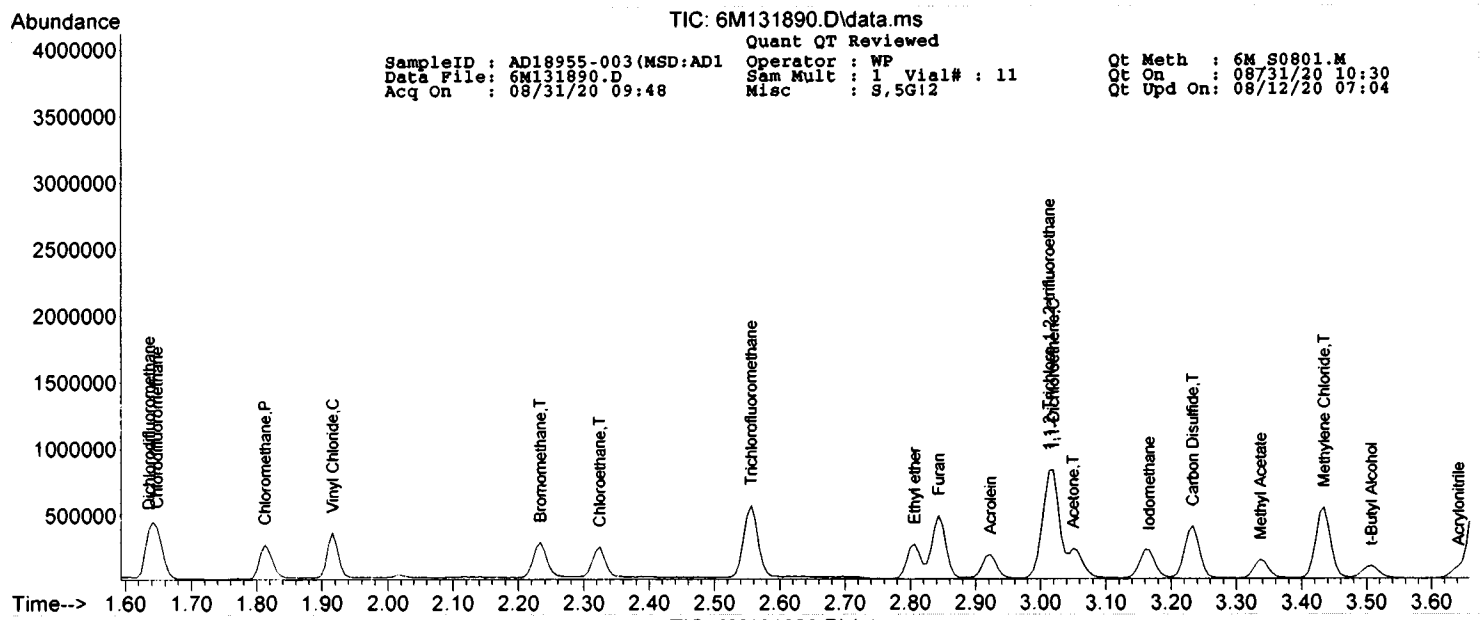
Quantitation Report (QT Reviewed)

SampleID : AD18955-003(MSD:AD1 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131890.D Sam Mult : 1 Vial# : 11 Qt On : 08/31/20 10:30
Acq On : 08/31/20 09:48 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	161647m	45.2612	ug/l	
69)	Chlorobenzene	6.781	112	440381m	40.3151	ug/l	
71)	n-Butyl acrylate	7.019	55	286367m	45.4686	ug/l	
72)	n-Amyl acetate	7.135	43	266320m	44.7211	ug/l	
73)	Bromoform	7.232	173	113513m	70.4273	ug/l	
74)	Ethylbenzene	6.818	106	208000m	42.7105	ug/l	
75)	1,1,2,2-Tetrachloroethane	7.446	83	207363	44.1548	ug/l	97
77)	Styrene	7.104	104	485109m	40.2637	ug/l	
78)	m&p-Xylenes	6.879	106	575976m	78.8436	ug/l	
79)	o-Xylene	7.098	106	284131m	39.4447	ug/l	
80)	trans-1,4-Dichloro-2-b...	7.470	53	93264	40.8268	ug/l	96
81)	1,3-Dichlorobenzene	8.019	146	340972	37.8242	ug/l	98
82)	1,4-Dichlorobenzene	8.068	146	342318	36.8102	ug/l	100
83)	1,2-Dichlorobenzene	8.293	146	330816	39.2930	ug/l	98
84)	Isopropylbenzene	7.293	105	762031	40.7047	ug/l	99
85)	Cyclohexanone	7.373	55	34964	135.2346	ug/l	94
86)	Camphene	7.470	93	287505	42.2018	ug/l	100
87)	1,2,3-Trichloropropane	7.482	75	250139	41.2923	ug/l	98
88)	2-Chlorotoluene	7.592	91	465663	41.5022	ug/l	99
89)	p-Ethyltoluene	7.580	105	717379m	37.3405	ug/l	
90)	4-Chlorotoluene	7.647	91	435321	39.5570	ug/l	98
91)	n-Propylbenzene	7.519	91	869168	39.5838	ug/l	99
92)	Bromobenzene	7.495	77	459272	39.8882	ug/l	99
93)	1,3,5-Trimethylbenzene	7.604	105	595359m	44.2606	ug/l	
94)	Butyl methacrylate	7.610	41	232180	44.8847	ug/l	89
95)	t-Butylbenzene	7.805	119	625659	40.8828	ug/l	100
96)	1,2,4-Trimethylbenzene	7.830	105	604484	39.8077	ug/l	99
97)	sec-Butylbenzene	7.927	105	803539	41.2564	ug/l	99
98)	4-Isopropyltoluene	8.001	119	665740	40.7458	ug/l	99
99)	n-Butylbenzene	8.238	91	720234	38.6688	ug/l	100
100)	p-Diethylbenzene	8.220	119	373113	38.5083	ug/l	100
101)	1,2,4,5-Tetramethylben...	8.683	119	568373	41.4972	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.744	157	45955	36.9535	ug/l	96
103)	Camphor	9.177	95	236342	547.1421	ug/l	99
104)	Hexachlorobutadiene	9.323	225	124510	36.7858	ug/l	97
105)	1,2,4-Trichlorobenzene	9.238	180	207331	33.9584	ug/l	97
106)	1,2,3-Trichlorobenzene	9.537	180	192947	34.7254	ug/l	98
107)	Naphthalene	9.397	128	542074	35.4652	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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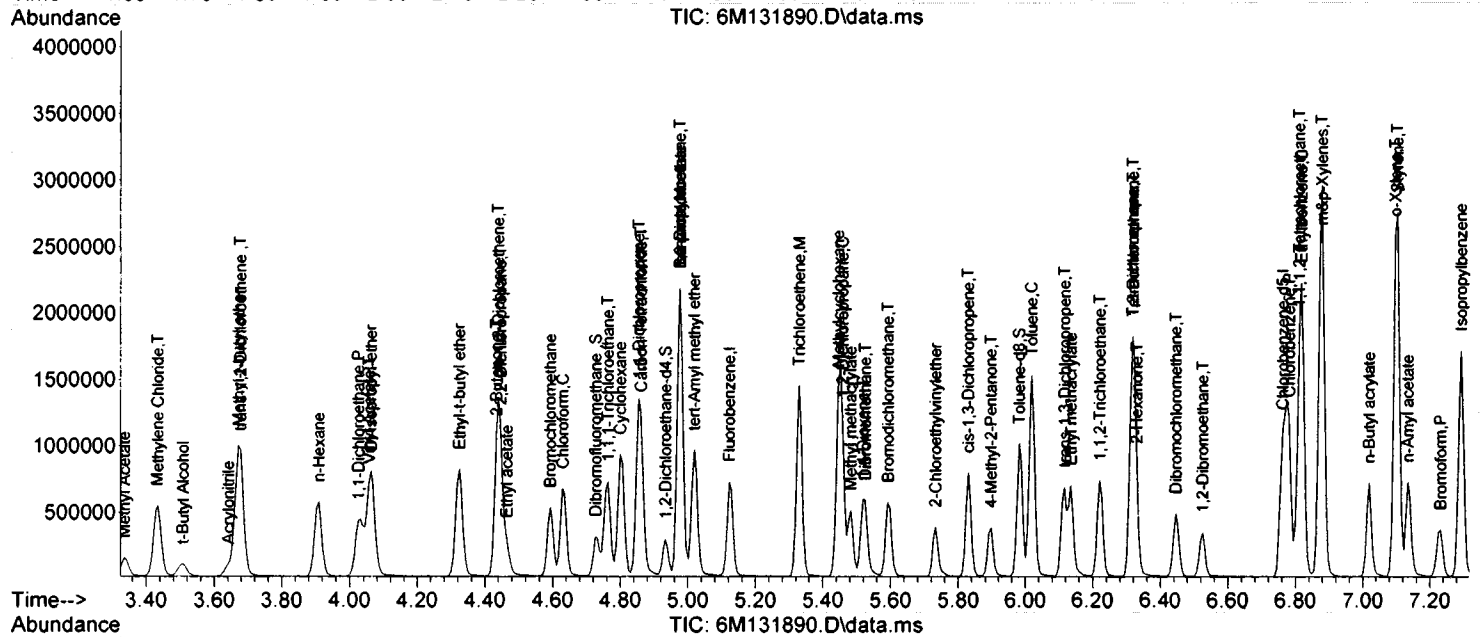
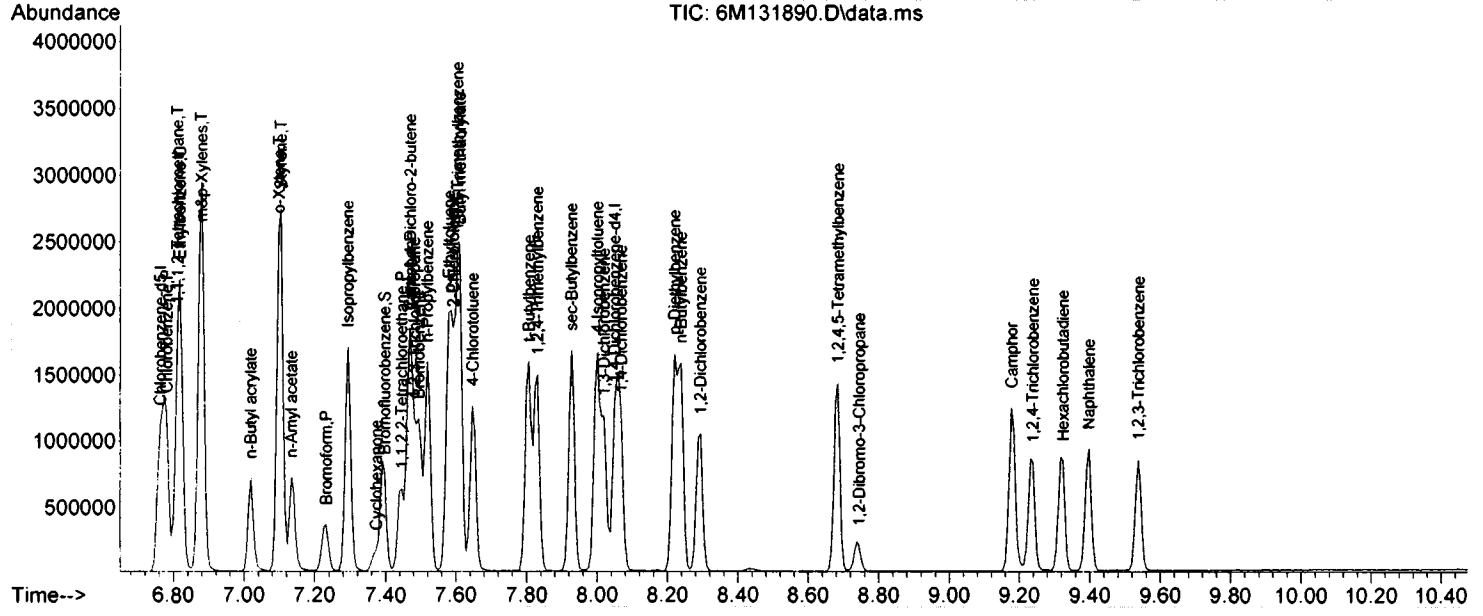
Quant QT Reviewed
SampleID : AD18955-003(MSD:AD1
Data File: 6M131890.D
Acq On : 08/31/20 09:48
Operator : WP
Sam Mult : 1 Vial# : 11
Misc : S,5G12
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 10:30
Qt Upd On: 08/12/20 07:04
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 6M131890.D\data.ms
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 6M131890.D\data.ms
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

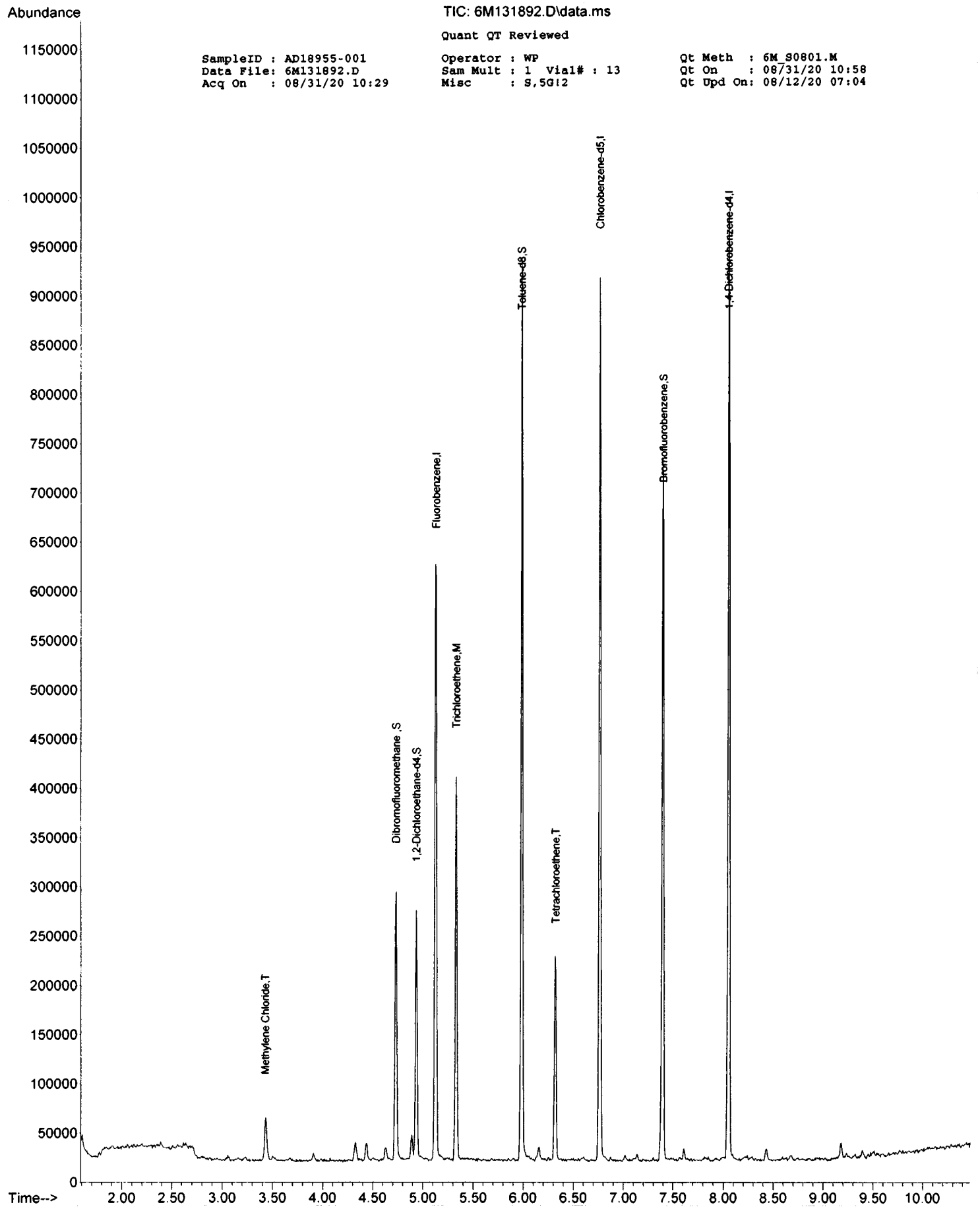
Quantitation Report (QT Reviewed)

SampleID : AD18955-001 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131892.D Sam Mult : 1 Vial# : 13 Qt On : 08/31/20 10:58
Acq On : 08/31/20 10:29 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	369414	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	347677	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	186441	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	104840	31.93	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.43%			
39) 1,2-Dichloroethane-d4	4.934	67	54002	30.50	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.67%			
66) Toluene-d8	5.983	98	392998	27.39	ug/l	0.00
Spiked Amount 30.000			Recovery = 91.30%			
76) Bromofluorobenzene	7.397	174	144989	29.54	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.47%			
Target Compounds						Qvalue
15) Methylene Chloride	3.428	84	16988	5.0839	ug/l	96
49) Trichloroethene	5.330	130	78734	21.8000	ug/l	91
65) Tetrachloroethene	6.324	164	34862	10.8224	ug/l	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M131892.D\data.ms
Quant QT Reviewed
SampleID : AD18955-001
Data File: 6M131892.D
Acq On : 08/31/20 10:29
Operator : WP
Sam Mult : 1 Vial# : 13
Misc : S,5G!2
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 10:58
Qt Upd On: 08/12/20 07:04
Methylene Chloride,T
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

GC/MS Volatile Data
Logbook Data

RUN LOG

Instrument: GCMS_6 Year: 2020
Analyst: BK

1-1-6M130900

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
6M130900.	BFB TUNE		V-321115,V-321040,V-331408	BK 08/02/20						08/01 11:54
6M130901.	BLK	CnAnc				Soil	1	1	8260C	08/01 12:09
6M130902.	BLK	CnAnc				Soil	1	1	8260C	08/01 12:30
6M130903.	CAL @ 0.5 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 12:51
6M130904.	CAL @ 1 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 13:11
6M130905.	CAL @ 2 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 13:32
6M130906.	CAL @ 5 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 13:52
6M130907.	CAL @ 20 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 14:13
6M130908.	CAL @ 50 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 14:34
6M130909.	CAL @ 100 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 14:54
6M130910.	BLK	Is				Soil	1	1	8260C	08/01 15:15
6M130911.	CAL @ 250 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 15:36
6M130912.	BLK					Soil	1	1	8260C	08/01 15:56
6M130913.	CAL @ 500 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 16:17
6M130914.	BLK					Soil	1	1	8260C	08/01 16:37
6M130915.	BLK					Soil	1	1	8260C	08/01 16:58
6M130916.	BLK					Soil	1	1	8260C	08/01 17:19
6M130917.	500 PPB	S8Ao				Soil	1	1	8260C	08/01 17:39
6M130918.	BLK					Soil	1	1	8260C	08/01 18:00
6M130919.	BLK					Soil	1	1	8260C	08/01 18:21
6M130920.	250 PPB					Soil	1	1	8260C	08/01 18:41
6M130921.	BLK					Soil	1	1	8260C	08/01 19:02
6M130922.	BLK					Soil	1	1	8260C	08/01 19:22
6M130923.	BLK					Soil	1	1	8260C	08/01 19:43
6M130924.	BLK					Soil	1	1	8260C	08/01 20:04
6M130925.	ICV	IvoSd	V-332451	BK 08/02/20		Soil	2.5	1	8260C	08/01 20:24
6M130926.	BLK					Soil	1	1	8260C	08/01 20:45
6M130927.	CCV					Soil	1	1	8260C	08/01 21:05
6M130928.	BLK					Soil	1	1	8260C	08/01 21:26
6M130929.	BLK					Soil	1	1	8260C	08/01 21:47
6M130930.	BLK					Soil	1	1	8260C	08/01 22:07
6M130931.	BLK					Soil	1	1	8260C	08/01 22:28
6M130932.	BLK					Soil	1	1	8260C	08/01 22:49
6M130933.	DAILY BLANK					Soil	1	1	8260C	08/01 23:09

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tclp/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for eoh
B8m	Blank 8000 series missing	Eto	Tclp Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evm	Eval Mix missing drlt or endda
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rpd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rpd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmst csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a samol	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

0082707 0231

RUN LOG

Instrument: GCMS_2 Year: 2020
Analyst: SG

1-1-2M141271

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
2M141271.	BFB TUNE		V-330632,V-330631,V-333805	WP 08/27/20						08/26 11:49
2M141273.	CAL @ 0.5 PPB		B-29590	WP 08/27/20		Aqueous	1	1	624\8260	08/26 12:25
2M141274.	CAL @ 1 PPB		B-29590	WP 08/27/20		Aqueous	1	1	624\8260	08/26 12:44
2M141275.	CAL @ 5 PPB		B-29590	WP 08/27/20		Aqueous	1	1	624\8260	08/26 13:04
2M141276.	CAL @ 10 PPB		B-29590	WP 08/27/20		Aqueous	1	1	624\8260	08/26 13:23
2M141277.	CAL @ 20 PPB		B-29590	WP 08/27/20		Aqueous	1	1	624\8260	08/26 13:43
2M141279.	CAL @ 50 PPB		B-29590	WP 08/27/20		Aqueous	1	1	624\8260	08/26 14:22
2M141280.	CAL @ 500 PPB		B-29590	WP 08/27/20		Aqueous	1	1	624\8260	08/26 14:42
2M141283.	CAL @ 250 PPB		B-29590	WP 08/27/20		Aqueous	1	1	624\8260	08/26 15:40
2M141286.	CAL @ 100 PPB		B-29590	WP 08/27/20		Aqueous	1	1	624\8260	08/26 16:39
2M141290.	ICV	IvoS6S8Bnf	V-333815	WP 08/27/20		Aqueous	1	1	624\8260	08/26 17:57
2M141291.	STD	Bnf				Aqueous	1	1	624\8260	08/26 18:16

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Exm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tcln/Solvent Extraction Date Missng/Not check'd	Cro	C30/C20 failed for eqh
B8m	Blank 8000 series missing	Eto	Tcln Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evro	Eval Mix missing drll or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rrd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rrd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmb with calmd csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Co	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Prpedy for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_2 Year: 2020
Analyst: SG

1-1-2M141348

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
2M141348.	BFB TUNE		V-330632,V-330631,V-333162,V-333922	SG 08/28/20						08/28 06:55
2M141350.	CAL @ 20 PPB		ok	sg 08/28/20		Aqueous	1	1	624\8260	08/28 07:30
2M141352.	BLK-1	S6S8				Aqueous	1	1	624\8260	08/28 08:09
2M141353.	BLK-2					Aqueous	1	1	624\8260	08/28 08:28
2M141354.	BLK	B8m				Methano	1	1	8260C	08/28 08:48
2M141355.	DAILY BLANK		ok	sg 08/28/20		Aqueous	1	1	624\8260	08/28 09:07
2M141356.	BLK	B8m				Methano	1	1	8260C	08/28 09:27
2M141357.	AD18867-001(T)		ok MBS87436	sg 08/28/20	VOTCLP-826	Aqueous	1	1	624\8260	08/28 09:46
2M141358.	AD18896-001(T)		ok	sg 08/28/20	VOTCLP-826	Aqueous	1	1	8260C	08/28 10:06
2M141359.	BLK	B8m				Methano	1	1	8260C	08/28 10:26
2M141360.	MBS87436	M16M18	ok MBS87436	sg 08/28/20		Aqueous	1	1	624\8260	08/28 10:45
2M141361.	AD18785-004		ok	sg 08/28/20	VO-8260	Aqueous	1	1	8260C	08/28 11:05
2M141362.	AD18867-001(T:MS)		ok MBS87436	sg 08/28/20	VOTCLP-826	Aqueous	1	1	624\8260	08/28 11:24
2M141363.	AD18867-001(T:MS		OK MBS87436	SG 08/28/20	VOTCLP-826	Aqueous	1	1	624\8260	08/28 11:43
2M141364.	EF-1V-333199(0827					Aqueous	1	82720	8260C	08/28 12:03
2M141365.	BLK					Aqueous	1	1	624\8260	08/28 12:22
2M141366.	AD18934-008		OK	BK 08/30/20	VO-8260	Aqueous	1	1	8260C	08/28 12:42
2M141367.	AD18907-003		OK	BK 08/29/20	VO15-8260	Aqueous	1	1	8260C	08/28 13:01
2M141368.	AD18907-005		OK	BK 08/29/20	VO15-8260	Aqueous	1	1	8260C	08/28 13:21
2M141369.	BLK					Aqueous	1	1	624\8260	08/28 13:41
2M141370.	AD18941-009		OK	BK 08/29/20	VO15-8260	Aqueous	1	1	8260C	08/28 14:00
2M141371.	AD18941-008		OK	BK 08/29/20	VO15-8260	Aqueous	1	1	8260C	08/28 14:20
2M141372.	AD18934-006		OK	BK 08/30/20	VO-8260	Aqueous	1	1	8260C	08/28 14:39
2M141373.	AD18934-007		OK	BK 08/30/20	VO-8260	Aqueous	1	1	8260C	08/28 14:59
2M141374.	AD18914-007		OK	BK 08/29/20	VO15-8260	Aqueous	1	1	8260C	08/28 15:19
2M141375.	AD18941-001		OK	BK 08/29/20	VO15-8260	Aqueous	1	1	8260C	08/28 15:38
2M141376.	AD18941-002		OK	BK 08/29/20	VO15-8260	Aqueous	1	1	8260C	08/28 15:58
2M141377.	AD18941-003		OK	BK 08/29/20	VO15-8260	Aqueous	1	1	8260C	08/28 16:17
2M141378.	AD18941-004		OK	BK 08/29/20	VO15-8260	Aqueous	1	1	8260C	08/28 16:37
2M141379.	AD18941-005		OK	BK 08/29/20	VO15-8260	Aqueous	1	1	8260C	08/28 16:56
2M141380.	AD18941-006		OK	BK 08/29/20	VO15-8260	Aqueous	1	1	8260C	08/28 17:16
2M141381.	AD18941-007		OK	BK 08/29/20	VO15-8260	Aqueous	1	1	8260C	08/28 17:35
2M141382.	BLK					Aqueous	1	1	624\8260	08/28 17:55
2M141383.	AD18914-001		OK	BK 08/29/20	VO15-8260	Aqueous	1	1	8260C	08/28 18:14
2M141384.	AD18914-003	S8Ocf	RR-MEXT,RR-5X	BK 08/29/20,BK 09/01/20,BK 09/01/20,BK 09/01/20	VO15-8260	Aqueous	1	1	8260C	08/28 18:34
2M141385.	AD18914-005	S8Ocf	RR-MEXT,RR-5X	BK 08/29/20,BK 09/01/20,BK 09/01/20,BK 09/01/20	VO15-8260	Aqueous	1	1	8260C	08/28 18:53
2M141386.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	08/28 19:13
2M141387.	BLK	S6S8Ti6Ti8				Aqueous	1	1	624\8260	08/28 19:32
2M141388.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	08/28 19:52
2M141389.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	08/28 20:11
2M141390.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	08/28 20:31
2M141391.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	08/28 20:51
2M141392.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	08/28 21:11
2M141393.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	08/28 21:30
2M141394.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	08/28 21:50
2M141395.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	08/28 22:09

Anc	Area Not Checked	Fo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Fsm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Ftn	Tclo/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for enh
B8m	Blank 8000 series missing	Fto	Tclo Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Fv	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evrc	Eval Mix missing drll or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rpd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rpd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmd.csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Endrin Cal missing for sample (8000 series)	Iw	Initial cal warning. Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_6 Year: 2020
Analyst: WP

1-1-6M131881

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
6M131881.	BFB TUNE		V-330632,V-330631,V-333162,V-334001	SG 08/31/20						08/31 06:48
6M131882.	CAL @ 50 PPB	C16	OK	SG 08/31/20		Soil	0.4	1	624\8260	08/31 07:03
6M131883.	50 PPB	Sd				Soil	0.4	1	8260C	08/31 07:24
6M131884.	BLK					Soil	1	1	8260C	08/31 07:44
6M131885.	BLK					Soil	1	1	8260C	08/31 08:05
6M131886.	DAILY BLANK		OK	SG 08/31/20		Soil	1	1	8260C	08/31 08:25
6M131887.	AD18861-008(%SO				VO-8260	Soil	1	1	8260C	08/31 08:46
6M131888.	MBS87762	M18	OK MBS87762	SG 08/31/20		Soil	1	1	8260C	08/31 09:07
6M131889.	AD18955-002(MS:A	M18	OK MBS87762	SG 08/31/20	VO-8260	Soil	1	1	8260C	08/31 09:27
6M131890.	AD18955-003(MSD:	M18	OK MBS87762	SG 08/31/20	VO-8260	Soil	1	1	8260C	08/31 09:48
6M131891.	BLK					Soil	1	1	8260C	08/31 10:08
6M131892.	AD18955-001		OK MBS87762	SG 08/31/20	VO-8260	Soil	1	1	8260C	08/31 10:29
6M131893.	AD18955-004		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 10:49
6M131894.	AD18955-005		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 11:10
6M131895.	AD18908-001		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 11:31
6M131896.	AD18908-005	Ao	OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 11:51
6M131897.	AD18926-011		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 12:12
6M131898.	AD18926-014		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 12:32
6M131899.	AD18926-010		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 12:53
6M131900.	AD18934-001		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 13:13
6M131901.	AD18934-002		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 13:34
6M131902.	AD18934-003		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 13:55
6M131903.	AD18934-004		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 14:15
6M131904.	AD18927-009		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 14:36
6M131905.	AD18927-010		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 14:56
6M131906.	AD18927-011		RR-5g POS CO	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 15:17
6M131907.	AD18949-014		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 15:38
6M131908.	AD18929-001		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 15:58
6M131909.	AD18956-001		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 16:19
6M131910.	AD18956-002		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 16:39
6M131911.	AD18956-003		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 17:00
6M131912.	AD18922-001		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 17:21
6M131913.	AD18927-012	S8	RR-5g DIRTY	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 17:41
6M131914.	BLK					Soil	1	1	8260C	08/31 18:02
6M131915.	AD18917-001(5X)	S8Ao	RR-1g DIRTY	SG 09/01/20	VO-PA-FO82	Soil	1	5	8260C	08/31 18:22

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tclp/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for eph
B8m	Blank 8000 series missing	Eto	Tclp Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evrc	Eval Mix missing rdt or eodrdn
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rpd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rpd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmb with calmt csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Endrin Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a samnl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-313322

Prepared By: Revolus, Jean
Description: VOA ADD MIX
Prep Date: 10/4/2019
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 5000/25000 p
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
12762	p-Diethylbenzene	50 mg	NEAT	5000 ppm
12588	Methyl alcohol		neat neat	
12764	Cyclohexanone	250 mg	NEAT	25000 ppm
12815	p-Ethyltoluene	50 mg	NEAT	5000 ppm

Veritech Lot Number: V-313323

Prepared By: Revolus, Jean
Description: VOA ADD MIX(2nd Source)
Prep Date: 10/4/2019
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 5000/25000 p
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
12762	p-Diethylbenzene	50 mg	NEAT	5000 ppm
12588	Methyl alcohol		neat neat	
12764	Cyclohexanone	250 mg	NEAT	25000 ppm
12815	p-Ethyltoluene	50 mg	NEAT	5000 ppm

Veritech Lot Number: V-313324

Prepared By: Revolus, Jean
Description: Voa Extra Add Mix
Prep Date: 10/4/2019
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 2000-20000 p
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12588	Methyl alcohol	10 ml	neat neat	
12763	Isopropyl acetate	20 mg	NEAT	2000 ppm
11935	Ethyl acetate	20 mg	Neat	2000 ppm
11578	n-Amyl Acetate	20 mg	NEAT neat	2000 ppm
11931	Methyl methacrylate	20 mg	Neat	2000 ppm
9641	d-Camphor	200 mg	Neat	20000 ppm
12766	Ethyl methacrylate	20 mg	NEAT	2000 ppm
11933	n-Butyl acrylate	20 mg	Neat	2000 ppm
12761	Camphene	20 mg	NEAT	2000 ppm
11932	Butyl methacrylate	20 mg	Neat	2000 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-313325

Prepared By: Revolus, Jean
Department: Organics
ApprovedBy: akmal
Description: Voa Extra Add Mix(2nd Source)
BatchNumber:
ApproveDate: 10/07/19
Prep Date: 10/4/2019
Concentration: 2000-20000 p
Checked: Yes
Expiration Date: 10/4/2020
Final Volume: 10 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12588	Methyl alcohol	10 ml	neat neat	
11935	Ethyl acetate	20 mg	Neat	2000 ppm
12763	Isopropyl acetate	20 mg	NEAT	2000 ppm
11578	n-Amyl Acetate	20 mg	NEAT neat	2000 ppm
11931	Methyl methacrylate	20 mg	Neat	2000 ppm
12766	Ethyl methacrylate	20 mg	NEAT	2000 ppm
9641	d-Camphor	200 mg	Neat	20000 ppm
12761	Camphene	20 mg	NEAT	2000 ppm
11933	n-Butyl acrylate	20 mg	Neat	2000 ppm
11932	Butyl methacrylate	20 mg	Neat	2000 ppm

Veritech Lot Number: V-321040

Prepared By: Previlon, Wilner
Department: Organics
ApprovedBy: akmal
Description: VOA WORKING INT/SURR MIX
BatchNumber:
ApproveDate: 02/05/20
Prep Date: 2/3/2020
Concentration: 150 ppm
Checked: Yes
Expiration Date: 8/3/2020
Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	88 ml	neat neat	
12137	8260A Surrogates Mix	6 ml	2500 ppm	150 ppm
12138	8260A Internal Standard Mix	6 ml	2500 ppm	150 ppm

Veritech Lot Number: V-321115

Prepared By: Previlon, Wilner
Department: Organics
ApprovedBy: akmal
Description: BFB Tune Mix
BatchNumber:
ApproveDate: 02/05/20
Prep Date: 2/3/2020
Concentration: 50 ppm
Checked: Yes
Expiration Date: 8/3/2020
Final Volume: 1.5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-321040	VOA WORKING INT/SURR MIX	500 ul	150 ppm	50 ppm
12804	methyl alcohol	1000 ul	neat neat	

Veritech Lot Number: V-327582

Prepared By: Revolus, Jean
Department: Organics
ApprovedBy: akmal
Description: Ethyl ether/Furan Mix
BatchNumber:
ApproveDate: 05/18/20
Prep Date: 5/13/2020
Concentration: 5000 ppm
Checked: Yes
Expiration Date: 5/13/2021
Final Volume: 10 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13224	methyl alcohol	10 ml	neat neat	
13193	Ethyl ether	50 mg	Neat	5000 ppm
11587	Furan	50 mg	NEAT neat	5000 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-327585

Prepared By: Revolus, Jean
Description: Ethyl ether/Furan Mix(2ND SOURCE)
Prep Date: 5/13/2020
Expiration Date: 5/13/2021
Department: Organics
BatchNumber:
Concentration: 5000 ppm
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 05/18/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13224	methyl alcohol	10 ml	neat neat	
13193	Ethyl ether	50 mg	Neat	5000 ppm
11587	Furan	50 mg	NEAT neat	5000 ppm

Veritech Lot Number: V-328517

Prepared By: Revolus, Jean
Description: 20ppm Freon VOA Working Std
Prep Date: 5/28/2020
Expiration Date: 12/3/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 06/04/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12588	Methyl alcohol	900 ul	neat neat	neat
12435	Chlorodifluoromethane(Freon #22)	100 ul	200 ppm	200 ppm

Veritech Lot Number: V-330631

Prepared By: Previlon, Wilner
Description: VOA WORKING INT/SURR MIX
Prep Date: 7/1/2020
Expiration Date: 1/1/2021
Department: Organics
BatchNumber:
Concentration: 150 ppm
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 07/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	88 ml	neat neat	
12137	8260A Surrogates Mix	6 ml	2500 ppm	150 ppm
12138	8260A Internal Standard Mix	6 ml	2500 ppm	150 ppm

Veritech Lot Number: V-330632

Prepared By: Previlon, Wilner
Description: BFB Tune Mix
Prep Date: 7/1/2020
Expiration Date: 1/1/2021
Department: Organics
BatchNumber:
Concentration: 50 ppm
Final Volume: 1.5 ml
ApprovedBy: akmal
ApproveDate: 07/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330631	VOA WORKING INT/SURR MIX	500 ul	150 ppm	50 ppm
12804	methyl alcohol	1000 ul	neat neat	

Veritech Lot Number: V-330843

Prepared By: Kim, Benjamin
Description: 200ppm VOA Working Std
Prep Date: 7/4/2020
Expiration Date: 9/16/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 07/09/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	220 ul	neat neat	neat
12994	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
12775	502.2 Cal2000 Mega Mix	100 ul	2000 ppm	200 ppm
12907	EPA 8260 CAL. MIX 2	100 ul	2000 ppm	200 ppm
13124	Custom VOC Standard	100 ul	VARIOUS	various ppm
12774	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-313322	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-313324	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
V-327582	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
12992	Ethyl-tert-Butyl Ether(ETBTE)	100 ul	2000 ppm	200 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-330844

Prepared By: Kim, Benjamin
Description: 20ppm VOA Working Std
Prep Date: 7/4/2020
Expiration Date: 9/16/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 07/09/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	900 ul	neat neat	neat
V-330843	200ppm VOA Working Std	100 ul	VARIOUS pp	200 ppm

Veritech Lot Number: V-331408

Prepared By: Previlon, Wilner
Description: MBS
Prep Date: 7/14/2020
Expiration Date: 9/16/2020
Department: Organics
BatchNumber:
Concentration: 100 ppm
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	610 ul	neat neat	neat neat
12776	502.2 Cal Mix #1(gases)	50 ul	2000 ppm	100 ppm
12605	Epa 502/524 VO Org Mix(2nd Sources)	50 ul	2000 ppm	100 ppm
12913	EPA 8260 CAL MIX 2	50 ul	2000 ppm	100 ppm
13124	Custom VOC Standard	50 ul	VARIOUS	various ppm
12993	tert-Amyl Methyl Ether	50 ul	2000 ppm	100 ppm
V-313323	VOA ADD MIX(2nd Source)	20 ul	5000/25000 p	various ppm
V-313325	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-327585	Ethyl ether/Furan Mix(2ND SOURCE)	20 ul	5000 ppm	100 ppm
11674	Ethyl-tert-Butyl Ether(ETBE)	50 ul	2000 ppm	100 ppm

Veritech Lot Number: V-331858

Prepared By: Previlon, Wilner
Description: 200ppm VOA Working Std
Prep Date: 7/22/2020
Expiration Date: 9/16/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	220 ul	neat neat	neat
12994	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
13185	502.2 Cal2000 Mega Mix	100 ul	2000 ppm	200 ppm
12907	EPA 8260 CAL. MIX 2	100 ul	2000 ppm	200 ppm
13124	Custom VOC Standard	100 ul	VARIOUS	various ppm
12774	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-313322	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-327582	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
V-313324	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
12992	Ethyl-tert-Butyl Ether(ETBTE)	100 ul	2000 ppm	200 ppm

Veritech Lot Number: V-332441

Prepared By: Kim, Benjamin
Description: Soil8260 Stock @ 500 PPB
Prep Date: 8/1/2020
Expiration Date: 8/8/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS ppb
Final Volume: 40 ml
ApprovedBy: akmal
ApproveDate: 08/03/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331858	200ppm VOA Working Std	100 ul	VARIOUS pp	500 ppb
12833	P&T Water	40 ml	NEAT neat	neat
13197	Chlorodifluoromethane (freon #22)	100 ul	200 ppm	500 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332442

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 250 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	2.5 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	2.5 ml	VARIOUS pp	250 ppb

Veritech Lot Number: V-332443

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 100 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	1 ml	VARIOUS pp	100 ppb

Veritech Lot Number: V-332444

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 50 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.5 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.5 ml	VARIOUS pp	50 ppb

Veritech Lot Number: V-332445

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 20 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.8 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.2 ml	VARIOUS pp	20 ppb

Veritech Lot Number: V-332446

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 2 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.98 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	20 ul	VARIOUS pp	2 ppb

Veritech Lot Number: V-332447

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 5 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.95 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.05 ml	VARIOUS pp	5 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332448

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 1 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.99 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.01 ml	VARIOUS pp	1 ppb

Veritech Lot Number: V-332449

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 500 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-332441	Soil8260 Stock @ 500 PPB	5 ml	VARIOUS pp	500 ppb

Veritech Lot Number: V-332450

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 0.5 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.995 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.005 ml	VARIOUS pp	0.5 ppb

Veritech Lot Number: V-332451

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: ICV CAL @ 50 PPB | BatchNumber: | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	5 ml	NEAT neat	
V-331408	MBS	2.5 ul	100 ppm	50 ppb
13198	Chlorodifluoromethane (freon #22)	1.25 ul	200 ppm	50 ppb

Veritech Lot Number: V-333162

Prepared By: Goring, Shawn | Department: Organics | ApprovedBy: akmal
Description: MBS | BatchNumber: | ApproveDate: 08/17/20
Prep Date: 8/13/2020 | Concentration: 100 ppm | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	610 ul	neat neat	neat neat
13186	502.2 Cal Mix#1(Gases)	50 ul	2000 ppm	100 ppm
13185	502.2 Cal2000 Mega Mix	50 ul	2000 ppm	100 ppm
12913	EPA 8260 CAL MIX 2	50 ul	2000 ppm	100 ppm
13401	Custom VOC Standard(2nd Sources)	50 ul	VARIOUS	various ppm
12993	tert-Amyl Methyl Ether	50 ul	2000 ppm	100 ppm
V-313323	VOA ADD MIX(2nd Source)	20 ul	5000/25000 p	various ppm
V-313325	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-327585	Ethyl ether/Furan Mix(2ND SOURCE)	20 ul	5000 ppm	100 ppm
13038	Ethyl-tert-Butyl Ether (ETBE)	50 ul	2000 ppm	100 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333804

Prepared By: Previlon, Wilner
Description: 200ppm VOA Working Std
Prep Date: 8/26/2020
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	220 ul	neat neat	neat
12994	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
13185	502.2 Cal2000 Mega Mix	100 ul	2000 ppm	200 ppm
12907	EPA 8260 CAL. MIX 2	100 ul	2000 ppm	200 ppm
13400	Custom VOC Standard	100 ul	VARIOUS	various ppm
12774	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-313322	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-313324	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
V-327582	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
12992	Ethyl-tert-Butyl Ether(ETBTE)	100 ul	2000 ppm	200 ppm

Veritech Lot Number: V-333805

Prepared By: Previlon, Wilner
Description: MBS
Prep Date: 8/26/2020
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 100 ppm
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	610 ul	neat neat	neat neat
13186	502.2 Cal Mix#1(Gases)	50 ul	2000 ppm	100 ppm
13185	502.2 Cal2000 Mega Mix	50 ul	2000 ppm	100 ppm
12913	EPA 8260 CAL MIX 2	50 ul	2000 ppm	100 ppm
13401	Custom VOC Standard(2nd Sources)	50 ul	VARIOUS	various ppm
12993	tert-Amyl Methyl Ether	50 ul	2000 ppm	100 ppm
V-313323	VOA ADD MIX(2nd Source)	20 ul	5000/25000 p	various ppm
V-313325	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-327585	Ethyl ether/Furan Mix(2ND SOURCE)	20 ul	5000 ppm	100 ppm
13038	Ethyl-tert-Butyl Ether (ETBE)	50 ul	2000 ppm	100 ppm

Veritech Lot Number: V-333806

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 250 PPB
Prep Date: 8/26/2020
Expiration Date: 9/2/2020
Department: Organics
BatchNumber: B-29590
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333804	200ppm VOA Working Std	125 ul	VARIOUS pp	250 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	125 ul	200 ppm	250 ppb

Veritech Lot Number: V-333807

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 100 PPB
Prep Date: 8/26/2020
Expiration Date: 9/2/2020
Department: Organics
BatchNumber: B-29590
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333804	200ppm VOA Working Std	50 ul	VARIOUS pp	100 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	50 ul	200 ppm	100 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333808

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 50 PPB
Prep Date: 8/26/2020
Expiration Date: 9/2/2020
Department: Organics
BatchNumber: B-29590
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333804	200ppm VOA Working Std	25 ul	VARIOUS pp	50 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	25 ul	200 ppm	50 ppb

Veritech Lot Number: V-333809

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 20 PPB
Prep Date: 8/26/2020
Expiration Date: 9/2/2020
Department: Organics
BatchNumber: B-29590
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333804	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-333810

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 10 PPB
Prep Date: 8/26/2020
Expiration Date: 9/2/2020
Department: Organics
BatchNumber: B-29590
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330844	20ppm VOA Working Std	50 ul	VARIOUS pp	10 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	50 ul	VARIOUS pp	10 ppb

Veritech Lot Number: V-333811

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 5 PPB
Prep Date: 8/26/2020
Expiration Date: 9/2/2020
Department: Organics
BatchNumber: B-29590
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330844	20ppm VOA Working Std	25 ul	VARIOUS pp	5 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	25 ul	VARIOUS pp	5 ppb

Veritech Lot Number: V-333812

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 1 PPB
Prep Date: 8/26/2020
Expiration Date: 9/2/2020
Department: Organics
BatchNumber: B-29590
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330844	20ppm VOA Working Std	5 ul	VARIOUS pp	1 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	5 ul	VARIOUS pp	1 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333813

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 0.5 PPB | BatchNumber: B-29590 | ApproveDate: 09/01/20
Prep Date: 8/26/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/2/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330844	20ppm VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb

Veritech Lot Number: V-333814

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 500 PPB | BatchNumber: B-29590 | ApproveDate: 09/01/20
Prep Date: 8/26/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/2/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333804	200ppm VOA Working Std	250 ul	VARIOUS pp	500 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	250 ul	200 ppm	500 ppb

Veritech Lot Number: V-333815

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: ICV CAL @ 20 PPB | BatchNumber: | ApproveDate: 09/01/20
Prep Date: 8/26/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/2/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333805	MBS	20 ul	100 ppm	20 ppb
9712	P&T Water	100 ml	Neat neat	neat
13198	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-333922

Prepared By: Goring, Shawn | Department: Organics | ApprovedBy: akmal
Description: CAL @ 20 PPB | BatchNumber: | ApproveDate: 09/01/20
Prep Date: 8/28/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/4/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331858	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
12833	P&T Water	100 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-334001

Prepared By: Goring, Shawn | Department: Organics | ApprovedBy: akmal
Description: CAL @ 50 PPB | BatchNumber: | ApproveDate: 09/01/20
Prep Date: 8/31/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/1/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331858	200ppm VOA Working Std	1.25 ul	VARIOUS pp	50 ppb
12833	P&T Water	5 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	1.25 ul	200 ppm	50 ppb

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 2889

Description: 1,2,4,5-TETRAMETHYLBENZENE

ApprovedBy: jean
ApproveDate: 07/30/09
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACROS ORGANI	409390050	A0214190	11/20/07	11/30/20	Revolus, Jean	1	1ML	NEAT	

Veritech Control/Receipt Number: 9641

Description: d-Camphor

ApprovedBy: jean
ApproveDate: 08/11/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11556-1G	3256300	08/11/15	10/31/20	Revolus, Jean	2	1g	Neat	

Veritech Control/Receipt Number: 9712

Description: P&T Water

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Veritech	N/A	N/A	09/28/15	09/28/20	Goring, Shawn	1	N/A	Neat	Neat

Veritech Control/Receipt Number: 11578

Description: n-Amyl Acetate

ApprovedBy: akmal
ApproveDate: 04/03/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Chem Service	N-12508-1G	6972800	04/03/18	02/27/21	Hamid, Akmal	1	1G	NEAT	NEAT

Veritech Control/Receipt Number: 11587

Description: Furan

ApprovedBy: akmal
ApproveDate: 04/05/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Aldrich	185922	SHBG4510V	04/05/18	08/31/25	Hamid, Akmal	1	5ML	NEAT	NEAT

Veritech Control/Receipt Number: 11674

Description: Ethyl-tert-Butyl Ether(ETBE)

ApprovedBy: jean
ApproveDate: 05/14/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30628	A0137814	05/10/18	05/31/23	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 11931

Description: Methyl methacrylate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-12443-1G	7530100	08/22/18	03/31/21	Revolus, Jean	1	1g	Neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11932

Description: Butyl methacrylate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11371-1G	4695500	08/22/18	01/31/23	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 11933

Description: n-Butyl acrylate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-12513-1G	7528400	08/22/18	12/31/20	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 11935

Description: Ethyl acetate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11881-1G	7518400	08/22/18	05/31/22	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 12137

Description: 8260A Surrogates Mix

ApprovedBy: jean
ApproveDate: 11/21/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30240	A0138193	11/21/18	05/31/23	Revolus, Jean	17	1ml	2500	PPM

Veritech Control/Receipt Number: 12138

Description: 8260A Internal Standard Mix

ApprovedBy: jean
ApproveDate: 11/21/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30241	A0138856	11/21/18	06/30/23	Revolus, Jean	14	1ml	2500	PPM

Veritech Control/Receipt Number: 12435

Description: Chlorodifluoromethane(Freon #22)

ApprovedBy: jean
ApproveDate: 04/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	M-REF-03	217071159	04/18/19	07/12/27	Revolus, Jean	20	1ml	200	PPM

Veritech Control/Receipt Number: 12588

Description: Methyl alcohol

ApprovedBy: akmal
ApproveDate: 06/14/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	19010891	06/11/19	04/16/21	Lopez, Jose	6	1L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12605

Description: Epa 502/524 VO Org Mix(2nd Sources)

ApprovedBy: akmal
ApproveDate: 07/08/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SIGMA-ALDRICH	502111	LRAC0242	06/14/19	09/30/20	Revolus, Jean	10	1ml	2000	PPM

Veritech Control/Receipt Number: 12761

Description: Camphene

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11395-250G	8199400	09/19/19	01/31/22	Revolus, Jean	2	250m	NEAT	

Veritech Control/Receipt Number: 12762

Description: p-Diethylbenzene

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-12771-100MG	8949700	09/19/19	08/31/23	Revolus, Jean	4	100m	NEAT	

Veritech Control/Receipt Number: 12763

Description: Isopropyl acetate

ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-12223-1G	8816500	09/19/19	04/30/24	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12764

Description: Cyclohexanone

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11531-1G	8743900	09/19/19	05/31/23	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12766

Description: Ethyl methacrylate

ApprovedBy: jean
ApproveDate: 09/25/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11903-1G	8239900	09/19/19	01/31/23	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12774

Description: tert-Amyl Methyl Ether Standard

ApprovedBy: akmal
ApproveDate: 09/23/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30629	A0143927	09/20/19	12/31/23	Revolus, Jean	6	1ml	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12775

Description: 502.2 Cal2000 Mega Mix

ApprovedBy: akmal
ApproveDate: 09/23/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30431	A0146957	09/20/19	03/31/21	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 12776

Description: 502.2 Cal Mix #1(gases)

ApprovedBy: akmal
ApproveDate: 09/23/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30042	A0150712	09/20/19	03/31/26	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 12804

Description: methyl alcohol

ApprovedBy: akmal
ApproveDate: 02/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	19010891	09/30/19	03/16/21	Lopez, Jose	36	1L	neat	neat

Veritech Control/Receipt Number: 12815

Description: p-Ethyltoluene

ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEMSERVICE	N-12776-1G	7926200	10/03/19	12/31/21	Revolus, Jean	4	250 m	NEAT	

Veritech Control/Receipt Number: 12833

Description: P&T Water

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Veritech	N/A	N/A	10/14/19	10/14/25	Goring, Shawn	1	N/A	NEAT	NEAT

Veritech Control/Receipt Number: 12907

Description: EPA 8260 CAL. MIX 2

ApprovedBy: akmal
ApproveDate: 12/03/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SIGMA-ALDRICH	46831-U	LRAC3827	12/02/19	10/31/22	Hamid, Akmal	18	1.5ML	2000	PPM

Veritech Control/Receipt Number: 12913

Description: EPA 8260 CAL MIX 2

ApprovedBy: akmal
ApproveDate: 12/09/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Sigma- Addrich	4S6831-U	LRAC0052	12/09/19	10/31/20	Hamid, Akmal	15	1.5ML	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12992

Description: Ethyl-tert-Butyl Ether(ETBTE)

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30628	A0153073	01/08/20	09/30/24	Revolus, Jean	2	1ml	2000	PPM

Veritech Control/Receipt Number: 12993

Description: tert-Amyl Methyl Ether

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30629	A0143927	01/08/20	12/31/23	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 12994

Description: 502.2 Cal Mix #1(Gases)

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30042	A0153419	01/08/20	05/31/26	Revolus, Jean	10	1ml	2000	PPM

Veritech Control/Receipt Number: 13038

Description: Ethyl-tert-Butyl Ether (ETBE)

ApprovedBy: akmal
ApproveDate: 02/05/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30628	A0157135	02/03/20	01/31/25	Revolus, Jean	3	1ml	2000	PPM

Veritech Control/Receipt Number: 13124

Description: Custom VOC Standard

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	S-16418	220031197	03/17/20	09/16/20	Revolus, Jean	5	1ml	VARIOU	

Veritech Control/Receipt Number: 13150

Description: methyl alcohol

ApprovedBy: akmal
ApproveDate: 04/01/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	19010891	03/30/20	04/16/21	Lopez, Jose	42	1L	neat	neat

Veritech Control/Receipt Number: 13185

Description: 502.2 Cal2000 Mega Mix

ApprovedBy: jean
ApproveDate: 04/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30431	A0150913	04/15/20	07/31/21	Revolus, Jean	10	1ml	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13186

Description: 502.2 Cal Mix#1(Gases)

ApprovedBy: jean
ApproveDate: 04/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30042	A0156895	04/15/20	09/30/26	Revolus, Jean	10	1ml	2000	PPM

Veritech Control/Receipt Number: 13193

Description: Ethyl ether

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11897-1G	9150400	04/17/20	11/30/21	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 13197

Description: Chlorodifluoromethane (freon #22)

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	M-REF-03	219081587	04/17/20	09/11/29	Revolus, Jean	10	1ml	200	PPM

Veritech Control/Receipt Number: 13198

Description: Chlorodifluoromethane (freon #22)

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	M-REF-03	220011384	04/17/20	01/28/30	Revolus, Jean	10	1ml	200	PPM

Veritech Control/Receipt Number: 13224

Description: methyl alcohol

ApprovedBy: akmal
ApproveDate: 05/05/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	20030219	05/04/20	03/13/22	Lopez, Jose	6	1L	neat	neat

Veritech Control/Receipt Number: 13400

Description: Custom VOC Standard

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	S-16418	220071002	07/15/20	01/08/21	Revolus, Jean	5	1ml	VARIOU	

Veritech Control/Receipt Number: 13401

Description: Custom VOC Standard(2nd Sources)

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	S-16418	220071003	07/15/20	04/21/21	Revolus, Jean	5	1ml	VARIOU	

Metal Data

Metal Data
Sample Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-001	% Solid:	76	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-10	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	110	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A
7440-47-3	Chromium	6.6	21	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A
7440-50-8	Copper	6.6	25	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A
7439-92-1	Lead	6.6	21	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A
7439-96-5	Manganese	13	840	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	08/31/20	85228	H26170S	20	CV	HGCV3A
7440-02-0	Nickel	6.6	33	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A
7440-66-6	Zinc	13	150	1	0.5	50	08/31/20	85228	S26168A3	51	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-001	% Solid:	76	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-10	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.26	13	1	0.5	100	08/31/20	852293	120ANEW	44	MS	MS3_7700SWA
7440-41-7	Beryllium	0.26	0.88	1	0.5	100	08/31/20	852293	120ANEW	44	MS	MS3_7700SWA
7782-49-2	Selenium	2.6	ND	1	0.5	100	08/31/20	852293	120ANEW	44	MS	MS3_7700SWA
7440-22-4	Silver	0.26	ND	1	0.5	100	08/31/20	852293	120ANEW	44	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-002	% Solid:	75	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-8	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	45	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A
7440-47-3	Chromium	6.7	14	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A
7440-50-8	Copper	6.7	24	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A
7439-92-1	Lead	6.7	16	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A
7439-96-5	Manganese	13	320	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	08/31/20	85228	H26170S	23	CV	HGCV3A
7440-02-0	Nickel	6.7	25	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A
7440-66-6	Zinc	13	82	1	0.5	50	08/31/20	85228	S26168A3	52	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-002	% Solid:	75	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-8	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.27	11	1	0.5	100	08/31/20	852293	120ANEW	45	MS	MS3_7700SWA
7440-41-7	Beryllium	0.27	0.44	1	0.5	100	08/31/20	852293	120ANEW	45	MS	MS3_7700SWA
7782-49-2	Selenium	2.7	ND	1	0.5	100	08/31/20	852293	120ANEW	45	MS	MS3_7700SWA
7440-22-4	Silver	0.27	ND	1	0.5	100	08/31/20	852293	120ANEW	45	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-003	% Solid:	79	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-7	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	56	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A
7440-47-3	Chromium	6.3	14	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A
7440-50-8	Copper	6.3	23	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A
7439-92-1	Lead	6.3	110	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A
7439-96-5	Manganese	13	440	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	08/31/20	85228	H26170S	24	CV	HGCV3A
7440-02-0	Nickel	6.3	22	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A
7440-66-6	Zinc	13	80	1	0.5	50	08/31/20	85228	S26168A3	53	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-003	% Solid:	79	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-7	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	11	1	0.5	100	08/31/20	852293	120ANEW	46	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	0.33	1	0.5	100	08/31/20	852293	120ANEW	46	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	08/31/20	852293	120ANEW	46	MS	MS3_7700SWA
7440-22-4	Silver	0.25	ND	1	0.5	100	08/31/20	852293	120ANEW	46	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-004	% Solid:	80	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-9	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	53	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A
7440-47-3	Chromium	6.2	17	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A
7440-50-8	Copper	6.2	30	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A
7439-92-1	Lead	6.2	8.8	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A
7439-96-5	Manganese	12	750	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A
7439-97-6	Mercury	0.10	ND	1	0.15	25	08/31/20	85228	H26170S	25	CV	HGCV3A
7440-02-0	Nickel	6.2	23	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A
7440-66-6	Zinc	12	100	1	0.5	50	08/31/20	85228	S26168A3	54	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-004	% Solid:	80	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-9	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	12	1	0.5	100	08/31/20	852293	120ANEW	47	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	0.30	1	0.5	100	08/31/20	852293	120ANEW	47	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	08/31/20	852293	120ANEW	47	MS	MS3_7700SWA
7440-22-4	Silver	0.25	ND	1	0.5	100	08/31/20	852293	120ANEW	47	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-005	% Solid:	77	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-4	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	79	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A
7440-47-3	Chromium	6.5	15	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A
7440-50-8	Copper	6.5	43	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A
7439-92-1	Lead	6.5	83	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A
7439-96-5	Manganese	13	400	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	08/31/20	85228	H26170S	26	CV	HGCV3A
7440-02-0	Nickel	6.5	34	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A
7440-66-6	Zinc	13	100	1	0.5	50	08/31/20	85228	S26168A3	55	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-005	% Solid:	77	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-4	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.26	7.3	1	0.5	100	08/31/20	852293	120ANEW	48	MS	MS3_7700SWA
7440-41-7	Beryllium	0.26	0.38	1	0.5	100	08/31/20	852293	120ANEW	48	MS	MS3_7700SWA
7782-49-2	Selenium	2.6	ND	1	0.5	100	08/31/20	852293	120ANEW	48	MS	MS3_7700SWA
7440-22-4	Silver	0.26	ND	1	0.5	100	08/31/20	852293	120ANEW	48	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Cr-SOIL

Sample	Total Cr (mg/kg)	RL	Hexavalent Cr (mg/kg)	RL	Trivalent Cr (mg/kg)	RL
AD18934-001	21.0	6.58	ND	1.05	21.0	6.58
AD18934-002	14.3	6.67	ND	1.07	14.3	6.67
AD18934-003	13.8	6.33	ND	1.01	13.8	6.33
AD18934-004	16.9	6.25	ND	1.00	16.9	6.25
AD18934-005	15.3	6.49	ND	1.04	15.3	6.49

Calculated using 3 significant figures. Reported using 2 significant figures.

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	EB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	50	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/02/20	85230	H26172SW	18	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/01/20	85230	W26165B2	48	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	EB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	2.0	ND	1	50	100	09/01/20	852300	120ANEW	30	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/01/20	852300	120ANEW	30	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/01/20	852300	120ANEW	30	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	09/01/20	852300	120ANEW	30	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	FB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	Mi	Instr
7440-39-3	Barium	50	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/02/20	85230	H26172SW	19	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/01/20	85230	W26165B2	49	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	FB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	2.0	ND	1	50	100	09/01/20	852300	120ANEW	31	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/01/20	852300	120ANEW	31	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/01/20	852300	120ANEW	31	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	09/01/20	852300	120ANEW	31	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Cr-AQUEOUS

Sample	Total Cr (ug/L)	RL	Hexavalent Cr (ug/L)	RL	Trivalent Cr (ug/L)	RL
AD18934-006	ND	50.0	ND	20.0	ND	50.0

Calculated using 3 significant figures. Reported using 2 significant figures.

Metal Data
QC Data

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/31/20
Data File: S26168A3
Prep Batch: 85228
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333673-5	Rec	CCV V-333673-17	Rec	CCV V-333673-27	Rec	CCV V-333673-38	Rec	CCV V-333673-49	Rec	CCV V-333673-59	Rec	CCV V-333673-69	Rec	Rec
Aluminum	5/5	4.91617	98	4.92725	99	4.91860	98	4.86265	97	4.84239	97	4.92474	98	4.94935	99	
Barium	.5/.5	0.49056	98	0.49126	98	0.48985	98	0.48456	97	0.48162	96	0.48884	98	0.49027	98	
Calcium	50/50	51.18840	102	51.06340	102	51.53440	103	50.59770	101	50.28860	101	51.44960	103	51.39680	103	
Chromium	.5/.5	0.52088	104	0.52396	105	0.52570	105	0.51553	103	0.50801	102	0.51955	104	0.51981	104	
Cobalt	.5/.5	0.49168	98	0.49442	99	0.49628	99	0.48639	97	0.48078	96	0.48990	98	0.48968	98	
Copper	.5/.5	0.49399	99	0.49738	99	0.49669	99	0.48867	98	0.48787	98	0.49639	99	0.49871	100	
Iron	5/5	4.95391	99	4.99366	100	5.01993	100	4.96048	99	4.94968	99	5.04222	101	5.06910	101	
Lead	.5/.5	0.49765	100	0.49956	100	0.49908	100	0.49103	98	0.48518	97	0.49188	98	0.49248	98	
Magnesium	50/50	51.32490	103	51.36530	103	51.20100	102	50.70370	101	50.53090	101	51.40380	103	51.56400	103	
Manganese	.5/.5	0.49394	99	0.49539	99	0.49413	99	0.48833	98	0.48718	97	0.49448	99	0.49633	99	
Nickel	.5/.5	0.49416	99	0.49705	99	0.49809	100	0.48885	98	0.48291	97	0.49251	99	0.49222	98	
Zinc	.5/.5	0.52095	104	0.52287	105	0.52755	106	0.51647	103	0.51250	102	0.52523	105	0.52633	105	

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 08/31/20
Data File: S26168A3
Prep Batch: 85226 | 85228
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333671	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-333662	Recovery	Low Limit	High Limit
Molybdenum	0.025	0.0271601	109	80	120	10	9.64505	96	90	110
Aluminum	2.0	2.00417	100	80	120	500	491.657	98	90	110
Arsenic	0.04	0.0421544	105	80	120	10	10.1496	101	90	110
Barium	0.1	0.103577	104	80	120	10	10.0083	100	90	110
Beryllium	0.012	0.0129819	108	80	120	5	4.91665	98	90	110
Calcium	10	10.2003	102	80	120	500	462.266	92	90	110
Cadmium	0.012	0.0100709	84	80	120	5	5.23137	105	90	110
Cobalt	0.025	0.0258329	103	80	120	5	4.61612	92	90	110
Chromium	0.05	0.0472362	94	80	120	10	9.84296	98	90	110
Copper	0.05	0.0501543	100	80	120	10	10.3208	103	90	110
Iron	2.0	1.99244	100	80	120	400	369.131	92	90	110
Potassium	NA	17.3823		80	120	200	-538.537	-270 a	90	110
Silver	0.015	0.0115914	77 a	80	120	1	1.18919	119 a	90	110
Manganese	0.1	0.0987280	99	80	120	10	9.90280	99	90	110
Silicon	0.1	0.128536	129 a	80	120	25	0.751578	3 a	90	110
Sodium	NA	2.67502		80	120	1000	1158.54	116 a	90	110
Nickel	0.05	0.0513031	103	80	120	10	9.12771	91	90	110
Lead	0.05	0.0496917	99	80	120	10	9.59483	96	90	110
Antimony	0.04	0.0391830	98	80	120	5	5.34295	107	90	110
Selenium	0.05	0.0543854	109	80	120	5	4.96152	99	90	110
Tin	0.2	0.200971	100	80	120	10	9.70371	97	90	110
Titanium	0.1	0.0993233	99	80	120	10	10.2235	102	90	110
Thallium	0.05	0.0540664	108	80	120	5	5.22158	104	90	110
Vanadium	0.1	0.0994242	99	80	120	10	10.4588	105	90	110
Zinc	0.1	0.0968929	97	80	120	10	9.39800	94	90	110
Boron	0.2	0.185147	93	80	120	5	0.0468477	.94 a	90	110
Magnesium	5.0	4.92241	98	80	120	500	473.591	95	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/31/20
Data File: S083120ANEW
Prep Batch: 85229
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333618-8	Rec	CCV V-333622-18	Rec	CCV V-333622-30	Rec	CCV V-333622-42	Rec	CCV V-333622-53	Rec		Rec		Rec		Rec
Antimony	50/50	47.56400	95	47.03700	94	46.54900	93	46.60300	93	46.24800	92						
Arsenic	50/50	51.75900	104	50.31000	101	50.46700	101	51.48800	103	49.81600	100						
Beryllium	50/50	54.79900	110	53.77000	108	52.90300	106	50.68200	101	45.10600	90						
Cadmium	50/50	49.59600	99	48.97600	98	48.05400	96	48.36500	97	47.52300	95						
Selenium	50/250	53.62600	107	248.56000	99	250.20000	100	248.10900	99	239.05100	96						
Silver	10/50	9.75500	98	47.81000	96	47.08800	94	47.08100	94	45.54100	91						
Thallium	50/50	50.81900	102	50.86600	102	50.69400	101	50.70500	101	49.56300	99						
Vanadium	50/50	50.73400	101	49.80700	100	49.75500	100	50.22600	100	48.80700	98						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 08/31/20
Data File: S083120ANEW
Prep Batch: 85229
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333623	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-333621	Recovery	Low Limit	High Limit
Magnesium	500	489.741	98	80	120		50000	49997.037	100	90	110
Aluminum	500	499.368	100	80	120		15000	15142.196	101	90	110
Chromium	2	1.911	96	80	120		500	512.035	102	90	110
Copper	10	10.217	102	80	120		500	503.894	101	90	110
Iron	500	514.339	103	80	120		50000	50638.130	101	90	110
Arsenic	1	0.940	94	80	120		500	511.841	102	90	110
Barium	5	5.156	103	80	120		500	526.406	105	90	110
Beryllium	1	1.064	106	80	120		500	509.241	102	90	110
Calcium	500	493.484	99	80	120		50000	53162.984	106	90	110
Cadmium	2	1.920	96	80	120		500	513.915	103	90	110
Silver	1	0.957	96	80	120		500	1543.709	309 a	90	110
Potassium	500	501.399	100	80	120		50000	51475.400	103	90	110
Zinc	20	20.014	100	80	120		500	488.757	98	90	110
Manganese	6	5.988	100	80	120		500	519.848	104	90	110
Molybdenum	1	1.038	104	80	120		500	520.382	104	90	110
Sodium	500	477.694	96	80	120		50000	50383.955	101	90	110
Nickel	3	2.962	99	80	120		500	511.399	102	90	110
Lead	2	1.940	97	80	120		500	472.246	94	90	110
Antimony	4	3.524	88	80	120		500	495.036	99	90	110
Selenium	10	9.949	99	80	120		2500	2499.409	100	90	110
Thallium	2	1.858	93	80	120		500	478.789	96	90	110
Vanadium	1	0.963	96	80	120		500	522.595	105	90	110
Cobalt	2	1.962	98	80	120		500	507.932	102	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/01/20
Data File: A090120ANEW
Prep Batch: 85230
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-334050-8	Rec	CCV V-334054-16	Rec	CCV V-334054-28	Rec	CCV V-334054-38	Rec	Rec	Rec	Rec	Rec
Antimony	50/50	48.16100	96	46.85400	94	47.35700	95	45.69900	91				
Arsenic	50/50	50.76900	102	49.46000	99	48.90700	98	50.07200	100				
Beryllium	50/50	50.71600	101	50.78400	102	52.40100	105	49.67600	99				
Cadmium	50/50	51.26100	103	49.84800	100	50.12700	100	48.55600	97				
Cobalt	50/50	50.76300	102	49.97500	100	49.52000	99	49.94600	100				
Lead	50/50	52.09100	104	51.08500	102	50.92600	102	49.71800	99				
Selenium	50/250	51.10600	102	250.97100	100	248.56100	99	254.61600	102				
Thallium	50/50	49.81900	100	51.15500	102	51.01500	102	49.35300	99				

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/01/20
Data File: A090120ANEW
Prep Batch: 85230
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-334056	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-334053	Recovery	Low Limit	High Limit	
Magnesium	250	248.949	100	80	120		50000	51449.223	103	90	110	
Aluminum	100	103.128	103	80	120		15000	15816.243	105	90	110	
Arsenic	1	0.970	97	80	120		500	516.640	103	90	110	
Barium	2.5	2.560	102	80	120		500	548.101	110	90	110	
Beryllium	0.5	0.525	105	80	120		500	503.347	101	90	110	
Calcium	250	252.761	101	80	120		50000	54742.959	109	90	110	
Cadmium	1	0.992	99	80	120		500	539.163	108	90	110	
Cobalt	1	1.034	103	80	120		500	521.750	104	90	110	
Chromium	1	1.038	104	80	120		500	531.264	106	90	110	
Copper	5	5.136	103	80	120		500	510.046	102	90	110	
Silver	0.5	0.495	99	80	120		500	455.142	91	90	110	
Potassium	250	247.676	99	80	120		50000	52350.965	105	90	110	
Zinc	10	10.379	104	80	120		500	485.861	97	90	110	
Manganese	3	2.992	100	80	120		500	533.699	107	90	110	
Molybdenum	1	1.081	108	80	120		500	545.199	109	90	110	
Sodium	250	243.111	97	80	120		50000	51847.266	104	90	110	
Nickel	1.5	1.485	99	80	120		500	519.665	104	90	110	
Lead	1.5	1.341	89	80	120		500	484.686	97	90	110	
Antimony	1.5	1.527	102	80	120		500	510.783	102	90	110	
Selenium	5	4.899	98	80	120		2500	2553.793	102	90	110	
Thallium	1	0.919	92	80	120		500	491.883	98	90	110	
Vanadium	1	0.966	97	80	120		500	533.691	107	90	110	
Iron	150	154.847	103	80	120		50000	51183.337	102	90	110	

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/02/20
Data File: A090220ANEW
Prep Batch: 85230
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-334050-8	Rec	CCV V-334054-16	Rec	CCV V-334054-28	Rec	CCV V-334054-40	Rec	CCV V-334054-46	Rec		Rec		Rec		Rec
Antimony	50/50	47.27600	95	47.47300	95	47.23300	94	46.36900	93	46.83300	94						
Arsenic	50/50	50.52500	101	49.88100	100	46.69600	93	49.29300	99	49.49900	99						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/02/20
Data File: A090220ANEW
Prep Batch: 85230
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-334056	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-334053	Recovery	Low Limit	High Limit	
Magnesium	250	248.641	99	80	120		50000	52191.689	104	90	110	
Aluminum	100	103.418	103	80	120		15000	15774.017	105	90	110	
Arsenic	1	0.942	94	80	120		500	513.263	103	90	110	
Barium	2.5	2.574	103	80	120		500	534.249	107	90	110	
Beryllium	0.5	0.498	100	80	120		500	479.626	96	90	110	
Calcium	250	250.868	100	80	120		50000	54542.674	109	90	110	
Cadmium	1	0.999	100	80	120		500	538.211	108	90	110	
Cobalt	1	1.012	101	80	120		500	520.363	104	90	110	
Chromium	1	1.013	101	80	120		500	535.292	107	90	110	
Copper	5	5.364	107	80	120		500	524.733	105	90	110	
Silver	0.5	0.501	100	80	120		500	258.483	52 a	90	110	
Potassium	250	248.374	99	80	120		50000	52880.987	106	90	110	
Zinc	10	10.354	104	80	120		500	487.183	97	90	110	
Manganese	3	3.060	102	80	120		500	539.118	108	90	110	
Molybdenum	1	1.043	104	80	120		500	547.976	110	90	110	
Sodium	250	224.097	90	80	120		50000	52715.315	105	90	110	
Nickel	1.5	1.575	105	80	120		500	528.309	106	90	110	
Lead	1.5	1.409	94	80	120		500	481.508	96	90	110	
Antimony	1.5	1.495	100	80	120		500	519.047	104	90	110	
Selenium	5	5.017	100	80	120		2500	2484.533	99	90	110	
Thallium	1	0.922	92	80	120		500	489.931	98	90	110	
Vanadium	1	0.978	98	80	120		500	539.815	108	90	110	
Iron	150	155.122	103	80	120		50000	51909.204	104	90	110	

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/01/20
Data File: SW26165B2
Prep Batch: 85230
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-329036-5	Rec	CCV V-329036-13	Rec	CCV V-329036-24	Rec	CCV V-329036-35	Rec	CCV V-329036-46	Rec	CCV V-329036-55	Rec		Rec		Rec
Aluminum	5/5	5.00187	100	5.02715	101	4.87562	98	4.96516	99	4.99576	100	4.82476	96				
Barium	.5/.5	0.50473	101	0.50328	101	0.48807	98	0.49404	99	0.49570	99	0.47449	95				
Calcium	50/50	50.72380	101	50.98070	102	49.71100	99	50.71010	101	50.81540	102	49.08560	98				
Chromium	.5/.5	0.50515	101	0.50568	101	0.49136	98	0.49974	100	0.50394	101	0.48442	97				
Copper	.5/.5	0.50705	101	0.50773	102	0.49579	99	0.50496	101	0.51000	102	0.49413	99				
Iron	5/5	5.05601	101	5.06235	101	4.91658	98	5.00212	100	5.04677	101	4.82752	97				
Magnesium	50/50	50.67630	101	50.80690	102	49.27920	99	50.21780	100	50.21760	100	48.26410	97				
Manganese	.5/.5	0.49986	100	0.50343	101	0.49340	99	0.50371	101	0.50517	101	0.48836	98				
Nickel	.5/.5	0.50975	102	0.50995	102	0.49522	99	0.50269	101	0.50775	102	0.48695	97				
Silver	0.1/0.1	0.10409	104	0.10330	103	0.10020	100	0.10198	102	0.10250	102	0.09873	99				
Vanadium	.5/.5	0.50083	100	0.49993	100	0.48457	97	0.49056	98	0.48959	98	0.46613	93				
Zinc	.5/.5	0.50750	102	0.50598	101	0.49105	98	0.49969	100	0.50449	101	0.47652	95				

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/01/20
Data File: SW26165B2
Prep Batch: 85222 / 85230 9/2/20
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333563	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-329041	Recovery	Low Limit	High Limit
Magnesium	5.0	4.85840	97	80	120		500	458.251	92	90	110
Silver	0.02	0.0208191	104	80	120		1	0.998728	100	90	110
Aluminum	0.2	0.196268	98	80	120		500	476.419	95	90	110
Arsenic	0.04	0.0396521	99	80	120		10	9.85162	99	90	110
Boron	0.2	0.199094	100	80	120		5	5.05225	101	90	110
Barium	0.05	0.0496174	99	80	120		10	9.45075	95	90	110
Beryllium	0.012	0.0114096	95	80	120		5	4.53432	91	90	110
Calcium	5.0	4.86548	97	80	120		500	456.989	91	90	110
Cadmium	0.012	0.0125801	105	80	120		5	5.06540	101	90	110
Cobalt	0.02	0.0194967	97	80	120		5	4.51675	90	90	110
Chromium	0.05	0.0489944	98	80	120		10	9.27618	93	90	110
Copper	0.05	0.0513017	103	80	120		10	9.93353	99	90	110
Silicon	0.10	0.0948317	95	80	120		25	25.9879	104	90	110
Potassium	NA	3.21047		80	120		200	120.561	60 a	90	110
Zinc	0.05	0.0488175	98	80	120		10	8.98176	90	90	110
Manganese	0.04	0.0395464	99	80	120		10	9.06690	91	90	110
Molybdenum	0.02	0.0200928	100	80	120		10	9.35231	94	90	110
Sodium	5.0	5.19029	104	80	120		1000	1222.37	122 a	90	110
Nickel	0.05	0.0505866	101	80	120		10	9.04073	90	90	110
Lead	0.05	0.0653009	131 a	80	120		10	8.85797	89 a	90	110
Antimony	0.05	0.0482708	97	80	120		5	5.35422	107	90	110
Selenium	0.05	0.0442170	88	80	120		5	5.11034	102	90	110
Tin	0.05	0.0507813	102	80	120		10	9.06973	91	90	110
Titanium	0.05	0.0504424	101	80	120		10	9.46266	95	90	110
Thallium	0.05	0.0528611	106	80	120		5	4.60616	92	90	110
Vanadium	0.05	0.0473666	95	80	120		10	9.70387	97	90	110
Iron	0.3	0.288884	96	80	120		200	181.119	91	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/31/20
Data File: H26170S
Prep Batch: 85228
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-21		CCV-33		CCV-40									
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec		Rec
Mercury	20/10	20.33000	102	10.29000	103	10.22000	102	10.13000	101								

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/02/20
Data File: H26172SW
Prep Batch: 85230
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-20		CCV-27									
Analyte	ICV/CCV Amt		Rec		Rec		Rec	Rec		Rec		Rec		Rec	
Mercury	20/10	20.20000	101	10.36000	104	10.35000	104								

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/31/20
Data File: S26168A3
Prep Batch: 85228
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-18	CCB V-333667-28	CCB V-333667-39	CCB V-333667-50	CCB V-333667-60	CCB V-333667-70	MB 85228 (100)-40
Aluminum	1 U	2 U	2 U	2 U	2 U	2U	2U	100 U
Barium	.05 U	.1 U	.1 U	.1 U	.1 U	.1U	.1U	5 U
Calcium	5 U	10 U	10 U	10 U	10 U	10U	10U	500 U
Chromium	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.05U	2.5 U
Cobalt	.0125 U	.025 U	.025 U	.025 U	.025 U	.025U	.025U	1.3 U
Copper	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.05U	2.5 U
Iron	1 U	2 U	2 U	2 U	2 U	2U	2U	100 U
Lead	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.05U	2.5 U
Magnesium	2.5 U	5 U	5 U	5 U	5 U	5U	5U	250 U
Manganese	.05 U	.1 U	.1 U	.1 U	.1 U	.1U	.1U	5 U
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.05U	2.5 U
Zinc	.05 U	.1 U	.1 U	.1 U	.1 U	.1U	.1U	5 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/31/20
Data File: S083120ANEW
Prep Batch: 85229
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333619-10	CCB V-333619-19	CCB V-333619-31	CCB V-333619-43	CCB V-333619-54	MB 85229-20
Antimony	2U	4U	4U	4U	4U	400U
Arsenic	.5U	1U	1U	1U	1U	100U
Beryllium	.5U	1U	1U	1U	1U	100U
Cadmium	1U	2U	2U	2U	2U	200U
Selenium	5U	10U	10U	10U	10U	1000U
Silver	.5U	1U	1U	1U	1U	100U
Thallium	1U	2U	2U	2U	2U	200U
Vanadium	.5U	1U	1U	1U	1U	100U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/01/20
Data File: A090120ANEW
Prep Batch: 85230
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-334051-10	CCB V-334051-17	CCB V-334051-29	CCB V-334051-39	MB 85230-18
Antimony	.75U	1.5U	1.5U	1.5U	1.5U
Arsenic	.5U	1U	1U	1U	1U
Beryllium	.25U	.5U	.5U	.5U	.5U
Cadmium	.5U	1U	1U	1U	1U
Cobalt	.5U	1U	1U	1U	1U
Lead	.75U	1.5U	1.5U	1.5U	1.5U
Selenium	2.5U	5U	5U	5U	5U
Thallium	.5U	1U	1U	1U	1U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/02/20
Data File: A090220ANEW
Prep Batch: 85230
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-334051-10	CCB V-334051-17	CCB V-334051-29	CCB V-334051-41	CCB V-334051-47			
Antimony	.75U	1.5U	1.5U	1.5U	1.5U			
Arsenic	.5U	1U	1U	1U	1U			

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/01/20
Data File: SW26165B2
Prep Batch: 85230
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-329027-6	CCB V-329027-14	CCB V-329027-25	CCB V-329027-36	CCB V-329027-47	CCB V-329027-56	MB 85230 (1)-37
Aluminum	.1 U	.2 U	.2 U	.2 U	.2 U	.2U	.1U
Barium	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.025U
Calcium	2.5 U	5 U	5 U	5 U	5 U	5U	2.5U
Chromium	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.025U
Copper	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.025U
Iron	.15 U	.3 U	.3 U	.3 U	.3 U	.3U	.15U
Magnesium	2.5 U	5 U	5 U	5 U	5 U	5U	2.5U
Manganese	.02 U	.04 U	.04 U	.04 U	.04 U	.04U	.02U
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.025U
Silver	.01 U	.02 U	.02 U	.02 U	.02 U	.02U	.01U
Vanadium	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.025U
Zinc	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.025U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/31/20
Data File: H26170S
Prep Batch: 85228
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-41	MB 85228 (167)-11
Mercury	.5 U	.5 U	.5 U	.5 U	83 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/02/20
Data File: H26172SW
Prep Batch: 85230
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-21	CCB-28	MB 85230 (1)-11				
Mercury	.5U	.5U	.5U	.5U				

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/31/20
Data File: S26168A3
Prep Batch: 85228
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	493.117	99							
Barium	0	U								
Calcium	500	466.547	93							
Chromium	0	U								
Cobalt	0	U								
Copper	0	U								
Iron	200	190.122	95							
Lead	0	U								
Magnesium	500	498.648	100							
Manganese	0	U								
Nickel	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/31/20
Data File: S083120ANEW
Prep Batch: 85229
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333620-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	48928.13	98							
Antimony	0	U								
Arsenic	0	U								
Beryllium	0	U								
Cadmium	0	U								
Calcium	150000	154503.1	103							
Iron	125000	123556.7	99							
Magnesium	50000	48193.53	96							
Selenium	0	U								
Silver	0	U								
Thallium	0	U								
Vanadium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/01/20
Data File: A090120ANEW
Prep Batch: 85230
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-334052-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	51226.38	102							
Antimony	0	U								
Arsenic	0	U								
Beryllium	0	U								
Cadmium	0	1.22b								
Calcium	150000	162404.2	108							
Cobalt	0	U								
Iron	125000	126789.6	101							
Lead	0	U								
Magnesium	50000	50193.34	100							
Selenium	0	U								
Thallium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/02/20
Data File: A090220ANEW
Prep Batch: 85230
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-334052-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	50989.08	102							
Antimony	0	U								
Arsenic	0	U								
Calcium	150000	159583.8	106							
Iron	125000	127088.5	102							
Magnesium	50000	50106.79	100							

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/01/20
Data File: SW26165B2
Prep Batch: 85230
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-329033-12	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	488.707	98							
Barium	0	U								
Calcium	500	481.019	96							
Chromium	0	U								
Copper	0	U								
Iron	200	186.17	93							
Magnesium	500	493.491	99							
Manganese	0	U								
Nickel	0	U								
Silver	0	U								
Vanadium	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 85228

Instrument Type: ICP/HG
Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85228

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	42	6.4978	8.92	73		65	110
Chromium	85228	1	S26168A3	42	1.7164	2.27	76		61	114
Copper	85228	1	S26168A3	42	1.5885	2.09	76		66	110
Lead	85228	1	S26168A3	42	1.1971	1.63	73		62	110
Manganese	85228	1	S26168A3	42	4.4543	6.03	74		68	110
Mercury	85228	4	H26170S	15	5.3180	41.64	51		39	110
Nickel	85228	1	S26168A3	42	0.4134	.553	75		61	114
Zinc	85228	1	S26168A3	42	5.3061	7.13	74		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85228

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	41	6.6782	8.92	75		65	110
Chromium	85228	1	S26168A3	41	1.6950	2.27	75		61	114
Copper	85228	1	S26168A3	41	1.5670	2.09	75		66	110
Lead	85228	1	S26168A3	41	1.1739	1.63	72		62	110
Manganese	85228	1	S26168A3	41	4.5188	6.03	75		68	110
Mercury	85228	4	H26170S	14	5.0070	41.64	48		39	110
Nickel	85228	1	S26168A3	41	0.4117	.553	74		61	114
Zinc	85228	1	S26168A3	41	5.1847	7.13	73		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	46	S26168A3	43	0.8400	0.7836	0.5	11	a	75	125
Chromium	85228	1	S26168A3	46	S26168A3	43	0.5701	0.0846	0.5	97		75	125
Copper	85228	1	S26168A3	46	S26168A3	43	0.6851	0.2354	0.5	90		75	125
Lead	85228	1	S26168A3	46	S26168A3	43	0.5399	3.5540	0.5	-600	b	75	125
Manganese	85228	1	S26168A3	46	S26168A3	43	5.9788	6.4359	0.5	-91	b	75	125
Mercury	85228	1	H26170S	19	H26170S	16	9.9320	0.8380	10	91		75	125
Nickel	85228	1	S26168A3	46	S26168A3	43	0.6142	0.1404	0.5	95		75	125
Zinc	85228	1	S26168A3	46	S26168A3	43	1.0408	0.5911	0.5	90		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD18955-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	45	S26168A3	43	0.6766	0.7836	0.5	-21	a	75	125
Chromium	85228	1	S26168A3	45	S26168A3	43	0.5546	0.0846	0.5	94		75	125
Copper	85228	1	S26168A3	45	S26168A3	43	0.6499	0.2354	0.5	83		75	125
Lead	85228	1	S26168A3	45	S26168A3	43	0.5416	3.5540	0.5	-600	b	75	125
Manganese	85228	1	S26168A3	45	S26168A3	43	2.5838	6.4359	0.5	-770	b	75	125
Mercury	85228	1	H26170S	18	H26170S	16	9.9250	0.8380	10	91		75	125
Nickel	85228	1	S26168A3	45	S26168A3	43	0.6158	0.1404	0.5	95		75	125
Zinc	85228	1	S26168A3	45	S26168A3	43	0.9384	0.5911	0.5	69	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85228

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS | Matrix: SOIL | SampleID: AD18955-001

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	1	S26168A3	47	S26168A3	43	1.2230	0.7836	0.50	88		75	125
Chromium	1	S26168A3	47	S26168A3	43	0.5702	0.0846	0.50	97		75	125
Copper	1	S26168A3	47	S26168A3	43	0.7008	0.2354	0.50	93		75	125
Lead	1	S26168A3	47	S26168A3	43	3.8984	3.5540	0.50	69	b	75	125
Manganese	1	S26168A3	47	S26168A3	43	6.7625	6.4359	0.50	65	b	75	125
Nickel	1	S26168A3	47	S26168A3	43	0.5878	0.1404	0.50	89		75	125
Zinc	1	S26168A3	47	S26168A3	43	1.0291	0.5911	0.50	88		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85229

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85229

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85229	1	S083120A	22	38.6760	49.4	78		61	113
Beryllium	85229	1	S083120A	22	143.2870	187	77		66	110
Selenium	85229	1	S083120A	22	276.1240	364	76		60	112
Silver	85229	1	S083120A	22	74.6300	94.0	79		61	111

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85229

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85229	1	S083120A	21	38.5900	49.4	78		61	113
Beryllium	85229	1	S083120A	21	144.8910	187	77		66	110
Selenium	85229	1	S083120A	21	279.3350	364	77		60	112
Silver	85229	1	S083120A	21	72.8790	94.0	78		61	111

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85229	1	S083120A	36	S083120A	32	250.5400	34.4610	250	86		75	125
Beryllium	85229	1	S083120A	36	S083120A	32	200.5140	1U	250	80		75	125
Selenium	85229	1	S083120A	36	S083120A	32	203.4800	10U	250	81		75	125
Silver	85229	1	S083120A	36	S083120A	32	40.2550	1U	50	81		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD18955-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85229	1	S083120A	35	S083120A	32	235.5220	34.4610	250	80		75	125
Beryllium	85229	1	S083120A	35	S083120A	32	197.0770	1U	250	79		75	125
Selenium	85229	1	S083120A	35	S083120A	32	202.5500	10U	250	81		75	125
Silver	85229	1	S083120A	35	S083120A	32	38.9120	1U	50	78		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 85229

Instrument Type: ICPMS
Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS | Matrix: SOIL | SampleID: AD18955-001

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	S083120A	37	S083120A	32	83.7790	34.4610	50	99		75	125
Beryllium	1	S083120A	37	S083120A	32	44.2790	1U	50	89		75	125
Selenium	1	S083120A	37	S083120A	32	229.8340	10U	250	92		75	125
Silver	1	S083120A	37	S083120A	32	45.6470	1U	50	91		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85230

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: AQUEOUS SampleID: LCSW 85230

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85230	1	SW26165B	38	0.5101	0.50	102		80	120
Chromium	85230	1	SW26165B	38	0.5002	0.50	100		80	120
Copper	85230	1	SW26165B	38	0.5038	0.50	101		80	120
Manganese	85230	1	SW26165B	38	0.5107	0.50	102		80	120
Mercury	85230	1	H26172S	12	10.3400	10	103		80	120
Nickel	85230	1	SW26165B	38	0.5027	0.50	101		80	120
Silver	85230	1	SW26165B	38	0.0992	0.10	99		80	120
Zinc	85230	1	SW26165B	38	0.5011	0.50	100		80	120

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 85230

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85230	1	SW26165B	39	0.5095	0.50	102		80	120
Chromium	85230	1	SW26165B	39	0.4986	0.50	100		80	120
Copper	85230	1	SW26165B	39	0.5058	0.50	101		80	120
Manganese	85230	1	SW26165B	39	0.5074	0.50	101		80	120
Mercury	85230	1	H26172S	13	9.8910	10	99		80	120
Nickel	85230	1	SW26165B	39	0.5037	0.50	101		80	120
Silver	85230	1	SW26165B	39	0.0993	0.10	99		80	120
Zinc	85230	1	SW26165B	39	0.5009	0.50	100		80	120

TxtQcType: MS Matrix: AQUEOUS SampleID: AD18954-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85230	1	SW26165B	42	SW26165B	40	0.5723	0.0747	0.50	100		75	125
Chromium	85230	1	SW26165B	42	SW26165B	40	0.4833	0.05U	0.50	97		75	125
Copper	85230	1	SW26165B	42	SW26165B	40	0.5304	0.05U	0.50	106		75	125
Manganese	85230	1	SW26165B	42	SW26165B	40	0.8974	0.3807	0.50	103		75	125
Mercury	85230	1	H26172S	16	H26172S	14	10.2200	0.50U	10	102		75	125
Nickel	85230	1	SW26165B	42	SW26165B	40	0.5530	0.0713	0.50	96		75	125
Silver	85230	1	SW26165B	42	SW26165B	40	0.0996	0.02U	0.10	100		75	125
Zinc	85230	1	SW26165B	42	SW26165B	40	1.4700	0.9332	0.50	107		75	125

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD18954-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85230	1	SW26165B	43	SW26165B	40	0.5643	0.0747	0.50	98		75	125
Chromium	85230	1	SW26165B	43	SW26165B	40	0.4765	0.05U	0.50	95		75	125
Copper	85230	1	SW26165B	43	SW26165B	40	0.5227	0.05U	0.50	105		75	125
Manganese	85230	1	SW26165B	43	SW26165B	40	0.8833	0.3807	0.50	101		75	125
Mercury	85230	1	H26172S	17	H26172S	14	10.2600	0.50U	10	103		75	125
Nickel	85230	1	SW26165B	43	SW26165B	40	0.5443	0.0713	0.50	95		75	125
Silver	85230	1	SW26165B	43	SW26165B	40	0.0982	0.02U	0.10	98		75	125
Zinc	85230	1	SW26165B	43	SW26165B	40	1.4385	0.9332	0.50	101		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85230

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: AQUEOUS SampleID: LCSW 85230

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85230	1	A090120A	19	246.1590	250	98		80	120
Beryllium	85230	1	A090120A	19	248.0860	250	99		80	120
Lead	85230	1	A090120A	19	247.7790	250	99		80	120
Selenium	85230	1	A090120A	19	241.3350	250	97		80	120

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 85230

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85230	1	A090120A	20	238.4460	250	95		80	120
Beryllium	85230	1	A090120A	20	241.9360	250	97		80	120
Lead	85230	1	A090120A	20	237.1440	250	95		80	120
Selenium	85230	1	A090120A	20	235.1500	250	94		80	120

TxtQcType: MS Matrix: AQUEOUS SampleID: AD18954-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85230	5	A090220A	21	A090220A	18	318.4730	251.2810	250	134	b	75	125
Beryllium	85230	1	A090120A	24	A090120A	21	216.1200	0.5U	250	86		75	125
Lead	85230	1	A090120A	24	A090120A	21	334.0030	102.3710	250	93		75	125
Selenium	85230	1	A090120A	24	A090120A	21	269.6820	35.3270	250	94		75	125

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD18954-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85230	5	A090220A	22	A090220A	18	316.3770	251.2810	250	130	b	75	125
Beryllium	85230	1	A090120A	25	A090120A	21	211.2340	0.5U	250	84		75	125
Lead	85230	1	A090120A	25	A090120A	21	330.2140	102.3710	250	91		75	125
Selenium	85230	1	A090120A	25	A090120A	21	269.4180	35.3270	250	94		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85230

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: AQUEOUS SampleID: AD18954-002

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	1	SW26165B	44	SW26165B	40	0.5417	0.0747	.5	93		75	125
Chromium	1	SW26165B	44	SW26165B	40	0.4766	0.05U	.5	95		75	125
Copper	1	SW26165B	44	SW26165B	40	0.5202	0.05U	.5	104		75	125
Manganese	1	SW26165B	44	SW26165B	40	0.8519	0.3807	.5	94		75	125
Nickel	1	SW26165B	44	SW26165B	40	0.5353	0.0713	.5	93		75	125
Silver	1	SW26165B	44	SW26165B	40	0.0920	0.02U	0.1	92		75	125
Zinc	1	SW26165B	44	SW26165B	40	1.3699	0.9332	.5	87		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85230

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS | Matrix: AQUEOUS | SampleID: AD18954-002

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	5	A090220A	23	A090220A	18	293.2510	251.2810	50	84		75	125
Beryllium	1	A090120A	26	A090120A	21	42.7480	0.5U	50	85		75	125
Lead	1	A090120A	26	A090120A	21	145.2610	102.3710	50	86		75	125
Selenium	1	A090120A	26	A090120A	21	273.7310	35.3270	250	95		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85228

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85228

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	42	S26168A3	41	6.4978	6.6782	2.7		20
Chromium	85228	S26168A3	42	S26168A3	41	1.7164	1.6950	1.3		20
Copper	85228	S26168A3	42	S26168A3	41	1.5885	1.5670	1.4		20
Lead	85228	S26168A3	42	S26168A3	41	1.1971	1.1739	2		20
Manganese	85228	S26168A3	42	S26168A3	41	4.4543	4.5188	1.4		20
Mercury	85228	H26170S	15	H26170S	14	5.3180	5.0070	6		20
Nickel	85228	S26168A3	42	S26168A3	41	0.4134	0.4117	.4		20
Zinc	85228	S26168A3	42	S26168A3	41	5.3061	5.1847	2.3		20

TxtQcType: MR Matrix: SOIL SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	44	S26168A3	43	0.8278	0.7836	5.5		20
Chromium	85228	S26168A3	44	S26168A3	43	0.1139	0.0846	29	b	20
Copper	85228	S26168A3	44	S26168A3	43	0.3037	0.2354	25	a	20
Lead	85228	S26168A3	44	S26168A3	43	2.3034	3.5540	43	a	20
Manganese	85228	S26168A3	44	S26168A3	43	6.3194	6.4359	1.8		20
Mercury	85228	H26170S	17	H26170S	16	0.6540	0.8380	25	b	20
Nickel	85228	S26168A3	44	S26168A3	43	0.1666	0.1404	17		20
Zinc	85228	S26168A3	44	S26168A3	43	0.6861	0.5911	15		20

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	46	S26168A3	45	0.8400	0.6766	22	a	20
Chromium	85228	S26168A3	46	S26168A3	45	0.5701	0.5546	2.8		20
Copper	85228	S26168A3	46	S26168A3	45	0.6851	0.6499	5.3		20
Lead	85228	S26168A3	46	S26168A3	45	0.5399	0.5416	.3		20
Manganese	85228	S26168A3	46	S26168A3	45	5.9788	2.5838	79	a	20
Mercury	85228	H26170S	19	H26170S	18	9.9320	9.9250	.071		20
Nickel	85228	S26168A3	46	S26168A3	45	0.6142	0.6158	.26		20
Zinc	85228	S26168A3	46	S26168A3	45	1.0408	0.9384	10		20

TxtQcType: SD Matrix: SOIL SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Barium	85228	S26168A3	48	S26168A3	43	5	0.1555	0.7836	0.75		10
Chromium	85228	S26168A3	48	S26168A3	43	5	0.0119	0.0846	30	a	10
Copper	85228	S26168A3	48	S26168A3	43	5	0.0469	0.2354	0.37		10
Lead	85228	S26168A3	48	S26168A3	43	5	0.7188	3.5540	1.1		10
Manganese	85228	S26168A3	48	S26168A3	43	5	1.3085	6.4359	1.7		10
Nickel	85228	S26168A3	48	S26168A3	43	5	0.0302	0.1404	7.5		10
Zinc	85228	S26168A3	48	S26168A3	43	5	0.1217	0.5911	3		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85229

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR | Matrix: SOIL | SampleID: LCS MR 85229

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Arsenic	85229	S083120A	22	S083120A	21	38.6760	38.5900	.22		20
Beryllium	85229	S083120A	22	S083120A	21	143.2870	144.8910	1.1		20
Selenium	85229	S083120A	22	S083120A	21	276.1240	279.3350	1.2		20
Silver	85229	S083120A	22	S083120A	21	74.6300	72.8790	2.4		20

TxtQcType: MR | Matrix: SOIL | SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Arsenic	85229	S083120A	33	S083120A	32	34.0100	34.4610	1.3		20
Beryllium	85229	S083120A	33	S083120A	32	1.0470	1U	---		20
Selenium	85229	S083120A	33	S083120A	32	10U	10U	---		20
Silver	85229	S083120A	33	S083120A	32	1U	1U	---		20

TxtQcType: MSD | Matrix: SOIL | SampleID: AD18955-003

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Arsenic	85229	S083120A	36	S083120A	35	250.5400	235.5220	6.2		20
Beryllium	85229	S083120A	36	S083120A	35	200.5140	197.0770	1.7		20
Selenium	85229	S083120A	36	S083120A	35	203.4800	202.5500	.46		20
Silver	85229	S083120A	36	S083120A	35	40.2550	38.9120	3.4		20

TxtQcType: SD | Matrix: SOIL | SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85229	S083120A	34	S083120A	32	5	7.3530	34.4610	6.7		20
Beryllium	85229	S083120A	34	S083120A	32	5	0.2180	0.9820	11	c	20
Selenium	85229	S083120A	34	S083120A	32	5	1.0710	4.4390	21	c	20
Silver	85229	S083120A	34	S083120A	32	5	0.0670	0.3380	0.89		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85230

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 85230

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Barium	85230	SW26165B	39	SW26165B	38	0.5095	0.5101	.11	20
Chromium	85230	SW26165B	39	SW26165B	38	0.4986	0.5002	.32	20
Copper	85230	SW26165B	39	SW26165B	38	0.5058	0.5038	.4	20
Manganese	85230	SW26165B	39	SW26165B	38	0.5074	0.5107	.64	20
Mercury	85230	H26172S	13	H26172S	12	9.8910	10.3400	4.4	20
Nickel	85230	SW26165B	39	SW26165B	38	0.5037	0.5027	.2	20
Silver	85230	SW26165B	39	SW26165B	38	0.0993	0.0992	.11	20
Zinc	85230	SW26165B	39	SW26165B	38	0.5009	0.5011	.028	20

TxtQcType: MR Matrix: AQUEOUS SampleID: AD18954-002

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Barium	85230	SW26165B	41	SW26165B	40	0.0777	0.0747	3.8	20
Chromium	85230	SW26165B	41	SW26165B	40	0.05U	0.05U	---	20
Copper	85230	SW26165B	41	SW26165B	40	0.05U	0.05U	---	20
Manganese	85230	SW26165B	41	SW26165B	40	0.4003	0.3807	5	20
Mercury	85230	H26172S	15	H26172S	14	0.50U	0.50U	---	20
Nickel	85230	SW26165B	41	SW26165B	40	0.0745	0.0713	4.3	20
Silver	85230	SW26165B	41	SW26165B	40	0.02U	0.02U	---	20
Zinc	85230	SW26165B	41	SW26165B	40	0.9822	0.9332	5.1	20

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD18954-002

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Barium	85230	SW26165B	43	SW26165B	42	0.5643	0.5723	1.4	20
Chromium	85230	SW26165B	43	SW26165B	42	0.4765	0.4833	1.4	20
Copper	85230	SW26165B	43	SW26165B	42	0.5227	0.5304	1.5	20
Manganese	85230	SW26165B	43	SW26165B	42	0.8833	0.8974	1.6	20
Mercury	85230	H26172S	17	H26172S	16	10.2600	10.2200	.39	20
Nickel	85230	SW26165B	43	SW26165B	42	0.5443	0.5530	1.6	20
Silver	85230	SW26165B	43	SW26165B	42	0.0982	0.0996	1.4	20
Zinc	85230	SW26165B	43	SW26165B	42	1.4385	1.4700	2.2	20

TxtQcType: SD Matrix: AQUEOUS SampleID: AD18954-002

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Barium	85230	SW26165B	45	SW26165B	40	5	0.0142	0.0747	5.3	10
Chromium	85230	SW26165B	45	SW26165B	40	5	-0.0005	0.0034	---	10
Copper	85230	SW26165B	45	SW26165B	40	5	0.0069	0.0326	5.6	10
Manganese	85230	SW26165B	45	SW26165B	40	5	0.0763	0.3807	0.2	10
Nickel	85230	SW26165B	45	SW26165B	40	5	0.0144	0.0713	1	10
Silver	85230	SW26165B	45	SW26165B	40	5	0.0004	0.0016	---	10
Zinc	85230	SW26165B	45	SW26165B	40	5	0.1879	0.9332	0.67	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85230

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 85230

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85230	A090120A	20	A090120A	19	238.4460	246.1590	3.2	20
Beryllium	85230	A090120A	20	A090120A	19	241.9360	248.0860	2.5	20
Lead	85230	A090120A	20	A090120A	19	237.1440	247.7790	4.4	20
Selenium	85230	A090120A	20	A090120A	19	235.1500	241.3350	2.6	20

TxtQcType: MR Matrix: AQUEOUS SampleID: AD18954-002

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85230	A090220A	19	A090220A	18	260.0330	251.2810	3.4	20
Beryllium	85230	A090120A	22	A090120A	21	0.5U	0.5U	---	20
Lead	85230	A090120A	22	A090120A	21	106.4350	102.3710	3.9	20
Selenium	85230	A090120A	22	A090120A	21	35.4350	35.3270	0.31	20

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD18954-002

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85230	A090220A	22	A090220A	21	316.3770	318.4730	.66	20
Beryllium	85230	A090120A	25	A090120A	24	211.2340	216.1200	2.3	20
Lead	85230	A090120A	25	A090120A	24	330.2140	334.0030	1.1	20
Selenium	85230	A090120A	25	A090120A	24	269.4180	269.6820	.098	20

TxtQcType: SD Matrix: AQUEOUS SampleID: AD18954-002

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Arsenic	85230	A090220A	20	A090220A	18	5	51.3970	251.2810	2.3	20
Beryllium	85230	A090120A	23	A090120A	21	5	0.0220	0.0880	---	20
Lead	85230	A090120A	23	A090120A	21	5	19.7420	102.3710	3.6	20
Selenium	85230	A090120A	23	A090120A	21	5	7.0650	35.3270	0.0057	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Metal Data
Verification of Instrument Parameters

INTERELEMENT CORRECTION SUMMARY PEICP3ax

Interfered Elements	Interfering Elements								
	Al	Ca	Fe	Mg	B	Ba	Cu	Mn	Mo
Al	N/A	0	0	0	0	0	0	0	23.5
Sb	0	0	0	0	0	0	0	0	-12.9
As	0	0	-0.116	0	0	0	0	0	5.29
Ba	0	0	0	0	0	N/A	0	0	0
Be	0	0	0	0	0	0	0	0	0
B	0	0	4.15	0	N/A	0	0	0	-2.34
Cd	0	0	0	0	0	0	0	0	0
Ca	0	N/A	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	N/A	0	0
Fe	0	0	N/A	0	0	0	0	0	0
Pb	-0.0911	0	0	0	0	0	0	0	0
Mg	0	0	0	N/A	0	0	0	0	0
Mn	0	0	0	0	0	0	0	N/A	0
Mo	0	0	0	0	0	0	0	0	N/A
Ni	0	0	0	0	0	0	0	0	0
K	0	0	4207.75	0	0	0	0	0	0
Se	0	0.0541	-0.495	0	0	0	0	0	0
Si	-0.0936	-0.0964	-0.285	-0.0459	-10.34	-5.45	-5.89	-4.28	11.1
Ag	0	0	0	0	0	0	0	0	0
Na	0	0	0	0	0	0	0	0	0
Tl	0	0	0	0	0	0	0	2.59	0.00
Sn	0	0	0	0	0	0	0	0	0
Ti	0	0	0	0	0	0	0	0	0
V	0	0	0.0684	0	0	0	0	0	-13.1
Zn	0	0	0	0	0	0	0	0	0

IECs run 07/15/2019. As, B Mod 12302019

INTERELEMENT CORRECTION SUMMARY PEICP3ax

	Interfering Elements							
Interfered Elements	Na	Ni	Se	Si	Sn	Ti	V	Zn
Al	0	0	0	0	0	0	0	0
Sb	0	0	0	0	0	0	0	0
As	0	0	0	0	0	0	0	0
Ba	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0.00	0	0
B	0	0	0	0	0	0	0	0
Cd	0	0	0	0	0	0	0	0
Ca	0	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	0	0
Fe	0	0	0	0	0	0	0	0
Pb	0	0	0	0	0	0	0	0
Mg	0	0	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0
Mo	0	0	0	0	0	0	0	0
Ni	0	N/A	0	0	0	0	0	0
K	0	0	0	0	0	0	0	0
Se	0	0	N/A	0	0.000	0	0	0
Si	0.0185	-5.1	0	N/A	-5.27	-2.58	-5.57	-4.92
Ag	0	0	0	0	0	0	0	0
Na	N/A	0	0	0	0	0.0	0	0
Tl	0	0	0	0	0	-11.1	-13.5	0
Sn	0	0	0	0	N/A	5.67	0	0
Ti	0	0	0	0	0	N/A	0	0
V	0	0	0	0	0	0	N/A	0
Zn	0	0	0	0	0	0	0	N/A

IECs run 07/15/2019. As, B Mod 12302019

MDL / RL SUMMARY
SOIL
PE ICP 3 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/Kg)
Ag	0.24396749	1.5
Al	16.7078017	200
As	1.37117317	4
Ba	0.67596126	10
Be	0.71383086	1.2
Ca	100.98567	1000
Cd	0.52283194	1.2
Co	0.71289903	2.5
Cr	0.67036785	5
Cu	0.61619583	5
Fe	13.1992644	200
Mg	19.5137102	500
Mn	0.64172541	10
Mo	0.27417636	2.5
Na	111.789255	250
Ni	1.10372174	5
Pb	0.61639339	5
Sb	1.03795619	4
Se	1.72784998	5
Sn	1.86972983	20
Ti	0.63640908	10
Tl	16.577423	5
V	0.95770226	10
Zn	1.50868728	10
B	5.92873987	20

COMPLETED: 12/31/2019

HGCV3 MDL/RL SUMMARY

Element:	*Mercury*	**Instrument ID:**	*HgCV3*
Instrument:	*PE FIMS 100*	**Analyst**	*Carmela Aliano*
Technique:	*CV*		

200 Series	METHOD	MDL (ppb)	Completed	RL (ppb)
H_2O	245.1	0.0794	12/31/2019	0.20
SW846				
H_2O	7470A	0.1740	12/31/2019	0.50
SOIL	7471 B	0.0757 (0.0126 mg/kg)	12/31/2019	0.50 (0.0833 mg/kg)

MDL/RL
Method 6020/6020A
MS3_7700
SOIL

ELEMENT	MDL (MG/KG)	Reporting Limits (MG/KG)
Al	1.5871	100
Sb	0.0225	0.8
AS	0.0175	0.2
BA	0.0568	1
BE	0.0157	0.2
CA	19.0038	100
CD	0.0141	0.4
CR	0.0859	0.4
CO	0.0109	0.4
CU	0.1937	2
FE	4.2445	100
PB	0.0374	0.4
MG	2.3285	100
MN	0.2413	1.2
MO	0.0534	0.2
NA	17.8116	100
Ni	0.0522	0.6
K	5.8233	100
Se	0.0635	2
Ag	0.0261	0.2
TL	0.0176	0.4
V	0.0108	0.2
Zn	1.4649	4

MDL analyzed 5/21/2019, 7/12/2019, 9/5/2019, 10/29/2019.
Blanks 1/24/2019-1/24/2020

INTERELEMENT CORRECTION SUMMARY PEICP2ax

Interfered Elements	Interfering Elements								
	Al	Ca	Fe	Mg	B	Ba	Ce	Cu	Mn
Al	N/A	0	0	0	0	0	-6.18497	0	0
Sb	0	0	0.0332865	0	0	0	-1.62618	0	0
As	0	0	-0.170638	0	0	0	0	0	0
Ba	0	0	0	0	0	N/A	0	0	0
Be	0	0	0	0	0	0	0	0	0
B	0	0	5.86388	0	N/A	0	0	0	0
Cd	0	0	0	0	0	0	-0.321734	0	0
Ca	0	N/A	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0	0
Ce	0	0	-0.810592	0	0	0	N/A	0	0
Cu	0	0	0	0	0	0	0	N/A	0
Fe	0	0	N/A	0	0	0	0	0	0
Pb	-0.104709	0	0	0	0	0	0.851109	0	0
Mg	0	0	0	N/A	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0	N/A
Mo	0	0	0	0	0	0	0	0	0
Ni	0	0	0	0	0	0	0	0	0
Se	0	0	-0.270247	0	0	0	0	0	0
Si	0	0	0	0	0	0	0	0	0
Ag	0	0	0	0	0	0	-3.49792	0	0
Na	0	0	0	0	0	0	0	0	0
Tl	0	0	0	0	0	0	-6.76851	0	0
Sn	0	0	0	0	0	0	0	0	0
Ti	0	0	0	0	0	0	0	0	0
V	0	0	0.0740709	0	0	0	0	0	0
Zn	0	0	0	0	0	0	0	0	0

INTERELEMENT CORRECTION SUMMARY PEICP2ax

Interfered Elements	Interfering Elements: Mo	Na	Ni	Se	Si	Sn	Ti	V	Zn
Al	20.7388	0	0	0	0	0	0	14.0607	0
Sb	-13.2842	0	0	0	0	-2.30	-1.75844	-1.45826	0
As	0	0	0	0	0	0	0	0	0
Ba	0	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0	-1.57995	0	0
B	0	0	0	0	0	0	0	0	0
Cd	0	0	0	0	0	0	0	0	0
Ca	0	0	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	1.46089	0	0
Ce	0	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	0	0	0
Fe	0	0	23.8802	76.9698	0	0	0	0	0
Pb	-2.86747	0	0	0	0	0	0	0	0
Mg	0	0	0	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0	0
Mo	N/A	0	0	0	0	0	0	0	0
Ni	0	0	N/A	0	0	0	0	0	0
Se	15.7635	0	0	N/A	0	0	0	0	0
Si	0	0	0	0	N/A	0	0	0	0
Ag	0	0	0	0	0	0	0	-3.20409	0
Na	0	N/A	0	0	0	0	0	0	-500.545
Tl	0	0	0	0	0	0	-6.58319	0	0
Sn	0	0	0	0	0	N/A	0	0	0
Ti	0	0	0	0	0	0	N/A	0	0
V	-15.9505	0	0	0	0	0	0	N/A	0
Zn	0	0	0	0	0	0	0	0	N/A

MDL / RL SUMMARY
SW846
PE ICP 2 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/L)
Ag	0.00166	0.02
Al	0.10472	0.2
As	0.00923	0.04
Ba	0.00477	0.05
Be	0.00484	0.012
Ca	0.33432	5
Cd	0.00312	0.012
Co	0.00304	0.02
Cr	0.01169	0.05
Cu	0.01043	0.05
Fe	0.20532	0.3
Mg	0.63182	5
Mn	0.01074	0.04
Mo	0.00697	0.02
Na	3.48291	5
Ni	0.01086	0.05
Pb	0.01069	0.05
Sb	0.01126	0.05
Se	0.01823	0.05
Sn	0.02613	0.05
Ti	0.00507	0.05
Tl	0.01693	0.05
V	0.00406	0.05
Zn	0.01975	0.05
B	0.04774	0.2
Si	0.01454	0.1

COMPLETED: 12/2019

MDL/RL
Method 6020/6020A
MS3_7700
Aqueous

ELEMENT	MDL (ug/L)	Reporting Limits (ug/L)
Al	29.0660	200
Sb	0.3002	3
As	0.1752	2
Ba	0.5171	5
Be	0.0715	1
Cd	0.0648	2
Ca	92.8156	500
Cr	0.7300	2
Co	0.0566	2
Cu	2.4965	10
Fe	49.4310	300
Pb	0.5029	3
Mg	26.1393	500
Mn	1.6649	6
Mo	0.2909	2
Ni	0.5894	3
K	48.0303	500
Se	0.4989	10
Ag	0.3106	1
Na	109.9227	500
Tl	0.2023	2
V	0.6477	2
Zn	7.9830	20

All elements analyzed 5/8/2019, 7/18/2019, 9/5/2019, 10/29/2019.
Blanks 9/9/2018 - 9/9/2019

HGCV3 MDL/RL SUMMARY

Element: *Mercury*
Instrument: *PE FIMS 100*
Technique: *CV*

Instrument ID: *HgCV3*
Analyst *Carmela Aliano*

200 Series	METHOD	MDL (ppb)	Completed	RL (ppb)
H_2O	245.1	0.0794	12/31/2019	0.20
SW846				
H_2O	7470A	0.1740	12/31/2019	0.50
SOIL	7471 B	0.0757 (0.0126 mg/kg)	12/31/2019	0.50 (0.0833 mg/kg)

Metal Data
Raw Data

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85228 (100) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85228 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-36-0	Antimony	2.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-38-2	Arsenic	2.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-39-3	Barium	5.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-41-7	Beryllium	0.60	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-42-8	Boron	10	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-43-9	Cadmium	0.60	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-70-2	Calcium	500	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-47-3	Chromium	2.5	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-48-4	Cobalt	1.2	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-50-8	Copper	2.5	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7439-89-6	Iron	100	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7439-92-1	Lead	2.5	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7439-95-4	Magnesium	250	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7439-96-5	Manganese	5.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7439-98-7	Molybdenum	1.2	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-02-0	Nickel	2.5	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-09-7	Potassium	250	ND	1	0.5	50	09/01/20	85228	S26170A4	15	P	PEICPRAD4A
7782-49-2	Selenium	2.5	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-23-5	Sodium	120	ND	1	0.5	50	09/01/20	85228	S26170A4	15	P	PEICPRAD4A
7440-28-0	Thallium	2.5	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-31-5	Tin	10	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-32-6	Titanium	5.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-62-2	Vanadium	5.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-66-6	Zinc	5.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85228 (167) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85228 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	08/31/20	85228	H26170S	11	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85229 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85229 Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	50	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-36-0	Antimony	0.40	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-38-2	Arsenic	0.10	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-39-3	Barium	0.50	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-41-7	Beryllium	0.10	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-43-9	Cadmium	0.20	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-70-2	Calcium	50	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-47-3	Chromium	0.20	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-48-4	Cobalt	0.20	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-50-8	Copper	1.0	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7439-89-6	Iron	50	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7439-92-1	Lead	0.20	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7439-95-4	Magnesium	50	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7439-96-5	Manganese	0.60	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7439-98-7	Molybdenum	0.20	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-02-0	Nickel	0.30	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-09-7	Potassium	50	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7782-49-2	Selenium	1.0	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-22-4	Silver	0.10	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-23-5	Sodium	50	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-28-0	Thallium	0.20	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-62-2	Vanadium	0.10	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA
7440-66-6	Zinc	2.0	ND	1	0.5	100	08/31/20	85229	3120ANEW	20	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85230 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85230 Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-36-0	Antimony	1.5	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-38-2	Arsenic	1.0	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-39-3	Barium	2.5	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-41-7	Beryllium	0.50	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-43-9	Cadmium	1.0	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-70-2	Calcium	250	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-47-3	Chromium	1.0	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-48-4	Cobalt	1.0	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-50-8	Copper	5.0	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7439-89-6	Iron	150	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7439-92-1	Lead	1.5	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7439-95-4	Magnesium	250	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7439-96-5	Manganese	3.0	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7439-98-7	Molybdenum	1.0	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-02-0	Nickel	1.5	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-09-7	Potassium	250	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7782-49-2	Selenium	5.0	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-22-4	Silver	0.50	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-23-5	Sodium	250	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-28-0	Thallium	1.0	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-62-2	Vanadium	1.0	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA
7440-66-6	Zinc	10	ND	1	50	100	09/01/20	85230	0120ANEW	18	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85230 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85230 (1) Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-36-0	Antimony	25	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-39-3	Barium	25	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-41-7	Beryllium	6.0	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-42-8	Boron	100	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-43-9	Cadmium	6.0	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-70-2	Calcium	2500	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-47-3	Chromium	25	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-48-4	Cobalt	10	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-50-8	Copper	25	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7439-89-6	Iron	150	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7439-95-4	Magnesium	2500	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7439-96-5	Manganese	20	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/02/20	85230	H26172SW	11	CV	HGCV3A
7439-98-7	Molybdenum	10	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-02-0	Nickel	25	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-09-7	Potassium	2500	ND	1	50	50	09/02/20	85230	SW26172A2	14	P	PEICPRAD2A
7440-21-3	Silicon	50	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-22-4	Silver	10	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-23-5	Sodium	2500	ND	1	50	50	09/02/20	85230	SW26172A2	14	P	PEICPRAD2A
7440-28-0	Thallium	25	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-31-5	Tin	25	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-32-6	Titanium	25	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-62-2	Vanadium	25	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A
7440-66-6	Zinc	25	ND	1	50	50	09/01/20	85230	SW26165B2	37	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S26168A3.txt

Analysis Date: 08/31/20 **Instrument:** PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	16:56	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	16:59	2							V-333671(LLICV/LLCCV soil)
CALST3 V-333666	1	CAL	17:03	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	17:07	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	17:12	5							V-333673(CCV)
ICB V-333667	1	ICB	17:16	6							V-333667(ICB/CCB)
LRS V-333662	1	LRS	17:19	7	PB-SOIL	SOIL	SOIL	SW846	85226		V-333662(LRS)
ICS3 V-333666	1	ICS	17:24	8							V-333666(ICS3 - Middle Std)
RINSE	1	SMP	17:28	9		SOIL	SOIL	SW846	85226		()
LLICV V-333671	1	LLICV	17:32	10	PB-SOIL	SOIL	SOIL	SW846	85226		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	17:36	11							V-333668(ICSA)
AD18966-001	1	SMP	17:41	12	MET-1-SOIL	SOIL	SOIL	SW846	85226		()
AD18966-002	1	SMP	17:45	13	MET-1-SOIL	SOIL	SOIL	SW846	85226		()
MB 85226 (100)	1	MB	17:48	14	PB-SOIL	SOIL	SOIL	SW846	85226		()
LCS 85226	1	LCS	17:52	15	PB-SOIL	SOIL	SOIL	SW846	85226		()
LCS MR 85226	1	LCS	17:57	16	PB-SOIL	SOIL	SOIL	SW846	85226		()
CCV V-333673	1	CCV	18:02	17							V-333673(CCV)
CCB V-333667	1	CCB	18:06	18							V-333667(ICB/CCB)
AD18927-001	1	SMP	18:10	19	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-001	1	MR	18:14	20	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-001	1	MS	18:19	21	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-001	1	MSD	18:24	22	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-001	1	PS	18:29	23	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-001	5	SD	18:33	24	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-002	1	SMP	18:37	25	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-003	1	SMP	18:41	26	PB-SOIL	SOIL	SOIL	SW846	85226		()
CCV V-333673	1	CCV	18:45	27							V-333673(CCV)
CCB V-333667	1	CCB	18:49	28							V-333667(ICB/CCB)
AD18927-004	1	SMP	18:53	29	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-005	1	SMP	18:56	30	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-006	1	SMP	19:00	31	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-007	1	SMP	19:04	32	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-008	1	SMP	19:09	33	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-009	1	SMP	19:13	34	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-010	1	SMP	19:17	35	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-011	1	SMP	19:20	36	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-012	1	SMP	19:25	37	PB-SOIL	SOIL	SOIL	SW846	85226		()
CCV V-333673	1	CCV	19:29	38							V-333673(CCV)
CCB V-333667	1	CCB	19:34	39							V-333667(ICB/CCB)
MB 85228 (100)	1	MB	19:37	40	SRSMETALS-S	SOIL	SOIL	SW846	85228		()
LCS 85228	1	LCS	19:41	41	SRSMETALS-S	SOIL	SOIL	SW846	85228		()
LCS MR 85228	1	LCS	19:46	42	SRSMETALS-S	SOIL	SOIL	SW846	85228		()
AD18955-001	1	SMP	19:51	43	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-001	1	MR	19:56	44	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-002	1	MS	20:00	45	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-003	1	MSD	20:05	46	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-001	1	PS	20:10	47	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-001	5	SD	20:14	48	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
CCV V-333673	1	CCV	20:18	49							V-333673(CCV)
CCB V-333667	1	CCB	20:22	50							V-333667(ICB/CCB)
AD18934-001	1	SMP	20:26	51	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18934-002	1	SMP	20:31	52	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18934-003	1	SMP	20:36	53	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18934-004	1	SMP	20:41	54	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18934-005	1	SMP	20:45	55	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-004	1	SMP	20:50	56	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-005	1	SMP	20:55	57	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18949-014	1	SMP	20:59	58	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
CCV V-333673	1	CCV	21:03	59							V-333673(CCV)
CCB V-333667	1	CCB	21:07	60							V-333667(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.105 9/1/2020 2:46:07 PM

OK
ALL ELEMENTS REPORTED
Na,K NOT REPORTED

9/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S26168A3.txt

Analysis Date: 08/31/20 **Instrument:** PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
AD18950-004	1	SMP	21:10	61	MET-RCRA-S	SOIL	SOIL	SW846	85228		()
AD18932-002	1	SMP	21:15	62	MET-RCRA-S	SOIL	SOIL	SW846	85228	Ba,Pb,Zn NOT REPORTED>LR	()
AD18960-001	1	SMP	21:20	63	MET-PP6010S	SOIL	SOIL	SW846	85228		()
AD18960-003	1	SMP	21:24	64	MET-PP6010S	SOIL	SOIL	SW846	85228		()
AD18960-004	1	SMP	21:27	65	MET-PP6010S	SOIL	SOIL	SW846	85228		()
AD18960-007	1	SMP	21:32	66	MET-PP6010S	SOIL	SOIL	SW846	85228		()
AD18960-015	1	SMP	21:37	67	SRSMETALS-S	SOIL	SOIL	SW846	85228		()
AD18960-017	1	SMP	21:41	68	SRSMETALS-S	SOIL	SOIL	SW846	85228		()
CCV V-333673	1	CCV	21:45	69							V-333673(CCV)
CCB V-333667	1	CCB	21:50	70							V-333667(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.105 9/1/2020 2:46:07 PM

OK
ALL ELEMENTS REPORTED
Na,K NOT REPORTED

9/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H261705.txt

Analysis Date: 08/31/20 **Instrument:** HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	11:46	1							()
.2 PPB	1	CAL	11:47	2							()
.5 PPB	1	CAL	11:48	3							()
1 PPB	1	CAL	11:50	4							()
2 PPB	1	CAL	11:51	5							()
5 PPB	1	CAL	11:52	6							()
10 PPB	1	CAL	11:54	7							()
25 PPB	1	CAL	11:55	8							()
ICV (2)	1	ICV	11:57	9							()
ICB	1	ICB	11:59	10							()
MB 85228 (167)	1	MB	12:00	11	HG-SOIL	SOIL	SOIL	SW846	85228		()
LCS 85228	1	NA	12:02	12	HG-SOIL	SOIL	SOIL	SW846	85228	Conc. Is greater than calibration limits.	()
LCS MR 85228	1	NA	12:03	13	HG-SOIL	SOIL	SOIL	SW846	85228	Conc. Is greater than calibration limits.	()
LCS 4D	4	LCS	12:05	14	HG-SOIL	SOIL	SOIL	SW846	85228		()
LCS 4D MR	4	LCS	12:06	15	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18955-001	1	SMP	12:08	16	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18955-001	1	MR	12:09	17	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18955-002	1	MS	12:10	18	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18955-003	1	MSD	12:12	19	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18934-001	1	SMP	12:14	20	HG-SOIL	SOIL	SOIL	SW846	85228		()
CCV	1	CCV	12:15	21							()
CCB	1	CCB	12:17	22							()
AD18934-002	1	SMP	12:18	23	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18934-003	1	SMP	12:19	24	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18934-004	1	SMP	12:21	25	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18934-005	1	SMP	12:22	26	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18955-004	1	SMP	12:23	27	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18955-005	1	SMP	12:25	28	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18949-014	1	SMP	12:26	29	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18950-004	1	SMP	12:27	30	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18932-002	1	SMP	12:29	31	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18960-001	1	SMP	12:30	32	HG-SOIL	SOIL	SOIL	SW846	85228		()
CCV	1	CCV	12:32	33							()
CCB	1	CCB	12:34	34							()
AD18960-003	1	SMP	12:35	35	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18960-004	1	SMP	12:36	36	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18960-007	1	SMP	12:38	37	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18960-015	1	SMP	12:39	38	HG-SOIL	SOIL	SOIL	SW846	85228		()
AD18960-017	1	SMP	12:40	39	HG-SOIL	SOIL	SOIL	SW846	85228		()
CCV	1	CCV	12:42	40							()
CCB	1	CCB	12:43	41							()

Comments/Reviewedby:

bransaw
192.168.1.120 8/31/2020 1:30:12 PM

OK

9/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334000

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Control/Receipt Number: 13067

Description
hydrogen peroxide`

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	H325-4	197718	02/19/20	01/31/25	Lopez, Jose	4	4L	neat	neat

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13422

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T. BAKER	9530-33	253057	07/28/20	01/21/25	Burwell, John	6	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333595

Prepared By: Silva, Amanda
Description: 1:1 HNO3 WARNING
Prep Date: 8/24/2020
Expiration Date: 2/24/2021
Department: Metals
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13421	nitric acid	500 ml	neat neat	

Veritech Lot Number: V-333662

Prepared By: Aliano, Carmela
Description: LRS
Prep Date: 8/24/2020
Expiration Date: 10/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	335 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12915	LINEAR RANGE 1B	50 ml	neat neat	
12917	linear range 1C	50 ml	neat neat	
13092	CERIUM	12.5 ml	CONC conc	
12976	BORON	2.5 ml	CONC conc	
12977	SILICON	12.5 ml	CONC conc	

Veritech Lot Number: V-333665

Prepared By: Aliano, Carmela
Description: ICS4 High std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: various mg/l
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	434.5 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	1
12977	SILICON	5 ml	CONC conc	10

Veritech Lot Number: V-333666

Prepared By: Aliano, Carmela
Description: ICS3 - Middle Std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	944.75 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	.5
12977	SILICON	5 ml	CONC conc	5
13092	CERIUM	5 ml	CONC conc	5

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333667

Prepared By: Aliano, Carmela
Description: ICB/CCB
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: 0 mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	

Veritech Lot Number: V-333668

Prepared By: Aliano, Carmela
Description: ICSA
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: MULTI mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13176	ICSA	50 ml	NEAT neat	

Veritech Lot Number: V-333671

Prepared By: Aliano, Carmela
Description: LLICV/LLCCV soil
Prep Date: 8/24/2020
Expiration Date: 12/31/2020
Department: WetChem
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
12982	LL-SOIL	10 ml		
12976	BORON	.2 ml	CONC conc	
12977	SILICON	.1 ml	CONC conc	
13092	CERIUM	.1 ml	CONC conc	

Veritech Lot Number: V-333673

Prepared By: Aliano, Carmela
Description: CCV
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13171	ICV 1	10 ml	NEAT neat	
13170	ICV 2	10 ml	CONC conc	
12981	BORON	.5 ml	CONC conc	
13091	CERIUM	5 ml	CONC conc	
12933	silicon	5 ml	CONC conc	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12915

Description
LINEAR RANGE 1B

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-40-500	7/271ab	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12917

Description
linear range 1C

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
spex	XHCV-44-500	8-002AB	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12933

Description
silicon

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-145	S191206040	12/13/19	12/30/21	Aliano, Carmela	4	500m	CONC	CONC

Veritech Control/Receipt Number: 12976

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLB9-2X	24-110BX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12977

Description
SILICON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLSI9-2X	24-93SIX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12981

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-055	S190719015	01/06/20	07/30/21	Aliano, Carmela	3	500ml	CONC	CONC

Veritech Control/Receipt Number: 12982

Description
LL-SOIL

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-31-500	8/209AB	01/06/20	12/31/20	Aliano, Carmela	1	500m		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12983

Description
CALIBRATION 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	8/214AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 12984

Description
CALIBRATION 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	8/215AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13091

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-051-585	S190710006	03/04/20	07/30/21	Aliano, Carmela	2	500ml	CONC	CONC

Veritech Control/Receipt Number: 13092

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLCE2-2X	24-15CEX	03/04/20	02/28/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13168

Description
nitric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	245675	04/07/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13169

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	04/07/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number:13170

Description
ICV 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S200306032	04/07/20	03/31/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number:13171

Description
ICV 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S200306031	04/07/20	03/31/21	Aliano, Carmela	2	500ml	NEAT	NEAT

Veritech Control/Receipt Number:13176

Description
ICSA

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-30	9-265AB	04/07/20	03/31/21	Aliano, Carmela	4	500ml	NEAT	NEAT

Veritech Control/Receipt Number:13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Method: PE3 7300DV SOIL AX Page 1 Date: 8/31/2020 4:58:41 PM

S26168A3 26168/26170

SOIL 9/1/20

Analysis Begun

Start Time: 8/31/2020 4:54:52 PM Plasma On Time: 8/31/2020 4:30:25 PM
Logged In Analyst: usermet Technique: ICP Continuous
Spectrometer Model: Optima 7300 DV, S/N No Serial #Autosampler Model: S10

Sample Information File: C:\pe\Administrator\Sample Information\08.31.20.sif
Batch ID:
Results Data Set: S26168A3
Results Library: C:\pe\Administrator\Results\Results.mdb

9/3/20

Method Loaded
Method Name: PE3 7300DV SOIL AX Method Last Saved: 8/24/2020 1:40:56 PM
IEC File: IECax071519A3.iec MSF File:
Method Description: 6010D (SOIL)

Sequence No.: 1 Autosampler Location: 1
Sample ID: CALBLK V-333667 Date Collected: 8/31/2020 4:56:11 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CALBLK V-333667

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	410872.8	4677.55	1.14%	100	%
Y 371.029	182512.8	1838.24	1.01%	100	%
Ag 328.068†	-242.4	57.58	23.76%	[0.00]	mg/L
Al 308.215†	3327.9	14.27	0.43%	[0.00]	mg/L
As 188.979†	11.5	2.88	25.14%	[0.00]	mg/L
Ba 233.527†	-19.8	13.64	68.83%	[0.00]	mg/L
Be 313.107†	-1314.1	91.44	6.96%	[0.00]	mg/L
Ca 317.933†	2714.1	86.08	3.17%	[0.00]	mg/L
Cd 228.802†	161.3	9.16	5.68%	[0.00]	mg/L
Co 228.616†	-46.0	10.08	21.88%	[0.00]	mg/L
Cr 267.716†	39.7	34.32	86.52%	[0.00]	mg/L
Cu 327.393†	-456.0	59.40	13.02%	[0.00]	mg/L
Fe 273.955†	-1263.4	10.92	0.86%	[0.00]	mg/L
K 404.721†	77186.3	851.43	1.10%	[0.00]	mg/L
Mg 279.077†	-905.8	38.99	4.30%	[0.00]	mg/L
Mn 257.610†	375.9	10.22	2.72%	[0.00]	mg/L
Mo 202.031†	228.3	4.48	1.96%	[0.00]	mg/L
Na 330.237†	576.9	33.57	5.82%	[0.00]	mg/L
Ni 231.604†	12.5	2.28	18.30%	[0.00]	mg/L
Pb 220.353†	74.0	11.24	15.20%	[0.00]	mg/L
Sb 206.836†	62.7	6.13	9.78%	[0.00]	mg/L
Se 196.026†	50.8	7.30	14.39%	[0.00]	mg/L
Sn 189.927†	2.3	2.69	117.24%	[0.00]	mg/L
Ti 334.940†	216.7	37.77	17.43%	[0.00]	mg/L
Tl 190.801†	-62.2	7.07	11.37%	[0.00]	mg/L
V 290.880†	1853.5	32.86	1.77%	[0.00]	mg/L
Zn 206.200†	-113.3	13.88	12.25%	[0.00]	mg/L
B 249.772	299.9	17.46	5.82%	[0.00]	mg/L
Si 251.611	258.2	19.27	7.46%	[0.00]	mg/L

26170/80228

All reported
Na, K NOT reported

18932-002
Ba, Zn, Pb
NOT Reported

Sequence No.: 2
Sample ID: CALST2 V-333671
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 8/31/2020 4:59:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST2 V-333671

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	398229.1	5210.68	1.31%	96.9	%
Y 371.029	176104.9	2316.27	1.32%	96.5	%
Ag 328.068†	1439.2	92.32	6.41%	[0.015]	mg/L
Al 308.215†	18042.0	51.70	0.29%	[2]	mg/L
As 188.979†	90.6	1.89	2.09%	[0.04]	mg/L
Ba 233.527†	9478.7	145.76	1.54%	[0.1]	mg/L
Be 313.107†	15421.7	66.29	0.43%	[0.012]	mg/L
Ca 317.933†	986154.3	2526.80	0.26%	[10]	mg/L
Cd 228.802†	414.3	3.47	0.84%	[0.012]	mg/L
Co 228.616†	727.1	5.81	0.80%	[0.025]	mg/L
Cr 267.716†	3650.5	60.54	1.66%	[0.05]	mg/L
Cu 327.393†	3497.6	46.15	1.32%	[0.05]	mg/L
Fe 273.955†	18783.5	120.13	0.64%	[2]	mg/L
K 404.721†	2799.7	1104.65	39.46%	[5]	mg/L
Mg 279.077†	59732.1	285.51	0.48%	[5]	mg/L
Mn 257.610†	28951.8	34.32	0.12%	[0.1]	mg/L
Mo 202.031†	295.8	12.67	4.28%	[0.025]	mg/L
Na 330.237†	902.7	23.07	2.56%	[2.5]	mg/L
Ni 231.604†	1564.8	34.31	2.19%	[0.05]	mg/L
Pb 220.353†	363.2	27.26	7.51%	[0.05]	mg/L
Sb 206.836†	94.7	3.81	4.03%	[0.04]	mg/L
Se 196.026†	113.8	1.94	1.70%	[0.05]	mg/L
Sn 189.927†	1353.1	24.77	1.83%	[0.2]	mg/L
Ti 334.940†	27132.0	47.82	0.18%	[0.1]	mg/L
Tl 190.801†	121.6	6.35	5.22%	[0.05]	mg/L
V 290.880†	4885.4	47.58	0.97%	[0.1]	mg/L
Zn 206.200†	5703.1	96.16	1.69%	[0.1]	mg/L
B 249.772	13903.4	140.38	1.01%	[0.2]	mg/L
Si 251.611	3555.5	46.39	1.30%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-333666
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 8/31/2020 5:03:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST3 V-333666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	396359.9	3423.11	0.86%	96.5	%
Y 371.029	148016.5	1449.74	0.98%	81.1	%
Ag 328.068†	10631.1	83.92	0.79%	[0.1]	mg/L
Al 308.215†	44732.5	102.70	0.23%	[5]	mg/L
As 188.979†	1126.4	11.82	1.05%	[0.5]	mg/L
Ba 233.527†	44902.6	93.96	0.21%	[0.5]	mg/L
Be 313.107†	660878.4	5962.46	0.90%	[0.5]	mg/L
Ca 317.933†	4736712.1	40690.52	0.86%	[50]	mg/L
Cd 228.802†	16518.5	229.61	1.39%	[0.5]	mg/L
Co 228.616†	14720.1	194.00	1.32%	[0.5]	mg/L
Cr 267.716†	35818.5	498.03	1.39%	[0.5]	mg/L
Cu 327.393†	34736.4	127.62	0.37%	[0.5]	mg/L
Fe 273.955†	46803.3	192.95	0.41%	[5]	mg/L
K 404.721†	4655.0	913.11	19.62%	[50]	mg/L
Mg 279.077†	583482.7	2692.52	0.46%	[50]	mg/L
Mn 257.610†	146963.7	294.21	0.20%	[0.5]	mg/L
Mo 202.031†	5762.7	76.18	1.32%	[0.5]	mg/L
Na 330.237†	19885.4	46.96	0.24%	[50]	mg/L
Ni 231.604†	15416.2	189.73	1.23%	[0.5]	mg/L
Pb 220.353†	3590.9	57.32	1.60%	[0.5]	mg/L
Sb 206.836†	1127.8	19.67	1.74%	[0.5]	mg/L
Se 196.026†	1118.9	22.72	2.03%	[0.5]	mg/L
Sn 189.927†	3369.5	53.88	1.60%	[0.5]	mg/L
Ti 334.940†	137182.1	352.42	0.26%	[0.5]	mg/L
Tl 190.801†	1136.3	22.83	2.01%	[0.5]	mg/L
V 290.880†	24206.8	156.18	0.65%	[0.5]	mg/L
Zn 206.200†	28859.5	351.55	1.22%	[0.5]	mg/L
B 249.772	36409.0	565.89	1.55%	[0.5]	mg/L
Si 251.611	117126.2	1238.57	1.06%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-333665
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 8/31/2020 5:07:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST4 V-333665

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	387108.8	2621.99	0.68%	94.2	%
Y 371.029	118872.0	972.03	0.82%	65.1	%
Ag 328.068†	17425.6	29.01	0.17%	[0.2]	mg/L
Al 308.215†	89941.9	58.24	0.06%	[10]	mg/L
As 188.979†	2273.1	22.59	0.99%	[1]	mg/L
Ba 233.527†	90195.4	83.39	0.09%	[1]	mg/L
Be 313.107†	1340682.9	1915.03	0.14%	[1]	mg/L
Ca 317.933†	9417077.5	105445.75	1.12%	[100]	mg/L
Cd 228.802†	32230.5	72.34	0.22%	[1]	mg/L
Co 228.616†	29831.9	349.32	1.17%	[1]	mg/L
Cr 267.716†	67803.9	58.15	0.09%	[1]	mg/L
Cu 327.393†	70012.1	66.03	0.09%	[1]	mg/L
Fe 273.955†	93532.4	89.25	0.10%	[10]	mg/L
K 404.721†	8043.7	619.67	7.70%	[100]	mg/L
Mg 279.077†	1148648.7	1686.18	0.15%	[100]	mg/L
Mn 257.610†	294200.0	330.01	0.11%	[1]	mg/L
Mo 202.031†	11694.8	104.86	0.90%	[1]	mg/L
Na 330.237†	42158.3	106.24	0.25%	[100]	mg/L
Ni 231.604†	31114.3	323.84	1.04%	[1]	mg/L
Pb 220.353†	7153.3	49.95	0.70%	[1]	mg/L
Sb 206.836†	2272.4	20.82	0.92%	[1]	mg/L
Se 196.026†	2249.9	17.47	0.78%	[1]	mg/L
Sn 189.927†	6803.3	81.36	1.20%	[1]	mg/L
Ti 334.940†	274598.2	107.17	0.04%	[1]	mg/L
Tl 190.801†	2248.2	32.00	1.42%	[1]	mg/L
V 290.880†	50042.6	238.94	0.48%	[1]	mg/L
Zn 206.200†	55175.8	165.58	0.30%	[1]	mg/L
B 249.772	71891.6	302.31	0.42%	[1]	mg/L
Si 251.611	231870.6	1510.26	0.65%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	412.5	88400	0.00000	0.993507	
Al 308.215	3	Lin, Calc Int	-23.8	8989	0.00000	0.999995	
As 188.979	3	Lin, Calc Int	-2.0	2271	0.00000	0.999989	
Ba 233.527	3	Lin, Calc Int	167.4	89940	0.00000	0.999981	
Be 313.107	3	Lin, Calc Int	-2025.2	1339000	0.00000	0.999974	
Ca 317.933	3	Lin, Calc Int	24939.9	94000	0.00000	0.999988	
Cd 228.802	3	Lin, Calc Int	85.9	32290	0.00000	0.999919	
Co 228.616	3	Lin, Calc Int	-44.2	29810	0.00000	0.999977	
Cr 267.716	3	Lin, Calc Int	468.3	68000	0.00000	0.999580	
Cu 327.393	3	Lin, Calc Int	-50.7	69970	0.00000	0.999992	
Fe 273.955	3	Lin, Calc Int	39.4	9351	0.00000	1.000000	
K 404.721	3	Lin, Calc Int	1196.3	69.12	0.00000	0.954810	
Mg 279.077	3	Lin, Calc Int	2713.4	11490	0.00000	0.999967	
Mn 257.610	3	Lin, Calc Int	-233.0	294400	0.00000	0.999999	
Mo 202.031	3	Lin, Calc Int	-13.9	11680	0.00000	0.999971	
Na 330.237	3	Lin, Calc Int	-286.2	420.3	0.00000	0.999584	
Ni 231.604	3	Lin, Calc Int	-21.7	31090	0.00000	0.999988	
Pb 220.353	3	Lin, Calc Int	5.1	7153	0.00000	0.999998	
Sb 206.836	3	Lin, Calc Int	0.2	2269	0.00000	0.999989	
Se 196.026	3	Lin, Calc Int	-0.5	2248	0.00000	0.999995	
Sn 189.927	3	Lin, Calc Int	-9.4	6802	0.00000	0.999987	
Ti 334.940	3	Lin, Calc Int	-167.1	274700	0.00000	0.999999	
Tl 190.801	3	Lin, Calc Int	6.4	2246	0.00000	0.999983	
V 290.880	3	Lin, Calc Int	-203.8	49970	0.00000	0.999853	
Zn 206.200	3	Lin, Calc Int	318.2	55290	0.00000	0.999707	
B 249.772	3	Lin, Calc Int	-109.0	72140	0.00000	0.999931	
Si 251.611	3	Lin, Calc Int	778.2	23140	0.00000	0.999982	

Sequence No.: 5
Sample ID: ICV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 8/31/2020 5:12:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	399552.5	97.2	%	0.33				0.34%
Y 371.029	148843.8	81.6	%	0.27				0.33%
Ag 328.068†	6753.3	0.0717286	mg/L	0.00115703	0.0717286	mg/L	0.00115703	1.61%
QC value less than the lower limit for Ag 328.068 Recovery = 71.73%								
Al 308.215†	44270.2	4.91617	mg/L	0.006168	4.91617	mg/L	0.006168	0.13%
QC value within limits for Al 308.215 Recovery = 98.32%								
As 188.979†	1123.7	0.493589	mg/L	0.0045632	0.493589	mg/L	0.0045632	0.92%
QC value within limits for As 188.979 Recovery = 98.72%								
Ba 233.527†	44288.9	0.490555	mg/L	0.0012833	0.490555	mg/L	0.0012833	0.26%
QC value within limits for Ba 233.527 Recovery = 98.11%								
Be 313.107†	644805.5	0.482947	mg/L	0.0052909	0.482947	mg/L	0.0052909	1.10%
QC value within limits for Be 313.107 Recovery = 96.59%								
Ca 317.933†	4836711.0	51.1884	mg/L	0.51571	51.1884	mg/L	0.51571	1.01%
QC value within limits for Ca 317.933 Recovery = 102.38%								
Cd 228.802†	16453.1	0.506909	mg/L	0.0039986	0.506909	mg/L	0.0039986	0.79%
QC value within limits for Cd 228.802 Recovery = 101.38%								
Co 228.616†	14611.5	0.491683	mg/L	0.0040680	0.491683	mg/L	0.0040680	0.83%
QC value within limits for Co 228.616 Recovery = 98.34%								
Cr 267.716†	35887.9	0.520879	mg/L	0.0043352	0.520879	mg/L	0.0043352	0.83%
QC value within limits for Cr 267.716 Recovery = 104.18%								
Cu 327.393†	34512.3	0.493990	mg/L	0.0010606	0.493990	mg/L	0.0010606	0.21%
QC value within limits for Cu 327.393 Recovery = 98.80%								
Fe 273.955†	46361.8	4.95391	mg/L	0.003754	4.95391	mg/L	0.003754	0.08%
QC value within limits for Fe 273.955 Recovery = 99.08%								
K 404.721†	4761.0	30.7302	mg/L	7.16890	30.7302	mg/L	7.16890	23.33%
QC value less than the lower limit for K 404.721 Recovery = 61.46%								
Mg 279.077†	592456.7	51.3249	mg/L	0.12273	51.3249	mg/L	0.12273	0.24%
QC value within limits for Mg 279.077 Recovery = 102.65%								
Mn 257.610†	145185.8	0.493942	mg/L	0.0003747	0.493942	mg/L	0.0003747	0.08%
QC value within limits for Mn 257.610 Recovery = 98.79%								
Mo 202.031†	5686.2	0.488103	mg/L	0.0038493	0.488103	mg/L	0.0038493	0.79%
QC value within limits for Mo 202.031 Recovery = 97.62%								
Na 330.237†	20475.0	49.3997	mg/L	0.15270	49.3997	mg/L	0.15270	0.31%
QC value within limits for Na 330.237 Recovery = 98.80%								
Ni 231.604†	15339.4	0.494161	mg/L	0.0043816	0.494161	mg/L	0.0043816	0.89%
QC value within limits for Ni 231.604 Recovery = 98.83%								
Pb 220.353†	3561.5	0.497647	mg/L	0.0027161	0.497647	mg/L	0.0027161	0.55%
QC value within limits for Pb 220.353 Recovery = 99.53%								
Sb 206.836†	1060.1	0.473450	mg/L	0.0283557	0.473450	mg/L	0.0283557	5.99%
QC value within limits for Sb 206.836 Recovery = 94.69%								
Se 196.026†	1096.3	0.487539	mg/L	0.0068373	0.487539	mg/L	0.0068373	1.40%
QC value within limits for Se 196.026 Recovery = 97.51%								
Sn 189.927†	3364.6	0.493205	mg/L	0.0051846	0.493205	mg/L	0.0051846	1.05%
QC value within limits for Sn 189.927 Recovery = 98.64%								
Ti 334.940†	136513.9	0.497496	mg/L	0.0011557	0.497496	mg/L	0.0011557	0.23%
QC value within limits for Ti 334.940 Recovery = 99.50%								
Tl 190.801†	1082.2	0.489934	mg/L	0.0025580	0.489934	mg/L	0.0025580	0.52%
QC value within limits for Tl 190.801 Recovery = 97.99%								
V 290.880†	24143.6	0.493319	mg/L	0.0002921	0.493319	mg/L	0.0002921	0.06%
QC value within limits for V 290.880 Recovery = 98.66%								
Zn 206.200†	29121.9	0.520947	mg/L	0.0047830	0.520947	mg/L	0.0047830	0.92%
QC value within limits for Zn 206.200 Recovery = 104.19%								
B 249.772	37719.5	0.504930	mg/L	0.0011441	0.504930	mg/L	0.0011441	0.23%
QC value within limits for B 249.772 Recovery = 100.99%								
Si 251.611	123516.5	5.33144	mg/L	0.022882	5.33144	mg/L	0.022882	0.43%
QC value within limits for Si 251.611 Recovery = 106.63%								

QC Failed. Continue with analysis.

Sequence No.: 6
Sample ID: ICB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 8/31/2020 5:16:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	408721.3	99.5	%	0.24				0.24%
Y 371.029	181200.6	99.3	%	0.22				0.22%
Ag 328.068†	-73.1	-0.0054935	mg/L	0.00017731	-0.0054935	mg/L	0.00017731	3.23%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	80.0	0.0114800	mg/L	0.00435060	0.0114800	mg/L	0.00435060	37.90%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.6	0.0011232	mg/L	0.00369699	0.0011232	mg/L	0.00369699	329.14%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-9.5	-0.0019678	mg/L	0.00006345	-0.0019678	mg/L	0.00006345	3.22%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	3.3	0.0015145	mg/L	0.00003763	0.0015145	mg/L	0.00003763	2.48%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	62.6	-0.264649	mg/L	0.0011278	-0.264649	mg/L	0.0011278	0.43%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	-3.0	-0.0027535	mg/L	0.00031650	-0.0027535	mg/L	0.00031650	11.49%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-3.1	0.0013775	mg/L	0.00019787	0.0013775	mg/L	0.00019787	14.36%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	3.9	-0.0068290	mg/L	0.00042176	-0.0068290	mg/L	0.00042176	6.18%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	33.4	0.0012018	mg/L	0.00021415	0.0012018	mg/L	0.00021415	17.82%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-5.9	-0.0048468	mg/L	0.00126928	-0.0048468	mg/L	0.00126928	26.19%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	1254.9	0.867135	mg/L	0.5266950	0.867135	mg/L	0.5266950	60.74%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	-10.7	-0.237080	mg/L	0.0005955	-0.237080	mg/L	0.0005955	0.25%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	19.5	0.0008576	mg/L	0.00002118	0.0008576	mg/L	0.00002118	2.47%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	19.2	0.0028374	mg/L	0.00046375	0.0028374	mg/L	0.00046375	16.34%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-20.7	0.631693	mg/L	0.0768543	0.631693	mg/L	0.0768543	12.17%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	12.7	0.0011088	mg/L	0.00028599	0.0011088	mg/L	0.00028599	25.79%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.7	-0.0009584	mg/L	0.00168321	-0.0009584	mg/L	0.00168321	175.62%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	8.5	0.0037201	mg/L	0.00069945	0.0037201	mg/L	0.00069945	18.80%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	11.5	0.0053520	mg/L	0.00488436	0.0053520	mg/L	0.00488436	91.26%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	11.2	0.0030195	mg/L	0.00041385	0.0030195	mg/L	0.00041385	13.71%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	78.8	0.0008952	mg/L	0.00022544	0.0008952	mg/L	0.00022544	25.18%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.2	-0.0033101	mg/L	0.00225592	-0.0033101	mg/L	0.00225592	68.15%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	2.1	0.0041587	mg/L	0.00056037	0.0041587	mg/L	0.00056037	13.47%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-0.4	-0.0057618	mg/L	0.00012006	-0.0057618	mg/L	0.00012006	2.08%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	302.6	0.0057315	mg/L	0.00066983	0.0057315	mg/L	0.00066983	11.69%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	16.4	-0.0329249	mg/L	0.00179694	-0.0329249	mg/L	0.00179694	5.46%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: LRS V-333662
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 8/31/2020 5:19:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LRS V-333662

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	354056.6	86.2	%	0.49				0.57%
Y 371.029	153995.5	84.4	%	0.59				0.70%
Ag 328.068†	105536.9	1.18919	mg/L	0.001343	1.18919	mg/L	0.001343	0.11%
QC value greater than the upper limit for Ag 328.068 Recovery = 118.92%								
Al 308.215†	4421477.1	491.657	mg/L	0.3402	491.657	mg/L	0.3402	0.07%
QC value within limits for Al 308.215 Recovery = 98.33%								
As 188.979†	23071.4	10.1496	mg/L	0.13798	10.1496	mg/L	0.13798	1.36%
QC value within limits for As 188.979 Recovery = 101.50%								
Ba 233.527†	900330.7	10.0083	mg/L	0.00925	10.0083	mg/L	0.00925	0.09%
QC value within limits for Ba 233.527 Recovery = 100.08%								
Be 313.107†	6583044.0	4.91665	mg/L	0.004672	4.91665	mg/L	0.004672	0.10%
QC value within limits for Be 313.107 Recovery = 98.33%								
Ca 317.933†	43478481.6	462.266	mg/L	0.7500	462.266	mg/L	0.7500	0.16%
QC value within limits for Ca 317.933 Recovery = 92.45%								
Cd 228.802†	168997.3	5.23137	mg/L	0.005790	5.23137	mg/L	0.005790	0.11%
QC value within limits for Cd 228.802 Recovery = 104.63%								
Co 228.616†	137549.1	4.61612	mg/L	0.004011	4.61612	mg/L	0.004011	0.09%
QC value within limits for Co 228.616 Recovery = 92.32%								
Cr 267.716†	669788.0	9.84296	mg/L	0.009405	9.84296	mg/L	0.009405	0.10%
QC value within limits for Cr 267.716 Recovery = 98.43%								
Cu 327.393†	722067.5	10.3208	mg/L	0.00355	10.3208	mg/L	0.00355	0.03%
QC value within limits for Cu 327.393 Recovery = 103.21%								
Fe 273.955†	3451664.3	369.131	mg/L	1.0110	369.131	mg/L	1.0110	0.27%
QC value within limits for Fe 273.955 Recovery = 92.28%								
K 404.721†	71327.3	-538.537	mg/L	28.6462	-538.537	mg/L	28.6462	5.32%
QC value less than the lower limit for K 404.721 Recovery = -269.27%								
Mg 279.077†	5444460.5	473.591	mg/L	0.9800	473.591	mg/L	0.9800	0.21%
QC value within limits for Mg 279.077 Recovery = 94.72%								
Mn 257.610†	2915195.8	9.90280	mg/L	0.014887	9.90280	mg/L	0.014887	0.15%
QC value within limits for Mn 257.610 Recovery = 99.03%								
Mo 202.031†	112620.8	9.64505	mg/L	0.010782	9.64505	mg/L	0.010782	0.11%
QC value within limits for Mo 202.031 Recovery = 96.45%								
Na 330.237†	486611.0	1158.54	mg/L	1.719	1158.54	mg/L	1.719	0.15%
QC value greater than the upper limit for Na 330.237 Recovery = 115.85%								
Ni 231.604†	283715.2	9.12771	mg/L	0.007251	9.12771	mg/L	0.007251	0.08%
QC value within limits for Ni 231.604 Recovery = 91.28%								
Pb 220.353†	68314.7	9.59483	mg/L	0.096851	9.59483	mg/L	0.096851	1.01%
QC value within limits for Pb 220.353 Recovery = 95.95%								
Sb 206.836†	11840.5	5.34295	mg/L	0.082073	5.34295	mg/L	0.082073	1.54%
QC value within limits for Sb 206.836 Recovery = 106.86%								
Se 196.026†	10799.7	4.96152	mg/L	0.076503	4.96152	mg/L	0.076503	1.54%
QC value within limits for Se 196.026 Recovery = 99.23%								
Sn 189.927†	66390.2	9.70371	mg/L	0.107637	9.70371	mg/L	0.107637	1.11%
QC value within limits for Sn 189.927 Recovery = 97.04%								
Ti 334.940†	2808621.0	10.2235	mg/L	0.00585	10.2235	mg/L	0.00585	0.06%
QC value within limits for Ti 334.940 Recovery = 102.24%								
Tl 190.801†	11219.0	5.22158	mg/L	0.055634	5.22158	mg/L	0.055634	1.07%
QC value within limits for Tl 190.801 Recovery = 104.43%								
V 290.880†	517347.7	10.4588	mg/L	0.00501	10.4588	mg/L	0.00501	0.05%
QC value within limits for V 290.880 Recovery = 104.59%								
Zn 206.200†	519944.3	9.39800	mg/L	0.016341	9.39800	mg/L	0.016341	0.17%
QC value within limits for Zn 206.200 Recovery = 93.98%								
B 249.772	112264.5	0.0468477	mg/L	0.01486321	0.0468477	mg/L	0.01486321	31.73%
QC value less than the lower limit for B 249.772 Recovery = 0.94%								
Si 251.611	6793.8	0.751578	mg/L	0.0054425	0.751578	mg/L	0.0054425	0.72%
QC value less than the lower limit for Si 251.611 Recovery = 3.01%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-333666
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 8/31/2020 5:24:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	399582.4	97.3	%	0.79				0.81%
Y 371.029	149289.6	81.8	%	0.66				0.81%
Ag 328.068†	10512.7	0.114256	mg/L	0.0008757	0.114256	mg/L	0.0008757	0.77%
QC value greater than the upper limit for Ag 328.068 Recovery = 114.26%								
Al 308.215†	44487.9	4.94034	mg/L	0.007539	4.94034	mg/L	0.007539	0.15%
QC value within limits for Al 308.215 Recovery = 98.81%								
As 188.979†	1109.2	0.487178	mg/L	0.0060829	0.487178	mg/L	0.0060829	1.25%
QC value within limits for As 188.979 Recovery = 97.44%								
Ba 233.527†	44739.4	0.495564	mg/L	0.0011318	0.495564	mg/L	0.0011318	0.23%
QC value within limits for Ba 233.527 Recovery = 99.11%								
Be 313.107†	649064.8	0.486127	mg/L	0.0031569	0.486127	mg/L	0.0031569	0.65%
QC value within limits for Be 313.107 Recovery = 97.23%								
Ca 317.933†	4668091.6	49.3946	mg/L	0.33854	49.3946	mg/L	0.33854	0.69%
QC value within limits for Ca 317.933 Recovery = 98.79%								
Cd 228.802†	16304.1	0.502295	mg/L	0.0046798	0.502295	mg/L	0.0046798	0.93%
QC value within limits for Cd 228.802 Recovery = 100.46%								
Co 228.616†	14527.8	0.488875	mg/L	0.0047131	0.488875	mg/L	0.0047131	0.96%
QC value within limits for Co 228.616 Recovery = 97.78%								
Cr 267.716†	35457.6	0.514551	mg/L	0.0050297	0.514551	mg/L	0.0050297	0.98%
QC value within limits for Cr 267.716 Recovery = 102.91%								
Cu 327.393†	34683.0	0.496429	mg/L	0.0008251	0.496429	mg/L	0.0008251	0.17%
QC value within limits for Cu 327.393 Recovery = 99.29%								
Fe 273.955†	46437.5	4.96200	mg/L	0.013396	4.96200	mg/L	0.013396	0.27%
QC value within limits for Fe 273.955 Recovery = 99.24%								
K 404.721†	3732.9	15.8204	mg/L	11.01785	15.8204	mg/L	11.01785	69.64%
QC value less than the lower limit for K 404.721 Recovery = 31.64%								
Mg 279.077†	578231.1	50.0869	mg/L	0.15130	50.0869	mg/L	0.15130	0.30%
QC value within limits for Mg 279.077 Recovery = 100.17%								
Mn 257.610†	146151.9	0.497223	mg/L	0.0001509	0.497223	mg/L	0.0001509	0.03%
QC value within limits for Mn 257.610 Recovery = 99.44%								
Mo 202.031†	5717.4	0.490777	mg/L	0.0053159	0.490777	mg/L	0.0053159	1.08%
QC value within limits for Mo 202.031 Recovery = 98.16%								
Na 330.237†	19614.3	47.3518	mg/L	0.13869	47.3518	mg/L	0.13869	0.29%
QC value within limits for Na 330.237 Recovery = 94.70%								
Ni 231.604†	15238.7	0.490923	mg/L	0.0048761	0.490923	mg/L	0.0048761	0.99%
QC value within limits for Ni 231.604 Recovery = 98.18%								
Pb 220.353†	3547.1	0.495632	mg/L	0.0034654	0.495632	mg/L	0.0034654	0.70%
QC value within limits for Pb 220.353 Recovery = 99.13%								
Sb 206.836†	1121.2	0.500397	mg/L	0.0036661	0.500397	mg/L	0.0036661	0.73%
QC value within limits for Sb 206.836 Recovery = 100.08%								
Se 196.026†	1110.4	0.493900	mg/L	0.0078022	0.493900	mg/L	0.0078022	1.58%
QC value within limits for Se 196.026 Recovery = 98.78%								
Sn 189.927†	3340.3	0.489630	mg/L	0.0045865	0.489630	mg/L	0.0045865	0.94%
QC value within limits for Sn 189.927 Recovery = 97.93%								
Ti 334.940†	136629.1	0.497915	mg/L	0.0003153	0.497915	mg/L	0.0003153	0.06%
QC value within limits for Ti 334.940 Recovery = 99.58%								
Tl 190.801†	1118.0	0.505875	mg/L	0.0048275	0.505875	mg/L	0.0048275	0.95%
QC value within limits for Tl 190.801 Recovery = 101.17%								
V 290.880†	24103.0	0.492540	mg/L	0.0007765	0.492540	mg/L	0.0007765	0.16%
QC value within limits for V 290.880 Recovery = 98.51%								
Zn 206.200†	28471.1	0.509176	mg/L	0.0058153	0.509176	mg/L	0.0058153	1.14%
QC value within limits for Zn 206.200 Recovery = 101.84%								
B 249.772	36246.7	0.484486	mg/L	0.0053071	0.484486	mg/L	0.0053071	1.10%
QC value within limits for B 249.772 Recovery = 96.90%								
Si 251.611	117460.5	5.06928	mg/L	0.042544	5.06928	mg/L	0.042544	0.84%
QC value within limits for Si 251.611 Recovery = 101.39%								

QC Failed. Continue with analysis.

Sequence No.: 9 **Autosampler Location: 14**
Sample ID: RINSE **Date Collected: 8/31/2020 5:28:26 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904068.3	220	%	7.2				3.27%
Y 371.029	410152.1	225	%	7.1				3.18%
Ag 328.068†	-99.7	-0.0057937	mg/L	0.00030386	-0.0057937	mg/L	0.00030386	5.24%
Al 308.215†	-2263.8	-0.248922	mg/L	0.0015248	-0.248922	mg/L	0.0015248	0.61%
As 188.979†	-8.3	-0.0026850	mg/L	0.00181990	-0.0026850	mg/L	0.00181990	67.78%
Ba 233.527†	13.6	-0.0017110	mg/L	0.00002781	-0.0017110	mg/L	0.00002781	1.63%
Be 313.107†	963.0	0.0022311	mg/L	0.00002277	0.0022311	mg/L	0.00002277	1.02%
Ca 317.933†	-863.5	-0.274501	mg/L	0.0000763	-0.274501	mg/L	0.0000763	0.03%
Cd 228.802†	-55.9	-0.0043905	mg/L	0.00011922	-0.0043905	mg/L	0.00011922	2.72%
Co 228.616†	20.1	0.0021551	mg/L	0.00019861	0.0021551	mg/L	0.00019861	9.22%
Cr 267.716†	-28.1	-0.0072997	mg/L	0.00017001	-0.0072997	mg/L	0.00017001	2.33%
Cu 327.393†	316.6	0.0052493	mg/L	0.00085511	0.0052493	mg/L	0.00085511	16.29%
Fe 273.955†	795.7	0.0808762	mg/L	0.00104595	0.0808762	mg/L	0.00104595	1.29%
K 404.721†	-45529.3	-676.378	mg/L	9.5944	-676.378	mg/L	9.5944	1.42%
Mg 279.077†	586.4	-0.185108	mg/L	0.0009993	-0.185108	mg/L	0.0009993	0.54%
Mn 257.610†	-380.8	-0.0005021	mg/L	0.00000941	-0.0005021	mg/L	0.00000941	1.88%
Mo 202.031†	-147.1	-0.0114077	mg/L	0.00022527	-0.0114077	mg/L	0.00022527	1.97%
Na 330.237†	-238.9	0.112560	mg/L	0.0334150	0.112560	mg/L	0.0334150	29.69%
Ni 231.604†	-17.3	0.0001422	mg/L	0.00007412	0.0001422	mg/L	0.00007412	52.11%
Pb 220.353†	-43.3	-0.0067898	mg/L	0.00010156	-0.0067898	mg/L	0.00010156	1.50%
Sb 206.836†	-36.7	-0.0164151	mg/L	0.00149576	-0.0164151	mg/L	0.00149576	9.11%
Se 196.026†	-29.2	-0.0127145	mg/L	0.00090993	-0.0127145	mg/L	0.00090993	7.16%
Sn 189.927†	-0.0	0.0013773	mg/L	0.00017596	0.0013773	mg/L	0.00017596	12.78%
Ti 334.940†	-83.1	0.0003057	mg/L	0.00005147	0.0003057	mg/L	0.00005147	16.83%
Tl 190.801†	32.8	0.0114842	mg/L	0.00230018	0.0114842	mg/L	0.00230018	20.03%
V 290.880†	-1338.0	-0.0228539	mg/L	0.00042135	-0.0228539	mg/L	0.00042135	1.84%
Zn 206.200†	76.3	-0.0043748	mg/L	0.00008146	-0.0043748	mg/L	0.00008146	1.86%
B 249.772	269.2	0.0048796	mg/L	0.00076500	0.0048796	mg/L	0.00076500	15.68%
Si 251.611	-24.5	-0.0346666	mg/L	0.00035648	-0.0346666	mg/L	0.00035648	1.03%

Sequence No.: 10
Sample ID: LLICV V-333671
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 8/31/2020 5:32:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LLICV V-333671

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	397913.8	96.8	%	0.74				0.77%
Y 371.029	176400.1	96.7	%	0.76				0.79%
Ag 328.068†	1437.2	0.0115914	mg/L	0.00136094	0.0115914	mg/L	0.00136094	11.74%
QC value less than the lower limit for Ag 328.068 Recovery = 77.28%								
Al 308.215†	17997.2	2.00417	mg/L	0.015764	2.00417	mg/L	0.015764	0.79%
QC value within limits for Al 308.215 Recovery = 100.21%								
As 188.979†	93.6	0.0421544	mg/L	0.00280014	0.0421544	mg/L	0.00280014	6.64%
QC value within limits for As 188.979 Recovery = 105.39%								
Ba 233.527†	9483.4	0.103577	mg/L	0.0005718	0.103577	mg/L	0.0005718	0.55%
QC value within limits for Ba 233.527 Recovery = 103.58%								
Be 313.107†	15362.0	0.0129819	mg/L	0.00007407	0.0129819	mg/L	0.00007407	0.57%
QC value within limits for Be 313.107 Recovery = 108.18%								
Ca 317.933†	983781.9	10.2003	mg/L	0.01618	10.2003	mg/L	0.01618	0.16%
QC value within limits for Ca 317.933 Recovery = 102.00%								
Cd 228.802†	411.1	0.0100709	mg/L	0.00028049	0.0100709	mg/L	0.00028049	2.79%
QC value within limits for Cd 228.802 Recovery = 83.92%								
Co 228.616†	725.8	0.0258329	mg/L	0.00044459	0.0258329	mg/L	0.00044459	1.72%
QC value within limits for Co 228.616 Recovery = 103.33%								
Cr 267.716†	3680.3	0.0472362	mg/L	0.00032854	0.0472362	mg/L	0.00032854	0.70%
QC value within limits for Cr 267.716 Recovery = 94.47%								
Cu 327.393†	3458.4	0.0501543	mg/L	0.00136290	0.0501543	mg/L	0.00136290	2.72%
QC value within limits for Cu 327.393 Recovery = 100.31%								
Fe 273.955†	18670.1	1.99244	mg/L	0.003273	1.99244	mg/L	0.003273	0.16%
QC value within limits for Fe 273.955 Recovery = 99.62%								
K 404.721†	2977.2	17.3823	mg/L	7.49144	17.3823	mg/L	7.49144	43.10%
QC value greater than the upper limit for K 404.721 Recovery = 347.65%								
Mg 279.077†	59273.8	4.92241	mg/L	0.008390	4.92241	mg/L	0.008390	0.17%
QC value within limits for Mg 279.077 Recovery = 98.45%								
Mn 257.610†	28833.0	0.0987280	mg/L	0.00021048	0.0987280	mg/L	0.00021048	0.21%
QC value within limits for Mn 257.610 Recovery = 98.73%								
Mo 202.031†	303.3	0.0271601	mg/L	0.00069826	0.0271601	mg/L	0.00069826	2.57%
QC value within limits for Mo 202.031 Recovery = 108.64%								
Na 330.237†	838.1	2.67502	mg/L	0.089404	2.67502	mg/L	0.089404	3.34%
QC value within limits for Na 330.237 Recovery = 107.00%								
Ni 231.604†	1573.0	0.0513031	mg/L	0.00031897	0.0513031	mg/L	0.00031897	0.62%
QC value within limits for Ni 231.604 Recovery = 102.61%								
Pb 220.353†	359.2	0.0496917	mg/L	0.00218273	0.0496917	mg/L	0.00218273	4.39%
QC value within limits for Pb 220.353 Recovery = 99.38%								
Sb 206.836†	88.3	0.0391830	mg/L	0.00249668	0.0391830	mg/L	0.00249668	6.37%
QC value within limits for Sb 206.836 Recovery = 97.96%								
Se 196.026†	120.8	0.0543854	mg/L	0.00573091	0.0543854	mg/L	0.00573091	10.54%
QC value within limits for Se 196.026 Recovery = 108.77%								
Sn 189.927†	1361.4	0.200971	mg/L	0.0016298	0.200971	mg/L	0.0016298	0.81%
QC value within limits for Sn 189.927 Recovery = 100.49%								
Ti 334.940†	27120.8	0.0993233	mg/L	0.00005795	0.0993233	mg/L	0.00005795	0.06%
QC value within limits for Ti 334.940 Recovery = 99.32%								
Tl 190.801†	122.9	0.0540664	mg/L	0.00122250	0.0540664	mg/L	0.00122250	2.26%
QC value within limits for Tl 190.801 Recovery = 108.13%								
V 290.880†	4753.3	0.0994242	mg/L	0.00056437	0.0994242	mg/L	0.00056437	0.57%
QC value within limits for V 290.880 Recovery = 99.42%								
Zn 206.200†	5675.5	0.0968929	mg/L	0.00025089	0.0968929	mg/L	0.00025089	0.26%
QC value within limits for Zn 206.200 Recovery = 96.89%								
B 249.772	13840.2	0.185147	mg/L	0.0027513	0.185147	mg/L	0.0027513	1.49%
QC value within limits for B 249.772 Recovery = 92.57%								
Si 251.611	3579.1	0.128536	mg/L	0.0022857	0.128536	mg/L	0.0022857	1.78%
QC value greater than the upper limit for Si 251.611 Recovery = 128.54%								

QC Failed. Continue with analysis.

Sequence No.: 11 Autosampler Location: 7
Sample ID: ICSA V-333668 Date Collected: 8/31/2020 5:36:04 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	374248.4	91.1	%	0.24				0.26%
Y 371.029	162256.1	88.9	%	0.28				0.31%
Ag 328.068†	-535.7	-0.0107262	mg/L	0.00093804	-0.0107262	mg/L	0.00093804	8.75%
Al 308.215†	4432562.0	493.117	mg/L	3.8128	493.117	mg/L	3.8128	0.77%
QC value within limits for Al 308.215 Recovery = 98.62%								
As 188.979†	-54.9	-0.0013071	mg/L	0.00210245	-0.0013071	mg/L	0.00210245	160.85%
Ba 233.527†	406.2	0.0026548	mg/L	0.00010289	0.0026548	mg/L	0.00010289	3.88%
Be 313.107†	-92.4	0.0014431	mg/L	0.00001772	0.0014431	mg/L	0.00001772	1.23%
Ca 317.933†	43880920.3	466.547	mg/L	2.6680	466.547	mg/L	2.6680	0.57%
QC value within limits for Ca 317.933 Recovery = 93.31%								
Cd 228.802†	-76.9	-0.0050420	mg/L	0.00032958	-0.0050420	mg/L	0.00032958	6.54%
Co 228.616†	56.1	0.0033644	mg/L	0.00062643	0.0033644	mg/L	0.00062643	18.62%
Cr 267.716†	-377.8	-0.0124424	mg/L	0.00054233	-0.0124424	mg/L	0.00054233	4.36%
Cu 327.393†	-2443.5	-0.0341988	mg/L	0.00025720	-0.0341988	mg/L	0.00025720	0.75%
Fe 273.955†	1777812.6	190.122	mg/L	1.1582	190.122	mg/L	1.1582	0.61%
QC value within limits for Fe 273.955 Recovery = 95.06%								
K 404.721†	34753.2	-314.477	mg/L	11.1559	-314.477	mg/L	11.1559	3.55%
Mg 279.077†	5732370.1	498.648	mg/L	2.5456	498.648	mg/L	2.5456	0.51%
QC value within limits for Mg 279.077 Recovery = 99.73%								
Mn 257.610†	-5739.8	-0.0187051	mg/L	0.00006425	-0.0187051	mg/L	0.00006425	0.34%
Mo 202.031†	73.1	0.0074528	mg/L	0.00080845	0.0074528	mg/L	0.00080845	10.85%
Na 330.237†	19.1	0.726381	mg/L	0.0378955	0.726381	mg/L	0.0378955	5.22%
Ni 231.604†	233.0	0.0081944	mg/L	0.00076920	0.0081944	mg/L	0.00076920	9.39%
Pb 220.353†	-370.3	-0.0075093	mg/L	0.00306370	-0.0075093	mg/L	0.00306370	40.80%
Sb 206.836†	17.2	0.0076022	mg/L	0.00928572	0.0076022	mg/L	0.00928572	122.14%
Se 196.026†	-138.4	0.0074326	mg/L	0.00439086	0.0074326	mg/L	0.00439086	59.08%
Sn 189.927†	-112.1	-0.0150756	mg/L	0.00147446	-0.0150756	mg/L	0.00147446	9.78%
Ti 334.940†	-1615.1	-0.0052704	mg/L	0.00003320	-0.0052704	mg/L	0.00003320	0.63%
Tl 190.801†	-23.4	-0.0130585	mg/L	0.00464253	-0.0130585	mg/L	0.00464253	35.55%
V 290.880†	592.8	0.0030295	mg/L	0.00249549	0.0030295	mg/L	0.00249549	82.37%
Zn 206.200†	45.3	-0.0049342	mg/L	0.00035197	-0.0049342	mg/L	0.00035197	7.13%
B 249.772	61028.9	0.0577207	mg/L	0.00987693	0.0577207	mg/L	0.00987693	17.11%
Si 251.611	-417.7	0.125077	mg/L	0.0008951	0.125077	mg/L	0.0008951	0.72%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: AD18966-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 8/31/2020 5:41:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18966-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	423406.1	103	%	1.6				1.59%
Y 371.029	215149.5	118	%	1.6				1.40%
Ag 328.068†	-179.4	-0.0066949	mg/L	0.00093099	-0.0066949	mg/L	0.00093099	13.91%
Al 308.215†	319104.1	35.5022	mg/L	0.05308	35.5022	mg/L	0.05308	0.15%
As 188.979†	136.3	0.0666539	mg/L	0.00241303	0.0666539	mg/L	0.00241303	3.62%
Ba 233.527†	6332.7	0.0685473	mg/L	0.00123141	0.0685473	mg/L	0.00123141	1.80%
Be 313.107†	-211.5	0.0013541	mg/L	0.00002609	0.0013541	mg/L	0.00002609	1.93%
Ca 317.933†	58751.5	0.359693	mg/L	0.0012722	0.359693	mg/L	0.0012722	0.35%
Cd 228.802†	39.7	-0.0014321	mg/L	0.00041613	-0.0014321	mg/L	0.00041613	29.06%
Co 228.616†	117.3	0.0054177	mg/L	0.00047325	0.0054177	mg/L	0.00047325	8.74%
Cr 267.716†	99143.6	1.45111	mg/L	0.003677	1.45111	mg/L	0.003677	0.25%
Cu 327.393†	4313.3	0.0623729	mg/L	0.00106018	0.0623729	mg/L	0.00106018	1.70%
Fe 273.955†	467748.5	50.0187	mg/L	0.11669	50.0187	mg/L	0.11669	0.23%
K 404.721†	6387.4	-135.361	mg/L	21.6267	-135.361	mg/L	21.6267	15.98%
Mg 279.077†	8542.1	0.507270	mg/L	0.0034098	0.507270	mg/L	0.0034098	0.67%
Mn 257.610†	8993.8	0.0313405	mg/L	0.00011713	0.0313405	mg/L	0.00011713	0.37%
Mo 202.031†	73.5	0.0074798	mg/L	0.00068822	0.0074798	mg/L	0.00068822	9.20%
Na 330.237†	-28.3	0.613553	mg/L	0.1589896	0.613553	mg/L	0.1589896	25.91%
Ni 231.604†	470.2	0.0158233	mg/L	0.00025101	0.0158233	mg/L	0.00025101	1.59%
Pb 220.353†	398.4	0.0582187	mg/L	0.00173253	0.0582187	mg/L	0.00173253	2.98%
Sb 206.836†	77.5	0.0341668	mg/L	0.00234554	0.0341668	mg/L	0.00234554	6.86%
Se 196.026†	-37.0	0.0084961	mg/L	0.00153298	0.0084961	mg/L	0.00153298	18.04%
Sn 189.927†	101.2	0.0134782	mg/L	0.00124495	0.0134782	mg/L	0.00124495	9.24%
Ti 334.940†	134415.3	0.489857	mg/L	0.0062378	0.489857	mg/L	0.0062378	1.27%
Tl 190.801†	-16.9	-0.0024385	mg/L	0.00139065	-0.0024385	mg/L	0.00139065	57.03%
V 290.880†	9232.1	0.185511	mg/L	0.0006986	0.185511	mg/L	0.0006986	0.38%
Zn 206.200†	1637.5	0.0238621	mg/L	0.00000404	0.0238621	mg/L	0.00000404	0.02%
B 249.772	18155.5	0.0454149	mg/L	0.00346559	0.0454149	mg/L	0.00346559	7.63%
Si 251.611	139728.5	6.02799	mg/L	0.108702	6.02799	mg/L	0.108702	1.80%

Sequence No.: 13
Sample ID: AD18966-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 8/31/2020 5:45:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18966-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	434556.1	106	%	0.5				0.45%
Y 371.029	265814.8	146	%	0.9				0.65%
Ag 328.068†	-275.0	-0.0077774	mg/L	0.00036331	-0.0077774	mg/L	0.00036331	4.67%
Al 308.215†	280161.2	31.1700	mg/L	0.03955	31.1700	mg/L	0.03955	0.13%
As 188.979†	58.5	0.0287467	mg/L	0.00304092	0.0287467	mg/L	0.00304092	10.58%
Ba 233.527†	4869.7	0.0522815	mg/L	0.00079623	0.0522815	mg/L	0.00079623	1.52%
Be 313.107†	469.1	0.0018623	mg/L	0.00003789	0.0018623	mg/L	0.00003789	2.03%
Ca 317.933†	94499.7	0.739988	mg/L	0.0026965	0.739988	mg/L	0.0026965	0.36%
Cd 228.802†	18.1	-0.0020996	mg/L	0.00028716	-0.0020996	mg/L	0.00028716	13.68%
Co 228.616†	62.3	0.0035720	mg/L	0.00032023	0.0035720	mg/L	0.00032023	8.97%
Cr 267.716†	42275.6	0.614816	mg/L	0.0008705	0.614816	mg/L	0.0008705	0.14%
Cu 327.393†	1464.1	0.0216502	mg/L	0.00082459	0.0216502	mg/L	0.00082459	3.81%
Fe 273.955†	173233.4	18.5221	mg/L	0.04814	18.5221	mg/L	0.04814	0.26%
K 404.721†	-564.7	-103.415	mg/L	8.1597	-103.415	mg/L	8.1597	7.89%
Mg 279.077†	9209.6	0.565359	mg/L	0.0028386	0.565359	mg/L	0.0028386	0.50%
Mn 257.610†	6913.1	0.0242727	mg/L	0.00022155	0.0242727	mg/L	0.00022155	0.91%
Mo 202.031†	21.2	0.0030017	mg/L	0.00073593	0.0030017	mg/L	0.00073593	24.52%
Na 330.237†	66.9	0.840120	mg/L	0.0728041	0.840120	mg/L	0.0728041	8.67%
Ni 231.604†	332.5	0.0113962	mg/L	0.00053075	0.0113962	mg/L	0.00053075	4.66%
Pb 220.353†	284.3	0.0418714	mg/L	0.00206925	0.0418714	mg/L	0.00206925	4.94%
Sb 206.836†	24.0	0.0105198	mg/L	0.00301990	0.0105198	mg/L	0.00301990	28.71%
Se 196.026†	-15.4	0.0024955	mg/L	0.00267140	0.0024955	mg/L	0.00267140	107.05%
Sn 189.927†	91.4	0.0130849	mg/L	0.00120514	0.0130849	mg/L	0.00120514	9.21%
Ti 334.940†	83853.4	0.305820	mg/L	0.0021762	0.305820	mg/L	0.0021762	0.71%
Tl 190.801†	-14.7	-0.0042850	mg/L	0.00313384	-0.0042850	mg/L	0.00313384	73.14%
V 290.880†	6306.7	0.129062	mg/L	0.0005403	0.129062	mg/L	0.0005403	0.42%
Zn 206.200†	1757.9	0.0260390	mg/L	0.00018950	0.0260390	mg/L	0.00018950	0.73%
B 249.772	7489.1	0.0283883	mg/L	0.00168011	0.0283883	mg/L	0.00168011	5.92%
Si 251.611	179183.2	7.72089	mg/L	0.136597	7.72089	mg/L	0.136597	1.77%

Sequence No.: 14
Sample ID: MB 85226 (100)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 8/31/2020 5:48:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85226 (100)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	416411.2	101	%	0.3				0.34%
Y 371.029	183299.8	100	%	0.4				0.39%
Ag 328.068†	50.7	-0.0040922	mg/L	0.00071158	-0.0040922	mg/L	0.00071158	17.39%
Al 308.215†	13.4	0.0041050	mg/L	0.00473364	0.0041050	mg/L	0.00473364	115.32%
As 188.979†	1.3	0.0014403	mg/L	0.00294095	0.0014403	mg/L	0.00294095	204.19%
Ba 233.527†	12.2	-0.0017263	mg/L	0.00012556	-0.0017263	mg/L	0.00012556	7.27%
Be 313.107†	60.5	0.0015572	mg/L	0.00005092	0.0015572	mg/L	0.00005092	3.27%
Ca 317.933†	1171.4	-0.252853	mg/L	0.0015547	-0.252853	mg/L	0.0015547	0.61%
Cd 228.802†	-0.8	-0.0026843	mg/L	0.00003075	-0.0026843	mg/L	0.00003075	1.15%
Co 228.616†	-11.5	0.0010970	mg/L	0.00029468	0.0010970	mg/L	0.00029468	26.86%
Cr 267.716†	44.2	-0.0062364	mg/L	0.00021591	-0.0062364	mg/L	0.00021591	3.46%
Cu 327.393†	164.1	0.0030705	mg/L	0.00060932	0.0030705	mg/L	0.00060932	19.84%
Fe 273.955†	103.5	0.0068569	mg/L	0.00144915	0.0068569	mg/L	0.00144915	21.13%
K 404.721†	-406.5	-23.2185	mg/L	9.81597	-23.2185	mg/L	9.81597	42.28%
Mg 279.077†	46.6	-0.232090	mg/L	0.0035276	-0.232090	mg/L	0.0035276	1.52%
Mn 257.610†	-208.8	0.0000819	mg/L	0.00002931	0.0000819	mg/L	0.00002931	35.80%
Mo 202.031†	4.7	0.0015918	mg/L	0.00108508	0.0015918	mg/L	0.00108508	68.17%
Na 330.237†	48.4	0.796050	mg/L	0.2077076	0.796050	mg/L	0.2077076	26.09%
Ni 231.604†	-1.4	0.0006521	mg/L	0.00007062	0.0006521	mg/L	0.00007062	10.83%
Pb 220.353†	8.3	0.0004509	mg/L	0.00210376	0.0004509	mg/L	0.00210376	466.53%
Sb 206.836†	-2.2	-0.0010470	mg/L	0.00464783	-0.0010470	mg/L	0.00464783	443.90%
Se 196.026†	10.2	0.0047896	mg/L	0.00482832	0.0047896	mg/L	0.00482832	100.81%
Sn 189.927†	88.2	0.0143467	mg/L	0.00144545	0.0143467	mg/L	0.00144545	10.08%
Ti 334.940†	220.4	0.0014105	mg/L	0.00023271	0.0014105	mg/L	0.00023271	16.50%
Tl 190.801†	-8.9	-0.0067275	mg/L	0.00357954	-0.0067275	mg/L	0.00357954	53.21%
V 290.880†	-46.4	0.0031700	mg/L	0.00047450	0.0031700	mg/L	0.00047450	14.97%
Zn 206.200†	530.4	0.0038383	mg/L	0.00024441	0.0038383	mg/L	0.00024441	6.37%
B 249.772	40.1	0.0020416	mg/L	0.00032737	0.0020416	mg/L	0.00032737	16.03%
Si 251.611	301.5	-0.0205178	mg/L	0.00158784	-0.0205178	mg/L	0.00158784	7.74%

Sequence No.: 15
Sample ID: LCS 85226
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 8/31/2020 5:52:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 85226

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	402572.4	98.0	%	0.16				0.16%
Y 371.029	205228.6	112	%	0.2				0.22%
Ag 328.068†	71655.4	0.805916	mg/L	0.0011517	0.805916	mg/L	0.0011517	0.14%
Al 308.215†	770507.7	85.6841	mg/L	0.14865	85.6841	mg/L	0.14865	0.17%
As 188.979†	808.4	0.364173	mg/L	0.0044347	0.364173	mg/L	0.0044347	1.22%
Ba 233.527†	613657.5	6.82097	mg/L	0.008250	6.82097	mg/L	0.008250	0.12%
Be 313.107†	1977049.8	1.47765	mg/L	0.004185	1.47765	mg/L	0.004185	0.28%
Ca 317.933†	16132006.3	171.350	mg/L	2.0118	171.350	mg/L	2.0118	1.17%
Cd 228.802†	48318.4	1.49382	mg/L	0.000850	1.49382	mg/L	0.000850	0.06%
Co 228.616†	62779.9	2.10769	mg/L	0.003040	2.10769	mg/L	0.003040	0.14%
Cr 267.716†	119280.0	1.74723	mg/L	0.002610	1.74723	mg/L	0.002610	0.15%
Cu 327.393†	114964.2	1.64384	mg/L	0.002291	1.64384	mg/L	0.002291	0.14%
Fe 273.955†	1253434.2	134.043	mg/L	0.3706	134.043	mg/L	0.3706	0.28%
K 404.721†	20644.5	-282.639	mg/L	1.3221	-282.639	mg/L	1.3221	0.47%
Mg 279.077†	676512.4	58.6402	mg/L	0.19488	58.6402	mg/L	0.19488	0.33%
Mn 257.610†	1391480.7	4.72721	mg/L	0.009374	4.72721	mg/L	0.009374	0.20%
Mo 202.031†	17974.5	1.54037	mg/L	0.004625	1.54037	mg/L	0.004625	0.30%
Na 330.237†	2787.3	7.31305	mg/L	0.040227	7.31305	mg/L	0.040227	0.55%
Ni 231.604†	13394.1	0.431580	mg/L	0.0011758	0.431580	mg/L	0.0011758	0.27%
Pb 220.353†	9020.3	1.26818	mg/L	0.003801	1.26818	mg/L	0.003801	0.30%
Sb 206.836†	790.9	0.368400	mg/L	0.0036830	0.368400	mg/L	0.0036830	1.00%
Se 196.026†	6160.7	2.79756	mg/L	0.001934	2.79756	mg/L	0.001934	0.07%
Sn 189.927†	8077.1	1.16524	mg/L	0.005937	1.16524	mg/L	0.005937	0.51%
Ti 334.940†	1142436.6	4.15889	mg/L	0.006345	4.15889	mg/L	0.006345	0.15%
Tl 190.801†	4148.7	1.91010	mg/L	0.009613	1.91010	mg/L	0.009613	0.50%
V 290.880†	115629.4	2.32915	mg/L	0.005151	2.32915	mg/L	0.005151	0.22%
Zn 206.200†	300702.8	5.43278	mg/L	0.010894	5.43278	mg/L	0.010894	0.20%
B 249.772	213502.9	2.40781	mg/L	0.019294	2.40781	mg/L	0.019294	0.80%
Si 251.611	126736.0	5.64776	mg/L	0.009856	5.64776	mg/L	0.009856	0.17%

Sequence No.: 16
Sample ID: LCS MR 85226
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 8/31/2020 5:57:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS MR 85226

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	401443.4	97.7	%	0.89				0.91%
Y 371.029	205015.2	112	%	1.1				0.94%
Ag 328.068†	70482.1	0.792643	mg/L	0.0010425	0.792643	mg/L	0.0010425	0.13%
Al 308.215†	759516.9	84.4614	mg/L	0.02686	84.4614	mg/L	0.02686	0.03%
As 188.979†	796.1	0.358602	mg/L	0.0003906	0.358602	mg/L	0.0003906	0.11%
Ba 233.527†	632778.4	7.03356	mg/L	0.005166	7.03356	mg/L	0.005166	0.07%
Be 313.107†	1935729.9	1.44680	mg/L	0.014787	1.44680	mg/L	0.014787	1.02%
Ca 317.933†	16433085.2	174.553	mg/L	1.8357	174.553	mg/L	1.8357	1.05%
Cd 228.802†	47853.1	1.47940	mg/L	0.001868	1.47940	mg/L	0.001868	0.13%
Co 228.616†	62306.1	2.09179	mg/L	0.002851	2.09179	mg/L	0.002851	0.14%
Cr 267.716†	118339.1	1.73340	mg/L	0.001897	1.73340	mg/L	0.001897	0.11%
Cu 327.393†	114201.5	1.63294	mg/L	0.001985	1.63294	mg/L	0.001985	0.12%
Fe 273.955†	1242043.4	132.825	mg/L	0.2173	132.825	mg/L	0.2173	0.16%
K 404.721†	19928.5	-287.872	mg/L	6.5257	-287.872	mg/L	6.5257	2.27%
Mg 279.077†	674637.2	58.4770	mg/L	0.09201	58.4770	mg/L	0.09201	0.16%
Mn 257.610†	1392765.4	4.73158	mg/L	0.004146	4.73158	mg/L	0.004146	0.09%
Mo 202.031†	17945.0	1.53784	mg/L	0.014208	1.53784	mg/L	0.014208	0.92%
Na 330.237†	2849.7	7.46161	mg/L	0.087613	7.46161	mg/L	0.087613	1.17%
Ni 231.604†	13229.9	0.426299	mg/L	0.0025740	0.426299	mg/L	0.0025740	0.60%
Pb 220.353†	8963.6	1.26015	mg/L	0.005346	1.26015	mg/L	0.005346	0.42%
Sb 206.836†	772.8	0.360394	mg/L	0.0070466	0.360394	mg/L	0.0070466	1.96%
Se 196.026†	6135.5	2.78558	mg/L	0.022965	2.78558	mg/L	0.022965	0.82%
Sn 189.927†	8104.7	1.16976	mg/L	0.005801	1.16976	mg/L	0.005801	0.50%
Ti 334.940†	1119776.4	4.07641	mg/L	0.008129	4.07641	mg/L	0.008129	0.20%
Tl 190.801†	4153.0	1.91081	mg/L	0.016381	1.91081	mg/L	0.016381	0.86%
V 290.880†	114674.5	2.31009	mg/L	0.001865	2.31009	mg/L	0.001865	0.08%
Zn 206.200†	299149.5	5.40469	mg/L	0.007870	5.40469	mg/L	0.007870	0.15%
B 249.772	211866.4	2.39018	mg/L	0.029343	2.39018	mg/L	0.029343	1.23%
Si 251.611	115628.5	5.16806	mg/L	0.066823	5.16806	mg/L	0.066823	1.29%

Sequence No.: 17 Autosampler Location: 6
Sample ID: CCV V-333673 Date Collected: 8/31/2020 6:02:32 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	399050.5	97.1	%	0.64				0.66%
Y 371.029	149145.6	81.7	%	0.55				0.67%
Ag 328.068†	6811.0	0.0723811	mg/L	0.00093098	0.0723811	mg/L	0.00093098	1.29%
QC value less than the lower limit for Ag 328.068 Recovery = 72.38%								
Al 308.215†	44370.1	4.92725	mg/L	0.027238	4.92725	mg/L	0.027238	0.55%
QC value within limits for Al 308.215 Recovery = 98.55%								
As 188.979†	1114.3	0.489442	mg/L	0.0088104	0.489442	mg/L	0.0088104	1.80%
QC value within limits for As 188.979 Recovery = 97.89%								
Ba 233.527†	44352.3	0.491261	mg/L	0.0024225	0.491261	mg/L	0.0024225	0.49%
QC value within limits for Ba 233.527 Recovery = 98.25%								
Be 313.107†	640914.0	0.480041	mg/L	0.0033126	0.480041	mg/L	0.0033126	0.69%
QC value within limits for Be 313.107 Recovery = 96.01%								
Ca 317.933†	4824954.8	51.0634	mg/L	0.31172	51.0634	mg/L	0.31172	0.61%
QC value within limits for Ca 317.933 Recovery = 102.13%								
Cd 228.802†	16567.0	0.510437	mg/L	0.0034379	0.510437	mg/L	0.0034379	0.67%
QC value within limits for Cd 228.802 Recovery = 102.09%								
Co 228.616†	14693.0	0.494417	mg/L	0.0034639	0.494417	mg/L	0.0034639	0.70%
QC value within limits for Co 228.616 Recovery = 98.88%								
Cr 267.716†	36097.3	0.523957	mg/L	0.0032023	0.523957	mg/L	0.0032023	0.61%
QC value within limits for Cr 267.716 Recovery = 104.79%								
Cu 327.393†	34749.6	0.497381	mg/L	0.0008416	0.497381	mg/L	0.0008416	0.17%
QC value within limits for Cu 327.393 Recovery = 99.48%								
Fe 273.955†	46733.5	4.99366	mg/L	0.026173	4.99366	mg/L	0.026173	0.52%
QC value within limits for Fe 273.955 Recovery = 99.87%								
K 404.721†	4749.8	30.4010	mg/L	14.74737	30.4010	mg/L	14.74737	48.51%
QC value less than the lower limit for K 404.721 Recovery = 60.80%								
Mg 279.077†	592920.0	51.3653	mg/L	0.44707	51.3653	mg/L	0.44707	0.87%
QC value within limits for Mg 279.077 Recovery = 102.73%								
Mn 257.610†	145613.2	0.495394	mg/L	0.0026320	0.495394	mg/L	0.0026320	0.53%
QC value within limits for Mn 257.610 Recovery = 99.08%								
Mo 202.031†	5705.7	0.489779	mg/L	0.0034334	0.489779	mg/L	0.0034334	0.70%
QC value within limits for Mo 202.031 Recovery = 97.96%								
Na 330.237†	20471.6	49.3915	mg/L	0.24609	49.3915	mg/L	0.24609	0.50%
QC value within limits for Na 330.237 Recovery = 98.78%								
Ni 231.604†	15429.3	0.497053	mg/L	0.0036341	0.497053	mg/L	0.0036341	0.73%
QC value within limits for Ni 231.604 Recovery = 99.41%								
Pb 220.353†	3575.2	0.499557	mg/L	0.0045137	0.499557	mg/L	0.0045137	0.90%
QC value within limits for Pb 220.353 Recovery = 99.91%								
Sb 206.836†	1060.6	0.473684	mg/L	0.0206247	0.473684	mg/L	0.0206247	4.35%
QC value within limits for Sb 206.836 Recovery = 94.74%								
Se 196.026†	1104.9	0.491403	mg/L	0.0113710	0.491403	mg/L	0.0113710	2.31%
QC value within limits for Se 196.026 Recovery = 98.28%								
Sn 189.927†	3360.8	0.492637	mg/L	0.0031373	0.492637	mg/L	0.0031373	0.64%
QC value within limits for Sn 189.927 Recovery = 98.53%								
Ti 334.940†	136997.9	0.499258	mg/L	0.0019424	0.499258	mg/L	0.0019424	0.39%
QC value within limits for Ti 334.940 Recovery = 99.85%								
Tl 190.801†	1091.2	0.493943	mg/L	0.0024698	0.493943	mg/L	0.0024698	0.50%
QC value within limits for Tl 190.801 Recovery = 98.79%								
V 290.880†	24112.0	0.492705	mg/L	0.0007061	0.492705	mg/L	0.0007061	0.14%
QC value within limits for V 290.880 Recovery = 98.54%								
Zn 206.200†	29228.1	0.522867	mg/L	0.0047777	0.522867	mg/L	0.0047777	0.91%
QC value within limits for Zn 206.200 Recovery = 104.57%								
B 249.772	38319.7	0.513088	mg/L	0.0009646	0.513088	mg/L	0.0009646	0.19%
QC value within limits for B 249.772 Recovery = 102.62%								
Si 251.611	123257.6	5.32037	mg/L	0.011953	5.32037	mg/L	0.011953	0.22%
QC value within limits for Si 251.611 Recovery = 106.41%								

QC Failed. Continue with analysis.

Sequence No.: 18 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 8/31/2020 6:06:36 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	412625.8	100	%	0.9				0.90%
Y 371.029	183697.7	101	%	0.9				0.92%
Ag 328.068†	48.8	-0.0041144	mg/L	0.00019184	-0.0041144	mg/L	0.00019184	4.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	77.2	0.0111774	mg/L	0.00357050	0.0111774	mg/L	0.00357050	31.94%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	7.1	0.0039798	mg/L	0.00419457	0.0039798	mg/L	0.00419457	105.40%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-3.8	-0.0019045	mg/L	0.00001166	-0.0019045	mg/L	0.00001166	0.61%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	54.6	0.0015528	mg/L	0.00003191	0.0015528	mg/L	0.00003191	2.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	271.0	-0.262431	mg/L	0.0012014	-0.262431	mg/L	0.0012014	0.46%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	-1.1	-0.0026955	mg/L	0.00020889	-0.0026955	mg/L	0.00020889	7.75%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.2	0.0014889	mg/L	0.00043203	0.0014889	mg/L	0.00043203	29.02%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	19.2	-0.0066043	mg/L	0.00030422	-0.0066043	mg/L	0.00030422	4.61%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	73.2	0.0017713	mg/L	0.00101619	0.0017713	mg/L	0.00101619	57.37%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-2.4	-0.0044718	mg/L	0.00206145	-0.0044718	mg/L	0.00206145	46.10%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	273.6	-13.3311	mg/L	14.80883	-13.3311	mg/L	14.80883	111.08%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	34.2	-0.233172	mg/L	0.0010989	-0.233172	mg/L	0.0010989	0.47%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-116.8	0.0003945	mg/L	0.00004458	0.0003945	mg/L	0.00004458	11.30%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	15.7	0.0025300	mg/L	0.00005728	0.0025300	mg/L	0.00005728	2.26%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-56.5	0.546570	mg/L	0.2773437	0.546570	mg/L	0.2773437	50.74%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	4.7	0.0008502	mg/L	0.00060348	0.0008502	mg/L	0.00060348	70.98%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-11.1	-0.0022600	mg/L	0.00128882	-0.0022600	mg/L	0.00128882	57.03%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.2	0.0009148	mg/L	0.00070684	0.0009148	mg/L	0.00070684	77.27%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	7.6	0.0036126	mg/L	0.00502450	0.0036126	mg/L	0.00502450	139.08%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	5.1	0.0021291	mg/L	0.00152133	0.0021291	mg/L	0.00152133	71.45%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	131.8	0.0010879	mg/L	0.00007016	0.0010879	mg/L	0.00007016	6.45%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	4.9	-0.0006073	mg/L	0.00349781	-0.0006073	mg/L	0.00349781	575.97%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-29.5	0.0035212	mg/L	0.00052676	0.0035212	mg/L	0.00052676	14.96%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	7.0	-0.0056282	mg/L	0.00002921	-0.0056282	mg/L	0.00002921	0.52%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	617.3	0.0100924	mg/L	0.00127442	0.0100924	mg/L	0.00127442	12.63%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	18.4	-0.0327920	mg/L	0.00136178	-0.0327920	mg/L	0.00136178	4.15%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 19
Sample ID: AD18927-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 8/31/2020 6:10:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	406659.0	99.0	%	0.73				0.74%
Y 371.029	208061.6	114	%	0.9				0.81%
Ag 328.068†	-264.9	-0.0076622	mg/L	0.00057143	-0.0076622	mg/L	0.00057143	7.46%
Al 308.215†	477344.0	53.1062	mg/L	0.14799	53.1062	mg/L	0.14799	0.28%
As 188.979†	103.5	0.0665751	mg/L	0.00360215	0.0665751	mg/L	0.00360215	5.41%
Ba 233.527†	26997.3	0.298302	mg/L	0.0023858	0.298302	mg/L	0.0023858	0.80%
Be 313.107†	2880.4	0.0036627	mg/L	0.00002016	0.0036627	mg/L	0.00002016	0.55%
Ca 317.933†	536440.2	5.44143	mg/L	0.016731	5.44143	mg/L	0.016731	0.31%
Cd 228.802†	0.9	-0.0026310	mg/L	0.00020346	-0.0026310	mg/L	0.00020346	7.73%
Co 228.616†	967.3	0.0339359	mg/L	0.00056488	0.0339359	mg/L	0.00056488	1.66%
Cr 267.716†	7099.2	0.0975139	mg/L	0.00089709	0.0975139	mg/L	0.00089709	0.92%
Cu 327.393†	1661.8	0.0244755	mg/L	0.00132893	0.0244755	mg/L	0.00132893	5.43%
Fe 273.955†	1626404.5	173.930	mg/L	0.4234	173.930	mg/L	0.4234	0.24%
K 404.721†	27036.5	-357.992	mg/L	20.6922	-357.992	mg/L	20.6922	5.78%
Mg 279.077†	78066.4	6.55791	mg/L	0.036271	6.55791	mg/L	0.036271	0.55%
Mn 257.610†	142570.2	0.485057	mg/L	0.0010092	0.485057	mg/L	0.0010092	0.21%
Mo 202.031†	23.9	0.0032362	mg/L	0.00088307	0.0032362	mg/L	0.00088307	27.29%
Na 330.237†	129.5	0.988946	mg/L	0.1007547	0.988946	mg/L	0.1007547	10.19%
Ni 231.604†	1451.7	0.0473984	mg/L	0.00060425	0.0473984	mg/L	0.00060425	1.27%
Pb 220.353†	487.8	0.0723222	mg/L	0.00272331	0.0723222	mg/L	0.00272331	3.77%
Sb 206.836†	16.8	0.0073642	mg/L	0.00443976	0.0073642	mg/L	0.00443976	60.29%
Se 196.026†	-155.2	0.0169283	mg/L	0.00502630	0.0169283	mg/L	0.00502630	29.69%
Sn 189.927†	89.2	0.0087965	mg/L	0.00032631	0.0087965	mg/L	0.00032631	3.71%
Ti 334.940†	275808.4	1.00450	mg/L	0.003167	1.00450	mg/L	0.003167	0.32%
Tl 190.801†	-34.5	-0.0053756	mg/L	0.00196093	-0.0053756	mg/L	0.00196093	36.48%
V 290.880†	10636.2	0.205076	mg/L	0.0025994	0.205076	mg/L	0.0025994	1.27%
Zn 206.200†	19488.3	0.346712	mg/L	0.0029472	0.346712	mg/L	0.0029472	0.85%
B 249.772	63936.3	0.165276	mg/L	0.0056369	0.165276	mg/L	0.0056369	3.41%
Si 251.611	75530.7	3.30445	mg/L	0.020560	3.30445	mg/L	0.020560	0.62%

Sequence No.: 20
Sample ID: AD18927-001 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 8/31/2020 6:14:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-001 MR

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	404149.5	98.4	%	0.10				0.11%
Y 371.029	212978.0	117	%	0.3				0.23%
Ag 328.068†	-486.2	-0.0101658	mg/L	0.00154527	-0.0101658	mg/L	0.00154527	15.20%
Al 308.215†	557855.2	62.0630	mg/L	0.14670	62.0630	mg/L	0.14670	0.24%
As 188.979†	133.9	0.0834811	mg/L	0.00133115	0.0834811	mg/L	0.00133115	1.59%
Ba 233.527†	31606.9	0.349554	mg/L	0.0008559	0.349554	mg/L	0.0008559	0.24%
Be 313.107†	3596.0	0.0041970	mg/L	0.00002109	0.0041970	mg/L	0.00002109	0.50%
Ca 317.933†	539938.1	5.47864	mg/L	0.005884	5.47864	mg/L	0.005884	0.11%
Cd 228.802†	3.8	-0.0025413	mg/L	0.00024837	-0.0025413	mg/L	0.00024837	9.77%
Co 228.616†	1173.8	0.0408635	mg/L	0.00025287	0.0408635	mg/L	0.00025287	0.62%
Cr 267.716†	6814.0	0.0933196	mg/L	0.00018409	0.0933196	mg/L	0.00018409	0.20%
Cu 327.393†	2424.0	0.0353697	mg/L	0.00039715	0.0353697	mg/L	0.00039715	1.12%
Fe 273.955†	1909628.4	204.219	mg/L	0.4651	204.219	mg/L	0.4651	0.23%
K 404.721†	32844.1	-401.415	mg/L	17.0711	-401.415	mg/L	17.0711	4.25%
Mg 279.077†	81185.2	6.82935	mg/L	0.007149	6.82935	mg/L	0.007149	0.10%
Mn 257.610†	168326.6	0.572544	mg/L	0.0008425	0.572544	mg/L	0.0008425	0.15%
Mo 202.031†	7.9	0.0018693	mg/L	0.00111637	0.0018693	mg/L	0.00111637	59.72%
Na 330.237†	175.3	1.09808	mg/L	0.108640	1.09808	mg/L	0.108640	9.89%
Ni 231.604†	1815.2	0.0590933	mg/L	0.00059484	0.0590933	mg/L	0.00059484	1.01%
Pb 220.353†	565.3	0.0839745	mg/L	0.00264946	0.0839745	mg/L	0.00264946	3.16%
Sb 206.836†	7.9	0.0034331	mg/L	0.00370831	0.0034331	mg/L	0.00370831	108.02%
Se 196.026†	-186.2	0.0181357	mg/L	0.00797097	0.0181357	mg/L	0.00797097	43.95%
Sn 189.927†	82.3	0.0069978	mg/L	0.00092216	0.0069978	mg/L	0.00092216	13.18%
Ti 334.940†	313918.7	1.14322	mg/L	0.001811	1.14322	mg/L	0.001811	0.16%
Tl 190.801†	-32.9	-0.0028927	mg/L	0.00355404	-0.0028927	mg/L	0.00355404	122.86%
V 290.880†	12191.2	0.234104	mg/L	0.0007208	0.234104	mg/L	0.0007208	0.31%
Zn 206.200†	23231.9	0.414420	mg/L	0.0009548	0.414420	mg/L	0.0009548	0.23%
B 249.772	73699.4	0.174784	mg/L	0.0083320	0.174784	mg/L	0.0083320	4.77%
Si 251.611	78658.0	3.45214	mg/L	0.002754	3.45214	mg/L	0.002754	0.08%

Sequence No.: 21
Sample ID: AD18927-001 MS 1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 8/31/2020 6:19:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-001 MS 1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	408598.9	99.4	%	0.96				0.97%
Y 371.029	220348.7	121	%	1.2				1.01%
Ag 328.068†	8196.4	0.0880538	mg/L	0.00108270	0.0880538	mg/L	0.00108270	1.23%
Al 308.215†	704977.3	78.4198	mg/L	1.49696	78.4198	mg/L	1.49696	1.91%
As 188.979†	1372.1	0.653340	mg/L	0.0117989	0.653340	mg/L	0.0117989	1.81%
Ba 233.527†	72021.1	0.798891	mg/L	0.0013290	0.798891	mg/L	0.0013290	0.17%
Be 313.107†	615704.7	0.461219	mg/L	0.0096000	0.461219	mg/L	0.0096000	2.08%
Ca 317.933†	5619695.7	59.5179	mg/L	1.12664	59.5179	mg/L	1.12664	1.89%
Cd 228.802†	15303.4	0.471302	mg/L	0.0042010	0.471302	mg/L	0.0042010	0.89%
Co 228.616†	15073.4	0.507181	mg/L	0.0051397	0.507181	mg/L	0.0051397	1.01%
Cr 267.716†	60430.7	0.881802	mg/L	0.0011260	0.881802	mg/L	0.0011260	0.13%
Cu 327.393†	33287.2	0.476480	mg/L	0.0008075	0.476480	mg/L	0.0008075	0.17%
Fe 273.955†	4095010.8	437.933	mg/L	7.8544	437.933	mg/L	7.8544	1.79%
K 404.721†	64631.6	-924.914	mg/L	70.2593	-924.914	mg/L	70.2593	7.60%
Mg 279.077†	687034.1	59.5559	mg/L	0.10036	59.5559	mg/L	0.10036	0.17%
Mn 257.610†	364904.6	1.24026	mg/L	0.002962	1.24026	mg/L	0.002962	0.24%
Mo 202.031†	5092.1	0.437235	mg/L	0.0036553	0.437235	mg/L	0.0036553	0.84%
Na 330.237†	19085.0	46.0922	mg/L	0.17952	46.0922	mg/L	0.17952	0.39%
Ni 231.604†	16316.0	0.525577	mg/L	0.0051485	0.525577	mg/L	0.0051485	0.98%
Pb 220.353†	3914.8	0.553748	mg/L	0.0036814	0.553748	mg/L	0.0036814	0.66%
Sb 206.836†	621.9	0.279662	mg/L	0.0052959	0.279662	mg/L	0.0052959	1.89%
Se 196.026†	542.6	0.454975	mg/L	0.0025549	0.454975	mg/L	0.0025549	0.56%
Sn 189.927†	3089.1	0.447125	mg/L	0.0047491	0.447125	mg/L	0.0047491	1.06%
Ti 334.940†	406544.1	1.48036	mg/L	0.012335	1.48036	mg/L	0.012335	0.83%
Tl 190.801†	1077.5	0.500532	mg/L	0.0023718	0.500532	mg/L	0.0023718	0.47%
V 290.880†	37717.8	0.734675	mg/L	0.0019731	0.734675	mg/L	0.0019731	0.27%
Zn 206.200†	54286.3	0.976073	mg/L	0.0039523	0.976073	mg/L	0.0039523	0.40%
B 249.772	197815.5	0.925412	mg/L	0.0450261	0.925412	mg/L	0.0450261	4.87%
Si 251.611	111402.2	4.97419	mg/L	0.065009	4.97419	mg/L	0.065009	1.31%

Sequence No.: 22
Sample ID: AD18927-001 MS 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 8/31/2020 6:24:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-001 MS 2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	409865.3	99.8	%	0.80				0.80%
Y 371.029	218460.6	120	%	0.9				0.74%
Ag 328.068†	8410.2	0.0904717	mg/L	0.00020904	0.0904717	mg/L	0.00020904	0.23%
Al 308.215†	707608.5	78.7124	mg/L	0.65977	78.7124	mg/L	0.65977	0.84%
As 188.979†	1212.4	0.565309	mg/L	0.0061540	0.565309	mg/L	0.0061540	1.09%
Ba 233.527†	74688.7	0.828549	mg/L	0.0032691	0.828549	mg/L	0.0032691	0.39%
Be 313.107†	614112.0	0.460030	mg/L	0.0044045	0.460030	mg/L	0.0044045	0.96%
Ca 317.933†	5184324.4	54.8864	mg/L	0.50706	54.8864	mg/L	0.50706	0.92%
Cd 228.802†	15256.1	0.469840	mg/L	0.0062675	0.469840	mg/L	0.0062675	1.33%
Co 228.616†	15055.5	0.506579	mg/L	0.0065407	0.506579	mg/L	0.0065407	1.29%
Cr 267.716†	39259.6	0.570462	mg/L	0.0015434	0.570462	mg/L	0.0015434	0.27%
Cu 327.393†	33979.7	0.486378	mg/L	0.0026967	0.486378	mg/L	0.0026967	0.55%
Fe 273.955†	2665368.5	285.041	mg/L	2.4824	285.041	mg/L	2.4824	0.87%
K 404.721†	42449.6	-602.518	mg/L	13.6230	-602.518	mg/L	13.6230	2.26%
Mg 279.077†	669378.6	58.0194	mg/L	0.13283	58.0194	mg/L	0.13283	0.23%
Mn 257.610†	360210.5	1.22431	mg/L	0.003628	1.22431	mg/L	0.003628	0.30%
Mo 202.031†	5135.1	0.440917	mg/L	0.0058842	0.440917	mg/L	0.0058842	1.33%
Na 330.237†	19090.7	46.1057	mg/L	0.05949	46.1057	mg/L	0.05949	0.13%
Ni 231.604†	16403.7	0.528400	mg/L	0.0067012	0.528400	mg/L	0.0067012	1.27%
Pb 220.353†	3786.2	0.535787	mg/L	0.0104898	0.535787	mg/L	0.0104898	1.96%
Sb 206.836†	599.6	0.269873	mg/L	0.0026422	0.269873	mg/L	0.0026422	0.98%
Se 196.026†	716.7	0.457021	mg/L	0.0102898	0.457021	mg/L	0.0102898	2.25%
Sn 189.927†	3094.2	0.446576	mg/L	0.0054683	0.446576	mg/L	0.0054683	1.22%
Ti 334.940†	469361.5	1.70901	mg/L	0.004063	1.70901	mg/L	0.004063	0.24%
Tl 190.801†	1077.1	0.502731	mg/L	0.0070645	0.502731	mg/L	0.0070645	1.41%
V 290.880†	37027.6	0.731374	mg/L	0.0024126	0.731374	mg/L	0.0024126	0.33%
Zn 206.200†	53087.0	0.954382	mg/L	0.0061508	0.954382	mg/L	0.0061508	0.64%
B 249.772	141180.6	0.775479	mg/L	0.0233647	0.775479	mg/L	0.0233647	3.01%
Si 251.611	110499.7	4.88348	mg/L	0.067980	4.88348	mg/L	0.067980	1.39%

Sequence No.: 23
Sample ID: AD18927-001 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 8/31/2020 6:29:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-001 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	409065.1	99.6	%	0.97				0.98%
Y 371.029	204286.5	112	%	0.9				0.84%
Ag 328.068†	7882.5	0.0845023	mg/L	0.00114269	0.0845023	mg/L	0.00114269	1.35%
Al 308.215†	513395.2	57.1063	mg/L	0.25406	57.1063	mg/L	0.25406	0.44%
As 188.979†	1113.3	0.508007	mg/L	0.0081879	0.508007	mg/L	0.0081879	1.61%
Ba 233.527†	65632.1	0.727855	mg/L	0.0035689	0.727855	mg/L	0.0035689	0.49%
Be 313.107†	602526.7	0.451380	mg/L	0.0031755	0.451380	mg/L	0.0031755	0.70%
Ca 317.933†	4987070.1	52.7880	mg/L	0.36451	52.7880	mg/L	0.36451	0.69%
Cd 228.802†	14964.1	0.460794	mg/L	0.0063761	0.460794	mg/L	0.0063761	1.38%
Co 228.616†	14219.6	0.478537	mg/L	0.0063517	0.478537	mg/L	0.0063517	1.33%
Cr 267.716†	37493.7	0.544493	mg/L	0.0026701	0.544493	mg/L	0.0026701	0.49%
Cu 327.393†	33694.1	0.482295	mg/L	0.0020296	0.482295	mg/L	0.0020296	0.42%
Fe 273.955†	1566221.1	167.494	mg/L	0.9601	167.494	mg/L	0.9601	0.57%
K 404.721†	24295.8	-370.563	mg/L	21.8875	-370.563	mg/L	21.8875	5.91%
Mg 279.077†	630974.9	54.6771	mg/L	0.36057	54.6771	mg/L	0.36057	0.66%
Mn 257.610†	274383.7	0.932787	mg/L	0.0041322	0.932787	mg/L	0.0041322	0.44%
Mo 202.031†	5240.6	0.449950	mg/L	0.0054138	0.449950	mg/L	0.0054138	1.20%
Na 330.237†	19260.2	46.5092	mg/L	0.40923	46.5092	mg/L	0.40923	0.88%
Ni 231.604†	15324.2	0.493673	mg/L	0.0067070	0.493673	mg/L	0.0067070	1.36%
Pb 220.353†	3673.6	0.518076	mg/L	0.0071317	0.518076	mg/L	0.0071317	1.38%
Sb 206.836†	1041.6	0.464801	mg/L	0.0062000	0.464801	mg/L	0.0062000	1.33%
Se 196.026†	869.6	0.466998	mg/L	0.0127707	0.466998	mg/L	0.0127707	2.73%
Sn 189.927†	3107.2	0.449932	mg/L	0.0067094	0.449932	mg/L	0.0067094	1.49%
Ti 334.940†	399309.4	1.45403	mg/L	0.005725	1.45403	mg/L	0.005725	0.39%
Tl 190.801†	1071.9	0.497033	mg/L	0.0111024	0.497033	mg/L	0.0111024	2.23%
V 290.880†	32107.5	0.641073	mg/L	0.0033111	0.641073	mg/L	0.0033111	0.52%
Zn 206.200†	43106.2	0.773867	mg/L	0.0051896	0.773867	mg/L	0.0051896	0.67%
B 249.772	95444.0	0.629807	mg/L	0.0097771	0.629807	mg/L	0.0097771	1.55%
Si 251.611	86691.5	3.80800	mg/L	0.027896	3.80800	mg/L	0.027896	0.73%

Sequence No.: 24 **Autosampler Location: 28**
Sample ID: AD18927-001 SD **Date Collected: 8/31/2020 6:33:52 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: AD18927-001 SD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	411562.3	100	%	1.2				1.19%
Y 371.029	188237.9	103	%	1.3				1.29%
Ag 328.068†	-39.4	-0.0051118	mg/L	0.00085534	-0.0051118	mg/L	0.00085534	16.73%
Al 308.215†	95981.1	10.6803	mg/L	0.03883	10.6803	mg/L	0.03883	0.36%
As 188.979†	22.3	0.0148227	mg/L	0.00310735	0.0148227	mg/L	0.00310735	20.96%
Ba 233.527†	5435.9	0.0585763	mg/L	0.00061216	0.0585763	mg/L	0.00061216	1.05%
Be 313.107†	599.2	0.0019594	mg/L	0.00007066	0.0019594	mg/L	0.00007066	3.61%
Ca 317.933†	119886.0	1.01005	mg/L	0.002388	1.01005	mg/L	0.002388	0.24%
Cd 228.802†	6.3	-0.0024648	mg/L	0.00025017	-0.0024648	mg/L	0.00025017	10.15%
Co 228.616†	189.3	0.0078337	mg/L	0.00018881	0.0078337	mg/L	0.00018881	2.41%
Cr 267.716†	1484.5	0.0149451	mg/L	0.00023791	0.0149451	mg/L	0.00023791	1.59%
Cu 327.393†	352.3	0.0057602	mg/L	0.00116373	0.0057602	mg/L	0.00116373	20.20%
Fe 273.955†	334120.4	35.7280	mg/L	0.08501	35.7280	mg/L	0.08501	0.24%
K 404.721†	4994.9	-95.3759	mg/L	18.66063	-95.3759	mg/L	18.66063	19.57%
Mg 279.077†	15884.2	1.14625	mg/L	0.004443	1.14625	mg/L	0.004443	0.39%
Mn 257.610†	29863.0	0.102227	mg/L	0.0002779	0.102227	mg/L	0.0002779	0.27%
Mo 202.031†	11.7	0.0021894	mg/L	0.00070080	0.0021894	mg/L	0.00070080	32.01%
Na 330.237†	-14.7	0.645922	mg/L	0.1273511	0.645922	mg/L	0.1273511	19.72%
Ni 231.604†	303.7	0.0104691	mg/L	0.00032801	0.0104691	mg/L	0.00032801	3.13%
Pb 220.353†	101.5	0.0144557	mg/L	0.00227093	0.0144557	mg/L	0.00227093	15.71%
Sb 206.836†	4.3	0.0018646	mg/L	0.00629484	0.0018646	mg/L	0.00629484	337.60%
Se 196.026†	-17.9	0.0098567	mg/L	0.00446335	0.0098567	mg/L	0.00446335	45.28%
Sn 189.927†	35.8	0.0054998	mg/L	0.00105859	0.0054998	mg/L	0.00105859	19.25%
Ti 334.940†	54923.6	0.200521	mg/L	0.0006394	0.200521	mg/L	0.0006394	0.32%
Tl 190.801†	-8.8	-0.0042241	mg/L	0.00093631	-0.0042241	mg/L	0.00093631	22.17%
V 290.880†	1920.2	0.0400912	mg/L	0.00077915	0.0400912	mg/L	0.00077915	1.94%
Zn 206.200†	4305.0	0.0721059	mg/L	0.00063957	0.0721059	mg/L	0.00063957	0.89%
B 249.772	13332.2	0.0379077	mg/L	0.00214383	0.0379077	mg/L	0.00214383	5.66%
Si 251.611	15332.8	0.644158	mg/L	0.0074875	0.644158	mg/L	0.0074875	1.16%

Sequence No.: 25
Sample ID: AD18927-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 8/31/2020 6:37:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	404256.0	98.4	%	0.30				0.30%
Y 371.029	199824.2	109	%	0.3				0.23%
Ag 328.068†	-283.6	-0.0078746	mg/L	0.00113293	-0.0078746	mg/L	0.00113293	14.39%
Al 308.215†	379765.5	42.2508	mg/L	0.13170	42.2508	mg/L	0.13170	0.31%
As 188.979†	197.8	0.111387	mg/L	0.0016936	0.111387	mg/L	0.0016936	1.52%
Ba 233.527†	15689.4	0.172577	mg/L	0.0016314	0.172577	mg/L	0.0016314	0.95%
Be 313.107†	2761.0	0.0035735	mg/L	0.00003019	0.0035735	mg/L	0.00003019	0.84%
Ca 317.933†	680013.1	6.96878	mg/L	0.013085	6.96878	mg/L	0.013085	0.19%
Cd 228.802†	23.3	-0.0019380	mg/L	0.00038378	-0.0019380	mg/L	0.00038378	19.80%
Co 228.616†	659.8	0.0236179	mg/L	0.00021629	0.0236179	mg/L	0.00021629	0.92%
Cr 267.716†	8402.1	0.116674	mg/L	0.0004496	0.116674	mg/L	0.0004496	0.39%
Cu 327.393†	2726.9	0.0396985	mg/L	0.00049934	0.0396985	mg/L	0.00049934	1.26%
Fe 273.955†	1890228.9	202.145	mg/L	0.3750	202.145	mg/L	0.3750	0.19%
K 404.721†	29565.3	-440.125	mg/L	17.0617	-440.125	mg/L	17.0617	3.88%
Mg 279.077†	82044.0	6.90409	mg/L	0.016397	6.90409	mg/L	0.016397	0.24%
Mn 257.610†	130624.1	0.444480	mg/L	0.0009795	0.444480	mg/L	0.0009795	0.22%
Mo 202.031†	-6.7	0.0006184	mg/L	0.00070290	0.0006184	mg/L	0.00070290	113.66%
Na 330.237†	182.8	1.11589	mg/L	0.129470	1.11589	mg/L	0.129470	11.60%
Ni 231.604†	1313.0	0.0429364	mg/L	0.00054809	0.0429364	mg/L	0.00054809	1.28%
Pb 220.353†	710.4	0.102451	mg/L	0.0025730	0.102451	mg/L	0.0025730	2.51%
Sb 206.836†	14.9	0.0065035	mg/L	0.00065958	0.0065035	mg/L	0.00065958	10.14%
Se 196.026†	-186.5	0.0168809	mg/L	0.00356304	0.0168809	mg/L	0.00356304	21.11%
Sn 189.927†	88.5	0.0091850	mg/L	0.00062852	0.0091850	mg/L	0.00062852	6.84%
Ti 334.940†	251993.0	0.917821	mg/L	0.0046983	0.917821	mg/L	0.0046983	0.51%
Tl 190.801†	-25.3	-0.0014790	mg/L	0.00354877	-0.0014790	mg/L	0.00354877	239.94%
V 290.880†	13034.7	0.251111	mg/L	0.0019252	0.251111	mg/L	0.0019252	0.77%
Zn 206.200†	15672.5	0.277700	mg/L	0.0019579	0.277700	mg/L	0.0019579	0.71%
B 249.772	73537.0	0.181147	mg/L	0.0093488	0.181147	mg/L	0.0093488	5.16%
Si 251.611	76975.1	3.37439	mg/L	0.017818	3.37439	mg/L	0.017818	0.53%

Sequence No.: 26
Sample ID: AD18927-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 8/31/2020 6:41:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-003

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	409157.3	99.6	%	0.31				0.31%
Y 371.029	183466.3	101	%	0.3				0.30%
Ag 328.068†	-90.8	-0.0056926	mg/L	0.00062214	-0.0056926	mg/L	0.00062214	10.93%
Al 308.215†	147515.2	16.4134	mg/L	0.01907	16.4134	mg/L	0.01907	0.12%
As 188.979†	28.3	0.0187777	mg/L	0.00204249	0.0187777	mg/L	0.00204249	10.88%
Ba 233.527†	3234.1	0.0340964	mg/L	0.00021906	0.0340964	mg/L	0.00021906	0.64%
Be 313.107†	344.3	0.0017691	mg/L	0.00001016	0.0017691	mg/L	0.00001016	0.57%
Ca 317.933†	146578.0	1.29401	mg/L	0.000904	1.29401	mg/L	0.000904	0.07%
Cd 228.802†	7.4	-0.0024311	mg/L	0.00039333	-0.0024311	mg/L	0.00039333	16.18%
Co 228.616†	209.0	0.0084954	mg/L	0.00030028	0.0084954	mg/L	0.00030028	3.53%
Cr 267.716†	4540.9	0.0598918	mg/L	0.00040193	0.0598918	mg/L	0.00040193	0.67%
Cu 327.393†	476.9	0.0075415	mg/L	0.00022015	0.0075415	mg/L	0.00022015	2.92%
Fe 273.955†	442104.0	47.2762	mg/L	0.16530	47.2762	mg/L	0.16530	0.35%
K 404.721†	6822.7	-117.523	mg/L	5.0760	-117.523	mg/L	5.0760	4.32%
Mg 279.077†	21538.9	1.63837	mg/L	0.005690	1.63837	mg/L	0.005690	0.35%
Mn 257.610†	24625.8	0.0844374	mg/L	0.00013909	0.0844374	mg/L	0.00013909	0.16%
Mo 202.031†	26.9	0.0034890	mg/L	0.00087293	0.0034890	mg/L	0.00087293	25.02%
Na 330.237†	17.2	0.721923	mg/L	0.1507061	0.721923	mg/L	0.1507061	20.88%
Ni 231.604†	350.8	0.0119848	mg/L	0.00008169	0.0119848	mg/L	0.00008169	0.68%
Pb 220.353†	125.8	0.0183751	mg/L	0.00133235	0.0183751	mg/L	0.00133235	7.25%
Sb 206.836†	3.3	0.0014312	mg/L	0.00445282	0.0014312	mg/L	0.00445282	311.13%
Se 196.026†	-40.3	0.0055899	mg/L	0.00344857	0.0055899	mg/L	0.00344857	61.69%
Sn 189.927†	86.5	0.0118974	mg/L	0.00083224	0.0118974	mg/L	0.00083224	7.00%
Ti 334.940†	106168.6	0.387044	mg/L	0.0004517	0.387044	mg/L	0.0004517	0.12%
Tl 190.801†	-5.1	0.0003731	mg/L	0.00342571	0.0003731	mg/L	0.00342571	918.06%
V 290.880†	4911.3	0.0991757	mg/L	0.00090835	0.0991757	mg/L	0.00090835	0.92%
Zn 206.200†	2231.9	0.0346118	mg/L	0.00010716	0.0346118	mg/L	0.00010716	0.31%
B 249.772	17237.9	0.0440788	mg/L	0.00111178	0.0440788	mg/L	0.00111178	2.52%
Si 251.611	71598.8	3.08044	mg/L	0.007498	3.08044	mg/L	0.007498	0.24%

Sequence No.: 27
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 8/31/2020 6:45:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	396306.9	96.5	%	0.32				0.34%
Y 371.029	148627.8	81.4	%	0.23				0.28%
Ag 328.068†	6805.8	0.0723231	mg/L	0.00072456	0.0723231	mg/L	0.00072456	1.00%
QC value less than the lower limit for Ag 328.068 Recovery = 72.32%								
Al 308.215†	44292.9	4.91860	mg/L	0.001747	4.91860	mg/L	0.001747	0.04%
QC value within limits for Al 308.215 Recovery = 98.37%								
As 188.979†	1125.1	0.494160	mg/L	0.0092437	0.494160	mg/L	0.0092437	1.87%
QC value within limits for As 188.979 Recovery = 98.83%								
Ba 233.527†	44225.6	0.489852	mg/L	0.0012286	0.489852	mg/L	0.0012286	0.25%
QC value within limits for Ba 233.527 Recovery = 97.97%								
Be 313.107†	647872.9	0.485237	mg/L	0.0022856	0.485237	mg/L	0.0022856	0.47%
QC value within limits for Be 313.107 Recovery = 97.05%								
Ca 317.933†	4869235.3	51.5344	mg/L	0.23551	51.5344	mg/L	0.23551	0.46%
QC value within limits for Ca 317.933 Recovery = 103.07%								
Cd 228.802†	16674.3	0.513761	mg/L	0.0053964	0.513761	mg/L	0.0053964	1.05%
QC value within limits for Cd 228.802 Recovery = 102.75%								
Co 228.616†	14748.5	0.496280	mg/L	0.0057332	0.496280	mg/L	0.0057332	1.16%
QC value within limits for Co 228.616 Recovery = 99.26%								
Cr 267.716†	36215.9	0.525701	mg/L	0.0061391	0.525701	mg/L	0.0061391	1.17%
QC value within limits for Cr 267.716 Recovery = 105.14%								
Cu 327.393†	34701.2	0.496690	mg/L	0.0008899	0.496690	mg/L	0.0008899	0.18%
QC value within limits for Cu 327.393 Recovery = 99.34%								
Fe 273.955†	46979.2	5.01993	mg/L	0.010460	5.01993	mg/L	0.010460	0.21%
QC value within limits for Fe 273.955 Recovery = 100.40%								
K 404.721†	5042.5	34.5245	mg/L	6.07626	34.5245	mg/L	6.07626	17.60%
QC value less than the lower limit for K 404.721 Recovery = 69.05%								
Mg 279.077†	591032.7	51.2010	mg/L	0.01930	51.2010	mg/L	0.01930	0.04%
QC value within limits for Mg 279.077 Recovery = 102.40%								
Mn 257.610†	145242.1	0.494133	mg/L	0.0005067	0.494133	mg/L	0.0005067	0.10%
QC value within limits for Mn 257.610 Recovery = 98.83%								
Mo 202.031†	5733.4	0.492148	mg/L	0.0059226	0.492148	mg/L	0.0059226	1.20%
QC value within limits for Mo 202.031 Recovery = 98.43%								
Na 330.237†	20500.4	49.4600	mg/L	0.27094	49.4600	mg/L	0.27094	0.55%
QC value within limits for Na 330.237 Recovery = 98.92%								
Ni 231.604†	15461.5	0.498090	mg/L	0.0055344	0.498090	mg/L	0.0055344	1.11%
QC value within limits for Ni 231.604 Recovery = 99.62%								
Pb 220.353†	3571.7	0.499076	mg/L	0.0052582	0.499076	mg/L	0.0052582	1.05%
QC value within limits for Pb 220.353 Recovery = 99.82%								
Sb 206.836†	1068.8	0.477325	mg/L	0.0235324	0.477325	mg/L	0.0235324	4.93%
QC value within limits for Sb 206.836 Recovery = 95.46%								
Se 196.026†	1103.5	0.490756	mg/L	0.0076133	0.490756	mg/L	0.0076133	1.55%
QC value within limits for Se 196.026 Recovery = 98.15%								
Sn 189.927†	3382.5	0.495829	mg/L	0.0072651	0.495829	mg/L	0.0072651	1.47%
QC value within limits for Sn 189.927 Recovery = 99.17%								
Ti 334.940†	136681.6	0.498106	mg/L	0.0005221	0.498106	mg/L	0.0005221	0.10%
QC value within limits for Ti 334.940 Recovery = 99.62%								
Tl 190.801†	1114.4	0.504295	mg/L	0.0024784	0.504295	mg/L	0.0024784	0.49%
QC value within limits for Tl 190.801 Recovery = 100.86%								
V 290.880†	24103.9	0.492572	mg/L	0.0019189	0.492572	mg/L	0.0019189	0.39%
QC value within limits for V 290.880 Recovery = 98.51%								
Zn 206.200†	29487.0	0.527550	mg/L	0.0050094	0.527550	mg/L	0.0050094	0.95%
QC value within limits for Zn 206.200 Recovery = 105.51%								
B 249.772	37041.6	0.495268	mg/L	0.0015126	0.495268	mg/L	0.0015126	0.31%
QC value within limits for B 249.772 Recovery = 99.05%								
Si 251.611	122425.2	5.28426	mg/L	0.025414	5.28426	mg/L	0.025414	0.48%
QC value within limits for Si 251.611 Recovery = 105.69%								

QC Failed. Continue with analysis.

Sequence No.: 28
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 2
Date Collected: 8/31/2020 6:49:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	411799.9	100	%	0.6				0.55%
Y 371.029	183582.0	101	%	0.5				0.54%
Ag 328.068†	-14.6	-0.0048317	mg/L	0.00034326	-0.0048317	mg/L	0.00034326	7.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	58.4	0.0090912	mg/L	0.00337407	0.0090912	mg/L	0.00337407	37.11%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	8.3	0.0045117	mg/L	0.00642327	0.0045117	mg/L	0.00642327	142.37%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-13.9	-0.0020166	mg/L	0.00016856	-0.0020166	mg/L	0.00016856	8.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	7.9	0.0015180	mg/L	0.00006162	0.0015180	mg/L	0.00006162	4.06%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	312.2	-0.261994	mg/L	0.0005861	-0.261994	mg/L	0.0005861	0.22%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	2.5	-0.0025835	mg/L	0.00011996	-0.0025835	mg/L	0.00011996	4.64%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-3.0	0.0013825	mg/L	0.00053324	0.0013825	mg/L	0.00053324	38.57%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3.6	-0.0069390	mg/L	0.00034390	-0.0069390	mg/L	0.00034390	4.96%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	138.5	0.0027041	mg/L	0.00048540	0.0027041	mg/L	0.00048540	17.95%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	13.6	-0.0027634	mg/L	0.00191103	-0.0027634	mg/L	0.00191103	69.16%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	129.8	-15.4196	mg/L	6.30900	-15.4196	mg/L	6.30900	40.92%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	-0.1	-0.236157	mg/L	0.0005376	-0.236157	mg/L	0.0005376	0.23%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-131.2	0.0003457	mg/L	0.00004447	0.0003457	mg/L	0.00004447	12.87%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	11.6	0.0021819	mg/L	0.00006308	0.0021819	mg/L	0.00006308	2.89%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-51.1	0.559327	mg/L	0.1266663	0.559327	mg/L	0.1266663	22.65%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	1.0	0.0007300	mg/L	0.00051006	0.0007300	mg/L	0.00051006	69.87%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-13.3	-0.0025749	mg/L	0.00080048	-0.0025749	mg/L	0.00080048	31.09%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	15.6	0.0068059	mg/L	0.00696520	0.0068059	mg/L	0.00696520	102.34%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	20.5	0.0093452	mg/L	0.00297278	0.0093452	mg/L	0.00297278	31.81%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-3.1	0.0009183	mg/L	0.00016318	0.0009183	mg/L	0.00016318	17.77%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	69.6	0.0008613	mg/L	0.00015795	0.0008613	mg/L	0.00015795	18.34%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.9	-0.0019127	mg/L	0.00170154	-0.0019127	mg/L	0.00170154	88.96%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	16.7	0.0044418	mg/L	0.00060539	0.0044418	mg/L	0.00060539	13.63%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-0.1	-0.0057563	mg/L	0.00020718	-0.0057563	mg/L	0.00020718	3.60%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	245.7	0.0049325	mg/L	0.00106938	0.0049325	mg/L	0.00106938	21.68%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-7.3	-0.0339493	mg/L	0.00078260	-0.0339493	mg/L	0.00078260	2.31%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 29
Sample ID: AD18927-004
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 31
Date Collected: 8/31/2020 6:53:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	399699.8	97.3	%	0.90				0.92%
Y 371.029	191449.2	105	%	1.0				0.91%
Ag 328.068†	-244.9	-0.0074361	mg/L	0.00062380	-0.0074361	mg/L	0.00062380	8.39%
Al 308.215†	427667.2	47.5797	mg/L	0.14535	47.5797	mg/L	0.14535	0.31%
As 188.979†	87.7	0.0542335	mg/L	0.00221709	0.0542335	mg/L	0.00221709	4.09%
Ba 233.527†	18239.8	0.200933	mg/L	0.0007438	0.200933	mg/L	0.0007438	0.37%
Be 313.107†	1762.6	0.0028281	mg/L	0.00004490	0.0028281	mg/L	0.00004490	1.59%
Ca 317.933†	664617.4	6.80500	mg/L	0.003452	6.80500	mg/L	0.003452	0.05%
Cd 228.802†	14.8	-0.0022025	mg/L	0.00018923	-0.0022025	mg/L	0.00018923	8.59%
Co 228.616†	393.1	0.0146716	mg/L	0.00027446	0.0146716	mg/L	0.00027446	1.87%
Cr 267.716†	7631.8	0.105347	mg/L	0.0004445	0.105347	mg/L	0.0004445	0.42%
Cu 327.393†	1390.6	0.0205998	mg/L	0.00038774	0.0205998	mg/L	0.00038774	1.88%
Fe 273.955†	1191859.3	127.458	mg/L	0.3822	127.458	mg/L	0.3822	0.30%
K 404.721†	20239.9	-260.784	mg/L	7.9421	-260.784	mg/L	7.9421	3.05%
Mg 279.077†	54041.8	4.46708	mg/L	0.012118	4.46708	mg/L	0.012118	0.27%
Mn 257.610†	126533.1	0.430584	mg/L	0.0010320	0.430584	mg/L	0.0010320	0.24%
Mo 202.031†	28.8	0.0036549	mg/L	0.00054393	0.0036549	mg/L	0.00054393	14.88%
Na 330.237†	141.8	1.01831	mg/L	0.121075	1.01831	mg/L	0.121075	11.89%
Ni 231.604†	899.9	0.0296487	mg/L	0.00078800	0.0296487	mg/L	0.00078800	2.66%
Pb 220.353†	527.1	0.0773149	mg/L	0.00205727	0.0773149	mg/L	0.00205727	2.66%
Sb 206.836†	12.6	0.0055075	mg/L	0.00567265	0.0055075	mg/L	0.00567265	103.00%
Se 196.026†	-117.9	0.0104445	mg/L	0.00293045	0.0104445	mg/L	0.00293045	28.06%
Sn 189.927†	112.2	0.0139532	mg/L	0.00193768	0.0139532	mg/L	0.00193768	13.89%
Ti 334.940†	189801.3	0.691453	mg/L	0.0047148	0.691453	mg/L	0.0047148	0.68%
Tl 190.801†	-20.7	-0.0021740	mg/L	0.00303180	-0.0021740	mg/L	0.00303180	139.46%
V 290.880†	11967.3	0.234899	mg/L	0.0025604	0.234899	mg/L	0.0025604	1.09%
Zn 206.200†	10841.3	0.190321	mg/L	0.0014926	0.190321	mg/L	0.0014926	0.78%
B 249.772	44472.4	0.0885193	mg/L	0.00860093	0.0885193	mg/L	0.00860093	9.72%
Si 251.611	79436.7	3.45441	mg/L	0.080546	3.45441	mg/L	0.080546	2.33%

Sequence No.: 30 **Autosampler Location:** 32
Sample ID: AD18927-005 **Date Collected:** 8/31/2020 6:56:59 PM
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: AD18927-005

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	400009.7	97.4	%	0.65				0.67%
Y 371.029	194272.5	106	%	0.6				0.59%
Ag 328.068†	-295.6	-0.0080094	mg/L	0.00056728	-0.0080094	mg/L	0.00056728	7.08%
Al 308.215†	431311.3	47.9851	mg/L	0.12232	47.9851	mg/L	0.12232	0.25%
As 188.979†	95.6	0.0615427	mg/L	0.00280658	0.0615427	mg/L	0.00280658	4.56%
Ba 233.527†	20055.7	0.221123	mg/L	0.0024048	0.221123	mg/L	0.0024048	1.09%
Be 313.107†	1159.1	0.0023775	mg/L	0.00000881	0.0023775	mg/L	0.00000881	0.37%
Ca 317.933†	3339360.6	35.2594	mg/L	0.05120	35.2594	mg/L	0.05120	0.15%
Cd 228.802†	29.4	-0.0017494	mg/L	0.00050930	-0.0017494	mg/L	0.00050930	29.11%
Co 228.616†	674.0	0.0240945	mg/L	0.00017688	0.0240945	mg/L	0.00017688	0.73%
Cr 267.716†	8599.2	0.119573	mg/L	0.0010808	0.119573	mg/L	0.0010808	0.90%
Cu 327.393†	3330.1	0.0483197	mg/L	0.00061558	0.0483197	mg/L	0.00061558	1.27%
Fe 273.955†	1501946.5	160.620	mg/L	0.3369	160.620	mg/L	0.3369	0.21%
K 404.721†	24911.3	-332.735	mg/L	17.8477	-332.735	mg/L	17.8477	5.36%
Mg 279.077†	214216.0	18.4069	mg/L	0.04378	18.4069	mg/L	0.04378	0.24%
Mn 257.610†	166721.2	0.567091	mg/L	0.0010848	0.567091	mg/L	0.0010848	0.19%
Mo 202.031†	33.2	0.0040310	mg/L	0.00043961	0.0040310	mg/L	0.00043961	10.91%
Na 330.237†	220.1	1.20467	mg/L	0.071925	1.20467	mg/L	0.071925	5.97%
Ni 231.604†	1307.0	0.0427432	mg/L	0.00080087	0.0427432	mg/L	0.00080087	1.87%
Pb 220.353†	916.5	0.131796	mg/L	0.0022408	0.131796	mg/L	0.0022408	1.70%
Sb 206.836†	1.6	0.0006755	mg/L	0.00361423	0.0006755	mg/L	0.00361423	535.02%
Se 196.026†	-135.1	0.0176791	mg/L	0.00327957	0.0176791	mg/L	0.00327957	18.55%
Sn 189.927†	61.0	0.0032556	mg/L	0.00053532	0.0032556	mg/L	0.00053532	16.44%
Ti 334.940†	343212.1	1.24984	mg/L	0.004043	1.24984	mg/L	0.004043	0.32%
Tl 190.801†	-31.3	-0.0010421	mg/L	0.00095541	-0.0010421	mg/L	0.00095541	91.68%
V 290.880†	12086.2	0.235015	mg/L	0.0029471	0.235015	mg/L	0.0029471	1.25%
Zn 206.200†	45661.3	0.820079	mg/L	0.0021481	0.820079	mg/L	0.0021481	0.26%
B 249.772	58871.0	0.150354	mg/L	0.0058768	0.150354	mg/L	0.0058768	3.91%
Si 251.611	88693.3	3.87479	mg/L	0.032445	3.87479	mg/L	0.032445	0.84%

Sequence No.: 31
Sample ID: AD18927-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 8/31/2020 7:00:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-006

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	402917.0	98.1	%	0.96				0.98%
Y 371.029	189209.4	104	%	1.0				0.95%
Ag 328.068†	-51.1	-0.0052446	mg/L	0.00026784	-0.0052446	mg/L	0.00026784	5.11%
Al 308.215†	233194.6	25.9450	mg/L	0.02971	25.9450	mg/L	0.02971	0.11%
As 188.979†	54.7	0.0329988	mg/L	0.00580820	0.0329988	mg/L	0.00580820	17.60%
Ba 233.527†	8790.7	0.0958762	mg/L	0.00070473	0.0958762	mg/L	0.00070473	0.74%
Be 313.107†	196.0	0.0016584	mg/L	0.00002191	0.0016584	mg/L	0.00002191	1.32%
Ca 317.933†	882436.0	9.12219	mg/L	0.000720	9.12219	mg/L	0.000720	0.01%
Cd 228.802†	18.5	-0.0020869	mg/L	0.00030321	-0.0020869	mg/L	0.00030321	14.53%
Co 228.616†	388.0	0.0144984	mg/L	0.00034477	0.0144984	mg/L	0.00034477	2.38%
Cr 267.716†	5167.4	0.0691050	mg/L	0.00051544	0.0691050	mg/L	0.00051544	0.75%
Cu 327.393†	2084.1	0.0305113	mg/L	0.00067592	0.0305113	mg/L	0.00067592	2.22%
Fe 273.955†	652626.7	69.7904	mg/L	0.14485	69.7904	mg/L	0.14485	0.21%
K 404.721†	11128.0	-149.966	mg/L	18.4550	-149.966	mg/L	18.4550	12.31%
Mg 279.077†	61486.4	5.11498	mg/L	0.006349	5.11498	mg/L	0.006349	0.12%
Mn 257.610†	78938.8	0.268922	mg/L	0.0005065	0.268922	mg/L	0.0005065	0.19%
Mo 202.031†	46.6	0.0051786	mg/L	0.00120253	0.0051786	mg/L	0.00120253	23.22%
Na 330.237†	20.4	0.729556	mg/L	0.1637070	0.729556	mg/L	0.1637070	22.44%
Ni 231.604†	664.8	0.0220844	mg/L	0.00018590	0.0220844	mg/L	0.00018590	0.84%
Pb 220.353†	436.2	0.0626378	mg/L	0.00079520	0.0626378	mg/L	0.00079520	1.27%
Sb 206.836†	10.0	0.0044153	mg/L	0.00434054	0.0044153	mg/L	0.00434054	98.31%
Se 196.026†	-52.5	0.0109168	mg/L	0.00250845	0.0109168	mg/L	0.00250845	22.98%
Sn 189.927†	73.6	0.0082590	mg/L	0.00090963	0.0082590	mg/L	0.00090963	11.01%
Ti 334.940†	190994.4	0.695796	mg/L	0.0006921	0.695796	mg/L	0.0006921	0.10%
Tl 190.801†	-15.5	-0.0008923	mg/L	0.00243739	-0.0008923	mg/L	0.00243739	273.15%
V 290.880†	6536.9	0.130190	mg/L	0.0005979	0.130190	mg/L	0.0005979	0.46%
Zn 206.200†	13886.5	0.245398	mg/L	0.0007256	0.245398	mg/L	0.0007256	0.30%
B 249.772	25472.4	0.0647031	mg/L	0.00312462	0.0647031	mg/L	0.00312462	4.83%
Si 251.611	79317.5	3.42669	mg/L	0.029811	3.42669	mg/L	0.029811	0.87%

Sequence No.: 32
Sample ID: AD18927-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 8/31/2020 7:04:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-007

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	405611.2	98.7	%	0.94				0.95%
Y 371.029	194647.7	107	%	1.1				1.04%
Ag 328.068†	-167.1	-0.0065568	mg/L	0.00040041	-0.0065568	mg/L	0.00040041	6.11%
Al 308.215†	490643.0	54.5855	mg/L	0.04913	54.5855	mg/L	0.04913	0.09%
As 188.979†	88.2	0.0557260	mg/L	0.00319889	0.0557260	mg/L	0.00319889	5.74%
Ba 233.527†	26752.4	0.295580	mg/L	0.0027224	0.295580	mg/L	0.0027224	0.92%
Be 313.107†	-772.7	0.0009352	mg/L	0.00004489	0.0009352	mg/L	0.00004489	4.80%
Ca 317.933†	2072473.4	21.7820	mg/L	0.04086	21.7820	mg/L	0.04086	0.19%
Cd 228.802†	48.4	-0.0011614	mg/L	0.00016495	-0.0011614	mg/L	0.00016495	14.20%
Co 228.616†	699.4	0.0249479	mg/L	0.00063867	0.0249479	mg/L	0.00063867	2.56%
Cr 267.716†	8852.7	0.123301	mg/L	0.0009806	0.123301	mg/L	0.0009806	0.80%
Cu 327.393†	4064.6	0.0588173	mg/L	0.00184265	0.0588173	mg/L	0.00184265	3.13%
Fe 273.955†	1298484.0	138.861	mg/L	0.2490	138.861	mg/L	0.2490	0.18%
K 404.721†	19905.5	-313.603	mg/L	9.8125	-313.603	mg/L	9.8125	3.13%
Mg 279.077†	150329.0	12.8469	mg/L	0.03489	12.8469	mg/L	0.03489	0.27%
Mn 257.610†	215529.3	0.732877	mg/L	0.0006681	0.732877	mg/L	0.0006681	0.09%
Mo 202.031†	111.1	0.0107042	mg/L	0.00039340	0.0107042	mg/L	0.00039340	3.68%
Na 330.237†	274.4	1.33381	mg/L	0.037774	1.33381	mg/L	0.037774	2.83%
Ni 231.604†	1103.5	0.0361990	mg/L	0.00057398	0.0361990	mg/L	0.00057398	1.59%
Pb 220.353†	2008.9	0.285123	mg/L	0.0025521	0.285123	mg/L	0.0025521	0.90%
Sb 206.836†	16.0	0.0071326	mg/L	0.00564393	0.0071326	mg/L	0.00564393	79.13%
Se 196.026†	-119.9	0.0144058	mg/L	0.00594059	0.0144058	mg/L	0.00594059	41.24%
Sn 189.927†	93.7	0.0049465	mg/L	0.00266667	0.0049465	mg/L	0.00266667	53.91%
Ti 334.940†	494212.8	1.79946	mg/L	0.000869	1.79946	mg/L	0.000869	0.05%
Tl 190.801†	-47.0	-0.0026491	mg/L	0.00135660	-0.0026491	mg/L	0.00135660	51.21%
V 290.880†	10870.7	0.212265	mg/L	0.0023403	0.212265	mg/L	0.0023403	1.10%
Zn 206.200†	23694.2	0.422780	mg/L	0.0044069	0.422780	mg/L	0.0044069	1.04%
B 249.772	52017.6	0.145758	mg/L	0.0066467	0.145758	mg/L	0.0066467	4.56%
Si 251.611	80009.9	3.49185	mg/L	0.020536	3.49185	mg/L	0.020536	0.59%

Sequence No.: 33
Sample ID: AD18927-008
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 35
Date Collected: 8/31/2020 7:09:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-008

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	401872.5	97.8	%	0.73				0.75%
Y 371.029	209091.0	115	%	0.9				0.76%
Ag 328.068†	-330.0	-0.0083986	mg/L	0.00002915	-0.0083986	mg/L	0.00002915	0.35%
Al 308.215†	416974.1	46.3901	mg/L	0.06068	46.3901	mg/L	0.06068	0.13%
As 188.979†	210.8	0.107751	mg/L	0.0012046	0.107751	mg/L	0.0012046	1.12%
Ba 233.527†	30590.2	0.338249	mg/L	0.0045429	0.338249	mg/L	0.0045429	1.34%
Be 313.107†	2768.3	0.0035790	mg/L	0.00003641	0.0035790	mg/L	0.00003641	1.02%
Ca 317.933†	1252184.7	13.0556	mg/L	0.01354	13.0556	mg/L	0.01354	0.10%
Cd 228.802†	75.5	-0.0003225	mg/L	0.00013310	-0.0003225	mg/L	0.00013310	41.27%
Co 228.616†	669.9	0.0239564	mg/L	0.00041281	0.0239564	mg/L	0.00041281	1.72%
Cr 267.716†	7016.0	0.0962904	mg/L	0.00108543	0.0962904	mg/L	0.00108543	1.13%
Cu 327.393†	6388.2	0.0920284	mg/L	0.00127340	0.0920284	mg/L	0.00127340	1.38%
Fe 273.955†	1138918.0	121.796	mg/L	0.0452	121.796	mg/L	0.0452	0.04%
K 404.721†	20017.3	-240.182	mg/L	19.3395	-240.182	mg/L	19.3395	8.05%
Mg 279.077†	84379.6	7.10735	mg/L	0.003604	7.10735	mg/L	0.003604	0.05%
Mn 257.610†	92472.5	0.314891	mg/L	0.0001609	0.314891	mg/L	0.0001609	0.05%
Mo 202.031†	32.9	0.0040063	mg/L	0.00110138	0.0040063	mg/L	0.00110138	27.49%
Na 330.237†	505.4	1.88336	mg/L	0.083364	1.88336	mg/L	0.083364	4.43%
Ni 231.604†	1705.2	0.0555539	mg/L	0.00074133	0.0555539	mg/L	0.00074133	1.33%
Pb 220.353†	3309.5	0.466200	mg/L	0.0047192	0.466200	mg/L	0.0047192	1.01%
Sb 206.836†	11.4	0.0049928	mg/L	0.00072984	0.0049928	mg/L	0.00072984	14.62%
Se 196.026†	-102.9	0.0139841	mg/L	0.00365318	0.0139841	mg/L	0.00365318	26.12%
Sn 189.927†	159.1	0.0198249	mg/L	0.00064405	0.0198249	mg/L	0.00064405	3.25%
Ti 334.940†	239466.9	0.872227	mg/L	0.0081921	0.872227	mg/L	0.0081921	0.94%
Tl 190.801†	-28.0	-0.0032758	mg/L	0.00308152	-0.0032758	mg/L	0.00308152	94.07%
V 290.880†	11501.6	0.225973	mg/L	0.0029827	0.225973	mg/L	0.0029827	1.32%
Zn 206.200†	22721.1	0.405181	mg/L	0.0051481	0.405181	mg/L	0.0051481	1.27%
B 249.772	45770.8	0.130037	mg/L	0.0031680	0.130037	mg/L	0.0031680	2.44%
Si 251.611	96194.1	4.18001	mg/L	0.047186	4.18001	mg/L	0.047186	1.13%

Sequence No.: 34
Sample ID: AD18927-009
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 8/31/2020 7:13:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-009

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	401315.4	97.7	%	0.86				0.88%
Y 371.029	195852.8	107	%	1.0				0.93%
Ag 328.068†	-96.7	-0.0057600	mg/L	0.00024618	-0.0057600	mg/L	0.00024618	4.27%
Al 308.215†	343261.9	38.1898	mg/L	0.09060	38.1898	mg/L	0.09060	0.24%
As 188.979†	89.6	0.0496232	mg/L	0.00148252	0.0496232	mg/L	0.00148252	2.99%
Ba 233.527†	25135.8	0.277606	mg/L	0.0009782	0.277606	mg/L	0.0009782	0.35%
Be 313.107†	2322.7	0.0032463	mg/L	0.00004101	0.0032463	mg/L	0.00004101	1.26%
Ca 317.933†	528637.7	5.35842	mg/L	0.010332	5.35842	mg/L	0.010332	0.19%
Cd 228.802†	22.0	-0.0019792	mg/L	0.00037340	-0.0019792	mg/L	0.00037340	18.87%
Co 228.616†	413.2	0.0153450	mg/L	0.00066554	0.0153450	mg/L	0.00066554	4.34%
Cr 267.716†	5860.3	0.0792957	mg/L	0.00005169	0.0792957	mg/L	0.00005169	0.07%
Cu 327.393†	4189.7	0.0606060	mg/L	0.00055454	0.0606060	mg/L	0.00055454	0.91%
Fe 273.955†	752156.7	80.4345	mg/L	0.35357	80.4345	mg/L	0.35357	0.44%
K 404.721†	13570.6	-159.414	mg/L	13.3330	-159.414	mg/L	13.3330	8.36%
Mg 279.077†	44058.5	3.59823	mg/L	0.004887	3.59823	mg/L	0.004887	0.14%
Mn 257.610†	95798.6	0.326189	mg/L	0.0007136	0.326189	mg/L	0.0007136	0.22%
Mo 202.031†	29.7	0.0037303	mg/L	0.00062854	0.0037303	mg/L	0.00062854	16.85%
Na 330.237†	209.0	1.17813	mg/L	0.030119	1.17813	mg/L	0.030119	2.56%
Ni 231.604†	1003.6	0.0329825	mg/L	0.00057036	0.0329825	mg/L	0.00057036	1.73%
Pb 220.353†	2038.1	0.287710	mg/L	0.0042282	0.287710	mg/L	0.0042282	1.47%
Sb 206.836†	10.4	0.0045508	mg/L	0.00759879	0.0045508	mg/L	0.00759879	166.98%
Se 196.026†	-61.4	0.0124131	mg/L	0.00542122	0.0124131	mg/L	0.00542122	43.67%
Sn 189.927†	190.9	0.0263223	mg/L	0.00028355	0.0263223	mg/L	0.00028355	1.08%
Ti 334.940†	150911.2	0.549900	mg/L	0.0010567	0.549900	mg/L	0.0010567	0.19%
Tl 190.801†	-23.0	-0.0055263	mg/L	0.00389198	-0.0055263	mg/L	0.00389198	70.43%
V 290.880†	8172.7	0.162178	mg/L	0.0009082	0.162178	mg/L	0.0009082	0.56%
Zn 206.200†	10493.2	0.184026	mg/L	0.0012654	0.184026	mg/L	0.0012654	0.69%
B 249.772	28639.3	0.0643830	mg/L	0.00366143	0.0643830	mg/L	0.00366143	5.69%
Si 251.611	86667.1	3.74956	mg/L	0.051659	3.74956	mg/L	0.051659	1.38%

Sequence No.: 35
Sample ID: AD18927-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 8/31/2020 7:17:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-010

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	403704.9	98.3	%	0.37				0.38%
Y 371.029	191818.4	105	%	0.4				0.33%
Ag 328.068†	-177.5	-0.0066736	mg/L	0.00065924	-0.0066736	mg/L	0.00065924	9.88%
Al 308.215†	416072.5	46.2896	mg/L	0.12402	46.2896	mg/L	0.12402	0.27%
As 188.979†	89.4	0.0580550	mg/L	0.00238051	0.0580550	mg/L	0.00238051	4.10%
Ba 233.527†	29993.0	0.331609	mg/L	0.0021611	0.331609	mg/L	0.0021611	0.65%
Be 313.107†	2938.3	0.0037059	mg/L	0.00002898	0.0037059	mg/L	0.00002898	0.78%
Ca 317.933†	1179274.2	12.2800	mg/L	0.01230	12.2800	mg/L	0.01230	0.10%
Cd 228.802†	21.1	-0.0020074	mg/L	0.00047004	-0.0020074	mg/L	0.00047004	23.41%
Co 228.616†	504.6	0.0184116	mg/L	0.00017977	0.0184116	mg/L	0.00017977	0.98%
Cr 267.716†	8915.0	0.124217	mg/L	0.0011525	0.124217	mg/L	0.0011525	0.93%
Cu 327.393†	4108.9	0.0594517	mg/L	0.00124078	0.0594517	mg/L	0.00124078	2.09%
Fe 273.955†	1444048.0	154.428	mg/L	0.3083	154.428	mg/L	0.3083	0.20%
K 404.721†	23966.8	-320.347	mg/L	17.7904	-320.347	mg/L	17.7904	5.55%
Mg 279.077†	62903.6	5.23831	mg/L	0.012548	5.23831	mg/L	0.012548	0.24%
Mn 257.610†	282558.4	0.960554	mg/L	0.0023284	0.960554	mg/L	0.0023284	0.24%
Mo 202.031†	133.2	0.0125972	mg/L	0.00050448	0.0125972	mg/L	0.00050448	4.00%
Na 330.237†	401.3	1.63566	mg/L	0.054426	1.63566	mg/L	0.054426	3.33%
Ni 231.604†	956.7	0.0314757	mg/L	0.00095108	0.0314757	mg/L	0.00095108	3.02%
Pb 220.353†	2203.3	0.311541	mg/L	0.0030854	0.311541	mg/L	0.0030854	0.99%
Sb 206.836†	11.0	0.0049246	mg/L	0.00302989	0.0049246	mg/L	0.00302989	61.53%
Se 196.026†	-146.7	0.0106900	mg/L	0.00228580	0.0106900	mg/L	0.00228580	21.38%
Sn 189.927†	113.4	0.0142744	mg/L	0.00114533	0.0142744	mg/L	0.00114533	8.02%
Ti 334.940†	183017.5	0.666761	mg/L	0.0007246	0.666761	mg/L	0.0007246	0.11%
Tl 190.801†	-30.7	-0.0086746	mg/L	0.00495308	-0.0086746	mg/L	0.00495308	57.10%
V 290.880†	10593.1	0.205670	mg/L	0.0010875	0.205670	mg/L	0.0010875	0.53%
Zn 206.200†	19362.9	0.344444	mg/L	0.0022357	0.344444	mg/L	0.0022357	0.65%
B 249.772	57177.4	0.152619	mg/L	0.0014763	0.152619	mg/L	0.0014763	0.97%
Si 251.611	84539.0	3.68850	mg/L	0.067906	3.68850	mg/L	0.067906	1.84%

Sequence No.: 36
Sample ID: AD18927-011
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 8/31/2020 7:20:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-011

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	402057.7	97.9	%	0.37				0.38%
Y 371.029	203018.7	111	%	0.4				0.40%
Ag 328.068†	-333.5	-0.0084389	mg/L	0.00057739	-0.0084389	mg/L	0.00057739	6.84%
Al 308.215†	557711.5	62.0467	mg/L	0.17559	62.0467	mg/L	0.17559	0.28%
As 188.979†	195.9	0.106756	mg/L	0.0030354	0.106756	mg/L	0.0030354	2.84%
Ba 233.527†	23134.1	0.255350	mg/L	0.0014862	0.255350	mg/L	0.0014862	0.58%
Be 313.107†	3401.9	0.0040521	mg/L	0.00000580	0.0040521	mg/L	0.00000580	0.14%
Ca 317.933†	1214661.0	12.6565	mg/L	0.04691	12.6565	mg/L	0.04691	0.37%
Cd 228.802†	27.4	-0.0018112	mg/L	0.00045100	-0.0018112	mg/L	0.00045100	24.90%
Co 228.616†	656.4	0.0235041	mg/L	0.00056174	0.0235041	mg/L	0.00056174	2.39%
Cr 267.716†	9797.3	0.137192	mg/L	0.0007357	0.137192	mg/L	0.0007357	0.54%
Cu 327.393†	3301.8	0.0479159	mg/L	0.00076676	0.0479159	mg/L	0.00076676	1.60%
Fe 273.955†	1591543.0	170.202	mg/L	0.2468	170.202	mg/L	0.2468	0.15%
K 404.721†	26467.9	-350.531	mg/L	10.5899	-350.531	mg/L	10.5899	3.02%
Mg 279.077†	80809.7	6.79667	mg/L	0.031806	6.79667	mg/L	0.031806	0.47%
Mn 257.610†	98727.3	0.336137	mg/L	0.0004835	0.336137	mg/L	0.0004835	0.14%
Mo 202.031†	164.0	0.0152355	mg/L	0.00080454	0.0152355	mg/L	0.00080454	5.28%
Na 330.237†	235.2	1.24057	mg/L	0.084707	1.24057	mg/L	0.084707	6.83%
Ni 231.604†	1244.6	0.0407376	mg/L	0.00052546	0.0407376	mg/L	0.00052546	1.29%
Pb 220.353†	735.4	0.107754	mg/L	0.0010982	0.107754	mg/L	0.0010982	1.02%
Sb 206.836†	16.0	0.0071624	mg/L	0.00050936	0.0071624	mg/L	0.00050936	7.11%
Se 196.026†	-157.8	0.0135474	mg/L	0.00953528	0.0135474	mg/L	0.00953528	70.38%
Sn 189.927†	70.4	0.0067624	mg/L	0.00231695	0.0067624	mg/L	0.00231695	34.26%
Ti 334.940†	240755.3	0.876917	mg/L	0.0010343	0.876917	mg/L	0.0010343	0.12%
Tl 190.801†	-26.2	-0.0018461	mg/L	0.00438137	-0.0018461	mg/L	0.00438137	237.33%
V 290.880†	13765.5	0.268114	mg/L	0.0018516	0.268114	mg/L	0.0018516	0.69%
Zn 206.200†	16532.8	0.293260	mg/L	0.0010759	0.293260	mg/L	0.0010759	0.37%
B 249.772	63453.1	0.174093	mg/L	0.0065304	0.174093	mg/L	0.0065304	3.75%
Si 251.611	85180.2	3.72068	mg/L	0.010597	3.72068	mg/L	0.010597	0.28%

Sequence No.: 37
Sample ID: AD18927-012
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 8/31/2020 7:25:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-012

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	403457.6	98.2	%	0.80				0.82%
Y 371.029	201215.1	110	%	0.8				0.76%
Ag 328.068†	-290.4	-0.0079513	mg/L	0.00029205	-0.0079513	mg/L	0.00029205	3.67%
Al 308.215†	506789.3	56.3819	mg/L	0.12315	56.3819	mg/L	0.12315	0.22%
As 188.979†	108.5	0.0693883	mg/L	0.00440372	0.0693883	mg/L	0.00440372	6.35%
Ba 233.527†	26124.0	0.288593	mg/L	0.0018699	0.288593	mg/L	0.0018699	0.65%
Be 313.107†	1710.5	0.0027892	mg/L	0.00000972	0.0027892	mg/L	0.00000972	0.35%
Ca 317.933†	2706815.1	28.5302	mg/L	0.05698	28.5302	mg/L	0.05698	0.20%
Cd 228.802†	57.6	-0.0008754	mg/L	0.00051853	-0.0008754	mg/L	0.00051853	59.23%
Co 228.616†	794.3	0.0281314	mg/L	0.00088799	0.0281314	mg/L	0.00088799	3.16%
Cr 267.716†	8496.9	0.118069	mg/L	0.0007665	0.118069	mg/L	0.0007665	0.65%
Cu 327.393†	4625.2	0.0668303	mg/L	0.00051603	0.0668303	mg/L	0.00051603	0.77%
Fe 273.955†	1676862.2	179.326	mg/L	0.5558	179.326	mg/L	0.5558	0.31%
K 404.721†	27299.3	-376.896	mg/L	30.8217	-376.896	mg/L	30.8217	8.18%
Mg 279.077†	212013.4	18.2152	mg/L	0.03578	18.2152	mg/L	0.03578	0.20%
Mn 257.610†	153667.2	0.522751	mg/L	0.0006949	0.522751	mg/L	0.0006949	0.13%
Mo 202.031†	21.5	0.0030340	mg/L	0.00056531	0.0030340	mg/L	0.00056531	18.63%
Na 330.237†	912.9	2.85302	mg/L	0.084248	2.85302	mg/L	0.084248	2.95%
Ni 231.604†	1662.7	0.0541865	mg/L	0.00057546	0.0541865	mg/L	0.00057546	1.06%
Pb 220.353†	2340.6	0.331657	mg/L	0.0054207	0.331657	mg/L	0.0054207	1.63%
Sb 206.836†	6.3	0.0027449	mg/L	0.00724914	0.0027449	mg/L	0.00724914	264.10%
Se 196.026†	-143.4	0.0235914	mg/L	0.00508201	0.0235914	mg/L	0.00508201	21.54%
Sn 189.927†	73.6	0.0057362	mg/L	0.00080661	0.0057362	mg/L	0.00080661	14.06%
Ti 334.940†	313262.6	1.14083	mg/L	0.002283	1.14083	mg/L	0.002283	0.20%
Tl 190.801†	-32.8	-0.0023108	mg/L	0.00730869	-0.0023108	mg/L	0.00730869	316.28%
V 290.880†	13806.8	0.268156	mg/L	0.0027017	0.268156	mg/L	0.0027017	1.01%
Zn 206.200†	25334.3	0.452444	mg/L	0.0030205	0.452444	mg/L	0.0030205	0.67%
B 249.772	65731.1	0.167739	mg/L	0.0090244	0.167739	mg/L	0.0090244	5.38%
Si 251.611	78598.4	3.44346	mg/L	0.054425	3.44346	mg/L	0.054425	1.58%

Sequence No.: 38
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 8/31/2020 7:29:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	402077.1	97.9	%	2.21				2.25%
Y 371.029	150799.5	82.6	%	2.08				2.51%
Ag 328.068†	6629.0	0.0703226	mg/L	0.00176304	0.0703226	mg/L	0.00176304	2.51%
QC value less than the lower limit for Ag 328.068 Recovery = 70.32%								
Al 308.215†	43787.5	4.86265	mg/L	0.085974	4.86265	mg/L	0.085974	1.77%
QC value within limits for Al 308.215 Recovery = 97.25%								
As 188.979†	1105.4	0.485548	mg/L	0.0119766	0.485548	mg/L	0.0119766	2.47%
QC value within limits for As 188.979 Recovery = 97.11%								
Ba 233.527†	43749.8	0.484562	mg/L	0.0067530	0.484562	mg/L	0.0067530	1.39%
QC value within limits for Ba 233.527 Recovery = 96.91%								
Be 313.107†	636356.8	0.476639	mg/L	0.0111260	0.476639	mg/L	0.0111260	2.33%
QC value within limits for Be 313.107 Recovery = 95.33%								
Ca 317.933†	4781181.6	50.5977	mg/L	1.18234	50.5977	mg/L	1.18234	2.34%
QC value within limits for Ca 317.933 Recovery = 101.20%								
Cd 228.802†	16303.7	0.502284	mg/L	0.0138165	0.502284	mg/L	0.0138165	2.75%
QC value within limits for Cd 228.802 Recovery = 100.46%								
Co 228.616†	14453.7	0.486391	mg/L	0.0126570	0.486391	mg/L	0.0126570	2.60%
QC value within limits for Co 228.616 Recovery = 97.28%								
Cr 267.716†	35524.3	0.515532	mg/L	0.0141677	0.515532	mg/L	0.0141677	2.75%
QC value within limits for Cr 267.716 Recovery = 103.11%								
Cu 327.393†	34140.3	0.488673	mg/L	0.0069697	0.488673	mg/L	0.0069697	1.43%
QC value within limits for Cu 327.393 Recovery = 97.73%								
Fe 273.955†	46423.3	4.96048	mg/L	0.065224	4.96048	mg/L	0.065224	1.31%
QC value within limits for Fe 273.955 Recovery = 99.21%								
K 404.721†	4302.5	24.0688	mg/L	31.80815	24.0688	mg/L	31.80815	132.16%
QC value less than the lower limit for K 404.721 Recovery = 48.14%								
Mg 279.077†	585317.9	50.7037	mg/L	0.76908	50.7037	mg/L	0.76908	1.52%
QC value within limits for Mg 279.077 Recovery = 101.41%								
Mn 257.610†	143532.8	0.488327	mg/L	0.0066091	0.488327	mg/L	0.0066091	1.35%
QC value within limits for Mn 257.610 Recovery = 97.67%								
Mo 202.031†	5596.9	0.480456	mg/L	0.0152939	0.480456	mg/L	0.0152939	3.18%
QC value within limits for Mo 202.031 Recovery = 96.09%								
Na 330.237†	20220.5	48.7942	mg/L	1.07922	48.7942	mg/L	1.07922	2.21%
QC value within limits for Na 330.237 Recovery = 97.59%								
Ni 231.604†	15174.4	0.488853	mg/L	0.0125840	0.488853	mg/L	0.0125840	2.57%
QC value within limits for Ni 231.604 Recovery = 97.77%								
Pb 220.353†	3514.2	0.491025	mg/L	0.0131890	0.491025	mg/L	0.0131890	2.69%
QC value within limits for Pb 220.353 Recovery = 98.21%								
Sb 206.836†	1044.5	0.466449	mg/L	0.0288048	0.466449	mg/L	0.0288048	6.18%
QC value within limits for Sb 206.836 Recovery = 93.29%								
Se 196.026†	1077.7	0.479291	mg/L	0.0115164	0.479291	mg/L	0.0115164	2.40%
QC value within limits for Se 196.026 Recovery = 95.86%								
Sn 189.927†	3315.6	0.486024	mg/L	0.0133307	0.486024	mg/L	0.0133307	2.74%
QC value within limits for Sn 189.927 Recovery = 97.20%								
Ti 334.940†	135064.5	0.492220	mg/L	0.0065046	0.492220	mg/L	0.0065046	1.32%
QC value within limits for Ti 334.940 Recovery = 98.44%								
Tl 190.801†	1093.7	0.494903	mg/L	0.0137718	0.494903	mg/L	0.0137718	2.78%
QC value within limits for Tl 190.801 Recovery = 98.98%								
V 290.880†	23742.2	0.485185	mg/L	0.0072140	0.485185	mg/L	0.0072140	1.49%
QC value within limits for V 290.880 Recovery = 97.04%								
Zn 206.200†	28874.5	0.516473	mg/L	0.0131934	0.516473	mg/L	0.0131934	2.55%
QC value within limits for Zn 206.200 Recovery = 103.29%								
B 249.772	37082.8	0.496059	mg/L	0.0048997	0.496059	mg/L	0.0048997	0.99%
QC value within limits for B 249.772 Recovery = 99.21%								
Si 251.611	122683.7	5.29513	mg/L	0.055696	5.29513	mg/L	0.055696	1.05%
QC value within limits for Si 251.611 Recovery = 105.90%								

QC Failed. Continue with analysis.

Sequence No.: 39
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 8/31/2020 7:34:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	409794.6	99.7	%	0.74				0.74%
Y 371.029	182628.1	100	%	0.7				0.74%
Ag 328.068†	2.1	-0.0046418	mg/L	0.00052213	-0.0046418	mg/L	0.00052213	11.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	11.0	0.0038275	mg/L	0.00297483	0.0038275	mg/L	0.00297483	77.72%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-3.6	-0.0007235	mg/L	0.00084528	-0.0007235	mg/L	0.00084528	116.84%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	6.7	-0.0017876	mg/L	0.00022777	-0.0017876	mg/L	0.00022777	12.74%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	37.3	0.0015399	mg/L	0.00002568	0.0015399	mg/L	0.00002568	1.67%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	357.3	-0.261514	mg/L	0.0010077	-0.261514	mg/L	0.0010077	0.39%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	2.9	-0.0025688	mg/L	0.00013549	-0.0025688	mg/L	0.00013549	5.27%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-4.1	0.0013438	mg/L	0.00033216	0.0013438	mg/L	0.00033216	24.72%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-4.3	-0.0069486	mg/L	0.00003322	-0.0069486	mg/L	0.00003322	0.48%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	19.1	0.0009986	mg/L	0.00120130	0.0009986	mg/L	0.00120130	120.30%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	17.5	-0.0023479	mg/L	0.00170989	-0.0023479	mg/L	0.00170989	72.83%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	787.3	-5.90878	mg/L	9.153013	-5.90878	mg/L	9.153013	154.91%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	5.4	-0.235672	mg/L	0.0034963	-0.235672	mg/L	0.0034963	1.48%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-107.8	0.0004252	mg/L	0.00002835	0.0004252	mg/L	0.00002835	6.67%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.6	0.0019285	mg/L	0.00088227	0.0019285	mg/L	0.00088227	45.75%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-55.2	0.549596	mg/L	0.0835505	0.549596	mg/L	0.0835505	15.20%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	1.9	0.0007588	mg/L	0.00058681	0.0007588	mg/L	0.00058681	77.33%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-2.2	-0.0010198	mg/L	0.00173328	-0.0010198	mg/L	0.00173328	169.97%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.7	0.0011210	mg/L	0.00517329	0.0011210	mg/L	0.00517329	461.50%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	11.4	0.0053105	mg/L	0.00123710	0.0053105	mg/L	0.00123710	23.30%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	8.1	0.0025660	mg/L	0.00257631	0.0025660	mg/L	0.00257631	100.40%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	60.7	0.0008291	mg/L	0.00032866	0.0008291	mg/L	0.00032866	39.64%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.3	-0.0033515	mg/L	0.00266640	-0.0033515	mg/L	0.00266640	79.56%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-12.3	0.0038585	mg/L	0.00015850	0.0038585	mg/L	0.00015850	4.11%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-11.7	-0.0059652	mg/L	0.00011378	-0.0059652	mg/L	0.00011378	1.91%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	182.9	0.0040606	mg/L	0.00036950	0.0040606	mg/L	0.00036950	9.10%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	7.8	-0.0333089	mg/L	0.00200981	-0.0333089	mg/L	0.00200981	6.03%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 40
Sample ID: MB 85228 (100)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 8/31/2020 7:37:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85228 (100)

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	408422.4	99.4	%	0.44				0.44%
Y 371.029	181455.9	99.4	%	0.53				0.53%
Ag 328.068†	45.0	-0.0041569	mg/L	0.00043896	-0.0041569	mg/L	0.00043896	10.56%
Al 308.215†	122.5	0.0162346	mg/L	0.00206088	0.0162346	mg/L	0.00206088	12.69%
As 188.979†	2.0	0.0017474	mg/L	0.00598130	0.0017474	mg/L	0.00598130	342.29%
Ba 233.527†	76.5	-0.0010114	mg/L	0.00002307	-0.0010114	mg/L	0.00002307	2.28%
Be 313.107†	-16.9	0.0014995	mg/L	0.00004608	0.0014995	mg/L	0.00004608	3.07%
Ca 317.933†	2011.8	-0.243913	mg/L	0.0005859	-0.243913	mg/L	0.0005859	0.24%
Cd 228.802†	16.2	-0.0021569	mg/L	0.00022471	-0.0021569	mg/L	0.00022471	10.42%
Co 228.616†	-17.2	0.0009049	mg/L	0.00013526	0.0009049	mg/L	0.00013526	14.95%
Cr 267.716†	29.8	-0.0064474	mg/L	0.00038203	-0.0064474	mg/L	0.00038203	5.93%
Cu 327.393†	100.0	0.0021549	mg/L	0.00040977	0.0021549	mg/L	0.00040977	19.02%
Fe 273.955†	295.2	0.0273599	mg/L	0.00099122	0.0273599	mg/L	0.00099122	3.62%
K 404.721†	-15.5	-17.6478	mg/L	8.97241	-17.6478	mg/L	8.97241	50.84%
Mg 279.077†	28.4	-0.233672	mg/L	0.0043864	-0.233672	mg/L	0.0043864	1.88%
Mn 257.610†	-207.9	0.0000851	mg/L	0.00004329	0.0000851	mg/L	0.00004329	50.86%
Mo 202.031†	8.0	0.0018767	mg/L	0.00075899	0.0018767	mg/L	0.00075899	40.44%
Na 330.237†	58.6	0.820424	mg/L	0.1756209	0.820424	mg/L	0.1756209	21.41%
Ni 231.604†	1.4	0.0007446	mg/L	0.00034059	0.0007446	mg/L	0.00034059	45.74%
Pb 220.353†	-6.9	-0.0016819	mg/L	0.00397800	-0.0016819	mg/L	0.00397800	236.52%
Sb 206.836†	5.8	0.0025144	mg/L	0.00296112	0.0025144	mg/L	0.00296112	117.77%
Se 196.026†	9.1	0.0042842	mg/L	0.00233674	0.0042842	mg/L	0.00233674	54.54%
Sn 189.927†	94.1	0.0152153	mg/L	0.00142734	0.0152153	mg/L	0.00142734	9.38%
Ti 334.940†	155.1	0.0011729	mg/L	0.00017208	0.0011729	mg/L	0.00017208	14.67%
Tl 190.801†	-6.3	-0.0055637	mg/L	0.00259377	-0.0055637	mg/L	0.00259377	46.62%
V 290.880†	-8.4	0.0039335	mg/L	0.00070648	0.0039335	mg/L	0.00070648	17.96%
Zn 206.200†	155.0	-0.0029508	mg/L	0.00031085	-0.0029508	mg/L	0.00031085	10.53%
B 249.772	74.5	0.0024346	mg/L	0.00008320	0.0024346	mg/L	0.00008320	3.42%
Si 251.611	340.8	-0.0188377	mg/L	0.00092039	-0.0188377	mg/L	0.00092039	4.89%

Sequence No.: 41
Sample ID: LCS 85228
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 8/31/2020 7:41:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 85228

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	402768.9	98.0	%	0.63				0.64%
Y 371.029	204160.2	112	%	0.6				0.56%
Ag 328.068†	68488.5	0.770092	mg/L	0.0011518	0.770092	mg/L	0.0011518	0.15%
Al 308.215†	676733.5	75.2527	mg/L	0.03880	75.2527	mg/L	0.03880	0.05%
As 188.979†	783.7	0.353086	mg/L	0.0024468	0.353086	mg/L	0.0024468	0.69%
Ba 233.527†	600816.4	6.67820	mg/L	0.007935	6.67820	mg/L	0.007935	0.12%
Be 313.107†	1882986.2	1.40742	mg/L	0.001204	1.40742	mg/L	0.001204	0.09%
Ca 317.933†	15477423.3	164.386	mg/L	2.5713	164.386	mg/L	2.5713	1.56%
Cd 228.802†	45647.0	1.41108	mg/L	0.002203	1.41108	mg/L	0.002203	0.16%
Co 228.616†	59549.4	1.99931	mg/L	0.002123	1.99931	mg/L	0.002123	0.11%
Cr 267.716†	115729.9	1.69503	mg/L	0.001799	1.69503	mg/L	0.001799	0.11%
Cu 327.393†	109586.8	1.56699	mg/L	0.000199	1.56699	mg/L	0.000199	0.01%
Fe 273.955†	1221580.8	130.637	mg/L	0.3147	130.637	mg/L	0.3147	0.24%
K 404.721†	20320.1	-272.999	mg/L	10.4497	-272.999	mg/L	10.4497	3.83%
Mg 279.077†	638771.5	55.3557	mg/L	0.09942	55.3557	mg/L	0.09942	0.18%
Mn 257.610†	1330125.0	4.51881	mg/L	0.005137	4.51881	mg/L	0.005137	0.11%
Mo 202.031†	17558.8	1.50477	mg/L	0.004119	1.50477	mg/L	0.004119	0.27%
Na 330.237†	2695.5	7.09463	mg/L	0.161185	7.09463	mg/L	0.161185	2.27%
Ni 231.604†	12776.4	0.411712	mg/L	0.0003709	0.411712	mg/L	0.0003709	0.09%
Pb 220.353†	8352.6	1.17387	mg/L	0.000714	1.17387	mg/L	0.000714	0.06%
Sb 206.836†	829.0	0.384701	mg/L	0.0057877	0.384701	mg/L	0.0057877	1.50%
Se 196.026†	6038.6	2.74192	mg/L	0.007841	2.74192	mg/L	0.007841	0.29%
Sn 189.927†	7945.3	1.14858	mg/L	0.002355	1.14858	mg/L	0.002355	0.21%
Ti 334.940†	1010921.9	3.68019	mg/L	0.004401	3.68019	mg/L	0.004401	0.12%
Tl 190.801†	4055.5	1.86250	mg/L	0.007718	1.86250	mg/L	0.007718	0.41%
V 290.880†	110781.7	2.23190	mg/L	0.002584	2.23190	mg/L	0.002584	0.12%
Zn 206.200†	286987.9	5.18473	mg/L	0.017139	5.18473	mg/L	0.017139	0.33%
B 249.772	203036.7	2.27680	mg/L	0.014340	2.27680	mg/L	0.014340	0.63%
Si 251.611	94480.1	4.24472	mg/L	0.047509	4.24472	mg/L	0.047509	1.12%

Sequence No.: 42
Sample ID: LCS MR 85228
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 8/31/2020 7:46:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS MR 85228

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	409154.5	99.6	%	1.06				1.06%
Y 371.029	207213.9	114	%	1.1				0.99%
Ag 328.068†	68561.8	0.770921	mg/L	0.0031585	0.770921	mg/L	0.0031585	0.41%
Al 308.215†	680135.8	75.6313	mg/L	0.86193	75.6313	mg/L	0.86193	1.14%
As 188.979†	785.4	0.353845	mg/L	0.0027939	0.353845	mg/L	0.0027939	0.79%
Ba 233.527†	584595.1	6.49784	mg/L	0.028293	6.49784	mg/L	0.028293	0.44%
Be 313.107†	1875419.2	1.40177	mg/L	0.017633	1.40177	mg/L	0.017633	1.26%
Ca 317.933†	15086226.2	160.224	mg/L	1.6748	160.224	mg/L	1.6748	1.05%
Cd 228.802†	46128.1	1.42598	mg/L	0.006801	1.42598	mg/L	0.006801	0.48%
Co 228.616†	60012.2	2.01483	mg/L	0.010206	2.01483	mg/L	0.010206	0.51%
Cr 267.716†	117185.6	1.71643	mg/L	0.007718	1.71643	mg/L	0.007718	0.45%
Cu 327.393†	111091.5	1.58849	mg/L	0.006812	1.58849	mg/L	0.006812	0.43%
Fe 273.955†	1222668.7	130.753	mg/L	1.5131	130.753	mg/L	1.5131	1.16%
K 404.721†	18518.9	-299.548	mg/L	19.5271	-299.548	mg/L	19.5271	6.52%
Mg 279.077†	637056.0	55.2064	mg/L	0.58839	55.2064	mg/L	0.58839	1.07%
Mn 257.610†	1311131.5	4.45429	mg/L	0.054550	4.45429	mg/L	0.054550	1.22%
Mo 202.031†	17498.0	1.49957	mg/L	0.015057	1.49957	mg/L	0.015057	1.00%
Na 330.237†	2729.0	7.17426	mg/L	0.063974	7.17426	mg/L	0.063974	0.89%
Ni 231.604†	12827.5	0.413355	mg/L	0.0037503	0.413355	mg/L	0.0037503	0.91%
Pb 220.353†	8518.1	1.19705	mg/L	0.013633	1.19705	mg/L	0.013633	1.14%
Sb 206.836†	833.1	0.386468	mg/L	0.0058018	0.386468	mg/L	0.0058018	1.50%
Se 196.026†	6066.8	2.75476	mg/L	0.035213	2.75476	mg/L	0.035213	1.28%
Sn 189.927†	7946.4	1.14859	mg/L	0.009153	1.14859	mg/L	0.009153	0.80%
Ti 334.940†	1018362.4	3.70728	mg/L	0.053267	3.70728	mg/L	0.053267	1.44%
Tl 190.801†	4056.5	1.86402	mg/L	0.014644	1.86402	mg/L	0.014644	0.79%
V 290.880†	113111.1	2.27844	mg/L	0.007602	2.27844	mg/L	0.007602	0.33%
Zn 206.200†	293700.9	5.30614	mg/L	0.033728	5.30614	mg/L	0.033728	0.64%
B 249.772	211078.4	2.38777	mg/L	0.046857	2.38777	mg/L	0.046857	1.96%
Si 251.611	112238.7	5.01278	mg/L	0.083239	5.01278	mg/L	0.083239	1.66%

Sequence No.: 43
Sample ID: AD18955-001
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 45
Date Collected: 8/31/2020 7:51:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	391507.0	95.3	%	0.48				0.51%
Y 371.029	198630.4	109	%	0.5				0.44%
Ag 328.068†	-320.9	-0.0082964	mg/L	0.00062060	-0.0082964	mg/L	0.00062060	7.48%
Al 308.215†	311328.7	34.6373	mg/L	0.10023	34.6373	mg/L	0.10023	0.29%
As 188.979†	100.2	0.0617689	mg/L	0.00233402	0.0617689	mg/L	0.00233402	3.78%
Ba 233.527†	70641.5	0.783552	mg/L	0.0022016	0.783552	mg/L	0.0022016	0.28%
Be 313.107†	1621.5	0.0027227	mg/L	0.00002572	0.0027227	mg/L	0.00002572	0.94%
Ca 317.933†	42394644.0	450.736	mg/L	2.3293	450.736	mg/L	2.3293	0.52%
Cd 228.802†	41.4	-0.0013793	mg/L	0.00019891	-0.0013793	mg/L	0.00019891	14.42%
Co 228.616†	1299.5	0.0450796	mg/L	0.00018251	0.0450796	mg/L	0.00018251	0.40%
Cr 267.716†	6223.3	0.0846339	mg/L	0.00048728	0.0846339	mg/L	0.00048728	0.58%
Cu 327.393†	16420.6	0.235416	mg/L	0.0013599	0.235416	mg/L	0.0013599	0.58%
Fe 273.955†	1355356.1	144.943	mg/L	0.5139	144.943	mg/L	0.5139	0.35%
K 404.721†	21976.5	-309.232	mg/L	12.6826	-309.232	mg/L	12.6826	4.10%
Mg 279.077†	555871.1	48.1409	mg/L	0.22030	48.1409	mg/L	0.22030	0.46%
Mn 257.610†	1894510.2	6.43585	mg/L	0.020664	6.43585	mg/L	0.020664	0.32%
Mo 202.031†	41.9	0.0047789	mg/L	0.00024139	0.0047789	mg/L	0.00024139	5.05%
Na 330.237†	300.1	1.39499	mg/L	0.092615	1.39499	mg/L	0.092615	6.64%
Ni 231.604†	4343.5	0.140427	mg/L	0.0005846	0.140427	mg/L	0.0005846	0.42%
Pb 220.353†	25403.7	3.55399	mg/L	0.019074	3.55399	mg/L	0.019074	0.54%
Sb 206.836†	58.1	0.0255860	mg/L	0.00515141	0.0255860	mg/L	0.00515141	20.13%
Se 196.026†	-88.4	0.0081810	mg/L	0.00350961	0.0081810	mg/L	0.00350961	42.90%
Sn 189.927†	1818.3	0.265812	mg/L	0.0017181	0.265812	mg/L	0.0017181	0.65%
Ti 334.940†	139435.4	0.508130	mg/L	0.0039243	0.508130	mg/L	0.0039243	0.77%
Tl 190.801†	-31.9	-0.0269050	mg/L	0.00133395	-0.0269050	mg/L	0.00133395	4.96%
V 290.880†	4253.9	0.0793534	mg/L	0.00014915	0.0793534	mg/L	0.00014915	0.19%
Zn 206.200†	33000.1	0.591088	mg/L	0.0031566	0.591088	mg/L	0.0031566	0.53%
B 249.772	51172.1	0.108758	mg/L	0.0028489	0.108758	mg/L	0.0028489	2.62%
Si 251.611	70742.3	3.16090	mg/L	0.023771	3.16090	mg/L	0.023771	0.75%

Sequence No.: 44
Sample ID: AD18955-001 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 8/31/2020 7:56:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-001 MR

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	394403.1	96.0	%	1.05				1.10%
Y 371.029	203218.3	111	%	1.2				1.12%
Ag 328.068†	-408.3	-0.0092848	mg/L	0.00033346	-0.0092848	mg/L	0.00033346	3.59%
Al 308.215†	379053.3	42.1714	mg/L	0.03516	42.1714	mg/L	0.03516	0.08%
As 188.979†	139.5	0.0829283	mg/L	0.00284996	0.0829283	mg/L	0.00284996	3.44%
Ba 233.527†	74618.8	0.827772	mg/L	0.0009159	0.827772	mg/L	0.0009159	0.11%
Be 313.107†	2277.1	0.0032122	mg/L	0.00002151	0.0032122	mg/L	0.00002151	0.67%
Ca 317.933†	43324318.8	460.626	mg/L	0.3503	460.626	mg/L	0.3503	0.08%
Cd 228.802†	41.0	-0.0013903	mg/L	0.00017241	-0.0013903	mg/L	0.00017241	12.40%
Co 228.616†	1453.7	0.0502510	mg/L	0.00071343	0.0502510	mg/L	0.00071343	1.42%
Cr 267.716†	8211.4	0.113870	mg/L	0.0021505	0.113870	mg/L	0.0021505	1.89%
Cu 327.393†	21200.1	0.303726	mg/L	0.0010007	0.303726	mg/L	0.0010007	0.33%
Fe 273.955†	1668843.4	178.469	mg/L	0.4816	178.469	mg/L	0.4816	0.27%
K 404.721†	27170.7	-375.148	mg/L	11.5610	-375.148	mg/L	11.5610	3.08%
Mg 279.077†	560840.3	48.5734	mg/L	0.02823	48.5734	mg/L	0.02823	0.06%
Mn 257.610†	1860222.9	6.31939	mg/L	0.008736	6.31939	mg/L	0.008736	0.14%
Mo 202.031†	100.1	0.0097595	mg/L	0.00040537	0.0097595	mg/L	0.00040537	4.15%
Na 330.237†	229.5	1.22690	mg/L	0.039243	1.22690	mg/L	0.039243	3.20%
Ni 231.604†	5158.6	0.166649	mg/L	0.0025130	0.166649	mg/L	0.0025130	1.51%
Pb 220.353†	16453.5	2.30339	mg/L	0.034052	2.30339	mg/L	0.034052	1.48%
Sb 206.836†	54.9	0.0242559	mg/L	0.00411511	0.0242559	mg/L	0.00411511	16.97%
Se 196.026†	-126.0	0.0075009	mg/L	0.00468390	0.0075009	mg/L	0.00468390	62.44%
Sn 189.927†	785.5	0.113614	mg/L	0.0010103	0.113614	mg/L	0.0010103	0.89%
Ti 334.940†	156770.7	0.571227	mg/L	0.0083032	0.571227	mg/L	0.0083032	1.45%
Tl 190.801†	-28.0	-0.0238101	mg/L	0.00480412	-0.0238101	mg/L	0.00480412	20.18%
V 290.880†	5480.3	0.101669	mg/L	0.0018341	0.101669	mg/L	0.0018341	1.80%
Zn 206.200†	38255.7	0.686141	mg/L	0.0019624	0.686141	mg/L	0.0019624	0.29%
B 249.772	62521.9	0.126831	mg/L	0.0117152	0.126831	mg/L	0.0117152	9.24%
Si 251.611	62621.6	2.82306	mg/L	0.056391	2.82306	mg/L	0.056391	2.00%

Sequence No.: 45
Sample ID: AD18955-002 MS 1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 8/31/2020 8:00:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-002 MS 1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	395649.5	96.3	%	0.70				0.72%
Y 371.029	209595.1	115	%	0.7				0.65%
Ag 328.068†	8933.3	0.0963892	mg/L	0.00024139	0.0963892	mg/L	0.00024139	0.25%
Al 308.215†	605695.1	67.3747	mg/L	0.19373	67.3747	mg/L	0.19373	0.29%
As 188.979†	1101.9	0.502178	mg/L	0.0051572	0.502178	mg/L	0.0051572	1.03%
Ba 233.527†	61022.5	0.676604	mg/L	0.0019011	0.676604	mg/L	0.0019011	0.28%
Be 313.107†	628423.7	0.470716	mg/L	0.0015274	0.470716	mg/L	0.0015274	0.32%
Ca 317.933†	27954242.8	297.117	mg/L	0.7931	297.117	mg/L	0.7931	0.27%
Cd 228.802†	15522.4	0.478086	mg/L	0.0027786	0.478086	mg/L	0.0027786	0.58%
Co 228.616†	15428.3	0.519086	mg/L	0.0040407	0.519086	mg/L	0.0040407	0.78%
Cr 267.716†	38183.9	0.554643	mg/L	0.0012372	0.554643	mg/L	0.0012372	0.22%
Cu 327.393†	45421.1	0.649902	mg/L	0.0013632	0.649902	mg/L	0.0013632	0.21%
Fe 273.955†	1497389.1	160.133	mg/L	0.2790	160.133	mg/L	0.2790	0.17%
K 404.721†	23131.2	-356.439	mg/L	9.6178	-356.439	mg/L	9.6178	2.70%
Mg 279.077†	1645542.6	142.974	mg/L	0.5755	142.974	mg/L	0.5755	0.40%
Mn 257.610†	760443.7	2.58378	mg/L	0.006167	2.58378	mg/L	0.006167	0.24%
Mo 202.031†	5145.7	0.441826	mg/L	0.0042360	0.441826	mg/L	0.0042360	0.96%
Na 330.237†	19800.5	47.7948	mg/L	0.16175	47.7948	mg/L	0.16175	0.34%
Ni 231.604†	19119.6	0.615768	mg/L	0.0054587	0.615768	mg/L	0.0054587	0.89%
Pb 220.353†	3834.9	0.541561	mg/L	0.0071778	0.541561	mg/L	0.0071778	1.33%
Sb 206.836†	573.1	0.258209	mg/L	0.0060361	0.258209	mg/L	0.0060361	2.34%
Se 196.026†	879.2	0.454419	mg/L	0.0046558	0.454419	mg/L	0.0046558	1.02%
Sn 189.927†	3043.1	0.443656	mg/L	0.0037826	0.443656	mg/L	0.0037826	0.85%
Ti 334.940†	247165.9	0.900251	mg/L	0.0155895	0.900251	mg/L	0.0155895	1.73%
Tl 190.801†	1086.3	0.492141	mg/L	0.0054008	0.492141	mg/L	0.0054008	1.10%
V 290.880†	28953.3	0.578346	mg/L	0.0080302	0.578346	mg/L	0.0080302	1.39%
Zn 206.200†	52201.3	0.938362	mg/L	0.0052756	0.938362	mg/L	0.0052756	0.56%
B 249.772	88875.3	0.569313	mg/L	0.0112204	0.569313	mg/L	0.0112204	1.97%
Si 251.611	112745.6	4.96683	mg/L	0.006271	4.96683	mg/L	0.006271	0.13%

Sequence No.: 46
Sample ID: AD18955-003 MS 2
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 48
Date Collected: 8/31/2020 8:05:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-003 MS 2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	395006.0	96.1	%	0.87				0.91%
Y 371.029	207174.7	114	%	0.8				0.73%
Ag 328.068†	8870.6	0.0956802	mg/L	0.00104737	0.0956802	mg/L	0.00104737	1.09%
Al 308.215†	634990.0	70.6337	mg/L	0.03485	70.6337	mg/L	0.03485	0.05%
As 188.979†	1185.8	0.542671	mg/L	0.0053439	0.542671	mg/L	0.0053439	0.98%
Ba 233.527†	75718.6	0.840000	mg/L	0.0008858	0.840000	mg/L	0.0008858	0.11%
Be 313.107†	627729.5	0.470197	mg/L	0.0003957	0.470197	mg/L	0.0003957	0.08%
Ca 317.933†	35462241.3	376.988	mg/L	1.2300	376.988	mg/L	1.2300	0.33%
Cd 228.802†	15542.5	0.478709	mg/L	0.0067881	0.478709	mg/L	0.0067881	1.42%
Co 228.616†	15447.9	0.519745	mg/L	0.0068391	0.519745	mg/L	0.0068391	1.32%
Cr 267.716†	39237.6	0.570139	mg/L	0.0006295	0.570139	mg/L	0.0006295	0.11%
Cu 327.393†	47881.9	0.685073	mg/L	0.0005746	0.685073	mg/L	0.0005746	0.08%
Fe 273.955†	1782714.5	190.647	mg/L	0.2636	190.647	mg/L	0.2636	0.14%
K 404.721†	28391.8	-408.721	mg/L	2.5891	-408.721	mg/L	2.5891	0.63%
Mg 279.077†	1340869.5	116.459	mg/L	0.0806	116.459	mg/L	0.0806	0.07%
Mn 257.610†	1759951.0	5.97879	mg/L	0.009271	5.97879	mg/L	0.009271	0.16%
Mo 202.031†	5185.8	0.445256	mg/L	0.0041388	0.445256	mg/L	0.0041388	0.93%
Na 330.237†	19860.0	47.9363	mg/L	0.08782	47.9363	mg/L	0.08782	0.18%
Ni 231.604†	19069.4	0.614153	mg/L	0.0084893	0.614153	mg/L	0.0084893	1.38%
Pb 220.353†	3821.2	0.539940	mg/L	0.0056715	0.539940	mg/L	0.0056715	1.05%
Sb 206.836†	515.6	0.232899	mg/L	0.0088129	0.232899	mg/L	0.0088129	3.78%
Se 196.026†	857.4	0.455500	mg/L	0.0091954	0.455500	mg/L	0.0091954	2.02%
Sn 189.927†	2958.7	0.431919	mg/L	0.0042860	0.431919	mg/L	0.0042860	0.99%
Ti 334.940†	214753.2	0.782274	mg/L	0.0073876	0.782274	mg/L	0.0073876	0.94%
Tl 190.801†	1067.2	0.473641	mg/L	0.0067080	0.473641	mg/L	0.0067080	1.42%
V 290.880†	29486.1	0.586966	mg/L	0.0024403	0.586966	mg/L	0.0024403	0.42%
Zn 206.200†	57864.2	1.04078	mg/L	0.001194	1.04078	mg/L	0.001194	0.11%
B 249.772	97693.5	0.564800	mg/L	0.0117274	0.564800	mg/L	0.0117274	2.08%
Si 251.611	119500.4	5.29125	mg/L	0.167549	5.29125	mg/L	0.167549	3.17%

Sequence No.: 47
Sample ID: AD18955-002 PS
Analyst:
Initial Sample Wt: -001 CJ
Dilution:

Autosampler Location: 49
Date Collected: 8/31/2020 8:10:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-002 PS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	392969.1	95.6	%	0.11				0.12%
Y 371.029	196181.3	107	%	0.1				0.10%
Ag 328.068†	8321.3	0.0894665	mg/L	0.00032219	0.0894665	mg/L	0.00032219	0.36%
Al 308.215†	348516.4	38.7636	mg/L	0.07204	38.7636	mg/L	0.07204	0.19%
As 188.979†	1151.2	0.522191	mg/L	0.0025168	0.522191	mg/L	0.0025168	0.48%
Ba 233.527†	110161.4	1.22295	mg/L	0.002763	1.22295	mg/L	0.002763	0.23%
Be 313.107†	629675.6	0.471650	mg/L	0.0008090	0.471650	mg/L	0.0008090	0.17%
Ca 317.933†	45079918.9	479.302	mg/L	2.2369	479.302	mg/L	2.2369	0.47%
Cd 228.802†	15477.0	0.476681	mg/L	0.0006516	0.476681	mg/L	0.0006516	0.14%
Co 228.616†	14653.5	0.493092	mg/L	0.0018561	0.493092	mg/L	0.0018561	0.38%
Cr 267.716†	39241.3	0.570194	mg/L	0.0011136	0.570194	mg/L	0.0011136	0.20%
Cu 327.393†	48983.4	0.700816	mg/L	0.0016974	0.700816	mg/L	0.0016974	0.24%
Fe 273.955†	1367105.4	146.200	mg/L	0.4360	146.200	mg/L	0.4360	0.30%
K 404.721†	21151.8	-326.450	mg/L	4.6518	-326.450	mg/L	4.6518	1.42%
Mg 279.077†	1088711.9	94.5137	mg/L	0.32275	94.5137	mg/L	0.32275	0.34%
Mn 257.610†	1990664.8	6.76246	mg/L	0.014194	6.76246	mg/L	0.014194	0.21%
Mo 202.031†	5363.5	0.460474	mg/L	0.0015695	0.460474	mg/L	0.0015695	0.34%
Na 330.237†	20421.4	49.2721	mg/L	0.11282	49.2721	mg/L	0.11282	0.23%
Ni 231.604†	18251.6	0.587846	mg/L	0.0017187	0.587846	mg/L	0.0017187	0.29%
Pb 220.353†	27864.2	3.89836	mg/L	0.015514	3.89836	mg/L	0.015514	0.40%
Sb 206.836†	1117.1	0.498209	mg/L	0.0050450	0.498209	mg/L	0.0050450	1.01%
Se 196.026†	936.6	0.463187	mg/L	0.0021626	0.463187	mg/L	0.0021626	0.47%
Sn 189.927†	4833.7	0.706552	mg/L	0.0016642	0.706552	mg/L	0.0016642	0.24%
Ti 334.940†	264238.9	0.962394	mg/L	0.0054649	0.962394	mg/L	0.0054649	0.57%
Tl 190.801†	1092.0	0.484123	mg/L	0.0046324	0.484123	mg/L	0.0046324	0.96%
V 290.880†	27490.9	0.550279	mg/L	0.0002659	0.550279	mg/L	0.0002659	0.05%
Zn 206.200†	57219.7	1.02912	mg/L	0.004249	1.02912	mg/L	0.004249	0.41%
B 249.772	83990.7	0.559526	mg/L	0.0019959	0.559526	mg/L	0.0019959	0.36%
Si 251.611	81672.2	3.65468	mg/L	0.018775	3.65468	mg/L	0.018775	0.51%

Sequence No.: 48
Sample ID: AD18955-002 SD
Analyst:
Initial Sample Wt: .001 cfa
Dilution:

Autosampler Location: 50
Date Collected: 8/31/2020 8:14:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-002 SD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	406962.0	99.0	%	0.61				0.62%
Y 371.029	185405.9	102	%	0.5				0.54%
Ag 328.068†	-41.0	-0.0051300	mg/L	0.00076484	-0.0051300	mg/L	0.00076484	14.91%
Al 308.215†	62396.3	6.94411	mg/L	0.011810	6.94411	mg/L	0.011810	0.17%
As 188.979†	19.2	0.0127847	mg/L	0.00122755	0.0127847	mg/L	0.00122755	9.60%
Ba 233.527†	14155.9	0.155528	mg/L	0.0005069	0.155528	mg/L	0.0005069	0.33%
Be 313.107†	312.8	0.0017456	mg/L	0.00007391	0.0017456	mg/L	0.00007391	4.23%
Ca 317.933†	8910164.6	94.5225	mg/L	1.09355	94.5225	mg/L	1.09355	1.16%
Cd 228.802†	12.4	-0.0022765	mg/L	0.00008280	-0.0022765	mg/L	0.00008280	3.64%
Co 228.616†	264.9	0.0103693	mg/L	0.00039096	0.0103693	mg/L	0.00039096	3.77%
Cr 267.716†	1277.1	0.0118943	mg/L	0.00031140	0.0118943	mg/L	0.00031140	2.62%
Cu 327.393†	3231.4	0.0469093	mg/L	0.00041305	0.0469093	mg/L	0.00041305	0.88%
Fe 273.955†	279455.6	29.8819	mg/L	0.06966	29.8819	mg/L	0.06966	0.23%
K 404.721†	3799.5	-88.0716	mg/L	5.86447	-88.0716	mg/L	5.86447	6.66%
Mg 279.077†	115010.2	9.77311	mg/L	0.017066	9.77311	mg/L	0.017066	0.17%
Mn 257.610†	384983.1	1.30846	mg/L	0.001393	1.30846	mg/L	0.001393	0.11%
Mo 202.031†	-6.7	0.0006134	mg/L	0.00054704	0.0006134	mg/L	0.00054704	89.18%
Na 330.237†	13.7	0.713452	mg/L	0.0550300	0.713452	mg/L	0.0550300	7.71%
Ni 231.604†	916.5	0.0301830	mg/L	0.00034580	0.0301830	mg/L	0.00034580	1.15%
Pb 220.353†	5142.2	0.718814	mg/L	0.0034301	0.718814	mg/L	0.0034301	0.48%
Sb 206.836†	8.3	0.0036083	mg/L	0.00391829	0.0036083	mg/L	0.00391829	108.59%
Se 196.026†	-0.8	0.0095257	mg/L	0.00374086	0.0095257	mg/L	0.00374086	39.27%
Sn 189.927†	322.8	0.0482532	mg/L	0.00016483	0.0482532	mg/L	0.00016483	0.34%
Ti 334.940†	28000.9	0.102527	mg/L	0.0036947	0.102527	mg/L	0.0036947	3.60%
Tl 190.801†	-7.7	-0.0083734	mg/L	0.00258174	-0.0083734	mg/L	0.00258174	30.83%
V 290.880†	418.4	0.0104140	mg/L	0.00029970	0.0104140	mg/L	0.00029970	2.88%
Zn 206.200†	7049.2	0.121737	mg/L	0.0006191	0.121737	mg/L	0.0006191	0.51%
B 249.772	10999.2	0.0298498	mg/L	0.00193301	0.0298498	mg/L	0.00193301	6.48%
Si 251.611	14162.8	0.606758	mg/L	0.0115313	0.606758	mg/L	0.0115313	1.90%

Sequence No.: 49
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 8/31/2020 8:18:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	407322.9	99.1	%	0.83				0.84%
Y 371.029	153173.5	83.9	%	0.63				0.75%
Ag 328.068†	6576.7	0.0697308	mg/L	0.00073506	0.0697308	mg/L	0.00073506	1.05%
QC value less than the lower limit for Ag 328.068 Recovery = 69.73%								
Al 308.215†	43604.2	4.84239	mg/L	0.018289	4.84239	mg/L	0.018289	0.38%
QC value within limits for Al 308.215 Recovery = 96.85%								
As 188.979†	1090.3	0.478948	mg/L	0.0039410	0.478948	mg/L	0.0039410	0.82%
QC value within limits for As 188.979 Recovery = 95.79%								
Ba 233.527†	43485.2	0.481620	mg/L	0.0012468	0.481620	mg/L	0.0012468	0.26%
QC value within limits for Ba 233.527 Recovery = 96.32%								
Be 313.107†	632498.7	0.473758	mg/L	0.0069709	0.473758	mg/L	0.0069709	1.47%
QC value within limits for Be 313.107 Recovery = 94.75%								
Ca 317.933†	4752121.8	50.2886	mg/L	0.70777	50.2886	mg/L	0.70777	1.41%
QC value within limits for Ca 317.933 Recovery = 100.58%								
Cd 228.802†	16114.9	0.496435	mg/L	0.0027241	0.496435	mg/L	0.0027241	0.55%
QC value within limits for Cd 228.802 Recovery = 99.29%								
Co 228.616†	14286.5	0.480780	mg/L	0.0027163	0.480780	mg/L	0.0027163	0.56%
QC value within limits for Co 228.616 Recovery = 96.16%								
Cr 267.716†	35013.1	0.508014	mg/L	0.0028930	0.508014	mg/L	0.0028930	0.57%
QC value within limits for Cr 267.716 Recovery = 101.60%								
Cu 327.393†	34084.1	0.487870	mg/L	0.0026389	0.487870	mg/L	0.0026389	0.54%
QC value within limits for Cu 327.393 Recovery = 97.57%								
Fe 273.955†	46322.3	4.94968	mg/L	0.005829	4.94968	mg/L	0.005829	0.12%
QC value within limits for Fe 273.955 Recovery = 98.99%								
K 404.721†	2853.2	3.14481	mg/L	11.379178	3.14481	mg/L	11.379178	361.84%
QC value less than the lower limit for K 404.721 Recovery = 6.29%								
Mg 279.077†	583333.1	50.5309	mg/L	0.13724	50.5309	mg/L	0.13724	0.27%
QC value within limits for Mg 279.077 Recovery = 101.06%								
Mn 257.610†	143193.9	0.487176	mg/L	0.0012561	0.487176	mg/L	0.0012561	0.26%
QC value within limits for Mn 257.610 Recovery = 97.44%								
Mo 202.031†	5534.8	0.475141	mg/L	0.0019794	0.475141	mg/L	0.0019794	0.42%
QC value within limits for Mo 202.031 Recovery = 95.03%								
Na 330.237†	20038.8	48.3618	mg/L	0.29616	48.3618	mg/L	0.29616	0.61%
QC value within limits for Na 330.237 Recovery = 96.72%								
Ni 231.604†	14989.7	0.482913	mg/L	0.0025237	0.482913	mg/L	0.0025237	0.52%
QC value within limits for Ni 231.604 Recovery = 96.58%								
Pb 220.353†	3472.3	0.485176	mg/L	0.0050843	0.485176	mg/L	0.0050843	1.05%
QC value within limits for Pb 220.353 Recovery = 97.04%								
Sb 206.836†	1030.9	0.460404	mg/L	0.0212071	0.460404	mg/L	0.0212071	4.61%
QC value within limits for Sb 206.836 Recovery = 92.08%								
Se 196.026†	1068.9	0.475378	mg/L	0.0034233	0.475378	mg/L	0.0034233	0.72%
QC value within limits for Se 196.026 Recovery = 95.08%								
Sn 189.927†	3278.9	0.480652	mg/L	0.0030228	0.480652	mg/L	0.0030228	0.63%
QC value within limits for Sn 189.927 Recovery = 96.13%								
Ti 334.940†	134513.0	0.490213	mg/L	0.0008771	0.490213	mg/L	0.0008771	0.18%
QC value within limits for Ti 334.940 Recovery = 98.04%								
Tl 190.801†	1083.5	0.490329	mg/L	0.0054905	0.490329	mg/L	0.0054905	1.12%
QC value within limits for Tl 190.801 Recovery = 98.07%								
V 290.880†	23592.9	0.482129	mg/L	0.0021371	0.482129	mg/L	0.0021371	0.44%
QC value within limits for V 290.880 Recovery = 96.43%								
Zn 206.200†	28654.8	0.512499	mg/L	0.0022317	0.512499	mg/L	0.0022317	0.44%
QC value within limits for Zn 206.200 Recovery = 102.50%								
B 249.772	37576.3	0.502932	mg/L	0.0060287	0.502932	mg/L	0.0060287	1.20%
QC value within limits for B 249.772 Recovery = 100.59%								
Si 251.611	123961.2	5.35031	mg/L	0.040009	5.35031	mg/L	0.040009	0.75%
QC value within limits for Si 251.611 Recovery = 107.01%								

QC Failed. Continue with analysis.

Sequence No.: 50 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 8/31/2020 8:22:54 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	409120.1	99.6	%	0.68				0.68%
Y 371.029	182162.9	99.8	%	0.60				0.61%
Ag 328.068†	28.5	-0.0043436	mg/L	0.00019117	-0.0043436	mg/L	0.00019117	4.40%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	44.0	0.0074904	mg/L	0.00472928	0.0074904	mg/L	0.00472928	63.14%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	5.0	0.0030888	mg/L	0.00200011	0.0030888	mg/L	0.00200011	64.75%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-5.0	-0.0019176	mg/L	0.00007783	-0.0019176	mg/L	0.00007783	4.06%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	14.9	0.0015232	mg/L	0.00001418	0.0015232	mg/L	0.00001418	0.93%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	363.4	-0.261449	mg/L	0.0009710	-0.261449	mg/L	0.0009710	0.37%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	1.6	-0.0026094	mg/L	0.00021574	-0.0026094	mg/L	0.00021574	8.27%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-9.1	0.0011776	mg/L	0.00064338	0.0011776	mg/L	0.00064338	54.63%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	8.0	-0.0067690	mg/L	0.00028787	-0.0067690	mg/L	0.00028787	4.25%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-18.7	0.0004577	mg/L	0.00138194	0.0004577	mg/L	0.00138194	301.91%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.0	-0.0043164	mg/L	0.00046962	-0.0043164	mg/L	0.00046962	10.88%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	1169.9	-0.364394	mg/L	7.9117664	-0.364394	mg/L	7.9117664	>999.9%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	-10.6	-0.237066	mg/L	0.0014437	-0.237066	mg/L	0.0014437	0.61%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-92.6	0.0004767	mg/L	0.00005183	0.0004767	mg/L	0.00005183	10.87%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	12.3	0.0022466	mg/L	0.00085468	0.0022466	mg/L	0.00085468	38.04%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-14.0	0.647719	mg/L	0.1270049	0.647719	mg/L	0.1270049	19.61%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-13.7	0.0002582	mg/L	0.00035535	0.0002582	mg/L	0.00035535	137.61%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-10.7	-0.0022037	mg/L	0.00066233	-0.0022037	mg/L	0.00066233	30.06%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	14.0	0.0061419	mg/L	0.00605807	0.0061419	mg/L	0.00605807	98.63%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	14.5	0.0066970	mg/L	0.00387202	0.0066970	mg/L	0.00387202	57.82%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	6.8	0.0023842	mg/L	0.00251275	0.0023842	mg/L	0.00251275	105.39%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	37.7	0.0007453	mg/L	0.00018522	0.0007453	mg/L	0.00018522	24.85%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.2	-0.0033091	mg/L	0.00085249	-0.0033091	mg/L	0.00085249	25.76%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	9.4	0.0042955	mg/L	0.00049743	0.0042955	mg/L	0.00049743	11.58%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-5.1	-0.0058461	mg/L	0.00029567	-0.0058461	mg/L	0.00029567	5.06%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	302.2	0.0057228	mg/L	0.00093598	0.0057228	mg/L	0.00093598	16.36%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	64.7	-0.0308444	mg/L	0.00177322	-0.0308444	mg/L	0.00177322	5.75%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 51
Sample ID: AD18934-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 8/31/2020 8:26:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18934-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	412040.9	100	%	0.5				0.46%
Y 371.029	240647.4	132	%	0.9				0.69%
Ag 328.068†	-303.3	-0.0080972	mg/L	0.00050341	-0.0080972	mg/L	0.00050341	6.22%
Al 308.215†	1006472.6	111.971	mg/L	0.2121	111.971	mg/L	0.2121	0.19%
As 188.979†	127.5	0.0895586	mg/L	0.00319694	0.0895586	mg/L	0.00319694	3.57%
Ba 233.527†	78001.4	0.865381	mg/L	0.0025343	0.865381	mg/L	0.0025343	0.29%
Be 313.107†	7766.9	0.0073111	mg/L	0.00002484	0.0073111	mg/L	0.00002484	0.34%
Ca 317.933†	3004072.9	31.6925	mg/L	0.04299	31.6925	mg/L	0.04299	0.14%
Cd 228.802†	70.0	-0.0004936	mg/L	0.00042923	-0.0004936	mg/L	0.00042923	86.96%
Co 228.616†	3687.4	0.125191	mg/L	0.0004412	0.125191	mg/L	0.0004412	0.35%
Cr 267.716†	11299.4	0.159282	mg/L	0.0010035	0.159282	mg/L	0.0010035	0.63%
Cu 327.393†	13153.5	0.188720	mg/L	0.0009215	0.188720	mg/L	0.0009215	0.49%
Fe 273.955†	2630067.4	281.266	mg/L	1.2503	281.266	mg/L	1.2503	0.44%
K 404.721†	41222.7	-604.385	mg/L	34.6338	-604.385	mg/L	34.6338	5.73%
Mg 279.077†	512297.9	44.3488	mg/L	0.04628	44.3488	mg/L	0.04628	0.10%
Mn 257.610†	1876536.9	6.37480	mg/L	0.014131	6.37480	mg/L	0.014131	0.22%
Mo 202.031†	19.6	0.0028680	mg/L	0.00125519	0.0028680	mg/L	0.00125519	43.76%
Na 330.237†	9.3	0.703139	mg/L	0.0449890	0.703139	mg/L	0.0449890	6.40%
Ni 231.604†	7769.0	0.250626	mg/L	0.0013204	0.250626	mg/L	0.0013204	0.53%
Pb 220.353†	1069.5	0.159011	mg/L	0.0014999	0.159011	mg/L	0.0014999	0.94%
Sb 206.836†	13.5	0.0059268	mg/L	0.00262720	0.0059268	mg/L	0.00262720	44.33%
Se 196.026†	-240.3	0.0307651	mg/L	0.00184215	0.0307651	mg/L	0.00184215	5.99%
Sn 189.927†	45.1	0.0041099	mg/L	0.00051429	0.0041099	mg/L	0.00051429	12.51%
Ti 334.940†	188728.1	0.687547	mg/L	0.0039257	0.687547	mg/L	0.0039257	0.57%
Tl 190.801†	-31.7	-0.0230125	mg/L	0.00420667	-0.0230125	mg/L	0.00420667	18.28%
V 290.880†	10210.7	0.189209	mg/L	0.0012730	0.189209	mg/L	0.0012730	0.67%
Zn 206.200†	64112.0	1.15378	mg/L	0.003147	1.15378	mg/L	0.003147	0.27%
B 249.772	102801.1	0.258132	mg/L	0.0096320	0.258132	mg/L	0.0096320	3.73%
Si 251.611	85634.6	3.82042	mg/L	0.021689	3.82042	mg/L	0.021689	0.57%

Sequence No.: 52
Sample ID: AD18934-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 8/31/2020 8:31:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18934-002

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	397306.1	96.7	%	0.84				0.87%
Y 371.029	214091.7	117	%	1.0				0.88%
Ag 328.068†	-428.7	-0.0095156	mg/L	0.00109860	-0.0095156	mg/L	0.00109860	11.55%
Al 308.215†	628061.4	69.8732	mg/L	0.19959	69.8732	mg/L	0.19959	0.29%
As 188.979†	288.9	0.149811	mg/L	0.0054671	0.149811	mg/L	0.0054671	3.65%
Ba 233.527†	30502.3	0.337272	mg/L	0.0015170	0.337272	mg/L	0.0015170	0.45%
Be 313.107†	3612.7	0.0042094	mg/L	0.00000691	0.0042094	mg/L	0.00000691	0.16%
Ca 317.933†	24924548.2	264.886	mg/L	2.0039	264.886	mg/L	2.0039	0.76%
Cd 228.802†	72.8	-0.0004068	mg/L	0.00030999	-0.0004068	mg/L	0.00030999	76.20%
Co 228.616†	2425.1	0.0828408	mg/L	0.00029669	0.0828408	mg/L	0.00029669	0.36%
Cr 267.716†	7749.0	0.107070	mg/L	0.0009271	0.107070	mg/L	0.0009271	0.87%
Cu 327.393†	12668.1	0.181783	mg/L	0.0002485	0.181783	mg/L	0.0002485	0.14%
Fe 273.955†	1756725.7	187.867	mg/L	0.2132	187.867	mg/L	0.2132	0.11%
K 404.721†	28103.7	-401.196	mg/L	22.3344	-401.196	mg/L	22.3344	5.57%
Mg 279.077†	1401861.6	121.767	mg/L	0.7601	121.767	mg/L	0.7601	0.62%
Mn 257.610†	705435.8	2.39694	mg/L	0.005499	2.39694	mg/L	0.005499	0.23%
Mo 202.031†	36.5	0.0043126	mg/L	0.00013655	0.0043126	mg/L	0.00013655	3.17%
Na 330.237†	267.3	1.31704	mg/L	0.003004	1.31704	mg/L	0.003004	0.23%
Ni 231.604†	5839.0	0.188538	mg/L	0.0007362	0.188538	mg/L	0.0007362	0.39%
Pb 220.353†	814.8	0.119569	mg/L	0.0023006	0.119569	mg/L	0.0023006	1.92%
Sb 206.836†	7.3	0.0031920	mg/L	0.00360516	0.0031920	mg/L	0.00360516	112.94%
Se 196.026†	-148.8	0.0126206	mg/L	0.00617815	0.0126206	mg/L	0.00617815	48.95%
Sn 189.927†	-29.1	-0.0063761	mg/L	0.00151490	-0.0063761	mg/L	0.00151490	23.76%
Ti 334.940†	168179.9	0.612755	mg/L	0.0109457	0.612755	mg/L	0.0109457	1.79%
Tl 190.801†	-19.3	-0.0089491	mg/L	0.01015897	-0.0089491	mg/L	0.01015897	113.52%
V 290.880†	6698.3	0.125329	mg/L	0.0021567	0.125329	mg/L	0.0021567	1.72%
Zn 206.200†	34349.3	0.615491	mg/L	0.0043344	0.615491	mg/L	0.0043344	0.70%
B 249.772	66985.7	0.149654	mg/L	0.0057952	0.149654	mg/L	0.0057952	3.87%
Si 251.611	109479.3	4.81754	mg/L	0.093852	4.81754	mg/L	0.093852	1.95%

Sequence No.: 53
Sample ID: AD18934-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 8/31/2020 8:36:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18934-003

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	391683.1	95.3	%	0.93				0.97%
Y 371.029	208292.5	114	%	1.0				0.86%
Ag 328.068†	-458.0	-0.0098474	mg/L	0.00084598	-0.0098474	mg/L	0.00084598	8.59%
Al 308.215†	644604.8	71.7137	mg/L	0.10835	71.7137	mg/L	0.10835	0.15%
As 188.979†	125.3	0.0778358	mg/L	0.00234777	0.0778358	mg/L	0.00234777	3.02%
Ba 233.527†	39653.0	0.439012	mg/L	0.0014710	0.439012	mg/L	0.0014710	0.34%
Be 313.107†	3690.6	0.0042676	mg/L	0.00002393	0.0042676	mg/L	0.00002393	0.56%
Ca 317.933†	37749961.8	401.325	mg/L	3.4410	401.325	mg/L	3.4410	0.86%
Cd 228.802†	17.6	-0.0021154	mg/L	0.00011860	-0.0021154	mg/L	0.00011860	5.61%
Co 228.616†	1986.4	0.0681255	mg/L	0.00059122	0.0681255	mg/L	0.00059122	0.87%
Cr 267.716†	7872.2	0.108882	mg/L	0.0011683	0.108882	mg/L	0.0011683	1.07%
Cu 327.393†	12867.0	0.184626	mg/L	0.0005392	0.184626	mg/L	0.0005392	0.29%
Fe 273.955†	1759148.8	188.126	mg/L	0.5410	188.126	mg/L	0.5410	0.29%
K 404.721†	27743.7	-407.495	mg/L	12.5517	-407.495	mg/L	12.5517	3.08%
Mg 279.077†	970159.9	84.1962	mg/L	0.31318	84.1962	mg/L	0.31318	0.37%
Mn 257.610†	1024050.5	3.47917	mg/L	0.007491	3.47917	mg/L	0.007491	0.22%
Mo 202.031†	-11.7	0.0001847	mg/L	0.00054105	0.0001847	mg/L	0.00054105	292.87%
Na 330.237†	332.7	1.47250	mg/L	0.062607	1.47250	mg/L	0.062607	4.25%
Ni 231.604†	5383.4	0.173880	mg/L	0.0028534	0.173880	mg/L	0.0028534	1.64%
Pb 220.353†	6308.7	0.887807	mg/L	0.0135628	0.887807	mg/L	0.0135628	1.53%
Sb 206.836†	8.1	0.0035005	mg/L	0.00360485	0.0035005	mg/L	0.00360485	102.98%
Se 196.026†	-149.1	0.0052165	mg/L	0.00325197	0.0052165	mg/L	0.00325197	62.34%
Sn 189.927†	-20.7	-0.0045876	mg/L	0.00149430	-0.0045876	mg/L	0.00149430	32.57%
Ti 334.940†	141800.8	0.516739	mg/L	0.0086975	0.516739	mg/L	0.0086975	1.68%
Tl 190.801†	-16.6	-0.0116658	mg/L	0.00313185	-0.0116658	mg/L	0.00313185	26.85%
V 290.880†	6640.9	0.124108	mg/L	0.0033313	0.124108	mg/L	0.0033313	2.68%
Zn 206.200†	35047.1	0.628110	mg/L	0.0047184	0.628110	mg/L	0.0047184	0.75%
B 249.772	65462.7	0.127455	mg/L	0.0069219	0.127455	mg/L	0.0069219	5.43%
Si 251.611	113878.5	5.02408	mg/L	0.171400	5.02408	mg/L	0.171400	3.41%

Sequence No.: 54
Sample ID: AD18934-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 8/31/2020 8:41:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18934-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	394379.5	96.0	%	1.16				1.21%
Y 371.029	208567.2	114	%	1.3				1.17%
Ag 328.068†	-445.3	-0.0097029	mg/L	0.00034734	-0.0097029	mg/L	0.00034734	3.58%
Al 308.215†	666978.0	74.2027	mg/L	0.05265	74.2027	mg/L	0.05265	0.07%
As 188.979†	121.8	0.0792018	mg/L	0.00725386	0.0792018	mg/L	0.00725386	9.16%
Ba 233.527†	38487.3	0.426052	mg/L	0.0062013	0.426052	mg/L	0.0062013	1.46%
Be 313.107†	3416.5	0.0040629	mg/L	0.00003938	0.0040629	mg/L	0.00003938	0.97%
Ca 317.933†	39189397.3	416.638	mg/L	5.0274	416.638	mg/L	5.0274	1.21%
Cd 228.802†	20.0	-0.0020398	mg/L	0.00041651	-0.0020398	mg/L	0.00041651	20.42%
Co 228.616†	1968.4	0.0675205	mg/L	0.00072738	0.0675205	mg/L	0.00072738	1.08%
Cr 267.716†	9666.5	0.135269	mg/L	0.0022652	0.135269	mg/L	0.0022652	1.67%
Cu 327.393†	16689.0	0.239251	mg/L	0.0017366	0.239251	mg/L	0.0017366	0.73%
Fe 273.955†	1994302.5	213.275	mg/L	0.7010	213.275	mg/L	0.7010	0.33%
K 404.721†	31022.4	-465.876	mg/L	23.5835	-465.876	mg/L	23.5835	5.06%
Mg 279.077†	877706.9	76.1501	mg/L	0.21056	76.1501	mg/L	0.21056	0.28%
Mn 257.610†	1770040.4	6.01306	mg/L	0.011406	6.01306	mg/L	0.011406	0.19%
Mo 202.031†	-21.5	-0.0006492	mg/L	0.00077027	-0.0006492	mg/L	0.00077027	118.64%
Na 330.237†	358.1	1.53309	mg/L	0.097453	1.53309	mg/L	0.097453	6.36%
Ni 231.604†	5745.3	0.185523	mg/L	0.0031109	0.185523	mg/L	0.0031109	1.68%
Pb 220.353†	458.0	0.0700838	mg/L	0.00210253	0.0700838	mg/L	0.00210253	3.00%
Sb 206.836†	14.4	0.0062622	mg/L	0.00323434	0.0062622	mg/L	0.00323434	51.65%
Se 196.026†	-170.4	0.0073635	mg/L	0.00542281	0.0073635	mg/L	0.00542281	73.64%
Sn 189.927†	-15.2	-0.0027997	mg/L	0.00017225	-0.0027997	mg/L	0.00017225	6.15%
Ti 334.940†	94203.5	0.343493	mg/L	0.0046203	0.343493	mg/L	0.0046203	1.35%
Tl 190.801†	-31.2	-0.0264498	mg/L	0.00351519	-0.0264498	mg/L	0.00351519	13.29%
V 290.880†	7363.3	0.136833	mg/L	0.0022535	0.136833	mg/L	0.0022535	1.65%
Zn 206.200†	44811.5	0.804710	mg/L	0.0039917	0.804710	mg/L	0.0039917	0.50%
B 249.772	74165.9	0.143628	mg/L	0.0138657	0.143628	mg/L	0.0138657	9.65%
Si 251.611	81562.2	3.64906	mg/L	0.023064	3.64906	mg/L	0.023064	0.63%

Sequence No.: 55
Sample ID: AD18934-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 8/31/2020 8:45:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18934-005

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	398000.8	96.9	%	0.23				0.24%
Y 371.029	210389.3	115	%	0.2				0.18%
Ag 328.068†	-296.2	-0.0080162	mg/L	0.00070885	-0.0080162	mg/L	0.00070885	8.84%
Al 308.215†	417736.4	46.4749	mg/L	0.02312	46.4749	mg/L	0.02312	0.05%
As 188.979†	74.3	0.0512301	mg/L	0.00418225	0.0512301	mg/L	0.00418225	8.16%
Ba 233.527†	55138.3	0.611183	mg/L	0.0008067	0.611183	mg/L	0.0008067	0.13%
Be 313.107†	1516.5	0.0026443	mg/L	0.00000645	0.0026443	mg/L	0.00000645	0.24%
Ca 317.933†	21922446.4	232.949	mg/L	1.2151	232.949	mg/L	1.2151	0.52%
Cd 228.802†	58.6	-0.0008466	mg/L	0.00010545	-0.0008466	mg/L	0.00010545	12.46%
Co 228.616†	1656.9	0.0570713	mg/L	0.00086366	0.0570713	mg/L	0.00086366	1.51%
Cr 267.716†	8457.2	0.117485	mg/L	0.0004988	0.117485	mg/L	0.0004988	0.42%
Cu 327.393†	22931.6	0.328474	mg/L	0.0005201	0.328474	mg/L	0.0005201	0.16%
Fe 273.955†	1427218.1	152.628	mg/L	0.1316	152.628	mg/L	0.1316	0.09%
K 404.721†	22362.1	-335.990	mg/L	16.6228	-335.990	mg/L	16.6228	4.95%
Mg 279.077†	458567.7	39.6727	mg/L	0.06845	39.6727	mg/L	0.06845	0.17%
Mn 257.610†	913064.3	3.10218	mg/L	0.002654	3.10218	mg/L	0.002654	0.09%
Mo 202.031†	34.2	0.0041166	mg/L	0.00040033	0.0041166	mg/L	0.00040033	9.72%
Na 330.237†	178.7	1.10617	mg/L	0.158872	1.10617	mg/L	0.158872	14.36%
Ni 231.604†	8146.0	0.262754	mg/L	0.0011167	0.262754	mg/L	0.0011167	0.43%
Pb 220.353†	4562.1	0.641323	mg/L	0.0011907	0.641323	mg/L	0.0011907	0.19%
Sb 206.836†	13.3	0.0058364	mg/L	0.00385894	0.0058364	mg/L	0.00385894	66.12%
Se 196.026†	-109.6	0.0143769	mg/L	0.00932506	0.0143769	mg/L	0.00932506	64.86%
Sn 189.927†	132.7	0.0140660	mg/L	0.00293027	0.0140660	mg/L	0.00293027	20.83%
Ti 334.940†	330201.5	1.20249	mg/L	0.018518	1.20249	mg/L	0.018518	1.54%
Tl 190.801†	-35.9	-0.0116135	mg/L	0.00289654	-0.0116135	mg/L	0.00289654	24.94%
V 290.880†	6774.9	0.129271	mg/L	0.0012053	0.129271	mg/L	0.0012053	0.93%
Zn 206.200†	43154.4	0.774739	mg/L	0.0032020	0.774739	mg/L	0.0032020	0.41%
B 249.772	54318.1	0.120440	mg/L	0.0018678	0.120440	mg/L	0.0018678	1.55%
Si 251.611	105300.9	4.62427	mg/L	0.092104	4.62427	mg/L	0.092104	1.99%

Sequence No.: 56
Sample ID: AD18955-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 8/31/2020 8:50:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-004

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	397421.6	96.7	%	0.58				0.60%
Y 371.029	211244.9	116	%	0.8				0.70%
Ag 328.068†	-281.6	-0.0078514	mg/L	0.00038150	-0.0078514	mg/L	0.00038150	4.86%
Al 308.215†	646965.3	71.9764	mg/L	0.14060	71.9764	mg/L	0.14060	0.20%
As 188.979†	42.0	0.0391077	mg/L	0.00691798	0.0391077	mg/L	0.00691798	17.69%
Ba 233.527†	21594.5	0.238232	mg/L	0.0011719	0.238232	mg/L	0.0011719	0.49%
Be 313.107†	3868.3	0.0044003	mg/L	0.00002180	0.0044003	mg/L	0.00002180	0.50%
Ca 317.933†	18426182.9	195.756	mg/L	0.6621	195.756	mg/L	0.6621	0.34%
Cd 228.802†	-15.9	-0.0031513	mg/L	0.00038362	-0.0031513	mg/L	0.00038362	12.17%
Co 228.616†	2360.1	0.0806605	mg/L	0.00086073	0.0806605	mg/L	0.00086073	1.07%
Cr 267.716†	8496.2	0.118059	mg/L	0.0002768	0.118059	mg/L	0.0002768	0.23%
Cu 327.393†	11797.7	0.169344	mg/L	0.0008407	0.169344	mg/L	0.0008407	0.50%
Fe 273.955†	1593409.3	170.402	mg/L	0.4234	170.402	mg/L	0.4234	0.25%
K 404.721†	24708.0	-376.834	mg/L	13.9743	-376.834	mg/L	13.9743	3.71%
Mg 279.077†	1053146.0	91.4184	mg/L	0.25540	91.4184	mg/L	0.25540	0.28%
Mn 257.610†	609652.0	2.07159	mg/L	0.002896	2.07159	mg/L	0.002896	0.14%
Mo 202.031†	-33.1	-0.0016427	mg/L	0.00091982	-0.0016427	mg/L	0.00091982	56.00%
Na 330.237†	291.0	1.37344	mg/L	0.077136	1.37344	mg/L	0.077136	5.62%
Ni 231.604†	5889.2	0.190151	mg/L	0.0001017	0.190151	mg/L	0.0001017	0.05%
Pb 220.353†	685.3	0.101650	mg/L	0.0012004	0.101650	mg/L	0.0012004	1.18%
Sb 206.836†	13.7	0.0059535	mg/L	0.00721846	0.0059535	mg/L	0.00721846	121.25%
Se 196.026†	-135.5	0.0136423	mg/L	0.00475979	0.0136423	mg/L	0.00475979	34.89%
Sn 189.927†	2.3	-0.0011746	mg/L	0.00088469	-0.0011746	mg/L	0.00088469	75.32%
Ti 334.940†	139754.2	0.509290	mg/L	0.0135662	0.509290	mg/L	0.0135662	2.66%
Tl 190.801†	-26.4	-0.0126691	mg/L	0.00448087	-0.0126691	mg/L	0.00448087	35.37%
V 290.880†	5930.7	0.111085	mg/L	0.0019467	0.111085	mg/L	0.0019467	1.75%
Zn 206.200†	31473.8	0.563482	mg/L	0.0016335	0.563482	mg/L	0.0016335	0.29%
B 249.772	60657.9	0.134478	mg/L	0.0050861	0.134478	mg/L	0.0050861	3.78%
Si 251.611	85640.5	3.77114	mg/L	0.031598	3.77114	mg/L	0.031598	0.84%

Sequence No.: 57
Sample ID: AD18955-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 8/31/2020 8:55:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-005

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	401551.9	97.7	%	0.48				0.49%
Y 371.029	212205.8	116	%	0.4				0.37%
Ag 328.068†	-256.6	-0.0075685	mg/L	0.00113509	-0.0075685	mg/L	0.00113509	15.00%
Al 308.215†	431399.3	47.9950	mg/L	0.06589	47.9950	mg/L	0.06589	0.14%
As 188.979†	80.0	0.0550249	mg/L	0.00434655	0.0550249	mg/L	0.00434655	7.90%
Ba 233.527†	31450.3	0.347812	mg/L	0.0020688	0.347812	mg/L	0.0020688	0.59%
Be 313.107†	2922.6	0.0036942	mg/L	0.00004196	0.0036942	mg/L	0.00004196	1.14%
Ca 317.933†	13159833.1	139.731	mg/L	0.9194	139.731	mg/L	0.9194	0.66%
Cd 228.802†	9.3	-0.0023719	mg/L	0.00023247	-0.0023719	mg/L	0.00023247	9.80%
Co 228.616†	1684.4	0.0579923	mg/L	0.00080188	0.0579923	mg/L	0.00080188	1.38%
Cr 267.716†	5668.9	0.0764799	mg/L	0.00062135	0.0764799	mg/L	0.00062135	0.81%
Cu 327.393†	19943.0	0.285760	mg/L	0.0005706	0.285760	mg/L	0.0005706	0.20%
Fe 273.955†	1527456.4	163.348	mg/L	0.2840	163.348	mg/L	0.2840	0.17%
K 404.721†	24443.3	-350.986	mg/L	2.8199	-350.986	mg/L	2.8199	0.80%
Mg 279.077†	474414.2	41.0518	mg/L	0.02199	41.0518	mg/L	0.02199	0.05%
Mn 257.610†	1040092.6	3.53366	mg/L	0.002321	3.53366	mg/L	0.002321	0.07%
Mo 202.031†	17.3	0.0026711	mg/L	0.00079703	0.0026711	mg/L	0.00079703	29.84%
Na 330.237†	181.6	1.11302	mg/L	0.058596	1.11302	mg/L	0.058596	5.26%
Ni 231.604†	4379.6	0.141588	mg/L	0.0016310	0.141588	mg/L	0.0016310	1.15%
Pb 220.353†	2344.8	0.331479	mg/L	0.0040410	0.331479	mg/L	0.0040410	1.22%
Sb 206.836†	15.3	0.0066863	mg/L	0.00257772	0.0066863	mg/L	0.00257772	38.55%
Se 196.026†	-128.5	0.0163231	mg/L	0.00615778	0.0163231	mg/L	0.00615778	37.72%
Sn 189.927†	58.5	0.0077356	mg/L	0.00144929	0.0077356	mg/L	0.00144929	18.74%
Ti 334.940†	108860.8	0.396843	mg/L	0.0003381	0.396843	mg/L	0.0003381	0.09%
Tl 190.801†	-29.2	-0.0192717	mg/L	0.00708894	-0.0192717	mg/L	0.00708894	36.78%
V 290.880†	4731.8	0.0876314	mg/L	0.00047726	0.0876314	mg/L	0.00047726	0.54%
Zn 206.200†	33169.8	0.594156	mg/L	0.0012702	0.594156	mg/L	0.0012702	0.21%
B 249.772	57944.9	0.126181	mg/L	0.0021446	0.126181	mg/L	0.0021446	1.70%
Si 251.611	96157.5	4.22026	mg/L	0.075575	4.22026	mg/L	0.075575	1.79%

Sequence No.: 58
Sample ID: AD18949-014
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 8/31/2020 8:59:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18949-014

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	411391.7	100	%	0.6				0.58%
Y 371.029	187812.8	103	%	0.5				0.49%
Ag 328.068†	-89.4	-0.0056771	mg/L	0.00079013	-0.0056771	mg/L	0.00079013	13.92%
Al 308.215†	259511.8	28.8727	mg/L	0.08815	28.8727	mg/L	0.08815	0.31%
As 188.979†	73.8	0.0407245	mg/L	0.00404883	0.0407245	mg/L	0.00404883	9.94%
Ba 233.527†	8202.4	0.0893353	mg/L	0.00063287	0.0893353	mg/L	0.00063287	0.71%
Be 313.107†	938.2	0.0022125	mg/L	0.00003554	0.0022125	mg/L	0.00003554	1.61%
Ca 317.933†	164557.9	1.48528	mg/L	0.003692	1.48528	mg/L	0.003692	0.25%
Cd 228.802†	31.5	-0.0016852	mg/L	0.00028602	-0.0016852	mg/L	0.00028602	16.97%
Co 228.616†	280.8	0.0109024	mg/L	0.00040305	0.0109024	mg/L	0.00040305	3.70%
Cr 267.716†	6147.6	0.0835194	mg/L	0.00022106	0.0835194	mg/L	0.00022106	0.26%
Cu 327.393†	3196.9	0.0464165	mg/L	0.00084809	0.0464165	mg/L	0.00084809	1.83%
Fe 273.955†	597284.3	63.8718	mg/L	0.27964	63.8718	mg/L	0.27964	0.44%
K 404.721†	8851.6	-157.999	mg/L	6.6727	-157.999	mg/L	6.6727	4.22%
Mg 279.077†	41086.0	3.33954	mg/L	0.009281	3.33954	mg/L	0.009281	0.28%
Mn 257.610†	47431.7	0.161902	mg/L	0.0003525	0.161902	mg/L	0.0003525	0.22%
Mo 202.031†	38.7	0.0045063	mg/L	0.00038233	0.0045063	mg/L	0.00038233	8.48%
Na 330.237†	-29.9	0.609782	mg/L	0.1245116	0.609782	mg/L	0.1245116	20.42%
Ni 231.604†	815.3	0.0269253	mg/L	0.00038440	0.0269253	mg/L	0.00038440	1.43%
Pb 220.353†	1092.5	0.154649	mg/L	0.0018126	0.154649	mg/L	0.0018126	1.17%
Sb 206.836†	13.6	0.0059577	mg/L	0.00205928	0.0059577	mg/L	0.00205928	34.56%
Se 196.026†	-46.2	0.0111843	mg/L	0.00357152	0.0111843	mg/L	0.00357152	31.93%
Sn 189.927†	132.2	0.0182936	mg/L	0.00183362	0.0182936	mg/L	0.00183362	10.02%
Ti 334.940†	121901.5	0.444309	mg/L	0.0022415	0.444309	mg/L	0.0022415	0.50%
Tl 190.801†	-12.2	-0.0026433	mg/L	0.00199952	-0.0026433	mg/L	0.00199952	75.65%
V 290.880†	3848.1	0.0767765	mg/L	0.00084080	0.0767765	mg/L	0.00084080	1.10%
Zn 206.200†	21861.0	0.389626	mg/L	0.0021491	0.389626	mg/L	0.0021491	0.55%
B 249.772	22675.8	0.0505212	mg/L	0.00260669	0.0505212	mg/L	0.00260669	5.16%
Si 251.611	69393.9	2.99468	mg/L	0.031481	2.99468	mg/L	0.031481	1.05%

Sequence No.: 59 Autosampler Location: 6
Sample ID: CCV V-333673 Date Collected: 8/31/2020 9:03:05 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	400560.7	97.5	%	0.94				0.97%
Y 371.029	150427.0	82.4	%	0.74				0.90%
Ag 328.068†	6706.3	0.0711972	mg/L	0.00069999	0.0711972	mg/L	0.00069999	0.98%
QC value less than the lower limit for Ag 328.068 Recovery = 71.20%								
Al 308.215†	44346.6	4.92474	mg/L	0.003622	4.92474	mg/L	0.003622	0.07%
QC value within limits for Al 308.215 Recovery = 98.49%								
As 188.979†	1108.8	0.487042	mg/L	0.0054777	0.487042	mg/L	0.0054777	1.12%
QC value within limits for As 188.979 Recovery = 97.41%								
Ba 233.527†	44134.2	0.488835	mg/L	0.0003113	0.488835	mg/L	0.0003113	0.06%
QC value within limits for Ba 233.527 Recovery = 97.77%								
Be 313.107†	646329.0	0.484084	mg/L	0.0101312	0.484084	mg/L	0.0101312	2.09%
QC value within limits for Be 313.107 Recovery = 96.82%								
Ca 317.933†	4861258.1	51.4496	mg/L	0.97144	51.4496	mg/L	0.97144	1.89%
QC value within limits for Ca 317.933 Recovery = 102.90%								
Cd 228.802†	16487.6	0.507979	mg/L	0.0045194	0.507979	mg/L	0.0045194	0.89%
QC value within limits for Cd 228.802 Recovery = 101.60%								
Co 228.616†	14558.2	0.489896	mg/L	0.0055537	0.489896	mg/L	0.0055537	1.13%
QC value within limits for Co 228.616 Recovery = 97.98%								
Cr 267.716†	35797.3	0.519546	mg/L	0.0052657	0.519546	mg/L	0.0052657	1.01%
QC value within limits for Cr 267.716 Recovery = 103.91%								
Cu 327.393†	34679.9	0.496385	mg/L	0.0020756	0.496385	mg/L	0.0020756	0.42%
QC value within limits for Cu 327.393 Recovery = 99.28%								
Fe 273.955†	47187.6	5.04222	mg/L	0.015504	5.04222	mg/L	0.015504	0.31%
QC value within limits for Fe 273.955 Recovery = 100.84%								
K 404.721†	4110.4	20.9455	mg/L	16.43433	20.9455	mg/L	16.43433	78.46%
QC value less than the lower limit for K 404.721 Recovery = 41.89%								
Mg 279.077†	593363.3	51.4038	mg/L	0.08762	51.4038	mg/L	0.08762	0.17%
QC value within limits for Mg 279.077 Recovery = 102.81%								
Mn 257.610†	145345.1	0.494483	mg/L	0.0007300	0.494483	mg/L	0.0007300	0.15%
QC value within limits for Mn 257.610 Recovery = 98.90%								
Mo 202.031†	5651.4	0.485125	mg/L	0.0059460	0.485125	mg/L	0.0059460	1.23%
QC value within limits for Mo 202.031 Recovery = 97.02%								
Na 330.237†	20309.7	49.0063	mg/L	0.29980	49.0063	mg/L	0.29980	0.61%
QC value within limits for Na 330.237 Recovery = 98.01%								
Ni 231.604†	15288.0	0.492508	mg/L	0.0050152	0.492508	mg/L	0.0050152	1.02%
QC value within limits for Ni 231.604 Recovery = 98.50%								
Pb 220.353†	3520.3	0.491881	mg/L	0.0057107	0.491881	mg/L	0.0057107	1.16%
QC value within limits for Pb 220.353 Recovery = 98.38%								
Sb 206.836†	1056.7	0.471900	mg/L	0.0221126	0.471900	mg/L	0.0221126	4.69%
QC value within limits for Sb 206.836 Recovery = 94.38%								
Se 196.026†	1098.3	0.488468	mg/L	0.0080463	0.488468	mg/L	0.0080463	1.65%
QC value within limits for Se 196.026 Recovery = 97.69%								
Sn 189.927†	3342.0	0.489873	mg/L	0.0081379	0.489873	mg/L	0.0081379	1.66%
QC value within limits for Sn 189.927 Recovery = 97.97%								
Ti 334.940†	136712.7	0.498219	mg/L	0.0001813	0.498219	mg/L	0.0001813	0.04%
QC value within limits for Ti 334.940 Recovery = 99.64%								
Tl 190.801†	1118.8	0.506236	mg/L	0.0032422	0.506236	mg/L	0.0032422	0.64%
QC value within limits for Tl 190.801 Recovery = 101.25%								
V 290.880†	24052.9	0.491459	mg/L	0.0018511	0.491459	mg/L	0.0018511	0.38%
QC value within limits for V 290.880 Recovery = 98.29%								
Zn 206.200†	29358.9	0.525234	mg/L	0.0059378	0.525234	mg/L	0.0059378	1.13%
QC value within limits for Zn 206.200 Recovery = 105.05%								
B 249.772	37422.1	0.500433	mg/L	0.0042628	0.500433	mg/L	0.0042628	0.85%
QC value within limits for B 249.772 Recovery = 100.09%								
Si 251.611	123880.8	5.34723	mg/L	0.052259	5.34723	mg/L	0.052259	0.98%
QC value within limits for Si 251.611 Recovery = 106.94%								

QC Failed. Continue with analysis.

Sequence No.: 60
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 2
Date Collected: 8/31/2020 9:07:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	409037.8	99.6	%	0.80				0.80%
Y 371.029	182603.9	100	%	1.1				1.10%
Ag 328.068†	65.0	-0.0039311	mg/L	0.00028536	-0.0039311	mg/L	0.00028536	7.26%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	58.3	0.0090689	mg/L	0.00902628	0.0090689	mg/L	0.00902628	99.53%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	5.0	0.0030813	mg/L	0.00175419	0.0030813	mg/L	0.00175419	56.93%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	6.2	-0.0017931	mg/L	0.00004229	-0.0017931	mg/L	0.00004229	2.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-17.2	0.0014992	mg/L	0.00003417	0.0014992	mg/L	0.00003417	2.28%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	398.6	-0.261075	mg/L	0.0007872	-0.261075	mg/L	0.0007872	0.30%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	11.4	-0.0023075	mg/L	0.00038498	-0.0023075	mg/L	0.00038498	16.68%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-10.1	0.0011443	mg/L	0.00016152	0.0011443	mg/L	0.00016152	14.12%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	5.2	-0.0068100	mg/L	0.00008522	-0.0068100	mg/L	0.00008522	1.25%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	50.1	0.0014414	mg/L	0.00126147	0.0014414	mg/L	0.00126147	87.52%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	3.4	-0.0038492	mg/L	0.00148419	-0.0038492	mg/L	0.00148419	38.56%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	550.8	-9.32285	mg/L	7.817177	-9.32285	mg/L	7.817177	83.85%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	7.0	-0.235540	mg/L	0.0025628	-0.235540	mg/L	0.0025628	1.09%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-110.8	0.0004148	mg/L	0.00001749	0.0004148	mg/L	0.00001749	4.22%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	16.2	0.0025792	mg/L	0.00078710	0.0025792	mg/L	0.00078710	30.52%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	25.7	0.742058	mg/L	0.1574740	0.742058	mg/L	0.1574740	21.22%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-15.6	0.0001972	mg/L	0.00094271	0.0001972	mg/L	0.00094271	478.08%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.2	-0.0006797	mg/L	0.00135096	-0.0006797	mg/L	0.00135096	198.77%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	6.1	0.0026274	mg/L	0.00502320	0.0026274	mg/L	0.00502320	191.18%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	9.7	0.0045631	mg/L	0.00543644	0.0045631	mg/L	0.00543644	119.14%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.8	0.0016481	mg/L	0.00180307	0.0016481	mg/L	0.00180307	109.40%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	85.3	0.0009186	mg/L	0.00018481	0.0009186	mg/L	0.00018481	20.12%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-8.0	-0.0063277	mg/L	0.00064495	-0.0063277	mg/L	0.00064495	10.19%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-2.6	0.0040601	mg/L	0.00041944	0.0040601	mg/L	0.00041944	10.33%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-5.0	-0.0058447	mg/L	0.00033009	-0.0058447	mg/L	0.00033009	5.65%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	222.0	0.0046103	mg/L	0.00079376	0.0046103	mg/L	0.00079376	17.22%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	94.0	-0.0295929	mg/L	0.00509869	-0.0295929	mg/L	0.00509869	17.23%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 61 Autosampler Location: 59
Sample ID: AD18950-004 Date Collected: 8/31/2020 9:10:55 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: AD18950-004

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	423164.4	103	%	0.3				0.31%
Y 371.029	224805.7	123	%	0.4				0.34%
Ag 328.068†	-426.6	-0.0094922	mg/L	0.00019634	-0.0094922	mg/L	0.00019634	2.07%
Al 308.215†	1122098.2	124.834	mg/L	0.1137	124.834	mg/L	0.1137	0.09%
As 188.979†	450.9	0.229183	mg/L	0.0055574	0.229183	mg/L	0.0055574	2.42%
Ba 233.527†	72044.4	0.799149	mg/L	0.0015066	0.799149	mg/L	0.0015066	0.19%
Be 313.107†	-16148.1	-0.0105447	mg/L	0.00010858	-0.0105447	mg/L	0.00010858	1.03%
Ca 317.933†	1286056.4	13.4160	mg/L	0.00462	13.4160	mg/L	0.00462	0.03%
Cd 228.802†	124.6	0.0011978	mg/L	0.00023090	0.0011978	mg/L	0.00023090	19.28%
Co 228.616†	3214.3	0.109319	mg/L	0.0006262	0.109319	mg/L	0.0006262	0.57%
Cr 267.716†	19682.4	0.282562	mg/L	0.0011146	0.282562	mg/L	0.0011146	0.39%
Cu 327.393†	83750.1	1.19772	mg/L	0.001761	1.19772	mg/L	0.001761	0.15%
Fe 273.955†	2407867.4	257.503	mg/L	0.4825	257.503	mg/L	0.4825	0.19%
K 404.721†	39180.0	-533.950	mg/L	12.3765	-533.950	mg/L	12.3765	2.32%
Mg 279.077†	355705.6	30.7207	mg/L	0.02681	30.7207	mg/L	0.02681	0.09%
Mn 257.610†	960568.5	3.26354	mg/L	0.005528	3.26354	mg/L	0.005528	0.17%
Mo 202.031†	62.3	0.0065231	mg/L	0.00104725	0.0065231	mg/L	0.00104725	16.05%
Na 330.237†	-620.1	-0.794682	mg/L	0.1124895	-0.794682	mg/L	0.1124895	14.16%
Ni 231.604†	4742.5	0.153264	mg/L	0.0006991	0.153264	mg/L	0.0006991	0.46%
Pb 220.353†	2980.2	0.427316	mg/L	0.0030234	0.427316	mg/L	0.0030234	0.71%
Sb 206.836†	23.0	0.0101325	mg/L	0.00318759	0.0101325	mg/L	0.00318759	31.46%
Se 196.026†	-240.7	0.0198318	mg/L	0.00245697	0.0198318	mg/L	0.00245697	12.39%
Sn 189.927†	246.4	-0.0152750	mg/L	0.00116550	-0.0152750	mg/L	0.00116550	7.63%
Ti 334.940†	2560785.0	9.32144	mg/L	0.015502	9.32144	mg/L	0.015502	0.17%
Tl 190.801†	-190.2	0.0134320	mg/L	0.00483440	0.0134320	mg/L	0.00483440	35.99%
V 290.880†	21050.3	0.407812	mg/L	0.0013654	0.407812	mg/L	0.0013654	0.33%
Zn 206.200†	40112.9	0.719731	mg/L	0.0018196	0.719731	mg/L	0.0018196	0.25%
B 249.772	94654.9	0.243932	mg/L	0.0034008	0.243932	mg/L	0.0034008	1.39%
Si 251.611	66430.8	2.99476	mg/L	0.015856	2.99476	mg/L	0.015856	0.53%

Sequence No.: 62
Sample ID: AD18932-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 8/31/2020 9:15:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18932-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	410105.0	99.8	%	0.22				0.22%
Y 371.029	201249.4	110	%	0.1				0.06%
Ag 328.068†	272.0	-0.0015894	mg/L	0.00029067	-0.0015894	mg/L	0.00029067	18.29%
Al 308.215†	295346.2	32.8590	mg/L	0.10547	32.8590	mg/L	0.10547	0.32%
As 188.979†	243.3	0.118585	mg/L	0.0022338	0.118585	mg/L	0.0022338	1.88%
Ba 233.527†	2332925.2	25.9363	mg/L	0.11712	25.9363	mg/L	0.11712	0.45%
Be 313.107†	-23.6	0.0014945	mg/L	0.00001480	0.0014945	mg/L	0.00001480	0.99%
Ca 317.933†	2764866.3	29.1478	mg/L	0.06058	29.1478	mg/L	0.06058	0.21%
Cd 228.802†	3925.6	0.118919	mg/L	0.0004676	0.118919	mg/L	0.0004676	0.39%
Co 228.616†	242.7	0.0096232	mg/L	0.00040993	0.0096232	mg/L	0.00040993	4.26%
Cr 267.716†	300774.1	4.41627	mg/L	0.012645	4.41627	mg/L	0.012645	0.29%
Cu 327.393†	50159.9	0.717631	mg/L	0.0022447	0.717631	mg/L	0.0022447	0.31%
Fe 273.955†	861701.1	92.1497	mg/L	0.32175	92.1497	mg/L	0.32175	0.35%
K 404.721†	13950.0	-203.219	mg/L	6.8637	-203.219	mg/L	6.8637	3.38%
Mg 279.077†	216433.7	18.5999	mg/L	0.05436	18.5999	mg/L	0.05436	0.29%
Mn 257.610†	387729.3	1.31779	mg/L	0.003572	1.31779	mg/L	0.003572	0.27%
Mo 202.031†	176.3	0.0162870	mg/L	0.00052747	0.0162870	mg/L	0.00052747	3.24%
Na 330.237†	2374.0	6.32976	mg/L	0.123404	6.32976	mg/L	0.123404	1.95%
Ni 231.604†	3187.3	0.103232	mg/L	0.0003808	0.103232	mg/L	0.0003808	0.37%
Pb 220.353†	82028.4	11.4702	mg/L	0.03289	11.4702	mg/L	0.03289	0.29%
Sb 206.836†	310.7	0.137058	mg/L	0.0071289	0.137058	mg/L	0.0071289	5.20%
Se 196.026†	-63.7	0.0159120	mg/L	0.00227622	0.0159120	mg/L	0.00227622	14.31%
Sn 189.927†	2405.1	0.349122	mg/L	0.0012705	0.349122	mg/L	0.0012705	0.36%
Ti 334.940†	283098.0	1.03104	mg/L	0.005841	1.03104	mg/L	0.005841	0.57%
Tl 190.801†	-26.9	-0.0053164	mg/L	0.00100581	-0.0053164	mg/L	0.00100581	18.92%
V 290.880†	5246.6	0.102984	mg/L	0.0012106	0.102984	mg/L	0.0012106	1.18%
Zn 206.200†	1067918.6	19.3087	mg/L	0.13346	19.3087	mg/L	0.13346	0.69%
B 249.772	34694.8	0.0996859	mg/L	0.00301252	0.0996859	mg/L	0.00301252	3.02%
Si 251.611	62544.4	2.95864	mg/L	0.023078	2.95864	mg/L	0.023078	0.78%

Sequence No.: 63
Sample ID: AD18960-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 8/31/2020 9:20:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18960-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	404790.9	98.5	%	1.33				1.35%
Y 371.029	195856.5	107	%	1.4				1.27%
Ag 328.068†	-303.3	-0.0080969	mg/L	0.00101187	-0.0080969	mg/L	0.00101187	12.50%
Al 308.215†	419277.2	46.6464	mg/L	0.09164	46.6464	mg/L	0.09164	0.20%
As 188.979†	241.7	0.136185	mg/L	0.0036720	0.136185	mg/L	0.0036720	2.70%
Ba 233.527†	11850.8	0.129899	mg/L	0.0017142	0.129899	mg/L	0.0017142	1.32%
Be 313.107†	683.3	0.0020222	mg/L	0.00001123	0.0020222	mg/L	0.00001123	0.56%
Ca 317.933†	1190980.0	12.4045	mg/L	0.03103	12.4045	mg/L	0.03103	0.25%
Cd 228.802†	39.9	-0.0014254	mg/L	0.00020197	-0.0014254	mg/L	0.00020197	14.17%
Co 228.616†	217.6	0.0087812	mg/L	0.00038899	0.0087812	mg/L	0.00038899	4.43%
Cr 267.716†	10108.5	0.141769	mg/L	0.0017343	0.141769	mg/L	0.0017343	1.22%
Cu 327.393†	4435.7	0.0641223	mg/L	0.00107293	0.0641223	mg/L	0.00107293	1.67%
Fe 273.955†	2333322.0	249.531	mg/L	0.8717	249.531	mg/L	0.8717	0.35%
K 404.721†	42415.6	-453.592	mg/L	18.1895	-453.592	mg/L	18.1895	4.01%
Mg 279.077†	41976.1	3.41701	mg/L	0.014460	3.41701	mg/L	0.014460	0.42%
Mn 257.610†	77927.8	0.265488	mg/L	0.0005221	0.265488	mg/L	0.0005221	0.20%
Mo 202.031†	-13.2	0.0000586	mg/L	0.00075147	0.0000586	mg/L	0.00075147	>999.9%
Na 330.237†	37.6	0.770403	mg/L	0.0585956	0.770403	mg/L	0.0585956	7.61%
Ni 231.604†	572.5	0.0191151	mg/L	0.00040979	0.0191151	mg/L	0.00040979	2.14%
Pb 220.353†	1113.6	0.159220	mg/L	0.0019977	0.159220	mg/L	0.0019977	1.25%
Sb 206.836†	5.5	0.0023396	mg/L	0.00210147	0.0023396	mg/L	0.00210147	89.82%
Se 196.026†	-235.5	0.0182267	mg/L	0.00238955	0.0182267	mg/L	0.00238955	13.11%
Sn 189.927†	62.3	0.0067263	mg/L	0.00077543	0.0067263	mg/L	0.00077543	11.53%
Ti 334.940†	184339.8	0.671574	mg/L	0.0014793	0.671574	mg/L	0.0014793	0.22%
Tl 190.801†	-17.1	0.0014280	mg/L	0.00274400	0.0014280	mg/L	0.00274400	192.16%
V 290.880†	18583.2	0.358900	mg/L	0.0062327	0.358900	mg/L	0.0062327	1.74%
Zn 206.200†	9478.1	0.165667	mg/L	0.0026024	0.165667	mg/L	0.0026024	1.57%
B 249.772	88543.0	0.192312	mg/L	0.0234315	0.192312	mg/L	0.0234315	12.18%
Si 251.611	74648.3	3.28874	mg/L	0.051428	3.28874	mg/L	0.051428	1.56%

Sequence No.: 64
Sample ID: AD18960-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 8/31/2020 9:24:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18960-003

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	402909.7	98.1	%	0.70				0.72%
Y 371.029	205224.0	112	%	1.0				0.90%
Ag 328.068†	-150.4	-0.0063672	mg/L	0.00010409	-0.0063672	mg/L	0.00010409	1.63%
Al 308.215†	324447.0	36.0967	mg/L	0.08167	36.0967	mg/L	0.08167	0.23%
As 188.979†	13.7	0.0172613	mg/L	0.00371101	0.0172613	mg/L	0.00371101	21.50%
Ba 233.527†	38414.1	0.425238	mg/L	0.0040737	0.425238	mg/L	0.0040737	0.96%
Be 313.107†	-893.6	0.0008449	mg/L	0.00001398	0.0008449	mg/L	0.00001398	1.65%
Ca 317.933†	2383668.8	25.0926	mg/L	0.01044	25.0926	mg/L	0.01044	0.04%
Cd 228.802†	53.8	-0.0009929	mg/L	0.00013705	-0.0009929	mg/L	0.00013705	13.80%
Co 228.616†	933.1	0.0327858	mg/L	0.00037119	0.0327858	mg/L	0.00037119	1.13%
Cr 267.716†	5668.8	0.0764792	mg/L	0.00089671	0.0764792	mg/L	0.00089671	1.17%
Cu 327.393†	27543.7	0.394391	mg/L	0.0003924	0.394391	mg/L	0.0003924	0.10%
Fe 273.955†	837695.2	89.5824	mg/L	0.11687	89.5824	mg/L	0.11687	0.13%
K 404.721†	15409.9	-171.294	mg/L	15.6395	-171.294	mg/L	15.6395	9.13%
Mg 279.077†	137455.3	11.7265	mg/L	0.02524	11.7265	mg/L	0.02524	0.22%
Mn 257.610†	445063.4	1.51253	mg/L	0.002045	1.51253	mg/L	0.002045	0.14%
Mo 202.031†	3.1	0.0014572	mg/L	0.00076508	0.0014572	mg/L	0.00076508	52.50%
Na 330.237†	316.6	1.43428	mg/L	0.031899	1.43428	mg/L	0.031899	2.22%
Ni 231.604†	2244.5	0.0729031	mg/L	0.00115984	0.0729031	mg/L	0.00115984	1.59%
Pb 220.353†	13183.4	1.84567	mg/L	0.014434	1.84567	mg/L	0.014434	0.78%
Sb 206.836†	16.5	0.0072090	mg/L	0.00328031	0.0072090	mg/L	0.00328031	45.50%
Se 196.026†	-72.8	0.0107734	mg/L	0.00941957	0.0107734	mg/L	0.00941957	87.43%
Sn 189.927†	176.1	0.0193013	mg/L	0.00116112	0.0193013	mg/L	0.00116112	6.02%
Ti 334.940†	385650.2	1.40431	mg/L	0.007054	1.40431	mg/L	0.007054	0.50%
Tl 190.801†	-28.7	-0.0022835	mg/L	0.00284268	-0.0022835	mg/L	0.00284268	124.49%
V 290.880†	5940.0	0.116841	mg/L	0.0015316	0.116841	mg/L	0.0015316	1.31%
Zn 206.200†	76796.7	1.38320	mg/L	0.006406	1.38320	mg/L	0.006406	0.46%
B 249.772	32668.1	0.0822230	mg/L	0.00506602	0.0822230	mg/L	0.00506602	6.16%
Si 251.611	59755.0	2.60782	mg/L	0.036646	2.60782	mg/L	0.036646	1.41%

Sequence No.: 65
Sample ID: AD18960-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 8/31/2020 9:27:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18960-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	405917.5	98.8	%	1.15				1.17%
Y 371.029	224018.1	123	%	1.5				1.22%
Ag 328.068†	-230.3	-0.0072710	mg/L	0.00088331	-0.0072710	mg/L	0.00088331	12.15%
Al 308.215†	528149.7	58.7583	mg/L	0.03473	58.7583	mg/L	0.03473	0.06%
As 188.979†	15.9	0.0232766	mg/L	0.00170086	0.0232766	mg/L	0.00170086	7.31%
Ba 233.527†	46699.7	0.517360	mg/L	0.0012016	0.517360	mg/L	0.0012016	0.23%
Be 313.107†	-2028.3	-0.0000023	mg/L	0.00006840	-0.0000023	mg/L	0.00006840	>999.9%
Ca 317.933†	1871962.8	19.6489	mg/L	0.02285	19.6489	mg/L	0.02285	0.12%
Cd 228.802†	-21.7	-0.0033336	mg/L	0.00012671	-0.0033336	mg/L	0.00012671	3.80%
Co 228.616†	1824.2	0.0626816	mg/L	0.00085782	0.0626816	mg/L	0.00085782	1.37%
Cr 267.716†	8387.1	0.116454	mg/L	0.0019665	0.116454	mg/L	0.0019665	1.69%
Cu 327.393†	6779.5	0.0976203	mg/L	0.00046111	0.0976203	mg/L	0.00046111	0.47%
Fe 273.955†	1243484.4	132.979	mg/L	0.1740	132.979	mg/L	0.1740	0.13%
K 404.721†	21133.9	-271.080	mg/L	17.9655	-271.080	mg/L	17.9655	6.63%
Mg 279.077†	347263.4	29.9859	mg/L	0.02812	29.9859	mg/L	0.02812	0.09%
Mn 257.610†	1101278.5	3.74149	mg/L	0.001445	3.74149	mg/L	0.001445	0.04%
Mo 202.031†	-16.4	-0.0002170	mg/L	0.00076545	-0.0002170	mg/L	0.00076545	352.82%
Na 330.237†	286.2	1.36198	mg/L	0.038556	1.36198	mg/L	0.038556	2.83%
Ni 231.604†	3687.4	0.119321	mg/L	0.0018062	0.119321	mg/L	0.0018062	1.51%
Pb 220.353†	792.9	0.115498	mg/L	0.0036823	0.115498	mg/L	0.0036823	3.19%
Sb 206.836†	19.5	0.0085326	mg/L	0.00148002	0.0085326	mg/L	0.00148002	17.35%
Se 196.026†	-113.9	0.0142975	mg/L	0.00335468	0.0142975	mg/L	0.00335468	23.46%
Sn 189.927†	63.7	-0.0063409	mg/L	0.00171378	-0.0063409	mg/L	0.00171378	27.03%
Ti 334.940†	827172.0	3.01138	mg/L	0.004109	3.01138	mg/L	0.004109	0.14%
Tl 190.801†	-74.3	-0.0097674	mg/L	0.00251584	-0.0097674	mg/L	0.00251584	25.76%
V 290.880†	8636.8	0.167819	mg/L	0.0035127	0.167819	mg/L	0.0035127	2.09%
Zn 206.200†	17042.6	0.302480	mg/L	0.0045179	0.302480	mg/L	0.0045179	1.49%
B 249.772	64731.1	0.346396	mg/L	0.0111392	0.346396	mg/L	0.0111392	3.22%
Si 251.611	89077.0	3.90190	mg/L	0.043783	3.90190	mg/L	0.043783	1.12%

Sequence No.: 66
Sample ID: AD18960-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 64
Date Collected: 8/31/2020 9:32:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18960-007

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	406658.4	99.0	%	0.91				0.92%
Y 371.029	224428.6	123	%	0.8				0.65%
Ag 328.068†	-274.5	-0.0077711	mg/L	0.00074954	-0.0077711	mg/L	0.00074954	9.65%
Al 308.215†	727696.0	80.9574	mg/L	0.87429	80.9574	mg/L	0.87429	1.08%
As 188.979†	-23.3	0.0157378	mg/L	0.00175612	0.0157378	mg/L	0.00175612	11.16%
Ba 233.527†	47489.4	0.526140	mg/L	0.0053690	0.526140	mg/L	0.0053690	1.02%
Be 313.107†	-1947.4	0.0000581	mg/L	0.00004752	0.0000581	mg/L	0.00004752	81.80%
Ca 317.933†	3547545.0	37.4741	mg/L	0.40528	37.4741	mg/L	0.40528	1.08%
Cd 228.802†	-44.8	-0.0040474	mg/L	0.00057798	-0.0040474	mg/L	0.00057798	14.28%
Co 228.616†	3738.9	0.126917	mg/L	0.0009805	0.126917	mg/L	0.0009805	0.77%
Cr 267.716†	10461.6	0.146962	mg/L	0.0015585	0.146962	mg/L	0.0015585	1.06%
Cu 327.393†	35360.3	0.506110	mg/L	0.0048414	0.506110	mg/L	0.0048414	0.96%
Fe 273.955†	2029219.4	217.009	mg/L	2.6756	217.009	mg/L	2.6756	1.23%
K 404.721†	34355.6	-433.362	mg/L	2.3294	-433.362	mg/L	2.3294	0.54%
Mg 279.077†	584010.1	50.5898	mg/L	0.61381	50.5898	mg/L	0.61381	1.21%
Mn 257.610†	1106877.1	3.76051	mg/L	0.041047	3.76051	mg/L	0.041047	1.09%
Mo 202.031†	15.2	0.0024918	mg/L	0.00046957	0.0024918	mg/L	0.00046957	18.84%
Na 330.237†	1283.6	3.73519	mg/L	0.017975	3.73519	mg/L	0.017975	0.48%
Ni 231.604†	6324.8	0.204166	mg/L	0.0022010	0.204166	mg/L	0.0022010	1.08%
Pb 220.353†	1566.7	0.225703	mg/L	0.0026303	0.225703	mg/L	0.0026303	1.17%
Sb 206.836†	17.2	0.0075439	mg/L	0.00157344	0.0075439	mg/L	0.00157344	20.86%
Se 196.026†	-206.1	0.0138679	mg/L	0.00315751	0.0138679	mg/L	0.00315751	22.77%
Sn 189.927†	267.5	0.0201804	mg/L	0.00040152	0.0201804	mg/L	0.00040152	1.99%
Ti 334.940†	993625.4	3.61724	mg/L	0.039162	3.61724	mg/L	0.039162	1.08%
Tl 190.801†	-86.3	-0.0064332	mg/L	0.00380864	-0.0064332	mg/L	0.00380864	59.20%
V 290.880†	15895.5	0.307370	mg/L	0.0035266	0.307370	mg/L	0.0035266	1.15%
Zn 206.200†	61302.7	1.10297	mg/L	0.014376	1.10297	mg/L	0.014376	1.30%
B 249.772	107824.2	0.594685	mg/L	0.0059214	0.594685	mg/L	0.0059214	1.00%
Si 251.611	70390.7	3.13870	mg/L	0.053224	3.13870	mg/L	0.053224	1.70%

Sequence No.: 67
Sample ID: AD18960-015
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 65
Date Collected: 8/31/2020 9:37:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18960-015

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	400618.7	97.5	%	0.64				0.66%
Y 371.029	208566.9	114	%	0.7				0.65%
Ag 328.068†	-243.6	-0.0074212	mg/L	0.00026583	-0.0074212	mg/L	0.00026583	3.58%
Al 308.215†	584193.8	64.9931	mg/L	0.18529	64.9931	mg/L	0.18529	0.29%
As 188.979†	20.1	0.0273044	mg/L	0.00279988	0.0273044	mg/L	0.00279988	10.25%
Ba 233.527†	37768.5	0.418059	mg/L	0.0019995	0.418059	mg/L	0.0019995	0.48%
Be 313.107†	-3524.0	-0.0011191	mg/L	0.00002763	-0.0011191	mg/L	0.00002763	2.47%
Ca 317.933†	13954970.8	148.190	mg/L	1.0620	148.190	mg/L	1.0620	0.72%
Cd 228.802†	-3.4	-0.0027660	mg/L	0.00025069	-0.0027660	mg/L	0.00025069	9.06%
Co 228.616†	2818.3	0.0960346	mg/L	0.00118059	0.0960346	mg/L	0.00118059	1.23%
Cr 267.716†	16513.9	0.235965	mg/L	0.0013062	0.235965	mg/L	0.0013062	0.55%
Cu 327.393†	12380.8	0.177677	mg/L	0.0005519	0.177677	mg/L	0.0005519	0.31%
Fe 273.955†	1420149.8	151.872	mg/L	0.5313	151.872	mg/L	0.5313	0.35%
K 404.721†	23832.3	-311.538	mg/L	2.8513	-311.538	mg/L	2.8513	0.92%
Mg 279.077†	774404.6	67.1597	mg/L	0.21444	67.1597	mg/L	0.21444	0.32%
Mn 257.610†	860002.6	2.92195	mg/L	0.008499	2.92195	mg/L	0.008499	0.29%
Mo 202.031†	-0.6	0.0011408	mg/L	0.00044038	0.0011408	mg/L	0.00044038	38.60%
Na 330.237†	932.7	2.90024	mg/L	0.104673	2.90024	mg/L	0.104673	3.61%
Ni 231.604†	20672.8	0.665733	mg/L	0.0026326	0.665733	mg/L	0.0026326	0.40%
Pb 220.353†	1737.3	0.248099	mg/L	0.0044139	0.248099	mg/L	0.0044139	1.78%
Sb 206.836†	26.8	0.0117664	mg/L	0.00354846	0.0117664	mg/L	0.00354846	30.16%
Se 196.026†	-115.8	0.0158183	mg/L	0.00432862	0.0158183	mg/L	0.00432862	27.36%
Sn 189.927†	176.9	0.0096205	mg/L	0.00102836	0.0096205	mg/L	0.00102836	10.69%
Ti 334.940†	860511.1	3.13272	mg/L	0.014002	3.13272	mg/L	0.014002	0.45%
Tl 190.801†	-72.6	-0.0044911	mg/L	0.00094369	-0.0044911	mg/L	0.00094369	21.01%
V 290.880†	12351.5	0.240885	mg/L	0.0010213	0.240885	mg/L	0.0010213	0.42%
Zn 206.200†	31979.2	0.572624	mg/L	0.0037073	0.572624	mg/L	0.0037073	0.65%
B 249.772	55082.9	0.134176	mg/L	0.0056317	0.134176	mg/L	0.0056317	4.20%
Si 251.611	100042.8	4.39576	mg/L	0.028845	4.39576	mg/L	0.028845	0.66%

Sequence No.: 68
Sample ID: AD18960-017
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 8/31/2020 9:41:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18960-017

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	408290.4	99.4	%	1.29				1.30%
Y 371.029	199482.4	109	%	1.3				1.20%
Ag 328.068†	-85.5	-0.0056331	mg/L	0.00012492	-0.0056331	mg/L	0.00012492	2.22%
Al 308.215†	321930.1	35.8167	mg/L	0.05796	35.8167	mg/L	0.05796	0.16%
As 188.979†	22.0	0.0218763	mg/L	0.00096185	0.0218763	mg/L	0.00096185	4.40%
Ba 233.527†	33002.6	0.365071	mg/L	0.0053385	0.365071	mg/L	0.0053385	1.46%
Be 313.107†	-2670.9	-0.0004821	mg/L	0.00002782	-0.0004821	mg/L	0.00002782	5.77%
Ca 317.933†	7287385.9	77.2591	mg/L	1.71255	77.2591	mg/L	1.71255	2.22%
Cd 228.802†	8.5	-0.0023973	mg/L	0.00038372	-0.0023973	mg/L	0.00038372	16.01%
Co 228.616†	1524.6	0.0526295	mg/L	0.00089859	0.0526295	mg/L	0.00089859	1.71%
Cr 267.716†	9354.8	0.130684	mg/L	0.0022405	0.130684	mg/L	0.0022405	1.71%
Cu 327.393†	13737.3	0.197064	mg/L	0.0008401	0.197064	mg/L	0.0008401	0.43%
Fe 273.955†	913145.0	97.6513	mg/L	2.30740	97.6513	mg/L	2.30740	2.36%
K 404.721†	15292.5	-206.945	mg/L	4.8452	-206.945	mg/L	4.8452	2.34%
Mg 279.077†	365199.1	31.5469	mg/L	0.10483	31.5469	mg/L	0.10483	0.33%
Mn 257.610†	567711.1	1.92913	mg/L	0.005720	1.92913	mg/L	0.005720	0.30%
Mo 202.031†	27.2	0.0035217	mg/L	0.00187836	0.0035217	mg/L	0.00187836	53.34%
Na 330.237†	369.7	1.56064	mg/L	0.062521	1.56064	mg/L	0.062521	4.01%
Ni 231.604†	8584.2	0.276849	mg/L	0.0045321	0.276849	mg/L	0.0045321	1.64%
Pb 220.353†	2092.2	0.295051	mg/L	0.0039146	0.295051	mg/L	0.0039146	1.33%
Sb 206.836†	16.6	0.0072717	mg/L	0.00129845	0.0072717	mg/L	0.00129845	17.86%
Se 196.026†	-72.2	0.0122284	mg/L	0.00427974	0.0122284	mg/L	0.00427974	35.00%
Sn 189.927†	167.8	0.0150070	mg/L	0.00317748	0.0150070	mg/L	0.00317748	21.17%
Ti 334.940†	534529.9	1.94621	mg/L	0.044221	1.94621	mg/L	0.044221	2.27%
Tl 190.801†	-51.7	-0.0072258	mg/L	0.00301117	-0.0072258	mg/L	0.00301117	41.67%
V 290.880†	7163.2	0.140796	mg/L	0.0023754	0.140796	mg/L	0.0023754	1.69%
Zn 206.200†	25263.0	0.451154	mg/L	0.0061679	0.451154	mg/L	0.0061679	1.37%
B 249.772	39207.7	0.139359	mg/L	0.0138895	0.139359	mg/L	0.0138895	9.97%
Si 251.611	70585.5	3.08323	mg/L	0.113081	3.08323	mg/L	0.113081	3.67%

Sequence No.: 69
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 8/31/2020 9:45:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	397201.6	96.7	%	0.46				0.47%
Y 371.029	149655.6	82.0	%	0.40				0.49%
Ag 328.068†	6817.1	0.0724506	mg/L	0.00098313	0.0724506	mg/L	0.00098313	1.36%
QC value less than the lower limit for Ag 328.068 Recovery = 72.45%								
Al 308.215†	44567.9	4.94935	mg/L	0.007661	4.94935	mg/L	0.007661	0.15%
QC value within limits for Al 308.215 Recovery = 98.99%								
As 188.979†	1113.9	0.489269	mg/L	0.0032833	0.489269	mg/L	0.0032833	0.67%
QC value within limits for As 188.979 Recovery = 97.85%								
Ba 233.527†	44263.1	0.490268	mg/L	0.0006448	0.490268	mg/L	0.0006448	0.13%
QC value within limits for Ba 233.527 Recovery = 98.05%								
Be 313.107†	644912.4	0.483027	mg/L	0.0010416	0.483027	mg/L	0.0010416	0.22%
QC value within limits for Be 313.107 Recovery = 96.61%								
Ca 317.933†	4856293.9	51.3968	mg/L	0.10795	51.3968	mg/L	0.10795	0.21%
QC value within limits for Ca 317.933 Recovery = 102.79%								
Cd 228.802†	16514.8	0.508823	mg/L	0.0010485	0.508823	mg/L	0.0010485	0.21%
QC value within limits for Cd 228.802 Recovery = 101.76%								
Co 228.616†	14551.7	0.489678	mg/L	0.0006291	0.489678	mg/L	0.0006291	0.13%
QC value within limits for Co 228.616 Recovery = 97.94%								
Cr 267.716†	35815.5	0.519814	mg/L	0.0010571	0.519814	mg/L	0.0010571	0.20%
QC value within limits for Cr 267.716 Recovery = 103.96%								
Cu 327.393†	34842.4	0.498708	mg/L	0.0005912	0.498708	mg/L	0.0005912	0.12%
QC value within limits for Cu 327.393 Recovery = 99.74%								
Fe 273.955†	47438.9	5.06910	mg/L	0.016742	5.06910	mg/L	0.016742	0.33%
QC value within limits for Fe 273.955 Recovery = 101.38%								
K 404.721†	4684.0	29.1305	mg/L	7.64154	29.1305	mg/L	7.64154	26.23%
QC value less than the lower limit for K 404.721 Recovery = 58.26%								
Mg 279.077†	595203.5	51.5640	mg/L	0.17054	51.5640	mg/L	0.17054	0.33%
QC value within limits for Mg 279.077 Recovery = 103.13%								
Mn 257.610†	145888.2	0.496328	mg/L	0.0007549	0.496328	mg/L	0.0007549	0.15%
QC value within limits for Mn 257.610 Recovery = 99.27%								
Mo 202.031†	5654.8	0.485418	mg/L	0.0023991	0.485418	mg/L	0.0023991	0.49%
QC value within limits for Mo 202.031 Recovery = 97.08%								
Na 330.237†	20578.0	49.6448	mg/L	0.21541	49.6448	mg/L	0.21541	0.43%
QC value within limits for Na 330.237 Recovery = 99.29%								
Ni 231.604†	15279.2	0.492224	mg/L	0.0010225	0.492224	mg/L	0.0010225	0.21%
QC value within limits for Ni 231.604 Recovery = 98.44%								
Pb 220.353†	3524.5	0.492481	mg/L	0.0018868	0.492481	mg/L	0.0018868	0.38%
QC value within limits for Pb 220.353 Recovery = 98.50%								
Sb 206.836†	1062.6	0.474510	mg/L	0.0221565	0.474510	mg/L	0.0221565	4.67%
QC value within limits for Sb 206.836 Recovery = 94.90%								
Se 196.026†	1102.7	0.490409	mg/L	0.0039178	0.490409	mg/L	0.0039178	0.80%
QC value within limits for Se 196.026 Recovery = 98.08%								
Sn 189.927†	3344.2	0.490196	mg/L	0.0027838	0.490196	mg/L	0.0027838	0.57%
QC value within limits for Sn 189.927 Recovery = 98.04%								
Ti 334.940†	137191.6	0.499963	mg/L	0.0000979	0.499963	mg/L	0.0000979	0.02%
QC value within limits for Ti 334.940 Recovery = 99.99%								
Tl 190.801†	1120.4	0.506999	mg/L	0.0017761	0.506999	mg/L	0.0017761	0.35%
QC value within limits for Tl 190.801 Recovery = 101.40%								
V 290.880†	24285.8	0.496121	mg/L	0.0006893	0.496121	mg/L	0.0006893	0.14%
QC value within limits for V 290.880 Recovery = 99.22%								
Zn 206.200†	29419.7	0.526332	mg/L	0.0002616	0.526332	mg/L	0.0002616	0.05%
QC value within limits for Zn 206.200 Recovery = 105.27%								
B 249.772	37284.4	0.498413	mg/L	0.0012461	0.498413	mg/L	0.0012461	0.25%
QC value within limits for B 249.772 Recovery = 99.68%								
Si 251.611	123363.9	5.32493	mg/L	0.035015	5.32493	mg/L	0.035015	0.66%
QC value within limits for Si 251.611 Recovery = 106.50%								

QC Failed. Continue with analysis.

Sequence No.: 70 Autosampler Location: 1
Sample ID: CCB V-333667 Date Collected: 8/31/2020 9:50:02 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	403654.1	98.2	%	0.80				0.81%
Y 371.029	180548.4	98.9	%	0.79				0.80%
Ag 328.068†	24.8	-0.0043859	mg/L	0.00057354	-0.0043859	mg/L	0.00057354	13.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	84.5	0.0120013	mg/L	0.00362477	0.0120013	mg/L	0.00362477	30.20%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	5.1	0.0031179	mg/L	0.00512519	0.0031179	mg/L	0.00512519	164.38%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	2.5	-0.0018334	mg/L	0.00011458	-0.0018334	mg/L	0.00011458	6.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-10.6	0.0015042	mg/L	0.00001159	0.0015042	mg/L	0.00001159	0.77%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	-164.2	-0.267061	mg/L	0.0004794	-0.267061	mg/L	0.0004794	0.18%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	5.0	-0.0025048	mg/L	0.00022707	-0.0025048	mg/L	0.00022707	9.07%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.0	0.0015169	mg/L	0.00029492	0.0015169	mg/L	0.00029492	19.44%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-18.1	-0.0071528	mg/L	0.00033493	-0.0071528	mg/L	0.00033493	4.68%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	87.6	0.0019764	mg/L	0.00106008	0.0019764	mg/L	0.00106008	53.64%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-18.2	-0.0061659	mg/L	0.00168050	-0.0061659	mg/L	0.00168050	27.25%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	1923.1	10.5412	mg/L	11.71462	10.5412	mg/L	11.71462	111.13%
QC value greater than the upper limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	-9.0	-0.236928	mg/L	0.0025303	-0.236928	mg/L	0.0025303	1.07%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-208.2	0.0000840	mg/L	0.00003119	0.0000840	mg/L	0.00003119	37.14%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	11.0	0.0021315	mg/L	0.00032933	0.0021315	mg/L	0.00032933	15.45%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-40.9	0.583582	mg/L	0.1653771	0.583582	mg/L	0.1653771	28.34%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-10.6	0.0003578	mg/L	0.00015774	0.0003578	mg/L	0.00015774	44.09%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-3.8	-0.0012506	mg/L	0.00145844	-0.0012506	mg/L	0.00145844	116.62%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	10.1	0.0043856	mg/L	0.00262253	0.0043856	mg/L	0.00262253	59.80%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	3.0	0.0015831	mg/L	0.00362354	0.0015831	mg/L	0.00362354	228.89%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-3.0	0.0009298	mg/L	0.00120025	0.0009298	mg/L	0.00120025	129.08%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	134.0	0.0010958	mg/L	0.00015302	0.0010958	mg/L	0.00015302	13.96%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-5.3	-0.0051575	mg/L	0.00213251	-0.0051575	mg/L	0.00213251	41.35%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-10.5	0.0038962	mg/L	0.00032361	0.0038962	mg/L	0.00032361	8.31%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-22.3	-0.0061578	mg/L	0.00011164	-0.0061578	mg/L	0.00011164	1.81%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	229.0	0.0047159	mg/L	0.00088103	0.0047159	mg/L	0.00088103	18.68%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	51.5	-0.0314236	mg/L	0.00091233	-0.0314236	mg/L	0.00091233	2.90%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334003

Prepared By: Silva, Amanda
Description: Hg Intermediate Standard -WARNING
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29607
Concentration: .25 ppm
Final Volume: 500 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13311	MERCURY 1000 PPM	.125 ml	1000 ug/ml	
13421	nitric acid	12.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334004

Prepared By: Silva, Amanda
Description: Hg intermediate Control -WARNING
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29607
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334006

Prepared By: Silva, Amanda
Description: Aquaregia
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: 0 neat
Final Volume: 80 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13421	nitric acid	20 ml	neat neat	
13422	hydrochloric acid	60 ml	neat neat	

Veritech Lot Number: V-334007

Prepared By: Silva, Amanda
Description: Hg Soil ICV Soil
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: 20 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334004	Hg intermediate Control -WARNING	.5 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334008

Prepared By: Silva, Amanda
Description: Hg soil CCV 10ppb
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: 10 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334004	Hg intermediate Control -WARNING	.25 ml	1.0 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334009

Prepared By: Silva, Amanda
Description: Hg soil standard blk
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: 0 ppm
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			

Veritech Lot Number: V-334010

Prepared By: Silva, Amanda
Description: Hg soil standard .2 ppb
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: .2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	.02 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334011

Prepared By: Silva, Amanda
Description: Hg soil standard .5 ppb
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: .5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	.05 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334012

Prepared By: Silva, Amanda
Description: Hg soil standard 1 ppb
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: 1 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	.1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334013

Prepared By: Silva, Amanda
Description: Hg soil standard 2 ppb
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: 2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	.2 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334014

Prepared By: Silva, Amanda
Description: Hg soil standard 5 ppb
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: 5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	.5 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334015

Prepared By:	Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description:	Hg soil standard 10 ppb	BatchNumber: B-29608	ApproveDate: 09/02/20
Prep Date:	8/31/2020	Concentration: 10 ppb	Checked: Yes
Expiration Date:	8/31/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334016

Prepared By:	Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description:	Hg soil standard 25 ppb	BatchNumber: B-29608	ApproveDate: 09/02/20
Prep Date:	8/31/2020	Concentration: 25 ppb	Checked: Yes
Expiration Date:	8/31/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	2.5 ml	.25 ppm	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13311

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP	140-051-801	S200130001	06/04/20	12/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13422

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T. BAKER	9530-33	253057	07/28/20	01/21/25	Burwell, John	6	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-317822

Prepared By: Aliano, Carmela
Description: Hydroxylamine Hydrochloride WARNIN
Prep Date: 12/13/2019
Expiration Date: 1/8/2020
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 10 l
ApprovedBy: shiamala
ApproveDate: 12/16/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12651	DI H2O			
12218	Sodium Chloride	1200 g	neat neat	
12619	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-331286

Prepared By: Lucca, Daniela
Description: 5% Potassium Permanganate WARNIN
Prep Date: 7/13/2020
Expiration Date: 2/13/2021
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12621	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-333999

Prepared By: Ransaw, Brianna
Description: 3% HCL WARNING
Prep Date: 8/31/2020
Expiration Date: 9/10/2020
Department: WetChem
BatchNumber:
Concentration: 3 %
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13130	hydrochloric acid	600 ml	neat neat	3%
13084	DI H20			

Veritech Lot Number: V-334000

Prepared By: Ransaw, Brianna
Description: SnCl2 "WARNING:"
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber:
Concentration: reagent I
Final Volume: 2 l
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333999	3% HCL WARNING	2000 ml	3 %	
13089	STANNOUS CHOLORIDE	26.4 g		

Veritech Lot Number: V-334004

Prepared By: Silva, Amanda
Description: Hg intermediate Control -WARNING
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29607
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12218

Description
Sodium Chloride

ApprovedBy: akmal
ApproveDate: 12/31/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	SX0420-5	17F145203	12/27/18	12/26/23	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12619

Description
HYDROXYLAMINE HYDROCHLORIDE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LS-1580015	190318-4C	06/25/19	06/24/23	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12621

Description
POTASSIUM PERMANGANATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-T10208	190318-3C	06/25/19	06/24/29	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12651

Description
DI H2O

ApprovedBy: janee
ApproveDate: 10/10/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	07/08/19	07/07/20	Cousineau, Paul	1			

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13089

Description
STANNOUS CHOLORIDE

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB CHEM	LC-P33805	190620-3C	02/15/20	02/14/23	Aliano, Carmela	1	1Gal		

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

H26170S
SnCl2V-334000
8/31/20
BR

Analysis Begun

Logged In Analyst: usermet
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26170S.sif
Batch ID: H26170S
Results Data Set: H26170S
Results Library: C:\data-AA\johns\Results\Results.mdb

Method Loaded
Method Name: HGCV3 Soil (7471B)
Method Last Saved: 2/11/2020 1:24:07 PM
Method Description: HgCV3 Soil (7471B)

9/3/20

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calibration Blank
Date Collected: 8/31/2020 11:46:12 AM
Analyst:
Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0008	0.0001	11:46:58	Yes
2		[0.00]	0.0001	0.0010	0.0001	11:47:31	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	1.91				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 2
Sample ID: .2 PPB
Date Collected: 8/31/2020 11:47:32 AM
Analyst:
Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0016	0.0067	0.0017	11:48:18	Yes
2		[0.2]	0.0016	0.0066	0.0017	11:48:50	Yes
Mean:		[0.2]	0.0016				
SD:		0.0	0.0000				
%RSD:		0.0	0.92				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00791 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 3
Sample ID: .5 PPB
Date Collected: 8/31/2020 11:48:52 AM
Analyst:
Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0036	0.0139	0.0037	11:49:37	Yes
2		[0.5]	0.0036	0.0136	0.0037	11:50:10	Yes
Mean:		[0.5]	0.0036				
SD:		0.0	0.0000				
%RSD:		0.0	0.76				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.998897 Slope: 0.00713 Intercept: 0.00006

Sequence No.: 4
Autosampler Location: 4
Sample ID: 1 PPB
Date Collected: 8/31/2020 11:50:11 AM
Analyst:
Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[1]	0.0071	0.0267	0.0072	11:50:57	Yes
2	[1]	0.0071	0.0265	0.0072	11:51:30	Yes
Mean:	[1]	0.0071				
SD:	0	0.0000				
%RSD:	0	0.13				

Standard number 3 applied. [1]
Correlation Coef.: 0.999727 Slope: 0.00705 Intercept: 0.00007

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: 2 PPB **Date Collected: 8/31/2020 11:51:31 AM**
Analyst: **Data Type: Original**

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0142	0.0527	0.0143	11:52:16	Yes
2		[2]	0.0142	0.0531	0.0143	11:52:49	Yes
Mean:		[2]	0.0142				
SD:		0	0.0000				
%RSD:		0	0.28				

Standard number 4 applied. [2]
Correlation Coef.: 0.999939 Slope: 0.00707 Intercept: 0.00007

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: 5 PPB **Date Collected: 8/31/2020 11:52:50 AM**
Analyst: **Data Type: Original**

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0359	0.1337	0.0360	11:53:36	Yes
2		[5]	0.0357	0.1326	0.0358	11:54:09	Yes
Mean:		[5]	0.0358				
SD:		0	0.0001				
%RSD:		0	0.33				

Standard number 5 applied. [5]
Correlation Coef.: 0.999981 Slope: 0.00715 Intercept: 0.00002

Sequence No.: 7 **Autosampler Location: 7**
Sample ID: 10 PPB **Date Collected: 8/31/2020 11:54:10 AM**
Analyst: **Data Type: Original**

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0710	0.2639	0.0711	11:54:55	Yes
2		[10]	0.0704	0.2610	0.0705	11:55:28	Yes
Mean:		[10]	0.0707				
SD:		0	0.0004				
%RSD:		0	0.56				

Standard number 6 applied. [10]
Correlation Coef.: 0.999981 Slope: 0.00707 Intercept: 0.00010

Sequence No.: 8 **Autosampler Location: 8**
Sample ID: 25 PPB **Date Collected: 8/31/2020 11:55:53 AM**
Analyst: **Data Type: Original**

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[25]	0.1698	0.6317	0.1699	11:56:43	Yes
2		[25]	0.1690	0.6278	0.1691	11:57:16	Yes
Mean:		[25]	0.1694				
SD:		0	0.0005				
%RSD:		0	0.32				

Standard number 7 applied. [25]
Correlation Coef.: 0.999835 Slope: 0.00679 Intercept: 0.00071

Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.105	0.00	1.9
.2 PPB	0.0016	0.2	0.128	0.00	0.9
.5 PPB	0.0036	0.5	0.423	0.00	0.8
1 PPB	0.0071	1.0	0.942	0.00	0.1
2 PPB	0.0142	2.0	1.987	0.00	0.3
5 PPB	0.0358	5.0	5.167	0.00	0.3
10 PPB	0.0707	10.0	10.307	0.00	0.6
25 PPB	0.1694	25.0	24.849	0.00	0.3

Correlation Coef.: 0.999835 Slope: 0.00679 Intercept: 0.00071

Sequence No.: 9 **Autosampler Location: 10**
Sample ID: ICV (2) **Date Collected: 8/31/2020 11:57:42 AM**
Analyst: **Data Type: Original**

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.37	20.37	0.1390	0.5158	0.1391	11:58:29	Yes
2	20.28	20.28	0.1384	0.5113	0.1385	11:59:01	Yes
Mean:	20.33	20.33	0.1387				
SD:	0.065	0.065	0.0004				
%RSD:	0.320	0.320	0.32				

QC value within limits for Hg 253.7 Recovery = 101.64%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 8/31/2020 11:59:24 AM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.117	-0.117	-0.0001	-0.0007	0.0000	12:00:11	Yes
2	-0.116	-0.116	-0.0001	-0.0004	0.0000	12:00:44	Yes
Mean:	-0.116	-0.116	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.027	1.027	10.25				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 11**
Sample ID: MB 85228 (167) **Date Collected: 8/31/2020 12:00:45 PM**
Analyst: **Data Type: Original**

Replicate Data: MB 85228 (167)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.059	-0.059	0.0003	0.0013	0.0004	12:01:31	Yes
2	-0.057	-0.057	0.0003	0.0013	0.0004	12:02:04	Yes
Mean:	-0.058	-0.058	0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	2.939	2.939	3.65				

Sequence No.: 12 **Autosampler Location: 12**
Sample ID: LCS 85228 **Date Collected: 8/31/2020 12:02:05 PM**
Analyst: **Data Type: Original**

Replicate Data: LCS 85228

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	22.96	22.96	0.1566	0.5798	0.1567	12:02:51	Yes
2	22.94	22.94	0.1565	0.5775	0.1566	12:03:23	Yes
Mean:	22.95	22.95	0.1565				

SD:	0.011	0.011	0.0001
%RSD:	0.047	0.047	0.05

Sequence No.: 13 Autosampler Location: 13
Sample ID: LCS MR 85228 Date Collected: 8/31/2020 12:03:47 PM
Analyst: Data Type: Original

H261705 SnCl2 v-335000 8/31/20 BR

Replicate Data: LCS MR 85228

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.55	20.55	0.1402	0.5185	0.1403	12:04:35	Yes
2	20.43	20.43	0.1394	0.5144	0.1396	12:05:08	Yes
Mean:	20.49	20.49	0.1398				
SD:	0.081	0.081	0.0005				
%RSD:	0.393	0.393	0.39				

Sequence No.: 14 Autosampler Location: 14
Sample ID: LCS 4D Date Collected: 8/31/2020 12:05:31 PM
Analyst: Data Type: Original

Replicate Data: LCS 4D

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.015	5.015	0.0348	0.1294	0.0349	12:06:20	Yes
2	4.998	4.998	0.0346	0.1284	0.0348	12:06:52	Yes
Mean:	5.007	5.007	0.0347				
SD:	0.012	0.012	0.0001				
%RSD:	0.239	0.239	0.23				

Sequence No.: 15 Autosampler Location: 15
Sample ID: LCS 4D MR Date Collected: 8/31/2020 12:06:54 PM
Analyst: Data Type: Original

Replicate Data: LCS 4D MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.336	5.336	0.0369	0.1372	0.0370	12:07:39	Yes
2	5.300	5.300	0.0367	0.1363	0.0368	12:08:11	Yes
Mean:	5.318	5.318	0.0368				
SD:	0.026	0.026	0.0002				
%RSD:	0.481	0.481	0.47				

Sequence No.: 16 Autosampler Location: 16
Sample ID: AD18955-001 Date Collected: 8/31/2020 12:08:13 PM
Analyst: Data Type: Original

Replicate Data: AD18955-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.840	0.840	0.0064	0.0238	0.0065	12:08:58	Yes
2	0.836	0.836	0.0064	0.0237	0.0065	12:09:31	Yes
Mean:	0.838	0.838	0.0064				
SD:	0.003	0.003	0.0000				
%RSD:	0.354	0.354	0.31				

Sequence No.: 17 Autosampler Location: 17
Sample ID: AD18955-001 MR Date Collected: 8/31/2020 12:09:32 PM
Analyst: Data Type: Original

Replicate Data: AD18955-001 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.658	0.658	0.0052	0.0192	0.0053	12:10:18	Yes
2	0.649	0.649	0.0051	0.0190	0.0052	12:10:50	Yes
Mean:	0.654	0.654	0.0051				
SD:	0.007	0.007	0.0000				

%RSD: 1.000 1.000 0.86

Sequence No.: 18 Autosampler Location: 18
Sample ID: AD18955-002 MS 1 Date Collected: 8/31/2020 12:10:52 PM
Analyst: Data Type: Original

Replicate Data: AD18955-002 MS 1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.910	9.910	0.0680	0.2500	0.0681	12:11:37	Yes
2	9.941	9.941	0.0682	0.2493	0.0683	12:12:10	Yes
Mean:	9.925	9.925	0.0681				
SD:	0.022	0.022	0.0002				
%RSD:	0.223	0.223	0.22				

Sequence No.: 19 Autosampler Location: 19
Sample ID: AD18955-003 MS 2 Date Collected: 8/31/2020 12:12:36 PM
Analyst: Data Type: Original

Replicate Data: AD18955-003 MS 2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.942	9.942	0.0682	0.2494	0.0683	12:13:22	Yes
2	9.922	9.922	0.0681	0.2483	0.0682	12:13:54	Yes
Mean:	9.932	9.932	0.0681				
SD:	0.014	0.014	0.0001				
%RSD:	0.144	0.144	0.14				

Sequence No.: 20 Autosampler Location: 20
Sample ID: AD18934-001 Date Collected: 8/31/2020 12:14:16 PM
Analyst: Data Type: Original

Replicate Data: AD18934-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.232	0.232	0.0023	0.0081	0.0024	12:15:03	Yes
2	0.231	0.231	0.0023	0.0083	0.0024	12:15:35	Yes
Mean:	0.231	0.231	0.0023				
SD:	0.000	0.000	0.0000				
%RSD:	0.178	0.178	0.12				

Sequence No.: 21 Autosampler Location: 9
Sample ID: CCV Date Collected: 8/31/2020 12:15:36 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.30	10.30	0.0707	0.2588	0.0708	12:16:23	Yes
2	10.28	10.28	0.0705	0.2568	0.0706	12:16:55	Yes
Mean:	10.29	10.29	0.0706				
SD:	0.020	0.020	0.0001				
%RSD:	0.198	0.198	0.20				

QC value within limits for Hg 253.7 Recovery = 102.89%
All analyte(s) passed QC.

Sequence No.: 22 Autosampler Location: 1
Sample ID: CCB Date Collected: 8/31/2020 12:17:18 PM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.114	-0.114	-0.0001	-0.0001	0.0001	12:18:04	Yes
2	-0.112	-0.112	-0.0000	0.0000	0.0001	12:18:37	Yes
Mean:	-0.113	-0.113	-0.0001				

SD:	0.001	0.001	0.0000
%RSD:	1.105	1.105	15.60

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 23 Autosampler Location: 21
Sample ID: AD18934-002 Date Collected: 8/31/2020 12:18:38 PM
Analyst: Data Type: Original

Replicate Data: AD18934-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	0.0007	0.0026	0.0008	12:19:26	Yes
2	-0.002	-0.002	0.0007	0.0027	0.0008	12:19:58	Yes
Mean:	-0.004	-0.004	0.0007				
SD:	0.003	0.003	0.0000				
%RSD:	76.59	76.59	3.41				

Sequence No.: 24 Autosampler Location: 22
Sample ID: AD18934-003 Date Collected: 8/31/2020 12:19:59 PM
Analyst: Data Type: Original

Replicate Data: AD18934-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.016	0.016	0.0008	0.0030	0.0009	12:20:45	Yes
2	0.019	0.019	0.0008	0.0032	0.0010	12:21:18	Yes
Mean:	0.018	0.018	0.0008				
SD:	0.003	0.003	0.0000				
%RSD:	14.47	14.47	2.08				

Sequence No.: 25 Autosampler Location: 23
Sample ID: AD18934-004 Date Collected: 8/31/2020 12:21:19 PM
Analyst: Data Type: Original

Replicate Data: AD18934-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.033	-0.033	0.0005	0.0019	0.0006	12:22:04	Yes
2	-0.036	-0.036	0.0005	0.0015	0.0006	12:22:37	Yes
Mean:	-0.035	-0.035	0.0005				
SD:	0.002	0.002	0.0000				
%RSD:	6.500	6.500	3.22				

Sequence No.: 26 Autosampler Location: 24
Sample ID: AD18934-005 Date Collected: 8/31/2020 12:22:38 PM
Analyst: Data Type: Original

Replicate Data: AD18934-005

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.124	0.124	0.0016	0.0058	0.0017	12:23:24	Yes
2	0.129	0.129	0.0016	0.0060	0.0017	12:23:56	Yes
Mean:	0.127	0.127	0.0016				
SD:	0.003	0.003	0.0000				
%RSD:	2.317	2.317	1.27				

Sequence No.: 27 Autosampler Location: 25
Sample ID: AD18955-004 Date Collected: 8/31/2020 12:23:58 PM
Analyst: Data Type: Original

Replicate Data: AD18955-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.021	-0.021	0.0006	0.0020	0.0007	12:24:43	Yes
2	-0.019	-0.019	0.0006	0.0023	0.0007	12:25:16	Yes

Mean:	-0.020	-0.020	0.0006
SD:	0.001	0.001	0.0000
%RSD:	4.688	4.688	1.12

Sequence No.: 28 Autosampler Location: 26
Sample ID: AD18955-005 Date Collected: 8/31/2020 12:25:17 PM
Analyst: Data Type: Original

Replicate Data: AD18955-005

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.128	0.128	0.0016	0.0057	0.0017	12:26:03	Yes
2	0.130	0.130	0.0016	0.0057	0.0017	12:26:36	Yes
Mean:	0.129	0.129	0.0016				
SD:	0.001	0.001	0.0000				
%RSD:	0.784	0.784	0.43				

Sequence No.: 29 Autosampler Location: 27
Sample ID: AD18949-014 Date Collected: 8/31/2020 12:26:37 PM
Analyst: Data Type: Original

Replicate Data: AD18949-014

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.789	0.789	0.0061	0.0220	0.0062	12:27:22	Yes
2	0.791	0.791	0.0061	0.0219	0.0062	12:27:55	Yes
Mean:	0.790	0.790	0.0061				
SD:	0.001	0.001	0.0000				
%RSD:	0.172	0.172	0.15				

Sequence No.: 30 Autosampler Location: 28
Sample ID: AD18950-004 Date Collected: 8/31/2020 12:27:56 PM
Analyst: Data Type: Original

Replicate Data: AD18950-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.358	0.358	0.0031	0.0114	0.0033	12:28:45	Yes
2	0.351	0.351	0.0031	0.0110	0.0032	12:29:17	Yes
Mean:	0.355	0.355	0.0031				
SD:	0.005	0.005	0.0000				
%RSD:	1.379	1.379	1.06				

Sequence No.: 31 Autosampler Location: 29
Sample ID: AD18932-002 Date Collected: 8/31/2020 12:29:19 PM
Analyst: Data Type: Original

Replicate Data: AD18932-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.07	20.07	0.1369	0.4980	0.1371	12:30:04	Yes
2	19.93	19.93	0.1360	0.4927	0.1361	12:30:37	Yes
Mean:	20.00	20.00	0.1365				
SD:	0.095	0.095	0.0006				
%RSD:	0.476	0.476	0.47				

Sequence No.: 32 Autosampler Location: 30
Sample ID: AD18960-001 Date Collected: 8/31/2020 12:30:59 PM
Analyst: Data Type: Original

Replicate Data: AD18960-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.326	0.326	0.0029	0.0103	0.0030	12:31:46	Yes
2	0.329	0.329	0.0029	0.0104	0.0031	12:32:18	Yes
Mean:	0.327	0.327	0.0029				

SD:	0.003	0.003	0.0000
%RSD:	0.774	0.774	0.59

Sequence No.: 33 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 8/31/2020 12:32:20 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.21	10.21	0.0700	0.2541	0.0701	12:33:07	Yes
2	10.23	10.23	0.0702	0.2528	0.0703	12:33:40	Yes
Mean:	10.22	10.22	0.0701				
SD:	0.016	0.016	0.0001				
%RSD:	0.158	0.158	0.16				

QC value within limits for Hg 253.7 Recovery = 102.22%
All analyte(s) passed QC.

Sequence No.: 34 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 8/31/2020 12:34:02 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.118	-0.118	-0.0001	-0.0007	0.0000	12:34:49	Yes
2	-0.114	-0.114	-0.0001	-0.0002	0.0000	12:35:21	Yes
Mean:	-0.116	-0.116	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	2.784	2.784	28.27				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 31**
Sample ID: AD18960-003 **Date Collected: 8/31/2020 12:35:23 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18960-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.324	0.324	0.0029	0.0109	0.0030	12:36:11	Yes
2	0.324	0.324	0.0029	0.0108	0.0030	12:36:43	Yes
Mean:	0.324	0.324	0.0029				
SD:	0.000	0.000	0.0000				
%RSD:	0.106	0.106	0.08				

Sequence No.: 36 **Autosampler Location: 32**
Sample ID: AD18960-004 **Date Collected: 8/31/2020 12:36:45 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18960-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.071	-0.071	0.0002	0.0009	0.0003	12:37:30	Yes
2	-0.073	-0.073	0.0002	0.0009	0.0003	12:38:03	Yes
Mean:	-0.072	-0.072	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	2.221	2.221	4.86				

Sequence No.: 37 **Autosampler Location: 33**
Sample ID: AD18960-007 **Date Collected: 8/31/2020 12:38:04 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18960-007

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	0.169	0.169	0.0019	0.0065	0.0020	12:38:50	Yes
2	0.168	0.168	0.0019	0.0065	0.0020	12:39:22	Yes
Mean:	0.169	0.169	0.0019				
SD:	0.001	0.001	0.0000				
%RSD:	0.430	0.430	0.27				

Sequence No.: 38 **Autosampler Location: 34**
Sample ID: AD18960-015 **Date Collected: 8/31/2020 12:39:24 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18960-015

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.136	0.136	0.0016	0.0058	0.0017	12:40:09	Yes
2	0.136	0.136	0.0016	0.0059	0.0017	12:40:42	Yes
Mean:	0.136	0.136	0.0016				
SD:	0.000	0.000	0.0000				
%RSD:	0.048	0.048	0.03				

Sequence No.: 39 **Autosampler Location: 35**
Sample ID: AD18960-017 **Date Collected: 8/31/2020 12:40:43 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18960-017

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.157	0.157	0.0018	0.0063	0.0019	12:41:29	Yes
2	0.157	0.157	0.0018	0.0064	0.0019	12:42:01	Yes
Mean:	0.157	0.157	0.0018				
SD:	0.000	0.000	0.0000				
%RSD:	0.058	0.058	0.03				

Sequence No.: 40 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 8/31/2020 12:42:02 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.14	10.14	0.0696	0.2518	0.0697	12:42:51	Yes
2	10.12	10.12	0.0694	0.2511	0.0695	12:43:24	Yes
Mean:	10.13	10.13	0.0695				
SD:	0.013	0.013	0.0001				
%RSD:	0.133	0.133	0.13				

QC value within limits for Hg 253.7 Recovery = 101.31%
All analyte(s) passed QC.

Sequence No.: 41 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 8/31/2020 12:43:46 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.119	-0.119	-0.0001	-0.0007	0.0000	12:44:33	Yes
2	-0.118	-0.118	-0.0001	-0.0006	0.0000	12:45:05	Yes
Mean:	-0.118	-0.118	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.354	0.354	3.08				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS3_7700SWA\S083120ANEW.txt

Analysis Date: 08/31/20 **Instrument:** MS3_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	10:20	1	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
CalBlk V-333612	1	ISBLK	10:24	2		SOIL	SOIL				V-333612(Cal Blk WARNING)
CalStd1 V-333613	1	CAL	10:29	3							V-333613(Cal Std-1 WARNING)
CalStd2 V-333614	1	CAL	10:34	4							V-333614(Cal Std-2 WARNING)
CalStd3 V-333615	1	CAL	10:38	5							V-333615(Cal Std-3 WARNING)
CalStd4 V-333616	1	CAL	10:43	6							V-333616(Cal Std-4 WARNING)
CalStd5 V-333617	1	CAL	10:47	7							V-333617(Cal Std-5 WARNING)
ICV V-333618	1	ICV	10:51	8							V-333618(ICV WARNING)
LLICV V-333623	1	LLICV	10:56	9	MET-RCRA-MS	SOIL	SOIL	SW846	85229		V-333623(LL-ICV/CCV SOIL WARNING)
ICB V-333619	1	ICB	11:00	10							V-333619(ICB/CCB WARNING)
ICSA V-333620	1	ICSA	11:05	11							V-333620(ICSA WARNING)
RINSE	1	NA	11:09	12	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
LRS V-333621	1	LRS	11:14	13	MET-RCRA-MS	SOIL	SOIL	SW846	85229	Ag fail	V-333621(LRS WARNING)
RINSE	1	NA	11:18	14	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
RINSE	1	NA	11:23	15	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
MB 85229	1	NA	11:31	16	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
RINSE	1	NA	11:35	17	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
CCV V-333622	1	CCV	11:40	18							V-333622(CCV WARNING)
CCB V-333619	1	CCB	11:44	19							V-333619(ICB/CCB WARNING)
MB 85229	1	MB	11:49	20	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
LCS 85229	1	LCS	11:53	21	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
LCS MR 85229	1	LCS	11:57	22	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
AD18960-001	1	SMP	12:02	23	MET-PP6020S	SOIL	SOIL	SW846	85229		0
AD18960-003	1	SMP	12:06	24	MET-PP6020S	SOIL	SOIL	SW846	85229		0
AD18960-004	1	SMP	12:11	25	MET-PP6020S	SOIL	SOIL	SW846	85229		0
AD18960-007	1	SMP	12:15	26	MET-PP6020S	SOIL	SOIL	SW846	85229		0
AD18960-015	1	SMP	12:19	27	MET-5-6020	SOIL	SOIL	SW846	85229		0
AD18960-017	1	SMP	12:24	28	MET-5-6020	SOIL	SOIL	SW846	85229		0
RINSE	1	NA	12:28	29	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
CCV V-333622	1	CCV	12:33	30							V-333622(CCV WARNING)
CCB V-333619	1	CCB	12:37	31							V-333619(ICB/CCB WARNING)
AD18955-001	1	SMP	12:42	32	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-001	1	MR	12:46	33	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-001	5	SD	12:50	34	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-002	1	MS	12:55	35	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-003	1	MSD	12:59	36	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-001	1	PS	13:03	37	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18951-001	1	SMP	13:08	38	MET-1-6020	SOIL	SOIL	SW846	85229		0
AD18949-014	1	SMP	13:12	39	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18950-004	1	SMP	13:17	40	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
RINSE	1	NA	13:21	41	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
CCV V-333622	1	CCV	13:26	42							V-333622(CCV WARNING)
CCB V-333619	1	CCB	13:30	43							V-333619(ICB/CCB WARNING)
AD18934-001	1	SMP	13:35	44	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18934-002	1	SMP	13:39	45	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18934-003	1	SMP	13:44	46	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18934-004	1	SMP	13:48	47	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18934-005	1	SMP	13:53	48	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-004	1	SMP	13:57	49	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-005	1	SMP	14:01	50	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18932-002	1	SMP	14:06	51	MET-RCRA-MS	SOIL	SOIL	SW846	85229	Rerun Ag, Cd (IS).	0
RINSE	1	NA	14:10	52	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
CCV V-333622	1	CCV	14:15	53							V-333622(CCV WARNING)
CCB V-333619	1	CCB	14:19	54							V-333619(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.87 9/1/2020 7:54:46 AM

Run ok. Report Ag, As, Be, Cd, Sb, Se, Tl, V. LRS fail for Ag. Ag LR = 100ppb.
Rerun Ag, Cd for 18932-002 (int. std. Fail.) PC.

9/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 2 & 3 m

Standard/Batch/SnCl2 Lot #:

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: S083120AN Sample ID: CalBlk V-333612 Sample Date 08/31/20 Sample Time: 10:24

IS ID:	Area	Area Limit		
Ho-1	2372256.93	1660579.851	-	3083934.009
In-1	1490926.09	1043648.263	-	1938203.917
Sc-1	1058582.32	741007.624	-	1376157.016
Tb-1	2402232.57	1681562.799	-	3122902.341

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-333612	2	2372256.	1490926.	1058582.	2402232.				
SMP	RINSE	1	2264284.	1401032.	998230.4	2295118.				
CAL	CalStd1 V-33361	3	2430162.	1585394.	1079901.	2447214.				
CAL	CalStd2 V-33361	4	2441222.	1532740.	1082316.	2472265.				
CAL	CalStd3 V-33361	5	2451104.	1623302.	1092594.	2496897.				
CAL	CalStd4 V-33361	6	2419750.	1533129.	1083088.	2451033.				
CAL	CalStd5 V-33361	7	2445686.	1547381.	1095393.	2462319.				
ICV	ICV V-333618	8	2460264.	1632588.	1101090.	2509770.				
LLICV	LLICV V-333623	9	2474786.	1659355.	1117399.	2537704.				
ICB	ICB V-333619	10	2499574.	1680438.	1126341.	2518847.				
ICSA	ICSA V-333620	11	2552857.	1600754.	1151379.	2605439.				
SMP	RINSE	12	2618822.	1757792.	1186523.	2652760.				
LRS	LRS V-333621	13	2529534.	1591696.	1125531.	2534456.				
SMP	RINSE	14	2609914.	1749779.	1199885.	2624318.				
SMP	RINSE	15	2535257.	1706510.	1142474.	2572079.				
MB	MB 85229	16	9746179. *	6420330. *	4626141. *	9889499. *				
SMP	RINSE	17	2499616.	1694168.	1125429.	2570588.				
CCV	CCV V-333622	18	2556159.	1681160.	1144288.	2572052.				
CCB	CCB V-333619	19	2532326.	1717662.	1140614.	2582507.				
MB	MB 85229	20	2633869.	1774787.	1174603.	2685849.				
LCS	LCS 85229	21	2700747.	1760232.	1308244.	2743398.				
MR	LCS MR 85229	22	2694818.	1724196.	1286386.	2760022.				
SMP	AD18960-001	23	2795688.	1773070.	1801066. *	2823479.				
SMP	AD18960-003	24	2890444.	1816489.	1598954. *	2915884.				
SMP	AD18960-004	25	2963573.	1813355.	1914299. *	3008937.				
SMP	AD18960-007	26	2932927.	1794507.	1746971. *	2964847.				
SMP	AD18960-015	27	2885549.	1761094.	1853757. *	2894281.				
SMP	AD18960-017	28	2824985.	1750418.	1601712. *	2858962.				
SMP	RINSE	29	2654807.	1784527.	1176246.	2680990.				
CCV	CCV V-333622	30	2589130.	1740498.	1171260.	2655144.				
CCB	CCB V-333619	31	2619238.	1760432.	1175062.	2669691.				
SMP	AD18955-001	32	2755614.	1708454.	1539594. *	2763198.				
MR	AD18955-001	33	2709844.	1654454.	1495974. *	2746614.				
SD	AD18955-001	34	2709306.	1750796.	1275625.	2706324.				
MS	AD18955-002	35	2758555.	1684461.	1615822. *	2792488.				
MSD	AD18955-003	36	2782080.	1694054.	1550329. *	2807869.				
PS	AD18955-001	37	2750381.	1677087.	1485024. *	2763899.				
SMP	AD18951-001	38	2845717.	1813214.	1408979. *	2838183.				
SMP	AD18949-014	39	2788993.	1804800.	1336584.	2829529.				
SMP	AD18950-004	40	2943425.	1792377.	2073312. *	2993299.				
SMP	RINSE	41	2753310.	1847516.	1270044.	2784613.				
CCV	CCV V-333622	42	2644639.	1765504.	1166741.	2701413.				
CCB	CCB V-333619	43	2637426.	1766810.	1236038.	2689936.				
SMP	AD18934-001	44	2961084.	1758478.	2061390. *	3047336.				
SMP	AD18934-002	45	2873456.	1681683.	1700788. *	2917314.				
SMP	AD18934-003	46	2853556.	1698823.	1616382. *	2866372.				
SMP	AD18934-004	47	2845041.	1698173.	1604682. *	2891213.				
SMP	AD18934-005	48	2889570.	1723950.	1539444. *	2914350.				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 1

SMP	AD18955-004	49	2889436.	1722413.	1617750.	*	2907197.
SMP	AD18955-005	50	2949802.	1758854.	1627590.	*	2967685.
SMP	AD18932-002	51	2875572.	2194262. *	1474911.	*	2867233.
SMP	RINSE	52	2641892.	1746167.	1078651.		2669929.
CCV	CCV V-333622	53	2685592.	1716633.	1090165.		2695300.
CCB	CCB V-333619	54	2653454.	1763376.	1113398.		2720132.

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

Batch/FileID: S083120ANSample ID: CalBlk V-333612 Sample Date 08/31/20 Sample Time: 10:24

IS ID:	Area	Area Limit		
Ho-2	1044049.94	730834.958	-	1357264.922
In-2	324073.06	226851.142	-	421294.978
Sc-2	55969.15	39178.405	-	72759.895
Tb-2	1053941.83	737759.281	-	1370124.379

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area		Area	Area	Area	Area
ISBLK	CalBlk V-333612	2	1044049.	324073.0	55969.15	1053941.					
SMP	RINSE	1	1000720.	311137.1	54087.16	1007553.					
CAL	CalStd1 V-33361	3	1053537.	329223.3	56387.14	1059170.					
CAL	CalStd2 V-33361	4	1063563.	330598.8	57055.43	1074119.					
CAL	CalStd3 V-33361	5	1064727.	331159.6	57403.36	1082694.					
CAL	CalStd4 V-33361	6	1063429.	326138.6	56156.35	1072659.					
CAL	CalStd5 V-33361	7	1076387.	324578.7	56799.72	1078997.					
ICV	ICV V-333618	8	1089115.	330881.7	57798.24	1097626.					
LLICV	LLICV V-333623	9	1109289.	342727.3	59634.74	1109671.					
ICB	ICB V-333619	10	1107024.	342491.3	59897.78	1108711.					
ICSA	ICSA V-333620	11	1112366.	330667.3	61184.39	1114779.					
SMP	RINSE	12	1155700.	360639.6	62793.99	1161726.					
LRS	LRS V-333621	13	1114130.	334364.1	60395.97	1112089.					
SMP	RINSE	14	1144215.	360605.2	63015.53	1150984.					
SMP	RINSE	15	1111947.	350788.1	59915.80	1127776.					
MB	MB 85229	16	1107325.	348201.7	60458.46	1114041.					
SMP	RINSE	17	1121030.	349104.7	59636.98	1121833.					
CCV	CCV V-333622	18	1120903.	346703.8	60224.39	1133621.					
CCB	CCB V-333619	19	1129154.	352024.0	60843.01	1136007.					
MB	MB 85229	20	1128829.	345123.1	59482.06	1134233.					
LCS	LCS 85229	21	1136783.	333120.6	59921.25	1148799.					
MR	LCS MR 85229	22	1143234.	332454.6	60446.22	1153982.					
SMP	AD18960-001	23	1187255.	341172.3	85894.83	1190819.	*				
SMP	AD18960-003	24	1215988.	349462.0	76452.58	1227204.	*				
SMP	AD18960-004	25	1253991.	345330.4	92852.58	1252308.	*				
SMP	AD18960-007	26	1233744.	343528.2	84773.20	1247272.	*				
SMP	AD18960-015	27	1201445.	334406.8	88299.98	1207736.	*				
SMP	AD18960-017	28	1130344.	312048.8	71945.75	1133816.					
SMP	RINSE	29	1154287.	353321.6	59884.30	1157905.					
CCV	CCV V-333622	30	1132562.	347883.1	60105.34	1141525.					
CCB	CCB V-333619	31	1136204.	352376.7	60858.54	1134823.					
SMP	AD18955-001	32	1131469.	316303.6	71637.11	1136660.					
MR	AD18955-001	33	1105858.	306673.6	69657.80	1113384.					
SD	AD18955-001	34	1134200.	334137.0	60960.25	1135010.					
MS	AD18955-002	35	1145665.	314598.0	76335.38	1149550.	*				
MSD	AD18955-003	36	1133283.	318850.0	71307.06	1144125.					
PS	AD18955-001	37	1115770.	306588.6	68157.94	1116366.					
SMP	AD18951-001	38	1162978.	333104.1	63256.32	1152375.					
SMP	AD18949-014	39	1143528.	332625.3	61046.95	1150601.					
SMP	AD18950-004	40	1216912.	328094.8	99557.59	1216904.	*				
SMP	RINSE	41	1096467.	330454.9	55881.06	1075036.					
CCV	CCV V-333622	42	1133671.	342823.1	58943.95	1140727.					
CCB	CCB V-333619	43	1128188.	349413.2	59111.15	1136585.					
SMP	AD18934-001	44	1237701.	330152.8	98257.30	1243302.	*				
SMP	AD18934-002	45	1174321.	312235.4	80018.47	1180049.	*				
SMP	AD18934-003	46	1133461.	307144.0	73186.48	1138201.	*				
SMP	AD18934-004	47	1120138.	300158.1	72752.42	1129312.					
SMP	AD18934-005	48	1138538.	305172.2	69375.36	1145876.					

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

SMP	AD18955-004	49	1144599.	300711.5	72559.54		1151433.
SMP	AD18955-005	50	1177119.	316146.7	73875.53	*	1177012.
SMP	AD18932-002	51	1162193.	415625.2	65444.70		1158096.
SMP	RINSE	52	1061048.	309644.4	51769.52		1065960.
CCV	CCV V-333622	53	1098234.	323989.8	53776.35		1099887.
CCB	CCB V-333619	54	1101726.	330731.0	55582.63		1105219.

* Indicates Internal Standard Area outside of limits

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-329062

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Antimony Intermediate 1PPM | BatchNumber: | ApproveDate: 06/12/20
Prep Date: 6/5/2020 | Concentration: 1000 ppb | Checked: Yes
Expiration Date: 2/25/2021 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13251	nitric acid	2.5 ml	neat neat	
13296	ANTIMONY 1000 PPM	.1 ml	1000 ug/ml	

Veritech Lot Number: V-333325

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: 6020 CALIBRATION STOCK | BatchNumber: | ApproveDate: 08/24/20
Prep Date: 8/16/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 11/15/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13331	Nitric acid	2 ml	neat neat	
13304	ALUMINUM 10000 PPM	.725 ml	10000 ug/ml	72.5
13305	CALCIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13308	IRON 10000 PPM	2.5 ml	10000 ug/ml	250
13306	MAGNESIUM 10000PPM	2.5 ml	10000 ug/ml	250
13309	POTASSIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13307	SODIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13297	SELENIUM 1000 PPM	1 ml	1000 ug/ml	10
13323	CAL STD	12.5 ml	20 ug/ml	2.5

Veritech Lot Number: V-333595

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: carmela
Description: 1:1 HNO3 WARNING | BatchNumber: | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: Reagent reag | Checked: Yes
Expiration Date: 2/24/2021 | Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13421	nitric acid	500 ml	neat neat	

Veritech Lot Number: V-333612

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: Cal Blk WARNING | BatchNumber: B-29574 | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: 0 ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-333613

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: Cal Std-1 WARNING | BatchNumber: B-29574 | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.02 ml	VARIOUS pp	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333614

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: Cal Std-2 WARNING | BatchNumber: B-29574 | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.2 ml	VARIOUS pp	

Veritech Lot Number: V-333615

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: Cal Std-3 WARNING | BatchNumber: B-29574 | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.4 ml	VARIOUS pp	

Veritech Lot Number: V-333616

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: Cal Std-4 WARNING | BatchNumber: B-29574 | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-333617

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: Cal Std-5 WARNING | BatchNumber: B-29574 | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	4 ml	VARIOUS pp	

Veritech Lot Number: V-333618

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: ICV WARNING | BatchNumber: B-29574 | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
13315	6020 ICV	.1 ml	MULTI ug/ml	
13314	6020 ICV (Ag only)	.1 ml	10 ug/ml	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333619

Prepared By: Cousineau, Paul
Description: ICB/CCB WARNING
Prep Date: 8/24/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29574
Concentration: 0 ppb
Final Volume: 100 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-333620

Prepared By: Cousineau, Paul
Description: ICSA WARNING
Prep Date: 8/24/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29574
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	
12856	Interferents A	2.5 ml	NEAT mg/l	

Veritech Lot Number: V-333621

Prepared By: Cousineau, Paul
Description: LRS WARNING
Prep Date: 8/24/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29574
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	2.5 %
V-333325	6020 CALIBRATION STOCK	10 ml	VARIOUS pp	

Veritech Lot Number: V-333622

Prepared By: Cousineau, Paul
Description: CCV WARNING
Prep Date: 8/24/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29574
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-333623

Prepared By: Cousineau, Paul
Description: LL-ICV/CCV SOIL WARNING
Prep Date: 8/24/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29574
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
12979	LLICV/CCV SOIL	1 ml	NEAT neat	
V-329062	Antimony Intermediate 1PPM	.3 ml	1000 ppb	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12856

Description
Interferents A

ApprovedBy: carmela
ApproveDate: 12/09/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-A1	CL51-020CRY	10/31/19	10/30/20	Cousineau, Paul	1		NEAT	mg/l

Veritech Control/Receipt Number: 12979

Description
LLICV/CCV SOIL

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	ZHCV-13-100	53-093CR	01/06/20	12/30/20	Aliano, Carmela	1	125ml	NEAT	NEAT

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13251

Description
nitric acid

ApprovedBy: jean
ApproveDate: 05/27/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	245675	05/19/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13296

Description
ANTIMONY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSB7-2Y	24-153SBY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13297

Description
SELENIUM 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSE2-2Y	25-14SEY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13304

Description
ALUMINUM 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLAL2-3X	AP18-72ALX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13305

Description
CALCIUM 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLCA2-3X	AZ18-49CAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13306

Description
MAGNESIUM 10000PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLMG2-3X	AP18-57MGX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13307

Description
SODIUM 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLNA2-3X	AT18-84NAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13308

Description
IRON 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLFE2-3X	AR18-89FEX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13309

Description
POTASSIUM 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLK2-3X	AX18-77KX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13314

Description
6020 ICV (Ag only)

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-113	S200519030	06/04/20	05/31/21	Cousineau, Paul	1	125 M	10	UG/ML

Veritech Control/Receipt Number: 13315

Description
6020 ICV

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-112	S200519029	06/04/20	05/31/21	Cousineau, Paul	1	125 M	MULTI	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13323

Description
CAL STD

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-CAL-1	CL51-013CRY	06/15/20	06/30/21	Cousineau, Paul	1	125M	20	UG/ML

Veritech Control/Receipt Number: 13331

Description
Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13391

Description
nitric acid

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	07/14/20	02/03/25	Lopez, Jose	4	2.5	neat	neat

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Control/Receipt Number: 13067

Description
hrydrogen peroxide`

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	H325-4	197718	02/19/20	01/31/25	Lopez, Jose	4	4L	neat	neat

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13421

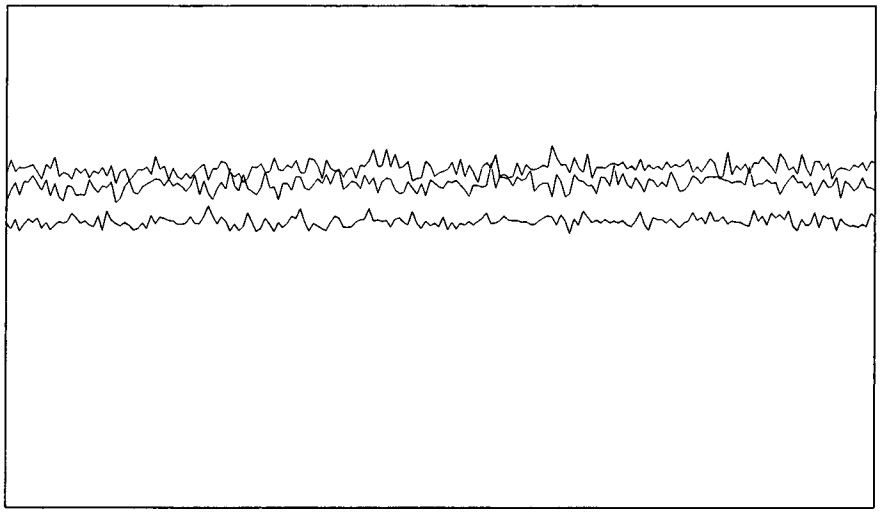
Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

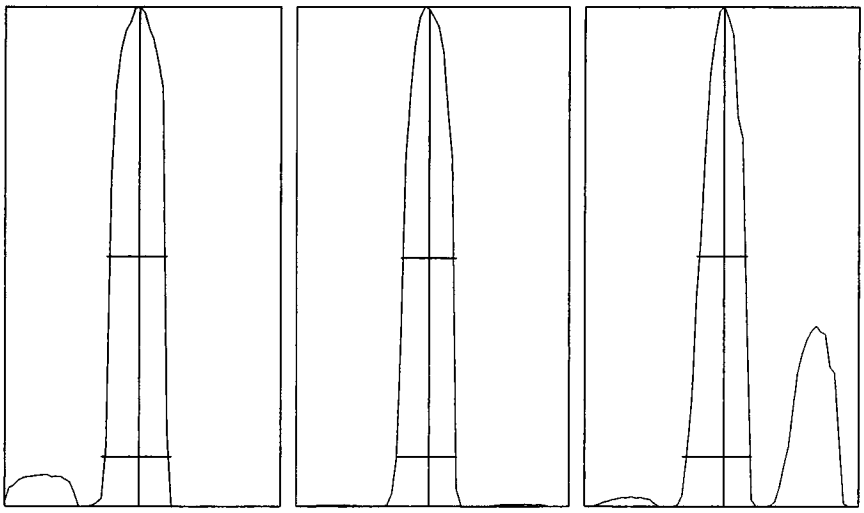
Tune Report

Tune File : ATUNE.U
Comment : TN083120



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	1.004
Doubly Charged:	70/140	1.104

m/z	Range	Count	Mean	RSD%	Background
7	100,000	57908.0	56944.7	1.80	0.50
89	100,000	68774.0	67624.7	2.04	1.90
205	100,000	63229.0	64352.0	2.21	5.30
156/140	2	1.024%	0.989%	5.20	
70/140	2	1.102%	1.127%	4.66	



m/z:	7	89	
Height:	58,020	67,160	6
Axis:	7.00	89.00	2
W-50%:	0.65	0.60	
W-10%:	0.7500	0.6500	0

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Aug 31, 2020 08:24:27
Printed : Aug 31, 2020 08:24:32

Tune Report

Tune File : ATUNE.U
Comment : TN083120

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1500 W	Extract 1	:	0 V	AMU Gain	:	127
RF Matching	:	2.5 V	Extract 2	:	-125 V	AMU Offset	:	127
Smpl Depth	:	10 mm	Omega Bias	:	-65 V	Axis Gain	:	0.9999
Torch-H	:	-1.2 mm	Omega Lens	:	6.5 V	Axis Offset	:	0.02
Torch-V	:	0.9 mm	Cell Entrance	:	-40 V	QP Bias	:	-3 V
Carrier Gas	:	0.55 L/min	Cell Exit	:	-60 V			
Dilution Mode	:	ON	Deflect	:	13 V	===Detector Parameters===		
Dilution Gas	:	0.5 L/min	Plate Bias	:	-40 V	Discriminator	:	4.5 mV
Optional Gas	:	--- %	===Octopole Parameters===			Analog HV	:	1713 V
Nebulizer Pump	:	0.1 rps	OctP RF	:	190 V	Pulse HV	:	1664 V
Sample Pump	:	--- rps	OctP Bias	:	-8 V			
S/C Temp	:	2 degC						

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	--- mL/min	He Gas	:	4.3 mL/min	Optional Gas	:	--- %

Generated : Aug 31, 2020 08:24:27
Printed : Aug 31, 2020 08:24:34

C:\ICPMH\1\7500\QCTUNE.D

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 31 Aug 2020 08:36:29 am
Operator: PC
Misc Info:
Vial Number: 4
Current Method: C:\ICPMH\1\METHODS\TN6020.m

Minimum Response(CPS)

Element	Actual	Required	Flag
7 Li	5809720.00	0.00	
59 Co	4144000.00	0.00	
115 In	6565260.00	0.00	
205 Tl	6110990.00	0.00	

RSD (%)

Element	Actual	Required	Flag
7 Li	0.33	5.00	
59 Co	0.97	5.00	
115 In	1.06	5.00	
205 Tl	0.82	5.00	

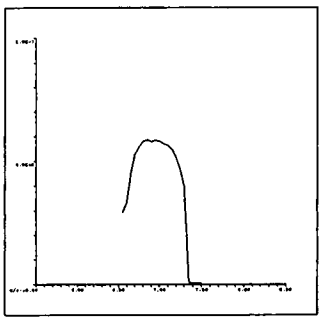
Ion Ratio

Element	Actual	Required	Flag
7 Li			
59 Co			
115 In			
205 Tl			

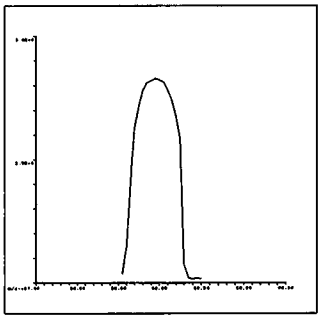
Maximum Bkg. Count(CPS)

Element	Actual	Required	Flag

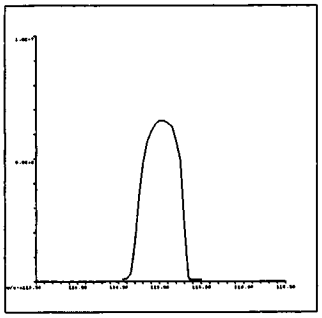
C:\ICPMH\1\7500\QCTUNE.D



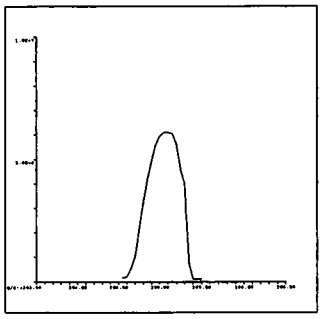
7 Li
Mass Calib.
Actual: 6.90
Required: 6.90-7.10
Flag:
Peak Width
Actual: 0.75
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.05
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.05
Required: 204.90-205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

QC Tune Result:Pass

Calibration Blank Report

File S083120A
Qe-85224
Qe. B- 24171
Rinse

Sample Name	**RINSE**
Data File Name	**001CALB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:20:22-04:00**
Type	**CalBlk**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

Report Ag, As Be, Cd, Sb, Se, Tl, V

LRS fail for Ag.
Ag LR= 100PPB

Rerun As, Cd for 18532-W2
(Cont std fail)

Paul
9/1/20

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	27	45.07
Na	23	115	2	31309	1.05
Mg	24	115	2	393	15.32
Al	27	115	2	271	17.58
K	39	115	2	32764	0.23
Ca	44	115	2	216	7.93
V	51	115	2	28	38.58
Cr	52	115	2	1539	5.23
Mn	55	115	2	676	2.97
Fe	56	115	2	19517	3.49
Co	59	115	2	152	17.01
Ni	60	115	2	659	2.11
Cu	65	115	2	1929	7.96
Zn	66	115	2	1139	11.71
As	75	115	2	7	48.25
Se	78	115	2	11	47.73
Kr	83	115	1	192	14.44
Mo	95	115	1	62	3.10
Ag	107	115	1	323	25.34
Cd	111	115	1	4	95.82
Sb	121	115	1	322	20.10
Ba	137	159	1	167	7.21
Tl	205	165	1	2014	4.18
(Pb)	206	165	1	927	11.53
(Pb)	207	165	1	856	5.64
Pb	208	165	1	2011	5.91

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	998230	0.60
Sc	45	2	54087	2.40
In	115	1	1401032	1.03
In	115	2	311137	1.77
Tb	159	1	2295119	0.28
Tb	159	2	1007554	1.00
Ho	165	1	2264284	0.81
Ho	165	2	1000721	0.75

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Blank Report

Sample Name	**CalBlk V-333612**
Data File Name	**002CALB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:24:56-04:00**
Type	**CalBlk**
VialNumber	**2101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	38	13.48
Na	23	115	2	54502	0.86
Mg	24	115	2	1079	7.42
Al	27	115	2	1190	6.19
K	39	115	2	36212	1.66
Ca	44	115	2	337	11.88
V	51	115	2	42	52.57
Cr	52	115	2	1855	6.46
Mn	55	115	2	1028	10.93
Fe	56	115	2	39969	1.63
Co	59	115	2	143	22.18
Ni	60	115	2	962	3.82
Cu	65	115	2	2012	6.53
Zn	66	115	2	1819	2.50
As	75	115	2	12	19.50
Se	78	115	2	13	19.78
Kr	83	115	1	159	26.40
Mo	95	115	1	86	18.41
Ag	107	115	1	287	6.15
Cd	111	115	1	20	25.46
Sb	121	115	1	3365	4.07
Ba	137	159	1	1095	5.65
Tl	205	165	1	2381	4.72
(Pb)	206	165	1	1408	8.15
(Pb)	207	165	1	1176	2.45
Pb	208	165	1	2866	1.94

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	1058582	0.47
Sc	45	2	55969	2.40
In	115	1	1490926	0.35
In	115	2	324073	0.23
Tb	159	1	2402233	0.94
Tb	159	2	1053942	1.12
Ho	165	1	2372257	0.19
Ho	165	2	1044050	1.26

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd1 V-333613**
Data File Name	**003CALS.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:29:28-04:00**
Type	**CalStd**
VialNumber	**2102**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	5364	3.03
Na	23	115	2	151505	0.93
Mg	24	115	2	39009	2.55
Al	27	115	2	5195	1.43
K	39	115	2	67564	0.77
Ca	44	115	2	1637	3.00
V	51	115	2	2787	4.51
Cr	52	115	2	5656	2.92
Mn	55	115	2	3228	5.02
Fe	56	115	2	349786	1.52
Co	59	115	2	5942	3.19
Ni	60	115	2	2627	1.78
Cu	65	115	2	4284	5.41
Zn	66	115	2	2964	6.55
As	75	115	2	343	5.03
Se	78	115	2	148	16.16
Kr	83	115	1	122	10.32
Mo	95	115	1	4348	1.43
Ag	107	115	1	11811	1.80
Cd	111	115	1	2291	4.04
Sb	121	115	1	11942	5.67
Ba	137	159	1	4381	7.39
Tl	205	165	1	28783	2.65
(Pb)	206	165	1	9808	6.34
(Pb)	207	165	1	8248	0.61
Pb	208	165	1	20526	4.95

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1079901	0.63	1058582	102.0	70	130	
Sc	45	2	56387	1.83	55969	100.7	70	130	
In	115	1	1585394	2.89	1490926	106.3	70	130	
In	115	2	329223	0.22	324073	101.6	70	130	
Tb	159	1	2447214	1.44	2402233	101.9	70	130	
Tb	159	2	1059171	1.28	1053942	100.5	70	130	
Ho	165	1	2430162	1.60	2372257	102.4	70	130	
Ho	165	2	1053538	0.22	1044050	100.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd2 V-333614**
Data File Name	**004CALS.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:34:00-04:00**
Type	**CalStd**
VialNumber	**2103**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	54465	3.20
Na	23	115	2	800488	0.84
Mg	24	115	2	387161	1.08
Al	27	115	2	43316	1.29
K	39	115	2	293864	0.56
Ca	44	115	2	13173	1.12
V	51	115	2	28745	1.12
Cr	52	115	2	37537	2.12
Mn	55	115	2	21644	4.84
Fe	56	115	2	3180734	0.47
Co	59	115	2	58686	1.42
Ni	60	115	2	16304	0.25
Cu	65	115	2	21398	0.83
Zn	66	115	2	7093	2.59
As	75	115	2	3515	3.18
Se	78	115	2	1420	2.10
Kr	83	115	1	148	26.43
Mo	95	115	1	41400	3.05
Ag	107	115	1	114209	3.07
Cd	111	115	1	22706	2.30
Sb	121	115	1	87790	2.16
Ba	137	159	1	34203	2.64
Tl	205	165	1	270165	2.20
(Pb)	206	165	1	88503	3.67
(Pb)	207	165	1	74626	3.32
Pb	208	165	1	185340	2.49

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1082317	1.17	1058582	102.2	70	130	
Sc	45	2	57055	1.24	55969	101.9	70	130	
In	115	1	1532740	0.89	1490926	102.8	70	130	
In	115	2	330599	0.59	324073	102.0	70	130	
Tb	159	1	2472265	0.84	2402233	102.9	70	130	
Tb	159	2	1074120	1.84	1053942	101.9	70	130	
Ho	165	1	2441223	0.79	2372257	102.9	70	130	
Ho	165	2	1063564	0.87	1044050	101.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd3 V-333615**
Data File Name	**005CALS.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:38:31-04:00**
Type	**CalStd**
VialNumber	**2104**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	108340	3.15
Na	23	115	2	1709103	0.34
Mg	24	115	2	776062	0.45
Al	27	115	2	84819	0.87
K	39	115	2	559387	0.43
Ca	44	115	2	26445	2.35
V	51	115	2	57897	1.02
Cr	52	115	2	75925	2.14
Mn	55	115	2	42969	0.33
Fe	56	115	2	6347776	1.66
Co	59	115	2	117272	0.50
Ni	60	115	2	33060	1.88
Cu	65	115	2	44434	0.84
Zn	66	115	2	14363	2.98
As	75	115	2	6935	2.06
Se	78	115	2	2792	3.22
Kr	83	115	1	151	17.83
Mo	95	115	1	83176	3.18
Ag	107	115	1	231999	3.50
Cd	111	115	1	45838	2.67
Sb	121	115	1	177071	2.88
Ba	137	159	1	69163	3.99
Tl	205	165	1	545600	3.72
(Pb)	206	165	1	178575	3.00
(Pb)	207	165	1	150228	3.76
Pb	208	165	1	370478	3.90

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1092594	0.68	1058582	103.2	70	130	
Sc	45	2	57403	1.13	55969	102.6	70	130	
In	115	1	1623302	1.31	1490926	108.9	70	130	
In	115	2	331160	1.61	324073	102.2	70	130	
Tb	159	1	2496898	1.01	2402233	103.9	70	130	
Tb	159	2	1082694	0.54	1053942	102.7	70	130	
Ho	165	1	2451105	0.14	2372257	103.3	70	130	
Ho	165	2	1064727	0.79	1044050	102.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd4 V-333616**
Data File Name	**006CALS.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:43:04-04:00**
Type	**CalStd**
VialNumber	**2105**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	546910	2.77
Na	23	115	2	8160355	0.31
Mg	24	115	2	3920364	1.51
Al	27	115	2	421572	0.58
K	39	115	2	2624015	0.94
Ca	44	115	2	130687	0.58
V	51	115	2	289484	1.37
Cr	52	115	2	368731	0.82
Mn	55	115	2	209680	1.49
Fe	56	115	2	30905495	0.95
Co	59	115	2	581624	0.65
Ni	60	115	2	155668	1.18
Cu	65	115	2	205513	1.66
Zn	66	115	2	62242	0.24
As	75	115	2	35228	1.20
Se	78	115	2	14027	0.26
Kr	83	115	1	202	21.52
Mo	95	115	1	418497	2.83
Ag	107	115	1	1150564	2.84
Cd	111	115	1	231463	2.63
Sb	121	115	1	880687	3.00
Ba	137	159	1	345522	3.25
Tl	205	165	1	2946276	3.36
(Pb)	206	165	1	880255	3.68
(Pb)	207	165	1	741899	3.15
Pb	208	165	1	1972202	1.92

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1083088	0.64	1058582	102.3	70	130	
Sc	45	2	56156	0.97	55969	100.3	70	130	
In	115	1	1533129	2.52	1490926	102.8	70	130	
In	115	2	326139	0.96	324073	100.6	70	130	
Tb	159	1	2451034	1.71	2402233	102.0	70	130	
Tb	159	2	1072660	0.80	1053942	101.8	70	130	
Ho	165	1	2419751	1.50	2372257	102.0	70	130	
Ho	165	2	1063430	0.61	1044050	101.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd5 V-333617**
Data File Name	**007CALS.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:47:30-04:00**
Type	**CalStd**
VialNumber	**2106**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	1086296	1.89
Na	23	115	2	16093114	1.49
Mg	24	115	2	7621533	0.75
Al	27	115	2	826303	1.44
K	39	115	2	5149233	1.60
Ca	44	115	2	258602	2.07
V	51	115	2	573683	1.94
Cr	52	115	2	726504	1.94
Mn	55	115	2	412553	1.19
Fe	56	115	2	60860497	2.26
Co	59	115	2	1143451	1.13
Ni	60	115	2	302895	2.39
Cu	65	115	2	399688	2.41
Zn	66	115	2	120737	2.70
As	75	115	2	69705	2.34
Se	78	115	2	27698	0.71
Kr	83	115	1	214	8.84
Mo	95	115	1	822527	2.37
Ag	107	115	1	2320093	1.75
Cd	111	115	1	442983	2.76
Sb	121	115	1	1790326	2.30
Ba	137	159	1	669578	2.47
Tl	205	165	1	5663058	2.98
(Pb)	206	165	1	1779229	6.67
(Pb)	207	165	1	1430346	2.57
Pb	208	165	1	3792580	1.75

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1095393	0.48	1058582	103.5	70	130	
Sc	45	2	56800	2.56	55969	101.5	70	130	
In	115	1	1547382	2.88	1490926	103.8	70	130	
In	115	2	324579	0.77	324073	100.2	70	130	
Tb	159	1	2462319	0.75	2402233	102.5	70	130	
Tb	159	2	1078998	1.00	1053942	102.4	70	130	
Ho	165	1	2445687	1.04	2372257	103.1	70	130	
Ho	165	2	1076388	1.28	1044050	103.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Verification (ICV) - US EPA Method 6020

Sample Name	**ICV V-333618**
Data File Name	**008_ICV.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:51:53-04:00**
Type	**6-ICV**
VialNumber	**2108**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	54.80	ppb	50	555830	2.94	109.60	90	110	
Na	23	115	2	5185.74	ppb	5000	8542800	0.89	103.71	90	110	
Mg	24	115	2	5187.67	ppb	5000	4049769	0.85	103.75	90	110	
Al	27	115	2	5237.74	ppb	5000	1473614	0.17	104.75	90	110	
K	39	115	2	5271.81	ppb	5000	2788752	1.52	105.44	90	110	
Ca	44	115	2	5189.36	ppb	5000	137063	1.09	103.79	90	110	
V	51	115	2	50.73	ppb	50	296943	1.94	101.47	90	110	
Cr	52	115	2	51.52	ppb	50	383065	1.44	103.05	90	110	
Mn	55	115	2	50.67	ppb	50	214014	1.96	101.35	90	110	
Fe	56	115	2	5187.09	ppb	5000	32269886	1.64	103.74	90	110	
Co	59	115	2	51.56	ppb	50	602512	1.30	103.11	90	110	
Ni	60	115	2	52.24	ppb	50	162450	2.12	104.47	90	110	
Cu	65	115	2	52.59	ppb	50	216069	1.56	105.18	90	110	
Zn	66	115	2	52.92	ppb	50	66144	1.19	105.84	90	110	
As	75	115	2	51.76	ppb	50	36818	1.88	103.52	90	110	
Se	78	115	2	53.63	ppb	50	3045	3.89	107.25	90	110	
Mo	95	115	1	47.92	ppb	50	418334	3.56	95.84	90	110	
Ag	107	115	1	9.75	ppb	10	235448	3.13	97.55	90	110	
Cd	111	115	1	49.60	ppb	50	234504	3.68	99.19	90	110	
Sb	121	115	1	47.56	ppb	50	898866	4.09	95.13	90	110	
Ba	137	159	1	51.17	ppb	50	352211	4.03	102.33	90	110	
Tl	205	165	1	50.82	ppb	50	2923919	2.75	101.64	90	110	
Pb	208	165	1	52.26	ppb	50	2014265	3.81	104.53	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1101090	0.30	1058582	104.0	70	130	
Sc	45	2	57798	0.30	55969	103.3	70	130	
In	115	1	1632589	0.75	1490926	109.5	70	130	
In	115	2	330882	1.28	324073	102.1	70	130	
Tb	159	1	2509770	0.23	2402233	104.5	70	130	
Tb	159	2	1097627	1.01	1053942	104.1	70	130	
Ho	165	1	2460264	0.79	2372257	103.7	70	130	
Ho	165	2	1089115	1.32	1044050	104.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Low Level Initial/Continuing Calibration Verification (ICV/CCV) - US EPA Method 6020

Sample Name	**LLICV V-333623**
Data File Name	**009_LCS.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:56:18-04:00**
Type	**6-LCS**
VialNumber	**2110**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	ExpectedValue	%Recovery	%QC Low	%QC High	QC Flag
Be	9	165	1	1.06	ppb	1	106.4	80	120	
Na	23	115	2	477.69	ppb	500	95.5	80	120	
Mg	24	115	2	489.74	ppb	500	97.9	80	120	
Al	27	115	2	499.37	ppb	500	99.9	80	120	
K	39	115	2	501.40	ppb	500	100.3	80	120	
Ca	44	115	2	493.48	ppb	500	98.7	80	120	
V	51	115	2	0.96	ppb	1	96.3	80	120	
Cr	52	115	2	1.91	ppb	2	95.5	80	120	
Mn	55	115	2	5.99	ppb	6	99.8	80	120	
Fe	56	115	2	514.34	ppb	500	102.9	80	120	
Co	59	115	2	1.96	ppb	2	98.1	80	120	
Ni	60	115	2	2.96	ppb	3	98.7	80	120	
Cu	65	115	2	10.22	ppb	10	102.2	80	120	
Zn	66	115	2	20.01	ppb	20	100.1	80	120	
As	75	115	2	0.94	ppb	1	94.0	80	120	
Se	78	115	2	9.95	ppb	10	99.5	80	120	
Mo	95	115	1	1.04	ppb	1	103.8	80	120	
Ag	107	115	1	0.96	ppb	1	95.7	80	120	
Cd	111	115	1	1.92	ppb	2	96.0	80	120	
Sb	121	115	1	3.52	ppb	4	88.1	80	120	
Ba	137	159	1	5.16	ppb	5	103.1	80	120	
Tl	205	165	1	1.86	ppb	2	92.9	80	120	
Pb	208	165	1	1.94	ppb	2	97.0	80	120	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1117400	0.56	1058582	105.6	70	130	
Sc	45	2	59635	0.18	55969	106.5	70	130	
In	115	1	1659355	1.54	1490926	111.3	70	130	
In	115	2	342727	0.70	324073	105.8	70	130	
Tb	159	1	2537705	1.58	2402233	105.6	70	130	
Tb	159	2	1109672	0.43	1053942	105.3	70	130	
Ho	165	1	2474787	1.10	2372257	104.3	70	130	
Ho	165	2	1109290	0.69	1044050	106.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Blank (ICB) - US EPA Method 6020

Sample Name	**ICB V-333619**
Data File Name	**010_ICB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:00:49-04:00**
Type	**6-ICB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.00	ppb	0.5	
Na	23	115	2	-3.83	ppb	250	
Mg	24	115	2	-0.23	ppb	250	
Al	27	115	2	-0.52	ppb	250	
K	39	115	2	-3.98	ppb	250	
Ca	44	115	2	-2.45	ppb	250	
V	51	115	2	0.00	ppb	0.5	
Cr	52	115	2	-0.01	ppb	1	
Mn	55	115	2	-0.05	ppb	3	
Fe	56	115	2	0.20	ppb	250	
Co	59	115	2	0.00	ppb	1	
Ni	60	115	2	-0.03	ppb	1.5	
Cu	65	115	2	-0.10	ppb	5	
Zn	66	115	2	-0.13	ppb	10	
As	75	115	2	0.01	ppb	0.5	
Se	78	115	2	0.18	ppb	5	
Mo	95	115	1	0.02	ppb	0.5	
Ag	107	115	1	0.00	ppb	0.5	
Cd	111	115	1	0.00	ppb	1	
Sb	121	115	1	0.01	ppb	2	
Ba	137	159	1	-0.03	ppb	2.5	
Tl	205	165	1	-0.02	ppb	1	
Pb	208	165	1	-0.01	ppb	1	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1126342	0.48	1058582	106.4	70	130	
Sc	45	2	59898	1.29	55969	107.0	70	130	
In	115	1	1680439	1.45	1490926	112.7	70	130	
In	115	2	342491	0.80	324073	105.7	70	130	
Tb	159	1	2518847	0.64	2402233	104.9	70	130	
Tb	159	2	1108712	0.62	1053942	105.2	70	130	
Ho	165	1	2499574	1.08	2372257	105.4	70	130	
Ho	165	2	1107025	0.66	1044050	106.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Interference Check Sample A (ICS-A) - US EPA Method 6020

Sample Name	**ICSA V-333620**
Data File Name	**011ICSA.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:05:21-04:00**
Type	**6-ICSA**
VialNumber	**2107**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	124499.95	ppb	162500	
Mg	24	115	2	48193.53	ppb	65000	
Al	27	115	2	48928.13	ppb	65000	
K	39	115	2	50812.99	ppb	65000	
Ca	44	115	2	154503.07	ppb	195000	
V	51	115	2	0.06	ppb	1	
Cr	52	115	2	0.44	ppb	2	
Mn	55	115	2	1.28	ppb	6	
Fe	56	115	2	123556.71	ppb	162500	
Co	59	115	2	0.24	ppb	2	
Ni	60	115	2	0.52	ppb	3	
Cu	65	115	2	0.01	ppb	10	
Zn	66	115	2	0.03	ppb	20	
As	75	115	2	0.22	ppb	1	
Se	78	115	2	0.57	ppb	10	
Mo	95	115	1	991.30	ppb	1300	
Ag	107	115	1	0.11	ppb	1	
Cd	111	115	1	1.35	ppb	2	
Sb	121	115	1	0.17	ppb	1	
Ba	137	159	1	0.70	ppb	5	
Tl	205	165	1	-0.02	ppb	2	
Pb	208	165	1	0.00	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1151379	1.07	1058582	108.8	70	130	
Sc	45	2	61184	0.49	55969	109.3	70	130	
In	115	1	1600755	0.62	1490926	107.4	70	130	
In	115	2	330667	1.22	324073	102.0	70	130	
Tb	159	1	2605439	0.88	2402233	108.5	70	130	
Tb	159	2	1114779	0.78	1053942	105.8	70	130	
Ho	165	1	2552858	1.28	2372257	107.6	70	130	
Ho	165	2	1112366	0.57	1044050	106.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**012SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:09:45-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.00	0.00	ppb	47	37.80	550	
Na	23	115	2	-4.52	-4.52	ppb	52577	0.28	55000	
Mg	24	115	2	-0.48	-0.48	ppb	789	7.56	55000	
Al	27	115	2	-2.82	-2.82	ppb	459	7.13	16500	
K	39	115	2	-3.05	-3.05	ppb	38560	1.48	55000	
Ca	44	115	2	-4.41	-4.41	ppb	248	12.06	55000	
V	51	115	2	0.00	0.00	ppb	34	47.75	550	
Cr	52	115	2	-0.02	-0.02	ppb	1889	3.92	550	
Mn	55	115	2	-0.07	-0.07	ppb	812	9.49	550	
Fe	56	115	2	0.49	0.49	ppb	47740	4.35	55000	
Co	59	115	2	0.00	0.00	ppb	118	26.30	550	
Ni	60	115	2	-0.08	-0.08	ppb	817	4.60	550	
Cu	65	115	2	0.03	0.03	ppb	2367	5.42	550	
Zn	66	115	2	-0.48	-0.48	ppb	1385	3.46	550	
As	75	115	2	-0.01	-0.01	ppb	9	33.03	550	
Se	78	115	2	0.16	0.16	ppb	24	11.62	2750	
Mo	95	115	1	0.56	0.56	ppb	5353	11.68	550	
Ag	107	115	1	0.00	0.00	ppb	384	14.88	550	
Cd	111	115	1	0.00	0.00	ppb	24	32.91	550	
Sb	121	115	1	-0.17	-0.17	ppb	511	2.94	550	
Ba	137	159	1	-0.14	-0.14	ppb	191	8.24	550	
Tl	205	165	1	-0.02	-0.02	ppb	1270	10.62	550	
Pb	208	165	1	-0.02	-0.02	ppb	2326	3.32	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1186523	0.59	1058582	112.1	70	130	
Sc	45	2	62794	0.19	55969	112.2	70	130	
In	115	1	1757793	0.67	1490926	117.9	70	130	
In	115	2	360640	1.38	324073	111.3	70	130	
Tb	159	1	2652760	1.00	2402233	110.4	70	130	
Tb	159	2	1161727	1.70	1053942	110.2	70	130	
Ho	165	1	2618823	1.64	2372257	110.4	70	130	
Ho	165	2	1155701	0.65	1044050	110.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LRS V-333621**
Data File Name	**013SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:14:16-04:00**
Type	**Sample**
VialNumber	**2109**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	509.24	509.24	ppb	5310819	2.53	550	
Na	23	115	2	50383.95	50383.95	ppb	83386724	1.17	55000	
Mg	24	115	2	49997.04	49997.04	ppb	39432528	1.48	55000	
Al	27	115	2	15142.20	15142.20	ppb	4303027	1.65	16500	
K	39	115	2	51475.40	51475.40	ppb	27187173	1.25	55000	
Ca	44	115	2	53162.98	53162.98	ppb	1415591	3.58	55000	
V	51	115	2	522.59	522.59	ppb	3090646	2.39	550	
Cr	52	115	2	512.04	512.04	ppb	3829892	1.87	550	
Mn	55	115	2	519.85	519.85	ppb	2208692	2.21	550	
Fe	56	115	2	50638.13	50638.13	ppb	317994260	2.12	55000	
Co	59	115	2	507.93	507.93	ppb	5996932	1.06	550	
Ni	60	115	2	511.40	511.40	ppb	1598345	3.70	550	
Cu	65	115	2	503.89	503.89	ppb	2074230	1.55	550	
Zn	66	115	2	488.76	488.76	ppb	601860	1.13	550	
As	75	115	2	511.84	511.84	ppb	367785	1.24	550	
Se	78	115	2	2499.41	2499.41	ppb	142770	1.62	2750	
Mo	95	115	1	520.38	520.38	ppb	4421489	1.61	550	
Ag	107	115	1	1543.71	1543.71	ppb	36225014	1.70	550	>LDR
Cd	111	115	1	513.92	513.92	ppb	2365341	2.05	550	
Sb	121	115	1	495.04	495.04	ppb	9073233	2.22	550	
Ba	137	159	1	526.41	526.41	ppb	3648725	1.71	550	
Tl	205	165	1	478.79	478.79	ppb	28304958	1.38	550	
Pb	208	165	1	472.25	472.25	ppb	18690946	2.29	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1125531	0.35	1058582	106.3	70	130	
Sc	45	2	60396	0.53	55969	107.9	70	130	
In	115	1	1591697	4.00	1490926	106.8	70	130	
In	115	2	334364	1.27	324073	103.2	70	130	
Tb	159	1	2534457	0.55	2402233	105.5	70	130	
Tb	159	2	1112089	0.98	1053942	105.5	70	130	
Ho	165	1	2529534	0.72	2372257	106.6	70	130	
Ho	165	2	1114131	0.06	1044050	106.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**014SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:18:27-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.02	0.02	ppb	272	10.42	550	
Na	23	115	2	-1.28	-1.28	ppb	58364	0.74	55000	
Mg	24	115	2	0.00	0.00	ppb	1197	3.38	55000	
Al	27	115	2	-2.42	-2.42	ppb	582	7.77	16500	
K	39	115	2	-0.13	-0.13	ppb	40213	0.88	55000	
Ca	44	115	2	-3.79	-3.79	ppb	266	9.42	55000	
V	51	115	2	0.00	0.00	ppb	57	51.27	550	
Cr	52	115	2	-0.02	-0.02	ppb	1862	2.80	550	
Mn	55	115	2	-0.06	-0.06	ppb	883	13.78	550	
Fe	56	115	2	-0.05	-0.05	ppb	44117	2.90	55000	
Co	59	115	2	0.00	0.00	ppb	174	13.83	550	
Ni	60	115	2	-0.08	-0.08	ppb	818	8.97	550	
Cu	65	115	2	0.03	0.03	ppb	2385	3.80	550	
Zn	66	115	2	-0.58	-0.58	ppb	1256	5.60	550	
As	75	115	2	0.05	0.05	ppb	48	25.41	550	
Se	78	115	2	0.45	0.45	ppb	42	5.27	2750	
Mo	95	115	1	0.34	0.34	ppb	3299	9.23	550	
Ag	107	115	1	17.13	17.13	ppb	443356	43.40	550	
Cd	111	115	1	0.01	0.01	ppb	52	6.39	550	
Sb	121	115	1	0.12	0.12	ppb	6358	7.22	550	
Ba	137	159	1	-0.13	-0.13	ppb	238	27.69	550	
Tl	205	165	1	0.03	0.03	ppb	4251	2.34	550	
Pb	208	165	1	0.00	0.00	ppb	3294	2.14	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1199885	3.52	1058582	113.3	70	130	
Sc	45	2	63016	0.56	55969	112.6	70	130	
In	115	1	1749779	0.96	1490926	117.4	70	130	
In	115	2	360605	1.21	324073	111.3	70	130	
Tb	159	1	2624318	0.28	2402233	109.2	70	130	
Tb	159	2	1150984	0.80	1053942	109.2	70	130	
Ho	165	1	2609915	1.23	2372257	110.0	70	130	
Ho	165	2	1144216	1.25	1044050	109.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**015SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:23:49-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.03	0.03	ppb	349	3.62	550	
Na	23	115	2	-4.27	-4.27	ppb	51584	1.64	55000	
Mg	24	115	2	1.39	1.39	ppb	2316	6.64	55000	
Al	27	115	2	-2.16	-2.16	ppb	644	10.22	16500	
K	39	115	2	-1.21	-1.21	ppb	38528	0.97	55000	
Ca	44	115	2	-1.38	-1.38	ppb	326	15.54	55000	
V	51	115	2	0.02	0.02	ppb	139	22.30	550	
Cr	52	115	2	-0.01	-0.01	ppb	1947	3.68	550	
Mn	55	115	2	-0.01	-0.01	ppb	1053	4.91	550	
Fe	56	115	2	0.81	0.81	ppb	48599	1.53	55000	
Co	59	115	2	0.02	0.02	ppb	380	4.02	550	
Ni	60	115	2	-0.06	-0.06	ppb	839	8.43	550	
Cu	65	115	2	0.02	0.02	ppb	2276	5.61	550	
Zn	66	115	2	-0.55	-0.55	ppb	1263	2.28	550	
As	75	115	2	0.03	0.03	ppb	35	26.86	550	
Se	78	115	2	0.29	0.29	ppb	31	33.36	2750	
Mo	95	115	1	0.10	0.10	ppb	1010	6.89	550	
Ag	107	115	1	0.30	0.30	ppb	7899	5.39	550	
Cd	111	115	1	0.01	0.01	ppb	96	16.89	550	
Sb	121	115	1	-0.11	-0.11	ppb	1747	3.58	550	
Ba	137	159	1	-0.12	-0.12	ppb	294	14.77	550	
Tl	205	165	1	0.00	0.00	ppb	2659	4.24	550	
Pb	208	165	1	0.00	0.00	ppb	3256	3.11	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1142475	0.68	1058582	107.9	70	130	
Sc	45	2	59916	0.33	55969	107.1	70	130	
In	115	1	1706511	2.29	1490926	114.5	70	130	
In	115	2	350788	1.14	324073	108.2	70	130	
Tb	159	1	2572080	1.36	2402233	107.1	70	130	
Tb	159	2	1127776	0.86	1053942	107.0	70	130	
Ho	165	1	2535257	1.47	2372257	106.9	70	130	
Ho	165	2	1111947	1.69	1044050	106.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**MB 85229**
Data File Name	**016SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:31:04-04:00**
Type	**Sample**
VialNumber	**2201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.00	0.00	ppb	54	43.00	550	
Na	23	115	2	-6.94	-6.94	ppb	46600	0.30	55000	
Mg	24	115	2	-0.43	-0.43	ppb	807	8.31	55000	
Al	27	115	2	-1.33	-1.33	ppb	884	23.39	16500	
K	39	115	2	-3.39	-3.39	ppb	37041	0.46	55000	
Ca	44	115	2	-4.92	-4.92	ppb	226	17.32	55000	
V	51	115	2	0.00	0.00	ppb	74	40.39	550	
Cr	52	115	2	-0.01	-0.01	ppb	1877	3.82	550	
Mn	55	115	2	0.04	0.04	ppb	1266	5.89	550	
Fe	56	115	2	-0.05	-0.05	ppb	42644	4.19	55000	
Co	59	115	2	0.01	0.01	ppb	218	13.19	550	
Ni	60	115	2	-0.06	-0.06	ppb	850	6.60	550	
Cu	65	115	2	0.41	0.41	ppb	3903	1.36	550	
Zn	66	115	2	0.75	0.75	ppb	2919	5.98	550	
As	75	115	2	0.00	0.00	ppb	16	49.99	550	
Se	78	115	2	0.30	0.30	ppb	32	33.88	2750	
Mo	95	115	1	0.00	0.00	ppb	483	21.68	550	
Ag	107	115	1	0.01	0.01	ppb	2587	130.09	550	
Cd	111	115	1	0.00	0.00	ppb	15	15.63	550	
Sb	121	115	1	-0.18	-0.18	ppb	1043	14.97	550	
Ba	137	159	1	-0.15	-0.15	ppb	569	28.87	550	
Tl	205	165	1	-0.04	-0.04	ppb	1588	12.81	550	
Pb	208	165	1	-0.07	-0.07	ppb	1854	15.91	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	4626142	2.68	1058582	437.0	70	130	IS Fail
Sc	45	2	60458	0.84	55969	108.0	70	130	
In	115	1	6420331	1.81	1490926	430.6	70	130	IS Fail
In	115	2	348202	1.05	324073	107.4	70	130	
Tb	159	1	9889500	1.05	2402233	411.7	70	130	IS Fail
Tb	159	2	1114041	1.13	1053942	105.7	70	130	
Ho	165	1	9746179	1.61	2372257	410.8	70	130	IS Fail
Ho	165	2	1107326	1.07	1044050	106.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 7:52 AM on:9/1/2020

Sample Report

Sample Name	**RINSE**
Data File Name	**017SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:35:34-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.02	0.02	ppb	277	11.49	550	
Na	23	115	2	-6.00	-6.00	ppb	48345	1.45	55000	
Mg	24	115	2	0.88	0.88	ppb	1889	4.71	55000	
Al	27	115	2	-2.07	-2.07	ppb	668	10.23	16500	
K	39	115	2	-3.56	-3.56	ppb	37048	0.70	55000	
Ca	44	115	2	-3.29	-3.29	ppb	271	12.07	55000	
V	51	115	2	0.01	0.01	ppb	100	31.80	550	
Cr	52	115	2	-0.02	-0.02	ppb	1821	2.26	550	
Mn	55	115	2	-0.04	-0.04	ppb	936	4.45	550	
Fe	56	115	2	0.10	0.10	ppb	43700	1.49	55000	
Co	59	115	2	0.01	0.01	ppb	336	7.05	550	
Ni	60	115	2	-0.07	-0.07	ppb	792	6.32	550	
Cu	65	115	2	0.01	0.01	ppb	2216	2.69	550	
Zn	66	115	2	-0.50	-0.50	ppb	1318	5.64	550	
As	75	115	2	0.02	0.02	ppb	25	26.95	550	
Se	78	115	2	0.19	0.19	ppb	26	41.49	2750	
Mo	95	115	1	0.06	0.06	ppb	640	9.42	550	
Ag	107	115	1	0.41	0.41	ppb	10473	2.58	550	
Cd	111	115	1	0.01	0.01	ppb	86	24.03	550	
Sb	121	115	1	-0.15	-0.15	ppb	979	9.23	550	
Ba	137	159	1	-0.13	-0.13	ppb	261	11.86	550	
Tl	205	165	1	-0.01	-0.01	ppb	2111	3.18	550	
Pb	208	165	1	-0.01	-0.01	ppb	2801	6.90	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1125429	0.64	1058582	106.3	70	130	
Sc	45	2	59637	1.38	55969	106.6	70	130	
In	115	1	1694169	1.78	1490926	113.6	70	130	
In	115	2	349105	1.21	324073	107.7	70	130	
Tb	159	1	2570589	0.52	2402233	107.0	70	130	
Tb	159	2	1121834	0.40	1053942	106.4	70	130	
Ho	165	1	2499616	0.65	2372257	105.4	70	130	
Ho	165	2	1121030	0.27	1044050	107.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-333622**
Data File Name	**0186CCV.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:40:06-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	53.77	ppb	50	566152	3.35	107.54	90	110	
Na	23	115	2	4928.08	ppb	5000	8507759	1.24	98.56	90	110	
Mg	24	115	2	4956.37	ppb	5000	4053196	1.39	99.13	90	110	
Al	27	115	2	1475.92	ppb	1500	435945	0.97	98.39	90	110	
K	39	115	2	4967.20	ppb	5000	2754765	1.38	99.34	90	110	
Ca	44	115	2	4910.49	ppb	5000	135896	0.76	98.21	90	110	
V	51	115	2	49.81	ppb	50	305389	0.78	99.61	90	110	
Cr	52	115	2	49.91	ppb	50	388755	1.92	99.83	90	110	
Mn	55	115	2	49.93	ppb	50	220895	0.93	99.85	90	110	
Fe	56	115	2	5017.95	ppb	5000	32702169	1.27	100.36	90	110	
Co	59	115	2	50.18	ppb	50	614279	1.73	100.36	90	110	
Ni	60	115	2	51.05	ppb	50	166319	0.89	102.10	90	110	
Cu	65	115	2	50.73	ppb	50	218407	0.98	101.45	90	110	
Zn	66	115	2	50.34	ppb	50	66012	1.23	100.69	90	110	
As	75	115	2	50.31	ppb	50	37487	1.00	100.62	90	110	
Se	78	115	2	248.56	ppb	250	14732	1.52	99.42	90	110	
Mo	95	115	1	48.67	ppb	50	437281	3.91	97.33	90	110	
Ag	107	115	1	47.81	ppb	50	1186468	2.90	95.62	90	110	
Cd	111	115	1	48.98	ppb	50	238347	3.21	97.95	90	110	
Sb	121	115	1	47.04	ppb	50	914917	3.89	94.07	90	110	
Ba	137	159	1	50.52	ppb	50	356067	3.12	101.03	90	110	
Tl	205	165	1	50.87	ppb	50	3038484	2.20	101.73	90	110	
Pb	208	165	1	51.02	ppb	50	2041592	2.73	102.04	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1144288	2.04	1058582	108.1	70	130	
Sc	45	2	60224	1.79	55969	107.6	70	130	
In	115	1	1681161	1.89	1490926	112.8	70	130	
In	115	2	346704	1.57	324073	107.0	70	130	
Tb	159	1	2572053	2.57	2402233	107.1	70	130	
Tb	159	2	1133621	1.56	1053942	107.6	70	130	
Ho	165	1	2556160	2.84	2372257	107.8	70	130	
Ho	165	2	1120903	0.83	1044050	107.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-333619**
Data File Name	**0196CCB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:44:30-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	-2.63	ppb	500	
Mg	24	115	2	-0.14	ppb	500	
Al	27	115	2	0.03	ppb	500	
K	39	115	2	-2.65	ppb	500	
Ca	44	115	2	-3.53	ppb	500	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	-0.01	ppb	2	
Mn	55	115	2	-0.06	ppb	6	
Fe	56	115	2	0.46	ppb	500	
Co	59	115	2	0.00	ppb	2	
Ni	60	115	2	-0.01	ppb	3	
Cu	65	115	2	-0.13	ppb	10	
Zn	66	115	2	-0.23	ppb	20	
As	75	115	2	0.01	ppb	1	
Se	78	115	2	0.01	ppb	10	
Mo	95	115	1	0.07	ppb	1	
Ag	107	115	1	0.02	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.03	ppb	4	
Ba	137	159	1	-0.02	ppb	5	
Tl	205	165	1	-0.01	ppb	2	
Pb	208	165	1	0.00	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1140614	1.28	1058582	107.7	70	130	
Sc	45	2	60843	1.13	55969	108.7	70	130	
In	115	1	1717662	2.61	1490926	115.2	70	130	
In	115	2	352024	0.52	324073	108.6	70	130	
Tb	159	1	2582507	0.34	2402233	107.5	70	130	
Tb	159	2	1136007	0.56	1053942	107.8	70	130	
Ho	165	1	2532327	0.74	2372257	106.7	70	130	
Ho	165	2	1129155	0.55	1044050	108.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**MB 85229**
Data File Name	**020SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:49:01-04:00**
Type	**Sample**
VialNumber	**2201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.01	0.01	ppb	138	9.16	550	
Na	23	115	2	0.13	0.13	ppb	58262	0.80	55000	
Mg	24	115	2	0.20	0.20	ppb	1312	3.70	55000	
Al	27	115	2	-1.83	-1.83	ppb	730	11.22	16500	
K	39	115	2	-2.11	-2.11	ppb	37414	0.79	55000	
Ca	44	115	2	0.38	0.38	ppb	369	12.27	55000	
V	51	115	2	0.11	0.11	ppb	714	11.18	550	
Cr	52	115	2	0.04	0.04	ppb	2316	6.10	550	
Mn	55	115	2	0.17	0.17	ppb	1835	5.97	550	
Fe	56	115	2	2.02	2.02	ppb	55656	2.05	55000	
Co	59	115	2	0.00	0.00	ppb	163	17.79	550	
Ni	60	115	2	-0.02	-0.02	ppb	958	8.25	550	
Cu	65	115	2	0.37	0.37	ppb	3733	1.80	550	
Zn	66	115	2	1.97	1.97	ppb	4434	2.05	550	
As	75	115	2	0.02	0.02	ppb	29	26.95	550	
Se	78	115	2	0.17	0.17	ppb	24	28.25	2750	
Mo	95	115	1	0.03	0.03	ppb	409	7.71	550	
Ag	107	115	1	0.47	0.47	ppb	12761	4.42	550	
Cd	111	115	1	0.00	0.00	ppb	40	6.47	550	
Sb	121	115	1	-0.14	-0.14	ppb	1205	6.33	550	
Ba	137	159	1	-0.09	-0.09	ppb	558	0.91	550	
Tl	205	165	1	-0.02	-0.02	ppb	1428	5.91	550	
Pb	208	165	1	0.00	0.00	ppb	3288	5.94	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1174604	1.39	1058582	111.0	70	130	
Sc	45	2	59482	1.10	55969	106.3	70	130	
In	115	1	1774787	0.51	1490926	119.0	70	130	
In	115	2	345123	0.76	324073	106.5	70	130	
Tb	159	1	2685850	0.82	2402233	111.8	70	130	
Tb	159	2	1134234	0.93	1053942	107.6	70	130	
Ho	165	1	2633870	1.46	2372257	111.0	70	130	
Ho	165	2	1128829	0.31	1044050	108.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LCS 85229**
Data File Name	**021SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:53:34-04:00**
Type	**Sample**
VialNumber	**2202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	144.89	144.89	ppb	1613333	1.74	550	
Na	23	115	2	738.59	738.59	ppb	1272986	0.44	55000	
Mg	24	115	2	5727.38	5727.38	ppb	4501399	1.25	55000	
Al	27	115	2	7467.66	7467.66	ppb	2115023	1.97	16500	
K	39	115	2	1597.78	1597.78	ppb	876871	1.69	55000	
Ca	44	115	2	17246.22	17246.22	ppb	457829	2.18	55000	
V	51	115	2	233.01	233.01	ppb	1372921	2.46	550	
Cr	52	115	2	182.81	182.81	ppb	1363619	3.10	550	
Mn	55	115	2	473.54	473.54	ppb	2004470	1.38	550	
Fe	56	115	2	11791.42	11791.42	ppb	73798275	1.58	55000	
Co	59	115	2	226.61	226.61	ppb	2665627	1.24	550	
Ni	60	115	2	43.04	43.04	ppb	134913	2.12	550	
Cu	65	115	2	167.37	167.37	ppb	687801	1.88	550	
Zn	66	115	2	539.44	539.44	ppb	661644	2.07	550	
As	75	115	2	38.59	38.59	ppb	27638	1.68	550	
Se	78	115	2	279.33	279.33	ppb	15908	0.76	2750	
Mo	95	115	1	150.79	150.79	ppb	1418441	6.26	550	
Ag	107	115	1	72.88	72.88	ppb	1893814	3.81	550	
Cd	111	115	1	142.03	142.03	ppb	723824	2.97	550	
Sb	121	115	1	30.36	30.36	ppb	619935	2.94	550	
Ba	137	159	1	706.82	706.82	ppb	5301151	1.69	550	>LDR
Tl	205	165	1	164.01	164.01	ppb	10353021	2.73	550	
Pb	208	165	1	127.37	127.37	ppb	5384386	1.91	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1308245	0.85	1058582	123.6	70	130	
Sc	45	2	59921	1.30	55969	107.1	70	130	
In	115	1	1760233	1.00	1490926	118.1	70	130	
In	115	2	333121	1.16	324073	102.8	70	130	
Tb	159	1	2743398	1.55	2402233	114.2	70	130	
Tb	159	2	1148799	1.53	1053942	109.0	70	130	
Ho	165	1	2700748	2.20	2372257	113.8	70	130	
Ho	165	2	1136784	1.39	1044050	108.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LCS MR 85229**
Data File Name	**022SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:57:52-04:00**
Type	**Sample**
VialNumber	**2203**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	143.29	143.29	ppb	1592234	3.16	550	
Na	23	115	2	727.34	727.34	ppb	1252141	2.26	55000	
Mg	24	115	2	5647.07	5647.07	ppb	4429590	1.63	55000	
Al	27	115	2	7368.53	7368.53	ppb	2082642	1.20	16500	
K	39	115	2	1572.86	1572.86	ppb	862008	0.56	55000	
Ca	44	115	2	17195.69	17195.69	ppb	455566	1.25	55000	
V	51	115	2	230.39	230.39	ppb	1354727	2.31	550	
Cr	52	115	2	183.25	183.25	ppb	1363971	2.16	550	
Mn	55	115	2	470.64	470.64	ppb	1988447	1.85	550	
Fe	56	115	2	11719.50	11719.50	ppb	73203502	1.51	55000	
Co	59	115	2	226.46	226.46	ppb	2658906	2.75	550	
Ni	60	115	2	42.48	42.48	ppb	132916	0.77	550	
Cu	65	115	2	167.47	167.47	ppb	686866	2.17	550	
Zn	66	115	2	539.80	539.80	ppb	660760	1.36	550	
As	75	115	2	38.68	38.68	ppb	27644	1.31	550	
Se	78	115	2	276.12	276.12	ppb	15694	0.73	2750	
Mo	95	115	1	153.00	153.00	ppb	1410405	5.03	550	
Ag	107	115	1	74.63	74.63	ppb	1900078	0.51	550	
Cd	111	115	1	146.76	146.76	ppb	732769	2.70	550	
Sb	121	115	1	32.17	32.17	ppb	643258	2.74	550	
Ba	137	159	1	695.98	695.98	ppb	5253768	3.56	550	>LDR
Tl	205	165	1	167.49	167.49	ppb	10552114	3.64	550	
Pb	208	165	1	129.49	129.49	ppb	5463478	3.13	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1286386	0.62	1058582	121.5	70	130	
Sc	45	2	60446	2.57	55969	108.0	70	130	
In	115	1	1724196	0.49	1490926	115.6	70	130	
In	115	2	332455	1.03	324073	102.6	70	130	
Tb	159	1	2760023	0.69	2402233	114.9	70	130	
Tb	159	2	1153982	0.21	1053942	109.5	70	130	
Ho	165	1	2694818	0.96	2372257	113.6	70	130	
Ho	165	2	1143235	1.01	1044050	109.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18960-001**
Data File Name	**023SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:02:11-04:00**
Type	**Sample**
VialNumber	**2309**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.94	0.94	ppb	10911	5.20	550	
Na	23	115	2	226.67	226.67	ppb	439884	1.25	55000	
Mg	24	115	2	1620.22	1620.22	ppb	1304780	0.30	55000	
Al	27	115	2	24343.81	24343.81	ppb	7057658	1.11	16500	>LDR
K	39	115	2	2192.76	2192.76	ppb	1218126	0.68	55000	
Ca	44	115	2	5800.94	5800.94	ppb	157933	1.05	55000	
V	51	115	2	191.28	191.28	ppb	1154169	1.51	550	
Cr	52	115	2	77.15	77.15	ppb	590427	1.74	550	
Mn	55	115	2	102.82	102.82	ppb	446611	1.59	550	
Fe	56	115	2	139809.23	139809.23	ppb	895703142	1.60	55000	>LDR
Co	59	115	2	2.65	2.65	ppb	32054	3.40	550	
Ni	60	115	2	5.54	5.54	ppb	18678	2.89	550	
Cu	65	115	2	39.07	39.07	ppb	166079	2.28	550	
Zn	66	115	2	73.83	73.83	ppb	94395	2.17	550	
As	75	115	2	92.24	92.24	ppb	67638	0.98	550	
Se	78	115	2	4.93	4.93	ppb	301	9.20	2750	
Mo	95	115	1	3.16	3.16	ppb	30036	2.85	550	
Ag	107	115	1	0.16	0.16	ppb	4621	1.40	550	
Cd	111	115	1	0.28	0.28	ppb	1452	4.25	550	
Sb	121	115	1	0.73	0.73	ppb	18833	2.66	550	
Ba	137	159	1	58.38	58.38	ppb	451980	4.11	550	
Tl	205	165	1	0.50	0.50	ppb	35340	4.60	550	
Pb	208	165	1	69.66	69.66	ppb	3050875	3.75	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1801067	0.62	1058582	170.1	70	130	IS Fail
Sc	45	2	85895	1.21	55969	153.5	70	130	IS Fail
In	115	1	1773070	0.79	1490926	118.9	70	130	
In	115	2	341172	1.74	324073	105.3	70	130	
Tb	159	1	2823480	1.49	2402233	117.5	70	130	
Tb	159	2	1190819	1.40	1053942	113.0	70	130	
Ho	165	1	2795689	1.35	2372257	117.8	70	130	
Ho	165	2	1187256	0.72	1044050	113.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18960-003**
Data File Name	**024SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:06:39-04:00**
Type	**Sample**
VialNumber	**2310**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.14	1.14	ppb	13594	3.55	550	
Na	23	115	2	401.44	401.44	ppb	752605	1.36	55000	
Mg	24	115	2	5815.26	5815.26	ppb	4794861	1.82	55000	
Al	27	115	2	17132.47	17132.47	ppb	5088402	1.29	16500	>LDR
K	39	115	2	1461.90	1461.90	ppb	844984	1.58	55000	
Ca	44	115	2	10609.97	10609.97	ppb	295613	1.54	55000	
V	51	115	2	44.21	44.21	ppb	273311	2.14	550	
Cr	52	115	2	33.98	33.98	ppb	267484	1.37	550	
Mn	55	115	2	740.57	740.57	ppb	3287922	0.67	550	>LDR
Fe	56	115	2	34221.59	34221.59	ppb	224602228	1.04	55000	
Co	59	115	2	14.37	14.37	ppb	177467	2.00	550	
Ni	60	115	2	34.18	34.18	ppb	112614	0.94	550	
Cu	65	115	2	171.11	171.11	ppb	737662	1.99	550	
Zn	66	115	2	363.36	363.36	ppb	468191	1.82	550	
As	75	115	2	9.58	9.58	ppb	7208	1.75	550	
Se	78	115	2	4.22	4.22	ppb	266	6.49	2750	
Mo	95	115	1	0.95	0.95	ppb	9331	6.08	550	
Ag	107	115	1	0.27	0.27	ppb	7459	4.51	550	
Cd	111	115	1	0.86	0.86	ppb	4542	4.69	550	
Sb	121	115	1	0.83	0.83	ppb	21541	2.30	550	
Ba	137	159	1	189.08	189.08	ppb	1508866	5.45	550	
Tl	205	165	1	0.16	0.16	ppb	13730	5.93	550	
Pb	208	165	1	499.63	499.63	ppb	22603267	3.82	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1598954	1.98	1058582	151.0	70	130	IS Fail
Sc	45	2	76453	1.42	55969	136.6	70	130	IS Fail
In	115	1	1816490	0.81	1490926	121.8	70	130	
In	115	2	349462	1.30	324073	107.8	70	130	
Tb	159	1	2915885	1.08	2402233	121.4	70	130	
Tb	159	2	1227204	1.02	1053942	116.4	70	130	
Ho	165	1	2890445	2.27	2372257	121.8	70	130	
Ho	165	2	1215988	1.51	1044050	116.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18960-004**
Data File Name	**025SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:11:05-04:00**
Type	**Sample**
VialNumber	**2311**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	2.37	2.37	ppb	29036	3.63	550	
Na	23	115	2	662.48	662.48	ppb	1189450	1.44	55000	
Mg	24	115	2	16225.29	16225.29	ppb	13217424	1.65	55000	
Al	27	115	2	27233.75	27233.75	ppb	7991423	1.02	16500	>LDR
K	39	115	2	4225.08	4225.08	ppb	2339955	0.56	55000	
Ca	44	115	2	8434.53	8434.53	ppb	232279	1.20	55000	
V	51	115	2	74.72	74.72	ppb	456392	1.63	550	
Cr	52	115	2	74.01	74.01	ppb	573382	1.22	550	
Mn	55	115	2	1516.48	1516.48	ppb	6652892	2.41	550	>LDR
Fe	56	115	2	46347.54	46347.54	ppb	300572451	1.32	55000	
Co	59	115	2	27.14	27.14	ppb	331055	1.49	550	
Ni	60	115	2	54.97	54.97	ppb	178346	1.79	550	
Cu	65	115	2	55.32	55.32	ppb	237099	1.14	550	
Zn	66	115	2	196.03	196.03	ppb	250488	1.79	550	
As	75	115	2	13.45	13.45	ppb	9994	1.65	550	
Se	78	115	2	6.25	6.25	ppb	382	4.51	2750	
Mo	95	115	1	0.63	0.63	ppb	6186	6.38	550	
Ag	107	115	1	0.09	0.09	ppb	2640	7.38	550	
Cd	111	115	1	0.23	0.23	ppb	1216	6.89	550	
Sb	121	115	1	0.06	0.06	ppb	5312	4.37	550	
Ba	137	159	1	255.28	255.28	ppb	2101791	4.01	550	
Tl	205	165	1	0.25	0.25	ppb	20227	3.64	550	
Pb	208	165	1	30.65	30.65	ppb	1424732	3.48	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1914299	1.40	1058582	180.8	70	130	IS Fail
Sc	45	2	92853	0.99	55969	165.9	70	130	IS Fail
In	115	1	1813356	1.18	1490926	121.6	70	130	
In	115	2	345330	1.33	324073	106.6	70	130	
Tb	159	1	3008937	0.97	2402233	125.3	70	130	
Tb	159	2	1252309	0.39	1053942	118.8	70	130	
Ho	165	1	2963574	0.41	2372257	124.9	70	130	
Ho	165	2	1253992	1.11	1044050	120.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18960-007**
Data File Name	**026SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:15:30-04:00**
Type	**Sample**
VialNumber	**2312**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	2.15	2.15	ppb	26016	2.71	550	
Na	23	115	2	1948.10	1948.10	ppb	3368198	0.83	55000	
Mg	24	115	2	20366.02	20366.02	ppb	16503717	1.74	55000	
Al	27	115	2	34922.05	34922.05	ppb	10194356	1.59	16500	>LDR
K	39	115	2	3389.14	3389.14	ppb	1875015	1.65	55000	
Ca	44	115	2	16618.46	16618.46	ppb	454955	2.45	55000	
V	51	115	2	109.89	109.89	ppb	667669	1.59	550	
Cr	52	115	2	54.64	54.64	ppb	421633	1.57	550	
Mn	55	115	2	2028.87	2028.87	ppb	8853283	1.38	550	>LDR
Fe	56	115	2	70402.43	70402.43	ppb	454178869	1.34	55000	>LDR
Co	59	115	2	60.51	60.51	ppb	734125	0.86	550	
Ni	60	115	2	85.30	85.30	ppb	274751	1.34	550	
Cu	65	115	2	172.38	172.38	ppb	730466	2.01	550	
Zn	66	115	2	394.46	394.46	ppb	499447	1.92	550	
As	75	115	2	11.78	11.78	ppb	8711	0.42	550	
Se	78	115	2	5.94	5.94	ppb	362	9.05	2750	
Mo	95	115	1	1.87	1.87	ppb	18002	3.66	550	
Ag	107	115	1	0.30	0.30	ppb	8248	0.73	550	
Cd	111	115	1	0.35	0.35	ppb	1834	2.77	550	
Sb	121	115	1	0.82	0.82	ppb	20952	2.35	550	
Ba	137	159	1	236.66	236.66	ppb	1919695	2.96	550	
Tl	205	165	1	0.25	0.25	ppb	20387	4.03	550	
Pb	208	165	1	84.18	84.18	ppb	3865267	3.60	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1746972	0.78	1058582	165.0	70	130	IS Fail
Sc	45	2	84773	1.38	55969	151.5	70	130	IS Fail
In	115	1	1794508	1.03	1490926	120.4	70	130	
In	115	2	343528	0.42	324073	106.0	70	130	
Tb	159	1	2964847	0.68	2402233	123.4	70	130	
Tb	159	2	1247272	0.78	1053942	118.3	70	130	
Ho	165	1	2932927	1.40	2372257	123.6	70	130	
Ho	165	2	1233744	1.41	1044050	118.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18960-015**
Data File Name	**027SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:19:52-04:00**
Type	**Sample**
VialNumber	**2401**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	2.14	2.14	ppb	25491	3.52	550	
Na	23	115	2	1462.26	1462.26	ppb	2475219	1.88	55000	
Mg	24	115	2	28618.88	28618.88	ppb	22575488	0.95	55000	
Al	27	115	2	30436.71	30436.71	ppb	8649595	1.42	16500	>LDR
K	39	115	2	5393.50	5393.50	ppb	2882647	1.08	55000	
Ca	44	115	2	40906.97	40906.97	ppb	1089647	1.17	55000	
V	51	115	2	103.00	103.00	ppb	609206	1.09	550	
Cr	52	115	2	122.87	122.87	ppb	920551	1.39	550	
Mn	55	115	2	2129.40	2129.40	ppb	9045350	1.30	550	>LDR
Fe	56	115	2	71054.16	71054.16	ppb	446218944	0.94	55000	>LDR
Co	59	115	2	56.91	56.91	ppb	672161	1.59	550	
Ni	60	115	2	505.62	505.62	ppb	1580436	0.94	550	
Cu	65	115	2	99.20	99.20	ppb	410083	1.86	550	
Zn	66	115	2	303.12	303.12	ppb	374066	2.26	550	
As	75	115	2	18.95	18.95	ppb	13636	3.37	550	
Se	78	115	2	4.69	4.69	ppb	281	1.95	2750	
Mo	95	115	1	1.64	1.64	ppb	15573	3.23	550	
Ag	107	115	1	0.35	0.35	ppb	9503	2.63	550	
Cd	111	115	1	0.62	0.62	ppb	3200	1.97	550	
Sb	121	115	1	0.39	0.39	ppb	11868	1.30	550	
Ba	137	159	1	250.49	250.49	ppb	1983859	3.59	550	
Tl	205	165	1	0.38	0.38	ppb	28275	4.60	550	
Pb	208	165	1	112.40	112.40	ppb	5078456	3.03	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1853757	0.29	1058582	175.1	70	130	IS Fail
Sc	45	2	88300	1.19	55969	157.8	70	130	IS Fail
In	115	1	1761095	1.11	1490926	118.1	70	130	
In	115	2	334407	0.71	324073	103.2	70	130	
Tb	159	1	2894281	1.70	2402233	120.5	70	130	
Tb	159	2	1207736	0.55	1053942	114.6	70	130	
Ho	165	1	2885549	1.06	2372257	121.6	70	130	
Ho	165	2	1201446	1.36	1044050	115.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18960-017**
Data File Name	**028SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:24:13-04:00**
Type	**Sample**
VialNumber	**2402**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.30	1.30	ppb	15198	2.28	550	
Na	23	115	2	826.61	826.61	ppb	1323741	1.66	55000	
Mg	24	115	2	18192.21	18192.21	ppb	13343601	1.80	55000	
Al	27	115	2	22650.82	22650.82	ppb	5982398	0.69	16500	>LDR
K	39	115	2	3298.55	3298.55	ppb	1651660	0.99	55000	
Ca	44	115	2	44213.53	44213.53	ppb	1095022	1.61	55000	
V	51	115	2	75.54	75.54	ppb	415276	1.39	550	
Cr	52	115	2	75.47	75.47	ppb	526122	0.46	550	
Mn	55	115	2	1142.82	1142.82	ppb	4512206	1.07	550	>LDR
Fe	56	115	2	51615.59	51615.59	ppb	301426838	1.75	55000	
Co	59	115	2	32.25	32.25	ppb	354155	1.47	550	
Ni	60	115	2	178.66	178.66	ppb	519868	1.70	550	
Cu	65	115	2	123.49	123.49	ppb	474214	1.69	550	
Zn	66	115	2	282.65	282.65	ppb	324394	1.47	550	
As	75	115	2	13.19	13.19	ppb	8816	1.39	550	
Se	78	115	2	3.93	3.93	ppb	220	4.77	2750	
Mo	95	115	1	2.70	2.70	ppb	25395	3.65	550	
Ag	107	115	1	0.84	0.84	ppb	22133	0.42	550	
Cd	111	115	1	0.49	0.49	ppb	2524	5.71	550	
Sb	121	115	1	0.33	0.33	ppb	10545	6.44	550	
Ba	137	159	1	190.89	190.89	ppb	1493281	3.03	550	
Tl	205	165	1	0.20	0.20	ppb	16314	3.66	550	
Pb	208	165	1	113.28	113.28	ppb	5009563	3.34	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1601712	0.92	1058582	151.3	70	130	IS Fail
Sc	45	2	71946	5.47	55969	128.5	70	130	
In	115	1	1750418	0.96	1490926	117.4	70	130	
In	115	2	312049	8.07	324073	96.3	70	130	
Tb	159	1	2858962	0.92	2402233	119.0	70	130	
Tb	159	2	1133816	6.48	1053942	107.6	70	130	
Ho	165	1	2824985	0.86	2372257	119.1	70	130	
Ho	165	2	1130344	6.56	1044050	108.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**029SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:28:38-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.02	0.02	ppb	208	34.64	550	
Na	23	115	2	-8.92	-8.92	ppb	43834	0.89	55000	
Mg	24	115	2	0.92	0.92	ppb	1946	2.90	55000	
Al	27	115	2	-1.81	-1.81	ppb	754	13.79	16500	
K	39	115	2	-6.63	-6.63	ppb	35785	0.89	55000	
Ca	44	115	2	-2.42	-2.42	ppb	299	16.74	55000	
V	51	115	2	0.02	0.02	ppb	194	3.57	550	
Cr	52	115	2	-0.01	-0.01	ppb	1936	7.80	550	
Mn	55	115	2	-0.05	-0.05	ppb	883	4.58	550	
Fe	56	115	2	1.97	1.97	ppb	56618	1.65	55000	
Co	59	115	2	0.01	0.01	ppb	237	13.43	550	
Ni	60	115	2	-0.07	-0.07	ppb	833	9.15	550	
Cu	65	115	2	0.07	0.07	ppb	2511	3.73	550	
Zn	66	115	2	-0.48	-0.48	ppb	1361	5.46	550	
As	75	115	2	0.02	0.02	ppb	25	9.33	550	
Se	78	115	2	0.21	0.21	ppb	27	32.55	2750	
Mo	95	115	1	0.03	0.03	ppb	431	12.57	550	
Ag	107	115	1	0.34	0.34	ppb	9366	4.38	550	
Cd	111	115	1	0.01	0.01	ppb	80	18.41	550	
Sb	121	115	1	-0.15	-0.15	ppb	887	13.05	550	
Ba	137	159	1	-0.11	-0.11	ppb	397	3.66	550	
Tl	205	165	1	-0.01	-0.01	ppb	2140	11.17	550	
Pb	208	165	1	0.02	0.02	ppb	4106	1.40	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1176246	0.46	1058582	111.1	70	130	
Sc	45	2	59884	0.84	55969	107.0	70	130	
In	115	1	1784527	0.92	1490926	119.7	70	130	
In	115	2	353322	0.36	324073	109.0	70	130	
Tb	159	1	2680990	0.47	2402233	111.6	70	130	
Tb	159	2	1157906	1.21	1053942	109.9	70	130	
Ho	165	1	2654807	1.00	2372257	111.9	70	130	
Ho	165	2	1154287	0.75	1044050	110.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-333622**
Data File Name	**0306CCV.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:33:09-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	52.90	ppb	50	564795	4.20	105.81	90	110	
Na	23	115	2	4825.70	ppb	5000	8362868	1.11	96.51	90	110	
Mg	24	115	2	4836.53	ppb	5000	3969984	1.41	96.73	90	110	
Al	27	115	2	1424.89	ppb	1500	422477	2.16	94.99	90	110	
K	39	115	2	4944.46	ppb	5000	2752242	0.41	98.89	90	110	
Ca	44	115	2	4864.20	ppb	5000	135109	1.34	97.28	90	110	
V	51	115	2	49.76	ppb	50	306177	2.29	99.51	90	110	
Cr	52	115	2	49.82	ppb	50	389478	2.37	99.63	90	110	
Mn	55	115	2	49.32	ppb	50	219020	1.92	98.64	90	110	
Fe	56	115	2	5048.93	ppb	5000	33024907	1.52	100.98	90	110	
Co	59	115	2	50.49	ppb	50	620418	0.87	100.99	90	110	
Ni	60	115	2	50.67	ppb	50	165714	2.14	101.35	90	110	
Cu	65	115	2	50.64	ppb	50	218839	1.58	101.28	90	110	
Zn	66	115	2	49.82	ppb	50	65589	0.72	99.65	90	110	
As	75	115	2	50.47	ppb	50	37742	0.70	100.93	90	110	
Se	78	115	2	250.20	ppb	250	14881	1.71	100.08	90	110	
Mo	95	115	1	48.01	ppb	50	446712	3.50	96.03	90	110	
Ag	107	115	1	47.09	ppb	50	1209959	3.45	94.18	90	110	
Cd	111	115	1	48.05	ppb	50	242155	3.28	96.11	90	110	
Sb	121	115	1	46.55	ppb	50	937625	3.39	93.10	90	110	
Ba	137	159	1	50.26	ppb	50	366052	3.45	100.53	90	110	
Tl	205	165	1	50.69	ppb	50	3070031	2.57	101.39	90	110	
Pb	208	165	1	51.30	ppb	50	2081236	2.82	102.60	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1171261	0.55	1058582	110.6	70	130	
Sc	45	2	60105	0.47	55969	107.4	70	130	
In	115	1	1740498	1.10	1490926	116.7	70	130	
In	115	2	347883	0.90	324073	107.3	70	130	
Tb	159	1	2655144	0.78	2402233	110.5	70	130	
Tb	159	2	1141526	1.13	1053942	108.3	70	130	
Ho	165	1	2589130	0.10	2372257	109.1	70	130	
Ho	165	2	1132562	0.77	1044050	108.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-333619**
Data File Name	**0316CCB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:37:33-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	-4.72	ppb	500	
Mg	24	115	2	-0.12	ppb	500	
Al	27	115	2	-0.24	ppb	500	
K	39	115	2	-4.83	ppb	500	
Ca	44	115	2	-4.53	ppb	500	
V	51	115	2	0.00	ppb	1	
Cr	52	115	2	0.01	ppb	2	
Mn	55	115	2	-0.05	ppb	6	
Fe	56	115	2	0.92	ppb	500	
Co	59	115	2	0.00	ppb	2	
Ni	60	115	2	0.00	ppb	3	
Cu	65	115	2	-0.10	ppb	10	
Zn	66	115	2	0.01	ppb	20	
As	75	115	2	0.02	ppb	1	
Se	78	115	2	0.15	ppb	10	
Mo	95	115	1	0.07	ppb	1	
Ag	107	115	1	0.03	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.03	ppb	4	
Ba	137	159	1	-0.02	ppb	5	
Tl	205	165	1	-0.01	ppb	2	
Pb	208	165	1	0.01	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1175063	1.23	1058582	111.0	70	130	
Sc	45	2	60859	0.42	55969	108.7	70	130	
In	115	1	1760432	0.72	1490926	118.1	70	130	
In	115	2	352377	1.69	324073	108.7	70	130	
Tb	159	1	2669691	1.05	2402233	111.1	70	130	
Tb	159	2	1134824	1.33	1053942	107.7	70	130	
Ho	165	1	2619239	0.71	2372257	110.4	70	130	
Ho	165	2	1136205	0.92	1044050	108.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18955-001**
Data File Name	**032SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:42:04-04:00**
Type	**Sample**
VialNumber	**2204**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.98	0.98	ppb	11198	2.61	550	
Na	23	115	2	286.99	286.99	ppb	502203	0.14	55000	
Mg	24	115	2	21394.33	21394.33	ppb	15962684	0.38	55000	
Al	27	115	2	15819.96	15819.96	ppb	4252918	1.04	16500	
K	39	115	2	2871.83	2871.83	ppb	1468253	1.04	55000	
Ca	44	115	2	267149.00	267149.00	ppb	6729074	1.34	55000	>LDR
V	51	115	2	42.59	42.59	ppb	238318	0.73	550	
Cr	52	115	2	44.99	44.99	ppb	319995	0.60	550	
Mn	55	115	2	2842.89	2842.89	ppb	11422246	1.44	550	>LDR
Fe	56	115	2	68467.37	68467.37	ppb	406709994	1.48	55000	>LDR
Co	59	115	2	20.43	20.43	ppb	228292	0.84	550	
Ni	60	115	2	66.56	66.56	ppb	197603	1.66	550	
Cu	65	115	2	136.53	136.53	ppb	533118	0.57	550	
Zn	66	115	2	285.41	285.41	ppb	333233	1.16	550	
As	75	115	2	34.46	34.46	ppb	23436	1.37	550	
Se	78	115	2	4.44	4.44	ppb	253	8.17	2750	
Mo	95	115	1	4.41	4.41	ppb	40332	3.69	550	
Ag	107	115	1	0.34	0.34	ppb	8838	3.98	550	
Cd	111	115	1	0.61	0.61	ppb	3031	2.82	550	
Sb	121	115	1	5.41	5.41	ppb	110382	2.49	550	
Ba	137	159	1	363.60	363.60	ppb	2746886	3.27	550	
Tl	205	165	1	0.34	0.34	ppb	24497	3.70	550	
Pb	208	165	1	998.20	998.20	ppb	43027294	3.78	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1539594	0.55	1058582	145.4	70	130	IS Fail
Sc	45	2	71637	1.20	55969	128.0	70	130	
In	115	1	1708455	1.72	1490926	114.6	70	130	
In	115	2	316304	0.76	324073	97.6	70	130	
Tb	159	1	2763198	1.59	2402233	115.0	70	130	
Tb	159	2	1136660	1.22	1053942	107.8	70	130	
Ho	165	1	2755614	1.45	2372257	116.2	70	130	
Ho	165	2	1131469	0.81	1044050	108.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18955-001 MR**
Data File Name	**033SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:46:26-04:00**
Type	**Sample**
VialNumber	**2205**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.05	1.05	ppb	11741	3.00	550	
Na	23	115	2	297.28	297.28	ppb	502538	0.83	55000	
Mg	24	115	2	22048.47	22048.47	ppb	15950669	1.50	55000	
Al	27	115	2	16939.36	16939.36	ppb	4415212	1.78	16500	>LDR
K	39	115	2	2814.51	2814.51	ppb	1395982	2.26	55000	
Ca	44	115	2	334778.25	334778.25	ppb	8175993	1.84	55000	>LDR
V	51	115	2	41.66	41.66	ppb	225993	1.66	550	
Cr	52	115	2	47.76	47.76	ppb	329208	1.71	550	
Mn	55	115	2	2920.79	2920.79	ppb	11377909	1.58	550	>LDR
Fe	56	115	2	62480.05	62480.05	ppb	359848310	1.71	55000	>LDR
Co	59	115	2	20.27	20.27	ppb	219601	1.55	550	
Ni	60	115	2	66.96	66.96	ppb	192737	1.96	550	
Cu	65	115	2	124.29	124.29	ppb	470742	1.64	550	
Zn	66	115	2	288.38	288.38	ppb	326444	1.97	550	
As	75	115	2	34.01	34.01	ppb	22426	1.46	550	
Se	78	115	2	4.12	4.12	ppb	228	9.94	2750	
Mo	95	115	1	4.03	4.03	ppb	35704	4.23	550	
Ag	107	115	1	0.29	0.29	ppb	7290	1.21	550	
Cd	111	115	1	0.63	0.63	ppb	3048	1.18	550	
Sb	121	115	1	3.14	3.14	ppb	63575	1.45	550	
Ba	137	159	1	361.54	361.54	ppb	2716203	1.95	550	
Tl	205	165	1	0.32	0.32	ppb	22853	4.00	550	
Pb	208	165	1	895.71	895.71	ppb	37977605	3.43	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1495974	1.20	1058582	141.3	70	130	IS Fail
Sc	45	2	69658	2.30	55969	124.5	70	130	
In	115	1	1654455	1.88	1490926	111.0	70	130	
In	115	2	306674	1.08	324073	94.6	70	130	
Tb	159	1	2746614	0.43	2402233	114.3	70	130	
Tb	159	2	1113385	1.19	1053942	105.6	70	130	
Ho	165	1	2709845	0.48	2372257	114.2	70	130	
Ho	165	2	1105858	0.99	1044050	105.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18955-001 SD**
Data File Name	**034SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:50:48-04:00**
Type	**Sample**
VialNumber	**2209**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.22	0.22	ppb	2476	7.23	550	
Na	23	115	2	62.29	62.29	ppb	159122	1.82	55000	
Mg	24	115	2	4400.79	4400.79	ppb	3469155	1.28	55000	
Al	27	115	2	3257.27	3257.27	ppb	925881	1.61	16500	
K	39	115	2	567.44	567.44	ppb	336377	0.88	55000	
Ca	44	115	2	55666.41	55666.41	ppb	1481371	1.58	55000	>LDR
V	51	115	2	8.56	8.56	ppb	50608	1.99	550	
Cr	52	115	2	9.09	9.09	ppb	69838	0.79	550	
Mn	55	115	2	590.28	590.28	ppb	2505822	1.72	550	>LDR
Fe	56	115	2	14103.61	14103.61	ppb	88522094	1.10	55000	
Co	59	115	2	4.21	4.21	ppb	49838	0.86	550	
Ni	60	115	2	13.91	13.91	ppb	44406	0.62	550	
Cu	65	115	2	29.46	29.46	ppb	123154	1.86	550	
Zn	66	115	2	64.26	64.26	ppb	80694	1.43	550	
As	75	115	2	7.35	7.35	ppb	5292	2.53	550	
Se	78	115	2	1.07	1.07	ppb	74	3.95	2750	
Mo	95	115	1	0.91	0.91	ppb	8603	3.38	550	
Ag	107	115	1	0.07	0.07	ppb	2069	3.45	550	
Cd	111	115	1	0.13	0.13	ppb	672	5.71	550	
Sb	121	115	1	1.06	1.06	ppb	25337	3.23	550	
Ba	137	159	1	75.78	75.78	ppb	561976	3.50	550	
Tl	205	165	1	0.05	0.05	ppb	6160	4.53	550	
Pb	208	165	1	222.68	222.68	ppb	9441103	2.10	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1275625	0.69	1058582	120.5	70	130	
Sc	45	2	60960	1.16	55969	108.9	70	130	
In	115	1	1750796	0.60	1490926	117.4	70	130	
In	115	2	334137	1.62	324073	103.1	70	130	
Tb	159	1	2706325	0.50	2402233	112.7	70	130	
Tb	159	2	1135011	0.91	1053942	107.7	70	130	
Ho	165	1	2709306	0.86	2372257	114.2	70	130	
Ho	165	2	1134200	0.39	1044050	108.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18955-002 MS 1**
Data File Name	**035SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:55:14-04:00**
Type	**Sample**
VialNumber	**2206**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	197.08	197.08	ppb	2241223	2.53	550	
Na	23	115	2	21959.83	21959.83	ppb	34227090	1.22	55000	
Mg	24	115	2	69357.69	69357.69	ppb	51469928	1.29	55000	>LDR
Al	27	115	2	28766.18	28766.18	ppb	7690875	2.11	16500	>LDR
K	39	115	2	23103.25	23103.25	ppb	11501131	1.29	55000	
Ca	44	115	2	142849.18	142849.18	ppb	3579051	2.86	55000	>LDR
V	51	115	2	269.74	269.74	ppb	1500801	0.34	550	
Cr	52	115	2	270.32	270.32	ppb	1903179	2.16	550	
Mn	55	115	2	1170.53	1170.53	ppb	4678152	1.72	550	>LDR
Fe	56	115	2	69207.91	69207.91	ppb	408889234	1.98	55000	>LDR
Co	59	115	2	252.87	252.87	ppb	2809310	1.78	550	
Ni	60	115	2	282.30	282.30	ppb	830568	1.75	550	
Cu	65	115	2	300.56	300.56	ppb	1164940	1.50	550	
Zn	66	115	2	428.04	428.04	ppb	496185	2.00	550	
As	75	115	2	235.52	235.52	ppb	159243	2.11	550	
Se	78	115	2	202.55	202.55	ppb	10897	0.43	2750	
Mo	95	115	1	207.62	207.62	ppb	1869483	2.65	550	
Ag	107	115	1	38.91	38.91	ppb	967907	2.73	550	
Cd	111	115	1	201.15	201.15	ppb	981092	3.05	550	
Sb	121	115	1	68.42	68.42	ppb	1332171	3.20	550	
Ba	137	159	1	303.07	303.07	ppb	2314733	3.06	550	
Tl	205	165	1	189.24	189.24	ppb	12200168	3.29	550	
Pb	208	165	1	239.25	239.25	ppb	10327512	2.48	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1615822	0.76	1058582	152.6	70	130	IS Fail
Sc	45	2	76335	2.08	55969	136.4	70	130	IS Fail
In	115	1	1684461	0.68	1490926	113.0	70	130	
In	115	2	314598	0.51	324073	97.1	70	130	
Tb	159	1	2792488	1.04	2402233	116.2	70	130	
Tb	159	2	1149551	0.54	1053942	109.1	70	130	
Ho	165	1	2758555	0.82	2372257	116.3	70	130	
Ho	165	2	1145666	0.69	1044050	109.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 7:55 AM on:9/1/2020

Sample Report

Sample Name	**AD18955-003 MS 2**
Data File Name	**036SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:59:29-04:00**
Type	**Sample**
VialNumber	**2207**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	200.51	200.51	ppb	2300104	2.30	550	
Na	23	115	2	22059.69	22059.69	ppb	34843896	0.10	55000	
Mg	24	115	2	43482.94	43482.94	ppb	32703463	0.83	55000	
Al	27	115	2	21970.70	21970.70	ppb	5953615	1.70	16500	>LDR
K	39	115	2	23131.57	23131.57	ppb	11670672	2.06	55000	
Ca	44	115	2	149445.26	149445.26	ppb	3794748	1.84	55000	>LDR
V	51	115	2	263.23	263.23	ppb	1484432	1.36	550	
Cr	52	115	2	266.63	266.63	ppb	1902409	1.09	550	
Mn	55	115	2	1713.06	1713.06	ppb	6938461	1.27	550	>LDR
Fe	56	115	2	59339.94	59339.94	ppb	355304164	0.67	55000	>LDR
Co	59	115	2	254.05	254.05	ppb	2860634	1.66	550	
Ni	60	115	2	266.52	266.52	ppb	794771	1.48	550	
Cu	65	115	2	285.19	285.19	ppb	1120382	1.25	550	
Zn	66	115	2	402.13	402.13	ppb	472547	1.03	550	
As	75	115	2	250.54	250.54	ppb	171680	0.92	550	
Se	78	115	2	203.48	203.48	ppb	11096	2.00	2750	
Mo	95	115	1	217.75	217.75	ppb	1972153	2.03	550	
Ag	107	115	1	40.26	40.26	ppb	1007174	2.29	550	
Cd	111	115	1	207.29	207.29	ppb	1017011	2.64	550	
Sb	121	115	1	87.56	87.56	ppb	1713737	2.11	550	
Ba	137	159	1	354.26	354.26	ppb	2720428	1.99	550	
Tl	205	165	1	195.02	195.02	ppb	12682301	2.48	550	
Pb	208	165	1	242.55	242.55	ppb	10560735	3.01	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1550330	0.67	1058582	146.5	70	130	IS Fail
Sc	45	2	71307	1.82	55969	127.4	70	130	
In	115	1	1694055	0.37	1490926	113.6	70	130	
In	115	2	318850	1.11	324073	98.4	70	130	
Tb	159	1	2807869	0.82	2402233	116.9	70	130	
Tb	159	2	1144125	0.79	1053942	108.6	70	130	
Ho	165	1	2782081	0.18	2372257	117.3	70	130	
Ho	165	2	1133284	0.96	1044050	108.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 7:55 AM on:9/1/2020

Sample Report

Sample Name	**AD18955-001 PS**
Data File Name	**037SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:03:45-04:00**
Type	**Sample**
VialNumber	**2208**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	44.28	44.28	ppb	502157	1.99	550	
Na	23	115	2	5329.81	5329.81	ppb	8134262	0.40	55000	
Mg	24	115	2	25506.43	25506.43	ppb	18444218	1.08	55000	
Al	27	115	2	16757.75	16757.75	ppb	4366227	0.30	16500	>LDR
K	39	115	2	7575.54	7575.54	ppb	3697785	0.44	55000	
Ca	44	115	2	263365.74	263365.74	ppb	6429063	0.91	55000	>LDR
V	51	115	2	92.15	92.15	ppb	499638	0.82	550	
Cr	52	115	2	94.23	94.23	ppb	647570	0.78	550	
Mn	55	115	2	2810.02	2810.02	ppb	10941707	0.83	550	>LDR
Fe	56	115	2	71918.14	71918.14	ppb	414036278	1.02	55000	>LDR
Co	59	115	2	69.32	69.32	ppb	750566	0.24	550	
Ni	60	115	2	113.90	113.90	ppb	327067	0.72	550	
Cu	65	115	2	182.89	182.89	ppb	691463	0.88	550	
Zn	66	115	2	328.54	328.54	ppb	371498	0.99	550	
As	75	115	2	83.78	83.78	ppb	55204	0.60	550	
Se	78	115	2	229.83	229.83	ppb	12049	1.75	2750	
Mo	95	115	1	52.12	52.12	ppb	467497	2.94	550	
Ag	107	115	1	45.65	45.65	ppb	1130661	2.29	550	
Cd	111	115	1	46.41	46.41	ppb	225468	2.89	550	
Sb	121	115	1	52.07	52.07	ppb	1010574	2.52	550	
Ba	137	159	1	410.42	410.42	ppb	3102191	2.15	550	
Tl	205	165	1	46.93	46.93	ppb	3019227	2.37	550	
Pb	208	165	1	1044.59	1044.59	ppb	44950503	2.84	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1485025	0.79	1058582	140.3	70	130	IS Fail
Sc	45	2	68158	1.41	55969	121.8	70	130	
In	115	1	1677088	1.25	1490926	112.5	70	130	
In	115	2	306589	1.03	324073	94.6	70	130	
Tb	159	1	2763899	0.80	2402233	115.1	70	130	
Tb	159	2	1116366	0.34	1053942	105.9	70	130	
Ho	165	1	2750381	0.65	2372257	115.9	70	130	
Ho	165	2	1115771	0.67	1044050	106.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18951-001**
Data File Name	**038SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:08:06-04:00**
Type	**Sample**
VialNumber	**2305**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.18	0.18	ppb	2167	2.68	550	
Na	23	115	2	84.00	84.00	ppb	194435	1.51	55000	
Mg	24	115	2	128.98	128.98	ppb	102443	1.23	55000	
Al	27	115	2	6246.62	6246.62	ppb	1769271	2.02	16500	
K	39	115	2	191.05	191.05	ppb	137597	0.69	55000	
Ca	44	115	2	297.05	297.05	ppb	8224	0.81	55000	
V	51	115	2	21.94	21.94	ppb	129273	0.57	550	
Cr	52	115	2	8.08	8.08	ppb	62044	0.72	550	
Mn	55	115	2	26.06	26.06	ppb	111303	1.35	550	
Fe	56	115	2	9536.49	9536.49	ppb	59687791	1.76	55000	
Co	59	115	2	1.88	1.88	ppb	22257	2.47	550	
Ni	60	115	2	2.45	2.45	ppb	8609	3.76	550	
Cu	65	115	2	3.20	3.20	ppb	15189	2.38	550	
Zn	66	115	2	8.70	8.70	ppb	12505	1.85	550	
As	75	115	2	3.92	3.92	ppb	2819	1.21	550	
Se	78	115	2	1.31	1.31	ppb	88	9.56	2750	
Mo	95	115	1	0.40	0.40	ppb	3974	2.13	550	
Ag	107	115	1	0.09	0.09	ppb	2859	6.16	550	
Cd	111	115	1	0.02	0.02	ppb	121	9.67	550	
Sb	121	115	1	0.19	0.19	ppb	8137	6.10	550	
Ba	137	159	1	18.41	18.41	ppb	144087	4.43	550	
Tl	205	165	1	0.09	0.09	ppb	8747	2.55	550	
Pb	208	165	1	4.22	4.22	ppb	191424	2.67	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1408980	0.13	1058582	133.1	70	130	IS Fail
Sc	45	2	63256	1.30	55969	113.0	70	130	
In	115	1	1813214	0.83	1490926	121.6	70	130	
In	115	2	333104	1.65	324073	102.8	70	130	
Tb	159	1	2838184	1.21	2402233	118.1	70	130	
Tb	159	2	1152376	1.63	1053942	109.3	70	130	
Ho	165	1	2845718	0.35	2372257	120.0	70	130	
Ho	165	2	1162979	1.30	1044050	111.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18949-014**
Data File Name	**039SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:12:36-04:00**
Type	**Sample**
VialNumber	**2306**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.57	0.57	ppb	6644	3.24	550	
Na	23	115	2	103.68	103.68	ppb	226528	1.31	55000	
Mg	24	115	2	1557.84	1557.84	ppb	1223371	0.71	55000	
Al	27	115	2	11393.78	11393.78	ppb	3221302	1.94	16500	
K	39	115	2	707.22	707.22	ppb	408259	0.38	55000	
Ca	44	115	2	874.14	874.14	ppb	23498	3.42	55000	
V	51	115	2	29.51	29.51	ppb	173629	1.31	550	
Cr	52	115	2	29.42	29.42	ppb	220713	1.34	550	
Mn	55	115	2	85.81	85.81	ppb	363567	1.15	550	
Fe	56	115	2	23854.45	23854.45	ppb	149032671	0.77	55000	
Co	59	115	2	3.77	3.77	ppb	44380	2.09	550	
Ni	60	115	2	12.71	12.71	ppb	40479	1.29	550	
Cu	65	115	2	25.94	25.94	ppb	108203	1.45	550	
Zn	66	115	2	187.07	187.07	ppb	230326	1.57	550	
As	75	115	2	10.73	10.73	ppb	7685	1.47	550	
Se	78	115	2	1.47	1.47	ppb	97	6.71	2750	
Mo	95	115	1	1.69	1.69	ppb	16411	4.23	550	
Ag	107	115	1	0.27	0.27	ppb	7562	4.82	550	
Cd	111	115	1	0.36	0.36	ppb	1892	4.29	550	
Sb	121	115	1	0.42	0.42	ppb	12771	4.68	550	
Ba	137	159	1	39.74	39.74	ppb	308601	2.96	550	
Tl	205	165	1	0.11	0.11	ppb	10025	3.27	550	
Pb	208	165	1	76.49	76.49	ppb	3340614	2.99	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1336585	0.42	1058582	126.3	70	130	
Sc	45	2	61047	0.94	55969	109.1	70	130	
In	115	1	1804800	0.84	1490926	121.1	70	130	
In	115	2	332625	0.20	324073	102.6	70	130	
Tb	159	1	2829529	1.07	2402233	117.8	70	130	
Tb	159	2	1150601	0.68	1053942	109.2	70	130	
Ho	165	1	2788994	0.53	2372257	117.6	70	130	
Ho	165	2	1143528	1.10	1044050	109.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18950-004**
Data File Name	**040SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:17:04-04:00**
Type	**Sample**
VialNumber	**2307**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	2.75	2.75	ppb	33372	2.91	550	
Na	23	115	2	232.87	232.87	ppb	433125	1.13	55000	
Mg	24	115	2	13286.92	13286.92	ppb	10283394	1.16	55000	
Al	27	115	2	50352.76	50352.76	ppb	14037480	1.33	16500	>LDR
K	39	115	2	8605.79	8605.79	ppb	4490536	2.13	55000	
Ca	44	115	2	11447.49	11447.49	ppb	299412	2.84	55000	
V	51	115	2	176.79	176.79	ppb	1025858	0.84	550	
Cr	52	115	2	136.82	136.82	ppb	1005495	1.54	550	
Mn	55	115	2	2174.06	2174.06	ppb	9059921	1.22	550	>LDR
Fe	56	115	2	115940.60	115940.60	ppb	714307563	1.85	55000	>LDR
Co	59	115	2	40.68	40.68	ppb	471471	2.27	550	
Ni	60	115	2	73.12	73.12	ppb	225062	1.70	550	
Cu	65	115	2	702.63	702.63	ppb	2837120	0.93	550	>LDR
Zn	66	115	2	466.78	466.78	ppb	564134	1.57	550	
As	75	115	2	159.21	159.21	ppb	112267	1.36	550	
Se	78	115	2	7.97	7.97	ppb	460	5.88	2750	
Mo	95	115	1	6.17	6.17	ppb	59198	4.48	550	
Ag	107	115	1	0.43	0.43	ppb	11770	3.78	550	
Cd	111	115	1	1.35	1.35	ppb	7050	4.17	550	
Sb	121	115	1	1.70	1.70	ppb	39164	4.39	550	
Ba	137	159	1	376.96	376.96	ppb	3086258	3.73	550	
Tl	205	165	1	0.59	0.59	ppb	43326	4.83	550	
Pb	208	165	1	286.28	286.28	ppb	13188330	2.72	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	2073313	1.08	1058582	195.9	70	130	IS Fail
Sc	45	2	99558	1.57	55969	177.9	70	130	IS Fail
In	115	1	1792377	1.43	1490926	120.2	70	130	
In	115	2	328095	1.06	324073	101.2	70	130	
Tb	159	1	2993300	0.16	2402233	124.6	70	130	
Tb	159	2	1216905	0.64	1053942	115.5	70	130	
Ho	165	1	2943425	0.58	2372257	124.1	70	130	
Ho	165	2	1216913	0.58	1044050	116.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**041SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:21:25-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.02	0.02	ppb	219	4.65	550	
Na	23	115	2	-6.92	-6.92	ppb	44009	0.75	55000	
Mg	24	115	2	1.59	1.59	ppb	2324	1.72	55000	
Al	27	115	2	3.43	3.43	ppb	2056	91.06	16500	
K	39	115	2	-3.29	-3.29	ppb	35014	1.02	55000	
Ca	44	115	2	-2.66	-2.66	ppb	274	17.91	55000	
V	51	115	2	0.02	0.02	ppb	181	28.30	550	
Cr	52	115	2	0.00	0.00	ppb	1913	6.17	550	
Mn	55	115	2	0.00	0.00	ppb	1050	8.25	550	
Fe	56	115	2	4.23	4.23	ppb	66470	3.44	55000	
Co	59	115	2	0.01	0.01	ppb	269	22.50	550	
Ni	60	115	2	-0.01	-0.01	ppb	958	12.51	550	
Cu	65	115	2	0.11	0.11	ppb	2466	4.26	550	
Zn	66	115	2	-0.31	-0.31	ppb	1473	5.53	550	
As	75	115	2	0.02	0.02	ppb	24	2.66	550	
Se	78	115	2	0.10	0.10	ppb	19	26.96	2750	
Mo	95	115	1	0.04	0.04	ppb	507	14.90	550	
Ag	107	115	1	0.35	0.35	ppb	9820	2.50	550	
Cd	111	115	1	0.01	0.01	ppb	69	15.88	550	
Sb	121	115	1	-0.13	-0.13	ppb	1421	9.76	550	
Ba	137	159	1	-0.10	-0.10	ppb	524	8.27	550	
Tl	205	165	1	0.00	0.00	ppb	2708	3.33	550	
Pb	208	165	1	0.06	0.06	ppb	5936	2.41	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1270045	3.65	1058562	120.0	70	130	
Sc	45	2	55881	10.04	55969	99.8	70	130	
In	115	1	1847517	0.58	1490926	123.9	70	130	
In	115	2	330455	9.57	324073	102.0	70	130	
Tb	159	1	2784614	0.37	2402233	115.9	70	130	
Tb	159	2	1075036	9.78	1053942	102.0	70	130	
Ho	165	1	2753311	0.62	2372257	116.1	70	130	
Ho	165	2	1096467	6.06	1044050	105.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-333622**
Data File Name	**0426CCV.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:26:25-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	50.68	ppb	50	552645	3.04	101.36	90	110	
Na	23	115	2	4821.12	ppb	5000	8233003	0.60	96.42	90	110	
Mg	24	115	2	4862.19	ppb	5000	3932660	0.52	97.24	90	110	
Al	27	115	2	1415.09	ppb	1500	413460	1.32	94.34	90	110	
K	39	115	2	4933.00	ppb	5000	2706018	0.74	98.66	90	110	
Ca	44	115	2	4885.50	ppb	5000	133710	0.49	97.71	90	110	
V	51	115	2	50.23	ppb	50	304566	1.48	100.45	90	110	
Cr	52	115	2	50.15	ppb	50	386372	0.85	100.31	90	110	
Mn	55	115	2	49.29	ppb	50	215682	0.92	98.57	90	110	
Fe	56	115	2	5063.81	ppb	5000	32638041	0.35	101.28	90	110	
Co	59	115	2	50.90	ppb	50	616253	0.55	101.79	90	110	
Ni	60	115	2	51.22	ppb	50	165047	1.19	102.45	90	110	
Cu	65	115	2	51.53	ppb	50	219408	0.28	103.07	90	110	
Zn	66	115	2	50.88	ppb	50	65962	1.33	101.76	90	110	
As	75	115	2	51.49	ppb	50	37946	1.47	102.98	90	110	
Se	78	115	2	248.11	ppb	250	14543	1.64	99.24	90	110	
Mo	95	115	1	47.81	ppb	50	451367	3.41	95.62	90	110	
Ag	107	115	1	47.08	ppb	50	1227533	3.69	94.16	90	110	
Cd	111	115	1	48.36	ppb	50	247294	3.14	96.73	90	110	
Sb	121	115	1	46.60	ppb	50	952430	3.72	93.21	90	110	
Ba	137	159	1	50.03	ppb	50	370674	4.25	100.06	90	110	
Tl	205	165	1	50.70	ppb	50	3136292	2.72	101.41	90	110	
Pb	208	165	1	50.80	ppb	50	2105027	3.36	101.60	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1166742	0.72	1058582	110.2	70	130	
Sc	45	2	58944	0.92	55969	105.3	70	130	
In	115	1	1765505	0.72	1490926	118.4	70	130	
In	115	2	342823	1.16	324073	105.8	70	130	
Tb	159	1	2701414	0.60	2402233	112.5	70	130	
Tb	159	2	1140727	0.83	1053942	108.2	70	130	
Ho	165	1	2644640	0.41	2372257	111.5	70	130	
Ho	165	2	1133672	0.66	1044050	108.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-333619**
Data File Name	**0436CCB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:30:52-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	-5.24	ppb	500	
Mg	24	115	2	-0.07	ppb	500	
Al	27	115	2	-0.31	ppb	500	
K	39	115	2	-7.21	ppb	500	
Ca	44	115	2	-1.88	ppb	500	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	0.00	ppb	2	
Mn	55	115	2	-0.04	ppb	6	
Fe	56	115	2	1.13	ppb	500	
Co	59	115	2	0.00	ppb	2	
Ni	60	115	2	0.03	ppb	3	
Cu	65	115	2	-0.10	ppb	10	
Zn	66	115	2	-0.02	ppb	20	
As	75	115	2	0.03	ppb	1	
Se	78	115	2	0.22	ppb	10	
Mo	95	115	1	0.06	ppb	1	
Ag	107	115	1	0.03	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.04	ppb	4	
Ba	137	159	1	-0.02	ppb	5	
Tl	205	165	1	0.00	ppb	2	
Pb	208	165	1	0.04	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1236039	1.76	1058582	116.8	70	130	
Sc	45	2	59111	1.47	55969	105.6	70	130	
In	115	1	1766810	0.53	1490926	118.5	70	130	
In	115	2	349413	1.15	324073	107.8	70	130	
Tb	159	1	2689936	0.71	2402233	112.0	70	130	
Tb	159	2	1136586	0.25	1053942	107.8	70	130	
Ho	165	1	2637426	0.23	2372257	111.2	70	130	
Ho	165	2	1128188	1.02	1044050	108.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18934-001**
Data File Name	**044SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:35:24-04:00**
Type	**Sample**
VialNumber	**2210**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	3.33	3.33	ppb	40658	2.02	550	
Na	23	115	2	138.42	138.42	ppb	281585	0.97	55000	
Mg	24	115	2	23893.44	23893.44	ppb	18608600	1.49	55000	
Al	27	115	2	51763.68	51763.68	ppb	14522398	1.55	16500	>LDR
K	39	115	2	3690.02	3690.02	ppb	1958706	1.04	55000	
Ca	44	115	2	32976.41	32976.41	ppb	867265	1.15	55000	
V	51	115	2	93.60	93.60	ppb	546590	1.09	550	
Cr	52	115	2	81.83	81.83	ppb	605951	1.78	550	
Mn	55	115	2	4210.62	4210.62	ppb	17656081	1.06	550	>LDR
Fe	56	115	2	146006.60	146006.60	ppb	905159898	0.77	55000	>LDR
Co	59	115	2	75.41	75.41	ppb	879250	0.76	550	
Ni	60	115	2	118.83	118.83	ppb	367461	1.06	550	
Cu	65	115	2	106.89	106.89	ppb	436071	0.95	550	
Zn	66	115	2	552.69	552.69	ppb	671821	1.66	550	>LDR
As	75	115	2	49.02	49.02	ppb	34791	1.18	550	
Se	78	115	2	9.83	9.83	ppb	567	7.46	2750	
Mo	95	115	1	3.86	3.86	ppb	36411	3.44	550	
Ag	107	115	1	0.44	0.44	ppb	11688	5.48	550	
Cd	111	115	1	1.76	1.76	ppb	8985	2.80	550	
Sb	121	115	1	0.08	0.08	ppb	5607	6.41	550	
Ba	137	159	1	460.61	460.61	ppb	3839081	2.57	550	
Tl	205	165	1	0.31	0.31	ppb	24475	4.81	550	
Pb	208	165	1	74.27	74.27	ppb	3444614	3.37	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	2061390	0.82	1058582	194.7	70	130	IS Fail
Sc	45	2	98257	1.16	55969	175.6	70	130	IS Fail
In	115	1	1758478	0.49	1490926	117.9	70	130	
In	115	2	330153	1.16	324073	101.9	70	130	
Tb	159	1	3047336	0.94	2402233	126.9	70	130	
Tb	159	2	1243303	0.95	1053942	118.0	70	130	
Ho	165	1	2961085	0.57	2372257	124.8	70	130	
Ho	165	2	1237701	0.84	1044050	118.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18934-002**
Data File Name	**045SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:39:48-04:00**
Type	**Sample**
VialNumber	**2211**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.65	1.65	ppb	19627	3.16	550	
Na	23	115	2	283.38	283.38	ppb	490140	0.79	55000	
Mg	24	115	2	57450.69	57450.69	ppb	42309697	1.14	55000	>LDR
Al	27	115	2	32168.58	32168.58	ppb	8534446	0.85	16500	>LDR
K	39	115	2	4343.64	4343.64	ppb	2173953	0.12	55000	
Ca	44	115	2	135778.56	135778.56	ppb	3375909	1.20	55000	>LDR
V	51	115	2	61.46	61.46	ppb	339404	1.55	550	
Cr	52	115	2	56.16	56.16	ppb	393841	1.42	550	
Mn	55	115	2	1174.45	1174.45	ppb	4658055	0.91	550	>LDR
Fe	56	115	2	81510.57	81510.57	ppb	477884562	0.78	55000	>LDR
Co	59	115	2	40.53	40.53	ppb	446978	1.29	550	
Ni	60	115	2	90.59	90.59	ppb	265130	1.20	550	
Cu	65	115	2	98.48	98.48	ppb	380060	0.44	550	
Zn	66	115	2	302.81	302.81	ppb	348852	0.90	550	
As	75	115	2	39.42	39.42	ppb	26461	0.90	550	
Se	78	115	2	6.26	6.26	ppb	347	10.27	2750	
Mo	95	115	1	1.32	1.32	ppb	11968	5.65	550	
Ag	107	115	1	0.30	0.30	ppb	7700	2.64	550	
Cd	111	115	1	0.36	0.36	ppb	1755	4.24	550	
Sb	121	115	1	0.02	0.02	ppb	4266	5.31	550	
Ba	137	159	1	166.87	166.87	ppb	1332225	3.44	550	
Tl	205	165	1	0.24	0.24	ppb	18783	2.96	550	
Pb	208	165	1	54.95	54.95	ppb	2473954	3.89	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1700789	0.39	1058582	160.7	70	130	IS Fail
Sc	45	2	80018	1.24	55969	143.0	70	130	IS Fail
In	115	1	1681684	1.47	1490926	112.8	70	130	
In	115	2	312235	1.72	324073	96.3	70	130	
Tb	159	1	2917314	1.20	2402233	121.4	70	130	
Tb	159	2	1180049	1.14	1053942	112.0	70	130	
Ho	165	1	2873456	0.26	2372257	121.1	70	130	
Ho	165	2	1174322	0.80	1044050	112.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18934-003**
Data File Name	**046SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:44:13-04:00**
Type	**Sample**
VialNumber	**2212**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.32	1.32	ppb	15555	2.34	550	
Na	23	115	2	267.10	267.10	ppb	457452	0.86	55000	
Mg	24	115	2	37759.54	37759.54	ppb	27354667	0.88	55000	
Al	27	115	2	27242.00	27242.00	ppb	7110544	1.11	16500	>LDR
K	39	115	2	3275.70	3275.70	ppb	1621452	0.95	55000	
Ca	44	115	2	267603.07	267603.07	ppb	6545098	0.92	55000	>LDR
V	51	115	2	53.52	53.52	ppb	290737	0.83	550	
Cr	52	115	2	46.52	46.52	ppb	321186	0.55	550	
Mn	55	115	2	1951.77	1951.77	ppb	7614795	0.94	550	>LDR
Fe	56	115	2	82148.47	82148.47	ppb	473807477	0.56	55000	>LDR
Co	59	115	2	30.55	30.55	ppb	331513	1.16	550	
Ni	60	115	2	71.73	71.73	ppb	206718	2.14	550	
Cu	65	115	2	86.77	86.77	ppb	329700	1.26	550	
Zn	66	115	2	258.49	258.49	ppb	293219	1.28	550	
As	75	115	2	43.04	43.04	ppb	28419	1.51	550	
Se	78	115	2	5.44	5.44	ppb	297	5.10	2750	
Mo	95	115	1	2.20	2.20	ppb	20077	2.86	550	
Ag	107	115	1	0.14	0.14	ppb	3866	4.04	550	
Cd	111	115	1	0.42	0.42	ppb	2094	4.20	550	
Sb	121	115	1	0.05	0.05	ppb	4761	1.91	550	
Ba	137	159	1	224.97	224.97	ppb	1764568	3.45	550	
Tl	205	165	1	0.21	0.21	ppb	16611	1.83	550	
Pb	208	165	1	397.41	397.41	ppb	17746125	2.60	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1616383	0.38	1058582	152.7	70	130	IS Fail
Sc	45	2	73186	1.31	55969	130.8	70	130	IS Fail
In	115	1	1698824	0.99	1490926	113.9	70	130	
In	115	2	307144	1.04	324073	94.8	70	130	
Tb	159	1	2866372	1.22	2402233	119.3	70	130	
Tb	159	2	1138201	1.20	1053942	108.0	70	130	
Ho	165	1	2853556	1.39	2372257	120.3	70	130	
Ho	165	2	1133461	0.91	1044050	108.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18934-004**
Data File Name	**047SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:48:36-04:00**
Type	**Sample**
VialNumber	**2301**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.20	1.20	ppb	14136	2.39	550	
Na	23	115	2	358.31	358.31	ppb	582505	1.77	55000	
Mg	24	115	2	34960.67	34960.67	ppb	24753698	1.31	55000	
Al	27	115	2	26351.28	26351.28	ppb	6721912	2.11	16500	>LDR
K	39	115	2	2809.07	2809.07	ppb	1363661	0.89	55000	
Ca	44	115	2	244614.06	244614.06	ppb	5846891	0.76	55000	>LDR
V	51	115	2	52.70	52.70	ppb	279785	0.86	550	
Cr	52	115	2	66.29	66.29	ppb	446593	1.32	550	
Mn	55	115	2	1740.40	1740.40	ppb	6635850	1.47	550	>LDR
Fe	56	115	2	83965.88	83965.88	ppb	473293100	1.09	55000	>LDR
Co	59	115	2	28.18	28.18	ppb	298806	1.40	550	
Ni	60	115	2	67.34	67.34	ppb	189704	0.96	550	
Cu	65	115	2	94.26	94.26	ppb	349857	2.01	550	
Zn	66	115	2	308.12	308.12	ppb	341245	0.89	550	
As	75	115	2	46.54	46.54	ppb	30030	1.65	550	
Se	78	115	2	4.65	4.65	ppb	250	5.62	2750	
Mo	95	115	1	2.13	2.13	ppb	19419	2.35	550	
Ag	107	115	1	0.10	0.10	ppb	2783	9.60	550	
Cd	111	115	1	0.37	0.37	ppb	1852	2.82	550	
Sb	121	115	1	0.07	0.07	ppb	5147	7.27	550	
Ba	137	159	1	171.77	171.77	ppb	1358945	3.54	550	
Tl	205	165	1	0.13	0.13	ppb	11220	1.33	550	
Pb	208	165	1	32.90	32.90	ppb	1467962	2.89	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1604683	0.81	1058582	151.6	70	130	IS Fail
Sc	45	2	72752	1.82	55969	130.0	70	130	
In	115	1	1698173	0.73	1490926	113.9	70	130	
In	115	2	300158	0.37	324073	92.6	70	130	
Tb	159	1	2891214	1.01	2402233	120.4	70	130	
Tb	159	2	1129313	1.02	1053942	107.2	70	130	
Ho	165	1	2845041	0.12	2372257	119.9	70	130	
Ho	165	2	1120139	1.00	1044050	107.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18934-005**
Data File Name	**048SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:53:00-04:00**
Type	**Sample**
VialNumber	**2302**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.46	1.46	ppb	17471	2.96	550	
Na	23	115	2	256.75	256.75	ppb	438919	1.34	55000	
Mg	24	115	2	20379.95	20379.95	ppb	14670903	1.10	55000	
Al	27	115	2	20280.39	20280.39	ppb	5259722	1.39	16500	>LDR
K	39	115	2	2630.46	2630.46	ppb	1300409	2.74	55000	
Ca	44	115	2	146677.61	146677.61	ppb	3564647	1.35	55000	>LDR
V	51	115	2	49.24	49.24	ppb	265829	1.69	550	
Cr	52	115	2	53.92	53.92	ppb	369632	1.81	550	
Mn	55	115	2	1443.72	1443.72	ppb	5596767	0.92	550	>LDR
Fe	56	115	2	67331.52	67331.52	ppb	385874825	1.43	55000	>LDR
Co	59	115	2	25.29	25.29	ppb	272722	1.49	550	
Ni	60	115	2	123.42	123.42	ppb	352724	1.42	550	
Cu	65	115	2	142.53	142.53	ppb	536876	2.13	550	
Zn	66	115	2	372.32	372.32	ppb	418883	1.18	550	
As	75	115	2	28.06	28.06	ppb	18414	0.51	550	
Se	78	115	2	5.99	5.99	ppb	324	11.35	2750	
Mo	95	115	1	3.09	3.09	ppb	28577	3.35	550	
Ag	107	115	1	0.32	0.32	ppb	8391	2.87	550	
Cd	111	115	1	1.00	1.00	ppb	5012	2.76	550	
Sb	121	115	1	0.76	0.76	ppb	18954	4.49	550	
Ba	137	159	1	290.89	290.89	ppb	2319524	4.43	550	
Tl	205	165	1	0.36	0.36	ppb	27247	2.39	550	
Pb	208	165	1	332.16	332.16	ppb	15020726	3.42	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1539444	1.09	1058582	145.4	70	130	IS Fail
Sc	45	2	69375	1.13	55969	124.0	70	130	
In	115	1	1723950	1.77	1490926	115.6	70	130	
In	115	2	305172	0.41	324073	94.2	70	130	
Tb	159	1	2914351	0.85	2402233	121.3	70	130	
Tb	159	2	1145876	0.85	1053942	108.7	70	130	
Ho	165	1	2889570	0.45	2372257	121.8	70	130	
Ho	165	2	1138538	1.37	1044050	109.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18955-004**
Data File Name	**049SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:57:23-04:00**
Type	**Sample**
VialNumber	**2303**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.39	1.39	ppb	16582	4.22	550	
Na	23	115	2	254.53	254.53	ppb	429170	1.21	55000	
Mg	24	115	2	41303.47	41303.47	ppb	29296987	1.30	55000	
Al	27	115	2	29025.01	29025.01	ppb	7417247	1.63	16500	>LDR
K	39	115	2	3648.65	3648.65	ppb	1764161	0.79	55000	
Ca	44	115	2	104783.47	104783.47	ppb	2509289	1.29	55000	>LDR
V	51	115	2	51.51	51.51	ppb	273950	1.30	550	
Cr	52	115	2	54.44	54.44	ppb	367747	1.56	550	
Mn	55	115	2	962.39	962.39	ppb	3676731	1.84	550	>LDR
Fe	56	115	2	72192.18	72192.18	ppb	407650301	0.85	55000	>LDR
Co	59	115	2	34.98	34.98	ppb	371510	1.05	550	
Ni	60	115	2	83.85	83.85	ppb	236428	1.98	550	
Cu	65	115	2	82.56	82.56	ppb	307230	1.87	550	
Zn	66	115	2	240.77	240.77	ppb	267491	0.94	550	
As	75	115	2	22.42	22.42	ppb	14497	2.06	550	
Se	78	115	2	5.64	5.64	ppb	302	15.75	2750	
Mo	95	115	1	1.05	1.05	ppb	9722	7.12	550	
Ag	107	115	1	0.18	0.18	ppb	5022	4.82	550	
Cd	111	115	1	0.18	0.18	ppb	946	1.81	550	
Sb	121	115	1	0.07	0.07	ppb	5374	4.30	550	
Ba	137	159	1	99.26	99.26	ppb	790385	3.61	550	
Tl	205	165	1	0.15	0.15	ppb	12908	4.02	550	
Pb	208	165	1	44.01	44.01	ppb	1993099	3.84	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1617751	0.42	1058582	152.8	70	130	IS Fail
Sc	45	2	72560	1.01	55969	129.6	70	130	
In	115	1	1722414	0.13	1490926	115.5	70	130	
In	115	2	300712	1.56	324073	92.8	70	130	
Tb	159	1	2907197	0.87	2402233	121.0	70	130	
Tb	159	2	1151434	1.32	1053942	109.3	70	130	
Ho	165	1	2889437	1.00	2372257	121.8	70	130	
Ho	165	2	1144600	0.94	1044050	109.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18955-005**
Data File Name	**050SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T14:01:47-04:00**
Type	**Sample**
VialNumber	**2304**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.33	1.33	ppb	16252	2.43	550	
Na	23	115	2	227.64	227.64	ppb	409152	0.95	55000	
Mg	24	115	2	22753.74	22753.74	ppb	16968195	1.27	55000	
Al	27	115	2	24363.78	24363.78	ppb	6545431	1.58	16500	>LDR
K	39	115	2	2501.73	2501.73	ppb	1282995	1.02	55000	
Ca	44	115	2	71330.57	71330.57	ppb	1795945	1.46	55000	>LDR
V	51	115	2	49.34	49.34	ppb	275909	0.35	550	
Cr	52	115	2	45.52	45.52	ppb	323512	1.16	550	
Mn	55	115	2	1679.74	1679.74	ppb	6745407	1.62	550	>LDR
Fe	56	115	2	74665.14	74665.14	ppb	443261980	1.63	55000	>LDR
Co	59	115	2	29.37	29.37	ppb	328047	1.61	550	
Ni	60	115	2	73.37	73.37	ppb	217607	2.04	550	
Cu	65	115	2	111.86	111.86	ppb	436885	1.37	550	
Zn	66	115	2	305.71	305.71	ppb	356609	1.11	550	
As	75	115	2	31.59	31.59	ppb	21476	1.22	550	
Se	78	115	2	5.85	5.85	ppb	329	13.77	2750	
Mo	95	115	1	2.84	2.84	ppb	26811	5.01	550	
Ag	107	115	1	0.32	0.32	ppb	8674	1.58	550	
Cd	111	115	1	0.47	0.47	ppb	2434	5.05	550	
Sb	121	115	1	1.02	1.02	ppb	24731	2.12	550	
Ba	137	159	1	158.42	158.42	ppb	1286406	3.46	550	
Tl	205	165	1	0.19	0.19	ppb	15806	1.74	550	
Pb	208	165	1	140.35	140.35	ppb	6481013	2.39	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1627591	0.68	1058582	153.8	70	130	IS Fail
Sc	45	2	73876	0.90	55969	132.0	70	130	IS Fail
In	115	1	1758855	0.64	1490926	118.0	70	130	
In	115	2	316147	0.42	324073	97.6	70	130	
Tb	159	1	2967686	1.20	2402233	123.5	70	130	
Tb	159	2	1177012	1.10	1053942	111.7	70	130	
Ho	165	1	2949803	0.42	2372257	124.3	70	130	
Ho	165	2	1177119	0.91	1044050	112.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18932-002**
Data File Name	**051SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T14:06:10-04:00**
Type	**Sample**
VialNumber	**2308**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.00	1.00	ppb	11890	3.58	550	
Na	23	115	2	2769.48	2769.48	ppb	5763923	1.27	55000	
Mg	24	115	2	5751.33	5751.33	ppb	5639737	1.05	55000	
Al	27	115	2	13626.15	13626.15	ppb	4813676	1.46	16500	
K	39	115	2	1758.78	1758.78	ppb	1199604	0.96	55000	
Ca	44	115	2	10243.87	10243.87	ppb	339477	2.28	55000	
V	51	115	2	49.26	49.26	ppb	362137	2.12	550	
Cr	52	115	2	5584.22	5584.22	ppb	51895974	1.82	550	>LDR
Mn	55	115	2	474.02	474.02	ppb	2503628	1.46	550	
Fe	56	115	2	34386.66	34386.66	ppb	268425816	1.16	55000	
Co	59	115	2	12.92	12.92	ppb	189750	2.11	550	
Ni	60	115	2	62.16	62.16	ppb	242553	1.14	550	
Cu	65	115	2	994.15	994.15	ppb	5084704	1.34	550	>LDR
Zn	66	115	2	23293.51	23293.51	ppb	35548405	1.09	550	>LDR
As	75	115	2	175.90	175.90	ppb	157128	1.32	550	
Se	78	115	2	8.21	8.21	ppb	600	6.53	2750	
Mo	95	115	1	14.45	14.45	ppb	169712	3.26	550	
Ag	107	115	1	5.51	5.51	ppb	179004	3.68	550	
Cd	111	115	1	164.08	164.08	ppb	1042831	3.69	550	
Sb	121	115	1	25.30	25.30	ppb	644884	3.48	550	
Ba	137	159	1	14256.16	14256.16	ppb	111755271	3.05	550	>LDR
Tl	205	165	1	0.37	0.37	ppb	27978	3.76	550	
Pb	208	165	1	18063.26	18063.26	ppb	812801117	3.13	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1474912	0.72	1058582	139.3	70	130	IS Fail
Sc	45	2	65445	1.13	55969	116.9	70	130	
In	115	1	2194262	0.74	1490926	147.2	70	130	IS Fail
In	115	2	415625	0.69	324073	128.3	70	130	
Tb	159	1	2867234	0.64	2402233	119.4	70	130	
Tb	159	2	1158096	0.92	1053942	109.9	70	130	
Ho	165	1	2875572	0.96	2372257	121.2	70	130	
Ho	165	2	1162194	0.93	1044050	111.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**052SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T14:10:31-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.01	0.01	ppb	157	14.74	550	
Na	23	115	2	-8.11	-8.11	ppb	39658	1.49	55000	
Mg	24	115	2	1.36	1.36	ppb	2021	2.22	55000	
Al	27	115	2	-0.88	-0.88	ppb	906	4.54	16500	
K	39	115	2	-7.10	-7.10	ppb	31132	0.51	55000	
Ca	44	115	2	-0.57	-0.57	ppb	308	15.18	55000	
V	51	115	2	0.02	0.02	ppb	132	7.70	550	
Cr	52	115	2	0.10	0.10	ppb	2455	3.13	550	
Mn	55	115	2	-0.04	-0.04	ppb	820	2.85	550	
Fe	56	115	2	3.71	3.71	ppb	59734	7.89	55000	
Co	59	115	2	0.01	0.01	ppb	210	13.84	550	
Ni	60	115	2	-0.07	-0.07	ppb	726	18.66	550	
Cu	65	115	2	0.09	0.09	ppb	2278	5.62	550	
Zn	66	115	2	0.52	0.52	ppb	2325	5.48	550	
As	75	115	2	0.03	0.03	ppb	30	17.29	550	
Se	78	115	2	-0.02	-0.02	ppb	11	20.13	2750	
Mo	95	115	1	0.04	0.04	ppb	434	6.15	550	
Ag	107	115	1	0.32	0.32	ppb	8698	3.53	550	
Cd	111	115	1	0.02	0.02	ppb	136	9.89	550	
Sb	121	115	1	0.04	0.04	ppb	4674	1.52	550	
Ba	137	159	1	8.88	8.88	ppb	65938	6.75	550	
Tl	205	165	1	-0.02	-0.02	ppb	1689	3.87	550	
Pb	208	165	1	1.73	1.73	ppb	74705	11.43	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1078652	0.98	1058582	101.9	70	130	
Sc	45	2	51770	1.03	55969	92.5	70	130	
In	115	1	1746167	1.98	1490926	117.1	70	130	
In	115	2	309644	0.33	324073	95.5	70	130	
Tb	159	1	2669930	1.98	2402233	111.1	70	130	
Tb	159	2	1065961	0.42	1053942	101.1	70	130	
Ho	165	1	2641893	2.04	2372257	111.4	70	130	
Ho	165	2	1061048	0.56	1044050	101.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-333622**
Data File Name	**0536CCV.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T14:15:03-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	45.11	ppb	50	499515	3.04	90.21	90	110	
Na	23	115	2	4751.29	ppb	5000	7668691	1.36	95.03	90	110	
Mg	24	115	2	4742.97	ppb	5000	3625542	1.18	94.86	90	110	
Al	27	115	2	1341.92	ppb	1500	370569	2.08	89.46	90	110	>+-10%
K	39	115	2	4769.91	ppb	5000	2474017	0.53	95.40	90	110	
Ca	44	115	2	4673.57	ppb	5000	120902	1.38	93.47	90	110	
V	51	115	2	48.81	ppb	50	279689	1.35	97.61	90	110	
Cr	52	115	2	49.33	ppb	50	359151	1.89	98.66	90	110	
Mn	55	115	2	48.05	ppb	50	198759	1.46	96.11	90	110	
Fe	56	115	2	4957.90	ppb	5000	30200951	1.22	99.16	90	110	
Co	59	115	2	49.64	ppb	50	567971	1.31	99.27	90	110	
Ni	60	115	2	49.95	ppb	50	152131	2.04	99.91	90	110	
Cu	65	115	2	50.46	ppb	50	203084	1.27	100.92	90	110	
Zn	66	115	2	50.19	ppb	50	61518	1.40	100.38	90	110	
As	75	115	2	49.82	ppb	50	34695	1.00	99.63	90	110	
Se	78	115	2	239.05	ppb	250	13242	1.76	95.62	90	110	
Mo	95	115	1	45.73	ppb	50	419881	4.08	91.46	90	110	
Ag	107	115	1	45.54	ppb	50	1154830	4.12	91.08	90	110	
Cd	111	115	1	47.52	ppb	50	236310	3.43	95.05	90	110	
Sb	121	115	1	46.25	ppb	50	919265	3.48	92.50	90	110	
Ba	137	159	1	51.22	ppb	50	378566	5.92	102.44	90	110	
Tl	205	165	1	49.56	ppb	50	3113495	3.76	99.13	90	110	
Pb	208	165	1	50.20	ppb	50	2112660	3.73	100.41	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1090166	0.57	1058582	103.0	70	130	
Sc	45	2	53776	2.01	55969	96.1	70	130	
In	115	1	1716633	1.25	1490926	115.1	70	130	
In	115	2	323990	0.50	324073	100.0	70	130	
Tb	159	1	2695301	1.15	2402233	112.2	70	130	
Tb	159	2	1099888	0.87	1053942	104.4	70	130	
Ho	165	1	2685593	0.27	2372257	113.2	70	130	
Ho	165	2	1098234	0.62	1044050	105.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-333619**
Data File Name	**0546CCB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T14:19:28-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

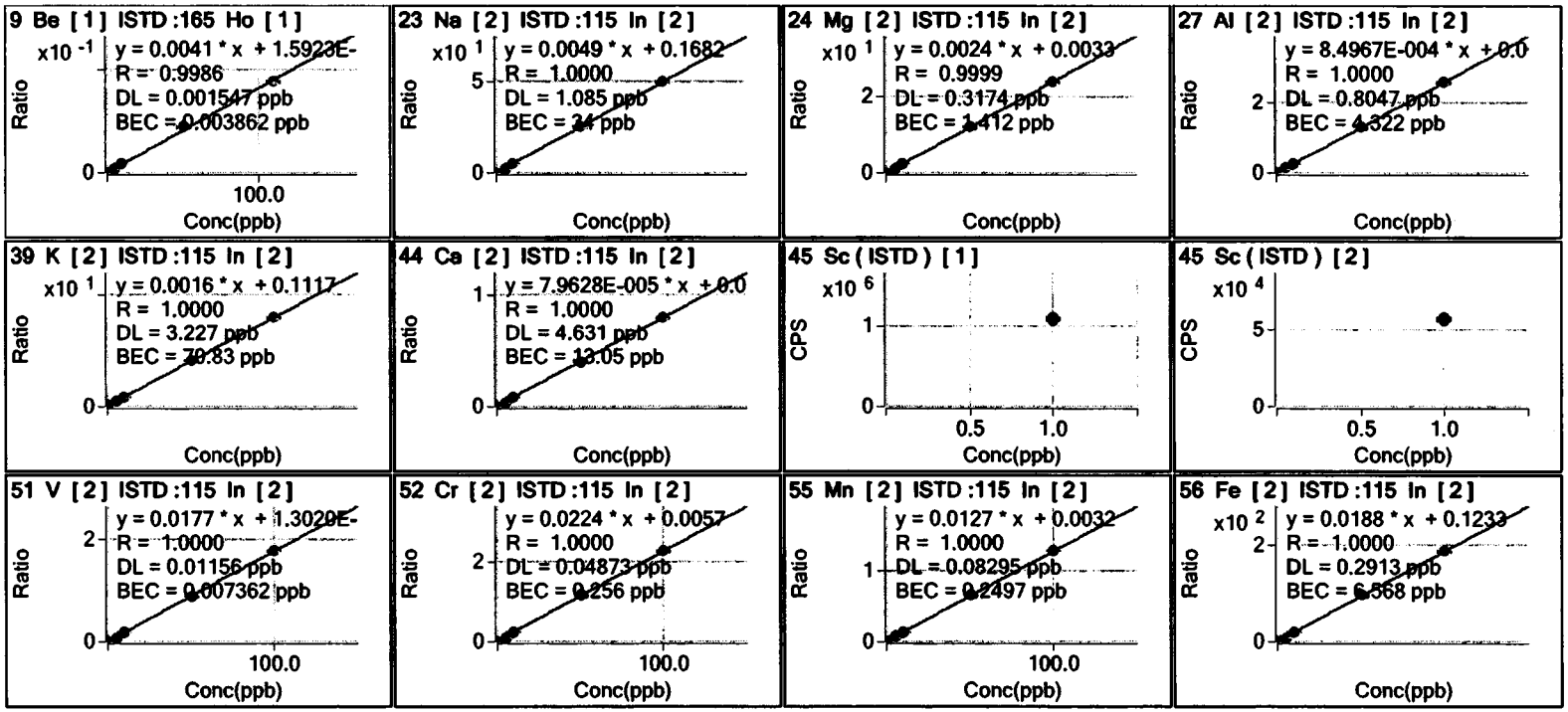
Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	-5.21	ppb	500	
Mg	24	115	2	0.12	ppb	500	
Al	27	115	2	0.01	ppb	500	
K	39	115	2	-7.52	ppb	500	
Ca	44	115	2	-2.68	ppb	500	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	0.02	ppb	2	
Mn	55	115	2	-0.05	ppb	6	
Fe	56	115	2	1.34	ppb	500	
Co	59	115	2	0.00	ppb	2	
Ni	60	115	2	-0.02	ppb	3	
Cu	65	115	2	-0.09	ppb	10	
Zn	66	115	2	0.32	ppb	20	
As	75	115	2	0.02	ppb	1	
Se	78	115	2	0.12	ppb	10	
Mo	95	115	1	0.06	ppb	1	
Ag	107	115	1	0.03	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.06	ppb	4	
Ba	137	159	1	0.63	ppb	5	
Tl	205	165	1	-0.01	ppb	2	
Pb	208	165	1	0.33	ppb	2	

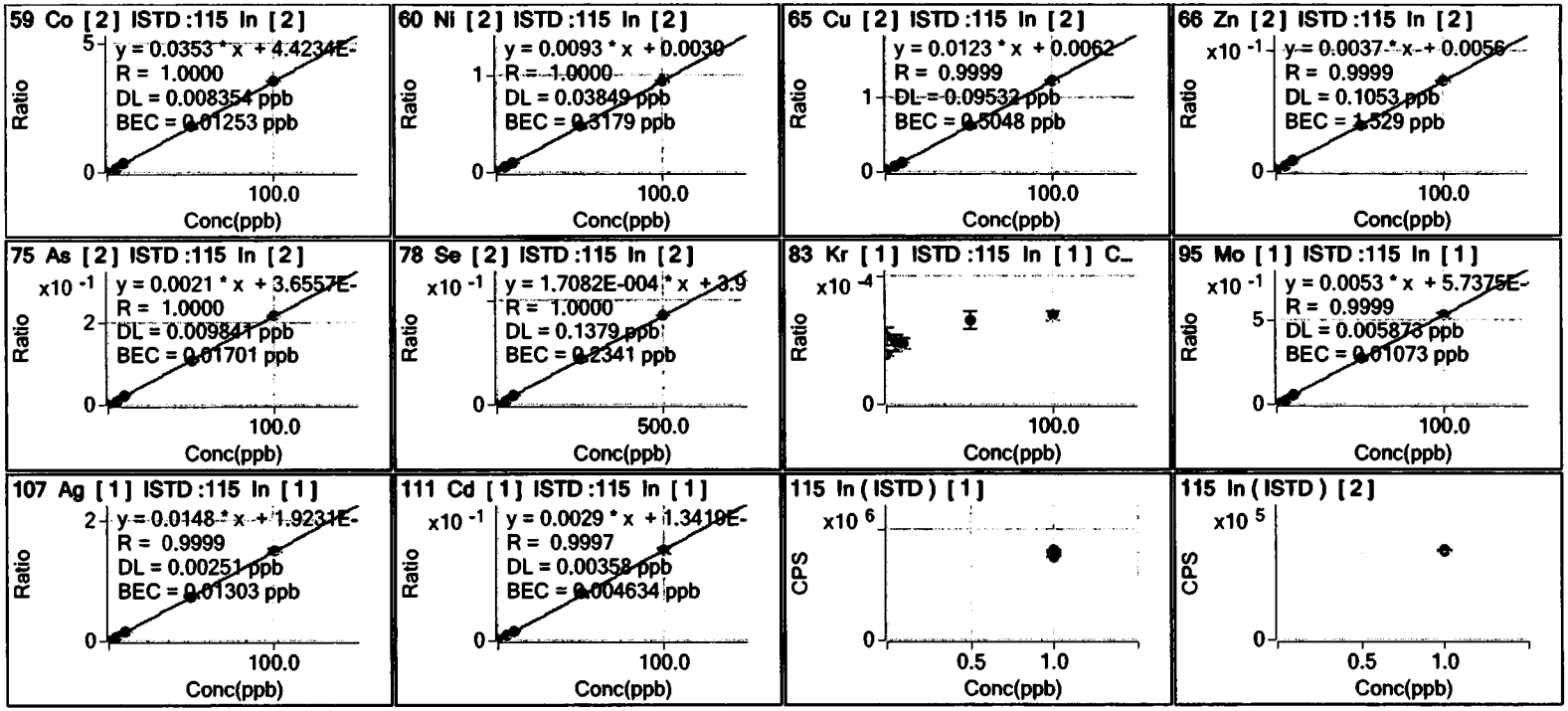
QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1113398	0.68	1058582	105.2	70	130	
Sc	45	2	55583	1.59	55969	99.3	70	130	
In	115	1	1763377	0.80	1490926	118.3	70	130	
In	115	2	330731	1.33	324073	102.1	70	130	
Tb	159	1	2720133	0.38	2402233	113.2	70	130	
Tb	159	2	1105219	1.05	1053942	104.9	70	130	
Ho	165	1	2653454	0.49	2372257	111.9	70	130	
Ho	165	2	1101726	1.01	1044050	105.5	70	130	

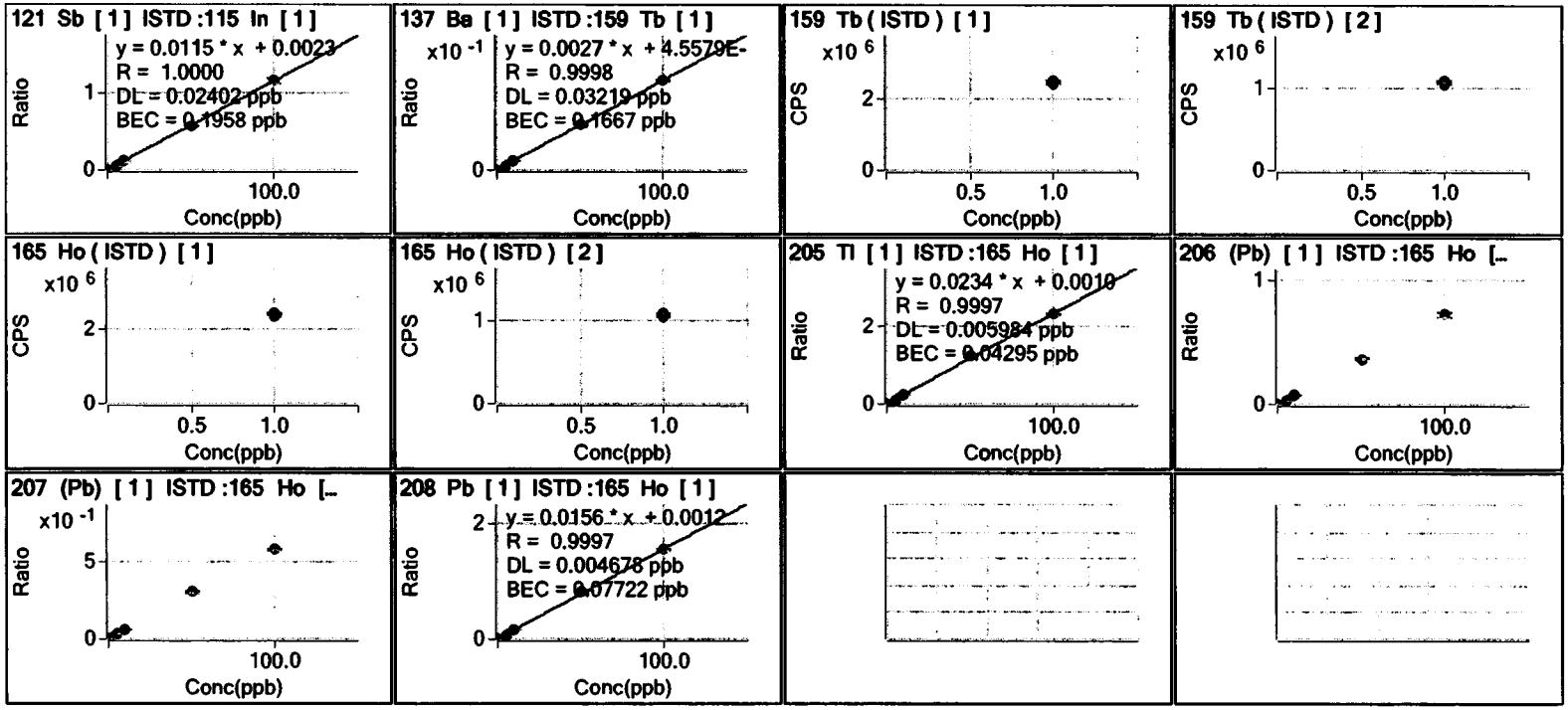
TuneStep	TuneFile
1	nogas.u
2	he.u

0082707 0487




59 Co [2] ISTD :115 In [2]
y = 0.0353 * x + 4.4234E-
R = 1.0000
DL = 0.008354 ppb
BEC = 0.01253 ppb
Ratio
Conc(ppb)
60 Ni [2] ISTD :115 In [2]
y = 0.0093 * x + 0.0030
R = 1.0000
DL = 0.03849 ppb
BEC = 0.3179 ppb
Ratio
Conc(ppb)
65 Cu [2] ISTD :115 In [2]
y = 0.0123 * x + 0.0062
R = 0.9999
DL = 0.09532 ppb
BEC = 0.5048 ppb
Ratio
Conc(ppb)
66 Zn [2] ISTD :115 In [2]
y = 0.0037 * x + 0.0056
R = 0.9999
DL = 0.1053 ppb
BEC = 1.529 ppb
Ratio
Conc(ppb)
75 As [2] ISTD :115 In [2]
y = 0.0021 * x + 3.6557E-
R = 1.0000
DL = 0.009841 ppb
BEC = 0.01701 ppb
Ratio
Conc(ppb)
78 Se [2] ISTD :115 In [2]
y = 1.7082E-004 * x + 3.9
R = 1.0000
DL = 0.1379 ppb
BEC = 0.2341 ppb
Ratio
Conc(ppb)
83 Kr [1] ISTD :115 In [1] C...
Ratio
Conc(ppb)
95 Mo [1] ISTD :115 In [1]
y = 0.0053 * x + 5.7375E-
R = 0.9999
DL = 0.005873 ppb
BEC = 0.01073 ppb
Ratio
Conc(ppb)
107 Ag [1] ISTD :115 In [1]
y = 0.0148 * x + 1.9231E-
R = 0.9999
DL = 0.00251 ppb
BEC = 0.01303 ppb
Ratio
Conc(ppb)
111 Cd [1] ISTD :115 In [1]
y = 0.0029 * x + 1.3419E-
R = 0.9997
DL = 0.00358 ppb
BEC = 0.004634 ppb
Ratio
Conc(ppb)
115 In (ISTD) [1]
CPS
Conc(ppb)
115 In (ISTD) [2]
CPS
Conc(ppb)

0082707 0489



Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\SW26165B2.txt

Analysis Date: 09/01/20

Instrument: PEICP2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-329027	1	CAL	17:35	1							V-329027(ICB/CCB)
CALST2 V-333563	1	CAL	17:41	2							V-333563(LLICV/LLCCV aq)
CALST3 V-329028	1	CAL	17:45	3							V-329028(ICS3 - Middle Std)
CALST4 V-329029	1	CAL	17:49	4							V-329029(ICS4 High std)
ICV V-329036	1	ICV	17:54	5							V-329036(CCV)
ICB V-329027	1	ICB	17:59	6							V-329027(ICB/CCB)
LRS V-329041	1	NA	18:02	7		AQUEO	AQUEO	SW846	85222	Rerun.	V-329041(LRS 1/2 Fe)
ICS3 V-329028	1	ICS	18:08	8							V-329028(ICS3 - Middle Std)
LRS V-329041	1	LRS	18:13	9	MET-2-SOIL	AQUEO	AQUEO	SW846	85222		V-329041(LRS 1/2 Fe)
RINSE	1	NA	18:20	10	MET-2-SOIL	AQUEO	AQUEO	SW846	85222		0
LLICV V-333563	1	LLICV	18:23	11	MET-2-SOIL	AQUEO	AQUEO	SW846	85222		V-333563(LLICV/LLCCV aq)
ICSA V-329033	1	ICSA	18:27	12							V-329033(ICSA)
CCV V-329036	1	CCV	18:33	13							V-329036(CCV)
CCB V-329027	1	CCB	18:38	14							V-329027(ICB/CCB)
MB 85222 (1)	1	MB	18:41	15	MET-2-SOIL	AQUEO	AQUEO	SW846	85222		0
LCS 85222	1	LCS	18:45	16	MET-2-SOIL	AQUEO	AQUEO	SW846	85222		0
LCS MR 85222	1	LCS	18:49	17	MET-2-SOIL	AQUEO	AQUEO	SW846	85222		0
AD18930-006	1	SMP	18:54	18	MET-TAL6010W	AQUEO	AQUEO	SW846	85222		0
AD18930-006	1	MR	18:58	19	MET-TAL6010W	AQUEO	AQUEO	SW846	85222		0
AD18930-006	1	MS	19:03	20	MET-TAL6010W	AQUEO	AQUEO	SW846	85222		0
AD18930-006	1	MSD	19:07	21	MET-TAL6010W	AQUEO	AQUEO	SW846	85222		0
AD18930-006	1	PS	19:12	22	MET-TAL6010W	AQUEO	AQUEO	SW846	85222		0
AD18930-006	5	SD	19:17	23	MET-TAL6010W	AQUEO	AQUEO	SW846	85222		0
CCV V-329036	1	CCV	19:21	24							V-329036(CCV)
CCB V-329027	1	CCB	19:25	25							V-329027(ICB/CCB)
AD18921-002	1	SMP	19:29	26	MET-TAL6010W	AQUEO	AQUEO	SW846	85222		0
AD18930-001	1	SMP	19:33	27	MET-TAL6010W	AQUEO	AQUEO	SW846	85222		0
AD18930-002	1	SMP	19:38	28	MET-TAL6010W	AQUEO	AQUEO	SW846	85222		0
AD18930-003	1	SMP	19:42	29	MET-TAL6010W	AQUEO	AQUEO	SW846	85222		0
AD18930-004	1	SMP	19:46	30	MET-TAL6010W	AQUEO	AQUEO	SW846	85222		0
AD18930-005	1	SMP	19:51	31	MET-TAL6010W	AQUEO	AQUEO	SW846	85222		0
AD18930-007	1	SMP	19:55	32	MET-TAL6010W	AQUEO	AQUEO	SW846	85222		0
AD18935-001	1	SMP	19:59	33	MET-2-SOIL	AQUEO	AQUEO	SW846	85222		0
AD18935-002	1	SMP	20:03	34	MET-2-SOIL	AQUEO	AQUEO	SW846	85222		0
CCV V-329036	1	CCV	20:06	35							V-329036(CCV)
CCB V-329027	1	CCB	20:11	36							V-329027(ICB/CCB)
MB 85230 (1)	1	MB	20:14	37	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
LCSW 85230	1	LCS	20:18	38	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
LCSW MR 85230	1	LCS	20:23	39	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
AD18954-002	1	SMP	20:27	40	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
AD18954-002	1	MR	20:31	41	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
AD18954-002	1	MS	20:36	42	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
AD18954-002	1	MSD	20:40	43	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
AD18954-002	1	PS	20:45	44	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
AD18954-002	5	SD	20:49	45	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
CCV V-329036	1	CCV	20:53	46							V-329036(CCV)
CCB V-329027	1	CCB	20:58	47							V-329027(ICB/CCB)
AD18934-006	1	SMP	21:01	48	MET-TAL6010S	AQUEO	AQUEO	SW846	85230		0
AD18934-008	1	SMP	21:05	49	MET-TAL6010S	AQUEO	AQUEO	SW846	85230		0
AD18954-001	1	SMP	21:09	50	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
AD18954-003	1	SMP	21:13	51	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
AD18954-004	1	SMP	21:18	52	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
AD18954-005	1	SMP	21:24	53	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
AD18954-006	1	SMP	21:29	54	MET-TAL6010W	AQUEO	AQUEO	SW846	85230		0
CCV V-329036	1	CCV	21:34	55							V-329036(CCV)
CCB V-329027	1	CCB	21:38	56							V-329027(ICB/CCB)

Comments/Reviewedby:

pcousineau
192.168.1.87 9/2/2020 12:42:55 PM

Runs ok. Report TAL. PC.

9/8/25

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS3_7700SWA\A090120ANEW.txt

Analysis Date: 09/01/20 **Instrument:** MS3_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	13:17	1		AQUEO	AQUEO	SW846	85230		0
CalBlk V-334044	1	ISBLK	13:21	2		AQUEO	AQUEO				V-334044(Cal Blk WARNING)
CalStd1 V-334045	1	CAL	13:26	3							V-334045(Cal Std-1 WARNING)
CalStd2 V-334046	1	CAL	13:30	4							V-334046(Cal Std-2 WARNING)
CalStd3 V-334047	1	CAL	13:35	5							V-334047(Cal Std-3 WARNING)
CalStd4 V-334048	1	CAL	13:39	6							V-334048(Cal Std-4 WARNING)
CalStd5 V-334049	1	CAL	13:44	7							V-334049(Cal Std-5 WARNING)
ICV V-334050	1	ICV	13:48	8							V-334050(ICV WARNING)
LLICV V-334056	1	LLICV	13:53	9		AQUEO	AQUEO	SW846	85230		V-334056(LL-ICV/CCV AQ WARNING)
ICB V-334051	1	ICB	13:57	10							V-334051(ICB/CCB WARNING)
ICSA V-334052	1	ICSA	14:02	11							V-334052(ICSA WARNING)
RINSE	1	NA	14:06	12		AQUEO	AQUEO	SW846	85230		0
LRS V-334053	1	LRS	14:11	13		AQUEO	AQUEO	SW846	85230		V-334053(LRS WARNING)
RINSE	1	NA	14:15	14		AQUEO	AQUEO	SW846	85230		0
RINSE	1	NA	14:19	15		AQUEO	AQUEO	SW846	85230		0
CCV V-334054	1	CCV	14:24	16							V-334054(CCV WARNING)
CCB V-334051	1	CCB	14:28	17							V-334051(ICB/CCB WARNING)
MB 85230	1	MB	14:33	18		AQUEO	AQUEO	SW846	85230		0
LCSW 85230	1	LCS	14:37	19		AQUEO	AQUEO	SW846	85230		0
LCSW MR 85230	1	LCS	14:42	20		AQUEO	AQUEO	SW846	85230		0
AD18954-002	1	SMP	14:46	21	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Rerun As, Sb.(LR)	0
AD18954-002	1	MR	14:50	22	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Rerun As, Sb.(LR)	0
AD18954-002	5	SD	14:55	23	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Rerun As, Sb.(LR)	0
AD18954-002	1	MS	14:59	24	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Rerun As, Sb.(LR)	0
AD18954-002	1	MSD	15:03	25	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Rerun As, Sb.(LR)	0
AD18954-002	1	PS	15:08	26	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Rerun As, Sb.(LR)	0
RINSE	1	NA	15:12	27		AQUEO	AQUEO	SW846	85230		0
CCV V-334054	1	CCV	15:17	28							V-334054(CCV WARNING)
CCB V-334051	1	CCB	15:21	29							V-334051(ICB/CCB WARNING)
AD18934-006	1	SMP	15:25	30	MET-TAL6020S	AQUEO	AQUEO	SW846	85230		0
AD18934-008	1	SMP	15:30	31	MET-TAL6020S	AQUEO	AQUEO	SW846	85230		0
AD18954-001	1	SMP	15:35	32	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Rerun As. (LR)	0
AD18954-003	1	SMP	15:39	33	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Rerun As. (LR)	0
AD18954-004	1	SMP	15:43	34	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Rerun As. (LR)	0
AD18954-005	1	SMP	15:48	35	MET-TAL6020W	AQUEO	AQUEO	SW846	85230		0
AD18954-006	1	SMP	15:52	36	MET-TAL6020W	AQUEO	AQUEO	SW846	85230		0
RINSE	1	NA	15:57	37		AQUEO	AQUEO	SW846	85230		0
CCV V-334054	1	CCV	16:01	38							V-334054(CCV WARNING)
CCB V-334051	1	CCB	16:06	39							V-334051(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.87 9/2/2020 9:05:13 AM

Run ok Report As, Be, Cd, Co, Pb, Sb, Se, Tl.
Rerun As, Sb for 18954-002+QC, Rerun As for 18954-001, 003, 004 (over LR). PC

9/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 2x 9/1/20

Standard/Batch/SnCl2 Lot #:

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: A090120AN Sample ID: CalBlk V-334044 Sample Date 09/01/20 Sample Time: 13:21

IS ID:	Area	Area Limit		
Ho-1	2786946.28	1950862.396	-	3623030.164
In-1	1898929.85	1329250.895	-	2468608.805
Sc-1	1362089.24	953462.468	-	1770716.012
Tb-1	2853403.92	1997382.744	-	3709425.096

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-334044	2	2786946.	1898929.	1362089.	2853403.				
SMP	RINSE	1	2761615.	1881085.	1322499.	2828928.				
CAL	CalStd1 V-33404	3	2804172.	1921813.	1352130.	2849045.				
CAL	CalStd2 V-33404	4	2822193.	1923783.	1370110.	2852002.				
CAL	CalStd3 V-33404	5	2834907.	1912288.	1373079.	2860392.				
CAL	CalStd4 V-33404	6	2794784.	1872811.	1330562.	2837296.				
CAL	CalStd5 V-33404	7	2757023.	1826531.	1296443.	2780187.				
ICV	ICV V-334050	8	2766066.	1850742.	1294196.	2810197.				
LLICV	LLICV V-334056	9	2770607.	1857625.	1308573.	2806263.				
ICB	ICB V-334051	10	2758798.	1891402.	1326513.	2829453.				
ICSA	ICSA V-334052	11	2740539.	1751451.	1279324.	2787552.				
SMP	RINSE	12	2859347.	1966497.	1368707.	2908801.				
LRS	LRS V-334053	13	2707573.	1757361.	1229806.	2713686.				
SMP	RINSE	14	2763241.	1915201.	1332689.	2805635.				
SMP	RINSE	15	2743607.	1856799.	1286298.	2788287.				
CCV	CCV V-334054	16	2710971.	1838560.	1302717.	2814633.				
CCB	CCB V-334051	17	2714874.	1845626.	1278150.	2774610.				
MB	MB 85230	18	2814684.	1893100.	1299597.	2880661.				
LCS	LCSW 85230	19	2800824.	1836171.	1274019.	2831924.				
MR	LCSW MR 85230	20	2849883.	1841916.	1263586.	2863003.				
SMP	AD18954-002	21	2826890.	1764306.	1357283.	2828919.				
MR	AD18954-002	22	2853780.	1802637.	1368565.	2880750.				
SD	AD18954-002	23	2954307.	1908936.	1341160.	2967066.				
MS	AD18954-002	24	2823259.	1781469.	1365036.	2810293.				
MSD	AD18954-002	25	2790785.	1816314.	1362232.	2840568.				
PS	AD18954-002	26	2825223.	1764336.	1346274.	2842190.				
SMP	RINSE	27	2827188.	1894111.	1287243.	2874009.				
CCV	CCV V-334054	28	2782269.	1833009.	1281439.	2818304.				
CCB	CCB V-334051	29	2752485.	1844643.	1288702.	2788749.				
SMP	AD18934-006	30	2817441.	1854963.	1147676.	2862769.				
SMP	AD18934-008	31	2842764.	1834314.	1215843.	2848842.				
SMP	AD18954-001	32	2778891.	1736967.	1350550.	2804273.				
SMP	AD18954-003	33	2767866.	1745346.	1377532.	2800705.				
SMP	AD18954-004	34	2616392.	1661510.	1410176.	2662547.				
SMP	AD18954-005	35	2281947.	1386973.	1264897.	2328398.				
SMP	AD18954-006	36	2666812.	1755301.	1429359.	2692556.				
SMP	RINSE	37	2880696.	2016950.	1444553.	2951612.				
CCV	CCV V-334054	38	2845345.	1964081.	1406694.	2901756.				
CCB	CCB V-334051	39	2812866.	1950864.	1372752.	2861185.				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

Batch/FileID: A090120AN Sample ID: CalBlk V-334044 Sample Date 09/01/20 Sample Time: 13:21

IS ID:	Area	Area Limit		
Ho-2	1166474.79	816532.353	-	1516417.227
In-2	361904.97	253333.479	-	470476.461
Sc-2	63505.97	44454.179	-	82557.761
Tb-2	1165922.75	816145.925	-	1515699.575

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-334044	2	1166474.	361904.9	63505.97	1165922.				
SMP	RINSE	1	1162562.	357214.4	62378.99	1163241.				
CAL	CalStd1 V-33404	3	1167517.	363640.7	63900.71	1180073.				
CAL	CalStd2 V-33404	4	1181505.	368397.3	64695.88	1189171.				
CAL	CalStd3 V-33404	5	1184008.	366423.5	63969.81	1189498.				
CAL	CalStd4 V-33404	6	1169066.	357297.7	62444.92	1169543.				
CAL	CalStd5 V-33404	7	1157369.	349517.9	60475.02	1166054.				
ICV	ICV V-334050	8	1163306.	353011.9	61011.45	1163361.				
LLICV	LLICV V-334056	9	1177455.	361518.2	62594.07	1176477.				
ICB	ICB V-334051	10	1162803.	360714.2	62912.88	1170420.				
ICSA	ICSA V-334052	11	1132665.	333841.5	61792.57	1143068.				
SMP	RINSE	12	1178616.	367919.2	63804.79	1190560.				
LRS	LRS V-334053	13	1129340.	337035.4	60162.83	1129185.				
SMP	RINSE	14	1169314.	363934.5	63656.81	1173394.				
SMP	RINSE	15	1143317.	354419.0	60854.88	1148024.				
CCV	CCV V-334054	16	1149547.	350709.5	60800.66	1147446.				
CCB	CCB V-334051	17	1141113.	352406.7	61274.46	1148288.				
MB	MB 85230	18	1146100.	341995.2	59124.53	1150541.				
LCS	LCSW 85230	19	1116184.	327558.7	56525.20	1121489.				
MR	LCSW MR 85230	20	1123113.	331319.3	56580.71	1134079.				
SMP	AD18954-002	21	1132013.	318457.0	57662.99	1129106.				
MR	AD18954-002	22	1128312.	316676.3	57835.92	1125067.				
SD	AD18954-002	23	1169887.	345064.0	60565.50	1175392.				
MS	AD18954-002	24	1118605.	324743.9	58076.49	1119491.				
MSD	AD18954-002	25	1129527.	326833.7	58162.36	1122255.				
PS	AD18954-002	26	1130332.	314834.1	56888.72	1132629.				
SMP	RINSE	27	1163891.	353670.9	60589.80	1173909.				
CCV	CCV V-334054	28	1156813.	349188.2	60011.35	1158565.				
CCB	CCB V-334051	29	1143288.	349396.5	61099.49	1145146.				
SMP	AD18934-006	30	1126252.	327074.3	55048.65	1128853.				
SMP	AD18934-008	31	1155895.	334543.3	57186.59	1157824.				
SMP	AD18954-001	32	1116438.	311948.1	55994.83	1116003.				
SMP	AD18954-003	33	1110043.	314157.7	57843.76	1102782.				
SMP	AD18954-004	34	1045666.	304991.3	60984.64	1036554.				
SMP	AD18954-005	35	935903.0	289068.2	61402.52	929768.4				
SMP	AD18954-006	36	1078269.	326671.6	64409.06	1080332.				
SMP	RINSE	37	1225721.	394398.7	68467.88	1236612.				
CCV	CCV V-334054	38	1227045.	383098.0	68268.41	1232130.				
CCB	CCB V-334051	39	1214501.	385945.2	66592.13	1218490.				

* Indicates Internal Standard Area outside of limits

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS3_7700SWA\A090220ANEW.txt

Analysis Date: 09/02/20 **Instrument:** MS3_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	09:16	1		AQUEO	AQUEO	SW846	85230		0
CalBlk V-334044	1	ISBLK	09:21	2		AQUEO	AQUEO				V-334044(Cal Blk WARNING)
CalStd1 V-334045	1	CAL	09:25	3							V-334045(Cal Std-1 WARNING)
CalStd2 V-334046	1	CAL	09:30	4							V-334046(Cal Std-2 WARNING)
CalStd3 V-334047	1	CAL	09:34	5							V-334047(Cal Std-3 WARNING)
CalStd4 V-334048	1	CAL	09:39	6							V-334048(Cal Std-4 WARNING)
CalStd5 V-334049	1	CAL	09:43	7							V-334049(Cal Std-5 WARNING)
ICV V-334050	1	ICV	09:48	8							V-334050(ICV WARNING)
LLICV V-334056	1	LLICV	09:52	9		AQUEO	AQUEO	SW846	85230		V-334056(LL-ICV/CCV AQ. WARNING)
ICB V-334051	1	ICB	09:57	10							V-334051(ICB/CCB WARNING)
ICSA V-334052	1	ICSA	10:01	11							V-334052(ICSA WARNING)
RINSE	1	NA	10:06	12		AQUEO	AQUEO	SW846	85230		0
LRS V-334053	1	LRS	10:10	13		AQUEO	AQUEO	SW846	85230		V-334053(LRS WARNING)
RINSE	1	NA	10:14	14		AQUEO	AQUEO	SW846	85230		0
RINSE	1	NA	10:19	15		AQUEO	AQUEO	SW846	85230		0
CCV V-334054	1	CCV	10:23	16							V-334054(CCV WARNING)
CCB V-334051	1	CCB	10:28	17							V-334051(ICB/CCB WARNING)
AD18954-002	5	SMP	10:32	18	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Report As, Sb.	0
AD18954-002	5	MR	10:37	19	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Report As, Sb.	0
AD18954-002	5	SD	10:41	20	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Report As, Sb.	0
AD18954-002	5	MS	10:46	21	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Report As, Sb.	0
AD18954-002	5	MSD	10:50	22	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Report As, Sb.	0
AD18954-002	5	PS	10:54	23	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Report As, Sb.	0
AD18954-001	3	SMP	10:59	24	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Report As.	0
AD18954-003	10	SMP	11:03	25	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Report As.	0
AD18954-004	3	SMP	11:08	26	MET-TAL6020W	AQUEO	AQUEO	SW846	85230	Report As.	0
RINSE	1	NA	11:22	27		AQUEO	AQUEO	SW846	85236		0
CCV V-334054	1	CCV	11:27	28							V-334054(CCV WARNING)
CCB V-334051	1	CCB	11:31	29							V-334051(ICB/CCB WARNING)
MB 85236	1	MB	11:35	30		AQUEO	AQUEO	SW846	85236		0
LCSW 85236	1	LCS	11:40	31		AQUEO	AQUEO	SW846	85236		0
LCSW MR 85236	1	LCS	11:44	32		AQUEO	AQUEO	SW846	85236		0
AD18979-001	1	SMP	11:49	33	MET-TAL6020W	AQUEO	AQUEO	SW846	85236		0
AD18979-001	1	MR	11:53	34	MET-TAL6020W	AQUEO	AQUEO	SW846	85236		0
AD18979-001	5	SD	11:57	35	MET-TAL6020W	AQUEO	AQUEO	SW846	85236		0
AD18979-001	1	NA	12:02	36	MET-TAL6020W	AQUEO	AQUEO	SW846	85236	RSD %	0
AD18979-001	1	MSD	12:06	37	MET-TAL6020W	AQUEO	AQUEO	SW846	85236		0
AD18979-001	1	PS	12:10	38	MET-TAL6020W	AQUEO	AQUEO	SW846	85236		0
RINSE	1	NA	12:15	39		AQUEO	AQUEO	SW846	85236		0
CCV V-334054	1	CCV	12:20	40							V-334054(CCV WARNING)
CCB V-334051	1	CCB	12:24	41							V-334051(ICB/CCB WARNING)
AD18979-002	1	SMP	12:29	42	MET-TAL6020W	AQUEO	AQUEO	SW846	85236		0
AD18979-004	1	SMP	12:34	43	MET-TAL6020W	AQUEO	AQUEO	SW846	85236		0
AD18979-001	1	MS	12:38	44	MET-TAL6020W	AQUEO	AQUEO	SW846	85236		0
RINSE	1	NA	12:42	45		AQUEO	AQUEO	SW846	85236		0
CCV V-334054	1	CCV	12:47	46							V-334054(CCV WARNING)
CCB V-334051	1	CCB	12:51	47							V-334051(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.87 9/2/2020 1:12:51 PM

B-26172 Report As, Sb for 18954-002+QC, Report As for 18954-001, 003, 004.
B-26178 Report As, Be, Cd, Co, Pb, Sb, Se, Tl. PC.

9/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 20 9/1/20

Standard/Batch/SnCl2 Lot #:

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: A090220AN Sample ID: CalBlk V-334044 Sample Date 09/02/20 Sample Time: 09:21

IS ID:	Area	Area Limit		
Ho-1	2503645.06	1752551.542	-	3254738.578
In-1	1710129.28	1197090.496	-	2223168.064
Sc-1	1155708.97	808996.279	-	1502421.661
Tb-1	2599141.56	1819399.092	-	3378884.028

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-334044	2	2503645.	1710129.	1155708.	2599141.				
SMP	RINSE	1	2482802.	1691842.	1112126.	2570761.				
CAL	CalStd1 V-33404	3	2520938.	1729710.	1145303.	2613862.				
CAL	CalStd2 V-33404	4	2534144.	1737510.	1147353.	2596509.				
CAL	CalStd3 V-33404	5	2524036.	1750593.	1201475.	2620382.				
CAL	CalStd4 V-33404	6	2528352.	1707814.	1154353.	2622529.				
CAL	CalStd5 V-33404	7	2541771.	1702325.	1215508.	2593473.				
ICV	ICV V-334050	8	2658477.	1823374.	1276803.	2730488.				
LLICV	LLICV V-334056	9	2572156.	1792285.	1228957.	2674160.				
ICB	ICB V-334051	10	2561327.	1771514.	1211082.	2661887.				
ICSA	ICSA V-334052	11	2608383.	1689872.	1232149.	2692831.				
SMP	RINSE	12	2731006.	1906749.	1342105.	2827684.				
LRS	LRS V-334053	13	2631714.	1721667.	1260662.	2693662.				
SMP	RINSE	14	2681434.	1874912.	1316576.	2787658.				
SMP	RINSE	15	2671992.	1853908.	1294048.	2746584.				
CCV	CCV V-334054	16	2655200.	1834135.	1296520.	2748626.				
CCB	CCB V-334051	17	2664540.	1830688.	1275279.	2737137.				
SMP	AD18954-002	18	2733406.	1842366.	1315392.	2819562.				
MR	AD18954-002	19	2735773.	1828767.	1308527.	2804208.				
SD	AD18954-002	20	2715140.	1856034.	1308924.	2812405.				
MS	AD18954-002	21	2729018.	1809683.	1301947.	2797633.				
MSD	AD18954-002	22	2734243.	1825539.	1309549.	2834983.				
PS	AD18954-002	23	2737927.	1803682.	1292589.	2828945.				
SMP	AD18954-001	24	2760793.	1807162.	1316744.	2811884.				
SMP	AD18954-003	25	2733664.	1853453.	1315113.	2836410.				
SMP	AD18954-004	26	2679073.	1751174.	1391788.	2728867.				
SMP	RINSE	27	2605336.	1803462.	1296491.	2676556.				
CCV	CCV V-334054	28	2649359.	1817036.	1318134.	2733623.				
CCB	CCB V-334051	29	2632098.	1803147.	1294289.	2715867.				
MB	MB 85236	30	2711813.	1823384.	1276562.	2772887.				
LCS	LCSW 85236	31	2751103.	1818640.	1300148.	2847362.				
MR	LCSW MR 85236	32	2755084.	1810450.	1299596.	2837667.				
SMP	AD18979-001	33	2734614.	1768405.	1307212.	2791277.				
MR	AD18979-001	34	2738338.	1777556.	1297233.	2814257.				
SD	AD18979-001	35	2740161.	1833429.	1274696.	2808869.				
MS	AD18979-001	36	2952821.	1890422.	1387181.	2996311.				
MSD	AD18979-001	37	2666100.	1742435.	1294061.	2723656.				
PS	AD18979-001	38	2711435.	1724351.	1247195.	2750466.				
SMP	RINSE	39	2608614.	1759544.	1227775.	2675628.				
CCV	CCV V-334054	40	2555676.	1716236.	1154205.	2612335.				
CCB	CCB V-334051	41	2519554.	1722666.	1136972.	2585679.				
SMP	AD18979-002	42	2709059.	1797216.	1163457.	2791567.				
SMP	AD18979-004	43	2663140.	1709670.	1321674.	2732803.				
MS	AD18979-001	44	2695723.	1769814.	1288072.	2768995.				
SMP	RINSE	45	2612363.	1782534.	1210201.	2681787.				
CCV	CCV V-334054	46	2569591.	1717656.	1133491.	2610426.				
CCB	CCB V-334051	47	2511948.	1705230.	1115454.	2588358.				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

Batch/FileID: A090220AN Sample ID: CalBlk V-334044 Sample Date 09/02/20 Sample Time: 09:21

IS ID:	Area	Area Limit		
Ho-2	1092554.00	764787.8	-	1420320.2
In-2	338692.63	237084.841	-	440300.419
Sc-2	57559.41	40291.587	-	74827.233
Tb-2	1103705.32	772593.724	-	1434816.916

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-334044	2	1092554.	338692.6	57559.41	1103705.				
SMP	RINSE	1	1075999.	337648.6	57358.74	1089463.				
CAL	CalStd1 V-33404	3	1094199.	342377.8	58605.96	1096900.				
CAL	CalStd2 V-33404	4	1103605.	344290.5	58918.35	1117197.				
CAL	CalStd3 V-33404	5	1107437.	346229.6	59869.82	1130893.				
CAL	CalStd4 V-33404	6	1112436.	343199.3	58909.05	1121775.				
CAL	CalStd5 V-33404	7	1107367.	337749.0	58598.40	1120265.				
ICV	ICV V-334050	8	1128360.	347322.8	59529.92	1129414.				
LLICV	LLICV V-334056	9	1126424.	355220.7	61076.90	1150665.				
ICB	ICB V-334051	10	1110130.	348068.7	60422.91	1117712.				
ICSA	ICSA V-334052	11	1110467.	329669.4	61341.58	1127388.				
SMP	RINSE	12	1167660.	370925.4	64479.35	1184079.				
LRS	LRS V-334053	13	1119265.	338863.4	61436.00	1124235.				
SMP	RINSE	14	1151410.	364983.2	63037.88	1162467.				
SMP	RINSE	15	1141037.	362104.6	62316.53	1150924.				
CCV	CCV V-334054	16	1140192.	356573.9	62390.04	1154638.				
CCB	CCB V-334051	17	1137454.	358037.6	61238.52	1149971.				
SMP	AD18954-002	18	1151004.	348980.6	60929.92	1163912.				
MR	AD18954-002	19	1142828.	347610.7	60141.55	1148345.				
SD	AD18954-002	20	1149775.	355058.2	61262.06	1153122.				
MS	AD18954-002	21	1147353.	343972.8	60243.19	1147599.				
MSD	AD18954-002	22	1143883.	342595.8	60036.91	1150759.				
PS	AD18954-002	23	1130752.	338516.2	59235.64	1146047.				
SMP	AD18954-001	24	1129772.	330191.9	58135.74	1133693.				
SMP	AD18954-003	25	1143693.	348069.1	60201.24	1156556.				
SMP	AD18954-004	26	1104560.	335613.4	63674.25	1109311.				
SMP	RINSE	27	1123179.	358696.9	64563.11	1143358.				
CCV	CCV V-334054	28	1217044.	384718.8	67927.97	1234317.				
CCB	CCB V-334051	29	1128856.	354646.9	62088.24	1135700.				
MB	MB 85236	30	1127384.	340911.5	58241.32	1128514.				
LCS	LCSW 85236	31	1111217.	333479.1	57379.08	1128816.				
MR	LCSW MR 85236	32	1106763.	332090.5	57601.58	1121929.				
SMP	AD18979-001	33	1104225.	317447.3	56798.28	1108905.				
MR	AD18979-001	34	1101161.	317412.2	56207.57	1105632.				
SD	AD18979-001	35	1117353.	334963.8	57722.22	1130604.				
MS	AD18979-001	36	1074231.	318655.1	56032.87	1087383.				
MSD	AD18979-001	37	1079225.	318098.1	56272.39	1081713.				
PS	AD18979-001	38	1086048.	308908.5	55890.05	1088795.				
SMP	RINSE	39	1095919.	337329.9	57837.87	1102657.				
CCV	CCV V-334054	40	1088756.	334096.1	57495.85	1098064.				
CCB	CCB V-334051	41	1079522.	335408.1	56813.02	1088210.				
SMP	AD18979-002	42	1089022.	323234.0	55755.35	1101689.				
SMP	AD18979-004	43	1004776.	288713.5	51964.86	1002514.				
MS	AD18979-001	44	1076979.	318257.8	55896.63	1087944.				
SMP	RINSE	45	1086962.	336554.5	57653.12	1099502.				
CCV	CCV V-334054	46	1082190.	333387.2	57473.54	1093730.				
CCB	CCB V-334051	47	1078621.	334762.1	58115.80	1090031.				

* Indicates Internal Standard Area outside of limits

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26172SW.txt

Analysis Date: 09/02/20 **Instrument:** HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	11:04	1							0
2 PPB	1	CAL	11:05	2							0
5 PPB	1	CAL	11:06	3							0
1 PPB	1	CAL	11:08	4							0
2 PPB	1	CAL	11:09	5							0
5 PPB	1	CAL	11:10	6							0
10 PPB	1	CAL	11:12	7							0
25 PPB	1	CAL	11:13	8							0
ICV (2)	1	ICV	11:15	9							0
ICB	1	ICB	11:17	10							0
MB 85230 (1)	1	MB	11:18	11	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
LCS 85230	1	LCS	11:20	12	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
LCS MR 85230	1	LCS	11:21	13	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
AD18954-002	1	SMP	11:23	14	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
AD18954-002	1	MR	11:24	15	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
AD18954-002	1	MS	11:26	16	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
AD18954-002	1	MSD	11:27	17	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
AD18934-006	1	SMP	11:29	18	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
AD18934-008	1	SMP	11:31	19	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
CCV	1	CCV	11:32	20							0
CCB	1	CCB	11:34	21							0
AD18954-001	1	SMP	11:35	22	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
AD18954-003	1	SMP	11:36	23	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
AD18954-004	1	SMP	11:38	24	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
AD18954-005	1	SMP	11:39	25	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
AD18954-006	1	SMP	11:40	26	HG-W-7470	AQUEO	AQUEO	SW846	85230		0
CCV	1	CCV	11:42	27							0
CCB	1	CCB	11:43	28							0

Comments/Reviewedby:

bransaw
192.168.1.120 9/2/2020 12:04:51 PM

OK

9/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334168

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-329027

Prepared By: Aliano, Carmela
Description: ICB/CCB
Prep Date: 6/4/2020
Expiration Date: 2/25/2021
Department: Metals
BatchNumber:
Concentration: 0 mg/l
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	

Veritech Lot Number: V-329028

Prepared By: Aliano, Carmela
Description: ICS3 - Middle Std
Prep Date: 6/4/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	944.75 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	.5
12977	SILICON	5 ml	CONC conc	5
13092	CERIUM	5 ml	CONC conc	5

Veritech Lot Number: V-329029

Prepared By: Aliano, Carmela
Description: ICS4 High std
Prep Date: 6/4/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: various mg/l
Final Volume: 500 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	434.5 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	1
12977	SILICON	5 ml	CONC conc	10

Veritech Lot Number: V-329033

Prepared By: Aliano, Carmela
Description: ICSA
Prep Date: 6/4/2020
Expiration Date: 2/25/2021
Department: Metals
BatchNumber:
Concentration: MULTI mg/l
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13176	ICSA	50 ml	NEAT neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-329036

Prepared By: Aliano, Carmela
Description: CCV
Prep Date: 6/4/2020
Expiration Date: 2/25/2021
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13171	ICV 1	10 ml	NEAT neat	
13170	ICV 2	10 ml	CONC conc	
12981	BORON	.5 ml	CONC conc	
12933	silicon	5 ml	CONC conc	
13091	CERIUM	5 ml	CONC conc	

Veritech Lot Number: V-329041

Prepared By: Aliano, Carmela
Description: LRS 1/2 Fe
Prep Date: 6/4/2020
Expiration Date: 10/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 500 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	335 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12915	LINEAR RANGE 1B	50 ml	neat neat	
12917	linear range 1C	50 ml	neat neat	
13092	CERIUM	12.5 ml	CONC conc	
12976	BORON	2.5 ml	CONC conc	
12977	SILICON	12.5 ml	CONC conc	

Veritech Lot Number: V-331024

Prepared By: Silva, Amanda
Description: 1:1 HCl WARNING
Prep Date: 7/7/2020
Expiration Date: 1/7/2021
Department: Metals
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13275	hydrochloric acid	500 ml	neat neat	

Veritech Lot Number: V-331982

Prepared By: Cousineau, Paul
Description: B, Si, Ce INTERMEDIATE
Prep Date: 7/23/2020
Expiration Date: 10/23/2020
Department: Metals
BatchNumber:
Concentration: 100 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 07/28/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	5 ml	neat neat	
13169	hydrochloric acid	5 ml	neat neat	
12976	BORON	10 ml	CONC conc	100 ppm
13092	CERIUM	10 ml	CONC conc	100 ppm
12977	SILICON	10 ml	CONC conc	100 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333563

Prepared By:	Balashanthan, Shiamala	Department:	Metals	ApprovedBy:	shiamala
Description:	LLICV/LLCCV aq	BatchNumber:		ApproveDate:	09/02/20
Prep Date:	8/21/2020	Concentration:	MULTI multi	Checked:	Yes
Expiration Date:	11/20/2020	Final Volume:	500 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13421	nitric acid	25 ml	neat neat	
13329	Hydrochloric acid	25 ml	neat neat	
13359	LL AQUEOUS	5 ml	MULTI ug/ml	
12976	BORON	.1 ml	CONC conc	0.2 ppm
12977	SILICON	.05 ml	CONC conc	0.1 ppm
13092	CERIUM	.05 ml	CONC conc	0.1 ppm

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12915

Description: LINEAR RANGE 1B

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-40-500	7/271ab	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12917

Description: linear range 1C

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
spex	XHCV-44-500	8-002AB	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12933

Description: silicon

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-145	S191206040	12/13/19	12/30/21	Aliano, Carmela	4	500m	CONC	CONC

Veritech Control/Receipt Number: 12976

Description: BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLB9-2X	24-110BX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12977

Description: SILICON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLSI9-2X	24-93SIX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12981

Description: BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-055	S190719015	01/06/20	07/30/21	Aliano, Carmela	3	500ml	CONC	CONC

Veritech Control/Receipt Number: 12983

Description: CALIBRATION 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	8/214AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12984

Description: CALIBRATION 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	8/215AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 13084

Description: DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13091

Description: CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-051-585	S190710006	03/04/20	07/30/21	Aliano, Carmela	2	500ml	CONC	CONC

Veritech Control/Receipt Number: 13092

Description: CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLCE2-2X	24-15CEX	03/04/20	02/28/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13168

Description: nitric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	245675	04/07/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13169

Description: hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	04/07/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13170

Description: ICV 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S200306032	04/07/20	03/31/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13171

Description
ICV 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S200306031	04/07/20	03/31/21	Aliano, Carmela	2	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13176

Description
ICSA

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-30	9-265AB	04/07/20	03/31/21	Aliano, Carmela	4	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13275

Description
hydrochloric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	06/02/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13329

Description
Hydrochloric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	253057	06/16/20	01/21/25	Lopez, Jose	6	2.5	neat	neat

Veritech Control/Receipt Number: 13359

Description
LL AQUEOUS

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-43-500	2-005MF	06/29/20	06/30/21	Cousineau, Paul	1	500 M	MULTI	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

==========

Analysis Begun

Start Time: 9/1/2020 5:35:44 PM
Logged In Analyst: shiamala
Spectrometer Model: Optima 4300 DV, S/N 077N1030901
Plasma On Time: 9/1/2020 11:02:35 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

File SW26165B2
B-26172
Q2-85230

Sample Information File: C:\pe\administrator\Sample Information\09.01.20.sif
Batch ID:
Results Data Set: SW26165B2
Results Library: C:\pe\administrator\Results\Results.mdb

==========

Method Loaded
Method Name: PE2 4300DV SWAQ AX
IEC File: IEC050420A2.iec
Method Description: 6010D (AQUEOUS)
Method Last Saved: 8/26/2020 10:33:55 AM
MSF File:

9/3/20

==========

Sequence No.: 1
Sample ID: CALBLK V-329027
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 9/1/2020 5:35:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Ru dk

Mean Data: CALBLK V-329027

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1356572.7	13012.72	0.96%	100	%
Y 371.029	395840.1	3582.68	0.91%	100.0	%
Ag 328.068†	950.8	21.60	2.27%	[0.00]	mg/L
Al 308.215†	11345.8	130.62	1.15%	[0.00]	mg/L
As 188.979†	91.5	3.16	3.45%	[0.00]	mg/L
Ba 233.527†	-671.1	4.33	0.64%	[0.00]	mg/L
Be 313.107†	-7627.1	144.55	1.90%	[0.00]	mg/L
Ca 315.887†	4404.8	102.68	2.33%	[0.00]	mg/L
Cd 228.802†	-85.5	3.28	3.84%	[0.00]	mg/L
Co 228.616†	-56.6	1.17	2.08%	[0.00]	mg/L
Cr 267.716†	152.0	20.71	13.63%	[0.00]	mg/L
Cu 327.393†	-3849.9	51.78	1.35%	[0.00]	mg/L
Fe 273.955†	908.2	15.47	1.70%	[0.00]	mg/L
K 404.721†	-790.0	98.31	12.44%	[0.00]	mg/L
Mg 279.077†	-575.2	31.54	5.48%	[0.00]	mg/L
Mn 257.610†	2483.2	42.35	1.71%	[0.00]	mg/L
Mo 202.031†	-170.5	2.68	1.57%	[0.00]	mg/L
Na 330.237†	1333.4	26.97	2.02%	[0.00]	mg/L
Ni 231.604†	345.8	11.47	3.32%	[0.00]	mg/L
Pb 220.353†	-1202.0	10.34	0.86%	[0.00]	mg/L
Sb 206.836†	109.4	4.15	3.80%	[0.00]	mg/L
Se 196.026†	48.1	0.77	1.61%	[0.00]	mg/L
Sn 189.927†	-58.2	1.93	3.32%	[0.00]	mg/L
Ti 334.940†	1334.1	21.48	1.61%	[0.00]	mg/L
Tl 190.801†	-35.9	1.07	2.97%	[0.00]	mg/L
V 290.880†	3794.2	36.04	0.95%	[0.00]	mg/L
Zn 206.200†	629.1	6.29	1.00%	[0.00]	mg/L
Si 251.611†	2105.2	30.92	1.47%	[0.00]	mg/L
B 249.772†	3064.3	20.03	0.65%	[0.00]	mg/L
Ce 413.764	-237.9	67.98	28.58%	[0.00]	mg/L

9/2/20

Sequence No.: 2
Sample ID: CALST2 V-333563
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 9/1/2020 5:41:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST2 V-333563

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1319271.5	11845.21	0.90%	97.3	%
Y 371.029	378775.3	3685.98	0.97%	95.7	%
Ag 328.068†	4991.3	34.66	0.69%	[0.02]	mg/L
Al 308.215†	6948.3	183.45	2.64%	[0.2]	mg/L
As 188.979†	62.0	2.81	4.54%	[0.040]	mg/L
Ba 233.527†	5202.7	49.87	0.96%	[0.050]	mg/L
Be 313.107†	47181.0	451.11	0.96%	[0.012]	mg/L
Ca 315.887†	716837.6	7995.62	1.12%	[5]	mg/L
Cd 228.802†	804.0	13.31	1.66%	[0.012]	mg/L
Co 228.616†	1103.9	21.70	1.97%	[0.020]	mg/L
Cr 267.716†	6239.3	62.02	0.99%	[0.050]	mg/L
Cu 327.393†	9476.7	60.01	0.63%	[0.050]	mg/L
Fe 273.955†	11507.5	153.05	1.33%	[0.30]	mg/L
K 404.721†	661.4	78.93	11.93%	[5.0]	mg/L
Mg 279.077†	141260.4	1660.14	1.18%	[5.0]	mg/L
Mn 257.610†	41383.9	405.13	0.98%	[0.040]	mg/L
Mo 202.031†	229.2	1.81	0.79%	[0.020]	mg/L
Na 330.237†	6619.7	51.12	0.77%	[5.0]	mg/L
Ni 231.604†	2230.4	23.87	1.07%	[0.050]	mg/L
Pb 220.353†	266.0	11.06	4.16%	[0.050]	mg/L
Sb 206.836†	110.2	6.64	6.02%	[0.050]	mg/L
Se 196.026†	51.8	1.72	3.32%	[0.050]	mg/L
Sn 189.927†	195.0	3.04	1.56%	[0.050]	mg/L
Ti 334.940†	51532.3	509.31	0.99%	[0.050]	mg/L
Tl 190.801†	93.4	2.10	2.24%	[0.050]	mg/L
V 290.880†	9733.8	162.88	1.67%	[0.050]	mg/L
Zn 206.200†	2901.0	33.94	1.17%	[0.050]	mg/L
Si 251.611†	5633.3	115.37	2.05%	[0.10]	mg/L
B 249.772†	23688.2	392.10	1.66%	[0.20]	mg/L
Ce 413.764	1584.5	152.57	9.63%	[0.10]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-329028
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 9/1/2020 5:45:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST3 V-329028

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1302319.8	10215.61	0.78%	96.0	%
Y 371.029	328552.1	750.28	0.23%	83.0	%
Ag 328.068†	23237.2	325.75	1.40%	[0.10]	mg/L
Al 308.215†	162920.2	2475.20	1.52%	[5.0]	mg/L
As 188.979†	801.5	12.03	1.50%	[0.50]	mg/L
Ba 233.527†	50519.8	735.19	1.46%	[0.50]	mg/L
Be 313.107†	1932441.8	6452.35	0.33%	[0.50]	mg/L
Ca 315.887†	6846996.3	33986.21	0.50%	[50]	mg/L
Cd 228.802†	31167.9	467.77	1.50%	[0.50]	mg/L
Co 228.616†	26453.3	303.64	1.15%	[0.50]	mg/L
Cr 267.716†	59826.3	885.25	1.48%	[0.50]	mg/L
Cu 327.393†	92945.4	1374.96	1.48%	[0.50]	mg/L
Fe 273.955†	185764.1	2811.32	1.51%	[5.0]	mg/L
K 404.721†	15195.8	334.34	2.20%	[50]	mg/L
Mg 279.077†	1327420.5	5868.06	0.44%	[50]	mg/L
Mn 257.610†	498602.2	7670.28	1.54%	[0.50]	mg/L
Mo 202.031†	5548.5	68.29	1.23%	[0.50]	mg/L
Na 330.237†	70651.9	1030.66	1.46%	[50]	mg/L
Ni 231.604†	21166.1	270.32	1.28%	[0.50]	mg/L
Pb 220.353†	2803.8	31.89	1.14%	[0.50]	mg/L
Sb 206.836†	1069.0	16.21	1.52%	[0.50]	mg/L
Se 196.026†	523.4	16.18	3.09%	[0.50]	mg/L
Sn 189.927†	1903.0	27.50	1.45%	[0.50]	mg/L
Ti 334.940†	497285.7	7336.61	1.48%	[0.50]	mg/L
Tl 190.801†	829.6	15.81	1.91%	[0.50]	mg/L
V 290.880†	95673.2	1681.67	1.76%	[0.50]	mg/L
Zn 206.200†	28220.1	346.96	1.23%	[0.50]	mg/L
Si 251.611†	249348.6	3769.97	1.51%	[5]	mg/L
B 249.772†	64085.2	852.63	1.33%	[0.50]	mg/L
Ce 413.764	68814.1	623.76	0.91%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-329029
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 9/1/2020 5:49:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST4 V-329029

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1276884.0	10880.88	0.85%	94.1	%
Y 371.029	290313.2	2331.59	0.80%	73.3	%
Ag 328.068†	49341.7	54.11	0.11%	[0.20]	mg/L
Al 308.215†	326003.3	544.22	0.17%	[10]	mg/L
As 188.979†	1611.8	18.06	1.12%	[1.0]	mg/L
Ba 233.527†	100589.9	183.62	0.18%	[1.0]	mg/L
Be 313.107†	3841502.1	17330.29	0.45%	[1.0]	mg/L
Ca 315.887†	13432401.2	59339.70	0.44%	[100]	mg/L
Cd 228.802†	62478.6	63.19	0.10%	[1.0]	mg/L
Co 228.616†	52700.4	79.75	0.15%	[1.0]	mg/L
Cr 267.716†	118506.1	228.70	0.19%	[1.0]	mg/L
Cu 327.393†	185864.8	313.12	0.17%	[1.0]	mg/L
Fe 273.955†	367337.9	424.18	0.12%	[10]	mg/L
K 404.721†	30988.5	80.67	0.26%	[100]	mg/L
Mg 279.077†	2596441.3	4133.64	0.16%	[100]	mg/L
Mn 257.610†	992733.5	819.43	0.08%	[1.0]	mg/L
Mo 202.031†	11058.7	97.77	0.88%	[1.0]	mg/L
Na 330.237†	149366.1	427.28	0.29%	[100]	mg/L
Ni 231.604†	42202.4	65.68	0.16%	[1.0]	mg/L
Pb 220.353†	5575.0	36.07	0.65%	[1.0]	mg/L
Sb 206.836†	2158.0	34.45	1.60%	[1.0]	mg/L
Se 196.026†	1053.0	9.86	0.94%	[1.0]	mg/L
Sn 189.927†	3748.7	37.51	1.00%	[1.0]	mg/L
Ti 334.940†	1001742.6	935.25	0.09%	[1.0]	mg/L
Tl 190.801†	1640.7	16.31	0.99%	[1.0]	mg/L
V 290.880†	191803.7	66.11	0.03%	[1.0]	mg/L
Zn 206.200†	56120.2	132.94	0.24%	[1.0]	mg/L
Si 251.611†	493395.9	455.53	0.09%	[10]	mg/L
B 249.772†	127050.3	566.60	0.45%	[1.0]	mg/L
Ce 413.764	134179.9	621.10	0.46%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-240.6	245400	0.00000	0.999484	
Al 308.215	3	Lin, Calc Int	179.3	32580	0.00000	0.999999	
As 188.979	3	Lin, Calc Int	-1.9	1612	0.00000	0.999996	
Ba 233.527	3	Lin, Calc Int	119.2	100500	0.00000	0.999997	
Be 313.107	3	Lin, Calc Int	2619.8	3843000	0.00000	0.999995	
Ca 315.887	3	Lin, Calc Int	44328.1	134300	0.00000	0.999952	
Cd 228.802	3	Lin, Calc Int	11.6	62440	0.00000	0.999999	
Co 228.616	3	Lin, Calc Int	41.4	52690	0.00000	0.999998	
Cr 267.716	3	Lin, Calc Int	246.5	118400	0.00000	0.999988	
Cu 327.393	3	Lin, Calc Int	85.0	185800	0.00000	1.000000	
Fe 273.955	3	Lin, Calc Int	602.9	36740	0.00000	0.999984	
K 404.721	3	Lin, Calc Int	-454.8	314.0	0.00000	0.999676	
Mg 279.077	3	Lin, Calc Int	10501.6	25960	0.00000	0.999935	
Mn 257.610	3	Lin, Calc Int	1164.9	992200	0.00000	0.999997	
Mo 202.031	3	Lin, Calc Int	7.1	11060	0.00000	0.999998	
Na 330.237	3	Lin, Calc Int	-1120.6	1491	0.00000	0.999622	
Ni 231.604	3	Lin, Calc Int	66.1	42150	0.00000	0.999996	
Pb 220.353	3	Lin, Calc Int	-2.8	5584	0.00000	0.999991	
Sb 206.836	3	Lin, Calc Int	-0.8	2155	0.00000	0.999986	
Se 196.026	3	Lin, Calc Int	-1.0	1053	0.00000	0.999996	
Sn 189.927	3	Lin, Calc Int	8.7	3750	0.00000	0.999970	
Ti 334.940	3	Lin, Calc Int	-5.4	1000000	0.00000	0.999990	
Tl 190.801	3	Lin, Calc Int	6.8	1636	0.00000	0.999972	
V 290.880	3	Lin, Calc Int	22.9	191700	0.00000	0.999999	
Zn 206.200	3	Lin, Calc Int	72.1	56100	0.00000	0.999996	
Si 251.611	3	Lin, Calc Int	799.9	49350	0.00000	0.999986	
B 249.772	3	Lin, Calc Int	-612.1	127800	0.00000	0.999859	
Ce 413.764	3	Lin, Calc Int	424.0	13440	0.00000	0.999917	

Sequence No.: 5
Sample ID: ICV V-329036
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/1/2020 5:54:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV V-329036

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1300145.9	95.8	%	0.58				0.60%
Y 371.029	330858.5	83.6	%	0.45				0.54%
Ag 328.068†	23913.5	0.104089	mg/L	0.0002650	0.104089	mg/L	0.0002650	0.25%
QC value within limits for Ag 328.068 Recovery = 104.09%								
Al 308.215†	163833.0	5.00187	mg/L	0.032597	5.00187	mg/L	0.032597	0.65%
QC value within limits for Al 308.215 Recovery = 100.04%								
As 188.979†	796.6	0.494460	mg/L	0.0037006	0.494460	mg/L	0.0037006	0.75%
QC value within limits for As 188.979 Recovery = 98.89%								
Ba 233.527†	50864.3	0.504730	mg/L	0.0020920	0.504730	mg/L	0.0020920	0.41%
QC value within limits for Ba 233.527 Recovery = 100.95%								
Be 313.107†	1932264.8	0.499610	mg/L	0.0002741	0.499610	mg/L	0.0002741	0.05%
QC value within limits for Be 313.107 Recovery = 99.92%								
Ca 315.887†	6857332.9	50.7238	mg/L	0.02160	50.7238	mg/L	0.02160	0.04%
QC value within limits for Ca 315.887 Recovery = 101.45%								
Cd 228.802†	31300.3	0.501129	mg/L	0.0027349	0.501129	mg/L	0.0027349	0.55%
QC value within limits for Cd 228.802 Recovery = 100.23%								
Co 228.616†	26721.6	0.504878	mg/L	0.0017789	0.504878	mg/L	0.0017789	0.35%
QC value within limits for Co 228.616 Recovery = 100.98%								
Cr 267.716†	60189.3	0.505149	mg/L	0.0022445	0.505149	mg/L	0.0022445	0.44%
QC value within limits for Cr 267.716 Recovery = 101.03%								
Cu 327.393†	93403.7	0.507052	mg/L	0.0022285	0.507052	mg/L	0.0022285	0.44%
QC value within limits for Cu 327.393 Recovery = 101.41%								
Fe 273.955†	186385.9	5.05601	mg/L	0.026793	5.05601	mg/L	0.026793	0.53%
QC value within limits for Fe 273.955 Recovery = 101.12%								
K 404.721†	15352.4	18.8308	mg/L	0.25129	18.8308	mg/L	0.25129	1.33%
QC value less than the lower limit for K 404.721 Recovery = 37.66%								
Mg 279.077†	1325835.0	50.6763	mg/L	0.02103	50.6763	mg/L	0.02103	0.04%
QC value within limits for Mg 279.077 Recovery = 101.35%								
Mn 257.610†	497147.7	0.499858	mg/L	0.0004031	0.499858	mg/L	0.0004031	0.08%
QC value within limits for Mn 257.610 Recovery = 99.97%								
Mo 202.031†	5512.9	0.496122	mg/L	0.0039450	0.496122	mg/L	0.0039450	0.80%
QC value within limits for Mo 202.031 Recovery = 99.22%								
Na 330.237†	71144.8	49.7397	mg/L	0.24262	49.7397	mg/L	0.24262	0.49%
QC value within limits for Na 330.237 Recovery = 99.48%								
Ni 231.604†	21463.5	0.509748	mg/L	0.0021392	0.509748	mg/L	0.0021392	0.42%
QC value within limits for Ni 231.604 Recovery = 101.95%								
Pb 220.353†	2802.4	0.497674	mg/L	0.0018707	0.497674	mg/L	0.0018707	0.38%
QC value within limits for Pb 220.353 Recovery = 99.53%								
Sb 206.836†	1065.7	0.516249	mg/L	0.0035126	0.516249	mg/L	0.0035126	0.68%
QC value within limits for Sb 206.836 Recovery = 103.25%								
Se 196.026†	520.4	0.506391	mg/L	0.0110717	0.506391	mg/L	0.0110717	2.19%
QC value within limits for Se 196.026 Recovery = 101.28%								
Sn 189.927†	1883.3	0.501694	mg/L	0.0034855	0.501694	mg/L	0.0034855	0.69%
QC value within limits for Sn 189.927 Recovery = 100.34%								
Ti 334.940†	501363.9	0.503524	mg/L	0.0002674	0.503524	mg/L	0.0002674	0.05%
QC value within limits for Ti 334.940 Recovery = 100.70%								
Tl 190.801†	818.0	0.521442	mg/L	0.0047479	0.521442	mg/L	0.0047479	0.91%
QC value within limits for Tl 190.801 Recovery = 104.29%								
V 290.880†	96095.8	0.500828	mg/L	0.0031851	0.500828	mg/L	0.0031851	0.64%
QC value within limits for V 290.880 Recovery = 100.17%								
Zn 206.200†	28585.1	0.507500	mg/L	0.0024843	0.507500	mg/L	0.0024843	0.49%
QC value within limits for Zn 206.200 Recovery = 101.50%								
Si 251.611†	250482.8	5.05948	mg/L	0.025971	5.05948	mg/L	0.025971	0.51%
QC value within limits for Si 251.611 Recovery = 101.19%								
B 249.772†	65140.4	0.500940	mg/L	0.0030162	0.500940	mg/L	0.0030162	0.60%
QC value within limits for B 249.772 Recovery = 100.19%								
Ce 413.764	69353.4	5.13023	mg/L	0.045613	5.13023	mg/L	0.045613	0.89%
QC value within limits for Ce 413.764 Recovery = 102.60%								

QC Failed. Continue with analysis.

Sequence No.: 6
Sample ID: ICB V-329027
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 9/1/2020 5:59:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB V-329027

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1364713.3	101	%	1.1				1.07%
Y 371.029	397434.7	100	%	1.1				1.12%
Ag 328.068†	-23.5	0.0008493	mg/L	0.00019328	0.0008493	mg/L	0.00019328	22.76%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-218.7	-0.0119092	mg/L	0.00483264	-0.0119092	mg/L	0.00483264	40.58%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-4.3	-0.0014897	mg/L	0.00223819	-0.0014897	mg/L	0.00223819	150.25%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	13.9	-0.0010474	mg/L	0.00004762	-0.0010474	mg/L	0.00004762	4.55%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	468.1	-0.0005437	mg/L	0.00004389	-0.0005437	mg/L	0.00004389	8.07%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	592.0	-0.325622	mg/L	0.0036487	-0.325622	mg/L	0.0036487	1.12%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	2.1	-0.0001523	mg/L	0.00015931	-0.0001523	mg/L	0.00015931	104.57%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-9.4	-0.0009643	mg/L	0.00008163	-0.0009643	mg/L	0.00008163	8.47%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-0.8	-0.0020803	mg/L	0.00034186	-0.0020803	mg/L	0.00034186	16.43%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	185.4	0.0005253	mg/L	0.00014891	0.0005253	mg/L	0.00014891	28.35%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-36.7	-0.0174068	mg/L	0.00052569	-0.0174068	mg/L	0.00052569	3.02%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	110.4	2.00406	mg/L	0.119986	2.00406	mg/L	0.119986	5.99%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	143.7	-0.399064	mg/L	0.0040603	-0.399064	mg/L	0.0040603	1.02%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-16.8	-0.0011910	mg/L	0.00003985	-0.0011910	mg/L	0.00003985	3.35%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	9.8	0.0002530	mg/L	0.00059206	0.0002530	mg/L	0.00059206	234.06%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-10.6	0.735754	mg/L	0.0124591	0.735754	mg/L	0.0124591	1.69%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-4.9	-0.0016996	mg/L	0.00025118	-0.0016996	mg/L	0.00025118	14.78%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	55.1	0.0103747	mg/L	0.00170574	0.0103747	mg/L	0.00170574	16.44%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-6.8	-0.0028822	mg/L	0.00075627	-0.0028822	mg/L	0.00075627	26.24%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-4.7	-0.0036544	mg/L	0.00561829	-0.0036544	mg/L	0.00561829	153.74%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-2.6	-0.0030215	mg/L	0.00045363	-0.0030215	mg/L	0.00045363	15.01%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	61.2	0.0000514	mg/L	0.00004738	0.0000514	mg/L	0.00004738	92.12%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.2	-0.0035999	mg/L	0.00088283	-0.0035999	mg/L	0.00088283	24.52%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-113.7	-0.0007112	mg/L	0.00026954	-0.0007112	mg/L	0.00026954	37.90%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-13.8	-0.0015261	mg/L	0.00012123	-0.0015261	mg/L	0.00012123	7.94%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	-38.9	-0.0169970	mg/L	0.00102416	-0.0169970	mg/L	0.00102416	6.03%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	-268.1	0.0027256	mg/L	0.00131410	0.0027256	mg/L	0.00131410	48.21%
QC value within limits for B 249.772 Recovery = Not calculated								
Ce 413.764	-21.6	-0.0331602	mg/L	0.00381337	-0.0331602	mg/L	0.00381337	11.50%
QC value within limits for Ce 413.764 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: LRS V-329041
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 9/1/2020 6:02:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LRS V-329041

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1984467.8	146	%	52.4				35.80%
Y 371.029	529129.9	134	%	78.2				58.52%
Ag 328.068†	78116.8	0.332233	mg/L	0.5785878	0.332233	mg/L	0.5785878	174.15%
QC value less than the lower limit for Ag 328.068 Recovery = 33.22%								
Al 308.215†	5176179.6	159.052	mg/L	274.9507	159.052	mg/L	274.9507	172.87%
QC value less than the lower limit for Al 308.215 Recovery = 31.81%								
As 188.979†	878.6	0.540768	mg/L	0.9964794	0.540768	mg/L	0.9964794	184.27%
QC value less than the lower limit for As 188.979 Recovery = 5.41%								
Ba 233.527†	318047.9	3.16224	mg/L	5.471724	3.16224	mg/L	5.471724	173.03%
QC value less than the lower limit for Ba 233.527 Recovery = 31.62%								
Be 313.107†	5818682.7	1.50992	mg/L	2.613754	1.50992	mg/L	2.613754	173.11%
QC value less than the lower limit for Be 313.107 Recovery = 30.20%								
Ca 315.887†	20553890.0	152.697	mg/L	264.1897	152.697	mg/L	264.1897	173.02%
QC value less than the lower limit for Ca 315.887 Recovery = 30.54%								
Cd 228.802†	105974.4	1.69713	mg/L	2.936699	1.69713	mg/L	2.936699	173.04%
QC value less than the lower limit for Cd 228.802 Recovery = 33.94%								
Co 228.616†	80306.0	1.51263	mg/L	2.621792	1.51263	mg/L	2.621792	173.33%
QC value less than the lower limit for Co 228.616 Recovery = 30.25%								
Cr 267.716†	367922.8	3.10141	mg/L	5.376042	3.10141	mg/L	5.376042	173.34%
QC value less than the lower limit for Cr 267.716 Recovery = 31.01%								
Cu 327.393†	613499.4	3.32800	mg/L	5.739523	3.32800	mg/L	5.739523	172.46%
QC value less than the lower limit for Cu 327.393 Recovery = 33.28%								
Fe 273.955†	2233282.0	60.7615	mg/L	105.28442	60.7615	mg/L	105.28442	173.27%
QC value less than the lower limit for Fe 273.955 Recovery = 30.38%								
K 404.721†	26459.4	41.8301	mg/L	67.38506	41.8301	mg/L	67.38506	161.09%
QC value less than the lower limit for K 404.721 Recovery = 20.92%								
Mg 279.077†	3985270.1	153.137	mg/L	265.0544	153.137	mg/L	265.0544	173.08%
QC value less than the lower limit for Mg 279.077 Recovery = 30.63%								
Mn 257.610†	2998804.5	3.02106	mg/L	5.217527	3.02106	mg/L	5.217527	172.71%
QC value less than the lower limit for Mn 257.610 Recovery = 30.21%								
Mo 202.031†	34727.7	3.13486	mg/L	5.410635	3.13486	mg/L	5.410635	172.60%
QC value less than the lower limit for Mo 202.031 Recovery = 31.35%								
Na 330.237†	606924.7	408.968	mg/L	707.0154	408.968	mg/L	707.0154	172.88%
QC value less than the lower limit for Na 330.237 Recovery = 40.90%								
Ni 231.604†	127274.4	3.02428	mg/L	5.246468	3.02428	mg/L	5.246468	173.48%
QC value less than the lower limit for Ni 231.604 Recovery = 30.24%								
Pb 220.353†	3712.7	0.665860	mg/L	0.9244725	0.665860	mg/L	0.9244725	138.84%
QC value less than the lower limit for Pb 220.353 Recovery = 6.66%								
Sb 206.836†	624.3	0.339347	mg/L	0.6374835	0.339347	mg/L	0.6374835	187.86%
QC value less than the lower limit for Sb 206.836 Recovery = 6.79%								
Se 196.026†	285.5	0.327533	mg/L	0.6010222	0.327533	mg/L	0.6010222	183.50%
QC value less than the lower limit for Se 196.026 Recovery = 6.55%								
Sn 189.927†	2192.6	0.590460	mg/L	1.0070983	0.590460	mg/L	1.0070983	170.56%
QC value less than the lower limit for Sn 189.927 Recovery = 5.90%								
Ti 334.940†	3152720.9	3.15481	mg/L	5.448600	3.15481	mg/L	5.448600	172.71%
QC value less than the lower limit for Ti 334.940 Recovery = 31.55%								
Tl 190.801†	515.6	0.345020	mg/L	0.5805598	0.345020	mg/L	0.5805598	168.27%
QC value less than the lower limit for Tl 190.801 Recovery = 6.90%								
V 290.880†	620916.3	3.23470	mg/L	5.625654	3.23470	mg/L	5.625654	173.92%
QC value less than the lower limit for V 290.880 Recovery = 32.35%								
Zn 206.200†	169017.0	3.00707	mg/L	5.223974	3.00707	mg/L	5.223974	173.72%
QC value less than the lower limit for Zn 206.200 Recovery = 30.07%								
Si 251.611†	425673.3	8.60947	mg/L	14.979171	8.60947	mg/L	14.979171	173.98%
QC value less than the lower limit for Si 251.611 Recovery = 34.44%								
B 249.772†	239388.7	1.68908	mg/L	2.893792	1.68908	mg/L	2.893792	171.32%
QC value less than the lower limit for B 249.772 Recovery = 33.78%								
Ce 413.764	96423.6	7.14499	mg/L	12.459663	7.14499	mg/L	12.459663	174.38%
QC value less than the lower limit for Ce 413.764 Recovery = 28.58%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-329028
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 9/1/2020 6:08:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICS3 V-329028

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1305081.5	96.2	%	0.32				0.33%
Y 371.029	332011.3	83.9	%	0.16				0.19%
Ag 328.068†	23139.6	0.100899	mg/L	0.0007874	0.100899	mg/L	0.0007874	0.78%
QC value within limits for Ag 328.068 Recovery = 100.90%								
Al 308.215†	162925.7	4.97380	mg/L	0.029851	4.97380	mg/L	0.029851	0.60%
QC value within limits for Al 308.215 Recovery = 99.48%								
As 188.979†	801.1	0.497238	mg/L	0.0055968	0.497238	mg/L	0.0055968	1.13%
QC value within limits for As 188.979 Recovery = 99.45%								
Ba 233.527†	50344.5	0.499560	mg/L	0.0041450	0.499560	mg/L	0.0041450	0.83%
QC value within limits for Ba 233.527 Recovery = 99.91%								
Be 313.107†	1921028.2	0.496702	mg/L	0.0013175	0.496702	mg/L	0.0013175	0.27%
QC value within limits for Be 313.107 Recovery = 99.34%								
Ca 315.887†	6797673.9	50.2797	mg/L	0.07472	50.2797	mg/L	0.07472	0.15%
QC value within limits for Ca 315.887 Recovery = 100.56%								
Cd 228.802†	31005.8	0.496411	mg/L	0.0030852	0.496411	mg/L	0.0030852	0.62%
QC value within limits for Cd 228.802 Recovery = 99.28%								
Co 228.616†	26413.2	0.499032	mg/L	0.0035984	0.499032	mg/L	0.0035984	0.72%
QC value within limits for Co 228.616 Recovery = 99.81%								
Cr 267.716†	59666.6	0.500746	mg/L	0.0033501	0.500746	mg/L	0.0033501	0.67%
QC value within limits for Cr 267.716 Recovery = 100.15%								
Cu 327.393†	92947.9	0.504567	mg/L	0.0025501	0.504567	mg/L	0.0025501	0.51%
QC value within limits for Cu 327.393 Recovery = 100.91%								
Fe 273.955†	184516.1	5.00513	mg/L	0.035391	5.00513	mg/L	0.035391	0.71%
QC value within limits for Fe 273.955 Recovery = 100.10%								
K 404.721†	15275.6	18.7797	mg/L	0.33042	18.7797	mg/L	0.33042	1.76%
QC value less than the lower limit for K 404.721 Recovery = 37.56%								
Mg 279.077†	1310441.2	50.0832	mg/L	0.10040	50.0832	mg/L	0.10040	0.20%
QC value within limits for Mg 279.077 Recovery = 100.17%								
Mn 257.610†	494931.5	0.497625	mg/L	0.0005220	0.497625	mg/L	0.0005220	0.10%
QC value within limits for Mn 257.610 Recovery = 99.52%								
Mo 202.031†	5532.7	0.497925	mg/L	0.0039877	0.497925	mg/L	0.0039877	0.80%
QC value within limits for Mo 202.031 Recovery = 99.59%								
Na 330.237†	70779.2	49.4878	mg/L	0.10787	49.4878	mg/L	0.10787	0.22%
QC value within limits for Na 330.237 Recovery = 98.98%								
Ni 231.604†	21185.7	0.503132	mg/L	0.0042280	0.503132	mg/L	0.0042280	0.84%
QC value within limits for Ni 231.604 Recovery = 100.63%								
Pb 220.353†	2855.3	0.507184	mg/L	0.0017161	0.507184	mg/L	0.0017161	0.34%
QC value within limits for Pb 220.353 Recovery = 101.44%								
Sb 206.836†	1069.3	0.517902	mg/L	0.0036838	0.517902	mg/L	0.0036838	0.71%
QC value within limits for Sb 206.836 Recovery = 103.58%								
Se 196.026†	508.1	0.494602	mg/L	0.0077680	0.494602	mg/L	0.0077680	1.57%
QC value within limits for Se 196.026 Recovery = 98.92%								
Sn 189.927†	1885.1	0.502159	mg/L	0.0048370	0.502159	mg/L	0.0048370	0.96%
QC value within limits for Sn 189.927 Recovery = 100.43%								
Ti 334.940†	499508.6	0.501655	mg/L	0.0005406	0.501655	mg/L	0.0005406	0.11%
QC value within limits for Ti 334.940 Recovery = 100.33%								
Tl 190.801†	828.5	0.527717	mg/L	0.0043192	0.527717	mg/L	0.0043192	0.82%
QC value within limits for Tl 190.801 Recovery = 105.54%								
V 290.880†	95068.9	0.495474	mg/L	0.0028677	0.495474	mg/L	0.0028677	0.58%
QC value within limits for V 290.880 Recovery = 99.09%								
Zn 206.200†	28156.8	0.499865	mg/L	0.0039613	0.499865	mg/L	0.0039613	0.79%
QC value within limits for Zn 206.200 Recovery = 99.97%								
Si 251.611†	247453.7	4.99810	mg/L	0.038931	4.99810	mg/L	0.038931	0.78%
QC value within limits for Si 251.611 Recovery = 99.96%								
B 249.772†	64680.2	0.497475	mg/L	0.0043338	0.497475	mg/L	0.0043338	0.87%
QC value within limits for B 249.772 Recovery = 99.50%								
Ce 413.764	68930.4	5.09875	mg/L	0.021458	5.09875	mg/L	0.021458	0.42%
QC value within limits for Ce 413.764 Recovery = 101.97%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: LRS V-329041
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 9/1/2020 6:13:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LRS V-329041

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1161278.8	85.6	%	0.22				0.26%
Y 371.029	171740.0	43.4	%	0.15				0.34%
Ag 328.068†	235398.4	0.998728	mg/L	0.0016293	0.998728	mg/L	0.0016293	0.16%
Al 308.215†	15504030.1	476.419	mg/L	0.8553	476.419	mg/L	0.8553	0.18%
As 188.979†	15907.8	9.85162	mg/L	0.105364	9.85162	mg/L	0.105364	1.07%
Ba 233.527†	950288.9	9.45075	mg/L	0.008147	9.45075	mg/L	0.008147	0.09%
Be 313.107†	17468046.7	4.53432	mg/L	0.021999	4.53432	mg/L	0.021999	0.49%
Ca 315.887†	61425079.4	456.989	mg/L	0.8377	456.989	mg/L	0.8377	0.18%
Cd 228.802†	316277.4	5.06540	mg/L	0.005252	5.06540	mg/L	0.005252	0.10%
Co 228.616†	239719.2	4.51675	mg/L	0.002065	4.51675	mg/L	0.002065	0.05%
Cr 267.716†	1099948.3	9.27616	mg/L	0.016287	9.27616	mg/L	0.016287	0.18%
Cu 327.393†	1830983.4	9.93353	mg/L	0.005420	9.93353	mg/L	0.005420	0.05%
Fe 273.955†	6655815.5	181.119	mg/L	0.1545	181.119	mg/L	0.1545	0.09%
K 404.721†	78415.9	120.561	mg/L	1.3083	120.561	mg/L	1.3083	1.09%
Mg 279.077†	11904664.4	458.251	mg/L	0.7616	458.251	mg/L	0.7616	0.17%
Mn 257.610†	8997767.1	9.06690	mg/L	0.016447	9.06690	mg/L	0.016447	0.18%
Mo 202.031†	103591.2	9.35231	mg/L	0.004252	9.35231	mg/L	0.004252	0.05%
Na 330.237†	1816313.7	1222.37	mg/L	3.375	1222.37	mg/L	3.375	0.28%
Ni 231.604†	380339.5	9.04073	mg/L	0.013042	9.04073	mg/L	0.013042	0.14%
Pb 220.353†	49453.9	8.85797	mg/L	0.093564	8.85797	mg/L	0.093564	1.06%
Sb 206.836†	11117.1	5.35422	mg/L	0.076568	5.35422	mg/L	0.076568	1.43%
Se 196.026†	5205.6	5.11034	mg/L	0.078256	5.11034	mg/L	0.078256	1.53%
Sn 189.927†	33927.1	9.06973	mg/L	0.076137	9.06973	mg/L	0.076137	0.84%
Ti 334.940†	9456488.7	9.46266	mg/L	0.016291	9.46266	mg/L	0.016291	0.17%
Tl 190.801†	7378.1	4.60616	mg/L	0.037738	4.60616	mg/L	0.037738	0.82%
V 290.880†	1862641.2	9.70387	mg/L	0.008597	9.70387	mg/L	0.008597	0.09%
Zn 206.200†	505222.4	8.98176	mg/L	0.015562	8.98176	mg/L	0.015562	0.17%
Si 251.611†	1283288.7	25.9879	mg/L	0.01790	25.9879	mg/L	0.01790	0.07%
B 249.772†	716989.7	5.05225	mg/L	0.017995	5.05225	mg/L	0.017995	0.36%
Ce 413.764	286164.2	21.2669	mg/L	0.13080	21.2669	mg/L	0.13080	0.62%

Sequence No.: 10
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 9/1/2020 6:20:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1357615.2	100	%	1.0				0.96%
Y 371.029	396663.0	100	%	1.0				0.97%
Ag 328.068†	-16.0	0.0008779	mg/L	0.00032659	0.0008779	mg/L	0.00032659	37.20%
Al 308.215†	286.8	0.0035468	mg/L	0.01114188	0.0035468	mg/L	0.01114188	314.14%
As 188.979†	1.4	0.0020829	mg/L	0.00313913	0.0020829	mg/L	0.00313913	150.71%
Ba 233.527†	35.3	-0.0008347	mg/L	0.00024071	-0.0008347	mg/L	0.00024071	28.84%
Be 313.107†	1157.4	-0.0003632	mg/L	0.00017800	-0.0003632	mg/L	0.00017800	49.02%
Ca 315.887†	747.2	-0.324466	mg/L	0.0150639	-0.324466	mg/L	0.0150639	4.64%
Cd 228.802†	27.5	0.0002542	mg/L	0.00011804	0.0002542	mg/L	0.00011804	46.44%
Co 228.616†	3.8	-0.0007134	mg/L	0.00025869	-0.0007134	mg/L	0.00025869	36.26%
Cr 267.716†	27.5	-0.0018420	mg/L	0.00005654	-0.0018420	mg/L	0.00005654	3.07%
Cu 327.393†	254.9	0.0009006	mg/L	0.00060243	0.0009006	mg/L	0.00060243	66.89%
Fe 273.955†	101.8	-0.0136365	mg/L	0.00348940	-0.0136365	mg/L	0.00348940	25.59%
K 404.721†	56.9	1.84822	mg/L	0.071584	1.84822	mg/L	0.071584	3.87%
Mg 279.077†	525.3	-0.384360	mg/L	0.0160587	-0.384360	mg/L	0.0160587	4.18%
Mn 257.610†	473.2	-0.0006971	mg/L	0.00013715	-0.0006971	mg/L	0.00013715	19.67%
Mo 202.031†	16.7	0.0008784	mg/L	0.00067890	0.0008784	mg/L	0.00067890	77.29%
Na 330.237†	117.4	0.820752	mg/L	0.0227301	0.820752	mg/L	0.0227301	2.77%
Ni 231.604†	9.8	-0.0013511	mg/L	0.00029592	-0.0013511	mg/L	0.00029592	21.90%
Pb 220.353†	85.1	0.0157610	mg/L	0.00170205	0.0157610	mg/L	0.00170205	10.80%
Sb 206.836†	-7.0	-0.0029501	mg/L	0.00277278	-0.0029501	mg/L	0.00277278	93.99%
Se 196.026†	6.7	0.0072337	mg/L	0.00445796	0.0072337	mg/L	0.00445796	61.63%
Sn 189.927†	9.8	0.0002857	mg/L	0.00077313	0.0002857	mg/L	0.00077313	270.61%
Ti 334.940†	336.3	0.0003254	mg/L	0.00036740	0.0003254	mg/L	0.00036740	112.91%
Tl 190.801†	6.4	-0.0004342	mg/L	0.00147665	-0.0004342	mg/L	0.00147665	340.05%
V 290.880†	-250.7	-0.0014262	mg/L	0.00013232	-0.0014262	mg/L	0.00013232	9.28%
Zn 206.200†	25.9	-0.0008243	mg/L	0.00009371	-0.0008243	mg/L	0.00009371	11.37%
Si 251.611†	150.9	-0.0131506	mg/L	0.00080353	-0.0131506	mg/L	0.00080353	6.11%
B 249.772†	4838.4	0.0426689	mg/L	0.00483804	0.0426689	mg/L	0.00483804	11.34%
Ce 413.764	-53.4	-0.0355301	mg/L	0.01269028	-0.0355301	mg/L	0.01269028	35.72%

Sequence No.: 11
Sample ID: LLICV V-333563
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 9/1/2020 6:23:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LLICV V-333563

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1334649.7	98.4	%	0.72				0.73%
Y 371.029	383702.0	96.9	%	0.78				0.81%
Ag 328.068†	4845.4	0.0208191	mg/L	0.00018360	0.0208191	mg/L	0.00018360	0.88%
QC value within limits for Ag 328.068 Recovery = 104.10%								
Al 308.215†	6460.4	0.196268	mg/L	0.0016872	0.196268	mg/L	0.0016872	0.86%
QC value within limits for Al 308.215 Recovery = 98.13%								
As 188.979†	62.1	0.0396521	mg/L	0.00185798	0.0396521	mg/L	0.00185798	4.69%
QC value within limits for As 188.979 Recovery = 99.13%								
Ba 233.527†	5107.7	0.0496174	mg/L	0.00047146	0.0496174	mg/L	0.00047146	0.95%
QC value within limits for Ba 233.527 Recovery = 99.23%								
Be 313.107†	46593.2	0.0114096	mg/L	0.00004225	0.0114096	mg/L	0.00004225	0.37%
QC value within limits for Be 313.107 Recovery = 95.08%								
Ca 315.887†	697838.0	4.86548	mg/L	0.013342	4.86548	mg/L	0.013342	0.27%
QC value within limits for Ca 315.887 Recovery = 97.31%								
Cd 228.802†	797.1	0.0125801	mg/L	0.00017053	0.0125801	mg/L	0.00017053	1.36%
QC value within limits for Cd 228.802 Recovery = 104.83%								
Co 228.616†	1076.3	0.0194967	mg/L	0.00023929	0.0194967	mg/L	0.00023929	1.23%
QC value within limits for Co 228.616 Recovery = 97.48%								
Cr 267.716†	6060.2	0.0489944	mg/L	0.00022035	0.0489944	mg/L	0.00022035	0.45%
QC value within limits for Cr 267.716 Recovery = 97.99%								
Cu 327.393†	9533.6	0.0513017	mg/L	0.00049712	0.0513017	mg/L	0.00049712	0.97%
QC value within limits for Cu 327.393 Recovery = 102.60%								
Fe 273.955†	11217.9	0.288884	mg/L	0.0017241	0.288884	mg/L	0.0017241	0.60%
QC value within limits for Fe 273.955 Recovery = 96.29%								
K 404.721†	682.8	3.21047	mg/L	0.342426	3.21047	mg/L	0.342426	10.67%
QC value less than the lower limit for K 404.721 Recovery = 64.21%								
Mg 279.077†	136604.3	4.85840	mg/L	0.014501	4.85840	mg/L	0.014501	0.30%
QC value within limits for Mg 279.077 Recovery = 97.17%								
Mn 257.610†	40404.8	0.0395464	mg/L	0.00017504	0.0395464	mg/L	0.00017504	0.44%
QC value within limits for Mn 257.610 Recovery = 98.87%								
Mo 202.031†	231.3	0.0200928	mg/L	0.00088545	0.0200928	mg/L	0.00088545	4.41%
QC value within limits for Mo 202.031 Recovery = 100.46%								
Na 330.237†	6609.9	5.19029	mg/L	0.062856	5.19029	mg/L	0.062856	1.21%
QC value within limits for Na 330.237 Recovery = 103.81%								
Ni 231.604†	2189.8	0.0505866	mg/L	0.00068413	0.0505866	mg/L	0.00068413	1.35%
QC value within limits for Ni 231.604 Recovery = 101.17%								
Pb 220.353†	362.9	0.0653009	mg/L	0.00163814	0.0653009	mg/L	0.00163814	2.51%
QC value greater than the upper limit for Pb 220.353 Recovery = 130.60%								
Sb 206.836†	101.5	0.0482708	mg/L	0.00121300	0.0482708	mg/L	0.00121300	2.51%
QC value within limits for Sb 206.836 Recovery = 96.54%								
Se 196.026†	45.0	0.0442170	mg/L	0.00339039	0.0442170	mg/L	0.00339039	7.67%
QC value within limits for Se 196.026 Recovery = 88.43%								
Sn 189.927†	198.4	0.0507813	mg/L	0.00082806	0.0507813	mg/L	0.00082806	1.63%
QC value within limits for Sn 189.927 Recovery = 101.56%								
Ti 334.940†	50425.2	0.0504424	mg/L	0.00022497	0.0504424	mg/L	0.00022497	0.45%
QC value within limits for Ti 334.940 Recovery = 100.88%								
Tl 190.801†	92.8	0.0528611	mg/L	0.00272662	0.0528611	mg/L	0.00272662	5.16%
QC value within limits for Tl 190.801 Recovery = 105.72%								
V 290.880†	9106.5	0.0473666	mg/L	0.00010399	0.0473666	mg/L	0.00010399	0.22%
QC value within limits for V 290.880 Recovery = 94.73%								
Zn 206.200†	2814.6	0.0488175	mg/L	0.00072240	0.0488175	mg/L	0.00072240	1.48%
QC value within limits for Zn 206.200 Recovery = 97.64%								
Si 251.611†	5479.8	0.0948317	mg/L	0.00108666	0.0948317	mg/L	0.00108666	1.15%
QC value within limits for Si 251.611 Recovery = 94.83%								
B 249.772†	24916.7	0.199094	mg/L	0.0015400	0.199094	mg/L	0.0015400	0.77%
QC value within limits for B 249.772 Recovery = 99.55%								
Ce 413.764	1327.4	0.0672393	mg/L	0.01002511	0.0672393	mg/L	0.01002511	14.91%
QC value less than the lower limit for Ce 413.764 Recovery = 67.24%								

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: ICSA V-329033
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 9/1/2020 6:27:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA V-329033

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1182131.1	87.1	%	1.06				1.22%
Y 371.029	333682.4	84.3	%	1.01				1.19%
Ag 328.068†	-3173.4	0.0049333	mg/L	0.00041421	0.0049333	mg/L	0.00041421	8.40%
Al 308.215†	15920052.4	488.707	mg/L	8.4823	488.707	mg/L	8.4823	1.74%
QC value within limits for Al 308.215 Recovery = 97.74%								
As 188.979†	161.8	0.0846628	mg/L	0.00149758	0.0846628	mg/L	0.00149758	1.77%
Ba 233.527†	-742.7	-0.0085736	mg/L	0.00011227	-0.0085736	mg/L	0.00011227	1.31%
Be 313.107†	-5519.1	-0.0018151	mg/L	0.00004092	-0.0018151	mg/L	0.00004092	2.25%
Ca 315.887†	64652742.9	481.019	mg/L	8.5944	481.019	mg/L	8.5944	1.79%
QC value within limits for Ca 315.887 Recovery = 96.20%								
Cd 228.802†	-430.5	-0.0070809	mg/L	0.00009424	-0.0070809	mg/L	0.00009424	1.33%
Co 228.616†	163.8	-0.0032166	mg/L	0.00019941	-0.0032166	mg/L	0.00019941	6.20%
Cr 267.716†	702.5	-0.0053396	mg/L	0.00016929	-0.0053396	mg/L	0.00016929	3.17%
Cu 327.393†	-8851.2	-0.0073054	mg/L	0.00065021	-0.0073054	mg/L	0.00065021	8.90%
Fe 273.955†	6841422.4	186.170	mg/L	3.4317	186.170	mg/L	3.4317	1.84%
QC value within limits for Fe 273.955 Recovery = 93.09%								
K 404.721†	-462.1	3.78317	mg/L	0.063008	3.78317	mg/L	0.063008	1.67%
Mg 279.077†	12819336.8	493.491	mg/L	9.1625	493.491	mg/L	9.1625	1.86%
QC value within limits for Mg 279.077 Recovery = 98.70%								
Mn 257.610†	3901.6	0.0027580	mg/L	0.00005366	0.0027580	mg/L	0.00005366	1.95%
Mo 202.031†	-271.0	-0.0286419	mg/L	0.00109586	-0.0286419	mg/L	0.00109586	3.83%
Na 330.237†	-122.0	0.494573	mg/L	0.0261365	0.494573	mg/L	0.0261365	5.28%
Ni 231.604†	-413.4	0.0092124	mg/L	0.00081378	0.0092124	mg/L	0.00081378	8.83%
Pb 220.353†	-2202.6	-0.356575	mg/L	0.0032196	-0.356575	mg/L	0.0032196	0.90%
Sb 206.836†	152.6	0.0006280	mg/L	0.00638784	0.0006280	mg/L	0.00638784	>999.9%
Se 196.026†	-19.3	0.131466	mg/L	0.0055644	0.131466	mg/L	0.0055644	4.23%
Sn 189.927†	-114.2	-0.0137671	mg/L	0.00253602	-0.0137671	mg/L	0.00253602	18.42%
Ti 334.940†	2755.7	0.0024771	mg/L	0.00004725	0.0024771	mg/L	0.00004725	1.91%
Tl 190.801†	-3.2	-0.0599102	mg/L	0.00289473	-0.0599102	mg/L	0.00289473	4.83%
V 290.880†	-1362.5	-0.0205495	mg/L	0.00060462	-0.0205495	mg/L	0.00060462	2.94%
Zn 206.200†	1234.7	0.0092454	mg/L	0.00036177	0.0092454	mg/L	0.00036177	3.91%
Si 251.611†	1951.9	0.0233427	mg/L	0.00125333	0.0233427	mg/L	0.00125333	5.37%
B 249.772†	104513.9	0.245455	mg/L	0.0156587	0.245455	mg/L	0.0156587	6.38%
Ce 413.764	-7901.0	-0.619605	mg/L	0.0069982	-0.619605	mg/L	0.0069982	1.13%

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCV V-329036
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/1/2020 6:33:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1293327.9	95.3	%	0.24				0.26%
Y 371.029	328814.4	83.1	%	0.22				0.27%
Ag 328.068†	23720.6	0.103299	mg/L	0.0007725	0.103299	mg/L	0.0007725	0.75%
QC value within limits for Ag 328.068 Recovery = 103.30%								
Al 308.215†	164658.1	5.02715	mg/L	0.021523	5.02715	mg/L	0.021523	0.43%
QC value within limits for Al 308.215 Recovery = 100.54%								
As 188.979†	803.3	0.498571	mg/L	0.0059785	0.498571	mg/L	0.0059785	1.20%
QC value within limits for As 188.979 Recovery = 99.71%								
Ba 233.527†	50718.7	0.503282	mg/L	0.0031365	0.503282	mg/L	0.0031365	0.62%
QC value within limits for Ba 233.527 Recovery = 100.66%								
Be 313.107†	1940329.0	0.501711	mg/L	0.0007290	0.501711	mg/L	0.0007290	0.15%
QC value within limits for Be 313.107 Recovery = 100.34%								
Ca 315.887†	6891836.9	50.9807	mg/L	0.08339	50.9807	mg/L	0.08339	0.16%
QC value within limits for Ca 315.887 Recovery = 101.96%								
Cd 228.802†	31144.9	0.498639	mg/L	0.0029987	0.498639	mg/L	0.0029987	0.60%
QC value within limits for Cd 228.802 Recovery = 99.73%								
Co 228.616†	26563.1	0.501864	mg/L	0.0026465	0.501864	mg/L	0.0026465	0.53%
QC value within limits for Co 228.616 Recovery = 100.37%								
Cr 267.716†	60252.4	0.505679	mg/L	0.0021384	0.505679	mg/L	0.0021384	0.42%
QC value within limits for Cr 267.716 Recovery = 101.14%								
Cu 327.393†	93525.2	0.507728	mg/L	0.0028317	0.507728	mg/L	0.0028317	0.56%
QC value within limits for Cu 327.393 Recovery = 101.55%								
Fe 273.955†	186618.6	5.06235	mg/L	0.023697	5.06235	mg/L	0.023697	0.47%
QC value within limits for Fe 273.955 Recovery = 101.25%								
K 404.721†	15233.2	18.4784	mg/L	0.19920	18.4784	mg/L	0.19920	1.08%
QC value less than the lower limit for K 404.721 Recovery = 36.96%								
Mg 279.077†	1329224.1	50.8069	mg/L	0.11121	50.8069	mg/L	0.11121	0.22%
QC value within limits for Mg 279.077 Recovery = 101.61%								
Mn 257.610†	500686.7	0.503425	mg/L	0.0005413	0.503425	mg/L	0.0005413	0.11%
QC value within limits for Mn 257.610 Recovery = 100.69%								
Mo 202.031†	5514.9	0.496299	mg/L	0.0011169	0.496299	mg/L	0.0011169	0.23%
QC value within limits for Mo 202.031 Recovery = 99.26%								
Na 330.237†	71309.7	49.8495	mg/L	0.09508	49.8495	mg/L	0.09508	0.19%
QC value within limits for Na 330.237 Recovery = 99.70%								
Ni 231.604†	21471.6	0.509946	mg/L	0.0022595	0.509946	mg/L	0.0022595	0.44%
QC value within limits for Ni 231.604 Recovery = 101.99%								
Pb 220.353†	2893.1	0.513927	mg/L	0.0023309	0.513927	mg/L	0.0023309	0.45%
QC value within limits for Pb 220.353 Recovery = 102.79%								
Sb 206.836†	1072.0	0.519163	mg/L	0.0026862	0.519163	mg/L	0.0026862	0.52%
QC value within limits for Sb 206.836 Recovery = 103.83%								
Se 196.026†	515.5	0.501745	mg/L	0.0011231	0.501745	mg/L	0.0011231	0.22%
QC value within limits for Se 196.026 Recovery = 100.35%								
Sn 189.927†	1890.1	0.503517	mg/L	0.0007671	0.503517	mg/L	0.0007671	0.15%
QC value within limits for Sn 189.927 Recovery = 100.70%								
Ti 334.940†	503882.1	0.506039	mg/L	0.0005398	0.506039	mg/L	0.0005398	0.11%
QC value within limits for Ti 334.940 Recovery = 101.21%								
Tl 190.801†	827.3	0.527079	mg/L	0.0016222	0.527079	mg/L	0.0016222	0.31%
QC value within limits for Tl 190.801 Recovery = 105.42%								
V 290.880†	95923.6	0.499929	mg/L	0.0024585	0.499929	mg/L	0.0024585	0.49%
QC value within limits for V 290.880 Recovery = 99.99%								
Zn 206.200†	28500.2	0.505983	mg/L	0.0029483	0.505983	mg/L	0.0029483	0.58%
QC value within limits for Zn 206.200 Recovery = 101.20%								
Si 251.611†	249271.5	5.03493	mg/L	0.025163	5.03493	mg/L	0.025163	0.50%
QC value within limits for Si 251.611 Recovery = 100.70%								
B 249.772†	63541.0	0.488417	mg/L	0.0044284	0.488417	mg/L	0.0044284	0.91%
QC value within limits for B 249.772 Recovery = 97.68%								
Ce 413.764	69294.4	5.12584	mg/L	0.021227	5.12584	mg/L	0.021227	0.41%
QC value within limits for Ce 413.764 Recovery = 102.52%								

QC Failed. Continue with analysis.

Sequence No.: 14
Sample ID: CCB V-329027
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/1/2020 6:38:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1353603.3	99.8	%	0.43				0.43%
Y 371.029	395188.6	99.8	%	0.47				0.47%
Ag 328.068†	-65.2	0.0006725	mg/L	0.00022878	0.0006725	mg/L	0.00022878	34.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-118.3	-0.0088833	mg/L	0.00246664	-0.0088833	mg/L	0.00246664	27.77%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-5.6	-0.0022633	mg/L	0.00162328	-0.0022633	mg/L	0.00162328	71.72%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	2.4	-0.0011625	mg/L	0.00010067	-0.0011625	mg/L	0.00010067	8.66%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	580.4	-0.0005112	mg/L	0.00003177	-0.0005112	mg/L	0.00003177	6.21%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-1010.2	-0.337551	mg/L	0.0045300	-0.337551	mg/L	0.0045300	1.34%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	3.7	-0.0001265	mg/L	0.00017169	-0.0001265	mg/L	0.00017169	135.69%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-9.7	-0.0009692	mg/L	0.00021348	-0.0009692	mg/L	0.00021348	22.03%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.7	-0.0020680	mg/L	0.00012989	-0.0020680	mg/L	0.00012989	6.28%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	146.9	0.0003168	mg/L	0.00045624	0.0003168	mg/L	0.00045624	143.99%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-92.5	-0.0189250	mg/L	0.00048421	-0.0189250	mg/L	0.00048421	2.56%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	85.7	1.96638	mg/L	0.264782	1.96638	mg/L	0.264782	13.47%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	203.5	-0.396759	mg/L	0.0051816	-0.396759	mg/L	0.0051816	1.31%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-209.5	-0.0013852	mg/L	0.00003538	-0.0013852	mg/L	0.00003538	2.55%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.2	-0.0006136	mg/L	0.00059658	-0.0006136	mg/L	0.00059658	97.22%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-81.5	0.686510	mg/L	0.0948698	0.686510	mg/L	0.0948698	13.82%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	26.8	-0.0009494	mg/L	0.00020343	-0.0009494	mg/L	0.00020343	21.43%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	91.9	0.0169803	mg/L	0.00133256	0.0169803	mg/L	0.00133256	7.85%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-12.0	-0.0053131	mg/L	0.00100551	-0.0053131	mg/L	0.00100551	18.93%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-11.9	-0.0104159	mg/L	0.00527777	-0.0104159	mg/L	0.00527777	50.67%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.5	-0.0021934	mg/L	0.00068132	-0.0021934	mg/L	0.00068132	31.06%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-14.8	-0.0000276	mg/L	0.00010632	-0.0000276	mg/L	0.00010632	385.18%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.3	-0.0035742	mg/L	0.00364843	-0.0035742	mg/L	0.00364843	102.08%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-411.4	-0.0022641	mg/L	0.00016251	-0.0022641	mg/L	0.00016251	7.18%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-46.3	-0.0021068	mg/L	0.00001459	-0.0021068	mg/L	0.00001459	0.69%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	-170.2	-0.0196572	mg/L	0.00054568	-0.0196572	mg/L	0.00054568	2.78%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	-819.3	-0.0015817	mg/L	0.00084271	-0.0015817	mg/L	0.00084271	53.28%
QC value within limits for B 249.772 Recovery = Not calculated								
Ce 413.764	-111.1	-0.0398232	mg/L	0.00433492	-0.0398232	mg/L	0.00433492	10.89%
QC value within limits for Ce 413.764 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 15
Sample ID: MB 85222 (1)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 97
Date Collected: 9/1/2020 6:41:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85222 (1)

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1323016.2	97.5	%	0.27				0.27%
Y 371.029	384397.0	97.1	%	0.25				0.26%
Ag 328.068†	-14.2	0.0008854	mg/L	0.00012296	0.0008854	mg/L	0.00012296	13.89%
Al 308.215†	332.5	0.0049522	mg/L	0.00165357	0.0049522	mg/L	0.00165357	33.39%
As 188.979†	-4.0	-0.0013047	mg/L	0.00236310	-0.0013047	mg/L	0.00236310	181.12%
Ba 233.527†	-0.4	-0.0011903	mg/L	0.00006952	-0.0011903	mg/L	0.00006952	5.84%
Be 313.107†	321.6	-0.0005792	mg/L	0.00002016	-0.0005792	mg/L	0.00002016	3.48%
Ca 315.887†	2699.6	-0.309930	mg/L	0.0001561	-0.309930	mg/L	0.0001561	0.05%
Cd 228.802†	-6.8	-0.0002943	mg/L	0.00018544	-0.0002943	mg/L	0.00018544	63.00%
Co 228.616†	-18.4	-0.0011356	mg/L	0.00015288	-0.0011356	mg/L	0.00015288	13.46%
Cr 267.716†	13.4	-0.0019605	mg/L	0.00004048	-0.0019605	mg/L	0.00004048	2.06%
Cu 327.393†	83.5	-0.0000174	mg/L	0.00016062	-0.0000174	mg/L	0.00016062	922.61%
Fe 273.955†	1435.5	0.0226597	mg/L	0.00025377	0.0226597	mg/L	0.00025377	1.12%
K 404.721†	64.7	1.89149	mg/L	0.242873	1.89149	mg/L	0.242873	12.84%
Mg 279.077†	189.9	-0.397283	mg/L	0.0032565	-0.397283	mg/L	0.0032565	0.82%
Mn 257.610†	1288.0	0.0001240	mg/L	0.00002022	0.0001240	mg/L	0.00002022	16.30%
Mo 202.031†	1.3	-0.0005207	mg/L	0.00056566	-0.0005207	mg/L	0.00056566	108.63%
Na 330.237†	92.9	0.802531	mg/L	0.0693796	0.802531	mg/L	0.0693796	8.65%
Ni 231.604†	40.8	-0.0006164	mg/L	0.00033586	-0.0006164	mg/L	0.00033586	54.48%
Pb 220.353†	79.3	0.0147133	mg/L	0.00079717	0.0147133	mg/L	0.00079717	5.42%
Sb 206.836†	-0.1	0.0002231	mg/L	0.00168603	0.0002231	mg/L	0.00168603	755.57%
Se 196.026†	-2.6	-0.0015650	mg/L	0.00523192	-0.0015650	mg/L	0.00523192	334.32%
Sn 189.927†	2.4	-0.0016777	mg/L	0.00109549	-0.0016777	mg/L	0.00109549	65.30%
Ti 334.940†	298.5	0.0002862	mg/L	0.00015770	0.0002862	mg/L	0.00015770	55.10%
Tl 190.801†	-2.6	-0.0059542	mg/L	0.00167253	-0.0059542	mg/L	0.00167253	28.09%
V 290.880†	-381.1	-0.0021090	mg/L	0.00013657	-0.0021090	mg/L	0.00013657	6.48%
Zn 206.200†	225.3	0.0027334	mg/L	0.00008789	0.0027334	mg/L	0.00008789	3.22%
Si 251.611†	615.1	-0.0037458	mg/L	0.00036349	-0.0037458	mg/L	0.00036349	9.70%
B 249.772†	-1344.1	-0.0058264	mg/L	0.00038474	-0.0058264	mg/L	0.00038474	6.60%
Ce 413.764	-94.2	-0.0385639	mg/L	0.00655352	-0.0385639	mg/L	0.00655352	16.99%

Sequence No.: 16
Sample ID: LCS 85222
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 98
Date Collected: 9/1/2020 6:45:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 85222

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1281798.0	94.5	%	0.23				0.25%
Y 371.029	352181.1	89.0	%	0.51				0.57%
Ag 328.068†	24939.1	0.103653	mg/L	0.0013170	0.103653	mg/L	0.0013170	1.27%
Al 308.215†	172489.7	5.32232	mg/L	0.057484	5.32232	mg/L	0.057484	1.08%
As 188.979†	839.5	0.520977	mg/L	0.0037325	0.520977	mg/L	0.0037325	0.72%
Ba 233.527†	53877.5	0.534700	mg/L	0.0060104	0.534700	mg/L	0.0060104	1.12%
Be 313.107†	2024648.6	0.525891	mg/L	0.0017998	0.525891	mg/L	0.0017998	0.34%
Ca 315.887†	7251937.2	53.6617	mg/L	0.15219	53.6617	mg/L	0.15219	0.28%
Cd 228.802†	32303.6	0.517197	mg/L	0.0052127	0.517197	mg/L	0.0052127	1.01%
Co 228.616†	27614.5	0.521753	mg/L	0.0025498	0.521753	mg/L	0.0025498	0.49%
Cr 267.716†	62005.9	0.520439	mg/L	0.0058068	0.520439	mg/L	0.0058068	1.12%
Cu 327.393†	97648.5	0.530151	mg/L	0.0062785	0.530151	mg/L	0.0062785	1.18%
Fe 273.955†	197407.3	5.35595	mg/L	0.057874	5.35595	mg/L	0.057874	1.08%
K 404.721†	6823.5	19.8523	mg/L	0.19926	19.8523	mg/L	0.19926	1.00%
Mg 279.077†	1392131.6	53.2305	mg/L	0.15971	53.2305	mg/L	0.15971	0.30%
Mn 257.610†	524882.8	0.527810	mg/L	0.0057622	0.527810	mg/L	0.0057622	1.09%
Mo 202.031†	5839.3	0.525552	mg/L	0.0032360	0.525552	mg/L	0.0032360	0.62%
Na 330.237†	76381.3	51.9892	mg/L	0.47209	51.9892	mg/L	0.47209	0.91%
Ni 231.604†	22148.0	0.526092	mg/L	0.0027140	0.526092	mg/L	0.0027140	0.52%
Pb 220.353†	3047.8	0.544595	mg/L	0.0040128	0.544595	mg/L	0.0040128	0.74%
Sb 206.836†	1135.2	0.539819	mg/L	0.0065935	0.539819	mg/L	0.0065935	1.22%
Se 196.026†	536.5	0.517356	mg/L	0.0025003	0.517356	mg/L	0.0025003	0.48%
Sn 189.927†	1977.4	0.526884	mg/L	0.0032786	0.526884	mg/L	0.0032786	0.62%
Ti 334.940†	524129.8	0.524186	mg/L	0.0056165	0.524186	mg/L	0.0056165	1.07%
Tl 190.801†	942.3	0.574122	mg/L	0.0024692	0.574122	mg/L	0.0024692	0.43%
V 290.880†	100362.0	0.523062	mg/L	0.0056823	0.523062	mg/L	0.0056823	1.09%
Zn 206.200†	29708.2	0.527481	mg/L	0.0030272	0.527481	mg/L	0.0030272	0.57%
Si 251.611†	28202.0	0.555265	mg/L	0.0075624	0.555265	mg/L	0.0075624	1.36%
B 249.772†	67008.3	0.514734	mg/L	0.0092722	0.514734	mg/L	0.0092722	1.80%
Ce 413.764	7705.8	0.541968	mg/L	0.0116792	0.541968	mg/L	0.0116792	2.15%

Sequence No.: 17
Sample ID: LCS MR 85222
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 99
Date Collected: 9/1/2020 6:49:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS MR 85222

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1289656.1	95.1	%	0.51				0.54%
Y 371.029	360244.1	91.0	%	0.54				0.59%
Ag 328.068†	24331.9	0.101159	mg/L	0.0006108	0.101159	mg/L	0.0006108	0.60%
Al 308.215†	167779.3	5.17690	mg/L	0.031945	5.17690	mg/L	0.031945	0.62%
As 188.979†	805.7	0.500037	mg/L	0.0030873	0.500037	mg/L	0.0030873	0.62%
Ba 233.527†	52623.7	0.522230	mg/L	0.0036348	0.522230	mg/L	0.0036348	0.70%
Be 313.107†	1957459.2	0.508409	mg/L	0.0015918	0.508409	mg/L	0.0015918	0.31%
Ca 315.887†	7039413.0	52.0795	mg/L	0.16591	52.0795	mg/L	0.16591	0.32%
Cd 228.802†	31607.5	0.506048	mg/L	0.0035858	0.506048	mg/L	0.0035858	0.71%
Co 228.616†	26810.4	0.506524	mg/L	0.0032444	0.506524	mg/L	0.0032444	0.64%
Cr 267.716†	60433.5	0.507192	mg/L	0.0032704	0.507192	mg/L	0.0032704	0.64%
Cu 327.393†	94272.3	0.511848	mg/L	0.0027615	0.511848	mg/L	0.0027615	0.54%
Fe 273.955†	191010.8	5.18188	mg/L	0.034483	5.18188	mg/L	0.034483	0.67%
K 404.721†	6615.2	19.2062	mg/L	0.27493	19.2062	mg/L	0.27493	1.43%
Mg 279.077†	1351328.3	51.6585	mg/L	0.18054	51.6585	mg/L	0.18054	0.35%
Mn 257.610†	511238.9	0.514060	mg/L	0.0018792	0.514060	mg/L	0.0018792	0.37%
Mo 202.031†	5589.9	0.503045	mg/L	0.0036250	0.503045	mg/L	0.0036250	0.72%
Na 330.237†	74292.8	50.5915	mg/L	0.31647	50.5915	mg/L	0.31647	0.63%
Ni 231.604†	21597.8	0.512974	mg/L	0.0028599	0.512974	mg/L	0.0028599	0.56%
Pb 220.353†	2924.5	0.522569	mg/L	0.0007393	0.522569	mg/L	0.0007393	0.14%
Sb 206.836†	1090.0	0.518326	mg/L	0.0025185	0.518326	mg/L	0.0025185	0.49%
Se 196.026†	518.6	0.500159	mg/L	0.0037380	0.500159	mg/L	0.0037380	0.75%
Sn 189.927†	1897.2	0.505453	mg/L	0.0051467	0.505453	mg/L	0.0051467	1.02%
Ti 334.940†	513522.6	0.513581	mg/L	0.0018046	0.513581	mg/L	0.0018046	0.35%
Tl 190.801†	905.1	0.551402	mg/L	0.0040177	0.551402	mg/L	0.0040177	0.73%
V 290.880†	97626.3	0.508803	mg/L	0.0035535	0.508803	mg/L	0.0035535	0.70%
Zn 206.200†	28890.5	0.512936	mg/L	0.0033854	0.512936	mg/L	0.0033854	0.66%
Si 251.611†	27782.6	0.546766	mg/L	0.0038717	0.546766	mg/L	0.0038717	0.71%
B 249.772†	66132.2	0.508356	mg/L	0.0035629	0.508356	mg/L	0.0035629	0.70%
Ce 413.764	7667.8	0.539137	mg/L	0.0020154	0.539137	mg/L	0.0020154	0.37%

Sequence No.: 18
Sample ID: AD18930-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 100
Date Collected: 9/1/2020 6:54:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18930-006

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1232584.2	90.9	%	0.39				0.43%
Y 371.029	349638.1	88.3	%	0.35				0.39%
Ag 328.068†	306.9	0.0022487	mg/L	0.00036461	0.0022487	mg/L	0.00036461	16.21%
Al 308.215†	2779.6	0.0793346	mg/L	0.00154603	0.0793346	mg/L	0.00154603	1.95%
As 188.979†	14.8	0.0098048	mg/L	0.00120214	0.0098048	mg/L	0.00120214	12.26%
Ba 233.527†	108187.1	1.07488	mg/L	0.004287	1.07488	mg/L	0.004287	0.40%
Be 313.107†	-1164.9	-0.0009729	mg/L	0.00000768	-0.0009729	mg/L	0.00000768	0.79%
Ca 315.887†	33490412.9	249.011	mg/L	0.8118	249.011	mg/L	0.8118	0.33%
Cd 228.802†	5.6	-0.0000955	mg/L	0.00008016	-0.0000955	mg/L	0.00008016	83.91%
Co 228.616†	365.7	0.0055932	mg/L	0.00027955	0.0055932	mg/L	0.00027955	5.00%
Cr 267.716†	2244.9	0.0162469	mg/L	0.00013541	0.0162469	mg/L	0.00013541	0.83%
Cu 327.393†	-1530.0	0.0017093	mg/L	0.00030234	0.0017093	mg/L	0.00030234	17.69%
Fe 273.955†	17199.7	0.451677	mg/L	0.0013349	0.451677	mg/L	0.0013349	0.30%
K 404.721†	577.8	3.43876	mg/L	0.272006	3.43876	mg/L	0.272006	7.91%
Mg 279.077†	882521.3	33.5966	mg/L	0.16965	33.5966	mg/L	0.16965	0.50%
Mn 257.610†	9034169.9	9.10359	mg/L	0.032090	9.10359	mg/L	0.032090	0.35%
Mo 202.031†	72.0	-0.0010202	mg/L	0.00024538	-0.0010202	mg/L	0.00024538	24.05%
Na 330.237†	327063.0	220.087	mg/L	0.2119	220.087	mg/L	0.2119	0.10%
Ni 231.604†	784.1	0.0184359	mg/L	0.00020204	0.0184359	mg/L	0.00020204	1.10%
Pb 220.353†	-19.8	-0.0053230	mg/L	0.00317633	-0.0053230	mg/L	0.00317633	59.67%
Sb 206.836†	5.5	0.0028858	mg/L	0.00180599	0.0028858	mg/L	0.00180599	62.58%
Se 196.026†	-13.4	-0.0094166	mg/L	0.00523460	-0.0094166	mg/L	0.00523460	55.59%
Sn 189.927†	-11.1	0.0014602	mg/L	0.00253525	0.0014602	mg/L	0.00253525	173.62%
Ti 334.940†	1571.6	0.0015653	mg/L	0.00011878	0.0015653	mg/L	0.00011878	7.59%
Tl 190.801†	-35.4	-0.0273630	mg/L	0.00489268	-0.0273630	mg/L	0.00489268	17.88%
V 290.880†	-1172.0	-0.0062657	mg/L	0.00024885	-0.0062657	mg/L	0.00024885	3.97%
Zn 206.200†	357.6	0.0050934	mg/L	0.00012097	0.0050934	mg/L	0.00012097	2.38%
Si 251.611†	444498.9	8.99094	mg/L	0.037682	8.99094	mg/L	0.037682	0.42%
B 249.772†	7446.8	0.0700424	mg/L	0.00095293	0.0700424	mg/L	0.00095293	1.36%
Ce 413.764	96.3	-0.0243896	mg/L	0.00650013	-0.0243896	mg/L	0.00650013	26.65%

Sequence No.: 19
Sample ID: AD18930-006 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 9/1/2020 6:58:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18930-006 MR

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1234877.1	91.0	%	0.17				0.19%
Y 371.029	350629.0	88.6	%	0.14				0.16%
Ag 328.068†	291.8	0.0021752	mg/L	0.00018987	0.0021752	mg/L	0.00018987	8.73%
Al 308.215†	2707.4	0.0772034	mg/L	0.00081607	0.0772034	mg/L	0.00081607	1.06%
As 188.979†	9.4	0.0065174	mg/L	0.00277517	0.0065174	mg/L	0.00277517	42.58%
Ba 233.527†	100819.9	1.00161	mg/L	0.002727	1.00161	mg/L	0.002727	0.27%
Be 313.107†	-1040.3	-0.0009355	mg/L	0.00001608	-0.0009355	mg/L	0.00001608	1.72%
Ca 315.887†	31178830.9	231.801	mg/L	1.1109	231.801	mg/L	1.1109	0.48%
Cd 228.802†	0.7	-0.0001753	mg/L	0.00011669	-0.0001753	mg/L	0.00011669	66.56%
Co 228.616†	346.8	0.0052731	mg/L	0.00021921	0.0052731	mg/L	0.00021921	4.16%
Cr 267.716†	1959.5	0.0138803	mg/L	0.00019553	0.0138803	mg/L	0.00019553	1.41%
Cu 327.393†	-1383.6	0.0017803	mg/L	0.00066363	0.0017803	mg/L	0.00066363	37.28%
Fe 273.955†	16630.8	0.436194	mg/L	0.0014736	0.436194	mg/L	0.0014736	0.34%
K 404.721†	499.7	3.25226	mg/L	0.366979	3.25226	mg/L	0.366979	11.28%
Mg 279.077†	822833.8	31.2970	mg/L	0.05986	31.2970	mg/L	0.05986	0.19%
Mn 257.610†	8413052.1	8.47762	mg/L	0.039168	8.47762	mg/L	0.039168	0.46%
Mo 202.031†	73.7	-0.0003928	mg/L	0.00059897	-0.0003928	mg/L	0.00059897	152.47%
Na 330.237†	303011.2	203.955	mg/L	0.4636	203.955	mg/L	0.4636	0.23%
Ni 231.604†	716.0	0.0167249	mg/L	0.00027197	0.0167249	mg/L	0.00027197	1.63%
Pb 220.353†	-17.8	-0.0047924	mg/L	0.00073279	-0.0047924	mg/L	0.00073279	15.29%
Sb 206.836†	6.5	0.0033444	mg/L	0.00047315	0.0033444	mg/L	0.00047315	14.15%
Se 196.026†	-19.1	-0.0150311	mg/L	0.01197389	-0.0150311	mg/L	0.01197389	79.66%
Sn 189.927†	-9.5	0.0014206	mg/L	0.00136454	0.0014206	mg/L	0.00136454	96.06%
Ti 334.940†	1508.0	0.0014970	mg/L	0.00013741	0.0014970	mg/L	0.00013741	9.18%
Tl 190.801†	-35.5	-0.0274085	mg/L	0.00176361	-0.0274085	mg/L	0.00176361	6.43%
V 290.880†	-1223.9	-0.0065351	mg/L	0.00068897	-0.0065351	mg/L	0.00068897	10.54%
Zn 206.200†	312.2	0.0042850	mg/L	0.00016229	0.0042850	mg/L	0.00016229	3.79%
Si 251.611†	413563.9	8.36409	mg/L	0.021359	8.36409	mg/L	0.021359	0.26%
B 249.772†	6266.0	0.0602682	mg/L	0.00043587	0.0602682	mg/L	0.00043587	0.72%
Ce 413.764	-39.7	-0.0345095	mg/L	0.01394173	-0.0345095	mg/L	0.01394173	40.40%

Sequence No.: 20
Sample ID: AD18930-006 MS 1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 102
Date Collected: 9/1/2020 7:03:11 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18930-006 MS 1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1239531.9	91.4	%	1.12				1.23%
Y 371.029	345797.9	87.4	%	1.07				1.23%
Ag 328.068†	24875.2	0.103355	mg/L	0.0003943	0.103355	mg/L	0.0003943	0.38%
Al 308.215†	168788.6	5.20783	mg/L	0.011238	5.20783	mg/L	0.011238	0.22%
As 188.979†	820.4	0.508715	mg/L	0.0057320	0.508715	mg/L	0.0057320	1.13%
Ba 233.527†	150146.9	1.49223	mg/L	0.001637	1.49223	mg/L	0.001637	0.11%
Be 313.107†	1942060.8	0.504423	mg/L	0.0002696	0.504423	mg/L	0.0002696	0.05%
Ca 315.887†	36837160.2	273.928	mg/L	2.7188	273.928	mg/L	2.7188	0.99%
Cd 228.802†	31508.1	0.504457	mg/L	0.0010892	0.504457	mg/L	0.0010892	0.22%
Co 228.616†	25982.9	0.490321	mg/L	0.0064296	0.490321	mg/L	0.0064296	1.31%
Cr 267.716†	60870.1	0.510344	mg/L	0.0005440	0.510344	mg/L	0.0005440	0.11%
Cu 327.393†	92562.2	0.511881	mg/L	0.0002583	0.511881	mg/L	0.0002583	0.05%
Fe 273.955†	200457.8	5.43897	mg/L	0.005686	5.43897	mg/L	0.005686	0.10%
K 404.721†	7719.2	22.9818	mg/L	0.20784	22.9818	mg/L	0.20784	0.90%
Mg 279.077†	2095848.0	80.3429	mg/L	0.03938	80.3429	mg/L	0.03938	0.05%
Mn 257.610†	8669404.6	8.73597	mg/L	0.087968	8.73597	mg/L	0.087968	1.01%
Mo 202.031†	5565.9	0.494735	mg/L	0.0071916	0.494735	mg/L	0.0071916	1.45%
Na 330.237†	391017.3	262.997	mg/L	0.8658	262.997	mg/L	0.8658	0.33%
Ni 231.604†	21185.8	0.504396	mg/L	0.0063629	0.504396	mg/L	0.0063629	1.26%
Pb 220.353†	2818.9	0.501540	mg/L	0.0052519	0.501540	mg/L	0.0052519	1.05%
Sb 206.836†	1091.6	0.518795	mg/L	0.0055227	0.518795	mg/L	0.0055227	1.06%
Se 196.026†	514.5	0.498240	mg/L	0.0022083	0.498240	mg/L	0.0022083	0.44%
Sn 189.927†	1831.1	0.493808	mg/L	0.0058930	0.493808	mg/L	0.0058930	1.19%
Ti 334.940†	511617.6	0.511658	mg/L	0.0006626	0.511658	mg/L	0.0006626	0.13%
Tl 190.801†	832.5	0.505608	mg/L	0.0067848	0.505608	mg/L	0.0067848	1.34%
V 290.880†	96494.0	0.502878	mg/L	0.0007687	0.502878	mg/L	0.0007687	0.15%
Zn 206.200†	27487.5	0.487949	mg/L	0.0055538	0.487949	mg/L	0.0055538	1.14%
Si 251.611†	442991.5	8.96040	mg/L	0.006406	8.96040	mg/L	0.006406	0.07%
B 249.772†	73503.6	0.572699	mg/L	0.0037028	0.572699	mg/L	0.0037028	0.65%
Ce 413.764	7100.7	0.496933	mg/L	0.0097238	0.496933	mg/L	0.0097238	1.96%

Sequence No.: 21
Sample ID: AD18930-006 MS 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 9/1/2020 7:07:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18930-006 MS 2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1234615.5	91.0	%	0.27				0.29%
Y 371.029	344052.4	86.9	%	0.33				0.38%
Ag 328.068†	24868.6	0.103325	mg/L	0.0002829	0.103325	mg/L	0.0002829	0.27%
Al 308.215†	169628.7	5.23367	mg/L	0.011814	5.23367	mg/L	0.011814	0.23%
As 188.979†	831.0	0.515319	mg/L	0.0093244	0.515319	mg/L	0.0093244	1.81%
Ba 233.527†	147530.1	1.46621	mg/L	0.003036	1.46621	mg/L	0.003036	0.21%
Be 313.107†	1947706.0	0.505895	mg/L	0.0011444	0.505895	mg/L	0.0011444	0.23%
Ca 315.887†	36377496.7	270.506	mg/L	1.0078	270.506	mg/L	1.0078	0.37%
Cd 228.802†	31819.3	0.509440	mg/L	0.0032323	0.509440	mg/L	0.0032323	0.63%
Co 228.616†	26404.4	0.498329	mg/L	0.0035139	0.498329	mg/L	0.0035139	0.71%
Cr 267.716†	61060.4	0.511961	mg/L	0.0010290	0.511961	mg/L	0.0010290	0.20%
Cu 327.393†	93104.2	0.514668	mg/L	0.0005227	0.514668	mg/L	0.0005227	0.10%
Fe 273.955†	201327.6	5.46264	mg/L	0.009129	5.46264	mg/L	0.009129	0.17%
K 404.721†	7796.4	23.2612	mg/L	0.25705	23.2612	mg/L	0.25705	1.11%
Mg 279.077†	2081323.0	79.7833	mg/L	0.14254	79.7833	mg/L	0.14254	0.18%
Mn 257.610†	8528547.9	8.59401	mg/L	0.031921	8.59401	mg/L	0.031921	0.37%
Mo 202.031†	5659.2	0.503264	mg/L	0.0026461	0.503264	mg/L	0.0026461	0.53%
Na 330.237†	382215.0	257.090	mg/L	0.1973	257.090	mg/L	0.1973	0.08%
Ni 231.604†	21525.4	0.512430	mg/L	0.0036079	0.512430	mg/L	0.0036079	0.70%
Pb 220.353†	2866.9	0.510178	mg/L	0.0033749	0.510178	mg/L	0.0033749	0.66%
Sb 206.836†	1114.6	0.529660	mg/L	0.0049464	0.529660	mg/L	0.0049464	0.93%
Se 196.026†	513.9	0.497601	mg/L	0.0121060	0.497601	mg/L	0.0121060	2.43%
Sn 189.927†	1865.2	0.502825	mg/L	0.0035176	0.502825	mg/L	0.0035176	0.70%
Ti 334.940†	513826.5	0.513863	mg/L	0.0006949	0.513863	mg/L	0.0006949	0.14%
Tl 190.801†	848.0	0.515073	mg/L	0.0012042	0.515073	mg/L	0.0012042	0.23%
V 290.880†	96865.3	0.504813	mg/L	0.0007841	0.504813	mg/L	0.0007841	0.16%
Zn 206.200†	27995.9	0.497000	mg/L	0.0039008	0.497000	mg/L	0.0039008	0.78%
Si 251.611†	431543.6	8.72842	mg/L	0.014963	8.72842	mg/L	0.014963	0.17%
B 249.772†	74143.6	0.577509	mg/L	0.0038593	0.577509	mg/L	0.0038593	0.67%
Ce 413.764	7027.3	0.491466	mg/L	0.0157807	0.491466	mg/L	0.0157807	3.21%

Sequence No.: 22
Sample ID: AD18930-006 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 9/1/2020 7:12:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18930-006 PS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1234224.5	91.0	%	0.64				0.70%
Y 371.029	344289.2	87.0	%	0.60				0.69%
Ag 328.068†	21627.9	0.0900194	mg/L	0.00032373	0.0900194	mg/L	0.00032373	0.36%
Al 308.215†	153816.2	4.74567	mg/L	0.011774	4.74567	mg/L	0.011774	0.25%
As 188.979†	757.9	0.469992	mg/L	0.0022429	0.469992	mg/L	0.0022429	0.48%
Ba 233.527†	144222.9	1.43331	mg/L	0.000907	1.43331	mg/L	0.000907	0.06%
Be 313.107†	1782715.8	0.462991	mg/L	0.0004381	0.462991	mg/L	0.0004381	0.09%
Ca 315.887†	36755838.2	273.323	mg/L	1.1996	273.323	mg/L	1.1996	0.44%
Cd 228.802†	28776.8	0.460711	mg/L	0.0020032	0.460711	mg/L	0.0020032	0.43%
Co 228.616†	24083.6	0.454409	mg/L	0.0020977	0.454409	mg/L	0.0020977	0.46%
Cr 267.716†	56744.3	0.475561	mg/L	0.0003083	0.475561	mg/L	0.0003083	0.06%
Cu 327.393†	85135.9	0.471660	mg/L	0.0001705	0.471660	mg/L	0.0001705	0.04%
Fe 273.955†	185227.5	5.02449	mg/L	0.004520	5.02449	mg/L	0.004520	0.09%
K 404.721†	7237.5	21.8382	mg/L	0.10883	21.8382	mg/L	0.10883	0.50%
Mg 279.077†	2025533.9	77.6339	mg/L	0.04706	77.6339	mg/L	0.04706	0.06%
Mn 257.610†	8695799.9	8.76257	mg/L	0.039685	8.76257	mg/L	0.039685	0.45%
Mo 202.031†	5123.9	0.454807	mg/L	0.0029111	0.454807	mg/L	0.0029111	0.64%
Na 330.237†	384515.2	258.627	mg/L	0.6309	258.627	mg/L	0.6309	0.24%
Ni 231.604†	19817.7	0.471826	mg/L	0.0027741	0.471826	mg/L	0.0027741	0.59%
Pb 220.353†	2619.2	0.465897	mg/L	0.0008683	0.465897	mg/L	0.0008683	0.19%
Sb 206.836†	998.8	0.474763	mg/L	0.0014361	0.474763	mg/L	0.0014361	0.30%
Se 196.026†	478.0	0.463138	mg/L	0.0030671	0.463138	mg/L	0.0030671	0.66%
Sn 189.927†	1695.3	0.457548	mg/L	0.0038884	0.457548	mg/L	0.0038884	0.85%
Ti 334.940†	469036.0	0.469063	mg/L	0.0005355	0.469063	mg/L	0.0005355	0.11%
Tl 190.801†	776.7	0.471099	mg/L	0.0037963	0.471099	mg/L	0.0037963	0.81%
V 290.880†	88265.2	0.459980	mg/L	0.0007455	0.459980	mg/L	0.0007455	0.16%
Zn 206.200†	25658.2	0.455398	mg/L	0.0028850	0.455398	mg/L	0.0028850	0.63%
Si 251.611†	440168.1	8.90319	mg/L	0.010314	8.90319	mg/L	0.010314	0.12%
B 249.772†	67228.0	0.524859	mg/L	0.0016717	0.524859	mg/L	0.0016717	0.32%
Ce 413.764	6246.2	0.433329	mg/L	0.0062072	0.433329	mg/L	0.0062072	1.43%

Sequence No.: 23
Sample ID: AD18930-006 SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 9/1/2020 7:17:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18930-006 SD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1326120.9	97.8	%	1.12				1.15%
Y 371.029	375099.1	94.8	%	1.13				1.19%
Ag 328.068†	-56.8	0.0007301	mg/L	0.00033817	0.0007301	mg/L	0.00033817	46.32%
Al 308.215†	365.0	0.0055812	mg/L	0.00466281	0.0055812	mg/L	0.00466281	83.54%
As 188.979†	-4.7	-0.0018080	mg/L	0.00087608	-0.0018080	mg/L	0.00087608	48.45%
Ba 233.527†	20596.2	0.203672	mg/L	0.0017241	0.203672	mg/L	0.0017241	0.85%
Be 313.107†	335.7	-0.0005820	mg/L	0.00004400	-0.0005820	mg/L	0.00004400	7.56%
Ca 315.887†	6489570.2	47.9858	mg/L	0.03709	47.9858	mg/L	0.03709	0.08%
Cd 228.802†	-1.6	-0.0002120	mg/L	0.00027023	-0.0002120	mg/L	0.00027023	127.50%
Co 228.616†	47.8	0.0000148	mg/L	0.00017631	0.0000148	mg/L	0.00017631	>999.9%
Cr 267.716†	479.0	0.0018466	mg/L	0.00038367	0.0018466	mg/L	0.00038367	20.78%
Cu 327.393†	-177.1	0.0005906	mg/L	0.00039793	0.0005906	mg/L	0.00039793	67.37%
Fe 273.955†	3273.6	0.0726822	mg/L	0.00124032	0.0726822	mg/L	0.00124032	1.71%
K 404.721†	5.2	1.62005	mg/L	0.210709	1.62005	mg/L	0.210709	13.01%
Mg 279.077†	173313.8	6.27272	mg/L	0.041135	6.27272	mg/L	0.041135	0.66%
Mn 257.610†	1760955.7	1.77354	mg/L	0.001407	1.77354	mg/L	0.001407	0.08%
Mo 202.031†	43.3	0.0019446	mg/L	0.00055476	0.0019446	mg/L	0.00055476	28.53%
Na 330.237†	53382.0	36.5450	mg/L	0.27787	36.5450	mg/L	0.27787	0.76%
Ni 231.604†	134.5	0.0018851	mg/L	0.00043910	0.0018851	mg/L	0.00043910	23.29%
Pb 220.353†	106.6	0.0192132	mg/L	0.00328288	0.0192132	mg/L	0.00328288	17.09%
Sb 206.836†	-4.5	-0.0017214	mg/L	0.00062188	-0.0017214	mg/L	0.00062188	36.13%
Se 196.026†	-8.8	-0.0070053	mg/L	0.00192527	-0.0070053	mg/L	0.00192527	27.48%
Sn 189.927†	0.3	-0.0009329	mg/L	0.00079950	-0.0009329	mg/L	0.00079950	85.70%
Ti 334.940†	-78.8	-0.0000849	mg/L	0.00004711	-0.0000849	mg/L	0.00004711	55.48%
Tl 190.801†	-7.0	-0.0088425	mg/L	0.00203985	-0.0088425	mg/L	0.00203985	23.07%
V 290.880†	-610.8	-0.0033108	mg/L	0.00041840	-0.0033108	mg/L	0.00041840	12.64%
Zn 206.200†	87.3	0.0002736	mg/L	0.00024647	0.0002736	mg/L	0.00024647	90.09%
Si 251.611†	82784.3	1.66130	mg/L	0.015971	1.66130	mg/L	0.015971	0.96%
B 249.772†	287.2	0.0084237	mg/L	0.00091355	0.0084237	mg/L	0.00091355	10.84%
Ce 413.764	85.0	-0.0252299	mg/L	0.01174815	-0.0252299	mg/L	0.01174815	46.56%

Sequence No.: 24
Sample ID: CCV V-329036
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/1/2020 7:21:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1306817.2	96.3	%	1.06				1.10%
Y 371.029	332614.1	84.0	%	0.82				0.98%
Ag 328.068†	22985.9	0.100195	mg/L	0.0013581	0.100195	mg/L	0.0013581	1.36%
QC value within limits for Ag 328.068 Recovery = 100.19%								
Al 308.215†	159723.2	4.87562	mg/L	0.083127	4.87562	mg/L	0.083127	1.70%
QC value within limits for Al 308.215 Recovery = 97.51%								
As 188.979†	776.0	0.481692	mg/L	0.0105690	0.481692	mg/L	0.0105690	2.19%
QC value within limits for As 188.979 Recovery = 96.34%								
Ba 233.527†	49189.5	0.488072	mg/L	0.0072661	0.488072	mg/L	0.0072661	1.49%
QC value within limits for Ba 233.527 Recovery = 97.61%								
Be 313.107†	1889277.3	0.488473	mg/L	0.0007924	0.488473	mg/L	0.0007924	0.16%
QC value within limits for Be 313.107 Recovery = 97.69%								
Ca 315.887†	6721288.9	49.7110	mg/L	0.08318	49.7110	mg/L	0.08318	0.17%
QC value within limits for Ca 315.887 Recovery = 99.42%								
Cd 228.802†	30060.0	0.481263	mg/L	0.0064591	0.481263	mg/L	0.0064591	1.34%
QC value within limits for Cd 228.802 Recovery = 96.25%								
Co 228.616†	25677.1	0.485088	mg/L	0.0073313	0.485088	mg/L	0.0073313	1.51%
QC value within limits for Co 228.616 Recovery = 97.02%								
Cr 267.716†	58552.6	0.491356	mg/L	0.0070534	0.491356	mg/L	0.0070534	1.44%
QC value within limits for Cr 267.716 Recovery = 98.27%								
Cu 327.393†	91329.0	0.495787	mg/L	0.0072188	0.495787	mg/L	0.0072188	1.46%
QC value within limits for Cu 327.393 Recovery = 99.16%								
Fe 273.955†	181262.3	4.91658	mg/L	0.075498	4.91658	mg/L	0.075498	1.54%
QC value within limits for Fe 273.955 Recovery = 98.33%								
K 404.721†	14991.4	18.2974	mg/L	0.97300	18.2974	mg/L	0.97300	5.32%
QC value less than the lower limit for K 404.721 Recovery = 36.59%								
Mg 279.077†	1289570.9	49.2792	mg/L	0.06994	49.2792	mg/L	0.06994	0.14%
QC value within limits for Mg 279.077 Recovery = 98.56%								
Mn 257.610†	490737.5	0.493398	mg/L	0.0006898	0.493398	mg/L	0.0006898	0.14%
QC value within limits for Mn 257.610 Recovery = 98.68%								
Mo 202.031†	5347.0	0.481159	mg/L	0.0062025	0.481159	mg/L	0.0062025	1.29%
QC value within limits for Mo 202.031 Recovery = 96.23%								
Na 330.237†	69657.8	48.7192	mg/L	0.61848	48.7192	mg/L	0.61848	1.27%
QC value within limits for Na 330.237 Recovery = 97.44%								
Ni 231.604†	20853.7	0.495221	mg/L	0.0067575	0.495221	mg/L	0.0067575	1.36%
QC value within limits for Ni 231.604 Recovery = 99.04%								
Pb 220.353†	2923.8	0.519522	mg/L	0.0053150	0.519522	mg/L	0.0053150	1.02%
QC value within limits for Pb 220.353 Recovery = 103.90%								
Sb 206.836†	1045.2	0.506209	mg/L	0.0096464	0.506209	mg/L	0.0096464	1.91%
QC value within limits for Sb 206.836 Recovery = 101.24%								
Se 196.026†	495.7	0.482633	mg/L	0.0171126	0.482633	mg/L	0.0171126	3.55%
QC value within limits for Se 196.026 Recovery = 96.53%								
Sn 189.927†	1835.2	0.488820	mg/L	0.0050747	0.488820	mg/L	0.0050747	1.04%
QC value within limits for Sn 189.927 Recovery = 97.76%								
Ti 334.940†	491607.2	0.493725	mg/L	0.0011564	0.493725	mg/L	0.0011564	0.23%
QC value within limits for Ti 334.940 Recovery = 98.75%								
Tl 190.801†	803.6	0.512118	mg/L	0.0084484	0.512118	mg/L	0.0084484	1.65%
QC value within limits for Tl 190.801 Recovery = 102.42%								
V 290.880†	92976.7	0.484566	mg/L	0.0072554	0.484566	mg/L	0.0072554	1.50%
QC value within limits for V 290.880 Recovery = 96.91%								
Zn 206.200†	27661.3	0.491052	mg/L	0.0070810	0.491052	mg/L	0.0070810	1.44%
QC value within limits for Zn 206.200 Recovery = 98.21%								
Si 251.611†	241634.8	4.88018	mg/L	0.072597	4.88018	mg/L	0.072597	1.49%
QC value within limits for Si 251.611 Recovery = 97.60%								
B 249.772†	61070.1	0.469478	mg/L	0.0101508	0.469478	mg/L	0.0101508	2.16%
QC value within limits for B 249.772 Recovery = 93.90%								
Ce 413.764	68005.3	5.02989	mg/L	0.045080	5.02989	mg/L	0.045080	0.90%
QC value within limits for Ce 413.764 Recovery = 100.60%								

QC Failed. Continue with analysis.

Sequence No.: 25
Sample ID: CCB V-329027
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/1/2020 7:25:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1350726.9	99.6	%	0.73				0.73%
Y 371.029	394311.7	99.6	%	1.00				1.00%
Ag 328.068†	-55.0	0.0006981	mg/L	0.00029648	0.0006981	mg/L	0.00029648	42.47%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-360.9	-0.0161724	mg/L	0.00323810	-0.0161724	mg/L	0.00323810	20.02%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-8.0	-0.0037627	mg/L	0.00011728	-0.0037627	mg/L	0.00011728	3.12%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-1.9	-0.0012047	mg/L	0.00008936	-0.0012047	mg/L	0.00008936	7.42%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	808.5	-0.0004443	mg/L	0.00002460	-0.0004443	mg/L	0.00002460	5.54%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-1048.0	-0.337832	mg/L	0.0047312	-0.337832	mg/L	0.0047312	1.40%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	4.1	-0.0001204	mg/L	0.00018716	-0.0001204	mg/L	0.00018716	155.40%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-32.2	-0.0013959	mg/L	0.00007124	-0.0013959	mg/L	0.00007124	5.10%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-10.9	-0.0021655	mg/L	0.00013826	-0.0021655	mg/L	0.00013826	6.38%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	226.3	0.0007438	mg/L	0.00074321	0.0007438	mg/L	0.00074321	99.93%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-120.5	-0.0196866	mg/L	0.00019125	-0.0196866	mg/L	0.00019125	0.97%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	114.4	2.15314	mg/L	0.172093	2.15314	mg/L	0.172093	7.99%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	159.1	-0.398470	mg/L	0.0036328	-0.398470	mg/L	0.0036328	0.91%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-122.2	-0.0012972	mg/L	0.00002880	-0.0012972	mg/L	0.00002880	2.22%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-1.8	-0.0007999	mg/L	0.00057382	-0.0007999	mg/L	0.00057382	71.74%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-81.7	0.682077	mg/L	0.0764701	0.682077	mg/L	0.0764701	11.21%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	17.3	-0.0011729	mg/L	0.00027141	-0.0011729	mg/L	0.00027141	23.14%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	148.6	0.0271421	mg/L	0.00069748	0.0271421	mg/L	0.00069748	2.57%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-2.7	-0.0010333	mg/L	0.00138026	-0.0010333	mg/L	0.00138026	133.58%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-8.2	-0.0069280	mg/L	0.00192700	-0.0069280	mg/L	0.00192700	27.81%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	4.7	-0.0010623	mg/L	0.00089030	-0.0010623	mg/L	0.00089030	83.81%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-47.8	-0.0000676	mg/L	0.00005982	-0.0000676	mg/L	0.00005982	88.47%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.2	-0.0051876	mg/L	0.00197849	-0.0051876	mg/L	0.00197849	38.14%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-461.1	-0.0025232	mg/L	0.00029337	-0.0025232	mg/L	0.00029337	11.63%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-46.5	-0.0021128	mg/L	0.00005133	-0.0021128	mg/L	0.00005133	2.43%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	-184.4	-0.0199458	mg/L	0.00052119	-0.0199458	mg/L	0.00052119	2.61%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	-1418.7	-0.0062700	mg/L	0.00109518	-0.0062700	mg/L	0.00109518	17.47%
QC value within limits for B 249.772 Recovery = Not calculated								
Ce 413.764	-320.1	-0.0553766	mg/L	0.00301316	-0.0553766	mg/L	0.00301316	5.44%
QC value within limits for Ce 413.764 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 26
Sample ID: AD18921-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 106
Date Collected: 9/1/2020 7:29:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18921-002

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1223357.6	90.2	%	0.85				0.95%
Y 371.029	346680.3	87.6	%	0.68				0.77%
Ag 328.068†	-107.6	0.0012867	mg/L	0.00012261	0.0012867	mg/L	0.00012261	9.53%
Al 308.215†	1322.9	0.0350469	mg/L	0.00178451	0.0350469	mg/L	0.00178451	5.09%
As 188.979†	10.7	0.0073620	mg/L	0.00110810	0.0073620	mg/L	0.00110810	15.05%
Ba 233.527†	35013.5	0.347072	mg/L	0.0000549	0.347072	mg/L	0.0000549	0.02%
Be 313.107†	-535.3	-0.0007888	mg/L	0.00002503	-0.0007888	mg/L	0.00002503	3.17%
Ca 315.887†	13512493.3	100.273	mg/L	0.8568	100.273	mg/L	0.8568	0.85%
Cd 228.802†	-9.2	-0.0003340	mg/L	0.00007575	-0.0003340	mg/L	0.00007575	22.68%
Co 228.616†	17.4	-0.0006383	mg/L	0.00017527	-0.0006383	mg/L	0.00017527	27.46%
Cr 267.716†	507.6	0.0013293	mg/L	0.00021608	0.0013293	mg/L	0.00021608	16.25%
Cu 327.393†	-39.8	0.0044625	mg/L	0.00009894	0.0044625	mg/L	0.00009894	2.22%
Fe 273.955†	317597.5	8.62688	mg/L	0.001584	8.62688	mg/L	0.001584	0.02%
K 404.721†	4528.0	16.2755	mg/L	0.39444	16.2755	mg/L	0.39444	2.42%
Mg 279.077†	1230879.8	47.0179	mg/L	0.05725	47.0179	mg/L	0.05725	0.12%
Mn 257.610†	448029.1	0.450356	mg/L	0.0001696	0.450356	mg/L	0.0001696	0.04%
Mo 202.031†	42.5	0.0008749	mg/L	0.00116077	0.0008749	mg/L	0.00116077	132.67%
Na 330.237†	736467.6	494.641	mg/L	0.7657	494.641	mg/L	0.7657	0.15%
Ni 231.604†	57.0	0.0017461	mg/L	0.00024850	0.0017461	mg/L	0.00024850	14.23%
Pb 220.353†	4.3	-0.0043679	mg/L	0.00274033	-0.0043679	mg/L	0.00274033	62.74%
Sb 206.836†	5.6	0.0026712	mg/L	0.00237531	0.0026712	mg/L	0.00237531	88.92%
Se 196.026†	-16.7	-0.0077224	mg/L	0.00322508	-0.0077224	mg/L	0.00322508	41.76%
Sn 189.927†	14.9	0.0043632	mg/L	0.00122971	0.0043632	mg/L	0.00122971	28.18%
Ti 334.940†	1056.5	0.0010314	mg/L	0.00029699	0.0010314	mg/L	0.00029699	28.80%
Tl 190.801†	-5.2	-0.0097079	mg/L	0.00322879	-0.0097079	mg/L	0.00322879	33.26%
V 290.880†	-1402.0	-0.0080502	mg/L	0.00033654	-0.0080502	mg/L	0.00033654	4.18%
Zn 206.200†	447.7	0.0066916	mg/L	0.00028205	0.0066916	mg/L	0.00028205	4.21%
Si 251.611†	553501.6	11.1997	mg/L	0.00518	11.1997	mg/L	0.00518	0.05%
B 249.772†	129530.8	0.993999	mg/L	0.0050616	0.993999	mg/L	0.0050616	0.51%
Ce 413.764	-461.9	-0.0659302	mg/L	0.00404210	-0.0659302	mg/L	0.00404210	6.13%

Sequence No.: 27
Sample ID: AD18930-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 107
Date Collected: 9/1/2020 7:33:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18930-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1241723.5	91.5	%	0.86				0.94%
Y 371.029	352819.9	89.1	%	0.84				0.94%
Ag 328.068†	63.9	0.0013350	mg/L	0.00018370	0.0013350	mg/L	0.00018370	13.76%
Al 308.215†	40603.9	1.24075	mg/L	0.006360	1.24075	mg/L	0.006360	0.51%
As 188.979†	10.5	0.0072199	mg/L	0.00196070	0.0072199	mg/L	0.00196070	27.16%
Ba 233.527†	36710.5	0.363951	mg/L	0.0003219	0.363951	mg/L	0.0003219	0.09%
Be 313.107†	-294.5	-0.0007390	mg/L	0.00003053	-0.0007390	mg/L	0.00003053	4.13%
Ca 315.887†	27917875.1	207.523	mg/L	3.5539	207.523	mg/L	3.5539	1.71%
Cd 228.802†	-2.5	-0.0002255	mg/L	0.00010099	-0.0002255	mg/L	0.00010099	44.77%
Co 228.616†	47.1	-0.0001615	mg/L	0.00027188	-0.0001615	mg/L	0.00027188	168.35%
Cr 267.716†	1792.0	0.0125144	mg/L	0.00022937	0.0125144	mg/L	0.00022937	1.83%
Cu 327.393†	-1113.9	0.0024480	mg/L	0.00013815	0.0024480	mg/L	0.00013815	5.64%
Fe 273.955†	53089.8	1.42841	mg/L	0.002468	1.42841	mg/L	0.002468	0.17%
K 404.721†	401.4	2.97012	mg/L	0.373371	2.97012	mg/L	0.373371	12.57%
Mg 279.077†	755572.1	28.7056	mg/L	0.02216	28.7056	mg/L	0.02216	0.08%
Mn 257.610†	288244.9	0.289323	mg/L	0.0002977	0.289323	mg/L	0.0002977	0.10%
Mo 202.031†	80.9	0.0009486	mg/L	0.00049109	0.0009486	mg/L	0.00049109	51.77%
Na 330.237†	233341.9	157.224	mg/L	0.2641	157.224	mg/L	0.2641	0.17%
Ni 231.604†	430.5	0.0098425	mg/L	0.00024077	0.0098425	mg/L	0.00024077	2.45%
Pb 220.353†	10.3	0.0007300	mg/L	0.00078189	0.0007300	mg/L	0.00078189	107.11%
Sb 206.836†	4.4	0.0022227	mg/L	0.00233083	0.0022227	mg/L	0.00233083	104.87%
Se 196.026†	-22.2	-0.0175242	mg/L	0.00316269	-0.0175242	mg/L	0.00316269	18.05%
Sn 189.927†	-1.8	0.0028666	mg/L	0.00077572	0.0028666	mg/L	0.00077572	27.06%
Ti 334.940†	29355.8	0.0293321	mg/L	0.00028915	0.0293321	mg/L	0.00028915	0.99%
Tl 190.801†	-5.1	-0.0086966	mg/L	0.00119766	-0.0086966	mg/L	0.00119766	13.77%
V 290.880†	-893.6	-0.0048829	mg/L	0.00049976	-0.0048829	mg/L	0.00049976	10.23%
Zn 206.200†	1628.6	0.0277211	mg/L	0.00026723	0.0277211	mg/L	0.00026723	0.96%
Si 251.611†	543132.6	10.9896	mg/L	0.01485	10.9896	mg/L	0.01485	0.14%
B 249.772†	5668.5	0.0515048	mg/L	0.00153614	0.0515048	mg/L	0.00153614	2.98%
Ce 413.764	-107.5	-0.0395591	mg/L	0.01560623	-0.0395591	mg/L	0.01560623	39.45%

Sequence No.: 28
Sample ID: AD18930-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 9/1/2020 7:38:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18930-002

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1229598.3	90.6	%	0.16				0.17%
Y 371.029	355831.4	89.9	%	0.13				0.15%
Ag 328.068†	143.4	0.0022154	mg/L	0.00030960	0.0022154	mg/L	0.00030960	13.98%
Al 308.215†	235104.3	7.21209	mg/L	0.030441	7.21209	mg/L	0.030441	0.42%
As 188.979†	15.9	0.0100000	mg/L	0.00057766	0.0100000	mg/L	0.00057766	5.78%
Ba 233.527†	38906.7	0.385795	mg/L	0.0021435	0.385795	mg/L	0.0021435	0.56%
Be 313.107†	3479.2	0.0002332	mg/L	0.00002721	0.0002332	mg/L	0.00002721	11.67%
Ca 315.887†	36736669.0	273.180	mg/L	1.6240	273.180	mg/L	1.6240	0.59%
Cd 228.802†	37.1	0.0004082	mg/L	0.00021830	0.0004082	mg/L	0.00021830	53.48%
Co 228.616†	238.2	0.0032504	mg/L	0.00018914	0.0032504	mg/L	0.00018914	5.82%
Cr 267.716†	4786.6	0.0371667	mg/L	0.00031292	0.0371667	mg/L	0.00031292	0.84%
Cu 327.393†	-250.6	0.0107032	mg/L	0.00032864	0.0107032	mg/L	0.00032864	3.07%
Fe 273.955†	262541.1	7.12855	mg/L	0.039161	7.12855	mg/L	0.039161	0.55%
K 404.721†	5808.2	20.0684	mg/L	0.30308	20.0684	mg/L	0.30308	1.51%
Mg 279.077†	1634892.7	62.5835	mg/L	0.10961	62.5835	mg/L	0.10961	0.18%
Mn 257.610†	3764902.8	3.79315	mg/L	0.007741	3.79315	mg/L	0.007741	0.20%
Mo 202.031†	79.8	-0.0007445	mg/L	0.00080084	-0.0007445	mg/L	0.00080084	107.57%
Na 330.237†	763203.1	512.571	mg/L	1.2501	512.571	mg/L	1.2501	0.24%
Ni 231.604†	3878.8	0.0930645	mg/L	0.00027926	0.0930645	mg/L	0.00027926	0.30%
Pb 220.353†	116.2	0.0162850	mg/L	0.00092555	0.0162850	mg/L	0.00092555	5.68%
Sb 206.836†	9.4	0.0036399	mg/L	0.00225365	0.0036399	mg/L	0.00225365	61.92%
Se 196.026†	-28.1	-0.0178825	mg/L	0.00444894	-0.0178825	mg/L	0.00444894	24.88%
Sn 189.927†	2.9	0.0060478	mg/L	0.00044312	0.0060478	mg/L	0.00044312	7.33%
Ti 334.940†	88798.2	0.0887614	mg/L	0.00162971	0.0887614	mg/L	0.00162971	1.84%
Tl 190.801†	-16.4	-0.0170488	mg/L	0.00443007	-0.0170488	mg/L	0.00443007	25.98%
V 290.880†	829.7	0.0036991	mg/L	0.00056113	0.0036991	mg/L	0.00056113	15.17%
Zn 206.200†	3440.5	0.0598767	mg/L	0.00048048	0.0598767	mg/L	0.00048048	0.80%
Si 251.611†	751111.5	15.2040	mg/L	0.03614	15.2040	mg/L	0.03614	0.24%
B 249.772†	9004.3	0.0618178	mg/L	0.00060526	0.0618178	mg/L	0.00060526	0.98%
Ce 413.764	160.9	-0.0195779	mg/L	0.01171408	-0.0195779	mg/L	0.01171408	59.83%

Sequence No.: 29
Sample ID: AD18930-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 109
Date Collected: 9/1/2020 7:42:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18930-003

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1255957.2	92.6	%	0.62				0.67%
Y 371.029	359637.4	90.9	%	0.58				0.64%
Ag 328.068†	3.9	0.0011563	mg/L	0.00018564	0.0011563	mg/L	0.00018564	16.05%
Al 308.215†	82047.0	2.51272	mg/L	0.010657	2.51272	mg/L	0.010657	0.42%
As 188.979†	11.7	0.0075885	mg/L	0.00209079	0.0075885	mg/L	0.00209079	27.55%
Ba 233.527†	49619.5	0.492348	mg/L	0.0020412	0.492348	mg/L	0.0020412	0.41%
Be 313.107†	-102.0	-0.0006925	mg/L	0.00002406	-0.0006925	mg/L	0.00002406	3.47%
Ca 315.887†	38492555.8	286.253	mg/L	4.3706	286.253	mg/L	4.3706	1.53%
Cd 228.802†	17.3	0.0000910	mg/L	0.00003984	0.0000910	mg/L	0.00003984	43.80%
Co 228.616†	82.9	0.0004308	mg/L	0.00020390	0.0004308	mg/L	0.00020390	47.33%
Cr 267.716†	3170.4	0.0237618	mg/L	0.00040179	0.0237618	mg/L	0.00040179	1.69%
Cu 327.393†	-1278.5	0.0049128	mg/L	0.00028602	0.0049128	mg/L	0.00028602	5.82%
Fe 273.955†	75885.5	2.04879	mg/L	0.011233	2.04879	mg/L	0.011233	0.55%
K 404.721†	541.6	3.37190	mg/L	0.281058	3.37190	mg/L	0.281058	8.34%
Mg 279.077†	1299857.5	49.6755	mg/L	0.18282	49.6755	mg/L	0.18282	0.37%
Mn 257.610†	329149.2	0.330547	mg/L	0.0013630	0.330547	mg/L	0.0013630	0.41%
Mo 202.031†	105.7	0.0010370	mg/L	0.00038811	0.0010370	mg/L	0.00038811	37.42%
Na 330.237†	74580.7	50.7567	mg/L	0.23020	50.7567	mg/L	0.23020	0.45%
Ni 231.604†	770.3	0.0187801	mg/L	0.00034484	0.0187801	mg/L	0.00034484	1.84%
Pb 220.353†	50.9	0.0088789	mg/L	0.00085819	0.0088789	mg/L	0.00085819	9.67%
Sb 206.836†	-5.9	-0.0026128	mg/L	0.00357520	-0.0026128	mg/L	0.00357520	136.84%
Se 196.026†	-29.9	-0.0230860	mg/L	0.00509652	-0.0230860	mg/L	0.00509652	22.08%
Sn 189.927†	41.3	0.0165081	mg/L	0.00098097	0.0165081	mg/L	0.00098097	5.94%
Ti 334.940†	31891.0	0.0318697	mg/L	0.00014416	0.0318697	mg/L	0.00014416	0.45%
Tl 190.801†	-0.8	-0.0069807	mg/L	0.00381301	-0.0069807	mg/L	0.00381301	54.62%
V 290.880†	-1046.2	-0.0057236	mg/L	0.00017728	-0.0057236	mg/L	0.00017728	3.10%
Zn 206.200†	788.3	0.0126957	mg/L	0.00027110	0.0126957	mg/L	0.00027110	2.14%
Si 251.611†	772396.1	15.6353	mg/L	0.05623	15.6353	mg/L	0.05623	0.36%
B 249.772†	3762.5	0.0375952	mg/L	0.00081631	0.0375952	mg/L	0.00081631	2.17%
Ce 413.764	-9.8	-0.0322860	mg/L	0.01022149	-0.0322860	mg/L	0.01022149	31.66%

Sequence No.: 30
Sample ID: AD18930-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 110
Date Collected: 9/1/2020 7:46:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18930-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1272615.8	93.8	%	0.18				0.19%
Y 371.029	357479.7	90.3	%	0.15				0.17%
Ag 328.068†	70.5	0.0013018	mg/L	0.00012962	0.0013018	mg/L	0.00012962	9.96%
Al 308.215†	9167.3	0.275935	mg/L	0.0008474	0.275935	mg/L	0.0008474	0.31%
As 188.979†	-3.4	-0.0010281	mg/L	0.00069450	-0.0010281	mg/L	0.00069450	67.55%
Ba 233.527†	22272.3	0.220343	mg/L	0.0019880	0.220343	mg/L	0.0019880	0.90%
Be 313.107†	461.6	-0.0005484	mg/L	0.00000624	-0.0005484	mg/L	0.00000624	1.14%
Ca 315.887†	7085309.7	52.4212	mg/L	0.46797	52.4212	mg/L	0.46797	0.89%
Cd 228.802†	19.4	0.0001251	mg/L	0.00021720	0.0001251	mg/L	0.00021720	173.65%
Co 228.616†	-24.4	-0.0013799	mg/L	0.00025971	-0.0013799	mg/L	0.00025971	18.82%
Cr 267.716†	471.6	0.0017332	mg/L	0.00044045	0.0017332	mg/L	0.00044045	25.41%
Cu 327.393†	-64.3	0.0014719	mg/L	0.00018420	0.0014719	mg/L	0.00018420	12.51%
Fe 273.955†	24655.7	0.654587	mg/L	0.0047920	0.654587	mg/L	0.0047920	0.73%
K 404.721†	706.4	3.86413	mg/L	0.053300	3.86413	mg/L	0.053300	1.38%
Mg 279.077†	244234.8	9.00512	mg/L	0.053876	9.00512	mg/L	0.053876	0.60%
Mn 257.610†	4766758.6	4.80283	mg/L	0.044232	4.80283	mg/L	0.044232	0.92%
Mo 202.031†	24.4	0.0001370	mg/L	0.00060720	0.0001370	mg/L	0.00060720	443.28%
Na 330.237†	500368.6	336.314	mg/L	2.7264	336.314	mg/L	2.7264	0.81%
Ni 231.604†	75.9	0.0006076	mg/L	0.00044271	0.0006076	mg/L	0.00044271	72.86%
Pb 220.353†	83.1	0.0122668	mg/L	0.00121546	0.0122668	mg/L	0.00121546	9.91%
Sb 206.836†	-2.8	-0.0010351	mg/L	0.00126412	-0.0010351	mg/L	0.00126412	122.13%
Se 196.026†	-15.7	-0.0130781	mg/L	0.00647194	-0.0130781	mg/L	0.00647194	49.49%
Sn 189.927†	-3.8	-0.0018895	mg/L	0.00174240	-0.0018895	mg/L	0.00174240	92.21%
Ti 334.940†	5979.4	0.0059702	mg/L	0.00005242	0.0059702	mg/L	0.00005242	0.88%
Tl 190.801†	-18.1	-0.0157720	mg/L	0.00135430	-0.0157720	mg/L	0.00135430	8.59%
V 290.880†	-451.3	-0.0025205	mg/L	0.00032917	-0.0025205	mg/L	0.00032917	13.06%
Zn 206.200†	264.6	0.0034287	mg/L	0.00009350	0.0034287	mg/L	0.00009350	2.73%
Si 251.611†	231868.6	4.68229	mg/L	0.023874	4.68229	mg/L	0.023874	0.51%
B 249.772†	4669.7	0.0409997	mg/L	0.00034761	0.0409997	mg/L	0.00034761	0.85%
Ce 413.764	61.7	-0.0269620	mg/L	0.00941177	-0.0269620	mg/L	0.00941177	34.91%

Sequence No.: 31
Sample ID: AD18930-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 111
Date Collected: 9/1/2020 7:51:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18930-005

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1264926.4	93.2	%	0.63				0.68%
Y 371.029	355627.2	89.8	%	0.68				0.76%
Ag 328.068†	-17.9	0.0009231	mg/L	0.00028877	0.0009231	mg/L	0.00028877	31.28%
Al 308.215†	8283.9	0.248988	mg/L	0.0032462	0.248988	mg/L	0.0032462	1.30%
As 188.979†	-3.3	-0.0010032	mg/L	0.00138378	-0.0010032	mg/L	0.00138378	137.94%
Ba 233.527†	21794.8	0.215593	mg/L	0.0025389	0.215593	mg/L	0.0025389	1.18%
Be 313.107†	474.2	-0.0005385	mg/L	0.00003161	-0.0005385	mg/L	0.00003161	5.87%
Ca 315.887†	6933195.9	51.2887	mg/L	0.31595	51.2887	mg/L	0.31595	0.62%
Cd 228.802†	11.6	-0.0000002	mg/L	0.00019040	-0.0000002	mg/L	0.00019040	>999.9%
Co 228.616†	-21.5	-0.0013205	mg/L	0.00005658	-0.0013205	mg/L	0.00005658	4.28%
Cr 267.716†	396.6	0.0011031	mg/L	0.00007031	0.0011031	mg/L	0.00007031	6.37%
Cu 327.393†	-223.2	0.0005612	mg/L	0.00035981	0.0005612	mg/L	0.00035981	64.11%
Fe 273.955†	22728.9	0.602152	mg/L	0.0066262	0.602152	mg/L	0.0066262	1.10%
K 404.721†	571.3	3.51707	mg/L	0.398392	3.51707	mg/L	0.398392	11.33%
Mg 279.077†	239932.5	8.83937	mg/L	0.094436	8.83937	mg/L	0.094436	1.07%
Mn 257.610†	4668716.4	4.70402	mg/L	0.030101	4.70402	mg/L	0.030101	0.64%
Mo 202.031†	21.8	-0.0000729	mg/L	0.00085050	-0.0000729	mg/L	0.00085050	>999.9%
Na 330.237†	491340.5	330.256	mg/L	1.6850	330.256	mg/L	1.6850	0.51%
Ni 231.604†	71.3	0.0004919	mg/L	0.00028014	0.0004919	mg/L	0.00028014	56.95%
Pb 220.353†	71.5	0.0102518	mg/L	0.00068715	0.0102518	mg/L	0.00068715	6.70%
Sb 206.836†	-3.1	-0.0011928	mg/L	0.00072866	-0.0011928	mg/L	0.00072866	61.09%
Se 196.026†	-10.3	-0.0080344	mg/L	0.00630495	-0.0080344	mg/L	0.00630495	78.47%
Sn 189.927†	-0.8	-0.0011345	mg/L	0.00142331	-0.0011345	mg/L	0.00142331	125.46%
Ti 334.940†	5459.8	0.0054447	mg/L	0.00008165	0.0054447	mg/L	0.00008165	1.50%
Tl 190.801†	-23.7	-0.0192351	mg/L	0.00061493	-0.0192351	mg/L	0.00061493	3.20%
V 290.880†	-434.8	-0.0024306	mg/L	0.00006431	-0.0024306	mg/L	0.00006431	2.65%
Zn 206.200†	235.4	0.0029080	mg/L	0.00003157	0.0029080	mg/L	0.00003157	1.09%
Si 251.611†	227176.1	4.58720	mg/L	0.044461	4.58720	mg/L	0.044461	0.97%
B 249.772†	4556.4	0.0402489	mg/L	0.00058360	0.0402489	mg/L	0.00058360	1.45%
Ce 413.764	-120.0	-0.0404885	mg/L	0.00555759	-0.0404885	mg/L	0.00555759	13.73%

Sequence No.: 32
Sample ID: AD18930-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 112
Date Collected: 9/1/2020 7:55:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18930-007

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1314265.6	96.9	%	0.42				0.43%
Y 371.029	381069.4	96.3	%	0.58				0.61%
Ag 328.068†	-147.2	0.0003192	mg/L	0.00016003	0.0003192	mg/L	0.00016003	50.14%
Al 308.215†	191.9	0.0008490	mg/L	0.00179070	0.0008490	mg/L	0.00179070	210.93%
As 188.979†	-4.0	-0.0012692	mg/L	0.00131622	-0.0012692	mg/L	0.00131622	103.70%
Ba 233.527†	57.3	-0.0006164	mg/L	0.00010577	-0.0006164	mg/L	0.00010577	17.16%
Be 313.107†	583.2	-0.0005004	mg/L	0.00001166	-0.0005004	mg/L	0.00001166	2.33%
Ca 315.887†	16790.9	-0.205019	mg/L	0.0008280	-0.205019	mg/L	0.0008280	0.40%
Cd 228.802†	10.5	-0.0000181	mg/L	0.00007049	-0.0000181	mg/L	0.00007049	390.43%
Co 228.616†	-44.6	-0.0016317	mg/L	0.00021523	-0.0016317	mg/L	0.00021523	13.19%
Cr 267.716†	33.1	-0.0017952	mg/L	0.00004734	-0.0017952	mg/L	0.00004734	2.64%
Cu 327.393†	1336.5	0.0067283	mg/L	0.00038711	0.0067283	mg/L	0.00038711	5.75%
Fe 273.955†	579.0	-0.0006500	mg/L	0.00054644	-0.0006500	mg/L	0.00054644	84.07%
K 404.721†	128.5	2.22879	mg/L	0.301369	2.22879	mg/L	0.301369	13.52%
Mg 279.077†	1098.2	-0.362291	mg/L	0.0008596	-0.362291	mg/L	0.0008596	0.24%
Mn 257.610†	1660.3	0.0004993	mg/L	0.00002058	0.0004993	mg/L	0.00002058	4.12%
Mo 202.031†	-12.1	-0.0017347	mg/L	0.00051713	-0.0017347	mg/L	0.00051713	29.81%
Na 330.237†	536.4	0.878261	mg/L	0.0520689	0.878261	mg/L	0.0520689	5.93%
Ni 231.604†	126.6	0.0014211	mg/L	0.00066336	0.0014211	mg/L	0.00066336	46.68%
Pb 220.353†	136.1	0.0248988	mg/L	0.00118961	0.0248988	mg/L	0.00118961	4.78%
Sb 206.836†	-4.2	-0.0017672	mg/L	0.00311338	-0.0017672	mg/L	0.00311338	176.18%
Se 196.026†	-12.4	-0.0109882	mg/L	0.00453101	-0.0109882	mg/L	0.00453101	41.24%
Sn 189.927†	-0.1	-0.0023443	mg/L	0.00061775	-0.0023443	mg/L	0.00061775	26.35%
Ti 334.940†	112.3	0.0000900	mg/L	0.00003148	0.0000900	mg/L	0.00003148	34.96%
Tl 190.801†	-0.3	-0.0046292	mg/L	0.00160711	-0.0046292	mg/L	0.00160711	34.72%
V 290.880†	-517.3	-0.0028178	mg/L	0.00011155	-0.0028178	mg/L	0.00011155	3.96%
Zn 206.200†	47326.8	0.842354	mg/L	0.0062027	0.842354	mg/L	0.0062027	0.74%
Si 251.611†	3660.1	0.0579575	mg/L	0.00145478	0.0579575	mg/L	0.00145478	2.51%
B 249.772†	-2104.1	-0.0116902	mg/L	0.00019588	-0.0116902	mg/L	0.00019588	1.68%
Ce 413.764	-387.2	-0.0603734	mg/L	0.00432976	-0.0603734	mg/L	0.00432976	7.17%

Sequence No.: 33
Sample ID: AD18935-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 113
Date Collected: 9/1/2020 7:59:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18935-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1340406.4	98.8	%	0.98				0.99%
Y 371.029	383710.3	96.9	%	0.89				0.92%
Ag 328.068†	-174.5	0.0002095	mg/L	0.00027048	0.0002095	mg/L	0.00027048	129.10%
Al 308.215†	-8.0	-0.0054127	mg/L	0.00052477	-0.0054127	mg/L	0.00052477	9.70%
As 188.979†	-6.7	-0.0029438	mg/L	0.00228533	-0.0029438	mg/L	0.00228533	77.63%
Ba 233.527†	230.1	0.0011023	mg/L	0.00002555	0.0011023	mg/L	0.00002555	2.32%
Be 313.107†	721.3	-0.0004652	mg/L	0.00003613	-0.0004652	mg/L	0.00003613	7.77%
Ca 315.887†	247251.7	1.51080	mg/L	0.013833	1.51080	mg/L	0.013833	0.92%
Cd 228.802†	20.6	0.0001436	mg/L	0.00010218	0.0001436	mg/L	0.00010218	71.16%
Co 228.616†	-41.6	-0.0015757	mg/L	0.00020942	-0.0015757	mg/L	0.00020942	13.29%
Cr 267.716†	22.7	-0.0018924	mg/L	0.00011624	-0.0018924	mg/L	0.00011624	6.14%
Cu 327.393†	2732.7	0.0143158	mg/L	0.00018055	0.0143158	mg/L	0.00018055	1.26%
Fe 273.955†	654.2	0.0013978	mg/L	0.00029859	0.0013978	mg/L	0.00029859	21.36%
K 404.721†	181.5	2.38870	mg/L	0.140292	2.38870	mg/L	0.140292	5.87%
Mg 279.077†	15069.5	0.175987	mg/L	0.0053831	0.175987	mg/L	0.0053831	3.06%
Mn 257.610†	1130.1	-0.0000351	mg/L	0.00002473	-0.0000351	mg/L	0.00002473	70.55%
Mo 202.031†	-3.7	-0.0010162	mg/L	0.00074571	-0.0010162	mg/L	0.00074571	73.38%
Na 330.237†	12931.3	9.40619	mg/L	0.075369	9.40619	mg/L	0.075369	0.80%
Ni 231.604†	62.1	-0.0000866	mg/L	0.00030979	-0.0000866	mg/L	0.00030979	357.79%
Pb 220.353†	143.4	0.0261201	mg/L	0.00165768	0.0261201	mg/L	0.00165768	6.35%
Sb 206.836†	-4.3	-0.0017602	mg/L	0.00395554	-0.0017602	mg/L	0.00395554	224.73%
Se 196.026†	-8.6	-0.0072952	mg/L	0.00431545	-0.0072952	mg/L	0.00431545	59.16%
Sn 189.927†	6.2	-0.0006284	mg/L	0.00054423	-0.0006284	mg/L	0.00054423	86.61%
Ti 334.940†	131.4	0.0001099	mg/L	0.00003038	0.0001099	mg/L	0.00003038	27.65%
Tl 190.801†	-0.9	-0.0049931	mg/L	0.00341406	-0.0049931	mg/L	0.00341406	68.38%
V 290.880†	-690.9	-0.0037236	mg/L	0.00011825	-0.0037236	mg/L	0.00011825	3.18%
Zn 206.200†	403.3	0.0059042	mg/L	0.00016537	0.0059042	mg/L	0.00016537	2.80%
Si 251.611†	15441.2	0.296686	mg/L	0.0015651	0.296686	mg/L	0.0015651	0.53%
B 249.772†	-2073.4	-0.0113885	mg/L	0.00009814	-0.0113885	mg/L	0.00009814	0.86%
Ce 413.764	-367.8	-0.0589318	mg/L	0.00748019	-0.0589318	mg/L	0.00748019	12.69%

Sequence No.: 34
Sample ID: AD18935-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 114
Date Collected: 9/1/2020 8:03:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18935-002

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1311695.6	96.7	%	0.58				0.60%
Y 371.029	377316.3	95.3	%	0.60				0.63%
Ag 328.068†	-128.9	0.0003939	mg/L	0.00007557	0.0003939	mg/L	0.00007557	19.18%
Al 308.215†	260.7	0.0029529	mg/L	0.00207799	0.0029529	mg/L	0.00207799	70.37%
As 188.979†	-4.4	-0.0015668	mg/L	0.00131275	-0.0015668	mg/L	0.00131275	83.79%
Ba 233.527†	179.4	0.0005981	mg/L	0.00003503	0.0005981	mg/L	0.00003503	5.86%
Be 313.107†	627.1	-0.0004873	mg/L	0.00001951	-0.0004873	mg/L	0.00001951	4.00%
Ca 315.887†	248945.8	1.52341	mg/L	0.009097	1.52341	mg/L	0.009097	0.60%
Cd 228.802†	9.0	-0.0000415	mg/L	0.00017104	-0.0000415	mg/L	0.00017104	412.23%
Co 228.616†	-36.8	-0.0014859	mg/L	0.00021675	-0.0014859	mg/L	0.00021675	14.59%
Cr 267.716†	81.3	-0.0014024	mg/L	0.00017973	-0.0014024	mg/L	0.00017973	12.82%
Cu 327.393†	4369.2	0.0231294	mg/L	0.00051949	0.0231294	mg/L	0.00051949	2.25%
Fe 273.955†	1970.2	0.0372111	mg/L	0.00079492	0.0372111	mg/L	0.00079492	2.14%
K 404.721†	159.0	2.34698	mg/L	0.121818	2.34698	mg/L	0.121818	5.19%
Mg 279.077†	21790.0	0.434911	mg/L	0.0056557	0.434911	mg/L	0.0056557	1.30%
Mn 257.610†	7997.6	0.0068861	mg/L	0.00007018	0.0068861	mg/L	0.00007018	1.02%
Mo 202.031†	-8.4	-0.0014468	mg/L	0.00019276	-0.0014468	mg/L	0.00019276	13.32%
Na 330.237†	4737.3	3.90958	mg/L	0.033509	3.90958	mg/L	0.033509	0.86%
Ni 231.604†	80.3	0.0003548	mg/L	0.00021926	0.0003548	mg/L	0.00021926	61.79%
Pb 220.353†	113.2	0.0207604	mg/L	0.00245681	0.0207604	mg/L	0.00245681	11.83%
Sb 206.836†	-2.6	-0.0009932	mg/L	0.00043036	-0.0009932	mg/L	0.00043036	43.33%
Se 196.026†	-9.2	-0.0078071	mg/L	0.00514382	-0.0078071	mg/L	0.00514382	65.89%
Sn 189.927†	-0.2	-0.0023152	mg/L	0.00084603	-0.0023152	mg/L	0.00084603	36.54%
Ti 334.940†	146.2	0.0001224	mg/L	0.00004411	0.0001224	mg/L	0.00004411	36.02%
Tl 190.801†	2.3	-0.0031196	mg/L	0.00064356	-0.0031196	mg/L	0.00064356	20.63%
V 290.880†	-589.9	-0.0031991	mg/L	0.00037464	-0.0031991	mg/L	0.00037464	11.71%
Zn 206.200†	400.3	0.0058532	mg/L	0.00015782	0.0058532	mg/L	0.00015782	2.70%
Si 251.611†	9689.4	0.180133	mg/L	0.0014588	0.180133	mg/L	0.0014588	0.81%
B 249.772†	-1983.2	-0.0107929	mg/L	0.00011799	-0.0107929	mg/L	0.00011799	1.09%
Ce 413.764	-433.2	-0.0637939	mg/L	0.00618447	-0.0637939	mg/L	0.00618447	9.69%

Sequence No.: 35
Sample ID: CCV V-329036
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/1/2020 8:06:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1288966.4	95.0	%	0.19				0.20%
Y 371.029	327975.7	82.9	%	0.28				0.34%
Ag 328.068†	23407.8	0.101982	mg/L	0.0007935	0.101982	mg/L	0.0007935	0.78%
QC value within limits for Ag 328.068 Recovery = 101.98%								
Al 308.215†	162647.8	4.96516	mg/L	0.030179	4.96516	mg/L	0.030179	0.61%
QC value within limits for Al 308.215 Recovery = 99.30%								
As 188.979†	797.6	0.495056	mg/L	0.0019543	0.495056	mg/L	0.0019543	0.39%
QC value within limits for As 188.979 Recovery = 99.01%								
Ba 233.527†	49789.3	0.494038	mg/L	0.0032980	0.494038	mg/L	0.0032980	0.67%
QC value within limits for Ba 233.527 Recovery = 98.81%								
Be 313.107†	1923691.5	0.497400	mg/L	0.0010565	0.497400	mg/L	0.0010565	0.21%
QC value within limits for Be 313.107 Recovery = 99.48%								
Ca 315.887†	6855481.2	50.7101	mg/L	0.11543	50.7101	mg/L	0.11543	0.23%
QC value within limits for Ca 315.887 Recovery = 101.42%								
Cd 228.802†	30432.5	0.487229	mg/L	0.0031608	0.487229	mg/L	0.0031608	0.65%
QC value within limits for Cd 228.802 Recovery = 97.45%								
Co 228.616†	25946.4	0.490175	mg/L	0.0032323	0.490175	mg/L	0.0032323	0.66%
QC value within limits for Co 228.616 Recovery = 98.03%								
Cr 267.716†	59548.1	0.499744	mg/L	0.0034288	0.499744	mg/L	0.0034288	0.69%
QC value within limits for Cr 267.716 Recovery = 99.95%								
Cu 327.393†	93016.9	0.504959	mg/L	0.0033025	0.504959	mg/L	0.0033025	0.65%
QC value within limits for Cu 327.393 Recovery = 100.99%								
Fe 273.955†	184405.6	5.00212	mg/L	0.033759	5.00212	mg/L	0.033759	0.67%
QC value within limits for Fe 273.955 Recovery = 100.04%								
K 404.721†	15292.0	18.8947	mg/L	0.59949	18.8947	mg/L	0.59949	3.17%
QC value less than the lower limit for K 404.721 Recovery = 37.79%								
Mg 279.077†	1313932.7	50.2178	mg/L	0.10201	50.2178	mg/L	0.10201	0.20%
QC value within limits for Mg 279.077 Recovery = 100.44%								
Mn 257.610†	500971.2	0.503712	mg/L	0.0012691	0.503712	mg/L	0.0012691	0.25%
QC value within limits for Mn 257.610 Recovery = 100.74%								
Mo 202.031†	5416.2	0.487378	mg/L	0.0019761	0.487378	mg/L	0.0019761	0.41%
QC value within limits for Mo 202.031 Recovery = 97.48%								
Na 330.237†	70934.3	49.5891	mg/L	0.11673	49.5891	mg/L	0.11673	0.24%
QC value within limits for Na 330.237 Recovery = 99.18%								
Ni 231.604†	21166.6	0.502685	mg/L	0.0031035	0.502685	mg/L	0.0031035	0.62%
QC value within limits for Ni 231.604 Recovery = 100.54%								
Pb 220.353†	3026.9	0.537917	mg/L	0.0014873	0.537917	mg/L	0.0014873	0.28%
QC value within limits for Pb 220.353 Recovery = 107.58%								
Sb 206.836†	1063.4	0.514915	mg/L	0.0009770	0.514915	mg/L	0.0009770	0.19%
QC value within limits for Sb 206.836 Recovery = 102.98%								
Se 196.026†	505.0	0.491689	mg/L	0.0017487	0.491689	mg/L	0.0017487	0.36%
QC value within limits for Se 196.026 Recovery = 98.34%								
Sn 189.927†	1864.5	0.496674	mg/L	0.0015946	0.496674	mg/L	0.0015946	0.32%
QC value within limits for Sn 189.927 Recovery = 99.33%								
Ti 334.940†	500302.9	0.502445	mg/L	0.0013475	0.502445	mg/L	0.0013475	0.27%
QC value within limits for Ti 334.940 Recovery = 100.49%								
Tl 190.801†	818.6	0.521578	mg/L	0.0031148	0.521578	mg/L	0.0031148	0.60%
QC value within limits for Tl 190.801 Recovery = 104.32%								
V 290.880†	94126.6	0.490559	mg/L	0.0027201	0.490559	mg/L	0.0027201	0.55%
QC value within limits for V 290.880 Recovery = 98.11%								
Zn 206.200†	28146.7	0.499692	mg/L	0.0026708	0.499692	mg/L	0.0026708	0.53%
QC value within limits for Zn 206.200 Recovery = 99.94%								
Si 251.611†	245061.6	4.94962	mg/L	0.028864	4.94962	mg/L	0.028864	0.58%
QC value within limits for Si 251.611 Recovery = 98.99%								
B 249.772†	61779.5	0.474806	mg/L	0.0072525	0.474806	mg/L	0.0072525	1.53%
QC value within limits for B 249.772 Recovery = 94.96%								
Ce 413.764	68793.2	5.08853	mg/L	0.037685	5.08853	mg/L	0.037685	0.74%
QC value within limits for Ce 413.764 Recovery = 101.77%								

QC Failed. Continue with analysis.

Sequence No.: 36
Sample ID: CCB V-329027
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/1/2020 8:11:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1341879.9	98.9	%	0.97				0.98%
Y 371.029	390736.3	98.7	%	0.92				0.93%
Ag 328.068†	-135.9	0.0003684	mg/L	0.00011997	0.0003684	mg/L	0.00011997	32.57%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-164.6	-0.0102759	mg/L	0.00357452	-0.0102759	mg/L	0.00357452	34.79%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-5.1	-0.0019883	mg/L	0.00158411	-0.0019883	mg/L	0.00158411	79.67%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-14.0	-0.0013249	mg/L	0.00012399	-0.0013249	mg/L	0.00012399	9.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	933.8	-0.0004116	mg/L	0.00004125	-0.0004116	mg/L	0.00004125	10.02%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-908.2	-0.336791	mg/L	0.0041438	-0.336791	mg/L	0.0041438	1.23%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	13.4	0.0000294	mg/L	0.00013926	0.0000294	mg/L	0.00013926	473.67%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-43.0	-0.0016002	mg/L	0.00025655	-0.0016002	mg/L	0.00025655	16.03%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-27.2	-0.0023034	mg/L	0.00013071	-0.0023034	mg/L	0.00013071	5.67%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	168.7	0.0004342	mg/L	0.00032705	0.0004342	mg/L	0.00032705	75.33%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-111.6	-0.0194434	mg/L	0.00031132	-0.0194434	mg/L	0.00031132	1.60%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	96.0	2.09482	mg/L	0.151868	2.09482	mg/L	0.151868	7.25%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	171.7	-0.397986	mg/L	0.0053938	-0.397986	mg/L	0.0053938	1.36%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-66.6	-0.0012411	mg/L	0.00000866	-0.0012411	mg/L	0.00000866	0.70%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-4.6	-0.0010560	mg/L	0.00035340	-0.0010560	mg/L	0.00035340	33.47%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-6.4	0.732530	mg/L	0.0346154	0.732530	mg/L	0.0346154	4.73%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	41.9	-0.0005896	mg/L	0.00021245	-0.0005896	mg/L	0.00021245	36.04%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	138.7	0.0253686	mg/L	0.00194692	0.0253686	mg/L	0.00194692	7.67%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-7.1	-0.0030780	mg/L	0.00085325	-0.0030780	mg/L	0.00085325	27.72%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-12.7	-0.0112618	mg/L	0.00251656	-0.0112618	mg/L	0.00251656	22.35%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.3	-0.0019616	mg/L	0.00099723	-0.0019616	mg/L	0.00099723	50.84%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-45.8	-0.0000657	mg/L	0.00005197	-0.0000657	mg/L	0.00005197	79.12%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.7	-0.0028040	mg/L	0.00199768	-0.0028040	mg/L	0.00199768	71.24%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-720.4	-0.0038757	mg/L	0.00015066	-0.0038757	mg/L	0.00015066	3.89%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-37.5	-0.0019509	mg/L	0.00006744	-0.0019509	mg/L	0.00006744	3.46%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	-226.0	-0.0207882	mg/L	0.00019716	-0.0207882	mg/L	0.00019716	0.95%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	-1725.5	-0.0086709	mg/L	0.00064329	-0.0086709	mg/L	0.00064329	7.42%
QC value within limits for B 249.772 Recovery = Not calculated								
Ce 413.764	-320.9	-0.0554371	mg/L	0.00517260	-0.0554371	mg/L	0.00517260	9.33%
QC value within limits for Ce 413.764 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 37
Sample ID: MB 85230 (1)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 115
Date Collected: 9/1/2020 8:14:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85230 (1)

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1326394.0	97.8	%	0.46				0.47%
Y 371.029	384154.9	97.0	%	0.37				0.38%
Ag 328.068†	-133.9	0.0003910	mg/L	0.00010301	0.0003910	mg/L	0.00010301	26.35%
Al 308.215†	-51.2	-0.0068911	mg/L	0.00189146	-0.0068911	mg/L	0.00189146	27.45%
As 188.979†	-4.6	-0.0016604	mg/L	0.00128152	-0.0016604	mg/L	0.00128152	77.18%
Ba 233.527†	-20.4	-0.0013892	mg/L	0.00005280	-0.0013892	mg/L	0.00005280	3.80%
Be 313.107†	617.3	-0.0004988	mg/L	0.00002268	-0.0004988	mg/L	0.00002268	4.55%
Ca 315.887†	788.5	-0.324159	mg/L	0.0005394	-0.324159	mg/L	0.0005394	0.17%
Cd 228.802†	29.4	0.0002843	mg/L	0.00020834	0.0002843	mg/L	0.00020834	73.29%
Co 228.616†	-43.8	-0.0016171	mg/L	0.00019929	-0.0016171	mg/L	0.00019929	12.32%
Cr 267.716†	45.4	-0.0016903	mg/L	0.00010563	-0.0016903	mg/L	0.00010563	6.25%
Cu 327.393†	212.6	0.0006763	mg/L	0.00030461	0.0006763	mg/L	0.00030461	45.04%
Fe 273.955†	1539.1	0.0254799	mg/L	0.00077220	0.0254799	mg/L	0.00077220	3.03%
K 404.721†	89.4	2.01277	mg/L	0.277446	2.01277	mg/L	0.277446	13.78%
Mg 279.077†	186.6	-0.397412	mg/L	0.0009021	-0.397412	mg/L	0.0009021	0.23%
Mn 257.610†	583.3	-0.0005862	mg/L	0.00003941	-0.0005862	mg/L	0.00003941	6.72%
Mo 202.031†	-4.8	-0.0010693	mg/L	0.00034854	-0.0010693	mg/L	0.00034854	32.60%
Na 330.237†	72.1	0.786986	mg/L	0.0220171	0.786986	mg/L	0.0220171	2.80%
Ni 231.604†	79.3	0.0002977	mg/L	0.00030237	0.0002977	mg/L	0.00030237	101.56%
Pb 220.353†	124.5	0.0228147	mg/L	0.00089000	0.0228147	mg/L	0.00089000	3.90%
Sb 206.836†	-6.5	-0.0027807	mg/L	0.00126284	-0.0027807	mg/L	0.00126284	45.42%
Se 196.026†	-3.3	-0.0022544	mg/L	0.00114860	-0.0022544	mg/L	0.00114860	50.95%
Sn 189.927†	0.5	-0.0021751	mg/L	0.00025988	-0.0021751	mg/L	0.00025988	11.95%
Ti 334.940†	126.4	0.0001110	mg/L	0.00002395	0.0001110	mg/L	0.00002395	21.58%
Tl 190.801†	-2.5	-0.0058864	mg/L	0.00237344	-0.0058864	mg/L	0.00237344	40.32%
V 290.880†	-683.6	-0.0036871	mg/L	0.00047130	-0.0036871	mg/L	0.00047130	12.78%
Zn 206.200†	169.8	0.0017452	mg/L	0.00019254	0.0017452	mg/L	0.00019254	11.03%
Si 251.611†	803.1	0.0000653	mg/L	0.00051862	0.0000653	mg/L	0.00051862	794.26%
B 249.772†	-1340.1	-0.0058049	mg/L	0.00028162	-0.0058049	mg/L	0.00028162	4.85%
Ce 413.764	-187.0	-0.0454703	mg/L	0.01407633	-0.0454703	mg/L	0.01407633	30.96%

Sequence No.: 38
Sample ID: LCSW 85230
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 116
Date Collected: 9/1/2020 8:18:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCSW 85230

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1290871.9	95.2	%	0.45				0.48%
Y 371.029	360353.2	91.0	%	0.62				0.68%
Ag 328.068†	23844.8	0.0991647	mg/L	0.00050771	0.0991647	mg/L	0.00050771	0.51%
Al 308.215†	164789.6	5.08438	mg/L	0.018891	5.08438	mg/L	0.018891	0.37%
As 188.979†	791.4	0.491214	mg/L	0.0044301	0.491214	mg/L	0.0044301	0.90%
Ba 233.527†	51403.9	0.510097	mg/L	0.0022100	0.510097	mg/L	0.0022100	0.43%
Be 313.107†	1930809.3	0.501485	mg/L	0.0016769	0.501485	mg/L	0.0016769	0.33%
Ca 315.887†	6975418.2	51.6030	mg/L	0.11555	51.6030	mg/L	0.11555	0.22%
Cd 228.802†	30683.2	0.491245	mg/L	0.0019391	0.491245	mg/L	0.0019391	0.39%
Co 228.616†	26068.8	0.492475	mg/L	0.0023266	0.492475	mg/L	0.0023266	0.47%
Cr 267.716†	59609.3	0.500247	mg/L	0.0027650	0.500247	mg/L	0.0027650	0.55%
Cu 327.393†	92779.0	0.503773	mg/L	0.0027629	0.503773	mg/L	0.0027629	0.55%
Fe 273.955†	195381.2	5.30082	mg/L	0.023903	5.30082	mg/L	0.023903	0.45%
K 404.721†	6476.8	18.8938	mg/L	0.45544	18.8938	mg/L	0.45544	2.41%
Mg 279.077†	1333041.6	50.9540	mg/L	0.13239	50.9540	mg/L	0.13239	0.26%
Mn 257.610†	507906.6	0.510701	mg/L	0.0010250	0.510701	mg/L	0.0010250	0.20%
Mo 202.031†	5437.5	0.489293	mg/L	0.0026376	0.489293	mg/L	0.0026376	0.54%
Na 330.237†	73301.3	49.9238	mg/L	0.18827	49.9238	mg/L	0.18827	0.38%
Ni 231.604†	21164.5	0.502666	mg/L	0.0021908	0.502666	mg/L	0.0021908	0.44%
Pb 220.353†	3006.5	0.537256	mg/L	0.0017921	0.537256	mg/L	0.0017921	0.33%
Sb 206.836†	1064.5	0.506169	mg/L	0.0018200	0.506169	mg/L	0.0018200	0.36%
Se 196.026†	495.7	0.478387	mg/L	0.0078340	0.478387	mg/L	0.0078340	1.64%
Sn 189.927†	1855.3	0.494265	mg/L	0.0010828	0.494265	mg/L	0.0010828	0.22%
Ti 334.940†	506145.0	0.506197	mg/L	0.0013441	0.506197	mg/L	0.0013441	0.27%
Tl 190.801†	890.2	0.542216	mg/L	0.0028249	0.542216	mg/L	0.0028249	0.52%
V 290.880†	95069.0	0.495453	mg/L	0.0021297	0.495453	mg/L	0.0021297	0.43%
Zn 206.200†	28223.0	0.501055	mg/L	0.0022707	0.501055	mg/L	0.0022707	0.45%
Si 251.611†	27122.0	0.533381	mg/L	0.0011538	0.533381	mg/L	0.0011538	0.22%
B 249.772†	64686.8	0.496608	mg/L	0.0028287	0.496608	mg/L	0.0028287	0.57%
Ce 413.764	7387.1	0.518247	mg/L	0.0088395	0.518247	mg/L	0.0088395	1.71%

Sequence No.: 39
Sample ID: LCSW MR 85230
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 117
Date Collected: 9/1/2020 8:23:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCSW MR 85230

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1275084.4	94.0	%	0.55				0.58%
Y 371.029	356288.8	90.0	%	0.36				0.40%
Ag 328.068†	23878.0	0.0992715	mg/L	0.00108980	0.0992715	mg/L	0.00108980	1.10%
Al 308.215†	164860.7	5.08659	mg/L	0.058056	5.08659	mg/L	0.058056	1.14%
As 188.979†	790.1	0.490376	mg/L	0.0043601	0.490376	mg/L	0.0043601	0.89%
Ba 233.527†	51347.9	0.509540	mg/L	0.0057975	0.509540	mg/L	0.0057975	1.14%
Be 313.107†	1917529.0	0.498036	mg/L	0.0016718	0.498036	mg/L	0.0016718	0.34%
Ca 315.887†	6944451.9	51.3725	mg/L	0.15864	51.3725	mg/L	0.15864	0.31%
Cd 228.802†	30634.7	0.490467	mg/L	0.0047348	0.490467	mg/L	0.0047348	0.97%
Co 228.616†	26026.4	0.491675	mg/L	0.0053450	0.491675	mg/L	0.0053450	1.09%
Cr 267.716†	59419.2	0.498647	mg/L	0.0053199	0.498647	mg/L	0.0053199	1.07%
Cu 327.393†	93161.8	0.505797	mg/L	0.0052781	0.505797	mg/L	0.0052781	1.04%
Fe 273.955†	189555.2	5.14226	mg/L	0.059627	5.14226	mg/L	0.059627	1.16%
K 404.721†	6565.9	19.2608	mg/L	0.30337	19.2608	mg/L	0.30337	1.58%
Mg 279.077†	1325652.5	50.6693	mg/L	0.18028	50.6693	mg/L	0.18028	0.36%
Mn 257.610†	504675.1	0.507445	mg/L	0.0015015	0.507445	mg/L	0.0015015	0.30%
Mo 202.031†	5449.5	0.490376	mg/L	0.0038354	0.490376	mg/L	0.0038354	0.78%
Na 330.237†	73512.6	50.0619	mg/L	0.54912	50.0619	mg/L	0.54912	1.10%
Ni 231.604†	21206.5	0.503651	mg/L	0.0063417	0.503651	mg/L	0.0063417	1.26%
Pb 220.353†	3017.8	0.539309	mg/L	0.0026292	0.539309	mg/L	0.0026292	0.49%
Sb 206.836†	1070.3	0.508846	mg/L	0.0060143	0.508846	mg/L	0.0060143	1.18%
Se 196.026†	500.5	0.482811	mg/L	0.0104560	0.482811	mg/L	0.0104560	2.17%
Sn 189.927†	1861.5	0.495892	mg/L	0.0043362	0.495892	mg/L	0.0043362	0.87%
Ti 334.940†	503864.6	0.503911	mg/L	0.0012610	0.503911	mg/L	0.0012610	0.25%
Tl 190.801†	891.6	0.543005	mg/L	0.0067286	0.543005	mg/L	0.0067286	1.24%
V 290.880†	94885.2	0.494506	mg/L	0.0052664	0.494506	mg/L	0.0052664	1.06%
Zn 206.200†	28215.2	0.500913	mg/L	0.0055486	0.500913	mg/L	0.0055486	1.11%
Si 251.611†	27249.4	0.535962	mg/L	0.0087507	0.535962	mg/L	0.0087507	1.63%
B 249.772†	64929.1	0.499018	mg/L	0.0077057	0.499018	mg/L	0.0077057	1.54%
Ce 413.764	7205.4	0.504721	mg/L	0.0036693	0.504721	mg/L	0.0036693	0.73%

Sequence No.: 40
Sample ID: AD18954-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 118
Date Collected: 9/1/2020 8:27:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18954-002

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1252693.7	92.3	%	1.20				1.30%
Y 371.029	357451.0	90.3	%	1.11				1.23%
Ag 328.068†	17.2	0.0015841	mg/L	0.00025272	0.0015841	mg/L	0.00025272	15.95%
Al 308.215†	47779.5	1.46015	mg/L	0.013170	1.46015	mg/L	0.013170	0.90%
As 188.979†	3890.8	2.41353	mg/L	0.036438	2.41353	mg/L	0.036438	1.51%
Ba 233.527†	7634.4	0.0747486	mg/L	0.00097517	0.0747486	mg/L	0.00097517	1.30%
Be 313.107†	1.4	-0.0006567	mg/L	0.00000227	-0.0006567	mg/L	0.00000227	0.35%
Ca 315.887†	25889875.2	192.424	mg/L	1.8140	192.424	mg/L	1.8140	0.94%
Cd 228.802†	3994.1	0.0637839	mg/L	0.00085772	0.0637839	mg/L	0.00085772	1.34%
Co 228.616†	1034.4	0.0186779	mg/L	0.00028930	0.0186779	mg/L	0.00028930	1.55%
Cr 267.716†	781.8	0.0034093	mg/L	0.00027453	0.0034093	mg/L	0.00027453	8.05%
Cu 327.393†	4496.9	0.0326406	mg/L	0.00048774	0.0326406	mg/L	0.00048774	1.49%
Fe 273.955†	229129.0	6.21925	mg/L	0.018062	6.21925	mg/L	0.018062	0.29%
K 404.721†	5616.4	19.6470	mg/L	0.29502	19.6470	mg/L	0.29502	1.50%
Mg 279.077†	1557925.2	59.6181	mg/L	0.11352	59.6181	mg/L	0.11352	0.19%
Mn 257.610†	378925.2	0.380712	mg/L	0.0008134	0.380712	mg/L	0.0008134	0.21%
Mo 202.031†	324.9	0.0236605	mg/L	0.00037798	0.0236605	mg/L	0.00037798	1.60%
Na 330.237†	347769.3	233.728	mg/L	0.7426	233.728	mg/L	0.7426	0.32%
Ni 231.604†	2966.9	0.0713060	mg/L	0.00098241	0.0713060	mg/L	0.00098241	1.38%
Pb 220.353†	1275.0	0.225761	mg/L	0.0028437	0.225761	mg/L	0.0028437	1.26%
Sb 206.836†	1563.4	0.725781	mg/L	0.0070308	0.725781	mg/L	0.0070308	0.97%
Se 196.026†	50.0	0.0553532	mg/L	0.00401609	0.0553532	mg/L	0.00401609	7.26%
Sn 189.927†	8.8	0.0053075	mg/L	0.00026400	0.0053075	mg/L	0.00026400	4.97%
Ti 334.940†	49344.4	0.0493083	mg/L	0.00497484	0.0493083	mg/L	0.00497484	10.09%
Tl 190.801†	-2.7	-0.0085004	mg/L	0.00392773	-0.0085004	mg/L	0.00392773	46.21%
V 290.880†	-1737.6	-0.0096291	mg/L	0.00035112	-0.0096291	mg/L	0.00035112	3.65%
Zn 206.200†	52422.8	0.933156	mg/L	0.0019121	0.933156	mg/L	0.0019121	0.20%
Si 251.611†	636886.9	12.8894	mg/L	0.02748	12.8894	mg/L	0.02748	0.21%
B 249.772†	91455.1	0.707326	mg/L	0.0058694	0.707326	mg/L	0.0058694	0.83%
Ce 413.764	-253.8	-0.0504472	mg/L	0.00359293	-0.0504472	mg/L	0.00359293	7.12%

Sequence No.: 41
Sample ID: AD18954-002 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 119
Date Collected: 9/1/2020 8:31:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18954-002 MR

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1257321.0	92.7	%	0.27				0.29%
Y 371.029	358141.5	90.5	%	0.31				0.34%
Ag 328.068†	-11.3	0.0014933	mg/L	0.00039307	0.0014933	mg/L	0.00039307	26.32%
Al 308.215†	50215.3	1.53492	mg/L	0.027409	1.53492	mg/L	0.027409	1.79%
As 188.979†	4069.5	2.52434	mg/L	0.015256	2.52434	mg/L	0.015256	0.60%
Ba 233.527†	7927.4	0.0776633	mg/L	0.00028026	0.0776633	mg/L	0.00028026	0.36%
Be 313.107†	33.7	-0.0006465	mg/L	0.00001226	-0.0006465	mg/L	0.00001226	1.90%
Ca 315.887†	27023338.0	200.863	mg/L	1.6045	200.863	mg/L	1.6045	0.80%
Cd 228.802†	4165.4	0.0665283	mg/L	0.00038744	0.0665283	mg/L	0.00038744	0.58%
Co 228.616†	1074.2	0.0194274	mg/L	0.00022982	0.0194274	mg/L	0.00022982	1.18%
Cr 267.716†	786.7	0.0033946	mg/L	0.00031671	0.0033946	mg/L	0.00031671	9.33%
Cu 327.393†	4705.1	0.0341505	mg/L	0.00045960	0.0341505	mg/L	0.00045960	1.35%
Fe 273.955†	240386.0	6.52560	mg/L	0.019258	6.52560	mg/L	0.019258	0.30%
K 404.721†	5929.8	20.6679	mg/L	0.13513	20.6679	mg/L	0.13513	0.65%
Mg 279.077†	1636910.3	62.6612	mg/L	0.17609	62.6612	mg/L	0.17609	0.28%
Mn 257.610†	398401.6	0.400341	mg/L	0.0011672	0.400341	mg/L	0.0011672	0.29%
Mo 202.031†	340.9	0.0248925	mg/L	0.00122218	0.0248925	mg/L	0.00122218	4.91%
Na 330.237†	366679.0	246.396	mg/L	1.0173	246.396	mg/L	1.0173	0.41%
Ni 231.604†	3094.9	0.0744695	mg/L	0.00054340	0.0744695	mg/L	0.00054340	0.73%
Pb 220.353†	1345.4	0.238217	mg/L	0.0014968	0.238217	mg/L	0.0014968	0.63%
Sb 206.836†	1638.5	0.760638	mg/L	0.0041811	0.760638	mg/L	0.0041811	0.55%
Se 196.026†	49.2	0.0549599	mg/L	0.00523831	0.0549599	mg/L	0.00523831	9.53%
Sn 189.927†	13.8	0.0068714	mg/L	0.00083581	0.0068714	mg/L	0.00083581	12.16%
Ti 334.940†	50380.3	0.0503421	mg/L	0.00291906	0.0503421	mg/L	0.00291906	5.80%
Tl 190.801†	-2.5	-0.0085332	mg/L	0.00159524	-0.0085332	mg/L	0.00159524	18.69%
V 290.880†	-1746.3	-0.0096960	mg/L	0.00027316	-0.0096960	mg/L	0.00027316	2.82%
Zn 206.200†	55174.5	0.982203	mg/L	0.0029747	0.982203	mg/L	0.0029747	0.30%
Si 251.611†	670770.1	13.5760	mg/L	0.05049	13.5760	mg/L	0.05049	0.37%
B 249.772†	96601.1	0.746921	mg/L	0.0056801	0.746921	mg/L	0.0056801	0.76%
Ce 413.764	-303.5	-0.0541446	mg/L	0.00278144	-0.0541446	mg/L	0.00278144	5.14%

Sequence No.: 42
Sample ID: AD18954-002 MS 1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 120
Date Collected: 9/1/2020 8:36:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18954-002 MS 1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1239567.1	91.4	%	0.29				0.32%
Y 371.029	347245.9	87.7	%	0.31				0.35%
Ag 328.068†	23827.7	0.0996053	mg/L	0.00020195	0.0996053	mg/L	0.00020195	0.20%
Al 308.215†	224626.7	6.92028	mg/L	0.006702	6.92028	mg/L	0.006702	0.10%
As 188.979†	5015.9	3.11054	mg/L	0.012809	3.11054	mg/L	0.012809	0.41%
Ba 233.527†	57661.9	0.572342	mg/L	0.0009099	0.572342	mg/L	0.0009099	0.16%
Be 313.107†	1866721.1	0.484845	mg/L	0.0007860	0.484845	mg/L	0.0007860	0.16%
Ca 315.887†	33859192.6	251.757	mg/L	0.5315	251.757	mg/L	0.5315	0.21%
Cd 228.802†	34679.9	0.555257	mg/L	0.0035655	0.555257	mg/L	0.0035655	0.64%
Co 228.616†	25969.6	0.490459	mg/L	0.0029173	0.490459	mg/L	0.0029173	0.59%
Cr 267.716†	57733.9	0.483282	mg/L	0.0005769	0.483282	mg/L	0.0005769	0.12%
Cu 327.393†	96024.9	0.530403	mg/L	0.0007626	0.530403	mg/L	0.0007626	0.14%
Fe 273.955†	424458.1	11.5351	mg/L	0.01729	11.5351	mg/L	0.01729	0.15%
K 404.721†	13465.0	41.6150	mg/L	0.48348	41.6150	mg/L	0.48348	1.16%
Mg 279.077†	2908329.1	111.646	mg/L	0.1509	111.646	mg/L	0.1509	0.14%
Mn 257.610†	891616.8	0.897410	mg/L	0.0012236	0.897410	mg/L	0.0012236	0.14%
Mo 202.031†	5612.8	0.499874	mg/L	0.0030442	0.499874	mg/L	0.0030442	0.61%
Na 330.237†	466588.6	313.411	mg/L	0.0920	313.411	mg/L	0.0920	0.03%
Ni 231.604†	23180.3	0.553020	mg/L	0.0034116	0.553020	mg/L	0.0034116	0.62%
Pb 220.353†	4213.0	0.750068	mg/L	0.0048697	0.750068	mg/L	0.0048697	0.65%
Sb 206.836†	2768.2	1.29626	mg/L	0.002552	1.29626	mg/L	0.002552	0.20%
Se 196.026†	576.4	0.562076	mg/L	0.0051981	0.562076	mg/L	0.0051981	0.92%
Sn 189.927†	1798.3	0.484534	mg/L	0.0006276	0.484534	mg/L	0.0006276	0.13%
Ti 334.940†	541535.5	0.541540	mg/L	0.0033667	0.541540	mg/L	0.0033667	0.62%
Tl 190.801†	835.3	0.505667	mg/L	0.0058306	0.505667	mg/L	0.0058306	1.15%
V 290.880†	92362.3	0.480887	mg/L	0.0000846	0.480887	mg/L	0.0000846	0.02%
Zn 206.200†	82578.9	1.46996	mg/L	0.003560	1.46996	mg/L	0.003560	0.24%
Si 251.611†	736969.6	14.9175	mg/L	0.01466	14.9175	mg/L	0.01466	0.10%
B 249.772†	164559.4	1.26523	mg/L	0.008109	1.26523	mg/L	0.008109	0.64%
Ce 413.764	6373.6	0.442817	mg/L	0.0143664	0.442817	mg/L	0.0143664	3.24%

Sequence No.: 43
Sample ID: AD18954-002 MS 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 121
Date Collected: 9/1/2020 8:40:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18954-002 MS 2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1227175.7	90.5	%	0.08				0.09%
Y 371.029	344540.1	87.0	%	0.19				0.22%
Ag 328.068†	23478.7	0.0981823	mg/L	0.00023183	0.0981823	mg/L	0.00023183	0.24%
Al 308.215†	223857.2	6.89604	mg/L	0.007237	6.89604	mg/L	0.007237	0.10%
As 188.979†	4901.6	3.03964	mg/L	0.004895	3.03964	mg/L	0.004895	0.16%
Ba 233.527†	56851.6	0.564282	mg/L	0.0008160	0.564282	mg/L	0.0008160	0.14%
Be 313.107†	1839091.3	0.477649	mg/L	0.0008303	0.477649	mg/L	0.0008303	0.17%
Ca 315.887†	33470905.2	248.866	mg/L	1.2380	248.866	mg/L	1.2380	0.50%
Cd 228.802†	34049.1	0.545153	mg/L	0.0016906	0.545153	mg/L	0.0016906	0.31%
Co 228.616†	25545.7	0.482438	mg/L	0.0016358	0.482438	mg/L	0.0016358	0.34%
Cr 267.716†	56922.9	0.476476	mg/L	0.0006810	0.476476	mg/L	0.0006810	0.14%
Cu 327.393†	94627.0	0.522704	mg/L	0.0010169	0.522704	mg/L	0.0010169	0.19%
Fe 273.955†	418494.8	11.3728	mg/L	0.02139	11.3728	mg/L	0.02139	0.19%
K 404.721†	13265.5	40.8925	mg/L	0.11140	40.8925	mg/L	0.11140	0.27%
Mg 279.077†	2851607.6	109.460	mg/L	0.2090	109.460	mg/L	0.2090	0.19%
Mn 257.610†	877578.2	0.883261	mg/L	0.0009693	0.883261	mg/L	0.0009693	0.11%
Mo 202.031†	5498.7	0.489640	mg/L	0.0020659	0.489640	mg/L	0.0020659	0.42%
Na 330.237†	457122.0	307.074	mg/L	0.5643	307.074	mg/L	0.5643	0.18%
Ni 231.604†	22817.5	0.544323	mg/L	0.0018316	0.544323	mg/L	0.0018316	0.34%
Pb 220.353†	4158.5	0.740386	mg/L	0.0030574	0.740386	mg/L	0.0030574	0.41%
Sb 206.836†	2706.5	1.26746	mg/L	0.002053	1.26746	mg/L	0.002053	0.16%
Se 196.026†	566.7	0.552624	mg/L	0.0121132	0.552624	mg/L	0.0121132	2.19%
Sn 189.927†	1767.3	0.476184	mg/L	0.0019509	0.476184	mg/L	0.0019509	0.41%
Ti 334.940†	532681.3	0.532695	mg/L	0.0029581	0.532695	mg/L	0.0029581	0.56%
Tl 190.801†	829.2	0.502063	mg/L	0.0013141	0.502063	mg/L	0.0013141	0.26%
V 290.880†	90985.0	0.473714	mg/L	0.0005071	0.473714	mg/L	0.0005071	0.11%
Zn 206.200†	80810.9	1.43846	mg/L	0.002929	1.43846	mg/L	0.002929	0.20%
Si 251.611†	727775.8	14.7312	mg/L	0.01677	14.7312	mg/L	0.01677	0.11%
B 249.772†	162103.4	1.24640	mg/L	0.007521	1.24640	mg/L	0.007521	0.60%
Ce 413.764	6564.0	0.456987	mg/L	0.0111249	0.456987	mg/L	0.0111249	2.43%

Sequence No.: 44
Sample ID: AD18954-002 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 122
Date Collected: 9/1/2020 8:45:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18954-002 PS

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1240302.8	91.4	%	0.33				0.36%
Y 371.029	348449.8	88.0	%	0.35				0.40%
Ag 328.068†	21982.8	0.0919788	mg/L	0.00017296	0.0919788	mg/L	0.00017296	0.19%
Al 308.215†	203410.7	6.26869	mg/L	0.029797	6.26869	mg/L	0.029797	0.48%
As 188.979†	4580.3	2.84044	mg/L	0.018276	2.84044	mg/L	0.018276	0.64%
Ba 233.527†	54579.7	0.541685	mg/L	0.0012069	0.541685	mg/L	0.0012069	0.22%
Be 313.107†	1826793.1	0.474473	mg/L	0.0010448	0.474473	mg/L	0.0010448	0.22%
Ca 315.887†	31188904.1	231.876	mg/L	1.8240	231.876	mg/L	1.8240	0.79%
Cd 228.802†	33199.8	0.531551	mg/L	0.0021001	0.531551	mg/L	0.0021001	0.40%
Co 228.616†	25170.4	0.475345	mg/L	0.0022447	0.475345	mg/L	0.0022447	0.47%
Cr 267.716†	56921.2	0.476559	mg/L	0.0008067	0.476559	mg/L	0.0008067	0.17%
Cu 327.393†	94308.7	0.520199	mg/L	0.0014595	0.520199	mg/L	0.0014595	0.28%
Fe 273.955†	396273.3	10.7680	mg/L	0.03008	10.7680	mg/L	0.03008	0.28%
K 404.721†	12555.0	38.9392	mg/L	0.21958	38.9392	mg/L	0.21958	0.56%
Mg 279.077†	2716120.0	104.240	mg/L	0.2146	104.240	mg/L	0.2146	0.21%
Mn 257.610†	846432.1	0.851872	mg/L	0.0020877	0.851872	mg/L	0.0020877	0.25%
Mo 202.031†	5437.7	0.484567	mg/L	0.0023442	0.484567	mg/L	0.0023442	0.48%
Na 330.237†	427475.8	287.196	mg/L	0.6561	287.196	mg/L	0.6561	0.23%
Ni 231.604†	22448.5	0.535349	mg/L	0.0027436	0.535349	mg/L	0.0027436	0.51%
Pb 220.353†	4081.9	0.726922	mg/L	0.0023415	0.726922	mg/L	0.0023415	0.32%
Sb 206.836†	2564.2	1.20130	mg/L	0.004752	1.20130	mg/L	0.004752	0.40%
Se 196.026†	556.0	0.541706	mg/L	0.0057142	0.541706	mg/L	0.0057142	1.05%
Sn 189.927†	1739.0	0.468154	mg/L	0.0032764	0.468154	mg/L	0.0032764	0.70%
Ti 334.940†	528340.7	0.528333	mg/L	0.0011277	0.528333	mg/L	0.0011277	0.21%
Tl 190.801†	828.6	0.501731	mg/L	0.0025215	0.501731	mg/L	0.0025215	0.50%
V 290.880†	90187.2	0.469595	mg/L	0.0016363	0.469595	mg/L	0.0016363	0.35%
Zn 206.200†	76965.8	1.36994	mg/L	0.003573	1.36994	mg/L	0.003573	0.26%
Si 251.611†	652983.0	13.2156	mg/L	0.05068	13.2156	mg/L	0.05068	0.38%
B 249.772†	150591.1	1.15765	mg/L	0.006849	1.15765	mg/L	0.006849	0.59%
Ce 413.764	5886.8	0.406586	mg/L	0.0072033	0.406586	mg/L	0.0072033	1.77%

Sequence No.: 45
Sample ID: AD18954-002 SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 123
Date Collected: 9/1/2020 8:49:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18954-002 SD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1326556.2	97.8	%	1.27				1.29%
Y 371.029	375283.2	94.8	%	1.30				1.37%
Ag 328.068†	-172.9	0.0003627	mg/L	0.00032804	0.0003627	mg/L	0.00032804	90.45%
Al 308.215†	9358.6	0.281264	mg/L	0.0044556	0.281264	mg/L	0.0044556	1.58%
As 188.979†	762.8	0.474160	mg/L	0.0085596	0.474160	mg/L	0.0085596	1.81%
Ba 233.527†	1542.9	0.0141599	mg/L	0.00017324	0.0141599	mg/L	0.00017324	1.22%
Be 313.107†	757.4	-0.0004698	mg/L	0.00001607	-0.0004698	mg/L	0.00001607	3.42%
Ca 315.887†	5312495.9	39.2223	mg/L	0.06669	39.2223	mg/L	0.06669	0.17%
Cd 228.802†	803.7	0.0126863	mg/L	0.00008811	0.0126863	mg/L	0.00008811	0.69%
Co 228.616†	183.4	0.0026639	mg/L	0.00012177	0.0026639	mg/L	0.00012177	4.57%
Cr 267.716†	218.2	-0.0004626	mg/L	0.00034654	-0.0004626	mg/L	0.00034654	74.92%
Cu 327.393†	1030.1	0.0068912	mg/L	0.00047882	0.0068912	mg/L	0.00047882	6.95%
Fe 273.955†	46552.1	1.25049	mg/L	0.011108	1.25049	mg/L	0.011108	0.89%
K 404.721†	915.7	4.55132	mg/L	0.259070	4.55132	mg/L	0.259070	5.69%
Mg 279.077†	322807.1	12.0323	mg/L	0.12047	12.0323	mg/L	0.12047	1.00%
Mn 257.610†	76868.0	0.0762946	mg/L	0.00071973	0.0762946	mg/L	0.00071973	0.94%
Mo 202.031†	81.7	0.0057090	mg/L	0.00066515	0.0057090	mg/L	0.00066515	11.65%
Na 330.237†	60464.3	41.2451	mg/L	0.34098	41.2451	mg/L	0.34098	0.83%
Ni 231.604†	652.1	0.0144056	mg/L	0.00024475	0.0144056	mg/L	0.00024475	1.70%
Pb 220.353†	426.2	0.0762640	mg/L	0.00136972	0.0762640	mg/L	0.00136972	1.80%
Sb 206.836†	306.2	0.142421	mg/L	0.0074948	0.142421	mg/L	0.0074948	5.26%
Se 196.026†	1.1	0.0033653	mg/L	0.00447116	0.0033653	mg/L	0.00447116	132.86%
Sn 189.927†	6.8	0.0005601	mg/L	0.00072182	0.0005601	mg/L	0.00072182	128.88%
Ti 334.940†	8435.5	0.0084239	mg/L	0.00083093	0.0084239	mg/L	0.00083093	9.86%
Tl 190.801†	-0.7	-0.0052541	mg/L	0.00163509	-0.0052541	mg/L	0.00163509	31.12%
V 290.880†	-1317.9	-0.0070839	mg/L	0.00026642	-0.0070839	mg/L	0.00026642	3.76%
Zn 206.200†	10612.5	0.187885	mg/L	0.0030409	0.187885	mg/L	0.0030409	1.62%
Si 251.611†	124542.2	2.50746	mg/L	0.012368	2.50746	mg/L	0.012368	0.49%
B 249.772†	18141.8	0.144132	mg/L	0.0026522	0.144132	mg/L	0.0026522	1.84%
Ce 413.764	17.2	-0.0302740	mg/L	0.00624085	-0.0302740	mg/L	0.00624085	20.61%

Sequence No.: 46
Sample ID: CCV V-329036
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/1/2020 8:53:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1281877.0	94.5	%	0.42				0.44%
Y 371.029	326079.7	82.4	%	0.32				0.39%
Ag 328.068†	23536.6	0.102500	mg/L	0.0015194	0.102500	mg/L	0.0015194	1.48%
QC value within limits for Ag 328.068 Recovery = 102.50%								
Al 308.215†	163640.2	4.99576	mg/L	0.088334	4.99576	mg/L	0.088334	1.77%
QC value within limits for Al 308.215 Recovery = 99.92%								
As 188.979†	795.8	0.493965	mg/L	0.0056475	0.493965	mg/L	0.0056475	1.14%
QC value within limits for As 188.979 Recovery = 98.79%								
Ba 233.527†	49956.6	0.495702	mg/L	0.0100395	0.495702	mg/L	0.0100395	2.03%
QC value within limits for Ba 233.527 Recovery = 99.14%								
Be 313.107†	1925675.0	0.497920	mg/L	0.0010075	0.497920	mg/L	0.0010075	0.20%
QC value within limits for Be 313.107 Recovery = 99.58%								
Ca 315.887†	6869631.0	50.8154	mg/L	0.09525	50.8154	mg/L	0.09525	0.19%
QC value within limits for Ca 315.887 Recovery = 101.63%								
Cd 228.802†	30505.7	0.488401	mg/L	0.0088329	0.488401	mg/L	0.0088329	1.81%
QC value within limits for Cd 228.802 Recovery = 97.68%								
Co 228.616†	26047.7	0.492094	mg/L	0.0093382	0.492094	mg/L	0.0093382	1.90%
QC value within limits for Co 228.616 Recovery = 98.42%								
Cr 267.716†	60045.4	0.503942	mg/L	0.0091925	0.503942	mg/L	0.0091925	1.82%
QC value within limits for Cr 267.716 Recovery = 100.79%								
Cu 327.393†	93951.3	0.510001	mg/L	0.0079908	0.510001	mg/L	0.0079908	1.57%
QC value within limits for Cu 327.393 Recovery = 102.00%								
Fe 273.955†	186046.5	5.04677	mg/L	0.096813	5.04677	mg/L	0.096813	1.92%
QC value within limits for Fe 273.955 Recovery = 100.94%								
K 404.721†	15358.1	19.1655	mg/L	0.62066	19.1655	mg/L	0.62066	3.24%
QC value less than the lower limit for K 404.721 Recovery = 38.33%								
Mg 279.077†	1313927.5	50.2176	mg/L	0.12689	50.2176	mg/L	0.12689	0.25%
QC value within limits for Mg 279.077 Recovery = 100.44%								
Mn 257.610†	502421.6	0.505173	mg/L	0.0006245	0.505173	mg/L	0.0006245	0.12%
QC value within limits for Mn 257.610 Recovery = 101.03%								
Mo 202.031†	5362.6	0.482530	mg/L	0.0050332	0.482530	mg/L	0.0050332	1.04%
QC value within limits for Mo 202.031 Recovery = 96.51%								
Na 330.237†	71426.9	49.9155	mg/L	0.62269	49.9155	mg/L	0.62269	1.25%
QC value within limits for Na 330.237 Recovery = 99.83%								
Ni 231.604†	21380.2	0.507751	mg/L	0.0099009	0.507751	mg/L	0.0099009	1.95%
QC value within limits for Ni 231.604 Recovery = 101.55%								
Pb 220.353†	3129.7	0.556329	mg/L	0.0044506	0.556329	mg/L	0.0044506	0.80%
QC value greater than the upper limit for Pb 220.353 Recovery = 111.27%								
Sb 206.836†	1063.1	0.514679	mg/L	0.0078952	0.514679	mg/L	0.0078952	1.53%
QC value within limits for Sb 206.836 Recovery = 102.94%								
Se 196.026†	510.5	0.496922	mg/L	0.0026311	0.496922	mg/L	0.0026311	0.53%
QC value within limits for Se 196.026 Recovery = 99.38%								
Sn 189.927†	1855.8	0.494357	mg/L	0.0053857	0.494357	mg/L	0.0053857	1.09%
QC value within limits for Sn 189.927 Recovery = 98.87%								
Ti 334.940†	500793.5	0.502930	mg/L	0.0005365	0.502930	mg/L	0.0005365	0.11%
QC value within limits for Ti 334.940 Recovery = 100.59%								
Tl 190.801†	823.8	0.524741	mg/L	0.0036281	0.524741	mg/L	0.0036281	0.69%
QC value within limits for Tl 190.801 Recovery = 104.95%								
V 290.880†	93941.0	0.489587	mg/L	0.0092933	0.489587	mg/L	0.0092933	1.90%
QC value within limits for V 290.880 Recovery = 97.92%								
Zn 206.200†	28415.6	0.504489	mg/L	0.0107659	0.504489	mg/L	0.0107659	2.13%
QC value within limits for Zn 206.200 Recovery = 100.90%								
Si 251.611†	246128.3	4.97124	mg/L	0.097542	4.97124	mg/L	0.097542	1.96%
QC value within limits for Si 251.611 Recovery = 99.42%								
B 249.772†	63447.6	0.487713	mg/L	0.0120930	0.487713	mg/L	0.0120930	2.48%
QC value within limits for B 249.772 Recovery = 97.54%								
Ce 413.764	68661.5	5.07873	mg/L	0.027836	5.07873	mg/L	0.027836	0.55%
QC value within limits for Ce 413.764 Recovery = 101.57%								

QC Failed. Continue with analysis.

Sequence No.: 47
Sample ID: CCB V-329027
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/1/2020 8:58:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1352047.8	99.7	%	0.39				0.39%
Y 371.029	393197.8	99.3	%	0.41				0.42%
Ag 328.068†	-190.0	0.0001461	mg/L	0.00009990	0.0001461	mg/L	0.00009990	68.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-252.3	-0.0130656	mg/L	0.00160199	-0.0130656	mg/L	0.00160199	12.26%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-6.2	-0.0026643	mg/L	0.00128983	-0.0026643	mg/L	0.00128983	48.41%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-22.5	-0.0014096	mg/L	0.00008650	-0.0014096	mg/L	0.00008650	6.14%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	1163.4	-0.0003509	mg/L	0.00004253	-0.0003509	mg/L	0.00004253	12.12%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-704.9	-0.335277	mg/L	0.0047978	-0.335277	mg/L	0.0047978	1.43%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	26.3	0.0002357	mg/L	0.00008198	0.0002357	mg/L	0.00008198	34.78%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-53.1	-0.0017919	mg/L	0.00003263	-0.0017919	mg/L	0.00003263	1.82%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3.9	-0.0021067	mg/L	0.00007396	-0.0021067	mg/L	0.00007396	3.51%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	245.4	0.0008468	mg/L	0.00027807	0.0008468	mg/L	0.00027807	32.84%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-137.3	-0.0201435	mg/L	0.00004786	-0.0201435	mg/L	0.00004786	0.24%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	43.3	1.93949	mg/L	0.171863	1.93949	mg/L	0.171863	8.86%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	272.3	-0.394110	mg/L	0.0070592	-0.394110	mg/L	0.0070592	1.79%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-168.4	-0.0013438	mg/L	0.00001219	-0.0013438	mg/L	0.00001219	0.91%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-4.7	-0.0010586	mg/L	0.00079457	-0.0010586	mg/L	0.00079457	75.06%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	16.7	0.747522	mg/L	0.0596671	0.747522	mg/L	0.0596671	7.98%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	74.3	0.0001795	mg/L	0.00031904	0.0001795	mg/L	0.00031904	177.70%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	211.4	0.0383785	mg/L	0.00170406	0.0383785	mg/L	0.00170406	4.44%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-5.7	-0.0024318	mg/L	0.00397106	-0.0024318	mg/L	0.00397106	163.30%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-9.7	-0.0084136	mg/L	0.00889953	-0.0084136	mg/L	0.00889953	105.78%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	3.2	-0.0014662	mg/L	0.00031761	-0.0014662	mg/L	0.00031761	21.66%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-106.1	-0.0001269	mg/L	0.00006555	-0.0001269	mg/L	0.00006555	51.66%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-2.2	-0.0058026	mg/L	0.00098268	-0.0058026	mg/L	0.00098268	16.94%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-953.8	-0.0050936	mg/L	0.00031568	-0.0050936	mg/L	0.00031568	6.20%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-50.2	-0.0021783	mg/L	0.00022204	-0.0021783	mg/L	0.00022204	10.19%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	-252.0	-0.0213154	mg/L	0.00044653	-0.0213154	mg/L	0.00044653	2.09%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	-1312.3	-0.0054350	mg/L	0.00116969	-0.0054350	mg/L	0.00116969	21.52%
QC value within limits for B 249.772 Recovery = Not calculated								
Ce 413.764	-348.2	-0.0574735	mg/L	0.00101763	-0.0574735	mg/L	0.00101763	1.77%
QC value within limits for Ce 413.764 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 48
Sample ID: AD18934-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 124
Date Collected: 9/1/2020 9:01:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18934-006

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1318723.6	97.2	%	0.62				0.64%
Y 371.029	381648.9	96.4	%	0.35				0.36%
Ag 328.068†	-232.7	-0.0000279	mg/L	0.00022384	-0.0000279	mg/L	0.00022384	803.61%
Al 308.215†	19.1	-0.0046783	mg/L	0.00241928	-0.0046783	mg/L	0.00241928	51.71%
As 188.979†	-6.4	-0.0027717	mg/L	0.00236413	-0.0027717	mg/L	0.00236413	85.30%
Ba 233.527†	-27.1	-0.0014553	mg/L	0.00003348	-0.0014553	mg/L	0.00003348	2.30%
Be 313.107†	864.0	-0.0004266	mg/L	0.00001657	-0.0004266	mg/L	0.00001657	3.89%
Ca 315.887†	5813.6	-0.286746	mg/L	0.0005712	-0.286746	mg/L	0.0005712	0.20%
Cd 228.802†	21.0	0.0001505	mg/L	0.00007616	0.0001505	mg/L	0.00007616	50.59%
Co 228.616†	-66.8	-0.0020527	mg/L	0.00024164	-0.0020527	mg/L	0.00024164	11.77%
Cr 267.716†	12.7	-0.0019665	mg/L	0.00007799	-0.0019665	mg/L	0.00007799	3.97%
Cu 327.393†	211.4	0.0006720	mg/L	0.00043629	0.0006720	mg/L	0.00043629	64.93%
Fe 273.955†	1713.6	0.0302269	mg/L	0.00060719	0.0302269	mg/L	0.00060719	2.01%
K 404.721†	92.5	2.12439	mg/L	0.041440	2.12439	mg/L	0.041440	1.95%
Mg 279.077†	240.7	-0.395328	mg/L	0.0018696	-0.395328	mg/L	0.0018696	0.47%
Mn 257.610†	520.5	-0.0006494	mg/L	0.00003671	-0.0006494	mg/L	0.00003671	5.65%
Mo 202.031†	-7.4	-0.0013049	mg/L	0.00025671	-0.0013049	mg/L	0.00025671	19.67%
Na 330.237†	466.7	1.04751	mg/L	0.024834	1.04751	mg/L	0.024834	2.37%
Ni 231.604†	94.3	0.0006540	mg/L	0.00018334	0.0006540	mg/L	0.00018334	28.04%
Pb 220.353†	183.5	0.0333928	mg/L	0.00135820	0.0333928	mg/L	0.00135820	4.07%
Sb 206.836†	0.4	0.0004014	mg/L	0.00189326	0.0004014	mg/L	0.00189326	471.68%
Se 196.026†	-13.2	-0.0116696	mg/L	0.00157948	-0.0116696	mg/L	0.00157948	13.53%
Sn 189.927†	0.7	-0.0021392	mg/L	0.00096842	-0.0021392	mg/L	0.00096842	45.27%
Ti 334.940†	109.5	0.0000865	mg/L	0.00006274	0.0000865	mg/L	0.00006274	72.54%
Tl 190.801†	0.7	-0.0040179	mg/L	0.00048036	-0.0040179	mg/L	0.00048036	11.96%
V 290.880†	-962.5	-0.0051426	mg/L	0.00014602	-0.0051426	mg/L	0.00014602	2.84%
Zn 206.200†	66.3	-0.0001000	mg/L	0.00018358	-0.0001000	mg/L	0.00018358	183.60%
Si 251.611†	4638.6	0.0777848	mg/L	0.00171029	0.0777848	mg/L	0.00171029	2.20%
B 249.772†	-1807.0	-0.0094730	mg/L	0.00022877	-0.0094730	mg/L	0.00022877	2.42%
Ce 413.764	-409.5	-0.0620367	mg/L	0.00305735	-0.0620367	mg/L	0.00305735	4.93%

Sequence No.: 49
Sample ID: AD48934-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 125
Date Collected: 9/1/2020 9:05:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD48934-008

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1317552.1	97.1	%	0.93				0.96%
Y 371.029	381653.2	96.4	%	0.88				0.92%
Ag 328.068†	-238.3	-0.0000350	mg/L	0.00004131	-0.0000350	mg/L	0.00004131	118.11%
Al 308.215†	-8.7	-0.0055089	mg/L	0.00385000	-0.0055089	mg/L	0.00385000	69.89%
As 188.979†	-4.9	-0.0018619	mg/L	0.00087485	-0.0018619	mg/L	0.00087485	46.99%
Ba 233.527†	36.3	-0.0008251	mg/L	0.00003344	-0.0008251	mg/L	0.00003344	4.05%
Be 313.107†	799.8	-0.0004435	mg/L	0.00003903	-0.0004435	mg/L	0.00003903	8.80%
Ca 315.887†	6374.7	-0.282569	mg/L	0.0006367	-0.282569	mg/L	0.0006367	0.23%
Cd 228.802†	29.2	0.0002814	mg/L	0.00006727	0.0002814	mg/L	0.00006727	23.90%
Co 228.616†	-57.6	-0.0018792	mg/L	0.00006558	-0.0018792	mg/L	0.00006558	3.49%
Cr 267.716†	544.2	0.0025208	mg/L	0.00004588	0.0025208	mg/L	0.00004588	1.82%
Cu 327.393†	240.3	0.0008457	mg/L	0.00010652	0.0008457	mg/L	0.00010652	12.60%
Fe 273.955†	7678.1	0.192551	mg/L	0.0002026	0.192551	mg/L	0.0002026	0.11%
K 404.721†	128.5	2.23569	mg/L	0.385469	2.23569	mg/L	0.385469	17.24%
Mg 279.077†	236.7	-0.395479	mg/L	0.0012602	-0.395479	mg/L	0.0012602	0.32%
Mn 257.610†	722.3	-0.0004461	mg/L	0.00002183	-0.0004461	mg/L	0.00002183	4.89%
Mo 202.031†	-8.5	-0.0013944	mg/L	0.00007194	-0.0013944	mg/L	0.00007194	5.16%
Na 330.237†	435.1	1.02657	mg/L	0.057335	1.02657	mg/L	0.057335	5.59%
Ni 231.604†	111.8	0.0010683	mg/L	0.00015772	0.0010683	mg/L	0.00015772	14.76%
Pb 220.353†	192.1	0.0349144	mg/L	0.00277245	0.0349144	mg/L	0.00277245	7.94%
Sb 206.836†	1.2	0.0007557	mg/L	0.00046413	0.0007557	mg/L	0.00046413	61.41%
Se 196.026†	-6.2	-0.0049567	mg/L	0.00550410	-0.0049567	mg/L	0.00550410	111.04%
Sn 189.927†	0.7	-0.0021408	mg/L	0.00044379	-0.0021408	mg/L	0.00044379	20.73%
Ti 334.940†	115.1	0.0000924	mg/L	0.00018310	0.0000924	mg/L	0.00018310	198.26%
Tl 190.801†	-3.3	-0.0064542	mg/L	0.00344122	-0.0064542	mg/L	0.00344122	53.32%
V 290.880†	-908.4	-0.0048720	mg/L	0.00010644	-0.0048720	mg/L	0.00010644	2.18%
Zn 206.200†	52.2	-0.0003517	mg/L	0.00007781	-0.0003517	mg/L	0.00007781	22.12%
Si 251.611†	4781.2	0.0806753	mg/L	0.00149062	0.0806753	mg/L	0.00149062	1.85%
B 249.772†	-1901.0	-0.0107512	mg/L	0.00005809	-0.0107512	mg/L	0.00005809	0.54%
Ce 413.764	-402.1	-0.0614794	mg/L	0.00490563	-0.0614794	mg/L	0.00490563	7.98%

Sequence No.: 50
Sample ID: AD18954-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 126
Date Collected: 9/1/2020 9:09:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18954-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1246681.4	91.9	%	0.47				0.51%
Y 371.029	357390.6	90.3	%	0.56				0.62%
Ag 328.068†	25.3	0.0019463	mg/L	0.00011545	0.0019463	mg/L	0.00011545	5.93%
Al 308.215†	153779.1	4.71502	mg/L	0.103689	4.71502	mg/L	0.103689	2.20%
As 188.979†	2727.4	1.69203	mg/L	0.013167	1.69203	mg/L	0.013167	0.78%
Ba 233.527†	12649.2	0.124628	mg/L	0.0009800	0.124628	mg/L	0.0009800	0.79%
Be 313.107†	914.8	-0.0004110	mg/L	0.00000833	-0.0004110	mg/L	0.00000833	2.03%
Ca 315.887†	24886332.1	184.952	mg/L	0.8853	184.952	mg/L	0.8853	0.48%
Cd 228.802†	3825.9	0.0610912	mg/L	0.00037906	0.0610912	mg/L	0.00037906	0.62%
Co 228.616†	3601.2	0.0671335	mg/L	0.00052482	0.0671335	mg/L	0.00052482	0.78%
Cr 267.716†	1431.7	0.0089345	mg/L	0.00015689	0.0089345	mg/L	0.00015689	1.76%
Cu 327.393†	10718.8	0.0665815	mg/L	0.00089143	0.0665815	mg/L	0.00089143	1.34%
Fe 273.955†	364182.7	9.89468	mg/L	0.006861	9.89468	mg/L	0.006861	0.07%
K 404.721†	5708.8	20.0418	mg/L	0.20950	20.0418	mg/L	0.20950	1.05%
Mg 279.077†	1504518.1	57.5605	mg/L	0.19798	57.5605	mg/L	0.19798	0.34%
Mn 257.610†	802941.3	0.808041	mg/L	0.0029276	0.808041	mg/L	0.0029276	0.36%
Mo 202.031†	358.9	0.0270345	mg/L	0.00035505	0.0270345	mg/L	0.00035505	1.31%
Na 330.237†	300433.3	201.379	mg/L	0.3497	201.379	mg/L	0.3497	0.17%
Ni 231.604†	8295.1	0.197627	mg/L	0.0015513	0.197627	mg/L	0.0015513	0.78%
Pb 220.353†	924.8	0.163274	mg/L	0.0001947	0.163274	mg/L	0.0001947	0.12%
Sb 206.836†	1738.9	0.806727	mg/L	0.0067937	0.806727	mg/L	0.0067937	0.84%
Se 196.026†	155.7	0.157542	mg/L	0.0056716	0.157542	mg/L	0.0056716	3.60%
Sn 189.927†	7.9	0.0050067	mg/L	0.00217100	0.0050067	mg/L	0.00217100	43.36%
Ti 334.940†	134528.2	0.134453	mg/L	0.0142766	0.134453	mg/L	0.0142766	10.62%
Tl 190.801†	-7.0	-0.0109617	mg/L	0.00255060	-0.0109617	mg/L	0.00255060	23.27%
V 290.880†	-137.6	-0.0015451	mg/L	0.00005373	-0.0015451	mg/L	0.00005373	3.48%
Zn 206.200†	183255.8	3.26528	mg/L	0.017656	3.26528	mg/L	0.017656	0.54%
Si 251.611†	978260.2	19.8069	mg/L	0.19424	19.8069	mg/L	0.19424	0.98%
B 249.772†	116762.6	0.892855	mg/L	0.0090244	0.892855	mg/L	0.0090244	1.01%
Ce 413.764	-473.9	-0.0668270	mg/L	0.00766209	-0.0668270	mg/L	0.00766209	11.47%

Sequence No.: 51
Sample ID: AD18954-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 127
Date Collected: 9/1/2020 9:13:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18954-003

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1235946.0	91.1	%	0.95				1.04%
Y 371.029	352468.8	89.0	%	1.02				1.15%
Ag 328.068†	837.7	0.0055613	mg/L	0.00032019	0.0055613	mg/L	0.00032019	5.76%
Al 308.215†	163824.6	5.02281	mg/L	0.078004	5.02281	mg/L	0.078004	1.55%
As 188.979†	8234.5	5.10727	mg/L	0.065104	5.10727	mg/L	0.065104	1.27%
Ba 233.527†	11359.9	0.111804	mg/L	0.0012637	0.111804	mg/L	0.0012637	1.13%
Be 313.107†	1315.5	-0.0003154	mg/L	0.00002466	-0.0003154	mg/L	0.00002466	7.82%
Ca 315.887†	26004104.1	193.274	mg/L	2.7767	193.274	mg/L	2.7767	1.44%
Cd 228.802†	8661.7	0.138542	mg/L	0.0017620	0.138542	mg/L	0.0017620	1.27%
Co 228.616†	972.8	0.0172149	mg/L	0.00037002	0.0172149	mg/L	0.00037002	2.15%
Cr 267.716†	1654.3	0.0102536	mg/L	0.00024683	0.0102536	mg/L	0.00024683	2.41%
Cu 327.393†	61662.5	0.341563	mg/L	0.0067939	0.341563	mg/L	0.0067939	1.99%
Fe 273.955†	476057.1	12.9393	mg/L	0.00739	12.9393	mg/L	0.00739	0.06%
K 404.721†	9919.1	33.3428	mg/L	0.48676	33.3428	mg/L	0.48676	1.46%
Mg 279.077†	2285533.1	87.6509	mg/L	0.08162	87.6509	mg/L	0.08162	0.09%
Mn 257.610†	408908.3	0.410929	mg/L	0.0005795	0.410929	mg/L	0.0005795	0.14%
Mo 202.031†	566.5	0.0457154	mg/L	0.00009542	0.0457154	mg/L	0.00009542	0.21%
Na 330.237†	593944.8	398.745	mg/L	1.8397	398.745	mg/L	1.8397	0.46%
Ni 231.604†	1286.3	0.0326044	mg/L	0.00067699	0.0326044	mg/L	0.00067699	2.08%
Pb 220.353†	5779.8	1.03053	mg/L	0.013127	1.03053	mg/L	0.013127	1.27%
Sb 206.836†	327.6	0.152651	mg/L	0.0089703	0.152651	mg/L	0.0089703	5.88%
Se 196.026†	41.2	0.0522993	mg/L	0.00493924	0.0522993	mg/L	0.00493924	9.44%
Sn 189.927†	324.1	0.0895817	mg/L	0.00100005	0.0895817	mg/L	0.00100005	1.12%
Ti 334.940†	151409.2	0.151335	mg/L	0.0033281	0.151335	mg/L	0.0033281	2.20%
Tl 190.801†	0.9	-0.0072777	mg/L	0.00111516	-0.0072777	mg/L	0.00111516	15.32%
V 290.880†	62.8	-0.0007175	mg/L	0.00055002	-0.0007175	mg/L	0.00055002	76.65%
Zn 206.200†	70092.5	1.24794	mg/L	0.025772	1.24794	mg/L	0.025772	2.07%
Si 251.611†	1077873.3	21.8254	mg/L	0.20481	21.8254	mg/L	0.20481	0.94%
B 249.772†	90718.1	0.680179	mg/L	0.0175896	0.680179	mg/L	0.0175896	2.59%
Ce 413.764	-235.3	-0.0490668	mg/L	0.00278905	-0.0490668	mg/L	0.00278905	5.68%

Sequence No.: 52
Sample ID: AD18954-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 128
Date Collected: 9/1/2020 9:18:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18954-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1109429.3	81.8	%	0.57				0.70%
Y 371.029	317841.1	80.3	%	0.51				0.63%
Ag 328.068†	-30.6	0.0034517	mg/L	0.00019104	0.0034517	mg/L	0.00019104	5.53%
Al 308.215†	220433.7	6.76217	mg/L	0.154600	6.76217	mg/L	0.154600	2.29%
As 188.979†	3164.3	1.96106	mg/L	0.013569	1.96106	mg/L	0.013569	0.69%
Ba 233.527†	7932.0	0.0777088	mg/L	0.00033735	0.0777088	mg/L	0.00033735	0.43%
Be 313.107†	1046.2	-0.0003664	mg/L	0.00003258	-0.0003664	mg/L	0.00003258	8.89%
Ca 315.887†	21513981.4	159.845	mg/L	2.5652	159.845	mg/L	2.5652	1.60%
Cd 228.802†	3513.3	0.0560843	mg/L	0.00041106	0.0560843	mg/L	0.00041106	0.73%
Co 228.616†	759.5	0.0130529	mg/L	0.00007487	0.0130529	mg/L	0.00007487	0.57%
Cr 267.716†	2226.7	0.0128076	mg/L	0.00043672	0.0128076	mg/L	0.00043672	3.41%
Cu 327.393†	20004.1	0.117875	mg/L	0.0015779	0.117875	mg/L	0.0015779	1.34%
Fe 273.955†	1049712.7	28.5511	mg/L	0.10511	28.5511	mg/L	0.10511	0.37%
K 404.721†	13176.0	43.9563	mg/L	0.20350	43.9563	mg/L	0.20350	0.46%
Mg 279.077†	5461640.4	210.018	mg/L	0.6689	210.018	mg/L	0.6689	0.32%
Mn 257.610†	1624226.7	1.63574	mg/L	0.006424	1.63574	mg/L	0.006424	0.39%
Mo 202.031†	147.1	0.0094756	mg/L	0.00044378	0.0094756	mg/L	0.00044378	4.68%
Na 330.237†	3714262.9	2491.57	mg/L	14.206	2491.57	mg/L	14.206	0.57%
Ni 231.604†	796.4	0.0260868	mg/L	0.00055797	0.0260868	mg/L	0.00055797	2.14%
Pb 220.353†	2929.2	0.498961	mg/L	0.0027849	0.498961	mg/L	0.0027849	0.56%
Sb 206.836†	308.2	0.141775	mg/L	0.0023391	0.141775	mg/L	0.0023391	1.65%
Se 196.026†	7.8	0.0361658	mg/L	0.00427997	0.0361658	mg/L	0.00427997	11.83%
Sn 189.927†	29.2	0.0101312	mg/L	0.00046069	0.0101312	mg/L	0.00046069	4.55%
Ti 334.940†	200496.7	0.200387	mg/L	0.0085671	0.200387	mg/L	0.0085671	4.28%
Tl 190.801†	-5.8	-0.0167725	mg/L	0.00075947	-0.0167725	mg/L	0.00075947	4.53%
V 290.880†	423.3	0.0000457	mg/L	0.00083977	0.0000457	mg/L	0.00083977	>999.9%
Zn 206.200†	26263.2	0.466710	mg/L	0.0081997	0.466710	mg/L	0.0081997	1.76%
Si 251.611†	929798.6	18.8249	mg/L	0.28191	18.8249	mg/L	0.28191	1.50%
B 249.772†	159639.3	1.17049	mg/L	0.018129	1.17049	mg/L	0.018129	1.55%
Ce 413.764	-760.3	-0.0881404	mg/L	0.00574374	-0.0881404	mg/L	0.00574374	6.52%

Sequence No.: 53
Sample ID: AD18954-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 129
Date Collected: 9/1/2020 9:24:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18954-005

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	986235.0	72.7	%	0.94				1.30%
Y 371.029	278400.8	70.3	%	0.99				1.40%
Ag 328.068†	-221.7	0.0035092	mg/L	0.00011788	0.0035092	mg/L	0.00011788	3.36%
Al 308.215†	74288.4	2.27374	mg/L	0.048456	2.27374	mg/L	0.048456	2.13%
As 188.979†	128.5	0.0762144	mg/L	0.00157069	0.0762144	mg/L	0.00157069	2.06%
Ba 233.527†	18178.4	0.179624	mg/L	0.0022319	0.179624	mg/L	0.0022319	1.24%
Be 313.107†	-1004.7	-0.0008797	mg/L	0.00003929	-0.0008797	mg/L	0.00003929	4.47%
Ca 315.887†	60164886.3	447.607	mg/L	2.9266	447.607	mg/L	2.9266	0.65%
Cd 228.802†	52.7	0.0006578	mg/L	0.00008008	0.0006578	mg/L	0.00008008	12.17%
Co 228.616†	44.4	-0.0002373	mg/L	0.00044438	-0.0002373	mg/L	0.00044438	187.23%
Cr 267.716†	1691.1	0.0056166	mg/L	0.00041406	0.0056166	mg/L	0.00041406	7.37%
Cu 327.393†	6702.9	0.0587681	mg/L	0.00037717	0.0587681	mg/L	0.00037717	0.64%
Fe 273.955†	1392801.7	37.8881	mg/L	0.10047	37.8881	mg/L	0.10047	0.27%
K 404.721†	40950.2	132.675	mg/L	1.9528	132.675	mg/L	1.9528	1.47%
Mg 279.077†	9181539.0	353.336	mg/L	0.8438	353.336	mg/L	0.8438	0.24%
Mn 257.610†	5148431.2	5.18749	mg/L	0.013932	5.18749	mg/L	0.013932	0.27%
Mo 202.031†	425.0	0.0272787	mg/L	0.00023258	0.0272787	mg/L	0.00023258	0.85%
Na 330.237†	8925527.0	5986.57	mg/L	21.855	5986.57	mg/L	21.855	0.37%
Ni 231.604†	149.7	0.0167235	mg/L	0.00018471	0.0167235	mg/L	0.00018471	1.10%
Pb 220.353†	1342.3	0.180741	mg/L	0.0017398	0.180741	mg/L	0.0017398	0.96%
Sb 206.836†	61.8	0.0280540	mg/L	0.00170120	0.0280540	mg/L	0.00170120	6.06%
Se 196.026†	-14.7	0.0283896	mg/L	0.00133849	0.0283896	mg/L	0.00133849	4.71%
Sn 189.927†	-0.9	0.0096623	mg/L	0.00234467	0.0096623	mg/L	0.00234467	24.27%
Ti 334.940†	76647.8	0.0765651	mg/L	0.00714500	0.0765651	mg/L	0.00714500	9.33%
Tl 190.801†	-20.6	-0.0325334	mg/L	0.00674292	-0.0325334	mg/L	0.00674292	20.73%
V 290.880†	-3383.6	-0.0204819	mg/L	0.00030186	-0.0204819	mg/L	0.00030186	1.47%
Zn 206.200†	4411.9	0.0773097	mg/L	0.00081130	0.0773097	mg/L	0.00081130	1.05%
Si 251.611†	305176.1	6.16776	mg/L	0.105425	6.16776	mg/L	0.105425	1.71%
B 249.772†	48425.5	0.282368	mg/L	0.0048146	0.282368	mg/L	0.0048146	1.71%
Ce 413.764	-1321.1	-0.129879	mg/L	0.0036449	-0.129879	mg/L	0.0036449	2.81%

Sequence No.: 54
Sample ID: AD18954-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 130
Date Collected: 9/1/2020 9:29:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18954-006

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1084913.3	80.0	%	0.65				0.82%
Y 371.029	306648.8	77.5	%	0.78				1.01%
Ag 328.068†	-317.2	0.0015102	mg/L	0.00032094	0.0015102	mg/L	0.00032094	21.25%
Al 308.215†	74103.5	2.26688	mg/L	0.067614	2.26688	mg/L	0.067614	2.98%
As 188.979†	66.4	0.0400978	mg/L	0.00196434	0.0400978	mg/L	0.00196434	4.90%
Ba 233.527†	14066.1	0.138720	mg/L	0.0036906	0.138720	mg/L	0.0036906	2.66%
Be 313.107†	-62.4	-0.0006564	mg/L	0.00003608	-0.0006564	mg/L	0.00003608	5.50%
Ca 315.887†	19927588.4	148.034	mg/L	1.0005	148.034	mg/L	1.0005	0.68%
Cd 228.802†	19.5	0.0001257	mg/L	0.00013832	0.0001257	mg/L	0.00013832	110.01%
Co 228.616†	6.1	-0.0009529	mg/L	0.00042316	-0.0009529	mg/L	0.00042316	44.41%
Cr 267.716†	1841.1	0.0102090	mg/L	0.00032090	0.0102090	mg/L	0.00032090	3.14%
Cu 327.393†	2062.3	0.0193930	mg/L	0.00029752	0.0193930	mg/L	0.00029752	1.53%
Fe 273.955†	746297.9	20.2938	mg/L	0.01332	20.2938	mg/L	0.01332	0.07%
K 404.721†	38421.3	124.345	mg/L	1.9235	124.345	mg/L	1.9235	1.55%
Mg 279.077†	4546725.2	174.769	mg/L	0.1233	174.769	mg/L	0.1233	0.07%
Mn 257.610†	2750128.8	2.77044	mg/L	0.001634	2.77044	mg/L	0.001634	0.06%
Mo 202.031†	815.3	0.0699540	mg/L	0.00205108	0.0699540	mg/L	0.00205108	2.93%
Na 330.237†	3096098.7	2077.11	mg/L	4.673	2077.11	mg/L	4.673	0.22%
Ni 231.604†	239.8	0.0114121	mg/L	0.00015822	0.0114121	mg/L	0.00015822	1.39%
Pb 220.353†	844.7	0.130000	mg/L	0.0037963	0.130000	mg/L	0.0037963	2.92%
Sb 206.836†	35.5	0.0169417	mg/L	0.00340133	0.0169417	mg/L	0.00340133	20.08%
Se 196.026†	-20.9	0.0023079	mg/L	0.00941121	0.0023079	mg/L	0.00941121	407.78%
Sn 189.927†	6.3	0.0034460	mg/L	0.00218802	0.0034460	mg/L	0.00218802	63.49%
Ti 334.940†	81065.6	0.0810017	mg/L	0.00335083	0.0810017	mg/L	0.00335083	4.14%
Tl 190.801†	-5.1	-0.0150704	mg/L	0.00299585	-0.0150704	mg/L	0.00299585	19.88%
V 290.880†	-2940.8	-0.0169128	mg/L	0.00062682	-0.0169128	mg/L	0.00062682	3.71%
Zn 206.200†	2278.4	0.0392758	mg/L	0.00127473	0.0392758	mg/L	0.00127473	3.25%
Si 251.611†	257152.9	5.19464	mg/L	0.176385	5.19464	mg/L	0.176385	3.40%
B 249.772†	46605.4	0.312006	mg/L	0.0082626	0.312006	mg/L	0.0082626	2.65%
Ce 413.764	-719.2	-0.0850860	mg/L	0.00516583	-0.0850860	mg/L	0.00516583	6.07%

Sequence No.: 55
Sample ID: CCV V-329036
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/1/2020 9:34:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1253482.9	92.4	%	0.31				0.33%
Y 371.029	321072.5	81.1	%	0.27				0.33%
Ag 328.068†	22694.7	0.0987315	mg/L	0.00049038	0.0987315	mg/L	0.00049038	0.50%
QC value within limits for Ag 328.068 Recovery = 98.73%								
Al 308.215†	158009.3	4.82476	mg/L	0.014862	4.82476	mg/L	0.014862	0.31%
QC value within limits for Al 308.215 Recovery = 96.50%								
As 188.979†	763.5	0.473959	mg/L	0.0064513	0.473959	mg/L	0.0064513	1.36%
QC value within limits for As 188.979 Recovery = 94.79%								
Ba 233.527†	47824.3	0.474493	mg/L	0.0025367	0.474493	mg/L	0.0025367	0.53%
QC value within limits for Ba 233.527 Recovery = 94.90%								
Be 313.107†	1857580.8	0.480355	mg/L	0.0006656	0.480355	mg/L	0.0006656	0.14%
QC value within limits for Be 313.107 Recovery = 96.07%								
Ca 315.887†	6637294.0	49.0856	mg/L	0.08011	49.0856	mg/L	0.08011	0.16%
QC value within limits for Ca 315.887 Recovery = 98.17%								
Cd 228.802†	29036.7	0.464874	mg/L	0.0031392	0.464874	mg/L	0.0031392	0.68%
QC value within limits for Cd 228.802 Recovery = 92.97%								
Co 228.616†	24711.8	0.466793	mg/L	0.0038157	0.466793	mg/L	0.0038157	0.82%
QC value within limits for Co 228.616 Recovery = 93.36%								
Cr 267.716†	57728.8	0.484419	mg/L	0.0028267	0.484419	mg/L	0.0028267	0.58%
QC value within limits for Cr 267.716 Recovery = 96.88%								
Cu 327.393†	91033.1	0.494125	mg/L	0.0021945	0.494125	mg/L	0.0021945	0.44%
QC value within limits for Cu 327.393 Recovery = 98.82%								
Fe 273.955†	177990.1	4.82752	mg/L	0.032044	4.82752	mg/L	0.032044	0.66%
QC value within limits for Fe 273.955 Recovery = 96.55%								
K 404.721†	14857.1	19.4991	mg/L	0.25057	19.4991	mg/L	0.25057	1.29%
QC value less than the lower limit for K 404.721 Recovery = 39.00%								
Mg 279.077†	1263223.9	48.2641	mg/L	0.07002	48.2641	mg/L	0.07002	0.15%
QC value within limits for Mg 279.077 Recovery = 96.53%								
Mn 257.610†	485737.4	0.488359	mg/L	0.0006409	0.488359	mg/L	0.0006409	0.13%
QC value within limits for Mn 257.610 Recovery = 97.67%								
Mo 202.031†	5114.9	0.460191	mg/L	0.0035378	0.460191	mg/L	0.0035378	0.77%
QC value within limits for Mo 202.031 Recovery = 92.04%								
Na 330.237†	69557.3	48.5828	mg/L	0.06676	48.5828	mg/L	0.06676	0.14%
QC value within limits for Na 330.237 Recovery = 97.17%								
Ni 231.604†	20506.9	0.486951	mg/L	0.0040176	0.486951	mg/L	0.0040176	0.83%
QC value within limits for Ni 231.604 Recovery = 97.39%								
Pb 220.353†	3241.3	0.576564	mg/L	0.0042934	0.576564	mg/L	0.0042934	0.74%
QC value greater than the upper limit for Pb 220.353 Recovery = 115.31%								
Sb 206.836†	1012.2	0.489915	mg/L	0.0062341	0.489915	mg/L	0.0062341	1.27%
QC value within limits for Sb 206.836 Recovery = 97.98%								
Se 196.026†	473.7	0.461374	mg/L	0.0126604	0.461374	mg/L	0.0126604	2.74%
QC value within limits for Se 196.026 Recovery = 92.27%								
Sn 189.927†	1767.9	0.470876	mg/L	0.0044910	0.470876	mg/L	0.0044910	0.95%
QC value within limits for Sn 189.927 Recovery = 94.18%								
Ti 334.940†	483559.8	0.485560	mg/L	0.0011631	0.485560	mg/L	0.0011631	0.24%
QC value within limits for Ti 334.940 Recovery = 97.11%								
Tl 190.801†	789.1	0.501923	mg/L	0.0020345	0.501923	mg/L	0.0020345	0.41%
QC value within limits for Tl 190.801 Recovery = 100.38%								
V 290.880†	89441.8	0.466132	mg/L	0.0028894	0.466132	mg/L	0.0028894	0.62%
QC value within limits for V 290.880 Recovery = 93.23%								
Zn 206.200†	26844.5	0.476517	mg/L	0.0041075	0.476517	mg/L	0.0041075	0.86%
QC value within limits for Zn 206.200 Recovery = 95.30%								
Si 251.611†	235890.1	4.76378	mg/L	0.022522	4.76378	mg/L	0.022522	0.47%
QC value within limits for Si 251.611 Recovery = 95.28%								
B 249.772†	59956.0	0.461004	mg/L	0.0055334	0.461004	mg/L	0.0055334	1.20%
QC value within limits for B 249.772 Recovery = 92.20%								
Ce 413.764	64441.8	4.76467	mg/L	0.009478	4.76467	mg/L	0.009478	0.20%
QC value within limits for Ce 413.764 Recovery = 95.29%								

QC Failed. Continue with analysis.

Sequence No.: 56
Sample ID: CCB V-329027
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 9/1/2020 9:38:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1313145.2	96.8	%	0.61				0.63%
Y 371.029	383447.5	96.9	%	0.44				0.45%
Ag 328.068†	-201.5	0.0000943	mg/L	0.00009012	0.0000943	mg/L	0.00009012	95.59%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	27.6	-0.0044797	mg/L	0.00140898	-0.0044797	mg/L	0.00140898	31.45%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-6.2	-0.0026725	mg/L	0.00152835	-0.0026725	mg/L	0.00152835	57.19%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-36.8	-0.0015522	mg/L	0.00005816	-0.0015522	mg/L	0.00005816	3.75%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	1140.7	-0.0003542	mg/L	0.00004740	-0.0003542	mg/L	0.00004740	13.38%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	1087.5	-0.321932	mg/L	0.0045038	-0.321932	mg/L	0.0045038	1.40%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	24.8	0.0002109	mg/L	0.00022642	0.0002109	mg/L	0.00022642	107.34%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-50.4	-0.0017420	mg/L	0.00013021	-0.0017420	mg/L	0.00013021	7.47%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-4.9	-0.0021148	mg/L	0.00006216	-0.0021148	mg/L	0.00006216	2.94%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	218.6	0.0007038	mg/L	0.00012808	0.0007038	mg/L	0.00012808	18.20%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	83.1	-0.0141446	mg/L	0.00032408	-0.0141446	mg/L	0.00032408	2.29%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	130.6	2.24931	mg/L	0.081778	2.24931	mg/L	0.081778	3.64%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	247.5	-0.395064	mg/L	0.0058859	-0.395064	mg/L	0.0058859	1.49%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	119.9	-0.0010532	mg/L	0.00001650	-0.0010532	mg/L	0.00001650	1.57%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-11.5	-0.0016776	mg/L	0.00065925	-0.0016776	mg/L	0.00065925	39.30%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	79.9	0.788378	mg/L	0.0467682	0.788378	mg/L	0.0467682	5.93%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	121.0	0.0012860	mg/L	0.00017605	0.0012860	mg/L	0.00017605	13.69%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	302.1	0.0546313	mg/L	0.00158446	0.0546313	mg/L	0.00158446	2.90%
QC value greater than the upper limit for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.7	0.0010069	mg/L	0.00097303	0.0010069	mg/L	0.00097303	96.64%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-6.2	-0.0050228	mg/L	0.00386396	-0.0050228	mg/L	0.00386396	76.93%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	3.2	-0.0014777	mg/L	0.00107269	-0.0014777	mg/L	0.00107269	72.59%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-34.5	-0.0000577	mg/L	0.00004027	-0.0000577	mg/L	0.00004027	69.82%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.9	-0.0056429	mg/L	0.00142204	-0.0056429	mg/L	0.00142204	25.20%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-1112.9	-0.0059239	mg/L	0.00032167	-0.0059239	mg/L	0.00032167	5.43%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-19.1	-0.0016229	mg/L	0.00020835	-0.0016229	mg/L	0.00020835	12.84%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	-209.9	-0.0204628	mg/L	0.00028764	-0.0204628	mg/L	0.00028764	1.41%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	-1364.3	-0.0058616	mg/L	0.00065792	-0.0058616	mg/L	0.00065792	11.22%
QC value within limits for B 249.772 Recovery = Not calculated								
Ce 413.764	-417.7	-0.0626427	mg/L	0.00708487	-0.0626427	mg/L	0.00708487	11.31%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-329062

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Antimony Intermediate 1PPM | BatchNumber: | ApproveDate: 06/12/20
Prep Date: 6/5/2020 | Concentration: 1000 ppb | Checked: Yes
Expiration Date: 2/25/2021 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13251	nitric acid	2.5 ml	neat neat	
13296	ANTIMONY 1000 PPM	.1 ml	1000 ug/ml	

Veritech Lot Number: V-331024

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: 1:1 HCl WARNING | BatchNumber: | ApproveDate: 07/16/20
Prep Date: 7/7/2020 | Concentration: Reagent reag | Checked: Yes
Expiration Date: 1/7/2021 | Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13275	hydrochloric acid	500 ml	neat neat	

Veritech Lot Number: V-333325

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: 6020 CALIBRATION STOCK | BatchNumber: | ApproveDate: 08/24/20
Prep Date: 8/16/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 11/15/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13331	Nitric acid	2 ml	neat neat	
13304	ALUMINUM 10000 PPM	.725 ml	10000 ug/ml	72.5
13305	CALCIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13308	IRON 10000 PPM	2.5 ml	10000 ug/ml	250
13306	MAGNESIUM 10000PPM	2.5 ml	10000 ug/ml	250
13309	POTASSIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13307	SODIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13297	SELENIUM 1000 PPM	1 ml	1000 ug/ml	10
13323	CAL STD	12.5 ml	20 ug/ml	2.5

Veritech Lot Number: V-334044

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Blk WARNING | BatchNumber: B-29611 | ApproveDate: 09/02/20
Prep Date: 9/1/2020 | Concentration: 0 ppb | Checked: Yes
Expiration Date: 9/8/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-334045

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-1 WARNING | BatchNumber: B-29611 | ApproveDate: 09/02/20
Prep Date: 9/1/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/8/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.02 ml	VARIOUS pp	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334046

Prepared By: Cousineau, Paul
Description: Cal Std-2 WARNING
Prep Date: 9/1/2020
Expiration Date: 9/8/2020
Department: Metals
BatchNumber: B-29611
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.2 ml	VARIOUS pp	

Veritech Lot Number: V-334047

Prepared By: Cousineau, Paul
Description: Cal Std-3 WARNING
Prep Date: 9/1/2020
Expiration Date: 9/8/2020
Department: Metals
BatchNumber: B-29611
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.4 ml	VARIOUS pp	

Veritech Lot Number: V-334048

Prepared By: Cousineau, Paul
Description: Cal Std-4 WARNING
Prep Date: 9/1/2020
Expiration Date: 9/8/2020
Department: Metals
BatchNumber: B-29611
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-334049

Prepared By: Cousineau, Paul
Description: Cal Std-5 WARNING
Prep Date: 9/1/2020
Expiration Date: 9/8/2020
Department: Metals
BatchNumber: B-29611
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	4 ml	VARIOUS pp	

Veritech Lot Number: V-334050

Prepared By: Cousineau, Paul
Description: ICV WARNING
Prep Date: 9/1/2020
Expiration Date: 9/8/2020
Department: Metals
BatchNumber: B-29611
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
13315	6020 ICV	.1 ml	MULTI ug/ml	
13314	6020 ICV (Ag only)	.1 ml	10 ug/ml	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334051

Prepared By: Cousineau, Paul
Description: ICB/CCB WARNING
Prep Date: 9/1/2020
Expiration Date: 9/8/2020
Department: Metals
BatchNumber: B-29611
Concentration: 0 ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-334052

Prepared By: Cousineau, Paul
Description: ICSA WARNING
Prep Date: 9/1/2020
Expiration Date: 9/8/2020
Department: Metals
BatchNumber: B-29611
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	
12856	Interferents A	2.5 ml	NEAT mg/l	

Veritech Lot Number: V-334053

Prepared By: Cousineau, Paul
Description: LRS WARNING
Prep Date: 9/1/2020
Expiration Date: 9/8/2020
Department: Metals
BatchNumber: B-29611
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	2.5 %
V-333325	6020 CALIBRATION STOCK	10 ml	VARIOUS pp	

Veritech Lot Number: V-334054

Prepared By: Cousineau, Paul
Description: CCV WARNING
Prep Date: 9/1/2020
Expiration Date: 9/8/2020
Department: Metals
BatchNumber: B-29611
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-334056

Prepared By: Cousineau, Paul
Description: LL-ICV/CCV AQ. WARNING
Prep Date: 9/1/2020
Expiration Date: 9/8/2020
Department: Metals
BatchNumber:
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
13360	LL 6020 AQUEOUS	.5 ml	MULTI ug/ml	
V-329062	Antimony Intermediate 1PPM	.05 ml	1000 ppb	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12856

Description
Interferents A

ApprovedBy: carmela
ApproveDate: 12/09/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-A1	CL51-020CRY	10/31/19	10/30/20	Cousineau, Paul	1		NEAT	mg/l

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13251

Description
nitric acid

ApprovedBy: jean
ApproveDate: 05/27/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	245675	05/19/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13275

Description
hydrochloric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	251602	06/02/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13296

Description
ANTIMONY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSB7-2Y	24-153SBY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13297

Description
SELENIUM 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSE2-2Y	25-14SEY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13304

Description
ALUMINUM 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLAL2-3X	AP18-72ALX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13305

Description
CALCIUM 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLCA2-3X	AZ18-49CAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13306

Description
MAGNESIUM 10000PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLMG2-3X	AP18-57MGX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13307

Description
SODIUM 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLNA2-3X	AT18-84NAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13308

Description
IRON 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLFE2-3X	AR18-89FEX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13309

Description
POTASSIUM 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLK2-3X	AX18-77KX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13314

Description
6020 ICV (Ag only)

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-113	S200519030	06/04/20	05/31/21	Cousineau, Paul	1	125 M	10	UG/ML

Veritech Control/Receipt Number: 13315

Description
6020 ICV

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-112	S200519029	06/04/20	05/31/21	Cousineau, Paul	1	125 M	MULTI	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13323

Description
CAL STD

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-CAL-1	CL51-013CRY	06/15/20	06/30/21	Cousineau, Paul	1	125M	20	UG/ML

Veritech Control/Receipt Number: 13331

Description
Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13360

Description
LL 6020 AQUEOUS

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	ZHCV-14-100	2-008MF	06/29/20	06/30/21	Cousineau, Paul	1	125 M	MULTI	UG/ML

Veritech Control/Receipt Number: 13391

Description
nitric acid

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	07/14/20	02/03/25	Lopez, Jose	4	2.5	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13421

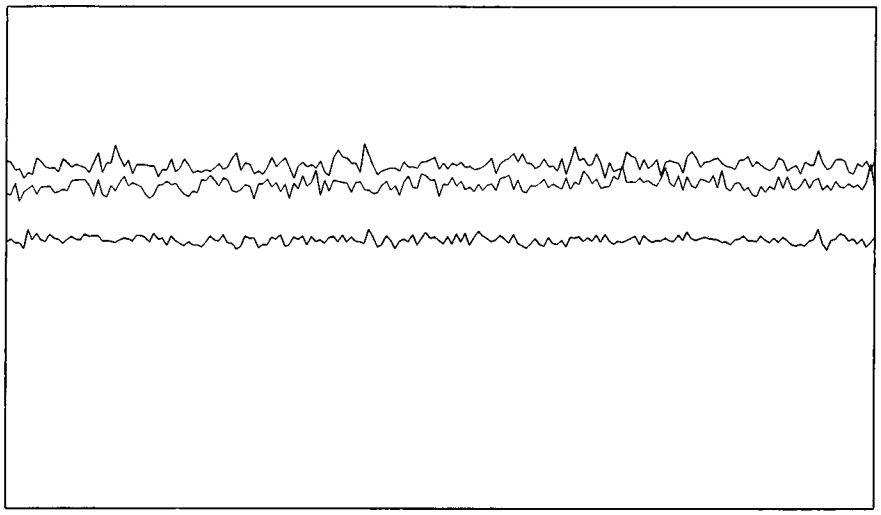
Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

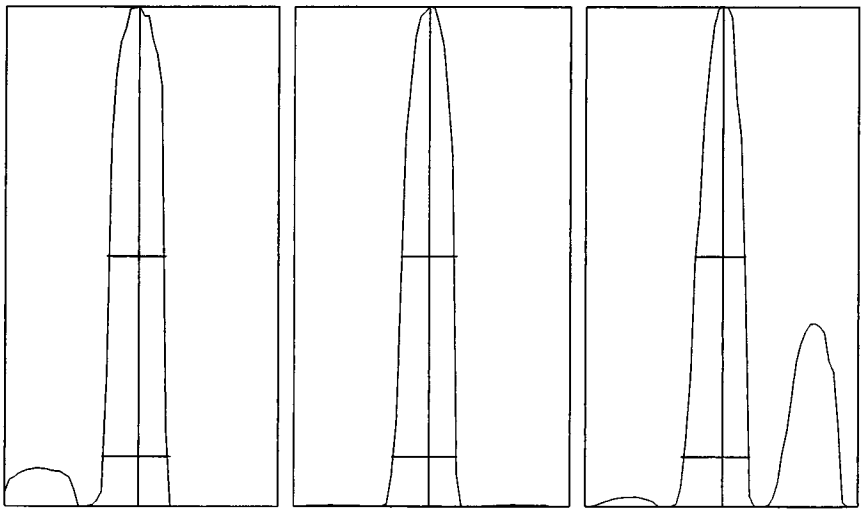
Tune Report

Tune File : ATUNE.U
Comment : TN090120



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	0.96
Doubly Charged:	70/140	0.89

m/z	Range	Count	Mean	RSD%	Background
7	100,000	54104.0	53457.5	1.50	0.30
89	100,000	69470.0	68482.2	1.84	1.50
205	100,000	63696.0	64403.3	2.00	5.10
156/140	2	0.949%	0.934%	5.88	
70/140	2	0.880%	0.884%	5.48	



m/z:	7	89	
Height:	53,519	68,005	6
Axis:	7.00	89.00	2
W-50%:	0.65	0.60	
W-10%:	0.7500	0.700	0

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Sep 01, 2020 08:45:02
Printed : Sep 01, 2020 08:45:06

Tune Report

Tune File : ATUNE.U
Comment : TN090120

Tuning Parameters

===Plasma Condition===				===Ion Lenses===				===Q-Pole Parameters===		
RF Power	:	1500	W	Extract 1	:	0	V	AMU Gain	:	127
RF Matching	:	2.5	V	Extract 2	:	-125	V	AMU Offset	:	127
Smpl Depth	:	10	mm	Omega Bias	:	-65	V	Axis Gain	:	0.9999
Torch-H	:	-1.3	mm	Omega Lens	:	6.5	V	Axis Offset	:	0.02
Torch-V	:	0.8	mm	Cell Entrance	:	-40	V	QP Bias	:	-3 V
Carrier Gas	:	0.55	L/min	Cell Exit	:	-60	V			
Dilution Mode	:	ON		Deflect	:	13	V	===Detector Parameters===		
Dilution Gas	:	0.5	L/min	Plate Bias	:	-40	V	Discriminator	:	4.7 mV
Optional Gas	:	---	%	===Octopole Parameters===				Analog HV	:	1713 V
Nebulizer Pump	:	0.1	rps	OctP RF	:	190	V	Pulse HV	:	1664 V
Sample Pump	:	---	rps	OctP Bias	:	-8	V			
S/C Temp	:	2	degC							

===Reaction Cell===										
Reaction Mode	:	OFF								
H2 Gas	:	---	mL/min	He Gas	:	4.3	mL/min	Optional Gas	:	--- %

Generated : Sep 01, 2020 08:45:02
Printed : Sep 01, 2020 08:45:08

C:\ICPMH\1\7500\QCTUNE.D

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 1 Sep 2020 08:56:19 am
Operator: PC
Misc Info:
Vial Number: 4
Current Method: C:\ICPMH\1\METHODS\TN6020.m

Minimum Response(CPS)

Element	Actual	Required	Flag
7 Li	5637570.00	0.00	
59 Co	4180990.00	0.00	
115 In	6792200.00	0.00	
205 Tl	6238240.00	0.00	

RSD (%)

Element	Actual	Required	Flag
7 Li	0.94	5.00	
59 Co	0.33	5.00	
115 In	0.56	5.00	
205 Tl	0.49	5.00	

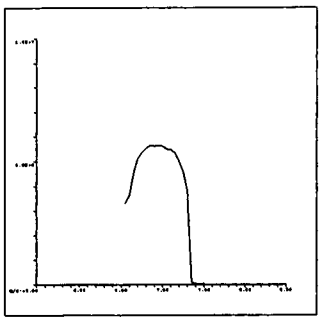
Ion Ratio

Element	Actual	Required	Flag
7 Li			
59 Co			
115 In			
205 Tl			

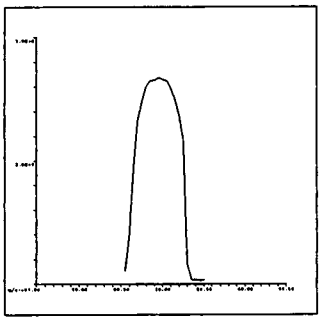
Maximum Bkg. Count(CPS)

Element	Actual	Required	Flag

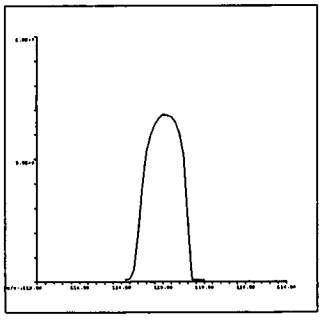
C:\ICPMH\1\7500\QCTUNE.D



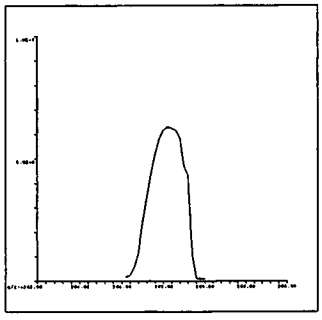
7 Li
Mass Calib.
Actual: 6.90
Required: 6.90-7.10
Flag:
Peak Width
Actual: 0.75
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.05
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.10
Required: 204.90-205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

QC Tune Result:Pass

Calibration Blank Report

File A090120A

B- 26172

QC-8523D

Sample Name	**RINSE**
Data File Name	**001CALB.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T13:17:17-04:00**
Type	**CalBlk**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

Rmk

Report Hg, As, Be, Cd, Co, Pb, Sb, Se, Tl

Rerun As, Sb for 18954-002+QC,
Rerun As for 18954-001, 003, 004
(over LR)

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	160	15.02
Na	23	115	2	31729	1.69
Mg	24	115	2	1478	8.08
Al	27	115	2	432	6.74
K	39	115	2	33057	1.71
Ca	44	115	2	177	6.80
V	51	115	2	61	31.02
Cr	52	115	2	1436	2.42
Mn	55	115	2	920	5.26
Fe	56	115	2	31473	1.69
Co	59	115	2	460	7.97
Ni	60	115	2	486	7.65
Cu	65	115	2	1549	4.70
Zn	66	115	2	1159	9.30
As	75	115	2	13	39.79
Se	78	115	2	16	17.57
Kr	83	115	1	202	3.43
Mo	95	115	1	398	16.34
Ag	107	115	1	651	6.44
Cd	111	115	1	53	22.05
Sb	121	115	1	609	2.28
Ba	137	159	1	633	5.57
Tl	205	165	1	2238	11.45
(Pb)	206	165	1	4213	3.53
(Pb)	207	165	1	3334	5.29
Pb	208	165	1	8437	0.72

9/1/20

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	1322500	0.80
Sc	45	2	62379	1.86
In	115	1	1881086	1.50
In	115	2	357214	0.89
Tb	159	1	2828929	0.70
Tb	159	2	1163241	1.35
Ho	165	1	2761616	0.48
Ho	165	2	1162562	1.18

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Blank Report

Sample Name	**CalBlk V-334044**
Data File Name	**002CALB.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T13:21:47-04:00**
Type	**CalBlk**
VialNumber	**2101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	88	23.20
Na	23	115	2	31024	2.53
Mg	24	115	2	931	5.39
Al	27	115	2	675	53.96
K	39	115	2	33319	0.31
Ca	44	115	2	98	20.83
V	51	115	2	30	66.67
Cr	52	115	2	1298	8.31
Mn	55	115	2	781	15.91
Fe	56	115	2	17865	2.24
Co	59	115	2	289	12.23
Ni	60	115	2	571	9.44
Cu	65	115	2	572	7.87
Zn	66	115	2	1100	13.25
As	75	115	2	10	23.99
Se	78	115	2	12	51.62
Kr	83	115	1	196	10.28
Mo	95	115	1	149	27.99
Ag	107	115	1	359	4.58
Cd	111	115	1	22	18.03
Sb	121	115	1	527	3.52
Ba	137	159	1	346	3.10
Tl	205	165	1	1386	8.30
(Pb)	206	165	1	2595	3.64
(Pb)	207	165	1	2126	2.89
Pb	208	165	1	5575	3.74

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	1362089	0.61
Sc	45	2	63506	1.48
In	115	1	1898930	0.78
In	115	2	361905	0.95
Tb	159	1	2853404	0.99
Tb	159	2	1165923	1.26
Ho	165	1	2786946	0.24
Ho	165	2	1166475	0.84

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd1 V-334045**
Data File Name	**003CALS.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T13:26:19-04:00**
Type	**CalStd**
VialNumber	**2102**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	5280	3.97
Na	23	115	2	111539	1.06
Mg	24	115	2	39683	2.00
Al	27	115	2	4584	2.15
K	39	115	2	60157	1.18
Ca	44	115	2	1550	1.51
V	51	115	2	2978	2.59
Cr	52	115	2	5445	3.91
Mn	55	115	2	3095	5.83
Fe	56	115	2	343562	1.26
Co	59	115	2	6547	1.70
Ni	60	115	2	2170	2.15
Cu	65	115	2	3586	2.46
Zn	66	115	2	2190	3.06
As	75	115	2	372	9.43
Se	78	115	2	170	7.56
Kr	83	115	1	192	10.60
Mo	95	115	1	4294	4.61
Ag	107	115	1	11947	6.12
Cd	111	115	1	2390	4.66
Sb	121	115	1	9574	2.83
Ba	137	159	1	3928	6.22
Tl	205	165	1	27722	4.16
(Pb)	206	165	1	11269	2.55
(Pb)	207	165	1	9322	6.00
Pb	208	165	1	23271	1.16

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1352130	1.51	1362089	99.3	70	130	
Sc	45	2	63901	2.11	63506	100.6	70	130	
In	115	1	1921813	0.66	1898930	101.2	70	130	
In	115	2	363641	1.21	361905	100.5	70	130	
Tb	159	1	2849046	0.98	2853404	99.8	70	130	
Tb	159	2	1180074	1.56	1165923	101.2	70	130	
Ho	165	1	2804172	1.17	2786946	100.6	70	130	
Ho	165	2	1167517	1.35	1166475	100.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd2 V-334046**
Data File Name	**004CALS.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T13:30:51-04:00**
Type	**CalStd**
VialNumber	**2103**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	52664	4.14
Na	23	115	2	812400	0.23
Mg	24	115	2	389128	0.83
Al	27	115	2	41432	1.99
K	39	115	2	297547	0.90
Ca	44	115	2	13533	1.98
V	51	115	2	29990	2.05
Cr	52	115	2	39755	2.42
Mn	55	115	2	24273	1.49
Fe	56	115	2	3366841	1.49
Co	59	115	2	62149	0.39
Ni	60	115	2	17162	2.67
Cu	65	115	2	23313	2.15
Zn	66	115	2	8632	1.93
As	75	115	2	3700	3.20
Se	78	115	2	1416	2.19
Kr	83	115	1	191	20.95
Mo	95	115	1	43079	3.31
Ag	107	115	1	117822	4.02
Cd	111	115	1	23511	3.76
Sb	121	115	1	90926	3.61
Ba	137	159	1	35654	3.19
Tl	205	165	1	266436	3.61
(Pb)	206	165	1	88513	4.00
(Pb)	207	165	1	74012	3.20
Pb	208	165	1	182566	3.80

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1370111	0.54	1362089	100.6	70	130	
Sc	45	2	64696	1.24	63506	101.9	70	130	
In	115	1	1923784	0.59	1898930	101.3	70	130	
In	115	2	368397	1.51	361905	101.8	70	130	
Tb	159	1	2852002	1.17	2853404	100.0	70	130	
Tb	159	2	1189172	0.51	1165923	102.0	70	130	
Ho	165	1	2822193	1.02	2786946	101.3	70	130	
Ho	165	2	1181506	0.79	1166475	101.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd3 V-334047**
Data File Name	**005CALS.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T13:35:20-04:00**
Type	**CalStd**
VialNumber	**2104**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	108107	3.58
Na	23	115	2	1783497	0.86
Mg	24	115	2	783108	1.19
Al	27	115	2	82889	0.91
K	39	115	2	574413	0.61
Ca	44	115	2	26963	0.83
V	51	115	2	60548	1.46
Cr	52	115	2	79241	2.32
Mn	55	115	2	44227	0.83
Fe	56	115	2	6670268	1.17
Co	59	115	2	122673	1.36
Ni	60	115	2	34341	0.28
Cu	65	115	2	46111	1.09
Zn	66	115	2	14720	1.79
As	75	115	2	7343	2.57
Se	78	115	2	2919	4.43
Kr	83	115	1	192	21.68
Mo	95	115	1	88966	3.63
Ag	107	115	1	243652	3.42
Cd	111	115	1	48251	3.10
Sb	121	115	1	186601	2.22
Ba	137	159	1	73356	3.44
Tl	205	165	1	548230	2.10
(Pb)	206	165	1	180544	1.93
(Pb)	207	165	1	151302	2.78
Pb	208	165	1	374225	3.00

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1373080	0.95	1362089	100.8	70	130	
Sc	45	2	63970	1.60	63506	100.7	70	130	
In	115	1	1912289	0.56	1898930	100.7	70	130	
In	115	2	366424	0.56	361905	101.2	70	130	
Tb	159	1	2860392	0.56	2853404	100.2	70	130	
Tb	159	2	1189498	0.92	1165923	102.0	70	130	
Ho	165	1	2834908	1.15	2786946	101.7	70	130	
Ho	165	2	1184008	0.90	1166475	101.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd4 V-334048**
Data File Name	**006CALS.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T13:39:51-04:00**
Type	**CalStd**
VialNumber	**2105**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	526896	2.16
Na	23	115	2	8103724	1.28
Mg	24	115	2	3865645	1.02
Al	27	115	2	402811	1.27
K	39	115	2	2652602	0.88
Ca	44	115	2	129336	1.31
V	51	115	2	295341	2.46
Cr	52	115	2	373312	1.52
Mn	55	115	2	211123	0.68
Fe	56	115	2	32017062	1.56
Co	59	115	2	591517	1.37
Ni	60	115	2	157543	1.91
Cu	65	115	2	208224	0.88
Zn	66	115	2	63171	0.43
As	75	115	2	36248	1.47
Se	78	115	2	13992	2.99
Kr	83	115	1	194	25.27
Mo	95	115	1	438725	3.63
Ag	107	115	1	1185211	3.22
Cd	111	115	1	237254	3.24
Sb	121	115	1	917342	3.39
Ba	137	159	1	359792	3.27
Tl	205	165	1	3023928	2.45
(Pb)	206	165	1	875072	3.04
(Pb)	207	165	1	738644	3.24
Pb	208	165	1	2006277	1.67

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1330562	1.59	1362089	97.7	70	130	
Sc	45	2	62445	1.12	63506	98.3	70	130	
In	115	1	1872811	0.87	1898930	98.6	70	130	
In	115	2	357298	1.30	361905	98.7	70	130	
Tb	159	1	2837296	0.43	2853404	99.4	70	130	
Tb	159	2	1169544	1.29	1165923	100.3	70	130	
Ho	165	1	2794784	0.29	2786946	100.3	70	130	
Ho	165	2	1169067	1.25	1166475	100.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd5 V-334049**
Data File Name	**007CALS.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T13:44:17-04:00**
Type	**CalStd**
VialNumber	**2106**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	1037802	2.88
Na	23	115	2	15544126	0.49
Mg	24	115	2	7385632	0.86
Al	27	115	2	784697	0.93
K	39	115	2	5111355	1.12
Ca	44	115	2	249911	1.45
V	51	115	2	577195	1.41
Cr	52	115	2	719557	1.17
Mn	55	115	2	403882	2.11
Fe	56	115	2	61028640	1.37
Co	59	115	2	1137145	1.28
Ni	60	115	2	304142	0.88
Cu	65	115	2	403002	0.64
Zn	66	115	2	122741	0.77
As	75	115	2	69922	1.07
Se	78	115	2	26732	0.79
Kr	83	115	1	216	23.27
Mo	95	115	1	839216	3.45
Ag	107	115	1	2417908	2.91
Cd	111	115	1	452290	3.50
Sb	121	115	1	1902031	2.90
Ba	137	159	1	686088	3.18
Tl	205	165	1	5732626	2.92
(Pb)	206	165	1	1876672	2.77
(Pb)	207	165	1	1413458	3.34
Pb	208	165	1	3877351	2.22

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1296443	0.49	1362089	95.2	70	130	
Sc	45	2	60475	1.65	63506	95.2	70	130	
In	115	1	1826532	1.42	1898930	96.2	70	130	
In	115	2	349518	1.33	361905	96.6	70	130	
Tb	159	1	2780188	0.72	2853404	97.4	70	130	
Tb	159	2	1166054	1.29	1165923	100.0	70	130	
Ho	165	1	2757024	0.67	2786946	98.9	70	130	
Ho	165	2	1157369	0.62	1166475	99.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Verification (ICV) - US EPA Method 6020

Sample Name	**ICV V-334050**
Data File Name	**008_ICV.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T13:48:40-04:00**
Type	**6-ICV**
VialNumber	**2108**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	45	1	50.72	ppb	50	524154	3.08	101.43	90	110	
Na	23	115	2	5193.74	ppb	5000	8202206	0.72	103.87	90	110	
Mg	24	115	2	5141.55	ppb	5000	3854419	0.50	102.83	90	110	
Al	27	115	2	5273.04	ppb	5000	1393493	0.70	105.46	90	110	
K	39	115	2	5155.11	ppb	5000	2682042	0.01	103.10	90	110	
Ca	44	115	2	5158.61	ppb	5000	130596	0.34	103.17	90	110	
V	51	115	2	49.82	ppb	50	290521	1.03	99.65	90	110	
Cr	52	115	2	51.10	ppb	50	373074	0.93	102.20	90	110	
Mn	55	115	2	50.32	ppb	50	206583	0.74	100.65	90	110	
Fe	56	115	2	5151.87	ppb	5000	31939729	0.74	103.04	90	110	
Co	59	115	2	50.76	ppb	50	585317	0.52	101.53	90	110	
Ni	60	115	2	50.09	ppb	50	154585	0.19	100.18	90	110	
Cu	65	115	2	50.91	ppb	50	208042	0.89	101.81	90	110	
Zn	66	115	2	50.27	ppb	50	62886	1.05	100.53	90	110	
As	75	115	2	50.77	ppb	50	35959	0.98	101.54	90	110	
Se	78	115	2	51.11	ppb	50	2783	4.07	102.21	90	110	
Mo	95	115	1	50.12	ppb	50	427999	2.63	100.25	90	110	
Ag	107	115	1	9.92	ppb	10	241280	3.31	99.25	90	110	
Cd	111	115	1	51.26	ppb	50	236070	3.18	102.52	90	110	
Sb	121	115	1	48.16	ppb	50	916969	2.72	96.32	90	110	
Ba	137	159	1	51.44	ppb	50	358942	3.46	102.88	90	110	
Tl	205	165	1	49.82	ppb	50	2886841	3.36	99.64	90	110	
Pb	208	165	1	52.09	ppb	50	2035297	3.44	104.18	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1294196	0.69	1362089	95.0	70	130	
Sc	45	2	61011	0.30	63506	96.1	70	130	
In	115	1	1850742	1.24	1898930	97.5	70	130	
In	115	2	353012	0.77	361905	97.5	70	130	
Tb	159	1	2810197	0.47	2853404	98.5	70	130	
Tb	159	2	1163362	1.12	1165923	99.8	70	130	
Ho	165	1	2766067	1.37	2786946	99.3	70	130	
Ho	165	2	1163307	0.70	1166475	99.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

LL-ICV/CCV - US EPA Method 6020

Sample Name	**LLICV V-334056**
Data File Name	**009_LCS.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T13:53:06-04:00**
Type	**6-LCS**
VialNumber	**2111**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	45	1	0.52	ppb	0.5	5569	1.47	104.97	80	120	
Na	23	115	2	243.11	ppb	250	422690	0.62	97.24	80	120	
Mg	24	115	2	248.95	ppb	250	191991	0.90	99.58	80	120	
Al	27	115	2	103.13	ppb	100	28574	2.10	103.13	80	120	
K	39	115	2	247.68	ppb	250	163652	1.56	99.07	80	120	
Ca	44	115	2	252.76	ppb	250	6645	1.83	101.10	80	120	
V	51	115	2	0.97	ppb	1	5797	5.52	96.58	80	120	
Cr	52	115	2	1.04	ppb	1	9033	0.87	103.83	80	120	
Mn	55	115	2	2.99	ppb	3	13313	4.12	99.72	80	120	
Fe	56	115	2	154.85	ppb	150	1000464	1.74	103.23	80	120	
Co	59	115	2	1.03	ppb	1	12492	2.88	103.38	80	120	
Ni	60	115	2	1.48	ppb	1.5	5245	2.15	98.97	80	120	
Cu	65	115	2	5.14	ppb	5	22006	1.50	102.71	80	120	
Zn	66	115	2	10.38	ppb	10	14168	1.35	103.79	80	120	
As	75	115	2	0.97	ppb	1	713	3.33	96.97	80	120	
Se	78	115	2	4.90	ppb	5	284	7.01	97.98	80	120	
Mo	95	115	1	1.08	ppb	1	9408	1.15	108.12	80	120	
Ag	107	115	1	0.50	ppb	0.5	12420	2.77	99.07	80	120	
Cd	111	115	1	0.99	ppb	1	4605	4.62	99.16	80	120	
Sb	121	115	1	1.53	ppb	1.5	29672	1.85	101.80	80	120	
Ba	137	159	1	2.56	ppb	2.5	18160	0.42	102.40	80	120	
Tl	205	165	1	0.92	ppb	1	54686	2.79	91.89	80	120	
Pb	208	165	1	1.34	ppb	1.5	57890	2.17	89.42	80	120	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1308574	0.41	1362089	96.1	70	130	
Sc	45	2	62594	1.39	63506	98.6	70	130	
In	115	1	1857626	1.73	1898930	97.8	70	130	
In	115	2	361518	1.64	361905	99.9	70	130	
Tb	159	1	2806264	0.87	2853404	98.3	70	130	
Tb	159	2	1176477	1.05	1165923	100.9	70	130	
Ho	165	1	2770607	1.39	2786946	99.4	70	130	
Ho	165	2	1177455	1.49	1166475	100.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Blank (ICB) - US EPA Method 6020

Sample Name	**ICB V-334051**
Data File Name	**010_ICB.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T13:57:38-04:00**
Type	**6-ICB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	45	1	0.01	ppb	0.25	
Na	23	115	2	-0.57	ppb	125	
Mg	24	115	2	0.26	ppb	125	
Al	27	115	2	-0.88	ppb	50	
K	39	115	2	-0.92	ppb	125	
Ca	44	115	2	0.32	ppb	125	
V	51	115	2	0.01	ppb	0.5	
Cr	52	115	2	0.01	ppb	0.5	
Mn	55	115	2	0.02	ppb	1.5	
Fe	56	115	2	0.92	ppb	75	
Co	59	115	2	0.00	ppb	0.5	
Ni	60	115	2	-0.03	ppb	0.75	
Cu	65	115	2	0.01	ppb	2.5	
Zn	66	115	2	0.05	ppb	5	
As	75	115	2	0.01	ppb	0.5	
Se	78	115	2	0.10	ppb	2.5	
Mo	95	115	1	0.02	ppb	0.5	
Ag	107	115	1	0.00	ppb	0.25	
Cd	111	115	1	0.00	ppb	0.5	
Sb	121	115	1	0.03	ppb	0.75	
Ba	137	159	1	0.00	ppb	1.25	
Tl	205	165	1	0.01	ppb	0.5	
Pb	208	165	1	-0.03	ppb	0.75	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1326514	1.51	1362089	97.4	70	130	
Sc	45	2	62913	0.75	63506	99.1	70	130	
In	115	1	1891403	1.12	1898930	99.6	70	130	
In	115	2	360714	0.59	361905	99.7	70	130	
Tb	159	1	2829453	0.45	2853404	99.2	70	130	
Tb	159	2	1170421	0.19	1165923	100.4	70	130	
Ho	165	1	2758798	0.64	2786946	99.0	70	130	
Ho	165	2	1162803	0.25	1166475	99.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Interference Check Sample A (ICS-A) - US EPA Method 6020

Sample Name	**ICSA V-334052**
Data File Name	**011ICSA.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:02:10-04:00**
Type	**6-ICSA**
VialNumber	**2107**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	45	1	0.01	ppb	1	
Na	23	115	2	128726.45	ppb	150000	
Mg	24	115	2	50193.34	ppb	60000	
Al	27	115	2	51226.38	ppb	60000	
K	39	115	2	51895.80	ppb	60000	
Ca	44	115	2	162404.22	ppb	180000	
V	51	115	2	0.09	ppb	2	
Cr	52	115	2	0.53	ppb	2	
Mn	55	115	2	1.87	ppb	6	
Fe	56	115	2	126789.57	ppb	150000	
Co	59	115	2	0.21	ppb	2	
Ni	60	115	2	0.64	ppb	3	
Cu	65	115	2	1.43	ppb	10	
Zn	66	115	2	1.53	ppb	20	
As	75	115	2	0.23	ppb	2	
Se	78	115	2	0.44	ppb	10	
Mo	95	115	1	1053.26	ppb	1200	
Ag	107	115	1	0.12	ppb	1	
Cd	111	115	1	1.22	ppb	2	
Sb	121	115	1	0.35	ppb	2	
Ba	137	159	1	0.88	ppb	5	
Tl	205	165	1	0.00	ppb	2	
Pb	208	165	1	0.17	ppb	3	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1279325	2.83	1362089	93.9	70	130	
Sc	45	2	61793	2.17	63506	97.3	70	130	
In	115	1	1751451	1.46	1898930	92.2	70	130	
In	115	2	333842	1.73	361905	92.2	70	130	
Tb	159	1	2787553	1.41	2853404	97.7	70	130	
Tb	159	2	1143069	0.92	1165923	98.0	70	130	
Ho	165	1	2740539	1.03	2786946	98.3	70	130	
Ho	165	2	1132666	0.54	1166475	97.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**012SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:06:34-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.01	0.01	ppb	182	11.76	550	
Na	23	115	2	7.83	7.83	ppb	44384	2.29	55000	
Mg	24	115	2	0.96	0.96	ppb	1698	10.29	55000	
Al	27	115	2	-0.07	-0.07	ppb	668	16.66	16500	
K	39	115	2	1.99	1.99	ppb	34941	0.22	55000	
Ca	44	115	2	3.05	3.05	ppb	180	11.26	55000	
V	51	115	2	0.01	0.01	ppb	91	9.20	550	
Cr	52	115	2	0.03	0.03	ppb	1516	3.31	550	
Mn	55	115	2	-0.05	-0.05	ppb	589	7.93	550	
Fe	56	115	2	5.97	5.97	ppb	56737	6.28	55000	
Co	59	115	2	0.00	0.00	ppb	263	13.92	550	
Ni	60	115	2	-0.04	-0.04	ppb	454	8.81	550	
Cu	65	115	2	0.23	0.23	ppb	1580	1.28	550	
Zn	66	115	2	0.18	0.18	ppb	1345	5.73	550	
As	75	115	2	0.00	0.00	ppb	9	60.41	550	
Se	78	115	2	0.12	0.12	ppb	19	20.39	2750	
Mo	95	115	1	0.58	0.58	ppb	5458	0.97	550	
Ag	107	115	1	0.01	0.01	ppb	659	6.41	550	
Cd	111	115	1	0.01	0.01	ppb	60	34.70	550	
Sb	121	115	1	0.01	0.01	ppb	684	11.87	550	
Ba	137	159	1	0.06	0.06	ppb	767	9.25	550	
Tl	205	165	1	0.00	0.00	ppb	1575	8.63	550	
Pb	208	165	1	0.05	0.05	ppb	7763	3.47	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1368707	2.30	1362089	100.5	70	130	
Sc	45	2	63805	0.27	63506	100.5	70	130	
In	115	1	1966497	0.80	1898930	103.6	70	130	
In	115	2	367919	0.59	361905	101.7	70	130	
Tb	159	1	2908801	0.76	2853404	101.9	70	130	
Tb	159	2	1190561	1.07	1165923	102.1	70	130	
Ho	165	1	2859347	1.10	2786946	102.6	70	130	
Ho	165	2	1178616	0.88	1166475	101.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LRS V-334053**
Data File Name	**013SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:11:04-04:00**
Type	**Sample**
VialNumber	**2109**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	503.35	503.35	ppb	4935736	3.35	550	
Na	23	115	2	51847.27	51847.27	ppb	77920121	1.78	55000	
Mg	24	115	2	51449.22	51449.22	ppb	36817720	1.51	55000	
Al	27	115	2	15816.24	15816.24	ppb	3989507	2.06	16500	
K	39	115	2	52350.96	52350.96	ppb	25721074	1.24	55000	
Ca	44	115	2	54742.96	54742.96	ppb	1322111	1.38	55000	
V	51	115	2	533.69	533.69	ppb	2970910	1.46	550	
Cr	52	115	2	531.26	531.26	ppb	3692059	2.46	550	
Mn	55	115	2	533.70	533.70	ppb	2084675	0.59	550	
Fe	56	115	2	51183.34	51183.34	ppb	302821100	1.71	55000	
Co	59	115	2	521.75	521.75	ppb	5740995	0.51	550	
Ni	60	115	2	519.66	519.66	ppb	1526103	0.45	550	
Cu	65	115	2	510.05	510.05	ppb	1985102	1.13	550	
Zn	66	115	2	485.86	485.86	ppb	571423	1.13	550	
As	75	115	2	516.64	516.64	ppb	349286	1.35	550	
Se	78	115	2	2553.79	2553.79	ppb	132266	0.80	2750	
Mo	95	115	1	545.20	545.20	ppb	4419436	1.51	550	
Ag	107	115	1	455.14	455.14	ppb	10492402	1.89	550	
Cd	111	115	1	539.16	539.16	ppb	2357575	1.68	550	
Sb	121	115	1	510.78	510.78	ppb	9229744	1.32	550	
Ba	137	159	1	548.10	548.10	ppb	3689496	2.17	550	
Tl	205	165	1	491.88	491.88	ppb	27886331	2.42	550	
Pb	208	165	1	484.69	484.69	ppb	18491073	2.95	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1229806	4.82	1362089	90.3	70	130	
Sc	45	2	60163	2.01	63506	94.7	70	130	
In	115	1	1757361	0.12	1898930	92.5	70	130	
In	115	2	337035	1.09	361905	93.1	70	130	
Tb	159	1	2713686	0.96	2853404	95.1	70	130	
Tb	159	2	1129185	0.70	1165923	96.8	70	130	
Ho	165	1	2707573	0.25	2786946	97.2	70	130	
Ho	165	2	1129340	0.74	1166475	96.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 2:12 PM on:9/1/2020

Sample Report

Sample Name	**RINSE**
Data File Name	**014SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:15:14-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.05	0.05	ppb	624	20.58	550	
Na	23	115	2	8.97	8.97	ppb	45749	1.52	55000	
Mg	24	115	2	1.04	1.04	ppb	1738	9.80	55000	
Al	27	115	2	-0.44	-0.44	ppb	560	16.59	16500	
K	39	115	2	4.10	4.10	ppb	35682	0.64	55000	
Ca	44	115	2	2.71	2.71	ppb	169	6.35	55000	
V	51	115	2	0.01	0.01	ppb	77	42.82	550	
Cr	52	115	2	0.03	0.03	ppb	1528	7.24	550	
Mn	55	115	2	-0.02	-0.02	ppb	706	4.02	550	
Fe	56	115	2	4.25	4.25	ppb	45140	1.77	55000	
Co	59	115	2	0.01	0.01	ppb	454	6.97	550	
Ni	60	115	2	-0.02	-0.02	ppb	500	8.35	550	
Cu	65	115	2	0.24	0.24	ppb	1598	7.72	550	
Zn	66	115	2	0.03	0.03	ppb	1145	2.26	550	
As	75	115	2	0.05	0.05	ppb	45	7.97	550	
Se	78	115	2	0.47	0.47	ppb	38	13.13	2750	
Mo	95	115	1	0.37	0.37	ppb	3429	14.82	550	
Ag	107	115	1	0.04	0.04	ppb	1415	10.49	550	
Cd	111	115	1	0.03	0.03	ppb	150	18.90	550	
Sb	121	115	1	0.33	0.33	ppb	7097	10.84	550	
Ba	137	159	1	0.08	0.08	ppb	878	3.88	550	
Tl	205	165	1	0.06	0.06	ppb	4840	6.30	550	
Pb	208	165	1	0.08	0.08	ppb	8606	2.54	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1332689	0.26	1362089	97.8	70	130	
Sc	45	2	63657	0.81	63506	100.2	70	130	
In	115	1	1915201	1.29	1898930	100.9	70	130	
In	115	2	363935	0.23	361905	100.6	70	130	
Tb	159	1	2805635	0.84	2853404	98.3	70	130	
Tb	159	2	1173394	0.45	1165923	100.6	70	130	
Ho	165	1	2763242	0.49	2786946	99.1	70	130	
Ho	165	2	1169315	0.19	1166475	100.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**015SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:19:46-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.04	0.04	ppb	464	18.02	550	
Na	23	115	2	5.60	5.60	ppb	39229	1.15	55000	
Mg	24	115	2	2.23	2.23	ppb	2595	9.58	55000	
Al	27	115	2	0.05	0.05	ppb	677	18.35	16500	
K	39	115	2	2.74	2.74	ppb	34043	0.72	55000	
Ca	44	115	2	2.40	2.40	ppb	157	12.77	55000	
V	51	115	2	0.03	0.03	ppb	184	25.83	550	
Cr	52	115	2	0.04	0.04	ppb	1581	4.87	550	
Mn	55	115	2	0.00	0.00	ppb	746	5.02	550	
Fe	56	115	2	4.79	4.79	ppb	47290	3.13	55000	
Co	59	115	2	0.03	0.03	ppb	588	12.96	550	
Ni	60	115	2	-0.03	-0.03	ppb	464	6.78	550	
Cu	65	115	2	0.25	0.25	ppb	1591	4.04	550	
Zn	66	115	2	0.04	0.04	ppb	1122	9.97	550	
As	75	115	2	0.02	0.02	ppb	26	20.25	550	
Se	78	115	2	0.13	0.13	ppb	19	11.75	2750	
Mo	95	115	1	0.12	0.12	ppb	1165	5.63	550	
Ag	107	115	1	0.03	0.03	ppb	1202	10.76	550	
Cd	111	115	1	0.02	0.02	ppb	102	20.74	550	
Sb	121	115	1	0.08	0.08	ppb	2007	5.51	550	
Ba	137	159	1	0.06	0.06	ppb	739	12.87	550	
Tl	205	165	1	0.02	0.02	ppb	2720	5.67	550	
Pb	208	165	1	0.05	0.05	ppb	7582	3.30	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1286298	0.83	1362089	94.4	70	130	
Sc	45	2	60855	0.67	63506	95.8	70	130	
In	115	1	1856800	0.77	1898930	97.8	70	130	
In	115	2	354419	0.86	361905	97.9	70	130	
Tb	159	1	2788288	0.40	2853404	97.7	70	130	
Tb	159	2	1148024	0.86	1165923	98.5	70	130	
Ho	165	1	2743607	0.70	2786946	98.4	70	130	
Ho	165	2	1143318	1.17	1166475	98.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334054**
Data File Name	**0166CCV.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:24:16-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	45	1	50.78	ppb	50	528208	2.15	101.57	90	110	
Na	23	115	2	5049.15	ppb	5000	7922770	1.14	100.98	90	110	
Mg	24	115	2	5045.02	ppb	5000	3757212	0.91	100.90	90	110	
Al	27	115	2	1495.82	ppb	1500	393176	0.95	99.72	90	110	
K	39	115	2	5024.58	ppb	5000	2597779	1.70	100.49	90	110	
Ca	44	115	2	5049.47	ppb	5000	126999	0.67	100.99	90	110	
V	51	115	2	49.48	ppb	50	286651	1.21	98.96	90	110	
Cr	52	115	2	50.08	ppb	50	363276	1.31	100.16	90	110	
Mn	55	115	2	49.89	ppb	50	203472	1.03	99.78	90	110	
Fe	56	115	2	4990.56	ppb	5000	30738113	1.19	99.81	90	110	
Co	59	115	2	49.97	ppb	50	572478	1.06	99.95	90	110	
Ni	60	115	2	49.85	ppb	50	152849	0.90	99.70	90	110	
Cu	65	115	2	49.20	ppb	50	199752	1.01	98.39	90	110	
Zn	66	115	2	49.39	ppb	50	61407	1.17	98.79	90	110	
As	75	115	2	49.46	ppb	50	34805	1.77	98.92	90	110	
Se	78	115	2	250.97	ppb	250	13536	0.52	100.39	90	110	
Mo	95	115	1	49.67	ppb	50	421319	3.29	99.34	90	110	
Ag	107	115	1	46.83	ppb	50	1129650	3.75	93.66	90	110	
Cd	111	115	1	49.85	ppb	50	228029	3.87	99.70	90	110	
Sb	121	115	1	46.85	ppb	50	886126	3.33	93.71	90	110	
Ba	137	159	1	49.86	ppb	50	348327	3.21	99.72	90	110	
Tl	205	165	1	51.16	ppb	50	2904612	2.99	102.31	90	110	
Pb	208	165	1	51.09	ppb	50	1956024	2.73	102.17	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1302717	1.57	1362089	95.6	70	130	
Sc	45	2	60801	0.38	63506	95.7	70	130	
In	115	1	1838560	0.70	1898930	96.8	70	130	
In	115	2	350710	1.05	361905	96.9	70	130	
Tb	159	1	2814633	1.46	2853404	98.6	70	130	
Tb	159	2	1147447	0.59	1165923	98.4	70	130	
Ho	165	1	2710972	0.71	2786946	97.3	70	130	
Ho	165	2	1149548	0.68	1166475	98.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334051**
Data File Name	**0176CCB.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:28:42-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	45	1	0.02	ppb	0.5	
Na	23	115	2	1.70	ppb	250	
Mg	24	115	2	0.29	ppb	250	
Al	27	115	2	-0.79	ppb	100	
K	39	115	2	1.08	ppb	250	
Ca	44	115	2	0.59	ppb	250	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	0.00	ppb	1	
Mn	55	115	2	-0.01	ppb	3	
Fe	56	115	2	1.14	ppb	150	
Co	59	115	2	0.01	ppb	1	
Ni	60	115	2	-0.03	ppb	1.5	
Cu	65	115	2	0.02	ppb	5	
Zn	66	115	2	0.01	ppb	10	
As	75	115	2	0.01	ppb	1	
Se	78	115	2	0.11	ppb	5	
Mo	95	115	1	0.10	ppb	1	
Ag	107	115	1	0.02	ppb	0.5	
Cd	111	115	1	0.01	ppb	1	
Sb	121	115	1	0.07	ppb	1.5	
Ba	137	159	1	0.00	ppb	2.5	
Tl	205	165	1	0.02	ppb	1	
Pb	208	165	1	-0.03	ppb	1.5	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1278150	1.31	1362089	93.8	70	130	
Sc	45	2	61274	1.74	63506	96.5	70	130	
In	115	1	1845626	0.19	1898930	97.2	70	130	
In	115	2	352407	0.96	361905	97.4	70	130	
Tb	159	1	2774611	0.79	2853404	97.2	70	130	
Tb	159	2	1148288	1.29	1165923	98.5	70	130	
Ho	165	1	2714875	0.84	2786946	97.4	70	130	
Ho	165	2	1141114	0.35	1166475	97.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**MB 85230**
Data File Name	**018SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:33:14-04:00**
Type	**Sample**
VialNumber	**2401**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.01	0.01	ppb	153	7.84	550	
Na	23	115	2	13.14	13.14	ppb	49360	1.56	55000	
Mg	24	115	2	0.43	0.43	ppb	1192	3.28	55000	
Al	27	115	2	0.17	0.17	ppb	683	9.52	16500	
K	39	115	2	2.47	2.47	ppb	32714	0.84	55000	
Ca	44	115	2	5.12	5.12	ppb	218	3.85	55000	
V	51	115	2	0.22	0.22	ppb	1283	6.21	550	
Cr	52	115	2	0.04	0.04	ppb	1522	3.35	550	
Mn	55	115	2	0.01	0.01	ppb	762	11.17	550	
Fe	56	115	2	3.96	3.96	ppb	40632	2.08	55000	
Co	59	115	2	-0.02	-0.02	ppb	82	34.95	550	
Ni	60	115	2	-0.01	-0.01	ppb	509	16.10	550	
Cu	65	115	2	0.12	0.12	ppb	1035	3.23	550	
Zn	66	115	2	1.19	1.19	ppb	2451	10.35	550	
As	75	115	2	0.04	0.04	ppb	36	21.64	550	
Se	78	115	2	0.30	0.30	ppb	27	25.10	2750	
Mo	95	115	1	0.04	0.04	ppb	467	6.23	550	
Ag	107	115	1	0.02	0.02	ppb	850	5.31	550	
Cd	111	115	1	0.00	0.00	ppb	43	33.66	550	
Sb	121	115	1	0.05	0.05	ppb	1518	6.57	550	
Ba	137	159	1	0.02	0.02	ppb	521	2.06	550	
Tl	205	165	1	0.02	0.02	ppb	2626	8.84	550	
Pb	208	165	1	-0.03	-0.03	ppb	4525	1.50	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1299598	1.03	1362089	95.4	70	130	
Sc	45	2	59125	1.12	63506	93.1	70	130	
In	115	1	1893100	0.96	1898930	99.7	70	130	
In	115	2	341995	0.65	361905	94.5	70	130	
Tb	159	1	2880662	1.00	2853404	101.0	70	130	
Tb	159	2	1150542	0.33	1165923	98.7	70	130	
Ho	165	1	2814685	0.38	2786946	101.0	70	130	
Ho	165	2	1146100	0.46	1166475	98.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 2:35 PM on:9/1/2020

Sample Report

Sample Name	**LCSW 85230**
Data File Name	**019SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:37:46-04:00**
Type	**Sample**
VialNumber	**2402**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	248.09	248.09	ppb	2523599	3.44	550	
Na	23	115	2	26031.04	26031.04	ppb	38033741	1.26	55000	
Mg	24	115	2	25326.54	25326.54	ppb	17614636	1.48	55000	
Al	27	115	2	2455.33	2455.33	ppb	602429	1.78	16500	
K	39	115	2	24893.04	24893.04	ppb	11901465	0.38	55000	
Ca	44	115	2	24604.63	24604.63	ppb	577680	1.65	55000	
V	51	115	2	260.15	260.15	ppb	1407440	1.60	550	
Cr	52	115	2	261.14	261.14	ppb	1764083	0.56	550	
Mn	55	115	2	247.92	247.92	ppb	941615	1.66	550	
Fe	56	115	2	2592.47	2592.47	ppb	14921411	0.89	55000	
Co	59	115	2	260.77	260.77	ppb	2789050	1.39	550	
Ni	60	115	2	243.44	243.44	ppb	695163	1.83	550	
Cu	65	115	2	246.56	246.56	ppb	933013	1.54	550	
Zn	66	115	2	241.52	241.52	ppb	276596	2.25	550	
As	75	115	2	246.16	246.16	ppb	161750	1.52	550	
Se	78	115	2	241.34	241.34	ppb	12158	1.61	2750	
Mo	95	115	1	264.23	264.23	ppb	2237851	3.42	550	
Ag	107	115	1	45.84	45.84	ppb	1104467	2.80	550	
Cd	111	115	1	246.23	246.23	ppb	1124864	3.54	550	
Sb	121	115	1	249.49	249.49	ppb	4710491	2.80	550	
Ba	137	159	1	269.15	269.15	ppb	1891120	2.31	550	
Tl	205	165	1	235.37	235.37	ppb	13805715	3.34	550	
Pb	208	165	1	247.78	247.78	ppb	9782151	2.65	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1274019	0.73	1362089	93.5	70	130	
Sc	45	2	56525	0.53	63506	89.0	70	130	
In	115	1	1836172	0.50	1898930	96.7	70	130	
In	115	2	327559	1.21	361905	90.5	70	130	
Tb	159	1	2831924	0.28	2853404	99.2	70	130	
Tb	159	2	1121489	1.70	1165923	96.2	70	130	
Ho	165	1	2800824	0.72	2786946	100.5	70	130	
Ho	165	2	1116185	0.76	1166475	95.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LCSW MR 85230**
Data File Name	**020SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:42:04-04:00**
Type	**Sample**
VialNumber	**2403**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	241.94	241.94	ppb	2441206	2.18	550	
Na	23	115	2	24939.43	24939.43	ppb	36858377	1.13	55000	
Mg	24	115	2	24258.11	24258.11	ppb	17065274	1.23	55000	
Al	27	115	2	2344.82	2344.82	ppb	581957	2.39	16500	
K	39	115	2	23917.14	23917.14	ppb	11568094	1.28	55000	
Ca	44	115	2	23788.80	23788.80	ppb	564947	2.15	55000	
V	51	115	2	251.97	251.97	ppb	1378892	1.64	550	
Cr	52	115	2	251.82	251.82	ppb	1720900	1.23	550	
Mn	55	115	2	238.72	238.72	ppb	917085	1.26	550	
Fe	56	115	2	2501.66	2501.66	ppb	14565489	1.66	55000	
Co	59	115	2	253.08	253.08	ppb	2737848	0.90	550	
Ni	60	115	2	236.12	236.12	ppb	682047	1.59	550	
Cu	65	115	2	240.15	240.15	ppb	919197	1.49	550	
Zn	66	115	2	236.30	236.30	ppb	273733	1.55	550	
As	75	115	2	238.45	238.45	ppb	158482	2.20	550	
Se	78	115	2	235.15	235.15	ppb	11983	1.82	2750	
Mo	95	115	1	254.66	254.66	ppb	2163576	2.67	550	
Ag	107	115	1	44.27	44.27	ppb	1070019	2.77	550	
Cd	111	115	1	239.30	239.30	ppb	1096679	3.31	550	
Sb	121	115	1	240.36	240.36	ppb	4552273	2.71	550	
Ba	137	159	1	258.85	258.85	ppb	1838841	2.67	550	
Tl	205	165	1	224.94	224.94	ppb	13426280	3.20	550	
Pb	208	165	1	237.14	237.14	ppb	9527484	3.09	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1263586	0.47	1362089	92.8	70	130	
Sc	45	2	56581	0.78	63506	89.1	70	130	
In	115	1	1841916	0.45	1898930	97.0	70	130	
In	115	2	331319	0.78	361905	91.5	70	130	
Tb	159	1	2863003	0.93	2853404	100.3	70	130	
Tb	159	2	1134080	0.88	1165923	97.3	70	130	
Ho	165	1	2849883	1.27	2786946	102.3	70	130	
Ho	165	2	1123114	1.08	1166475	96.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18954-002**
Data File Name	**021SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:46:21-04:00**
Type	**Sample**
VialNumber	**2404**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.09	0.09	ppb	1043	7.51	550	
Na	23	115	2	109475.39	109475.39	ppb	155419657	0.54	55000	>LDR
Mg	24	115	2	30308.77	30308.77	ppb	20493239	1.27	55000	
Al	27	115	2	667.42	667.42	ppb	159637	1.51	16500	
K	39	115	2	22179.03	22179.03	ppb	10312977	0.70	55000	
Ca	44	115	2	100420.71	100420.71	ppb	2291851	0.91	55000	>LDR
V	51	115	2	3.35	3.35	ppb	17664	1.72	550	
Cr	52	115	2	1.77	1.77	ppb	12764	2.57	550	
Mn	55	115	2	190.17	190.17	ppb	702358	1.61	550	
Fe	56	115	2	3403.23	3403.23	ppb	19039175	1.35	55000	
Co	59	115	2	10.57	10.57	ppb	110128	0.79	550	
Ni	60	115	2	36.06	36.06	ppb	100545	1.42	550	
Cu	65	115	2	15.73	15.73	ppb	58333	1.18	550	
Zn	66	115	2	448.79	448.79	ppb	498829	1.10	550	
As	75	115	2	1243.84	1243.84	ppb	794563	0.86	550	>LDR
Se	78	115	2	35.33	35.33	ppb	1739	5.89	2750	
Mo	95	115	1	12.91	12.91	ppb	105172	2.82	550	
Ag	107	115	1	0.29	0.29	ppb	7016	5.14	550	
Cd	111	115	1	0.69	0.69	ppb	3037	3.40	550	
Sb	121	115	1	382.10	382.10	ppb	6931679	2.42	550	
Ba	137	159	1	37.76	37.76	ppb	265278	2.76	550	
Tl	205	165	1	0.52	0.52	ppb	32031	6.88	550	
Pb	208	165	1	102.37	102.37	ppb	4082726	2.84	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1357284	1.62	1362089	99.6	70	130	
Sc	45	2	57663	0.91	63506	90.8	70	130	
In	115	1	1764306	0.18	1898930	92.9	70	130	
In	115	2	318457	0.41	361905	88.0	70	130	
Tb	159	1	2828920	0.48	2853404	99.1	70	130	
Tb	159	2	1129107	0.65	1165923	96.8	70	130	
Ho	165	1	2826890	0.91	2786946	101.4	70	130	
Ho	165	2	1132014	1.13	1166475	97.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18954-002 MR**
Data File Name	**022SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:50:45-04:00**
Type	**Sample**
VialNumber	**2405**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.07	0.07	ppb	899	6.73	550	
Na	23	115	2	115574.19	115574.19	ppb	163130675	0.64	55000	>LDR
Mg	24	115	2	31989.46	31989.46	ppb	21507507	0.82	55000	
Al	27	115	2	707.44	707.44	ppb	168244	3.89	16500	
K	39	115	2	23269.20	23269.20	ppb	10757534	0.85	55000	
Ca	44	115	2	103895.60	103895.60	ppb	2357784	0.75	55000	>LDR
V	51	115	2	3.77	3.77	ppb	19764	1.85	550	
Cr	52	115	2	1.69	1.69	ppb	12186	4.06	550	
Mn	55	115	2	195.62	195.62	ppb	718463	2.27	550	
Fe	56	115	2	3344.97	3344.97	ppb	18609633	1.68	55000	
Co	59	115	2	11.10	11.10	ppb	115034	2.62	550	
Ni	60	115	2	37.64	37.64	ppb	104335	2.57	550	
Cu	65	115	2	16.71	16.71	ppb	61610	2.02	550	
Zn	66	115	2	466.64	466.64	ppb	515699	0.86	550	
As	75	115	2	1297.15	1297.15	ppb	823974	1.22	550	>LDR
Se	78	115	2	35.44	35.44	ppb	1735	3.02	2750	
Mo	95	115	1	12.90	12.90	ppb	107412	3.14	550	
Ag	107	115	1	0.28	0.28	ppb	7070	2.55	550	
Cd	111	115	1	0.71	0.71	ppb	3184	1.94	550	
Sb	121	115	1	391.01	391.01	ppb	7246648	3.14	550	
Ba	137	159	1	38.14	38.14	ppb	272958	2.66	550	
Tl	205	165	1	0.13	0.13	ppb	9172	5.53	550	
Pb	208	165	1	106.44	106.44	ppb	4284397	2.41	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1368566	0.32	1362089	100.5	70	130	
Sc	45	2	57836	1.14	63506	91.1	70	130	
In	115	1	1802637	0.52	1898930	94.9	70	130	
In	115	2	316676	1.36	361905	87.5	70	130	
Tb	159	1	2880751	0.63	2853404	101.0	70	130	
Tb	159	2	1125067	1.91	1165923	96.5	70	130	
Ho	165	1	2853781	0.33	2786946	102.4	70	130	
Ho	165	2	1128313	0.72	1166475	96.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18954-002 SD**
Data File Name	**023SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:55:11-04:00**
Type	**Sample**
VialNumber	**2409**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.02	0.02	ppb	324	9.21	550	
Na	23	115	2	22104.07	22104.07	ppb	34027456	1.39	55000	
Mg	24	115	2	6244.58	6244.58	ppb	4575923	1.40	55000	
Al	27	115	2	142.49	142.49	ppb	37434	5.18	16500	
K	39	115	2	4568.34	4568.34	ppb	2326955	0.65	55000	
Ca	44	115	2	19446.72	19446.72	ppb	480998	1.36	55000	
V	51	115	2	0.87	0.87	ppb	4961	4.04	550	
Cr	52	115	2	0.35	0.35	ppb	3707	4.39	550	
Mn	55	115	2	38.44	38.44	ppb	154413	0.31	550	
Fe	56	115	2	657.53	657.53	ppb	3999724	1.01	55000	
Co	59	115	2	2.14	2.14	ppb	24342	1.35	550	
Ni	60	115	2	7.40	7.40	ppb	22796	2.22	550	
Cu	65	115	2	3.86	3.86	ppb	15920	1.71	550	
Zn	66	115	2	97.64	97.64	ppb	118409	0.75	550	
As	75	115	2	250.55	250.55	ppb	173423	0.32	550	
Se	78	115	2	7.07	7.07	ppb	386	3.19	2750	
Mo	95	115	1	2.54	2.54	ppb	22514	2.19	550	
Ag	107	115	1	0.06	0.06	ppb	1803	0.49	550	
Cd	111	115	1	0.14	0.14	ppb	705	6.80	550	
Sb	121	115	1	76.84	76.84	ppb	1508836	7.43	550	
Ba	137	159	1	7.92	7.92	ppb	58687	3.49	550	
Tl	205	165	1	0.05	0.05	ppb	4520	6.38	550	
Pb	208	165	1	19.74	19.74	ppb	827528	2.85	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1341161	1.10	1362089	98.5	70	130	
Sc	45	2	60566	1.71	63506	95.4	70	130	
In	115	1	1908936	1.11	1898930	100.5	70	130	
In	115	2	345064	0.68	361905	95.3	70	130	
Tb	159	1	2967067	0.96	2853404	104.0	70	130	
Tb	159	2	1175392	0.80	1165923	100.8	70	130	
Ho	165	1	2954308	0.63	2786946	106.0	70	130	
Ho	165	2	1169887	1.26	1166475	100.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18954-002 MS 1**
Data File Name	**024SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T14:59:37-04:00**
Type	**Sample**
VialNumber	**2406**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	216.12	216.12	ppb	2356186	2.96	550	
Na	23	115	2	139887.62	139887.62	ppb	202500788	0.50	55000	>LDR
Mg	24	115	2	55592.82	55592.82	ppb	38332208	1.55	55000	>LDR
Al	27	115	2	3287.41	3287.41	ppb	799421	1.29	16500	
K	39	115	2	47231.71	47231.71	ppb	22361589	0.65	55000	
Ca	44	115	2	129589.62	129589.62	ppb	3015843	0.57	55000	>LDR
V	51	115	2	256.89	256.89	ppb	1377863	0.73	550	
Cr	52	115	2	253.35	253.35	ppb	1696899	0.60	550	
Mn	55	115	2	453.55	453.55	ppb	1707278	1.80	550	
Fe	56	115	2	5827.43	5827.43	ppb	33234324	1.29	55000	
Co	59	115	2	263.59	263.59	ppb	2794931	1.10	550	
Ni	60	115	2	266.00	266.00	ppb	753030	1.67	550	
Cu	65	115	2	246.93	246.93	ppb	926350	1.13	550	
Zn	66	115	2	683.58	683.58	ppb	774253	0.94	550	>LDR
As	75	115	2	1538.72	1538.72	ppb	1002334	0.97	550	>LDR
Se	78	115	2	269.68	269.68	ppb	13469	2.04	2750	
Mo	95	115	1	268.75	268.75	ppb	2208343	2.41	550	
Ag	107	115	1	43.47	43.47	ppb	1016042	2.34	550	
Cd	111	115	1	235.65	235.65	ppb	1044490	2.79	550	
Sb	121	115	1	638.97	638.97	ppb	11703521	2.06	550	>LDR
Ba	137	159	1	299.90	299.90	ppb	2090732	1.90	550	
Tl	205	165	1	216.99	216.99	ppb	12826095	2.07	550	
Pb	208	165	1	334.00	334.00	ppb	13285505	3.02	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1365037	0.93	1362089	100.2	70	130	
Sc	45	2	58076	1.39	63506	91.5	70	130	
In	115	1	1781470	0.74	1898930	93.8	70	130	
In	115	2	324744	1.05	361905	89.7	70	130	
Tb	159	1	2810294	1.02	2853404	98.5	70	130	
Tb	159	2	1119491	0.96	1165923	96.0	70	130	
Ho	165	1	2823260	1.03	2786946	101.3	70	130	
Ho	165	2	1118605	1.09	1166475	95.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18954-002 MS 2**
Data File Name	**025SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T15:03:53-04:00**
Type	**Sample**
VialNumber	**2407**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	211.23	211.23	ppb	2297234	2.19	550	
Na	23	115	2	137479.99	137479.99	ppb	200283637	0.58	55000	>LDR
Mg	24	115	2	54776.62	54776.62	ppb	38007617	0.80	55000	
Al	27	115	2	3266.02	3266.02	ppb	799308	1.20	16500	
K	39	115	2	46530.68	46530.68	ppb	22171240	1.17	55000	
Ca	44	115	2	126859.79	126859.79	ppb	2971345	1.40	55000	>LDR
V	51	115	2	251.16	251.16	ppb	1355754	1.49	550	
Cr	52	115	2	247.99	247.99	ppb	1671743	1.26	550	
Mn	55	115	2	446.66	446.66	ppb	1691917	0.51	550	
Fe	56	115	2	5672.38	5672.38	ppb	32556270	1.17	55000	
Co	59	115	2	255.96	255.96	ppb	2731486	2.12	550	
Ni	60	115	2	260.83	260.83	ppb	743075	1.46	550	
Cu	65	115	2	241.43	241.43	ppb	911510	1.24	550	
Zn	66	115	2	670.15	670.15	ppb	763984	1.97	550	>LDR
As	75	115	2	1510.86	1510.86	ppb	990518	1.87	550	>LDR
Se	78	115	2	269.42	269.42	ppb	13541	1.20	2750	
Mo	95	115	1	259.25	259.25	ppb	2171580	3.11	550	
Ag	107	115	1	41.96	41.96	ppb	999877	3.38	550	
Cd	111	115	1	228.68	228.68	ppb	1033275	3.44	550	
Sb	121	115	1	614.54	614.54	ppb	11474806	2.13	550	>LDR
Ba	137	159	1	293.96	293.96	ppb	2071111	3.76	550	
Tl	205	165	1	214.11	214.11	ppb	12511304	3.12	550	
Pb	208	165	1	330.21	330.21	ppb	12985931	2.94	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1362233	1.47	1362089	100.0	70	130	
Sc	45	2	58162	0.12	63506	91.6	70	130	
In	115	1	1816314	1.03	1898930	95.6	70	130	
In	115	2	326834	1.53	361905	90.3	70	130	
Tb	159	1	2840568	1.24	2853404	99.6	70	130	
Tb	159	2	1122255	1.51	1165923	96.3	70	130	
Ho	165	1	2790785	0.85	2786946	100.1	70	130	
Ho	165	2	1129528	0.82	1166475	96.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18954-002 PS**
Data File Name	**026SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T15:08:10-04:00**
Type	**Sample**
VialNumber	**2408**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	42.75	42.75	ppb	459660	3.14	550	
Na	23	115	2	110755.84	110755.84	ppb	155449622	1.18	55000	>LDR
Mg	24	115	2	34311.72	34311.72	ppb	22936322	1.39	55000	
Al	27	115	2	2042.98	2042.98	ppb	481860	1.72	16500	
K	39	115	2	26315.05	26315.05	ppb	12091186	0.60	55000	
Ca	44	115	2	101801.73	101801.73	ppb	2296862	0.87	55000	>LDR
V	51	115	2	53.30	53.30	ppb	277204	1.11	550	
Cr	52	115	2	51.61	51.61	ppb	336042	1.14	550	
Mn	55	115	2	232.80	232.80	ppb	849836	2.09	550	
Fe	56	115	2	8010.20	8010.20	ppb	44282742	2.20	55000	
Co	59	115	2	59.19	59.19	ppb	608713	1.53	550	
Ni	60	115	2	82.88	82.88	ppb	227807	1.45	550	
Cu	65	115	2	63.84	63.84	ppb	232570	2.12	550	
Zn	66	115	2	484.22	484.22	ppb	531997	1.40	550	
As	75	115	2	1257.20	1257.20	ppb	793966	1.41	550	>LDR
Se	78	115	2	273.73	273.73	ppb	13253	3.68	2750	
Mo	95	115	1	61.59	61.59	ppb	501388	3.43	550	
Ag	107	115	1	45.64	45.64	ppb	1056614	2.30	550	
Cd	111	115	1	49.00	49.00	ppb	215130	2.63	550	
Sb	121	115	1	417.86	417.86	ppb	7581026	2.39	550	
Ba	137	159	1	83.39	83.39	ppb	588336	2.10	550	
Tl	205	165	1	46.45	46.45	ppb	2749991	4.87	550	
Pb	208	165	1	145.26	145.26	ppb	5787185	2.05	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1346274	3.11	1362089	98.8	70	130	
Sc	45	2	56889	0.79	63506	89.6	70	130	
In	115	1	1764336	1.76	1898930	92.9	70	130	
In	115	2	314834	1.18	361905	87.0	70	130	
Tb	159	1	2842190	0.68	2853404	99.6	70	130	
Tb	159	2	1132630	1.01	1165923	97.1	70	130	
Ho	165	1	2825223	0.90	2786946	101.4	70	130	
Ho	165	2	1130332	1.09	1166475	96.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**027SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T15:12:32-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.04	0.04	ppb	451	10.38	550	
Na	23	115	2	24.92	24.92	ppb	69588	0.48	55000	
Mg	24	115	2	2.01	2.01	ppb	2421	5.17	55000	
Al	27	115	2	-0.04	-0.04	ppb	650	1.85	16500	
K	39	115	2	2.95	2.95	ppb	34079	1.36	55000	
Ca	44	115	2	4.60	4.60	ppb	212	17.23	55000	
V	51	115	2	0.05	0.05	ppb	297	10.11	550	
Cr	52	115	2	0.03	0.03	ppb	1495	7.06	550	
Mn	55	115	2	-0.05	-0.05	ppb	576	6.71	550	
Fe	56	115	2	3.88	3.88	ppb	41536	1.68	55000	
Co	59	115	2	0.00	0.00	ppb	288	12.92	550	
Ni	60	115	2	-0.02	-0.02	ppb	491	5.14	550	
Cu	65	115	2	0.30	0.30	ppb	1800	3.21	550	
Zn	66	115	2	0.08	0.08	ppb	1171	5.51	550	
As	75	115	2	0.16	0.16	ppb	120	9.26	550	
Se	78	115	2	0.17	0.17	ppb	21	25.32	2750	
Mo	95	115	1	0.11	0.11	ppb	1139	11.50	550	
Ag	107	115	1	0.03	0.03	ppb	1225	4.89	550	
Cd	111	115	1	0.02	0.02	ppb	119	9.76	550	
Sb	121	115	1	0.35	0.35	ppb	7369	6.72	550	
Ba	137	159	1	0.07	0.07	ppb	867	1.92	550	
Tl	205	165	1	0.28	0.28	ppb	18144	9.12	550	
Pb	208	165	1	0.08	0.08	ppb	8958	1.33	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1287243	0.54	1362089	94.5	70	130	
Sc	45	2	60590	0.73	63506	95.4	70	130	
In	115	1	1894112	1.47	1898930	99.7	70	130	
In	115	2	353671	1.49	361905	97.7	70	130	
Tb	159	1	2874010	0.34	2853404	100.7	70	130	
Tb	159	2	1173909	0.35	1165923	100.7	70	130	
Ho	165	1	2827188	0.93	2786946	101.4	70	130	
Ho	165	2	1163892	0.12	1166475	99.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334054**
Data File Name	**0286CCV.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T15:17:02-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	45	1	52.40	ppb	50	536240	3.40	104.80	90	110	
Na	23	115	2	4997.79	ppb	5000	7808289	0.53	99.96	90	110	
Mg	24	115	2	4965.49	ppb	5000	3681973	0.84	99.31	90	110	
Al	27	115	2	1471.05	ppb	1500	384988	2.28	98.07	90	110	
K	39	115	2	4931.68	ppb	5000	2539374	0.35	98.63	90	110	
Ca	44	115	2	4924.38	ppb	5000	123318	0.90	98.49	90	110	
V	51	115	2	48.95	ppb	50	282323	0.68	97.90	90	110	
Cr	52	115	2	49.44	ppb	50	357048	1.42	98.87	90	110	
Mn	55	115	2	49.34	ppb	50	200362	0.92	98.68	90	110	
Fe	56	115	2	4940.23	ppb	5000	30296179	1.31	98.80	90	110	
Co	59	115	2	49.52	ppb	50	564808	1.12	99.04	90	110	
Ni	60	115	2	49.17	ppb	50	150106	0.92	98.33	90	110	
Cu	65	115	2	49.13	ppb	50	198633	1.21	98.26	90	110	
Zn	66	115	2	49.02	ppb	50	60677	1.60	98.03	90	110	
As	75	115	2	48.91	ppb	50	34265	0.91	97.81	90	110	
Se	78	115	2	248.56	ppb	250	13348	0.51	99.42	90	110	
Mo	95	115	1	49.37	ppb	50	417496	3.36	98.73	90	110	
Ag	107	115	1	47.22	ppb	50	1135684	3.05	94.44	90	110	
Cd	111	115	1	50.13	ppb	50	228629	2.91	100.25	90	110	
Sb	121	115	1	47.36	ppb	50	892967	3.87	94.71	90	110	
Ba	137	159	1	50.08	ppb	50	350485	3.37	100.16	90	110	
Tl	205	165	1	51.01	ppb	50	2973194	3.64	102.03	90	110	
Pb	208	165	1	50.93	ppb	50	2001349	2.96	101.85	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1281440	0.62	1362089	94.1	70	130	
Sc	45	2	60011	1.14	63506	94.5	70	130	
In	115	1	1833010	0.44	1898930	96.5	70	130	
In	115	2	349188	0.79	361905	96.5	70	130	
Tb	159	1	2818305	0.56	2853404	98.8	70	130	
Tb	159	2	1158566	0.76	1165923	99.4	70	130	
Ho	165	1	2782270	0.82	2786946	99.8	70	130	
Ho	165	2	1156813	0.45	1166475	99.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334051**
Data File Name	**0296CCB.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T15:21:26-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	45	1	0.02	ppb	0.5	
Na	23	115	2	14.90	ppb	250	
Mg	24	115	2	0.64	ppb	250	
Al	27	115	2	-0.73	ppb	100	
K	39	115	2	1.72	ppb	250	
Ca	44	115	2	0.80	ppb	250	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	0.01	ppb	1	
Mn	55	115	2	0.00	ppb	3	
Fe	56	115	2	1.33	ppb	150	
Co	59	115	2	0.00	ppb	1	
Ni	60	115	2	-0.02	ppb	1.5	
Cu	65	115	2	0.03	ppb	5	
Zn	66	115	2	0.00	ppb	10	
As	75	115	2	0.04	ppb	1	
Se	78	115	2	0.08	ppb	5	
Mo	95	115	1	0.09	ppb	1	
Ag	107	115	1	0.02	ppb	0.5	
Cd	111	115	1	0.01	ppb	1	
Sb	121	115	1	0.12	ppb	1.5	
Ba	137	159	1	0.01	ppb	2.5	
Tl	205	165	1	0.06	ppb	1	
Pb	208	165	1	0.00	ppb	1.5	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1288702	0.66	1362089	94.6	70	130	
Sc	45	2	61099	2.14	63506	96.2	70	130	
In	115	1	1844644	0.51	1898930	97.1	70	130	
In	115	2	349397	1.29	361905	96.5	70	130	
Tb	159	1	2788750	0.98	2853404	97.7	70	130	
Tb	159	2	1145146	0.63	1165923	98.2	70	130	
Ho	165	1	2752485	0.32	2786946	98.8	70	130	
Ho	165	2	1143288	0.78	1166475	98.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18934-006**
Data File Name	**030SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T15:25:57-04:00**
Type	**Sample**
VialNumber	**2410**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.01	0.01	ppb	203	21.31	550	
Na	23	115	2	175.91	175.91	ppb	284482	0.47	55000	
Mg	24	115	2	1.38	1.38	ppb	1801	3.60	55000	
Al	27	115	2	0.88	0.88	ppb	828	12.41	16500	
K	39	115	2	5.51	5.51	ppb	32738	0.76	55000	
Ca	44	115	2	28.55	28.55	ppb	758	14.34	55000	
V	51	115	2	0.50	0.50	ppb	2728	8.21	550	
Cr	52	115	2	0.12	0.12	ppb	1998	7.57	550	
Mn	55	115	2	0.41	0.41	ppb	2251	3.11	550	
Fe	56	115	2	15.60	15.60	ppb	105709	1.08	55000	
Co	59	115	2	-0.01	-0.01	ppb	147	35.72	550	
Ni	60	115	2	-0.02	-0.02	ppb	472	16.65	550	
Cu	65	115	2	0.39	0.39	ppb	1982	7.87	550	
Zn	66	115	2	2.65	2.65	ppb	4016	2.85	550	
As	75	115	2	0.23	0.23	ppb	161	7.74	550	
Se	78	115	2	0.13	0.13	ppb	17	33.46	2750	
Mo	95	115	1	0.03	0.03	ppb	396	8.52	550	
Ag	107	115	1	0.06	0.06	ppb	1874	8.31	550	
Cd	111	115	1	0.01	0.01	ppb	53	19.63	550	
Sb	121	115	1	0.16	0.16	ppb	3621	6.48	550	
Ba	137	159	1	0.08	0.08	ppb	933	7.86	550	
Tl	205	165	1	0.10	0.10	ppb	7584	5.39	550	
Pb	208	165	1	0.06	0.06	ppb	7936	1.94	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1147676	0.50	1362089	84.3	70	130	
Sc	45	2	55049	1.67	63506	86.7	70	130	
In	115	1	1854963	0.60	1898930	97.7	70	130	
In	115	2	327074	0.80	361905	90.4	70	130	
Tb	159	1	2862769	0.06	2853404	100.3	70	130	
Tb	159	2	1128853	0.51	1165923	96.8	70	130	
Ho	165	1	2817442	0.33	2786946	101.1	70	130	
Ho	165	2	1126252	0.85	1166475	96.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18934-008**
Data File Name	**031SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T15:30:31-04:00**
Type	**Sample**
VialNumber	**2411**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.01	0.01	ppb	169	23.13	550	
Na	23	115	2	161.98	161.98	ppb	269726	1.09	55000	
Mg	24	115	2	1.19	1.19	ppb	1699	5.56	55000	
Al	27	115	2	-0.24	-0.24	ppb	564	7.48	16500	
K	39	115	2	-0.46	-0.46	ppb	30527	2.13	55000	
Ca	44	115	2	27.57	27.57	ppb	750	0.89	55000	
V	51	115	2	0.57	0.57	ppb	3195	4.93	550	
Cr	52	115	2	0.09	0.09	ppb	1829	4.29	550	
Mn	55	115	2	0.16	0.16	ppb	1335	4.75	550	
Fe	56	115	2	5.65	5.65	ppb	49578	2.66	55000	
Co	59	115	2	-0.01	-0.01	ppb	104	4.87	550	
Ni	60	115	2	-0.01	-0.01	ppb	486	8.19	550	
Cu	65	115	2	0.34	0.34	ppb	1822	0.28	550	
Zn	66	115	2	2.06	2.06	ppb	3407	2.46	550	
As	75	115	2	0.21	0.21	ppb	150	2.96	550	
Se	78	115	2	0.28	0.28	ppb	25	38.61	2750	
Mo	95	115	1	0.02	0.02	ppb	314	7.96	550	
Ag	107	115	1	0.04	0.04	ppb	1292	7.52	550	
Cd	111	115	1	0.00	0.00	ppb	34	27.46	550	
Sb	121	115	1	0.10	0.10	ppb	2462	6.50	550	
Ba	137	159	1	0.07	0.07	ppb	835	2.72	550	
Tl	205	165	1	0.03	0.03	ppb	2928	6.65	550	
Pb	208	165	1	0.01	0.01	ppb	6153	3.54	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1215844	3.98	1362089	89.3	70	130	
Sc	45	2	57187	5.10	63506	90.0	70	130	
In	115	1	1834314	1.15	1898930	96.6	70	130	
In	115	2	334543	5.31	361905	92.4	70	130	
Tb	159	1	2848842	0.89	2853404	99.8	70	130	
Tb	159	2	1157824	5.57	1165923	99.3	70	130	
Ho	165	1	2842764	0.96	2786946	102.0	70	130	
Ho	165	2	1155895	6.10	1166475	99.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18954-001**
Data File Name	**032SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T15:35:04-04:00**
Type	**Sample**
VialNumber	**2412**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.13	0.13	ppb	1489	3.60	550	
Na	23	115	2	94465.19	94465.19	ppb	131373857	0.87	55000	>LDR
Mg	24	115	2	29345.27	29345.27	ppb	19437079	1.54	55000	
Al	27	115	2	2424.89	2424.89	ppb	566620	1.60	16500	
K	39	115	2	22377.14	22377.14	ppb	10192033	0.69	55000	
Ca	44	115	2	96173.23	96173.23	ppb	2150129	1.89	55000	>LDR
V	51	115	2	7.80	7.80	ppb	40213	2.66	550	
Cr	52	115	2	4.66	4.66	ppb	31079	3.42	550	
Mn	55	115	2	415.43	415.43	ppb	1502162	1.04	550	
Fe	56	115	2	5067.99	5067.99	ppb	27766065	0.98	55000	
Co	59	115	2	35.90	35.90	ppb	365888	1.25	550	
Ni	60	115	2	97.59	97.59	ppb	265682	0.75	550	
Cu	65	115	2	31.82	31.82	ppb	115097	1.09	550	
Zn	66	115	2	1649.22	1649.22	ppb	1793130	1.66	550	>LDR
As	75	115	2	857.06	857.06	ppb	536308	1.02	550	>LDR
Se	78	115	2	83.89	83.89	ppb	4031	0.76	2750	
Mo	95	115	1	14.55	14.55	ppb	116715	3.19	550	
Ag	107	115	1	0.51	0.51	ppb	12002	4.95	550	
Cd	111	115	1	9.24	9.24	ppb	39954	3.67	550	
Sb	121	115	1	423.41	423.41	ppb	7562103	2.74	550	
Ba	137	159	1	63.00	63.00	ppb	438552	3.28	550	
Tl	205	165	1	0.22	0.22	ppb	14073	4.03	550	
Pb	208	165	1	69.84	69.84	ppb	2739819	2.77	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1350550	1.25	1362089	99.2	70	130	
Sc	45	2	55995	1.51	63506	88.2	70	130	
In	115	1	1736967	0.79	1898930	91.5	70	130	
In	115	2	311948	0.83	361905	86.2	70	130	
Tb	159	1	2804274	0.35	2853404	98.3	70	130	
Tb	159	2	1116003	0.70	1165923	95.7	70	130	
Ho	165	1	2778892	0.50	2786946	99.7	70	130	
Ho	165	2	1116438	0.86	1166475	95.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18954-003**
Data File Name	**033SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T15:39:28-04:00**
Type	**Sample**
VialNumber	**2501**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.16	0.16	ppb	1885	2.59	550	
Na	23	115	2	176725.68	176725.68	ppb	247483014	1.05	55000	>LDR
Mg	24	115	2	44398.93	44398.93	ppb	29612383	0.65	55000	
Al	27	115	2	2553.40	2553.40	ppb	600797	1.83	16500	
K	39	115	2	37442.44	37442.44	ppb	17155157	1.35	55000	
Ca	44	115	2	101283.83	101283.83	ppb	2280339	1.39	55000	>LDR
V	51	115	2	10.07	10.07	ppb	52305	2.81	550	
Cr	52	115	2	5.09	5.09	ppb	34089	0.93	550	
Mn	55	115	2	200.78	200.78	ppb	731512	1.96	550	
Fe	56	115	2	6580.42	6580.42	ppb	36303624	2.02	55000	
Co	59	115	2	10.30	10.30	ppb	105866	2.11	550	
Ni	60	115	2	15.52	15.52	ppb	42957	1.16	550	
Cu	65	115	2	160.90	160.90	ppb	584100	1.44	550	
Zn	66	115	2	591.31	591.31	ppb	648045	1.57	550	>LDR
As	75	115	2	2784.10	2784.10	ppb	1754311	1.34	550	>LDR
Se	78	115	2	32.45	32.45	ppb	1577	1.11	2750	
Mo	95	115	1	24.56	24.56	ppb	197793	3.24	550	
Ag	107	115	1	1.95	1.95	ppb	44898	2.61	550	
Cd	111	115	1	2.71	2.71	ppb	11774	3.91	550	
Sb	121	115	1	73.34	73.34	ppb	1316244	3.57	550	
Ba	137	159	1	55.80	55.80	ppb	388056	3.43	550	
Tl	205	165	1	0.14	0.14	ppb	9240	5.73	550	
Pb	208	165	1	444.82	444.82	ppb	17350263	3.62	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1377533	1.23	1362089	101.1	70	130	
Sc	45	2	57844	1.62	63506	91.1	70	130	
In	115	1	1745347	0.84	1898930	91.9	70	130	
In	115	2	314158	1.40	361905	86.8	70	130	
Tb	159	1	2800706	0.99	2853404	98.2	70	130	
Tb	159	2	1102782	0.76	1165923	94.6	70	130	
Ho	165	1	2767866	0.88	2786946	99.3	70	130	
Ho	165	2	1110044	1.05	1166475	95.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18954-004**
Data File Name	**034SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T15:43:50-04:00**
Type	**Sample**
VialNumber	**2502**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.18	0.18	ppb	2089	2.31	550	
Na	23	115	2	1107251.79	1107251.79	ppb	1505264226	1.83	55000	>LDR
Mg	24	115	2	118711.41	118711.41	ppb	76870217	1.56	55000	>LDR
Al	27	115	2	3730.58	3730.58	ppb	851992	2.24	16500	
K	39	115	2	44978.58	44978.58	ppb	19999521	0.70	55000	
Ca	44	115	2	96683.74	96683.74	ppb	2113340	1.88	55000	>LDR
V	51	115	2	14.07	14.07	ppb	70876	0.46	550	
Cr	52	115	2	7.81	7.81	ppb	50204	1.03	550	
Mn	55	115	2	896.53	896.53	ppb	3168610	1.43	550	>LDR
Fe	56	115	2	15719.56	15719.56	ppb	84155506	1.56	55000	
Co	59	115	2	8.63	8.63	ppb	86174	1.49	550	
Ni	60	115	2	10.26	10.26	ppb	27740	1.97	550	
Cu	65	115	2	55.26	55.26	ppb	195059	1.28	550	
Zn	66	115	2	220.48	220.48	ppb	235170	1.79	550	
As	75	115	2	1011.19	1011.19	ppb	618646	2.05	550	>LDR
Se	78	115	2	15.68	15.68	ppb	745	2.18	2750	
Mo	95	115	1	6.74	6.74	ppb	51787	3.15	550	
Ag	107	115	1	0.95	0.95	ppb	20905	5.36	550	
Cd	111	115	1	3.24	3.24	ppb	13419	2.88	550	
Sb	121	115	1	66.64	66.64	ppb	1138345	3.28	550	
Ba	137	159	1	41.37	41.37	ppb	273529	3.38	550	
Tl	205	165	1	0.56	0.56	ppb	31889	3.07	550	
Pb	208	165	1	227.32	227.32	ppb	8383665	2.87	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1410176	0.56	1362089	103.5	70	130	
Sc	45	2	60985	1.77	63506	96.0	70	130	
In	115	1	1661511	1.55	1898930	87.5	70	130	
In	115	2	304991	1.64	361905	84.3	70	130	
Tb	159	1	2662547	0.89	2853404	93.3	70	130	
Tb	159	2	1036554	0.92	1165923	88.9	70	130	
Ho	165	1	2616393	0.12	2786946	93.9	70	130	
Ho	165	2	1045666	1.32	1166475	89.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18954-005**
Data File Name	**035SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T15:48:17-04:00**
Type	**Sample**
VialNumber	**2503**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.13	0.13	ppb	1443	5.60	550	
Na	23	115	2	2726556.77	2726556.77	ppb	3513072837	1.41	55000	>LDR
Mg	24	115	2	208702.65	208702.65	ppb	128094923	2.10	55000	>LDR
Al	27	115	2	1138.54	1138.54	ppb	246833	3.35	16500	
K	39	115	2	116778.36	116778.36	ppb	49179990	2.12	55000	>LDR
Ca	44	115	2	287267.67	287267.67	ppb	5951189	1.85	55000	>LDR
V	51	115	2	3.86	3.86	ppb	18477	4.28	550	
Cr	52	115	2	3.59	3.59	ppb	22423	3.38	550	
Mn	55	115	2	2860.39	2860.39	ppb	9580619	1.28	550	>LDR
Fe	56	115	2	20849.68	20849.68	ppb	105812173	1.95	55000	
Co	59	115	2	1.26	1.26	ppb	12082	1.69	550	
Ni	60	115	2	2.88	2.88	ppb	7711	3.23	550	
Cu	65	115	2	21.51	21.51	ppb	72235	1.88	550	
Zn	66	115	2	39.35	39.35	ppb	40522	12.16	550	
As	75	115	2	25.92	25.92	ppb	15036	1.10	550	
Se	78	115	2	2.81	2.81	ppb	134	26.04	2750	
Mo	95	115	1	22.34	22.34	ppb	143022	2.71	550	
Ag	107	115	1	0.47	0.47	ppb	8848	6.02	550	
Cd	111	115	1	0.32	0.32	ppb	1121	6.54	550	
Sb	121	115	1	10.70	10.70	ppb	152973	4.21	550	
Ba	137	159	1	93.46	93.46	ppb	540172	3.79	550	
Tl	205	165	1	0.08	0.08	ppb	5092	5.56	550	
Pb	208	165	1	103.84	103.84	ppb	3342275	2.37	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1264897	1.30	1362089	92.9	70	130	
Sc	45	2	61403	1.36	63506	96.7	70	130	
In	115	1	1386973	0.51	1898930	73.0	70	130	
In	115	2	289068	1.10	361905	79.9	70	130	
Tb	159	1	2328399	0.63	2853404	81.6	70	130	
Tb	159	2	929768	0.39	1165923	79.7	70	130	
Ho	165	1	2281948	0.20	2786946	81.9	70	130	
Ho	165	2	935903	0.50	1166475	80.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18954-006**
Data File Name	**036SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T15:52:46-04:00**
Type	**Sample**
VialNumber	**2504**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.06	0.06	ppb	828	7.82	550	
Na	23	115	2	859234.81	859234.81	ppb	1250962328	0.36	55000	>LDR
Mg	24	115	2	94590.91	94590.91	ppb	65604093	0.81	55000	>LDR
Al	27	115	2	1220.33	1220.33	ppb	298845	2.06	16500	
K	39	115	2	124985.23	124985.23	ppb	59470395	0.38	55000	>LDR
Ca	44	115	2	87273.29	87273.29	ppb	2043112	1.13	55000	>LDR
V	51	115	2	3.60	3.60	ppb	19456	3.91	550	
Cr	52	115	2	5.38	5.38	ppb	37413	1.82	550	
Mn	55	115	2	1440.65	1440.65	ppb	5452970	0.50	550	>LDR
Fe	56	115	2	10654.34	10654.34	ppb	61108598	1.19	55000	
Co	59	115	2	0.86	0.86	ppb	9408	3.16	550	
Ni	60	115	2	2.87	2.87	ppb	8678	2.79	550	
Cu	65	115	2	10.45	10.45	ppb	39931	0.27	550	
Zn	66	115	2	20.34	20.34	ppb	24132	0.24	550	
As	75	115	2	10.61	10.61	ppb	6964	2.74	550	
Se	78	115	2	1.52	1.52	ppb	87	8.50	2750	
Mo	95	115	1	37.84	37.84	ppb	306497	3.29	550	
Ag	107	115	1	0.21	0.21	ppb	5094	5.65	550	
Cd	111	115	1	0.17	0.17	ppb	756	6.74	550	
Sb	121	115	1	5.13	5.13	ppb	93025	3.99	550	
Ba	137	159	1	69.82	69.82	ppb	466689	2.37	550	
Tl	205	165	1	0.02	0.02	ppb	2714	3.76	550	
Pb	208	165	1	56.49	56.49	ppb	2127774	2.78	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1429359	0.63	1362089	104.9	70	130	
Sc	45	2	64409	0.91	63506	101.4	70	130	
In	115	1	1755302	0.66	1898930	92.4	70	130	
In	115	2	326672	1.25	361905	90.3	70	130	
Tb	159	1	2692556	0.30	2853404	94.4	70	130	
Tb	159	2	1080332	0.12	1165923	92.7	70	130	
Ho	165	1	2666813	0.57	2786946	95.7	70	130	
Ho	165	2	1078269	1.01	1166475	92.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**037SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T15:57:15-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.02	0.02	ppb	299	4.22	550	
Na	23	115	2	187.01	187.01	ppb	362544	0.93	55000	
Mg	24	115	2	2.88	2.88	ppb	3423	4.93	55000	
Al	27	115	2	0.80	0.80	ppb	973	11.45	16500	
K	39	115	2	12.97	12.97	ppb	43762	0.46	55000	
Ca	44	115	2	5.86	5.86	ppb	272	6.96	55000	
V	51	115	2	0.04	0.04	ppb	306	15.90	550	
Cr	52	115	2	0.03	0.03	ppb	1693	7.35	550	
Mn	55	115	2	-0.04	-0.04	ppb	670	6.47	550	
Fe	56	115	2	4.31	4.31	ppb	49279	2.44	55000	
Co	59	115	2	0.00	0.00	ppb	281	14.34	550	
Ni	60	115	2	-0.02	-0.02	ppb	557	15.07	550	
Cu	65	115	2	0.31	0.31	ppb	2024	6.52	550	
Zn	66	115	2	0.04	0.04	ppb	1255	4.82	550	
As	75	115	2	0.06	0.06	ppb	58	33.23	550	
Se	78	115	2	0.29	0.29	ppb	30	16.90	2750	
Mo	95	115	1	0.07	0.07	ppb	770	5.41	550	
Ag	107	115	1	0.04	0.04	ppb	1542	8.92	550	
Cd	111	115	1	0.01	0.01	ppb	93	7.20	550	
Sb	121	115	1	0.04	0.04	ppb	1422	14.60	550	
Ba	137	159	1	0.08	0.08	ppb	936	2.03	550	
Tl	205	165	1	0.02	0.02	ppb	2938	0.73	550	
Pb	208	165	1	0.08	0.08	ppb	9017	0.83	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1444553	1.09	1362089	106.1	70	130	
Sc	45	2	68468	1.24	63506	107.8	70	130	
In	115	1	2016951	0.63	1898930	106.2	70	130	
In	115	2	394399	0.68	361905	109.0	70	130	
Tb	159	1	2951612	1.14	2853404	103.4	70	130	
Tb	159	2	1236613	0.71	1165923	106.1	70	130	
Ho	165	1	2880697	0.54	2786946	103.4	70	130	
Ho	165	2	1225722	0.26	1166475	105.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334054**
Data File Name	**0386CCV.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T16:01:46-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	45	1	49.68	ppb	50	558096	2.99	99.35	90	110	
Na	23	115	2	5098.01	ppb	5000	8737392	1.28	101.96	90	110	
Mg	24	115	2	4943.21	ppb	5000	4021425	1.13	98.86	90	110	
Al	27	115	2	1485.23	ppb	1500	426435	1.38	99.02	90	110	
K	39	115	2	5097.80	ppb	5000	2878595	0.92	101.96	90	110	
Ca	44	115	2	5097.36	ppb	5000	140039	1.03	101.95	90	110	
V	51	115	2	49.39	ppb	50	312507	0.50	98.77	90	110	
Cr	52	115	2	49.52	ppb	50	392373	0.94	99.04	90	110	
Mn	55	115	2	50.05	ppb	50	222960	1.20	100.10	90	110	
Fe	56	115	2	4969.40	ppb	5000	33434410	0.61	99.39	90	110	
Co	59	115	2	49.95	ppb	50	624958	1.53	99.89	90	110	
Ni	60	115	2	49.05	ppb	50	164280	1.16	98.10	90	110	
Cu	65	115	2	48.55	ppb	50	215316	1.12	97.09	90	110	
Zn	66	115	2	48.50	ppb	50	65874	2.14	96.99	90	110	
As	75	115	2	50.07	ppb	50	38486	1.03	100.14	90	110	
Se	78	115	2	254.62	ppb	250	15001	1.96	101.85	90	110	
Mo	95	115	1	48.98	ppb	50	443844	4.72	97.95	90	110	
Ag	107	115	1	46.13	ppb	50	1188890	4.20	92.26	90	110	
Cd	111	115	1	48.56	ppb	50	237318	3.43	97.11	90	110	
Sb	121	115	1	45.70	ppb	50	923396	3.09	91.40	90	110	
Ba	137	159	1	50.90	ppb	50	366782	3.25	101.81	90	110	
Tl	205	165	1	49.35	ppb	50	2941613	2.76	98.71	90	110	
Pb	208	165	1	49.72	ppb	50	1998431	3.00	99.44	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1406695	1.21	1362089	103.3	70	130	
Sc	45	2	68268	0.98	63506	107.5	70	130	
In	115	1	1964082	0.38	1898930	103.4	70	130	
In	115	2	383098	0.61	361905	105.9	70	130	
Tb	159	1	2901757	0.25	2853404	101.7	70	130	
Tb	159	2	1232131	0.93	1165923	105.7	70	130	
Ho	165	1	2845346	0.49	2786946	102.1	70	130	
Ho	165	2	1227045	1.28	1166475	105.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334051**
Data File Name	**0396CCB.D**
DataPath	**C:\ICPMH\1\DATA\A090120A.b**
Acq Date Time	**2020-09-01T16:06:12-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

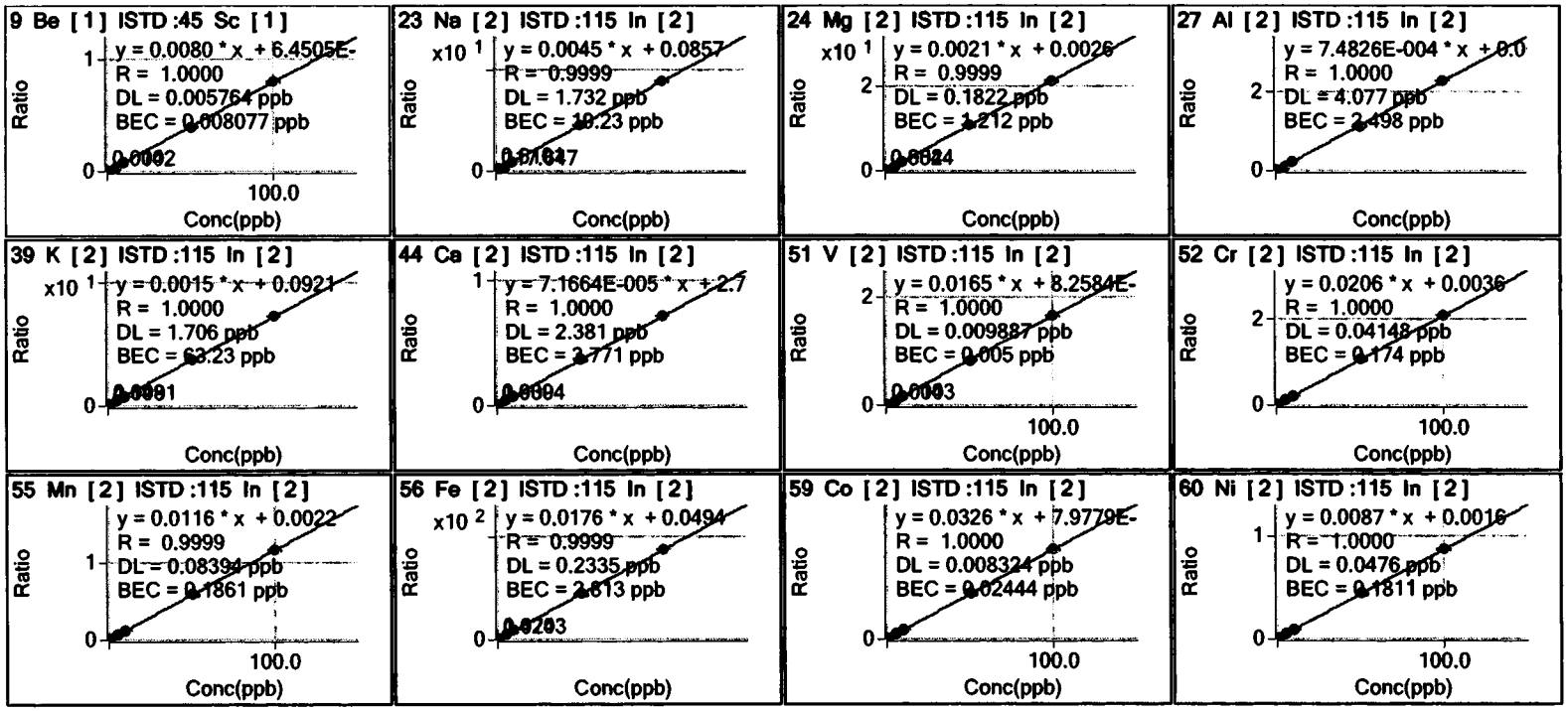
Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	45	1	0.01	ppb	0.5	
Na	23	115	2	117.65	ppb	250	
Mg	24	115	2	0.85	ppb	250	
Al	27	115	2	-0.36	ppb	100	
K	39	115	2	4.15	ppb	250	
Ca	44	115	2	1.94	ppb	250	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	-0.01	ppb	1	
Mn	55	115	2	-0.01	ppb	3	
Fe	56	115	2	1.42	ppb	150	
Co	59	115	2	-0.01	ppb	1	
Ni	60	115	2	-0.03	ppb	1.5	
Cu	65	115	2	0.05	ppb	5	
Zn	66	115	2	0.03	ppb	10	
As	75	115	2	0.05	ppb	1	
Se	78	115	2	0.23	ppb	5	
Mo	95	115	1	0.08	ppb	1	
Ag	107	115	1	0.02	ppb	0.5	
Cd	111	115	1	0.01	ppb	1	
Sb	121	115	1	0.07	ppb	1.5	
Ba	137	159	1	0.02	ppb	2.5	
Tl	205	165	1	0.02	ppb	1	
Pb	208	165	1	-0.01	ppb	1.5	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1372752	1.06	1362089	100.8	70	130	
Sc	45	2	66592	2.81	63506	104.9	70	130	
In	115	1	1950864	1.12	1898930	102.7	70	130	
In	115	2	385945	1.33	361905	106.6	70	130	
Tb	159	1	2861186	1.09	2853404	100.3	70	130	
Tb	159	2	1218490	1.08	1165923	104.5	70	130	
Ho	165	1	2812866	1.33	2786946	100.9	70	130	
Ho	165	2	1214501	0.79	1166475	104.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

0082707 0611



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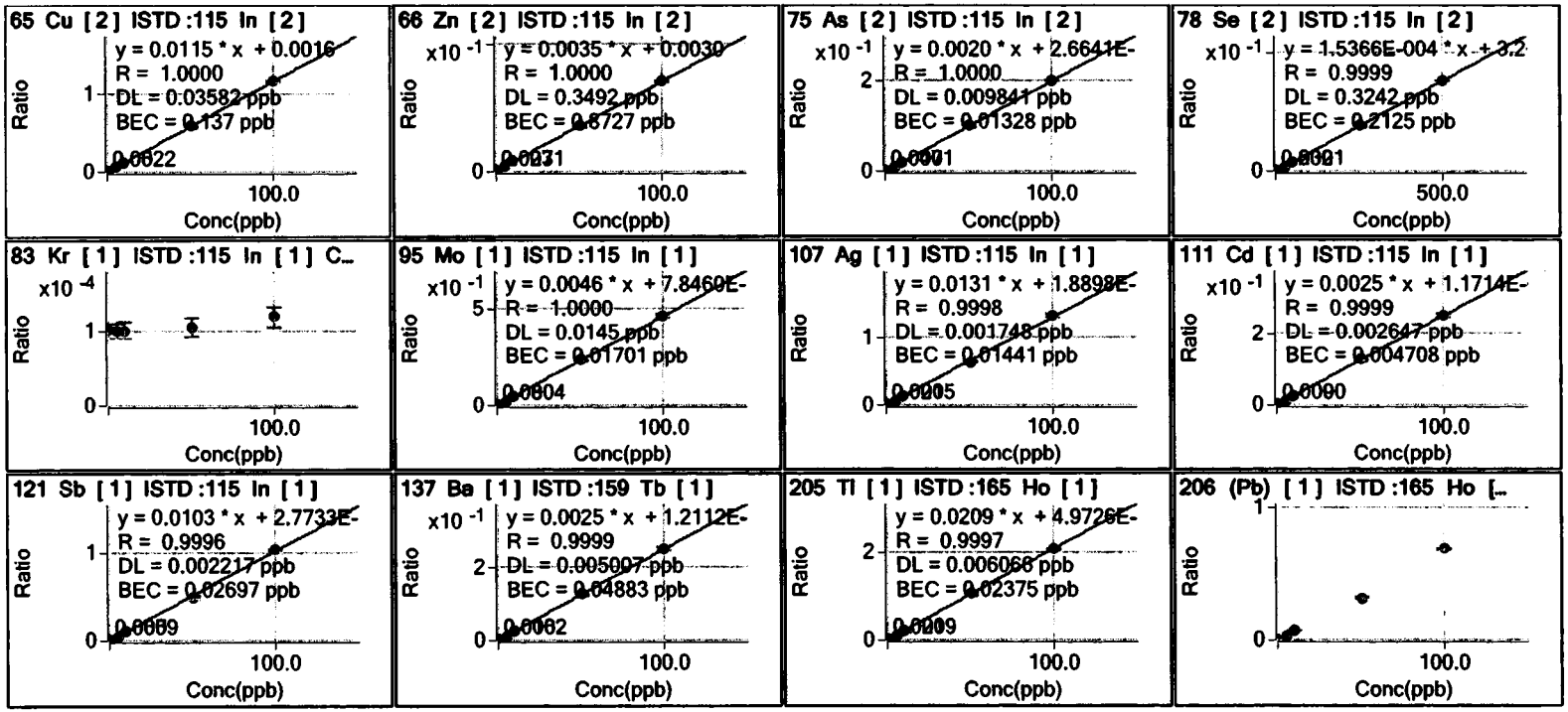

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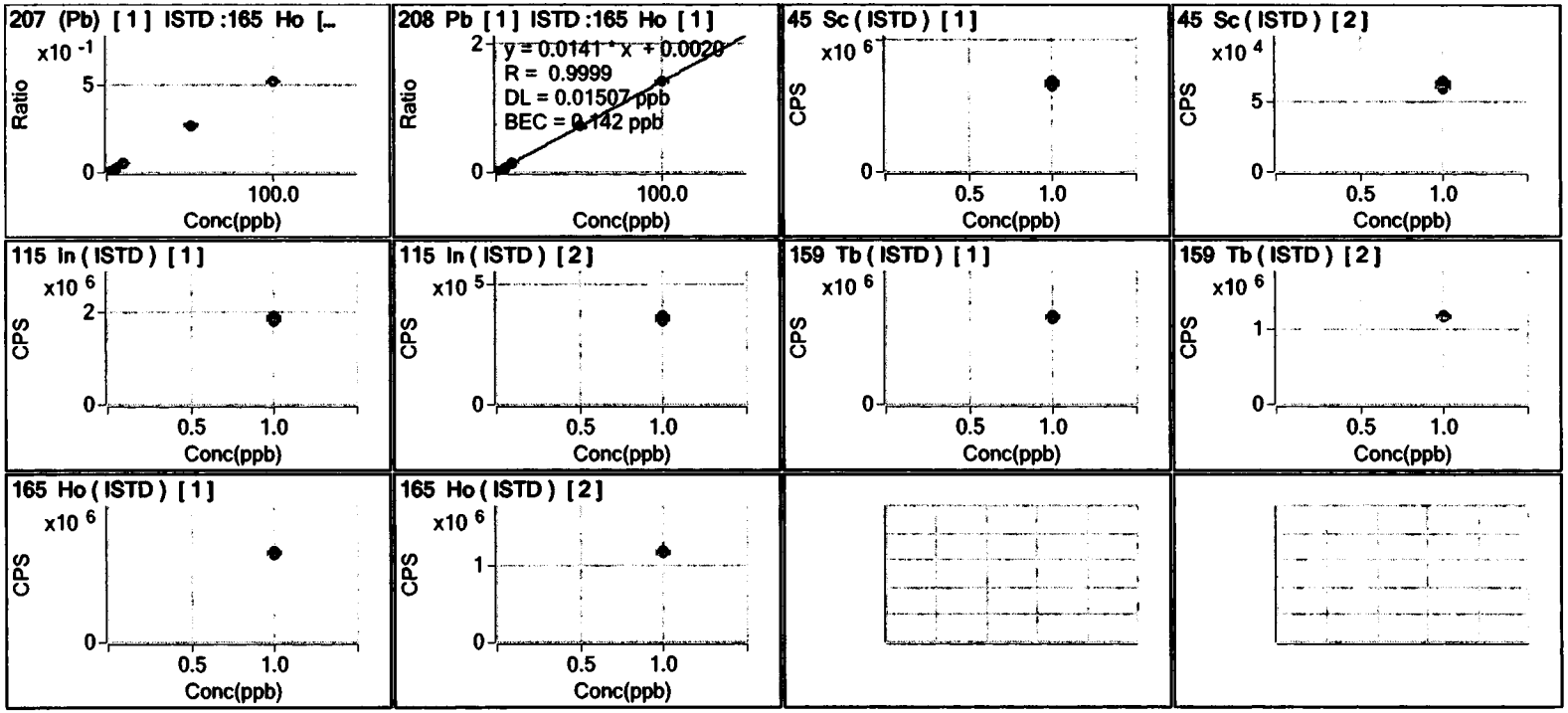

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334059

Prepared By: Silva, Amanda
Description: Hg Intermediate Standard -WARNING
Prep Date: 9/1/2020
Expiration Date: 9/1/2020
Department: Metals
BatchNumber: B-29612
Concentration: .25 ppm
Final Volume: 500 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13311	MERCURY 1000 PPM	.125 ml	1000 ug/ml	
13421	nitric acid	12.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334060

Prepared By: Silva, Amanda
Description: Hg intermediate Control -WARNING
Prep Date: 9/1/2020
Expiration Date: 9/1/2020
Department: Metals
BatchNumber: B-29612
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334072

Prepared By: Silva, Amanda
Description: Hg AQ ICV 20 ppb
Prep Date: 9/1/2020
Expiration Date: 9/1/2020
Department: Metals
BatchNumber: B-29614
Concentration: 20 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334060	Hg intermediate Control -WARNING	.5 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334073

Prepared By: Silva, Amanda
Description: Hg AQ CCV 10 ppb
Prep Date: 9/1/2020
Expiration Date: 9/1/2020
Department: Metals
BatchNumber: B-29614
Concentration: 10 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334060	Hg intermediate Control -WARNING	.25 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334074

Prepared By: Silva, Amanda
Description: Hg AQ standard blk
Prep Date: 9/1/2020
Expiration Date: 9/1/2020
Department: Metals
BatchNumber: B-29614
Concentration: 0 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334075

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard .2 ppb | BatchNumber: B-29614 | ApproveDate: 09/02/20
Prep Date: 9/1/2020 | Concentration: .2 ppb | Checked: Yes
Expiration Date: 9/1/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334059	Hg Intermediate Standard -WARNING	.02 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334076

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard .5 ppb | BatchNumber: B-29614 | ApproveDate: 09/02/20
Prep Date: 9/1/2020 | Concentration: .5 ppb | Checked: Yes
Expiration Date: 9/1/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334059	Hg Intermediate Standard -WARNING	.05 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334077

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard 1 ppb | BatchNumber: B-29614 | ApproveDate: 09/02/20
Prep Date: 9/1/2020 | Concentration: 1 ppb | Checked: Yes
Expiration Date: 9/1/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334059	Hg Intermediate Standard -WARNING	.1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334078

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard 2 ppb | BatchNumber: B-29614 | ApproveDate: 09/02/20
Prep Date: 9/1/2020 | Concentration: 2 ppb | Checked: Yes
Expiration Date: 9/1/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334059	Hg Intermediate Standard -WARNING	.2 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334079

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard 5 ppb | BatchNumber: B-29614 | ApproveDate: 09/02/20
Prep Date: 9/1/2020 | Concentration: 5 ppb | Checked: Yes
Expiration Date: 9/1/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334059	Hg Intermediate Standard -WARNING	.5 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334080

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard 10 ppb | BatchNumber: B-29614 | ApproveDate: 09/02/20
Prep Date: 9/1/2020 | Concentration: 10 ppb | Checked: Yes
Expiration Date: 9/1/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334059	Hg Intermediate Standard -WARNING	1 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334081

Prepared By:	Silva, Amanda	Department:	Metals	ApprovedBy:	shiamala
Description:	Hg AQ standard 25 ppb	BatchNumber:	B-29614	ApproveDate:	09/02/20
Prep Date:	9/1/2020	Concentration:	25 ppb	Checked:	Yes
Expiration Date:	9/1/2020	Final Volume:	25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334059	Hg Intermediate Standard -WARNING	2.5 ml	.25 ppm	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13311

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP	140-051-801	S200130001	06/04/20	12/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-317822

Prepared By: Aliano, Carmela
Description: Hydroxylamine Hydrochloride WARNIN
Prep Date: 12/13/2019
Expiration Date: 1/8/2020
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 10 l
ApprovedBy: shiamala
ApproveDate: 12/16/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12651	DI H2O			
12218	Sodium Chloride	1200 g	neat neat	
12619	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-327154

Prepared By: Cousineau, Paul
Description: 5% Potassium Persulfate WARNING
Prep Date: 5/7/2020
Expiration Date: 11/6/2020
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 12620 l
ApprovedBy: shiamala
ApproveDate: 05/07/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12620	POTASSIUM PERSULFATE	500 g	NEAT neat	

Veritech Lot Number: V-331286

Prepared By: Lucca, Daniela
Description: 5% Potassium Permanganate WARNIN
Prep Date: 7/13/2020
Expiration Date: 2/13/2021
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12621	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-333999

Prepared By: Ransaw, Brianna
Description: 3% HCL WARNING
Prep Date: 8/31/2020
Expiration Date: 9/10/2020
Department: WetChem
BatchNumber:
Concentration: 3 %
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13130	hydrochloric acid	600 ml	neat neat	3%
13084	DI H20			

Veritech Lot Number: V-334060

Prepared By: Silva, Amanda
Description: Hg intermediate Control -WARNING
Prep Date: 9/1/2020
Expiration Date: 9/1/2020
Department: Metals
BatchNumber: B-29612
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334168

Prepared By: Ransaw, Brianna
Description: SnCl2 "WARNING:"
Prep Date: 9/2/2020
Expiration Date: 9/2/2020

Department: Metals
BatchNumber:
Concentration: reagent I
Final Volume: 2 l

ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333999	3% HCL WARNING	2000 ml	3 %	
13089	STANNOUS CHOLORIDE	26.4 g		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12218

Description: Sodium Chloride

ApprovedBy: akmal
ApproveDate: 12/31/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	SX0420-5	17F145203	12/27/18	12/26/23	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12619

Description: HYDROXYLAMINE HYDROCHLORIDE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LS-1580015	190318-4C	06/25/19	06/24/23	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12620

Description: POTASSIUM PERSULFATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-4445NG	170106-A	06/25/19	08/09/21	Balashanthan, Shi	1	2.5KG	NEAT	NEAT

Veritech Control/Receipt Number: 12621

Description: POTASSIUM PERMANGANATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-T10208	190318-3C	06/25/19	06/24/29	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12651

Description: DI H2O

ApprovedBy: janee
ApproveDate: 10/10/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	07/08/19	07/07/20	Cousineau, Paul	1			

Veritech Control/Receipt Number: 13084

Description: DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13089

Description: STANNOUS CHOLORIDE

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB CHEM	LC-P33805	190620-3C	02/15/20	02/14/23	Aliano, Carmela	1	1Gal		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

H26172SW
SnCl2v-334168
9/2/20
BR

Analysis Begun

Logged In Analyst: usermet
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26172SW.sif
Batch ID: H26172SW
Results Data Set: H26172W
Results Library: C:\data-AA\johns\Results\Results.mdb

Method Loaded
Method Name: HGCV3 SWH2O (7470A)
Method Last Saved: 2/13/2020 4:19:05 PM
Method Description: HgCV3 SW846H2O (7470A)

9/3/20

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calibration Blank
Date Collected: 9/2/2020 11:04:08 AM
Analyst:
Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0000	-0.0001	0.0000	11:04:55	Yes
2		[0.00]	0.0000	0.0001	0.0000	11:05:27	Yes
Mean:		[0.00]	0.0000				
SD:		0.00	0.0000				
%RSD:		0.00	53.16				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 2
Sample ID: .2 PPB
Date Collected: 9/2/2020 11:05:28 AM
Analyst:
Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0012	0.0054	0.0012	11:06:14	Yes
2		[0.2]	0.0011	0.0051	0.0012	11:06:46	Yes
Mean:		[0.2]	0.0012				
SD:		0.0	0.0000				
%RSD:		0.0	1.12				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00579 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 3
Sample ID: .5 PPB
Date Collected: 9/2/2020 11:06:47 AM
Analyst:
Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0026	0.0117	0.0026	11:07:33	Yes
2		[0.5]	0.0026	0.0116	0.0026	11:08:05	Yes
Mean:		[0.5]	0.0026				
SD:		0.0	0.0000				
%RSD:		0.0	0.50				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.998496 Slope: 0.00514 Intercept: 0.00005

Sequence No.: 4
Autosampler Location: 4
Sample ID: 1 PPB
Date Collected: 9/2/2020 11:08:07 AM
Analyst:
Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[1]	0.0047	0.0214	0.0048	11:08:52	Yes
2	[1]	0.0047	0.0211	0.0048	11:09:25	Yes
Mean:	[1]	0.0047				
SD:	0	0.0000				
%RSD:	0	0.18				

Standard number 3 applied. [1]
Correlation Coef.: 0.998269 Slope: 0.00469 Intercept: 0.00013

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: 2 PPB **Date Collected: 9/2/2020 11:09:27 AM**
Analyst: **Data Type: Original**

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0098	0.0432	0.0098	11:10:12	Yes
2		[2]	0.0097	0.0425	0.0097	11:10:45	Yes
Mean:		[2]	0.0097				
SD:		0	0.0001				
%RSD:		0	0.73				

Standard number 4 applied. [2]
Correlation Coef.: 0.999562 Slope: 0.00479 Intercept: 0.00009

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: 5 PPB **Date Collected: 9/2/2020 11:10:46 AM**
Analyst: **Data Type: Original**

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0235	0.1050	0.0236	11:11:32	Yes
2		[5]	0.0234	0.1033	0.0234	11:12:04	Yes
Mean:		[5]	0.0235				
SD:		0	0.0001				
%RSD:		0	0.54				

Standard number 5 applied. [5]
Correlation Coef.: 0.999876 Slope: 0.00467 Intercept: 0.00017

Sequence No.: 7 **Autosampler Location: 7**
Sample ID: 10 PPB **Date Collected: 9/2/2020 11:12:06 AM**
Analyst: **Data Type: Original**

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0486	0.2173	0.0486	11:12:51	Yes
2		[10]	0.0486	0.2150	0.0486	11:13:24	Yes
Mean:		[10]	0.0486				
SD:		0	0.0000				
%RSD:		0	0.06				

Standard number 6 applied. [10]
Correlation Coef.: 0.999830 Slope: 0.00483 Intercept: -0.00000

Sequence No.: 8 **Autosampler Location: 8**
Sample ID: 25 PPB **Date Collected: 9/2/2020 11:13:49 AM**
Analyst: **Data Type: Original**

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[25]	0.1227	0.5536	0.1227	11:14:39	Yes
2		[25]	0.1207	0.5392	0.1207	11:15:11	Yes
Mean:		[25]	0.1217				
SD:		0	0.0014				
%RSD:		0	1.18				

Standard number 7 applied. [25]
Correlation Coef.: 0.999968 Slope: 0.00486 Intercept: -0.00009

Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	0.018	0.00	53.2
.2 PPB	0.0012	0.2	0.256	0.00	1.1
.5 PPB	0.0026	0.5	0.549	0.00	0.5
1 PPB	0.0047	1.0	0.992	0.00	0.2
2 PPB	0.0097	2.0	2.015	0.00	0.7
5 PPB	0.0235	5.0	4.838	0.00	0.5
10 PPB	0.0486	10.0	10.002	0.00	0.1
25 PPB	0.1217	25.0	25.029	0.00	1.2

Correlation Coef.: 0.999968 Slope: 0.00486 Intercept: -0.00009

Sequence No.: 9 Autosampler Location: 10
Sample ID: ICV (2) Date Collected: 9/2/2020 11:15:38 AM
Analyst: Data Type: Original

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.31	20.31	0.0987	0.4424	0.0987	11:16:24	Yes
2	20.09	20.09	0.0977	0.4353	0.0977	11:16:57	Yes
Mean:	20.20	20.20	0.0982				
SD:	0.156	0.156	0.0008				
%RSD:	0.771	0.771	0.77				

QC value within limits for Hg 253.7 Recovery = 101.01%
All analyte(s) passed QC.

Sequence No.: 10 Autosampler Location: 1
Sample ID: ICB Date Collected: 9/2/2020 11:17:20 AM
Analyst: Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.011	0.011	-0.0000	-0.0010	-0.0000	11:18:07	Yes
2	0.011	0.011	-0.0000	-0.0006	-0.0000	11:18:39	Yes
Mean:	0.011	0.011	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.085	1.085	1.89				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 11
Sample ID: MB 85230 (1) Date Collected: 9/2/2020 11:18:40 AM
Analyst: Data Type: Original

Replicate Data: MB 85230 (1)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.014	0.014	-0.0000	-0.0003	0.0000	11:19:27	Yes
2	0.015	0.015	-0.0000	-0.0003	0.0000	11:19:59	Yes
Mean:	0.015	0.015	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.914	4.914	24.79				

Sequence No.: 12 Autosampler Location: 12
Sample ID: LCS 85230 Date Collected: 9/2/2020 11:20:01 AM
Analyst: Data Type: Original

Replicate Data: LCS 85230

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.34	10.34	0.0502	0.2240	0.0502	11:20:46	Yes
2	10.34	10.34	0.0502	0.2217	0.0502	11:21:19	Yes
Mean:	10.34	10.34	0.0502				

SD:	0.000	0.000	0.0000
%RSD:	0.001	0.001	0.00

Sequence No.: 13 Autosampler Location: 13
Sample ID: LCS MR 85230 Date Collected: 9/2/2020 11:21:43 AM
Analyst: Data Type: Original

Replicate Data: LCS MR 85230

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.933	9.933	0.0482	0.2146	0.0483	11:22:30	Yes
2	9.849	9.849	0.0478	0.2113	0.0478	11:23:02	Yes
Mean:	9.891	9.891	0.0480				
SD:	0.059	0.059	0.0003				
%RSD:	0.599	0.599	0.60				

Sequence No.: 14 Autosampler Location: 14
Sample ID: AD18954-002 Date Collected: 9/2/2020 11:23:26 AM
Analyst: Data Type: Original

Replicate Data: AD18954-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.088	0.088	0.0003	0.0011	0.0004	11:24:15	Yes
2	0.095	0.095	0.0004	0.0013	0.0004	11:24:47	Yes
Mean:	0.092	0.092	0.0004				
SD:	0.005	0.005	0.0000				
%RSD:	5.670	5.670	7.04				

Sequence No.: 15 Autosampler Location: 15
Sample ID: AD18954-002 MR Date Collected: 9/2/2020 11:24:48 AM
Analyst: Data Type: Original

Replicate Data: AD18954-002 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.078	0.078	0.0003	0.0010	0.0003	11:25:34	Yes
2	0.074	0.074	0.0003	0.0010	0.0003	11:26:07	Yes
Mean:	0.076	0.076	0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	3.634	3.634	4.75				

Sequence No.: 16 Autosampler Location: 16
Sample ID: AD18954-002 MS 1 Date Collected: 9/2/2020 11:26:08 AM
Analyst: Data Type: Original

Replicate Data: AD18954-002 MS 1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.24	10.24	0.0497	0.2214	0.0497	11:26:53	Yes
2	10.20	10.20	0.0495	0.2194	0.0495	11:27:25	Yes
Mean:	10.22	10.22	0.0496				
SD:	0.029	0.029	0.0001				
%RSD:	0.282	0.282	0.28				

Sequence No.: 17 Autosampler Location: 17
Sample ID: AD18954-002 MS 2 Date Collected: 9/2/2020 11:27:50 AM
Analyst: Data Type: Original

Replicate Data: AD18954-002 MS 2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.28	10.28	0.0499	0.2216	0.0500	11:28:40	Yes
2	10.23	10.23	0.0497	0.2189	0.0497	11:29:13	Yes
Mean:	10.26	10.26	0.0498				
SD:	0.036	0.036	0.0002				

%RSD: 0.350 0.350 0.35

Sequence No.: 18 **Autosampler Location: 18**
Sample ID: AD18934-006 **Date Collected: 9/2/2020 11:29:38 AM**
Analyst: **Data Type: Original**

Replicate Data: AD18934-006

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.011	0.011	-0.0000	-0.0009	-0.0000	11:30:28	Yes
2	0.012	0.012	-0.0000	-0.0007	-0.0000	11:31:00	Yes
Mean:	0.012	0.012	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	9.327	9.327	17.07				

Sequence No.: 19 **Autosampler Location: 19**
Sample ID: AD18934-008 **Date Collected: 9/2/2020 11:31:01 AM**
Analyst: **Data Type: Original**

Replicate Data: AD18934-008

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.014	0.014	-0.0000	-0.0008	-0.0000	11:31:50	Yes
2	0.015	0.015	-0.0000	-0.0005	0.0000	11:32:23	Yes
Mean:	0.014	0.014	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	7.513	7.513	31.39				

Sequence No.: 20 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 9/2/2020 11:32:24 AM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.37	10.37	0.0504	0.2225	0.0504	11:33:10	Yes
2	10.36	10.36	0.0503	0.2208	0.0503	11:33:42	Yes
Mean:	10.36	10.36	0.0503				
SD:	0.009	0.009	0.0000				
%RSD:	0.091	0.091	0.09				

QC value within limits for Hg 253.7 Recovery = 103.63%
All analyte(s) passed QC.

Sequence No.: 21 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/2/2020 11:34:05 AM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.012	0.012	-0.0000	-0.0007	-0.0000	11:34:51	Yes
2	0.014	0.014	-0.0000	-0.0006	0.0000	11:35:24	Yes
Mean:	0.013	0.013	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	10.96	10.96	32.36				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 22 **Autosampler Location: 20**
Sample ID: AD18954-001 **Date Collected: 9/2/2020 11:35:25 AM**
Analyst: **Data Type: Original**

Replicate Data: AD18954-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.120	0.120	0.0005	0.0019	0.0005	11:36:12	Yes

2	0.119	0.119	0.0005	0.0019	0.0005	11:36:45	Yes
Mean:	0.119	0.119	0.0005				
SD:	0.000	0.000	0.0000				
%RSD:	0.201	0.201	0.24				

Sequence No.: 23 Autosampler Location: 21
Sample ID: AD18954-003 Date Collected: 9/2/2020 11:36:46 AM
Analyst: Data Type: Original

Replicate Data: AD18954-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.438	0.438	0.0020	0.0086	0.0021	11:37:31	Yes
2	0.439	0.439	0.0020	0.0087	0.0021	11:38:04	Yes
Mean:	0.438	0.438	0.0020				
SD:	0.000	0.000	0.0000				
%RSD:	0.105	0.105	0.11				

Sequence No.: 24 Autosampler Location: 22
Sample ID: AD18954-004 Date Collected: 9/2/2020 11:38:05 AM
Analyst: Data Type: Original

Replicate Data: AD18954-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.313	0.313	0.0014	0.0060	0.0015	11:38:51	Yes
2	0.311	0.311	0.0014	0.0061	0.0014	11:39:23	Yes
Mean:	0.312	0.312	0.0014				
SD:	0.001	0.001	0.0000				
%RSD:	0.392	0.392	0.42				

Sequence No.: 25 Autosampler Location: 23
Sample ID: AD18954-005 Date Collected: 9/2/2020 11:39:24 AM
Analyst: Data Type: Original

Replicate Data: AD18954-005

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.066	0.066	0.0002	0.0008	0.0003	11:40:10	Yes
2	0.060	0.060	0.0002	0.0005	0.0002	11:40:42	Yes
Mean:	0.063	0.063	0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	6.717	6.717	9.35				

Sequence No.: 26 Autosampler Location: 24
Sample ID: AD18954-006 Date Collected: 9/2/2020 11:40:44 AM
Analyst: Data Type: Original

Replicate Data: AD18954-006

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.055	0.055	0.0002	0.0006	0.0002	11:41:29	Yes
2	0.060	0.060	0.0002	0.0007	0.0002	11:42:02	Yes
Mean:	0.058	0.058	0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	6.153	6.153	8.93				

Sequence No.: 27 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/2/2020 11:42:03 AM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.37	10.37	0.0503	0.2210	0.0504	11:42:51	Yes
2	10.33	10.33	0.0502	0.2188	0.0502	11:43:24	Yes

Mean:	10.35	10.35	0.0503
SD:	0.024	0.024	0.0001
%RSD:	0.229	0.229	0.23

QC value within limits for Hg 253.7 Recovery = 103.49%
All analyte(s) passed QC.

==========

Sequence No.: 28 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/2/2020 11:43:46 AM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.013	0.013	-0.0000	-0.0008	-0.0000	11:44:33	Yes
2	0.013	0.013	-0.0000	-0.0006	-0.0000	11:45:05	Yes
Mean:	0.013	0.013	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	2.514	2.514	6.79				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Metal Data
Digestion Logbook Data

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A (3050B) 200.7/200.8 OTHER_____

Batch No.: 26170 Analyst: ANS

QC Number: 85228 Prep Date: 8/31/20

Matrix: soil 6010 Reviewed By: CM

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50.0	50ml				--	
LCS	0.5g	~~0.5g~~				--	
LCSD						--	
1. AD18955-001							Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -001							
MS -002							Balance used: 032
MSD -003							Pipettes used: 149,155
2. AD18934-001							
3. -002							Hot Block used: 5
4. -003							
5. -004							
6. -005							
7. AD18955-004							
8. -005							
9. AD18949-014							
10. AD18950-004							
11. AD18932-002							
12. AD18960-001							
13. -003							
14. -004							
15. -007							
16. -015							
17. -017							
18.							
19.							
20.							

Hot Plate Temperature: 92.7 C (90-95° C) Start Time: 9:00am End Time: 10:30am

	Volume mL	Lot #
LCS, LCSD	0.5g	V- 13005
LLLCS, LLLCSD		V-
MS, MSD	0.25ml	V-13177, 13178,
LLMS, LLMSD		V- 331983

Acid	Vol mL	Lot#
HNO_3	2.5	V-13421
HCl	5	V-13422
H_2O_2	1-5	V-13067

Acid	Vol mL	Lot#
1:1 HNO_3	5	V-333595
1:1 HCl		V-

Relinquished By ANS Date 8/31/20

Received By CM Date 8/31/2020

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HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 7470A (7471B) OTHER_____

Batch No.:* 26170

QC Number: 85228

Matrix: soil

Analyst: ANS

Prep Date: 8/31/20

Review By: BL

LAB ID#	MERCURY INITIAL	MERCURY FINAL	COMMENTS	STANDARDS
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 334009
LCS	0.15g			
LCSD				STD 0.2 ppb V- 334010
1 AD 18955-001				STD 0.5 ppb V- 334011
MR -001				STD 1.0 ppb V- 334012
MS -002				STD 2.0 ppb V- 334013
MSD -003				STD 5.0 ppb V- 334014
2 AD 18934-001				STD 10.0 ppb V- 334015
3 -002				STD 25.0 ppb V- 334016
4 -003				ICV 10.0 ppb V- 334007
5 -004				CCV 20.0 ppb V- 334008
6 -005				
7 AD 18955-004				
8 -005				Balance used: 032
9 AD 18949-014				Pipettes used: 143, 159, 155
10 AD 18950-004				
11 ~~AD 18932~~ ANS 8/31/20				Hot Block used: 6
12 AD 18932-002				
13 AD 18960-001				
14 -003				
15 -004				
16 -007				
17 -015				
18 -017				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 331286	3.75	HNO_3		V-
$K_2S_2O_8$: V-		HCl		V-
NH_2OH: V- 317822	1.5	H_2SO_4		V-
		Aqua Regia	1.25	V- 334006

**Block Temp.: °C 92.8

Time In Block: 9:30am

Time Out of Block: 10:00am

Spike Volume & Lot # 1300S ANS 8/31/20

☐ LCS V- 334004 0.15g 0.25 ml

MS V- 334004 0.250 ml

Standards/Control Batch B- 29608

StartTime: 9:00am

EndTime: 10:00am

**Temperature
245.1 / 7470A: 90-95C
7471B: 92-98C

Relinquished By: ANS

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

HG PREP 2018

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A (3050B) 200.7/200.8 OTHER_____

Batch No.: 26171 Analyst: ANS

QC Number: 85229 Prep Date: 8/31/20

Matrix: soil 6020 Reviewed By: [illegible]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50mL	50mL	25mL	50mL		--	
LCS	0.1g					--	
LCSD	0.1g					--	
1. AD18955-001	0.5g						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -001							
MS -002							Balance used: 032
MSD -003							Pipettes used: 149, 155
2. AD18934-001							
3. -002							Hot Block used: 4
4. -003							
5. -004							
6. -005							
7. AD18955-004							
8. -005							
9. AD18951-001							
10. AD18949-014							
11. AD18950-004							
12. AD18932-002							
13. AD18960-001							
14. -003							
15. -004							
16. -007							
17. -015							
18. -017							
19.							
20.							

Hot Plate Temperature: 93.2 C (90-95° C) Start Time: 9:00am End Time: 10:00am

	Volume mL	Lot #
LCS, LCSD	0.1g	V- 13005
LLLCS, LLLCSD		V-
MS, MSD	0.25mL	V-13177, 13178
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2.5	V- 13421
HCl		V-
H_2O_2	5	V-13067

Acid	Vol mL	Lot#
1:1 HNO_3	5	V- 333595
1:1 HCl		V-

Relinquished By ANS Date 8/31/20

Received By [illegible] Date 8/31/20

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Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: (3010A) 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 26172 Analyst: AWS

QC Number: 85230 Prep Date: 9/01/20

Matrix: SW 846 6010/6020 Reviewed By: [signature]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml	10ml	20ml		--	
LCS						--	
LCSD						--	
1. AD 18954-002							Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -002							
MS -002							Balance used: NSA
MSD -002							Pipettes used: 149
2. AD 18934-006 (FD)							
3. -008 (FD)							Hot Block used: 9
4. AD 18954-001							
5. -003							
6. -004							
7. -005							
8. -006							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 94.1 C (90-95° C) Start Time: 8:30am End Time: 11:00am

	Volume mL	Lot #
LCS, LCSD	0.25ml	V-13177, 13178,
LLLCS, LLLCSD		V- 331982
MS, MSD	0.25ml	V-13177, 13178,
LLMS, LLMSD		V- 331982

Acid	Vol mL	Lot#
HNO_3	3ml	V- 13421
HCl		V-
H_2O_2		V- ~~130~~

Acid	Vol mL	Lot#
1:1 HNO_3		V-
1:1 HCl	5ml	V- 331024

Relinquished By AWS Date 9/01/20

Received By [signature] Date 9/1/2020

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HG SAMPLE PREPARATION LOG

Hampton [illegible]

ANALYTICAL METHOD: 245.1 (1470A) 7471B **OTHER**_____

Batch No.:* 26172

QC Number: 85230

Matrix: SW 846

Analyst: ANS

Prep Date: 9/01/20

Review By: PBL

LAB ID#	MERCURY INITIAL	MERCURY FINAL	COMMENTS	STANDARDS
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 334074
LCS				
LCSD				STD 0.2 ppb V- 334075
1 AO18954-002				STD 0.5 ppb V- 334076
MR -002				STD 1.0 ppb V- 334077
MS -002				STD 2.0 ppb V- 334078
MSD -002				STD 5.0 ppb V- 334079
2 AO18934-006				STD 10.0 ppb V- 334080
3 -008				STD 25.0 ppb V- 334081
4 AO18954-001				ICV 10.0 ppb V- 334072
5 -003				CCV 20.0 ppb V- 334073
6 -004				
7 -005				
8 -006				Balance used: N/A
9				Pipettes used: 159, 143
10				
11				Hot Block used: 7
12				
13				
14				
15				
16				
17				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 331286	3.75	HNO3	0.625	V- 13421
$K_2S_2O_8$: V- 327154	2.0	HCl		V-
NH_2OH: V- 317822	1.5	H2SO4	1.25	V- 13343
		Aqua Regia		V-

**Block Temp.: °C 92.5

Time In Block: 8:30am

Time Out of Block: 10:30am

Spike Volume & Lot #

LCS V- 334060 0.15x (0.37 ml)

MS V- 334060 0.250 ml

Standards/Control Batch B- 29614

StartTime: 8:30am

EndTime: 10:30am

**Temperature

245.1 / 7470A: 90-95C

7471B: 92-98C

Relinquished By: ANS

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

Wet Chemistry Data

Wet Chemistry Data
Sample Data

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD18934-001
Matrix Soil/Terracore
Client SampleID: HRPB-10
Project Number: 0082707
Received Date: 8/27/2020
Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.32	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	160	mV		08/31/20	08/31/20
pH	CR6-PH	1	6.8	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/31/20	08/31/20

Lab#: AD18934-002
Matrix Soil/Terracore
Client SampleID: HRPB-8
Project Number: 0082707
Received Date: 8/27/2020
Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.32	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	190	mV		08/31/20	08/31/20
pH	CR6-PH	1	8.2	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/31/20	08/31/20

Lab#: AD18934-003
Matrix Soil/Terracore
Client SampleID: HRPB-7
Project Number: 0082707
Received Date: 8/27/2020
Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.30	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	200	mV		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
pH	CR6-PH	1	8.2	pH		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.0	08/31/20	08/31/20

Lab#: AD18934-004
Matrix Soil/Terracore
Client SampleID: HRPB-9
Project Number: 0082707
Received Date: 8/27/2020
Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.30	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	220	mV		08/31/20	08/31/20
pH	CR6-PH	1	8.5	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.0	08/31/20	08/31/20

Lab#: AD18934-005
Matrix Soil
Client SampleID: HRPB-4
Project Number: 0082707
Received Date: 8/27/2020
Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.36	mg/Kg	0.31	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	-3.9	mV		08/31/20	08/31/20
pH	CR6-PH	1	7.8	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.0	08/31/20	08/31/20

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD18934-006
Matrix Aqueous
Client SampleID: EB

Project Number: 0082707
Received Date: 8/27/2020
Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-W-9012	1	ND	mg/L	0.020	09/02/20	09/02/20
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.02	08/31/20	08/31/20

Lab#: AD18934-008
Matrix Aqueous
Client SampleID: FB

Project Number: 0082707
Received Date: 8/27/2020
Collect Date: 8/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-W-9012	1	ND	mg/L	0.020	09/02/20	09/02/20
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.02	08/31/20	08/31/20

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 0082707**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD18934-001	HRPB-10	Soil/Terracore	1	76	Percent			08/28/20	08/27/20	08/26/20
AD18934-002	HRPB-8	Soil/Terracore	1	75	Percent			08/28/20	08/27/20	08/26/20
AD18934-003	HRPB-7	Soil/Terracore	1	79	Percent			08/28/20	08/27/20	08/26/20
AD18934-004	HRPB-9	Soil/Terracore	1	80	Percent			08/28/20	08/27/20	08/26/20
AD18934-005	HRPB-4	Soil	1	77	Percent			08/28/20	08/27/20	08/26/20

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-10930

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD18949-005	94	93.59684	Percent	1.35	14.00	13.19	08/28/20	BEENA	0.095	5
Sample	AD18932-002	79	79.47137	Percent	1.36	12.71	10.38	08/28/20	BEENA		
Sample	AD18934-001	76	75.87983	Percent	1.37	13.02	10.21	08/28/20	BEENA		
Sample	AD18934-002	75	74.83498	Percent	1.34	13.46	10.41	08/28/20	BEENA		
Sample	AD18934-003	79	79.45619	Percent	1.35	14.59	11.87	08/28/20	BEENA		
Sample	AD18934-004	80	80.47337	Percent	1.35	11.49	9.51	08/28/20	BEENA		
Sample	AD18934-005	77	76.79871	Percent	1.36	13.73	10.87	08/28/20	BEENA		
Sample	AD18939-001	27	26.53779	Percent	1.35	7.04	2.86	08/28/20	BEENA		
Sample	AD18939-002	3.7	3.72706	Percent	1.35	18.79	2.00	08/28/20	BEENA		
Sample	AD18940-001	30	30.23839	Percent	1.35	9.32	3.76	08/28/20	BEENA		
Sample	AD18940-002	6.6	6.56200	Percent	1.36	26.20	2.99	08/28/20	BEENA		
Sample	AD18944-001	95	94.68326	Percent	1.38	10.22	9.75	08/28/20	BEENA		
Sample	AD18944-002	81	80.69241	Percent	1.36	8.87	7.42	08/28/20	BEENA		
Sample	AD18944-003	86	86.16558	Percent	1.38	10.56	9.29	08/28/20	BEENA		
Sample	AD18944-004	84	83.92283	Percent	1.36	10.69	9.19	08/28/20	BEENA		
Sample	AD18947-001	76	75.94502	Percent	1.35	10.08	7.98	08/28/20	BEENA		
Sample	AD18947-002	77	77.12355	Percent	1.35	11.71	9.34	08/28/20	BEENA		
Sample	AD18949-005	94	93.50752	Percent	1.34	13.97	13.15	08/28/20	BEENA		
Sample	AD18950-001	82	82.39661	Percent	1.36	10.79	9.14	08/28/20	BEENA		
Sample	AD18950-002	86	86.39212	Percent	1.36	12.53	11.01	08/28/20	BEENA		
Sample	AD18950-003	87	87.30549	Percent	1.35	13.56	12.01	08/28/20	BEENA		

* - Indicates Failed Rpd Criteria

Wet Chemistry Data
QC Data

Analysis Type: HEX-CR-W

Batch Number: HEX-CR-W-895

Units: mg/l

Calibration Curve Information

Cal Curve Date: 08/31/20

Concentration:	Abs/Area
0	0
0.02	0.027
0.05	0.063
0.25	0.292
0.5	0.573
0.75	0.849
1	1.103

Slope: 1.108432
Intercept: 0.008332739
Rsquared: 0.9997776
Date Performed: 08/31/20

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-08/31/20	0.02	50-150	NA	0.015939	80	NA	
CCV	CCV-2	0.5	90-110	NA	0.504918	101	NA	
CCV	CCV-1	0.5	90-110	NA	0.510331	102	NA	
DUP	AD18895-007	0	NA	20	-0.0084198	NA	NA	Nc
ICV	ICV-08/31/20	0.5	95-105	NA	0.510331	102	NA	
LCS	LCS	0.5	75-125	NA	0.510331	102	NA	
MS	AD18895-007	0.5	75-125	NA	0.5040158	101	NA	
MSD	AD18895-007	0.5	75-125	20	0.5031136	101	0.18	

Analytical Method(s)

SM3500-CrB11

Sam #	Type	MB	Result	RL	Per Sol	Full Result	ABS	Turb Abs	DF	Sam Vol	Fin Vol	Prep Date	Prep By	Anal Date	Anal By
CAL-01-08/31/20	CAL-01		0.016		100	0.015939	0.026	0	1	1	1			08/31/20	JMP
MB-1-08/31/20	MB	MB-1-08/31/20	ND	0.02	100	-0.0039089	0.004	0	1	10	10	08/31/20	JMP	08/31/20	JMP
LCS	LCS	MB-1-08/31/20	0.51	0.02	100	0.51033	0.574	0	1	10	10	08/31/20	JMP	08/31/20	JMP
AD18895-007	Sample	MB-1-08/31/20	ND	0.02	100	-0.0084198	0.001	0.002	1	10	10	08/31/20	JMP	08/31/20	JMP
AD18895-007	DUP	MB-1-08/31/20	ND	0.02	100	-0.0084198	0.001	0.002	1	10	10	08/31/20	JMP	08/31/20	JMP
AD18895-007	MS	MB-1-08/31/20	0.50	0.02	100	0.50402	0.569	0.002	1	10	10	08/31/20	JMP	08/31/20	JMP
AD18895-007	MSD	MB-1-08/31/20	0.50	0.02	100	0.50311	0.568	0.002	1	10	10	08/31/20	JMP	08/31/20	JMP
AD18912-007	Sample	MB-1-08/31/20	ND	0.02	100	-0.0075176	0.001	0.001	1	10	10	08/31/20	JMP	08/31/20	JMP
CCV-1	CCV	MB-1-08/31/20	0.51		100	0.51033	0.574	0	1	1	1	08/31/20	JMP	08/31/20	JMP
CCB-1	CCB	MB-1-08/31/20	ND	0.02	100	-0.0075176	0	0	1	1	1	08/31/20	JMP	08/31/20	JMP
AD18921-002	Sample	MB-1-08/31/20	ND	0.02	100	-0.0075176	0.001	0.001	1	10	10	08/31/20	JMP	08/31/20	JMP
AD18934-006	Sample	MB-1-08/31/20	ND	0.02	100	-0.0057132	0.002	0	1	10	10	08/31/20	JMP	08/31/20	JMP
AD18934-008	Sample	MB-1-08/31/20	ND	0.02	100	-0.0075176	0.003	0.003	1	10	10	08/31/20	JMP	08/31/20	JMP
AD18945-007	Sample	MB-1-08/31/20	ND	0.02	100	-0.0075176	0	0	1	10	10	08/31/20	JMP	08/31/20	JMP
AD18964-007	Sample	MB-1-08/31/20	ND	0.02	100	-0.0075176	0	0	1	10	10	08/31/20	JMP	08/31/20	JMP
CCV-2	CCV	MB-1-08/31/20	0.50		100	0.50492	0.568	0	1	1	1	08/31/20	JMP	08/31/20	JMP
CCB-2	CCB	MB-1-08/31/20	ND	0.02	100	-0.0075176	0	0	1	1	1	08/31/20	JMP	08/31/20	JMP
ICV-08/31/20	ICV		0.51	0.02	100	0.51033	0.574	0	1	1	1		JMP	08/31/20	JMP

JMP 08/31/20

JW 8/31/20

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

Hex-Cr Soil SW-846 3060A / 7196A

Cr6 soil curve		Date	8/31/2020			Batch #	778			TestGroupID	CR6-SOIL
										TestID:	CR-HEX
STD ppm			ABS								
0			0.0001		Intercept	Constant	-0.000172124				
0.02			0.0202								
0.25			0.1769		Slope	X Coefficients	0.70800035				
0.5			0.3410								
1			0.7141								
STD mg/L			ABS		PPM	DIFF					
0			0.0001		0.000384355	-0.000384355					
0.02			0.0202		0.028774172	-0.008774172					
0.25			0.1769		0.250101746	-0.000101746					
0.5			0.3410		0.481881293	0.018118707					
1			0.7141		1.008858434	-0.008858434					
SUMMARY OUTPUT											
Regression Statistics											
Multiple R	0.999647651										
R Square	0.999295427										
Adjusted R Square	0.999060569										
Standard Error	0.008991916										
Observations	5										
ANOVA											
	df	*SS*	*MS*	*F*	*Significance F*						
Regression	1	0.344027848	0.344027848	4254.897293	7.93907E-06						
Residual	3	0.000242564	8.08546E-05								
Total	4	0.344270412									
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*			
Intercept	-0.000172124	0.005561856	-0.030947185	0.977255404	-0.017872449	0.017528201	-0.017872449	0.017528201			
X Variable 1	0.70800035	0.010853978	65.22957376	7.93907E-06	0.673458116	0.742542584	0.673458116	0.742542584			

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA								
Batch#	779		QC Sample	AD18918-003 NS.Sample							
Date	8/31/2020			Spike Amount PPM	Result PPM	Adjusted Conc PPM	% REC	Limits	RPD	Limits	%REC PASS/FAIL / RPD PASS/FAIL
Analyst	BCT		LCS	20.00	19.10	19.10	96%	80-120%	NA	NA	PASS
PrepBy	BCT		MS(Sol)	21.98	37.52	16.81	76%	75-125%	NA	NA	PASS
			MS(Insol)	791.63	436.99	416.29	53%	75-125%	NA	20%	FAIL / PASS
			Sample	NA	20.70	NA	NA	NA	NA	NA	
			Sample Dup	NA	20.18	NA	NA	NA	3	20%	PASS
			PVS	21.98	43.28	22.57	103%	85-115%	NA	NA	PASS
Lead Chromate Added (G)	0.0112	0.0118									
Upper Calibration Abbsorbance	0.7141										
			MS(Sol)	25.32	21.49	21.49	85%	75-125%	NA	NA	PASS
			MS(Insol)	892.91	400.71	400.71	45%	75-125%	NA	20%	FAIL / PASS
			Sample	NA	ND	NA	NA	NA	NA	NA	

ICV Data	ABS	Turb ABS		PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3425	0.0000	Crct. ABS	0.483999937	1	1	1	1	0.484	0.500	97	8/31/20 15:40	PASS
QC Data	**ABS**	**Turb ABS**	0.3425	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0001	0.0000	Crct. ABS	0.000384355	1	1	1	1	0.000	0.020		8/31/20 15:40	
MB.Sample	0.0001	0.0000	0.0001	0.000384355	1	2.5	1	100	0.015	0.800		8/31/20 15:40	
LCS.Sample	0.3379	0.0000	0.0001	0.477502782	1	2.5	1	100	19.100	0.800		8/31/20 15:41	
AD18918-003 NS.Sample	0.3344	0.0011	0.3379	0.471005589	0.91	2.5	1	100	20.704	0.879		8/31/20 15:42	
AD18918-003 DUP.Sample	0.3260	0.0011	0.3333	0.459141198	0.91	2.5	1	100	20.182	0.879		8/31/20 15:43	
AD18918-004 MS.Sample	0.6083	0.0042	0.3249	0.853491237	0.91	2.5	1	100	37.516	0.879		8/31/20 15:43	
AD18918-005 50X MSD.Sample	0.1410	0.0004	0.6041	0.198830589	0.91	2.5	50	100	436.990	43.956		8/31/20 15:44	
AD18918-003 PVS.Sample	0.6980	0.0011	0.1406	0.98456468	0.91	2.5	1	100	43.278	0.879		8/31/20 15:44	
			0.6969										
AD18955-001.Sample	0.0030	0.0017		0.00207927	0.81	2.5	1	100	0.103	0.988		8/31/20 15:47	
AD18955-002 MS2.Sample	0.3033	0.0030	0.0013	0.424395436	0.79	2.5	1	100	21.488	1.013		8/31/20 15:47	
AD18955-003 MSD 2.Sample	4.1905	0.0018	0.3003	5.916482821	0.85	2.5	1	100	278.423	0.941		8/31/20 15:48	
AD18955-003 MSD 50X 2.Sample	0.1218	0.0014	4.1887	0.170299523	0.85	2.5	50	100	400.705	47.059		8/31/20 15:49	
			0.1204										
Analytical Run					1	2.5	1	100					
ICV.Control	0.3425			0.483999937	1	1	1	1	0.484	0.020	97	8/31/20 15:40	PASS
ICB.Sample	0.0001		0.3425	0.000384355	1	1	1	1	0.000	0.020		8/31/20 15:40	
MB.Sample	0.0001		0.0001	0.000384355	1	2.5	1	100	0.015	0.800		8/31/20 15:40	
LCS.Sample	0.3379		0.0001	0.477502782	1	2.5	1	100	19.100	0.800		8/31/20 15:41	
AD18918-003 NS.Sample	0.3344	0.0011	0.3379	0.471005589	0.91	2.5	1	100	20.704	0.879		8/31/20 15:42	
AD18918-003 DUP.Sample	0.3260	0.0011	0.3333	0.459141198	0.91	2.5	1	100	20.182	0.879		8/31/20 15:43	
AD18918-004 MS.Sample	0.6083	0.0042	0.3249	0.853491237	0.91	2.5	1	100	37.516	0.879		8/31/20 15:43	
AD18918-005 XXX.Sample	4.0144	0.0039	0.6041	5.664788345	0.91	2.5	1	100	249.002	0.879		8/31/20 15:43	
AD18918-005 50X MSD.Sample	0.1410	0.0004	4.0105	0.198830589	0.91	2.5	50	100	436.990	43.956		8/31/20 15:44	
AD18918-003 PVS.Sample	0.6980	0.0011	0.1406	0.98456468	0.91	2.5	1	100	43.278	0.879		8/31/20 15:44	
CCV-1.Control	0.3330		0.6969	0.470581869	1	1	1	1	0.471	0.020	94	8/31/20 15:44	PASS
CCB-1.Sample	0.0003		0.3330	0.000666841	1	1	1	1	0.001	0.020		8/31/20 15:45	
AD18932-002.Sample	0.0135	0.0202	0.0003	-0.009220158	0.79	2.5	1	100	-0.467	1.013		8/31/20 15:45	
AD18934-001.Sample	0.0073	0.0075	-0.0067	-3.93727E-05	0.76	2.5	1	100	-0.002	1.053		8/31/20 15:45	
AD18934-002.Sample	0.0097	0.0105	-0.0002	-0.00088683	0.75	2.5	1	100	-0.047	1.067		8/31/20 15:46	
AD18934-003.Sample	0.0002	0.0004	-0.0008	-3.93732E-05	0.79	2.5	1	100	-0.002	1.013		8/31/20 15:46	
AD18934-004.Sample	0.0031	0.0038	-0.0002	-0.000745587	0.8	2.5	1	100	-0.037	1.000		8/31/20 15:46	
AD18934-005.Sample	0.0042	0.0029	-0.0007	0.00207927	0.77	2.5	1	100	0.108	1.039		8/31/20 15:47	
AD18955-001.Sample	0.0030	0.0017	0.0013	0.00207927	0.81	2.5	1	100	0.103	0.988		8/31/20 15:47	

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AD18955-002 MS2 Sample	0.3033	0.0030	0.0013	0.424395436	0.79	2.5	1	100	21.488	1.013		8/31/20 15:47	
AD18955-003 MSD 2 Sample	4.1905	0.0018	0.3003	5.916482821	0.85	2.5	1	100	278.423	0.941		8/31/20 15:48	
AD18955-003 MSD 50X 2 Sample	0.1218	0.0014	4.1887	0.170299523	0.85	2.5	50	100	400.705	47.059		8/31/20 15:49	
CCV-2 Control	0.3468		0.1204	0.490073378	1	1	1	1	0.490	0.020	98	8/31/20 15:49	PASS
CCB-2 Sample	0.0003		0.3468	0.000666841	1	1	1	1	0.001	0.020		8/31/20 15:49	
AD18955-004 Sample	0.0022	0.0027	0.0003	-0.000463102	0.76	2.5	1	100	-0.024	1.053		8/31/20 15:49	
AD18955-005 Sample	0.0029	0.0017	-0.0005	0.001938027	0.72	2.5	1	100	0.108	1.111		8/31/20 15:50	
AD18966-001 Sample	1.2255	0.0036	0.0012	1.7260897	0.82	2.5	1	100	84.199	0.976		8/31/20 15:51	
AD18966-001 5X Sample	0.2678	0.0005	1.2219	0.377785304	0.82	2.5	5	100	92.143	4.878		8/31/20 15:51	
AD18966-002 Sample	0.3376	0.0040	0.2673	0.47142931	0.81	2.5	1	100	23.280	0.988		8/31/20 15:52	
AD18970-003 Sample	0.0031	0.0004	0.3336	0.00405667	0.92	2.5	1	100	0.176	0.870		8/31/20 15:52	
AD18918-003 T Sample	0.0011		0.0027	0.001796784	0.91	2.5	1	100	0.079	0.879		8/31/20 15:52	
AD18918-004 T Sample	0.0042		0.0011	0.006175313	0.91	2.5	1	100	0.271	0.879		8/31/20 15:53	
AD18918-005 T Sample	0.0039		0.0042	0.005751584	0.91	2.5	1	100	0.253	0.879		8/31/20 15:53	
AD18918-005 50X T Sample	0.0004		0.0039	0.000808084	0.91	2.5	1	100	0.036	0.879		8/31/20 15:53	
CCV-3 Control	0.3447		0.0004	0.487107291	1	1	1	1	0.487	0.020	97	8/31/20 15:53	PASS
CCB-3 Sample	0.0003		0.3447	0.000666841	1	1	1	1	0.001	0.020		8/31/20 15:54	
AD18932-002 T Sample	0.0202		0.0003	0.028774171	0.79	2.5	1	100	1.457	1.013		8/31/20 15:54	
AD18934-001 T Sample	0.0075		0.0202	0.010836327	0.76	2.5	1	100	0.570	1.053		8/31/20 15:54	
AD18934-002 T Sample	0.0105		0.0075	0.015073614	0.75	2.5	1	100	0.804	1.067		8/31/20 15:55	
AD18934-003 T Sample	0.0004		0.0105	0.000808084	0.79	2.5	1	100	0.041	1.013		8/31/20 15:55	
AD18934-004 T Sample	0.0038		0.0004	0.005610342	0.8	2.5	1	100	0.281	1.000		8/31/20 15:55	
AD18934-005 T Sample	0.0029		0.0038	0.004339156	0.77	2.5	1	100	0.225	1.039		8/31/20 15:56	
AD18955-001 T Sample	0.0017		0.0029	0.002644241	0.81	2.5	1	100	0.131	0.988		8/31/20 15:56	
AD18955-002 T Sample	0.0030		0.0017	0.004480399	0.79	2.5	1	100	0.227	1.013		8/31/20 15:56	
AD18955-003 T Sample	0.0018		0.0030	0.002785484	0.85	2.5	1	100	0.131	0.941		8/31/20 15:57	
AD18955-003 50X T Sample	0.0014		0.0018	0.002220513	0.85	2.5	1	100	0.104	0.941		8/31/20 15:57	
CCV-4 Control	0.3426		0.0014	0.484141162	1	1	1	1	0.484	0.020	97	8/31/20 15:57	PASS
CCB-4 Sample	0.0038		0.3426	0.005610342	1	1	1	1	0.006	0.020		8/31/20 15:57	
AD18955-004 T Sample	0.0027		0.0038	0.00405667	0.76	2.5	1	100	0.214	1.053		8/31/20 15:58	
AD18955-005 T Sample	0.0017		0.0027	0.002644241	0.72	2.5	1	100	0.147	1.111		8/31/20 15:58	
AD18966-001 T Sample	0.0036		0.0017	0.005327856	0.82	2.5	1	100	0.260	0.976		8/31/20 15:58	
AD18966-001 5X T Sample	0.0005		0.0036	0.000949327	0.82	2.5	1	100	0.046	0.976		8/31/20 15:59	
AD18966-002 T Sample	0.0040		0.0005	0.005892828	0.81	2.5	1	100	0.291	0.988		8/31/20 15:59	
AD18970-003 T Sample	0.0004		0.0040	0.000808084	0.92	2.5	1	100	0.035	0.870		8/31/20 15:59	
CCV-5 Control	0.3418		0.0004	0.483011242	1	1	1	1	0.483	0.020	97	8/31/20 16:00	PASS
CCB-5 Sample	0.0039		0.3418	0.005751584	1	1	1	1	0.006	0.020		8/31/20 16:00	

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Cr6 soil curve		Date	8/31/2020			Batch #	779 A			TestGroupID	CR6-SOIL
										TestID:	CR-HEX
STD ppm			ABS								
0			0.0001		Intercept	Constant	-0.000172124				
0.02			0.0202								
0.25			0.1769		Slope	X Coefficients	0.70800035				
0.5			0.3410								
1			0.7141								

STD mg/L			ABS		PPM	DIFF					
0			0.0001		0.000384355	-0.000384355					
0.02			0.0202		0.028774172	-0.008774172					
0.25			0.1769		0.250101746	-0.000101746					
0.5			0.3410		0.481881293	0.018118707					
1			0.7141		1.008858434	-0.008858434					

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.999647651
R Square	0.999295427
Adjusted R Square	0.999060569
Standard Error	0.008991916
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.344027848	0.344027848	4254.897293	7.93907E-06
Residual	3	0.000242564	8.08546E-05		
Total	4	0.344270412			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	-0.000172124	0.005561856	-0.030947185	0.977255404	-0.017872449	0.017528201	-0.017872449	0.017528201
X Variable 1	0.70800035	0.010853978	65.22957376	7.93907E-06	0.673458116	0.742542584	0.673458116	0.742542584

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	Hex-Cr Soil		Q.C. DATA									
Batch#	779 A		QC Sample	AD18918-003 NS.Sample								
Date	8/31/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	18.63	18.63	93%	80-120%	NA	NA	PASS	
			MS(Sol)	21.98	40.45	18.92	86%	75-125%	NA	NA	PASS	
			MS(Insol)	791.63	438.54	417.01	53%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	21.53	NA	NA	NA	NA	NA		
			Sample Dup	NA	21.29	NA	NA	NA	1	20%		PASS
			PVS	21.98	41.97	20.45	93%	85-115%	NA	NA	PASS	
Lead Chromate Added :	0.0112	0.0118										
Upper Calibration Abbsorbance:	0.7141											
			MS(Sol)	25.32	20.68	20.68	82%	75-125%	NA	NA	PASS	
			MS(Insol)	892.91	415.00	415.00	46%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	ND	NA	NA	NA	NA	NA		

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3256	0.0000	0.3256	0.460129889	1	1	1	1	0.460	0.500	92	8/31/20 16:05	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	-0.0007	0.0000	-0.0007	-0.000745587	1	1	1	1	-0.001	0.020		8/31/20 16:06	
MB.Sample	-0.0007	0.0000	-0.0007	-0.000745587	1	2.5	1	100	-0.030	0.800		8/31/20 16:06	
LCS.Sample	0.3295	0.0000	0.3295	0.465638348	1	2.5	1	100	18.626	0.800		8/31/20 16:06	
AD18918-003 NS.Sample	0.3492	0.0026	0.3466	0.489790908	0.91	2.5	1	100	21.529	0.879		8/31/20 16:07	
AD18918-003 DUP.Sample	0.3454	0.0026	0.3428	0.484423672	0.91	2.5	1	100	21.293	0.879		8/31/20 16:07	
AD18918-004 MS.Sample	0.6532	0.0019	0.6513	0.920157871	0.91	2.5	1	100	40.446	0.879		8/31/20 16:07	
AD18918-005 50X MSD.Sample	0.1415	0.0004	0.1411	0.199536794	0.91	2.5	50	100	438.542	43.956		8/31/20 16:08	
AD18918-003 PVS.Sample	0.6785	0.0026	0.6759	0.954903653	0.91	2.5	1	100	41.974	0.879		8/31/20 16:09	
AD18955-001.Sample	0.0104	0.0094	0.0010	0.001655541	0.81	2.5	1	100	0.082	0.988		8/31/20 16:13	
AD18955-002 MS2.Sample	0.2989	0.0099	0.2890	0.408435013	0.79	2.5	1	100	20.680	1.013		8/31/20 16:13	
AD18955-003 MSD 2.Sample	4.0644	0.0092	4.0552	5.727924176	0.85	2.5	1	100	269.549	0.941		8/31/20 16:14	
AD18955-003 MSD 50X 2.Sample	0.1243	-0.0004	0.1247	0.176372973	0.85	2.5	50	100	414.995	47.059		8/31/20 16:14	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3256		0.3256	0.460129889	1	1	1	1	0.460	0.020	92	8/31/20 16:05	PASS
ICB.Sample	-0.0007		-0.0007	-0.000745587	1	1	1	1	-0.001	0.020		8/31/20 16:06	
MB.Sample	-0.0007		-0.0007	-0.000745587	1	2.5	1	100	-0.030	0.800		8/31/20 16:06	
LCS.Sample	0.3295		0.3295	0.465638348	1	2.5	1	100	18.626	0.800		8/31/20 16:06	
AD18918-003 NS.Sample	0.3492	0.0026	0.3466	0.489790908	0.91	2.5	1	100	21.529	0.879		8/31/20 16:07	
AD18918-003 DUP.Sample	0.3454	0.0026	0.3428	0.484423672	0.91	2.5	1	100	21.293	0.879		8/31/20 16:07	
AD18918-004 MS.Sample	0.6532	0.0019	0.6513	0.920157871	0.91	2.5	1	100	40.446	0.879		8/31/20 16:07	
AD18918-005 XXX.Sample	4.1893	0.0043	4.1850	5.911257227	0.91	2.5	1	100	259.835	0.879		8/31/20 16:08	
AD18918-005 50X MSD.Sample	0.1415	0.0004	0.1411	0.199536794	0.91	2.5	50	100	438.542	43.956		8/31/20 16:08	
AD18918-003 PVS.Sample	0.6785	0.0026	0.6759	0.954903653	0.91	2.5	1	100	41.974	0.879		8/31/20 16:09	
CCV-1.Control	0.3386		0.3386	0.478491478	1	1	1	1	0.478	0.020	96	8/31/20 16:09	PASS
CCB-1.Sample	0.0028		0.0028	0.004197913	1	1	1	1	0.004	0.020		8/31/20 16:09	
AD18932-002.Sample	0.0136	0.0161	-0.0025	-0.00328796	0.79	2.5	1	100	-0.166	1.013		8/31/20 16:11	
AD18934-001.Sample	0.0081	0.0076	0.0005	0.000949327	0.76	2.5	1	100	0.050	1.053		8/31/20 16:11	
AD18934-002.Sample	0.0052	0.0039	0.0013	0.00207927	0.75	2.5	1	100	0.111	1.067		8/31/20 16:12	
AD18934-003.Sample	0.0021	0.0015	0.0006	0.00109057	0.79	2.5	1	100	0.055	1.013		8/31/20 16:12	
AD18934-004.Sample	0.0016	0.0011	0.0005	0.000949327	0.8	2.5	1	100	0.047	1.000		8/31/20 16:12	
AD18934-005.Sample	0.0044	0.0032	0.0012	0.001938027	0.77	2.5	1	100	0.101	1.039		8/31/20 16:13	
AD18955-001.Sample	0.0104	0.0094	0.0010	0.001655541	0.81	2.5	1	100	0.082	0.988		8/31/20 16:13	

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AD18955-002 MS2.Sample	0.2989	0.0099	0.2890	0.408435013	0.79	2.5	1	100	20.680	1.013		8/31/20 16:13	
AD18955-003 MSD 2.Sample	4.0644	0.0092	4.0552	5.727924176	0.85	2.5	1	100	269.549	0.941		8/31/20 16:14	
AD18955-003 MSD 50X 2.Sample	0.1243	-0.0004	0.1247	0.176372973	0.85	2.5	50	100	414.995	47.059		8/31/20 16:14	
CCV-2.Control	0.3394		0.3394	0.479621398	1	1	1	1	0.480	0.020	96	8/31/20 16:15	PASS
CCB-2.Sample	-0.0002		-0.0002	-3.93732E-05	1	1	1	1	0.000	0.020		8/31/20 16:15	
AD18955-004.Sample	-0.0002	0.0004	-0.0006	-0.000604345	0.76	2.5	1	100	-0.032	1.053		8/31/20 16:15	
AD18955-005.Sample	-0.0009	-0.0006	-0.0003	-0.000180616	0.72	2.5	1	100	-0.010	1.111		8/31/20 16:16	
AD18966-001.Sample	1.0507	0.0066	1.0441	1.474959827	0.82	2.5	1	100	71.949	0.976		8/31/20 16:16	
AD18966-001 5X.Sample	0.2604	-0.0007	0.2611	0.369028237	0.82	2.5	5	100	90.007	4.878		8/31/20 16:17	
AD18966-002.Sample	0.3182	0.0019	0.3163	0.446994293	0.81	2.5	1	100	22.074	0.988		8/31/20 16:18	
AD18970-003.Sample	0.0047	0.0027	0.0020	0.00306797	0.92	2.5	1	100	0.133	0.870		8/31/20 16:19	
AD18918-003 T.Sample	0.0026		0.0026	0.003915427	0.91	2.5	1	100	0.172	0.879		8/31/20 16:19	
AD18918-004 T.Sample	0.0019		0.0019	0.002926727	0.91	2.5	1	100	0.129	0.879		8/31/20 16:19	
AD18918-005 T.Sample	0.0043		0.0043	0.006316556	0.91	2.5	1	100	0.278	0.879		8/31/20 16:20	
AD18918-005 50X T.Sample	0.0004		0.0004	0.000808084	0.91	2.5	1	100	0.036	0.879		8/31/20 16:20	
CCV-3.Control	0.3378		0.3378	0.477361516	1	1	1	1	0.477	0.020	95	8/31/20 16:20	PASS
CCB-3.Sample	-0.0005		-0.0005	-0.000463102	1	1	1	1	0.000	0.020		8/31/20 16:21	
AD18932-002 T.Sample	0.0161		0.0161	0.022983215	0.79	2.5	1	100	1.164	1.013		8/31/20 16:22	
AD18934-001 T.Sample	0.0076		0.0076	0.010977571	0.76	2.5	1	100	0.578	1.053		8/31/20 16:22	
AD18934-002 T.Sample	0.0039		0.0039	0.005751584	0.75	2.5	1	100	0.307	1.067		8/31/20 16:22	
AD18934-003 T.Sample	0.0015		0.0015	0.002361756	0.79	2.5	1	100	0.120	1.013		8/31/20 16:22	
AD18934-004 T.Sample	0.0011		0.0011	0.001796784	0.8	2.5	1	100	0.090	1.000		8/31/20 16:23	
AD18934-005 T.Sample	0.0032		0.0032	0.004762884	0.77	2.5	1	100	0.247	1.039		8/31/20 16:23	
AD18955-001 T.Sample	0.0094		0.0094	0.013519942	0.81	2.5	1	100	0.668	0.988		8/31/20 16:23	
AD18955-002 T.Sample	0.0099		0.0099	0.014226156	0.79	2.5	1	100	0.720	1.013		8/31/20 16:24	
AD18955-003 T.Sample	0.0092		0.0092	0.013237457	0.85	2.5	1	100	0.623	0.941		8/31/20 16:24	
AD18955-003 50X T.Sample	-0.0004		-0.0004	-0.000321859	0.85	2.5	1	100	-0.015	0.941		8/31/20 16:24	
CCV-4.Control	0.3335		0.3335	0.471288075	1	1	1	1	0.471	0.020	94	8/31/20 16:24	PASS
CCB-4.Sample	-0.0007		-0.0007	-0.000745587	1	1	1	1	-0.001	0.020		8/31/20 16:25	
AD18955-004 T.Sample	0.0004		0.0004	0.000808084	0.76	2.5	1	100	0.043	1.053		8/31/20 16:25	
AD18955-005 T.Sample	-0.0006		-0.0006	-0.000604345	0.72	2.5	1	100	-0.034	1.111		8/31/20 16:25	
AD18966-001 T.Sample	0.0066		0.0066	0.009565142	0.82	2.5	1	100	0.467	0.976		8/31/20 16:25	
AD18966-001 5X T.Sample	-0.0007		-0.0007	-0.000745587	0.82	2.5	1	100	-0.036	0.976		8/31/20 16:26	
AD18966-002 T.Sample	0.0019		0.0019	0.002926727	0.81	2.5	1	100	0.145	0.988		8/31/20 16:26	
AD18970-003 T.Sample	0.0027		0.0027	0.00405667	0.92	2.5	1	100	0.176	0.870		8/31/20 16:26	
CCV-5.Control	0.3346		0.3346	0.472841751	1	1	1	1	0.473	0.020	95	8/31/20 16:27	PASS
CCB-5.Control	-0.0003		-0.0003	-0.000180616	1	1	1	1	0.000	0.020		8/31/20 16:27	

MS/MSD/DUP Recovery

0082707 0650

Prep Batch: S-2412 Sample ID: AD18955-001
Method: EPA 9012B Matrix: Soil

Qc Type: DUP

Analyte	Limits Rpd	Dil	DUP Conc	Sample Conc	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	35	1	0	0	NA		20200831132	15	08/31/20 14:00	20200831132	14	08/31/20 13:58

Qc Type: MS

Analyte	Amt	Limits Recov	Dil	MS Conc	Sample Conc	% Rec	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.3373	0	84		20200831132	16	08/31/20 14:03	20200831132	14	08/31/20 13:58

Qc Type: MSD

Analyte	Amt	Limits Recov	Rpd	Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.3596	0	90	6.4		20200831132	17	08/31/20 14:05	20200831132	14	08/31/20 13:58

LCS Recoveries

	BatchRunID/RunID:====>	202008311328-12							
	QcBatchID:====>	LCSS-2412							
	Date/Time:====>	08/31/20 13:53							
	Analytical Method:====>	EPA 9012B							
	Matrix:====>	Soil	Soil		Soil		Soil		Soil	
	EPA 9012B									
Analyte	**Amt Limits**	**Amt Limits**	**% Rec**	**Flags**	**% Rec**	**Flags**	**% Rec**	**Flags**	**% Rec**	**Flags**	**% Rec**	**Flags**
Cyanide	0.4 80-120		100									

Calibration Summary:

0082707 0652

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200831132	9	ICV	101	0.4	85-115
Cyanide	20200831132	21	CCV	100	0.4	85-115
Cyanide	20200831132	33	CCV	99	0.4	85-115
Cyanide	20200831132	39	CCV	101	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 8/31/20

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200831132	8/31/20 13:51	MBS-2412	11	Cyanide	ND	0.020

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200831132	8/31/20 13:49	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200831132	8/31/20 14:17	CCB	22	Cyanide	ND	0.020
20200831132	8/31/20 14:45	CCB	34	Cyanide	ND	0.020
20200831132	8/31/20 14:55	CCB	40	Cyanide	ND	0.020

MS/MSD/DUP Recovery

0082707 0654

Prep Batch: W-1504 Sample ID: AD18945-007
Method: EPA 9012B Matrix: Aqueous

Qc Type: DUP	Limits		DUP	Sample			MS/MSD/DUP			Non Spike		
Analyte	Rpd	Dil	Conc	Conc	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	35	1	0	0	NA		20200902135	15	09/02/20 14:28	20200902135	14	09/02/20 14:25

Qc Type: MS		Limits		MS	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.4432	0	111		20200902135	16	09/02/20 14:30	20200902135	14	09/02/20 14:25

Qc Type: MSD		Limits		MSD	Sample				MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.3832	0	96	14.5		20200902135	17	09/02/20 14:32	20200902135	14	09/02/20 14:25

LCS Recoveries

	BatchRunID/RunID:====>	202009021355-12								
	QcBatchID:====>	LCSW-1504								
	Date/Time:====>	09/02/20 14:21								
	Analytical Method:====>	EPA 9012B								
	Matrix:====>	Aqueous		Soil		Soil		Soil		Soil
	EPA 9012B									
Analyte	**Amt Limits**	**Amt Limits**	**% Rec Flags**	**% Rec Flags**		**% Rec Flags**		**% Rec Flags**		**% Rec Flags**
Cyanide	0.4 80-120		96							

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200902135	9	ICV	97	0.4	85-115
Cyanide	20200902135	21	CCV	103	0.4	85-115
Cyanide	20200902135	33	CCV	99	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 9/2/20

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200902135	9/2/20 14:18	MBW-1504	11	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200902135	9/2/20 14:44	CCB	22	Cyanide	ND	0.020
20200902135	9/2/20 15:11	CCB	34	Cyanide	ND	0.020

MS/MSD/DUP Recovery

0082707 0658

Prep Batch: W-1504 Sample ID: AD18945-007
Method: EPA 335.4 Matrix: Aqueous

Qc Type: DUP	Limits		DUP	Sample			MS/MSD/DUP			Non Spike		
Analyte	Rpd	Dil	Conc	Conc	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	20	1	0	0	NA		20200902135	15	09/02/20 14:28	20200902135	14	09/02/20 14:25

Qc Type: MS		Limits		MS	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.4432	0	111		20200902135	16	09/02/20 14:30	20200902135	14	09/02/20 14:25

Qc Type: MSD		Limits		MSD	Sample				MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.3832	0	96	14.5		20200902135	17	09/02/20 14:32	20200902135	14	09/02/20 14:25

LCS Recoveries

	BatchRunID/RunID:====>	202009021355-12								
	QcBatchID:====>	LCSW-1504								
	Date/Time:====>	09/02/20 14:21								
	Analytical Method:====>	EPA 335.4								
	Matrix:====>	Aqueous		Soil		Soil		Soil		Soil
	EPA 335.4									
Analyte	**Amt Limits**	**Amt Limits**	**% Rec Flags**	**% Rec Flags**		**% Rec Flags**		**% Rec Flags**		**% Rec Flags**
Cyanide	0.4 90-110		96							

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 335.4

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200902135	9	ICV	97	0.4	90-110
Cyanide	20200902135	21	CCV	103	0.4	90-110
Cyanide	20200902135	33	CCV	99	0.4	90-110
Cyanide	20200902135	37	CCV	104	0.4	90-110

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 9/2/20

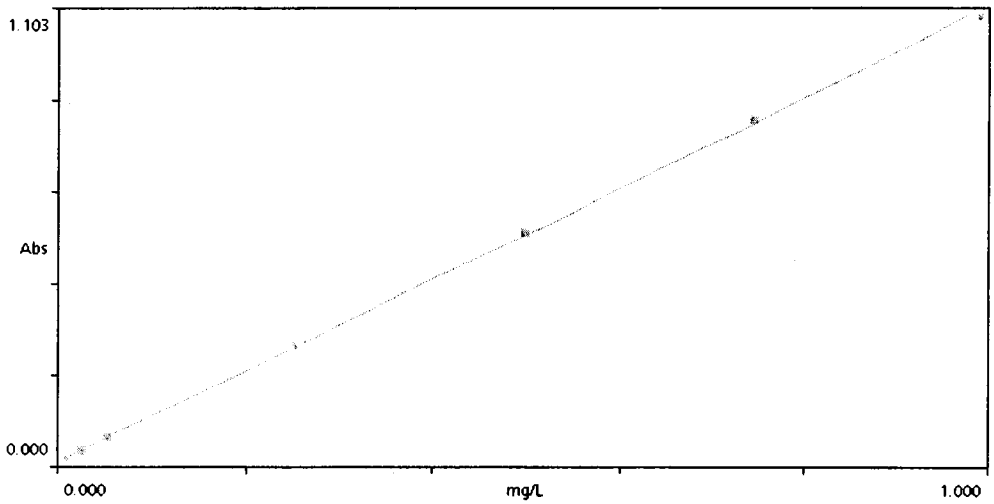
Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200902135	9/2/20 14:18	MBW-1504	11	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200902135	9/2/20 14:44	CCB	22	Cyanide	ND	0.020
20200902135	9/2/20 15:11	CCB	34	Cyanide	ND	0.020
20200902135	9/2/20 15:18	CCB	38	Cyanide	ND	0.020

Wet Chemistry Data
Raw Data

Program:	9005			
Name:	CR6 W			
Units:	mg/L			
Wavelength:	540 nm			
Resolution:	0.001			
Chemical Form 1:	Cr6			
Calibration:	C = a + bA			
	a:	-0.007	b:	0.9016
Curve Fit r^2=	0.9996			



mg/L	Abs
0.0000	0.000
0.0200	0.027
0.0500	0.063
0.2500	0.292
0.5000	0.573
0.7500	0.849
1.0000	1.103

Upper Limit:	Off
Lower Limit:	Off
Timer 1:	Off
Timer 2:	Off
Timer 3:	Off
Timer 4:	Off
Chemical Form 2:	Off
Chemical Form 3:	Off
Chemical Form 4:	Off
Created:	31-AUG-2020 12:36

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(AQUEOUS SAMPLES ONLY)
Method SM3500-Cr B

Batch: 895 Analyst [illegible] Date 6/31/20

Laboratory Sample No.	Sample Vol (ml)	Date	Time	Comments
Cal Curve 0.0	10	6/31/20	12:40	V-
Cal Curve 0.02 / CAL-01				V- 334024
Cal Curve 0.05				V- 334025
Cal Curve 0.25				V- 334026
Cal Curve 0.50				V- 334027
Cal Curve 0.75				V- 334028
Cal Curve 1.0				V- 334029
ICV / CCV				V- 334030
MB				
LCS				V- 334031
1. QC Sample AD 188995-007				
DUP -007				
MS -007				
MSD -007				
2. AD188912-007				
3. AD188921-002				
4. AD188934-006				
5. -008				
6. AD188945-007				
7. AD188964-007				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				

stock chromium soln (cal, LCS, MS, MSD)	2nd source chromium (ICV / CCV)
V- 331859	V- 331890

Diphenylcarbazide	10% H2SO4
V- 333923	V- 333094

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-331889

Prepared By: Trivedi, Beena
Description: 100 ppm cr6 std
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12831	1000 ppm cr6 std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-331890

Prepared By: Trivedi, Beena
Description: 100 ppm cr6 CCV
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12101	1000 ppm Cr6 Std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-333091

Prepared By: Trivedi, Beena
Description: 10 % H2SO4
Prep Date: 8/12/2020
Expiration Date: 2/11/2021
Department: WetChem
BatchNumber:
Concentration: 10 %
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 08/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13343	sulfuric acid	200 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-333923

Prepared By: Trivedi, Beena
Description: Cr6 Color Reagent
Prep Date: 8/28/2020
Expiration Date: 12/29/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 08/28/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11768	1,5-Diphenylcarbazide	1.25 g	neat neat	
12943	acetone	250 ml	neat neat	

Veritech Lot Number: V-334024

Prepared By: Patel, Jessica
Description: 0.02 ppm
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Wet Lab
BatchNumber: B-29610
Concentration: 0.02 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 08/31/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.02 ml	100 mg/l	
13084	DI H20			

Veritech Lot Number: V-334025

Prepared By: Patel, Jessica
Description: 0.05 ppm
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Wet Lab
BatchNumber: B-29610
Concentration: 0.05 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 08/31/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.05 ml	100 mg/l	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334026

Prepared By: Patel, Jessica
Description: 0.25 ppm
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Wet Lab
BatchNumber: B-29610
Concentration: 0.25 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 08/31/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.25 ml	100 mg/l	
13084	DI H20			

Veritech Lot Number: V-334027

Prepared By: Patel, Jessica
Description: 0.5 ppm
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Wet Lab
BatchNumber: B-29610
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 08/31/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	
13084	DI H20			

Veritech Lot Number: V-334028

Prepared By: Patel, Jessica
Description: 0.75 ppm
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Wet Lab
BatchNumber: B-29610
Concentration: 0.75 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 08/31/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.75 ml	100 mg/l	
13084	DI H20			

Veritech Lot Number: V-334029

Prepared By: Patel, Jessica
Description: 1 ppm
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Wet Lab
BatchNumber: B-29610
Concentration: 1 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 08/31/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	1 ml	100 mg/l	
13084	DI H20			

Veritech Lot Number: V-334030

Prepared By: Patel, Jessica
Description: 0.5 ppm ICV/CCV
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Wet Lab
BatchNumber: B-29610
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 08/31/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-331890	100 ppm cr6 CCV	.5	100 mg/l	

Veritech Lot Number: V-334031

Prepared By: Patel, Jessica
Description: 0.5 ppm LCS
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Wet Lab
BatchNumber: B-29610
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 08/31/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-331889	100 ppm cr6 std	.5	100 mg/l	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11768

Description
1,5-Diphenylcarbazide

ApprovedBy: janee
ApproveDate: 09/08/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LabChem	LC136558	H134-17	06/12/18	05/15/23	Wonge, Janee	1	25 g	neat	neat

Veritech Control/Receipt Number: 12101

Description
1000 ppm Cr6 Std

ApprovedBy: janee
ApproveDate: 11/29/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Sigma-Aldrich	19036-100mL	BCBV2169	11/05/18	04/30/21	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12831

Description
1000 ppm cr6 std

ApprovedBy: janee
ApproveDate: 12/26/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Hach	1466442	A9240	10/14/19	08/31/24	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12943

Description
acetone

ApprovedBy: akmal
ApproveDate: 12/18/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9254-03	236884	12/17/19	05/13/22	Lopez, Jose	32	4L	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 779 Analyst MM Date 8/31/20

Digestion Start: 1140 Finish: 1210 Hot Plate Temp 1: 90C Hot Plate Temp 2: 90c

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 (100 PPM)	0.02	7.64	100	2.06	
Cal Curve 0.02 (100 PPM)	0.02	7.37		2.08	
Cal Curve 0.25 PPM	0.25	7.96		1.94	Balance used: 031
Cal Curve 0.5	0.5	7.87		1.90	Pipettes used: 11, 19
Cal Curve 1.0	1.0	7.39		1.87	
MB	2.5gm	7.15		1.73	
LCS		7.66		1.68	
~~AD18918.003~~					
PDS		7.38		2.05	
DUP		7.30		2.08	
(Sol) MS 004		7.45		1.95	
(Insol) MSD 005		7.19		1.87	
AD18918.003		7.28		1.70	
2. AD18932.003		7.20		1.66	
3. AD18934.001		7.15		1.89	
4. 002		7.61		2.08	
5. 003		7.59		2.00	
6. 004		7.30		1.94	
7. 005		7.87		1.90	
8. AD18955.001		7.90		1.87	
9. MS 002		7.95		1.71	
10. MSD 003		7.12		1.65	
11. 004		7.48		1.68	
12. 005		7.40		2.03	
13. AD18966.001		7.67		2.08	
14. 002		7.58		1.94	
15. AD18970.003		7.30		1.90	
16.					
17.					
18.					
19.					
20.					

Reagent	Lot #:		$MgCl_2$	# 12689
Digestion Solution - pH must be > 11.5. If not, discard	V- 331005	pH 13.27	Lead Chromate ($PbCrO_4$)	# 6713
Phosphate Buffer	V- 331886		Weight of $PbCrO_4$ (10-20mg)	0.0112 0.0118 g
			PVS Volume 0.5 ml	10% H_2SO_4 V: 333091
			PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3 V: 333092
			Spike Volume 0.5ml V- 331890	Col Rea. V: 333923

SendToLims

0082707 0999

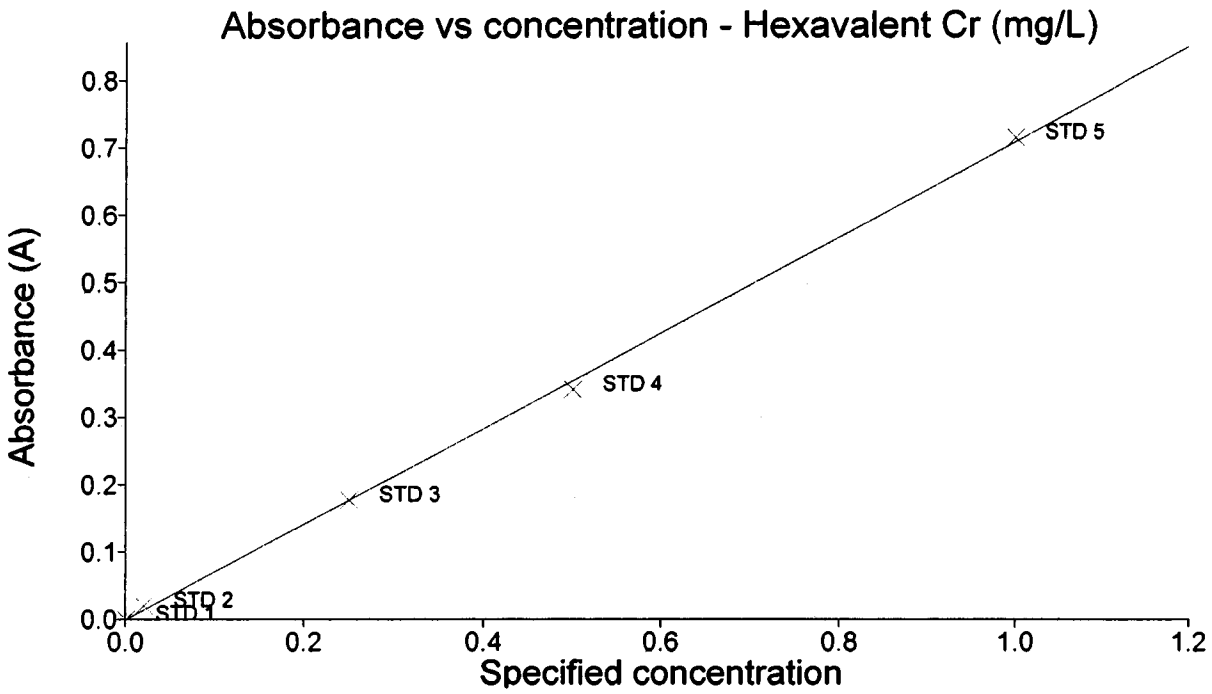
Analytical ID	Send To Lims?	Error	Sent?	FinalConc	RL	Solids	Original Aspen Results: Conc	Aspen RI	Aspen Anal Date	PrepDate	AnalysisDate	Prep By	Analyzed By	Batch I	Dilution	Concentrat	Units	TestGroupId	TestId	Weight	Volume
ICV.Control				0.48	0.020	1				8/31/2020	8/31/2020 15:40	BCT	BCT	778	1	0.484	mg/Kg	CR6-SOIL	CR-HEX	1	1
ICB.Sample				ND	0.020	1				8/31/2020	8/31/2020 15:40	BCT	BCT	778	1	0	mg/Kg	CR6-SOIL	CR-HEX	1	1
MB.Sample				ND	0.80	1				8/31/2020	8/31/2020 15:40	BCT	BCT	778	1	0.015	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
LCS.Sample				19	0.80	1				8/31/2020	8/31/2020 15:41	BCT	BCT	778	1	19.1	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18918-003 NS.Sample	Y			21	0.88	0.91	21	0.88	8/31/2020	8/31/2020	8/31/2020 15:42	BCT	BCT	778	1	20.704	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18918-003 DUP.Sample				20	0.88	0.91				8/31/2020	8/31/2020 15:43	BCT	BCT	778	1	20.182	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18918-004 MS.Sample	Y			38	0.88	0.91	38	0.88	8/31/2020 15:43	8/31/2020	8/31/2020 15:43	BCT	BCT	778	1	37.516	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18918-005 XXX.Sample				250	0.88	0.91				8/31/2020	8/31/2020 15:43	BCT	BCT	778	1	249.002	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18918-005 50X MSD.Sample	Y			440	44	0.91	440	44	8/31/2020 15:44	8/31/2020	8/31/2020 15:44	BCT	BCT	778	50	436.99	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18918-003 PVS.Sample				43	0.88	0.91				8/31/2020	8/31/2020 15:44	BCT	BCT	778	1	43.278	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
CCV-1.Control				0.47	0.020	1				8/31/2020	8/31/2020 15:44	BCT	BCT	778	1	0.471	mg/Kg	CR6-SOIL	CR-HEX	1	1
CCB-1.Sample				ND	0.020	1				8/31/2020	8/31/2020 15:45	BCT	BCT	778	1	0.001	mg/Kg	CR6-SOIL	CR-HEX	1	1
AD18932-002.Sample	Y			ND	1.0	0.79	ND	1.0	8/31/2020	8/31/2020	8/31/2020 15:45	BCT	BCT	778	1	-0.467	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18934-001.Sample	Y			ND	1.1	0.76	ND	1.1	8/31/2020	8/31/2020	8/31/2020 15:45	BCT	BCT	778	1	-0.002	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18934-002.Sample	Y			ND	1.1	0.75	ND	1.1	8/31/2020	8/31/2020	8/31/2020 15:46	BCT	BCT	778	1	-0.047	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18934-003.Sample	Y			ND	1.0	0.79	ND	1.0	8/31/2020	8/31/2020	8/31/2020 15:46	BCT	BCT	778	1	-0.002	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18934-004.Sample	Y			ND	1.0	0.8	ND	1.0	8/31/2020	8/31/2020	8/31/2020 15:46	BCT	BCT	778	1	-0.037	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18934-005.Sample	Y			ND	1.0	0.77	ND	1.0	8/31/2020	8/31/2020	8/31/2020 15:47	BCT	BCT	778	1	0.108	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18955-001.Sample	Y			ND	0.99	0.81	ND	0.99	8/31/2020	8/31/2020	8/31/2020 15:47	BCT	BCT	778	1	0.103	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18955-002 MS2.Sample	Y			21	1.0	0.79	21	1.0	8/31/2020	8/31/2020	8/31/2020 15:47	BCT	BCT	778	1	21.488	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18955-003 MSD 2.Sample				280	0.94	0.85				8/31/2020	8/31/2020 15:48	BCT	BCT	778	1	278.423	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18955-003 MSD 50X 2.Sample	Y			400	47	0.85	400	47	8/31/2020	8/31/2020	8/31/2020 15:49	BCT	BCT	778	50	400.705	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
CCV-2.Control				0.49	0.020	1				8/31/2020	8/31/2020 15:49	BCT	BCT	778	1	0.49	mg/Kg	CR6-SOIL	CR-HEX	1	1
CCB-2.Sample				ND	0.020	1				8/31/2020	8/31/2020 15:49	BCT	BCT	778	1	0.001	mg/Kg	CR6-SOIL	CR-HEX	1	1
AD18955-004.Sample	Y			ND	1.1	0.76	ND	1.1	8/31/2020	8/31/2020	8/31/2020 15:49	BCT	BCT	778	1	-0.024	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18955-005.Sample	Y			ND	1.1	0.72	ND	1.1	8/31/2020	8/31/2020	8/31/2020 15:50	BCT	BCT	778	1	0.108	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18966-001.Sample				84	0.98	0.82				8/31/2020	8/31/2020 15:51	BCT	BCT	778	1	84.199	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18966-001 5X.Sample	Y			92	4.9	0.82	92	4.9	8/31/2020	8/31/2020	8/31/2020 15:51	BCT	BCT	778	5	92.143	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18966-002.Sample				23	0.99	0.81				8/31/2020	8/31/2020 15:52	BCT	BCT	778	1	23.28	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18970-003.Sample	Y			ND	0.87	0.92	ND	0.87	8/31/2020	8/31/2020	8/31/2020 15:52	BCT	BCT	778	1	0.176	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18918-003 T.Sample				ND	0.88	0.91				8/31/2020	8/31/2020 15:52	BCT	BCT	778	1	0.079	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18918-004 T.Sample				ND	0.88	0.91				8/31/2020	8/31/2020 15:53	BCT	BCT	778	1	0.271	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18918-005 T.Sample				ND	0.88	0.91				8/31/2020	8/31/2020 15:53	BCT	BCT	778	1	0.253	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18918-005 50X T.Sample				ND	0.88	0.91				8/31/2020	8/31/2020 15:53	BCT	BCT	778	1	0.036	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
CCV-3.Control				0.49	0.020	1				8/31/2020	8/31/2020 15:53	BCT	BCT	778	1	0.487	mg/Kg	CR6-SOIL	CR-HEX	1	1
CCB-3.Sample				ND	0.020	1				8/31/2020	8/31/2020 15:54	BCT	BCT	778	1	0.001	mg/Kg	CR6-SOIL	CR-HEX	1	1
AD18932-002 T.Sample				1.5	1.0	0.79				8/31/2020	8/31/2020 15:54	BCT	BCT	778	1	1.457	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18934-001 T.Sample				ND	1.1	0.76				8/31/2020	8/31/2020 15:54	BCT	BCT	778	1	0.57	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18934-002 T.Sample				ND	1.1	0.75				8/31/2020	8/31/2020 15:55	BCT	BCT	778	1	0.804	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18934-003 T.Sample				ND	1.0	0.79				8/31/2020	8/31/2020 15:55	BCT	BCT	778	1	0.041	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18934-004 T.Sample				ND	1.0	0.8				8/31/2020	8/31/2020 15:55	BCT	BCT	778	1	0.281	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18934-005 T.Sample				ND	1.0	0.77				8/31/2020	8/31/2020 15:56	BCT	BCT	778	1	0.225	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18955-001 T.Sample				ND	0.99	0.81				8/31/2020	8/31/2020 15:56	BCT	BCT	778	1	0.131	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18955-002 T.Sample				ND	1.0	0.79				8/31/2020	8/31/2020 15:56	BCT	BCT	778	1	0.227	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18955-003 T.Sample				ND	0.94	0.85				8/31/2020	8/31/2020 15:57	BCT	BCT	778	1	0.131	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18955-003 50X T.Sample				ND	0.94	0.85				8/31/2020	8/31/2020 15:57	BCT	BCT	778	1	0.104	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
CCV-4.Control				0.48	0.020	1				8/31/2020	8/31/2020 15:57	BCT	BCT	778	1	0.484	mg/Kg	CR6-SOIL	CR-HEX	1	1
CCB-4.Sample				ND	0.020	1				8/31/2020	8/31/2020 15:57	BCT	BCT	778	1	0.006	mg/Kg	CR6-SOIL	CR-HEX	1	1
AD18955-004 T.Sample				ND	1.1	0.76				8/31/2020	8/31/2020 15:58	BCT	BCT	778	1	0.214	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18955-005 T.Sample				ND	1.1	0.72				8/31/2020	8/31/2020 15:58	BCT	BCT	778	1	0.147	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18966-001 T.Sample				ND	0.98	0.82				8/31/2020	8/31/2020 15:58	BCT	BCT	778	1	0.26	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18966-001 5X T.Sample				ND	0.98	0.82				8/31/2020	8/31/2020 15:59	BCT	BCT	778	1	0.046	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18966-002 T.Sample				ND	0.99	0.81				8/31/2020	8/31/2020 15:59	BCT	BCT	778	1	0.291	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
AD18970-003 T.Sample				ND	0.87	0.92				8/31/2020	8/31/2020 15:59	BCT	BCT	778	1	0.035	mg/Kg	CR6-SOIL	CR-HEX	2.5	100
CCV-5.Control				0.48	0.020	1				8/31/2020	8/31/2020 16:00	BCT	BCT	778	1	0.483	mg/Kg	CR6-SOIL	CR-HEX	1	1
CCB-5.Sample				ND	0.020	1				8/31/2020	8/31/2020 16:00	BCT	BCT	778	1	0.006	mg/Kg	CR6-SOIL	CR-HEX	1	1

9/1/20

9/1/20

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9997

Calibrated on: 08/31/20 15:19:18

User name: wet chem

Method name: Hexavalent Cr

9/1/20

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	0.0004	-0.0004	0.0001
STD 2.Sample	0.0200	0.0287	-0.0087	0.0202
STD 3.Sample	0.2500	0.2501	-0.0001	0.1769
STD 4.Sample	0.5000	0.4819	0.0181	0.3410
STD 5.Sample	1.0000	1.0088	-0.0088	0.7141

Report Generated On:08/31/2020 16:01

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		08/31/20 15:40:22	0.5000	0.0159	0.3425	0.4841
ICB.Sample		08/31/20 15:40:35			0.0001	0.0004
MB.Sample		08/31/20 15:40:51			0.0001	0.0004
LCS.Sample		08/31/20 15:41:12			0.3379	0.4774
AD18918-003 NS.Sample		08/31/20 15:42:40			0.3344	0.4725
AD18918-003 DUP.Sample		08/31/20 15:43:07			0.3260	0.4607
AD18918-004 MS.Sample		08/31/20 15:43:31			0.6083	0.8594
AD18918-005 XXX.Sample		08/31/20 15:43:48			4.0144	5.6701 : Exceeded calibration limits.
AD18918-005 50X MSD.Sample	50	08/31/20 15:44:16			0.1410	0.1995
AD18918-003 PVS.Sample		08/31/20 15:44:41			0.6980	0.9861
CCV-1.Control		08/31/20 15:44:57	0.5000	0.0294	0.3330	0.4706
CCB-1.Sample		08/31/20 15:45:11			0.0003	0.0008
AD18932-002.Sample		08/31/20 15:45:39			0.0135	0.0193
AD18934-001.Sample		08/31/20 15:45:56			0.0073	0.0106
AD18934-002.Sample		08/31/20 15:46:13			0.0097	0.0139
AD18934-003.Sample		08/31/20 15:46:29			0.0002	0.0006
AD18934-004.Sample		08/31/20 15:46:50			0.0031	0.0046
AD18934-005.Sample		08/31/20 15:47:07			0.0042	0.0062
AD18955-001.Sample		08/31/20 15:47:29			0.0030	0.0046
AD18955-002 MS2.Sample		08/31/20 15:47:51			0.3033	0.4286
AD18955-003 MSD 2.Sample TU 892.91 PM		08/31/20 15:48:07			4.1905	5.9188 : Exceeded calibration limits.
AD18955-003 MSD 50X 2.Sample	50	08/31/20 15:49:11			0.1218	0.1723
CCV-2.Control		08/31/20 15:49:28	0.5000	0.0099	0.3468	0.4901
CCB-2.Sample		08/31/20 15:49:43			0.0003	0.0007
AD18955-004.Sample		08/31/20 15:49:58			0.0022	0.0034
AD18955-005.Sample		08/31/20 15:50:18			0.0029	0.0044

Report Generated On:08/31/2020 16:01

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD18966-001.Sample		08/31/20 15:51:30			1.2255	1.7312 : Exceeded calibration limits.
AD18966-001 5X.Sample	5	08/31/20 15:51:52			0.2678	0.3785
AD18966-002.Sample		08/31/20 15:52:12			0.3376	0.4771
AD18970-003.Sample		08/31/20 15:52:32			0.0031	0.0047
AD18918-003 T.Sample		08/31/20 15:52:55			0.0011	0.0018
AD18918-004 T.Sample		08/31/20 15:53:12			0.0042	0.0062
AD18918-005 T.Sample		08/31/20 15:53:30			0.0039	0.0057
AD18918-005 50X T.Sample		08/31/20 15:53:45			0.0004	0.0008
CCV-3.Control		08/31/20 15:53:58	0.5000	0.0129	0.3447	0.4871
CCB-3.Sample		08/31/20 15:54:11			0.0003	0.0006
AD18932-002 T.Sample		08/31/20 15:54:29			0.0202	0.0288
AD18934-001 T.Sample		08/31/20 15:54:51			0.0075	0.0109
AD18934-002 T.Sample		08/31/20 15:55:15			0.0105	0.0151
AD18934-003 T.Sample		08/31/20 15:55:32			0.0004	0.0008
AD18934-004 T.Sample		08/31/20 15:55:47			0.0038	0.0057
AD18934-005 T.Sample		08/31/20 15:56:02			0.0029	0.0043
AD18955-001 T.Sample		08/31/20 15:56:24			0.0017	0.0027
AD18955-002 T.Sample		08/31/20 15:56:40			0.0030	0.0046
AD18955-003 T.Sample		08/31/20 15:57:10			0.0018	0.0029
AD18955-003 50X T.Sample		08/31/20 15:57:24			0.0014	0.0023
CCV-4.Control		08/31/20 15:57:39	0.5000	0.0158	0.3426	0.4842
CCB-4.Sample		08/31/20 15:57:53			0.0038	0.0056
AD18955-004 T.Sample		08/31/20 15:58:11			0.0027	0.0041
AD18955-005 T.Sample		08/31/20 15:58:29			0.0017	0.0026
AD18966-001 T.Sample		08/31/20 15:58:45			0.0036	0.0054
AD18966-001 5X T.Sample		08/31/20 15:59:02			0.0005	0.0010

Report Generated On:08/31/2020 16:01

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD18966-002 T.Sample		08/31/20 15:59:28			0.0040	0.0060
AD18970-003 T.Sample		08/31/20 15:59:44			0.0004	0.0009
CCV-5.Control		08/31/20 16:00:03	0.5000	0.0170	0.3418	0.4830
CCB-5.Sample		08/31/20 16:00:22			0.0039	0.0059

Report Generated On:08/31/2020 16:01

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 779A Analyst MM Date 8/31/20

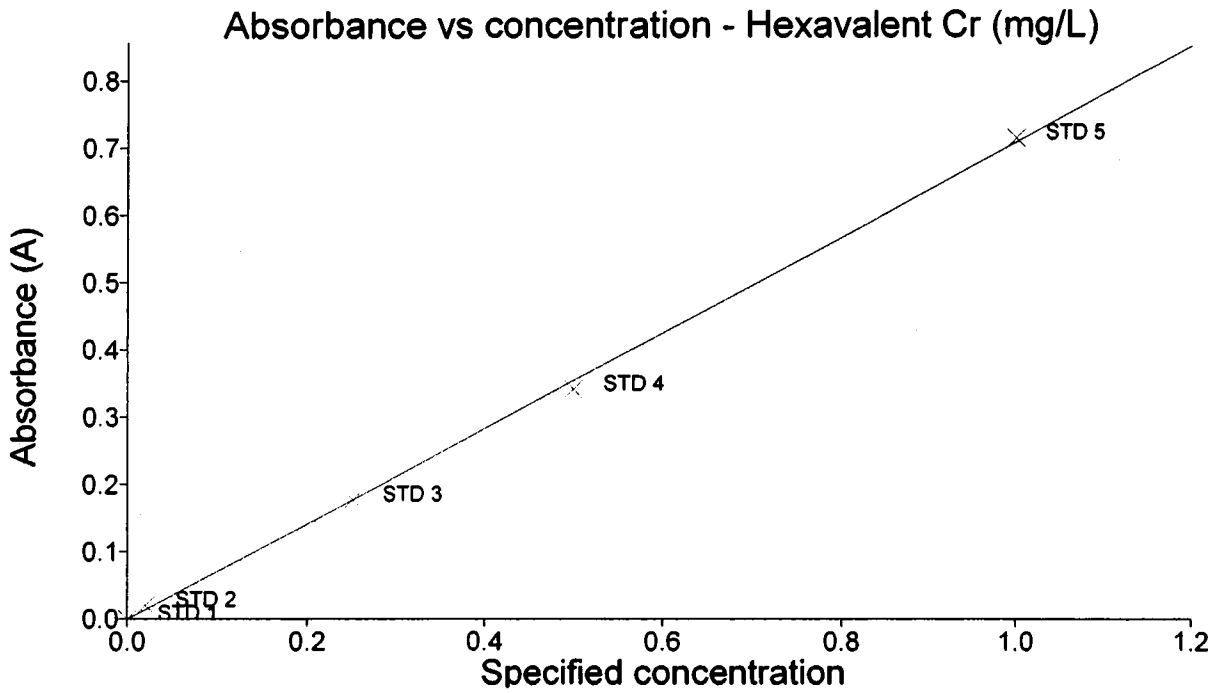
Digestion Start: 11:10 Finish: 12:10 Hot Plate Temp 1: 90°C Hot Plate Temp 2: 90°C

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 1000	0.0ml	7.64	100	2.06	
Cal Curve 0.02 100	0.02	7.37		2.08	
Cal Curve 0.25 1PM	0.25	7.90		1.94	Balance used: 031
Cal Curve 0.5	0.5	7.87		1.90	Pipettes used: 11,19
Cal Curve 1.0	1.0	7.35		1.87	
MB	2.5gM	7.88		2.09	
LCS		7.10		1.97	
~~Asp~~ AD18918-003					
PDS		7.43		1.84	
DUP		7.15		1.80	
(Sol) MS 004		7.66		2.03	
(Insol) MSD 005		7.33		1.96	
AD18918-003		7.19		1.95	
2. AD18932-002		7.28		1.90	
3. AD18934-001		7.10		1.84	
4. 002		7.66		1.73	
5. 003		7.45		2.02	
6. 004		7.15		2.18	
7. 005		7.81		2.15	
8. AD18955-001		7.33		1.96	
9. MS 002		7.30		1.98	
10. MSD 003		7.11		1.73	
11. 004		7.19		1.70	
12. 005		7.08		1.85	
13. AD18966-001		7.90		1.88	
14. 002		7.66		2.03	
15. AD18970-003		7.43		2.08	
16.					
17.					
18.					
19.					
20.					

Reagent	Lot #:		$MgCl_2$	#
Digestion Solution - pH must be > 11.5. If not, discard	V- 334005	pH 13.27	Lead Chromate ($PbCrO_4$)	# 6413
Phosphate Buffer	V- 331886		Weight of $PbCrO_4$ (10-20mg)	0.0112 / 0.0118 g
			PVS Volume 0.5 ml	10% H_2SO_4 V: 333091
			PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3 V: 333092
			Spike Volume 0.5ml V- 331890	Col Rgn. V: 333123

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9997

Calibrated on: 08/31/20 15:19:18

User name: wet chem

Method name: Hexavalent Cr

9/1/20

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	0.0004	-0.0004	0.0001
STD 2.Sample	0.0200	0.0287	-0.0087	0.0202
STD 3.Sample	0.2500	0.2501	-0.0001	0.1769
STD 4.Sample	0.5000	0.4819	0.0181	0.3410
STD 5.Sample	1.0000	1.0088	-0.0088	0.7141

Report Generated On:08/31/2020 16:28

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		08/31/20 16:05:44	0.5000	0.0398	0.3256	0.4602
ICB.Sample		08/31/20 16:06:01			-0.0007	-0.0007 : Exceeded calibration limits.
MB.Sample		08/31/20 16:06:14			-0.0007	-0.0007 : Exceeded calibration limits.
LCS.Sample		08/31/20 16:06:30			0.3295	0.4657
AD18918-003 NS.Sample		08/31/20 16:07:09			0.3492	0.4935
AD18918-003 DUP.Sample		08/31/20 16:07:37			0.3454	0.4882
AD18918-004 MS.Sample		08/31/20 16:07:59			0.6532	0.9228
AD18918-005 XXX.Sample		08/31/20 16:08:15			4.1893	5.9171 : Exceeded calibration limits.
AD18918-005 50X MSD.Sample	50	08/31/20 16:08:40			0.1415	0.2002
AD18918-003 PVS.Sample		08/31/20 16:09:04			0.6785	0.9586
CCV-1.Control		08/31/20 16:09:23	0.5000	0.0215	0.3386	0.4785
CCB-1.Sample		08/31/20 16:09:37			0.0028	0.0043
AD18932-002.Sample		08/31/20 16:11:29			0.0136	0.0195
AD18934-001.Sample		08/31/20 16:11:47			0.0081	0.0117
AD18934-002.Sample		08/31/20 16:12:06			0.0052	0.0076
AD18934-003.Sample		08/31/20 16:12:25			0.0021	0.0033
AD18934-004.Sample		08/31/20 16:12:43			0.0016	0.0026
AD18934-005.Sample		08/31/20 16:13:02			0.0044	0.0064
AD18955-001.Sample		08/31/20 16:13:33			0.0104	0.0150
AD18955-002 MS2.Sample		08/31/20 16:13:55			0.2989	0.4224
AD18955-003 MSD 2.Sample		08/31/20 16:14:12			4.0644	5.7406 : Exceeded calibration limits.
AD18955-003 MSD 50X 2.Sample	50	08/31/20 16:14:53			0.1243	0.1759
CCV-2.Control		08/31/20 16:15:07	0.5000	0.0203	0.3394	0.4797
CCB-2.Sample		08/31/20 16:15:21			-0.0002	0.0001

Report Generated On:08/31/2020 16:28

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD18955-004.Sample		08/31/20 16:15:44			-0.0002	0.0001
AD18955-005.Sample		08/31/20 16:16:02			-0.0009	-0.0010 : Exceeded calibration limits
AD18966-001.Sample		08/31/20 16:16:17			1.0507	1.4842 : Exceeded calibration limits
AD18966-001 5X.Sample	5	08/31/20 16:17:54			0.2604	0.3680
AD18966-002.Sample		08/31/20 16:18:43			0.3182	0.4497
AD18970-003.Sample		08/31/20 16:19:04			0.0047	0.0069
AD18918-003 T.Sample		08/31/20 16:19:20			0.0026	0.0039
AD18918-004 T.Sample		08/31/20 16:19:59			0.0019	0.0030
AD18918-005 T.Sample		08/31/20 16:20:13			0.0043	0.0064
AD18918-005 50X T.Sample		08/31/20 16:20:28			0.0004	0.0009
CCV-3.Control		08/31/20 16:20:44	0.5000	0.0227	0.3378	0.4773
CCB-3.Sample		08/31/20 16:21:00			-0.0005	-0.0004 : Exceeded calibration limits
AD18932-002 T.Sample		08/31/20 16:22:04			0.0161	0.0230
AD18934-001 T.Sample		08/31/20 16:22:22			0.0076	0.0110
AD18934-002 T.Sample		08/31/20 16:22:40			0.0039	0.0058
AD18934-003 T.Sample		08/31/20 16:22:59			0.0015	0.0024
AD18934-004 T.Sample		08/31/20 16:23:17			0.0011	0.0019
AD18934-005 T.Sample		08/31/20 16:23:36			0.0032	0.0048
AD18955-001 T.Sample		08/31/20 16:23:55			0.0094	0.0136
AD18955-002 T.Sample		08/31/20 16:24:10			0.0099	0.0143
AD18955-003 T.Sample		08/31/20 16:24:25			0.0092	0.0133
AD18955-003 50X T.Sample		08/31/20 16:24:40			-0.0004	-0.0003 : Exceeded calibration limits
CCV-4.Control		08/31/20 16:24:56	0.5000	0.0287	0.3335	0.4713
CCB-4.Sample		08/31/20 16:25:12			-0.0007	-0.0007 : Exceeded calibration limits

Report Generated On:08/31/2020 16:28

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD18955-004 T.Sample		08/31/20 16:25:26			0.0004	0.0009
AD18955-005 T.Sample		08/31/20 16:25:43			-0.0006	-0.0005 : Exceeded calibration limits
AD18966-001 T.Sample		08/31/20 16:25:58			0.0066	0.0095
AD18966-001 5X T.Sample		08/31/20 16:26:11			-0.0007	-0.0006 : Exceeded calibration limits
AD18966-002 T.Sample		08/31/20 16:26:35			0.0019	0.0029
AD18970-003 T.Sample		08/31/20 16:26:50			0.0027	0.0042
CCV-5.Control		08/31/20 16:27:05	0.5000	0.0271	0.3346	0.4729
CCB-5.Control		08/31/20 16:27:20			-0.0003	-0.0001 : Exceeded calibration limits

Report Generated On:08/31/2020 16:28

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-325340

Prepared By: Patel, Jessica
Description: 100 ppm cr6 CCV
Prep Date: 4/7/2020
Expiration Date: 10/6/2020
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 04/07/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12101	1000 ppm Cr6 Std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-331888

Prepared By: Trivedi, Beena
Description: Phosphate Buffer
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9811	Potassium Phosphate Monobasic	68.04 g	neat neat	
12908	potassium phosphate dibasic anhydrous	87.09 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-331889

Prepared By: Trivedi, Beena
Description: 100 ppm cr6 std
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12831	1000 ppm cr6 std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-333091

Prepared By: Trivedi, Beena
Description: 10 % H2SO4
Prep Date: 8/12/2020
Expiration Date: 2/11/2021
Department: WetChem
BatchNumber:
Concentration: 10 %
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 08/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13343	sulfuric acid	200 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-333092

Prepared By: Trivedi, Beena
Description: 5 M HNO3
Prep Date: 8/12/2020
Expiration Date: 2/11/2021
Department: WetChem
BatchNumber:
Concentration: 5 m
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 08/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13331	Nitric acid	640 ml	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333923

Prepared By: Trivedi, Beena
Description: Cr6 Color Reagent
Prep Date: 8/28/2020
Expiration Date: 12/29/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 08/28/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11768	1,5-Diphenylcarbazide	1.25 g	neat neat	
12943	acetone	250 ml	neat neat	

Veritech Lot Number: V-334005

Prepared By: Trivedi, Beena
Description: Cr6 digestion solution
Prep Date: 8/31/2020
Expiration Date: 9/30/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 6000 ml
ApprovedBy: jessica
ApproveDate: 08/31/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12852	Sodium Carbonate, Anhydrous	180 g	neat neat	
12834	sodium hydroxide	120 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334017

Prepared By: Trivedi, Beena
Description: 0.02 PPM
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Wet Lab
BatchNumber: B-29609
Concentration: 0.02 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 08/31/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.02 ml	100 mg/l	
13084	DI H20			
V-334005	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334018

Prepared By: Trivedi, Beena
Description: 0.25 PPM
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: WetChem
BatchNumber: B-29609
Concentration: 0.25 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 08/31/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334005	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.25 ml	100 mg/l	

Veritech Lot Number: V-334019

Prepared By: Trivedi, Beena
Description: 0.5 PPM
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Wet Lab
BatchNumber: B-29609
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 08/31/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334005	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334020

Prepared By:	Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description:	1.0 PPM	BatchNumber: B-29609	ApproveDate: 08/31/20
Prep Date:	8/31/2020	Concentration: 1 ppm	Checked: Yes
Expiration Date:	8/31/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	1 ml	100 mg/l	
V-334005	Cr6 digestion solution	50 ml	Reagent reag	
13084	DI H20			

Veritech Lot Number: V-334021

Prepared By:	Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description:	ICV	BatchNumber: B-29609	ApproveDate: 08/31/20
Prep Date:	8/31/2020	Concentration: 0.5 ppm	Checked: Yes
Expiration Date:	8/31/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334005	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334022

Prepared By:	Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description:	CCV	BatchNumber: B-29609	ApproveDate: 08/31/20
Prep Date:	8/31/2020	Concentration: 0.5 ppm	Checked: Yes
Expiration Date:	8/31/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334005	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334023

Prepared By:	Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description:	LCS	BatchNumber: B-29609	ApproveDate: 08/31/20
Prep Date:	8/31/2020	Concentration: 0.5 ppm	Checked: Yes
Expiration Date:	8/31/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	
V-334005	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9811

Description
Potassium Phosphate Monobasic

ApprovedBy: janee
ApproveDate: 11/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	P285-500	151912	11/17/15	11/16/25	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 11768

Description
1,5-Diphenylcarbazide

ApprovedBy: janee
ApproveDate: 09/08/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	LC136558	H134-17	06/12/18	05/15/23	Wonge, Janee	1	25 g	neat	neat

Veritech Control/Receipt Number: 12101

Description
1000 ppm Cr6 Std

ApprovedBy: janee
ApproveDate: 11/29/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	19036-100mL	BCBV2169	11/05/18	04/30/21	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12831

Description
1000 ppm cr6 std

ApprovedBy: janee
ApproveDate: 12/26/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Hach	1466442	A9240	10/14/19	08/31/24	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12852

Description
Sodium Carbonate, Anhydrous

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Lab Chem	LC229651	J192-03	10/21/19	10/20/29	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12908

Description
potassium phosphate dibasic anhydrous

ApprovedBy: janee
ApproveDate: 12/04/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
fisher	p288-500	188106	12/04/19	12/03/29	Wonge, Janee	1	500 g	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12943

Description
acetone

ApprovedBy: akmal
ApproveDate: 12/18/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9254-03	236884	12/17/19	05/13/22	Lopez, Jose	32	4L	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13331

Description
Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6413

Description
Lead Chromate

ApprovedBy: aurora
ApproveDate: 11/05/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Pfaltz & Bauer inc	L01745	A056-5	10/27/11	10/26/21	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 12689

Description
Magnesium Chloride Anhydrous

ApprovedBy: janee
ApproveDate: 08/01/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Laboratory Sales	LC-2758812	190726-A	07/31/19	07/30/24	Wonge, Janee	1	2.5 kg	neat	neat

0082707 0685

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1106 Meter #: 16004

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.5	23.3	233.8	23.3	LCS: 4.46 23.9	25	25	8/27/20 1205	BJ/SDG
AD18889.004	241.7	25.9	244.2	25.9	DUP: 8.48				
1. ↓ 004	250.1	25.6	251.3	25.6	8.54				
2. ↓ 006	277.7	25.0	279.0	25.0	8.57				
AD18890.002	236.2	24.7	238.7	24.7	8.49				
4. ↓ 004	245.9	24.5	248.1	24.5	8.59				
5. ↓ 006	260.6	25.3	261.4	25.3	8.56				
AD18892.002	264.2	25.1	264.8	25.1	8.56				
7. ↓ 004	259.4	24.6	260.1	24.6	8.67				
8. ↓ 006	266.3	24.5	267.2	24.8	8.58				
9 AD18893.002	271.2	24.2	273.0	24.2	8.51				
10. ↓ 004	271.0	24.9	268.4	24.9	8.53				
11. ↓ 006	272.9	24.0	273.6	24.6	8.60				
12 AD18908.001	259.7	24.4	258.1	24.4	8.63				
13. 002	396.2	24.4	400.8	24.4	6.38				
14. ↓ 003	358.0	24.1	355.6	24.1	7.57				
15. 004	403.3	24.3	404.2	24.3	6.47				
16. ↓ 005	344.0	24.4	340.7	24.4	8.28				
AD18918.001	488.9	24.1	490.1	24.1	4.86				
18. ↓ 002	496.6	24.1	499.9	24.1	4.69				
19. ↓ 003	506.9	24.1	507.3	24.1	4.68				
20 AD18922.001	363.3	24.1	361.5	24.1	8.37				
ZoBell's Solution (228 ± 10 mV)	233.8	23.4	233.9	23.4					

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: [signature]

Date Reviewed: 8/27/20

Solution	Manufacturer's Lot #
ZoBell's Solution	13163
4 M KCl Filling Solution	10292
LCS	V-332644

00827707 0686

Hampton-Clarke

pH CALIBRATION RECORD

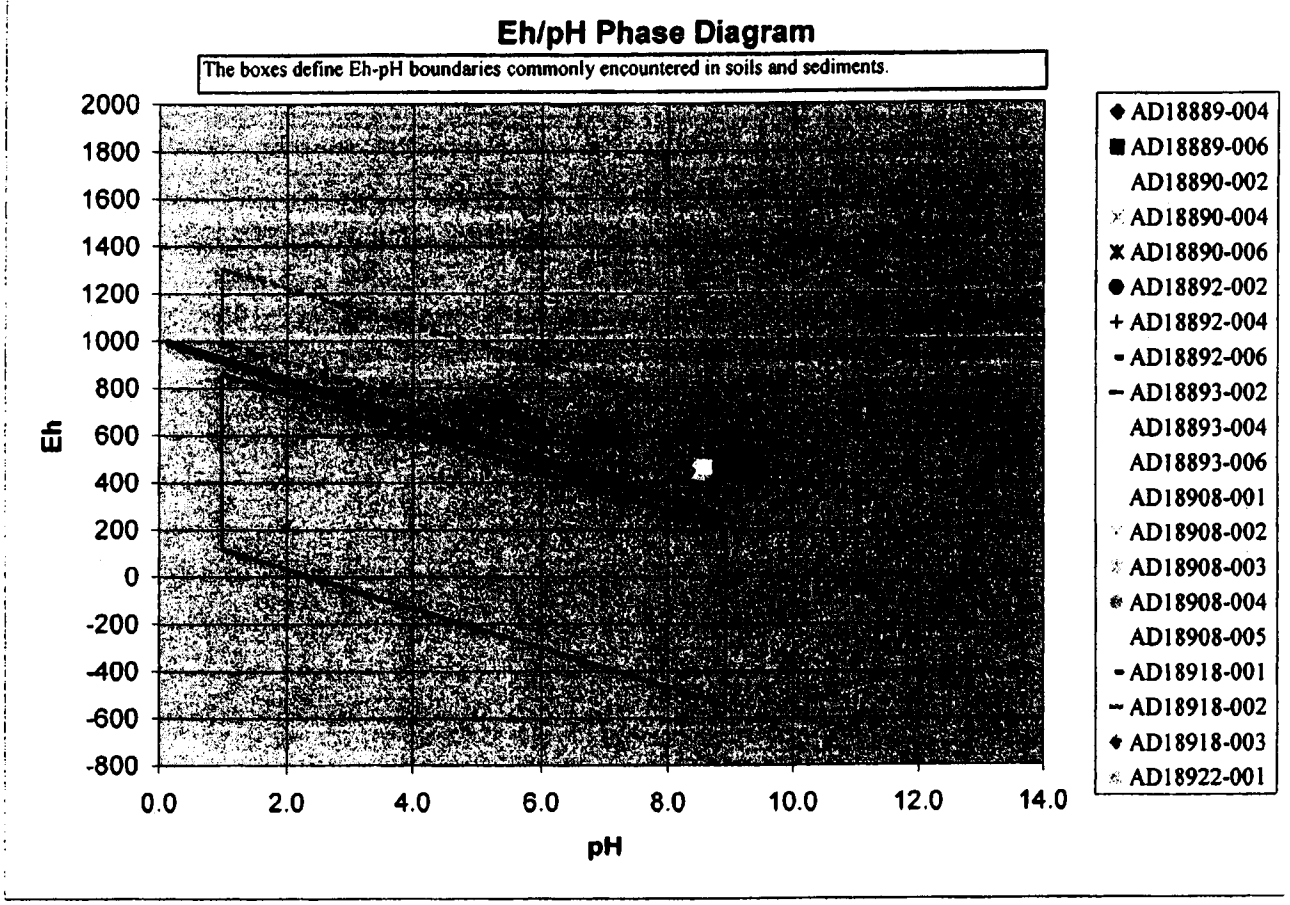
pH Meter: Orion 3 Star

Serial # 16004

Date	Calibration					Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate Buffer 1	Calibrate Buffer 2	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Buffer 1	Buffer 2	Mid point Buffer
8/20/20	DG 9:40	23.6	4.00	10.00	7.02							13022	13016	13006
8/21/20	BG 9:40	23.3	4.00	10.00	7.01									
8/24/20	BG 8:10	23.2	4.00	10.00	7.01									
8/25/20	BG 9:40	23.4	4.00	10.00	7.04									
8/26/20	6:45	23.2	4.00	10.00	7.04	SDC 10:50	23.3	7.04						
8/27/20	BG 9:30	23.1	4.00	10.00	7.03	SDC 12:00	23.8	7.04						

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0 and 7.0, check with 4.0. For basic samples calibrate with 7.0 and 12. 0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-



Sample	ORP	pH
AD18889-004	250	8.5
AD18889-006	280	8.6
AD18890-002	240	8.5
AD18890-004	250	8.6
AD18890-006	260	8.6
AD18892-002	260	8.6
AD18892-004	260	8.7
AD18892-006	270	8.6
AD18893-002	270	8.5
AD18893-004	270	8.5
AD18893-006	270	8.6
AD18908-001	260	8.6
AD18908-002	400	6.4
AD18908-003	360	7.6
AD18908-004	400	6.5
AD18908-005	340	8.3
AD18918-001	490	4.9
AD18918-002	500	4.7
AD18918-003	510	4.7
AD18922-001	360	8.4

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

8/27/20

8/25/20

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332644

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: jessica
Description: KHP LCS	BatchNumber:	ApproveDate: 08/05/20
Prep Date: 8/5/2020	Concentration: 300 ppm	Checked: Yes
Expiration Date: 2/4/2021	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE	600 mg	NEAT	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10292

Description
Potassium Chloride, 4M

ApprovedBy: janee
ApproveDate: 12/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	SP135-500	156731	07/01/16	12/31/20	Wonge, Janee	1	500 m	4	M

Veritech Control/Receipt Number: 13162

Description
zobell"s solution

ApprovedBy: jessica
ApproveDate: 04/06/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LABCHEM	LC273101	K050-17	04/06/20	02/20/21	Patel, Jessica	1	500M	NEAT	NEAT

0082707 0691

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1107 Meter #: 16004

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	227.6	23.5	228.1	23.5	LCS: 4.42 22.9	25	25	8/31/20 1100	BCT
AD18918.004	511.8	22.5	509.6	22.5	DUP: 4.66				
1. 004	508.3	22.6	510.2	22.6	4.64				
2. 005	512.4	22.8	511.8	22.8	4.67				
AD18932.002	271.0	23.3	270.3	23.3	7.62				
AD18934.001	162.8	23.0	164.0	23.0	6.76				
5. 002	191.2	22.9	186.7	22.9	8.17				
6. 003	202.8	22.9	197.8	22.9	8.23				
7. 004	219.8	22.7	224.6	22.7	8.53				
8. 005	-3.9	22.9	-5.2	22.9	7.76				
AD18955.001	246.7	22.8	248.9	22.8	7.93				
10. 002	251.2	22.9	253.3	22.9	7.95				
11. 003	247.7	23.1	247.9	23.1	7.94				
12. 004	273.3	22.7	271.6	22.7	7.786				
13. 005	-27.3	22.8	-27.0	22.8	7.52				
AD18966.001	478.3	22.7	480.9	22.7	4.74				
15. 003	443.6	22.7	441.3	22.7	5.04				
AD18970.003	277.8	22.6	281.3	22.6	7.52				
17.									
18.									
19.									
20.									
ZoBell's Solution (228 ± 10 mV)	230.3	23.1	229.6	23.1					

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: BCT

Date Reviewed: 9/1/20

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V- 332644

0082707 0692

Hampton-Clarke

pH CALIBRATION RECORD

pH Meter: Orion 3 Star

Serial # 16004

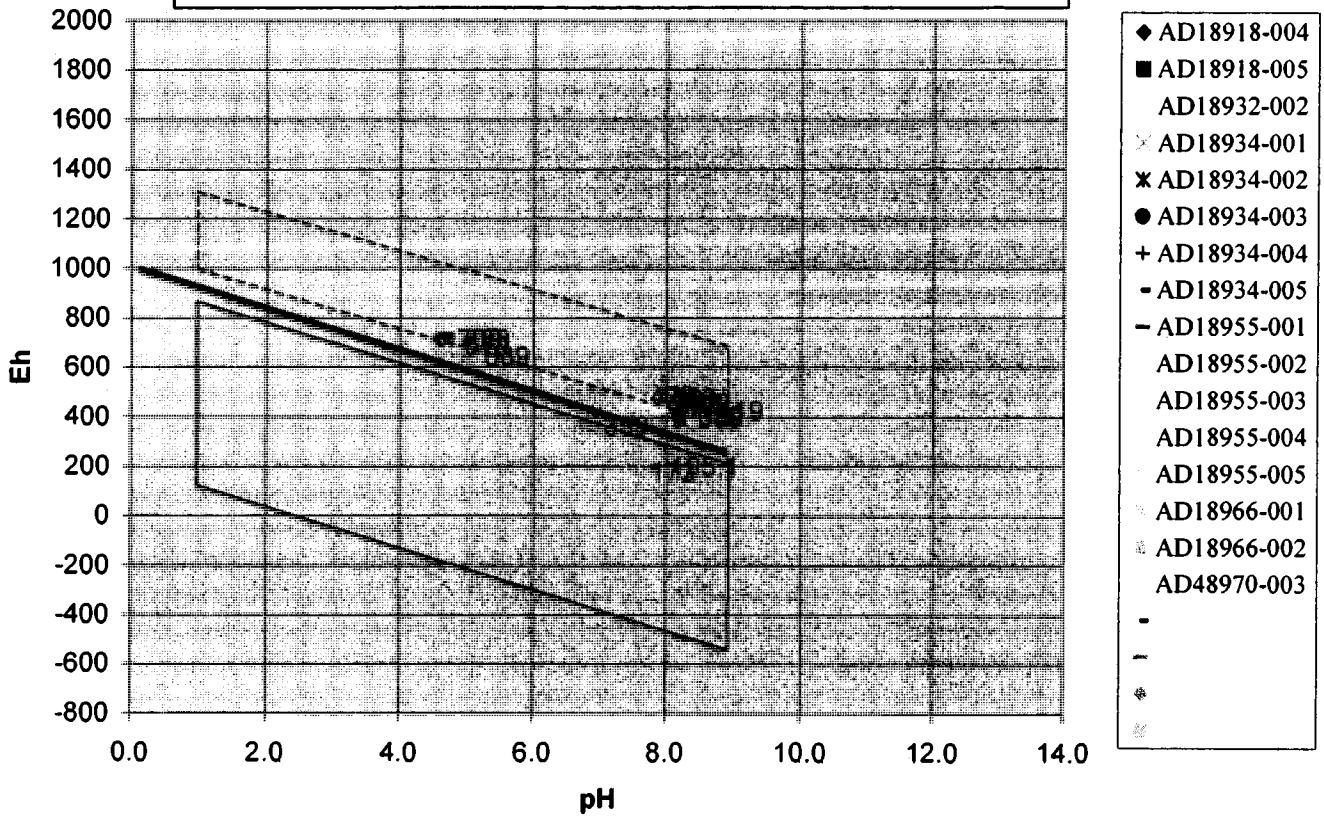
Date	Calibration					Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate Buffer 1	Calibrate Buffer 2	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Buffer 1	Buffer 2	Mid point Buffer
8/20/20	BG 9:40	23.6	4.00	10.00	7.02							13022	13016	13006
8/21/20	BG 9:40	23.3	4.00	10.00	7.01									
8/24/20	BG 8:10	23.2	4.00	10.00	7.01									
8/25/20	BG 9:40	23.4	4.00	10.00	7.04									
8/26/20	JW 6:45	23.2	4.00	10.00	7.04	SDC 10:50	23.3	7.04						
8/27/20	BG 9:30	23.1	4.00	10.00	7.03	SDC 12:00	23.8	7.04						
8/28/20	BG 9:40	23.6	4.00	10.00	7.02									13384
8/31/20	JW 8:50	22.8	4.00	10.00	7.06							13022	13016	13384

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0 and 7.0, check with 4.0. For basic samples calibrate with 7.0 and 12. 0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-

Eh/pH Phase Diagram

The boxes define Eh-pH boundaries commonly encountered in soils and sediments.



Sample	ORP	pH
AD18918-004	510	4.6
AD18918-005	510	4.7
AD18932-002	270	7.6
AD18934-001	160	6.8
AD18934-002	190	8.2
AD18934-003	200	8.2
AD18934-004	220	8.5
AD18934-005	-3.9	7.8
AD18955-001	250	7.9
AD18955-002	250	8.0
AD18955-003	250	7.9
AD18955-004	270	7.8
AD18955-005	-27	7.5
AD18966-001	480	4.7
AD18966-002	440	5.0
AD48970-003	280	7.5

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

8/31/20

9/11/20

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332644

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: jessica	
Description: KHP LCS	BatchNumber:	ApproveDate: 08/05/20	
Prep Date: 8/5/2020	Concentration: 300 ppm	Checked: Yes	
Expiration Date: 2/4/2021	Final Volume: 2000 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE	600 mg	NEAT	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10292

Description
Potassium Chloride, 4M

ApprovedBy: janee
ApproveDate: 12/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	SP135-500	156731	07/01/16	12/31/20	Wonge, Janee	1	500 m	4	M

Veritech Control/Receipt Number: 13162

Description
zobell"s solution

ApprovedBy: jessica
ApproveDate: 04/06/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LABCHEM	LC273101	K050-17	04/06/20	02/20/21	Patel, Jessica	1	500M	NEAT	NEAT

0082707 0690

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B ✓ Total CN⁻____ Amenable CN⁻____ OIA 1677 Avail CN⁻____ SM4500 WAD CN⁻____

Batch No. 2412 STD Cont/ Batch: _____ Distilled by: SW Start Distill. Time: 1115 End Distill. Time 1200 Date: 8/31/20 Reviewed by: DDQ Date: 8/31/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
MB	✓		05	5.5	6.0					
LCS / LCSD		0.12								Balance Used: 023
MS AD18955-002		↓								Pipettes Used: 11, 19
MSD 003		↓								
1. 001										Micro-dist used: 2,3
Dup 1. 001										
2. 004										
3. 005										
4. AD18949 -014										
5. AD18960 -015										
6. 017										
7. AD18934- 001										
8. 002										
9. 003										
10. 004			↓	↓	↓					
Cal Curve Blank										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. 0.8 ppm		0.24								V-334089 ★

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:	V-332257	V-330630	V-334035			

★ Samples analyzed on AQ2. only 0.8 ppm std. used

0065

0082707 0698

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B ✓ Total CN⁻____ Amenable CN⁻____ OIA 1677 Avail CN⁻____ SM4500 WAD CN⁻____

Batch No. 2412 STD Cont/ Batch: _____ Distilled by: JW Start Distill. Time: 1115 End Distill. Time 1200 Date: 8/31/20 Reviewed by: [illegible] Date: 9/3/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
MB										
LCS										Balance Used:
MS										Pipettes Used:
MSD JW 8/31/20										
1.										Micro-dist used:
Dup 1 AD18934-005	✓		0.5	5.5	6.0					
2. AD18957-001										
3. 003										
4. 005										
5. 007										
6. 009										
7. 011										
8. 013										
9.										
10.										
Cal Curve Blank										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:						

9900

RUN LOG

Instrument: DA1 BatchId: 202008311328 Analyzed By: jw

Run#	Qc Type	Sample ID	Flag summary:	Comments	An Date/Time:	Dil	Prep Batch	Method Blank
1	ICS	STANDARD 1		.g	08/31/20 13:28	1		
2	ICS	STANDARD 90		.g V-334039	08/31/20 13:30	1		
3	ICS	STANDARD 91		.g V-334039	08/31/20 13:32	1		
4	ICS	STANDARD 92		.g V-334039	08/31/20 13:35	1		
5	ICS	STANDARD 93		.g V-334039	08/31/20 13:37	1		
6	ICS	STANDARD 94		.g V-334039	08/31/20 13:39	1		
7	ICS	STANDARD 95		.g V-334039	08/31/20 13:42	1		
8	ICS	STANDARD 0		.g	08/31/20 13:44	1		
9	ICV	CCV		.g V-334036	08/31/20 13:46	1		
10	ICB	CCB		.g	08/31/20 13:49	1		
11	MB	MBS-2412		.g	08/31/20 13:51	1	S-2412	MBS-2412
12	LCS	LCSS-2412		.g V-334035	08/31/20 13:53	1	S-2412	MBS-2412
13	LCS	LCSS-2412 DUP		.g V-334035	08/31/20 13:56	1	S-2412	MBS-2412
14	SMP	AD18955-001		.g	08/31/20 13:58	1	S-2412	MBS-2412
15	DUP	AD18955-001 DUP		.g	08/31/20 14:00	1	S-2412	MBS-2412
16	MS	AD18955-002 MS		.g	08/31/20 14:03	1	S-2412	MBS-2412
17	MSD	AD18955-003 MSD		.g	08/31/20 14:05	1	S-2412	MBS-2412
18	SMP	AD18955-004		.g	08/31/20 14:07	1	S-2412	MBS-2412
19	SMP	AD18955-005		.g	08/31/20 14:10	1	S-2412	MBS-2412
20	SMP	AD18949-014		.g	08/31/20 14:12	1	S-2412	MBS-2412
21	CCV	CCV		.g V-334036	08/31/20 14:14	1		
22	CCB	CCB		.g	08/31/20 14:17	1		
23	SMP	AD18960-015		.g	08/31/20 14:19	1	S-2412	MBS-2412
24	SMP	AD18960-017		.g	08/31/20 14:21	1	S-2412	MBS-2412
25	SMP	AD18934-001		.g	08/31/20 14:24	1	S-2412	MBS-2412
26	SMP	AD18934-002		.g	08/31/20 14:26	1	S-2412	MBS-2412
27	SMP	AD18934-003		.g	08/31/20 14:28	1	S-2412	MBS-2412
28	SMP	AD18934-004		.g	08/31/20 14:31	1	S-2412	MBS-2412
29	SMP	AD18934-005		.g	08/31/20 14:33	1	S-2412	MBS-2412
30	SMP	AD18957-001		.g	08/31/20 14:35	1	S-2412	MBS-2412
31	SMP	AD18957-003		.g	08/31/20 14:38	1	S-2412	MBS-2412
32	SMP	AD18957-005		.g	08/31/20 14:40	1	S-2412	MBS-2412
33	CCV	CCV		.g V-334036	08/31/20 14:42	1		
34	CCB	CCB		.g	08/31/20 14:45	1		
35	SMP	AD18957-007		.g	08/31/20 14:47	1	S-2412	MBS-2412
36	SMP	AD18957-009		.g	08/31/20 14:48	1	S-2412	MBS-2412
37	SMP	AD18957-011		.g	08/31/20 14:50	1	S-2412	MBS-2412
38	SMP	AD18957-013		.g	08/31/20 14:52	1	S-2412	MBS-2412
39	CCV	CCV		.g V-334036	08/31/20 14:54	1		
40	CCB	CCB		.g	08/31/20 14:55	1		

Flag Code:	Flag Code Description	Flag Code:	Flag Code Description
Cs	CCV Out epa9056	Cw	CCV out 300.0 rev2.1
Ho	Hold Time Exceeded	I1	Init Cal x and y value problem
I2	Init Cal missing a data point	I3	Init Cal missing a Compound
I4	Init Cal Rsd < .995	Is	ICV out epa 9056
Iw	ICV Out 300.0 rev2.1	Ls	LCS Out EPA 9056
Lw	LCS Out 300.0 rev2.1	Ms	Spike Out EPA 9056
Mw	Spike Out EPA 300.0 REV2.1	Oc	Over Calibration/Linear Range

RUN LOG

Instrument: DA1 | BatchId: 202009021355 | Analyzed By: jw

Run#	Qc Type	Sample ID	Flag summary:	Comments	An Date/Time:	Dil	Prep Batch	Method Blank
1	ICS	STANDARD 1		.g	09/02/20 13:55	1		
2	ICS	STANDARD 90		.g V-334198	09/02/20 13:57	1		
3	ICS	STANDARD 91		.g V-334198	09/02/20 14:00	1		
4	ICS	STANDARD 92		.g V-334198	09/02/20 14:02	1		
5	ICS	STANDARD 93		.g V-334198	09/02/20 14:04	1		
6	ICS	STANDARD 94		.g V-334198	09/02/20 14:07	1		
7	ICS	STANDARD 95		.g V-334198	09/02/20 14:09	1		
8	ICS	STANDARD 0		.g	09/02/20 14:11	1		
9	ICV	CCV		.g V-334171	09/02/20 14:14	1		
10	CCB	CCB		.g	09/02/20 14:16	1		
11	MB	MBW-1504		.g	09/02/20 14:18	1	W-1504	MBW-1504
12	LCS	LCSW-1504		.g V-334170	09/02/20 14:21	1	W-1504	MBW-1504
13	LCS	LCSW-1504 DUP		.g V-334170	09/02/20 14:23	1	W-1504	MBW-1504
14	SMP	AD18945-007		.g	09/02/20 14:25	1	W-1504	MBW-1504
15	DUP	AD18945-007 DUP		.g	09/02/20 14:28	1	W-1504	MBW-1504
16	MS	AD18945-007 MS		.g	09/02/20 14:30	1	W-1504	MBW-1504
17	MSD	AD18945-007 MSD		.g	09/02/20 14:32	1	W-1504	MBW-1504
18	SMP	AD18964-007		.g	09/02/20 14:35	1	W-1504	MBW-1504
19	SMP	AD18979-001		.g	09/02/20 14:37	1	W-1504	MBW-1504
20	SMP	AD18979-002		.g	09/02/20 14:39	1	W-1504	MBW-1504
21	CCV	CCV		.g V-334171	09/02/20 14:42	1		
22	CCB	CCB		.g	09/02/20 14:44	1		
23	SMP	AD18979-004		.g	09/02/20 14:46	1	W-1504	MBW-1504
24	SMP	AD18934-006		.g	09/02/20 14:49	1	W-1504	MBW-1504
25	SMP	AD18934-008		.g	09/02/20 14:51	1	W-1504	MBW-1504
26	SMP	AD19010-001		.g	09/02/20 14:53	1	W-1504	MBW-1504
27	SMP	AD19010-002		.g	09/02/20 14:56	1	W-1504	MBW-1504
28	SMP	AD19010-004		.g	09/02/20 14:58	1	W-1504	MBW-1504
29	SMP	AD19010-005		.g	09/02/20 15:00	1	W-1504	MBW-1504
30	SMP	AD19010-006		.g	09/02/20 15:03	1	W-1504	MBW-1504
31	SMP	AD19015-001		.g	09/02/20 15:05	1	W-1504	MBW-1504
32	SMP	AD19015-004		.g	09/02/20 15:07	1	W-1504	MBW-1504
33	CCV	CCV		.g V-334171	09/02/20 15:09	1		
34	CCB	CCB		.g	09/02/20 15:11	1		
35	SMP	AD19015-005		.g	09/02/20 15:13	1	W-1504	MBW-1504
36	SMP	AD19015-006		.g	09/02/20 15:14	1	W-1504	MBW-1504
37	CCV	CCV		.g V-334171	09/02/20 15:16	1		
38	CCB	CCB		.g	09/02/20 15:18	1		

Flag Code:	Flag Code Description	Flag Code:	Flag Code Description
Cs	CCV Out epa9056	Cw	CCV out 300.0 rev2.1
Ho	Hold Time Exceeded	I1	Init Cal x and y value problem
I2	Init Cal missing a data point	I3	Init Cal missing a Compound
I4	Init Cal Rsd < .995	Is	ICV out epa 9056
Iw	ICV Out 300.0 rev2.1	Ls	LCS Out EPA 9056
Lw	LCS Out 300.0 rev2.1	Ms	Spike Out EPA 9056
Mw	Spike Out EPA 300.0 REV2.1	Oc	Over Calibration/Linear Range

RUN LOG

Instrument: DA1 BatchId: 202009021355 Analyzed By: jw

Run#	Qc Type	Sample ID	Flag summary:	Comments	An Date/Time:	Dil	Prep Batch	Method Blank
1	ICS	STANDARD 1		.g	09/02/20 13:55	1		
2	ICS	STANDARD 90		.g V-334198	09/02/20 13:57	1		
3	ICS	STANDARD 91		.g V-334198	09/02/20 14:00	1		
4	ICS	STANDARD 92		.g V-334198	09/02/20 14:02	1		
5	ICS	STANDARD 93		.g V-334198	09/02/20 14:04	1		
6	ICS	STANDARD 94		.g V-334198	09/02/20 14:07	1		
7	ICS	STANDARD 95		.g V-334198	09/02/20 14:09	1		
8	ICS	STANDARD 0		.g	09/02/20 14:11	1		
9	ICV	CCV		.g V-334171	09/02/20 14:14	1		
10	CCB	CCB		.g	09/02/20 14:16	1		
11	MB	MBW-1504		.g	09/02/20 14:18	1	W-1504	MBW-1504
12	LCS	LCSW-1504		.g V-334170	09/02/20 14:21	1	W-1504	MBW-1504
13	LCS	LCSW-1504 DUP		.g V-334170	09/02/20 14:23	1	W-1504	MBW-1504
14	SMP	AD18945-007		.g	09/02/20 14:25	1	W-1504	MBW-1504
15	DUP	AD18945-007 DUP		.g	09/02/20 14:28	1	W-1504	MBW-1504
16	MS	AD18945-007 MS		.g	09/02/20 14:30	1	W-1504	MBW-1504
17	MSD	AD18945-007 MSD		.g	09/02/20 14:32	1	W-1504	MBW-1504
18	SMP	AD18964-007		.g	09/02/20 14:35	1	W-1504	MBW-1504
19	SMP	AD18979-001		.g	09/02/20 14:37	1	W-1504	MBW-1504
20	SMP	AD18979-002		.g	09/02/20 14:39	1	W-1504	MBW-1504
21	CCV	CCV		.g V-334171	09/02/20 14:42	1		
22	CCB	CCB		.g	09/02/20 14:44	1		
23	SMP	AD18979-004		.g	09/02/20 14:46	1	W-1504	MBW-1504
24	SMP	AD18934-006		.g	09/02/20 14:49	1	W-1504	MBW-1504
25	SMP	AD18934-008		.g	09/02/20 14:51	1	W-1504	MBW-1504
26	SMP	AD19010-001		.g	09/02/20 14:53	1	W-1504	MBW-1504
27	SMP	AD19010-002		.g	09/02/20 14:56	1	W-1504	MBW-1504
28	SMP	AD19010-004		.g	09/02/20 14:58	1	W-1504	MBW-1504
29	SMP	AD19010-005		.g	09/02/20 15:00	1	W-1504	MBW-1504
30	SMP	AD19010-006		.g	09/02/20 15:03	1	W-1504	MBW-1504
31	SMP	AD19015-001		.g	09/02/20 15:05	1	W-1504	MBW-1504
32	SMP	AD19015-004		.g	09/02/20 15:07	1	W-1504	MBW-1504
33	CCV	CCV		.g V-334171	09/02/20 15:09	1		
34	CCB	CCB		.g	09/02/20 15:11	1		
35	SMP	AD19015-005		.g	09/02/20 15:13	1	W-1504	MBW-1504
36	SMP	AD19015-006		.g	09/02/20 15:14	1	W-1504	MBW-1504
37	CCV	CCV		.g V-334171	09/02/20 15:16	1		
38	CCB	CCB		.g	09/02/20 15:18	1		

Flag Code:	Flag Code Description	Flag Code:	Flag Code Description
Cs	CCV Out epa9056	Cw	CCV out 300.0 rev2.1
Ho	Hold Time Exceeded	I1	Init Cal x and y value problem
I2	Init Cal missing a data point	I3	Init Cal missing a Compound
I4	Init Cal Rsd < .995	Is	ICV out epa 9056
Iw	ICV Out 300.0 rev2.1	Ls	LCS Out EPA 9056
Lw	LCS Out 300.0 rev2.1	Ms	Spike Out EPA 9056
Mw	Spike Out EPA 300.0 REV2.1	Oc	Over Calibration/Linear Range

0082707 0702

Logo

AQ-2 Report

Serial Number:	090817
Report Requested By:	Janee
Date & Time:	Mon Aug 31 15:30:25 2020
Tray Number:	76
Tray Name:	CNS 2412

Worklist

Cup	Type	ID	Details	Tests
2	U1	MBS-2412		tCN-m
3	U2	LCSS-2412		tCN-m
4	U3	LCSS-2412 DUP		tCN-m
5	U4	AD18955-001		tCN-m
6	U5	AD18955-001 DUP		tCN-m
7	U6	AD18955-002 MS		tCN-m
8	U7	AD18955-003 MSD		tCN-m
9	U8	AD18955-004		tCN-m
10	U9	AD18955-005		tCN-m
11	U10	AD18949-014		tCN-m
12	U11	AD18960-015		tCN-m
13	U12	AD18960-017		tCN-m
14	U13	AD18934-001		tCN-m
15	U14	AD18934-002		tCN-m
16	U15	AD18934-003		tCN-m
17	U16	AD18934-004		tCN-m
18	U17	AD18934-005		tCN-m
19	U18	AD18957-001		tCN-m
20	U19	AD18957-003		tCN-m
21	U20	AD18957-005		tCN-m
22	U21	AD18957-007		tCN-m
23	U22	AD18957-009		tCN-m
24	U23	AD18957-011		tCN-m
25	U24	AD18957-013		tCN-m

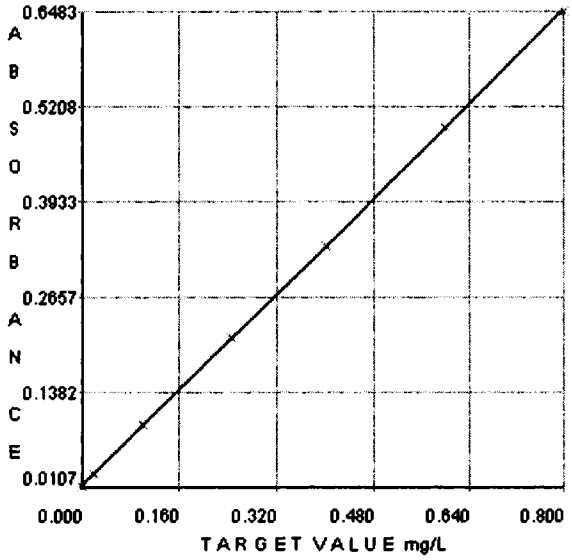
AQ2 tCN mod

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0107	-0.0046	0.0000	
S90	0.0288	0.0182	0.0200	-9.09
S91	0.0960	0.1025	0.1000	2.49
S92	0.2141	0.2506	0.2480	1.05
S93	0.3361	0.4037	0.4000	0.92
S94	0.4945	0.6023	0.6000	0.39
S95	0.6483	0.7953	0.8000	-0.58
S0	0.0110	-0.0042	0.0000	

Polynomial Order:	1
Correlation Coefficient:	0.9999
Carryover(%):	0.1
Calibration Equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured Absorbance
a =:	-1.799949E-002
b =:	1.254557E+000
Date & Time:	Mon Aug 31 13:44:30 2020

Calibration Graph



8/31/20

Reagents

Name	Batch	Prepared By	Expiry Date
tCN Neutral	V-333445	JMP	Fri Sep 18 22:00:00 2020
tCN Chlor T	V-334038	JW	Tue Sep 01 22:00:00 2020
tCN Pyr Barb	V-333629	JMP	Mon Aug 31 22:00:00 2020

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
	S1	STANDARD 1	0.0107		0.010667			jw	Mon Aug 31 13:28:16 2020
	S90	STANDARD 90	0.0288		0.028841			jw	Mon Aug 31 13:30:35 2020
	S91	STANDARD 91	0.0960		0.096044			jw	Mon Aug 31 13:32:55 2020
	S92	STANDARD 92	0.2141		0.214094			jw	Mon Aug 31 13:35:14 2020
	S93	STANDARD 93	0.3361		0.336103			jw	Mon Aug 31 13:37:32 2020
	S94	STANDARD 94	0.4945		0.494475			jw	Mon Aug 31 13:39:52 2020
	S95	STANDARD 95	0.6483		0.648307			jw	Mon Aug 31 13:42:11 2020
	S0	STANDARD 0	0.0110		0.010989			jw	Mon Aug 31 13:44:30 2020
	C11	C C V	0.4051	mg/L	0.337275			jw	Mon Aug 31 13:46:49 2020
	C12	C C B	-0.0042	mg/L	0.011004			jw	Mon Aug 31 13:49:08 2020
2	U1	MBS-2412	-0.0008	mg/L	0.013718			jw	Mon Aug 31 13:51:27 2020
3	U2	LCSS-2412	0.4011	mg/L	0.334092			jw	Mon Aug 31 13:53:46 2020
4	U3	LCSS-2412 DUP	0.3940	mg/L	0.328392			jw	Mon Aug 31 13:56:05 2020
5	U4	AD18955-001	-0.0008	mg/L	0.013690			jw	Mon Aug 31 13:58:24 2020
6	U5	AD18955-001 DUP	-0.0022	mg/L	0.012612			jw	Mon Aug 31 14:00:45 2020
7	U6	AD18955-002 MS	0.3373	mg/L	0.283197			jw	Mon Aug 31 14:03:06 2020
8	U7	AD18955-003 MSD	0.3596	mg/L	0.301007			jw	Mon Aug 31 14:05:25 2020
9	U8	AD18955-004	0.0050	mg/L	0.018357			jw	Mon Aug 31 14:07:45 2020
10	U9	AD18955-005	-0.0004	mg/L	0.014053			jw	Mon Aug 31 14:10:04 2020
11	U10	AD18949-014	0.0002	mg/L	0.014501			jw	Mon Aug 31 14:12:24 2020
	C11	C C V	0.4009	mg/L	0.333941			jw	Mon Aug 31 14:14:44 2020
	C12	C C B	-0.0044	mg/L	0.010812			jw	Mon Aug 31 14:17:03 2020
12	U11	AD18960-015	0.0096	mg/L	0.022021			jw	Mon Aug 31 14:19:24 2020
13	U12	AD18960-017	0.0020	mg/L	0.015961			jw	Mon Aug 31 14:21:44 2020
14	U13	AD18934-001	0.0008	mg/L	0.014995			jw	Mon Aug 31 14:24:04 2020
15	U14	AD18934-002	-0.0011	mg/L	0.013457			jw	Mon Aug 31 14:26:24 2020
16	U15	AD18934-003	-0.0015	mg/L	0.013183			jw	Mon Aug 31 14:28:45 2020
17	U16	AD18934-004	-0.0025	mg/L	0.012356			jw	Mon Aug 31 14:31:06 2020
18	U17	AD18934-005	0.0233	mg/L	0.032950			jw	Mon Aug 31 14:33:26 2020
19	U18	AD18957-001	-0.0003	mg/L	0.014135			jw	Mon Aug 31 14:35:46 2020
20	U19	AD18957-003	0.0005	mg/L	0.014711			jw	Mon Aug 31 14:38:06 2020
21	U20	AD18957-005	-0.0012	mg/L	0.013403			jw	Mon Aug 31 14:40:25 2020
	C11	C C V	0.3962	mg/L	0.330126			jw	Mon Aug 31 14:42:47 2020
	C12	C C B	-0.0041	mg/L	0.011109			jw	Mon Aug 31 14:45:07 2020
22	U21	AD18957-007	0.0163	mg/L	0.027334			jw	Mon Aug 31 14:47:04 2020
23	U22	AD18957-009	0.0026	mg/L	0.016438			jw	Mon Aug 31 14:48:56 2020
24	U23	AD18957-011	0.0016	mg/L	0.015605			jw	Mon Aug 31 14:50:37 2020
25	U24	AD18957-013	0.0050	mg/L	0.018343			jw	Mon Aug 31 14:52:19 2020
	C11	C C V	0.4054	mg/L	0.337517			jw	Mon Aug 31 14:54:01 2020
	C12	C C B	-0.0040	mg/L	0.011151			jw	Mon Aug 31 14:55:43 2020

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-330629

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: 0.4N Sulfamic Acid
BatchNumber:
ApproveDate: 07/01/20
Prep Date: 7/1/2020
Concentration: 0.4 n
Checked: Yes
Expiration Date: 12/31/2020
Final Volume: 250 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10606	Sulfamic Acid, ACS	10 g	neat neat	.4 n
13084	DI H20			

Veritech Lot Number: V-330630

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: CN Release Solution
BatchNumber:
ApproveDate: 07/01/20
Prep Date: 7/1/2020
Concentration: various neat
Checked: Yes
Expiration Date: 12/31/2020
Final Volume: 930.6 g

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12312	Magnesium Chloride Hexahydrate	96.6 g	neat neat	
13084	DI H20	332.4 g		
13280	sulfuric acid	417 g	neat neat	
V-330629	0.4N Sulfamic Acid	84.6 g	0.4 n	

Veritech Lot Number: V-332257

Prepared By: Trivedi, Beena
Department: Metals
ApprovedBy: jessica
Description: 1 N NAOH
BatchNumber:
ApproveDate: 07/28/20
Prep Date: 7/28/2020
Concentration: 1 n
Checked: Yes
Expiration Date: 1/27/2021
Final Volume: 2000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12987	sodium hydroxide	80 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-332898

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: 0.25 N NaOH
BatchNumber:
ApproveDate: 08/10/20
Prep Date: 8/10/2020
Concentration: 0.25 n
Checked: Yes
Expiration Date: 2/9/2021
Final Volume: 6000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12834	sodium hydroxide	60 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-333445

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: Sodium Phosphate
BatchNumber:
ApproveDate: 08/19/20
Prep Date: 8/19/2020
Concentration: Reagent reag
Checked: Yes
Expiration Date: 9/18/2020
Final Volume: 250 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13261	sodium phosphate monobasic	34.5 g	NEAT neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333629

Prepared By: Patel, Jessica | Department: WetChem | ApprovedBy: jessica
Description: Pyridine/Barbaturic acid | BatchNumber: | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: Reagent reag | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 250 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13135	Barbituric Acid	3.75 g	neat neat	
12769	Pyridine	18.75 ml	neat neat	
13096	hydrochloric acid	3.75 ml	neat neat	

Veritech Lot Number: V-334034

Prepared By: Wonge, Janee | Department: WetChem | ApprovedBy: [illegible]
Description: 20 ppm CN standard | BatchNumber: | ApproveDate: 8/31/20
Prep Date: 8/31/2020 | Concentration: 20 ppm | Checked: No
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13179	1000 ppm cn std	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334035

Prepared By: Wonge, Janee | Department: WetChem | ApprovedBy:
Description: 20 ppm CN control | BatchNumber: | ApproveDate:
Prep Date: 8/31/2020 | Concentration: 20 ppm | Checked: No
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13213	1000 PPM CN STD	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334036

Prepared By: Wonge, Janee | Department: WetChem | ApprovedBy:
Description: ICV/CCV | BatchNumber: | ApproveDate:
Prep Date: 8/31/2020 | Concentration: 0.40 ppm | Checked: No
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334035	20 ppm CN control	2 ml	20 ppm	
V-332898	0.25 N NaOH	98 ml	0.25 n	

Veritech Lot Number: V-334038

Prepared By: Wonge, Janee | Department: WetChem | ApprovedBy:
Description: Chloramine -T (AQ2) | BatchNumber: | ApproveDate:
Prep Date: 8/31/2020 | Concentration: reagent reage | Checked: No
Expiration Date: 9/1/2020 | Final Volume: 50 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10778	Chloramine T trihydrate	.5 g	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334039

Prepared By:	Wonge, Janee	Department: WetChem	ApprovedBy: [illegible]
Description:	0.80 ppm Cyanide	BatchNumber:	ApproveDate: 8/31/20
Prep Date:	8/31/2020	Concentration: 0.80 ppm	Checked: No
Expiration Date:	8/31/2020	Final Volume: 6 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334034	20 ppm CN standard	.24 ml	20 ppm	
V-332257	1 N NAOH	1.5 ml	1 n	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10606

Description
Sulfamic Acid, ACS

ApprovedBy: janee
ApproveDate: 12/21/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Lab chem	LC254201	F308-21	12/19/16	12/18/26	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 10778

Description
Chloramine T trihydrate

ApprovedBy: janee
ApproveDate: 03/02/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Emd Millipore	1.02426.0250	K48314926 637	03/02/17	03/01/27	Wonge, Janee	1	250 g	neat	neat

Veritech Control/Receipt Number: 12312

Description
Magnesium Chloride Hexahydrate

ApprovedBy: janee
ApproveDate: 02/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	M35-500	182951	02/20/19	08/31/21	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12769

Description
Pyridine

ApprovedBy: janee
ApproveDate: 09/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	P368-1	190224	09/20/19	09/19/24	Wonge, Janee	1	1 L	neat	neat

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12987

Description
sodium hydroxide

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069931	01/07/20	01/06/25	Lopez, Jose	4	12kg	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13096

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9530-33	251602	03/10/20	01/15/25	Burwell, John	6	2.5	neat	neat

Veritech Control/Receipt Number: 13135

Description
Barbituric Acid

ApprovedBy: jessica
ApproveDate: 03/25/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
GFS chemicals	LS-1580004	17501828	03/25/20	03/24/30	Patel, Jessica	1	100 g	neat	neat

Veritech Control/Receipt Number: 13179

Description
1000 ppm cn std

ApprovedBy: jessica
ApproveDate: 04/08/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
labchem	LC135451	K070-001	04/08/20	09/20/20	Patel, Jessica	1	500M	1000	PPM

Veritech Control/Receipt Number: 13213

Description
1000 PPM CN STD

ApprovedBy: jessica
ApproveDate: 04/21/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RICCA	2543-16	4003H35	04/21/20	09/30/20	Patel, Jessica	1	500 M	1000	PPM

Veritech Control/Receipt Number: 13261

Description
sodium phosphate monobasic

ApprovedBy: jessica
ApproveDate: 05/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
lab chem	LC247751	K086-13	05/26/20	05/25/30	Patel, Jessica	3	500 G	NEAT	NEAT

Veritech Control/Receipt Number: 13280

Description
sulfuric acid

ApprovedBy: jessica
ApproveDate: 06/22/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/04/20	08/30/22	Lopez, Jose	2	2.5L	neat	neat

0082707 0709

Logo

AQ-2 Report

Serial Number:	090817
Report Requested By:	Janee
Date & Time:	Thu Sep 03 08:11:38 2020
Tray Number:	79
Tray Name:	CNW 1504

Worklist

Cup	Type	ID	Details	Tests
2	U1	MBW-1504		tCN-m
3	U2	LCSW-1504		tCN-m
4	U3	LCSW-1504 DUP		tCN-m
5	U4	AD18945-007		tCN-m
6	U5	AD18945-007 DUP		tCN-m
7	U6	AD18945-007 MS		tCN-m
8	U7	AD18945-007 MSD		tCN-m
9	U8	AD18964-007		tCN-m
10	U9	AD18979-001		tCN-m
11	U10	AD18979-002		tCN-m
12	U11	AD18979-004		tCN-m
13	U12	AD18934-006		tCN-m
14	U13	AD18934-008		tCN-m
15	U14	AD19010-001		tCN-m
16	U15	AD19010-002		tCN-m
17	U16	AD19010-004		tCN-m
18	U17	AD19010-005		tCN-m
19	U18	AD19010-006		tCN-m
20	U19	AD19015-001		tCN-m
21	U20	AD19015-004		tCN-m
22	U21	AD19015-005		tCN-m
23	U22	AD19015-006		tCN-m

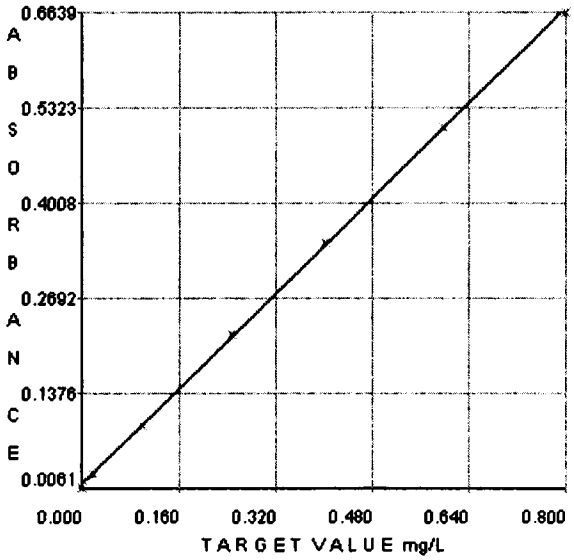
AQ2 tCN mod

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0061	-0.0060	0.0000	
S90	0.0252	0.0172	0.0200	-13.98
S91	0.0946	0.1015	0.1000	1.53
S92	0.2193	0.2530	0.2480	2.02
S93	0.3458	0.4067	0.4000	1.67
S94	0.5069	0.6025	0.6000	0.41
S95	0.6639	0.7932	0.8000	-0.86
S0	0.0063	-0.0058	0.0000	

Polynomial Order:	1
Correlation Coefficient:	0.9998
Carryover(%):	0.0
Calibration Equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured Absorbance
a =:	-1.338814E-002
b =:	1.214825E+000
Date & Time:	Wed Sep 02 14:11:49 2020

Calibration Graph



dcnp 9/3/20

Reagents

0082707 0710

Name	Batch	Prepared By	Expiry Date
tCN Neutral	V-333445	JMP	Fri Sep 18 22:00:00 2020
tCN Chlor T	V-334173	JW	Thu Sep 03 22:00:00 2020
tCN Pyr Barb	V-334117	JW	Wed Sep 09 22:00:00 2020

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
	S1	STANDARD 1	0.0061		0.006067			jw	Wed Sep 02 13:55:29 2020
	S90	STANDARD 90	0.0252		0.025182			jw	Wed Sep 02 13:57:50 2020
	S91	STANDARD 91	0.0946		0.094599			jw	Wed Sep 02 14:00:11 2020
	S92	STANDARD 92	0.2193		0.219288			jw	Wed Sep 02 14:02:32 2020
	S93	STANDARD 93	0.3458		0.345772			jw	Wed Sep 02 14:04:51 2020
	S94	STANDARD 94	0.5069		0.506941			jw	Wed Sep 02 14:07:11 2020
	S95	STANDARD 95	0.6639		0.663915			jw	Wed Sep 02 14:09:30 2020
	S0	STANDARD 0	0.0063		0.006280			jw	Wed Sep 02 14:11:49 2020
	C11	C C V	0.3873	mg/L	0.329797			jw	Wed Sep 02 14:14:08 2020
	C12	C C B	-0.0060	mg/L	0.006070			jw	Wed Sep 02 14:16:27 2020
2	U1	MBW-1504	-0.0044	mg/L	0.007364			jw	Wed Sep 02 14:18:47 2020
3	U2	LCSW-1504	0.3830	mg/L	0.326331			jw	Wed Sep 02 14:21:06 2020
4	U3	LCSW-1504 DUP	0.3849	mg/L	0.327842			jw	Wed Sep 02 14:23:25 2020
5	U4	AD18945-007	-0.0024	mg/L	0.009034			jw	Wed Sep 02 14:25:44 2020
6	U5	AD18945-007 DUP	-0.0002	mg/L	0.010867			jw	Wed Sep 02 14:28:05 2020
7	U6	AD18945-007 MS	0.4432	mg/L	0.375868			jw	Wed Sep 02 14:30:26 2020
8	U7	AD18945-007 MSD	0.3832	mg/L	0.326486			jw	Wed Sep 02 14:32:45 2020
9	U8	AD18964-007	-0.0024	mg/L	0.009018			jw	Wed Sep 02 14:35:04 2020
10	U9	AD18979-001	-0.0023	mg/L	0.009113			jw	Wed Sep 02 14:37:23 2020
11	U10	AD18979-002	-0.0042	mg/L	0.007579			jw	Wed Sep 02 14:39:42 2020
	C11	C C V	0.4135	mg/L	0.351371			jw	Wed Sep 02 14:42:02 2020
	C12	C C B	-0.0061	mg/L	0.006005			jw	Wed Sep 02 14:44:22 2020
12	U11	AD18979-004	-0.0027	mg/L	0.008767			jw	Wed Sep 02 14:46:41 2020
13	U12	AD18934-006	-0.0034	mg/L	0.008200			jw	Wed Sep 02 14:49:01 2020
14	U13	AD18934-008	-0.0020	mg/L	0.009351			jw	Wed Sep 02 14:51:21 2020
15	U14	AD19010-001	0.0015	mg/L	0.012252			jw	Wed Sep 02 14:53:41 2020
16	U15	AD19010-002	-0.0026	mg/L	0.008860			jw	Wed Sep 02 14:56:02 2020
17	U16	AD19010-004	0.0169	mg/L	0.024963			jw	Wed Sep 02 14:58:22 2020
18	U17	AD19010-005	0.0400	mg/L	0.043940			jw	Wed Sep 02 15:00:42 2020
19	U18	AD19010-006	0.0028	mg/L	0.013343			jw	Wed Sep 02 15:03:02 2020
20	U19	AD19015-001	0.5189	mg/L	0.438202			jw	Wed Sep 02 15:05:24 2020
21	U20	AD19015-004	0.5059	mg/L	0.427497			jw	Wed Sep 02 15:07:44 2020
	C11	C C V	0.3967	mg/L	0.337579			jw	Wed Sep 02 15:09:41 2020
	C12	C C B	-0.0052	mg/L	0.006771			jw	Wed Sep 02 15:11:33 2020
22	U21	AD19015-005	0.0048	mg/L	0.014997			jw	Wed Sep 02 15:13:15 2020
23	U22	AD19015-006	-0.0013	mg/L	0.009989			jw	Wed Sep 02 15:14:56 2020
	C11	C C V	0.4150	mg/L	0.352614			jw	Wed Sep 02 15:16:38 2020
	C12	C C B	-0.0050	mg/L	0.006886			jw	Wed Sep 02 15:18:20 2020

Logo

AQ-2 Report

Serial Number: 090817
Report Requested By: Janee
Date & Time: Thu Sep 03 08:11:38 2020
Tray Number: 79
Tray Name: CNW 1504

Worklist

Cup	Type	ID	Details	Tests
2	U1	MBW-1504		tCN-m
3	U2	LCSW-1504		tCN-m
4	U3	LCSW-1504 DUP		tCN-m
5	U4	AD18945-007		tCN-m
6	U5	AD18945-007 DUP		tCN-m
7	U6	AD18945-007 MS		tCN-m
8	U7	AD18945-007 MSD		tCN-m
9	U8	AD18964-007		tCN-m
10	U9	AD18979-001		tCN-m
11	U10	AD18979-002		tCN-m
12	U11	AD18979-004		tCN-m
13	U12	AD18934-006		tCN-m
14	U13	AD18934-008		tCN-m
15	U14	AD19010-001		tCN-m
16	U15	AD19010-002		tCN-m
17	U16	AD19010-004		tCN-m
18	U17	AD19010-005		tCN-m
19	U18	AD19010-006		tCN-m
20	U19	AD19015-001		tCN-m
21	U20	AD19015-004		tCN-m
22	U21	AD19015-005		tCN-m
23	U22	AD19015-006		tCN-m

AQ2 tCN mod

Calibration Chart

Type	Observed	Calculated	Target	% Error
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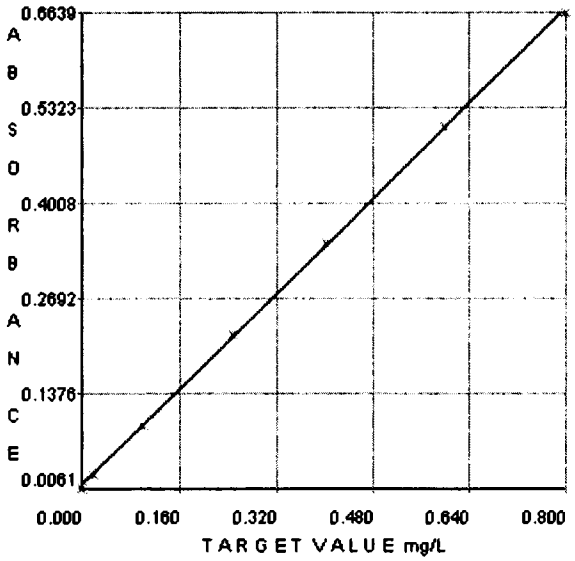
S92	0.2193	0.2530	0.2480	2.02
S93	0.3458	0.4067	0.4000	1.67
S94	0.5069	0.6025	0.6000	0.41
S95	0.6639	0.7932	0.8000	-0.86
S0	0.0063	-0.0058	0.0000	

Polynomial Order:	1
Correlation Coefficient:	0.9998
Carryover(%):	0.0
Calibration Equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured Absorbance
a =:	-1.338814E-002
b =:	1.214825E+000
Date & Time:	Wed Sep 02 14:11:49 2020

Calibration Graph



DORP 9/3/20

Reagents

0082707 0712

Name	Batch	Prepared By	Expiry Date
tCN Neutral	V-333445	JMP	Fri Sep 18 22:00:00 2020
tCN Chlor T	V-334173	JW	Thu Sep 03 22:00:00 2020
tCN Pyr Barb	V-334117	JW	Wed Sep 09 22:00:00 2020

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
	S1	STANDARD 1	0.0061		0.006067			jw	Wed Sep 02 13:55:29 2020
	S90	STANDARD 90	0.0252		0.025182			jw	Wed Sep 02 13:57:50 2020
	S91	STANDARD 91	0.0946		0.094599			jw	Wed Sep 02 14:00:11 2020
	S92	STANDARD 92	0.2193		0.219288			jw	Wed Sep 02 14:02:32 2020
	S93	STANDARD 93	0.3458		0.345772			jw	Wed Sep 02 14:04:51 2020
	S94	STANDARD 94	0.5069		0.506941			jw	Wed Sep 02 14:07:11 2020
	S95	STANDARD 95	0.6639		0.663915			jw	Wed Sep 02 14:09:30 2020
	S0	STANDARD 0	0.0063		0.006280			jw	Wed Sep 02 14:11:49 2020
	C11	C C V	0.3873	mg/L	0.329797			jw	Wed Sep 02 14:14:08 2020
	C12	C C B	-0.0060	mg/L	0.006070			jw	Wed Sep 02 14:16:27 2020
2	U1	MBW-1504	-0.0044	mg/L	0.007364			jw	Wed Sep 02 14:18:47 2020
3	U2	LCSW-1504	0.3830	mg/L	0.326331			jw	Wed Sep 02 14:21:06 2020
4	U3	LCSW-1504 DUP	0.3849	mg/L	0.327842			jw	Wed Sep 02 14:23:25 2020
5	U4	AD18945-007	-0.0024	mg/L	0.009034			jw	Wed Sep 02 14:25:44 2020
6	U5	AD18945-007 DUP	-0.0002	mg/L	0.010867			jw	Wed Sep 02 14:28:05 2020
7	U6	AD18945-007 MS	0.4432	mg/L	0.375868			jw	Wed Sep 02 14:30:26 2020
8	U7	AD18945-007 MSD	0.3832	mg/L	0.326486			jw	Wed Sep 02 14:32:45 2020
9	U8	AD18964-007	-0.0024	mg/L	0.009018			jw	Wed Sep 02 14:35:04 2020
10	U9	AD18979-001	-0.0023	mg/L	0.009113			jw	Wed Sep 02 14:37:23 2020
11	U10	AD18979-002	-0.0042	mg/L	0.007579			jw	Wed Sep 02 14:39:42 2020
	C11	C C V	0.4135	mg/L	0.351371			jw	Wed Sep 02 14:42:02 2020
	C12	C C B	-0.0061	mg/L	0.006005			jw	Wed Sep 02 14:44:22 2020
12	U11	AD18979-004	-0.0027	mg/L	0.008767			jw	Wed Sep 02 14:46:41 2020
13	U12	AD18934-006	-0.0034	mg/L	0.008200			jw	Wed Sep 02 14:49:01 2020
14	U13	AD18934-008	-0.0020	mg/L	0.009351			jw	Wed Sep 02 14:51:21 2020
15	U14	AD19010-001	0.0015	mg/L	0.012252			jw	Wed Sep 02 14:53:41 2020
16	U15	AD19010-002	-0.0026	mg/L	0.008860			jw	Wed Sep 02 14:56:02 2020
17	U16	AD19010-004	0.0169	mg/L	0.024963			jw	Wed Sep 02 14:58:22 2020
18	U17	AD19010-005	0.0400	mg/L	0.043940			jw	Wed Sep 02 15:00:42 2020
19	U18	AD19010-006	0.0028	mg/L	0.013343			jw	Wed Sep 02 15:03:02 2020
20	U19	AD19015-001	0.5189	mg/L	0.438202			jw	Wed Sep 02 15:05:24 2020
21	U20	AD19015-004	0.5059	mg/L	0.427497			jw	Wed Sep 02 15:07:44 2020
	C11	C C V	0.3967	mg/L	0.337579			jw	Wed Sep 02 15:09:41 2020
	C12	C C B	-0.0052	mg/L	0.006771			jw	Wed Sep 02 15:11:33 2020
22	U21	AD19015-005	0.0048	mg/L	0.014997			jw	Wed Sep 02 15:13:15 2020
23	U22	AD19015-006	-0.0013	mg/L	0.009989			jw	Wed Sep 02 15:14:56 2020
	C11	C C V	0.4150	mg/L	0.352614			jw	Wed Sep 02 15:16:38 2020
	C12	C C B	-0.0050	mg/L	0.006886			jw	Wed Sep 02 15:18:20 2020

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-330629

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: 0.4N Sulfamic Acid
BatchNumber:
ApproveDate: 07/01/20
Prep Date: 7/1/2020
Concentration: 0.4 n
Checked: Yes
Expiration Date: 12/31/2020
Final Volume: 250 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10606	Sulfamic Acid, ACS	10 g	neat neat	.4 n
13084	DI H20			

Veritech Lot Number: V-330630

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: CN Release Solution
BatchNumber:
ApproveDate: 07/01/20
Prep Date: 7/1/2020
Concentration: various neat
Checked: Yes
Expiration Date: 12/31/2020
Final Volume: 930.6 g

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12312	Magnesium Chloride Hexahydrate	96.6 g	neat neat	
13084	DI H20	332.4 g		
13280	sulfuric acid	417 g	neat neat	
V-330629	0.4N Sulfamic Acid	84.6 g	0.4 n	

Veritech Lot Number: V-332257

Prepared By: Trivedi, Beena
Department: Metals
ApprovedBy: jessica
Description: 1 N NAOH
BatchNumber:
ApproveDate: 07/28/20
Prep Date: 7/28/2020
Concentration: 1 n
Checked: Yes
Expiration Date: 1/27/2021
Final Volume: 2000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12987	sodium hydroxide	80 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-332898

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: 0.25 N NaOH
BatchNumber:
ApproveDate: 08/10/20
Prep Date: 8/10/2020
Concentration: 0.25 n
Checked: Yes
Expiration Date: 2/9/2021
Final Volume: 6000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12834	sodium hydroxide	60 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-333445

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: Sodium Phosphate
BatchNumber:
ApproveDate: 08/19/20
Prep Date: 8/19/2020
Concentration: Reagent reag
Checked: Yes
Expiration Date: 9/18/2020
Final Volume: 250 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13261	sodium phosphate monobasic	34.5 g	NEAT neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334117

Prepared By: Wonge, Janee
Description: Pyridine/Barbaturic acid
Prep Date: 9/2/2020
Expiration Date: 9/9/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13135	Barbituric Acid	3.75 g	neat neat	
12769	Pyridine	18.75 ml	neat neat	
13096	hydrochloric acid	3.75 ml	neat neat	

Veritech Lot Number: V-334169

Prepared By: Wonge, Janee
Description: 20 ppm CN standard
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: WetChem
BatchNumber:
Concentration: 20 ppm
Final Volume: 100 ml
ApprovedBy: [illegible]
ApproveDate: 9/3/20
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13179	1000 ppm cn std	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334170

Prepared By: Wonge, Janee
Description: 20 ppm CN control
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: WetChem
BatchNumber:
Concentration: 20 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13213	1000 PPM CN STD	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334171

Prepared By: Wonge, Janee
Description: ICV/CCV
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: WetChem
BatchNumber:
Concentration: 0.40 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334170	20 ppm CN control	2 ml	20 ppm	
V-332898	0.25 N NaOH	98 ml	0.25 n	

Veritech Lot Number: V-334173

Prepared By: Wonge, Janee
Description: Chloramine -T (AQ2)
Prep Date: 9/2/2020
Expiration Date: 9/3/2020
Department: WetChem
BatchNumber:
Concentration: reagent reage
Final Volume: 50 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10778	Chloramine T trihydrate	.5 g	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334198

Prepared By:	Wonge, Janee	Department: WetChem	ApprovedBy: JMP
Description:	0.80 ppm Cyanide	BatchNumber:	ApproveDate: 9/3/20
Prep Date:	9/2/2020	Concentration: 0.80 ppm	Checked: No
Expiration Date:	9/2/2020	Final Volume: 6 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334169	20 ppm CN standard	.24 ml	20 ppm	
V-332257	1 N NAOH	1.5 ml	1 n	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10606

Description
Sulfamic Acid, ACS

ApprovedBy: janee
ApproveDate: 12/21/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Lab chem	LC254201	F308-21	12/19/16	12/18/26	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 10778

Description
Chloramine T trihydrate

ApprovedBy: janee
ApproveDate: 03/02/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Emd Millipore	1.02426.0250	K48314926 637	03/02/17	03/01/27	Wonge, Janee	1	250 g	neat	neat

Veritech Control/Receipt Number: 12312

Description
Magnesium Chloride Hexahydrate

ApprovedBy: janee
ApproveDate: 02/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	M35-500	182951	02/20/19	08/31/21	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12769

Description
Pyridine

ApprovedBy: janee
ApproveDate: 09/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	P368-1	190224	09/20/19	09/19/24	Wonge, Janee	1	1 L	neat	neat

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12987

Description
sodium hydroxide

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069931	01/07/20	01/06/25	Lopez, Jose	4	12kg	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13096

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9530-33	251602	03/10/20	01/15/25	Burwell, John	6	2.5	neat	neat

Veritech Control/Receipt Number: 13135

Description
Barbituric Acid

ApprovedBy: jessica
ApproveDate: 03/25/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
GFS chemicals	LS-1580004	17501828	03/25/20	03/24/30	Patel, Jessica	1	100 g	neat	neat

Veritech Control/Receipt Number: 13179

Description
1000 ppm cn std

ApprovedBy: jessica
ApproveDate: 04/08/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
labchem	LC135451	K070-001	04/08/20	09/20/20	Patel, Jessica	1	500M	1000	PPM

Veritech Control/Receipt Number: 13213

Description
1000 PPM CN STD

ApprovedBy: jessica
ApproveDate: 04/21/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RICCA	2543-16	4003H35	04/21/20	09/30/20	Patel, Jessica	1	500 M	1000	PPM

Veritech Control/Receipt Number: 13261

Description
sodium phosphate monobasic

ApprovedBy: jessica
ApproveDate: 05/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
lab chem	LC247751	K086-13	05/26/20	05/25/30	Patel, Jessica	3	500 G	NEAT	NEAT

Veritech Control/Receipt Number: 13280

Description
sulfuric acid

ApprovedBy: jessica
ApproveDate: 06/22/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/04/20	08/30/22	Lopez, Jose	2	2.5L	neat	neat

Wet Chemistry Data
Preparation and Distillation Logbook Data

0082707 071

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (AQUEOUS SAMPLES ONLY)

Method: 335.4 ✓ SM4500 (Total) ____ 9012B ✓ Total CN⁻ ____ Amenable CN⁻ ____ OIA 1677 Avail CN⁻ ____ SM4500 WAD CN⁻ ____

Batch No. 1504 Distilled by: JW Start Distill. Time: 1255 End Distill. Time: 1325 Date: 9/2/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Vol. (ml)	Scrub Vol. (ml)	Sulfide Check Y/N	$PbCO_3$ Added (gm)	Oxidizer Check Y/N	Sodium Thiosulfate Added (gm)	Comments
MB	✓		6	6					Balance used: NA
LCS / LCSD		0.12							Pipettes used: 11,19
1. AD18945-007									
Dup 1.									Micro-dist used: 2,3
MS		0.12							
MSD		0.12							
2. AD18964-007									
3. AD18979-001									
4. 002									
5. 004									
6. AD18934-006									
7. 008									
8. AD19010-001									
9. 002									
10. 004									
Cal Curve Blank									V-
Std. ____ ppm									V-
Std. ____ ppm									V-
Std. ____ ppm									V-
Std. ____ ppm									V-
Std. ____ ppm									V-
Std. 0.8 ppm		0.24							V- 334198 *

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:	V- 332257	V- 330630	V- 334170	V-	V-	V-

* Samples analyzed on AQ2. only 0.8 ppm std used.

0099

0082707 0720

CYANIDE DISTILLATION DATA / BATCHING SHEET (AQUEOUS SAMPLES ONLY)

Method: 335.4 ___ **SM4500 (Total)** ___ **9012B** ✓ **Total CN⁻** ___ **Amenable CN⁻** ___ **OIA 1677 Avail CN⁻** ___ **SM4500 WAD CN⁻** ___

Batch No. 1504 Distilled by: JW Start Distill. Time: 1255 End Distill. Time: 1325 Date: ___

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Vol. (ml)	Scrub Vol. (ml)	Sulfide Check Y/N	$PbCO_3$ Added (gm)	Oxidizer Check Y/N	Sodium Thiosulfate Added (gm)	Comments
~~MB~~									Balance used:
LCS									Pipettes used:
1.									
Dup 1. JW 9/2/20									Micro-dist used:
MS									
~~MSD~~									
2. AD19010-005	✓		6	6					
3. ↓ 006	↓		↓	↓					
4. AD19015-001	↓		↓	↓					
5. 004	↓		↓	↓					
6. 005	↓		↓	↓					
7. 006	↓		↓	↓					
8.									
9.									
10.									
Cal Curve Blank									V-
Std. ___ ppm									V-
Std. ___ ppm									V-
Std. ___ ppm									V-
Std. ___ ppm									V-
Std. ___ ppm									V-
Std. ___ ppm									V-

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:	V-	V-	V-	V-	V-	V-

TCLP
Metal Data

TCLP
Metal Data
Sample Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-10	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7440-39-3	Barium	0.25	0.79	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	08/31/20	85218	H26161T	25	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	08/28/20	85218	T26161A4	29	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	08/31/20	85218	T26161C4	29	P	PEICP4A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-8	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	08/28/20	85218	T26161A4	32	P	PEICP4A
7440-39-3	Barium	0.25	0.57	1	50	50	08/28/20	85218	T26161A4	32	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	32	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	08/28/20	85218	T26161A4	32	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	08/28/20	85218	T26161A4	32	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	08/31/20	85218	H26161T	26	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	08/28/20	85218	T26161A4	32	P	PEICP4A
7782-49-2	Selenium	0.50	ND	5	50	50	08/31/20	85218	T26161B4	19	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	08/31/20	85218	T26161C4	32	P	PEICP4A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-7	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	08/28/20	85218	T26161A4	33	P	PEICP4A
7440-39-3	Barium	0.25	0.57	1	50	50	08/28/20	85218	T26161A4	33	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	33	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	08/28/20	85218	T26161A4	33	P	PEICP4A
7439-92-1	Lead	0.050	0.064	1	50	50	08/28/20	85218	T26161A4	33	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	08/31/20	85218	H26161T	27	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	08/28/20	85218	T26161A4	33	P	PEICP4A
7782-49-2	Selenium	0.50	ND	5	50	50	08/31/20	85218	T26161B4	20	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	08/31/20	85218	T26161C4	33	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-9	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	08/28/20	85218	T26161A4	34	P	PEICP4A
7440-39-3	Barium	0.25	0.34	1	50	50	08/28/20	85218	T26161A4	34	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	34	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	08/28/20	85218	T26161A4	34	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	08/28/20	85218	T26161A4	34	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	08/31/20	85218	H26161T	28	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	08/28/20	85218	T26161A4	34	P	PEICP4A
7782-49-2	Selenium	0.50	ND	5	50	50	08/31/20	85218	T26161B4	21	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	08/31/20	85218	T26161C4	34	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18934-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-4	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	08/28/20	85218	T26161A4	35	P	PEICP4A
7440-39-3	Barium	0.25	0.98	1	50	50	08/28/20	85218	T26161A4	35	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	35	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	08/28/20	85218	T26161A4	35	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	08/28/20	85218	T26161A4	35	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	08/31/20	85218	H26161T	29	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	08/28/20	85218	T26161A4	35	P	PEICP4A
7782-49-2	Selenium	0.50	ND	5	50	50	08/31/20	85218	T26161B4	22	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	08/31/20	85218	T26161C4	35	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

TCLP
Metal Data
QC Data

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/28/20
Data File: T26161A4
Prep Batch: 85218
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-329036-5	Rec	CCV V-329036-12	Rec	CCV V-329036-22	Rec	CCV V-329036-30	Rec	CCV V-329036-39	Rec		Rec		Rec		Rec
Arsenic	.5/.5	0.48613	97	0.48573	97	0.47655	95	0.47449	95	0.46126	92						
Barium	.5/.5	0.49250	98	0.48821	98	0.49340	99	0.48315	97	0.47252	95						
Beryllium	.5/.5	0.50456	101	0.50155	100	0.50810	102	0.49730	99	0.48549	97						
Cadmium	.5/.5	0.52810	106	0.52444	105	0.53008	106	0.51940	104	0.50633	101						
Chromium	.5/.5	0.51005	102	0.50613	101	0.51260	103	0.50124	100	0.49035	98						
Copper	.5/.5	0.49407	99	0.48978	98	0.49746	99	0.49003	98	0.47914	96						
Lead	.5/.5	0.50528	101	0.49628	99	0.51045	102	0.49661	99	0.48390	97						
Nickel	.5/.5	0.52574	105	0.52188	104	0.52703	105	0.51090	102	0.50281	101						
Selenium	.5/.5	0.50525	101	0.49488	99	0.50061	100	0.48520	97	0.47052	94						
Zinc	.5/.5	0.51974	104	0.51503	103	0.52298	105	0.50363	101	0.49362	99						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 08/28/20
Data File: T26161A4
Prep Batch: 85218
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-329037	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-329041	Recovery	Low Limit	High Limit	
Magnesium	5.0	5.24895	105	80	120		500	506.793	101	90	110	
Silver	0.05	0.0515331	103	80	120		1	0.826489	83 a	90	110	
Aluminum	1.0	1.13829	114	80	120		500	512.988	103	90	110	
Arsenic	0.1	0.112050	112	80	120		10	9.99985	100	90	110	
Boron	0.2	0.216905	108	80	120		5	4.82504	97	90	110	
Barium	0.25	0.277042	111	80	120		10	10.3195	103	90	110	
Beryllium	0.012	0.0135104	113	80	120		5	4.75738	95	90	110	
Calcium	5.0	5.05508	101	80	120		500	484.653	97	90	110	
Cadmium	0.05	0.0474533	95	80	120		5	5.40802	108	90	110	
Cobalt	0.1	0.104435	104	80	120		5	4.25266	85 a	90	110	
Chromium	0.1	0.102281	102	80	120		10	9.02648	90	90	110	
Copper	0.1	0.110919	111	80	120		10	11.0408	110	90	110	
Silicon	0.1	0.238040	238 a	80	120		25	25.3012	101	90	110	
Iron	1.0	1.10633	111	80	120		200	185.464	93	90	110	
Zinc	0.1	0.100679	101	80	120		10	9.22689	92	90	110	
Manganese	0.1	0.106098	106	80	120		10	8.91991	89 a	90	110	
Molybdenum	0.1	0.103915	104	80	120		10	9.24554	92	90	110	
Sodium	NA	25.6983		80	120		1000	1382.56	138 a	90	110	
Nickel	0.1	0.101794	102	80	120		10	9.20851	92	90	110	
Lead	0.05	0.0547634	110	80	120		10	9.57985	96	90	110	
Antimony	0.07	0.0741647	106	80	120		5	5.47391	109	90	110	
Selenium	0.1	0.101447	101	80	120		5	5.09089	102	90	110	
Tin	0.1	0.103161	103	80	120		10	9.95210	100	90	110	
Titanium	0.1	0.107399	107	80	120		10	9.14149	91	90	110	
Thallium	0.1	0.109665	110	80	120		5	4.36297	87 a	90	110	
Vanadium	0.1	0.105850	106	80	120		10	9.46101	95	90	110	
Potassium	NA	-8.04030		80	120		200	-1743.66	-870 a	90	110	

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/31/20
Data File: T26161B4
Prep Batch: 85218
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-329036-5	Rec	CCV V-329036-12	Rec	CCV V-329036-23	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	5/5	4.99652	100	5.00575	100	4.95934	99								
Antimony	.5/.5	0.52490	105	0.53256	107	0.53069	106								
Arsenic	.5/.5	0.49139	98	0.48578	97	0.47460	95								
Barium	.5/.5	0.50011	100	0.50625	101	0.50453	101								
Beryllium	.5/.5	0.51525	103	0.52093	104	0.51964	104								
Boron	.5/.5	0.49215	98	0.48129	96	0.48658	97								
Cadmium	.5/.5	0.54227	108	0.54199	108	0.53137	106								
Calcium	50/50	51.88770	104	52.48300	105	51.73510	103								
Chromium	.5/.5	0.51346	103	0.52217	104	0.58216	116 c								
Cobalt	.5/.5	0.51028	102	0.52080	104	0.52215	104								
Copper	.5/.5	0.50460	101	0.50547	101	0.50115	100								
Iron	5/5	5.00898	100	4.90628	98	4.64382	93								
Lead	.5/.5	0.52131	104	0.53405	107	0.52721	105								
Magnesium	50/50	51.38450	103	53.06940	106	52.23390	104								
Manganese	.5/.5	0.49165	98	0.49557	99	0.48894	98								
Molybdenum	.5/.5	0.51023	102	0.51212	102	0.51621	103								
Nickel	.5/.5	0.54630	109	0.54951	110	0.53709	107								
Selenium	.5/.5	0.51978	104	0.54272	109	0.53098	106								
Silicon	5/5	4.83381	97	4.74225	95	4.63805	93								
Silver	0.1/0.1	0.11358	114 a	0.11435	114 c	0.11460	115 c								
Thallium	.5/.5	0.52533	105	0.51773	104	0.52305	105								
Tin	.5/.5	0.50708	101	0.51174	102	0.49789	100								
Titanium	.5/.5	0.48967	98	0.48048	96	0.47103	94								
Vanadium	.5/.5	0.51805	104	0.51975	104	0.51314	103								
Zinc	.5/.5	0.53526	107	0.55790	112 c	0.55169	110								

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 08/31/20
Data File: T26161B4
Prep Batch: 85218
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-329037	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-329041	Recovery	Low Limit	High Limit
Manganese	0.1	0.0987789	99	80	120		10	9.71973	97	90	110
Aluminum	1.0	1.07726	108	80	120		500	514.246	103	90	110
Arsenic	0.1	0.0928462	93	80	120		10	9.89893	99	90	110
Boron	0.2	0.212822	106	80	120		5	4.60925	92	90	110
Barium	0.25	0.266700	107	80	120		10	9.93567	99	90	110
Beryllium	0.012	0.0090692	76 a	80	120		5	4.81596	96	90	110
Calcium	5.0	4.49887	90	80	120		500	483.526	97	90	110
Cadmium	0.05	0.0394626	79 a	80	120		5	5.32427	106	90	110
Cobalt	0.1	0.0967209	97	80	120		5	4.68808	94	90	110
Chromium	0.1	0.102603	103	80	120		10	9.74087	97	90	110
Copper	0.1	0.104793	105	80	120		10	10.7638	108	90	110
Iron	1.0	0.973958	97	80	120		200	195.056	98	90	110
Silver	0.05	0.0501580	100	80	120		1	1.21029	121 a	90	110
Magnesium	5.0	4.69907	94	80	120		500	503.672	101	90	110
Zinc	0.1	0.0907841	91	80	120		10	9.24699	92	90	110
Molybdenum	0.1	0.0951516	95	80	120		10	10.0086	100	90	110
Sodium	NA	24.9666		80	120		1000	1296.20	130 a	90	110
Nickel	0.1	0.0902830	90	80	120		10	9.23306	92	90	110
Lead	0.05	0.0462668	93	80	120		10	9.37132	94	90	110
Antimony	0.07	0.0703855	101	80	120		5	5.48232	110	90	110
Selenium	0.1	0.0996547	100	80	120		5	5.17762	104	90	110
Silicon	0.1	0.196902	197 a	80	120		25	23.4690	94	90	110
Tin	0.1	0.0963275	96	80	120		10	9.62220	96	90	110
Titanium	0.1	0.0984526	98	80	120		10	9.16310	92	90	110
Thallium	0.1	0.0993433	99	80	120		5	4.44755	89 a	90	110
Vanadium	0.1	0.0987423	99	80	120		10	9.10656	91	90	110
Potassium	NA	-7.29037		80	120		200	-1845.21	-920 a	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/31/20
Data File: T26161C4
Prep Batch: 85218
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-329036-5	Rec	CCV V-329036-12	Rec	CCV V-329036-22	Rec	CCV V-329036-30	Rec	CCV V-329036-39	Rec		Rec		Rec		Rec
Silver	0.1/0.1	0.09812	98	0.09436	94	0.09607	96	0.09559	96	0.09400	94						

Notes:
a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 08/31/20
Data File: T26161C4
Prep Batch: 85218
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-329037	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-329041	Recovery	Low Limit	High Limit
Magnesium	5.0	4.39593	88	80	120	500	505.026	101	90	110
Silver	0.05	0.0456457	91	80	120	1	1.06259	106	90	110
Aluminum	1.0	1.04868	105	80	120	500	518.556	104	90	110
Arsenic	0.1	0.0965928	97	80	120	10	9.69993	97	90	110
Boron	0.2	0.209131	105	80	120	5	4.68061	94	90	110
Barium	0.25	0.265083	106	80	120	10	10.0237	100	90	110
Beryllium	0.012	0.0062212	52 a	80	120	5	4.80972	96	90	110
Calcium	5.0	4.20530	84	80	120	500	484.750	97	90	110
Cadmium	0.05	0.0377871	76 a	80	120	5	5.36942	107	90	110
Cobalt	0.1	0.0925362	93	80	120	5	4.67162	93	90	110
Chromium	0.1	0.0981330	98	80	120	10	9.76408	98	90	110
Copper	0.1	0.101792	102	80	120	10	10.8244	108	90	110
Silicon	0.1	0.173940	174 a	80	120	25	23.7557	95	90	110
Iron	1.0	0.952745	95	80	120	200	195.367	98	90	110
Zinc	0.1	0.0870936	87	80	120	10	9.26281	93	90	110
Manganese	0.1	0.0964362	96	80	120	10	9.76752	98	90	110
Molybdenum	0.1	0.0936893	94	80	120	10	9.96157	100	90	110
Sodium	NA	24.6889		80	120	1000	1323.89	132 a	90	110
Nickel	0.1	0.0861151	86	80	120	10	9.18248	92	90	110
Lead	0.05	0.0423986	85	80	120	10	9.31526	93	90	110
Antimony	0.07	0.0645092	92	80	120	5	5.43881	109	90	110
Selenium	0.1	0.0955635	96	80	120	5	5.12851	103	90	110
Tin	0.1	0.0931906	93	80	120	10	9.55647	96	90	110
Titanium	0.1	0.0957828	96	80	120	10	10.0975	101	90	110
Thallium	0.1	0.0916586	92	80	120	5	4.44942	89 a	90	110
Vanadium	0.1	0.0948603	95	80	120	10	9.18442	92	90	110
Potassium	NA	-6.96608		80	120	200	-1845.81	-920 a	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/01/20
Data File: T26161D4
Prep Batch: 85218
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-329036-5	Rec	CCV V-329036-13	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Silver	0.1/0.1	0.10110	101	0.10100	101								

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/01/20
Data File: T26161D4
Prep Batch: 85218
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-329037	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-329041	Recovery	Low Limit	High Limit
Manganese	0.1	0.107920	108	80	120	10	9.82964	98	90	110
Aluminum	1.0	1.15278	115	80	120	500	521.261	104	90	110
Arsenic	0.1	0.0965914	97	80	120	10	9.89730	99	90	110
Boron	0.2	0.220313	110	80	120	5	4.56683	91	90	110
Barium	0.25	0.280530	112	80	120	10	10.0371	100	90	110
Beryllium	0.012	0.0164155	137 a	80	120	5	4.86582	97	90	110
Calcium	5.0	5.29694	106	80	120	500	493.089	99	90	110
Cadmium	0.05	0.0499646	100	80	120	5	5.41833	108	90	110
Cobalt	0.1	0.106686	107	80	120	5	4.77003	95	90	110
Chromium	0.1	0.112503	113	80	120	10	9.85532	99	90	110
Copper	0.1	0.115213	115	80	120	10	10.7976	108	90	110
Iron	1.0	1.09053	109	80	120	200	198.151	99	90	110
Silver	0.05	0.0503761	101	80	120	1	1.07120	107	90	110
Magnesium	5.0	5.49023	110	80	120	500	513.162	103	90	110
Zinc	0.1	0.0969249	97	80	120	10	9.46271	95	90	110
Molybdenum	0.1	0.106005	106	80	120	10	10.0852	101	90	110
Sodium	NA	25.9162		80	120	1000	1306.08	131 a	90	110
Nickel	0.1	0.103761	104	80	120	10	9.42397	94	90	110
Lead	0.05	0.0522655	105	80	120	10	9.47123	95	90	110
Antimony	0.07	0.0945864	135 a	80	120	5	5.50472	110	90	110
Selenium	0.1	0.110922	111	80	120	5	5.28044	106	90	110
Silicon	0.1	0.236391	236 a	80	120	25	23.7483	95	90	110
Tin	0.1	0.107816	108	80	120	10	9.77819	98	90	110
Titanium	0.1	0.108400	108	80	120	10	9.29956	93	90	110
Thallium	0.1	0.114812	115	80	120	5	4.48237	90	90	110
Vanadium	0.1	0.109037	109	80	120	10	9.29939	93	90	110
Potassium	NA	-7.67952		80	120	200	-1873.87	-940 a	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/31/20
Data File: H26161T
Prep Batch: 85218
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-21		CCV-33											
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec		Rec
Mercury	20/10	19.83000	99	10.46000	105	10.44000	104										

Notes:
a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/28/20
Data File: T26161A4
Prep Batch: 85218
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-329027-6	CCB V-329027-13	CCB V-329027-23	CCB V-329027-31	CCB V-329027-40	MB 85218 (1)-14	EF V-333199 8/27-36	EF V-333199 8/28-37
Arsenic	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Barium	.125U	.25U	.25U	.25U	.25U	.13U	.25U	.25U
Beryllium	.006U	.012U	.012U	.012U	.012U	.006U	.012U	.012U
Cadmium	.025U	.05U	.05U	.05U	.05U	.025U	.05U	.05U
Chromium	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Copper	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Lead	.025U	.05U	.05U	.05U	.05U	.025U	.05U	.05U
Nickel	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Selenium	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Zinc	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U

Analyte	EF V-326719 8/27-38							
Arsenic	.1U							
Barium	.25U							
Beryllium	.012U							
Cadmium	.05U							
Chromium	.1U							
Copper	.1U							
Lead	.05U							
Nickel	.1U							
Selenium	.1U							
Zinc	.1U							

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/31/20
Data File: T26161B4
Prep Batch: 85218
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-329027-6	CCB V-329027-13	CCB V-329027-24					
Aluminum	.5 U	1 U	1 U					
Antimony	.035 U	.07 U	.07 U					
Arsenic	.05 U	.1 U	.1 U					
Barium	.125 U	.25 U	.25 U					
Beryllium	.006 U	.012 U	.012 U					
Boron	.1 U	.2 U	.2 U					
Cadmium	.025 U	.05 U	.05 U					
Calcium	2.5 U	5 U	5 U					
Chromium	.05 U	.1 U	.1 U					
Cobalt	.05 U	.1 U	.1 U					
Copper	.05 U	.1 U	.1 U					
Iron	.5 U	1 U	1 U					
Lead	.025 U	.05 U	.05 U					
Magnesium	2.5 U	5 U	5 U					
Manganese	.05 U	.1 U	.1 U					
Molybdenum	.05 U	.1 U	.1 U					
Nickel	.05 U	.1 U	.1 U					
Selenium	.05 U	.1 U	.1 U					
Silicon	.05 U	.1 U	.1 U					
Silver	.025 U	.05 U	.05 U					
Thallium	.05 U	.1 U	.1 U					
Tin	.05 U	.1 U	.1 U					
Titanium	.05 U	.1 U	.1 U					
Vanadium	.05 U	.1 U	.1 U					
Zinc	.05 U	.1 U	.1 U					

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/31/20
Data File: T26161C4
Prep Batch: 85218
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-329027-6	CCB V-329027-13	CCB V-329027-23	CCB V-329027-31	CCB V-329027-40	MB 85218 (1)-14	EF V-333199 8/27-36	EF V-333199 8/28-37
Silver	.025 U	.05 U	.05 U	.05 U	.05 U	.025U	.05U	.05 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/01/20
Data File: T26161D4
Prep Batch: 85218
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-329027-6	CCB V-329027-14	EF V-326719 8/27-12				
Silver	.025 U	.05 U	.05 U				

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/31/20
Data File: H26161T
Prep Batch: 85218
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	MB 85218 (1)-11	EF V-333199 A-30	EF V-333199 B-31	EF V-326719-32
Mercury	.5 U	.5 U	.5 U	.5 U	.5 U	.5U	.5U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/28/20
Data File: T26161A4
Prep Batch: 85218
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-329033-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	570.265	114							
Arsenic	0	U								
Barium	0	U								
Beryllium	0	U								
Cadmium	0	U								
Calcium	500	546.5	109							
Chromium	0	U								
Copper	0	U								
Iron	200	205.567	103							
Lead	0	U								
Magnesium	500	579.198	116							
Nickel	0	U								
Selenium	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/31/20
Data File: T26161B4
Prep Batch: 85218
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-329033-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	531.911	106							
Antimony	0	U								
Arsenic	0	U								
Barium	0	U								
Beryllium	0	U								
Boron	0	U								
Cadmium	0	U								
Calcium	500	502.556	101							
Chromium	0	U								
Cobalt	0	U								
Copper	0	U								
Iron	200	185.015	93							
Lead	0	U								
Magnesium	500	535.111	107							
Manganese	0	U								
Molybdenu	0	U								
Nickel	0	U								
Selenium	0	U								
Silicon	0	.833885a								
Silver	0	U								
Thallium	0	U								
Tin	0	U								
Titanium	0	U								
Vanadium	0	.145179b								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/31/20
Data File: T26161C4
Prep Batch: 85218
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-329033-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	542.086	108							
Calcium	500	509.593	102							
Iron	200	188.789	94							
Magnesium	500	543.051	109							
Silver	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/01/20
Data File: T26161D4
Prep Batch: 85218
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082707

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-329033-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	554.53	111							
Calcium	500	537.51	108							
Iron	200	194.982	97							
Magnesium	500	574.052	115							
Silver	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH:85218

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCS MR 85218

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85218	1	T26161A4	16	0.5115	0.50	102		80	120
Barium	85218	1	T26161A4	16	0.5522	0.50	110		80	120
Cadmium	85218	1	T26161A4	16	0.5805	0.50	116		80	120
Chromium	85218	1	T26161A4	16	0.5515	0.50	110		80	120
Lead	85218	1	T26161A4	16	0.5490	0.50	110		80	120
Mercury	85218	1	H26161T	13	10.4500	10	104		80	120
Nickel	85218	1	T26161A4	16	0.5729	0.50	115		80	120
Silver	85218	1	T26161C4	16	0.1077	0.100	108		80	120

TxtQcType: LCS Matrix: TCLP SampleID: LCS 85218

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85218	1	T26161A4	15	0.5285	0.50	106		80	120
Barium	85218	1	T26161A4	15	0.5484	0.50	110		80	120
Cadmium	85218	1	T26161A4	15	0.5792	0.50	116		80	120
Chromium	85218	1	T26161A4	15	0.5518	0.50	110		80	120
Lead	85218	1	T26161A4	15	0.5482	0.50	110		80	120
Mercury	85218	1	H26161T	12	10.4600	10	105		80	120
Nickel	85218	1	T26161A4	15	0.5725	0.50	114		80	120
Silver	85218	1	T26161C4	15	0.1080	0.100	108		80	120

TxtQcType: MS Matrix: TCLP SampleID: AD18923-001

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85218	1	T26161A4	19	T26161A4	17	0.5639	0.1U	0.50	113		50	
Barium	85218	1	T26161A4	19	T26161A4	17	0.6111	0.25U	0.50	122		50	
Cadmium	85218	1	T26161A4	19	T26161A4	17	0.5954	0.05U	0.50	119		50	
Chromium	85218	1	T26161A4	19	T26161A4	17	0.5258	0.1U	0.50	105		50	
Lead	85218	1	T26161A4	19	T26161A4	17	0.5024	0.05U	0.50	100		50	
Mercury	85218	1	H26161T	16	H26161T	14	10.4800	0.50U	10	105		50	
Nickel	85218	1	T26161A4	19	T26161A4	17	0.5568	0.1U	0.50	111		50	
Selenium	85218	5	T26161B4	16	T26161B4	14	0.1526	0.1U	0.50	153		50	
Silver	85218	1	T26161C4	19	T26161C4	17	0.1352	0.05U	0.100	135		50	

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85218

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS | Matrix: TCLP | SampleID: AD18923-001

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	T26161A4	20	T26161A4	17	0.5638	0.1U	0.5	113		75	125
Barium	1	T26161A4	20	T26161A4	17	0.5902	0.25U	0.5	118		75	125
Cadmium	1	T26161A4	20	T26161A4	17	0.5807	0.05U	0.5	116		75	125
Chromium	1	T26161A4	20	T26161A4	17	0.5216	0.1U	0.5	104		75	125
Lead	1	T26161A4	20	T26161A4	17	0.4889	0.05U	0.5	98		75	125
Nickel	1	T26161A4	20	T26161A4	17	0.5505	0.1U	0.5	110		75	125
Selenium	5	T26161B4	17	T26161B4	14	0.5686	0.1U	0.5	114		75	125
Silver	1	T26161C4	20	T26161C4	17	0.1243	0.05U	0.1	124		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85218

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCS MR 85218

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85218	T26161A4	16	T26161A4	15	0.5115	0.5285	3.3	20
Barium	85218	T26161A4	16	T26161A4	15	0.5522	0.5484	.68	20
Cadmium	85218	T26161A4	16	T26161A4	15	0.5805	0.5792	.22	20
Chromium	85218	T26161A4	16	T26161A4	15	0.5515	0.5518	.047	20
Lead	85218	T26161A4	16	T26161A4	15	0.5490	0.5482	.14	20
Mercury	85218	H26161T	13	H26161T	12	10.4500	10.4600	.096	20
Nickel	85218	T26161A4	16	T26161A4	15	0.5729	0.5725	.075	20
Silver	85218	T26161C4	16	T26161C4	15	0.1077	0.1080	.21	20

TxtQcType: MR Matrix: TCLP SampleID: AD18923-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85218	T26161A4	18	T26161A4	17	0.1U	0.1U	---	20
Barium	85218	T26161A4	18	T26161A4	17	0.25U	0.25U	---	20
Cadmium	85218	T26161A4	18	T26161A4	17	0.05U	0.05U	---	20
Chromium	85218	T26161A4	18	T26161A4	17	0.1U	0.1U	---	20
Lead	85218	T26161A4	18	T26161A4	17	0.05U	0.05U	---	20
Mercury	85218	H26161T	15	H26161T	14	0.50U	0.50U	---	20
Nickel	85218	T26161A4	18	T26161A4	17	0.1U	0.1U	---	20
Selenium	85218	T26161B4	15	T26161B4	14	0.1U	0.1U	---	20
Silver	85218	T26161C4	18	T26161C4	17	0.05U	0.05U	---	20

TxtQcType: SD Matrix: TCLP SampleID: AD18923-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85218	T26161A4	21	T26161A4	17	5	0.0233	0.0020	---		10
Barium	85218	T26161A4	21	T26161A4	17	5	0.0072	0.0812	56	a	10
Cadmium	85218	T26161A4	21	T26161A4	17	5	-0.0055	-0.0033	---		10
Chromium	85218	T26161A4	21	T26161A4	17	5	0.0024	0.0035	244	c	10
Lead	85218	T26161A4	21	T26161A4	17	5	0.0037	-0.0049	---		10
Nickel	85218	T26161A4	21	T26161A4	17	5	0.0001	0.0224	---		10
Selenium	85218	T26161B4	18	T26161B4	14	5	-0.0009	0.0314	---		10
Silver	85218	T26161C4	21	T26161C4	17	5	0.0071	0.0333	6		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

TCLP
Metal Data
Verification of Instrument Parameters

INTERELEMENT CORRECTION SUMMARY PEICP4ax

Interfered Elements	Interfering Elements								
	Al	Ca	Fe	Mg	B	Ba	Cu	Mn	Mo
Al	N/A	0	0	0	0	0	0	0	25.4
Sb	0	0	0	0	0	0	0	0	-17.50
As	0.032	0	-0.07	0	0	0	0	0	24.8
Ba	0	0	0	0	0	N/A	0	0	0
Be	0	0	0	0	0	0	0	0	0
B	0	0	3.4	0	N/A	-3.91	0	-2.61	-5.9
Cd	0	0	0	0	0	0	0	0	0
Ca	0	N/A	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0	0
Cu	0	0	-0.1	0	0	0	N/A	0	0
Fe	0	0	N/A	0	0	0	0	0	0
Pb	-0.04	0	0.125	0	0	0	3.06	0	-3.66
Mg	0	0	0	N/A	0	0	0	0	0
Mn	0	0	0	0	0	0	0	N/A	0
Mo	0	0	0.0000	0	0	0	0	0	N/A
Ni	0	0	0	0	0	0	0	0	-2.79
Se	0	-0.08	-0.5	-0.034	0	0	0	0	0
Si	-0.288	-0.234	-2.39	-0.127	-22.10	-12.4	-14.50	-19.5	3.97
Ag	0	0	-0.065	0	0	0	0	0	0
Na	0	0	0	0	0	0	0	0	0
Tl	-0.028	0.06	0	0	0	2.32	0	-3.65	4.3
Sn	0	0	0	0	0	0	0	0	0
Ti	0	-0.076	0	0	0	0	0	0	0
V	0	0	0.035	-0.058	0	0	0	0	0
Zn	0	0	0	0	0	0	0	0	0
K	0	0	10771.7	0	0	0	0	0	0

IECs run 07/15/19. Sn mod 07/19/19; Cu mod 08/12/19; V mod 01/06/20; Sb mod 01/09/20; B, Ti mod 01/18/20; Ag, As, Mo, Pb, Se, Tl mod 03/11/20.

INTERELEMENT CORRECTION SUMMARY PEICP4ax

Interfered Elements	Interfering Elements: Na	Ni	Se	Si	Sn	Ti	V	Zn
Al	0	0	0	0	0	0	-53.2	0
Sb	0	0	0	0	-2.52	0	-3.51	0
As	0	0	0	0	5.11	0	18.3	0
Ba	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0	0	0
B	0.0096	-3.28	-7.4	-1.39	-3.26	-3.97	-4.33	-4.06
Cd	0	0	0	0	0	0	0	0
Ca	0	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	-4.63	0
Co	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	0	0
Fe	0	0	0	0	0	0	0.0	0
Pb	0	0	0	0	0	0	0	0
Mg	0	0	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0
Mo	0	0	0	0	0	0	0	0
Ni	0	N/A	0	0	0	0	0	0
Se	0	0	N/A	0	0	0	0	0
Si	-0.0333	-12.5	-19.90	N/A	-8.16	-10.1	-12.90	-11.9
Ag	0	0	0	0	0	0	-5.03	0
Na	N/A	0	0	0	0	0	0	0
Tl	0	0	0	0	0	-4.11	3.17	0
Sn	0	0	0	0	N/A	3.64	0	0
Ti	0	0	0	0	0	N/A	0	0
V	0	0	0	0	0	0	N/A	0
Zn	0	0	0	0	0	0	0	N/A
K	0	0	0	0	0	0	0	0

IECs run 07/15/19. Sn mod 07/19/19; Cu mod 08/12/19; V mod 01/06/20; Sb mod 01/09/20; B, Ti mod 01/18/20; Ag, As, Mo, Pb, Se, Tl mod 03/11/20.

MDL / RL SUMMARY
TCLP/SPLP
PE ICP 4 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/L)
AL	0.04124271	1
SB	0.03931955	0.07
AS	0.03438659	0.1
BA	0.00333959	0.25
BE	0.00524005	0.012
B	0.02711428	0.2
CD	0.00615363	0.05
CA	2.65167871	5
CR	0.00700712	0.1
CO	0.00382472	0.1
CU	0.02781758	0.1
FE	0.58649802	1
PB	0.0133322	0.05
MG	0.84264167	5
MN	0.00845022	0.1
MO	0.00271515	0.1
NI	0.00521027	0.1
SE	0.03922213	0.1
SI*	0.27653066	0.1
AG	0.01003449	0.05
NA	3.54005202	25
TL	0.04446035	0.1
SN	0.01672084	0.1
TI	0.00534095	0.1
V	0.01672283	0.1
ZN	0.02197619	0.1

COMPLETED: 12/2019

HGCV3 MDL/RL SUMMARY

Element: *Mercury*
Instrument: *PE FIMS 100*
Technique: *CV*

Instrument ID: *HgCV3*
Analyst *Carmela Aliano*

200 Series	METHOD	MDL (ppb)	Completed	RL (ppb)
H_2O	245.1	0.0794	12/31/2019	0.20
SW846				
H_2O	7470A	0.1740	12/31/2019	0.50
SOIL	7471 B	0.0757 (0.0126 mg/kg)	12/31/2019	0.50 (0.0833 mg/kg)

TCLP
Metal Data
Raw Data

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85218 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85218 (1) Units: MG/L Lab Code:
Matrix: TCLP
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	0.50	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-36-0	Antimony	0.035	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-38-2	Arsenic	0.050	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-39-3	Barium	0.12	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-41-7	Beryllium	0.0060	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-42-8	Boron	0.10	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-43-9	Cadmium	0.025	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-70-2	Calcium	2.5	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-47-3	Chromium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-48-4	Cobalt	0.050	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-50-8	Copper	0.050	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7439-89-6	Iron	0.50	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7439-92-1	Lead	0.025	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7439-95-4	Magnesium	2.5	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7439-96-5	Manganese	0.050	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	08/31/20	85218	H26161T	11	CV	HGCV3A
7439-98-7	Molybdenum	0.050	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-02-0	Nickel	0.050	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7782-49-2	Selenium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-22-4	Silver	0.025	ND	1	50	50	08/31/20	85218	T26161C4	14	P	PEICP4A
7440-28-0	Thallium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-31-5	Tin	0.050	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-32-6	Titanium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-62-2	Vanadium	0.050	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A
7440-66-6	Zinc	0.050	ND	1	50	50	08/28/20	85218	T26161A4	14	P	PEICP4A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\T26161A4.txt

Analysis Date: 08/28/20 **Instrument:** PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-329027	1	CAL	17:25	1							V-329027(ICB/CCB)
CALST2 V-329037	1	CAL	17:29	2							V-329037(LLICV/CCV leachate)
CALST3 V-329028	1	CAL	17:33	3							V-329028(ICS3 - Middle Std)
CALST4 V-329029	1	CAL	17:37	4							V-329029(ICS4 High std)
ICV V-329036	1	ICV	17:42	5							V-329036(CCV)
ICB V-329027	1	ICB	17:46	6							V-329027(ICB/CCB)
LRS V-329041	1	LRS	17:50	7	METALS-TCLP	TCLP	TCLP	SW846	85218		V-329041(LRS 1/2 Fe)
ICS3 V-329028	1	ICS	17:55	8							V-329028(ICS3 - Middle Std)
RINSE	1	SMP	17:59	9		TCLP	TCLP	SW846	85218		0
LLICV V-329037	1	LLICV	18:03	10	METALS-TCLP	TCLP	TCLP	SW846	85218		V-329037(LLICV/CCV leachate)
ICSA V-329033	1	ICSA	18:07	11							V-329033(ICSA)
CCV V-329036	1	CCV	18:12	12							V-329036(CCV)
CCB V-329027	1	CCB	18:16	13							V-329027(ICB/CCB)
MB 85218 (1)	1	MB	18:20	14	METALS-TCLP	TCLP	TCLP	SW846	85218		0
LCS 85218	1	LCS	18:24	15	METALS-TCLP	TCLP	TCLP	SW846	85218		0
LCS MR 85218	1	LCS	18:28	16	METALS-TCLP	TCLP	TCLP	SW846	85218		0
AD18923-001	1	SMP	18:32	17	METALS-TCLP	TCLP	TCLP	SW846	85218	Se NOT REPORTED Ca>LR	0
AD18923-001	1	MR	18:36	18	METALS-TCLP	TCLP	TCLP	SW846	85218	Se NOT REPORTED Ca>LR	0
AD18923-001	1	MS	18:41	19	METALS-TCLP	TCLP	TCLP	SW846	85218	Se NOT REPORTED Ca>LR	0
AD18923-001	1	PS	18:45	20	METALS-TCLP	TCLP	TCLP	SW846	85218	Se NOT REPORTED Ca>LR	0
AD18923-001	5	SD	18:49	21	METALS-TCLP	TCLP	TCLP	SW846	85218	Se NOT REPORTED Ca>LR	0
CCV V-329036	1	CCV	18:54	22							V-329036(CCV)
CCB V-329027	1	CCB	18:58	23							V-329027(ICB/CCB)
AD18922-001	1	SMP	19:01	24	METALS-TCLP	TCLP	TCLP	SW846	85218		0
AD18923-002	1	SMP	19:06	25	METALS-TCLP	TCLP	TCLP	SW846	85218		0
AD18935-001	1	SMP	19:10	26	METALS-TCLP	TCLP	TCLP	SW846	85218		0
AD18935-002	1	SMP	19:14	27	METALS-TCLP	TCLP	TCLP	SW846	85218		0
AD18935-003	1	SMP	19:18	28	METALS-TCLP	TCLP	TCLP	SW846	85218		0
AD18934-001	1	SMP	19:22	29	METALS-TCLP	TCLP	TCLP	SW846	85218		0
CCV V-329036	1	CCV	19:26	30							V-329036(CCV)
CCB V-329027	1	CCB	19:30	31							V-329027(ICB/CCB)
AD18934-002	1	SMP	19:34	32	METALS-TCLP	TCLP	TCLP	SW846	85218	Se NOT REPORTED Ca>LR	0
AD18934-003	1	SMP	19:38	33	METALS-TCLP	TCLP	TCLP	SW846	85218	Se NOT REPORTED Ca>LR	0
AD18934-004	1	SMP	19:43	34	METALS-TCLP	TCLP	TCLP	SW846	85218	Se NOT REPORTED Ca>LR	0
AD18934-005	1	SMP	19:47	35	METALS-TCLP	TCLP	TCLP	SW846	85218	Se NOT REPORTED Ca>LR	0
EF V-333199 8/27	1	EF	19:51	36	METALS-TCLP	TCLP	TCLP	SW846	85218		V-333199 8/27()
EF V-333199 8/28	1	EF	19:55	37	METALS-TCLP	TCLP	TCLP	SW846	85218		V-333199 8/28()
EF V-326719 8/27	1	EF	19:59	38	METALS-TCLP	TCLP	TCLP	SW846	85218		V-326719 8/27()
CCV V-329036	1	CCV	20:03	39							V-329036(CCV)
CCB V-329027	1	CCB	20:07	40							V-329027(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.89 8/31/2020 12:29:04 PM

OK
ALL REPORTED
Ag NOT REPORTED

9/1/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\T26161B4.txt

Analysis Date: 08/31/20 **Instrument:** PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-329027	1	CAL	14:14	1							V-329027(ICB/CCB)
CALST2 V-329037	1	CAL	14:18	2							V-329037(LLICV/CCV leachate)
CALST3 V-329028	1	CAL	14:22	3							V-329028(ICS3 - Middle Std)
CALST4 V-329029	1	CAL	14:26	4							V-329029(ICS4 High std)
ICV V-329036	1	ICV	14:31	5							V-329036(CCV)
ICB V-329027	1	ICB	14:35	6							V-329027(ICB/CCB)
LRS V-329041	1	LRS	14:39	7		TCLP	TCLP	SW846	85218		V-329041(LRS 1/2 Fe)
ICS3 V-329028	1	ICS	14:44	8							V-329028(ICS3 - Middle Std)
RINSE	1	SMP	14:48	9		TCLP	TCLP	SW846	85218		()
LLICV V-329037	1	LLICV	14:52	10		TCLP	TCLP	SW846	85218		V-329037(LLICV/CCV leachate)
ICSA V-329033	1	ICSA	14:56	11							V-329033(ICSA)
CCV V-329036	1	CCV	15:01	12							V-329036(CCV)
CCB V-329027	1	CCB	15:05	13							V-329027(ICB/CCB)
AD18923-001	5	SMP	15:09	14	METALS-TCLP	TCLP	TCLP	SW846	85218	Se REPORTED	()
AD18923-001	5	MR	15:13	15	METALS-TCLP	TCLP	TCLP	SW846	85218	Se REPORTED	()
AD18923-001	5	MS	15:17	16	METALS-TCLP	TCLP	TCLP	SW846	85218	Se REPORTED	()
AD18923-001	5	PS	15:21	17	METALS-TCLP	TCLP	TCLP	SW846	85218	Se REPORTED	()
AD18923-001	5	SD	15:26	18	METALS-TCLP	TCLP	TCLP	SW846	85218	Se REPORTED	()
AD18934-002	5	SMP	15:30	19	METALS-TCLP	TCLP	TCLP	SW846	85218	Se REPORTED	()
AD18934-003	5	SMP	15:34	20	METALS-TCLP	TCLP	TCLP	SW846	85218	Se REPORTED	()
AD18934-004	5	SMP	15:38	21	METALS-TCLP	TCLP	TCLP	SW846	85218	Se REPORTED	()
AD18934-005	5	SMP	15:43	22	METALS-TCLP	TCLP	TCLP	SW846	85218	Se REPORTED	()
CCV V-329036	1	CCV	15:47	23							V-329036(CCV)
CCB V-329027	1	CCB	15:51	24							V-329027(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.89 8/31/2020 4:13:08 PM

OK

9/1/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\T26161C4.txt

Analysis Date: 08/31/20 **Instrument:** PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-329027	1	CAL	16:17	1							V-329027(ICB/CCB)
CALST2 V-329037	1	CAL	16:21	2							V-329037(LLICV/CCV leachate)
CALST3 V-329028	1	CAL	16:25	3							V-329028(ICS3 - Middle Std)
CALST4 V-329029	1	CAL	16:29	4							V-329029(ICS4 High std)
ICV V-329036	1	ICV	16:34	5							V-329036(CCV)
ICB V-329027	1	ICB	16:38	6							V-329027(ICB/CCB)
LRS V-329041	1	LRS	16:42	7	METALS-TCLP	TCLP	TCLP	SW846	85218		V-329041(LRS 1/2 Fe)
ICS3 V-329028	1	ICS	16:47	8							V-329028(ICS3 - Middle Std)
RINSE	1	SMP	16:51	9		TCLP	TCLP	SW846	85218		()
LLICV V-329037	1	LLICV	16:55	10	METALS-TCLP	TCLP	TCLP	SW846	85218		V-329037(LLICV/CCV leachate)
ICSA V-329033	1	ICSA	16:59	11							V-329033(ICSA)
CCV V-329036	1	CCV	17:04	12							V-329036(CCV)
CCB V-329027	1	CCB	17:08	13							V-329027(ICB/CCB)
MB 85218 (1)	1	MB	17:12	14	METALS-TCLP	TCLP	TCLP	SW846	85218		()
LCS 85218	1	LCS	17:16	15	METALS-TCLP	TCLP	TCLP	SW846	85218		()
LCS MR 85218	1	LCS	17:20	16	METALS-TCLP	TCLP	TCLP	SW846	85218		()
AD18923-001	1	SMP	17:24	17	METALS-TCLP	TCLP	TCLP	SW846	85218		()
AD18923-001	1	MR	17:29	18	METALS-TCLP	TCLP	TCLP	SW846	85218		()
AD18923-001	1	MS	17:33	19	METALS-TCLP	TCLP	TCLP	SW846	85218		()
AD18923-001	1	PS	17:37	20	METALS-TCLP	TCLP	TCLP	SW846	85218		()
AD18923-001	5	SD	17:41	21	METALS-TCLP	TCLP	TCLP	SW846	85218		()
CCV V-329036	1	CCV	17:46	22							V-329036(CCV)
CCB V-329027	1	CCB	17:50	23							V-329027(ICB/CCB)
AD18922-001	1	SMP	17:54	24	METALS-TCLP	TCLP	TCLP	SW846	85218		()
AD18923-002	1	SMP	17:58	25	METALS-TCLP	TCLP	TCLP	SW846	85218		()
AD18935-001	1	SMP	18:02	26	METALS-TCLP	TCLP	TCLP	SW846	85218		()
AD18935-002	1	SMP	18:06	27	METALS-TCLP	TCLP	TCLP	SW846	85218		()
AD18935-003	1	SMP	18:10	28	METALS-TCLP	TCLP	TCLP	SW846	85218		()
AD18934-001	1	SMP	18:14	29	METALS-TCLP	TCLP	TCLP	SW846	85218		()
CCV V-329036	1	CCV	18:18	30							V-329036(CCV)
CCB V-329027	1	CCB	18:22	31							V-329027(ICB/CCB)
AD18934-002	1	SMP	18:26	32	METALS-TCLP	TCLP	TCLP	SW846	85218		()
AD18934-003	1	SMP	18:31	33	METALS-TCLP	TCLP	TCLP	SW846	85218		()
AD18934-004	1	SMP	18:35	34	METALS-TCLP	TCLP	TCLP	SW846	85218		()
AD18934-005	1	SMP	18:39	35	METALS-TCLP	TCLP	TCLP	SW846	85218		()
EF V-333199 8/27	1	EF	18:43	36	METALS-TCLP	TCLP	TCLP	SW846	85218		V-333199 8/27()
EF V-333199 8/28	1	EF	18:47	37	METALS-TCLP	TCLP	TCLP	SW846	85218		V-333199 8/28()
EF V-326719 8/27	1	NA	18:51	38	METALS-TCLP	TCLP	TCLP	SW846	85218	MISSED CUP	V-326719 8/27()
CCV V-329036	1	CCV	18:55	39							V-329036(CCV)
CCB V-329027	1	CCB	18:59	40							V-329027(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.105 9/1/2020 11:41:17 AM

OK
Ag REPORTED

9/1/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\T26161D4.txt

Analysis Date: 09/01/20

Instrument: PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-329027	1	CAL	11:13	1							V-329027(ICB/CCB)
CALST2 V-329037	1	CAL	11:17	2							V-329037(LLICV/CCV leachate)
CALST3 V-329028	1	CAL	11:21	3							V-329028(ICS3 - Middle Std)
CALST4 V-329029	1	CAL	11:25	4							V-329029(ICS4 High std)
ICV V-329036	1	ICV	11:30	5							V-329036(CCV)
ICB V-329027	1	ICB	11:34	6							V-329027(ICB/CCB)
LRS V-329041	1	LRS	11:38	7		TCLP	TCLP	SW846	85218		V-329041(LRS 1/2 Fe)
ICS3 V-329028	1	ICS	11:43	8							V-329028(ICS3 - Middle Std)
RINSE	1	SMP	11:47	9		TCLP	TCLP	SW846	85218		()
LLICV V-329037	1	LLICV	11:51	10		TCLP	TCLP	SW846	85218		V-329037(LLICV/CCV leachate)
ICSA V-329033	1	ICSA	11:55	11							V-329033(ICSA)
EF V-326719 8/27	1	EF	12:00	12		TCLP	TCLP	SW846	85218	Ag REPORTED	V-326719 8/27()
CCV V-329036	1	CCV	12:04	13							V-329036(CCV)
CCB V-329027	1	CCB	12:08	14							V-329027(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.105 9/1/2020 12:30:07 PM

OK

9/1/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26161T.txt

Analysis Date: 08/31/20 **Instrument:** HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	09:36	1							()
.2 PPB	1	CAL	09:38	2							()
.5 PPB	1	CAL	09:39	3							()
1 PPB	1	CAL	09:40	4							()
2 PPB	1	CAL	09:42	5							()
5 PPB	1	CAL	09:43	6							()
10 PPB	1	CAL	09:44	7							()
25 PPB	1	CAL	09:46	8							()
ICV (2)	1	ICV	09:48	9							()
ICB	1	ICB	09:50	10							()
MB 85218 (1)	1	MB	09:51	11	HG-TCLP	TCLP	TCLP	SW846	85218		()
LCS 85218	1	LCS	09:52	12	HG-TCLP	TCLP	TCLP	SW846	85218		()
LCS MR 85218	1	LCS	09:54	13	HG-TCLP	TCLP	TCLP	SW846	85218		()
AD18923-001	1	SMP	09:56	14	HG-TCLP	TCLP	TCLP	SW846	85218		()
AD18923-001	1	MR	09:57	15	HG-TCLP	TCLP	TCLP	SW846	85218		()
AD18923-001	1	MS	09:58	16	HG-TCLP	TCLP	TCLP	SW846	85218		()
AD18922-001	1	SMP	10:00	17	HG-TCLP	TCLP	TCLP	SW846	85218		()
AD18923-002	1	SMP	10:02	18	HG-TCLP	TCLP	TCLP	SW846	85218		()
AD18935-001	1	SMP	10:03	19	HG-TCLP	TCLP	TCLP	SW846	85218		()
AD18935-002	1	SMP	10:04	20	HG-TCLP	TCLP	TCLP	SW846	85218		()
CCV	1	CCV	10:06	21							()
CCB	1	CCB	10:07	22							()
AD18935-003	1	NA	10:09	23	HG-TCLP	TCLP	TCLP	SW846	85218	Not Needed.	()
AD18935-003	1	SMP	10:10	24	HG-TCLP	TCLP	TCLP	SW846	85218		()
AD18934-001	1	SMP	10:11	25	HG-TCLP	TCLP	TCLP	SW846	85218		()
AD18934-002	1	SMP	10:13	26	HG-TCLP	TCLP	TCLP	SW846	85218		()
AD18934-003	1	SMP	10:14	27	HG-TCLP	TCLP	TCLP	SW846	85218		()
AD18934-004	1	SMP	10:15	28	HG-TCLP	TCLP	TCLP	SW846	85218		()
AD18934-005	1	SMP	10:17	29	HG-TCLP	TCLP	TCLP	SW846	85218		()
EF V-333199 A	1	EF	10:18	30	HG-TCLP	TCLP	TCLP	SW846	85218		V-333199 A(EF-1 WARNING)
EF V-333199 B	1	EF	10:19	31	HG-TCLP	TCLP	TCLP	SW846	85218		V-333199 B(EF-1 WARNING)
EF V-326719	1	EF	10:21	32	HG-TCLP	TCLP	TCLP	SW846	85218		V-326719(EF-2 WARNING)
CCV	1	CCV	10:22	33							()
CCB	1	CCB	10:24	34							()

Comments/Reviewedby:

bransaw
192.168.1.120 8/31/2020 10:31:45 AM

OK

8/31/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334000

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-329027

Prepared By: Aliano, Carmela
Description: ICB/CCB
Prep Date: 6/4/2020
Expiration Date: 2/25/2021
Department: Metals
BatchNumber:
Concentration: 0 mg/l
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	

Veritech Lot Number: V-329028

Prepared By: Aliano, Carmela
Description: ICS3 - Middle Std
Prep Date: 6/4/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	944.75 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	.5
12977	SILICON	5 ml	CONC conc	5
13092	CERIUM	5 ml	CONC conc	5

Veritech Lot Number: V-329029

Prepared By: Aliano, Carmela
Description: ICS4 High std
Prep Date: 6/4/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: various mg/l
Final Volume: 500 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	434.5 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	1
12977	SILICON	5 ml	CONC conc	10

Veritech Lot Number: V-329033

Prepared By: Aliano, Carmela
Description: ICSA
Prep Date: 6/4/2020
Expiration Date: 2/25/2021
Department: Metals
BatchNumber:
Concentration: MULTI mg/l
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13176	ICSA	50 ml	NEAT neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-329036

Prepared By: Aliano, Carmela | Department: Metals | ApprovedBy: shiamala
Description: CCV | BatchNumber: | ApproveDate: 06/12/20
Prep Date: 6/4/2020 | Concentration: MULTI multi | Checked: Yes
Expiration Date: 2/25/2021 | Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13171	ICV 1	10 ml	NEAT neat	
13170	ICV 2	10 ml	CONC conc	
12981	BORON	.5 ml	CONC conc	
13091	CERIUM	5 ml	CONC conc	
12933	silicon	5 ml	CONC conc	

Veritech Lot Number: V-329037

Prepared By: Aliano, Carmela | Department: WetChem | ApprovedBy: shiamala
Description: LLICV/CCV leachate | BatchNumber: | ApproveDate: 06/12/20
Prep Date: 6/4/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 10/30/2020 | Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
12918	LL-LEACH	10 ml	neat neat	
12976	BORON	.2 ml	CONC conc	0.2 ppm
12977	SILICON	.05 ml	CONC conc	0.05 ppm
13092	CERIUM	.05 ml	CONC conc	0.05 ppm

Veritech Lot Number: V-329041

Prepared By: Aliano, Carmela | Department: Metals | ApprovedBy: shiamala
Description: LRS 1/2 Fe | BatchNumber: | ApproveDate: 06/12/20
Prep Date: 6/4/2020 | Concentration: MULTI multi | Checked: Yes
Expiration Date: 10/30/2020 | Final Volume: 500 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	335 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12915	LINEAR RANGE 1B	50 ml	neat neat	
12917	linear range 1C	50 ml	neat neat	
13092	CERIUM	12.5 ml	CONC conc	
12976	BORON	2.5 ml	CONC conc	
12977	SILICON	12.5 ml	CONC conc	

Veritech Lot Number: V-331024

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: 1:1 HCl WARNING | BatchNumber: | ApproveDate: 07/16/20
Prep Date: 7/7/2020 | Concentration: Reagent reag | Checked: Yes
Expiration Date: 1/7/2021 | Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13275	hydrochloric acid	500 ml	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-331982

Prepared By:	Cousineau, Paul	Department: Metals	ApprovedBy: shiamala
Description:	B, Si, Ce INTERMEDIATE	BatchNumber:	ApproveDate: 07/28/20
Prep Date:	7/23/2020	Concentration: 100 ppm	Checked: Yes
Expiration Date:	10/23/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	5 ml	neat neat	
13169	hydrochloric acid	5 ml	neat neat	
12976	BORON	10 ml	CONC conc	100 ppm
13092	CERIUM	10 ml	CONC conc	100 ppm
12977	SILICON	10 ml	CONC conc	100 ppm

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12915

Description
LINEAR RANGE 1B

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-40-500	7/271ab	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12917

Description
linear range 1C

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
spex	XHCV-44-500	8-002AB	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12918

Description
LL-LEACH

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
spex	XHCV-25-500	8-001AB	10/19/19	10/30/20	Aliano, Carmela	1	500ml	neat	neat

Veritech Control/Receipt Number: 12933

Description
silicon

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-145	S191206040	12/13/19	12/30/21	Aliano, Carmela	4	500m	CONC	CONC

Veritech Control/Receipt Number: 12976

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLB9-2X	24-110BX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12977

Description
SILICON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLSI9-2X	24-93SIX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12981

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-055	S190719015	01/06/20	07/30/21	Aliano, Carmela	3	500ml	CONC	CONC

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12983

Description
CALIBRATION 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	8/214AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 12984

Description
CALIBRATION 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	8/215AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13091

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-051-585	S190710006	03/04/20	07/30/21	Aliano, Carmela	2	500ml	CONC	CONC

Veritech Control/Receipt Number: 13092

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLCE2-2X	24-15CEX	03/04/20	02/28/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13168

Description
nitric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	245675	04/07/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13169

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	04/07/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13170

Description
ICV 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S200306032	04/07/20	03/31/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13171

Description
ICV 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S200306031	04/07/20	03/31/21	Aliano, Carmela	2	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13176

Description
ICSA

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-30	9-265AB	04/07/20	03/31/21	Aliano, Carmela	4	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13275

Description
hydrochloric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	06/02/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Method: PE 4 8300DV LEACH AX Page 1 Date: 8/28/2020 5:28:41 PM

T26161A4 26161/85218

Analysis Begun

TCLP GM 8/31/20

Start Time: 8/28/2020 5:23:45 PM
Logged In Analyst: usermet
Spectrometer: Optima 8300 , S/N 078S1410156
Plasma On Time: 8/28/2020 9:51:06 AM
Technique: ICP Continuous
Autosampler: S10

Sample Information File: C:\Users\Public\PerkinElmer\ICP\Data\Sample Information\08.28.20.sif
Batch ID: ICP4
Results Data Set: T26161A4
Results Library: C:\Users\Public\PerkinElmer\ICP\Data\Results\Results.mdb

C 9/1/20

Sequence No.: 1
Sample ID: CALBLK V-329027
Analyst:
Initial Sample Wt:
Dilution:
Wash Time:
Autosampler Location: 1
Date Collected: 8/28/2020 5:25:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-329027

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	61469.6	61.45	0.10%	100	%
Y 371.029	22533.0	231.00	1.03%	100	%
Ag 328.068†	-23.2	2.49	10.75%	[0.00]	mg/L
Al 308.215†	210.0	2.45	1.16%	[0.00]	mg/L
As 188.979†	-2.0	1.45	71.93%	[0.00]	mg/L
Ba 233.527†	-1.4	1.97	139.52%	[0.00]	mg/L
Be 313.107†	-827.9	21.15	2.55%	[0.00]	mg/L
Ca 315.887†	-426.3	8.67	2.03%	[0.00]	mg/L
Cd 228.802†	22.8	0.31	1.35%	[0.00]	mg/L
Co 228.616†	-3.5	2.99	84.13%	[0.00]	mg/L
Cr 267.716†	6.2	0.33	5.39%	[0.00]	mg/L
Cu 327.393†	-213.3	1.70	0.80%	[0.00]	mg/L
Fe 273.955†	-1.8	2.08	114.37%	[0.00]	mg/L
K 404.721†	-66.8	9.91	14.84%	[0.00]	mg/L
Mg 279.077†	-7.1	8.05	112.99%	[0.00]	mg/L
Mn 257.610†	21.2	0.35	1.64%	[0.00]	mg/L
Mo 202.031†	2.6	0.58	22.65%	[0.00]	mg/L
Na 330.237†	21.7	2.42	11.12%	[0.00]	mg/L
Ni 231.604†	61.1	5.66	9.27%	[0.00]	mg/L
Pb 220.353†	0.7	3.03	427.43%	[0.00]	mg/L
Sb 206.836†	5.1	0.71	13.82%	[0.00]	mg/L
Se 196.026†	9.2	2.39	26.00%	[0.00]	mg/L
Sn 189.927†	3.6	0.78	21.85%	[0.00]	mg/L
Ti 334.940†	26.7	3.20	12.01%	[0.00]	mg/L
Tl 190.801†	-4.8	1.53	31.80%	[0.00]	mg/L
V 290.880†	111.2	2.78	2.50%	[0.00]	mg/L
Zn 206.200†	4.7	1.74	36.72%	[0.00]	mg/L
B 249.772	167.7	1.05	0.62%	[0.00]	mg/L
Si 251.611	37.1	3.20	8.62%	[0.00]	mg/L

26161/85218

All reported

Ag NOT reported

18923-001 TQC

18934-002-005

Se NOT reported

Sequence No.: 2
Sample ID: CALST2 V-329037
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 8/28/2020 5:29:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST2 V-329037

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	61325.9	229.73	0.37%	99.8	%
Y 371.029	22066.1	220.48	1.00%	97.9	%
Ag 328.068†	673.2	1.58	0.23%	[0.05]	mg/L
Al 308.215†	1537.1	6.56	0.43%	[1]	mg/L
As 188.979†	13.0	1.03	7.95%	[0.1]	mg/L
Ba 233.527†	2811.0	12.81	0.46%	[0.25]	mg/L
Be 313.107†	3133.0	11.82	0.38%	[0.012]	mg/L
Ca 315.887†	18884.7	41.89	0.22%	[5]	mg/L
Cd 228.802†	145.5	1.71	1.17%	[0.05]	mg/L
Co 228.616†	250.8	2.17	0.86%	[0.1]	mg/L
Cr 267.716†	643.8	1.62	0.25%	[0.1]	mg/L
Cu 327.393†	951.4	7.82	0.82%	[0.1]	mg/L
Fe 273.955†	798.6	8.81	1.10%	[1]	mg/L
K 404.721†	47.7	6.85	14.37%	[5]	mg/L
Mg 279.077†	5872.4	14.19	0.24%	[5]	mg/L
Mn 257.610†	3002.7	12.64	0.42%	[0.1]	mg/L
Mo 202.031†	135.7	2.04	1.50%	[0.1]	mg/L
Na 330.237†	1101.3	14.51	1.32%	[25]	mg/L
Ni 231.604†	372.6	6.49	1.74%	[0.1]	mg/L
Pb 220.353†	32.1	1.51	4.70%	[0.05]	mg/L
Sb 206.836†	10.3	1.61	15.61%	[0.07]	mg/L
Se 196.026†	20.6	1.37	6.62%	[0.1]	mg/L
Sn 189.927†	60.2	2.34	3.89%	[0.1]	mg/L
Ti 334.940†	3056.3	5.05	0.17%	[0.1]	mg/L
Tl 190.801†	23.3	2.58	11.06%	[0.1]	mg/L
V 290.880†	609.6	8.77	1.44%	[0.1]	mg/L
Zn 206.200†	382.1	5.80	1.52%	[0.1]	mg/L
B 249.772	1245.5	9.39	0.75%	[0.2]	mg/L
Si 251.611	308.1	2.22	0.72%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-329028
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 3
Date Collected: 8/28/2020 5:33:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST3 V-329028

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	56759.3	698.84	1.23%	92.3	%
Y 371.029	20678.8	328.70	1.59%	91.8	%
Ag 328.068†	1107.2	18.87	1.70%	[0.10]	mg/L
Al 308.215†	6392.0	66.36	1.04%	[5.0]	mg/L
As 188.979†	56.4	1.01	1.79%	[0.50]	mg/L
Ba 233.527†	4799.1	66.27	1.38%	[0.50]	mg/L
Be 313.107†	126289.0	1456.62	1.15%	[0.50]	mg/L
Ca 315.887†	183590.6	1846.86	1.01%	[50]	mg/L
Cd 228.802†	1426.1	19.22	1.35%	[0.50]	mg/L
Co 228.616†	1215.0	12.32	1.01%	[0.50]	mg/L
Cr 267.716†	3183.0	39.57	1.24%	[0.50]	mg/L
Cu 327.393†	4065.4	28.56	0.70%	[0.50]	mg/L
Fe 273.955†	3436.1	26.20	0.76%	[5.0]	mg/L
K 404.721†	1007.6	7.07	0.70%	[50]	mg/L
Mg 279.077†	55404.0	620.89	1.12%	[50]	mg/L
Mn 257.610†	14227.0	136.92	0.96%	[0.50]	mg/L
Mo 202.031†	661.7	11.91	1.80%	[0.50]	mg/L
Na 330.237†	2039.5	25.53	1.25%	[50]	mg/L
Ni 231.604†	1776.6	21.07	1.19%	[0.50]	mg/L
Pb 220.353†	320.9	7.33	2.28%	[0.50]	mg/L
Sb 206.836†	76.8	2.03	2.64%	[0.50]	mg/L
Se 196.026†	117.1	2.71	2.31%	[0.50]	mg/L
Sn 189.927†	281.7	2.51	0.89%	[0.50]	mg/L
Ti 334.940†	14420.7	163.02	1.13%	[0.50]	mg/L
Tl 190.801†	98.0	1.43	1.46%	[0.50]	mg/L
V 290.880†	2741.5	19.43	0.71%	[0.50]	mg/L
Zn 206.200†	1878.4	29.72	1.58%	[0.50]	mg/L
B 249.772	2924.5	14.00	0.48%	[0.50]	mg/L
Si 251.611	9897.7	51.85	0.52%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-329029
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 4
Date Collected: 8/28/2020 5:37:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST4 V-329029

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	59821.4	271.02	0.45%	97.3	%
Y 371.029	20414.7	143.16	0.70%	90.6	%
Ag 328.068†	3377.5	7.63	0.23%	[0.20]	mg/L
Al 308.215†	13509.9	47.97	0.36%	[10]	mg/L
As 188.979†	116.9	1.25	1.07%	[1.00]	mg/L
Ba 233.527†	9877.4	15.13	0.15%	[1.00]	mg/L
Be 313.107†	256543.5	1659.13	0.65%	[1.00]	mg/L
Ca 315.887†	365949.8	2231.57	0.61%	[100]	mg/L
Cd 228.802†	2719.5	11.03	0.41%	[1.00]	mg/L
Co 228.616†	2549.2	8.69	0.34%	[1.00]	mg/L
Cr 267.716†	6453.6	9.84	0.15%	[1.00]	mg/L
Cu 327.393†	8458.9	9.24	0.11%	[1.00]	mg/L
Fe 273.955†	6987.3	1.79	0.03%	[10.0]	mg/L
K 404.721†	2096.8	12.09	0.58%	[100]	mg/L
Mg 279.077†	111948.5	754.59	0.67%	[100]	mg/L
Mn 257.610†	30454.6	41.68	0.14%	[1.00]	mg/L
Mo 202.031†	1374.4	7.79	0.57%	[1.00]	mg/L
Na 330.237†	4560.0	19.40	0.43%	[100]	mg/L
Ni 231.604†	3437.2	9.79	0.28%	[1.00]	mg/L
Pb 220.353†	654.1	2.42	0.37%	[1.00]	mg/L
Sb 206.836†	159.5	2.11	1.32%	[1.00]	mg/L
Se 196.026†	244.4	3.34	1.37%	[1.00]	mg/L
Sn 189.927†	581.8	5.81	1.00%	[1.00]	mg/L
Ti 334.940†	31117.3	27.21	0.09%	[1.00]	mg/L
Tl 190.801†	194.4	3.55	1.82%	[1.00]	mg/L
V 290.880†	5426.1	8.67	0.16%	[1.00]	mg/L
Zn 206.200†	3702.4	3.59	0.10%	[1.00]	mg/L
B 249.772	5895.3	42.29	0.72%	[1.00]	mg/L
Si 251.611	21886.0	114.93	0.53%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-184.8	16850	0.00000	0.982300	
Al 308.215	3	Lin, Calc Int	15.2	1336	0.00000	0.999346	
As 188.979	3	Lin, Calc Int	0.2	115.9	0.00000	0.999690	
Ba 233.527	3	Lin, Calc Int	108.7	9744	0.00000	0.998882	
Be 313.107	3	Lin, Calc Int	-336.2	256200	0.00000	0.999967	
Ca 315.887	3	Lin, Calc Int	377.4	3658	0.00000	0.999998	
Cd 228.802	3	Lin, Calc Int	16.5	2726	0.00000	0.999688	
Co 228.616	3	Lin, Calc Int	-12.9	2542	0.00000	0.999686	
Cr 267.716	3	Lin, Calc Int	-8.8	6447	0.00000	0.999973	
Cu 327.393	3	Lin, Calc Int	16.4	8381	0.00000	0.999616	
Fe 273.955	3	Lin, Calc Int	33.6	693.0	0.00000	0.999819	
K 404.721	3	Lin, Calc Int	-33.2	21.19	0.00000	0.999625	
Mg 279.077	3	Lin, Calc Int	19.5	1117	0.00000	0.999979	
Mn 257.610	3	Lin, Calc Int	-204.5	30310	0.00000	0.999370	
Mo 202.031	3	Lin, Calc Int	-5.5	1371	0.00000	0.999802	
Na 330.237	3	Lin, Calc Int	-63.6	45.46	0.00000	0.998247	
Ni 231.604	3	Lin, Calc Int	23.6	3433	0.00000	0.999843	
Pb 220.353	3	Lin, Calc Int	-1.4	653.3	0.00000	0.999952	
Sb 206.836	3	Lin, Calc Int	-0.9	159.4	0.00000	0.999819	
Se 196.026	3	Lin, Calc Int	-2.7	245.5	0.00000	0.999727	
Sn 189.927	3	Lin, Calc Int	-0.8	579.4	0.00000	0.999828	
Ti 334.940	3	Lin, Calc Int	-235.6	30960	0.00000	0.999221	
Tl 190.801	3	Lin, Calc Int	1.9	192.7	0.00000	0.999819	
V 290.880	3	Lin, Calc Int	35.0	5398	0.00000	0.999930	
Zn 206.200	3	Lin, Calc Int	10.3	3701	0.00000	0.999971	

B 249.772	3	Lin, Calc Int	23.3	5866	0.00000	0.999898
Si 251.611	3	Lin, Calc Int	-149.7	2165	0.00000	0.998694

Sequence No.: 5
Sample ID: ICV V-329036
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 105

Autosampler Location: 6
Date Collected: 8/28/2020 5:42:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	56810.1	92.4	%	0.56				0.60%
Y 371.029	20468.4	90.8	%	1.27				1.40%
Ag 328.068†	1180.5	0.0839237	mg/L	0.00103789	0.0839237	mg/L	0.00103789	1.24%
QC value less than the lower limit for Ag 328.068 Recovery = 83.92%								
Al 308.215†	6538.2	4.89649	mg/L	0.021096	4.89649	mg/L	0.021096	0.43%
QC value within limits for Al 308.215 Recovery = 97.93%								
As 188.979†	59.3	0.486128	mg/L	0.0043082	0.486128	mg/L	0.0043082	0.89%
QC value within limits for As 188.979 Recovery = 97.23%								
Ba 233.527†	4907.8	0.492496	mg/L	0.0017042	0.492496	mg/L	0.0017042	0.35%
QC value within limits for Ba 233.527 Recovery = 98.50%								
Be 313.107†	128911.0	0.504561	mg/L	0.0000892	0.504561	mg/L	0.0000892	0.02%
QC value within limits for Be 313.107 Recovery = 100.91%								
Ca 315.887†	188184.6	51.3482	mg/L	0.06079	51.3482	mg/L	0.06079	0.12%
QC value within limits for Ca 315.887 Recovery = 102.70%								
Cd 228.802†	1456.1	0.528101	mg/L	0.0096363	0.528101	mg/L	0.0096363	1.82%
QC value within limits for Cd 228.802 Recovery = 105.62%								
Co 228.616†	1244.6	0.494749	mg/L	0.0048115	0.494749	mg/L	0.0048115	0.97%
QC value within limits for Co 228.616 Recovery = 98.95%								
Cr 267.716†	3264.4	0.510045	mg/L	0.0071491	0.510045	mg/L	0.0071491	1.40%
QC value within limits for Cr 267.716 Recovery = 102.01%								
Cu 327.393†	4153.1	0.494068	mg/L	0.0018648	0.494068	mg/L	0.0018648	0.38%
QC value within limits for Cu 327.393 Recovery = 98.81%								
Fe 273.955†	3483.6	4.97855	mg/L	0.017472	4.97855	mg/L	0.017472	0.35%
QC value within limits for Fe 273.955 Recovery = 99.57%								
K 404.721†	1033.3	-3.30289	mg/L	0.386918	-3.30289	mg/L	0.386918	11.71%
QC value less than the lower limit for K 404.721 Recovery = -6.61%								
Mg 279.077†	56764.4	50.7977	mg/L	0.04629	50.7977	mg/L	0.04629	0.09%
QC value within limits for Mg 279.077 Recovery = 101.60%								
Mn 257.610†	14517.8	0.485662	mg/L	0.0002416	0.485662	mg/L	0.0002416	0.05%
QC value within limits for Mn 257.610 Recovery = 97.13%								
Mo 202.031†	676.8	0.497669	mg/L	0.0052350	0.497669	mg/L	0.0052350	1.05%
QC value within limits for Mo 202.031 Recovery = 99.53%								
Na 330.237†	2087.6	47.3219	mg/L	0.09865	47.3219	mg/L	0.09865	0.21%
QC value within limits for Na 330.237 Recovery = 94.64%								
Ni 231.604†	1823.4	0.525741	mg/L	0.0067535	0.525741	mg/L	0.0067535	1.28%
QC value within limits for Ni 231.604 Recovery = 105.15%								
Pb 220.353†	328.1	0.505277	mg/L	0.0041336	0.505277	mg/L	0.0041336	0.82%
QC value within limits for Pb 220.353 Recovery = 101.06%								
Sb 206.836†	78.6	0.510447	mg/L	0.0142825	0.510447	mg/L	0.0142825	2.80%
QC value within limits for Sb 206.836 Recovery = 102.09%								
Se 196.026†	119.2	0.505249	mg/L	0.0241746	0.505249	mg/L	0.0241746	4.78%
QC value within limits for Se 196.026 Recovery = 101.05%								
Sn 189.927†	289.9	0.500034	mg/L	0.0062646	0.500034	mg/L	0.0062646	1.25%
QC value within limits for Sn 189.927 Recovery = 100.01%								
Ti 334.940†	14689.9	0.485984	mg/L	0.0012888	0.485984	mg/L	0.0012888	0.27%
QC value within limits for Ti 334.940 Recovery = 97.20%								
Tl 190.801†	97.4	0.491554	mg/L	0.0130621	0.491554	mg/L	0.0130621	2.66%
QC value within limits for Tl 190.801 Recovery = 98.31%								
V 290.880†	2789.9	0.513100	mg/L	0.0012568	0.513100	mg/L	0.0012568	0.24%
QC value within limits for V 290.880 Recovery = 102.62%								
Zn 206.200†	1933.9	0.519742	mg/L	0.0071698	0.519742	mg/L	0.0071698	1.38%
QC value within limits for Zn 206.200 Recovery = 103.95%								
B 249.772	2757.8	0.474760	mg/L	0.0038914	0.474760	mg/L	0.0038914	0.82%
QC value within limits for B 249.772 Recovery = 94.95%								
Si 251.611	10144.5	4.85756	mg/L	0.034827	4.85756	mg/L	0.034827	0.72%
QC value within limits for Si 251.611 Recovery = 97.15%								

QC Failed. Continue with analysis.

Sequence No.: 6 **Autosampler Location: 1**
Sample ID: ICB V-329027 **Date Collected: 8/28/2020 5:46:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	61986.1	101	%	0.45				0.44%
Y 371.029	22802.2	101	%	0.78				0.77%
Ag 328.068†	3.0	0.0111080	mg/L	0.00030601	0.0111080	mg/L	0.00030601	2.75%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-8.5	-0.0182249	mg/L	0.00292069	-0.0182249	mg/L	0.00292069	16.03%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.2	-0.0036752	mg/L	0.00290752	-0.0036752	mg/L	0.00290752	79.11%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.9	-0.0110616	mg/L	0.00029510	-0.0110616	mg/L	0.00029510	2.67%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	0.0	0.0013127	mg/L	0.00007191	0.0013127	mg/L	0.00007191	5.48%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	18.4	-0.0981492	mg/L	0.00063447	-0.0981492	mg/L	0.00063447	0.65%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.0	-0.0060545	mg/L	0.00075695	-0.0060545	mg/L	0.00075695	12.50%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	4.3	0.0067595	mg/L	0.00132986	0.0067595	mg/L	0.00132986	19.67%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	2.5	0.0017235	mg/L	0.00029252	0.0017235	mg/L	0.00029252	16.97%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	1.9	-0.0017338	mg/L	0.00077228	-0.0017338	mg/L	0.00077228	44.54%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	0.0	-0.0484287	mg/L	0.00402553	-0.0484287	mg/L	0.00402553	8.31%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	11.0	2.60897	mg/L	0.313272	2.60897	mg/L	0.313272	12.01%
QC value greater than the upper limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	4.2	-0.0136319	mg/L	0.00587152	-0.0136319	mg/L	0.00587152	43.07%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	0.9	0.0067764	mg/L	0.00007078	0.0067764	mg/L	0.00007078	1.04%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.9	0.0046882	mg/L	0.00082040	0.0046882	mg/L	0.00082040	17.50%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.2	1.42523	mg/L	0.066010	1.42523	mg/L	0.066010	4.63%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	3.8	-0.0057531	mg/L	0.00093693	-0.0057531	mg/L	0.00093693	16.29%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.2	0.0018820	mg/L	0.00556324	0.0018820	mg/L	0.00556324	295.60%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.6	-0.0045534	mg/L	0.00128063	-0.0045534	mg/L	0.00128063	28.12%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-3.8	-0.0046756	mg/L	0.01039175	-0.0046756	mg/L	0.01039175	222.26%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.2	0.0010032	mg/L	0.00289866	0.0010032	mg/L	0.00289866	288.94%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	1.4	0.0076494	mg/L	0.00022593	0.0076494	mg/L	0.00022593	2.95%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.2	0.0016804	mg/L	0.00348106	0.0016804	mg/L	0.00348106	207.15%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	0.8	-0.0063305	mg/L	0.00023651	-0.0063305	mg/L	0.00023651	3.74%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-0.7	-0.0029790	mg/L	0.00059014	-0.0029790	mg/L	0.00059014	19.81%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-10.7	-0.0056158	mg/L	0.00123012	-0.0056158	mg/L	0.00123012	21.90%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	2.9	0.0700289	mg/L	0.00062762	0.0700289	mg/L	0.00062762	0.90%
QC value greater than the upper limit for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: LRS V-329041
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 13
Date Collected: 8/28/2020 5:50:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LRS V-329041

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	52564.0	85.5	%	0.29				0.34%
Y 371.029	17113.0	75.9	%	0.21				0.27%
Ag 328.068†	12737.8	0.826489	mg/L	0.0019528	0.826489	mg/L	0.0019528	0.24%
QC value less than the lower limit for Ag 328.068 Recovery = 82.65%								
Al 308.215†	685079.7	512.988	mg/L	3.1604	512.988	mg/L	3.1604	0.62%
QC value within limits for Al 308.215 Recovery = 102.60%								
As 188.979†	1212.1	9.99985	mg/L	0.054866	9.99985	mg/L	0.054866	0.55%
QC value within limits for As 188.979 Recovery = 100.00%								
Ba 233.527†	100664.5	10.3195	mg/L	0.02148	10.3195	mg/L	0.02148	0.21%
QC value within limits for Ba 233.527 Recovery = 103.19%								
Be 313.107†	1218302.2	4.75738	mg/L	0.027041	4.75738	mg/L	0.027041	0.57%
QC value within limits for Be 313.107 Recovery = 95.15%								
Ca 315.887†	1773005.8	484.653	mg/L	2.4426	484.653	mg/L	2.4426	0.50%
QC value within limits for Ca 315.887 Recovery = 96.93%								
Cd 228.802†	14758.7	5.40802	mg/L	0.014261	5.40802	mg/L	0.014261	0.26%
QC value within limits for Cd 228.802 Recovery = 108.16%								
Co 228.616†	10795.6	4.25266	mg/L	0.005625	4.25266	mg/L	0.005625	0.13%
QC value less than the lower limit for Co 228.616 Recovery = 85.05%								
Cr 267.716†	57905.6	9.02648	mg/L	0.020658	9.02648	mg/L	0.020658	0.23%
QC value within limits for Cr 267.716 Recovery = 90.26%								
Cu 327.393†	92398.1	11.0408	mg/L	0.00347	11.0408	mg/L	0.00347	0.03%
QC value greater than the upper limit for Cu 327.393 Recovery = 110.41%								
Fe 273.955†	128555.2	185.464	mg/L	0.7751	185.464	mg/L	0.7751	0.42%
QC value within limits for Fe 273.955 Recovery = 92.73%								
K 404.721†	5351.9	-1743.66	mg/L	8.990	-1743.66	mg/L	8.990	0.52%
QC value less than the lower limit for K 404.721 Recovery = -871.83%								
Mg 279.077†	566146.2	506.793	mg/L	2.5930	506.793	mg/L	2.5930	0.51%
QC value within limits for Mg 279.077 Recovery = 101.36%								
Mn 257.610†	270193.9	8.91991	mg/L	0.046147	8.91991	mg/L	0.046147	0.52%
QC value less than the lower limit for Mn 257.610 Recovery = 89.20%								
Mo 202.031†	12671.3	9.24554	mg/L	0.025841	9.24554	mg/L	0.025841	0.28%
QC value within limits for Mo 202.031 Recovery = 92.46%								
Na 330.237†	62784.2	1382.56	mg/L	1.692	1382.56	mg/L	1.692	0.12%
QC value greater than the upper limit for Na 330.237 Recovery = 138.26%								
Ni 231.604†	31543.8	9.20851	mg/L	0.032030	9.20851	mg/L	0.032030	0.35%
QC value within limits for Ni 231.604 Recovery = 92.09%								
Pb 220.353†	6219.2	9.57985	mg/L	0.011382	9.57985	mg/L	0.011382	0.12%
QC value within limits for Pb 220.353 Recovery = 95.80%								
Sb 206.836†	836.5	5.47391	mg/L	0.006780	5.47391	mg/L	0.006780	0.12%
QC value within limits for Sb 206.836 Recovery = 109.48%								
Se 196.026†	1205.7	5.09089	mg/L	0.029073	5.09089	mg/L	0.029073	0.57%
QC value within limits for Se 196.026 Recovery = 101.82%								
Sn 189.927†	5784.1	9.95210	mg/L	0.027062	9.95210	mg/L	0.027062	0.27%
QC value within limits for Sn 189.927 Recovery = 99.52%								
Ti 334.940†	281649.9	9.14149	mg/L	0.049700	9.14149	mg/L	0.049700	0.54%
QC value within limits for Ti 334.940 Recovery = 91.41%								
Tl 190.801†	849.9	4.36297	mg/L	0.041555	4.36297	mg/L	0.041555	0.95%
QC value less than the lower limit for Tl 190.801 Recovery = 87.26%								
V 290.880†	50984.2	9.46101	mg/L	0.022919	9.46101	mg/L	0.022919	0.24%
QC value within limits for V 290.880 Recovery = 94.61%								
Zn 206.200†	34159.4	9.22689	mg/L	0.011882	9.22689	mg/L	0.011882	0.13%
QC value within limits for Zn 206.200 Recovery = 92.27%								
B 249.772	29970.7	4.82504	mg/L	0.038888	4.82504	mg/L	0.038888	0.81%
QC value within limits for B 249.772 Recovery = 96.50%								
Si 251.611	50358.0	25.3012	mg/L	0.10636	25.3012	mg/L	0.10636	0.42%
QC value within limits for Si 251.611 Recovery = 101.20%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-329028
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 105

Autosampler Location: 3
Date Collected: 8/28/2020 5:55:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICS3 V-329028

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	57733.1	93.9	%	0.28				0.30%
Y 371.029	20734.4	92.0	%	0.64				0.69%
Ag 328.068†	1099.3	0.0790338	mg/L	0.00062697	0.0790338	mg/L	0.00062697	0.79%
QC value less than the lower limit for Ag 328.068 Recovery = 79.03%								
Al 308.215†	6396.7	4.79032	mg/L	0.033090	4.79032	mg/L	0.033090	0.69%
QC value within limits for Al 308.215 Recovery = 95.81%								
As 188.979†	55.3	0.451513	mg/L	0.0202365	0.451513	mg/L	0.0202365	4.48%
QC value within limits for As 188.979 Recovery = 90.30%								
Ba 233.527†	4785.9	0.479985	mg/L	0.0009239	0.479985	mg/L	0.0009239	0.19%
QC value within limits for Ba 233.527 Recovery = 96.00%								
Be 313.107†	125664.2	0.491886	mg/L	0.0005636	0.491886	mg/L	0.0005636	0.11%
QC value within limits for Be 313.107 Recovery = 98.38%								
Ca 315.887†	182808.7	49.8784	mg/L	0.16304	49.8784	mg/L	0.16304	0.33%
QC value within limits for Ca 315.887 Recovery = 99.76%								
Cd 228.802†	1411.2	0.511658	mg/L	0.0045887	0.511658	mg/L	0.0045887	0.90%
QC value within limits for Cd 228.802 Recovery = 102.33%								
Co 228.616†	1206.0	0.479582	mg/L	0.0018291	0.479582	mg/L	0.0018291	0.38%
QC value within limits for Co 228.616 Recovery = 95.92%								
Cr 267.716†	3153.5	0.492799	mg/L	0.0027159	0.492799	mg/L	0.0027159	0.55%
QC value within limits for Cr 267.716 Recovery = 98.56%								
Cu 327.393†	4050.5	0.481814	mg/L	0.0027101	0.481814	mg/L	0.0027101	0.56%
QC value within limits for Cu 327.393 Recovery = 96.36%								
Fe 273.955†	3427.1	4.89698	mg/L	0.044547	4.89698	mg/L	0.044547	0.91%
QC value within limits for Fe 273.955 Recovery = 97.94%								
K 404.721†	1001.1	-3.94601	mg/L	0.187716	-3.94601	mg/L	0.187716	4.76%
QC value less than the lower limit for K 404.721 Recovery = -7.89%								
Mg 279.077†	55102.9	49.3103	mg/L	0.05193	49.3103	mg/L	0.05193	0.11%
QC value within limits for Mg 279.077 Recovery = 98.62%								
Mn 257.610†	14182.2	0.474591	mg/L	0.0017233	0.474591	mg/L	0.0017233	0.36%
QC value within limits for Mn 257.610 Recovery = 94.92%								
Mo 202.031†	655.9	0.482411	mg/L	0.0029861	0.482411	mg/L	0.0029861	0.62%
QC value within limits for Mo 202.031 Recovery = 96.48%								
Na 330.237†	2024.2	45.9288	mg/L	0.53431	45.9288	mg/L	0.53431	1.16%
QC value within limits for Na 330.237 Recovery = 91.86%								
Ni 231.604†	1763.5	0.508235	mg/L	0.0042470	0.508235	mg/L	0.0042470	0.84%
QC value within limits for Ni 231.604 Recovery = 101.65%								
Pb 220.353†	317.5	0.488948	mg/L	0.0039369	0.488948	mg/L	0.0039369	0.81%
QC value within limits for Pb 220.353 Recovery = 97.79%								
Sb 206.836†	77.9	0.506180	mg/L	0.0089242	0.506180	mg/L	0.0089242	1.76%
QC value within limits for Sb 206.836 Recovery = 101.24%								
Se 196.026†	115.3	0.489204	mg/L	0.0063531	0.489204	mg/L	0.0063531	1.30%
QC value within limits for Se 196.026 Recovery = 97.84%								
Sn 189.927†	280.9	0.484517	mg/L	0.0050232	0.484517	mg/L	0.0050232	1.04%
QC value within limits for Sn 189.927 Recovery = 96.90%								
Ti 334.940†	14319.7	0.473915	mg/L	0.0015522	0.473915	mg/L	0.0015522	0.33%
QC value within limits for Ti 334.940 Recovery = 94.78%								
Tl 190.801†	96.8	0.488589	mg/L	0.0067929	0.488589	mg/L	0.0067929	1.39%
QC value within limits for Tl 190.801 Recovery = 97.72%								
V 290.880†	2722.5	0.500537	mg/L	0.0025586	0.500537	mg/L	0.0025586	0.51%
QC value within limits for V 290.880 Recovery = 100.11%								
Zn 206.200†	1865.4	0.501236	mg/L	0.0040834	0.501236	mg/L	0.0040834	0.81%
QC value within limits for Zn 206.200 Recovery = 100.25%								
B 249.772	2855.6	0.491083	mg/L	0.0013472	0.491083	mg/L	0.0013472	0.27%
QC value within limits for B 249.772 Recovery = 98.22%								
Si 251.611	10037.8	4.80616	mg/L	0.016784	4.80616	mg/L	0.016784	0.35%
QC value within limits for Si 251.611 Recovery = 96.12%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 14
Date Collected: 8/28/2020 5:59:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	61888.1	101	%	0.78				0.78%
Y 371.029	22639.1	100	%	1.68				1.68%
Ag 328.068†	0.4	0.0109549	mg/L	0.00043038	0.0109549	mg/L	0.00043038	3.93%
Al 308.215†	-2.6	-0.0138302	mg/L	0.00212153	-0.0138302	mg/L	0.00212153	15.34%
As 188.979†	1.6	0.0116781	mg/L	0.00820758	0.0116781	mg/L	0.00820758	70.28%
Ba 233.527†	-0.6	-0.0112183	mg/L	0.00009927	-0.0112183	mg/L	0.00009927	0.88%
Be 313.107†	31.3	0.0014348	mg/L	0.00003621	0.0014348	mg/L	0.00003621	2.52%
Ca 315.887†	24.5	-0.0964666	mg/L	0.00294932	-0.0964666	mg/L	0.00294932	3.06%
Cd 228.802†	-0.2	-0.0061210	mg/L	0.00081405	-0.0061210	mg/L	0.00081405	13.30%
Co 228.616†	1.8	0.0057900	mg/L	0.00110351	0.0057900	mg/L	0.00110351	19.06%
Cr 267.716†	2.2	0.0016774	mg/L	0.00095279	0.0016774	mg/L	0.00095279	56.80%
Cu 327.393†	2.0	-0.0017164	mg/L	0.00038921	-0.0017164	mg/L	0.00038921	22.68%
Fe 273.955†	1.3	-0.0466706	mg/L	0.00134757	-0.0466706	mg/L	0.00134757	2.89%
K 404.721†	17.1	2.87907	mg/L	0.176791	2.87907	mg/L	0.176791	6.14%
Mg 279.077†	7.9	-0.0103682	mg/L	0.00213865	-0.0103682	mg/L	0.00213865	20.63%
Mn 257.610†	1.2	0.0067875	mg/L	0.00006184	0.0067875	mg/L	0.00006184	0.91%
Mo 202.031†	1.0	0.0047624	mg/L	0.00058027	0.0047624	mg/L	0.00058027	12.18%
Na 330.237†	3.2	1.46824	mg/L	0.184819	1.46824	mg/L	0.184819	12.59%
Ni 231.604†	2.5	-0.0061302	mg/L	0.00123796	-0.0061302	mg/L	0.00123796	20.19%
Pb 220.353†	-0.7	0.0010557	mg/L	0.00628701	0.0010557	mg/L	0.00628701	595.51%
Sb 206.836†	-0.1	0.0054512	mg/L	0.00150718	0.0054512	mg/L	0.00150718	27.65%
Se 196.026†	-2.3	0.0014767	mg/L	0.00914916	0.0014767	mg/L	0.00914916	619.56%
Sn 189.927†	0.5	0.0022146	mg/L	0.00283252	0.0022146	mg/L	0.00283252	127.90%
Ti 334.940†	4.2	0.0077384	mg/L	0.00009039	0.0077384	mg/L	0.00009039	1.17%
Tl 190.801†	3.2	0.0069947	mg/L	0.00462285	0.0069947	mg/L	0.00462285	66.09%
V 290.880†	-0.4	-0.0065480	mg/L	0.00030292	-0.0065480	mg/L	0.00030292	4.63%
Zn 206.200†	0.5	-0.0026499	mg/L	0.00006069	-0.0026499	mg/L	0.00006069	2.29%
B 249.772	63.3	0.0070576	mg/L	0.00158389	0.0070576	mg/L	0.00158389	22.44%
Si 251.611	9.7	0.0735947	mg/L	0.00127028	0.0735947	mg/L	0.00127028	1.73%

Sequence No.: 10 **Autosampler Location: 5**
Sample ID: LLICV V-329037 **Date Collected: 8/28/2020 6:03:47 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: LLICV V-329037

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	61290.5	99.7	%	0.44				0.45%
Y 371.029	22120.1	98.2	%	0.50				0.51%
Ag 328.068†	673.3	0.0515331	mg/L	0.00018814	0.0515331	mg/L	0.00018814	0.37%
QC value within limits for Ag 328.068 Recovery = 103.07%								
Al 308.215†	1532.2	1.13829	mg/L	0.008126	1.13829	mg/L	0.008126	0.71%
QC value within limits for Al 308.215 Recovery = 113.83%								
As 188.979†	13.8	0.112050	mg/L	0.0088338	0.112050	mg/L	0.0088338	7.88%
QC value within limits for As 188.979 Recovery = 112.05%								
Ba 233.527†	2808.3	0.277042	mg/L	0.0019178	0.277042	mg/L	0.0019178	0.69%
QC value within limits for Ba 233.527 Recovery = 110.82%								
Be 313.107†	3124.6	0.0135104	mg/L	0.00001951	0.0135104	mg/L	0.00001951	0.14%
QC value within limits for Be 313.107 Recovery = 112.59%								
Ca 315.887†	18866.4	5.05508	mg/L	0.012701	5.05508	mg/L	0.012701	0.25%
QC value within limits for Ca 315.887 Recovery = 101.10%								
Cd 228.802†	145.8	0.0474533	mg/L	0.00054387	0.0474533	mg/L	0.00054387	1.15%
QC value within limits for Cd 228.802 Recovery = 94.91%								
Co 228.616†	252.5	0.104435	mg/L	0.0006158	0.104435	mg/L	0.0006158	0.59%
QC value within limits for Co 228.616 Recovery = 104.43%								
Cr 267.716†	647.5	0.102281	mg/L	0.0008174	0.102281	mg/L	0.0008174	0.80%
QC value within limits for Cr 267.716 Recovery = 102.28%								
Cu 327.393†	945.1	0.110919	mg/L	0.0011447	0.110919	mg/L	0.0011447	1.03%
QC value within limits for Cu 327.393 Recovery = 110.92%								
Fe 273.955†	800.3	1.10633	mg/L	0.008758	1.10633	mg/L	0.008758	0.79%
QC value within limits for Fe 273.955 Recovery = 110.63%								
K 404.721†	48.9	-8.04030	mg/L	0.498155	-8.04030	mg/L	0.498155	6.20%
QC value less than the lower limit for K 404.721 Recovery = -160.81%								
Mg 279.077†	5882.9	5.24895	mg/L	0.012270	5.24895	mg/L	0.012270	0.23%
QC value within limits for Mg 279.077 Recovery = 104.98%								
Mn 257.610†	3011.7	0.106098	mg/L	0.0000396	0.106098	mg/L	0.0000396	0.04%
QC value within limits for Mn 257.610 Recovery = 106.10%								
Mo 202.031†	137.0	0.103915	mg/L	0.0003477	0.103915	mg/L	0.0003477	0.33%
QC value within limits for Mo 202.031 Recovery = 103.91%								
Na 330.237†	1104.6	25.6983	mg/L	0.34417	25.6983	mg/L	0.34417	1.34%
QC value within limits for Na 330.237 Recovery = 102.79%								
Ni 231.604†	372.0	0.101794	mg/L	0.0010813	0.101794	mg/L	0.0010813	1.06%
QC value within limits for Ni 231.604 Recovery = 101.79%								
Pb 220.353†	34.3	0.0547634	mg/L	0.00169153	0.0547634	mg/L	0.00169153	3.09%
QC value within limits for Pb 220.353 Recovery = 109.53%								
Sb 206.836†	10.5	0.0741647	mg/L	0.01118263	0.0741647	mg/L	0.01118263	15.08%
QC value within limits for Sb 206.836 Recovery = 105.95%								
Se 196.026†	21.9	0.101447	mg/L	0.0047069	0.101447	mg/L	0.0047069	4.64%
QC value within limits for Se 196.026 Recovery = 101.45%								
Sn 189.927†	59.2	0.103161	mg/L	0.0019607	0.103161	mg/L	0.0019607	1.90%
QC value within limits for Sn 189.927 Recovery = 103.16%								
Ti 334.940†	3077.6	0.107399	mg/L	0.0004635	0.107399	mg/L	0.0004635	0.43%
QC value within limits for Ti 334.940 Recovery = 107.40%								
Tl 190.801†	23.2	0.109665	mg/L	0.0042923	0.109665	mg/L	0.0042923	3.91%
QC value within limits for Tl 190.801 Recovery = 109.66%								
V 290.880†	605.0	0.105850	mg/L	0.0009076	0.105850	mg/L	0.0009076	0.86%
QC value within limits for V 290.880 Recovery = 105.85%								
Zn 206.200†	382.9	0.100679	mg/L	0.0008106	0.100679	mg/L	0.0008106	0.81%
QC value within limits for Zn 206.200 Recovery = 100.68%								
B 249.772	1290.0	0.216905	mg/L	0.0004178	0.216905	mg/L	0.0004178	0.19%
QC value within limits for B 249.772 Recovery = 108.45%								
Si 251.611	311.7	0.238040	mg/L	0.0007236	0.238040	mg/L	0.0007236	0.30%
QC value greater than the upper limit for Si 251.611 Recovery = 238.04%								

QC Failed. Continue with analysis.

Sequence No.: 11 **Autosampler Location: 7**
Sample ID: ICSA V-329033 **Date Collected: 8/28/2020 6:07:47 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICSA V-329033

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	51542.0	83.8	%	0.77				0.92%
Y 371.029	18545.7	82.3	%	0.35				0.42%
Ag 328.068†	-622.6	-0.0120109	mg/L	0.00038897	-0.0120109	mg/L	0.00038897	3.24%
Al 308.215†	761958.5	570.265	mg/L	7.5648	570.265	mg/L	7.5648	1.33%
QC value within limits for Al 308.215 Recovery = 114.05%								
As 188.979†	-0.9	-0.0152334	mg/L	0.00643497	-0.0152334	mg/L	0.00643497	42.24%
Ba 233.527†	61.5	-0.0048500	mg/L	0.00049671	-0.0048500	mg/L	0.00049671	10.24%
Be 313.107†	-130.2	0.0008041	mg/L	0.00010509	0.0008041	mg/L	0.00010509	13.07%
Ca 315.887†	1999213.3	546.500	mg/L	7.0381	546.500	mg/L	7.0381	1.29%
QC value within limits for Ca 315.887 Recovery = 109.30%								
Cd 228.802†	-0.5	-0.0062380	mg/L	0.00133783	-0.0062380	mg/L	0.00133783	21.45%
Co 228.616†	-0.4	0.0048994	mg/L	0.00021695	0.0048994	mg/L	0.00021695	4.43%
Cr 267.716†	-10.1	0.0003617	mg/L	0.00174321	0.0003617	mg/L	0.00174321	481.93%
Cu 327.393†	-189.8	-0.0040421	mg/L	0.00163034	-0.0040421	mg/L	0.00163034	40.33%
Fe 273.955†	142486.2	205.567	mg/L	2.9315	205.567	mg/L	2.9315	1.43%
QC value within limits for Fe 273.955 Recovery = 102.78%								
K 404.721†	-24.8	-2213.90	mg/L	31.801	-2213.90	mg/L	31.801	1.44%
Mg 279.077†	647028.5	579.198	mg/L	7.7074	579.198	mg/L	7.7074	1.33%
QC value within limits for Mg 279.077 Recovery = 115.84%								
Mn 257.610†	-380.8	-0.0058159	mg/L	0.00057869	-0.0058159	mg/L	0.00057869	9.95%
Mo 202.031†	-5.8	-0.0001900	mg/L	0.00256111	-0.0001900	mg/L	0.00256111	>999.9%
Na 330.237†	-30.4	0.729218	mg/L	0.1512462	0.729218	mg/L	0.1512462	20.74%
Ni 231.604†	9.6	-0.0040788	mg/L	0.00118497	-0.0040788	mg/L	0.00118497	29.05%
Pb 220.353†	-26.5	0.0266523	mg/L	0.01087464	0.0266523	mg/L	0.01087464	40.80%
Sb 206.836†	1.8	0.0176720	mg/L	0.02707403	0.0176720	mg/L	0.02707403	153.20%
Se 196.026†	-45.9	0.0112110	mg/L	0.02053863	0.0112110	mg/L	0.02053863	183.20%
Sn 189.927†	-21.3	-0.0354031	mg/L	0.00243787	-0.0354031	mg/L	0.00243787	6.89%
Ti 334.940†	-243.5	0.0412795	mg/L	0.00037696	0.0412795	mg/L	0.00037696	0.91%
Tl 190.801†	-0.0	-0.0269767	mg/L	0.01950519	-0.0269767	mg/L	0.01950519	72.30%
V 290.880†	691.8	0.148059	mg/L	0.0071216	0.148059	mg/L	0.0071216	4.81%
Zn 206.200†	26.4	0.0043416	mg/L	0.00099316	0.0043416	mg/L	0.00099316	22.88%
B 249.772	4693.7	0.0957966	mg/L	0.01682431	0.0957966	mg/L	0.01682431	17.56%
Si 251.611	12.5	0.947151	mg/L	0.0152283	0.947151	mg/L	0.0152283	1.61%

All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 6**
Sample ID: CCV V-329036 **Date Collected: 8/28/2020 6:12:51 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 105 **Auto Dilution Factor: 1**

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	56745.5	92.3	%	0.41				0.45%
Y 371.029	20321.6	90.2	%	0.11				0.12%
Ag 328.068†	1175.6	0.0836186	mg/L	0.00061023	0.0836186	mg/L	0.00061023	0.73%
QC value less than the lower limit for Ag 328.068 Recovery = 83.62%								
Al 308.215†	6534.1	4.89342	mg/L	0.023017	4.89342	mg/L	0.023017	0.47%
QC value within limits for Al 308.215 Recovery = 97.87%								
As 188.979†	59.3	0.485727	mg/L	0.0081077	0.485727	mg/L	0.0081077	1.67%
QC value within limits for As 188.979 Recovery = 97.15%								
Ba 233.527†	4866.0	0.488206	mg/L	0.0007127	0.488206	mg/L	0.0007127	0.15%
QC value within limits for Ba 233.527 Recovery = 97.64%								
Be 313.107†	128139.8	0.501551	mg/L	0.0005541	0.501551	mg/L	0.0005541	0.11%
QC value within limits for Be 313.107 Recovery = 100.31%								
Ca 315.887†	186630.9	50.9234	mg/L	0.17486	50.9234	mg/L	0.17486	0.34%
QC value within limits for Ca 315.887 Recovery = 101.85%								
Cd 228.802†	1446.1	0.524437	mg/L	0.0003296	0.524437	mg/L	0.0003296	0.06%
QC value within limits for Cd 228.802 Recovery = 104.89%								
Co 228.616†	1236.9	0.491733	mg/L	0.0041162	0.491733	mg/L	0.0041162	0.84%
QC value within limits for Co 228.616 Recovery = 98.35%								
Cr 267.716†	3239.1	0.506126	mg/L	0.0027266	0.506126	mg/L	0.0027266	0.54%
QC value within limits for Cr 267.716 Recovery = 101.23%								
Cu 327.393†	4117.2	0.489777	mg/L	0.0032485	0.489777	mg/L	0.0032485	0.66%
QC value within limits for Cu 327.393 Recovery = 97.96%								
Fe 273.955†	3467.6	4.95543	mg/L	0.069288	4.95543	mg/L	0.069288	1.40%
QC value within limits for Fe 273.955 Recovery = 99.11%								
K 404.721†	1037.5	-2.85794	mg/L	1.048239	-2.85794	mg/L	1.048239	36.68%
QC value less than the lower limit for K 404.721 Recovery = -5.72%								
Mg 279.077†	56339.3	50.4171	mg/L	0.05188	50.4171	mg/L	0.05188	0.10%
QC value within limits for Mg 279.077 Recovery = 100.83%								
Mn 257.610†	14420.1	0.482437	mg/L	0.0019205	0.482437	mg/L	0.0019205	0.40%
QC value within limits for Mn 257.610 Recovery = 96.49%								
Mo 202.031†	671.9	0.494080	mg/L	0.0031883	0.494080	mg/L	0.0031883	0.65%
QC value within limits for Mo 202.031 Recovery = 98.82%								
Na 330.237†	2080.4	47.1652	mg/L	0.38897	47.1652	mg/L	0.38897	0.82%
QC value within limits for Na 330.237 Recovery = 94.33%								
Ni 231.604†	1810.2	0.521881	mg/L	0.0011311	0.521881	mg/L	0.0011311	0.22%
QC value within limits for Ni 231.604 Recovery = 104.38%								
Pb 220.353†	322.3	0.496277	mg/L	0.0072834	0.496277	mg/L	0.0072834	1.47%
QC value within limits for Pb 220.353 Recovery = 99.26%								
Sb 206.836†	78.0	0.506689	mg/L	0.0183175	0.506689	mg/L	0.0183175	3.62%
QC value within limits for Sb 206.836 Recovery = 101.34%								
Se 196.026†	116.7	0.494881	mg/L	0.0097839	0.494881	mg/L	0.0097839	1.98%
QC value within limits for Se 196.026 Recovery = 98.98%								
Sn 189.927†	286.1	0.493532	mg/L	0.0078831	0.493532	mg/L	0.0078831	1.60%
QC value within limits for Sn 189.927 Recovery = 98.71%								
Ti 334.940†	14557.8	0.481685	mg/L	0.0023827	0.481685	mg/L	0.0023827	0.49%
QC value within limits for Ti 334.940 Recovery = 96.34%								
Tl 190.801†	97.5	0.492372	mg/L	0.0134797	0.492372	mg/L	0.0134797	2.74%
QC value within limits for Tl 190.801 Recovery = 98.47%								
V 290.880†	2780.7	0.511377	mg/L	0.0016443	0.511377	mg/L	0.0016443	0.32%
QC value within limits for V 290.880 Recovery = 102.28%								
Zn 206.200†	1916.5	0.515031	mg/L	0.0016529	0.515031	mg/L	0.0016529	0.32%
QC value within limits for Zn 206.200 Recovery = 103.01%								
B 249.772	2730.6	0.469952	mg/L	0.0023707	0.469952	mg/L	0.0023707	0.50%
QC value within limits for B 249.772 Recovery = 93.99%								
Si 251.611	10057.9	4.81666	mg/L	0.025649	4.81666	mg/L	0.025649	0.53%
QC value within limits for Si 251.611 Recovery = 96.33%								

QC Failed. Continue with analysis.

Sequence No.: 13 **Autosampler Location: 2**
Sample ID: CCB V-329027 **Date Collected: 8/28/2020 6:16:49 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	61817.3	101	%	0.73				0.73%
Y 371.029	22685.9	101	%	0.42				0.42%
Ag 328.068†	9.3	0.0114853	mg/L	0.00048511	0.0114853	mg/L	0.00048511	4.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3.0	-0.0096492	mg/L	0.00487977	-0.0096492	mg/L	0.00487977	50.57%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.3	0.0005388	mg/L	0.00777851	0.0005388	mg/L	0.00777851	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.3	-0.0111290	mg/L	0.00030751	-0.0111290	mg/L	0.00030751	2.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	20.3	0.0013919	mg/L	0.00009275	0.0013919	mg/L	0.00009275	6.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-0.6	-0.103354	mg/L	0.0015022	-0.103354	mg/L	0.0015022	1.45%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.0	-0.0060499	mg/L	0.00074680	-0.0060499	mg/L	0.00074680	12.34%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.3	0.0055701	mg/L	0.00027843	0.0055701	mg/L	0.00027843	5.00%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	4.3	0.0019998	mg/L	0.00031294	0.0019998	mg/L	0.00031294	15.65%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	0.3	-0.0019254	mg/L	0.00030277	-0.0019254	mg/L	0.00030277	15.73%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	7.2	-0.0381666	mg/L	0.00598693	-0.0381666	mg/L	0.00598693	15.69%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	13.1	2.59895	mg/L	0.341670	2.59895	mg/L	0.341670	13.15%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	5.4	-0.0125832	mg/L	0.00150539	-0.0125832	mg/L	0.00150539	11.96%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	4.3	0.0068889	mg/L	0.00001410	0.0068889	mg/L	0.00001410	0.20%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	2.2	0.0056491	mg/L	0.00103190	0.0056491	mg/L	0.00103190	18.27%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	2.8	1.46065	mg/L	0.079545	1.46065	mg/L	0.079545	5.45%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	2.8	-0.0060298	mg/L	0.00064656	-0.0060298	mg/L	0.00064656	10.72%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.5	0.0013452	mg/L	0.00145186	0.0013452	mg/L	0.00145186	107.93%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.9	-0.0064162	mg/L	0.00801030	-0.0064162	mg/L	0.00801030	124.84%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-4.0	-0.0055279	mg/L	0.00741081	-0.0055279	mg/L	0.00741081	134.06%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.3	0.0019283	mg/L	0.00196034	0.0019283	mg/L	0.00196034	101.66%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	4.9	0.0077606	mg/L	0.00012876	0.0077606	mg/L	0.00012876	1.66%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	3.2	0.0072355	mg/L	0.00663325	0.0072355	mg/L	0.00663325	91.68%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-1.5	-0.0067578	mg/L	0.00060177	-0.0067578	mg/L	0.00060177	8.90%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	0.2	-0.0027394	mg/L	0.00032726	-0.0027394	mg/L	0.00032726	11.95%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-16.9	-0.0066927	mg/L	0.00082678	-0.0066927	mg/L	0.00082678	12.35%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	7.4	0.0720947	mg/L	0.00336925	0.0720947	mg/L	0.00336925	4.67%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: MB 85218 (1)
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 51
Date Collected: 8/28/2020 6:20:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: MB 85218 (1)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	63469.1	103	%	0.57				0.55%
Y 371.029	23066.7	102	%	0.65				0.64%
Ag 328.068†	0.2	0.0109380	mg/L	0.00041593	0.0109380	mg/L	0.00041593	3.80%
Al 308.215†	6.7	-0.0069050	mg/L	0.00184739	-0.0069050	mg/L	0.00184739	26.75%
As 188.979†	0.9	0.0055316	mg/L	0.00868043	0.0055316	mg/L	0.00868043	156.93%
Ba 233.527†	-1.0	-0.0112660	mg/L	0.00015641	-0.0112660	mg/L	0.00015641	1.39%
Be 313.107†	22.8	0.0014014	mg/L	0.00006837	0.0014014	mg/L	0.00006837	4.88%
Ca 315.887†	67.3	-0.0847659	mg/L	0.00034964	-0.0847659	mg/L	0.00034964	0.41%
Cd 228.802†	-0.9	-0.0063689	mg/L	0.00029041	-0.0063689	mg/L	0.00029041	4.56%
Co 228.616†	2.5	0.0060633	mg/L	0.00034795	0.0060633	mg/L	0.00034795	5.74%
Cr 267.716†	2.3	0.0016872	mg/L	0.00023494	0.0016872	mg/L	0.00023494	13.92%
Cu 327.393†	15.0	-0.0001612	mg/L	0.00035843	-0.0001612	mg/L	0.00035843	222.40%
Fe 273.955†	48.7	0.0217123	mg/L	0.00452130	0.0217123	mg/L	0.00452130	20.82%
K 404.721†	8.4	1.73114	mg/L	0.248076	1.73114	mg/L	0.248076	14.33%
Mg 279.077†	14.1	-0.0048352	mg/L	0.00185565	-0.0048352	mg/L	0.00185565	38.38%
Mn 257.610†	86.5	0.0095997	mg/L	0.00005275	0.0095997	mg/L	0.00005275	0.55%
Mo 202.031†	-0.2	0.0038708	mg/L	0.00060186	0.0038708	mg/L	0.00060186	15.55%
Na 330.237†	5.1	1.51135	mg/L	0.115701	1.51135	mg/L	0.115701	7.66%
Ni 231.604†	1.1	-0.0065437	mg/L	0.00066908	-0.0065437	mg/L	0.00066908	10.22%
Pb 220.353†	1.3	0.0041717	mg/L	0.00087464	0.0041717	mg/L	0.00087464	20.97%
Sb 206.836†	-0.8	0.0007030	mg/L	0.00635133	0.0007030	mg/L	0.00635133	903.42%
Se 196.026†	-5.9	-0.0132855	mg/L	0.00380709	-0.0132855	mg/L	0.00380709	28.66%
Sn 189.927†	1.6	0.0041151	mg/L	0.00209320	0.0041151	mg/L	0.00209320	50.87%
Ti 334.940†	8.0	0.0078634	mg/L	0.00004218	0.0078634	mg/L	0.00004218	0.54%
Tl 190.801†	3.8	0.0099703	mg/L	0.00144001	0.0099703	mg/L	0.00144001	14.44%
V 290.880†	-9.2	-0.0081960	mg/L	0.00053375	-0.0081960	mg/L	0.00053375	6.51%
Zn 206.200†	23.7	0.0036013	mg/L	0.00017430	0.0036013	mg/L	0.00017430	4.84%
B 249.772	-30.4	-0.0092073	mg/L	0.00122262	-0.0092073	mg/L	0.00122262	13.28%
Si 251.611	53.7	0.0935861	mg/L	0.00022170	0.0935861	mg/L	0.00022170	0.24%

Sequence No.: 15
Sample ID: LCS 85218
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 52
Date Collected: 8/28/2020 6:24:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LCS 85218

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	56358.1	91.7	%	0.34				0.37%
Y 371.029	20659.4	91.7	%	1.12				1.22%
Ag 328.068†	1448.4	0.100092	mg/L	0.0001797	0.100092	mg/L	0.0001797	0.18%
Al 308.215†	7169.0	5.36979	mg/L	0.022360	5.36979	mg/L	0.022360	0.42%
As 188.979†	64.5	0.528545	mg/L	0.0195468	0.528545	mg/L	0.0195468	3.70%
Ba 233.527†	5452.8	0.548434	mg/L	0.0011342	0.548434	mg/L	0.0011342	0.21%
Be 313.107†	140638.2	0.550343	mg/L	0.0012158	0.550343	mg/L	0.0012158	0.22%
Ca 315.887†	204577.8	55.8303	mg/L	0.16835	55.8303	mg/L	0.16835	0.30%
Cd 228.802†	1595.4	0.579233	mg/L	0.0033115	0.579233	mg/L	0.0033115	0.57%
Co 228.616†	1361.9	0.540933	mg/L	0.0032903	0.540933	mg/L	0.0032903	0.61%
Cr 267.716†	3532.2	0.551804	mg/L	0.0023636	0.551804	mg/L	0.0023636	0.43%
Cu 327.393†	4549.7	0.541428	mg/L	0.0029326	0.541428	mg/L	0.0029326	0.54%
Fe 273.955†	3810.2	5.44989	mg/L	0.031390	5.44989	mg/L	0.031390	0.58%
K 404.721†	419.8	-37.3290	mg/L	0.23301	-37.3290	mg/L	0.23301	0.62%
Mg 279.077†	61438.6	54.9820	mg/L	0.13623	54.9820	mg/L	0.13623	0.25%
Mn 257.610†	15827.9	0.528877	mg/L	0.0008843	0.528877	mg/L	0.0008843	0.17%
Mo 202.031†	747.3	0.549061	mg/L	0.0032185	0.549061	mg/L	0.0032185	0.59%
Na 330.237†	2259.2	51.0983	mg/L	0.36911	51.0983	mg/L	0.36911	0.72%
Ni 231.604†	1983.3	0.572458	mg/L	0.0021953	0.572458	mg/L	0.0021953	0.38%
Pb 220.353†	356.1	0.548202	mg/L	0.0050000	0.548202	mg/L	0.0050000	0.91%
Sb 206.836†	86.5	0.561348	mg/L	0.0219682	0.561348	mg/L	0.0219682	3.91%
Se 196.026†	127.2	0.538567	mg/L	0.0069900	0.538567	mg/L	0.0069900	1.30%
Sn 189.927†	314.0	0.541513	mg/L	0.0074402	0.541513	mg/L	0.0074402	1.37%
Ti 334.940†	16025.7	0.529470	mg/L	0.0026226	0.529470	mg/L	0.0026226	0.50%
Tl 190.801†	106.3	0.537676	mg/L	0.0258800	0.537676	mg/L	0.0258800	4.81%
V 290.880†	3046.9	0.560931	mg/L	0.0035180	0.560931	mg/L	0.0035180	0.63%
Zn 206.200†	2091.0	0.562180	mg/L	0.0026046	0.562180	mg/L	0.0026046	0.46%
B 249.772	3030.8	0.515697	mg/L	0.0043293	0.515697	mg/L	0.0043293	0.84%
Si 251.611	1295.9	0.779484	mg/L	0.0036997	0.779484	mg/L	0.0036997	0.47%

Sequence No.: 16 **Autosampler Location: 53**
Sample ID: LCS MR 85218 **Date Collected: 8/28/2020 6:28:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: LCS MR 85218

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	56850.1	92.5	%	0.95				1.03%
Y 371.029	20816.3	92.4	%	1.25				1.36%
Ag 328.068†	1449.9	0.100155	mg/L	0.0012514	0.100155	mg/L	0.0012514	1.25%
Al 308.215†	7194.5	5.38864	mg/L	0.023450	5.38864	mg/L	0.023450	0.44%
As 188.979†	62.6	0.511547	mg/L	0.0226185	0.511547	mg/L	0.0226185	4.42%
Ba 233.527†	5489.4	0.552189	mg/L	0.0013453	0.552189	mg/L	0.0013453	0.24%
Be 313.107†	141168.9	0.552414	mg/L	0.0008677	0.552414	mg/L	0.0008677	0.16%
Ca 315.887†	205495.1	56.0811	mg/L	0.10576	56.0811	mg/L	0.10576	0.19%
Cd 228.802†	1598.9	0.580502	mg/L	0.0089341	0.580502	mg/L	0.0089341	1.54%
Co 228.616†	1362.0	0.540965	mg/L	0.0039689	0.540965	mg/L	0.0039689	0.73%
Cr 267.716†	3530.7	0.551542	mg/L	0.0060216	0.551542	mg/L	0.0060216	1.09%
Cu 327.393†	4540.6	0.540344	mg/L	0.0008397	0.540344	mg/L	0.0008397	0.16%
Fe 273.955†	3856.3	5.51636	mg/L	0.005193	5.51636	mg/L	0.005193	0.09%
K 404.721†	414.7	-38.2872	mg/L	0.70051	-38.2872	mg/L	0.70051	1.83%
Mg 279.077†	61483.4	55.0221	mg/L	0.07602	55.0221	mg/L	0.07602	0.14%
Mn 257.610†	15925.2	0.532089	mg/L	0.0006019	0.532089	mg/L	0.0006019	0.11%
Mo 202.031†	746.0	0.548111	mg/L	0.0069892	0.548111	mg/L	0.0069892	1.28%
Na 330.237†	2286.1	51.6902	mg/L	0.08532	51.6902	mg/L	0.08532	0.17%
Ni 231.604†	1984.8	0.572886	mg/L	0.0061910	0.572886	mg/L	0.0061910	1.08%
Pb 220.353†	356.6	0.548952	mg/L	0.0025404	0.548952	mg/L	0.0025404	0.46%
Sb 206.836†	85.3	0.553846	mg/L	0.0132909	0.553846	mg/L	0.0132909	2.40%
Se 196.026†	129.0	0.546120	mg/L	0.0149892	0.546120	mg/L	0.0149892	2.74%
Sn 189.927†	316.8	0.546283	mg/L	0.0095230	0.546283	mg/L	0.0095230	1.74%
Ti 334.940†	16088.7	0.531524	mg/L	0.0016892	0.531524	mg/L	0.0016892	0.32%
Tl 190.801†	107.8	0.545155	mg/L	0.0112981	0.545155	mg/L	0.0112981	2.07%
V 290.880†	3015.8	0.555183	mg/L	0.0023308	0.555183	mg/L	0.0023308	0.42%
Zn 206.200†	2120.6	0.570169	mg/L	0.0064014	0.570169	mg/L	0.0064014	1.12%
B 249.772	3100.8	0.527527	mg/L	0.0064955	0.527527	mg/L	0.0064955	1.23%
Si 251.611	1324.3	0.793451	mg/L	0.0012666	0.793451	mg/L	0.0012666	0.16%

Sequence No.: 17
Sample ID: AD18923-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 54
Date Collected: 8/28/2020 6:32:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	52831.4	85.9	%	0.21				0.24%
Y 371.029	20441.3	90.7	%	0.52				0.58%
Ag 328.068†	489.0	0.0403430	mg/L	0.00052337	0.0403430	mg/L	0.00052337	1.30%
Al 308.215†	67.8	0.0416013	mg/L	0.00529934	0.0416013	mg/L	0.00529934	12.74%
As 188.979†	0.5	0.0019933	mg/L	0.01269502	0.0019933	mg/L	0.01269502	636.88%
Ba 233.527†	900.1	0.0812083	mg/L	0.00072223	0.0812083	mg/L	0.00072223	0.89%
Be 313.107†	-132.6	0.0007949	mg/L	0.00012144	0.0007949	mg/L	0.00012144	15.28%
Ca 315.887†	7062068.0	1930.73	mg/L	10.615	1930.73	mg/L	10.615	0.55%
Cd 228.802†	7.4	-0.0033160	mg/L	0.00121935	-0.0033160	mg/L	0.00121935	36.77%
Co 228.616†	3.4	0.0064217	mg/L	0.00066396	0.0064217	mg/L	0.00066396	10.34%
Cr 267.716†	12.7	0.0035447	mg/L	0.00029008	0.0035447	mg/L	0.00029008	8.18%
Cu 327.393†	-156.4	-0.0204171	mg/L	0.00123507	-0.0204171	mg/L	0.00123507	6.05%
Fe 273.955†	1363.9	1.91967	mg/L	0.005941	1.91967	mg/L	0.005941	0.31%
K 404.721†	53.5	-16.5864	mg/L	0.00943	-16.5864	mg/L	0.00943	0.06%
Mg 279.077†	36023.9	32.2309	mg/L	0.09626	32.2309	mg/L	0.09626	0.30%
Mn 257.610†	62946.4	2.08322	mg/L	0.001874	2.08322	mg/L	0.001874	0.09%
Mo 202.031†	3.5	0.0065532	mg/L	0.00063396	0.0065532	mg/L	0.00063396	9.67%
Na 330.237†	159.0	4.89718	mg/L	0.166938	4.89718	mg/L	0.166938	3.41%
Ni 231.604†	100.3	0.0223735	mg/L	0.00043578	0.0223735	mg/L	0.00043578	1.95%
Pb 220.353†	-4.7	-0.0049208	mg/L	0.00287527	-0.0049208	mg/L	0.00287527	58.43%
Sb 206.836†	0.9	0.0116283	mg/L	0.01325955	0.0116283	mg/L	0.01325955	114.03%
Se 196.026†	-3.1	0.154699	mg/L	0.0104696	0.154699	mg/L	0.0104696	6.77%
Sn 189.927†	-22.1	-0.0366360	mg/L	0.00475738	-0.0366360	mg/L	0.00475738	12.99%
Ti 334.940†	-923.0	0.124535	mg/L	0.0012335	0.124535	mg/L	0.0012335	0.99%
Tl 190.801†	1.9	-0.108328	mg/L	0.0095706	-0.108328	mg/L	0.0095706	8.83%
V 290.880†	279.6	0.0471064	mg/L	0.00115068	0.0471064	mg/L	0.00115068	2.44%
Zn 206.200†	4812.5	1.29751	mg/L	0.003843	1.29751	mg/L	0.003843	0.30%
B 249.772	255.4	0.0450203	mg/L	0.00132488	0.0450203	mg/L	0.00132488	2.94%
Si 251.611	1284.9	1.18050	mg/L	0.004324	1.18050	mg/L	0.004324	0.37%

Sequence No.: 18
Sample ID: AD18923-001 MR
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 55
Date Collected: 8/28/2020 6:36:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001 MR

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	54665.0	88.9	%	0.51				0.58%
Y 371.029	20563.3	91.3	%	0.76				0.83%
Ag 328.068†	468.8	0.0391275	mg/L	0.00011087	0.0391275	mg/L	0.00011087	0.28%
Al 308.215†	61.9	0.0370504	mg/L	0.00210667	0.0370504	mg/L	0.00210667	5.69%
As 188.979†	1.5	0.0107306	mg/L	0.01298953	0.0107306	mg/L	0.01298953	121.05%
Ba 233.527†	876.1	0.0787502	mg/L	0.00090418	0.0787502	mg/L	0.00090418	1.15%
Be 313.107†	-88.0	0.0009692	mg/L	0.00006375	0.0009692	mg/L	0.00006375	6.58%
Ca 315.887†	6573182.1	1797.07	mg/L	15.786	1797.07	mg/L	15.786	0.88%
Cd 228.802†	9.5	-0.0025645	mg/L	0.00028582	-0.0025645	mg/L	0.00028582	11.15%
Co 228.616†	2.8	0.0061739	mg/L	0.00135524	0.0061739	mg/L	0.00135524	21.95%
Cr 267.716†	15.7	0.0039966	mg/L	0.00026770	0.0039966	mg/L	0.00026770	6.70%
Cu 327.393†	-143.7	-0.0189113	mg/L	0.00066044	-0.0189113	mg/L	0.00066044	3.49%
Fe 273.955†	1336.3	1.87987	mg/L	0.014996	1.87987	mg/L	0.014996	0.80%
K 404.721†	73.3	-15.2234	mg/L	0.81532	-15.2234	mg/L	0.81532	5.36%
Mg 279.077†	35976.2	32.1882	mg/L	0.04443	32.1882	mg/L	0.04443	0.14%
Mn 257.610†	63674.5	2.10724	mg/L	0.002416	2.10724	mg/L	0.002416	0.11%
Mo 202.031†	2.4	0.0057594	mg/L	0.00051269	0.0057594	mg/L	0.00051269	8.90%
Na 330.237†	155.3	4.81535	mg/L	0.053135	4.81535	mg/L	0.053135	1.10%
Ni 231.604†	98.0	0.0217113	mg/L	0.00050395	0.0217113	mg/L	0.00050395	2.32%
Pb 220.353†	-5.2	-0.0056670	mg/L	0.00295183	-0.0056670	mg/L	0.00295183	52.09%
Sb 206.836†	-1.6	-0.0041855	mg/L	0.01818504	-0.0041855	mg/L	0.01818504	434.48%
Se 196.026†	-3.8	0.141254	mg/L	0.0104657	0.141254	mg/L	0.0104657	7.41%
Sn 189.927†	-19.6	-0.0323588	mg/L	0.00827090	-0.0323588	mg/L	0.00827090	25.56%
Ti 334.940†	-896.4	0.115234	mg/L	0.0013992	0.115234	mg/L	0.0013992	1.21%
Tl 190.801†	2.4	-0.0975773	mg/L	0.01686261	-0.0975773	mg/L	0.01686261	17.28%
V 290.880†	264.5	0.0443183	mg/L	0.00031533	0.0443183	mg/L	0.00031533	0.71%
Zn 206.200†	4720.7	1.27272	mg/L	0.002826	1.27272	mg/L	0.002826	0.22%
B 249.772	236.8	0.0419244	mg/L	0.00092827	0.0419244	mg/L	0.00092827	2.21%
Si 251.611	1286.8	1.15012	mg/L	0.006977	1.15012	mg/L	0.006977	0.61%

Sequence No.: 19
Sample ID: AD18923-001 MS 1
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 56
Date Collected: 8/28/2020 6:41:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001 MS 1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	52750.7	85.8	%	0.44				0.52%
Y 371.029	20054.2	89.0	%	0.87				0.97%
Ag 328.068†	1789.8	0.120442	mg/L	0.0005455	0.120442	mg/L	0.0005455	0.45%
Al 308.215†	7223.4	5.41100	mg/L	0.002705	5.41100	mg/L	0.002705	0.05%
As 188.979†	68.5	0.563938	mg/L	0.0205066	0.563938	mg/L	0.0205066	3.64%
Ba 233.527†	6063.2	0.611073	mg/L	0.0009525	0.611073	mg/L	0.0009525	0.16%
Be 313.107†	131687.3	0.515400	mg/L	0.0025088	0.515400	mg/L	0.0025088	0.49%
Ca 315.887†	6961554.6	1903.25	mg/L	9.018	1903.25	mg/L	9.018	0.47%
Cd 228.802†	1639.6	0.595431	mg/L	0.0042312	0.595431	mg/L	0.0042312	0.71%
Co 228.616†	1261.0	0.501219	mg/L	0.0027849	0.501219	mg/L	0.0027849	0.56%
Cr 267.716†	3364.3	0.525757	mg/L	0.0036856	0.525757	mg/L	0.0036856	0.70%
Cu 327.393†	4587.8	0.546111	mg/L	0.0035178	0.546111	mg/L	0.0035178	0.64%
Fe 273.955†	4794.4	6.87012	mg/L	0.013262	6.87012	mg/L	0.013262	0.19%
K 404.721†	591.1	-44.5461	mg/L	0.57546	-44.5461	mg/L	0.57546	1.29%
Mg 279.077†	96664.0	86.5156	mg/L	0.12606	86.5156	mg/L	0.12606	0.15%
Mn 257.610†	77818.6	2.57383	mg/L	0.003614	2.57383	mg/L	0.003614	0.14%
Mo 202.031†	720.0	0.529154	mg/L	0.0078389	0.529154	mg/L	0.0078389	1.48%
Na 330.237†	2797.6	62.9426	mg/L	0.33875	62.9426	mg/L	0.33875	0.54%
Ni 231.604†	1929.6	0.556773	mg/L	0.0024512	0.556773	mg/L	0.0024512	0.44%
Pb 220.353†	326.2	0.502392	mg/L	0.0033620	0.502392	mg/L	0.0033620	0.67%
Sb 206.836†	88.9	0.575754	mg/L	0.0306557	0.575754	mg/L	0.0306557	5.32%
Se 196.026†	142.4	0.750301	mg/L	0.0186363	0.750301	mg/L	0.0186363	2.48%
Sn 189.927†	285.5	0.492362	mg/L	0.0080379	0.492362	mg/L	0.0080379	1.63%
Ti 334.940†	14874.1	0.632680	mg/L	0.0017580	0.632680	mg/L	0.0017580	0.28%
Tl 190.801†	96.4	0.382464	mg/L	0.0046044	0.382464	mg/L	0.0046044	1.20%
V 290.880†	3040.1	0.561466	mg/L	0.0015504	0.561466	mg/L	0.0015504	0.28%
Zn 206.200†	6573.8	1.77340	mg/L	0.005249	1.77340	mg/L	0.005249	0.30%
B 249.772	3142.4	0.540889	mg/L	0.0020202	0.540889	mg/L	0.0020202	0.37%
Si 251.611	2263.4	1.72170	mg/L	0.004022	1.72170	mg/L	0.004022	0.23%

Sequence No.: 20
Sample ID: AD18923-001 PS
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 57
Date Collected: 8/28/2020 6:45:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	50626.8	82.4	%	2.76				3.35%
Y 371.029	19492.8	86.5	%	2.43				2.81%
Ag 328.068†	1693.4	0.114695	mg/L	0.0034133	0.114695	mg/L	0.0034133	2.98%
Al 308.215†	7017.3	5.25683	mg/L	0.201960	5.25683	mg/L	0.201960	3.84%
As 188.979†	68.5	0.563767	mg/L	0.0191992	0.563767	mg/L	0.0191992	3.41%
Ba 233.527†	5859.6	0.590180	mg/L	0.0214406	0.590180	mg/L	0.0214406	3.63%
Be 313.107†	132871.0	0.520020	mg/L	0.0204282	0.520020	mg/L	0.0204282	3.93%
Ca 315.887†	6993374.9	1911.95	mg/L	58.949	1911.95	mg/L	58.949	3.08%
Cd 228.802†	1599.5	0.580703	mg/L	0.0202361	0.580703	mg/L	0.0202361	3.48%
Co 228.616†	1228.0	0.488214	mg/L	0.0170741	0.488214	mg/L	0.0170741	3.50%
Cr 267.716†	3337.6	0.521612	mg/L	0.0191780	0.521612	mg/L	0.0191780	3.68%
Cu 327.393†	4507.0	0.536465	mg/L	0.0190801	0.536465	mg/L	0.0190801	3.56%
Fe 273.955†	4749.0	6.80456	mg/L	0.273471	6.80456	mg/L	0.273471	4.02%
K 404.721†	584.8	-44.1349	mg/L	1.72361	-44.1349	mg/L	1.72361	3.91%
Mg 279.077†	95669.9	85.6257	mg/L	3.41675	85.6257	mg/L	3.41675	3.99%
Mn 257.610†	77490.5	2.56301	mg/L	0.098727	2.56301	mg/L	0.098727	3.85%
Mo 202.031†	703.4	0.517057	mg/L	0.0168486	0.517057	mg/L	0.0168486	3.26%
Na 330.237†	2820.4	63.4430	mg/L	2.71977	63.4430	mg/L	2.71977	4.29%
Ni 231.604†	1908.1	0.550452	mg/L	0.0195540	0.550452	mg/L	0.0195540	3.55%
Pb 220.353†	317.4	0.488872	mg/L	0.0206760	0.488872	mg/L	0.0206760	4.23%
Sb 206.836†	89.3	0.578136	mg/L	0.0231757	0.578136	mg/L	0.0231757	4.01%
Se 196.026†	145.3	0.762745	mg/L	0.0192280	0.762745	mg/L	0.0192280	2.52%
Sn 189.927†	277.8	0.479249	mg/L	0.0126153	0.479249	mg/L	0.0126153	2.63%
Ti 334.940†	14277.3	0.614064	mg/L	0.0218331	0.614064	mg/L	0.0218331	3.56%
Tl 190.801†	94.3	0.371100	mg/L	0.0286895	0.371100	mg/L	0.0286895	7.73%
V 290.880†	3021.2	0.557917	mg/L	0.0217761	0.557917	mg/L	0.0217761	3.90%
Zn 206.200†	6761.0	1.82400	mg/L	0.074066	1.82400	mg/L	0.074066	4.06%
B 249.772	2898.1	0.499386	mg/L	0.0016653	0.499386	mg/L	0.0016653	0.33%
Si 251.611	2239.5	1.71131	mg/L	0.028193	1.71131	mg/L	0.028193	1.65%

Sequence No.: 21
Sample ID: AD18923-001 SD
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 58
Date Collected: 8/28/2020 6:49:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001 SD

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	56580.6	92.0	%	0.42				0.45%
Y 371.029	20810.8	92.4	%	0.53				0.58%
Ag 328.068†	119.4	0.0181114	mg/L	0.00015858	0.0181114	mg/L	0.00015858	0.88%
Al 308.215†	28.1	0.0098292	mg/L	0.00567130	0.0098292	mg/L	0.00567130	57.70%
As 188.979†	2.9	0.0232940	mg/L	0.01059899	0.0232940	mg/L	0.01059899	45.50%
Ba 233.527†	178.9	0.0072003	mg/L	0.00042118	0.0072003	mg/L	0.00042118	5.85%
Be 313.107†	-66.0	0.0010548	mg/L	0.00000726	0.0010548	mg/L	0.00000726	0.69%
Ca 315.887†	1628444.3	445.129	mg/L	3.0190	445.129	mg/L	3.0190	0.68%
Cd 228.802†	1.5	-0.0054898	mg/L	0.00055898	-0.0054898	mg/L	0.00055898	10.18%
Co 228.616†	1.8	0.0057909	mg/L	0.00131569	0.0057909	mg/L	0.00131569	22.72%
Cr 267.716†	6.7	0.0024393	mg/L	0.00092737	0.0024393	mg/L	0.00092737	38.02%
Cu 327.393†	-48.6	-0.0077185	mg/L	0.00064900	-0.0077185	mg/L	0.00064900	8.41%
Fe 273.955†	275.8	0.349458	mg/L	0.0025905	0.349458	mg/L	0.0025905	0.74%
K 404.721†	33.4	-0.622359	mg/L	0.8246306	-0.622359	mg/L	0.8246306	132.50%
Mg 279.077†	7480.5	6.67910	mg/L	0.003076	6.67910	mg/L	0.003076	0.05%
Mn 257.610†	12453.2	0.417556	mg/L	0.0011109	0.417556	mg/L	0.0011109	0.27%
Mo 202.031†	3.5	0.0065770	mg/L	0.00113418	0.0065770	mg/L	0.00113418	17.24%
Na 330.237†	22.5	1.89390	mg/L	0.119027	1.89390	mg/L	0.119027	6.28%
Ni 231.604†	23.9	0.0001081	mg/L	0.00072130	0.0001081	mg/L	0.00072130	667.50%
Pb 220.353†	1.0	0.0036731	mg/L	0.00513257	0.0036731	mg/L	0.00513257	139.73%
Sb 206.836†	-1.8	-0.0053083	mg/L	0.00609718	-0.0053083	mg/L	0.00609718	114.86%
Se 196.026†	-3.4	0.0330994	mg/L	0.01243752	0.0330994	mg/L	0.01243752	37.58%
Sn 189.927†	-11.7	-0.0188002	mg/L	0.00210223	-0.0188002	mg/L	0.00210223	11.18%
Ti 334.940†	-208.2	0.0347179	mg/L	0.00013700	0.0347179	mg/L	0.00013700	0.39%
Tl 190.801†	1.9	-0.0249306	mg/L	0.00251817	-0.0249306	mg/L	0.00251817	10.10%
V 290.880†	74.4	0.0076684	mg/L	0.00018335	0.0076684	mg/L	0.00018335	2.39%
Zn 206.200†	1040.2	0.278261	mg/L	0.0025171	0.278261	mg/L	0.0025171	0.90%
B 249.772	27.6	0.0020242	mg/L	0.00112801	0.0020242	mg/L	0.00112801	55.73%
Si 251.611	268.7	0.310336	mg/L	0.0015507	0.310336	mg/L	0.0015507	0.50%

Sequence No.: 22 **Autosampler Location: 6**
Sample ID: CCV V-329036 **Date Collected: 8/28/2020 6:54:03 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	56660.1	92.2	%	0.98				1.06%
Y 371.029	20247.6	89.9	%	1.64				1.83%
Ag 328.068†	1218.7	0.0862164	mg/L	0.00070882	0.0862164	mg/L	0.00070882	0.82%
QC value less than the lower limit for Ag 328.068 Recovery = 86.22%								
Al 308.215†	6597.3	4.94089	mg/L	0.010420	4.94089	mg/L	0.010420	0.21%
QC value within limits for Al 308.215 Recovery = 98.82%								
As 188.979†	58.3	0.476550	mg/L	0.0042365	0.476550	mg/L	0.0042365	0.89%
QC value within limits for As 188.979 Recovery = 95.31%								
Ba 233.527†	4916.6	0.493403	mg/L	0.0012813	0.493403	mg/L	0.0012813	0.26%
QC value within limits for Ba 233.527 Recovery = 98.68%								
Be 313.107†	129818.4	0.508103	mg/L	0.0009229	0.508103	mg/L	0.0009229	0.18%
QC value within limits for Be 313.107 Recovery = 101.62%								
Ca 315.887†	190181.9	51.8943	mg/L	0.15775	51.8943	mg/L	0.15775	0.30%
QC value within limits for Ca 315.887 Recovery = 103.79%								
Cd 228.802†	1461.5	0.530080	mg/L	0.0062086	0.530080	mg/L	0.0062086	1.17%
QC value within limits for Cd 228.802 Recovery = 106.02%								
Co 228.616†	1247.8	0.496042	mg/L	0.0058648	0.496042	mg/L	0.0058648	1.18%
QC value within limits for Co 228.616 Recovery = 99.21%								
Cr 267.716†	3280.7	0.512601	mg/L	0.0061279	0.512601	mg/L	0.0061279	1.20%
QC value within limits for Cr 267.716 Recovery = 102.52%								
Cu 327.393†	4181.6	0.497464	mg/L	0.0022416	0.497464	mg/L	0.0022416	0.45%
QC value within limits for Cu 327.393 Recovery = 99.49%								
Fe 273.955†	3515.7	5.02478	mg/L	0.038038	5.02478	mg/L	0.038038	0.76%
QC value within limits for Fe 273.955 Recovery = 100.50%								
K 404.721†	1042.9	-3.34688	mg/L	0.263786	-3.34688	mg/L	0.263786	7.88%
QC value less than the lower limit for K 404.721 Recovery = -6.69%								
Mg 279.077†	57189.9	51.1786	mg/L	0.18652	51.1786	mg/L	0.18652	0.36%
QC value within limits for Mg 279.077 Recovery = 102.36%								
Mn 257.610†	14599.7	0.488362	mg/L	0.0016392	0.488362	mg/L	0.0016392	0.34%
QC value within limits for Mn 257.610 Recovery = 97.67%								
Mo 202.031†	679.9	0.499863	mg/L	0.0058352	0.499863	mg/L	0.0058352	1.17%
QC value within limits for Mo 202.031 Recovery = 99.97%								
Na 330.237†	2106.8	47.7447	mg/L	0.72480	47.7447	mg/L	0.72480	1.52%
QC value within limits for Na 330.237 Recovery = 95.49%								
Ni 231.604†	1827.8	0.527031	mg/L	0.0065761	0.527031	mg/L	0.0065761	1.25%
QC value within limits for Ni 231.604 Recovery = 105.41%								
Pb 220.353†	331.5	0.510452	mg/L	0.0085129	0.510452	mg/L	0.0085129	1.67%
QC value within limits for Pb 220.353 Recovery = 102.09%								
Sb 206.836†	82.4	0.534297	mg/L	0.0118583	0.534297	mg/L	0.0118583	2.22%
QC value within limits for Sb 206.836 Recovery = 106.86%								
Se 196.026†	118.0	0.500608	mg/L	0.0051037	0.500608	mg/L	0.0051037	1.02%
QC value within limits for Se 196.026 Recovery = 100.12%								
Sn 189.927†	290.4	0.500902	mg/L	0.0026280	0.500902	mg/L	0.0026280	0.52%
QC value within limits for Sn 189.927 Recovery = 100.18%								
Ti 334.940†	14756.0	0.488161	mg/L	0.0010729	0.488161	mg/L	0.0010729	0.22%
QC value within limits for Ti 334.940 Recovery = 97.63%								
Tl 190.801†	99.0	0.500285	mg/L	0.0176911	0.500285	mg/L	0.0176911	3.54%
QC value within limits for Tl 190.801 Recovery = 100.06%								
V 290.880†	2816.9	0.518122	mg/L	0.0032188	0.518122	mg/L	0.0032188	0.62%
QC value within limits for V 290.880 Recovery = 103.62%								
Zn 206.200†	1945.9	0.522982	mg/L	0.0061405	0.522982	mg/L	0.0061405	1.17%
QC value within limits for Zn 206.200 Recovery = 104.60%								
B 249.772	2958.3	0.508841	mg/L	0.0036168	0.508841	mg/L	0.0036168	0.71%
QC value within limits for B 249.772 Recovery = 101.77%								
Si 251.611	10170.2	4.87063	mg/L	0.053482	4.87063	mg/L	0.053482	1.10%
QC value within limits for Si 251.611 Recovery = 97.41%								

QC Failed. Continue with analysis.

Sequence No.: 23 **Autosampler Location: 2**
Sample ID: CCB V-329027 **Date Collected: 8/28/2020 6:58:01 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	62345.0	101	%	1.06				1.04%
Y 371.029	22877.6	102	%	1.13				1.11%
Ag 328.068†	3.3	0.0111219	mg/L	0.00057452	0.0111219	mg/L	0.00057452	5.17%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-2.4	-0.0136508	mg/L	0.00292198	-0.0136508	mg/L	0.00292198	21.41%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.2	0.0002426	mg/L	0.00595265	0.0002426	mg/L	0.00595265	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-1.4	-0.0113029	mg/L	0.00009122	-0.0113029	mg/L	0.00009122	0.81%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	26.7	0.0014169	mg/L	0.00004535	0.0014169	mg/L	0.00004535	3.20%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	24.7	-0.0964284	mg/L	0.00418005	-0.0964284	mg/L	0.00418005	4.33%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-1.4	-0.0065536	mg/L	0.00036372	-0.0065536	mg/L	0.00036372	5.55%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.3	0.0055687	mg/L	0.00019365	0.0055687	mg/L	0.00019365	3.48%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.8	0.0016193	mg/L	0.00044346	0.0016193	mg/L	0.00044346	27.39%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	2.1	-0.0017089	mg/L	0.00076306	-0.0017089	mg/L	0.00076306	44.65%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	5.8	-0.0401027	mg/L	0.00442554	-0.0401027	mg/L	0.00442554	11.04%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	19.0	2.89764	mg/L	0.217095	2.89764	mg/L	0.217095	7.49%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	11.8	-0.0068291	mg/L	0.00085219	-0.0068291	mg/L	0.00085219	12.48%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	4.6	0.0068993	mg/L	0.00009150	0.0068993	mg/L	0.00009150	1.33%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.7	0.0045585	mg/L	0.00058405	0.0045585	mg/L	0.00058405	12.81%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.5	1.43186	mg/L	0.031994	1.43186	mg/L	0.031994	2.23%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	1.0	-0.0065542	mg/L	0.00146354	-0.0065542	mg/L	0.00146354	22.33%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.7	0.0047554	mg/L	0.00571757	0.0047554	mg/L	0.00571757	120.23%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.0	-0.0006848	mg/L	0.01342266	-0.0006848	mg/L	0.01342266	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.1	0.0062156	mg/L	0.00240372	0.0062156	mg/L	0.00240372	38.67%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.2	0.0010583	mg/L	0.00285405	0.0010583	mg/L	0.00285405	269.67%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	0.7	0.0076272	mg/L	0.00009787	0.0076272	mg/L	0.00009787	1.28%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.9	0.0003020	mg/L	0.00290029	0.0003020	mg/L	0.00290029	960.49%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-4.1	-0.0072442	mg/L	0.00102394	-0.0072442	mg/L	0.00102394	14.13%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-0.5	-0.0029189	mg/L	0.00018056	-0.0029189	mg/L	0.00018056	6.19%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-40.8	-0.0106958	mg/L	0.00116217	-0.0106958	mg/L	0.00116217	10.87%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	9.6	0.0732252	mg/L	0.00079295	0.0732252	mg/L	0.00079295	1.08%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 24
Sample ID: AD18922-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 59
Date Collected: 8/28/2020 7:01:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18922-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	52278.3	85.0	%	0.23				0.27%
Y 371.029	19207.3	85.2	%	0.61				0.72%
Ag 328.068†	132.5	0.0189982	mg/L	0.00013386	0.0189982	mg/L	0.00013386	0.70%
Al 308.215†	315.9	0.226464	mg/L	0.0027186	0.226464	mg/L	0.0027186	1.20%
As 188.979†	1.0	0.0064441	mg/L	0.02917664	0.0064441	mg/L	0.02917664	452.77%
Ba 233.527†	5101.9	0.512418	mg/L	0.0007706	0.512418	mg/L	0.0007706	0.15%
Be 313.107†	-58.3	0.0010851	mg/L	0.00004381	0.0010851	mg/L	0.00004381	4.04%
Ca 315.887†	1691977.1	462.499	mg/L	0.3848	462.499	mg/L	0.3848	0.08%
Cd 228.802†	16.2	-0.0001141	mg/L	0.00046703	-0.0001141	mg/L	0.00046703	409.36%
Co 228.616†	84.9	0.0384775	mg/L	0.00115277	0.0384775	mg/L	0.00115277	3.00%
Cr 267.716†	97.8	0.0166753	mg/L	0.00032281	0.0166753	mg/L	0.00032281	1.94%
Cu 327.393†	582.4	0.0675473	mg/L	0.00118690	0.0675473	mg/L	0.00118690	1.76%
Fe 273.955†	115.1	0.117652	mg/L	0.0070271	0.117652	mg/L	0.0070271	5.97%
K 404.721†	93.3	4.70173	mg/L	0.409016	4.70173	mg/L	0.409016	8.70%
Mg 279.077†	15310.7	13.6886	mg/L	0.03954	13.6886	mg/L	0.03954	0.29%
Mn 257.610†	78865.5	2.60836	mg/L	0.006322	2.60836	mg/L	0.006322	0.24%
Mo 202.031†	6.7	0.0089248	mg/L	0.00224337	0.0089248	mg/L	0.00224337	25.14%
Na 330.237†	89694.2	1974.55	mg/L	4.138	1974.55	mg/L	4.138	0.21%
Ni 231.604†	301.8	0.0810741	mg/L	0.00124246	0.0810741	mg/L	0.00124246	1.53%
Pb 220.353†	100.3	0.155523	mg/L	0.0074841	0.155523	mg/L	0.0074841	4.81%
Sb 206.836†	0.7	0.0105293	mg/L	0.01852464	0.0105293	mg/L	0.01852464	175.93%
Se 196.026†	-2.7	0.0374250	mg/L	0.00314751	0.0374250	mg/L	0.00314751	8.41%
Sn 189.927†	-11.3	-0.0180326	mg/L	0.00573676	-0.0180326	mg/L	0.00573676	31.81%
Ti 334.940†	-211.2	0.0359404	mg/L	0.00020530	0.0359404	mg/L	0.00020530	0.57%
Tl 190.801†	2.6	-0.0155915	mg/L	0.00753135	-0.0155915	mg/L	0.00753135	48.30%
V 290.880†	204.2	0.0321243	mg/L	0.00171870	0.0321243	mg/L	0.00171870	5.35%
Zn 206.200†	2444.1	0.657598	mg/L	0.0006398	0.657598	mg/L	0.0006398	0.10%
B 249.772	339.6	0.0548552	mg/L	0.00069910	0.0548552	mg/L	0.00069910	1.27%
Si 251.611	12960.1	6.30001	mg/L	0.019531	6.30001	mg/L	0.019531	0.31%

Sequence No.: 25
Sample ID: AD18923-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 60
Date Collected: 8/28/2020 7:06:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	60719.3	98.8	%	0.58				0.58%
Y 371.029	21554.8	95.7	%	0.58				0.60%
Ag 328.068†	28.0	0.0127767	mg/L	0.00026295	0.0127767	mg/L	0.00026295	2.06%
Al 308.215†	13.0	-0.0010793	mg/L	0.00089605	-0.0010793	mg/L	0.00089605	83.02%
As 188.979†	0.6	0.0026242	mg/L	0.00659512	0.0026242	mg/L	0.00659512	251.32%
Ba 233.527†	362.4	0.0260367	mg/L	0.00050963	0.0260367	mg/L	0.00050963	1.96%
Be 313.107†	-6.2	0.0012882	mg/L	0.00003901	0.0012882	mg/L	0.00003901	3.03%
Ca 315.887†	431282.6	117.813	mg/L	0.6273	117.813	mg/L	0.6273	0.53%
Cd 228.802†	2.6	-0.0050831	mg/L	0.00009003	-0.0050831	mg/L	0.00009003	1.77%
Co 228.616†	5.8	0.0073514	mg/L	0.00081047	0.0073514	mg/L	0.00081047	11.02%
Cr 267.716†	3.1	0.0019141	mg/L	0.00047388	0.0019141	mg/L	0.00047388	24.76%
Cu 327.393†	5.8	-0.0011519	mg/L	0.00054452	-0.0011519	mg/L	0.00054452	47.27%
Fe 273.955†	819.3	1.13384	mg/L	0.012567	1.13384	mg/L	0.012567	1.11%
K 404.721†	36.0	-8.94571	mg/L	0.945080	-8.94571	mg/L	0.945080	10.56%
Mg 279.077†	12370.0	11.0562	mg/L	0.01770	11.0562	mg/L	0.01770	0.16%
Mn 257.610†	6876.0	0.233572	mg/L	0.0005462	0.233572	mg/L	0.0005462	0.23%
Mo 202.031†	3.0	0.0062384	mg/L	0.00101818	0.0062384	mg/L	0.00101818	16.32%
Na 330.237†	2185.7	49.4802	mg/L	0.24789	49.4802	mg/L	0.24789	0.50%
Ni 231.604†	143.9	0.0350630	mg/L	0.00092255	0.0350630	mg/L	0.00092255	2.63%
Pb 220.353†	1.2	0.0039993	mg/L	0.00203549	0.0039993	mg/L	0.00203549	50.90%
Sb 206.836†	-1.1	-0.0009141	mg/L	0.00616300	-0.0009141	mg/L	0.00616300	674.22%
Se 196.026†	-2.8	0.0098525	mg/L	0.00167487	0.0098525	mg/L	0.00167487	17.00%
Sn 189.927†	-7.4	-0.0114325	mg/L	0.00192376	-0.0114325	mg/L	0.00192376	16.83%
Ti 334.940†	-34.3	0.0154569	mg/L	0.00011108	0.0154569	mg/L	0.00011108	0.72%
Tl 190.801†	1.8	-0.0067688	mg/L	0.00477248	-0.0067688	mg/L	0.00477248	70.51%
V 290.880†	112.9	0.0150247	mg/L	0.00116858	0.0150247	mg/L	0.00116858	7.78%
Zn 206.200†	368.7	0.0968243	mg/L	0.00011369	0.0968243	mg/L	0.00011369	0.12%
B 249.772	834.2	0.141186	mg/L	0.0003226	0.141186	mg/L	0.0003226	0.23%
Si 251.611	9166.1	4.34594	mg/L	0.024278	4.34594	mg/L	0.024278	0.56%

Sequence No.: 26
Sample ID: AD18935-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 61
Date Collected: 8/28/2020 7:10:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18935-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	62412.9	102	%	0.51				0.50%
Y 371.029	22399.7	99.4	%	1.32				1.32%
Ag 328.068†	-1.2	0.0108631	mg/L	0.00023363	0.0108631	mg/L	0.00023363	2.15%
Al 308.215†	-5.2	-0.0156944	mg/L	0.00350141	-0.0156944	mg/L	0.00350141	22.31%
As 188.979†	1.5	0.0113962	mg/L	0.00410903	0.0113962	mg/L	0.00410903	36.06%
Ba 233.527†	6.0	-0.0105447	mg/L	0.00028492	-0.0105447	mg/L	0.00028492	2.70%
Be 313.107†	10.0	0.0013517	mg/L	0.00005177	0.0013517	mg/L	0.00005177	3.83%
Ca 315.887†	6646.9	1.71416	mg/L	0.009753	1.71416	mg/L	0.009753	0.57%
Cd 228.802†	-0.9	-0.0063823	mg/L	0.00087042	-0.0063823	mg/L	0.00087042	13.64%
Co 228.616†	2.4	0.0060216	mg/L	0.00048526	0.0060216	mg/L	0.00048526	8.06%
Cr 267.716†	5.0	0.0021123	mg/L	0.00040731	0.0021123	mg/L	0.00040731	19.28%
Cu 327.393†	19.9	0.0004185	mg/L	0.00019671	0.0004185	mg/L	0.00019671	47.00%
Fe 273.955†	6.1	-0.0397104	mg/L	0.00058628	-0.0397104	mg/L	0.00058628	1.48%
K 404.721†	15.0	2.70440	mg/L	0.422210	2.70440	mg/L	0.422210	15.61%
Mg 279.077†	572.3	0.494936	mg/L	0.0037981	0.494936	mg/L	0.0037981	0.77%
Mn 257.610†	11.6	0.0071307	mg/L	0.00004101	0.0071307	mg/L	0.00004101	0.58%
Mo 202.031†	0.2	0.0041525	mg/L	0.00065760	0.0041525	mg/L	0.00065760	15.84%
Na 330.237†	621.9	15.0797	mg/L	0.06567	15.0797	mg/L	0.06567	0.44%
Ni 231.604†	0.2	-0.0068082	mg/L	0.00088580	-0.0068082	mg/L	0.00088580	13.01%
Pb 220.353†	-2.6	-0.0018850	mg/L	0.00103358	-0.0018850	mg/L	0.00103358	54.83%
Sb 206.836†	-1.1	-0.0011700	mg/L	0.01243186	-0.0011700	mg/L	0.01243186	>999.9%
Se 196.026†	-3.4	-0.0028637	mg/L	0.01142204	-0.0028637	mg/L	0.01142204	398.85%
Sn 189.927†	-0.6	0.0002914	mg/L	0.00460357	0.0002914	mg/L	0.00460357	>999.9%
Ti 334.940†	13.1	0.0081658	mg/L	0.00031823	0.0081658	mg/L	0.00031823	3.90%
Tl 190.801†	3.9	0.0104044	mg/L	0.00501643	0.0104044	mg/L	0.00501643	48.21%
V 290.880†	0.9	-0.0062829	mg/L	0.00071896	-0.0062829	mg/L	0.00071896	11.44%
Zn 206.200†	5.4	-0.0013448	mg/L	0.00022126	-0.0013448	mg/L	0.00022126	16.45%
B 249.772	150.9	0.0224038	mg/L	0.00061654	0.0224038	mg/L	0.00061654	2.75%
Si 251.611	958.1	0.512902	mg/L	0.0049493	0.512902	mg/L	0.0049493	0.96%

Sequence No.: 27
Sample ID: AD18935-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 62
Date Collected: 8/28/2020 7:14:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18935-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	62626.8	102	%	0.14				0.14%
Y 371.029	22319.0	99.0	%	0.61				0.62%
Ag 328.068†	1.1	0.0110019	mg/L	0.00009596	0.0110019	mg/L	0.00009596	0.87%
Al 308.215†	-3.8	-0.0146468	mg/L	0.00175825	-0.0146468	mg/L	0.00175825	12.00%
As 188.979†	0.4	0.0015006	mg/L	0.00983156	0.0015006	mg/L	0.00983156	655.19%
Ba 233.527†	-0.1	-0.0111695	mg/L	0.00034832	-0.0111695	mg/L	0.00034832	3.12%
Be 313.107†	-11.7	0.0012670	mg/L	0.00003109	0.0012670	mg/L	0.00003109	2.45%
Ca 315.887†	4240.1	1.05611	mg/L	0.003682	1.05611	mg/L	0.003682	0.35%
Cd 228.802†	-2.3	-0.0068823	mg/L	0.00014308	-0.0068823	mg/L	0.00014308	2.08%
Co 228.616†	-0.4	0.0048972	mg/L	0.00064276	0.0048972	mg/L	0.00064276	13.12%
Cr 267.716†	11.5	0.0031177	mg/L	0.00069338	0.0031177	mg/L	0.00069338	22.24%
Cu 327.393†	109.7	0.0111400	mg/L	0.00118084	0.0111400	mg/L	0.00118084	10.60%
Fe 273.955†	13.7	-0.0286608	mg/L	0.00148004	-0.0286608	mg/L	0.00148004	5.16%
K 404.721†	20.0	2.81877	mg/L	0.265772	2.81877	mg/L	0.265772	9.43%
Mg 279.077†	522.6	0.450418	mg/L	0.0020061	0.450418	mg/L	0.0020061	0.45%
Mn 257.610†	65.8	0.0089170	mg/L	0.00007359	0.0089170	mg/L	0.00007359	0.83%
Mo 202.031†	-1.2	0.0031711	mg/L	0.00071889	0.0031711	mg/L	0.00071889	22.67%
Na 330.237†	558.3	13.6800	mg/L	0.12142	13.6800	mg/L	0.12142	0.89%
Ni 231.604†	3.0	-0.0059884	mg/L	0.00094544	-0.0059884	mg/L	0.00094544	15.79%
Pb 220.353†	-0.6	0.0012221	mg/L	0.00340794	0.0012221	mg/L	0.00340794	278.87%
Sb 206.836†	-1.1	-0.0009324	mg/L	0.01113810	-0.0009324	mg/L	0.01113810	>999.9%
Se 196.026†	-4.2	-0.0062539	mg/L	0.00593374	-0.0062539	mg/L	0.00593374	94.88%
Sn 189.927†	-1.8	-0.0017633	mg/L	0.00146210	-0.0017633	mg/L	0.00146210	82.92%
Ti 334.940†	7.5	0.0079347	mg/L	0.00016510	0.0079347	mg/L	0.00016510	2.08%
Tl 190.801†	3.0	0.0059588	mg/L	0.00247840	0.0059588	mg/L	0.00247840	41.59%
V 290.880†	4.5	-0.0056197	mg/L	0.00035073	-0.0056197	mg/L	0.00035073	6.24%
Zn 206.200†	12.8	0.0006717	mg/L	0.00022974	0.0006717	mg/L	0.00022974	34.20%
B 249.772	258.4	0.0405891	mg/L	0.00049081	0.0405891	mg/L	0.00049081	1.21%
Si 251.611	793.3	0.437134	mg/L	0.0089765	0.437134	mg/L	0.0089765	2.05%

Sequence No.: 28
Sample ID: AD18935-006
Analyst:
Initial Sample Wt: ~0.3000
Dilution:
Wash Time: 55

Autosampler Location: 63
Date Collected: 8/28/2020 7:18:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18935-006

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	53228.2	86.6	%	0.02				0.03%
Y 371.029	19528.3	86.7	%	1.02				1.17%
Ag 328.068†	6.2	0.0113506	mg/L	0.00012179	0.0113506	mg/L	0.00012179	1.07%
Al 308.215†	154.7	0.104315	mg/L	0.0015860	0.104315	mg/L	0.0015860	1.52%
As 188.979†	0.1	-0.0012313	mg/L	0.00354708	-0.0012313	mg/L	0.00354708	288.07%
Ba 233.527†	1840.5	0.177719	mg/L	0.0008644	0.177719	mg/L	0.0008644	0.49%
Be 313.107†	-131.7	0.0007984	mg/L	0.00007597	0.0007984	mg/L	0.00007597	9.52%
Ca 315.887†	204010.2	55.6751	mg/L	0.06306	55.6751	mg/L	0.06306	0.11%
Cd 228.802†	3.1	-0.0049183	mg/L	0.00046152	-0.0049183	mg/L	0.00046152	9.38%
Co 228.616†	2.2	0.0059277	mg/L	0.00029262	0.0059277	mg/L	0.00029262	4.94%
Cr 267.716†	8.5	0.0027011	mg/L	0.00087739	0.0027011	mg/L	0.00087739	32.48%
Cu 327.393†	-39.3	-0.0066293	mg/L	0.00019648	-0.0066293	mg/L	0.00019648	2.96%
Fe 273.955†	73.7	0.0579201	mg/L	0.00280705	0.0579201	mg/L	0.00280705	4.85%
K 404.721†	16.9	1.74354	mg/L	0.204659	1.74354	mg/L	0.204659	11.74%
Mg 279.077†	2775.4	2.46711	mg/L	0.014012	2.46711	mg/L	0.014012	0.57%
Mn 257.610†	14990.7	0.501261	mg/L	0.0005842	0.501261	mg/L	0.0005842	0.12%
Mo 202.031†	3.8	0.0067796	mg/L	0.00097779	0.0067796	mg/L	0.00097779	14.42%
Na 330.237†	82944.0	1826.05	mg/L	4.827	1826.05	mg/L	4.827	0.26%
Ni 231.604†	34.8	0.0033022	mg/L	0.00037978	0.0033022	mg/L	0.00037978	11.50%
Pb 220.353†	8.8	0.0157522	mg/L	0.00117284	0.0157522	mg/L	0.00117284	7.45%
Sb 206.836†	-0.6	0.0023534	mg/L	0.01132482	0.0023534	mg/L	0.01132482	481.21%
Se 196.026†	1.0	0.0195815	mg/L	0.01247911	0.0195815	mg/L	0.01247911	63.73%
Sn 189.927†	-4.3	-0.0059462	mg/L	0.00572402	-0.0059462	mg/L	0.00572402	96.26%
Ti 334.940†	-15.4	0.0113455	mg/L	0.00008151	0.0113455	mg/L	0.00008151	0.72%
Tl 190.801†	3.4	0.0061848	mg/L	0.00766625	0.0061848	mg/L	0.00766625	123.95%
V 290.880†	47.9	0.0025260	mg/L	0.00059235	0.0025260	mg/L	0.00059235	23.45%
Zn 206.200†	1178.8	0.315709	mg/L	0.0009153	0.315709	mg/L	0.0009153	0.29%
B 249.772	39.8	-0.0104692	mg/L	0.00037773	-0.0104692	mg/L	0.00037773	3.61%
Si 251.611	1381.8	0.797896	mg/L	0.0022348	0.797896	mg/L	0.0022348	0.28%

Sequence No.: 29
Sample ID: AD18934-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 64
Date Collected: 8/28/2020 7:22:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18934-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	55617.5	90.5	%	0.75				0.83%
Y 371.029	19823.3	88.0	%	0.79				0.90%
Ag 328.068†	-58.4	0.0097235	mg/L	0.00059256	0.0097235	mg/L	0.00059256	6.09%
Al 308.215†	556.8	0.405526	mg/L	0.0062231	0.405526	mg/L	0.0062231	1.53%
As 188.979†	-0.2	-0.0016757	mg/L	0.00430095	-0.0016757	mg/L	0.00430095	256.66%
Ba 233.527†	7807.3	0.790058	mg/L	0.0041149	0.790058	mg/L	0.0041149	0.52%
Be 313.107†	222.5	0.0021812	mg/L	0.00005319	0.0021812	mg/L	0.00005319	2.44%
Ca 315.887†	400746.8	109.465	mg/L	1.2770	109.465	mg/L	1.2770	1.17%
Cd 228.802†	9.7	-0.0024865	mg/L	0.00033585	-0.0024865	mg/L	0.00033585	13.51%
Co 228.616†	212.2	0.0885487	mg/L	0.00161463	0.0885487	mg/L	0.00161463	1.82%
Cr 267.716†	10.9	0.0030771	mg/L	0.00018847	0.0030771	mg/L	0.00018847	6.12%
Cu 327.393†	-24.7	-0.0015257	mg/L	0.00176756	-0.0015257	mg/L	0.00176756	115.85%
Fe 273.955†	23411.0	33.7348	mg/L	0.16342	33.7348	mg/L	0.16342	0.48%
K 404.721†	59.3	-359.015	mg/L	1.6605	-359.015	mg/L	1.6605	0.46%
Mg 279.077†	4192.2	3.73536	mg/L	0.029880	3.73536	mg/L	0.029880	0.80%
Mn 257.610†	382633.1	12.6291	mg/L	0.14783	12.6291	mg/L	0.14783	1.17%
Mo 202.031†	0.6	0.0044866	mg/L	0.00149982	0.0044866	mg/L	0.00149982	33.43%
Na 330.237†	75814.6	1669.21	mg/L	20.780	1669.21	mg/L	20.780	1.24%
Ni 231.604†	194.7	0.0498767	mg/L	0.00099467	0.0498767	mg/L	0.00099467	1.99%
Pb 220.353†	8.0	0.0145037	mg/L	0.00151961	0.0145037	mg/L	0.00151961	10.48%
Sb 206.836†	-1.2	-0.0016095	mg/L	0.01327187	-0.0016095	mg/L	0.01327187	824.58%
Se 196.026†	-7.5	0.0096658	mg/L	0.00410255	0.0096658	mg/L	0.00410255	42.44%
Sn 189.927†	-6.4	-0.0096116	mg/L	0.00248773	-0.0096116	mg/L	0.00248773	25.88%
Ti 334.940†	-43.5	0.0145257	mg/L	0.00028384	0.0145257	mg/L	0.00028384	1.95%
Tl 190.801†	-1.1	0.0224396	mg/L	0.01431393	0.0224396	mg/L	0.01431393	63.79%
V 290.880†	63.6	0.0043395	mg/L	0.00040789	0.0043395	mg/L	0.00040789	9.40%
Zn 206.200†	572.0	0.151749	mg/L	0.0015528	0.151749	mg/L	0.0015528	1.02%
B 249.772	3381.9	0.480092	mg/L	0.0033136	0.480092	mg/L	0.0033136	0.69%
Si 251.611	2364.8	1.59511	mg/L	0.017119	1.59511	mg/L	0.017119	1.07%

Sequence No.: 30
Sample ID: CCV V-329036
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 8/28/2020 7:26:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	57705.7	93.9	%	0.62				0.66%
Y 371.029	20504.9	91.0	%	0.39				0.43%
Ag 328.068†	1185.0	0.0841458	mg/L	0.00073321	0.0841458	mg/L	0.00073321	0.87%
QC value less than the lower limit for Ag 328.068 Recovery = 84.15%								
Al 308.215†	6477.3	4.85076	mg/L	0.009395	4.85076	mg/L	0.009395	0.19%
QC value within limits for Al 308.215 Recovery = 97.02%								
As 188.979†	58.0	0.474485	mg/L	0.0125963	0.474485	mg/L	0.0125963	2.65%
QC value within limits for As 188.979 Recovery = 94.90%								
Ba 233.527†	4816.7	0.483151	mg/L	0.0022298	0.483151	mg/L	0.0022298	0.46%
QC value within limits for Ba 233.527 Recovery = 96.63%								
Be 313.107†	127050.3	0.497297	mg/L	0.0008423	0.497297	mg/L	0.0008423	0.17%
QC value within limits for Be 313.107 Recovery = 99.46%								
Ca 315.887†	185357.2	50.5752	mg/L	0.02545	50.5752	mg/L	0.02545	0.05%
QC value within limits for Ca 315.887 Recovery = 101.15%								
Cd 228.802†	1432.3	0.519395	mg/L	0.0033479	0.519395	mg/L	0.0033479	0.64%
QC value within limits for Cd 228.802 Recovery = 103.88%								
Co 228.616†	1224.3	0.486791	mg/L	0.0032746	0.486791	mg/L	0.0032746	0.67%
QC value within limits for Co 228.616 Recovery = 97.36%								
Cr 267.716†	3207.8	0.501239	mg/L	0.0020960	0.501239	mg/L	0.0020960	0.42%
QC value within limits for Cr 267.716 Recovery = 100.25%								
Cu 327.393†	4119.4	0.490027	mg/L	0.0037022	0.490027	mg/L	0.0037022	0.76%
QC value within limits for Cu 327.393 Recovery = 98.01%								
Fe 273.955†	3418.0	4.88385	mg/L	0.016270	4.88385	mg/L	0.016270	0.33%
QC value within limits for Fe 273.955 Recovery = 97.68%								
K 404.721†	1023.8	-2.73354	mg/L	0.366560	-2.73354	mg/L	0.366560	13.41%
QC value less than the lower limit for K 404.721 Recovery = -5.47%								
Mg 279.077†	55680.7	49.8275	mg/L	0.03970	49.8275	mg/L	0.03970	0.08%
QC value within limits for Mg 279.077 Recovery = 99.66%								
Mn 257.610†	14335.2	0.479636	mg/L	0.0006479	0.479636	mg/L	0.0006479	0.14%
QC value within limits for Mn 257.610 Recovery = 95.93%								
Mo 202.031†	664.8	0.488912	mg/L	0.0032953	0.488912	mg/L	0.0032953	0.67%
QC value within limits for Mo 202.031 Recovery = 97.78%								
Na 330.237†	2094.3	47.4703	mg/L	0.07827	47.4703	mg/L	0.07827	0.16%
QC value within limits for Na 330.237 Recovery = 94.94%								
Ni 231.604†	1772.6	0.510898	mg/L	0.0011439	0.510898	mg/L	0.0011439	0.22%
QC value within limits for Ni 231.604 Recovery = 102.18%								
Pb 220.353†	322.5	0.496606	mg/L	0.0054576	0.496606	mg/L	0.0054576	1.10%
QC value within limits for Pb 220.353 Recovery = 99.32%								
Sb 206.836†	77.7	0.505000	mg/L	0.0135790	0.505000	mg/L	0.0135790	2.69%
QC value within limits for Sb 206.836 Recovery = 101.00%								
Se 196.026†	114.3	0.485203	mg/L	0.0054837	0.485203	mg/L	0.0054837	1.13%
QC value within limits for Se 196.026 Recovery = 97.04%								
Sn 189.927†	282.1	0.486630	mg/L	0.0007866	0.486630	mg/L	0.0007866	0.16%
QC value within limits for Sn 189.927 Recovery = 97.33%								
Ti 334.940†	14437.8	0.477785	mg/L	0.0008869	0.477785	mg/L	0.0008869	0.19%
QC value within limits for Ti 334.940 Recovery = 95.56%								
Tl 190.801†	95.8	0.483452	mg/L	0.0027981	0.483452	mg/L	0.0027981	0.58%
QC value within limits for Tl 190.801 Recovery = 96.69%								
V 290.880†	2751.2	0.505891	mg/L	0.0047900	0.505891	mg/L	0.0047900	0.95%
QC value within limits for V 290.880 Recovery = 101.18%								
Zn 206.200†	1874.3	0.503632	mg/L	0.0049343	0.503632	mg/L	0.0049343	0.98%
QC value within limits for Zn 206.200 Recovery = 100.73%								
B 249.772	2924.8	0.503088	mg/L	0.0030356	0.503088	mg/L	0.0030356	0.60%
QC value within limits for B 249.772 Recovery = 100.62%								
Si 251.611	10156.0	4.86164	mg/L	0.025404	4.86164	mg/L	0.025404	0.52%
QC value within limits for Si 251.611 Recovery = 97.23%								

QC Failed. Continue with analysis.

Sequence No.: 31 **Autosampler Location: 2**
Sample ID: CCB V-329027 **Date Collected: 8/28/2020 7:30:38 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	62716.5	102	%	1.35				1.32%
Y 371.029	22943.9	102	%	2.15				2.11%
Ag 328.068†	5.1	0.0112286	mg/L	0.00050583	0.0112286	mg/L	0.00050583	4.50%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-9.1	-0.0186943	mg/L	0.00269904	-0.0186943	mg/L	0.00269904	14.44%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.1	0.0072965	mg/L	0.00508352	0.0072965	mg/L	0.00508352	69.67%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.2	-0.0111341	mg/L	0.00029893	-0.0111341	mg/L	0.00029893	2.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	48.9	0.0015035	mg/L	0.00005018	0.0015035	mg/L	0.00005018	3.34%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	30.8	-0.0947575	mg/L	0.00087480	-0.0947575	mg/L	0.00087480	0.92%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-1.8	-0.0066936	mg/L	0.00015133	-0.0066936	mg/L	0.00015133	2.26%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.1	0.0050955	mg/L	0.00006302	0.0050955	mg/L	0.00006302	1.24%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.8	0.0014617	mg/L	0.00030484	0.0014617	mg/L	0.00030484	20.86%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1.1	-0.0020845	mg/L	0.00016604	-0.0020845	mg/L	0.00016604	7.97%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	5.4	-0.0407432	mg/L	0.00250647	-0.0407432	mg/L	0.00250647	6.15%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	22.8	3.08169	mg/L	0.405717	3.08169	mg/L	0.405717	13.17%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	8.7	-0.0096594	mg/L	0.00756113	-0.0096594	mg/L	0.00756113	78.28%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	8.3	0.0070214	mg/L	0.00010135	0.0070214	mg/L	0.00010135	1.44%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.1	0.0039747	mg/L	0.00041296	0.0039747	mg/L	0.00041296	10.39%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.9	1.44048	mg/L	0.047765	1.44048	mg/L	0.047765	3.32%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-0.9	-0.0071237	mg/L	0.00029207	-0.0071237	mg/L	0.00029207	4.10%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.1	0.0022983	mg/L	0.00096215	0.0022983	mg/L	0.00096215	41.86%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.6	-0.0043637	mg/L	0.00390425	-0.0043637	mg/L	0.00390425	89.47%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-4.5	-0.0073684	mg/L	0.00132184	-0.0073684	mg/L	0.00132184	17.94%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-1.3	-0.0009170	mg/L	0.00189511	-0.0009170	mg/L	0.00189511	206.66%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	4.4	0.0077449	mg/L	0.00022058	0.0077449	mg/L	0.00022058	2.85%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.5	0.0035197	mg/L	0.00389818	0.0035197	mg/L	0.00389818	110.75%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-4.3	-0.0072833	mg/L	0.00066592	-0.0072833	mg/L	0.00066592	9.14%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	0.0	-0.0027787	mg/L	0.00062971	-0.0027787	mg/L	0.00062971	22.66%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-70.9	-0.0159267	mg/L	0.00109155	-0.0159267	mg/L	0.00109155	6.85%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	6.3	0.0712865	mg/L	0.00188269	0.0712865	mg/L	0.00188269	2.64%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 32
Sample ID: AD18934-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 65
Date Collected: 8/28/2020 7:34:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18934-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	52460.9	85.3	%	0.20				0.24%
Y 371.029	18974.4	84.2	%	0.17				0.20%
Ag 328.068†	166.4	0.0211186	mg/L	0.00025653	0.0211186	mg/L	0.00025653	1.21%
Al 308.215†	79.4	0.0507208	mg/L	0.00154655	0.0507208	mg/L	0.00154655	3.05%
As 188.979†	2.8	0.0212530	mg/L	0.01057113	0.0212530	mg/L	0.01057113	49.74%
Ba 233.527†	5670.3	0.570753	mg/L	0.0010337	0.570753	mg/L	0.0010337	0.18%
Be 313.107†	-105.1	0.0009022	mg/L	0.00006463	0.0009022	mg/L	0.00006463	7.16%
Ca 315.887†	2161224.4	590.796	mg/L	1.7334	590.796	mg/L	1.7334	0.29%
Cd 228.802†	1.9	-0.0053322	mg/L	0.00091254	-0.0053322	mg/L	0.00091254	17.11%
Co 228.616†	70.0	0.0326223	mg/L	0.00217305	0.0326223	mg/L	0.00217305	6.66%
Cr 267.716†	18.4	0.0044716	mg/L	0.00031882	0.0044716	mg/L	0.00031882	7.13%
Cu 327.393†	-57.9	-0.0088561	mg/L	0.00074846	-0.0088561	mg/L	0.00074846	8.45%
Fe 273.955†	69.7	0.0520355	mg/L	0.00514163	0.0520355	mg/L	0.00514163	9.88%
K 404.721†	50.0	3.36549	mg/L	0.242562	3.36549	mg/L	0.242562	7.21%
Mg 279.077†	45863.1	41.0389	mg/L	0.09787	41.0389	mg/L	0.09787	0.24%
Mn 257.610†	73821.0	2.44196	mg/L	0.007352	2.44196	mg/L	0.007352	0.30%
Mo 202.031†	3.5	0.0065964	mg/L	0.00135834	0.0065964	mg/L	0.00135834	20.59%
Na 330.237†	88531.5	1948.97	mg/L	8.156	1948.97	mg/L	8.156	0.42%
Ni 231.604†	93.6	0.0204281	mg/L	0.00017681	0.0204281	mg/L	0.00017681	0.87%
Pb 220.353†	0.9	0.0036425	mg/L	0.00331814	0.0036425	mg/L	0.00331814	91.09%
Sb 206.836†	0.8	0.0111212	mg/L	0.00506937	0.0111212	mg/L	0.00506937	45.58%
Se 196.026†	-2.0	0.0512662	mg/L	0.00590910	0.0512662	mg/L	0.00590910	11.53%
Sn 189.927†	-16.5	-0.0270407	mg/L	0.00732427	-0.0270407	mg/L	0.00732427	27.09%
Ti 334.940†	-265.2	0.0439457	mg/L	0.00028412	0.0439457	mg/L	0.00028412	0.65%
Tl 190.801†	1.9	-0.0276590	mg/L	0.00236026	-0.0276590	mg/L	0.00236026	8.53%
V 290.880†	324.7	0.0560353	mg/L	0.00050342	0.0560353	mg/L	0.00050342	0.90%
Zn 206.200†	136.3	0.0340228	mg/L	0.00030237	0.0340228	mg/L	0.00030237	0.89%
B 249.772	2053.7	0.337836	mg/L	0.0022174	0.337836	mg/L	0.0022174	0.66%
Si 251.611	2321.2	1.41317	mg/L	0.001979	1.41317	mg/L	0.001979	0.14%

Sequence No.: 33
Sample ID: AD18934-003
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 66
Date Collected: 8/28/2020 7:38:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18934-003

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	52773.0	85.9	%	0.67				0.78%
Y 371.029	19132.4	84.9	%	0.41				0.49%
Ag 328.068†	215.0	0.0237890	mg/L	0.00036496	0.0237890	mg/L	0.00036496	1.53%
Al 308.215†	41.9	0.0204650	mg/L	0.00287541	0.0204650	mg/L	0.00287541	14.05%
As 188.979†	2.9	0.0227408	mg/L	0.00798649	0.0227408	mg/L	0.00798649	35.12%
Ba 233.527†	5699.2	0.573715	mg/L	0.0020679	0.573715	mg/L	0.0020679	0.36%
Be 313.107†	-110.5	0.0008811	mg/L	0.00008259	0.0008811	mg/L	0.00008259	9.37%
Ca 315.887†	2844210.8	777.530	mg/L	5.2529	777.530	mg/L	5.2529	0.68%
Cd 228.802†	2.3	-0.0051963	mg/L	0.00066635	-0.0051963	mg/L	0.00066635	12.82%
Co 228.616†	25.4	0.0150560	mg/L	0.00167249	0.0150560	mg/L	0.00167249	11.11%
Cr 267.716†	14.2	0.0036232	mg/L	0.00152747	0.0036232	mg/L	0.00152747	42.16%
Cu 327.393†	-77.2	-0.0111616	mg/L	0.00136935	-0.0111616	mg/L	0.00136935	12.27%
Fe 273.955†	10.2	-0.0338433	mg/L	0.00654589	-0.0338433	mg/L	0.00654589	19.34%
K 404.721†	60.5	4.78578	mg/L	0.541344	4.78578	mg/L	0.541344	11.31%
Mg 279.077†	8307.6	7.41948	mg/L	0.043901	7.41948	mg/L	0.043901	0.59%
Mn 257.610†	125669.2	4.15233	mg/L	0.018461	4.15233	mg/L	0.018461	0.44%
Mo 202.031†	4.9	0.0076127	mg/L	0.00132958	0.0076127	mg/L	0.00132958	17.47%
Na 330.237†	88075.9	1938.95	mg/L	13.422	1938.95	mg/L	13.422	0.69%
Ni 231.604†	62.0	0.0112304	mg/L	0.00056292	0.0112304	mg/L	0.00056292	5.01%
Pb 220.353†	40.3	0.0639433	mg/L	0.00095595	0.0639433	mg/L	0.00095595	1.49%
Sb 206.836†	0.0	0.0059729	mg/L	0.01833516	0.0059729	mg/L	0.01833516	306.97%
Se 196.026†	-1.8	0.0660802	mg/L	0.00659466	0.0660802	mg/L	0.00659466	9.98%
Sn 189.927†	-12.7	-0.0205340	mg/L	0.00217129	-0.0205340	mg/L	0.00217129	10.57%
Ti 334.940†	-346.2	0.0555208	mg/L	0.00014239	0.0555208	mg/L	0.00014239	0.26%
Tl 190.801†	-0.0	-0.0426617	mg/L	0.00906166	-0.0426617	mg/L	0.00906166	21.24%
V 290.880†	102.0	0.0128358	mg/L	0.00047907	0.0128358	mg/L	0.00047907	3.73%
Zn 206.200†	38.5	0.0076197	mg/L	0.00067817	0.0076197	mg/L	0.00067817	8.90%
B 249.772	2523.3	0.422770	mg/L	0.0004520	0.422770	mg/L	0.0004520	0.11%
Si 251.611	2794.6	1.70487	mg/L	0.004813	1.70487	mg/L	0.004813	0.28%

Sequence No.: 34 **Autosampler Location: 67**
Sample ID: AD18934-004 **Date Collected: 8/28/2020 7:43:06 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD18934-004

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	52542.6	85.5	%	0.08				0.10%
Y 371.029	19102.7	84.8	%	0.14				0.17%
Ag 328.068†	206.0	0.0232581	mg/L	0.00014832	0.0232581	mg/L	0.00014832	0.64%
Al 308.215†	42.0	0.0205739	mg/L	0.00105832	0.0205739	mg/L	0.00105832	5.14%
As 188.979†	1.7	0.0125264	mg/L	0.01887854	0.0125264	mg/L	0.01887854	150.71%
Ba 233.527†	3415.7	0.339380	mg/L	0.0020054	0.339380	mg/L	0.0020054	0.59%
Be 313.107†	-90.4	0.0009596	mg/L	0.00005878	0.0009596	mg/L	0.00005878	6.13%
Ca 315.887†	2884438.8	788.529	mg/L	3.2991	788.529	mg/L	3.2991	0.42%
Cd 228.802†	1.0	-0.0056613	mg/L	0.00063976	-0.0056613	mg/L	0.00063976	11.30%
Co 228.616†	1.1	0.0055133	mg/L	0.00164939	0.0055133	mg/L	0.00164939	29.92%
Cr 267.716†	17.9	0.0042008	mg/L	0.00043577	0.0042008	mg/L	0.00043577	10.37%
Cu 327.393†	-84.8	-0.0120661	mg/L	0.00072316	-0.0120661	mg/L	0.00072316	5.99%
Fe 273.955†	13.8	-0.0286027	mg/L	0.00027960	-0.0286027	mg/L	0.00027960	0.98%
K 404.721†	57.8	4.60344	mg/L	0.493473	4.60344	mg/L	0.493473	10.72%
Mg 279.077†	9876.8	8.82421	mg/L	0.056373	8.82421	mg/L	0.056373	0.64%
Mn 257.610†	11638.0	0.390662	mg/L	0.0020539	0.390662	mg/L	0.0020539	0.53%
Mo 202.031†	5.6	0.0081375	mg/L	0.00014142	0.0081375	mg/L	0.00014142	1.74%
Na 330.237†	87117.4	1917.86	mg/L	7.484	1917.86	mg/L	7.484	0.39%
Ni 231.604†	22.0	-0.0004199	mg/L	0.00188449	-0.0004199	mg/L	0.00188449	448.79%
Pb 220.353†	-0.5	0.0014663	mg/L	0.00409207	0.0014663	mg/L	0.00409207	279.08%
Sb 206.836†	-1.2	-0.0014651	mg/L	0.00717945	-0.0014651	mg/L	0.00717945	490.04%
Se 196.026†	1.8	0.0813253	mg/L	0.03317276	0.0813253	mg/L	0.03317276	40.79%
Sn 189.927†	-12.6	-0.0203536	mg/L	0.00531733	-0.0203536	mg/L	0.00531733	26.12%
Ti 334.940†	-339.2	0.0565852	mg/L	0.00017395	0.0565852	mg/L	0.00017395	0.31%
Tl 190.801†	2.7	-0.0422133	mg/L	0.02298629	-0.0422133	mg/L	0.02298629	54.45%
V 290.880†	108.7	0.0141658	mg/L	0.00107341	0.0141658	mg/L	0.00107341	7.58%
Zn 206.200†	37.5	0.0073344	mg/L	0.00023023	0.0073344	mg/L	0.00023023	3.14%
B 249.772	2152.4	0.349282	mg/L	0.0020071	0.349282	mg/L	0.0020071	0.57%
Si 251.611	3114.8	1.77721	mg/L	0.009539	1.77721	mg/L	0.009539	0.54%

Sequence No.: 35
Sample ID: ~~AD18935-005~~ AD18934-005 cjm
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 68
Date Collected: 8/28/2020 7:47:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ~~AD18935-005~~

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	52061.7	84.7	%	0.15				0.17%
Y 371.029	19290.9	85.6	%	0.98				1.15%
Ag 328.068†	208.7	0.0233901	mg/L	0.00039053	0.0233901	mg/L	0.00039053	1.67%
Al 308.215†	44.0	0.0214789	mg/L	0.00193775	0.0214789	mg/L	0.00193775	9.02%
As 188.979†	1.2	0.0078632	mg/L	0.01156942	0.0078632	mg/L	0.01156942	147.13%
Ba 233.527†	9633.8	0.977501	mg/L	0.0034275	0.977501	mg/L	0.0034275	0.35%
Be 313.107†	-89.8	0.0009620	mg/L	0.00007845	0.0009620	mg/L	0.00007845	8.15%
Ca 315.887†	2822402.8	771.568	mg/L	4.0974	771.568	mg/L	4.0974	0.53%
Cd 228.802†	2.2	-0.0052230	mg/L	0.00105071	-0.0052230	mg/L	0.00105071	20.12%
Co 228.616†	26.4	0.0154744	mg/L	0.00013274	0.0154744	mg/L	0.00013274	0.86%
Cr 267.716†	6.7	0.0024291	mg/L	0.00052374	0.0024291	mg/L	0.00052374	21.56%
Cu 327.393†	-67.5	-0.0099984	mg/L	0.00060279	-0.0099984	mg/L	0.00060279	6.03%
Fe 273.955†	61.5	0.0401967	mg/L	0.00348817	0.0401967	mg/L	0.00348817	8.68%
K 404.721†	55.9	3.77204	mg/L	0.524713	3.77204	mg/L	0.524713	13.91%
Mg 279.077†	5008.6	4.46621	mg/L	0.025131	4.46621	mg/L	0.025131	0.56%
Mn 257.610†	130846.6	4.32312	mg/L	0.018730	4.32312	mg/L	0.018730	0.43%
Mo 202.031†	14.5	0.0145982	mg/L	0.00034735	0.0145982	mg/L	0.00034735	2.38%
Na 330.237†	90129.3	1984.12	mg/L	1.992	1984.12	mg/L	1.992	0.10%
Ni 231.604†	242.2	0.0637436	mg/L	0.00201218	0.0637436	mg/L	0.00201218	3.16%
Pb 220.353†	-0.6	0.0012975	mg/L	0.00623104	0.0012975	mg/L	0.00623104	480.24%
Sb 206.836†	1.6	0.0160151	mg/L	0.00693597	0.0160151	mg/L	0.00693597	43.31%
Se 196.026†	0.1	0.0731663	mg/L	0.00737208	0.0731663	mg/L	0.00737208	10.08%
Sn 189.927†	-13.7	-0.0222544	mg/L	0.00474870	-0.0222544	mg/L	0.00474870	21.34%
Ti 334.940†	-347.6	0.0550219	mg/L	0.00056548	0.0550219	mg/L	0.00056548	1.03%
Tl 190.801†	4.2	-0.0209559	mg/L	0.01856521	-0.0209559	mg/L	0.01856521	88.59%
V 290.880†	69.5	0.0066552	mg/L	0.00054095	0.0066552	mg/L	0.00054095	8.13%
Zn 206.200†	304.3	0.0794351	mg/L	0.00161648	0.0794351	mg/L	0.00161648	2.03%
B 249.772	1734.8	0.291456	mg/L	0.0009986	0.291456	mg/L	0.0009986	0.34%
Si 251.611	4726.2	2.60398	mg/L	0.050902	2.60398	mg/L	0.050902	1.95%

Sequence No.: 36
Sample ID: EF V-333199 8/27
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 69
Date Collected: 8/28/2020 7:51:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF V-333199 8/27

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	54812.0	89.2	%	1.47				1.65%
Y 371.029	19919.0	88.4	%	1.31				1.49%
Ag 328.068†	-0.6	0.0109109	mg/L	0.00023097	0.0109109	mg/L	0.00023097	2.12%
Al 308.215†	36.1	0.0151897	mg/L	0.00448154	0.0151897	mg/L	0.00448154	29.50%
As 188.979†	1.1	0.0073530	mg/L	0.00373764	0.0073530	mg/L	0.00373764	50.83%
Ba 233.527†	57.0	-0.0053103	mg/L	0.00047282	-0.0053103	mg/L	0.00047282	8.90%
Be 313.107†	-62.2	0.0010699	mg/L	0.00005132	0.0010699	mg/L	0.00005132	4.80%
Ca 315.887†	349.3	-0.0076715	mg/L	0.00938026	-0.0076715	mg/L	0.00938026	122.27%
Cd 228.802†	1.1	-0.0056480	mg/L	0.00019682	-0.0056480	mg/L	0.00019682	3.48%
Co 228.616†	0.2	0.0051486	mg/L	0.00071813	0.0051486	mg/L	0.00071813	13.95%
Cr 267.716†	15.1	0.0036969	mg/L	0.00030746	0.0036969	mg/L	0.00030746	8.32%
Cu 327.393†	-27.0	-0.0051757	mg/L	0.00046953	-0.0051757	mg/L	0.00046953	9.07%
Fe 273.955†	19.4	-0.0205208	mg/L	0.00750029	-0.0205208	mg/L	0.00750029	36.55%
K 404.721†	33.1	3.34898	mg/L	0.632588	3.34898	mg/L	0.632588	18.89%
Mg 279.077†	29.0	0.0085440	mg/L	0.00344559	0.0085440	mg/L	0.00344559	40.33%
Mn 257.610†	43.5	0.0081820	mg/L	0.00017327	0.0081820	mg/L	0.00017327	2.12%
Mo 202.031†	6.3	0.0086032	mg/L	0.00205470	0.0086032	mg/L	0.00205470	23.88%
Na 330.237†	87170.2	1919.02	mg/L	38.187	1919.02	mg/L	38.187	1.99%
Ni 231.604†	12.0	-0.0033554	mg/L	0.00149865	-0.0033554	mg/L	0.00149865	44.66%
Pb 220.353†	1.1	0.0038136	mg/L	0.00459238	0.0038136	mg/L	0.00459238	120.42%
Sb 206.836†	-1.2	-0.0015525	mg/L	0.00647093	-0.0015525	mg/L	0.00647093	416.81%
Se 196.026†	-1.6	0.0043707	mg/L	0.00157838	0.0043707	mg/L	0.00157838	36.11%
Sn 189.927†	1.0	0.0030563	mg/L	0.00182481	0.0030563	mg/L	0.00182481	59.71%
Ti 334.940†	11.8	0.0079904	mg/L	0.00021970	0.0079904	mg/L	0.00021970	2.75%
Tl 190.801†	4.7	0.0149540	mg/L	0.01052834	0.0149540	mg/L	0.01052834	70.40%
V 290.880†	12.6	-0.0041471	mg/L	0.00099191	-0.0041471	mg/L	0.00099191	23.92%
Zn 206.200†	9.1	-0.0003409	mg/L	0.00035511	-0.0003409	mg/L	0.00035511	104.17%
B 249.772	-43.2	-0.0294656	mg/L	0.00112024	-0.0294656	mg/L	0.00112024	3.80%
Si 251.611	66.2	0.163490	mg/L	0.0055978	0.163490	mg/L	0.0055978	3.42%

Sequence No.: 37
Sample ID: EF V-333199 8/28
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 70
Date Collected: 8/28/2020 7:55:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF V-333199 8/28

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	54250.3	88.3	%	0.18				0.21%
Y 371.029	19777.3	87.8	%	0.97				1.10%
Ag 328.068†	-1.5	0.0108559	mg/L	0.00046392	0.0108559	mg/L	0.00046392	4.27%
Al 308.215†	26.9	0.0083009	mg/L	0.00044055	0.0083009	mg/L	0.00044055	5.31%
As 188.979†	0.1	-0.0009416	mg/L	0.00363960	-0.0009416	mg/L	0.00363960	386.53%
Ba 233.527†	45.5	-0.0064859	mg/L	0.00021663	-0.0064859	mg/L	0.00021663	3.34%
Be 313.107†	-75.4	0.0010181	mg/L	0.00004962	0.0010181	mg/L	0.00004962	4.87%
Ca 315.887†	363.5	-0.0037924	mg/L	0.00093409	-0.0037924	mg/L	0.00093409	24.63%
Cd 228.802†	2.3	-0.0051955	mg/L	0.00083669	-0.0051955	mg/L	0.00083669	16.10%
Co 228.616†	1.9	0.0058226	mg/L	0.00068888	0.0058226	mg/L	0.00068888	11.83%
Cr 267.716†	14.0	0.0035178	mg/L	0.00054685	0.0035178	mg/L	0.00054685	15.55%
Cu 327.393†	-24.0	-0.0048178	mg/L	0.00036601	-0.0048178	mg/L	0.00036601	7.60%
Fe 273.955†	4.9	-0.0414046	mg/L	0.00165415	-0.0414046	mg/L	0.00165415	4.00%
K 404.721†	18.4	2.87954	mg/L	0.090711	2.87954	mg/L	0.090711	3.15%
Mg 279.077†	94.2	0.0669346	mg/L	0.00377241	0.0669346	mg/L	0.00377241	5.64%
Mn 257.610†	17.7	0.0073326	mg/L	0.00010092	0.0073326	mg/L	0.00010092	1.38%
Mo 202.031†	5.9	0.0083566	mg/L	0.00142435	0.0083566	mg/L	0.00142435	17.04%
Na 330.237†	88685.6	1952.36	mg/L	7.067	1952.36	mg/L	7.067	0.36%
Ni 231.604†	8.3	-0.0044109	mg/L	0.00050995	-0.0044109	mg/L	0.00050995	11.56%
Pb 220.353†	1.5	0.0045604	mg/L	0.00787687	0.0045604	mg/L	0.00787687	172.72%
Sb 206.836†	-0.1	0.0051654	mg/L	0.00655326	0.0051654	mg/L	0.00655326	126.87%
Se 196.026†	-3.0	-0.0012807	mg/L	0.01092993	-0.0012807	mg/L	0.01092993	853.46%
Sn 189.927†	-1.0	-0.0003736	mg/L	0.00257995	-0.0003736	mg/L	0.00257995	690.50%
Ti 334.940†	9.8	0.0079283	mg/L	0.00018041	0.0079283	mg/L	0.00018041	2.28%
Tl 190.801†	1.6	-0.0011789	mg/L	0.00369018	-0.0011789	mg/L	0.00369018	313.02%
V 290.880†	13.5	-0.0039827	mg/L	0.00076727	-0.0039827	mg/L	0.00076727	19.27%
Zn 206.200†	5.9	-0.0012026	mg/L	0.00011483	-0.0012026	mg/L	0.00011483	9.55%
B 249.772	138.3	0.0011681	mg/L	0.00093755	0.0011681	mg/L	0.00093755	80.26%
Si 251.611	65.8	0.164898	mg/L	0.0015750	0.164898	mg/L	0.0015750	0.96%

Sequence No.: 38
Sample ID: EF V-326719 8/27
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 71
Date Collected: 8/28/2020 7:59:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF V-326719 8/27

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	64385.4	105	%	0.30				0.28%
Y 371.029	23373.0	104	%	0.63				0.61%
Ag 328.068†	5.9	0.0112833	mg/L	0.00013060	0.0112833	mg/L	0.00013060	1.16%
Al 308.215†	37.7	0.0163294	mg/L	0.00073724	0.0163294	mg/L	0.00073724	4.51%
As 188.979†	0.1	-0.0011297	mg/L	0.01210527	-0.0011297	mg/L	0.01210527	>999.9%
Ba 233.527†	11.8	-0.0099493	mg/L	0.00029201	-0.0099493	mg/L	0.00029201	2.93%
Be 313.107†	40.4	0.0014703	mg/L	0.00005066	0.0014703	mg/L	0.00005066	3.45%
Ca 315.887†	499.0	0.0332631	mg/L	0.00068680	0.0332631	mg/L	0.00068680	2.06%
Cd 228.802†	-2.0	-0.0067601	mg/L	0.00011873	-0.0067601	mg/L	0.00011873	1.76%
Co 228.616†	-0.4	0.0049256	mg/L	0.00123703	0.0049256	mg/L	0.00123703	25.11%
Cr 267.716†	1.3	0.0015400	mg/L	0.00040932	0.0015400	mg/L	0.00040932	26.58%
Cu 327.393†	14.3	-0.0002419	mg/L	0.00023520	-0.0002419	mg/L	0.00023520	97.23%
Fe 273.955†	81.8	0.0695714	mg/L	0.00509616	0.0695714	mg/L	0.00509616	7.33%
K 404.721†	5.6	1.08317	mg/L	0.412296	1.08317	mg/L	0.412296	38.06%
Mg 279.077†	114.6	0.0851267	mg/L	0.00129728	0.0851267	mg/L	0.00129728	1.52%
Mn 257.610†	34.3	0.0078789	mg/L	0.00005249	0.0078789	mg/L	0.00005249	0.67%
Mo 202.031†	0.4	0.0043225	mg/L	0.00182795	0.0043225	mg/L	0.00182795	42.29%
Na 330.237†	27.3	1.99817	mg/L	0.188534	1.99817	mg/L	0.188534	9.44%
Ni 231.604†	2.1	-0.0062450	mg/L	0.00074464	-0.0062450	mg/L	0.00074464	11.92%
Pb 220.353†	1.7	0.0048379	mg/L	0.00273800	0.0048379	mg/L	0.00273800	56.59%
Sb 206.836†	-0.1	0.0054165	mg/L	0.00581671	0.0054165	mg/L	0.00581671	107.39%
Se 196.026†	-1.2	0.0058086	mg/L	0.00638429	0.0058086	mg/L	0.00638429	109.91%
Sn 189.927†	-1.9	-0.0018577	mg/L	0.00364981	-0.0018577	mg/L	0.00364981	196.47%
Ti 334.940†	3.5	0.0077256	mg/L	0.00008740	0.0077256	mg/L	0.00008740	1.13%
Tl 190.801†	3.7	0.0094756	mg/L	0.00973809	0.0094756	mg/L	0.00973809	102.77%
V 290.880†	-6.1	-0.0076173	mg/L	0.00098162	-0.0076173	mg/L	0.00098162	12.89%
Zn 206.200†	16.3	0.0016149	mg/L	0.00043087	0.0016149	mg/L	0.00043087	26.68%
B 249.772	102.8	0.0134480	mg/L	0.00052558	0.0134480	mg/L	0.00052558	3.91%
Si 251.611	48.3	0.0920462	mg/L	0.00115563	0.0920462	mg/L	0.00115563	1.26%

Sequence No.: 39
Sample ID: CCV V-329036
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 8/28/2020 8:03:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	57785.4	94.0	%	0.72				0.77%
Y 371.029	20827.4	92.4	%	1.14				1.23%
Ag 328.068†	1156.7	0.0824171	mg/L	0.00022472	0.0824171	mg/L	0.00022472	0.27%
Al 308.215†	6301.3	4.71887	mg/L	0.020037	4.71887	mg/L	0.020037	0.42%
As 188.979†	56.4	0.461255	mg/L	0.0093393	0.461255	mg/L	0.0093393	2.02%
Ba 233.527†	4713.1	0.472515	mg/L	0.0002191	0.472515	mg/L	0.0002191	0.05%
Be 313.107†	124024.7	0.485486	mg/L	0.0010064	0.485486	mg/L	0.0010064	0.21%
Ca 315.887†	181316.2	49.4703	mg/L	0.13768	49.4703	mg/L	0.13768	0.28%
Cd 228.802†	1396.7	0.506326	mg/L	0.0042848	0.506326	mg/L	0.0042848	0.85%
Co 228.616†	1192.8	0.474400	mg/L	0.0040109	0.474400	mg/L	0.0040109	0.85%
Cr 267.716†	3137.9	0.490353	mg/L	0.0039036	0.490353	mg/L	0.0039036	0.80%
Cu 327.393†	4028.2	0.479140	mg/L	0.0015086	0.479140	mg/L	0.0015086	0.31%
Fe 273.955†	3376.8	4.82441	mg/L	0.060002	4.82441	mg/L	0.060002	1.24%
K 404.721†	997.8	-3.31973	mg/L	0.641305	-3.31973	mg/L	0.641305	19.32%
Mg 279.077†	54405.5	48.6860	mg/L	0.11167	48.6860	mg/L	0.11167	0.23%
Mn 257.610†	13978.2	0.467862	mg/L	0.0017945	0.467862	mg/L	0.0017945	0.38%
Mo 202.031†	647.2	0.476038	mg/L	0.0036526	0.476038	mg/L	0.0036526	0.77%
Na 330.237†	2025.6	45.9584	mg/L	0.27159	45.9584	mg/L	0.27159	0.59%
Ni 231.604†	1744.9	0.502814	mg/L	0.0064118	0.502814	mg/L	0.0064118	1.28%
Pb 220.353†	314.2	0.483899	mg/L	0.0051608	0.483899	mg/L	0.0051608	1.07%
Sb 206.836†	75.5	0.490527	mg/L	0.0033165	0.490527	mg/L	0.0033165	0.68%
Se 196.026†	110.7	0.470519	mg/L	0.0047397	0.470519	mg/L	0.0047397	1.01%
Sn 189.927†	275.6	0.475485	mg/L	0.0044590	0.475485	mg/L	0.0044590	0.94%
Ti 334.940†	14180.7	0.469394	mg/L	0.0032409	0.469394	mg/L	0.0032409	0.69%
Tl 190.801†	93.9	0.473951	mg/L	0.0123800	0.473951	mg/L	0.0123800	2.61%
V 290.880†	2698.7	0.496087	mg/L	0.0016384	0.496087	mg/L	0.0016384	0.33%
Zn 206.200†	1837.2	0.493623	mg/L	0.0026761	0.493623	mg/L	0.0026761	0.54%
B 249.772	2817.1	0.484383	mg/L	0.0011651	0.484383	mg/L	0.0011651	0.24%
Si 251.611	9939.2	4.75916	mg/L	0.030334	4.75916	mg/L	0.030334	0.64%

Sequence No.: 40 **Autosampler Location: 2**
Sample ID: CCB V-329027 **Date Collected: 8/28/2020 8:07:35 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	62210.5	101	%	0.55				0.54%
Y 371.029	22791.8	101	%	0.97				0.95%
Ag 328.068†	2.5	0.0110770	mg/L	0.00014656	0.0110770	mg/L	0.00014656	1.32%
Al 308.215†	-4.1	-0.0149408	mg/L	0.00200958	-0.0149408	mg/L	0.00200958	13.45%
As 188.979†	0.7	0.0043526	mg/L	0.01900447	0.0043526	mg/L	0.01900447	436.62%
Ba 233.527†	0.9	-0.0110644	mg/L	0.00008957	-0.0110644	mg/L	0.00008957	0.81%
Be 313.107†	29.9	0.0014292	mg/L	0.00004188	0.0014292	mg/L	0.00004188	2.93%
Ca 315.887†	18.8	-0.0980238	mg/L	0.00133885	-0.0980238	mg/L	0.00133885	1.37%
Cd 228.802†	-1.6	-0.0066397	mg/L	0.00017257	-0.0066397	mg/L	0.00017257	2.60%
Co 228.616†	2.7	0.0061147	mg/L	0.00061529	0.0061147	mg/L	0.00061529	10.06%
Cr 267.716†	0.9	0.0014757	mg/L	0.00042602	0.0014757	mg/L	0.00042602	28.87%
Cu 327.393†	0.1	-0.0019467	mg/L	0.00075045	-0.0019467	mg/L	0.00075045	38.55%
Fe 273.955†	8.2	-0.0365990	mg/L	0.00225566	-0.0365990	mg/L	0.00225566	6.16%
K 404.721†	13.1	2.58040	mg/L	0.414360	2.58040	mg/L	0.414360	16.06%
Mg 279.077†	9.2	-0.0091604	mg/L	0.00192002	-0.0091604	mg/L	0.00192002	20.96%
Mn 257.610†	2.1	0.0068150	mg/L	0.00010103	0.0068150	mg/L	0.00010103	1.48%
Mo 202.031†	0.3	0.0042318	mg/L	0.00158289	0.0042318	mg/L	0.00158289	37.40%
Na 330.237†	0.5	1.40837	mg/L	0.024089	1.40837	mg/L	0.024089	1.71%
Ni 231.604†	3.5	-0.0058461	mg/L	0.00088285	-0.0058461	mg/L	0.00088285	15.10%
Pb 220.353†	-1.3	0.0001427	mg/L	0.00232651	0.0001427	mg/L	0.00232651	>999.9%
Sb 206.836†	-1.4	-0.0027201	mg/L	0.00471363	-0.0027201	mg/L	0.00471363	173.29%
Se 196.026†	-2.5	0.0004733	mg/L	0.00464716	0.0004733	mg/L	0.00464716	981.81%
Sn 189.927†	-0.9	-0.0002037	mg/L	0.00215535	-0.0002037	mg/L	0.00215535	>999.9%
Ti 334.940†	8.7	0.0078850	mg/L	0.00027626	0.0078850	mg/L	0.00027626	3.50%
Tl 190.801†	2.5	0.0036000	mg/L	0.00703900	0.0036000	mg/L	0.00703900	195.53%
V 290.880†	-4.6	-0.0073389	mg/L	0.00101692	-0.0073389	mg/L	0.00101692	13.86%
Zn 206.200†	1.0	-0.0025254	mg/L	0.00006357	-0.0025254	mg/L	0.00006357	2.52%
B 249.772	-85.3	-0.0183351	mg/L	0.00015239	-0.0183351	mg/L	0.00015239	0.83%
Si 251.611	4.5	0.0706198	mg/L	0.00067584	0.0706198	mg/L	0.00067584	0.96%

Method: PE 4 8300DV LEACH AX Page 1 Date: 8/31/2020 2:17:08 PM

T26161B4 26161/85218

Analysis Begun

RLP 9/4/2020

Start Time: 8/31/2020 2:12:13 PM
Logged In Analyst: usermet
Spectrometer: Optima 8300 , S/N 078S1410156
Plasma On Time: 8/31/2020 12:14:15 PM
Technique: ICP Continuous
Autosampler: S10

Sample Information File: C:\Users\Public\PerkinElmer\ICP\Data\Sample Information\08.31.20.sif
Batch ID: ICP4
Results Data Set: T26161B4
Results Library: C:\Users\Public\PerkinElmer\ICP\Data\Results\Results.mdb

9/1/20

Sequence No.: 1
Sample ID: CALBLK V-329027
Analyst:
Initial Sample Wt:
Dilution:
Wash Time:
Autosampler Location: 1
Date Collected: 8/31/2020 2:14:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-329027

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	67068.2	481.24	0.72%	100	%
Y 371.029	24650.7	154.10	0.63%	100	%
Ag 328.068†	-17.9	3.77	21.02%	[0.00]	mg/L
Al 308.215†	225.1	21.42	9.51%	[0.00]	mg/L
As 188.979†	-0.4	0.74	198.03%	[0.00]	mg/L
Ba 233.527†	-1.5	2.40	156.23%	[0.00]	mg/L
Be 313.107†	-921.4	9.58	1.04%	[0.00]	mg/L
Ca 315.887†	-359.7	4.88	1.36%	[0.00]	mg/L
Cd 228.802†	21.1	3.23	15.35%	[0.00]	mg/L
Co 228.616†	-4.0	2.58	64.39%	[0.00]	mg/L
Cr 267.716†	7.6	2.66	35.00%	[0.00]	mg/L
Cu 327.393†	-228.0	2.90	1.27%	[0.00]	mg/L
Fe 273.955†	1.3	0.34	25.71%	[0.00]	mg/L
K 404.721†	-63.1	5.23	8.30%	[0.00]	mg/L
Mg 279.077†	1.6	3.07	195.52%	[0.00]	mg/L
Mn 257.610†	28.3	3.60	12.73%	[0.00]	mg/L
Mo 202.031†	4.4	0.88	20.26%	[0.00]	mg/L
Na 330.237†	19.1	4.30	22.50%	[0.00]	mg/L
Ni 231.604†	58.6	1.95	3.32%	[0.00]	mg/L
Pb 220.353†	0.7	0.80	121.90%	[0.00]	mg/L
Sb 206.836†	2.9	0.56	19.02%	[0.00]	mg/L
Se 196.026†	6.8	1.11	16.43%	[0.00]	mg/L
Sn 189.927†	3.0	0.38	12.90%	[0.00]	mg/L
Ti 334.940†	29.8	11.18	37.58%	[0.00]	mg/L
Tl 190.801†	-2.2	0.19	8.72%	[0.00]	mg/L
V 290.880†	112.1	0.94	0.84%	[0.00]	mg/L
Zn 206.200†	7.7	2.16	28.22%	[0.00]	mg/L
B 249.772	54.3	5.84	10.77%	[0.00]	mg/L
Si 251.611	47.5	4.97	10.46%	[0.00]	mg/L

26161/85218

18923-001+QC

18934-002-005

(5D) Se Reported

Sequence No.: 2
Sample ID: CALST2 V-329037
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 8/31/2020 2:18:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST2 V-329037

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	64319.7	563.92	0.88%	95.9	%
Y 371.029	23275.2	278.39	1.20%	94.4	%
Ag 328.068†	747.1	14.27	1.91%	[0.05]	mg/L
Al 308.215†	1718.7	19.09	1.11%	[1]	mg/L
As 188.979†	11.5	1.31	11.37%	[0.1]	mg/L
Ba 233.527†	3105.4	24.95	0.80%	[0.25]	mg/L
Be 313.107†	3492.3	21.36	0.61%	[0.012]	mg/L
Ca 315.887†	21193.7	20.52	0.10%	[5]	mg/L
Cd 228.802†	166.8	1.79	1.07%	[0.05]	mg/L
Co 228.616†	288.3	3.29	1.14%	[0.1]	mg/L
Cr 267.716†	742.6	9.79	1.32%	[0.1]	mg/L
Cu 327.393†	1043.8	5.45	0.52%	[0.1]	mg/L
Fe 273.955†	909.5	10.49	1.15%	[1]	mg/L
K 404.721†	43.8	7.24	16.54%	[5]	mg/L
Mg 279.077†	6938.7	7.69	0.11%	[5]	mg/L
Mn 257.610†	3352.3	5.32	0.16%	[0.1]	mg/L
Mo 202.031†	152.0	1.59	1.05%	[0.1]	mg/L
Na 330.237†	1298.6	8.21	0.63%	[25]	mg/L
Ni 231.604†	438.2	2.65	0.61%	[0.1]	mg/L
Pb 220.353†	39.7	1.75	4.40%	[0.05]	mg/L
Sb 206.836†	15.2	1.41	9.28%	[0.07]	mg/L
Se 196.026†	28.4	1.75	6.17%	[0.1]	mg/L
Sn 189.927†	71.2	2.16	3.03%	[0.1]	mg/L
Ti 334.940†	3341.9	12.95	0.39%	[0.1]	mg/L
Tl 190.801†	23.6	2.77	11.74%	[0.1]	mg/L
V 290.880†	687.9	8.78	1.28%	[0.1]	mg/L
Zn 206.200†	459.0	5.47	1.19%	[0.1]	mg/L
B 249.772	1414.4	7.90	0.56%	[0.2]	mg/L
Si 251.611	329.5	6.50	1.97%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-329028
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 3
Date Collected: 8/31/2020 2:22:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST3 V-329028

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	61609.5	410.80	0.67%	91.9	%
Y 371.029	21971.7	279.77	1.27%	89.1	%
Ag 328.068†	1521.8	16.98	1.12%	[0.10]	mg/L
Al 308.215†	7358.5	43.91	0.60%	[5.0]	mg/L
As 188.979†	66.8	1.69	2.53%	[0.50]	mg/L
Ba 233.527†	5465.7	29.73	0.54%	[0.50]	mg/L
Be 313.107†	148480.2	626.22	0.42%	[0.50]	mg/L
Ca 315.887†	219490.8	849.40	0.39%	[50]	mg/L
Cd 228.802†	1655.1	1.29	0.08%	[0.50]	mg/L
Co 228.616†	1451.8	16.86	1.16%	[0.50]	mg/L
Cr 267.716†	3428.5	12.97	0.38%	[0.50]	mg/L
Cu 327.393†	4644.6	11.91	0.26%	[0.50]	mg/L
Fe 273.955†	3996.6	38.35	0.96%	[5.0]	mg/L
K 404.721†	1130.7	18.25	1.61%	[50]	mg/L
Mg 279.077†	68334.3	208.39	0.30%	[50]	mg/L
Mn 257.610†	16490.2	66.31	0.40%	[0.50]	mg/L
Mo 202.031†	776.3	2.35	0.30%	[0.50]	mg/L
Na 330.237†	2431.7	16.00	0.66%	[50]	mg/L
Ni 231.604†	2154.4	14.88	0.69%	[0.50]	mg/L
Pb 220.353†	389.8	3.73	0.96%	[0.50]	mg/L
Sb 206.836†	93.3	2.98	3.20%	[0.50]	mg/L
Se 196.026†	149.7	2.22	1.49%	[0.50]	mg/L
Sn 189.927†	341.0	3.59	1.05%	[0.50]	mg/L
Ti 334.940†	16232.8	56.15	0.35%	[0.50]	mg/L
Tl 190.801†	110.0	3.32	3.01%	[0.50]	mg/L
V 290.880†	3125.9	21.10	0.67%	[0.50]	mg/L
Zn 206.200†	2368.4	17.86	0.75%	[0.50]	mg/L
B 249.772	3214.4	33.12	1.03%	[0.50]	mg/L
Si 251.611	11395.2	95.78	0.84%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-329029
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 4
Date Collected: 8/31/2020 2:26:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST4 V-329029

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	64726.6	525.45	0.81%	96.5	%
Y 371.029	21750.8	323.33	1.49%	88.2	%
Ag 328.068†	2673.7	19.04	0.71%	[0.20]	mg/L
Al 308.215†	14814.3	62.80	0.42%	[10]	mg/L
As 188.979†	130.9	0.82	0.63%	[1.00]	mg/L
Ba 233.527†	10724.5	8.61	0.08%	[1.00]	mg/L
Be 313.107†	288138.1	3093.64	1.07%	[1.00]	mg/L
Ca 315.887†	418569.5	4201.32	1.00%	[100]	mg/L
Cd 228.802†	2998.2	18.97	0.63%	[1.00]	mg/L
Co 228.616†	2866.6	17.97	0.63%	[1.00]	mg/L
Cr 267.716†	6677.0	19.37	0.29%	[1.00]	mg/L
Cu 327.393†	9352.1	37.79	0.40%	[1.00]	mg/L
Fe 273.955†	7768.1	41.13	0.53%	[10.0]	mg/L
K 404.721†	2250.8	2.68	0.12%	[100]	mg/L
Mg 279.077†	132002.4	1418.89	1.07%	[100]	mg/L
Mn 257.610†	33816.6	76.40	0.23%	[1.00]	mg/L
Mo 202.031†	1527.1	2.56	0.17%	[1.00]	mg/L
Na 330.237†	5151.3	40.57	0.79%	[100]	mg/L
Ni 231.604†	3819.9	7.33	0.19%	[1.00]	mg/L
Pb 220.353†	751.1	4.56	0.61%	[1.00]	mg/L
Sb 206.836†	174.7	0.51	0.29%	[1.00]	mg/L
Se 196.026†	283.9	1.31	0.46%	[1.00]	mg/L
Sn 189.927†	662.9	5.11	0.77%	[1.00]	mg/L
Ti 334.940†	33711.5	80.89	0.24%	[1.00]	mg/L
Tl 190.801†	210.1	3.24	1.54%	[1.00]	mg/L
V 290.880†	5984.3	20.91	0.35%	[1.00]	mg/L
Zn 206.200†	4303.6	11.33	0.26%	[1.00]	mg/L
B 249.772	6663.2	54.00	0.81%	[1.00]	mg/L
Si 251.611	24326.8	232.63	0.96%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	68.5	13340	0.00000	0.997059	
Al 308.215	3	Lin, Calc Int	96.2	1469	0.00000	0.999849	
As 188.979	3	Lin, Calc Int	-0.5	131.9	0.00000	0.999832	
Ba 233.527	3	Lin, Calc Int	190.4	10590	0.00000	0.999094	
Be 313.107	3	Lin, Calc Int	818.7	288900	0.00000	0.999875	
Ca 315.887	3	Lin, Calc Int	1988.5	4202	0.00000	0.999674	
Cd 228.802	3	Lin, Calc Int	36.2	3016	0.00000	0.998575	
Co 228.616	3	Lin, Calc Int	4.2	2869	0.00000	0.999977	
Cr 267.716	3	Lin, Calc Int	49.9	6655	0.00000	0.999879	
Cu 327.393	3	Lin, Calc Int	42.3	9295	0.00000	0.999914	
Fe 273.955	3	Lin, Calc Int	79.7	772.2	0.00000	0.999812	
K 404.721	3	Lin, Calc Int	-30.0	22.87	0.00000	0.999578	
Mg 279.077	3	Lin, Calc Int	579.8	1322	0.00000	0.999836	
Mn 257.610	3	Lin, Calc Int	-90.6	33760	0.00000	0.999912	
Mo 202.031	3	Lin, Calc Int	2.0	1530	0.00000	0.999958	
Na 330.237	3	Lin, Calc Int	-24.5	51.31	0.00000	0.999439	
Ni 231.604	3	Lin, Calc Int	70.3	3832	0.00000	0.997798	
Pb 220.353	3	Lin, Calc Int	3.6	752.5	0.00000	0.999813	
Sb 206.836	3	Lin, Calc Int	2.4	174.2	0.00000	0.999372	
Se 196.026	3	Lin, Calc Int	1.4	285.1	0.00000	0.999562	
Sn 189.927	3	Lin, Calc Int	3.9	662.1	0.00000	0.999885	
Ti 334.940	3	Lin, Calc Int	-128.5	33630	0.00000	0.999802	
Tl 190.801	3	Lin, Calc Int	2.1	209.7	0.00000	0.999697	
V 290.880	3	Lin, Calc Int	64.5	5963	0.00000	0.999702	
Zn 206.200	3	Lin, Calc Int	52.9	4325	0.00000	0.998605	

B 249.772	3	Lin, Calc Int	11.5	6615	0.00000	0.999622
Si 251.611	3	Lin, Calc Int	-100.7	2414	0.00000	0.999423

Sequence No.: 5 **Autosampler Location: 6**
Sample ID: ICV V-329036 **Date Collected: 8/31/2020 2:31:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 105 **Auto Dilution Factor: 1**

Mean Data: ICV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	60955.9	90.9	%	0.23				0.26%
Y 371.029	21438.0	87.0	%	0.30				0.35%
Ag 328.068†	1544.7	0.113583	mg/L	0.0006594	0.113583	mg/L	0.0006594	0.58%
QC value greater than the upper limit for Ag 328.068 Recovery = 113.58%								
Al 308.215†	7415.7	4.99652	mg/L	0.009926	4.99652	mg/L	0.009926	0.20%
QC value within limits for Al 308.215 Recovery = 99.93%								
As 188.979†	67.6	0.491393	mg/L	0.0114341	0.491393	mg/L	0.0114341	2.33%
QC value within limits for As 188.979 Recovery = 98.28%								
Ba 233.527†	5487.0	0.500106	mg/L	0.0006916	0.500106	mg/L	0.0006916	0.14%
QC value within limits for Ba 233.527 Recovery = 100.02%								
Be 313.107†	149681.4	0.515252	mg/L	0.0015308	0.515252	mg/L	0.0015308	0.30%
QC value within limits for Be 313.107 Recovery = 103.05%								
Ca 315.887†	220017.3	51.8877	mg/L	0.06390	51.8877	mg/L	0.06390	0.12%
QC value within limits for Ca 315.887 Recovery = 103.78%								
Cd 228.802†	1671.9	0.542267	mg/L	0.0016314	0.542267	mg/L	0.0016314	0.30%
QC value within limits for Cd 228.802 Recovery = 108.45%								
Co 228.616†	1468.1	0.510279	mg/L	0.0024174	0.510279	mg/L	0.0024174	0.47%
QC value within limits for Co 228.616 Recovery = 102.06%								
Cr 267.716†	3451.3	0.513461	mg/L	0.0022483	0.513461	mg/L	0.0022483	0.44%
QC value within limits for Cr 267.716 Recovery = 102.69%								
Cu 327.393†	4727.6	0.504596	mg/L	0.0001450	0.504596	mg/L	0.0001450	0.03%
QC value within limits for Cu 327.393 Recovery = 100.92%								
Fe 273.955†	3947.7	5.00898	mg/L	0.006231	5.00898	mg/L	0.006231	0.12%
QC value within limits for Fe 273.955 Recovery = 100.18%								
K 404.721†	1138.3	-2.87978	mg/L	0.632824	-2.87978	mg/L	0.632824	21.97%
QC value less than the lower limit for K 404.721 Recovery = -5.76%								
Mg 279.077†	68525.4	51.3845	mg/L	0.09611	51.3845	mg/L	0.09611	0.19%
QC value within limits for Mg 279.077 Recovery = 102.77%								
Mn 257.610†	16509.1	0.491648	mg/L	0.0011431	0.491648	mg/L	0.0011431	0.23%
QC value within limits for Mn 257.610 Recovery = 98.33%								
Mo 202.031†	782.4	0.510228	mg/L	0.0019225	0.510228	mg/L	0.0019225	0.38%
QC value within limits for Mo 202.031 Recovery = 102.05%								
Na 330.237†	2431.9	47.8721	mg/L	0.26484	47.8721	mg/L	0.26484	0.55%
QC value within limits for Na 330.237 Recovery = 95.74%								
Ni 231.604†	2158.3	0.546299	mg/L	0.0014851	0.546299	mg/L	0.0014851	0.27%
QC value within limits for Ni 231.604 Recovery = 109.26%								
Pb 220.353†	395.2	0.521309	mg/L	0.0030818	0.521309	mg/L	0.0030818	0.59%
QC value within limits for Pb 220.353 Recovery = 104.26%								
Sb 206.836†	91.8	0.524900	mg/L	0.0179374	0.524900	mg/L	0.0179374	3.42%
QC value within limits for Sb 206.836 Recovery = 104.98%								
Se 196.026†	147.1	0.519778	mg/L	0.0102599	0.519778	mg/L	0.0102599	1.97%
QC value within limits for Se 196.026 Recovery = 103.96%								
Sn 189.927†	340.9	0.507083	mg/L	0.0020276	0.507083	mg/L	0.0020276	0.40%
QC value within limits for Sn 189.927 Recovery = 101.42%								
Ti 334.940†	16204.2	0.489672	mg/L	0.0005521	0.489672	mg/L	0.0005521	0.11%
QC value within limits for Ti 334.940 Recovery = 97.93%								
Tl 190.801†	113.1	0.525333	mg/L	0.0112880	0.525333	mg/L	0.0112880	2.15%
QC value within limits for Tl 190.801 Recovery = 105.07%								
V 290.880†	3136.6	0.518046	mg/L	0.0025748	0.518046	mg/L	0.0025748	0.50%
QC value within limits for V 290.880 Recovery = 103.61%								
Zn 206.200†	2367.7	0.535257	mg/L	0.0032555	0.535257	mg/L	0.0032555	0.61%
QC value within limits for Zn 206.200 Recovery = 107.05%								
B 249.772	3208.5	0.492147	mg/L	0.0002150	0.492147	mg/L	0.0002150	0.04%
QC value within limits for B 249.772 Recovery = 98.43%								
Si 251.611	11316.8	4.83381	mg/L	0.016966	4.83381	mg/L	0.016966	0.35%
QC value within limits for Si 251.611 Recovery = 96.68%								

QC Failed. Continue with analysis.

Sequence No.: 6 **Autosampler Location: 1**
Sample ID: ICB V-329027 **Date Collected: 8/31/2020 2:35:11 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	64507.1	96.2	%	0.93				0.96%
Y 371.029	23322.0	94.6	%	0.99				1.05%
Ag 328.068†	-7.1	-0.0057240	mg/L	0.00023628	-0.0057240	mg/L	0.00023628	4.13%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-24.6	-0.0827888	mg/L	0.00482072	-0.0827888	mg/L	0.00482072	5.82%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-1.6	-0.0085488	mg/L	0.00388914	-0.0085488	mg/L	0.00388914	45.49%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.3	-0.0179480	mg/L	0.00024761	-0.0179480	mg/L	0.00024761	1.38%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-35.7	-0.0029575	mg/L	0.00003047	-0.0029575	mg/L	0.00003047	1.03%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	8.0	-0.471337	mg/L	0.0015696	-0.471337	mg/L	0.0015696	0.33%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	3.3	-0.0108869	mg/L	0.00061454	-0.0108869	mg/L	0.00061454	5.64%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	4.3	0.0000549	mg/L	0.00023961	0.0000549	mg/L	0.00023961	436.15%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-1.8	-0.0078163	mg/L	0.00015028	-0.0078163	mg/L	0.00015028	1.92%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-20.6	-0.0067739	mg/L	0.00034145	-0.0067739	mg/L	0.00034145	5.04%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-3.0	-0.107128	mg/L	0.0025879	-0.107128	mg/L	0.0025879	2.42%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	7.4	2.78939	mg/L	0.801174	2.78939	mg/L	0.801174	28.72%
QC value greater than the upper limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	1.8	-0.437152	mg/L	0.0066375	-0.437152	mg/L	0.0066375	1.52%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-2.0	0.0026230	mg/L	0.00005358	0.0026230	mg/L	0.00005358	2.04%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.6	-0.0009564	mg/L	0.00092651	-0.0009564	mg/L	0.00092651	96.87%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-7.4	0.333476	mg/L	0.0618374	0.333476	mg/L	0.0618374	18.54%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	3.2	-0.0175189	mg/L	0.00077523	-0.0175189	mg/L	0.00077523	4.43%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.1	-0.0046720	mg/L	0.00029464	-0.0046720	mg/L	0.00029464	6.31%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.5	0.0001926	mg/L	0.00293786	0.0001926	mg/L	0.00293786	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.2	-0.0007795	mg/L	0.00413573	-0.0007795	mg/L	0.00413573	530.59%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.4	-0.0065270	mg/L	0.00137844	-0.0065270	mg/L	0.00137844	21.12%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-1.4	0.0037431	mg/L	0.00019915	0.0037431	mg/L	0.00019915	5.32%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.6	-0.0066782	mg/L	0.01043823	-0.0066782	mg/L	0.01043823	156.30%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	2.3	-0.0104635	mg/L	0.00101493	-0.0104635	mg/L	0.00101493	9.70%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	0.5	-0.0121239	mg/L	0.00009082	-0.0121239	mg/L	0.00009082	0.75%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-4.4	-0.0022152	mg/L	0.00026103	-0.0022152	mg/L	0.00026103	11.78%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	2.7	0.0415283	mg/L	0.00108282	0.0415283	mg/L	0.00108282	2.61%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7 **Autosampler Location: 13**
Sample ID: LRS V-329041 **Date Collected: 8/31/2020 2:39:07 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: LRS V-329041

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	54335.2	81.0	%	0.40				0.49%
Y 371.029	17497.1	71.0	%	0.39				0.55%
Ag 328.068†	15434.5	1.21029	mg/L	0.012106	1.21029	mg/L	0.012106	1.00%
QC value greater than the upper limit for Ag 328.068 Recovery = 121.03%								
Al 308.215†	755271.8	514.246	mg/L	4.1875	514.246	mg/L	4.1875	0.81%
QC value within limits for Al 308.215 Recovery = 102.85%								
As 188.979†	1366.7	9.89893	mg/L	0.152037	9.89893	mg/L	0.152037	1.54%
QC value within limits for As 188.979 Recovery = 98.99%								
Ba 233.527†	105418.0	9.93567	mg/L	0.008201	9.93567	mg/L	0.008201	0.08%
QC value within limits for Ba 233.527 Recovery = 99.36%								
Be 313.107†	1392209.7	4.81596	mg/L	0.040433	4.81596	mg/L	0.040433	0.84%
QC value within limits for Be 313.107 Recovery = 96.32%								
Ca 315.887†	2033734.9	483.526	mg/L	4.3146	483.526	mg/L	4.3146	0.89%
QC value within limits for Ca 315.887 Recovery = 96.71%								
Cd 228.802†	16096.5	5.32427	mg/L	0.004735	5.32427	mg/L	0.004735	0.09%
QC value within limits for Cd 228.802 Recovery = 106.49%								
Co 228.616†	13453.4	4.68808	mg/L	0.044612	4.68808	mg/L	0.044612	0.95%
QC value within limits for Co 228.616 Recovery = 93.76%								
Cr 267.716†	64598.2	9.74087	mg/L	0.002732	9.74087	mg/L	0.002732	0.03%
QC value within limits for Cr 267.716 Recovery = 97.41%								
Cu 327.393†	99905.4	10.7638	mg/L	0.01937	10.7638	mg/L	0.01937	0.18%
QC value within limits for Cu 327.393 Recovery = 107.64%								
Fe 273.955†	150703.5	195.056	mg/L	0.9815	195.056	mg/L	0.9815	0.50%
QC value within limits for Fe 273.955 Recovery = 97.53%								
K 404.721†	5822.7	-1845.21	mg/L	10.326	-1845.21	mg/L	10.326	0.56%
QC value less than the lower limit for K 404.721 Recovery = -922.60%								
Mg 279.077†	666583.8	503.672	mg/L	4.0685	503.672	mg/L	4.0685	0.81%
QC value within limits for Mg 279.077 Recovery = 100.73%								
Mn 257.610†	328080.6	9.71973	mg/L	0.009785	9.71973	mg/L	0.009785	0.10%
QC value within limits for Mn 257.610 Recovery = 97.20%								
Mo 202.031†	15310.2	10.0086	mg/L	0.09039	10.0086	mg/L	0.09039	0.90%
QC value within limits for Mo 202.031 Recovery = 100.09%								
Na 330.237†	66485.1	1296.20	mg/L	3.610	1296.20	mg/L	3.610	0.28%
QC value greater than the upper limit for Na 330.237 Recovery = 129.62%								
Ni 231.604†	35345.3	9.23306	mg/L	0.007662	9.23306	mg/L	0.007662	0.08%
QC value within limits for Ni 231.604 Recovery = 92.33%								
Pb 220.353†	7008.3	9.37132	mg/L	0.085251	9.37132	mg/L	0.085251	0.91%
QC value within limits for Pb 220.353 Recovery = 93.71%								
Sb 206.836†	917.0	5.48232	mg/L	0.044972	5.48232	mg/L	0.044972	0.82%
QC value within limits for Sb 206.836 Recovery = 109.65%								
Se 196.026†	1428.2	5.17762	mg/L	0.063820	5.17762	mg/L	0.063820	1.23%
QC value within limits for Se 196.026 Recovery = 103.55%								
Sn 189.927†	6396.9	9.62220	mg/L	0.106424	9.62220	mg/L	0.106424	1.11%
QC value within limits for Sn 189.927 Recovery = 96.22%								
Ti 334.940†	306746.8	9.16310	mg/L	0.093173	9.16310	mg/L	0.093173	1.02%
QC value within limits for Ti 334.940 Recovery = 91.63%								
Tl 190.801†	942.3	4.44755	mg/L	0.046218	4.44755	mg/L	0.046218	1.04%
QC value less than the lower limit for Tl 190.801 Recovery = 88.95%								
V 290.880†	54229.1	9.10656	mg/L	0.013480	9.10656	mg/L	0.013480	0.15%
QC value within limits for V 290.880 Recovery = 91.07%								
Zn 206.200†	40043.2	9.24699	mg/L	0.014631	9.24699	mg/L	0.014631	0.16%
QC value within limits for Zn 206.200 Recovery = 92.47%								
B 249.772	32562.9	4.60925	mg/L	0.043179	4.60925	mg/L	0.043179	0.94%
QC value within limits for B 249.772 Recovery = 92.19%								
Si 251.611	51763.4	23.4690	mg/L	0.12763	23.4690	mg/L	0.12763	0.54%
QC value within limits for Si 251.611 Recovery = 93.88%								

QC Failed. Continue with analysis.

Sequence No.: 8 **Autosampler Location: 3**
Sample ID: ICS3 V-329028 **Date Collected: 8/31/2020 2:44:16 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 105 **Auto Dilution Factor: 1**

Mean Data: ICS3 V-329028

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	60504.1	90.2	%	0.61				0.67%
Y 371.029	21116.6	85.7	%	0.88				1.03%
Ag 328.068†	1532.7	0.112636	mg/L	0.0019258	0.112636	mg/L	0.0019258	1.71%
QC value greater than the upper limit for Ag 328.068 Recovery = 112.64%								
Al 308.215†	7396.9	4.98349	mg/L	0.014054	4.98349	mg/L	0.014054	0.28%
QC value within limits for Al 308.215 Recovery = 99.67%								
As 188.979†	65.0	0.471876	mg/L	0.0275228	0.471876	mg/L	0.0275228	5.83%
QC value within limits for As 188.979 Recovery = 94.38%								
Ba 233.527†	5410.9	0.492922	mg/L	0.0013825	0.492922	mg/L	0.0013825	0.28%
QC value within limits for Ba 233.527 Recovery = 98.58%								
Be 313.107†	148143.4	0.509928	mg/L	0.0009764	0.509928	mg/L	0.0009764	0.19%
QC value within limits for Be 313.107 Recovery = 101.99%								
Ca 315.887†	216191.8	50.9773	mg/L	0.17891	50.9773	mg/L	0.17891	0.35%
QC value within limits for Ca 315.887 Recovery = 101.95%								
Cd 228.802†	1633.5	0.529540	mg/L	0.0075643	0.529540	mg/L	0.0075643	1.43%
QC value within limits for Cd 228.802 Recovery = 105.91%								
Co 228.616†	1444.8	0.502182	mg/L	0.0055362	0.502182	mg/L	0.0055362	1.10%
QC value within limits for Co 228.616 Recovery = 100.44%								
Cr 267.716†	3436.1	0.511149	mg/L	0.0040116	0.511149	mg/L	0.0040116	0.78%
QC value within limits for Cr 267.716 Recovery = 102.23%								
Cu 327.393†	4699.3	0.501535	mg/L	0.0019212	0.501535	mg/L	0.0019212	0.38%
QC value within limits for Cu 327.393 Recovery = 100.31%								
Fe 273.955†	3827.7	4.85360	mg/L	0.050047	4.85360	mg/L	0.050047	1.03%
QC value within limits for Fe 273.955 Recovery = 97.07%								
K 404.721†	1143.6	-0.973892	mg/L	0.5397427	-0.973892	mg/L	0.5397427	55.42%
QC value less than the lower limit for K 404.721 Recovery = -1.95%								
Mg 279.077†	67426.5	50.5534	mg/L	0.15419	50.5534	mg/L	0.15419	0.30%
QC value within limits for Mg 279.077 Recovery = 101.11%								
Mn 257.610†	16315.7	0.485918	mg/L	0.0016475	0.485918	mg/L	0.0016475	0.34%
QC value within limits for Mn 257.610 Recovery = 97.18%								
Mo 202.031†	773.0	0.504095	mg/L	0.0040314	0.504095	mg/L	0.0040314	0.80%
QC value within limits for Mo 202.031 Recovery = 100.82%								
Na 330.237†	2426.0	47.7572	mg/L	0.11300	47.7572	mg/L	0.11300	0.24%
QC value within limits for Na 330.237 Recovery = 95.51%								
Ni 231.604†	2114.4	0.534823	mg/L	0.0061106	0.534823	mg/L	0.0061106	1.14%
QC value within limits for Ni 231.604 Recovery = 106.96%								
Pb 220.353†	385.3	0.508109	mg/L	0.0093045	0.508109	mg/L	0.0093045	1.83%
QC value within limits for Pb 220.353 Recovery = 101.62%								
Sb 206.836†	91.9	0.525784	mg/L	0.0053509	0.525784	mg/L	0.0053509	1.02%
QC value within limits for Sb 206.836 Recovery = 105.16%								
Se 196.026†	141.3	0.499159	mg/L	0.0178033	0.499159	mg/L	0.0178033	3.57%
QC value within limits for Se 196.026 Recovery = 99.83%								
Sn 189.927†	332.5	0.494501	mg/L	0.0056002	0.494501	mg/L	0.0056002	1.13%
QC value within limits for Sn 189.927 Recovery = 98.90%								
Ti 334.940†	15937.7	0.481676	mg/L	0.0022214	0.481676	mg/L	0.0022214	0.46%
QC value within limits for Ti 334.940 Recovery = 96.34%								
Tl 190.801†	112.0	0.520420	mg/L	0.0224021	0.520420	mg/L	0.0224021	4.30%
QC value within limits for Tl 190.801 Recovery = 104.08%								
V 290.880†	3092.2	0.510550	mg/L	0.0010398	0.510550	mg/L	0.0010398	0.20%
QC value within limits for V 290.880 Recovery = 102.11%								
Zn 206.200†	2326.6	0.525743	mg/L	0.0068965	0.525743	mg/L	0.0068965	1.31%
QC value within limits for Zn 206.200 Recovery = 105.15%								
B 249.772	3265.6	0.500748	mg/L	0.0046019	0.500748	mg/L	0.0046019	0.92%
QC value within limits for B 249.772 Recovery = 100.15%								
Si 251.611	11071.6	4.73060	mg/L	0.049493	4.73060	mg/L	0.049493	1.05%
QC value within limits for Si 251.611 Recovery = 94.61%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 14
Date Collected: 8/31/2020 2:48:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	66666.9	99.4	%	0.80				0.81%
Y 371.029	23325.9	94.6	%	1.10				1.16%
Ag 328.068†	-1.6	-0.0053191	mg/L	0.00037119	-0.0053191	mg/L	0.00037119	6.98%
Al 308.215†	-29.9	-0.0863930	mg/L	0.00137727	-0.0863930	mg/L	0.00137727	1.59%
As 188.979†	-0.4	0.0005887	mg/L	0.00730264	0.0005887	mg/L	0.00730264	>999.9%
Ba 233.527†	2.3	-0.0177547	mg/L	0.00016009	-0.0177547	mg/L	0.00016009	0.90%
Be 313.107†	-7.9	-0.0028611	mg/L	0.00006865	-0.0028611	mg/L	0.00006865	2.40%
Ca 315.887†	16.5	-0.469300	mg/L	0.0040156	-0.469300	mg/L	0.0040156	0.86%
Cd 228.802†	1.6	-0.0114714	mg/L	0.00023150	-0.0114714	mg/L	0.00023150	2.02%
Co 228.616†	1.8	-0.0008267	mg/L	0.00117056	-0.0008267	mg/L	0.00117056	141.60%
Cr 267.716†	0.9	-0.0074145	mg/L	0.00047185	-0.0074145	mg/L	0.00047185	6.36%
Cu 327.393†	-25.1	-0.0072592	mg/L	0.00059521	-0.0072592	mg/L	0.00059521	8.20%
Fe 273.955†	9.4	-0.0911197	mg/L	0.00189932	-0.0911197	mg/L	0.00189932	2.08%
K 404.721†	-4.9	2.08055	mg/L	0.469915	2.08055	mg/L	0.469915	22.59%
Mg 279.077†	2.9	-0.436292	mg/L	0.0058611	-0.436292	mg/L	0.0058611	1.34%
Mn 257.610†	-0.6	0.0026644	mg/L	0.00005456	0.0026644	mg/L	0.00005456	2.05%
Mo 202.031†	-1.4	-0.0022482	mg/L	0.00053443	-0.0022482	mg/L	0.00053443	23.77%
Na 330.237†	-9.4	0.294284	mg/L	0.1029630	0.294284	mg/L	0.1029630	34.99%
Ni 231.604†	5.2	-0.0169876	mg/L	0.00053937	-0.0169876	mg/L	0.00053937	3.18%
Pb 220.353†	2.4	-0.0015035	mg/L	0.00161721	-0.0015035	mg/L	0.00161721	107.56%
Sb 206.836†	1.5	-0.0055045	mg/L	0.00579374	-0.0055045	mg/L	0.00579374	105.26%
Se 196.026†	-0.3	-0.0063444	mg/L	0.00972059	-0.0063444	mg/L	0.00972059	153.21%
Sn 189.927†	0.1	-0.0058308	mg/L	0.00239195	-0.0058308	mg/L	0.00239195	41.02%
Ti 334.940†	1.5	0.0038309	mg/L	0.00009257	0.0038309	mg/L	0.00009257	2.42%
Tl 190.801†	-0.2	-0.0103932	mg/L	0.00362046	-0.0103932	mg/L	0.00362046	34.83%
V 290.880†	-4.3	-0.0115598	mg/L	0.00075915	-0.0115598	mg/L	0.00075915	6.57%
Zn 206.200†	0.4	-0.0121332	mg/L	0.00046622	-0.0121332	mg/L	0.00046622	3.84%
B 249.772	44.1	0.0050318	mg/L	0.00153394	0.0050318	mg/L	0.00153394	30.48%
Si 251.611	19.3	0.0484935	mg/L	0.00274833	0.0484935	mg/L	0.00274833	5.67%

Sequence No.: 10 **Autosampler Location: 5**
Sample ID: LLICV V-329037 **Date Collected: 8/31/2020 2:52:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: LLICV V-329037

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	65366.9	97.5	%	0.29				0.30%
Y 371.029	22432.3	91.0	%	0.81				0.89%
Ag 328.068†	730.1	0.0501580	mg/L	0.00062584	0.0501580	mg/L	0.00062584	1.25%
QC value within limits for Ag 328.068 Recovery = 100.32%								
Al 308.215†	1674.8	1.07726	mg/L	0.011417	1.07726	mg/L	0.011417	1.06%
QC value within limits for Al 308.215 Recovery = 107.73%								
As 188.979†	12.4	0.0928462	mg/L	0.00135721	0.0928462	mg/L	0.00135721	1.46%
QC value within limits for As 188.979 Recovery = 92.85%								
Ba 233.527†	3015.0	0.266700	mg/L	0.0003676	0.266700	mg/L	0.0003676	0.14%
QC value within limits for Ba 233.527 Recovery = 106.68%								
Be 313.107†	3438.9	0.0090692	mg/L	0.00012949	0.0090692	mg/L	0.00012949	1.43%
QC value less than the lower limit for Be 313.107 Recovery = 75.58%								
Ca 315.887†	20892.5	4.49887	mg/L	0.013084	4.49887	mg/L	0.013084	0.29%
QC value within limits for Ca 315.887 Recovery = 89.98%								
Cd 228.802†	155.2	0.0394626	mg/L	0.00008104	0.0394626	mg/L	0.00008104	0.21%
QC value less than the lower limit for Cd 228.802 Recovery = 78.93%								
Co 228.616†	281.6	0.0967209	mg/L	0.00099865	0.0967209	mg/L	0.00099865	1.03%
QC value within limits for Co 228.616 Recovery = 96.72%								
Cr 267.716†	729.7	0.102603	mg/L	0.0003505	0.102603	mg/L	0.0003505	0.34%
QC value within limits for Cr 267.716 Recovery = 102.60%								
Cu 327.393†	1015.4	0.104793	mg/L	0.0007731	0.104793	mg/L	0.0007731	0.74%
QC value within limits for Cu 327.393 Recovery = 104.79%								
Fe 273.955†	831.8	0.973958	mg/L	0.0111094	0.973958	mg/L	0.0111094	1.14%
QC value within limits for Fe 273.955 Recovery = 97.40%								
K 404.721†	43.2	-7.29037	mg/L	0.135239	-7.29037	mg/L	0.135239	1.86%
QC value less than the lower limit for K 404.721 Recovery = -145.81%								
Mg 279.077†	6793.4	4.69907	mg/L	0.021848	4.69907	mg/L	0.021848	0.46%
QC value within limits for Mg 279.077 Recovery = 93.98%								
Mn 257.610†	3244.5	0.0987789	mg/L	0.00040544	0.0987789	mg/L	0.00040544	0.41%
QC value within limits for Mn 257.610 Recovery = 98.78%								
Mo 202.031†	147.6	0.0951516	mg/L	0.00029719	0.0951516	mg/L	0.00029719	0.31%
QC value within limits for Mo 202.031 Recovery = 95.15%								
Na 330.237†	1256.6	24.9666	mg/L	0.29647	24.9666	mg/L	0.29647	1.19%
QC value within limits for Na 330.237 Recovery = 99.87%								
Ni 231.604†	415.2	0.0902830	mg/L	0.00140303	0.0902830	mg/L	0.00140303	1.55%
QC value within limits for Ni 231.604 Recovery = 90.28%								
Pb 220.353†	38.3	0.0462668	mg/L	0.00120558	0.0462668	mg/L	0.00120558	2.61%
QC value within limits for Pb 220.353 Recovery = 92.53%								
Sb 206.836†	14.3	0.0703855	mg/L	0.01813773	0.0703855	mg/L	0.01813773	25.77%
QC value within limits for Sb 206.836 Recovery = 100.55%								
Se 196.026†	29.5	0.0996547	mg/L	0.01470763	0.0996547	mg/L	0.01470763	14.76%
QC value within limits for Se 196.026 Recovery = 99.65%								
Sn 189.927†	68.0	0.0963275	mg/L	0.00288153	0.0963275	mg/L	0.00288153	2.99%
QC value within limits for Sn 189.927 Recovery = 96.33%								
Ti 334.940†	3170.5	0.0984526	mg/L	0.00097991	0.0984526	mg/L	0.00097991	1.00%
QC value within limits for Ti 334.940 Recovery = 98.45%								
Tl 190.801†	23.1	0.0993433	mg/L	0.00581154	0.0993433	mg/L	0.00581154	5.85%
QC value within limits for Tl 190.801 Recovery = 99.34%								
V 290.880†	651.8	0.0987423	mg/L	0.00117972	0.0987423	mg/L	0.00117972	1.19%
QC value within limits for V 290.880 Recovery = 98.74%								
Zn 206.200†	445.5	0.0907841	mg/L	0.00048448	0.0907841	mg/L	0.00048448	0.53%
QC value within limits for Zn 206.200 Recovery = 90.78%								
B 249.772	1412.3	0.212822	mg/L	0.0008996	0.212822	mg/L	0.0008996	0.42%
QC value within limits for B 249.772 Recovery = 106.41%								
Si 251.611	318.2	0.196902	mg/L	0.0009316	0.196902	mg/L	0.0009316	0.47%
QC value greater than the upper limit for Si 251.611 Recovery = 196.90%								

QC Failed. Continue with analysis.

Sequence No.: 11 **Autosampler Location: 7**
Sample ID: ICSA V-329033 **Date Collected: 8/31/2020 2:56:14 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICSA V-329033

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	54824.4	81.7	%	0.45				0.55%
Y 371.029	18966.6	76.9	%	0.34				0.44%
Ag 328.068†	-672.0	-0.0428758	mg/L	0.00106042	-0.0428758	mg/L	0.00106042	2.47%
Al 308.215†	781552.6	531.911	mg/L	5.6542	531.911	mg/L	5.6542	1.06%
QC value within limits for Al 308.215 Recovery = 106.38%								
As 188.979†	-2.3	-0.0201000	mg/L	0.02931800	-0.0201000	mg/L	0.02931800	145.86%
Ba 233.527†	62.7	-0.0120604	mg/L	0.00017278	-0.0120604	mg/L	0.00017278	1.43%
Be 313.107†	-144.4	-0.0033335	mg/L	0.00008657	-0.0033335	mg/L	0.00008657	2.60%
Ca 315.887†	2113697.0	502.556	mg/L	4.1402	502.556	mg/L	4.1402	0.82%
QC value within limits for Ca 315.887 Recovery = 100.51%								
Cd 228.802†	1.9	-0.0113768	mg/L	0.00060338	-0.0113768	mg/L	0.00060338	5.30%
Co 228.616†	3.4	-0.0002514	mg/L	0.00074238	-0.0002514	mg/L	0.00074238	295.33%
Cr 267.716†	-13.7	-0.0089996	mg/L	0.00146686	-0.0089996	mg/L	0.00146686	16.30%
Cu 327.393†	-246.5	-0.0125751	mg/L	0.00064748	-0.0125751	mg/L	0.00064748	5.15%
Fe 273.955†	142949.3	185.015	mg/L	1.3228	185.015	mg/L	1.3228	0.71%
QC value within limits for Fe 273.955 Recovery = 92.51%								
K 404.721†	-41.7	-1993.43	mg/L	15.030	-1993.43	mg/L	15.030	0.75%
Mg 279.077†	708155.4	535.111	mg/L	5.0559	535.111	mg/L	5.0559	0.94%
QC value within limits for Mg 279.077 Recovery = 107.02%								
Mn 257.610†	-394.6	-0.0090045	mg/L	0.00033784	-0.0090045	mg/L	0.00033784	3.75%
Mo 202.031†	-8.5	-0.0068647	mg/L	0.00114903	-0.0068647	mg/L	0.00114903	16.74%
Na 330.237†	-43.7	-0.375412	mg/L	0.1158480	-0.375412	mg/L	0.1158480	30.86%
Ni 231.604†	13.8	-0.0147503	mg/L	0.00066516	-0.0147503	mg/L	0.00066516	4.51%
Pb 220.353†	-33.2	0.0117551	mg/L	0.00358229	0.0117551	mg/L	0.00358229	30.47%
Sb 206.836†	2.4	0.0002422	mg/L	0.00348634	0.0002422	mg/L	0.00348634	>999.9%
Se 196.026†	-41.3	0.0202444	mg/L	0.01232023	0.0202444	mg/L	0.01232023	60.86%
Sn 189.927†	-23.8	-0.0418669	mg/L	0.00235887	-0.0418669	mg/L	0.00235887	5.63%
Ti 334.940†	-261.2	0.0342467	mg/L	0.00048874	0.0342467	mg/L	0.00048874	1.43%
Tl 190.801†	-2.9	-0.0392262	mg/L	0.01686967	-0.0392262	mg/L	0.01686967	43.01%
V 290.880†	783.7	0.145179	mg/L	0.0026706	0.145179	mg/L	0.0026706	1.84%
Zn 206.200†	30.8	-0.0050971	mg/L	0.00019197	-0.0050971	mg/L	0.00019197	3.77%
B 249.772	5222.5	0.157230	mg/L	0.0090374	0.157230	mg/L	0.0090374	5.75%
Si 251.611	-8.9	0.833885	mg/L	0.0074804	0.833885	mg/L	0.0074804	0.90%

All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 6**
Sample ID: CCV V-329036 **Date Collected: 8/31/2020 3:01:18 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 105 **Auto Dilution Factor: 1**

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	59687.3	89.0	%	0.50				0.56%
Y 371.029	20239.6	82.1	%	0.96				1.17%
Ag 328.068†	1554.9	0.114352	mg/L	0.0006061	0.114352	mg/L	0.0006061	0.53%
QC value greater than the upper limit for Ag 328.068 Recovery = 114.35%								
Al 308.215†	7429.2	5.00575	mg/L	0.009747	5.00575	mg/L	0.009747	0.19%
QC value within limits for Al 308.215 Recovery = 100.12%								
As 188.979†	66.9	0.485776	mg/L	0.0189988	0.485776	mg/L	0.0189988	3.91%
QC value within limits for As 188.979 Recovery = 97.16%								
Ba 233.527†	5552.0	0.506251	mg/L	0.0029804	0.506251	mg/L	0.0029804	0.59%
QC value within limits for Ba 233.527 Recovery = 101.25%								
Be 313.107†	151322.7	0.520933	mg/L	0.0005080	0.520933	mg/L	0.0005080	0.10%
QC value within limits for Be 313.107 Recovery = 104.19%								
Ca 315.887†	222518.9	52.4830	mg/L	0.16193	52.4830	mg/L	0.16193	0.31%
QC value within limits for Ca 315.887 Recovery = 104.97%								
Cd 228.802†	1671.1	0.541993	mg/L	0.0024115	0.541993	mg/L	0.0024115	0.44%
QC value within limits for Cd 228.802 Recovery = 108.40%								
Co 228.616†	1498.2	0.520802	mg/L	0.0015014	0.520802	mg/L	0.0015014	0.29%
QC value within limits for Co 228.616 Recovery = 104.16%								
Cr 267.716†	3509.2	0.522168	mg/L	0.0034072	0.522168	mg/L	0.0034072	0.65%
QC value within limits for Cr 267.716 Recovery = 104.43%								
Cu 327.393†	4735.9	0.505472	mg/L	0.0006184	0.505472	mg/L	0.0006184	0.12%
QC value within limits for Cu 327.393 Recovery = 101.09%								
Fe 273.955†	3868.4	4.90628	mg/L	0.042731	4.90628	mg/L	0.042731	0.87%
QC value within limits for Fe 273.955 Recovery = 98.13%								
K 404.721†	1133.9	-1.96288	mg/L	0.397573	-1.96288	mg/L	0.397573	20.25%
QC value less than the lower limit for K 404.721 Recovery = -3.93%								
Mg 279.077†	70753.4	53.0694	mg/L	0.13363	53.0694	mg/L	0.13363	0.25%
QC value within limits for Mg 279.077 Recovery = 106.14%								
Mn 257.610†	16641.7	0.495574	mg/L	0.0004292	0.495574	mg/L	0.0004292	0.09%
QC value within limits for Mn 257.610 Recovery = 99.11%								
Mo 202.031†	785.3	0.512123	mg/L	0.0041864	0.512123	mg/L	0.0041864	0.82%
QC value within limits for Mo 202.031 Recovery = 102.42%								
Na 330.237†	2416.8	47.5785	mg/L	0.48033	47.5785	mg/L	0.48033	1.01%
QC value within limits for Na 330.237 Recovery = 95.16%								
Ni 231.604†	2170.6	0.549510	mg/L	0.0027717	0.549510	mg/L	0.0027717	0.50%
QC value within limits for Ni 231.604 Recovery = 109.90%								
Pb 220.353†	404.8	0.534051	mg/L	0.0043356	0.534051	mg/L	0.0043356	0.81%
QC value within limits for Pb 220.353 Recovery = 106.81%								
Sb 206.836†	93.1	0.532558	mg/L	0.0123227	0.532558	mg/L	0.0123227	2.31%
QC value within limits for Sb 206.836 Recovery = 106.51%								
Se 196.026†	153.6	0.542723	mg/L	0.0069905	0.542723	mg/L	0.0069905	1.29%
QC value within limits for Se 196.026 Recovery = 108.54%								
Sn 189.927†	343.9	0.511739	mg/L	0.0025693	0.511739	mg/L	0.0025693	0.50%
QC value within limits for Sn 189.927 Recovery = 102.35%								
Ti 334.940†	15893.5	0.480477	mg/L	0.0031260	0.480477	mg/L	0.0031260	0.65%
QC value within limits for Ti 334.940 Recovery = 96.10%								
Tl 190.801†	111.5	0.517730	mg/L	0.0142823	0.517730	mg/L	0.0142823	2.76%
QC value within limits for Tl 190.801 Recovery = 103.55%								
V 290.880†	3146.2	0.519753	mg/L	0.0027690	0.519753	mg/L	0.0027690	0.53%
QC value within limits for V 290.880 Recovery = 103.95%								
Zn 206.200†	2465.6	0.557896	mg/L	0.0022040	0.557896	mg/L	0.0022040	0.40%
QC value greater than the upper limit for Zn 206.200 Recovery = 111.58%								
B 249.772	3133.2	0.481293	mg/L	0.0026941	0.481293	mg/L	0.0026941	0.56%
QC value within limits for B 249.772 Recovery = 96.26%								
Si 251.611	11093.9	4.74225	mg/L	0.039254	4.74225	mg/L	0.039254	0.83%
QC value within limits for Si 251.611 Recovery = 94.84%								

QC Failed. Continue with analysis.

Sequence No.: 13 **Autosampler Location: 2**
Sample ID: CCB V-329027 **Date Collected: 8/31/2020 3:05:15 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	62799.2	93.6	%	0.52				0.55%
Y 371.029	21795.4	88.4	%	0.65				0.74%
Ag 328.068†	-12.1	-0.0061068	mg/L	0.00057509	-0.0061068	mg/L	0.00057509	9.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-30.7	-0.0869392	mg/L	0.00290997	-0.0869392	mg/L	0.00290997	3.35%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-1.3	-0.0062953	mg/L	0.00860348	-0.0062953	mg/L	0.00860348	136.67%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.7	-0.0179062	mg/L	0.00017216	-0.0179062	mg/L	0.00017216	0.96%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-12.7	-0.0028777	mg/L	0.00009296	-0.0028777	mg/L	0.00009296	3.23%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-1.5	-0.473595	mg/L	0.0056455	-0.473595	mg/L	0.0056455	1.19%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	1.9	-0.0113627	mg/L	0.00042740	-0.0113627	mg/L	0.00042740	3.76%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.7	-0.0008602	mg/L	0.00064838	-0.0008602	mg/L	0.00064838	75.38%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-1.5	-0.0077794	mg/L	0.00053135	-0.0077794	mg/L	0.00053135	6.83%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-33.0	-0.0081143	mg/L	0.00162747	-0.0081143	mg/L	0.00162747	20.06%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	0.9	-0.102017	mg/L	0.0051054	-0.102017	mg/L	0.0051054	5.00%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-3.5	2.25876	mg/L	0.787528	2.25876	mg/L	0.787528	34.87%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	9.8	-0.431106	mg/L	0.0049297	-0.431106	mg/L	0.0049297	1.14%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-3.7	0.0025736	mg/L	0.00003917	0.0025736	mg/L	0.00003917	1.52%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-1.6	-0.0023944	mg/L	0.00176858	-0.0023944	mg/L	0.00176858	73.86%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-0.9	0.460219	mg/L	0.1258562	0.460219	mg/L	0.1258562	27.35%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	6.4	-0.0166812	mg/L	0.00069376	-0.0166812	mg/L	0.00069376	4.16%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.0	-0.0047493	mg/L	0.00136976	-0.0047493	mg/L	0.00136976	28.84%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.3	-0.0121636	mg/L	0.00369988	-0.0121636	mg/L	0.00369988	30.42%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.9	-0.0084400	mg/L	0.00151187	-0.0084400	mg/L	0.00151187	17.91%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.7	-0.0048741	mg/L	0.00115298	-0.0048741	mg/L	0.00115298	23.66%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-3.1	0.0036930	mg/L	0.00025807	0.0036930	mg/L	0.00025807	6.99%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.1	-0.0042953	mg/L	0.01098550	-0.0042953	mg/L	0.01098550	255.75%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-2.6	-0.0112795	mg/L	0.00034125	-0.0112795	mg/L	0.00034125	3.03%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-1.3	-0.0125293	mg/L	0.00030464	-0.0125293	mg/L	0.00030464	2.43%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	6.0	-0.0007203	mg/L	0.00019636	-0.0007203	mg/L	0.00019636	27.26%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	8.8	0.0439742	mg/L	0.00033493	0.0439742	mg/L	0.00033493	0.76%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: AD18923-001 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 72
Date Collected: 8/31/2020 3:09:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001 5D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	59403.6	88.6	%	0.67				0.75%
Y 371.029	20800.9	84.4	%	1.01				1.20%
Ag 328.068†	146.0	0.0058489	mg/L	0.00137658	0.0058489	mg/L	0.00137658	23.54%
Al 308.215†	-9.9	-0.0720149	mg/L	0.00229844	-0.0720149	mg/L	0.00229844	3.19%
As 188.979†	-1.1	-0.0047924	mg/L	0.01502811	-0.0047924	mg/L	0.01502811	313.59%
Ba 233.527†	202.3	0.0011294	mg/L	0.00056056	0.0011294	mg/L	0.00056056	49.63%
Be 313.107†	-85.7	-0.0031303	mg/L	0.00005235	-0.0031303	mg/L	0.00005235	1.67%
Ca 315.887†	1876507.6	446.109	mg/L	3.2666	446.109	mg/L	3.2666	0.73%
Cd 228.802†	6.2	-0.0099417	mg/L	0.00085250	-0.0099417	mg/L	0.00085250	8.57%
Co 228.616†	2.0	-0.0007384	mg/L	0.00101742	-0.0007384	mg/L	0.00101742	137.79%
Cr 267.716†	7.4	-0.0063742	mg/L	0.00097948	-0.0063742	mg/L	0.00097948	15.37%
Cu 327.393†	-95.4	-0.0147887	mg/L	0.00047613	-0.0147887	mg/L	0.00047613	3.22%
Fe 273.955†	291.2	0.273875	mg/L	0.0068020	0.273875	mg/L	0.0068020	2.48%
K 404.721†	23.3	-0.617598	mg/L	0.5443050	-0.617598	mg/L	0.5443050	88.13%
Mg 279.077†	9023.3	6.38544	mg/L	0.003689	6.38544	mg/L	0.003689	0.06%
Mn 257.610†	13825.4	0.412163	mg/L	0.0016948	0.412163	mg/L	0.0016948	0.41%
Mo 202.031†	0.4	-0.0010328	mg/L	0.00124160	-0.0010328	mg/L	0.00124160	120.21%
Na 330.237†	19.2	0.850549	mg/L	0.1955426	0.850549	mg/L	0.1955426	22.99%
Ni 231.604†	31.3	-0.0101719	mg/L	0.00193677	-0.0101719	mg/L	0.00193677	19.04%
Pb 220.353†	0.5	-0.0040026	mg/L	0.00185622	-0.0040026	mg/L	0.00185622	46.38%
Sb 206.836†	-0.1	-0.0144176	mg/L	0.00852358	-0.0144176	mg/L	0.00852358	59.12%
Se 196.026†	0.1	0.0314409	mg/L	0.02281538	0.0314409	mg/L	0.02281538	72.57%
Sn 189.927†	-11.0	-0.0225518	mg/L	0.00223243	-0.0225518	mg/L	0.00223243	9.90%
Ti 334.940†	-235.8	0.0307146	mg/L	0.00019529	0.0307146	mg/L	0.00019529	0.64%
Tl 190.801†	1.3	-0.0286582	mg/L	0.00880898	-0.0286582	mg/L	0.00880898	30.74%
V 290.880†	85.3	0.0038490	mg/L	0.00042619	0.0038490	mg/L	0.00042619	11.07%
Zn 206.200†	1279.3	0.283585	mg/L	0.0019774	0.283585	mg/L	0.0019774	0.70%
B 249.772	83.4	0.0122459	mg/L	0.00124343	0.0122459	mg/L	0.00124343	10.15%
Si 251.611	289.5	0.278385	mg/L	0.0039898	0.278385	mg/L	0.0039898	1.43%

Sequence No.: 15
Sample ID: AD18923-001 MR 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 73
Date Collected: 8/31/2020 3:13:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001 MR 5D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	58925.7	87.9	%	0.60				0.69%
Y 371.029	20564.5	83.4	%	0.40				0.48%
Ag 328.068†	137.5	0.0052075	mg/L	0.00017219	0.0052075	mg/L	0.00017219	3.31%
Al 308.215†	-15.2	-0.0756846	mg/L	0.00204202	-0.0756846	mg/L	0.00204202	2.70%
As 188.979†	-0.2	0.0021621	mg/L	0.01254522	0.0021621	mg/L	0.01254522	580.23%
Ba 233.527†	199.4	0.0008464	mg/L	0.00008038	0.0008464	mg/L	0.00008038	9.50%
Be 313.107†	-81.6	-0.0031164	mg/L	0.00009520	-0.0031164	mg/L	0.00009520	3.05%
Ca 315.887†	1856237.0	441.284	mg/L	3.9732	441.284	mg/L	3.9732	0.90%
Cd 228.802†	4.1	-0.0106414	mg/L	0.00036696	-0.0106414	mg/L	0.00036696	3.45%
Co 228.616†	-0.1	-0.0014733	mg/L	0.00021386	-0.0014733	mg/L	0.00021386	14.52%
Cr 267.716†	5.7	-0.0066373	mg/L	0.00010233	-0.0066373	mg/L	0.00010233	1.54%
Cu 327.393†	-98.9	-0.0151706	mg/L	0.00113896	-0.0151706	mg/L	0.00113896	7.51%
Fe 273.955†	287.3	0.268747	mg/L	0.0080917	0.268747	mg/L	0.0080917	3.01%
K 404.721†	18.4	-0.780371	mg/L	0.3576510	-0.780371	mg/L	0.3576510	45.83%
Mg 279.077†	8870.2	6.26965	mg/L	0.011872	6.26965	mg/L	0.011872	0.19%
Mn 257.610†	13699.2	0.408422	mg/L	0.0004485	0.408422	mg/L	0.0004485	0.11%
Mo 202.031†	1.3	-0.0004722	mg/L	0.00074756	-0.0004722	mg/L	0.00074756	158.32%
Na 330.237†	21.1	0.888873	mg/L	0.1345327	0.888873	mg/L	0.1345327	15.14%
Ni 231.604†	34.3	-0.0093813	mg/L	0.00082261	-0.0093813	mg/L	0.00082261	8.77%
Pb 220.353†	1.7	-0.0024992	mg/L	0.00447365	-0.0024992	mg/L	0.00447365	179.00%
Sb 206.836†	0.6	-0.0107442	mg/L	0.00799714	-0.0107442	mg/L	0.00799714	74.43%
Se 196.026†	3.0	0.0410786	mg/L	0.00532159	0.0410786	mg/L	0.00532159	12.95%
Sn 189.927†	-11.3	-0.0229949	mg/L	0.00120660	-0.0229949	mg/L	0.00120660	5.25%
Ti 334.940†	-233.0	0.0304293	mg/L	0.00028134	0.0304293	mg/L	0.00028134	0.92%
Tl 190.801†	-1.8	-0.0435426	mg/L	0.00504512	-0.0435426	mg/L	0.00504512	11.59%
V 290.880†	80.2	0.0029868	mg/L	0.00046376	0.0029868	mg/L	0.00046376	15.53%
Zn 206.200†	1262.1	0.279606	mg/L	0.0014738	0.279606	mg/L	0.0014738	0.53%
B 249.772	89.8	0.0132755	mg/L	0.00102380	0.0132755	mg/L	0.00102380	7.71%
Si 251.611	278.8	0.272896	mg/L	0.0018186	0.272896	mg/L	0.0018186	0.67%

Sequence No.: 16
Sample ID: AD18923-001 MS 1 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 74
Date Collected: 8/31/2020 3:17:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001 MS 1 5D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	59203.5	88.3	%	0.36				0.40%
Y 371.029	20393.8	82.7	%	0.52				0.62%
Ag 328.068†	441.2	0.0286249	mg/L	0.00051808	0.0286249	mg/L	0.00051808	1.81%
Al 308.215†	1674.4	1.07805	mg/L	0.001536	1.07805	mg/L	0.001536	0.14%
As 188.979†	14.1	0.105118	mg/L	0.0125874	0.105118	mg/L	0.0125874	11.97%
Ba 233.527†	1402.0	0.114399	mg/L	0.0014449	0.114399	mg/L	0.0014449	1.26%
Be 313.107†	29143.3	0.0980385	mg/L	0.00017566	0.0980385	mg/L	0.00017566	0.18%
Ca 315.887†	1752530.6	416.604	mg/L	2.0700	416.604	mg/L	2.0700	0.50%
Cd 228.802†	317.4	0.0932281	mg/L	0.00164900	0.0932281	mg/L	0.00164900	1.77%
Co 228.616†	278.3	0.0955564	mg/L	0.00034898	0.0955564	mg/L	0.00034898	0.37%
Cr 267.716†	727.5	0.102363	mg/L	0.0002582	0.102363	mg/L	0.0002582	0.25%
Cu 327.393†	984.6	0.101509	mg/L	0.0007980	0.101509	mg/L	0.0007980	0.79%
Fe 273.955†	1062.8	1.27312	mg/L	0.008233	1.27312	mg/L	0.008233	0.65%
K 404.721†	132.9	-6.59295	mg/L	0.217094	-6.59295	mg/L	0.217094	3.29%
Mg 279.077†	21748.7	16.0092	mg/L	0.01753	16.0092	mg/L	0.01753	0.11%
Mn 257.610†	16028.8	0.477421	mg/L	0.0008964	0.477421	mg/L	0.0008964	0.19%
Mo 202.031†	154.7	0.0997878	mg/L	0.00085213	0.0997878	mg/L	0.00085213	0.85%
Na 330.237†	593.0	12.0338	mg/L	0.05796	12.0338	mg/L	0.05796	0.48%
Ni 231.604†	427.4	0.0934585	mg/L	0.00187642	0.0934585	mg/L	0.00187642	2.01%
Pb 220.353†	77.4	0.0982522	mg/L	0.00226436	0.0982522	mg/L	0.00226436	2.30%
Sb 206.836†	18.2	0.0929963	mg/L	0.00368970	0.0929963	mg/L	0.00368970	3.97%
Se 196.026†	35.1	0.152578	mg/L	0.0030174	0.152578	mg/L	0.0030174	1.98%
Sn 189.927†	54.1	0.0753877	mg/L	0.00584245	0.0753877	mg/L	0.00584245	7.75%
Ti 334.940†	2923.2	0.122420	mg/L	0.0010238	0.122420	mg/L	0.0010238	0.84%
Tl 190.801†	24.5	0.0829997	mg/L	0.00913025	0.0829997	mg/L	0.00913025	11.00%
V 290.880†	776.6	0.120316	mg/L	0.0008153	0.120316	mg/L	0.0008153	0.68%
Zn 206.200†	1635.2	0.365881	mg/L	0.0026435	0.365881	mg/L	0.0026435	0.72%
B 249.772	774.8	0.117357	mg/L	0.0008537	0.117357	mg/L	0.0008537	0.73%
Si 251.611	498.1	0.376431	mg/L	0.0035308	0.376431	mg/L	0.0035308	0.94%

Sequence No.: 17
Sample ID: AD18923-001 PS 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 75
Date Collected: 8/31/2020 3:21:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001 PS 5D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	58804.1	87.7	%	0.53				0.60%
Y 371.029	19947.4	80.9	%	0.52				0.64%
Ag 328.068†	1550.7	0.113896	mg/L	0.0032832	0.113896	mg/L	0.0032832	2.88%
Al 308.215†	7130.3	4.80166	mg/L	0.142384	4.80166	mg/L	0.142384	2.97%
As 188.979†	63.1	0.458927	mg/L	0.0133540	0.458927	mg/L	0.0133540	2.91%
Ba 233.527†	5396.2	0.491539	mg/L	0.0157371	0.491539	mg/L	0.0157371	3.20%
Be 313.107†	140493.6	0.483450	mg/L	0.0089716	0.483450	mg/L	0.0089716	1.86%
Ca 315.887†	1899037.1	451.470	mg/L	9.0403	451.470	mg/L	9.0403	2.00%
Cd 228.802†	1574.7	0.510054	mg/L	0.0133218	0.510054	mg/L	0.0133218	2.61%
Co 228.616†	1375.1	0.477889	mg/L	0.0104983	0.477889	mg/L	0.0104983	2.20%
Cr 267.716†	3625.9	0.539589	mg/L	0.0120180	0.539589	mg/L	0.0120180	2.23%
Cu 327.393†	4611.9	0.492115	mg/L	0.0132261	0.492115	mg/L	0.0132261	2.69%
Fe 273.955†	3719.1	4.71296	mg/L	0.162090	4.71296	mg/L	0.162090	3.44%
K 404.721†	458.1	-29.4282	mg/L	1.14179	-29.4282	mg/L	1.14179	3.88%
Mg 279.077†	76634.1	57.5167	mg/L	1.77165	57.5167	mg/L	1.77165	3.08%
Mn 257.610†	28825.8	0.856442	mg/L	0.0262648	0.856442	mg/L	0.0262648	3.07%
Mo 202.031†	741.8	0.483672	mg/L	0.0092699	0.483672	mg/L	0.0092699	1.92%
Na 330.237†	2523.2	49.6505	mg/L	1.56516	49.6505	mg/L	1.56516	3.15%
Ni 231.604†	1981.6	0.500120	mg/L	0.0117201	0.500120	mg/L	0.0117201	2.34%
Pb 220.353†	366.6	0.483296	mg/L	0.0108586	0.483296	mg/L	0.0108586	2.25%
Sb 206.836†	89.3	0.510145	mg/L	0.0170176	0.510145	mg/L	0.0170176	3.34%
Se 196.026†	151.9	0.568566	mg/L	0.0142299	0.568566	mg/L	0.0142299	2.50%
Sn 189.927†	305.2	0.453374	mg/L	0.0118508	0.453374	mg/L	0.0118508	2.61%
Ti 334.940†	14918.9	0.481817	mg/L	0.0146354	0.481817	mg/L	0.0146354	3.04%
Tl 190.801†	102.6	0.452924	mg/L	0.0200597	0.452924	mg/L	0.0200597	4.43%
V 290.880†	2996.5	0.494915	mg/L	0.0156562	0.494915	mg/L	0.0156562	3.16%
Zn 206.200†	3481.0	0.792680	mg/L	0.0184171	0.792680	mg/L	0.0184171	2.32%
B 249.772	2825.0	0.430776	mg/L	0.0146240	0.430776	mg/L	0.0146240	3.39%
Si 251.611	1344.1	0.803713	mg/L	0.0197049	0.803713	mg/L	0.0197049	2.45%

Sequence No.: 18
Sample ID: AD18923-001 SD 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 76
Date Collected: 8/31/2020 3:26:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001 SD 5D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	63943.5	95.3	%	0.67				0.71%
Y 371.029	21486.2	87.2	%	0.97				1.11%
Ag 328.068†	18.3	-0.0038105	mg/L	0.00021985	-0.0038105	mg/L	0.00021985	5.77%
Al 308.215†	-46.3	-0.0974668	mg/L	0.00358187	-0.0974668	mg/L	0.00358187	3.67%
As 188.979†	-1.1	-0.0046316	mg/L	0.01071706	-0.0046316	mg/L	0.01071706	231.39%
Ba 233.527†	40.2	-0.0141827	mg/L	0.00012123	-0.0141827	mg/L	0.00012123	0.85%
Be 313.107†	-16.5	-0.0028911	mg/L	0.00008999	-0.0028911	mg/L	0.00008999	3.11%
Ca 315.887†	374046.8	88.5445	mg/L	1.06079	88.5445	mg/L	1.06079	1.20%
Cd 228.802†	1.5	-0.0115097	mg/L	0.00082880	-0.0115097	mg/L	0.00082880	7.20%
Co 228.616†	2.1	-0.0007140	mg/L	0.00072344	-0.0007140	mg/L	0.00072344	101.32%
Cr 267.716†	-0.1	-0.0075556	mg/L	0.00029223	-0.0075556	mg/L	0.00029223	3.87%
Cu 327.393†	-53.5	-0.0103109	mg/L	0.00061209	-0.0103109	mg/L	0.00061209	5.94%
Fe 273.955†	54.4	-0.0327510	mg/L	0.00467206	-0.0327510	mg/L	0.00467206	14.27%
K 404.721†	16.7	2.39568	mg/L	0.207914	2.39568	mg/L	0.207914	8.68%
Mg 279.077†	1979.8	1.05873	mg/L	0.021135	1.05873	mg/L	0.021135	2.00%
Mn 257.610†	2724.9	0.0833892	mg/L	0.00009094	0.0833892	mg/L	0.00009094	0.11%
Mo 202.031†	-0.5	-0.0016767	mg/L	0.00073279	-0.0016767	mg/L	0.00073279	43.70%
Na 330.237†	-2.7	0.424812	mg/L	0.0778955	0.424812	mg/L	0.0778955	18.34%
Ni 231.604†	8.4	-0.0161513	mg/L	0.00082539	-0.0161513	mg/L	0.00082539	5.11%
Pb 220.353†	-1.4	-0.0066246	mg/L	0.00206234	-0.0066246	mg/L	0.00206234	31.13%
Sb 206.836†	1.3	-0.0063882	mg/L	0.00663489	-0.0063882	mg/L	0.00663489	103.86%
Se 196.026†	-0.9	-0.0009363	mg/L	0.00439476	-0.0009363	mg/L	0.00439476	469.35%
Sn 189.927†	-6.7	-0.0160179	mg/L	0.00204035	-0.0160179	mg/L	0.00204035	12.74%
Ti 334.940†	-47.3	0.0091439	mg/L	0.00019298	0.0091439	mg/L	0.00019298	2.11%
Tl 190.801†	0.2	-0.0137212	mg/L	0.00859535	-0.0137212	mg/L	0.00859535	62.64%
V 290.880†	10.4	-0.0090163	mg/L	0.00050224	-0.0090163	mg/L	0.00050224	5.57%
Zn 206.200†	239.1	0.0430621	mg/L	0.00052867	0.0430621	mg/L	0.00052867	1.23%
B 249.772	55.0	0.0069063	mg/L	0.00021429	0.0069063	mg/L	0.00021429	3.10%
Si 251.611	60.3	0.0887930	mg/L	0.00080417	0.0887930	mg/L	0.00080417	0.91%

Sequence No.: 19
Sample ID: AD18934-002 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 77
Date Collected: 8/31/2020 3:30:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18934-002 5D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	61830.4	92.2	%	0.50				0.54%
Y 371.029	20495.3	83.1	%	0.11				0.13%
Ag 328.068†	30.7	-0.0028175	mg/L	0.00041928	-0.0028175	mg/L	0.00041928	14.88%
Al 308.215†	-26.9	-0.0835643	mg/L	0.00187546	-0.0835643	mg/L	0.00187546	2.24%
As 188.979†	-1.1	-0.0051428	mg/L	0.00880387	-0.0051428	mg/L	0.00880387	171.19%
Ba 233.527†	1320.8	0.106731	mg/L	0.0014226	0.106731	mg/L	0.0014226	1.33%
Be 313.107†	-69.8	-0.0030756	mg/L	0.00004505	-0.0030756	mg/L	0.00004505	1.46%
Ca 315.887†	505872.6	119.917	mg/L	0.6807	119.917	mg/L	0.6807	0.57%
Cd 228.802†	0.5	-0.0118416	mg/L	0.00108404	-0.0118416	mg/L	0.00108404	9.15%
Co 228.616†	17.5	0.0046359	mg/L	0.00109016	0.0046359	mg/L	0.00109016	23.52%
Cr 267.716†	5.2	-0.0067021	mg/L	0.00045699	-0.0067021	mg/L	0.00045699	6.82%
Cu 327.393†	-74.9	-0.0126157	mg/L	0.00097935	-0.0126157	mg/L	0.00097935	7.76%
Fe 273.955†	11.9	-0.0877852	mg/L	0.00132738	-0.0877852	mg/L	0.00132738	1.51%
K 404.721†	26.3	3.40731	mg/L	0.432800	3.40731	mg/L	0.432800	12.70%
Mg 279.077†	11028.1	7.90161	mg/L	0.043320	7.90161	mg/L	0.043320	0.55%
Mn 257.610†	15681.5	0.467136	mg/L	0.0008820	0.467136	mg/L	0.0008820	0.19%
Mo 202.031†	0.7	-0.0008946	mg/L	0.00106461	-0.0008946	mg/L	0.00106461	119.00%
Na 330.237†	15752.8	307.482	mg/L	1.2449	307.482	mg/L	1.2449	0.40%
Ni 231.604†	26.4	-0.0114598	mg/L	0.00113164	-0.0114598	mg/L	0.00113164	9.87%
Pb 220.353†	2.0	-0.0021375	mg/L	0.00439325	-0.0021375	mg/L	0.00439325	205.53%
Sb 206.836†	0.3	-0.0121154	mg/L	0.00852399	-0.0121154	mg/L	0.00852399	70.36%
Se 196.026†	-1.2	0.0004399	mg/L	0.00723716	0.0004399	mg/L	0.00723716	>999.9%
Sn 189.927†	-9.6	-0.0205340	mg/L	0.00270930	-0.0205340	mg/L	0.00270930	13.19%
Ti 334.940†	-58.5	0.0111945	mg/L	0.00018451	0.0111945	mg/L	0.00018451	1.65%
Tl 190.801†	-1.0	-0.0202014	mg/L	0.00557118	-0.0202014	mg/L	0.00557118	27.58%
V 290.880†	86.5	0.0041451	mg/L	0.00088398	0.0041451	mg/L	0.00088398	21.33%
Zn 206.200†	30.7	-0.0051336	mg/L	0.00014569	-0.0051336	mg/L	0.00014569	2.84%
B 249.772	533.1	0.0779983	mg/L	0.00049745	0.0779983	mg/L	0.00049745	0.64%
Si 251.611	491.3	0.295788	mg/L	0.0023226	0.295788	mg/L	0.0023226	0.79%

Sequence No.: 20
Sample ID: AD18934-003 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 78
Date Collected: 8/31/2020 3:34:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18934-003 5D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	61643.3	91.9	%	0.41				0.44%
Y 371.029	20288.3	82.3	%	0.17				0.21%
Ag 328.068†	42.2	-0.0020176	mg/L	0.00022867	-0.0020176	mg/L	0.00022867	11.33%
Al 308.215†	-33.9	-0.0889769	mg/L	0.00244331	-0.0889769	mg/L	0.00244331	2.75%
As 188.979†	-0.9	-0.0029333	mg/L	0.01500919	-0.0029333	mg/L	0.01500919	511.69%
Ba 233.527†	1348.7	0.109368	mg/L	0.0002677	0.109368	mg/L	0.0002677	0.24%
Be 313.107†	-66.6	-0.0030642	mg/L	0.00015208	-0.0030642	mg/L	0.00015208	4.96%
Ca 315.887†	663245.9	157.370	mg/L	0.7656	157.370	mg/L	0.7656	0.49%
Cd 228.802†	3.4	-0.0108721	mg/L	0.00018002	-0.0108721	mg/L	0.00018002	1.66%
Co 228.616†	6.4	0.0007912	mg/L	0.00026912	0.0007912	mg/L	0.00026912	34.01%
Cr 267.716†	0.2	-0.0075082	mg/L	0.00062385	-0.0075082	mg/L	0.00062385	8.31%
Cu 327.393†	-87.5	-0.0139725	mg/L	0.00050000	-0.0139725	mg/L	0.00050000	3.58%
Fe 273.955†	-1.1	-0.104605	mg/L	0.0015047	-0.104605	mg/L	0.0015047	1.44%
K 404.721†	16.7	3.16736	mg/L	0.460256	3.16736	mg/L	0.460256	14.53%
Mg 279.077†	2286.5	1.29066	mg/L	0.003768	1.29066	mg/L	0.003768	0.29%
Mn 257.610†	26982.0	0.801833	mg/L	0.0008512	0.801833	mg/L	0.0008512	0.11%
Mo 202.031†	-0.8	-0.0018618	mg/L	0.00036608	-0.0018618	mg/L	0.00036608	19.66%
Na 330.237†	15996.7	312.235	mg/L	1.3846	312.235	mg/L	1.3846	0.44%
Ni 231.604†	18.6	-0.0134907	mg/L	0.00046096	-0.0134907	mg/L	0.00046096	3.42%
Pb 220.353†	14.5	0.0145041	mg/L	0.00207264	0.0145041	mg/L	0.00207264	14.29%
Sb 206.836†	1.1	-0.0079416	mg/L	0.01589500	-0.0079416	mg/L	0.01589500	200.15%
Se 196.026†	-0.6	0.0052845	mg/L	0.00440288	0.0052845	mg/L	0.00440288	83.32%
Sn 189.927†	-8.4	-0.0186325	mg/L	0.00070524	-0.0186325	mg/L	0.00070524	3.78%
Ti 334.940†	-92.1	0.0130439	mg/L	0.00010270	0.0130439	mg/L	0.00010270	0.79%
Tl 190.801†	-0.7	-0.0199023	mg/L	0.00830262	-0.0199023	mg/L	0.00830262	41.72%
V 290.880†	15.7	-0.0081128	mg/L	0.00043037	-0.0081128	mg/L	0.00043037	5.30%
Zn 206.200†	8.6	-0.0102467	mg/L	0.00042619	-0.0102467	mg/L	0.00042619	4.16%
B 249.772	647.1	0.0961620	mg/L	0.00088204	0.0961620	mg/L	0.00088204	0.92%
Si 251.611	667.5	0.383521	mg/L	0.0006389	0.383521	mg/L	0.0006389	0.17%

Sequence No.: 21 **Autosampler Location: 79**
Sample ID: AD18934-004 5D **Date Collected: 8/31/2020 3:38:59 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD18934-004 5D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	61118.3	91.1	%	0.67				0.74%
Y 371.029	20045.5	81.3	%	0.44				0.54%
Ag 328.068†	38.1	-0.0023161	mg/L	0.00050259	-0.0023161	mg/L	0.00050259	21.70%
Al 308.215†	-32.2	-0.0877814	mg/L	0.00142462	-0.0877814	mg/L	0.00142462	1.62%
As 188.979†	-1.6	-0.0082338	mg/L	0.00882970	-0.0082338	mg/L	0.00882970	107.24%
Ba 233.527†	712.8	0.0493226	mg/L	0.00059830	0.0493226	mg/L	0.00059830	1.21%
Be 313.107†	-77.9	-0.0031034	mg/L	0.00010381	-0.0031034	mg/L	0.00010381	3.35%
Ca 315.887†	686330.4	162.863	mg/L	1.8346	162.863	mg/L	1.8346	1.13%
Cd 228.802†	2.1	-0.0112997	mg/L	0.00086722	-0.0112997	mg/L	0.00086722	7.67%
Co 228.616†	3.9	-0.0000812	mg/L	0.00110002	-0.0000812	mg/L	0.00110002	>999.9%
Cr 267.716†	4.0	-0.0069410	mg/L	0.00016697	-0.0069410	mg/L	0.00016697	2.41%
Cu 327.393†	-89.1	-0.0141493	mg/L	0.00066254	-0.0141493	mg/L	0.00066254	4.68%
Fe 273.955†	2.9	-0.0995185	mg/L	0.00135478	-0.0995185	mg/L	0.00135478	1.36%
K 404.721†	25.0	3.47683	mg/L	0.766553	3.47683	mg/L	0.766553	22.05%
Mg 279.077†	2379.3	1.36088	mg/L	0.004019	1.36088	mg/L	0.004019	0.30%
Mn 257.610†	2816.5	0.0861001	mg/L	0.00079008	0.0861001	mg/L	0.00079008	0.92%
Mo 202.031†	0.2	-0.0011926	mg/L	0.00096956	-0.0011926	mg/L	0.00096956	81.30%
Na 330.237†	15297.9	298.616	mg/L	0.9179	298.616	mg/L	0.9179	0.31%
Ni 231.604†	9.5	-0.0158680	mg/L	0.00124588	-0.0158680	mg/L	0.00124588	7.85%
Pb 220.353†	1.2	-0.0031758	mg/L	0.00437408	-0.0031758	mg/L	0.00437408	137.73%
Sb 206.836†	2.1	-0.0017971	mg/L	0.00710592	-0.0017971	mg/L	0.00710592	395.41%
Se 196.026†	-0.5	0.0061588	mg/L	0.01003482	0.0061588	mg/L	0.01003482	162.93%
Sn 189.927†	-8.8	-0.0192753	mg/L	0.00103002	-0.0192753	mg/L	0.00103002	5.34%
Ti 334.940†	-89.5	0.0135369	mg/L	0.00025342	0.0135369	mg/L	0.00025342	1.87%
Tl 190.801†	0.5	-0.0169575	mg/L	0.00534599	-0.0169575	mg/L	0.00534599	31.53%
V 290.880†	21.4	-0.0071488	mg/L	0.00105164	-0.0071488	mg/L	0.00105164	14.71%
Zn 206.200†	8.1	-0.0103467	mg/L	0.00054347	-0.0103467	mg/L	0.00054347	5.25%
B 249.772	559.1	0.0809077	mg/L	0.00052222	0.0809077	mg/L	0.00052222	0.65%
Si 251.611	737.5	0.398322	mg/L	0.0037226	0.398322	mg/L	0.0037226	0.93%

Sequence No.: 22
Sample ID: AD18934-005 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 80
Date Collected: 8/31/2020 3:43:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18934-005 5D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	61397.4	91.5	%	0.57				0.63%
Y 371.029	20120.8	81.6	%	0.68				0.84%
Ag 328.068†	47.0	-0.0016612	mg/L	0.00033781	-0.0016612	mg/L	0.00033781	20.34%
Al 308.215†	-35.8	-0.0903653	mg/L	0.00319779	-0.0903653	mg/L	0.00319779	3.54%
As 188.979†	-0.1	0.0030508	mg/L	0.01080131	0.0030508	mg/L	0.01080131	354.05%
Ba 233.527†	2379.5	0.206695	mg/L	0.0011269	0.206695	mg/L	0.0011269	0.55%
Be 313.107†	-72.2	-0.0030838	mg/L	0.00007279	-0.0030838	mg/L	0.00007279	2.36%
Ca 315.887†	671282.7	159.282	mg/L	1.8748	159.282	mg/L	1.8748	1.18%
Cd 228.802†	5.3	-0.0102279	mg/L	0.00088311	-0.0102279	mg/L	0.00088311	8.63%
Co 228.616†	7.4	0.0011345	mg/L	0.00083607	0.0011345	mg/L	0.00083607	73.70%
Cr 267.716†	7.2	-0.0064619	mg/L	0.00031340	-0.0064619	mg/L	0.00031340	4.85%
Cu 327.393†	-85.2	-0.0137229	mg/L	0.00089307	-0.0137229	mg/L	0.00089307	6.51%
Fe 273.955†	13.0	-0.0864475	mg/L	0.00480627	-0.0864475	mg/L	0.00480627	5.56%
K 404.721†	18.9	3.06931	mg/L	0.588456	3.06931	mg/L	0.588456	19.17%
Mg 279.077†	1376.7	0.602630	mg/L	0.0082687	0.602630	mg/L	0.0082687	1.37%
Mn 257.610†	28345.7	0.842223	mg/L	0.0017469	0.842223	mg/L	0.0017469	0.21%
Mo 202.031†	2.1	0.0000438	mg/L	0.00093526	0.0000438	mg/L	0.00093526	>999.9%
Na 330.237†	16576.8	323.542	mg/L	1.4110	323.542	mg/L	1.4110	0.44%
Ni 231.604†	63.7	-0.0017111	mg/L	0.00025498	-0.0017111	mg/L	0.00025498	14.90%
Pb 220.353†	1.7	-0.0024685	mg/L	0.00112568	-0.0024685	mg/L	0.00112568	45.60%
Sb 206.836†	0.9	-0.0088079	mg/L	0.00936000	-0.0088079	mg/L	0.00936000	106.27%
Se 196.026†	-1.5	0.0023851	mg/L	0.01401325	0.0023851	mg/L	0.01401325	587.54%
Sn 189.927†	-6.0	-0.0150889	mg/L	0.00171456	-0.0150889	mg/L	0.00171456	11.36%
Ti 334.940†	-89.0	0.0132800	mg/L	0.00023656	0.0132800	mg/L	0.00023656	1.78%
Tl 190.801†	0.4	-0.0148584	mg/L	0.00242317	-0.0148584	mg/L	0.00242317	16.31%
V 290.880†	10.6	-0.0090086	mg/L	0.00090977	-0.0090086	mg/L	0.00090977	10.10%
Zn 206.200†	72.9	0.0046204	mg/L	0.00022575	0.0046204	mg/L	0.00022575	4.89%
B 249.772	490.2	0.0731355	mg/L	0.00052552	0.0731355	mg/L	0.00052552	0.72%
Si 251.611	1164.2	0.591808	mg/L	0.0009920	0.591808	mg/L	0.0009920	0.17%

Sequence No.: 23
Sample ID: CCV V-329036
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 8/31/2020 3:47:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	59596.0	88.9	%	0.32				0.36%
Y 371.029	19728.4	80.0	%	0.30				0.38%
Ag 328.068†	1558.9	0.114597	mg/L	0.0002998	0.114597	mg/L	0.0002998	0.26%
Al 308.215†	7361.7	4.95934	mg/L	0.006030	4.95934	mg/L	0.006030	0.12%
As 188.979†	65.4	0.474797	mg/L	0.0146008	0.474797	mg/L	0.0146008	3.08%
Ba 233.527†	5533.8	0.504526	mg/L	0.0019382	0.504526	mg/L	0.0019382	0.38%
Be 313.107†	150949.0	0.519639	mg/L	0.0004495	0.519639	mg/L	0.0004495	0.09%
Ca 315.887†	219376.1	51.7351	mg/L	0.10665	51.7351	mg/L	0.10665	0.21%
Cd 228.802†	1639.0	0.531370	mg/L	0.0029026	0.531370	mg/L	0.0029026	0.55%
Co 228.616†	1502.1	0.522146	mg/L	0.0022451	0.522146	mg/L	0.0022451	0.43%
Cr 267.716†	3908.6	0.582156	mg/L	0.0031632	0.582156	mg/L	0.0031632	0.54%
Cu 327.393†	4695.9	0.501151	mg/L	0.0014417	0.501151	mg/L	0.0014417	0.29%
Fe 273.955†	3665.7	4.64382	mg/L	0.027858	4.64382	mg/L	0.027858	0.60%
K 404.721†	1128.3	0.620435	mg/L	0.4633479	0.620435	mg/L	0.4633479	74.68%
Mg 279.077†	69648.6	52.2339	mg/L	0.05860	52.2339	mg/L	0.05860	0.11%
Mn 257.610†	16417.6	0.488938	mg/L	0.0013192	0.488938	mg/L	0.0013192	0.27%
Mo 202.031†	791.6	0.516206	mg/L	0.0026958	0.516206	mg/L	0.0026958	0.52%
Na 330.237†	2377.5	46.8118	mg/L	0.40686	46.8118	mg/L	0.40686	0.87%
Ni 231.604†	2122.9	0.537086	mg/L	0.0040191	0.537086	mg/L	0.0040191	0.75%
Pb 220.353†	399.6	0.527213	mg/L	0.0037746	0.527213	mg/L	0.0037746	0.72%
Sb 206.836†	92.8	0.530688	mg/L	0.0059259	0.530688	mg/L	0.0059259	1.12%
Se 196.026†	150.3	0.530975	mg/L	0.0077989	0.530975	mg/L	0.0077989	1.47%
Sn 189.927†	334.7	0.497886	mg/L	0.0044656	0.497886	mg/L	0.0044656	0.90%
Ti 334.940†	15577.6	0.471025	mg/L	0.0011106	0.471025	mg/L	0.0011106	0.24%
Tl 190.801†	112.6	0.523047	mg/L	0.0124016	0.523047	mg/L	0.0124016	2.37%
V 290.880†	3107.0	0.513137	mg/L	0.0018634	0.513137	mg/L	0.0018634	0.36%
Zn 206.200†	2438.8	0.551691	mg/L	0.0029943	0.551691	mg/L	0.0029943	0.54%
B 249.772	3164.9	0.486579	mg/L	0.0002304	0.486579	mg/L	0.0002304	0.05%
Si 251.611	10846.8	4.63805	mg/L	0.020424	4.63805	mg/L	0.020424	0.44%

Sequence No.: 24
Sample ID: CCB V-329027
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 8/31/2020 3:51:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	65397.4	97.5	%	0.32				0.33%
Y 371.029	21892.1	88.8	%	0.64				0.72%
Ag 328.068†	0.6	-0.0051504	mg/L	0.00074769	-0.0051504	mg/L	0.00074769	14.52%
Al 308.215†	-52.6	-0.101857	mg/L	0.0019952	-0.101857	mg/L	0.0019952	1.96%
As 188.979†	-0.4	0.0009436	mg/L	0.01397748	0.0009436	mg/L	0.01397748	>999.9%
Ba 233.527†	-0.4	-0.0180130	mg/L	0.00022720	-0.0180130	mg/L	0.00022720	1.26%
Be 313.107†	-16.3	-0.0028902	mg/L	0.00007078	-0.0028902	mg/L	0.00007078	2.45%
Ca 315.887†	7.4	-0.471473	mg/L	0.0012376	-0.471473	mg/L	0.0012376	0.26%
Cd 228.802†	2.4	-0.0112136	mg/L	0.00069664	-0.0112136	mg/L	0.00069664	6.21%
Co 228.616†	-1.2	-0.0018624	mg/L	0.00025650	-0.0018624	mg/L	0.00025650	13.77%
Cr 267.716†	0.3	-0.0075144	mg/L	0.00110681	-0.0075144	mg/L	0.00110681	14.73%
Cu 327.393†	-42.4	-0.0091271	mg/L	0.00020335	-0.0091271	mg/L	0.00020335	2.23%
Fe 273.955†	-2.8	-0.106831	mg/L	0.0054324	-0.106831	mg/L	0.0054324	5.09%
K 404.721†	10.8	2.93395	mg/L	0.259332	2.93395	mg/L	0.259332	8.84%
Mg 279.077†	-4.9	-0.442202	mg/L	0.0003183	-0.442202	mg/L	0.0003183	0.07%
Mn 257.610†	-9.1	0.0024148	mg/L	0.00013385	0.0024148	mg/L	0.00013385	5.54%
Mo 202.031†	-0.8	-0.0018303	mg/L	0.00120809	-0.0018303	mg/L	0.00120809	66.01%
Na 330.237†	-6.7	0.345994	mg/L	0.0367836	0.345994	mg/L	0.0367836	10.63%
Ni 231.604†	4.3	-0.0172175	mg/L	0.00136637	-0.0172175	mg/L	0.00136637	7.94%
Pb 220.353†	-2.0	-0.0073615	mg/L	0.00153840	-0.0073615	mg/L	0.00153840	20.90%
Sb 206.836†	0.9	-0.0091347	mg/L	0.00514592	-0.0091347	mg/L	0.00514592	56.33%
Se 196.026†	-2.9	-0.0153704	mg/L	0.00824102	-0.0153704	mg/L	0.00824102	53.62%
Sn 189.927†	0.3	-0.0055147	mg/L	0.00015485	-0.0055147	mg/L	0.00015485	2.81%
Ti 334.940†	5.7	0.0039555	mg/L	0.00012232	0.0039555	mg/L	0.00012232	3.09%
Tl 190.801†	-0.4	-0.0115776	mg/L	0.00811717	-0.0115776	mg/L	0.00811717	70.11%
V 290.880†	-5.1	-0.0116977	mg/L	0.00037839	-0.0116977	mg/L	0.00037839	3.23%
Zn 206.200†	-0.8	-0.0124183	mg/L	0.00017987	-0.0124183	mg/L	0.00017987	1.45%
B 249.772	68.7	0.0087239	mg/L	0.00024966	0.0087239	mg/L	0.00024966	2.86%
Si 251.611	2.3	0.0412822	mg/L	0.00136948	0.0412822	mg/L	0.00136948	3.32%

Method: PE 4 8300DV LEACH AX Page 1 Date: 8/31/2020 4:20:49 PM

T26161C4 26161/85218

Analysis Begun

Start Time: 8/31/2020 4:15:54 PM
Logged In Analyst: usermet
Spectrometer: Optima 8300 , S/N 078S1410156

Plasma On Time: 8/31/2020 12:14:15 PM
Technique: ICP Continuous
Autosampler: S10

ICP 9/1/2020

Sample Information File: C:\Users\Public\PerkinElmer\ICP\Data\Sample Information\08.31.20.sif
Batch ID: ICP4
Results Data Set: T26161C4
Results Library: C:\Users\Public\PerkinElmer\ICP\Data\Results\Results.mdb

9/1/20

Sequence No.: 1
Sample ID: CALBLK V-329027
Analyst:
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 8/31/2020 4:17:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-329027

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	65736.9	562.82	0.86%	100	%
Y 371.029	21811.2	362.27	1.66%	100	%
Ag 328.068†	-13.1	5.41	41.16%	[0.00]	mg/L
Al 308.215†	160.5	1.87	1.16%	[0.00]	mg/L
As 188.979†	-1.9	0.28	14.73%	[0.00]	mg/L
Ba 233.527†	-1.1	0.15	13.78%	[0.00]	mg/L
Be 313.107†	-918.4	19.96	2.17%	[0.00]	mg/L
Ca 315.887†	-359.4	6.73	1.87%	[0.00]	mg/L
Cd 228.802†	22.5	1.65	7.35%	[0.00]	mg/L
Co 228.616†	-1.7	2.43	143.71%	[0.00]	mg/L
Cr 267.716†	9.8	1.66	17.03%	[0.00]	mg/L
Cu 327.393†	-264.4	6.21	2.35%	[0.00]	mg/L
Fe 273.955†	0.6	3.22	525.00%	[0.00]	mg/L
K 404.721†	-60.5	4.58	7.58%	[0.00]	mg/L
Mg 279.077†	-3.8	2.30	59.89%	[0.00]	mg/L
Mn 257.610†	27.1	2.48	9.16%	[0.00]	mg/L
Mo 202.031†	3.9	0.82	21.03%	[0.00]	mg/L
Na 330.237†	14.3	2.13	14.86%	[0.00]	mg/L
Ni 231.604†	64.8	3.47	5.35%	[0.00]	mg/L
Pb 220.353†	1.0	2.98	292.70%	[0.00]	mg/L
Sb 206.836†	3.3	1.02	30.49%	[0.00]	mg/L
Se 196.026†	5.1	1.13	22.00%	[0.00]	mg/L
Sn 189.927†	1.8	0.29	16.14%	[0.00]	mg/L
Ti 334.940†	30.6	4.82	15.76%	[0.00]	mg/L
Tl 190.801†	-0.7	1.53	229.90%	[0.00]	mg/L
V 290.880†	99.5	1.72	1.73%	[0.00]	mg/L
Zn 206.200†	7.3	1.72	23.68%	[0.00]	mg/L
B 249.772	76.2	5.90	7.74%	[0.00]	mg/L
Si 251.611	47.7	1.53	3.22%	[0.00]	mg/L

26161/85218

Ag Reported

EF-326719 8/27
(not) Reported

Sequence No.: 2
Sample ID: CALST2 V-329037
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 8/31/2020 4:21:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST2 V-329037

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	65292.5	327.76	0.50%	99.3	%
Y 371.029	21212.2	231.77	1.09%	97.3	%
Ag 328.068†	718.7	11.72	1.63%	[0.05]	mg/L
Al 308.215†	1654.0	14.44	0.87%	[1]	mg/L
As 188.979†	11.5	1.37	11.96%	[0.1]	mg/L
Ba 233.527†	2968.1	23.30	0.79%	[0.25]	mg/L
Be 313.107†	3378.1	2.42	0.07%	[0.012]	mg/L
Ca 315.887†	20140.3	48.64	0.24%	[5]	mg/L
Cd 228.802†	150.6	2.16	1.44%	[0.05]	mg/L
Co 228.616†	276.6	2.70	0.97%	[0.1]	mg/L
Cr 267.716†	710.5	2.26	0.32%	[0.1]	mg/L
Cu 327.393†	1022.3	7.40	0.72%	[0.1]	mg/L
Fe 273.955†	752.6	8.45	1.12%	[1]	mg/L
K 404.721†	34.1	9.09	26.64%	[5]	mg/L
Mg 279.077†	6558.5	20.08	0.31%	[5]	mg/L
Mn 257.610†	3122.2	2.28	0.07%	[0.1]	mg/L
Mo 202.031†	143.3	4.15	2.90%	[0.1]	mg/L
Na 330.237†	1177.2	13.34	1.13%	[25]	mg/L
Ni 231.604†	383.3	1.85	0.48%	[0.1]	mg/L
Pb 220.353†	38.7	2.35	6.07%	[0.05]	mg/L
Sb 206.836†	13.1	1.57	12.02%	[0.07]	mg/L
Se 196.026†	30.2	6.01	19.88%	[0.1]	mg/L
Sn 189.927†	63.2	0.38	0.59%	[0.1]	mg/L
Ti 334.940†	2984.9	12.35	0.41%	[0.1]	mg/L
Tl 190.801†	20.9	0.73	3.49%	[0.1]	mg/L
V 290.880†	624.4	5.99	0.96%	[0.1]	mg/L
Zn 206.200†	433.3	3.98	0.92%	[0.1]	mg/L
B 249.772	1351.7	3.48	0.26%	[0.2]	mg/L
Si 251.611	307.0	2.18	0.71%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-329028
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 3
Date Collected: 8/31/2020 4:25:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST3 V-329028

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	60204.2	48.20	0.08%	91.6	%
Y 371.029	19507.4	112.17	0.58%	89.4	%
Ag 328.068†	1696.7	33.20	1.96%	[0.10]	mg/L
Al 308.215†	7400.8	46.08	0.62%	[5.0]	mg/L
As 188.979†	66.2	2.62	3.96%	[0.50]	mg/L
Ba 233.527†	5473.3	36.62	0.67%	[0.50]	mg/L
Be 313.107†	148886.1	932.55	0.63%	[0.50]	mg/L
Ca 315.887†	212732.0	874.60	0.41%	[50]	mg/L
Cd 228.802†	1588.7	14.33	0.90%	[0.50]	mg/L
Co 228.616†	1463.9	14.01	0.96%	[0.50]	mg/L
Cr 267.716†	3485.0	22.02	0.63%	[0.50]	mg/L
Cu 327.393†	4750.7	33.11	0.70%	[0.50]	mg/L
Fe 273.955†	3491.1	28.04	0.80%	[5.0]	mg/L
K 404.721†	1095.2	8.02	0.73%	[50]	mg/L
Mg 279.077†	67297.8	348.52	0.52%	[50]	mg/L
Mn 257.610†	16136.4	120.44	0.75%	[0.50]	mg/L
Mo 202.031†	780.4	4.12	0.53%	[0.50]	mg/L
Na 330.237†	2298.3	6.61	0.29%	[50]	mg/L
Ni 231.604†	2024.0	22.19	1.10%	[0.50]	mg/L
Pb 220.353†	388.8	8.48	2.18%	[0.50]	mg/L
Sb 206.836†	89.9	2.62	2.92%	[0.50]	mg/L
Se 196.026†	146.4	3.06	2.09%	[0.50]	mg/L
Sn 189.927†	317.3	4.33	1.37%	[0.50]	mg/L
Ti 334.940†	15234.5	59.69	0.39%	[0.50]	mg/L
Tl 190.801†	110.4	2.25	2.04%	[0.50]	mg/L
V 290.880†	3025.3	8.97	0.30%	[0.50]	mg/L
Zn 206.200†	2364.5	11.25	0.48%	[0.50]	mg/L
B 249.772	3136.4	13.08	0.42%	[0.50]	mg/L
Si 251.611	10974.7	34.77	0.32%	[5]	mg/L

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: CALST4 V-329029 **Date Collected: 8/31/2020 4:29:50 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CALST4 V-329029

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	63116.2	380.60	0.60%	96.0	%
Y 371.029	19492.1	116.68	0.60%	89.4	%
Ag 328.068†	2980.4	12.15	0.41%	[0.20]	mg/L
Al 308.215†	14356.6	30.48	0.21%	[10]	mg/L
As 188.979†	122.2	2.33	1.91%	[1.00]	mg/L
Ba 233.527†	10411.1	17.30	0.17%	[1.00]	mg/L
Be 313.107†	280138.9	2511.45	0.90%	[1.00]	mg/L
Ca 315.887†	394347.5	2812.76	0.71%	[100]	mg/L
Cd 228.802†	2786.9	4.45	0.16%	[1.00]	mg/L
Co 228.616†	2813.8	10.92	0.39%	[1.00]	mg/L
Cr 267.716†	6559.3	31.03	0.47%	[1.00]	mg/L
Cu 327.393†	9161.2	26.21	0.29%	[1.00]	mg/L
Fe 273.955†	6550.1	21.02	0.32%	[10.0]	mg/L
K 404.721†	2151.3	21.83	1.01%	[100]	mg/L
Mg 279.077†	126286.0	1067.04	0.84%	[100]	mg/L
Mn 257.610†	32017.9	92.03	0.29%	[1.00]	mg/L
Mo 202.031†	1493.7	6.88	0.46%	[1.00]	mg/L
Na 330.237†	4711.6	9.14	0.19%	[100]	mg/L
Ni 231.604†	3499.3	18.29	0.52%	[1.00]	mg/L
Pb 220.353†	726.9	7.13	0.98%	[1.00]	mg/L
Sb 206.836†	173.1	1.78	1.03%	[1.00]	mg/L
Se 196.026†	277.8	3.35	1.21%	[1.00]	mg/L
Sn 189.927†	608.7	1.45	0.24%	[1.00]	mg/L
Ti 334.940†	30525.1	13.77	0.05%	[1.00]	mg/L
Tl 190.801†	204.5	2.80	1.37%	[1.00]	mg/L
V 290.880†	5578.3	17.79	0.32%	[1.00]	mg/L
Zn 206.200†	4136.8	3.69	0.09%	[1.00]	mg/L
B 249.772	6313.7	34.99	0.55%	[1.00]	mg/L
Si 251.611	22693.8	157.70	0.69%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	30.7	15070	0.00000	0.996528	
Al 308.215	3	Lin, Calc Int	138.1	1429	0.00000	0.999820	
As 188.979	3	Lin, Calc Int	0.6	123.4	0.00000	0.998904	
Ba 233.527	3	Lin, Calc Int	199.7	10320	0.00000	0.999142	
Be 313.107	3	Lin, Calc Int	1612.5	281700	0.00000	0.999475	
Ca 315.887	3	Lin, Calc Int	3039.7	3968	0.00000	0.999151	
Cd 228.802	3	Lin, Calc Int	40.8	2815	0.00000	0.997389	
Co 228.616	3	Lin, Calc Int	8.5	2825	0.00000	0.999747	
Cr 267.716	3	Lin, Calc Int	62.3	6566	0.00000	0.999472	
Cu 327.393	3	Lin, Calc Int	78.6	9137	0.00000	0.999799	
Fe 273.955	3	Lin, Calc Int	83.4	653.8	0.00000	0.999406	
K 404.721	3	Lin, Calc Int	-29.5	21.93	0.00000	0.999373	
Mg 279.077	3	Lin, Calc Int	870.9	1269	0.00000	0.999417	
Mn 257.610	3	Lin, Calc Int	-11.7	32080	0.00000	0.999984	
Mo 202.031	3	Lin, Calc Int	3.5	1502	0.00000	0.999668	
Na 330.237	3	Lin, Calc Int	-11.8	47.05	0.00000	0.999899	
Ni 231.604	3	Lin, Calc Int	65.7	3527	0.00000	0.996632	
Pb 220.353	3	Lin, Calc Int	5.7	730.1	0.00000	0.999354	
Sb 206.836	3	Lin, Calc Int	1.0	173.2	0.00000	0.999812	
Se 196.026	3	Lin, Calc Int	2.5	277.8	0.00000	0.999601	
Sn 189.927	3	Lin, Calc Int	3.4	609.6	0.00000	0.999753	
Ti 334.940	3	Lin, Calc Int	-35.2	30550	0.00000	0.999998	
Tl 190.801	3	Lin, Calc Int	1.7	205.6	0.00000	0.999102	
V 290.880	3	Lin, Calc Int	73.3	5584	0.00000	0.999038	
Zn 206.200	3	Lin, Calc Int	63.6	4175	0.00000	0.997133	

B 249.772	3	Lin, Calc Int	33.2	6276	0.00000	0.999858
Si 251.611	3	Lin, Calc Int	-31.4	2258	0.00000	0.999834

Sequence No.: 5 **Autosampler Location: 6**
Sample ID: ICV V-329036 **Date Collected: 8/31/2020 4:34:55 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 105 **Auto Dilution Factor: 1**

Mean Data: ICV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	60394.1	91.9	%	0.30				0.32%
Y 371.029	19472.7	89.3	%	0.34				0.38%
Ag 328.068†	1463.7	0.0981162	mg/L	0.00025855	0.0981162	mg/L	0.00025855	0.26%
QC value within limits for Ag 328.068 Recovery = 98.12%								
Al 308.215†	7424.0	5.11475	mg/L	0.020347	5.11475	mg/L	0.020347	0.40%
QC value within limits for Al 308.215 Recovery = 102.29%								
As 188.979†	64.4	0.492232	mg/L	0.0235502	0.492232	mg/L	0.0235502	4.78%
QC value within limits for As 188.979 Recovery = 98.45%								
Ba 233.527†	5452.4	0.509157	mg/L	0.0016821	0.509157	mg/L	0.0016821	0.33%
QC value within limits for Ba 233.527 Recovery = 101.83%								
Be 313.107†	148095.3	0.519968	mg/L	0.0009910	0.519968	mg/L	0.0009910	0.19%
QC value within limits for Be 313.107 Recovery = 103.99%								
Ca 315.887†	215287.3	53.4880	mg/L	0.08642	53.4880	mg/L	0.08642	0.16%
QC value within limits for Ca 315.887 Recovery = 106.98%								
Cd 228.802†	1587.8	0.549592	mg/L	0.0017146	0.549592	mg/L	0.0017146	0.31%
QC value within limits for Cd 228.802 Recovery = 109.92%								
Co 228.616†	1466.4	0.516014	mg/L	0.0039434	0.516014	mg/L	0.0039434	0.76%
QC value within limits for Co 228.616 Recovery = 103.20%								
Cr 267.716†	3865.9	0.581735	mg/L	0.0028108	0.581735	mg/L	0.0028108	0.48%
QC value greater than the upper limit for Cr 267.716 Recovery = 116.35%								
Cu 327.393†	4732.2	0.509818	mg/L	0.0031322	0.509818	mg/L	0.0031322	0.61%
QC value within limits for Cu 327.393 Recovery = 101.96%								
Fe 273.955†	3482.8	5.19972	mg/L	0.040499	5.19972	mg/L	0.040499	0.78%
QC value within limits for Fe 273.955 Recovery = 103.99%								
K 404.721†	1112.0	-3.95012	mg/L	0.477572	-3.95012	mg/L	0.477572	12.09%
QC value less than the lower limit for K 404.721 Recovery = -7.90%								
Mg 279.077†	67952.2	52.8713	mg/L	0.08254	52.8713	mg/L	0.08254	0.16%
QC value within limits for Mg 279.077 Recovery = 105.74%								
Mn 257.610†	16096.5	0.502173	mg/L	0.0007176	0.502173	mg/L	0.0007176	0.14%
QC value within limits for Mn 257.610 Recovery = 100.43%								
Mo 202.031†	779.4	0.516529	mg/L	0.0035859	0.516529	mg/L	0.0035859	0.69%
QC value within limits for Mo 202.031 Recovery = 103.31%								
Na 330.237†	2335.9	49.8947	mg/L	0.31538	49.8947	mg/L	0.31538	0.63%
QC value within limits for Na 330.237 Recovery = 99.79%								
Ni 231.604†	2014.5	0.553926	mg/L	0.0025729	0.553926	mg/L	0.0025729	0.46%
QC value greater than the upper limit for Ni 231.604 Recovery = 110.79%								
Pb 220.353†	391.7	0.529703	mg/L	0.0043629	0.529703	mg/L	0.0043629	0.82%
QC value within limits for Pb 220.353 Recovery = 105.94%								
Sb 206.836†	91.6	0.534858	mg/L	0.0068215	0.534858	mg/L	0.0068215	1.28%
QC value within limits for Sb 206.836 Recovery = 106.97%								
Se 196.026†	145.1	0.522726	mg/L	0.0124012	0.522726	mg/L	0.0124012	2.37%
QC value within limits for Se 196.026 Recovery = 104.55%								
Sn 189.927†	320.5	0.518307	mg/L	0.0017710	0.518307	mg/L	0.0017710	0.34%
QC value within limits for Sn 189.927 Recovery = 103.66%								
Ti 334.940†	15180.6	0.502074	mg/L	0.0010383	0.502074	mg/L	0.0010383	0.21%
QC value within limits for Ti 334.940 Recovery = 100.41%								
Tl 190.801†	106.9	0.507363	mg/L	0.0154714	0.507363	mg/L	0.0154714	3.05%
QC value within limits for Tl 190.801 Recovery = 101.47%								
V 290.880†	3025.8	0.531610	mg/L	0.0056861	0.531610	mg/L	0.0056861	1.07%
QC value within limits for V 290.880 Recovery = 106.32%								
Zn 206.200†	2398.4	0.559215	mg/L	0.0025662	0.559215	mg/L	0.0025662	0.46%
QC value greater than the upper limit for Zn 206.200 Recovery = 111.84%								
B 249.772	3179.4	0.510244	mg/L	0.0005570	0.510244	mg/L	0.0005570	0.11%
QC value within limits for B 249.772 Recovery = 102.05%								
Si 251.611	11200.5	5.08069	mg/L	0.011718	5.08069	mg/L	0.011718	0.23%
QC value within limits for Si 251.611 Recovery = 101.61%								

QC Failed. Continue with analysis.

Sequence No.: 6
Sample ID: ICB V-329027
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 1
Date Collected: 8/31/2020 4:38:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICB V-329027

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	63563.5	96.7	%	0.54				0.56%
Y 371.029	20883.9	95.7	%	0.44				0.46%
Ag 328.068†	-10.7	-0.0028292	mg/L	0.00006127	-0.0028292	mg/L	0.00006127	2.17%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-0.6	-0.0977529	mg/L	0.00234224	-0.0977529	mg/L	0.00234224	2.40%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.1	-0.0037602	mg/L	0.01011028	-0.0037602	mg/L	0.01011028	268.87%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.0	-0.0193498	mg/L	0.00026658	-0.0193498	mg/L	0.00026658	1.38%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-10.3	-0.0057604	mg/L	0.00006156	-0.0057604	mg/L	0.00006156	1.07%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	11.2	-0.763215	mg/L	0.0020553	-0.763215	mg/L	0.0020553	0.27%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	1.0	-0.0141413	mg/L	0.00002783	-0.0141413	mg/L	0.00002783	0.20%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.6	-0.0027839	mg/L	0.00079928	-0.0027839	mg/L	0.00079928	28.71%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-5.1	-0.0103260	mg/L	0.00034539	-0.0103260	mg/L	0.00034539	3.34%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-25.9	-0.0114521	mg/L	0.00032260	-0.0114521	mg/L	0.00032260	2.82%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.6	-0.129996	mg/L	0.0015776	-0.129996	mg/L	0.0015776	1.21%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	2.3	2.84979	mg/L	0.566998	2.84979	mg/L	0.566998	19.90%
QC value greater than the upper limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	5.0	-0.682448	mg/L	0.0053022	-0.682448	mg/L	0.0053022	0.78%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	1.7	0.0004154	mg/L	0.00002526	0.0004154	mg/L	0.00002526	6.08%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.1	-0.0022870	mg/L	0.00127023	-0.0022870	mg/L	0.00127023	55.54%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-0.0	0.249521	mg/L	0.0682920	0.249521	mg/L	0.0682920	27.37%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	0.3	-0.0185446	mg/L	0.00101410	-0.0185446	mg/L	0.00101410	5.47%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.4	-0.0097293	mg/L	0.00073492	-0.0097293	mg/L	0.00073492	7.55%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.3	-0.0045487	mg/L	0.01020681	-0.0045487	mg/L	0.01020681	224.39%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.6	-0.0113932	mg/L	0.01580340	-0.0113932	mg/L	0.01580340	138.71%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.3	-0.0060845	mg/L	0.00199643	-0.0060845	mg/L	0.00199643	32.81%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-7.6	0.0008437	mg/L	0.00016503	0.0008437	mg/L	0.00016503	19.56%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.1	-0.0134963	mg/L	0.01188034	-0.0134963	mg/L	0.01188034	88.03%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-4.7	-0.0140152	mg/L	0.00087721	-0.0140152	mg/L	0.00087721	6.26%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-2.4	-0.0158052	mg/L	0.00076228	-0.0158052	mg/L	0.00076228	4.82%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-20.4	-0.0084648	mg/L	0.00043007	-0.0084648	mg/L	0.00043007	5.08%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-0.1	0.0118124	mg/L	0.00040899	0.0118124	mg/L	0.00040899	3.46%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: LRS V-329041
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 13
Date Collected: 8/31/2020 4:42:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LRS V-329041

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	53548.6	81.5	%	0.21				0.26%
Y 371.029	15710.0	72.0	%	0.40				0.56%
Ag 328.068†	15153.6	1.06259	mg/L	0.002454	1.06259	mg/L	0.002454	0.23%
QC value within limits for Ag 328.068 Recovery = 106.26%								
Al 308.215†	740655.0	518.556	mg/L	1.5048	518.556	mg/L	1.5048	0.29%
QC value within limits for Al 308.215 Recovery = 103.71%								
As 188.979†	1255.4	9.69993	mg/L	0.094997	9.69993	mg/L	0.094997	0.98%
QC value within limits for As 188.979 Recovery = 97.00%								
Ba 233.527†	103609.4	10.0237	mg/L	0.05046	10.0237	mg/L	0.05046	0.50%
QC value within limits for Ba 233.527 Recovery = 100.24%								
Be 313.107†	1356583.3	4.80972	mg/L	0.014659	4.80972	mg/L	0.014659	0.30%
QC value within limits for Be 313.107 Recovery = 96.19%								
Ca 315.887†	1926593.4	484.750	mg/L	2.2969	484.750	mg/L	2.2969	0.47%
QC value within limits for Ca 315.887 Recovery = 96.95%								
Cd 228.802†	15154.2	5.36942	mg/L	0.034161	5.36942	mg/L	0.034161	0.64%
QC value within limits for Cd 228.802 Recovery = 107.39%								
Co 228.616†	13207.3	4.67162	mg/L	0.016169	4.67162	mg/L	0.016169	0.35%
QC value within limits for Co 228.616 Recovery = 93.43%								
Cr 267.716†	63894.8	9.76408	mg/L	0.051387	9.76408	mg/L	0.051387	0.53%
QC value within limits for Cr 267.716 Recovery = 97.64%								
Cu 327.393†	98805.7	10.8244	mg/L	0.10698	10.8244	mg/L	0.10698	0.99%
QC value within limits for Cu 327.393 Recovery = 108.24%								
Fe 273.955†	127808.2	195.367	mg/L	1.3594	195.367	mg/L	1.3594	0.70%
QC value within limits for Fe 273.955 Recovery = 97.68%								
K 404.721†	5641.1	-1845.81	mg/L	11.749	-1845.81	mg/L	11.749	0.64%
QC value less than the lower limit for K 404.721 Recovery = -922.91%								
Mg 279.077†	641631.3	505.026	mg/L	1.9888	505.026	mg/L	1.9888	0.39%
QC value within limits for Mg 279.077 Recovery = 101.01%								
Mn 257.610†	313300.7	9.76752	mg/L	0.054355	9.76752	mg/L	0.054355	0.56%
QC value within limits for Mn 257.610 Recovery = 97.68%								
Mo 202.031†	14966.1	9.96157	mg/L	0.025910	9.96157	mg/L	0.025910	0.26%
QC value within limits for Mo 202.031 Recovery = 99.62%								
Na 330.237†	62280.5	1323.89	mg/L	8.353	1323.89	mg/L	8.353	0.63%
QC value greater than the upper limit for Na 330.237 Recovery = 132.39%								
Ni 231.604†	32357.8	9.18248	mg/L	0.020484	9.18248	mg/L	0.020484	0.22%
QC value within limits for Ni 231.604 Recovery = 91.82%								
Pb 220.353†	6761.0	9.31526	mg/L	0.025014	9.31526	mg/L	0.025014	0.27%
QC value within limits for Pb 220.353 Recovery = 93.15%								
Sb 206.836†	903.1	5.43881	mg/L	0.021763	5.43881	mg/L	0.021763	0.40%
QC value within limits for Sb 206.836 Recovery = 108.78%								
Se 196.026†	1378.8	5.12851	mg/L	0.018985	5.12851	mg/L	0.018985	0.37%
QC value within limits for Se 196.026 Recovery = 102.57%								
Sn 189.927†	5851.8	9.55647	mg/L	0.058028	9.55647	mg/L	0.058028	0.61%
QC value within limits for Sn 189.927 Recovery = 95.56%								
Ti 334.940†	307352.5	10.0975	mg/L	0.03419	10.0975	mg/L	0.03419	0.34%
QC value within limits for Ti 334.940 Recovery = 100.98%								
Tl 190.801†	923.4	4.44942	mg/L	0.015812	4.44942	mg/L	0.015812	0.36%
QC value less than the lower limit for Tl 190.801 Recovery = 88.99%								
V 290.880†	51235.4	9.18442	mg/L	0.046452	9.18442	mg/L	0.046452	0.51%
QC value within limits for V 290.880 Recovery = 91.84%								
Zn 206.200†	38736.6	9.26281	mg/L	0.037390	9.26281	mg/L	0.037390	0.40%
QC value within limits for Zn 206.200 Recovery = 92.63%								
B 249.772	31345.2	4.68061	mg/L	0.046225	4.68061	mg/L	0.046225	0.99%
QC value within limits for B 249.772 Recovery = 93.61%								
Si 251.611	49095.1	23.7557	mg/L	0.23530	23.7557	mg/L	0.23530	0.99%
QC value within limits for Si 251.611 Recovery = 95.02%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-329028
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 105

Autosampler Location: 3
Date Collected: 8/31/2020 4:47:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICS3 V-329028

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	60420.8	91.9	%	0.25				0.27%
Y 371.029	19115.0	87.6	%	0.61				0.70%
Ag 328.068†	1429.4	0.0957323	mg/L	0.00049678	0.0957323	mg/L	0.00049678	0.52%
QC value within limits for Ag 328.068 Recovery = 95.73%								
Al 308.215†	7294.2	5.02335	mg/L	0.011729	5.02335	mg/L	0.011729	0.23%
QC value within limits for Al 308.215 Recovery = 100.47%								
As 188.979†	62.4	0.476627	mg/L	0.0169083	0.476627	mg/L	0.0169083	3.55%
QC value within limits for As 188.979 Recovery = 95.33%								
Ba 233.527†	5314.6	0.495799	mg/L	0.0022556	0.495799	mg/L	0.0022556	0.45%
QC value within limits for Ba 233.527 Recovery = 99.16%								
Be 313.107†	144494.6	0.507187	mg/L	0.0017631	0.507187	mg/L	0.0017631	0.35%
QC value within limits for Be 313.107 Recovery = 101.44%								
Ca 315.887†	207715.0	51.5797	mg/L	0.21941	51.5797	mg/L	0.21941	0.43%
QC value within limits for Ca 315.887 Recovery = 103.16%								
Cd 228.802†	1535.2	0.530899	mg/L	0.0019475	0.530899	mg/L	0.0019475	0.37%
QC value within limits for Cd 228.802 Recovery = 106.18%								
Co 228.616†	1420.5	0.499770	mg/L	0.0029644	0.499770	mg/L	0.0029644	0.59%
QC value within limits for Co 228.616 Recovery = 99.95%								
Cr 267.716†	3759.5	0.565457	mg/L	0.0025764	0.565457	mg/L	0.0025764	0.46%
QC value greater than the upper limit for Cr 267.716 Recovery = 113.09%								
Cu 327.393†	4668.3	0.502785	mg/L	0.0023133	0.502785	mg/L	0.0023133	0.46%
QC value within limits for Cu 327.393 Recovery = 100.56%								
Fe 273.955†	3271.0	4.87580	mg/L	0.051305	4.87580	mg/L	0.051305	1.05%
QC value within limits for Fe 273.955 Recovery = 97.52%								
K 404.721†	1109.7	-0.567654	mg/L	1.0477803	-0.567654	mg/L	1.0477803	184.58%
QC value less than the lower limit for K 404.721 Recovery = -1.14%								
Mg 279.077†	65583.3	51.0042	mg/L	0.19255	51.0042	mg/L	0.19255	0.38%
QC value within limits for Mg 279.077 Recovery = 102.01%								
Mn 257.610†	15593.2	0.486481	mg/L	0.0016266	0.486481	mg/L	0.0016266	0.33%
QC value within limits for Mn 257.610 Recovery = 97.30%								
Mo 202.031†	758.2	0.502472	mg/L	0.0043684	0.502472	mg/L	0.0043684	0.87%
QC value within limits for Mo 202.031 Recovery = 100.49%								
Na 330.237†	2285.0	48.8123	mg/L	0.14920	48.8123	mg/L	0.14920	0.31%
QC value within limits for Na 330.237 Recovery = 97.62%								
Ni 231.604†	1929.2	0.529697	mg/L	0.0013397	0.529697	mg/L	0.0013397	0.25%
QC value within limits for Ni 231.604 Recovery = 105.94%								
Pb 220.353†	372.6	0.503476	mg/L	0.0012071	0.503476	mg/L	0.0012071	0.24%
QC value within limits for Pb 220.353 Recovery = 100.70%								
Sb 206.836†	89.2	0.520915	mg/L	0.0085475	0.520915	mg/L	0.0085475	1.64%
QC value within limits for Sb 206.836 Recovery = 104.18%								
Se 196.026†	137.3	0.493956	mg/L	0.0066362	0.493956	mg/L	0.0066362	1.34%
QC value within limits for Se 196.026 Recovery = 98.79%								
Sn 189.927†	308.0	0.497770	mg/L	0.0040512	0.497770	mg/L	0.0040512	0.81%
QC value within limits for Sn 189.927 Recovery = 99.55%								
Ti 334.940†	14621.9	0.483643	mg/L	0.0008599	0.483643	mg/L	0.0008599	0.18%
QC value within limits for Ti 334.940 Recovery = 96.73%								
Tl 190.801†	104.2	0.494217	mg/L	0.0076295	0.494217	mg/L	0.0076295	1.54%
QC value within limits for Tl 190.801 Recovery = 98.84%								
V 290.880†	2933.1	0.514910	mg/L	0.0016340	0.514910	mg/L	0.0016340	0.32%
QC value within limits for V 290.880 Recovery = 102.98%								
Zn 206.200†	2310.5	0.538154	mg/L	0.0020686	0.538154	mg/L	0.0020686	0.38%
QC value within limits for Zn 206.200 Recovery = 107.63%								
B 249.772	3177.7	0.510098	mg/L	0.0061937	0.510098	mg/L	0.0061937	1.21%
QC value within limits for B 249.772 Recovery = 102.02%								
Si 251.611	10818.9	4.90799	mg/L	0.020993	4.90799	mg/L	0.020993	0.43%
QC value within limits for Si 251.611 Recovery = 98.16%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 14
Date Collected: 8/31/2020 4:51:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	65714.0	100.0	%	0.62				0.62%
Y 371.029	21056.8	96.5	%	1.00				1.03%
Ag 328.068†	-3.2	-0.0023355	mg/L	0.00030754	-0.0023355	mg/L	0.00030754	13.17%
Al 308.215†	-7.9	-0.102918	mg/L	0.0022736	-0.102918	mg/L	0.0022736	2.21%
As 188.979†	1.7	0.0095242	mg/L	0.00528546	0.0095242	mg/L	0.00528546	55.50%
Ba 233.527†	0.7	-0.0192890	mg/L	0.00014109	-0.0192890	mg/L	0.00014109	0.73%
Be 313.107†	9.6	-0.0056896	mg/L	0.00001000	-0.0056896	mg/L	0.00001000	0.18%
Ca 315.887†	30.2	-0.758423	mg/L	0.0030346	-0.758423	mg/L	0.0030346	0.40%
Cd 228.802†	-0.4	-0.0146366	mg/L	0.00083105	-0.0146366	mg/L	0.00083105	5.68%
Co 228.616†	2.9	-0.0019655	mg/L	0.00083186	-0.0019655	mg/L	0.00083186	42.32%
Cr 267.716†	-2.4	-0.0099213	mg/L	0.00021819	-0.0099213	mg/L	0.00021819	2.20%
Cu 327.393†	-23.6	-0.0112046	mg/L	0.00134527	-0.0112046	mg/L	0.00134527	12.01%
Fe 273.955†	5.6	-0.119008	mg/L	0.0015839	-0.119008	mg/L	0.0015839	1.33%
K 404.721†	4.5	2.83205	mg/L	0.277001	2.83205	mg/L	0.277001	9.78%
Mg 279.077†	5.4	-0.682143	mg/L	0.0008572	-0.682143	mg/L	0.0008572	0.13%
Mn 257.610†	-1.1	0.0003309	mg/L	0.00008507	0.0003309	mg/L	0.00008507	25.71%
Mo 202.031†	-0.6	-0.0027283	mg/L	0.00105639	-0.0027283	mg/L	0.00105639	38.72%
Na 330.237†	-3.8	0.170675	mg/L	0.1567455	0.170675	mg/L	0.1567455	91.84%
Ni 231.604†	-3.9	-0.0197468	mg/L	0.00092591	-0.0197468	mg/L	0.00092591	4.69%
Pb 220.353†	-1.9	-0.0104073	mg/L	0.00221213	-0.0104073	mg/L	0.00221213	21.26%
Sb 206.836†	1.5	0.0026795	mg/L	0.00599614	0.0026795	mg/L	0.00599614	223.78%
Se 196.026†	1.7	-0.0028602	mg/L	0.00291512	-0.0028602	mg/L	0.00291512	101.92%
Sn 189.927†	1.0	-0.0040301	mg/L	0.00140939	-0.0040301	mg/L	0.00140939	34.97%
Ti 334.940†	1.5	0.0011442	mg/L	0.00007464	0.0011442	mg/L	0.00007464	6.52%
Tl 190.801†	-1.0	-0.0129920	mg/L	0.01055920	-0.0129920	mg/L	0.01055920	81.27%
V 290.880†	-9.3	-0.0148281	mg/L	0.00027058	-0.0148281	mg/L	0.00027058	1.82%
Zn 206.200†	0.1	-0.0152111	mg/L	0.00063069	-0.0152111	mg/L	0.00063069	4.15%
B 249.772	20.8	-0.0018596	mg/L	0.00131446	-0.0018596	mg/L	0.00131446	70.69%
Si 251.611	8.9	0.0161561	mg/L	0.00173276	0.0161561	mg/L	0.00173276	10.73%

Sequence No.: 10 **Autosampler Location: 5**
Sample ID: LLICV V-329037 **Date Collected: 8/31/2020 4:55:54 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: LLICV V-329037

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	65514.1	99.7	%	0.61				0.61%
Y 371.029	20575.1	94.3	%	0.66				0.70%
Ag 328.068†	710.3	0.0456457	mg/L	0.00027806	0.0456457	mg/L	0.00027806	0.61%
QC value within limits for Ag 328.068 Recovery = 91.29%								
Al 308.215†	1632.6	1.04868	mg/L	0.006994	1.04868	mg/L	0.006994	0.67%
QC value within limits for Al 308.215 Recovery = 104.87%								
As 188.979†	13.1	0.0965928	mg/L	0.01118080	0.0965928	mg/L	0.01118080	11.58%
QC value within limits for As 188.979 Recovery = 96.59%								
Ba 233.527†	2934.4	0.265083	mg/L	0.0015514	0.265083	mg/L	0.0015514	0.59%
QC value within limits for Ba 233.527 Recovery = 106.03%								
Be 313.107†	3365.1	0.0062212	mg/L	0.00003080	0.0062212	mg/L	0.00003080	0.50%
QC value less than the lower limit for Be 313.107 Recovery = 51.84%								
Ca 315.887†	19726.9	4.20530	mg/L	0.010962	4.20530	mg/L	0.010962	0.26%
QC value within limits for Ca 315.887 Recovery = 84.11%								
Cd 228.802†	147.2	0.0377871	mg/L	0.00097270	0.0377871	mg/L	0.00097270	2.57%
QC value less than the lower limit for Cd 228.802 Recovery = 75.57%								
Co 228.616†	269.9	0.0925362	mg/L	0.00068258	0.0925362	mg/L	0.00068258	0.74%
QC value within limits for Co 228.616 Recovery = 92.54%								
Cr 267.716†	703.8	0.0981330	mg/L	0.00101101	0.0981330	mg/L	0.00101101	1.03%
QC value within limits for Cr 267.716 Recovery = 98.13%								
Cu 327.393†	1007.9	0.101792	mg/L	0.0014982	0.101792	mg/L	0.0014982	1.47%
QC value within limits for Cu 327.393 Recovery = 101.79%								
Fe 273.955†	706.2	0.952745	mg/L	0.0055551	0.952745	mg/L	0.0055551	0.58%
QC value within limits for Fe 273.955 Recovery = 95.27%								
K 404.721†	42.8	-6.96608	mg/L	0.620732	-6.96608	mg/L	0.620732	8.91%
QC value less than the lower limit for K 404.721 Recovery = -139.32%								
Mg 279.077†	6448.3	4.39593	mg/L	0.018435	4.39593	mg/L	0.018435	0.42%
QC value within limits for Mg 279.077 Recovery = 87.92%								
Mn 257.610†	3081.7	0.0964362	mg/L	0.00030121	0.0964362	mg/L	0.00030121	0.31%
QC value within limits for Mn 257.610 Recovery = 96.44%								
Mo 202.031†	144.2	0.0936893	mg/L	0.00078341	0.0936893	mg/L	0.00078341	0.84%
QC value within limits for Mo 202.031 Recovery = 93.69%								
Na 330.237†	1149.9	24.6889	mg/L	0.13221	24.6889	mg/L	0.13221	0.54%
QC value within limits for Na 330.237 Recovery = 98.76%								
Ni 231.604†	368.5	0.0861151	mg/L	0.00118008	0.0861151	mg/L	0.00118008	1.37%
QC value within limits for Ni 231.604 Recovery = 86.12%								
Pb 220.353†	36.5	0.0423986	mg/L	0.00643938	0.0423986	mg/L	0.00643938	15.19%
QC value within limits for Pb 220.353 Recovery = 84.80%								
Sb 206.836†	11.8	0.0645092	mg/L	0.00656431	0.0645092	mg/L	0.00656431	10.18%
QC value within limits for Sb 206.836 Recovery = 92.16%								
Se 196.026†	28.7	0.0955635	mg/L	0.02030648	0.0955635	mg/L	0.02030648	21.25%
QC value within limits for Se 196.026 Recovery = 95.56%								
Sn 189.927†	60.5	0.0931906	mg/L	0.00178115	0.0931906	mg/L	0.00178115	1.91%
QC value within limits for Sn 189.927 Recovery = 93.19%								
Ti 334.940†	2881.5	0.0957828	mg/L	0.00040380	0.0957828	mg/L	0.00040380	0.42%
QC value within limits for Ti 334.940 Recovery = 95.78%								
Tl 190.801†	20.7	0.0916586	mg/L	0.00784522	0.0916586	mg/L	0.00784522	8.56%
QC value within limits for Tl 190.801 Recovery = 91.66%								
V 290.880†	601.8	0.0948603	mg/L	0.00180299	0.0948603	mg/L	0.00180299	1.90%
QC value within limits for V 290.880 Recovery = 94.86%								
Zn 206.200†	427.2	0.0870936	mg/L	0.00095144	0.0870936	mg/L	0.00095144	1.09%
QC value within limits for Zn 206.200 Recovery = 87.09%								
B 249.772	1339.4	0.209131	mg/L	0.0007474	0.209131	mg/L	0.0007474	0.36%
QC value within limits for B 249.772 Recovery = 104.57%								
Si 251.611	310.0	0.173940	mg/L	0.0051880	0.173940	mg/L	0.0051880	2.98%
QC value greater than the upper limit for Si 251.611 Recovery = 173.94%								

QC Failed. Continue with analysis.

Sequence No.: 10 **Autosampler Location: 5**
Sample ID: LLICV V-329037 **Date Collected: 8/31/2020 4:55:54 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: LLICV V-329037

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	65514.1	99.7	%	0.61				0.61%
Y 371.029	20575.1	94.3	%	0.66				0.70%
Ag 328.068†	710.3	0.0456457	mg/L	0.00027806	0.0456457	mg/L	0.00027806	0.61%
QC value within limits for Ag 328.068 Recovery = 91.29%								
Al 308.215†	1632.6	1.04868	mg/L	0.006994	1.04868	mg/L	0.006994	0.67%
QC value within limits for Al 308.215 Recovery = 104.87%								
As 188.979†	13.1	0.0965928	mg/L	0.01118080	0.0965928	mg/L	0.01118080	11.58%
QC value within limits for As 188.979 Recovery = 96.59%								
Ba 233.527†	2934.4	0.265083	mg/L	0.0015514	0.265083	mg/L	0.0015514	0.59%
QC value within limits for Ba 233.527 Recovery = 106.03%								
Be 313.107†	3365.1	0.0062212	mg/L	0.00003080	0.0062212	mg/L	0.00003080	0.50%
QC value less than the lower limit for Be 313.107 Recovery = 51.84%								
Ca 315.887†	19726.9	4.20530	mg/L	0.010962	4.20530	mg/L	0.010962	0.26%
QC value within limits for Ca 315.887 Recovery = 84.11%								
Cd 228.802†	147.2	0.0377871	mg/L	0.00097270	0.0377871	mg/L	0.00097270	2.57%
QC value less than the lower limit for Cd 228.802 Recovery = 75.57%								
Co 228.616†	269.9	0.0925362	mg/L	0.00068258	0.0925362	mg/L	0.00068258	0.74%
QC value within limits for Co 228.616 Recovery = 92.54%								
Cr 267.716†	703.8	0.0981330	mg/L	0.00101101	0.0981330	mg/L	0.00101101	1.03%
QC value within limits for Cr 267.716 Recovery = 98.13%								
Cu 327.393†	1007.9	0.101792	mg/L	0.0014982	0.101792	mg/L	0.0014982	1.47%
QC value within limits for Cu 327.393 Recovery = 101.79%								
Fe 273.955†	706.2	0.952745	mg/L	0.0055551	0.952745	mg/L	0.0055551	0.58%
QC value within limits for Fe 273.955 Recovery = 95.27%								
K 404.721†	42.8	-6.96608	mg/L	0.620732	-6.96608	mg/L	0.620732	8.91%
QC value less than the lower limit for K 404.721 Recovery = -139.32%								
Mg 279.077†	6448.3	4.39593	mg/L	0.018435	4.39593	mg/L	0.018435	0.42%
QC value within limits for Mg 279.077 Recovery = 87.92%								
Mn 257.610†	3081.7	0.0964362	mg/L	0.00030121	0.0964362	mg/L	0.00030121	0.31%
QC value within limits for Mn 257.610 Recovery = 96.44%								
Mo 202.031†	144.2	0.0936893	mg/L	0.00078341	0.0936893	mg/L	0.00078341	0.84%
QC value within limits for Mo 202.031 Recovery = 93.69%								
Na 330.237†	1149.9	24.6889	mg/L	0.13221	24.6889	mg/L	0.13221	0.54%
QC value within limits for Na 330.237 Recovery = 98.76%								
Ni 231.604†	368.5	0.0861151	mg/L	0.00118008	0.0861151	mg/L	0.00118008	1.37%
QC value within limits for Ni 231.604 Recovery = 86.12%								
Pb 220.353†	36.5	0.0423986	mg/L	0.00643938	0.0423986	mg/L	0.00643938	15.19%
QC value within limits for Pb 220.353 Recovery = 84.80%								
Sb 206.836†	11.8	0.0645092	mg/L	0.00656431	0.0645092	mg/L	0.00656431	10.18%
QC value within limits for Sb 206.836 Recovery = 92.16%								
Se 196.026†	28.7	0.0955635	mg/L	0.02030648	0.0955635	mg/L	0.02030648	21.25%
QC value within limits for Se 196.026 Recovery = 95.56%								
Sn 189.927†	60.5	0.0931906	mg/L	0.00178115	0.0931906	mg/L	0.00178115	1.91%
QC value within limits for Sn 189.927 Recovery = 93.19%								
Ti 334.940†	2881.5	0.0957828	mg/L	0.00040380	0.0957828	mg/L	0.00040380	0.42%
QC value within limits for Ti 334.940 Recovery = 95.78%								
Tl 190.801†	20.7	0.0916586	mg/L	0.00784522	0.0916586	mg/L	0.00784522	8.56%
QC value within limits for Tl 190.801 Recovery = 91.66%								
V 290.880†	601.8	0.0948603	mg/L	0.00180299	0.0948603	mg/L	0.00180299	1.90%
QC value within limits for V 290.880 Recovery = 94.86%								
Zn 206.200†	427.2	0.0870936	mg/L	0.00095144	0.0870936	mg/L	0.00095144	1.09%
QC value within limits for Zn 206.200 Recovery = 87.09%								
B 249.772	1339.4	0.209131	mg/L	0.0007474	0.209131	mg/L	0.0007474	0.36%
QC value within limits for B 249.772 Recovery = 104.57%								
Si 251.611	310.0	0.173940	mg/L	0.0051880	0.173940	mg/L	0.0051880	2.98%
QC value greater than the upper limit for Si 251.611 Recovery = 173.94%								

QC Failed. Continue with analysis.

Sequence No.: 11 **Autosampler Location: 7**
Sample ID: ICSA V-329033 **Date Collected: 8/31/2020 4:59:54 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICSA V-329033

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	55295.9	84.1	%	0.55				0.65%
Y 371.029	17548.0	80.5	%	0.38				0.47%
Ag 328.068†	-672.7	-0.0338430	mg/L	0.00065990	-0.0338430	mg/L	0.00065990	1.95%
Al 308.215†	774597.3	542.086	mg/L	6.3058	542.086	mg/L	6.3058	1.16%
QC value within limits for Al 308.215 Recovery = 108.42%								
As 188.979†	-0.5	-0.0148346	mg/L	0.00916806	-0.0148346	mg/L	0.00916806	61.80%
Ba 233.527†	57.2	-0.0138058	mg/L	0.00011700	-0.0138058	mg/L	0.00011700	0.85%
Be 313.107†	-133.0	-0.0061957	mg/L	0.00008509	-0.0061957	mg/L	0.00008509	1.37%
Ca 315.887†	2025172.6	509.593	mg/L	6.1475	509.593	mg/L	6.1475	1.21%
QC value within limits for Ca 315.887 Recovery = 101.92%								
Cd 228.802†	1.8	-0.0138798	mg/L	0.00089991	-0.0138798	mg/L	0.00089991	6.48%
Co 228.616†	2.7	-0.0020491	mg/L	0.00016375	-0.0020491	mg/L	0.00016375	7.99%
Cr 267.716†	-21.7	-0.0122653	mg/L	0.00123873	-0.0122653	mg/L	0.00123873	10.10%
Cu 327.393†	-226.3	-0.0144943	mg/L	0.00048596	-0.0144943	mg/L	0.00048596	3.35%
Fe 273.955†	123507.9	188.789	mg/L	2.4972	188.789	mg/L	2.4972	1.32%
QC value within limits for Fe 273.955 Recovery = 94.39%								
K 404.721†	-32.7	-2033.72	mg/L	26.110	-2033.72	mg/L	26.110	1.28%
Mg 279.077†	689875.1	543.051	mg/L	6.3775	543.051	mg/L	6.3775	1.17%
QC value within limits for Mg 279.077 Recovery = 108.61%								
Mn 257.610†	-342.7	-0.0103205	mg/L	0.00026920	-0.0103205	mg/L	0.00026920	2.61%
Mo 202.031†	-7.1	-0.0070502	mg/L	0.00280995	-0.0070502	mg/L	0.00280995	39.86%
Na 330.237†	-50.1	-0.815201	mg/L	0.1078622	-0.815201	mg/L	0.1078622	13.23%
Ni 231.604†	5.7	-0.0170204	mg/L	0.00084212	-0.0170204	mg/L	0.00084212	4.95%
Pb 220.353†	-39.7	-0.0002829	mg/L	0.00397271	-0.0002829	mg/L	0.00397271	>999.9%
Sb 206.836†	-0.1	-0.0061400	mg/L	0.01908388	-0.0061400	mg/L	0.01908388	310.81%
Se 196.026†	-44.6	0.0036407	mg/L	0.01976779	0.0036407	mg/L	0.01976779	542.97%
Sn 189.927†	-23.2	-0.0436801	mg/L	0.00458307	-0.0436801	mg/L	0.00458307	10.49%
Ti 334.940†	-241.8	0.0319659	mg/L	0.00090241	0.0319659	mg/L	0.00090241	2.82%
Tl 190.801†	-7.7	-0.0612318	mg/L	0.01052494	-0.0612318	mg/L	0.01052494	17.19%
V 290.880†	716.8	0.140128	mg/L	0.0024848	0.140128	mg/L	0.0024848	1.77%
Zn 206.200†	29.2	-0.0082464	mg/L	0.00039602	-0.0082464	mg/L	0.00039602	4.80%
B 249.772	5304.3	0.196308	mg/L	0.0135471	0.196308	mg/L	0.0135471	6.90%
Si 251.611	-22.8	0.814759	mg/L	0.0090891	0.814759	mg/L	0.0090891	1.12%

All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 6**
Sample ID: CCV V-329036 **Date Collected: 8/31/2020 5:04:58 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 105 **Auto Dilution Factor: 1**

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	60496.2	92.0	%	0.38				0.42%
Y 371.029	18830.8	86.3	%	0.57				0.66%
Ag 328.068†	1410.3	0.0943591	mg/L	0.00042686	0.0943591	mg/L	0.00042686	0.45%
QC value within limits for Ag 328.068 Recovery = 94.36%								
Al 308.215†	7085.3	4.87660	mg/L	0.021120	4.87660	mg/L	0.021120	0.43%
QC value within limits for Al 308.215 Recovery = 97.53%								
As 188.979†	58.2	0.443265	mg/L	0.0085002	0.443265	mg/L	0.0085002	1.92%
QC value less than the lower limit for As 188.979 Recovery = 88.65%								
Ba 233.527†	5154.4	0.480274	mg/L	0.0025334	0.480274	mg/L	0.0025334	0.53%
QC value within limits for Ba 233.527 Recovery = 96.05%								
Be 313.107†	140489.9	0.492971	mg/L	0.0009346	0.492971	mg/L	0.0009346	0.19%
QC value within limits for Be 313.107 Recovery = 98.59%								
Ca 315.887†	199940.3	49.6204	mg/L	0.03367	49.6204	mg/L	0.03367	0.07%
QC value within limits for Ca 315.887 Recovery = 99.24%								
Cd 228.802†	1475.8	0.509813	mg/L	0.0036948	0.509813	mg/L	0.0036948	0.72%
QC value within limits for Cd 228.802 Recovery = 101.96%								
Co 228.616†	1381.7	0.486034	mg/L	0.0045827	0.486034	mg/L	0.0045827	0.94%
QC value within limits for Co 228.616 Recovery = 97.21%								
Cr 267.716†	3653.2	0.549182	mg/L	0.0039681	0.549182	mg/L	0.0039681	0.72%
QC value within limits for Cr 267.716 Recovery = 109.84%								
Cu 327.393†	4521.6	0.486711	mg/L	0.0023094	0.486711	mg/L	0.0023094	0.47%
QC value within limits for Cu 327.393 Recovery = 97.34%								
Fe 273.955†	3153.9	4.69668	mg/L	0.022311	4.69668	mg/L	0.022311	0.48%
QC value within limits for Fe 273.955 Recovery = 93.93%								
K 404.721†	1054.8	-1.13903	mg/L	0.863402	-1.13903	mg/L	0.863402	75.80%
QC value less than the lower limit for K 404.721 Recovery = -2.28%								
Mg 279.077†	63385.6	49.2721	mg/L	0.03731	49.2721	mg/L	0.03731	0.08%
QC value within limits for Mg 279.077 Recovery = 98.54%								
Mn 257.610†	15106.7	0.471317	mg/L	0.0008450	0.471317	mg/L	0.0008450	0.18%
QC value within limits for Mn 257.610 Recovery = 94.26%								
Mo 202.031†	731.7	0.484779	mg/L	0.0016516	0.484779	mg/L	0.0016516	0.34%
QC value within limits for Mo 202.031 Recovery = 96.96%								
Na 330.237†	2180.7	46.5973	mg/L	0.19503	46.5973	mg/L	0.19503	0.42%
QC value within limits for Na 330.237 Recovery = 93.19%								
Ni 231.604†	1851.6	0.507644	mg/L	0.0018305	0.507644	mg/L	0.0018305	0.36%
QC value within limits for Ni 231.604 Recovery = 101.53%								
Pb 220.353†	358.9	0.484608	mg/L	0.0033145	0.484608	mg/L	0.0033145	0.68%
QC value within limits for Pb 220.353 Recovery = 96.92%								
Sb 206.836†	85.8	0.500594	mg/L	0.0078936	0.500594	mg/L	0.0078936	1.58%
QC value within limits for Sb 206.836 Recovery = 100.12%								
Se 196.026†	137.9	0.495952	mg/L	0.0177737	0.495952	mg/L	0.0177737	3.58%
QC value within limits for Se 196.026 Recovery = 99.19%								
Sn 189.927†	295.1	0.476765	mg/L	0.0107259	0.476765	mg/L	0.0107259	2.25%
QC value within limits for Sn 189.927 Recovery = 95.35%								
Ti 334.940†	14021.7	0.463847	mg/L	0.0007616	0.463847	mg/L	0.0007616	0.16%
QC value within limits for Ti 334.940 Recovery = 92.77%								
Tl 190.801†	102.1	0.484327	mg/L	0.0124750	0.484327	mg/L	0.0124750	2.58%
QC value within limits for Tl 190.801 Recovery = 96.87%								
V 290.880†	2827.2	0.495855	mg/L	0.0004845	0.495855	mg/L	0.0004845	0.10%
QC value within limits for V 290.880 Recovery = 99.17%								
Zn 206.200†	2232.9	0.519567	mg/L	0.0026055	0.519567	mg/L	0.0026055	0.50%
QC value within limits for Zn 206.200 Recovery = 103.91%								
B 249.772	2979.3	0.478306	mg/L	0.0028815	0.478306	mg/L	0.0028815	0.60%
QC value within limits for B 249.772 Recovery = 95.66%								
Si 251.611	10436.5	4.73502	mg/L	0.024228	4.73502	mg/L	0.024228	0.51%
QC value within limits for Si 251.611 Recovery = 94.70%								

QC Failed. Continue with analysis.

Sequence No.: 13 **Autosampler Location: 2**
Sample ID: CCB V-329027 **Date Collected: 8/31/2020 5:08:56 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	66241.1	101	%	0.04				0.04%
Y 371.029	21088.4	96.7	%	0.74				0.77%
Ag 328.068†	-2.5	-0.0022904	mg/L	0.00057494	-0.0022904	mg/L	0.00057494	25.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-10.1	-0.104448	mg/L	0.0054844	-0.104448	mg/L	0.0054844	5.25%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.2	-0.0029325	mg/L	0.00545089	-0.0029325	mg/L	0.00545089	185.88%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	1.5	-0.0192109	mg/L	0.00015303	-0.0192109	mg/L	0.00015303	0.80%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	41.8	-0.0055752	mg/L	0.00010786	-0.0055752	mg/L	0.00010786	1.93%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	25.4	-0.759632	mg/L	0.0048674	-0.759632	mg/L	0.0048674	0.64%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.2	-0.0145855	mg/L	0.00049383	-0.0145855	mg/L	0.00049383	3.39%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-0.8	-0.0032923	mg/L	0.00061397	-0.0032923	mg/L	0.00061397	18.65%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-5.7	-0.0104199	mg/L	0.00042660	-0.0104199	mg/L	0.00042660	4.09%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-21.9	-0.0110203	mg/L	0.00034505	-0.0110203	mg/L	0.00034505	3.13%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-0.0	-0.127507	mg/L	0.0050501	-0.127507	mg/L	0.0050501	3.96%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-3.6	2.55298	mg/L	0.448096	2.55298	mg/L	0.448096	17.55%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	8.5	-0.679740	mg/L	0.0035167	-0.679740	mg/L	0.0035167	0.52%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-0.6	0.0003440	mg/L	0.00003570	0.0003440	mg/L	0.00003570	10.38%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.9	-0.0029738	mg/L	0.00060287	-0.0029738	mg/L	0.00060287	20.27%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.7	0.287381	mg/L	0.0371069	0.287381	mg/L	0.0371069	12.91%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-2.9	-0.0194417	mg/L	0.00081311	-0.0194417	mg/L	0.00081311	4.18%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.3	-0.0094931	mg/L	0.00283173	-0.0094931	mg/L	0.00283173	29.83%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.9	-0.0008718	mg/L	0.00874935	-0.0008718	mg/L	0.00874935	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.1	-0.0086874	mg/L	0.01034081	-0.0086874	mg/L	0.01034081	119.03%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.1	-0.0055396	mg/L	0.00337860	-0.0055396	mg/L	0.00337860	60.99%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-3.4	0.0009829	mg/L	0.00024862	0.0009829	mg/L	0.00024862	25.30%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-3.2	-0.0235535	mg/L	0.00636466	-0.0235535	mg/L	0.00636466	27.02%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-10.5	-0.0150505	mg/L	0.00024227	-0.0150505	mg/L	0.00024227	1.61%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-2.0	-0.0157232	mg/L	0.00032514	-0.0157232	mg/L	0.00032514	2.07%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-28.7	-0.0097825	mg/L	0.00086087	-0.0097825	mg/L	0.00086087	8.80%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	1.4	0.0124946	mg/L	0.00095195	0.0124946	mg/L	0.00095195	7.62%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: MB 85218 (1)
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 51
Date Collected: 8/31/2020 5:12:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: MB 85218 (1)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	64089.5	97.5	%	0.70				0.72%
Y 371.029	20498.8	94.0	%	1.30				1.39%
Ag 328.068†	-9.9	-0.0027719	mg/L	0.00014629	-0.0027719	mg/L	0.00014629	5.28%
Al 308.215†	9.4	-0.0907866	mg/L	0.00468272	-0.0907866	mg/L	0.00468272	5.16%
As 188.979†	1.8	0.0102420	mg/L	0.00601872	0.0102420	mg/L	0.00601872	58.77%
Ba 233.527†	1.2	-0.0192342	mg/L	0.00009693	-0.0192342	mg/L	0.00009693	0.50%
Be 313.107†	-15.6	-0.0057791	mg/L	0.00004149	-0.0057791	mg/L	0.00004149	0.72%
Ca 315.887†	77.4	-0.746518	mg/L	0.0009777	-0.746518	mg/L	0.0009777	0.13%
Cd 228.802†	1.9	-0.0138291	mg/L	0.00071020	-0.0138291	mg/L	0.00071020	5.14%
Co 228.616†	-0.8	-0.0032962	mg/L	0.00132512	-0.0032962	mg/L	0.00132512	40.20%
Cr 267.716†	0.0	-0.0095488	mg/L	0.00068092	-0.0095488	mg/L	0.00068092	7.13%
Cu 327.393†	-21.0	-0.0109062	mg/L	0.00030892	-0.0109062	mg/L	0.00030892	2.83%
Fe 273.955†	54.9	-0.0435068	mg/L	0.00512052	-0.0435068	mg/L	0.00512052	11.77%
K 404.721†	-5.9	1.54660	mg/L	0.496743	1.54660	mg/L	0.496743	32.12%
Mg 279.077†	10.1	-0.678488	mg/L	0.0019437	-0.678488	mg/L	0.0019437	0.29%
Mn 257.610†	90.7	0.0031923	mg/L	0.00007017	0.0031923	mg/L	0.00007017	2.20%
Mo 202.031†	0.1	-0.0022903	mg/L	0.00030495	-0.0022903	mg/L	0.00030495	13.31%
Na 330.237†	1.3	0.279010	mg/L	0.0833993	0.279010	mg/L	0.0833993	29.89%
Ni 231.604†	-0.5	-0.0187728	mg/L	0.00041749	-0.0187728	mg/L	0.00041749	2.22%
Pb 220.353†	-1.2	-0.0094668	mg/L	0.00380569	-0.0094668	mg/L	0.00380569	40.20%
Sb 206.836†	0.5	-0.0034041	mg/L	0.00764658	-0.0034041	mg/L	0.00764658	224.63%
Se 196.026†	1.7	-0.0030526	mg/L	0.00493460	-0.0030526	mg/L	0.00493460	161.65%
Sn 189.927†	4.7	0.0019995	mg/L	0.00098673	0.0019995	mg/L	0.00098673	49.35%
Ti 334.940†	10.7	0.0014437	mg/L	0.00008856	0.0014437	mg/L	0.00008856	6.13%
Tl 190.801†	-0.2	-0.0088881	mg/L	0.00111157	-0.0088881	mg/L	0.00111157	12.51%
V 290.880†	-6.6	-0.0143519	mg/L	0.00039961	-0.0143519	mg/L	0.00039961	2.78%
Zn 206.200†	28.5	-0.0084202	mg/L	0.00063110	-0.0084202	mg/L	0.00063110	7.50%
B 249.772	-39.7	-0.0116795	mg/L	0.00063668	-0.0116795	mg/L	0.00063668	5.45%
Si 251.611	45.1	0.0323617	mg/L	0.00057451	0.0323617	mg/L	0.00057451	1.78%

Sequence No.: 15
Sample ID: LCS 85218
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 52
Date Collected: 8/31/2020 5:16:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LCS 85218

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	58706.4	89.3	%	0.37				0.42%
Y 371.029	18709.2	85.8	%	0.79				0.92%
Ag 328.068†	1610.7	0.107965	mg/L	0.0004760	0.107965	mg/L	0.0004760	0.44%
Al 308.215†	7862.8	5.42205	mg/L	0.022382	5.42205	mg/L	0.022382	0.41%
As 188.979†	66.5	0.507913	mg/L	0.0072795	0.507913	mg/L	0.0072795	1.43%
Ba 233.527†	5866.1	0.549260	mg/L	0.0013788	0.549260	mg/L	0.0013788	0.25%
Be 313.107†	156642.1	0.550307	mg/L	0.0013071	0.550307	mg/L	0.0013071	0.24%
Ca 315.887†	221112.9	54.9561	mg/L	0.09528	54.9561	mg/L	0.09528	0.17%
Cd 228.802†	1657.9	0.574507	mg/L	0.0046380	0.574507	mg/L	0.0046380	0.81%
Co 228.616†	1549.6	0.545456	mg/L	0.0022185	0.545456	mg/L	0.0022185	0.41%
Cr 267.716†	4043.2	0.608827	mg/L	0.0004290	0.608827	mg/L	0.0004290	0.07%
Cu 327.393†	5029.1	0.542304	mg/L	0.0003744	0.542304	mg/L	0.0003744	0.07%
Fe 273.955†	3500.9	5.22737	mg/L	0.039452	5.22737	mg/L	0.039452	0.75%
K 404.721†	442.3	-34.7882	mg/L	0.53692	-34.7882	mg/L	0.53692	1.54%
Mg 279.077†	70170.6	54.6198	mg/L	0.07525	54.6198	mg/L	0.07525	0.14%
Mn 257.610†	16797.7	0.524033	mg/L	0.0011699	0.524033	mg/L	0.0011699	0.22%
Mo 202.031†	829.3	0.549795	mg/L	0.0022540	0.549795	mg/L	0.0022540	0.41%
Na 330.237†	2425.3	51.7956	mg/L	0.46146	51.7956	mg/L	0.46146	0.89%
Ni 231.604†	2079.4	0.572417	mg/L	0.0043996	0.572417	mg/L	0.0043996	0.77%
Pb 220.353†	403.6	0.546027	mg/L	0.0099491	0.546027	mg/L	0.0099491	1.82%
Sb 206.836†	99.1	0.579133	mg/L	0.0035915	0.579133	mg/L	0.0035915	0.62%
Se 196.026†	151.4	0.545489	mg/L	0.0155746	0.545489	mg/L	0.0155746	2.86%
Sn 189.927†	330.0	0.533708	mg/L	0.0078709	0.533708	mg/L	0.0078709	1.47%
Ti 334.940†	15590.0	0.515583	mg/L	0.0008058	0.515583	mg/L	0.0008058	0.16%
Tl 190.801†	114.2	0.542536	mg/L	0.0202253	0.542536	mg/L	0.0202253	3.73%
V 290.880†	3129.4	0.550263	mg/L	0.0025533	0.550263	mg/L	0.0025533	0.46%
Zn 206.200†	2467.5	0.575781	mg/L	0.0034291	0.575781	mg/L	0.0034291	0.60%
B 249.772	3285.2	0.521792	mg/L	0.0058409	0.521792	mg/L	0.0058409	1.12%
Si 251.611	1308.6	0.704360	mg/L	0.0037648	0.704360	mg/L	0.0037648	0.53%

Sequence No.: 16
Sample ID: LCS MR 85218
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 53
Date Collected: 8/31/2020 5:20:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LCS MR 85218

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	58702.8	89.3	%	0.74				0.83%
Y 371.029	18686.3	85.7	%	0.76				0.89%
Ag 328.068†	1606.8	0.107739	mg/L	0.0007038	0.107739	mg/L	0.0007038	0.65%
Al 308.215†	7911.2	5.45617	mg/L	0.040606	5.45617	mg/L	0.040606	0.74%
As 188.979†	66.7	0.509472	mg/L	0.0111117	0.509472	mg/L	0.0111117	2.18%
Ba 233.527†	5908.6	0.553385	mg/L	0.0039591	0.553385	mg/L	0.0039591	0.72%
Be 313.107†	158041.2	0.555273	mg/L	0.0023256	0.555273	mg/L	0.0023256	0.42%
Ca 315.887†	222244.7	55.2413	mg/L	0.30948	55.2413	mg/L	0.30948	0.56%
Cd 228.802†	1659.5	0.575079	mg/L	0.0074256	0.575079	mg/L	0.0074256	1.29%
Co 228.616†	1553.5	0.546868	mg/L	0.0055619	0.546868	mg/L	0.0055619	1.02%
Cr 267.716†	4054.9	0.610626	mg/L	0.0058836	0.610626	mg/L	0.0058836	0.96%
Cu 327.393†	5086.6	0.548607	mg/L	0.0041499	0.548607	mg/L	0.0041499	0.76%
Fe 273.955†	3544.6	5.29431	mg/L	0.045348	5.29431	mg/L	0.045348	0.86%
K 404.721†	445.2	-35.3774	mg/L	1.10185	-35.3774	mg/L	1.10185	3.11%
Mg 279.077†	70279.0	54.7052	mg/L	0.25791	54.7052	mg/L	0.25791	0.47%
Mn 257.610†	16915.1	0.527693	mg/L	0.0023279	0.527693	mg/L	0.0023279	0.44%
Mo 202.031†	828.3	0.549111	mg/L	0.0060625	0.549111	mg/L	0.0060625	1.10%
Na 330.237†	2450.9	52.3391	mg/L	0.37665	52.3391	mg/L	0.37665	0.72%
Ni 231.604†	2086.6	0.574446	mg/L	0.0063540	0.574446	mg/L	0.0063540	1.11%
Pb 220.353†	401.7	0.543315	mg/L	0.0055675	0.543315	mg/L	0.0055675	1.02%
Sb 206.836†	96.7	0.565322	mg/L	0.0086454	0.565322	mg/L	0.0086454	1.53%
Se 196.026†	155.7	0.560995	mg/L	0.0045157	0.560995	mg/L	0.0045157	0.80%
Sn 189.927†	327.5	0.529614	mg/L	0.0043790	0.529614	mg/L	0.0043790	0.83%
Ti 334.940†	15732.8	0.520279	mg/L	0.0038684	0.520279	mg/L	0.0038684	0.74%
Tl 190.801†	116.4	0.553448	mg/L	0.0108309	0.553448	mg/L	0.0108309	1.96%
V 290.880†	3159.1	0.555577	mg/L	0.0037156	0.555577	mg/L	0.0037156	0.67%
Zn 206.200†	2488.2	0.580723	mg/L	0.0070697	0.580723	mg/L	0.0070697	1.22%
B 249.772	3351.9	0.532386	mg/L	0.0007636	0.532386	mg/L	0.0007636	0.14%
Si 251.611	1316.4	0.709019	mg/L	0.0028582	0.709019	mg/L	0.0028582	0.40%

Sequence No.: 17
Sample ID: AD18923-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 54
Date Collected: 8/31/2020 5:24:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	56550.0	86.0	%	0.72				0.83%
Y 371.029	18747.9	86.0	%	0.66				0.77%
Ag 328.068†	528.0	0.0333167	mg/L	0.00044983	0.0333167	mg/L	0.00044983	1.35%
Al 308.215†	52.2	-0.0580989	mg/L	0.00081146	-0.0580989	mg/L	0.00081146	1.40%
As 188.979†	1.2	0.0041529	mg/L	0.01017898	0.0041529	mg/L	0.01017898	245.11%
Ba 233.527†	937.3	0.0715020	mg/L	0.00112956	0.0715020	mg/L	0.00112956	1.58%
Be 313.107†	-98.0	-0.0060717	mg/L	0.00001512	-0.0060717	mg/L	0.00001512	0.25%
Ca 315.887†	7024468.8	1769.45	mg/L	14.702	1769.45	mg/L	14.702	0.83%
Cd 228.802†	8.0	-0.0116802	mg/L	0.00049587	-0.0116802	mg/L	0.00049587	4.25%
Co 228.616†	1.5	-0.0024596	mg/L	0.00100979	-0.0024596	mg/L	0.00100979	41.05%
Cr 267.716†	8.0	-0.0080908	mg/L	0.00028477	-0.0080908	mg/L	0.00028477	3.52%
Cu 327.393†	-185.4	-0.0287239	mg/L	0.00080733	-0.0287239	mg/L	0.00080733	2.81%
Fe 273.955†	1210.6	1.72415	mg/L	0.014788	1.72415	mg/L	0.014788	0.86%
K 404.721†	38.2	-15.4860	mg/L	0.22801	-15.4860	mg/L	0.22801	1.47%
Mg 279.077†	40772.5	31.4492	mg/L	0.07250	31.4492	mg/L	0.07250	0.23%
Mn 257.610†	67602.2	2.10786	mg/L	0.004539	2.10786	mg/L	0.004539	0.22%
Mo 202.031†	5.1	0.0010490	mg/L	0.00349257	0.0010490	mg/L	0.00349257	332.95%
Na 330.237†	176.2	3.99564	mg/L	0.146330	3.99564	mg/L	0.146330	3.66%
Ni 231.604†	99.8	0.0096789	mg/L	0.00060313	0.0096789	mg/L	0.00060313	6.23%
Pb 220.353†	-4.9	-0.0143723	mg/L	0.00591497	-0.0143723	mg/L	0.00591497	41.16%
Sb 206.836†	2.7	0.0094039	mg/L	0.00527485	0.0094039	mg/L	0.00527485	56.09%
Se 196.026†	3.0	0.145492	mg/L	0.0149089	0.145492	mg/L	0.0149089	10.25%
Sn 189.927†	-19.0	-0.0366437	mg/L	0.00488900	-0.0366437	mg/L	0.00488900	13.34%
Ti 334.940†	-1018.0	0.102311	mg/L	0.0008224	0.102311	mg/L	0.0008224	0.80%
Tl 190.801†	0.3	-0.105650	mg/L	0.0094722	-0.105650	mg/L	0.0094722	8.97%
V 290.880†	293.0	0.0411015	mg/L	0.00127329	0.0411015	mg/L	0.00127329	3.10%
Zn 206.200†	5498.2	1.30167	mg/L	0.004117	1.30167	mg/L	0.004117	0.32%
B 249.772	264.3	0.0427617	mg/L	0.00108414	0.0427617	mg/L	0.00108414	2.54%
Si 251.611	1286.5	1.06312	mg/L	0.006144	1.06312	mg/L	0.006144	0.58%

Sequence No.: 18
Sample ID: AD18923-001 MR
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 55
Date Collected: 8/31/2020 5:29:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001 MR

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	56196.0	85.5	%	0.39				0.45%
Y 371.029	18578.9	85.2	%	0.41				0.48%
Ag 328.068†	531.3	0.0335357	mg/L	0.00074738	0.0335357	mg/L	0.00074738	2.23%
Al 308.215†	209.7	0.0522085	mg/L	0.00215361	0.0522085	mg/L	0.00215361	4.13%
As 188.979†	1.3	0.0047636	mg/L	0.01214590	0.0047636	mg/L	0.01214590	254.97%
Ba 233.527†	953.2	0.0730417	mg/L	0.00023424	0.0730417	mg/L	0.00023424	0.32%
Be 313.107†	-117.6	-0.0061411	mg/L	0.00009876	-0.0061411	mg/L	0.00009876	1.61%
Ca 315.887†	7075079.1	1782.21	mg/L	8.473	1782.21	mg/L	8.473	0.48%
Cd 228.802†	8.5	-0.0114837	mg/L	0.00094899	-0.0114837	mg/L	0.00094899	8.26%
Co 228.616†	3.6	-0.0017291	mg/L	0.00131758	-0.0017291	mg/L	0.00131758	76.20%
Cr 267.716†	10.1	-0.0077722	mg/L	0.00066095	-0.0077722	mg/L	0.00066095	8.50%
Cu 327.393†	-178.7	-0.0279938	mg/L	0.00143818	-0.0279938	mg/L	0.00143818	5.14%
Fe 273.955†	1219.9	1.73841	mg/L	0.005040	1.73841	mg/L	0.005040	0.29%
K 404.721†	69.5	-14.2114	mg/L	1.10230	-14.2114	mg/L	1.10230	7.76%
Mg 279.077†	40888.8	31.5408	mg/L	0.07707	31.5408	mg/L	0.07707	0.24%
Mn 257.610†	67560.3	2.10656	mg/L	0.003614	2.10656	mg/L	0.003614	0.17%
Mo 202.031†	1.2	-0.0015126	mg/L	0.00161828	-0.0015126	mg/L	0.00161828	106.99%
Na 330.237†	185.1	4.18537	mg/L	0.134459	4.18537	mg/L	0.134459	3.21%
Ni 231.604†	102.7	0.0105003	mg/L	0.00034832	0.0105003	mg/L	0.00034832	3.32%
Pb 220.353†	-10.9	-0.0226949	mg/L	0.00689033	-0.0226949	mg/L	0.00689033	30.36%
Sb 206.836†	-0.8	-0.0105909	mg/L	0.00493770	-0.0105909	mg/L	0.00493770	46.62%
Se 196.026†	-0.7	0.133083	mg/L	0.0056570	0.133083	mg/L	0.0056570	4.25%
Sn 189.927†	-18.3	-0.0355129	mg/L	0.00308044	-0.0355129	mg/L	0.00308044	8.67%
Ti 334.940†	-1008.2	0.103600	mg/L	0.0005239	0.103600	mg/L	0.0005239	0.51%
Tl 190.801†	-0.6	-0.111036	mg/L	0.0148801	-0.111036	mg/L	0.0148801	13.40%
V 290.880†	291.6	0.0408489	mg/L	0.00141939	0.0408489	mg/L	0.00141939	3.47%
Zn 206.200†	5531.9	1.30975	mg/L	0.001173	1.30975	mg/L	0.001173	0.09%
B 249.772	253.1	0.0408595	mg/L	0.00082652	0.0408595	mg/L	0.00082652	2.02%
Si 251.611	1278.6	1.06250	mg/L	0.003872	1.06250	mg/L	0.003872	0.36%

Sequence No.: 19
Sample ID: AD18923-001 MS 1
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 56
Date Collected: 8/31/2020 5:33:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001 MS 1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	52702.6	80.2	%	0.29				0.36%
Y 371.029	17731.8	81.3	%	0.54				0.66%
Ag 328.068†	2017.9	0.135206	mg/L	0.0020958	0.135206	mg/L	0.0020958	1.55%
Al 308.215†	8029.8	5.54025	mg/L	0.006501	5.54025	mg/L	0.006501	0.12%
As 188.979†	73.6	0.564881	mg/L	0.0243307	0.564881	mg/L	0.0243307	4.31%
Ba 233.527†	6689.5	0.629077	mg/L	0.0021477	0.629077	mg/L	0.0021477	0.34%
Be 313.107†	156980.0	0.551506	mg/L	0.0000542	0.551506	mg/L	0.0000542	0.01%
Ca 315.887†	7459350.8	1879.05	mg/L	1.792	1879.05	mg/L	1.792	0.10%
Cd 228.802†	1737.7	0.602853	mg/L	0.0034771	0.602853	mg/L	0.0034771	0.58%
Co 228.616†	1471.3	0.517772	mg/L	0.0037375	0.517772	mg/L	0.0037375	0.72%
Cr 267.716†	3968.6	0.597554	mg/L	0.0033392	0.597554	mg/L	0.0033392	0.56%
Cu 327.393†	5208.7	0.562113	mg/L	0.0020874	0.562113	mg/L	0.0020874	0.37%
Fe 273.955†	4506.4	6.76548	mg/L	0.053474	6.76548	mg/L	0.053474	0.79%
K 404.721†	641.9	-42.2573	mg/L	0.38756	-42.2573	mg/L	0.38756	0.92%
Mg 279.077†	110422.0	86.3446	mg/L	0.08334	86.3446	mg/L	0.08334	0.10%
Mn 257.610†	81794.8	2.55032	mg/L	0.005611	2.55032	mg/L	0.005611	0.22%
Mo 202.031†	818.3	0.542460	mg/L	0.0011875	0.542460	mg/L	0.0011875	0.22%
Na 330.237†	3044.9	64.9628	mg/L	0.37620	64.9628	mg/L	0.37620	0.58%
Ni 231.604†	2086.9	0.574510	mg/L	0.0025736	0.574510	mg/L	0.0025736	0.45%
Pb 220.353†	376.5	0.508745	mg/L	0.0088359	0.508745	mg/L	0.0088359	1.74%
Sb 206.836†	104.7	0.611087	mg/L	0.0058961	0.611087	mg/L	0.0058961	0.96%
Se 196.026†	179.6	0.795083	mg/L	0.0229616	0.795083	mg/L	0.0229616	2.89%
Sn 189.927†	304.1	0.491505	mg/L	0.0013429	0.491505	mg/L	0.0013429	0.27%
Ti 334.940†	14513.8	0.618990	mg/L	0.0019751	0.618990	mg/L	0.0019751	0.32%
Tl 190.801†	105.1	0.396014	mg/L	0.0273611	0.396014	mg/L	0.0273611	6.91%
V 290.880†	3248.7	0.573409	mg/L	0.0026578	0.573409	mg/L	0.0026578	0.46%
Zn 206.200†	7984.3	1.89712	mg/L	0.006674	1.89712	mg/L	0.006674	0.35%
B 249.772	3387.8	0.544862	mg/L	0.0019674	0.544862	mg/L	0.0019674	0.36%
Si 251.611	2248.9	1.61359	mg/L	0.010929	1.61359	mg/L	0.010929	0.68%

Sequence No.: 20
Sample ID: AD18923-001 PS
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 57
Date Collected: 8/31/2020 5:37:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18923-001 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	52813.0	80.3	%	0.25				0.31%
Y 371.029	17725.8	81.3	%	0.45				0.55%
Ag 328.068†	1855.7	0.124292	mg/L	0.0008499	0.124292	mg/L	0.0008499	0.68%
Al 308.215†	7747.4	5.34183	mg/L	0.022022	5.34183	mg/L	0.022022	0.41%
As 188.979†	71.4	0.548535	mg/L	0.0087617	0.548535	mg/L	0.0087617	1.60%
Ba 233.527†	6241.6	0.585656	mg/L	0.0030502	0.585656	mg/L	0.0030502	0.52%
Be 313.107†	148245.0	0.520499	mg/L	0.0011691	0.520499	mg/L	0.0011691	0.22%
Ca 315.887†	7651299.6	1927.42	mg/L	8.548	1927.42	mg/L	8.548	0.44%
Cd 228.802†	1658.6	0.574764	mg/L	0.0040661	0.574764	mg/L	0.0040661	0.71%
Co 228.616†	1423.0	0.500658	mg/L	0.0012211	0.500658	mg/L	0.0012211	0.24%
Cr 267.716†	3850.8	0.579503	mg/L	0.0021236	0.579503	mg/L	0.0021236	0.37%
Cu 327.393†	4801.0	0.517472	mg/L	0.0069354	0.517472	mg/L	0.0069354	1.34%
Fe 273.955†	4356.1	6.53552	mg/L	0.039836	6.53552	mg/L	0.039836	0.61%
K 404.721†	589.9	-42.1517	mg/L	1.18075	-42.1517	mg/L	1.18075	2.80%
Mg 279.077†	111736.1	87.3803	mg/L	0.16514	87.3803	mg/L	0.16514	0.19%
Mn 257.610†	81839.1	2.55170	mg/L	0.000923	2.55170	mg/L	0.000923	0.04%
Mo 202.031†	778.7	0.516103	mg/L	0.0016744	0.516103	mg/L	0.0016744	0.32%
Na 330.237†	2854.4	60.9139	mg/L	0.18040	60.9139	mg/L	0.18040	0.30%
Ni 231.604†	2032.1	0.558899	mg/L	0.0032748	0.558899	mg/L	0.0032748	0.59%
Pb 220.353†	372.7	0.503646	mg/L	0.0022970	0.503646	mg/L	0.0022970	0.46%
Sb 206.836†	99.3	0.579617	mg/L	0.0218944	0.579617	mg/L	0.0218944	3.78%
Se 196.026†	174.2	0.779374	mg/L	0.0203783	0.779374	mg/L	0.0203783	2.61%
Sn 189.927†	296.4	0.478934	mg/L	0.0040602	0.478934	mg/L	0.0040602	0.85%
Ti 334.940†	13476.5	0.588716	mg/L	0.0014549	0.588716	mg/L	0.0014549	0.25%
Tl 190.801†	102.8	0.381938	mg/L	0.0225894	0.381938	mg/L	0.0225894	5.91%
V 290.880†	3103.6	0.547490	mg/L	0.0029814	0.547490	mg/L	0.0029814	0.54%
Zn 206.200†	8146.3	1.93594	mg/L	0.006118	1.93594	mg/L	0.006118	0.32%
B 249.772	3093.8	0.498197	mg/L	0.0030165	0.498197	mg/L	0.0030165	0.61%
Si 251.611	2254.8	1.62390	mg/L	0.004679	1.62390	mg/L	0.004679	0.29%

Sequence No.: 21 **Autosampler Location: 58**
Sample ID: AD18923-001 SD **Date Collected: 8/31/2020 5:41:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD18923-001 SD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	58599.4	89.1	%	0.08				0.09%
Y 371.029	18814.6	86.3	%	0.31				0.36%
Ag 328.068†	136.7	0.0070621	mg/L	0.00077412	0.0070621	mg/L	0.00077412	10.96%
Al 308.215†	11.5	-0.0885052	mg/L	0.00155754	-0.0885052	mg/L	0.00155754	1.76%
As 188.979†	0.5	-0.0010006	mg/L	0.00148882	-0.0010006	mg/L	0.00148882	148.80%
Ba 233.527†	200.1	0.0000420	mg/L	0.00038787	0.0000420	mg/L	0.00038787	923.20%
Be 313.107†	-107.9	-0.0061066	mg/L	0.00007305	-0.0061066	mg/L	0.00007305	1.20%
Ca 315.887†	1798370.0	452.437	mg/L	1.2197	452.437	mg/L	1.2197	0.27%
Cd 228.802†	2.7	-0.0135470	mg/L	0.00031137	-0.0135470	mg/L	0.00031137	2.30%
Co 228.616†	1.8	-0.0023750	mg/L	0.00093140	-0.0023750	mg/L	0.00093140	39.22%
Cr 267.716†	0.1	-0.0094647	mg/L	0.00081487	-0.0094647	mg/L	0.00081487	8.61%
Cu 327.393†	-87.7	-0.0181735	mg/L	0.00073492	-0.0181735	mg/L	0.00073492	4.04%
Fe 273.955†	264.2	0.276682	mg/L	0.0031406	0.276682	mg/L	0.0031406	1.14%
K 404.721†	15.7	-0.916512	mg/L	0.2100669	-0.916512	mg/L	0.2100669	22.92%
Mg 279.077†	8799.5	6.24910	mg/L	0.010137	6.24910	mg/L	0.010137	0.16%
Mn 257.610†	13375.6	0.417347	mg/L	0.0008776	0.417347	mg/L	0.0008776	0.21%
Mo 202.031†	1.7	-0.0012007	mg/L	0.00096288	-0.0012007	mg/L	0.00096288	80.19%
Na 330.237†	19.9	0.673729	mg/L	0.0049380	0.673729	mg/L	0.0049380	0.73%
Ni 231.604†	23.0	-0.0121181	mg/L	0.00047585	-0.0121181	mg/L	0.00047585	3.93%
Pb 220.353†	-0.3	-0.0081119	mg/L	0.00342465	-0.0081119	mg/L	0.00342465	42.22%
Sb 206.836†	0.6	-0.0025515	mg/L	0.01664638	-0.0025515	mg/L	0.01664638	652.42%
Se 196.026†	-0.4	0.0261215	mg/L	0.01166256	0.0261215	mg/L	0.01166256	44.65%
Sn 189.927†	-10.2	-0.0223369	mg/L	0.00300838	-0.0223369	mg/L	0.00300838	13.47%
Ti 334.940†	-239.7	0.0276900	mg/L	0.00018902	0.0276900	mg/L	0.00018902	0.68%
Tl 190.801†	-2.6	-0.0466434	mg/L	0.00911069	-0.0466434	mg/L	0.00911069	19.53%
V 290.880†	81.1	0.0017519	mg/L	0.00034374	0.0017519	mg/L	0.00034374	19.62%
Zn 206.200†	1272.9	0.289648	mg/L	0.0013747	0.289648	mg/L	0.0013747	0.47%
B 249.772	42.0	0.0026943	mg/L	0.00022750	0.0026943	mg/L	0.00022750	8.44%
Si 251.611	286.6	0.258724	mg/L	0.0015931	0.258724	mg/L	0.0015931	0.62%

Sequence No.: 22 **Autosampler Location: 6**
Sample ID: CCV V-329036 **Date Collected: 8/31/2020 5:46:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	59596.4	90.7	%	0.62				0.68%
Y 371.029	18567.8	85.1	%	0.55				0.65%
Ag 328.068†	1435.2	0.0960714	mg/L	0.00104967	0.0960714	mg/L	0.00104967	1.09%
QC value within limits for Ag 328.068 Recovery = 96.07%								
Al 308.215†	7045.9	4.84939	mg/L	0.028313	4.84939	mg/L	0.028313	0.58%
QC value within limits for Al 308.215 Recovery = 96.99%								
As 188.979†	61.2	0.467243	mg/L	0.0226468	0.467243	mg/L	0.0226468	4.85%
QC value within limits for As 188.979 Recovery = 93.45%								
Ba 233.527†	5240.8	0.488653	mg/L	0.0014379	0.488653	mg/L	0.0014379	0.29%
QC value within limits for Ba 233.527 Recovery = 97.73%								
Be 313.107†	143116.3	0.502294	mg/L	0.0004658	0.502294	mg/L	0.0004658	0.09%
QC value within limits for Be 313.107 Recovery = 100.46%								
Ca 315.887†	205997.0	51.1468	mg/L	0.14725	51.1468	mg/L	0.14725	0.29%
QC value within limits for Ca 315.887 Recovery = 102.29%								
Cd 228.802†	1501.4	0.518914	mg/L	0.0072770	0.518914	mg/L	0.0072770	1.40%
QC value within limits for Cd 228.802 Recovery = 103.78%								
Co 228.616†	1427.7	0.502329	mg/L	0.0081559	0.502329	mg/L	0.0081559	1.62%
QC value within limits for Co 228.616 Recovery = 100.47%								
Cr 267.716†	3730.4	0.560986	mg/L	0.0077367	0.560986	mg/L	0.0077367	1.38%
QC value greater than the upper limit for Cr 267.716 Recovery = 112.20%								
Cu 327.393†	4511.3	0.485593	mg/L	0.0021894	0.485593	mg/L	0.0021894	0.45%
QC value within limits for Cu 327.393 Recovery = 97.12%								
Fe 273.955†	3180.4	4.73719	mg/L	0.017663	4.73719	mg/L	0.017663	0.37%
QC value within limits for Fe 273.955 Recovery = 94.74%								
K 404.721†	1036.8	-2.39915	mg/L	0.574082	-2.39915	mg/L	0.574082	23.93%
QC value less than the lower limit for K 404.721 Recovery = -4.80%								
Mg 279.077†	66312.1	51.5786	mg/L	0.10366	51.5786	mg/L	0.10366	0.20%
QC value within limits for Mg 279.077 Recovery = 103.16%								
Mn 257.610†	15377.8	0.479766	mg/L	0.0014100	0.479766	mg/L	0.0014100	0.29%
QC value within limits for Mn 257.610 Recovery = 95.95%								
Mo 202.031†	744.3	0.493197	mg/L	0.0075699	0.493197	mg/L	0.0075699	1.53%
QC value within limits for Mo 202.031 Recovery = 98.64%								
Na 330.237†	2177.8	46.5353	mg/L	0.58485	46.5353	mg/L	0.58485	1.26%
QC value within limits for Na 330.237 Recovery = 93.07%								
Ni 231.604†	1919.0	0.526785	mg/L	0.0060596	0.526785	mg/L	0.0060596	1.15%
QC value within limits for Ni 231.604 Recovery = 105.36%								
Pb 220.353†	378.3	0.511189	mg/L	0.0049482	0.511189	mg/L	0.0049482	0.97%
QC value within limits for Pb 220.353 Recovery = 102.24%								
Sb 206.836†	89.5	0.522186	mg/L	0.0132823	0.522186	mg/L	0.0132823	2.54%
QC value within limits for Sb 206.836 Recovery = 104.44%								
Se 196.026†	142.8	0.513760	mg/L	0.0043469	0.513760	mg/L	0.0043469	0.85%
QC value within limits for Se 196.026 Recovery = 102.75%								
Sn 189.927†	305.9	0.494482	mg/L	0.0071423	0.494482	mg/L	0.0071423	1.44%
QC value within limits for Sn 189.927 Recovery = 98.90%								
Ti 334.940†	14047.0	0.464791	mg/L	0.0029446	0.464791	mg/L	0.0029446	0.63%
QC value within limits for Ti 334.940 Recovery = 92.96%								
Tl 190.801†	105.5	0.500912	mg/L	0.0127757	0.500912	mg/L	0.0127757	2.55%
QC value within limits for Tl 190.801 Recovery = 100.18%								
V 290.880†	2890.7	0.507347	mg/L	0.0026449	0.507347	mg/L	0.0026449	0.52%
QC value within limits for V 290.880 Recovery = 101.47%								
Zn 206.200†	2360.2	0.550070	mg/L	0.0084380	0.550070	mg/L	0.0084380	1.53%
QC value greater than the upper limit for Zn 206.200 Recovery = 110.01%								
B 249.772	2978.2	0.478522	mg/L	0.0034359	0.478522	mg/L	0.0034359	0.72%
QC value within limits for B 249.772 Recovery = 95.70%								
Si 251.611	10432.6	4.73550	mg/L	0.032131	4.73550	mg/L	0.032131	0.68%
QC value within limits for Si 251.611 Recovery = 94.71%								

QC Failed. Continue with analysis.

Sequence No.: 23 **Autosampler Location: 2**
Sample ID: CCB V-329027 **Date Collected: 8/31/2020 5:50:12 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	63929.9	97.3	%	0.54				0.55%
Y 371.029	20149.2	92.4	%	0.72				0.78%
Ag 328.068†	-9.8	-0.0027754	mg/L	0.00030720	-0.0027754	mg/L	0.00030720	11.07%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-11.7	-0.105600	mg/L	0.0031702	-0.105600	mg/L	0.0031702	3.00%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.2	0.0047014	mg/L	0.01387866	0.0047014	mg/L	0.01387866	295.21%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	1.2	-0.0192399	mg/L	0.00007475	-0.0192399	mg/L	0.00007475	0.39%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	20.2	-0.0056519	mg/L	0.00003508	-0.0056519	mg/L	0.00003508	0.62%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	76.9	-0.746651	mg/L	0.0012126	-0.746651	mg/L	0.0012126	0.16%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	0.9	-0.0141947	mg/L	0.00091188	-0.0141947	mg/L	0.00091188	6.42%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-1.2	-0.0034240	mg/L	0.00003476	-0.0034240	mg/L	0.00003476	1.02%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-4.1	-0.0101764	mg/L	0.00019323	-0.0101764	mg/L	0.00019323	1.90%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-27.0	-0.0115744	mg/L	0.00049591	-0.0115744	mg/L	0.00049591	4.28%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-2.3	-0.130968	mg/L	0.0033177	-0.130968	mg/L	0.0033177	2.53%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	1.6	2.82889	mg/L	0.382961	2.82889	mg/L	0.382961	13.54%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	3.7	-0.683484	mg/L	0.0012789	-0.683484	mg/L	0.0012789	0.19%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	3.5	0.0004734	mg/L	0.00006495	0.0004734	mg/L	0.00006495	13.72%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-2.1	-0.0037178	mg/L	0.00098759	-0.0037178	mg/L	0.00098759	26.56%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-1.8	0.213210	mg/L	0.0288270	0.213210	mg/L	0.0288270	13.52%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-0.3	-0.0187037	mg/L	0.00090225	-0.0187037	mg/L	0.00090225	4.82%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.2	-0.0061840	mg/L	0.00330661	-0.0061840	mg/L	0.00330661	53.47%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.2	-0.0071559	mg/L	0.00921472	-0.0071559	mg/L	0.00921472	128.77%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.5	-0.0036448	mg/L	0.01197299	-0.0036448	mg/L	0.01197299	328.50%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.8	-0.0043944	mg/L	0.00248981	-0.0043944	mg/L	0.00248981	56.66%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	0.2	0.0011026	mg/L	0.00003824	0.0011026	mg/L	0.00003824	3.47%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.8	-0.0166898	mg/L	0.01163470	-0.0166898	mg/L	0.01163470	69.71%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-11.6	-0.0152340	mg/L	0.00044986	-0.0152340	mg/L	0.00044986	2.95%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-2.8	-0.0159150	mg/L	0.00062688	-0.0159150	mg/L	0.00062688	3.94%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-5.1	-0.0059718	mg/L	0.00050262	-0.0059718	mg/L	0.00050262	8.42%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-1.8	0.0112610	mg/L	0.00140664	0.0112610	mg/L	0.00140664	12.49%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 24
Sample ID: AD18922-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 59
Date Collected: 8/31/2020 5:54:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18922-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	53353.3	81.2	%	0.43				0.53%
Y 371.029	16927.7	77.6	%	0.66				0.86%
Ag 328.068†	147.3	0.0078659	mg/L	0.00083398	0.0078659	mg/L	0.00083398	10.60%
Al 308.215†	337.9	0.141138	mg/L	0.0053974	0.141138	mg/L	0.0053974	3.82%
As 188.979†	2.7	0.0164116	mg/L	0.02108071	0.0164116	mg/L	0.02108071	128.45%
Ba 233.527†	5574.0	0.520951	mg/L	0.0019797	0.520951	mg/L	0.0019797	0.38%
Be 313.107†	-47.5	-0.0058922	mg/L	0.00009211	-0.0058922	mg/L	0.00009211	1.56%
Ca 315.887†	1857876.3	467.433	mg/L	0.7266	467.433	mg/L	0.7266	0.16%
Cd 228.802†	17.9	-0.0081644	mg/L	0.00045873	-0.0081644	mg/L	0.00045873	5.62%
Co 228.616†	98.6	0.0319155	mg/L	0.00060311	0.0319155	mg/L	0.00060311	1.89%
Cr 267.716†	108.6	0.0071738	mg/L	0.00023013	0.0071738	mg/L	0.00023013	3.21%
Cu 327.393†	629.8	0.0603250	mg/L	0.00098958	0.0603250	mg/L	0.00098958	1.64%
Fe 273.955†	117.2	0.0517465	mg/L	0.00384603	0.0517465	mg/L	0.00384603	7.43%
K 404.721†	71.8	4.06156	mg/L	0.326220	4.06156	mg/L	0.326220	8.03%
Mg 279.077†	17941.0	13.4541	mg/L	0.02617	13.4541	mg/L	0.02617	0.19%
Mn 257.610†	85084.4	2.65287	mg/L	0.001277	2.65287	mg/L	0.001277	0.05%
Mo 202.031†	5.3	0.0011840	mg/L	0.00184138	0.0011840	mg/L	0.00184138	155.52%
Na 330.237†	90433.7	1922.23	mg/L	7.143	1922.23	mg/L	7.143	0.37%
Ni 231.604†	317.5	0.0713820	mg/L	0.00162643	0.0713820	mg/L	0.00162643	2.28%
Pb 220.353†	114.3	0.148600	mg/L	0.0058670	0.148600	mg/L	0.0058670	3.95%
Sb 206.836†	2.6	0.0089105	mg/L	0.00513471	0.0089105	mg/L	0.00513471	57.63%
Se 196.026†	6.2	0.0511022	mg/L	0.01585562	0.0511022	mg/L	0.01585562	31.03%
Sn 189.927†	-12.3	-0.0257750	mg/L	0.00070008	-0.0257750	mg/L	0.00070008	2.72%
Ti 334.940†	-258.6	0.0282111	mg/L	0.00016363	0.0282111	mg/L	0.00016363	0.58%
Tl 190.801†	-2.2	-0.0386118	mg/L	0.01146164	-0.0386118	mg/L	0.01146164	29.68%
V 290.880†	211.9	0.0255979	mg/L	0.00148213	0.0255979	mg/L	0.00148213	5.79%
Zn 206.200†	3008.2	0.705272	mg/L	0.0051007	0.705272	mg/L	0.0051007	0.72%
B 249.772	411.6	0.0618944	mg/L	0.00043113	0.0618944	mg/L	0.00043113	0.70%
Si 251.611	13098.5	6.05918	mg/L	0.038278	6.05918	mg/L	0.038278	0.63%

Sequence No.: 25 **Autosampler Location: 60**
Sample ID: AD18923-002 **Date Collected: 8/31/2020 5:58:24 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD18923-002

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	62192.0	94.6	%	1.00				1.06%
Y 371.029	19076.5	87.5	%	0.91				1.03%
Ag 328.068†	20.1	-0.0005935	mg/L	0.00033435	-0.0005935	mg/L	0.00033435	56.34%
Al 308.215†	18.2	-0.0834263	mg/L	0.00406919	-0.0834263	mg/L	0.00406919	4.88%
As 188.979†	0.1	-0.0044159	mg/L	0.01368285	-0.0044159	mg/L	0.01368285	309.85%
Ba 233.527†	401.2	0.0195393	mg/L	0.00055457	0.0195393	mg/L	0.00055457	2.84%
Be 313.107†	-21.8	-0.0058010	mg/L	0.00000903	-0.0058010	mg/L	0.00000903	0.16%
Ca 315.887†	486882.8	121.932	mg/L	1.4601	121.932	mg/L	1.4601	1.20%
Cd 228.802†	2.2	-0.0137193	mg/L	0.00058874	-0.0137193	mg/L	0.00058874	4.29%
Co 228.616†	4.8	-0.0013006	mg/L	0.00055665	-0.0013006	mg/L	0.00055665	42.80%
Cr 267.716†	2.1	-0.0091308	mg/L	0.00030530	-0.0091308	mg/L	0.00030530	3.34%
Cu 327.393†	-14.9	-0.0101356	mg/L	0.00111293	-0.0101356	mg/L	0.00111293	10.98%
Fe 273.955†	769.8	1.04998	mg/L	0.020514	1.04998	mg/L	0.020514	1.95%
K 404.721†	30.1	-8.59178	mg/L	0.442281	-8.59178	mg/L	0.442281	5.15%
Mg 279.077†	14537.3	10.7714	mg/L	0.05968	10.7714	mg/L	0.05968	0.55%
Mn 257.610†	7444.8	0.232456	mg/L	0.0003077	0.232456	mg/L	0.0003077	0.13%
Mo 202.031†	2.9	-0.0004433	mg/L	0.00089693	-0.0004433	mg/L	0.00089693	202.33%
Na 330.237†	2337.0	49.9178	mg/L	0.58318	49.9178	mg/L	0.58318	1.17%
Ni 231.604†	158.0	0.0261627	mg/L	0.00153971	0.0261627	mg/L	0.00153971	5.89%
Pb 220.353†	-2.5	-0.0112093	mg/L	0.00250890	-0.0112093	mg/L	0.00250890	22.38%
Sb 206.836†	0.9	-0.0008043	mg/L	0.00396189	-0.0008043	mg/L	0.00396189	492.57%
Se 196.026†	-2.0	-0.0052337	mg/L	0.00971313	-0.0052337	mg/L	0.00971313	185.59%
Sn 189.927†	-6.8	-0.0168895	mg/L	0.00286094	-0.0168895	mg/L	0.00286094	16.94%
Ti 334.940†	-45.9	0.0089157	mg/L	0.00017299	0.0089157	mg/L	0.00017299	1.94%
Tl 190.801†	-1.8	-0.0234955	mg/L	0.01100940	-0.0234955	mg/L	0.01100940	46.86%
V 290.880†	124.5	0.0097485	mg/L	0.00075456	0.0097485	mg/L	0.00075456	7.74%
Zn 206.200†	450.2	0.0925946	mg/L	0.00069054	0.0925946	mg/L	0.00069054	0.75%
B 249.772	963.0	0.150864	mg/L	0.0006419	0.150864	mg/L	0.0006419	0.43%
Si 251.611	9323.4	4.18530	mg/L	0.048662	4.18530	mg/L	0.048662	1.16%

Sequence No.: 26
Sample ID: AD18935-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 61
Date Collected: 8/31/2020 6:02:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18935-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	62827.9	95.6	%	0.06				0.07%
Y 371.029	19770.0	90.6	%	0.61				0.67%
Ag 328.068†	-7.6	-0.0026178	mg/L	0.00082598	-0.0026178	mg/L	0.00082598	31.55%
Al 308.215†	64.5	-0.0521706	mg/L	0.00347762	-0.0521706	mg/L	0.00347762	6.67%
As 188.979†	0.4	-0.0015092	mg/L	0.01315214	-0.0015092	mg/L	0.01315214	871.48%
Ba 233.527†	8.2	-0.0185600	mg/L	0.00028793	-0.0185600	mg/L	0.00028793	1.55%
Be 313.107†	12.9	-0.0056780	mg/L	0.00004653	-0.0056780	mg/L	0.00004653	0.82%
Ca 315.887†	7460.7	1.11413	mg/L	0.010421	1.11413	mg/L	0.010421	0.94%
Cd 228.802†	1.5	-0.0139633	mg/L	0.00041262	-0.0139633	mg/L	0.00041262	2.96%
Co 228.616†	-0.2	-0.0030567	mg/L	0.00032320	-0.0030567	mg/L	0.00032320	10.57%
Cr 267.716†	0.9	-0.0094088	mg/L	0.00055263	-0.0094088	mg/L	0.00055263	5.87%
Cu 327.393†	-2.7	-0.0089072	mg/L	0.00070942	-0.0089072	mg/L	0.00070942	7.96%
Fe 273.955†	14.0	-0.106069	mg/L	0.0041515	-0.106069	mg/L	0.0041515	3.91%
K 404.721†	8.5	2.87762	mg/L	0.627931	2.87762	mg/L	0.627931	21.82%
Mg 279.077†	689.0	-0.143355	mg/L	0.0044444	-0.143355	mg/L	0.0044444	3.10%
Mn 257.610†	4.1	0.0004910	mg/L	0.00011562	0.0004910	mg/L	0.00011562	23.55%
Mo 202.031†	-0.9	-0.0029424	mg/L	0.00098954	-0.0029424	mg/L	0.00098954	33.63%
Na 330.237†	697.9	15.0832	mg/L	0.10878	15.0832	mg/L	0.10878	0.72%
Ni 231.604†	2.2	-0.0179946	mg/L	0.00036054	-0.0179946	mg/L	0.00036054	2.00%
Pb 220.353†	-1.2	-0.0093717	mg/L	0.00340864	-0.0093717	mg/L	0.00340864	36.37%
Sb 206.836†	-0.4	-0.0082403	mg/L	0.00984992	-0.0082403	mg/L	0.00984992	119.53%
Se 196.026†	1.1	-0.0048686	mg/L	0.00530374	-0.0048686	mg/L	0.00530374	108.94%
Sn 189.927†	1.3	-0.0035623	mg/L	0.00188157	-0.0035623	mg/L	0.00188157	52.82%
Ti 334.940†	6.2	0.0014385	mg/L	0.00012912	0.0014385	mg/L	0.00012912	8.98%
Tl 190.801†	0.9	-0.0036674	mg/L	0.01527373	-0.0036674	mg/L	0.01527373	416.47%
V 290.880†	-4.4	-0.0139312	mg/L	0.00039838	-0.0139312	mg/L	0.00039838	2.86%
Zn 206.200†	10.7	-0.0126619	mg/L	0.00031763	-0.0126619	mg/L	0.00031763	2.51%
B 249.772	223.5	0.0308478	mg/L	0.00041536	0.0308478	mg/L	0.00041536	1.35%
Si 251.611	981.9	0.448809	mg/L	0.0019725	0.448809	mg/L	0.0019725	0.44%

Sequence No.: 27
Sample ID: AD18935-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 62
Date Collected: 8/31/2020 6:06:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18935-002

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	64253.9	97.7	%	0.13				0.13%
Y 371.029	19739.4	90.5	%	0.11				0.13%
Ag 328.068†	-6.8	-0.0025661	mg/L	0.00032520	-0.0025661	mg/L	0.00032520	12.67%
Al 308.215†	10.5	-0.0899991	mg/L	0.00114847	-0.0899991	mg/L	0.00114847	1.28%
As 188.979†	1.6	0.0082448	mg/L	0.00664778	0.0082448	mg/L	0.00664778	80.63%
Ba 233.527†	4.8	-0.0188854	mg/L	0.00020850	-0.0188854	mg/L	0.00020850	1.10%
Be 313.107†	13.4	-0.0056760	mg/L	0.00012122	-0.0056760	mg/L	0.00012122	2.14%
Ca 315.887†	4761.7	0.433964	mg/L	0.0021609	0.433964	mg/L	0.0021609	0.50%
Cd 228.802†	-1.4	-0.0149930	mg/L	0.00036450	-0.0149930	mg/L	0.00036450	2.43%
Co 228.616†	0.5	-0.0028072	mg/L	0.00052001	-0.0028072	mg/L	0.00052001	18.52%
Cr 267.716†	9.3	-0.0081451	mg/L	0.00046295	-0.0081451	mg/L	0.00046295	5.68%
Cu 327.393†	114.4	0.0038989	mg/L	0.00138931	0.0038989	mg/L	0.00138931	35.63%
Fe 273.955†	16.9	-0.101617	mg/L	0.0052609	-0.101617	mg/L	0.0052609	5.18%
K 404.721†	16.7	3.20347	mg/L	0.363849	3.20347	mg/L	0.363849	11.36%
Mg 279.077†	603.3	-0.210915	mg/L	0.0034789	-0.210915	mg/L	0.0034789	1.65%
Mn 257.610†	65.4	0.0024016	mg/L	0.00003595	0.0024016	mg/L	0.00003595	1.50%
Mo 202.031†	-0.7	-0.0027950	mg/L	0.00101230	-0.0027950	mg/L	0.00101230	36.22%
Na 330.237†	617.0	13.3646	mg/L	0.19012	13.3646	mg/L	0.19012	1.42%
Ni 231.604†	3.5	-0.0176371	mg/L	0.00068723	-0.0176371	mg/L	0.00068723	3.90%
Pb 220.353†	-0.0	-0.0078689	mg/L	0.00137602	-0.0078689	mg/L	0.00137602	17.49%
Sb 206.836†	0.6	-0.0027147	mg/L	0.00120136	-0.0027147	mg/L	0.00120136	44.25%
Se 196.026†	0.9	-0.0058711	mg/L	0.00110451	-0.0058711	mg/L	0.00110451	18.81%
Sn 189.927†	-0.4	-0.0063694	mg/L	0.00118053	-0.0063694	mg/L	0.00118053	18.53%
Ti 334.940†	1.8	0.0012432	mg/L	0.00011013	0.0012432	mg/L	0.00011013	8.86%
Tl 190.801†	-2.2	-0.0188082	mg/L	0.00662858	-0.0188082	mg/L	0.00662858	35.24%
V 290.880†	-5.9	-0.0141892	mg/L	0.00032896	-0.0141892	mg/L	0.00032896	2.32%
Zn 206.200†	18.0	-0.0109269	mg/L	0.00030926	-0.0109269	mg/L	0.00030926	2.83%
B 249.772	356.6	0.0519475	mg/L	0.00047667	0.0519475	mg/L	0.00047667	0.92%
Si 251.611	795.8	0.366866	mg/L	0.0040192	0.366866	mg/L	0.0040192	1.10%

Sequence No.: 28
Sample ID: AD18935-006
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 63
Date Collected: 8/31/2020 6:10:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18935-006

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	53723.3	81.7	%	0.78				0.96%
Y 371.029	17000.2	77.9	%	0.43				0.55%
Ag 328.068†	4.1	-0.0017934	mg/L	0.00063917	-0.0017934	mg/L	0.00063917	35.64%
Al 308.215†	186.4	0.0334931	mg/L	0.00110787	0.0334931	mg/L	0.00110787	3.31%
As 188.979†	1.6	0.0081753	mg/L	0.00818760	0.0081753	mg/L	0.00818760	100.15%
Ba 233.527†	2071.2	0.181408	mg/L	0.0017200	0.181408	mg/L	0.0017200	0.95%
Be 313.107†	-128.8	-0.0061810	mg/L	0.00005745	-0.0061810	mg/L	0.00005745	0.93%
Ca 315.887†	228223.1	56.7479	mg/L	0.11146	56.7479	mg/L	0.11146	0.20%
Cd 228.802†	4.6	-0.0128708	mg/L	0.00085238	-0.0128708	mg/L	0.00085238	6.62%
Co 228.616†	-2.0	-0.0036970	mg/L	0.00088503	-0.0036970	mg/L	0.00088503	23.94%
Cr 267.716†	7.3	-0.0084083	mg/L	0.00015370	-0.0084083	mg/L	0.00015370	1.83%
Cu 327.393†	-76.0	-0.0169302	mg/L	0.00148241	-0.0169302	mg/L	0.00148241	8.76%
Fe 273.955†	68.3	-0.0230748	mg/L	0.00300164	-0.0230748	mg/L	0.00300164	13.01%
K 404.721†	18.4	2.43340	mg/L	0.455888	2.43340	mg/L	0.455888	18.73%
Mg 279.077†	3276.1	1.89569	mg/L	0.008211	1.89569	mg/L	0.008211	0.43%
Mn 257.610†	16323.3	0.509244	mg/L	0.0006681	0.509244	mg/L	0.0006681	0.13%
Mo 202.031†	3.7	0.0000925	mg/L	0.00080355	0.0000925	mg/L	0.00080355	868.27%
Na 330.237†	85749.9	1822.68	mg/L	3.509	1822.68	mg/L	3.509	0.19%
Ni 231.604†	42.0	-0.0067033	mg/L	0.00031809	-0.0067033	mg/L	0.00031809	4.75%
Pb 220.353†	8.6	0.0041089	mg/L	0.00172152	0.0041089	mg/L	0.00172152	41.90%
Sb 206.836†	2.5	0.0086590	mg/L	0.00615361	0.0086590	mg/L	0.00615361	71.07%
Se 196.026†	5.9	0.0169757	mg/L	0.01309370	0.0169757	mg/L	0.01309370	77.13%
Sn 189.927†	-4.1	-0.0123940	mg/L	0.00153070	-0.0123940	mg/L	0.00153070	12.35%
Ti 334.940†	-18.6	0.0048559	mg/L	0.00026423	0.0048559	mg/L	0.00026423	5.44%
Tl 190.801†	0.0	-0.0100175	mg/L	0.00549207	-0.0100175	mg/L	0.00549207	54.82%
V 290.880†	43.9	-0.0051572	mg/L	0.00048979	-0.0051572	mg/L	0.00048979	9.50%
Zn 206.200†	1454.6	0.333168	mg/L	0.0040619	0.333168	mg/L	0.0040619	1.22%
B 249.772	127.1	0.0018330	mg/L	0.00013628	0.0018330	mg/L	0.00013628	7.43%
Si 251.611	1434.6	0.739593	mg/L	0.0027053	0.739593	mg/L	0.0027053	0.37%

Sequence No.: 29
Sample ID: AD18934-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 64
Date Collected: 8/31/2020 6:14:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18934-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	55118.9	83.8	%	1.60				1.91%
Y 371.029	17039.8	78.1	%	0.84				1.08%
Ag 328.068†	-86.3	-0.0055274	mg/L	0.00044880	-0.0055274	mg/L	0.00044880	8.12%
Al 308.215†	628.7	0.343450	mg/L	0.0103709	0.343450	mg/L	0.0103709	3.02%
As 188.979†	0.7	0.0035751	mg/L	0.00852569	0.0035751	mg/L	0.00852569	238.48%
Ba 233.527†	8835.0	0.837045	mg/L	0.0179113	0.837045	mg/L	0.0179113	2.14%
Be 313.107†	236.4	-0.0048847	mg/L	0.00007229	-0.0048847	mg/L	0.00007229	1.48%
Ca 315.887†	452494.8	113.266	mg/L	2.5665	113.266	mg/L	2.5665	2.27%
Cd 228.802†	12.3	-0.0101316	mg/L	0.00031269	-0.0101316	mg/L	0.00031269	3.09%
Co 228.616†	253.8	0.0868230	mg/L	0.00173953	0.0868230	mg/L	0.00173953	2.00%
Cr 267.716†	11.4	-0.0077513	mg/L	0.00027438	-0.0077513	mg/L	0.00027438	3.54%
Cu 327.393†	-49.8	-0.0106064	mg/L	0.00064870	-0.0106064	mg/L	0.00064870	6.12%
Fe 273.955†	22635.9	34.4961	mg/L	0.91292	34.4961	mg/L	0.91292	2.65%
K 404.721†	49.2	-367.992	mg/L	10.3071	-367.992	mg/L	10.3071	2.80%
Mg 279.077†	5036.3	3.28303	mg/L	0.103913	3.28303	mg/L	0.103913	3.17%
Mn 257.610†	424506.4	13.2344	mg/L	0.29946	13.2344	mg/L	0.29946	2.26%
Mo 202.031†	-4.3	-0.0051923	mg/L	0.00037137	-0.0051923	mg/L	0.00037137	7.15%
Na 330.237†	79970.6	1699.85	mg/L	34.748	1699.85	mg/L	34.748	2.04%
Ni 231.604†	220.3	0.0438252	mg/L	0.00203247	0.0438252	mg/L	0.00203247	4.64%
Pb 220.353†	6.1	0.0005816	mg/L	0.00387094	0.0005816	mg/L	0.00387094	665.55%
Sb 206.836†	1.5	0.0025346	mg/L	0.01297149	0.0025346	mg/L	0.01297149	511.77%
Se 196.026†	-3.1	0.0098537	mg/L	0.01722464	0.0098537	mg/L	0.01722464	174.80%
Sn 189.927†	-7.0	-0.0171648	mg/L	0.00377415	-0.0171648	mg/L	0.00377415	21.99%
Ti 334.940†	-54.8	0.0079671	mg/L	0.00029021	0.0079671	mg/L	0.00029021	3.64%
Tl 190.801†	-7.9	-0.0071266	mg/L	0.02266815	-0.0071266	mg/L	0.02266815	318.08%
V 290.880†	69.9	-0.0016222	mg/L	0.00049196	-0.0016222	mg/L	0.00049196	30.33%
Zn 206.200†	713.5	0.155659	mg/L	0.0039991	0.155659	mg/L	0.0039991	2.57%
B 249.772	3526.0	0.462697	mg/L	0.0040377	0.462697	mg/L	0.0040377	0.87%
Si 251.611	2403.5	1.52718	mg/L	0.013560	1.52718	mg/L	0.013560	0.89%

Sequence No.: 30 **Autosampler Location: 6**
Sample ID: CCV V-329036 **Date Collected: 8/31/2020 6:18:53 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	58383.8	88.8	%	0.72				0.81%
Y 371.029	18131.2	83.1	%	1.35				1.63%
Ag 328.068†	1428.0	0.0955879	mg/L	0.00082858	0.0955879	mg/L	0.00082858	0.87%
QC value within limits for Ag 328.068 Recovery = 95.59%								
Al 308.215†	7139.0	4.91464	mg/L	0.018868	4.91464	mg/L	0.018868	0.38%
QC value within limits for Al 308.215 Recovery = 98.29%								
As 188.979†	60.1	0.458582	mg/L	0.0180185	0.458582	mg/L	0.0180185	3.93%
QC value within limits for As 188.979 Recovery = 91.72%								
Ba 233.527†	5227.0	0.487312	mg/L	0.0032425	0.487312	mg/L	0.0032425	0.67%
QC value within limits for Ba 233.527 Recovery = 97.46%								
Be 313.107†	142011.4	0.498372	mg/L	0.0010654	0.498372	mg/L	0.0010654	0.21%
QC value within limits for Be 313.107 Recovery = 99.67%								
Ca 315.887†	202576.9	50.2849	mg/L	0.17702	50.2849	mg/L	0.17702	0.35%
QC value within limits for Ca 315.887 Recovery = 100.57%								
Cd 228.802†	1480.0	0.511290	mg/L	0.0034580	0.511290	mg/L	0.0034580	0.68%
QC value within limits for Cd 228.802 Recovery = 102.26%								
Co 228.616†	1399.9	0.492476	mg/L	0.0016655	0.492476	mg/L	0.0016655	0.34%
QC value within limits for Co 228.616 Recovery = 98.50%								
Cr 267.716†	3676.0	0.552697	mg/L	0.0009313	0.552697	mg/L	0.0009313	0.17%
QC value greater than the upper limit for Cr 267.716 Recovery = 110.54%								
Cu 327.393†	4597.2	0.494985	mg/L	0.0018594	0.494985	mg/L	0.0018594	0.38%
QC value within limits for Cu 327.393 Recovery = 99.00%								
Fe 273.955†	3150.6	4.69165	mg/L	0.015268	4.69165	mg/L	0.015268	0.33%
QC value within limits for Fe 273.955 Recovery = 93.83%								
K 404.721†	1070.9	-0.353315	mg/L	0.5966051	-0.353315	mg/L	0.5966051	168.86%
QC value less than the lower limit for K 404.721 Recovery = -0.71%								
Mg 279.077†	64331.8	50.0178	mg/L	0.15546	50.0178	mg/L	0.15546	0.31%
QC value within limits for Mg 279.077 Recovery = 100.04%								
Mn 257.610†	15314.7	0.477800	mg/L	0.0012234	0.477800	mg/L	0.0012234	0.26%
QC value within limits for Mn 257.610 Recovery = 95.56%								
Mo 202.031†	738.6	0.489404	mg/L	0.0018355	0.489404	mg/L	0.0018355	0.38%
QC value within limits for Mo 202.031 Recovery = 97.88%								
Na 330.237†	2212.5	47.2719	mg/L	0.43409	47.2719	mg/L	0.43409	0.92%
QC value within limits for Na 330.237 Recovery = 94.54%								
Ni 231.604†	1873.8	0.513968	mg/L	0.0036061	0.513968	mg/L	0.0036061	0.70%
QC value within limits for Ni 231.604 Recovery = 102.79%								
Pb 220.353†	363.9	0.491496	mg/L	0.0071420	0.491496	mg/L	0.0071420	1.45%
QC value within limits for Pb 220.353 Recovery = 98.30%								
Sb 206.836†	88.2	0.515008	mg/L	0.0095056	0.515008	mg/L	0.0095056	1.85%
QC value within limits for Sb 206.836 Recovery = 103.00%								
Se 196.026†	137.4	0.494200	mg/L	0.0150151	0.494200	mg/L	0.0150151	3.04%
QC value within limits for Se 196.026 Recovery = 98.84%								
Sn 189.927†	295.1	0.476725	mg/L	0.0010587	0.476725	mg/L	0.0010587	0.22%
QC value within limits for Sn 189.927 Recovery = 95.35%								
Ti 334.940†	14132.5	0.467526	mg/L	0.0028946	0.467526	mg/L	0.0028946	0.62%
QC value within limits for Ti 334.940 Recovery = 93.51%								
Tl 190.801†	101.8	0.482669	mg/L	0.0181712	0.482669	mg/L	0.0181712	3.76%
QC value within limits for Tl 190.801 Recovery = 96.53%								
V 290.880†	2890.3	0.507202	mg/L	0.0012500	0.507202	mg/L	0.0012500	0.25%
QC value within limits for V 290.880 Recovery = 101.44%								
Zn 206.200†	2250.1	0.523707	mg/L	0.0016610	0.523707	mg/L	0.0016610	0.32%
QC value within limits for Zn 206.200 Recovery = 104.74%								
B 249.772	2938.4	0.471800	mg/L	0.0062385	0.471800	mg/L	0.0062385	1.32%
QC value within limits for B 249.772 Recovery = 94.36%								
Si 251.611	10174.3	4.61964	mg/L	0.048972	4.61964	mg/L	0.048972	1.06%
QC value within limits for Si 251.611 Recovery = 92.39%								

QC Failed. Continue with analysis.

Sequence No.: 31 **Autosampler Location: 2**
Sample ID: CCB V-329027 **Date Collected: 8/31/2020 6:22:50 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	64929.7	98.8	%	0.86				0.87%
Y 371.029	20402.9	93.5	%	0.77				0.82%
Ag 328.068†	-2.1	-0.0022620	mg/L	0.00034255	-0.0022620	mg/L	0.00034255	15.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-24.0	-0.114196	mg/L	0.0003584	-0.114196	mg/L	0.0003584	0.31%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.3	0.0058607	mg/L	0.00828330	0.0058607	mg/L	0.00828330	141.34%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-1.3	-0.0194769	mg/L	0.00012746	-0.0194769	mg/L	0.00012746	0.65%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	26.9	-0.0056283	mg/L	0.00002325	-0.0056283	mg/L	0.00002325	0.41%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	17.7	-0.761556	mg/L	0.0017017	-0.761556	mg/L	0.0017017	0.22%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	0.7	-0.0142588	mg/L	0.00030902	-0.0142588	mg/L	0.00030902	2.17%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.1	-0.0029514	mg/L	0.00080148	-0.0029514	mg/L	0.00080148	27.16%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-1.7	-0.0098239	mg/L	0.00012430	-0.0098239	mg/L	0.00012430	1.27%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-14.8	-0.0102332	mg/L	0.00031069	-0.0102332	mg/L	0.00031069	3.04%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-0.6	-0.128431	mg/L	0.0029122	-0.128431	mg/L	0.0029122	2.27%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	2.1	2.82401	mg/L	0.332537	2.82401	mg/L	0.332537	11.78%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	-3.1	-0.688859	mg/L	0.0045461	-0.688859	mg/L	0.0045461	0.66%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	3.4	0.0004709	mg/L	0.00016975	0.0004709	mg/L	0.00016975	36.05%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.2	-0.0024531	mg/L	0.00158887	-0.0024531	mg/L	0.00158887	64.77%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.9	0.291927	mg/L	0.0855881	0.291927	mg/L	0.0855881	29.32%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-1.5	-0.0190523	mg/L	0.00106460	-0.0190523	mg/L	0.00106460	5.59%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.6	-0.0100299	mg/L	0.00171215	-0.0100299	mg/L	0.00171215	17.07%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.4	0.0020738	mg/L	0.00685018	0.0020738	mg/L	0.00685018	330.33%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.3	-0.0136196	mg/L	0.00482065	-0.0136196	mg/L	0.00482065	35.39%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.0	-0.0057323	mg/L	0.00189290	-0.0057323	mg/L	0.00189290	33.02%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-6.7	0.0008736	mg/L	0.00023489	0.0008736	mg/L	0.00023489	26.89%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.1	-0.0077779	mg/L	0.00713685	-0.0077779	mg/L	0.00713685	91.76%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-9.7	-0.0149083	mg/L	0.00065639	-0.0149083	mg/L	0.00065639	4.40%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-3.2	-0.0159971	mg/L	0.00025726	-0.0159971	mg/L	0.00025726	1.61%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	52.5	0.0031192	mg/L	0.00011249	0.0031192	mg/L	0.00011249	3.61%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-5.2	0.0097697	mg/L	0.00180120	0.0097697	mg/L	0.00180120	18.44%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 32
Sample ID: AD18934-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 65
Date Collected: 8/31/2020 6:26:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18934-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	52759.5	80.3	%	0.69				0.85%
Y 371.029	16693.5	76.5	%	0.28				0.36%
Ag 328.068†	192.4	0.0110085	mg/L	0.00058527	0.0110085	mg/L	0.00058527	5.32%
Al 308.215†	64.1	-0.0489831	mg/L	0.00650024	-0.0489831	mg/L	0.00650024	13.27%
As 188.979†	0.9	0.0017441	mg/L	0.01477761	0.0017441	mg/L	0.01477761	847.31%
Ba 233.527†	6278.3	0.589214	mg/L	0.0031358	0.589214	mg/L	0.0031358	0.53%
Be 313.107†	-119.0	-0.0061463	mg/L	0.00015656	-0.0061463	mg/L	0.00015656	2.55%
Ca 315.887†	2374129.6	597.532	mg/L	4.5967	597.532	mg/L	4.5967	0.77%
Cd 228.802†	3.4	-0.0133071	mg/L	0.00067534	-0.0133071	mg/L	0.00067534	5.08%
Co 228.616†	80.6	0.0255171	mg/L	0.00065472	0.0255171	mg/L	0.00065472	2.57%
Cr 267.716†	14.6	-0.0070136	mg/L	0.00083392	-0.0070136	mg/L	0.00083392	11.89%
Cu 327.393†	-101.1	-0.0196605	mg/L	0.00052324	-0.0196605	mg/L	0.00052324	2.66%
Fe 273.955†	171.2	0.134352	mg/L	0.0067227	0.134352	mg/L	0.0067227	5.00%
K 404.721†	45.0	1.94973	mg/L	0.500988	1.94973	mg/L	0.500988	25.70%
Mg 279.077†	53738.9	41.6688	mg/L	0.19470	41.6688	mg/L	0.19470	0.47%
Mn 257.610†	80774.9	2.51852	mg/L	0.006852	2.51852	mg/L	0.006852	0.27%
Mo 202.031†	5.4	0.0012628	mg/L	0.00260240	0.0012628	mg/L	0.00260240	206.09%
Na 330.237†	93213.0	1981.29	mg/L	6.801	1981.29	mg/L	6.801	0.34%
Ni 231.604†	99.1	0.0094740	mg/L	0.00102577	0.0094740	mg/L	0.00102577	10.83%
Pb 220.353†	-0.9	-0.0089288	mg/L	0.00513676	-0.0089288	mg/L	0.00513676	57.53%
Sb 206.836†	1.1	0.0005482	mg/L	0.00906385	0.0005482	mg/L	0.00906385	>999.9%
Se 196.026†	3.9	0.0544012	mg/L	0.01530391	0.0544012	mg/L	0.01530391	28.13%
Sn 189.927†	-17.4	-0.0341394	mg/L	0.00252315	-0.0341394	mg/L	0.00252315	7.39%
Ti 334.940†	-293.2	0.0369682	mg/L	0.00062241	0.0369682	mg/L	0.00062241	1.68%
Tl 190.801†	-2.5	-0.0488020	mg/L	0.01229677	-0.0488020	mg/L	0.01229677	25.20%
V 290.880†	373.3	0.0561334	mg/L	0.00130270	0.0561334	mg/L	0.00130270	2.32%
Zn 206.200†	169.0	0.0252517	mg/L	0.0013604l	0.0252517	mg/L	0.00136041	5.39%
B 249.772	2289.9	0.350547	mg/L	0.0023503	0.350547	mg/L	0.0023503	0.67%
Si 251.611	2082.4	1.21228	mg/L	0.005097	1.21228	mg/L	0.005097	0.42%

Sequence No.: 33 **Autosampler Location: 66**
Sample ID: AD18934-003 **Date Collected: 8/31/2020 6:31:01 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD18934-003

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	52528.3	79.9	%	0.45				0.56%
Y 371.029	16431.5	75.3	%	0.49				0.66%
Ag 328.068†	254.5	0.0148716	mg/L	0.00036629	0.0148716	mg/L	0.00036629	2.46%
Al 308.215†	96.0	-0.0293344	mg/L	0.00493565	-0.0293344	mg/L	0.00493565	16.83%
As 188.979†	1.6	0.0075588	mg/L	0.00630371	0.0075588	mg/L	0.00630371	83.40%
Ba 233.527†	6387.8	0.599833	mg/L	0.0007726	0.599833	mg/L	0.0007726	0.13%
Be 313.107†	-128.7	-0.0061806	mg/L	0.00003302	-0.0061806	mg/L	0.00003302	0.53%
Ca 315.887†	3168974.7	797.839	mg/L	3.4716	797.839	mg/L	3.4716	0.44%
Cd 228.802†	5.7	-0.0124727	mg/L	0.00066735	-0.0124727	mg/L	0.00066735	5.35%
Co 228.616†	30.7	0.0078832	mg/L	0.00185089	0.0078832	mg/L	0.00185089	23.48%
Cr 267.716†	9.8	-0.0079824	mg/L	0.00037352	-0.0079824	mg/L	0.00037352	4.68%
Cu 327.393†	-133.1	-0.0231839	mg/L	0.00151563	-0.0231839	mg/L	0.00151563	6.54%
Fe 273.955†	8.1	-0.115092	mg/L	0.0050997	-0.115092	mg/L	0.0050997	4.43%
K 404.721†	46.6	4.71073	mg/L	0.493095	4.71073	mg/L	0.493095	10.47%
Mg 279.077†	9760.1	7.00621	mg/L	0.029252	7.00621	mg/L	0.029252	0.42%
Mn 257.610†	139037.1	4.33485	mg/L	0.003535	4.33485	mg/L	0.003535	0.08%
Mo 202.031†	7.3	0.0024834	mg/L	0.00091128	0.0024834	mg/L	0.00091128	36.69%
Na 330.237†	93076.5	1978.39	mg/L	2.696	1978.39	mg/L	2.696	0.14%
Ni 231.604†	65.3	-0.0001147	mg/L	0.00180990	-0.0001147	mg/L	0.00180990	>999.9%
Pb 220.353†	45.7	0.0548496	mg/L	0.00191506	0.0548496	mg/L	0.00191506	3.49%
Sb 206.836†	1.2	0.0009470	mg/L	0.01467604	0.0009470	mg/L	0.01467604	>999.9%
Se 196.026†	1.6	0.0609262	mg/L	0.00521637	0.0609262	mg/L	0.00521637	8.56%
Sn 189.927†	-13.4	-0.0275468	mg/L	0.00448145	-0.0275468	mg/L	0.00448145	16.27%
Ti 334.940†	-405.8	0.0485053	mg/L	0.00032216	0.0485053	mg/L	0.00032216	0.66%
Tl 190.801†	-4.0	-0.0610981	mg/L	0.01573345	-0.0610981	mg/L	0.01573345	25.75%
V 290.880†	98.3	0.0048865	mg/L	0.00047235	0.0048865	mg/L	0.00047235	9.67%
Zn 206.200†	55.2	-0.0020139	mg/L	0.00060548	-0.0020139	mg/L	0.00060548	30.06%
B 249.772	2768.5	0.432524	mg/L	0.0011619	0.432524	mg/L	0.0011619	0.27%
Si 251.611	2811.2	1.61269	mg/L	0.010695	1.61269	mg/L	0.010695	0.66%

Sequence No.: 34 **Autosampler Location: 67**
Sample ID: AD18934-004 **Date Collected: 8/31/2020 6:35:16 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD18934-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	52561.3	80.0	%	0.24				0.30%
Y 371.029	16437.0	75.4	%	0.22				0.30%
Ag 328.068†	242.7	0.0140972	mg/L	0.00087404	0.0140972	mg/L	0.00087404	6.20%
Al 308.215†	33.7	-0.0728267	mg/L	0.00460705	-0.0728267	mg/L	0.00460705	6.33%
As 188.979†	2.9	0.0186889	mg/L	0.02710223	0.0186889	mg/L	0.02710223	145.02%
Ba 233.527†	3872.6	0.356023	mg/L	0.0021313	0.356023	mg/L	0.0021313	0.60%
Be 313.107†	-147.1	-0.0062459	mg/L	0.00004686	-0.0062459	mg/L	0.00004686	0.75%
Ca 315.887†	3221456.8	811.065	mg/L	1.4991	811.065	mg/L	1.4991	0.18%
Cd 228.802†	2.8	-0.0135057	mg/L	0.00043431	-0.0135057	mg/L	0.00043431	3.22%
Co 228.616†	2.0	-0.0023011	mg/L	0.00082143	-0.0023011	mg/L	0.00082143	35.70%
Cr 267.716†	19.1	-0.0065531	mg/L	0.00035836	-0.0065531	mg/L	0.00035836	5.47%
Cu 327.393†	-132.0	-0.0230559	mg/L	0.00154412	-0.0230559	mg/L	0.00154412	6.70%
Fe 273.955†	24.9	-0.0893578	mg/L	0.00250185	-0.0893578	mg/L	0.00250185	2.80%
K 404.721†	59.2	5.00705	mg/L	0.275976	5.00705	mg/L	0.275976	5.51%
Mg 279.077†	11631.5	8.48117	mg/L	0.008262	8.48117	mg/L	0.008262	0.10%
Mn 257.610†	12899.4	0.402503	mg/L	0.0011315	0.402503	mg/L	0.0011315	0.28%
Mo 202.031†	6.3	0.0018246	mg/L	0.00077954	0.0018246	mg/L	0.00077954	42.72%
Na 330.237†	92506.9	1966.29	mg/L	5.009	1966.29	mg/L	5.009	0.25%
Ni 231.604†	24.2	-0.0117564	mg/L	0.00100702	-0.0117564	mg/L	0.00100702	8.57%
Pb 220.353†	-3.5	-0.0124494	mg/L	0.00332732	-0.0124494	mg/L	0.00332732	26.73%
Sb 206.836†	2.3	0.0071068	mg/L	0.01049631	0.0071068	mg/L	0.01049631	147.69%
Se 196.026†	4.6	0.0726115	mg/L	0.00735283	0.0726115	mg/L	0.00735283	10.13%
Sn 189.927†	-13.7	-0.0281021	mg/L	0.00364967	-0.0281021	mg/L	0.00364967	12.99%
Ti 334.940†	-408.3	0.0494283	mg/L	0.00039008	0.0494283	mg/L	0.00039008	0.79%
Tl 190.801†	-3.4	-0.0730952	mg/L	0.00457507	-0.0730952	mg/L	0.00457507	6.26%
V 290.880†	108.7	0.0068226	mg/L	0.00127422	0.0068226	mg/L	0.00127422	18.68%
Zn 206.200†	50.7	-0.0031047	mg/L	0.00128757	-0.0031047	mg/L	0.00128757	41.47%
B 249.772	2373.8	0.358679	mg/L	0.0018075	0.358679	mg/L	0.0018075	0.50%
Si 251.611	3137.4	1.67892	mg/L	0.004889	1.67892	mg/L	0.004889	0.29%

Sequence No.: 35
Sample ID: AD18935-005
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 68
Date Collected: 8/31/2020 6:39:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18935-005

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	52746.1	80.2	%	0.31				0.39%
Y 371.029	16498.5	75.6	%	0.38				0.51%
Ag 328.068†	247.9	0.0144086	mg/L	0.00025221	0.0144086	mg/L	0.00025221	1.75%
Al 308.215†	14.5	-0.0867374	mg/L	0.00400451	-0.0867374	mg/L	0.00400451	4.62%
As 188.979†	2.6	0.0164578	mg/L	0.00992481	0.0164578	mg/L	0.00992481	60.30%
Ba 233.527†	10689.5	1.01680	mg/L	0.003385	1.01680	mg/L	0.003385	0.33%
Be 313.107†	-123.5	-0.0061622	mg/L	0.00004514	-0.0061622	mg/L	0.00004514	0.73%
Ca 315.887†	3130832.7	788.227	mg/L	6.0224	788.227	mg/L	6.0224	0.76%
Cd 228.802†	10.1	-0.0109276	mg/L	0.00054604	-0.0109276	mg/L	0.00054604	5.00%
Co 228.616†	31.1	0.0080226	mg/L	0.00043203	0.0080226	mg/L	0.00043203	5.39%
Cr 267.716†	7.1	-0.0084176	mg/L	0.00097441	-0.0084176	mg/L	0.00097441	11.58%
Cu 327.393†	-106.6	-0.0202774	mg/L	0.00105676	-0.0202774	mg/L	0.00105676	5.21%
Fe 273.955†	77.6	-0.0087341	mg/L	0.00190631	-0.0087341	mg/L	0.00190631	21.83%
K 404.721†	44.3	3.46050	mg/L	0.364624	3.46050	mg/L	0.364624	10.54%
Mg 279.077†	5797.9	3.88330	mg/L	0.002937	3.88330	mg/L	0.002937	0.08%
Mn 257.610†	143038.0	4.45958	mg/L	0.008103	4.45958	mg/L	0.008103	0.18%
Mo 202.031†	13.1	0.0063917	mg/L	0.00095881	0.0063917	mg/L	0.00095881	15.00%
Na 330.237†	93525.2	1987.93	mg/L	8.371	1987.93	mg/L	8.371	0.42%
Ni 231.604†	255.0	0.0536743	mg/L	0.00163738	0.0536743	mg/L	0.00163738	3.05%
Pb 220.353†	1.0	-0.0063183	mg/L	0.00306966	-0.0063183	mg/L	0.00306966	48.58%
Sb 206.836†	1.7	0.0038291	mg/L	0.00959153	0.0038291	mg/L	0.00959153	250.49%
Se 196.026†	4.9	0.0719817	mg/L	0.01039449	0.0719817	mg/L	0.01039449	14.44%
Sn 189.927†	-11.0	-0.0236434	mg/L	0.00305584	-0.0236434	mg/L	0.00305584	12.92%
Ti 334.940†	-399.9	0.0479691	mg/L	0.00107084	0.0479691	mg/L	0.00107084	2.23%
Tl 190.801†	-5.3	-0.0672702	mg/L	0.00544970	-0.0672702	mg/L	0.00544970	8.10%
V 290.880†	64.5	-0.0013483	mg/L	0.00166932	-0.0013483	mg/L	0.00166932	123.81%
Zn 206.200†	367.4	0.0727614	mg/L	0.00076778	0.0727614	mg/L	0.00076778	1.06%
B 249.772	1926.7	0.301640	mg/L	0.0008675	0.301640	mg/L	0.0008675	0.29%
Si 251.611	4721.4	2.46289	mg/L	0.005649	2.46289	mg/L	0.005649	0.23%

Sequence No.: 36
Sample ID: EF V-333199 8/27
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 69
Date Collected: 8/31/2020 6:43:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF V-333199 8/27

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	54821.5	83.4	%	0.44				0.53%
Y 371.029	16843.9	77.2	%	0.38				0.49%
Ag 328.068†	-1.1	-0.0021739	mg/L	0.00046643	-0.0021739	mg/L	0.00046643	21.46%
Al 308.215†	70.1	-0.0482970	mg/L	0.00570452	-0.0482970	mg/L	0.00570452	11.81%
As 188.979†	0.7	0.0006313	mg/L	0.00947889	0.0006313	mg/L	0.00947889	>999.9%
Ba 233.527†	66.4	-0.0129153	mg/L	0.00016102	-0.0129153	mg/L	0.00016102	1.25%
Be 313.107†	-84.4	-0.0060234	mg/L	0.00007411	-0.0060234	mg/L	0.00007411	1.23%
Ca 315.887†	454.5	-0.651495	mg/L	0.0071961	-0.651495	mg/L	0.0071961	1.10%
Cd 228.802†	1.3	-0.0140495	mg/L	0.00075538	-0.0140495	mg/L	0.00075538	5.38%
Co 228.616†	-0.3	-0.0030936	mg/L	0.00139544	-0.0030936	mg/L	0.00139544	45.11%
Cr 267.716†	13.7	-0.0074521	mg/L	0.00102767	-0.0074521	mg/L	0.00102767	13.79%
Cu 327.393†	-69.7	-0.0162382	mg/L	0.00087779	-0.0162382	mg/L	0.00087779	5.41%
Fe 273.955†	52.5	-0.0471417	mg/L	0.00591331	-0.0471417	mg/L	0.00591331	12.54%
K 404.721†	11.8	2.39032	mg/L	0.596527	2.39032	mg/L	0.596527	24.96%
Mg 279.077†	29.0	-0.663579	mg/L	0.0035707	-0.663579	mg/L	0.0035707	0.54%
Mn 257.610†	40.4	0.0016237	mg/L	0.00012239	0.0016237	mg/L	0.00012239	7.54%
Mo 202.031†	6.3	0.0018208	mg/L	0.00073492	0.0018208	mg/L	0.00073492	40.36%
Na 330.237†	91357.8	1941.86	mg/L	10.358	1941.86	mg/L	10.358	0.53%
Ni 231.604†	13.9	-0.0146889	mg/L	0.00062659	-0.0146889	mg/L	0.00062659	4.27%
Pb 220.353†	-1.7	-0.0100550	mg/L	0.00476504	-0.0100550	mg/L	0.00476504	47.39%
Sb 206.836†	0.7	-0.0018691	mg/L	0.00267881	-0.0018691	mg/L	0.00267881	143.32%
Se 196.026†	3.1	0.0020855	mg/L	0.01120947	0.0020855	mg/L	0.01120947	537.51%
Sn 189.927†	2.7	-0.0012140	mg/L	0.00317548	-0.0012140	mg/L	0.00317548	261.57%
Ti 334.940†	11.9	0.0014915	mg/L	0.00004380	0.0014915	mg/L	0.00004380	2.94%
Tl 190.801†	-0.4	-0.0101859	mg/L	0.00718728	-0.0101859	mg/L	0.00718728	70.56%
V 290.880†	5.6	-0.0121640	mg/L	0.00063353	-0.0121640	mg/L	0.00063353	5.21%
Zn 206.200†	15.0	-0.0116440	mg/L	0.00034748	-0.0116440	mg/L	0.00034748	2.98%
B 249.772	21.8	-0.0204268	mg/L	0.00096993	-0.0204268	mg/L	0.00096993	4.75%
Si 251.611	48.4	0.0988638	mg/L	0.00116973	0.0988638	mg/L	0.00116973	1.18%

Sequence No.: 37
Sample ID: EF V-333199 8/28
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 70
Date Collected: 8/31/2020 6:47:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF V-333199 8/28

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	55018.6	83.7	%	0.25				0.30%
Y 371.029	17060.2	78.2	%	0.69				0.89%
Ag 328.068†	-14.0	-0.0030328	mg/L	0.00056638	-0.0030328	mg/L	0.00056638	18.68%
Al 308.215†	57.0	-0.0574383	mg/L	0.00256324	-0.0574383	mg/L	0.00256324	4.46%
As 188.979†	0.5	-0.0010045	mg/L	0.00463652	-0.0010045	mg/L	0.00463652	461.59%
Ba 233.527†	55.7	-0.0139552	mg/L	0.00043911	-0.0139552	mg/L	0.00043911	3.15%
Be 313.107†	-100.0	-0.0060788	mg/L	0.00006276	-0.0060788	mg/L	0.00006276	1.03%
Ca 315.887†	463.3	-0.649280	mg/L	0.0013030	-0.649280	mg/L	0.0013030	0.20%
Cd 228.802†	2.9	-0.0134811	mg/L	0.00119367	-0.0134811	mg/L	0.00119367	8.85%
Co 228.616†	0.4	-0.0028724	mg/L	0.00050694	-0.0028724	mg/L	0.00050694	17.65%
Cr 267.716†	9.1	-0.0081585	mg/L	0.00041369	-0.0081585	mg/L	0.00041369	5.07%
Cu 327.393†	-68.7	-0.0161334	mg/L	0.00039609	-0.0161334	mg/L	0.00039609	2.46%
Fe 273.955†	3.2	-0.122626	mg/L	0.0053036	-0.122626	mg/L	0.0053036	4.33%
K 404.721†	23.9	3.75703	mg/L	1.001529	3.75703	mg/L	1.001529	26.66%
Mg 279.077†	102.3	-0.605810	mg/L	0.0019931	-0.605810	mg/L	0.0019931	0.33%
Mn 257.610†	13.1	0.0007714	mg/L	0.00008370	0.0007714	mg/L	0.00008370	10.85%
Mo 202.031†	7.0	0.0023108	mg/L	0.00127971	0.0023108	mg/L	0.00127971	55.38%
Na 330.237†	93359.7	1984.41	mg/L	12.556	1984.41	mg/L	12.556	0.63%
Ni 231.604†	11.5	-0.0153429	mg/L	0.00107780	-0.0153429	mg/L	0.00107780	7.02%
Pb 220.353†	1.5	-0.0057484	mg/L	0.00249170	-0.0057484	mg/L	0.00249170	43.35%
Sb 206.836†	-0.9	-0.0110033	mg/L	0.01138560	-0.0110033	mg/L	0.01138560	103.47%
Se 196.026†	3.7	0.0040713	mg/L	0.01445546	0.0040713	mg/L	0.01445546	355.06%
Sn 189.927†	0.3	-0.0051935	mg/L	0.00298701	-0.0051935	mg/L	0.00298701	57.51%
Ti 334.940†	11.6	0.0014810	mg/L	0.00016354	0.0014810	mg/L	0.00016354	11.04%
Tl 190.801†	0.3	-0.0068960	mg/L	0.01486661	-0.0068960	mg/L	0.01486661	215.58%
V 290.880†	7.9	-0.0117540	mg/L	0.00084405	-0.0117540	mg/L	0.00084405	7.18%
Zn 206.200†	12.8	-0.0121683	mg/L	0.00027084	-0.0121683	mg/L	0.00027084	2.23%
B 249.772	216.8	0.0105050	mg/L	0.00067437	0.0105050	mg/L	0.00067437	6.42%
Si 251.611	52.5	0.102571	mg/L	0.0010655	0.102571	mg/L	0.0010655	1.04%

Sequence No.: 38
Sample ID: EF V-326719 8/27
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 71
Date Collected: 8/31/2020 6:51:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

X

Mean Data: EF V-326719 8/27

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	133010.1	202	%	1.29				0.64%
Y 371.029	41755.3	191	%	1.29				0.67%
Ag 328.068†	3.8	-0.0019298	mg/L	0.00018780	-0.0019298	mg/L	0.00018780	9.73%
Al 308.215†	-126.5	-0.186541	mg/L	0.0005218	-0.186541	mg/L	0.0005218	0.28%
As 188.979†	1.4	0.0070889	mg/L	0.00115294	0.0070889	mg/L	0.00115294	16.26%
Ba 233.527†	0.0	-0.0193536	mg/L	0.00005495	-0.0193536	mg/L	0.00005495	0.28%
Be 313.107†	639.0	-0.0034554	mg/L	0.00001687	-0.0034554	mg/L	0.00001687	0.49%
Ca 315.887†	253.2	-0.702218	mg/L	0.0004920	-0.702218	mg/L	0.0004920	0.07%
Cd 228.802†	-8.7	-0.0176002	mg/L	0.00013036	-0.0176002	mg/L	0.00013036	0.74%
Co 228.616†	0.9	-0.0026668	mg/L	0.00017009	-0.0026668	mg/L	0.00017009	6.38%
Cr 267.716†	-6.8	-0.0106463	mg/L	0.00004254	-0.0106463	mg/L	0.00004254	0.40%
Cu 327.393†	-27.2	-0.0115984	mg/L	0.00040580	-0.0115984	mg/L	0.00040580	3.50%
Fe 273.955†	-2.4	-0.131120	mg/L	0.0010293	-0.131120	mg/L	0.0010293	0.79%
K 404.721†	-10.5	2.27771	mg/L	0.452442	2.27771	mg/L	0.452442	19.86%
Mg 279.077†	0.6	-0.685930	mg/L	0.0007117	-0.685930	mg/L	0.0007117	0.10%
Mn 257.610†	-16.5	-0.0001503	mg/L	0.00002633	-0.0001503	mg/L	0.00002633	17.52%
Mo 202.031†	-3.0	-0.0043305	mg/L	0.00056115	-0.0043305	mg/L	0.00056115	12.96%
Na 330.237†	1.7	0.287502	mg/L	0.0768253	0.287502	mg/L	0.0768253	26.72%
Ni 231.604†	-32.4	-0.0278181	mg/L	0.00025885	-0.0278181	mg/L	0.00025885	0.93%
Pb 220.353†	-0.8	-0.0088731	mg/L	0.00171365	-0.0088731	mg/L	0.00171365	19.31%
Sb 206.836†	-1.5	-0.0146737	mg/L	0.00608616	-0.0146737	mg/L	0.00608616	41.48%
Se 196.026†	-2.4	-0.0175892	mg/L	0.00213922	-0.0175892	mg/L	0.00213922	12.16%
Sn 189.927†	-1.4	-0.0080331	mg/L	0.00097693	-0.0080331	mg/L	0.00097693	12.16%
Ti 334.940†	-15.0	0.0006061	mg/L	0.00012057	0.0006061	mg/L	0.00012057	19.89%
Tl 190.801†	-0.5	-0.0104855	mg/L	0.00569332	-0.0104855	mg/L	0.00569332	54.30%
V 290.880†	-77.5	-0.0270489	mg/L	0.00034145	-0.0270489	mg/L	0.00034145	1.26%
Zn 206.200†	-6.0	-0.0166779	mg/L	0.00010793	-0.0166779	mg/L	0.00010793	0.65%
B 249.772	-51.2	-0.0135358	mg/L	0.00034718	-0.0135358	mg/L	0.00034718	2.56%
Si 251.611	-11.0	0.0064149	mg/L	0.00042907	0.0064149	mg/L	0.00042907	6.69%

Sequence No.: 39 **Autosampler Location: 6**
Sample ID: CCV V-329036 **Date Collected: 8/31/2020 6:55:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	58886.2	89.6	%	0.09				0.10%
Y 371.029	18020.0	82.6	%	0.57				0.69%
Ag 328.068†	1405.5	0.0939960	mg/L	0.00133591	0.0939960	mg/L	0.00133591	1.42%
QC value within limits for Ag 328.068 Recovery = 94.00%								
Al 308.215†	7020.3	4.83101	mg/L	0.017396	4.83101	mg/L	0.017396	0.36%
QC value within limits for Al 308.215 Recovery = 96.62%								
As 188.979†	56.5	0.429624	mg/L	0.0208342	0.429624	mg/L	0.0208342	4.85%
QC value less than the lower limit for As 188.979 Recovery = 85.92%								
Ba 233.527†	5099.8	0.474978	mg/L	0.0010395	0.474978	mg/L	0.0010395	0.22%
QC value within limits for Ba 233.527 Recovery = 95.00%								
Be 313.107†	138474.4	0.485817	mg/L	0.0020793	0.485817	mg/L	0.0020793	0.43%
QC value within limits for Be 313.107 Recovery = 97.16%								
Ca 315.887†	195637.5	48.5361	mg/L	0.23340	48.5361	mg/L	0.23340	0.48%
QC value within limits for Ca 315.887 Recovery = 97.07%								
Cd 228.802†	1434.7	0.495187	mg/L	0.0030119	0.495187	mg/L	0.0030119	0.61%
QC value within limits for Cd 228.802 Recovery = 99.04%								
Co 228.616†	1361.9	0.479030	mg/L	0.0055022	0.479030	mg/L	0.0055022	1.15%
QC value within limits for Co 228.616 Recovery = 95.81%								
Cr 267.716†	3603.0	0.541509	mg/L	0.0020806	0.541509	mg/L	0.0020806	0.38%
QC value within limits for Cr 267.716 Recovery = 108.30%								
Cu 327.393†	4503.5	0.484713	mg/L	0.0020052	0.484713	mg/L	0.0020052	0.41%
QC value within limits for Cu 327.393 Recovery = 96.94%								
Fe 273.955†	2990.6	4.44694	mg/L	0.026030	4.44694	mg/L	0.026030	0.59%
QC value less than the lower limit for Fe 273.955 Recovery = 88.94%								
K 404.721†	1060.5	1.81163	mg/L	0.361837	1.81163	mg/L	0.361837	19.97%
QC value less than the lower limit for K 404.721 Recovery = 3.62%								
Mg 279.077†	61883.6	48.0882	mg/L	0.26098	48.0882	mg/L	0.26098	0.54%
QC value within limits for Mg 279.077 Recovery = 96.18%								
Mn 257.610†	14820.1	0.462382	mg/L	0.0019796	0.462382	mg/L	0.0019796	0.43%
QC value within limits for Mn 257.610 Recovery = 92.48%								
Mo 202.031†	720.9	0.477635	mg/L	0.0023929	0.477635	mg/L	0.0023929	0.50%
QC value within limits for Mo 202.031 Recovery = 95.53%								
Na 330.237†	2157.9	46.1129	mg/L	0.22033	46.1129	mg/L	0.22033	0.48%
QC value within limits for Na 330.237 Recovery = 92.23%								
Ni 231.604†	1795.5	0.491726	mg/L	0.0033441	0.491726	mg/L	0.0033441	0.68%
QC value within limits for Ni 231.604 Recovery = 98.35%								
Pb 220.353†	351.7	0.474815	mg/L	0.0075233	0.474815	mg/L	0.0075233	1.58%
QC value within limits for Pb 220.353 Recovery = 94.96%								
Sb 206.836†	86.4	0.504314	mg/L	0.0072604	0.504314	mg/L	0.0072604	1.44%
QC value within limits for Sb 206.836 Recovery = 100.86%								
Se 196.026†	132.6	0.476633	mg/L	0.0155258	0.476633	mg/L	0.0155258	3.26%
QC value within limits for Se 196.026 Recovery = 95.33%								
Sn 189.927†	282.1	0.455520	mg/L	0.0027923	0.455520	mg/L	0.0027923	0.61%
QC value within limits for Sn 189.927 Recovery = 91.10%								
Ti 334.940†	13704.2	0.453375	mg/L	0.0021500	0.453375	mg/L	0.0021500	0.47%
QC value within limits for Ti 334.940 Recovery = 90.68%								
Tl 190.801†	101.5	0.481485	mg/L	0.0057811	0.481485	mg/L	0.0057811	1.20%
QC value within limits for Tl 190.801 Recovery = 96.30%								
V 290.880†	2798.3	0.490619	mg/L	0.0046830	0.490619	mg/L	0.0046830	0.95%
QC value within limits for V 290.880 Recovery = 98.12%								
Zn 206.200†	2184.8	0.508046	mg/L	0.0030855	0.508046	mg/L	0.0030855	0.61%
QC value within limits for Zn 206.200 Recovery = 101.61%								
B 249.772	2814.2	0.452070	mg/L	0.0026877	0.452070	mg/L	0.0026877	0.59%
QC value within limits for B 249.772 Recovery = 90.41%								
Si 251.611	9911.2	4.49951	mg/L	0.004336	4.49951	mg/L	0.004336	0.10%
QC value less than the lower limit for Si 251.611 Recovery = 89.99%								

QC Failed. Continue with analysis.

Sequence No.: 40 **Autosampler Location: 2**
Sample ID: CCB V-329027 **Date Collected: 8/31/2020 6:59:42 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	64081.4	97.5	%	0.32				0.33%
Y 371.029	19880.8	91.1	%	0.48				0.52%
Ag 328.068†	-7.3	0.0026083	mg/L	0.00042829	-0.0026083	mg/L	0.00042829	16.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-26.0	-0.115653	mg/L	0.0029104	-0.115653	mg/L	0.0029104	2.52%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.0	0.0037389	mg/L	0.00911769	0.0037389	mg/L	0.00911769	243.86%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-2.6	-0.0196075	mg/L	0.00007071	-0.0196075	mg/L	0.00007071	0.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	35.1	-0.0055990	mg/L	0.00004936	-0.0055990	mg/L	0.00004936	0.88%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	27.7	-0.759038	mg/L	0.0020203	-0.759038	mg/L	0.0020203	0.27%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.2	-0.0145638	mg/L	0.00035156	-0.0145638	mg/L	0.00035156	2.41%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-0.6	-0.0032232	mg/L	0.00104207	-0.0032232	mg/L	0.00104207	32.33%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-1.3	-0.0097574	mg/L	0.00020949	-0.0097574	mg/L	0.00020949	2.15%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-35.7	-0.0125214	mg/L	0.00041625	-0.0125214	mg/L	0.00041625	3.32%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.0	-0.129043	mg/L	0.0034687	-0.129043	mg/L	0.0034687	2.69%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-3.4	2.57970	mg/L	0.462494	2.57970	mg/L	0.462494	17.93%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	-1.3	-0.687470	mg/L	0.0014243	-0.687470	mg/L	0.0014243	0.21%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	2.6	0.0004438	mg/L	0.00007711	0.0004438	mg/L	0.00007711	17.38%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.7	-0.0027802	mg/L	0.00012235	-0.0027802	mg/L	0.00012235	4.40%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	5.1	0.358811	mg/L	0.0760073	0.358811	mg/L	0.0760073	21.18%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	0.5	-0.0184774	mg/L	0.00035439	-0.0184774	mg/L	0.00035439	1.92%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-2.3	-0.0108869	mg/L	0.00131865	-0.0108869	mg/L	0.00131865	12.11%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.2	0.0007150	mg/L	0.00401816	0.0007150	mg/L	0.00401816	562.00%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-2.7	-0.0189888	mg/L	0.00995009	-0.0189888	mg/L	0.00995009	52.40%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.5	-0.0064894	mg/L	0.00301734	-0.0064894	mg/L	0.00301734	46.50%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	5.2	0.0012625	mg/L	0.00001314	0.0012625	mg/L	0.00001314	1.04%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.4	-0.0149099	mg/L	0.00260209	-0.0149099	mg/L	0.00260209	17.45%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-14.4	-0.0157446	mg/L	0.00061487	-0.0157446	mg/L	0.00061487	3.91%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-0.4	-0.0153316	mg/L	0.00075071	-0.0153316	mg/L	0.00075071	4.90%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-36.0	-0.0110280	mg/L	0.00064914	-0.0110280	mg/L	0.00064914	5.89%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-5.9	0.0090263	mg/L	0.00049564	0.0090263	mg/L	0.00049564	5.49%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Method: PE 4 8300DV LEACH AX Page 1 Date: 9/1/2020 11:16:03 AM

T26161D4 26161/89218

TCP 9/1/20

Analysis Begun

Start Time: 9/1/2020 11:11:03 AM
Logged In Analyst: usermet
Spectrometer: Optima 8300 , S/N 078S1410156
Plasma On Time: 9/1/2020 10:48:54 AM
Technique: ICP Continuous
Autosampler: S10

Sample Information File: C:\Users\Public\PerkinElmer\ICP\Data\Sample Information\08.31.20.sif
Batch ID: ICP4
Results Data Set: T26161D4
Results Library: C:\Users\Public\PerkinElmer\ICP\Data\Results\Results.mdb

9/1/20

Sequence No.: 1
Sample ID: CALBLK V-329027
Analyst:
Initial Sample Wt:
Dilution:
Wash Time:
Autosampler Location: 1
Date Collected: 9/1/2020 11:13:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-329027

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	68052.8	253.00	0.37%	100	%
Y 371.029	26058.5	96.28	0.37%	100	%
Ag 328.068†	-28.4	2.19	7.74%	[0.00]	mg/L
Al 308.215†	240.1	7.21	3.00%	[0.00]	mg/L
As 188.979†	-1.5	0.85	58.37%	[0.00]	mg/L
Ba 233.527†	0.4	1.20	336.74%	[0.00]	mg/L
Be 313.107†	-817.7	16.13	1.97%	[0.00]	mg/L
Ca 315.887†	-330.7	13.20	3.99%	[0.00]	mg/L
Cd 228.802†	20.1	1.67	8.29%	[0.00]	mg/L
Co 228.616†	-2.9	3.80	129.07%	[0.00]	mg/L
Cr 267.716†	9.7	4.11	42.60%	[0.00]	mg/L
Cu 327.393†	-213.7	12.79	5.98%	[0.00]	mg/L
Fe 273.955†	2.9	1.44	49.75%	[0.00]	mg/L
K 404.721†	-71.5	6.36	8.89%	[0.00]	mg/L
Mg 279.077†	-0.3	2.00	620.32%	[0.00]	mg/L
Mn 257.610†	37.2	2.52	6.77%	[0.00]	mg/L
Mo 202.031†	1.5	0.37	24.51%	[0.00]	mg/L
Na 330.237†	25.1	6.51	25.93%	[0.00]	mg/L
Ni 231.604†	57.1	3.37	5.90%	[0.00]	mg/L
Pb 220.353†	-0.9	1.85	200.64%	[0.00]	mg/L
Sb 206.836†	0.7	0.87	127.48%	[0.00]	mg/L
Se 196.026†	3.8	1.77	46.54%	[0.00]	mg/L
Sn 189.927†	0.7	1.03	158.26%	[0.00]	mg/L
Ti 334.940†	23.3	2.92	12.49%	[0.00]	mg/L
Tl 190.801†	0.0	1.69	>999.9%	[0.00]	mg/L
V 290.880†	113.0	1.02	0.90%	[0.00]	mg/L
Zn 206.200†	35.3	3.51	9.95%	[0.00]	mg/L
B 249.772	22.2	7.04	31.71%	[0.00]	mg/L
Si 251.611	51.9	2.67	5.13%	[0.00]	mg/L

26161/89218

Ag Reported for Cf-326719 8/27

Sequence No.: 2
Sample ID: CALST2 V-329037
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 9/1/2020 11:17:05 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST2 V-329037

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	67210.5	524.67	0.78%	98.8	%
Y 371.029	25113.8	88.49	0.35%	96.4	%
Ag 328.068†	748.0	10.02	1.34%	[0.05]	mg/L
Al 308.215†	1702.3	11.97	0.70%	[1]	mg/L
As 188.979†	14.6	0.95	6.47%	[0.1]	mg/L
Ba 233.527†	2983.3	24.11	0.81%	[0.25]	mg/L
Be 313.107†	3438.9	17.78	0.52%	[0.012]	mg/L
Ca 315.887†	21705.3	24.65	0.11%	[5]	mg/L
Cd 228.802†	166.1	4.21	2.54%	[0.05]	mg/L
Co 228.616†	272.3	6.57	2.41%	[0.1]	mg/L
Cr 267.716†	721.0	5.28	0.73%	[0.1]	mg/L
Cu 327.393†	1033.1	9.08	0.88%	[0.1]	mg/L
Fe 273.955†	1004.6	3.35	0.33%	[1]	mg/L
K 404.721†	49.8	7.98	16.03%	[5]	mg/L
Mg 279.077†	6848.7	20.65	0.30%	[5]	mg/L
Mn 257.610†	3326.4	14.31	0.43%	[0.1]	mg/L
Mo 202.031†	153.0	2.56	1.67%	[0.1]	mg/L
Na 330.237†	1353.9	4.21	0.31%	[25]	mg/L
Ni 231.604†	435.8	0.58	0.13%	[0.1]	mg/L
Pb 220.353†	42.6	1.61	3.77%	[0.05]	mg/L
Sb 206.836†	15.2	1.72	11.35%	[0.07]	mg/L
Se 196.026†	30.8	2.17	7.04%	[0.1]	mg/L
Sn 189.927†	73.6	4.42	6.00%	[0.1]	mg/L
Ti 334.940†	3430.3	18.58	0.54%	[0.1]	mg/L
Tl 190.801†	18.9	2.57	13.63%	[0.1]	mg/L
V 290.880†	683.5	8.65	1.27%	[0.1]	mg/L
Zn 206.200†	438.2	5.10	1.16%	[0.1]	mg/L
B 249.772	1427.6	6.27	0.44%	[0.2]	mg/L
Si 251.611	327.7	3.21	0.98%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-329028
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 3
Date Collected: 9/1/2020 11:21:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST3 V-329028

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	62658.9	184.52	0.29%	92.1	%
Y 371.029	23721.9	240.02	1.01%	91.0	%
Ag 328.068†	1486.8	3.79	0.25%	[0.10]	mg/L
Al 308.215†	6825.8	3.66	0.05%	[5.0]	mg/L
As 188.979†	67.2	1.46	2.16%	[0.50]	mg/L
Ba 233.527†	4979.9	6.23	0.13%	[0.50]	mg/L
Be 313.107†	135967.4	227.65	0.17%	[0.50]	mg/L
Ca 315.887†	205546.4	393.10	0.19%	[50]	mg/L
Cd 228.802†	1557.4	4.62	0.30%	[0.50]	mg/L
Co 228.616†	1296.4	1.77	0.14%	[0.50]	mg/L
Cr 267.716†	3131.2	21.28	0.68%	[0.50]	mg/L
Cu 327.393†	4253.6	22.10	0.52%	[0.50]	mg/L
Fe 273.955†	4184.0	23.58	0.56%	[5.0]	mg/L
K 404.721†	1058.6	5.28	0.50%	[50]	mg/L
Mg 279.077†	62949.5	86.32	0.14%	[50]	mg/L
Mn 257.610†	15491.0	39.67	0.26%	[0.50]	mg/L
Mo 202.031†	713.9	4.94	0.69%	[0.50]	mg/L
Na 330.237†	2345.8	27.44	1.17%	[50]	mg/L
Ni 231.604†	2025.9	13.68	0.68%	[0.50]	mg/L
Pb 220.353†	366.9	5.16	1.41%	[0.50]	mg/L
Sb 206.836†	83.7	0.97	1.16%	[0.50]	mg/L
Se 196.026†	130.9	3.30	2.52%	[0.50]	mg/L
Sn 189.927†	325.5	3.44	1.06%	[0.50]	mg/L
Ti 334.940†	15790.1	33.42	0.21%	[0.50]	mg/L
Tl 190.801†	99.2	2.97	3.00%	[0.50]	mg/L
V 290.880†	2969.5	13.06	0.44%	[0.50]	mg/L
Zn 206.200†	2147.2	10.88	0.51%	[0.50]	mg/L
B 249.772	2999.1	11.59	0.39%	[0.50]	mg/L
Si 251.611	10945.5	43.28	0.40%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-329029
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 4
Date Collected: 9/1/2020 11:25:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST4 V-329029

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	64510.7	508.71	0.79%	94.8	%
Y 371.029	23189.9	327.70	1.41%	89.0	%
Ag 328.068†	3062.8	16.99	0.55%	[0.20]	mg/L
Al 308.215†	14726.1	27.62	0.19%	[10]	mg/L
As 188.979†	139.8	1.88	1.34%	[1.00]	mg/L
Ba 233.527†	10527.0	27.42	0.26%	[1.00]	mg/L
Be 313.107†	285447.1	2273.66	0.80%	[1.00]	mg/L
Ca 315.887†	421573.7	3352.75	0.80%	[100]	mg/L
Cd 228.802†	3058.1	3.74	0.12%	[1.00]	mg/L
Co 228.616†	2799.9	33.37	1.19%	[1.00]	mg/L
Cr 267.716†	6562.9	16.41	0.25%	[1.00]	mg/L
Cu 327.393†	9247.4	11.53	0.12%	[1.00]	mg/L
Fe 273.955†	8807.0	28.99	0.33%	[10.0]	mg/L
K 404.721†	2311.3	6.84	0.30%	[100]	mg/L
Mg 279.077†	129697.1	1120.48	0.86%	[100]	mg/L
Mn 257.610†	34198.4	27.44	0.08%	[1.00]	mg/L
Mo 202.031†	1533.0	18.85	1.23%	[1.00]	mg/L
Na 330.237†	5411.0	27.46	0.51%	[100]	mg/L
Ni 231.604†	3930.4	22.62	0.58%	[1.00]	mg/L
Pb 220.353†	754.4	12.92	1.71%	[1.00]	mg/L
Sb 206.836†	173.3	3.33	1.92%	[1.00]	mg/L
Se 196.026†	280.3	4.75	1.69%	[1.00]	mg/L
Sn 189.927†	688.7	9.06	1.32%	[1.00]	mg/L
Ti 334.940†	35541.3	46.64	0.13%	[1.00]	mg/L
Tl 190.801†	207.8	9.15	4.40%	[1.00]	mg/L
V 290.880†	6098.8	35.87	0.59%	[1.00]	mg/L
Zn 206.200†	4213.2	12.41	0.29%	[1.00]	mg/L
B 249.772	6590.6	67.39	1.02%	[1.00]	mg/L
Si 251.611	24503.9	223.15	0.91%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-16.0	15320	0.00000	0.999871	
Al 308.215	3	Lin, Calc Int	2.2	1453	0.00000	0.998881	
As 188.979	3	Lin, Calc Int	-0.2	139.1	0.00000	0.999741	
Ba 233.527	3	Lin, Calc Int	83.9	10370	0.00000	0.998389	
Be 313.107	3	Lin, Calc Int	-1223.7	284200	0.00000	0.999697	
Ca 315.887	3	Lin, Calc Int	-677.3	4203	0.00000	0.999906	
Cd 228.802	3	Lin, Calc Int	11.2	3056	0.00000	0.999955	
Co 228.616	3	Lin, Calc Int	-22.6	2787	0.00000	0.999214	
Cr 267.716	3	Lin, Calc Int	0.8	6507	0.00000	0.999562	
Cu 327.393	3	Lin, Calc Int	-20.6	9135	0.00000	0.998806	
Fe 273.955	3	Lin, Calc Int	14.2	871.2	0.00000	0.999409	
K 404.721	3	Lin, Calc Int	-47.4	23.29	0.00000	0.999022	
Mg 279.077	3	Lin, Calc Int	-183.8	1292	0.00000	0.999863	
Mn 257.610	3	Lin, Calc Int	-339.7	33980	0.00000	0.998716	
Mo 202.031	3	Lin, Calc Int	-9.9	1525	0.00000	0.999300	
Na 330.237	3	Lin, Calc Int	-71.5	53.70	0.00000	0.996960	
Ni 231.604	3	Lin, Calc Int	30.2	3919	0.00000	0.999855	
Pb 220.353	3	Lin, Calc Int	0.3	750.1	0.00000	0.999850	
Sb 206.836	3	Lin, Calc Int	0.8	171.2	0.00000	0.999590	
Se 196.026	3	Lin, Calc Int	-0.5	277.5	0.00000	0.999187	
Sn 189.927	3	Lin, Calc Int	-1.4	683.4	0.00000	0.999466	
Ti 334.940	3	Lin, Calc Int	-422.3	35280	0.00000	0.998198	
Tl 190.801	3	Lin, Calc Int	-1.7	208.0	0.00000	0.999723	
V 290.880	3	Lin, Calc Int	17.8	6050	0.00000	0.999772	
Zn 206.200	3	Lin, Calc Int	15.0	4212	0.00000	0.999950	

B 249.772	3	Lin, Calc Int	-11.6	6508	0.00000	0.998192
Si 251.611	3	Lin, Calc Int	-200.2	2422	0.00000	0.998393

Sequence No.: 5 **Autosampler Location: 6**
Sample ID: ICV V-329036 **Date Collected: 9/1/2020 11:30:08 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 105 **Auto Dilution Factor: 1**

Mean Data: ICV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	61505.4	90.4	%	0.26				0.29%
Y 371.029	23269.8	89.3	%	0.80				0.89%
Ag 328.068†	1487.5	0.101103	mg/L	0.0004223	0.101103	mg/L	0.0004223	0.42%
QC value within limits for Ag 328.068 Recovery = 101.10%								
Al 308.215†	7288.5	5.02999	mg/L	0.009144	5.02999	mg/L	0.009144	0.18%
QC value within limits for Al 308.215 Recovery = 100.60%								
As 188.979†	67.7	0.463526	mg/L	0.0067644	0.463526	mg/L	0.0067644	1.46%
QC value within limits for As 188.979 Recovery = 92.71%								
Ba 233.527†	5329.3	0.505629	mg/L	0.0021751	0.505629	mg/L	0.0021751	0.43%
QC value within limits for Ba 233.527 Recovery = 101.13%								
Be 313.107†	145320.4	0.515592	mg/L	0.0007940	0.515592	mg/L	0.0007940	0.15%
QC value within limits for Be 313.107 Recovery = 103.12%								
Ca 315.887†	221066.6	52.7529	mg/L	0.06072	52.7529	mg/L	0.06072	0.12%
QC value within limits for Ca 315.887 Recovery = 105.51%								
Cd 228.802†	1680.2	0.546142	mg/L	0.0033196	0.546142	mg/L	0.0033196	0.61%
QC value within limits for Cd 228.802 Recovery = 109.23%								
Co 228.616†	1405.2	0.512310	mg/L	0.0027295	0.512310	mg/L	0.0027295	0.53%
QC value within limits for Co 228.616 Recovery = 102.46%								
Cr 267.716†	3359.7	0.518587	mg/L	0.0013539	0.518587	mg/L	0.0013539	0.26%
QC value within limits for Cr 267.716 Recovery = 103.72%								
Cu 327.393†	4615.6	0.508015	mg/L	0.0040118	0.508015	mg/L	0.0040118	0.79%
QC value within limits for Cu 327.393 Recovery = 101.60%								
Fe 273.955†	4451.7	5.09374	mg/L	0.024617	5.09374	mg/L	0.024617	0.48%
QC value within limits for Fe 273.955 Recovery = 101.87%								
K 404.721†	1146.2	-3.61046	mg/L	0.716798	-3.61046	mg/L	0.716798	19.85%
QC value less than the lower limit for K 404.721 Recovery = -7.22%								
Mg 279.077†	67436.8	52.3457	mg/L	0.05798	52.3457	mg/L	0.05798	0.11%
QC value within limits for Mg 279.077 Recovery = 104.69%								
Mn 257.610†	16529.0	0.496369	mg/L	0.0013443	0.496369	mg/L	0.0013443	0.27%
QC value within limits for Mn 257.610 Recovery = 99.27%								
Mo 202.031†	769.9	0.511474	mg/L	0.0029988	0.511474	mg/L	0.0029988	0.59%
QC value within limits for Mo 202.031 Recovery = 102.29%								
Na 330.237†	2561.0	49.0258	mg/L	0.28974	49.0258	mg/L	0.28974	0.59%
QC value within limits for Na 330.237 Recovery = 98.05%								
Ni 231.604†	2198.2	0.554548	mg/L	0.0027649	0.554548	mg/L	0.0027649	0.50%
QC value greater than the upper limit for Ni 231.604 Recovery = 110.91%								
Pb 220.353†	386.8	0.516139	mg/L	0.0052972	0.516139	mg/L	0.0052972	1.03%
QC value within limits for Pb 220.353 Recovery = 103.23%								
Sb 206.836†	90.7	0.536775	mg/L	0.0132872	0.536775	mg/L	0.0132872	2.48%
QC value within limits for Sb 206.836 Recovery = 107.35%								
Se 196.026†	140.7	0.517736	mg/L	0.0024709	0.517736	mg/L	0.0024709	0.48%
QC value within limits for Se 196.026 Recovery = 103.55%								
Sn 189.927†	350.3	0.512903	mg/L	0.0030513	0.512903	mg/L	0.0030513	0.59%
QC value within limits for Sn 189.927 Recovery = 102.58%								
Ti 334.940†	16931.0	0.495856	mg/L	0.0017538	0.495856	mg/L	0.0017538	0.35%
QC value within limits for Ti 334.940 Recovery = 99.17%								
Tl 190.801†	105.8	0.512458	mg/L	0.0160762	0.512458	mg/L	0.0160762	3.14%
QC value within limits for Tl 190.801 Recovery = 102.49%								
V 290.880†	3175.1	0.524702	mg/L	0.0020883	0.524702	mg/L	0.0020883	0.40%
QC value within limits for V 290.880 Recovery = 104.94%								
Zn 206.200†	2324.3	0.548309	mg/L	0.0043164	0.548309	mg/L	0.0043164	0.79%
QC value within limits for Zn 206.200 Recovery = 109.66%								
B 249.772	3211.3	0.504150	mg/L	0.0019032	0.504150	mg/L	0.0019032	0.38%
QC value within limits for B 249.772 Recovery = 100.83%								
Si 251.611	11578.3	4.96832	mg/L	0.023322	4.96832	mg/L	0.023322	0.47%
QC value within limits for Si 251.611 Recovery = 99.37%								

QC Failed. Continue with analysis.

Sequence No.: 6 **Autosampler Location: 1**
Sample ID: ICB V-329027 **Date Collected: 9/1/2020 11:34:05 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICB V-329027

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	66630.6	97.9	%	0.48				0.49%
Y 371.029	25616.1	98.3	%	0.52				0.53%
Ag 328.068†	7.3	0.0015099	mg/L	0.00022117	0.0015099	mg/L	0.00022117	14.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-11.6	-0.0098376	mg/L	0.00008931	-0.0098376	mg/L	0.00008931	0.91%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.2	0.0001081	mg/L	0.00380658	0.0001081	mg/L	0.00380658	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-3.6	-0.0084333	mg/L	0.00035746	-0.0084333	mg/L	0.00035746	4.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-25.8	0.0042148	mg/L	0.00011260	0.0042148	mg/L	0.00011260	2.67%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-103.8	0.136430	mg/L	0.0010124	0.136430	mg/L	0.0010124	0.74%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	3.0	-0.0026589	mg/L	0.00020146	-0.0026589	mg/L	0.00020146	7.58%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.1	0.0085126	mg/L	0.00025003	0.0085126	mg/L	0.00025003	2.94%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-0.5	-0.0002132	mg/L	0.00027995	-0.0002132	mg/L	0.00027995	131.33%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-2.7	0.0019613	mg/L	0.00042207	0.0019613	mg/L	0.00042207	21.52%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	1.9	-0.0141261	mg/L	0.00248154	-0.0141261	mg/L	0.00248154	17.57%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-2.3	2.09056	mg/L	0.270158	2.09056	mg/L	0.270158	12.92%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	-5.2	0.138268	mg/L	0.0015071	0.138268	mg/L	0.0015071	1.09%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-2.8	0.0099151	mg/L	0.00005477	0.0099151	mg/L	0.00005477	0.55%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	2.7	0.0082661	mg/L	0.00071792	0.0082661	mg/L	0.00071792	8.69%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	3.2	1.39144	mg/L	0.151673	1.39144	mg/L	0.151673	10.90%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	1.2	-0.0073924	mg/L	0.00088161	-0.0073924	mg/L	0.00088161	11.93%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.9	0.0007775	mg/L	0.00381654	0.0007775	mg/L	0.00381654	490.85%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	3.5	0.0158199	mg/L	0.01182831	0.0158199	mg/L	0.01182831	74.77%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.0	0.0091350	mg/L	0.00932427	0.0091350	mg/L	0.00932427	102.07%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	2.6	0.0057938	mg/L	0.00144778	0.0057938	mg/L	0.00144778	24.99%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	2.5	0.0120507	mg/L	0.00012141	0.0120507	mg/L	0.00012141	1.01%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-2.3	-0.0026064	mg/L	0.00622713	-0.0026064	mg/L	0.00622713	238.92%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	5.3	-0.0020674	mg/L	0.00078995	-0.0020674	mg/L	0.00078995	38.21%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-28.3	-0.0102735	mg/L	0.00024908	-0.0102735	mg/L	0.00024908	2.42%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	34.7	0.0073575	mg/L	0.00023603	0.0073575	mg/L	0.00023603	3.21%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-1.1	0.0826219	mg/L	0.00093603	0.0826219	mg/L	0.00093603	1.13%
QC value greater than the upper limit for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: LRS V-329041
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 13
Date Collected: 9/1/2020 11:38:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LRS V-329041

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	53848.7	79.1	%	0.85				1.08%
Y 371.029	18810.6	72.2	%	0.70				0.97%
Ag 328.068†	15481.5	1.07120	mg/L	0.007956	1.07120	mg/L	0.007956	0.74%
QC value within limits for Ag 328.068 Recovery = 107.12%								
Al 308.215†	756962.9	521.261	mg/L	6.9507	521.261	mg/L	6.9507	1.33%
QC value within limits for Al 308.215 Recovery = 104.25%								
As 188.979†	1442.1	9.89730	mg/L	0.098127	9.89730	mg/L	0.098127	0.99%
QC value within limits for As 188.979 Recovery = 98.97%								
Ba 233.527†	104209.2	10.0371	mg/L	0.04544	10.0371	mg/L	0.04544	0.45%
QC value within limits for Ba 233.527 Recovery = 100.37%								
Be 313.107†	1381765.9	4.86582	mg/L	0.060585	4.86582	mg/L	0.060585	1.25%
QC value within limits for Be 313.107 Recovery = 97.32%								
Ca 315.887†	2071996.0	493.089	mg/L	7.2609	493.089	mg/L	7.2609	1.47%
QC value within limits for Ca 315.887 Recovery = 98.62%								
Cd 228.802†	16570.2	5.41833	mg/L	0.013662	5.41833	mg/L	0.013662	0.25%
QC value within limits for Cd 228.802 Recovery = 108.37%								
Co 228.616†	13271.1	4.77003	mg/L	0.038829	4.77003	mg/L	0.038829	0.81%
QC value within limits for Co 228.616 Recovery = 95.40%								
Cr 267.716†	63853.0	9.85532	mg/L	0.032572	9.85532	mg/L	0.032572	0.33%
QC value within limits for Cr 267.716 Recovery = 98.55%								
Cu 327.393†	98437.9	10.7976	mg/L	0.02461	10.7976	mg/L	0.02461	0.23%
QC value within limits for Cu 327.393 Recovery = 107.98%								
Fe 273.955†	172637.4	198.151	mg/L	1.7958	198.151	mg/L	1.7958	0.91%
QC value within limits for Fe 273.955 Recovery = 99.08%								
K 404.721†	6019.9	-1873.87	mg/L	18.044	-1873.87	mg/L	18.044	0.96%
QC value less than the lower limit for K 404.721 Recovery = -936.94%								
Mg 279.077†	662723.6	513.162	mg/L	7.6197	513.162	mg/L	7.6197	1.48%
QC value within limits for Mg 279.077 Recovery = 102.63%								
Mn 257.610†	333713.0	9.82964	mg/L	0.041442	9.82964	mg/L	0.041442	0.42%
QC value within limits for Mn 257.610 Recovery = 98.30%								
Mo 202.031†	15366.6	10.0852	mg/L	0.09784	10.0852	mg/L	0.09784	0.97%
QC value within limits for Mo 202.031 Recovery = 100.85%								
Na 330.237†	70059.0	1306.08	mg/L	6.952	1306.08	mg/L	6.952	0.53%
QC value greater than the upper limit for Na 330.237 Recovery = 130.61%								
Ni 231.604†	36857.2	9.42397	mg/L	0.054325	9.42397	mg/L	0.054325	0.58%
QC value within limits for Ni 231.604 Recovery = 94.24%								
Pb 220.353†	7057.3	9.47123	mg/L	0.085926	9.47123	mg/L	0.085926	0.91%
QC value within limits for Pb 220.353 Recovery = 94.71%								
Sb 206.836†	903.4	5.50472	mg/L	0.056699	5.50472	mg/L	0.056699	1.03%
QC value greater than the upper limit for Sb 206.836 Recovery = 110.09%								
Se 196.026†	1415.8	5.28044	mg/L	0.063433	5.28044	mg/L	0.063433	1.20%
QC value within limits for Se 196.026 Recovery = 105.61%								
Sn 189.927†	6704.1	9.77819	mg/L	0.083059	9.77819	mg/L	0.083059	0.85%
QC value within limits for Sn 189.927 Recovery = 97.78%								
Ti 334.940†	326361.2	9.29956	mg/L	0.106356	9.29956	mg/L	0.106356	1.14%
QC value within limits for Ti 334.940 Recovery = 93.00%								
Tl 190.801†	938.4	4.48237	mg/L	0.034599	4.48237	mg/L	0.034599	0.77%
QC value less than the lower limit for Tl 190.801 Recovery = 89.65%								
V 290.880†	56143.7	9.29939	mg/L	0.040533	9.29939	mg/L	0.040533	0.44%
QC value within limits for V 290.880 Recovery = 92.99%								
Zn 206.200†	39868.4	9.46271	mg/L	0.047033	9.46271	mg/L	0.047033	0.50%
QC value within limits for Zn 206.200 Recovery = 94.63%								
B 249.772	31768.5	4.56683	mg/L	0.050111	4.56683	mg/L	0.050111	1.10%
QC value within limits for B 249.772 Recovery = 91.34%								
Si 251.611	52448.7	23.7483	mg/L	0.19962	23.7483	mg/L	0.19962	0.84%
QC value within limits for Si 251.611 Recovery = 94.99%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-329028
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 105

Autosampler Location: 3
Date Collected: 9/1/2020 11:43:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICS3 V-329028

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	59861.5	88.0	%	0.65				0.74%
Y 371.029	22411.3	86.0	%	1.34				1.55%
Ag 328.068†	1507.4	0.102219	mg/L	0.0008313	0.102219	mg/L	0.0008313	0.81%
QC value within limits for Ag 328.068 Recovery = 102.22%								
Al 308.215†	6985.3	4.82037	mg/L	0.041454	4.82037	mg/L	0.041454	0.86%
QC value within limits for Al 308.215 Recovery = 96.41%								
As 188.979†	63.5	0.434688	mg/L	0.0046889	0.434688	mg/L	0.0046889	1.08%
QC value less than the lower limit for As 188.979 Recovery = 86.94%								
Ba 233.527†	5030.3	0.476806	mg/L	0.0029028	0.476806	mg/L	0.0029028	0.61%
QC value within limits for Ba 233.527 Recovery = 95.36%								
Be 313.107†	136694.0	0.485241	mg/L	0.0024791	0.485241	mg/L	0.0024791	0.51%
QC value within limits for Be 313.107 Recovery = 97.05%								
Ca 315.887†	205740.2	49.1067	mg/L	0.20404	49.1067	mg/L	0.20404	0.42%
QC value within limits for Ca 315.887 Recovery = 98.21%								
Cd 228.802†	1555.9	0.505451	mg/L	0.0058480	0.505451	mg/L	0.0058480	1.16%
QC value within limits for Cd 228.802 Recovery = 101.09%								
Co 228.616†	1317.3	0.480793	mg/L	0.0037822	0.480793	mg/L	0.0037822	0.79%
QC value within limits for Co 228.616 Recovery = 96.16%								
Cr 267.716†	3498.8	0.539825	mg/L	0.0046476	0.539825	mg/L	0.0046476	0.86%
QC value within limits for Cr 267.716 Recovery = 107.97%								
Cu 327.393†	4357.6	0.479727	mg/L	0.0027200	0.479727	mg/L	0.0027200	0.57%
QC value within limits for Cu 327.393 Recovery = 95.95%								
Fe 273.955†	4082.6	4.67005	mg/L	0.009208	4.67005	mg/L	0.009208	0.20%
QC value within limits for Fe 273.955 Recovery = 93.40%								
K 404.721†	1073.9	-2.15000	mg/L	0.939678	-2.15000	mg/L	0.939678	43.71%
QC value less than the lower limit for K 404.721 Recovery = -4.30%								
Mg 279.077†	63050.4	48.9501	mg/L	0.22498	48.9501	mg/L	0.22498	0.46%
QC value within limits for Mg 279.077 Recovery = 97.90%								
Mn 257.610†	15537.1	0.467181	mg/L	0.0026836	0.467181	mg/L	0.0026836	0.57%
QC value within limits for Mn 257.610 Recovery = 93.44%								
Mo 202.031†	728.8	0.484476	mg/L	0.0046483	0.484476	mg/L	0.0046483	0.96%
QC value within limits for Mo 202.031 Recovery = 96.90%								
Na 330.237†	2436.2	46.7031	mg/L	0.21668	46.7031	mg/L	0.21668	0.46%
QC value within limits for Na 330.237 Recovery = 93.41%								
Ni 231.604†	2048.2	0.516204	mg/L	0.0056002	0.516204	mg/L	0.0056002	1.08%
QC value within limits for Ni 231.604 Recovery = 103.24%								
Pb 220.353†	365.8	0.488115	mg/L	0.0048855	0.488115	mg/L	0.0048855	1.00%
QC value within limits for Pb 220.353 Recovery = 97.62%								
Sb 206.836†	84.6	0.500565	mg/L	0.0116924	0.500565	mg/L	0.0116924	2.34%
QC value within limits for Sb 206.836 Recovery = 100.11%								
Se 196.026†	131.3	0.483220	mg/L	0.0193921	0.483220	mg/L	0.0193921	4.01%
QC value within limits for Se 196.026 Recovery = 96.64%								
Sn 189.927†	327.5	0.479548	mg/L	0.0080429	0.479548	mg/L	0.0080429	1.68%
QC value within limits for Sn 189.927 Recovery = 95.91%								
Ti 334.940†	15783.6	0.463059	mg/L	0.0020221	0.463059	mg/L	0.0020221	0.44%
QC value within limits for Ti 334.940 Recovery = 92.61%								
Tl 190.801†	100.2	0.485941	mg/L	0.0102558	0.485941	mg/L	0.0102558	2.11%
QC value within limits for Tl 190.801 Recovery = 97.19%								
V 290.880†	2988.9	0.493736	mg/L	0.0032828	0.493736	mg/L	0.0032828	0.66%
QC value within limits for V 290.880 Recovery = 98.75%								
Zn 206.200†	2147.4	0.506316	mg/L	0.0040412	0.506316	mg/L	0.0040412	0.80%
QC value within limits for Zn 206.200 Recovery = 101.26%								
B 249.772	3069.8	0.481964	mg/L	0.0017266	0.481964	mg/L	0.0017266	0.36%
QC value within limits for B 249.772 Recovery = 96.39%								
Si 251.611	10459.3	4.49958	mg/L	0.003654	4.49958	mg/L	0.003654	0.08%
QC value less than the lower limit for Si 251.611 Recovery = 89.99%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 14
Date Collected: 9/1/2020 11:47:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	66299.2	97.4	%	0.08				0.09%
Y 371.029	25220.6	96.8	%	0.36				0.37%
Ag 328.068†	5.1	0.0013569	mg/L	0.00047484	0.0013569	mg/L	0.00047484	34.99%
Al 308.215†	-20.2	-0.0157981	mg/L	0.00189725	-0.0157981	mg/L	0.00189725	12.01%
As 188.979†	0.5	0.0052302	mg/L	0.01192281	0.0052302	mg/L	0.01192281	227.96%
Ba 233.527†	-1.4	-0.0082260	mg/L	0.00015875	-0.0082260	mg/L	0.00015875	1.93%
Be 313.107†	14.6	0.0043569	mg/L	0.00004034	0.0043569	mg/L	0.00004034	0.93%
Ca 315.887†	-56.3	0.147737	mg/L	0.0019969	0.147737	mg/L	0.0019969	1.35%
Cd 228.802†	2.8	-0.0027506	mg/L	0.00023806	-0.0027506	mg/L	0.00023806	8.66%
Co 228.616†	-0.2	0.0080414	mg/L	0.00058844	0.0080414	mg/L	0.00058844	7.32%
Cr 267.716†	1.6	0.0001090	mg/L	0.00039127	0.0001090	mg/L	0.00039127	359.04%
Cu 327.393†	6.9	0.0030104	mg/L	0.00044122	0.0030104	mg/L	0.00044122	14.66%
Fe 273.955†	4.9	-0.0107080	mg/L	0.00188783	-0.0107080	mg/L	0.00188783	17.63%
K 404.721†	-3.0	2.02120	mg/L	0.222118	2.02120	mg/L	0.222118	10.99%
Mg 279.077†	-0.7	0.141785	mg/L	0.0022311	0.141785	mg/L	0.0022311	1.57%
Mn 257.610†	-2.5	0.0099230	mg/L	0.00006192	0.0099230	mg/L	0.00006192	0.62%
Mo 202.031†	3.1	0.0085110	mg/L	0.00105841	0.0085110	mg/L	0.00105841	12.44%
Na 330.237†	-0.4	1.32417	mg/L	0.028585	1.32417	mg/L	0.028585	2.16%
Ni 231.604†	3.2	-0.0068674	mg/L	0.00040477	-0.0068674	mg/L	0.00040477	5.89%
Pb 220.353†	4.0	0.0049093	mg/L	0.00199034	0.0049093	mg/L	0.00199034	40.54%
Sb 206.836†	3.2	0.0139409	mg/L	0.01085080	0.0139409	mg/L	0.01085080	77.83%
Se 196.026†	0.2	0.0025260	mg/L	0.00385209	0.0025260	mg/L	0.00385209	152.50%
Sn 189.927†	4.4	0.0084510	mg/L	0.00152549	0.0084510	mg/L	0.00152549	18.05%
Ti 334.940†	2.2	0.0120433	mg/L	0.00016939	0.0120433	mg/L	0.00016939	1.41%
Tl 190.801†	-2.3	-0.0029505	mg/L	0.00435330	-0.0029505	mg/L	0.00435330	147.55%
V 290.880†	-1.0	-0.0031108	mg/L	0.00009877	-0.0031108	mg/L	0.00009877	3.17%
Zn 206.200†	-24.3	-0.0093292	mg/L	0.00021183	-0.0093292	mg/L	0.00021183	2.27%
B 249.772	64.8	0.0119346	mg/L	0.00099757	0.0119346	mg/L	0.00099757	8.36%
Si 251.611	1.8	0.0838541	mg/L	0.00056735	0.0838541	mg/L	0.00056735	0.68%

Sequence No.: 10
Sample ID: LLICV V-329037
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 9/1/2020 11:51:08 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LLICV V-329037

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	64714.5	95.1	%	0.19				0.20%
Y 371.029	23830.7	91.5	%	0.07				0.07%
Ag 328.068†	746.3	0.0503761	mg/L	0.00022570	0.0503761	mg/L	0.00022570	0.45%
QC value within limits for Ag 328.068 Recovery = 100.75%								
Al 308.215†	1672.5	1.15278	mg/L	0.006213	1.15278	mg/L	0.006213	0.54%
QC value within limits for Al 308.215 Recovery = 115.28%								
As 188.979†	13.9	0.0965914	mg/L	0.00748950	0.0965914	mg/L	0.00748950	7.75%
QC value within limits for As 188.979 Recovery = 96.59%								
Ba 233.527†	2994.1	0.280530	mg/L	0.0013245	0.280530	mg/L	0.0013245	0.47%
QC value within limits for Ba 233.527 Recovery = 112.21%								
Be 313.107†	3441.9	0.0164155	mg/L	0.00010004	0.0164155	mg/L	0.00010004	0.61%
QC value greater than the upper limit for Be 313.107 Recovery = 136.80%								
Ca 315.887†	21588.1	5.29694	mg/L	0.015422	5.29694	mg/L	0.015422	0.29%
QC value within limits for Ca 315.887 Recovery = 105.94%								
Cd 228.802†	163.9	0.0499646	mg/L	0.00109482	0.0499646	mg/L	0.00109482	2.19%
QC value within limits for Cd 228.802 Recovery = 99.93%								
Co 228.616†	274.7	0.106686	mg/L	0.0013105	0.106686	mg/L	0.0013105	1.23%
QC value within limits for Co 228.616 Recovery = 106.69%								
Cr 267.716†	729.6	0.112503	mg/L	0.0007593	0.112503	mg/L	0.0007593	0.67%
QC value within limits for Cr 267.716 Recovery = 112.50%								
Cu 327.393†	1030.9	0.115213	mg/L	0.0006299	0.115213	mg/L	0.0006299	0.55%
QC value within limits for Cu 327.393 Recovery = 115.21%								
Fe 273.955†	964.3	1.09053	mg/L	0.001679	1.09053	mg/L	0.001679	0.15%
QC value within limits for Fe 273.955 Recovery = 109.05%								
K 404.721†	47.3	-7.67952	mg/L	0.212741	-7.67952	mg/L	0.212741	2.77%
QC value less than the lower limit for K 404.721 Recovery = -153.59%								
Mg 279.077†	6908.5	5.49023	mg/L	0.017057	5.49023	mg/L	0.017057	0.31%
QC value within limits for Mg 279.077 Recovery = 109.80%								
Mn 257.610†	3327.8	0.107920	mg/L	0.0000513	0.107920	mg/L	0.0000513	0.05%
QC value within limits for Mn 257.610 Recovery = 107.92%								
Mo 202.031†	151.7	0.106005	mg/L	0.0005085	0.106005	mg/L	0.0005085	0.48%
QC value within limits for Mo 202.031 Recovery = 106.00%								
Na 330.237†	1320.1	25.9162	mg/L	0.16671	25.9162	mg/L	0.16671	0.64%
QC value within limits for Na 330.237 Recovery = 103.66%								
Ni 231.604†	435.8	0.103761	mg/L	0.0012205	0.103761	mg/L	0.0012205	1.18%
QC value within limits for Ni 231.604 Recovery = 103.76%								
Pb 220.353†	39.4	0.0522655	mg/L	0.00572154	0.0522655	mg/L	0.00572154	10.95%
QC value within limits for Pb 220.353 Recovery = 104.53%								
Sb 206.836†	16.6	0.0945864	mg/L	0.01669892	0.0945864	mg/L	0.01669892	17.65%
QC value greater than the upper limit for Sb 206.836 Recovery = 135.12%								
Se 196.026†	29.9	0.110922	mg/L	0.0032497	0.110922	mg/L	0.0032497	2.93%
QC value within limits for Se 196.026 Recovery = 110.92%								
Sn 189.927†	72.5	0.107816	mg/L	0.0010402	0.107816	mg/L	0.0010402	0.96%
QC value within limits for Sn 189.927 Recovery = 107.82%								
Ti 334.940†	3388.0	0.108400	mg/L	0.0003877	0.108400	mg/L	0.0003877	0.36%
QC value within limits for Ti 334.940 Recovery = 108.40%								
Tl 190.801†	22.3	0.114812	mg/L	0.0022277	0.114812	mg/L	0.0022277	1.94%
QC value within limits for Tl 190.801 Recovery = 114.81%								
V 290.880†	675.8	0.109037	mg/L	0.0013220	0.109037	mg/L	0.0013220	1.21%
QC value within limits for V 290.880 Recovery = 109.04%								
Zn 206.200†	423.2	0.0969249	mg/L	0.00017306	0.0969249	mg/L	0.00017306	0.18%
QC value within limits for Zn 206.200 Recovery = 96.92%								
B 249.772	1414.9	0.220313	mg/L	0.0008515	0.220313	mg/L	0.0008515	0.39%
QC value within limits for B 249.772 Recovery = 110.16%								
Si 251.611	310.8	0.236391	mg/L	0.0017160	0.236391	mg/L	0.0017160	0.73%
QC value greater than the upper limit for Si 251.611 Recovery = 236.39%								

QC Failed. Continue with analysis.

Sequence No.: 11
Sample ID: ICSA V-329033
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 7
Date Collected: 9/1/2020 11:55:08 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICSA V-329033

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	54071.4	79.5	%	0.66				0.83%
Y 371.029	20357.0	78.1	%	0.18				0.23%
Ag 328.068†	-686.0	-0.0304488	mg/L	0.00051911	-0.0304488	mg/L	0.00051911	1.70%
Al 308.215†	805631.9	554.530	mg/L	5.0396	554.530	mg/L	5.0396	0.91%
QC value within limits for Al 308.215 Recovery = 110.91%								
As 188.979†	-4.4	-0.0360054	mg/L	0.01903826	-0.0360054	mg/L	0.01903826	52.88%
Ba 233.527†	64.6	-0.0018559	mg/L	0.00050802	-0.0018559	mg/L	0.00050802	27.37%
Be 313.107†	-135.4	0.0038292	mg/L	0.00007040	0.0038292	mg/L	0.00007040	1.84%
Ca 315.887†	2258716.5	537.510	mg/L	5.5865	537.510	mg/L	5.5865	1.04%
QC value within limits for Ca 315.887 Recovery = 107.50%								
Cd 228.802†	3.6	-0.0024896	mg/L	0.00050002	-0.0024896	mg/L	0.00050002	20.08%
Co 228.616†	-0.6	0.0078803	mg/L	0.00214005	0.0078803	mg/L	0.00214005	27.16%
Cr 267.716†	-15.1	-0.0018802	mg/L	0.00061967	-0.0018802	mg/L	0.00061967	32.96%
Cu 327.393†	-218.8	-0.0021991	mg/L	0.00093827	-0.0021991	mg/L	0.00093827	42.67%
Fe 273.955†	169876.6	194.982	mg/L	2.2272	194.982	mg/L	2.2272	1.14%
QC value within limits for Fe 273.955 Recovery = 97.49%								
K 404.721†	-35.8	-2099.79	mg/L	24.958	-2099.79	mg/L	24.958	1.19%
Mg 279.077†	741382.9	574.052	mg/L	5.9951	574.052	mg/L	5.9951	1.04%
QC value within limits for Mg 279.077 Recovery = 114.81%								
Mn 257.610†	-460.4	-0.0035495	mg/L	0.00024399	-0.0035495	mg/L	0.00024399	6.87%
Mo 202.031†	-9.3	0.0003762	mg/L	0.00081452	0.0003762	mg/L	0.00081452	216.49%
Na 330.237†	-26.4	0.839986	mg/L	0.1815035	0.839986	mg/L	0.1815035	21.61%
Ni 231.604†	11.0	-0.0049162	mg/L	0.00150457	-0.0049162	mg/L	0.00150457	30.60%
Pb 220.353†	-38.0	0.0121934	mg/L	0.00377100	0.0121934	mg/L	0.00377100	30.93%
Sb 206.836†	3.2	0.0144614	mg/L	0.02135927	0.0144614	mg/L	0.02135927	147.70%
Se 196.026†	-36.8	0.0493922	mg/L	0.01994369	0.0493922	mg/L	0.01994369	40.38%
Sn 189.927†	-22.8	-0.0312609	mg/L	0.00501516	-0.0312609	mg/L	0.00501516	16.04%
Ti 334.940†	-252.3	0.0456693	mg/L	0.00068582	0.0456693	mg/L	0.00068582	1.50%
Tl 190.801†	-3.0	-0.0230612	mg/L	0.00728029	-0.0230612	mg/L	0.00728029	31.57%
V 290.880†	758.5	0.148897	mg/L	0.0005709	0.148897	mg/L	0.0005709	0.38%
Zn 206.200†	0.3	-0.0034990	mg/L	0.00050611	-0.0034990	mg/L	0.00050611	14.46%
B 249.772	5066.8	0.116312	mg/L	0.0111446	0.116312	mg/L	0.0111446	9.58%
Si 251.611	-5.7	0.920575	mg/L	0.0098592	0.920575	mg/L	0.0098592	1.07%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: EF V-326719 8/27
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 105

Autosampler Location: 71
Date Collected: 9/1/2020 12:00:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF V-326719 8/27

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	65946.2	96.9	%	0.23				0.24%
Y 371.029	24769.0	95.1	%	0.51				0.53%
Ag 328.068†	14.2	0.0020013	mg/L	0.00039704	0.0020013	mg/L	0.00039704	19.84%
Al 308.215†	115.3	0.0774371	mg/L	0.00589106	0.0774371	mg/L	0.00589106	7.61%
As 188.979†	-0.8	-0.0045972	mg/L	0.00530204	-0.0045972	mg/L	0.00530204	115.33%
Ba 233.527†	15.6	-0.0065827	mg/L	0.00029754	-0.0065827	mg/L	0.00029754	4.52%
Be 313.107†	-1.7	0.0042994	mg/L	0.00002447	0.0042994	mg/L	0.00002447	0.57%
Ca 315.887†	696.5	0.326833	mg/L	0.0045456	0.326833	mg/L	0.0045456	1.39%
Cd 228.802†	2.1	-0.0029601	mg/L	0.00052904	-0.0029601	mg/L	0.00052904	17.87%
Co 228.616†	-0.7	0.0078753	mg/L	0.00114558	0.0078753	mg/L	0.00114558	14.55%
Cr 267.716†	3.9	0.0004577	mg/L	0.00061207	0.0004577	mg/L	0.00061207	133.74%
Cu 327.393†	2.3	0.0025754	mg/L	0.00024072	0.0025754	mg/L	0.00024072	9.35%
Fe 273.955†	603.1	0.675995	mg/L	0.0043572	0.675995	mg/L	0.0043572	0.64%
K 404.721†	6.0	-4.98902	mg/L	0.456517	-4.98902	mg/L	0.456517	9.15%
Mg 279.077†	180.2	0.281806	mg/L	0.0058278	0.281806	mg/L	0.0058278	2.07%
Mn 257.610†	49.4	0.0114512	mg/L	0.00010638	0.0114512	mg/L	0.00010638	0.93%
Mo 202.031†	3.5	0.0087968	mg/L	0.00145792	0.0087968	mg/L	0.00145792	16.57%
Na 330.237†	26.2	1.81916	mg/L	0.085920	1.81916	mg/L	0.085920	4.72%
Ni 231.604†	2.9	-0.0069552	mg/L	0.00077214	-0.0069552	mg/L	0.00077214	11.10%
Pb 220.353†	7.9	0.0101776	mg/L	0.00156045	0.0101776	mg/L	0.00156045	15.33%
Sb 206.836†	2.7	0.0113551	mg/L	0.00552553	0.0113551	mg/L	0.00552553	48.66%
Se 196.026†	3.1	0.0133020	mg/L	0.00387150	0.0133020	mg/L	0.00387150	29.10%
Sn 189.927†	2.8	0.0061813	mg/L	0.00168927	0.0061813	mg/L	0.00168927	27.33%
Ti 334.940†	12.0	0.0123331	mg/L	0.00005830	0.0123331	mg/L	0.00005830	0.47%
Tl 190.801†	-1.4	0.0013784	mg/L	0.00693061	0.0013784	mg/L	0.00693061	502.81%
V 290.880†	0.3	-0.0029039	mg/L	0.00035903	-0.0029039	mg/L	0.00035903	12.36%
Zn 206.200†	-1.7	-0.0039701	mg/L	0.00017022	-0.0039701	mg/L	0.00017022	4.29%
B 249.772	300.7	0.0459695	mg/L	0.00117123	0.0459695	mg/L	0.00117123	2.55%
Si 251.611	40.0	0.102447	mg/L	0.0006323	0.102447	mg/L	0.0006323	0.62%

Sequence No.: 13 **Autosampler Location: 6**
Sample ID: CCV V-329036 **Date Collected: 9/1/2020 12:04:12 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	59998.9	88.2	%	0.60				0.68%
Y 371.029	22067.1	84.7	%	0.60				0.71%
Ag 328.068†	1487.9	0.100998	mg/L	0.0009825	0.100998	mg/L	0.0009825	0.97%
QC value within limits for Ag 328.068 Recovery = 101.00%								
Al 308.215†	7067.7	4.87731	mg/L	0.012695	4.87731	mg/L	0.012695	0.26%
QC value within limits for Al 308.215 Recovery = 97.55%								
As 188.979†	66.0	0.452409	mg/L	0.0094008	0.452409	mg/L	0.0094008	2.08%
QC value within limits for As 188.979 Recovery = 90.48%								
Ba 233.527†	5168.4	0.490114	mg/L	0.0006854	0.490114	mg/L	0.0006854	0.14%
QC value within limits for Ba 233.527 Recovery = 98.02%								
Be 313.107†	140474.0	0.498540	mg/L	0.0012413	0.498540	mg/L	0.0012413	0.25%
QC value within limits for Be 313.107 Recovery = 99.71%								
Ca 315.887†	212313.5	50.6705	mg/L	0.13907	50.6705	mg/L	0.13907	0.27%
QC value within limits for Ca 315.887 Recovery = 101.34%								
Cd 228.802†	1591.4	0.517075	mg/L	0.0058989	0.517075	mg/L	0.0058989	1.14%
QC value within limits for Cd 228.802 Recovery = 103.42%								
Co 228.616†	1372.9	0.500747	mg/L	0.0043214	0.500747	mg/L	0.0043214	0.86%
QC value within limits for Co 228.616 Recovery = 100.15%								
Cr 267.716†	3613.9	0.557553	mg/L	0.0070356	0.557553	mg/L	0.0070356	1.26%
QC value greater than the upper limit for Cr 267.716 Recovery = 111.51%								
Cu 327.393†	4438.6	0.488590	mg/L	0.0026947	0.488590	mg/L	0.0026947	0.55%
QC value within limits for Cu 327.393 Recovery = 97.72%								
Fe 273.955†	4088.1	4.67634	mg/L	0.010403	4.67634	mg/L	0.010403	0.22%
QC value within limits for Fe 273.955 Recovery = 93.53%								
K 404.721†	1104.0	-0.924759	mg/L	0.6567791	-0.924759	mg/L	0.6567791	71.02%
QC value less than the lower limit for K 404.721 Recovery = -1.85%								
Mg 279.077†	65299.3	50.6910	mg/L	0.19616	50.6910	mg/L	0.19616	0.39%
QC value within limits for Mg 279.077 Recovery = 101.38%								
Mn 257.610†	15938.9	0.479004	mg/L	0.0010194	0.479004	mg/L	0.0010194	0.21%
QC value within limits for Mn 257.610 Recovery = 95.80%								
Mo 202.031†	743.7	0.494263	mg/L	0.0051828	0.494263	mg/L	0.0051828	1.05%
QC value within limits for Mo 202.031 Recovery = 98.85%								
Na 330.237†	2392.4	45.8861	mg/L	0.30902	45.8861	mg/L	0.30902	0.67%
QC value within limits for Na 330.237 Recovery = 91.77%								
Ni 231.604†	2096.0	0.528427	mg/L	0.0060414	0.528427	mg/L	0.0060414	1.14%
QC value within limits for Ni 231.604 Recovery = 105.69%								
Pb 220.353†	377.2	0.503301	mg/L	0.0070872	0.503301	mg/L	0.0070872	1.41%
QC value within limits for Pb 220.353 Recovery = 100.66%								
Sb 206.836†	88.4	0.523298	mg/L	0.0131747	0.523298	mg/L	0.0131747	2.52%
QC value within limits for Sb 206.836 Recovery = 104.66%								
Se 196.026†	134.9	0.496479	mg/L	0.0060843	0.496479	mg/L	0.0060843	1.23%
QC value within limits for Se 196.026 Recovery = 99.30%								
Sn 189.927†	336.1	0.492221	mg/L	0.0074918	0.492221	mg/L	0.0074918	1.52%
QC value within limits for Sn 189.927 Recovery = 98.44%								
Ti 334.940†	16054.9	0.470867	mg/L	0.0013395	0.470867	mg/L	0.0013395	0.28%
QC value within limits for Ti 334.940 Recovery = 94.17%								
Tl 190.801†	102.4	0.496520	mg/L	0.0139739	0.496520	mg/L	0.0139739	2.81%
QC value within limits for Tl 190.801 Recovery = 99.30%								
V 290.880†	3049.1	0.503788	mg/L	0.0034148	0.503788	mg/L	0.0034148	0.68%
QC value within limits for V 290.880 Recovery = 100.76%								
Zn 206.200†	2234.0	0.526877	mg/L	0.0062482	0.526877	mg/L	0.0062482	1.19%
QC value within limits for Zn 206.200 Recovery = 105.38%								
B 249.772	2993.0	0.470765	mg/L	0.0042161	0.470765	mg/L	0.0042161	0.90%
QC value within limits for B 249.772 Recovery = 94.15%								
Si 251.611	10706.4	4.60336	mg/L	0.049499	4.60336	mg/L	0.049499	1.08%
QC value within limits for Si 251.611 Recovery = 92.07%								

QC Failed. Continue with analysis.

Sequence No.: 14
Sample ID: CCB V-329027
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 9/1/2020 12:08:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	65203.7	95.8	%	0.83				0.86%
Y 371.029	24508.3	94.1	%	1.04				1.11%
Ag 328.068†	2.6	0.0011990	mg/L	0.00038107	0.0011990	mg/L	0.00038107	31.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-30.3	-0.0227382	mg/L	0.00482542	-0.0227382	mg/L	0.00482542	21.22%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.6	0.0054677	mg/L	0.00474482	0.0054677	mg/L	0.00474482	86.78%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-1.0	-0.0081828	mg/L	0.00006345	-0.0081828	mg/L	0.00006345	0.78%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	1.7	0.0043116	mg/L	0.00003966	0.0043116	mg/L	0.00003966	0.92%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-44.5	0.150546	mg/L	0.0009704	0.150546	mg/L	0.0009704	0.64%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	1.6	-0.0031254	mg/L	0.00071208	-0.0031254	mg/L	0.00071208	22.78%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-0.4	0.0079716	mg/L	0.00036142	0.0079716	mg/L	0.00036142	4.53%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-0.6	-0.0002277	mg/L	0.00031135	-0.0002277	mg/L	0.00031135	136.74%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	1.0	0.0023615	mg/L	0.00030154	0.0023615	mg/L	0.00030154	12.77%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-2.1	-0.0187143	mg/L	0.00276214	-0.0187143	mg/L	0.00276214	14.76%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-0.6	2.21009	mg/L	0.278100	2.21009	mg/L	0.278100	12.58%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	-1.5	0.141116	mg/L	0.0020328	0.141116	mg/L	0.0020328	1.44%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-1.0	0.0099670	mg/L	0.00005572	0.0099670	mg/L	0.00005572	0.56%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	2.5	0.0081390	mg/L	0.00060912	0.0081390	mg/L	0.00060912	7.48%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-5.2	1.23418	mg/L	0.058671	1.23418	mg/L	0.058671	4.75%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	1.8	-0.0072217	mg/L	0.00054783	-0.0072217	mg/L	0.00054783	7.59%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	2.4	0.0027519	mg/L	0.00081083	0.0027519	mg/L	0.00081083	29.46%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	5.1	0.0252306	mg/L	0.01223159	0.0252306	mg/L	0.01223159	48.48%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.1	0.0094121	mg/L	0.00878979	0.0094121	mg/L	0.00878979	93.39%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.4	0.0026650	mg/L	0.00407267	0.0026650	mg/L	0.00407267	152.82%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	6.0	0.0121524	mg/L	0.00005113	0.0121524	mg/L	0.00005113	0.42%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-2.2	-0.0021118	mg/L	0.00839681	-0.0021118	mg/L	0.00839681	397.61%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	0.9	-0.0027848	mg/L	0.00117059	-0.0027848	mg/L	0.00117059	42.03%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-28.5	-0.0103326	mg/L	0.00013299	-0.0103326	mg/L	0.00013299	1.29%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	48.5	0.0094898	mg/L	0.00039440	0.0094898	mg/L	0.00039440	4.16%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-7.1	0.0801730	mg/L	0.00082319	0.0801730	mg/L	0.00082319	1.03%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333907

Prepared By:	Lucca, Daniela	Department: Metals	ApprovedBy: shiamala
Description:	Hg Intermediate Standard -WARNING	BatchNumber: B-29599	ApproveDate: 09/02/20
Prep Date:	8/28/2020	Concentration: .25 ppm	Checked: Yes
Expiration Date:	8/28/2020	Final Volume: 500 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13311	MERCURY 1000 PPM	.125 ml	1000 ug/ml	
13421	nitric acid	12.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-333908

Prepared By:	Lucca, Daniela	Department: Metals	ApprovedBy: shiamala
Description:	Hg intermediate Control -WARNING	BatchNumber: B-29599	ApproveDate: 09/02/20
Prep Date:	8/28/2020	Concentration: 1.0 ppm	Checked: Yes
Expiration Date:	8/28/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-333945

Prepared By:	Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description:	Hg AQ ICV 20 ppb	BatchNumber: B-29603	ApproveDate: 09/02/20
Prep Date:	8/28/2020	Concentration: 20 ppb	Checked: Yes
Expiration Date:	8/28/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333908	Hg intermediate Control -WARNING	.5 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-333946

Prepared By:	Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description:	Hg AQ CCV 10 ppb	BatchNumber: B-29603	ApproveDate: 09/02/20
Prep Date:	8/28/2020	Concentration: 10 ppb	Checked: Yes
Expiration Date:	8/28/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333908	Hg intermediate Control -WARNING	.25 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-333947

Prepared By:	Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description:	Hg AQ standard blk	BatchNumber: B-29603	ApproveDate: 09/02/20
Prep Date:	8/28/2020	Concentration: 0 ppb	Checked: Yes
Expiration Date:	8/28/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333948

Prepared By: Silva, Amanda
Description: Hg AQ standard .2 ppb
Prep Date: 8/28/2020
Expiration Date: 8/28/2020
Department: Metals
BatchNumber: B-29603
Concentration: .2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333907	Hg Intermediate Standard -WARNING	.02 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-333949

Prepared By: Silva, Amanda
Description: Hg AQ standard .5 ppb
Prep Date: 8/28/2020
Expiration Date: 8/28/2020
Department: Metals
BatchNumber: B-29603
Concentration: .5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333907	Hg Intermediate Standard -WARNING	.05 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-333950

Prepared By: Silva, Amanda
Description: Hg AQ standard 1 ppb
Prep Date: 8/28/2020
Expiration Date: 8/28/2020
Department: Metals
BatchNumber: B-29603
Concentration: 1 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333907	Hg Intermediate Standard -WARNING	.1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-333951

Prepared By: Silva, Amanda
Description: Hg AQ standard 2 ppb
Prep Date: 8/28/2020
Expiration Date: 8/28/2020
Department: Metals
BatchNumber: B-29603
Concentration: 2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333907	Hg Intermediate Standard -WARNING	.2 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-333952

Prepared By: Silva, Amanda
Description: Hg AQ standard 5 ppb
Prep Date: 8/28/2020
Expiration Date: 8/28/2020
Department: Metals
BatchNumber: B-29603
Concentration: 5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333907	Hg Intermediate Standard -WARNING	.5 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-333953

Prepared By: Silva, Amanda
Description: Hg AQ standard 10 ppb
Prep Date: 8/28/2020
Expiration Date: 8/28/2020
Department: Metals
BatchNumber: B-29603
Concentration: 10 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333907	Hg Intermediate Standard -WARNING	1 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333954

Prepared By:	Silva, Amanda	Department:	Metals	ApprovedBy:	shiamala
Description:	Hg AQ standard 25 ppb	BatchNumber:	B-29603	ApproveDate:	09/02/20
Prep Date:	8/28/2020	Concentration:	25 ppb	Checked:	Yes
Expiration Date:	8/28/2020	Final Volume:	25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333907	Hg Intermediate Standard -WARNING	2.5 ml	.25 ppm	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13311

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP	140-051-801	S200130001	06/04/20	12/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-317822

Prepared By: Aliano, Carmela | Department: Metals | ApprovedBy: shiamala
Description: Hydroxylamine Hydrochloride WARNIN | BatchNumber: | ApproveDate: 12/16/19
Prep Date: 12/13/2019 | Concentration: reagent reage | Checked: Yes
Expiration Date: 1/8/2020 | Final Volume: 10 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12651	DI H2O			
12218	Sodium Chloride	1200 g	neat neat	
12619	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-327154

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: 5% Potassium Persulfate WARNING | BatchNumber: | ApproveDate: 05/07/20
Prep Date: 5/7/2020 | Concentration: reagent reage | Checked: Yes
Expiration Date: 11/6/2020 | Final Volume: 12620 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12620	POTASSIUM PERSULFATE	500 g	NEAT neat	

Veritech Lot Number: V-331286

Prepared By: Lucca, Daniela | Department: Metals | ApprovedBy: shiamala
Description: 5% Potassium Permanganate WARNIN | BatchNumber: | ApproveDate: 07/16/20
Prep Date: 7/13/2020 | Concentration: reagent reage | Checked: Yes
Expiration Date: 2/13/2021 | Final Volume: 20 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12621	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-333908

Prepared By: Lucca, Daniela | Department: Metals | ApprovedBy: shiamala
Description: Hg intermediate Control -WARNING | BatchNumber: B-29599 | ApproveDate: 09/02/20
Prep Date: 8/28/2020 | Concentration: 1.0 ppm | Checked: Yes
Expiration Date: 8/28/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-333999

Prepared By: Ransaw, Brianna | Department: WetChem | ApprovedBy: shiamala
Description: 3% HCL WARNING | BatchNumber: | ApproveDate: 09/02/20
Prep Date: 8/31/2020 | Concentration: 3 % | Checked: Yes
Expiration Date: 9/10/2020 | Final Volume: 20 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13130	hydrochloric acid	600 ml	neat neat	3%
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334000

Prepared By:	Ransaw, Brianna	Department: Metals	ApprovedBy: shiamala
Description:	SnCl2 "WARNING:"	BatchNumber:	ApproveDate: 09/02/20
Prep Date:	8/31/2020	Concentration: reagent I	Checked: Yes
Expiration Date:	8/31/2020	Final Volume: 2 l	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333999	3% HCL WARNING	2000 ml	3 %	
13089	STANNOUS CHOLORIDE	26.4 g		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12218

Description
Sodium Chloride

ApprovedBy: akmal
ApproveDate: 12/31/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	SX0420-5	17F145203	12/27/18	12/26/23	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12619

Description
HYDROXYLAMINE HYDROCHLORIDE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LS-1580015	190318-4C	06/25/19	06/24/23	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12620

Description
POTASSIUM PERSULFATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-4445NG	170106-A	06/25/19	08/09/21	Balashanthan, Shi	1	2.5KG	NEAT	NEAT

Veritech Control/Receipt Number: 12621

Description
POTASSIUM PERMANGANATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-T10208	190318-3C	06/25/19	06/24/29	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12651

Description
DI H2O

ApprovedBy: janee
ApproveDate: 10/10/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	07/08/19	07/07/20	Cousineau, Paul	1			

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13089

Description
STANNOUS CHOLORIDE

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB CHEM	LC-P33805	190620-3C	02/15/20	02/14/23	Aliano, Carmela	1	1Gal		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Analysis Begun

Logged In Analyst: usermet
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-90

H26161T
SnC12V-334000
8/31/20
BR

Sample Information File: C:\data-AA\johns\Sample Information\H26161T.sif
Batch ID: H26161T
Results Data Set: H26161T
Results Library: C:\data-AA\johns\Results\Results.mdb

Method Loaded
Method Name: HGCV3 TCLP (7470A)
Method Last Saved: 3/2/2020 12:35:25 PM
Method Description: HgCV3 TCLP (7470A)

8/31/20

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calibration Blank
Date Collected: 8/31/2020 9:36:54 AM
Analyst:
Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0006	0.0001	09:37:40	Yes
2		[0.00]	0.0001	0.0005	0.0001	09:38:13	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	12.29				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 2
Sample ID: .2 PPB
Date Collected: 8/31/2020 9:38:15 AM
Analyst:
Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0012	0.0052	0.0013	09:39:00	Yes
2		[0.2]	0.0012	0.0053	0.0013	09:39:32	Yes
Mean:		[0.2]	0.0012				
SD:		0.0	0.0000				
%RSD:		0.0	1.16				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00614 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 3
Sample ID: .5 PPB
Date Collected: 8/31/2020 9:39:34 AM
Analyst:
Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0029	0.0117	0.0030	09:40:19	Yes
2		[0.5]	0.0029	0.0118	0.0030	09:40:51	Yes
Mean:		[0.5]	0.0029				
SD:		0.0	0.0000				
%RSD:		0.0	0.34				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999763 Slope: 0.00584 Intercept: 0.00002

Sequence No.: 4
Autosampler Location: 4
Sample ID: 1 PPB
Date Collected: 8/31/2020 9:40:53 AM
Analyst:
Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0061	0.0239	0.0062	09:41:38	Yes
2		[1]	0.0060	0.0236	0.0061	09:42:12	Yes
Mean:		[1]	0.0060				
SD:		0	0.0001				
%RSD:		0	0.91				

Standard number 3 applied. [1]
Correlation Coef.: 0.999831 Slope: 0.00602 Intercept: -0.00001

Sequence No.: 5 Autosampler Location: 5
Sample ID: 2 PPB Date Collected: 8/31/2020 9:42:13 AM
Analyst: Data Type: Original

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0117	0.0460	0.0118	09:42:59	Yes
2		[2]	0.0117	0.0452	0.0118	09:43:31	Yes
Mean:		[2]	0.0117				
SD:		0	0.0001				
%RSD:		0	0.45				

Standard number 4 applied. [2]
Correlation Coef.: 0.999863 Slope: 0.00586 Intercept: 0.00004

Sequence No.: 6 Autosampler Location: 6
Sample ID: 5 PPB Date Collected: 8/31/2020 9:43:33 AM
Analyst: Data Type: Original

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0290	0.1126	0.0291	09:44:18	Yes
2		[5]	0.0288	0.1105	0.0289	09:44:51	Yes
Mean:		[5]	0.0289				
SD:		0	0.0001				
%RSD:		0	0.34				

Standard number 5 applied. [5]
Correlation Coef.: 0.999959 Slope: 0.00577 Intercept: 0.00010

Sequence No.: 7 Autosampler Location: 7
Sample ID: 10 PPB Date Collected: 8/31/2020 9:44:52 AM
Analyst: Data Type: Original

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0577	0.2224	0.0578	09:45:38	Yes
2		[10]	0.0578	0.2217	0.0579	09:46:10	Yes
Mean:		[10]	0.0578				
SD:		0	0.0001				
%RSD:		0	0.20				

Standard number 6 applied. [10]
Correlation Coef.: 0.999991 Slope: 0.00577 Intercept: 0.00011

Sequence No.: 8 Autosampler Location: 8
Sample ID: 25 PPB Date Collected: 8/31/2020 9:46:36 AM
Analyst: Data Type: Original

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[25]	0.1444	0.5603	0.1445	09:47:26	Yes
2	[25]	0.1435	0.5591	0.1436	09:47:58	Yes
Mean:	[25]	0.1439				
SD:	0	0.0007				
%RSD:	0	0.45				

Standard number 7 applied. [25]
Correlation Coef.: 0.999998 Slope: 0.00575 Intercept: 0.00013

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.023	0.00	12.3
.2 PPB	0.0012	0.2	0.190	0.00	1.2
.5 PPB	0.0029	0.5	0.486	0.00	0.3
1 PPB	0.0060	1.0	1.026	0.00	0.9
2 PPB	0.0117	2.0	2.013	0.00	0.5
5 PPB	0.0289	5.0	5.001	0.00	0.3
10 PPB	0.0578	10.0	10.015	0.00	0.2
25 PPB	0.1439	25.0	24.992	0.00	0.5

Correlation Coef.: 0.999998 Slope: 0.00575 Intercept: 0.00013

==========

Sequence No.: 9 **Autosampler Location: 10**
Sample ID: ICV (2) **Date Collected: 8/31/2020 9:48:25 AM**
Analyst: **Data Type: Original**

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	19.94	19.94	0.1149	0.4440	0.1150	09:49:11	Yes
2	19.71	19.71	0.1135	0.4389	0.1136	09:49:44	Yes
Mean:	19.83	19.83	0.1142				
SD:	0.165	0.165	0.0009				
%RSD:	0.833	0.833	0.83				

QC value within limits for Hg 253.7 Recovery = 99.14%
All analyte(s) passed QC.

==========

Sequence No.: 10 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 8/31/2020 9:50:07 AM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0000	-0.0001	0.0000	09:50:53	Yes
2	-0.023	-0.023	-0.0000	0.0005	0.0001	09:51:25	Yes
Mean:	-0.027	-0.027	-0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	20.08	20.08	133.85				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 11 **Autosampler Location: 11**
Sample ID: MB 85218 (1) **Date Collected: 8/31/2020 9:51:27 AM**
Analyst: **Data Type: Original**

Replicate Data: MB 85218 (1)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.050	0.050	0.0004	0.0018	0.0005	09:52:13	Yes
2	0.050	0.050	0.0004	0.0017	0.0005	09:52:46	Yes
Mean:	0.050	0.050	0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.179	0.179	0.12				

Sequence No.: 12 Autosampler Location: 12
Sample ID: LCS 85218 Date Collected: 8/31/2020 9:52:47 AM
Analyst: Data Type: Original

Replicate Data: LCS 85218

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.52	10.52	0.0607	0.2341	0.0608	09:53:33	Yes
2	10.39	10.39	0.0599	0.2322	0.0600	09:54:05	Yes
Mean:	10.46	10.46	0.0603				
SD:	0.091	0.091	0.0005				
%RSD:	0.873	0.873	0.87				

Sequence No.: 13 Autosampler Location: 13
Sample ID: LCS MR 85218 Date Collected: 8/31/2020 9:54:29 AM
Analyst: Data Type: Original

Replicate Data: LCS MR 85218

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.45	10.45	0.0603	0.2335	0.0603	09:55:17	Yes
2	10.45	10.45	0.0603	0.2333	0.0603	09:55:49	Yes
Mean:	10.45	10.45	0.0603				
SD:	0.001	0.001	0.0000				
%RSD:	0.008	0.008	0.01				

Sequence No.: 14 Autosampler Location: 14
Sample ID: AD18923-001 Date Collected: 8/31/2020 9:56:13 AM
Analyst: Data Type: Original

Replicate Data: AD18923-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.010	-0.010	0.0001	0.0003	0.0002	09:57:02	Yes
2	-0.009	-0.009	0.0001	0.0005	0.0002	09:57:34	Yes
Mean:	-0.009	-0.009	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	7.986	7.986	5.42				

Sequence No.: 15 Autosampler Location: 15
Sample ID: AD18923-001 MR Date Collected: 8/31/2020 9:57:36 AM
Analyst: Data Type: Original

Replicate Data: AD18923-001 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	0.0000	0.0003	0.0001	09:58:21	Yes
2	-0.023	-0.023	-0.0000	0.0001	0.0001	09:58:54	Yes
Mean:	-0.020	-0.020	0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	23.50	23.50	143.19				

Sequence No.: 16 Autosampler Location: 16
Sample ID: AD18923-001 MS 1 Date Collected: 8/31/2020 9:58:55 AM
Analyst: Data Type: Original

Replicate Data: AD18923-001 MS 1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.42	10.42	0.0601	0.2289	0.0602	09:59:40	Yes
2	10.54	10.54	0.0608	0.2307	0.0609	10:00:13	Yes
Mean:	10.48	10.48	0.0604				

SD:	0.087	0.087	0.0005
%RSD:	0.827	0.827	0.82

Sequence No.: 17 Autosampler Location: 17
Sample ID: AD18922-001 Date Collected: 8/31/2020 10:00:38 AM
Analyst: Data Type: Original

Replicate Data: AD18922-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.019	-0.019	0.0000	-0.0003	0.0001	10:01:27	Yes
2	-0.022	-0.022	0.0000	-0.0005	0.0001	10:02:00	Yes
Mean:	-0.020	-0.020	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	10.01	10.01	76.56				

Sequence No.: 18 Autosampler Location: 18
Sample ID: AD18923-002 Date Collected: 8/31/2020 10:02:02 AM
Analyst: Data Type: Original

Replicate Data: AD18923-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.027	-0.027	-0.0000	-0.0006	0.0001	10:02:47	Yes
2	-0.022	-0.022	0.0000	-0.0002	0.0001	10:03:20	Yes
Mean:	-0.024	-0.024	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	15.53	15.53	281.47				

Sequence No.: 19 Autosampler Location: 19
Sample ID: AD18935-001 Date Collected: 8/31/2020 10:03:21 AM
Analyst: Data Type: Original

Replicate Data: AD18935-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.024	-0.024	-0.0000	-0.0004	0.0001	10:04:10	Yes
2	-0.022	-0.022	0.0000	-0.0003	0.0001	10:04:43	Yes
Mean:	-0.023	-0.023	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	6.910	6.910	951.48				

Sequence No.: 20 Autosampler Location: 20
Sample ID: AD18935-002 Date Collected: 8/31/2020 10:04:44 AM
Analyst: Data Type: Original

Replicate Data: AD18935-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.019	-0.019	0.0000	-0.0002	0.0001	10:05:30	Yes
2	-0.019	-0.019	0.0000	-0.0000	0.0001	10:06:02	Yes
Mean:	-0.019	-0.019	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.446	0.446	2.06				

Sequence No.: 21 Autosampler Location: 9
Sample ID: CCV Date Collected: 8/31/2020 10:06:03 AM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	10.55	10.55	0.0608	0.2353	0.0609	10:06:50	Yes
2	10.37	10.37	0.0598	0.2250	0.0599	10:07:22	Yes
Mean:	10.46	10.46	0.0603				
SD:	0.128	0.128	0.0007				
%RSD:	1.227	1.227	1.22				

QC value within limits for Hg 253.7 Recovery = 104.61%
All analyte(s) passed QC.

==========

Sequence No.: 22 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 8/31/2020 10:07:44 AM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.033	-0.033	-0.0001	-0.0003	0.0000	10:08:31	Yes
2	-0.034	-0.034	-0.0001	-0.0003	0.0000	10:09:03	Yes
Mean:	-0.034	-0.034	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.798	0.798	2.49				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 23 **Autosampler Location: 30**
Sample ID: AD18935-003 5D **Date Collected: 8/31/2020 10:09:05 AM**
Analyst: **Data Type: Original**

Replicate Data: AD18935-003 5D

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0001	0.0001	0.0000	10:09:52	Yes
2	-0.040	-0.040	-0.0001	-0.0003	-0.0000	10:10:25	Yes
Mean:	-0.037	-0.037	-0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	12.01	12.01	31.82				

==========

Sequence No.: 24 **Autosampler Location: 21**
Sample ID: AD18935-003 **Date Collected: 8/31/2020 10:10:26 AM**
Analyst: **Data Type: Original**

Replicate Data: AD18935-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.023	-0.023	-0.0000	0.0005	0.0001	10:11:12	Yes
2	-0.031	-0.031	-0.0000	0.0001	0.0000	10:11:44	Yes
Mean:	-0.027	-0.027	-0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	20.07	20.07	131.45				

==========

Sequence No.: 25 **Autosampler Location: 22**
Sample ID: AD18934-001 **Date Collected: 8/31/2020 10:11:46 AM**
Analyst: **Data Type: Original**

Replicate Data: AD18934-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.021	-0.021	0.0000	-0.0002	0.0001	10:12:31	Yes
2	-0.015	-0.015	0.0000	0.0002	0.0001	10:13:04	Yes
Mean:	-0.018	-0.018	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	23.86	23.86	78.52				

==========

Sequence No.: 26 **Autosampler Location: 23**

Sample ID: AD18934-002 Date Collected: 8/31/2020 10:13:05 AM
Analyst: Data Type: Original

Replicate Data: AD18934-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	0.0000	0.0002	0.0001	10:13:51	Yes
2	-0.009	-0.009	0.0001	0.0003	0.0002	10:14:23	Yes
Mean:	-0.013	-0.013	0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	39.42	39.42	48.15				

Sequence No.: 27 Autosampler Location: 24
Sample ID: AD18934-003 Date Collected: 8/31/2020 10:14:24 AM
Analyst: Data Type: Original

Replicate Data: AD18934-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0001	0.0002	0.0002	10:15:10	Yes
2	-0.014	-0.014	0.0001	0.0003	0.0001	10:15:42	Yes
Mean:	-0.013	-0.013	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	14.60	14.60	17.80				

Sequence No.: 28 Autosampler Location: 25
Sample ID: AD18934-004 Date Collected: 8/31/2020 10:15:44 AM
Analyst: Data Type: Original

Replicate Data: AD18934-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.021	-0.021	0.0000	0.0001	0.0001	10:16:30	Yes
2	-0.019	-0.019	0.0000	0.0003	0.0001	10:17:02	Yes
Mean:	-0.020	-0.020	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	7.713	7.713	60.69				

Sequence No.: 29 Autosampler Location: 26
Sample ID: AD18934-005 Date Collected: 8/31/2020 10:17:03 AM
Analyst: Data Type: Original

Replicate Data: AD18934-005

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.023	-0.023	0.0000	0.0002	0.0001	10:17:49	Yes
2	-0.022	-0.022	0.0000	0.0002	0.0001	10:18:22	Yes
Mean:	-0.022	-0.022	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	3.014	3.014	106.03				

Sequence No.: 30 Autosampler Location: 27
Sample ID: EF V-333199 A Date Collected: 8/31/2020 10:18:23 AM
Analyst: Data Type: Original

Replicate Data: EF V-333199 A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	0.0001	0.0005	0.0001	10:19:08	Yes
2	-0.013	-0.013	0.0001	0.0002	0.0001	10:19:41	Yes
Mean:	-0.013	-0.013	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	3.299	3.299	4.36				

Sequence No.: 31 Autosampler Location: 28
Sample ID: EF V-333199 B Date Collected: 8/31/2020 10:19:42 AM
Analyst: Data Type: Original

Replicate Data: EF V-333199 B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.018	-0.018	0.0000	0.0001	0.0001	10:20:31	Yes
2	-0.018	-0.018	0.0000	0.0000	0.0001	10:21:03	Yes
Mean:	-0.018	-0.018	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	2.113	2.113	7.75				

Sequence No.: 32 Autosampler Location: 29
Sample ID: EF V-326719 Date Collected: 8/31/2020 10:21:04 AM
Analyst: Data Type: Original

Replicate Data: EF V-326719

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	0.0000	-0.0000	0.0001	10:21:50	Yes
2	-0.014	-0.014	0.0001	0.0003	0.0001	10:22:22	Yes
Mean:	-0.015	-0.015	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	9.739	9.739	17.11				

Sequence No.: 33 Autosampler Location: 9
Sample ID: CCV Date Collected: 8/31/2020 10:22:24 AM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.46	10.46	0.0603	0.2272	0.0604	10:23:11	Yes
2	10.43	10.43	0.0601	0.2252	0.0602	10:23:43	Yes
Mean:	10.44	10.44	0.0602				
SD:	0.021	0.021	0.0001				
%RSD:	0.205	0.205	0.20				

QC value within limits for Hg 253.7 Recovery = 104.41%
All analyte(s) passed QC.

Sequence No.: 34 Autosampler Location: 1
Sample ID: CCB Date Collected: 8/31/2020 10:24:05 AM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0001	-0.0003	0.0000	10:24:52	Yes
2	-0.033	-0.033	-0.0001	-0.0002	0.0000	10:25:24	Yes
Mean:	-0.033	-0.033	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.615	0.615	1.94				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

TCLP
Metal Data
Digestion Logbook Data

Hampton-Clarke, Inc.

LEACHATE PREPARATION LOG
(TCLP, SPLP)

Start Date: 8/27/20 TIME: 14:51 Finish Date: 8/28/20

**TCLP Ext. Fluid #1 pH: 4.91 (criteria: 4.93 ± 0.05)
**TCLP Ext. Fluid #2 pH: 2.88 (criteria: 2.88 ± 0.05)
**SPLP Ext. Fluid #3 pH: _____ (criteria: 4.20 ± 0.05)

Sample #	pH (units)	pH in HCL (units)	Final pH (units)	Ext. Fluid (number)	Wt./Vol of Sample (g or mL)	Start Time	Finish Time	Filter Time	Analyst (s)	Ext. Type*	Comments
18923-001	10.04	5.55	5.97	326719	150g/2L	17:25	10:05	11:00	EF	T	Balance ID: 037 MET+ORG
18934-001	7.29	1.78	5.03	333199	100g/2L			11:50			pH Meter ID: B-38168 MET
-002	9.26	1.76	6.04					11:55			Pipette ID: 155
-003	9.31	1.86	6.54					12:05			
-004	9.65	1.87	6.62					12:10			
-005	8.98	1.94	6.44					12:15			
333199 18935-003	7.05	2.31	5.35	~~326719~~ 333199	50g/1L			11:10			MET+ORG
EF1 333199	4.91	—	4.93	333199	3L			11:40			
EF2 326719	2.88	—	2.92	326719	3L			11:30			
18923-002	—	—	6.70	—	2L	17:38	—	17:55			MET+ORG
18935-001	—	—	9.99	—	0.25L	10:10	—	10:40			
-002	—	—	10.40	—	0.15L	10:10	—	10:50			

*Ext. Type: TCLP = T (Method 1311) LAMP=L (Methods 1311 / ANSI/NEMA C78.LL 1256-2003)
SPLP = P (Method 1312) MEP=M (Method 1320)
ZHE = Z (Method 1311/1312)

** The pH of the extraction fluid must be checked prior to use and must be within limits specified above

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: (3010A) 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 26161 Analyst: ANS

QC Number: 85218 Prep Date: 8/28/20

Matrix: TCLP Reviewed By: [signature]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS	↓	↓				--	
LCSD						--	
1. A018923-001					CF 8/27 326719	18923-001	Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate					↓	↓	
MR -001							
MS -001	↓	↓			↓		Balance used: N/A
~~MSD~~							Pipettes used: 149
2. A018922-001	50ml	50ml			CF 333199 8/27		
3. A018923-002	↓	↓			↓		Hot Block used: 9
4. A018935-001	5ml	50ml					
5. -002	5ml	50ml					
6. -003	50ml	50ml			↓		
7. A018934-001	↓	↓			CF 333199 8/28		
8. -002					↓		
9. -003							
10. -004							
11. -005	↓	↓			↓		
12. CF1 333199 8/27							
13. CF1 333199 8/28							
14. CF2 326719 8/27						↓	
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 93.2 C (90-95° C) Start Time: 13:00 End Time: 15:00

	Volume mL	Lot #
LCS, LCSD	0.25ml	V- 13177, 13178,
LLLCS, LLLCSD		V- 331992
MS, MSD	0.25ml	V- 13177, 13178,
LLMS, LLMSD		V- 331982

Acid	Vol mL	Lot#
HNO_3	3	V- 13421
HCl		V-
H_2O_2		V-

Acid	Vol mL	Lot#
1:1 HNO_3		V-
1:1 HCl	5ml	V- 331024

Relinquished By ANS Date 8/28/20

Received By [signature] Date 8/28/2020

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2018 DOD.DOC

HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 (7470A) 7471B OTHER_____

Batch No.:* 26161

QC Number: 85218

Matrix: TCLP

Analyst: ANS

Prep Date: 8/28/20

Review By: BK

LAB ID#	MERCURY INITIAL	MERCURY FINAL	COMMENTS	STANDARDS
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 333947
LCS				
LCSD				STD 0.2 ppb V- 333948
1 AD 18923-001				STD 0.5 ppb V- 333949
MR -001				STD 1.0 ppb V- 333950
MS -001				STD 2.0 ppb V- 333951
MSD -001				STD 5.0 ppb V- 333952
2 AD 18922-001				STD 10.0 ppb V- 333953
3 AD 18923-002 (F)			pH < 2	STD 25.0 ppb V- 333954
4 AD 18935-001 (D)	5	25ml		ICV 10.0 ppb V- 333945
5 -002 (F)				CCV 20.0 ppb V- 333946
6 -003	25ml	25ml		
7 AD 18934-001				
8 -002				Balance used: N/A
9 -003				Pipettes used: 159, 143
10 -004				
11 -005				Hot Block used: 7
12 EF1 333199 8/27/20				
13 EF1 333199 8/28/20				
14 EF2 326719 8/27/20				
15				
16				
17				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 331286	3.75	HNO3	0.625	V- 13421
$K_2S_2O_8$: V- 327154	2.0	HCl		V-
NH_2OH: V- 317822	1.5	H2SO4	1.25	V- 13343
		Aqua Regia		V-

**Block Temp.: °F 92.2

Time In Block: 13:00

Time Out of Block: 15:00

Spike Volume & Lot #

☐ LCS V- 333908 0.15g (0.23 ml)

☐ MS V- 333908 0.250 ml

Standards/Control Batch B- 29603

StartTime: 13:00

EndTime: 15:30

**Temperature

245.1 / 7470A: 90-95C

7471B : 92-98C

Relinquished By: ANS

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

HG PREP 2018

Hampton-Clarke
Analytical & Field Services

Last Page of Report

Hampton-Clarke
Analytical & Field Services

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800-426-9992 · 973-244-9770
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Project: Duofold- 7 Spruce St.

Client PO: HER1500.P2

Report To: HRP Associates. Inc.
1 Fairchild Square
Suite 110
Clifton Park, NY 12065
Attn: Stefan Truex

Received Date: 8/28/2020

Report Date: 9/16/2020

Deliverables: NYDOH-CatB

Lab ID: AD18955

Lab Project No: 0082803

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

Sean Berls - Quality Assurance Officer OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

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SDG Narrative

HC Case Narrative

Client: HRP Associates, Inc.
Project: Duofold-7 Spruce St.

HC Project: 0082803

Hampton-Clarke (HC) received the following samples on 8/28/2020:

Client ID	HC Sample ID	Matrix	Analysis
HRPB-3	AD18955-001	Soil/Terracore	% Solids SM2540G, Cyanide (Soil/Waste) 9012B, Cr3 (Trivalent), Oxidation-Reduction Potential, pH 9040C/9045D, Cr (Hexavalent) 7196A, Mercury (Soil/Waste) 7471B, Mercury (TCLP) 7470A, TCLP Metals 6010D, TAL Metals 6010D, TAL Metals 6020B, TCLP Metals Extraction 1311, Volatile Organics (no search) 8260
HRPB-3 MS	AD18955-002	Soil/Terracore	% Solids SM2540G, Cyanide (Soil/Waste) 9012B, Oxidation-Reduction Potential, pH 9040C/9045D, Cr (Hexavalent) 7196A, Mercury (Soil/Waste) 7471B, Mercury (TCLP) 7470A, TCLP Metals 6010D, TAL Metals 6010D, TAL Metals 6020B, TCLP Metals Extraction 1311, Volatile Organics (no search) 8260
HRPB-3 MSD	AD18955-003	Soil/Terracore	% Solids SM2540G, Cyanide (Soil/Waste) 9012B, Oxidation-Reduction Potential, pH 9040C/9045D, Cr (Hexavalent) 7196A, Mercury (Soil/Waste) 7471B, Mercury (TCLP) 7470A, TCLP Metals 6010D, TAL Metals 6010D, TAL Metals 6020B, TCLP Metals Extraction 1311, Volatile Organics (no search) 8260
Duplicate	AD18955-004	Soil/Terracore	% Solids SM2540G, Cyanide (Soil/Waste) 9012B, Cr3 (Trivalent), Oxidation-Reduction Potential, pH 9040C/9045D, Cr (Hexavalent) 7196A, Mercury (Soil/Waste) 7471B, Mercury (TCLP) 7470A, TCLP Metals 6010D, TAL Metals 6010D, TAL Metals 6020B, TCLP Metals Extraction 1311, Volatile Organics (no search) 8260
HRPB-2	AD18955-005	Soil/Terracore	% Solids SM2540G, Cyanide (Soil/Waste) 9012B, Cr3 (Trivalent), Oxidation-Reduction Potential, pH 9040C/9045D, Cr (Hexavalent) 7196A, Mercury (Soil/Waste) 7471B, Mercury (TCLP) 7470A, TCLP Metals 6010D, TAL Metals 6010D, TAL Metals 6020B, TCLP Metals Extraction 1311, Volatile Organics (no search) 8260
Trip blank	AD18955-006	Aqueous	Volatile Organics (no search) 8260

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Volatile Organic Analysis:

Methylene chloride was recovered in samples AD18955-001, -005 due to possible laboratory contamination.

The Method Blank Spike for batch 87763 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The Method Blank Spike, MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 87762 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Metals Analysis:

The Post Spike, Matrix Spike and/or Matrix Spike Duplicate for batch 85228 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The RPD between the QC sample and the Method Replicate had recoveries outside QC limits in batch 85228. Please refer to the applicable Form 6/9 for the recoveries.

The MS/MSD RPD had recoveries outside QC limits in batch 85228. Please refer to the applicable Form 6/9 for the recoveries.

The serial dilution for batch 85228 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

Wet Chemistry Analysis:

The MS Insoluble for Hexavalent Chromium, batch 778, recovered outside the QC limits. The batch was reset and recoveries confirmed. The results from first analysis are reported.

Samples AD18955-001, -002, -003, -004, -005 were received and analyzed outside the 15 minute hold time for Redox Potential. The samples were analyzed for Redox Potential using SM 2580B. SM 2580B is not a NELAP accredited parameter.

TCLP Metals Analysis:

QC Samples AD18955-001(MR), -002(MS), -003(MSD) were reported at a dilution for Se due to Ca over linear range.

Samples AD18955-004, -005 were reported at a dilution for Se due to Ca over linear range.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Sean Berls Quality Assurance Officer	Or	Jean Revolus Laboratory Director	9/16/20 Date

Reporting Limit Definitions

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

LCS = Laboratory Control Spike

MBS = Method Blank Spike

MS = Matrix Spike

MSD = Matrix Spike Duplicate

MDL = Method Detection Limit

NA = Not Applicable

ND = Not Detected

PS = Post Digestion Spike

RL* = Reporting Limit

RT = Retention Time

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Data Package Summary Forms

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0082803

Sample ID: HRPB-3
Lab#: AD18955-001
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		81

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.99	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.2	10

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	0.17

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		250

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		7.9
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	12	97
Chromium	1	mg/kg	6.2	10
Copper	1	mg/kg	6.2	29
Lead	1	mg/kg	6.2	440
Manganese	1	mg/kg	12	790
Nickel	1	mg/kg	6.2	17
Zinc	1	mg/kg	12	73

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.25	8.5
Beryllium	1	mg/kg	0.25	ND
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result

Sample ID: HRPB-3 **Collection Date:** 8/27/2020
Lab#: AD18955-001 **Receipt Date:** 8/28/2020
Matrix: Soil/Terracore

Arsenic	1	mg/l	0.10	ND
Barium	**1**	**mg/l**	**0.25**	**0.49**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	5	mg/l	0.50	ND
Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.835	mg/kg	0.0021	ND
1,1,2,2-Tetrachloroethane	0.835	mg/kg	0.0021	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.835	mg/kg	0.0021	ND
1,1,2-Trichloroethane	0.835	mg/kg	0.0021	ND
1,1-Dichloroethane	0.835	mg/kg	0.0021	ND
1,1-Dichloroethene	0.835	mg/kg	0.0021	ND
1,2,3-Trichloropropane	0.835	mg/kg	0.0021	ND
1,2,4-Trimethylbenzene	0.835	mg/kg	0.0010	ND
1,2-Dichlorobenzene	0.835	mg/kg	0.0021	ND
1,2-Dichloroethane	0.835	mg/kg	0.0021	ND
1,2-Dichloropropane	0.835	mg/kg	0.0021	ND
1,3,5-Trimethylbenzene	0.835	mg/kg	0.0010	ND
1,3-Dichlorobenzene	0.835	mg/kg	0.0021	ND
1,3-Dichloropropane	0.835	mg/kg	0.0021	ND
1,4-Dichlorobenzene	0.835	mg/kg	0.0021	ND
1,4-Dioxane	0.835	mg/kg	0.10	ND
2-Butanone	0.835	mg/kg	0.0021	ND
2-Chloroethylvinylether	0.835	mg/kg	0.0021	ND
2-Hexanone	0.835	mg/kg	0.0021	ND
4-Isopropyltoluene	0.835	mg/kg	0.0010	ND
4-Methyl-2-pentanone	0.835	mg/kg	0.0021	ND
Acetone	0.835	mg/kg	0.010	ND
Acrolein	0.835	mg/kg	0.010	ND
Acrylonitrile	0.835	mg/kg	0.0021	ND
Benzene	0.835	mg/kg	0.0010	ND
Bromodichloromethane	0.835	mg/kg	0.0021	ND
Bromoform	0.835	mg/kg	0.0021	ND
Bromomethane	0.835	mg/kg	0.0021	ND
Carbon disulfide	0.835	mg/kg	0.0021	ND
Carbon tetrachloride	0.835	mg/kg	0.0021	ND
Chlorobenzene	0.835	mg/kg	0.0021	ND
Chloroethane	0.835	mg/kg	0.0021	ND
Chloroform	0.835	mg/kg	0.0021	ND
Chloromethane	0.835	mg/kg	0.0021	ND
cis-1,2-Dichloroethene	0.835	mg/kg	0.0021	ND
cis-1,3-Dichloropropene	0.835	mg/kg	0.0021	ND
Dibromochloromethane	0.835	mg/kg	0.0021	ND
Dichlorodifluoromethane	0.835	mg/kg	0.0021	ND
Ethylbenzene	0.835	mg/kg	0.0010	ND
Isopropylbenzene	0.835	mg/kg	0.0010	ND
m&p-Xylenes	0.835	mg/kg	0.0010	ND
Methylene chloride	**0.835**	**mg/kg**	**0.0021**	**0.0052**
Methyl-t-butyl ether	0.835	mg/kg	0.0010	ND
n-Butylbenzene	0.835	mg/kg	0.0010	ND
n-Propylbenzene	0.835	mg/kg	0.0010	ND
o-Xylene	0.835	mg/kg	0.0010	ND

Sample ID: HRPB-3 **Collection Date:** 8/27/2020
Lab#: AD18955-001 **Receipt Date:** 8/28/2020
Matrix: Soil/Terracore

sec-Butylbenzene	0.835	mg/kg	0.0010	ND
Styrene	0.835	mg/kg	0.0021	ND
t-Butyl Alcohol	0.835	mg/kg	0.010	ND
t-Butylbenzene	0.835	mg/kg	0.0010	ND
Tetrachloroethene	**0.835**	**mg/kg**	**0.0021**	**0.011**
Toluene	0.835	mg/kg	0.0010	ND
trans-1,2-Dichloroethene	0.835	mg/kg	0.0021	ND
trans-1,3-Dichloropropene	0.835	mg/kg	0.0021	ND
Trichloroethene	**0.835**	**mg/kg**	**0.0021**	**0.022**
Trichlorofluoromethane	0.835	mg/kg	0.0021	ND
Vinyl chloride	0.835	mg/kg	0.0021	ND
Xylenes (Total)	0.835	mg/kg	0.0010	ND

Sample ID: HRPB-3 MS
Lab#: AD18955-002
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		79

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.0	21

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	5.1

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	2.1

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	0.010

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		250

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.0
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	13	86
Chromium	1	mg/kg	6.3	70
Copper	1	mg/kg	6.3	82
Lead	1	mg/kg	6.3	69
Manganese	1	mg/kg	13	330
Nickel	1	mg/kg	6.3	78
Zinc	1	mg/kg	13	120

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.25	60
Beryllium	1	mg/kg	0.25	50
Selenium	1	mg/kg	2.5	51
Silver	1	mg/kg	0.25	9.9

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	0.51
Barium	1	mg/l	0.25	0.87
Cadmium	1	mg/l	0.050	0.53
Chromium	1	mg/l	0.10	0.52
Lead	1	mg/l	0.050	0.50
Nickel	1	mg/l	0.10	0.50
Selenium	5	mg/l	0.50	0.57
Silver	1	mg/l	0.050	0.11

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result

Sample ID: HRPB-3 MS
Lab#: AD18955-002
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

1,1,1-Trichloroethane	0.696	mg/kg	0.0018	0.043
1,1,2,2-Tetrachloroethane	0.696	mg/kg	0.0018	0.035
1,1,2-Trichloro-1,2,2-trifluoroethane	0.696	mg/kg	0.0018	0.046
1,1,2-Trichloroethane	0.696	mg/kg	0.0018	0.039
1,1-Dichloroethane	0.696	mg/kg	0.0018	0.043
1,1-Dichloroethene	0.696	mg/kg	0.0018	0.046
1,2,3-Trichloropropane	0.696	mg/kg	0.0018	0.032
1,2,4-Trimethylbenzene	0.696	mg/kg	0.00088	0.034
1,2-Dichlorobenzene	0.696	mg/kg	0.0018	0.032
1,2-Dichloroethane	0.696	mg/kg	0.0018	0.044
1,2-Dichloropropane	0.696	mg/kg	0.0018	0.043
1,3,5-Trimethylbenzene	0.696	mg/kg	0.00088	0.038
1,3-Dichlorobenzene	0.696	mg/kg	0.0018	0.031
1,3-Dichloropropane	0.696	mg/kg	0.0018	0.038
1,4-Dichlorobenzene	0.696	mg/kg	0.0018	0.030
1,4-Dioxane	0.696	mg/kg	0.088	1.1
2-Butanone	0.696	mg/kg	0.0018	0.030
2-Chloroethylvinylether	0.696	mg/kg	0.0018	0.084
2-Hexanone	0.696	mg/kg	0.0018	0.027
4-Isopropyltoluene	0.696	mg/kg	0.00088	0.035
4-Methyl-2-pentanone	0.696	mg/kg	0.0018	0.030
Acetone	0.696	mg/kg	0.0088	0.14
Acrolein	0.696	mg/kg	0.0088	0.22
Acrylonitrile	0.696	mg/kg	0.0018	0.030
Benzene	0.696	mg/kg	0.00088	0.043
Bromodichloromethane	0.696	mg/kg	0.0018	0.044
Bromoform	0.696	mg/kg	0.0018	0.058
Bromomethane	0.696	mg/kg	0.0018	0.044
Carbon disulfide	0.696	mg/kg	0.0018	0.042
Carbon tetrachloride	0.696	mg/kg	0.0018	0.046
Chlorobenzene	0.696	mg/kg	0.0018	0.035
Chloroethane	0.696	mg/kg	0.0018	0.046
Chloroform	0.696	mg/kg	0.0018	0.044
Chloromethane	0.696	mg/kg	0.0018	0.049
cis-1,2-Dichloroethene	0.696	mg/kg	0.0018	0.043
cis-1,3-Dichloropropene	0.696	mg/kg	0.0018	0.040
Dibromochloromethane	0.696	mg/kg	0.0018	0.040
Dichlorodifluoromethane	0.696	mg/kg	0.0018	0.055
Ethylbenzene	0.696	mg/kg	0.00088	0.038
Isopropylbenzene	0.696	mg/kg	0.00088	0.036
m&p-Xylenes	0.896	mg/kg	0.00088	0.069
Methylene chloride	0.696	mg/kg	0.0018	0.047
Methyl-t-butyl ether	0.696	mg/kg	0.00088	0.048
n-Butylbenzene	0.696	mg/kg	0.00088	0.032
n-Propylbenzene	0.696	mg/kg	0.00088	0.034
o-Xylene	0.696	mg/kg	0.00088	0.035
sec-Butylbenzene	0.696	mg/kg	0.00088	0.036
Styrene	0.696	mg/kg	0.0018	0.033
t-Butyl Alcohol	0.696	mg/kg	0.0088	0.10
t-Butylbenzene	0.696	mg/kg	0.00088	0.035
Tetrachloroethene	0.696	mg/kg	0.0018	0.045
Toluene	0.696	mg/kg	0.00088	0.036
trans-1,2-Dichloroethene	0.696	mg/kg	0.0018	0.044
trans-1,3-Dichloropropene	0.696	mg/kg	0.0018	0.039
Trichloroethene	0.696	mg/kg	0.0018	0.064
Trichlorofluoromethane	0.696	mg/kg	0.0018	0.045
Vinyl chloride	0.696	mg/kg	0.0018	0.049

Sample ID: HRPB-3 MS
Lab#: AD18955-002
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

Xylenes (Total)	0.696	mg/kg	0.00088	0.10

Sample ID: HRPB-3 MSD
Lab#: AD18955-003
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		85

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	50	mg/kg	47	400

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.28	5.1

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.098	1.9

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	0.0095

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		250

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		7.9
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	12	99
Chromium	1	mg/kg	5.9	67
Copper	1	mg/kg	5.9	81
Lead	1	mg/kg	5.9	64
Manganese	1	mg/kg	12	700
Nickel	1	mg/kg	5.9	72
Zinc	1	mg/kg	12	120

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.24	59
Beryllium	1	mg/kg	0.24	47
Selenium	1	mg/kg	2.4	48
Silver	1	mg/kg	0.24	9.5

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	0.55
Barium	1	mg/l	0.25	0.94
Cadmium	1	mg/l	0.050	0.54
Chromium	1	mg/l	0.10	0.53
Lead	1	mg/l	0.050	0.50
Nickel	1	mg/l	0.10	0.51
Selenium	5	mg/l	0.50	0.62
Silver	1	mg/l	0.050	0.11

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result

Sample ID: HRPB-3 MSD
Lab#: AD18955-003
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

1,1,1-Trichloroethane	0.803	mg/kg	0.0019	0.049
1,1,2,2-Tetrachloroethane	0.803	mg/kg	0.0019	0.042
1,1,2-Trichloro-1,2,2-trifluoroethane	0.803	mg/kg	0.0019	0.053
1,1,2-Trichloroethane	0.803	mg/kg	0.0019	0.044
1,1-Dichloroethane	0.803	mg/kg	0.0019	0.049
1,1-Dichloroethene	0.803	mg/kg	0.0019	0.051
1,2,3-Trichloropropane	0.803	mg/kg	0.0019	0.039
1,2,4-Trimethylbenzene	0.803	mg/kg	0.00094	0.038
1,2-Dichlorobenzene	0.803	mg/kg	0.0019	0.037
1,2-Dichloroethane	0.803	mg/kg	0.0019	0.050
1,2-Dichloropropane	0.803	mg/kg	0.0019	0.047
1,3,5-Trimethylbenzene	0.803	mg/kg	0.00094	0.042
1,3-Dichlorobenzene	0.803	mg/kg	0.0019	0.036
1,3-Dichloropropane	0.803	mg/kg	0.0019	0.044
1,4-Dichlorobenzene	0.803	mg/kg	0.0019	0.035
1,4-Dioxane	0.803	mg/kg	0.094	1.2
2-Butanone	0.803	mg/kg	0.0019	0.033
2-Chloroethylvinylether	0.803	mg/kg	0.0019	0.095
2-Hexanone	0.803	mg/kg	0.0019	0.032
4-Isopropyltoluene	0.803	mg/kg	0.00094	0.038
4-Methyl-2-pentanone	0.803	mg/kg	0.0019	0.035
Acetone	0.803	mg/kg	0.0094	0.15
Acrolein	0.803	mg/kg	0.0094	0.25
Acrylonitrile	0.803	mg/kg	0.0019	0.033
Benzene	0.803	mg/kg	0.00094	0.048
Bromodichloromethane	0.803	mg/kg	0.0019	0.050
Bromoform	0.803	mg/kg	0.0019	0.066
Bromomethane	0.803	mg/kg	0.0019	0.049
Carbon disulfide	0.803	mg/kg	0.0019	0.047
Carbon tetrachloride	0.803	mg/kg	0.0019	0.051
Chlorobenzene	0.803	mg/kg	0.0019	0.038
Chloroethane	0.803	mg/kg	0.0019	0.049
Chloroform	0.803	mg/kg	0.0019	0.049
Chloromethane	0.803	mg/kg	0.0019	0.053
cis-1,2-Dichloroethene	0.803	mg/kg	0.0019	0.048
cis-1,3-Dichloropropene	0.803	mg/kg	0.0019	0.044
Dibromochloromethane	0.803	mg/kg	0.0019	0.045
Dichlorodifluoromethane	0.803	mg/kg	0.0019	0.062
Ethylbenzene	0.803	mg/kg	0.00094	0.040
Isopropylbenzene	0.803	mg/kg	0.00094	0.038
m&p-Xylenes	0.803	mg/kg	0.00094	0.074
Methylene chloride	0.803	mg/kg	0.0019	0.051
Methyl-t-butyl ether	0.803	mg/kg	0.00094	0.055
n-Butylbenzene	0.803	mg/kg	0.00094	0.037
n-Propylbenzene	0.803	mg/kg	0.00094	0.037
o-Xylene	0.803	mg/kg	0.00094	0.037
sec-Butylbenzene	0.803	mg/kg	0.00094	0.039
Styrene	0.803	mg/kg	0.0019	0.038
t-Butyl Alcohol	0.803	mg/kg	0.0094	0.12
t-Butylbenzene	0.803	mg/kg	0.00094	0.039
Tetrachloroethene	0.803	mg/kg	0.0019	0.050
Toluene	0.803	mg/kg	0.00094	0.038
trans-1,2-Dichloroethene	0.803	mg/kg	0.0019	0.047
trans-1,3-Dichloropropene	0.803	mg/kg	0.0019	0.045
Trichloroethene	0.803	mg/kg	0.0019	0.071
Trichlorofluoromethane	0.803	mg/kg	0.0019	0.049
Vinyl chloride	0.803	mg/kg	0.0019	0.054

Sample ID: HRPB-3 MSD
Lab#: AD18955-003
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

Xylenes (Total)	0.803	mg/kg	0.00094	0.11

Sample ID: Duplicate
Lab#: AD18955-004
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		76

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.1	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.6	16

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.32	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		270

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		7.8
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	13	31
Chromium	1	mg/kg	6.6	16
Copper	1	mg/kg	6.6	22
Lead	1	mg/kg	6.6	13
Manganese	1	mg/kg	13	270
Nickel	1	mg/kg	6.6	25
Zinc	1	mg/kg	13	74

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.26	5.9
Beryllium	1	mg/kg	0.26	0.37
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.35
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	2	mg/l	0.20	ND

Sample ID: Duplicate
Lab#: AD18955-004
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.649	mg/kg	0.0017	ND
1,1,2,2-Tetrachloroethane	0.649	mg/kg	0.0017	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.649	mg/kg	0.0017	ND
1,1,2-Trichloroethane	0.649	mg/kg	0.0017	ND
1,1-Dichloroethane	0.649	mg/kg	0.0017	ND
1,1-Dichloroethene	0.649	mg/kg	0.0017	ND
1,2,3-Trichloropropane	0.649	mg/kg	0.0017	ND
1,2,4-Trimethylbenzene	0.649	mg/kg	0.00085	ND
1,2-Dichlorobenzene	0.649	mg/kg	0.0017	ND
1,2-Dichloroethane	0.649	mg/kg	0.0017	ND
1,2-Dichloropropane	0.649	mg/kg	0.0017	ND
1,3,5-Trimethylbenzene	0.649	mg/kg	0.00085	ND
1,3-Dichlorobenzene	0.649	mg/kg	0.0017	ND
1,3-Dichloropropane	0.649	mg/kg	0.0017	ND
1,4-Dichlorobenzene	0.649	mg/kg	0.0017	ND
1,4-Dioxane	0.649	mg/kg	0.085	ND
2-Butanone	0.649	mg/kg	0.0017	ND
2-Chloroethylvinylether	0.649	mg/kg	0.0017	ND
2-Hexanone	0.649	mg/kg	0.0017	ND
4-Isopropyltoluene	0.649	mg/kg	0.00085	ND
4-Methyl-2-pentanone	0.649	mg/kg	0.0017	ND
Acetone	0.649	mg/kg	0.0085	ND
Acrolein	0.649	mg/kg	0.0085	ND
Acrylonitrile	0.649	mg/kg	0.0017	ND
Benzene	0.649	mg/kg	0.00085	ND
Bromodichloromethane	0.649	mg/kg	0.0017	ND
Bromoform	0.649	mg/kg	0.0017	ND
Bromomethane	0.649	mg/kg	0.0017	ND
Carbon disulfide	0.649	mg/kg	0.0017	ND
Carbon tetrachloride	0.649	mg/kg	0.0017	ND
Chlorobenzene	0.649	mg/kg	0.0017	ND
Chloroethane	0.649	mg/kg	0.0017	ND
Chloroform	0.649	mg/kg	0.0017	ND
Chloromethane	0.649	mg/kg	0.0017	ND
cis-1,2-Dichloroethene	**0.649**	**mg/kg**	**0.0017**	**0.0023**
cis-1,3-Dichloropropene	0.649	mg/kg	0.0017	ND
Dibromochloromethane	0.649	mg/kg	0.0017	ND
Dichlorodifluoromethane	0.649	mg/kg	0.0017	ND
Ethylbenzene	0.649	mg/kg	0.00085	ND
Isopropylbenzene	0.649	mg/kg	0.00085	ND
m&p-Xylenes	0.649	mg/kg	0.00085	ND
Methylene chloride	**0.649**	**mg/kg**	**0.0017**	**0.0057**
Methyl-t-butyl ether	0.649	mg/kg	0.00085	ND
n-Butylbenzene	0.649	mg/kg	0.00085	ND
n-Propylbenzene	0.649	mg/kg	0.00085	ND
o-Xylene	0.649	mg/kg	0.00085	ND
sec-Butylbenzene	0.649	mg/kg	0.00085	ND
Styrene	0.649	mg/kg	0.0017	ND
t-Butyl Alcohol	0.649	mg/kg	0.0085	ND
t-Butylbenzene	0.649	mg/kg	0.00085	ND
Tetrachloroethene	**0.649**	**mg/kg**	**0.0017**	**0.0052**
Toluene	0.649	mg/kg	0.00085	ND
trans-1,2-Dichloroethene	0.649	mg/kg	0.0017	ND

Sample ID: Duplicate
Lab#: AD18955-004
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

trans-1,3-Dichloropropene	0.649	mg/kg	0.0017	ND
Trichloroethene	**0.649**	**mg/kg**	**0.0017**	**0.021**
Trichlorofluoromethane	0.649	mg/kg	0.0017	ND
Vinyl chloride	0.649	mg/kg	0.0017	ND
Xylenes (Total)	0.649	mg/kg	0.00085	ND

Sample ID: HRPB-2
Lab#: AD18955-005
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		72

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.1	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.9	11

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.33	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.12	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		-27

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		7.5
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	14	48
Chromium	1	mg/kg	6.9	11
Copper	1	mg/kg	6.9	40
Lead	1	mg/kg	6.9	46
Manganese	1	mg/kg	14	490
Nickel	1	mg/kg	6.9	20
Zinc	1	mg/kg	14	63

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.28	8.8
Beryllium	1	mg/kg	0.28	0.37
Selenium	1	mg/kg	2.8	ND
Silver	1	mg/kg	0.28	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.61
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	2	mg/l	0.20	ND

Sample ID: HRPB-2 **Collection Date:** 8/27/2020
Lab#: AD18955-005 **Receipt Date:** 8/28/2020
Matrix: Soil/Terracore

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.917	mg/kg	0.0025	ND
1,1,2,2-Tetrachloroethane	0.917	mg/kg	0.0025	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.917	mg/kg	0.0025	ND
1,1,2-Trichloroethane	0.917	mg/kg	0.0025	ND
1,1-Dichloroethane	0.917	mg/kg	0.0025	ND
1,1-Dichloroethene	0.917	mg/kg	0.0025	ND
1,2,3-Trichloropropane	0.917	mg/kg	0.0025	ND
1,2,4-Trimethylbenzene	0.917	mg/kg	0.0013	ND
1,2-Dichlorobenzene	0.917	mg/kg	0.0025	ND
1,2-Dichloroethane	0.917	mg/kg	0.0025	ND
1,2-Dichloropropane	0.917	mg/kg	0.0025	ND
1,3,5-Trimethylbenzene	0.917	mg/kg	0.0013	ND
1,3-Dichlorobenzene	0.917	mg/kg	0.0025	ND
1,3-Dichloropropane	0.917	mg/kg	0.0025	ND
1,4-Dichlorobenzene	0.917	mg/kg	0.0025	ND
1,4-Dioxane	0.917	mg/kg	0.13	ND
2-Butanone	**0.917**	**mg/kg**	**0.0025**	**0.0088**
2-Chloroethylvinylether	0.917	mg/kg	0.0025	ND
2-Hexanone	0.917	mg/kg	0.0025	ND
4-Isopropyltoluene	0.917	mg/kg	0.0013	ND
4-Methyl-2-pentanone	0.917	mg/kg	0.0025	ND
Acetone	**0.917**	**mg/kg**	**0.013**	**0.054**
Acrolein	0.917	mg/kg	0.013	ND
Acrylonitrile	0.917	mg/kg	0.0025	ND
Benzene	0.917	mg/kg	0.0013	ND
Bromodichloromethane	0.917	mg/kg	0.0025	ND
Bromoform	0.917	mg/kg	0.0025	ND
Bromomethane	0.917	mg/kg	0.0025	ND
Carbon disulfide	0.917	mg/kg	0.0025	ND
Carbon tetrachloride	0.917	mg/kg	0.0025	ND
Chlorobenzene	0.917	mg/kg	0.0025	ND
Chloroethane	0.917	mg/kg	0.0025	ND
Chloroform	0.917	mg/kg	0.0025	ND
Chloromethane	0.917	mg/kg	0.0025	ND
cis-1,2-Dichloroethene	0.917	mg/kg	0.0025	ND
cis-1,3-Dichloropropene	0.917	mg/kg	0.0025	ND
Dibromochloromethane	0.917	mg/kg	0.0025	ND
Dichlorodifluoromethane	0.917	mg/kg	0.0025	ND
Ethylbenzene	0.917	mg/kg	0.0013	ND
Isopropylbenzene	0.917	mg/kg	0.0013	ND
m&p-Xylenes	0.917	mg/kg	0.0013	ND
Methylene chloride	**0.917**	**mg/kg**	**0.0025**	**0.0041**
Methyl-t-butyl ether	0.917	mg/kg	0.0013	ND
n-Butylbenzene	0.917	mg/kg	0.0013	ND
n-Propylbenzene	0.917	mg/kg	0.0013	ND
o-Xylene	0.917	mg/kg	0.0013	ND
sec-Butylbenzene	0.917	mg/kg	0.0013	ND
Styrene	0.917	mg/kg	0.0025	ND
t-Butyl Alcohol	0.917	mg/kg	0.013	ND
t-Butylbenzene	0.917	mg/kg	0.0013	ND
Tetrachloroethene	0.917	mg/kg	0.0025	ND
Toluene	0.917	mg/kg	0.0013	ND
trans-1,2-Dichloroethene	0.917	mg/kg	0.0025	ND

Sample ID: HRPB-2 **Collection Date:** 8/27/2020
Lab#: AD18955-005 **Receipt Date:** 8/28/2020
Matrix: Soil/Terracore

trans-1,3-Dichloropropene	0.917	mg/kg	0.0025	ND
Trichloroethene	0.917	mg/kg	0.0025	ND
Trichlorofluoromethane	0.917	mg/kg	0.0025	ND
Vinyl chloride	0.917	mg/kg	0.0025	ND
Xylenes (Total)	0.917	mg/kg	0.0013	ND

Sample ID: Trip blank
Lab#: AD18955-006
Matrix: Aqueous

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: Trip blank
Lab#: AD18955-006
Matrix: Aqueous
Collection Date: 8/27/2020
Receipt Date: 8/28/2020

Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18955-001
Client Id: HRPB-3
Data File: 6M131892.D
Analysis Date: 08/31/20 10:29
Date Rec/Extracted: 08/28/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5.99g
Final Vol: NA
Dilution: 0.835
Solids: 81

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0021	U	56-23-5	Carbon Tetrachloride	0.0021	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0021	U	108-90-7	Chlorobenzene	0.0021	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0021	U	75-00-3	Chloroethane	0.0021	U
79-00-5	1,1,2-Trichloroethane	0.0021	U	67-66-3	Chloroform	0.0021	U
75-34-3	1,1-Dichloroethane	0.0021	U	74-87-3	Chloromethane	0.0021	U
75-35-4	1,1-Dichloroethene	0.0021	U	156-59-2	cis-1,2-Dichloroethene	0.0021	U
96-18-4	1,2,3-Trichloropropane	0.0021	U	10061-01-5	cis-1,3-Dichloropropene	0.0021	U
95-63-6	1,2,4-Trimethylbenzene	0.0010	U	124-48-1	Dibromochloromethane	0.0021	U
95-50-1	1,2-Dichlorobenzene	0.0021	U	75-71-8	Dichlorodifluoromethane	0.0021	U
107-06-2	1,2-Dichloroethane	0.0021	U	100-41-4	Ethylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0021	U	98-82-8	Isopropylbenzene	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	0.0010	U	79601-23-1	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0021	U	**75-09-2**	**Methylene Chloride**	**0.0021**	**0.0052**
142-28-9	1,3-Dichloropropane	0.0021	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0021	U	104-51-8	n-Butylbenzene	0.0010	U
123-91-1	1,4-Dioxane	0.10	U	103-65-1	n-Propylbenzene	0.0010	U
78-93-3	2-Butanone	0.0021	U	95-47-6	o-Xylene	0.0010	U
110-75-8	2-Chloroethylvinylether	0.0021	U	135-98-8	sec-Butylbenzene	0.0010	U
591-78-6	2-Hexanone	0.0021	U	100-42-5	Styrene	0.0021	U
99-87-6	4-Isopropyltoluene	0.0010	U	75-65-0	t-Butyl Alcohol	0.010	U
108-10-1	4-Methyl-2-Pentanone	0.0021	U	98-06-6	t-Butylbenzene	0.0010	U
67-64-1	Acetone	0.010	U	**127-18-4**	**Tetrachloroethene**	**0.0021**	**0.011**
107-02-8	Acrolein	0.010	U	108-88-3	Toluene	0.0010	U
107-13-1	Acrylonitrile	0.0021	U	156-60-5	trans-1,2-Dichloroethene	0.0021	U
71-43-2	Benzene	0.0010	U	10061-02-6	trans-1,3-Dichloropropene	0.0021	U
75-27-4	Bromodichloromethane	0.0021	U	**79-01-6**	**Trichloroethene**	**0.0021**	**0.022**
75-25-2	Bromoform	0.0021	U	75-69-4	Trichlorofluoromethane	0.0021	U
74-83-9	Bromomethane	0.0021	U	75-01-4	Vinyl Chloride	0.0021	U
75-15-0	Carbon Disulfide	0.0021	U	1330-20-7	Xylenes (Total)	0.0010	U

Worksheet #: 565881

Total Target Concentration 0.038

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18955-002(MS:AD18
Client Id: HRPB-3 MS
Data File: 6M131889.D
Analysis Date: 08/31/20 09:27
Date Rec/Extracted: 08/28/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 7.18g
Final Vol: NA
Dilution: 0.696
Solids: 79

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0018	0.043	56-23-5	Carbon Tetrachloride	0.0018	0.046
79-34-5	1,1,2,2-Tetrachloroethane	0.0018	0.035	108-90-7	Chlorobenzene	0.0018	0.035
76-13-1	1,1,2-Trichloro-1,2,2-triflu	0.0018	0.046	75-00-3	Chloroethane	0.0018	0.046
79-00-5	1,1,2-Trichloroethane	0.0018	0.039	67-66-3	Chloroform	0.0018	0.044
75-34-3	1,1-Dichloroethane	0.0018	0.043	74-87-3	Chloromethane	0.0018	0.049
75-35-4	1,1-Dichloroethene	0.0018	0.046	156-59-2	cis-1,2-Dichloroethene	0.0018	0.043
96-18-4	1,2,3-Trichloropropane	0.0018	0.032	10061-01-5	cis-1,3-Dichloropropene	0.0018	0.040
95-63-6	1,2,4-Trimethylbenzene	0.00088	0.034	124-48-1	Dibromochloromethane	0.0018	0.040
95-50-1	1,2-Dichlorobenzene	0.0018	0.032	75-71-8	Dichlorodifluoromethane	0.0018	0.055
107-06-2	1,2-Dichloroethane	0.0018	0.044	100-41-4	Ethylbenzene	0.00088	0.038
78-87-5	1,2-Dichloropropane	0.0018	0.043	98-82-8	Isopropylbenzene	0.00088	0.036
108-67-8	1,3,5-Trimethylbenzene	0.00088	0.038	79601-23-1	m&p-Xylenes	0.00088	0.069
541-73-1	1,3-Dichlorobenzene	0.0018	0.031	75-09-2	Methylene Chloride	0.0018	0.047
142-28-9	1,3-Dichloropropane	0.0018	0.038	1634-04-4	Methyl-t-butyl ether	0.00088	0.048
106-46-7	1,4-Dichlorobenzene	0.0018	0.030	104-51-8	n-Butylbenzene	0.00088	0.032
123-91-1	1,4-Dioxane	0.088	1.1	103-65-1	n-Propylbenzene	0.00088	0.034
78-93-3	2-Butanone	0.0018	0.030	95-47-6	o-Xylene	0.00088	0.035
110-75-8	2-Chloroethylvinylether	0.0018	0.084	135-98-8	sec-Butylbenzene	0.00088	0.036
591-78-6	2-Hexanone	0.0018	0.027	100-42-5	Styrene	0.0018	0.033
99-87-6	4-Isopropyltoluene	0.00088	0.035	75-65-0	t-Butyl Alcohol	0.0088	0.10
108-10-1	4-Methyl-2-Pentanone	0.0018	0.030	98-06-6	t-Butylbenzene	0.00088	0.035
67-64-1	Acetone	0.0088	0.14	127-18-4	Tetrachloroethene	0.0018	0.045
107-02-8	Acrolein	0.0088	0.22	108-88-3	Toluene	0.00088	0.036
107-13-1	Acrylonitrile	0.0018	0.030	156-60-5	trans-1,2-Dichloroethene	0.0018	0.044
71-43-2	Benzene	0.00088	0.043	10061-02-6	trans-1,3-Dichloropropene	0.0018	0.039
75-27-4	Bromodichloromethane	0.0018	0.044	79-01-6	Trichloroethene	0.0018	0.064
75-25-2	Bromoform	0.0018	0.058	75-69-4	Trichlorofluoromethane	0.0018	0.045
74-83-9	Bromomethane	0.0018	0.044	75-01-4	Vinyl Chloride	0.0018	0.049
75-15-0	Carbon Disulfide	0.0018	0.042	1330-20-7	Xylenes (Total)	0.00088	0.10

Worksheet #: 565881

Total Target Concentration 3.8

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18955-003(MSD:AD
Client Id: HRPB-3 MSD
Data File: 6M131890.D
Analysis Date: 08/31/20 09:48
Date Rec/Extracted: 08/28/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 6.23g
Final Vol: NA
Dilution: 0.803
Solids: 85

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0019	0.049	56-23-5	Carbon Tetrachloride	0.0019	0.051
79-34-5	1,1,2,2-Tetrachloroethane	0.0019	0.042	108-90-7	Chlorobenzene	0.0019	0.038
76-13-1	1,1,2-Trichloro-1,2,2-triflu	0.0019	0.053	75-00-3	Chloroethane	0.0019	0.049
79-00-5	1,1,2-Trichloroethane	0.0019	0.044	67-66-3	Chloroform	0.0019	0.049
75-34-3	1,1-Dichloroethane	0.0019	0.049	74-87-3	Chloromethane	0.0019	0.053
75-35-4	1,1-Dichloroethene	0.0019	0.051	156-59-2	cis-1,2-Dichloroethene	0.0019	0.048
96-18-4	1,2,3-Trichloropropane	0.0019	0.039	10061-01-5	cis-1,3-Dichloropropene	0.0019	0.044
95-63-6	1,2,4-Trimethylbenzene	0.00094	0.038	124-48-1	Dibromochloromethane	0.0019	0.045
95-50-1	1,2-Dichlorobenzene	0.0019	0.037	75-71-8	Dichlorodifluoromethane	0.0019	0.062
107-06-2	1,2-Dichloroethane	0.0019	0.050	100-41-4	Ethylbenzene	0.00094	0.040
78-87-5	1,2-Dichloropropane	0.0019	0.047	98-82-8	Isopropylbenzene	0.00094	0.038
108-67-8	1,3,5-Trimethylbenzene	0.00094	0.042	79601-23-1	m&p-Xylenes	0.00094	0.074
541-73-1	1,3-Dichlorobenzene	0.0019	0.036	75-09-2	Methylene Chloride	0.0019	0.051
142-28-9	1,3-Dichloropropane	0.0019	0.044	1634-04-4	Methyl-t-butyl ether	0.00094	0.055
106-46-7	1,4-Dichlorobenzene	0.0019	0.035	104-51-8	n-Butylbenzene	0.00094	0.037
123-91-1	1,4-Dioxane	0.094	1.2	103-65-1	n-Propylbenzene	0.00094	0.037
78-93-3	2-Butanone	0.0019	0.033	95-47-6	o-Xylene	0.00094	0.037
110-75-8	2-Chloroethylvinylether	0.0019	0.095	135-98-8	sec-Butylbenzene	0.00094	0.039
591-78-6	2-Hexanone	0.0019	0.032	100-42-5	Styrene	0.0019	0.038
99-87-6	4-Isopropyltoluene	0.00094	0.038	75-65-0	t-Butyl Alcohol	0.0094	0.12
108-10-1	4-Methyl-2-Pentanone	0.0019	0.035	98-06-6	t-Butylbenzene	0.00094	0.039
67-64-1	Acetone	0.0094	0.15	127-18-4	Tetrachloroethene	0.0019	0.050
107-02-8	Acrolein	0.0094	0.25	108-88-3	Toluene	0.00094	0.038
107-13-1	Acrylonitrile	0.0019	0.033	156-60-5	trans-1,2-Dichloroethene	0.0019	0.047
71-43-2	Benzene	0.00094	0.048	10061-02-6	trans-1,3-Dichloropropene	0.0019	0.045
75-27-4	Bromodichloromethane	0.0019	0.050	79-01-6	Trichloroethene	0.0019	0.071
75-25-2	Bromoform	0.0019	0.066	75-69-4	Trichlorofluoromethane	0.0019	0.049
74-83-9	Bromomethane	0.0019	0.049	75-01-4	Vinyl Chloride	0.0019	0.054
75-15-0	Carbon Disulfide	0.0019	0.047	1330-20-7	Xylenes (Total)	0.00094	0.11

Worksheet #: 565881

Total Target Concentration 4.2

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18955-004
Client Id: Duplicate
Data File: 6M131893.D
Analysis Date: 08/31/20 10:49
Date Rec/Extracted: 08/28/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 7.7g
Final Vol: NA
Dilution: 0.649
Solids: 76

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0017	U	56-23-5	Carbon Tetrachloride	0.0017	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0017	U	108-90-7	Chlorobenzene	0.0017	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0017	U	75-00-3	Chloroethane	0.0017	U
79-00-5	1,1,2-Trichloroethane	0.0017	U	67-66-3	Chloroform	0.0017	U
75-34-3	1,1-Dichloroethane	0.0017	U	74-87-3	Chloromethane	0.0017	U
75-35-4	1,1-Dichloroethene	0.0017	U	**156-59-2**	**cis-1,2-Dichloroethene**	**0.0017**	**0.0023**
96-18-4	1,2,3-Trichloropropane	0.0017	U	10061-01-5	cis-1,3-Dichloropropene	0.0017	U
95-63-6	1,2,4-Trimethylbenzene	0.00085	U	124-48-1	Dibromochloromethane	0.0017	U
95-50-1	1,2-Dichlorobenzene	0.0017	U	75-71-8	Dichlorodifluoromethane	0.0017	U
107-06-2	1,2-Dichloroethane	0.0017	U	100-41-4	Ethylbenzene	0.00085	U
78-87-5	1,2-Dichloropropane	0.0017	U	98-82-8	Isopropylbenzene	0.00085	U
108-67-8	1,3,5-Trimethylbenzene	0.00085	U	79601-23-1	m&p-Xylenes	0.00085	U
541-73-1	1,3-Dichlorobenzene	0.0017	U	**75-09-2**	**Methylene Chloride**	**0.0017**	**0.0057**
142-28-9	1,3-Dichloropropane	0.0017	U	1634-04-4	Methyl-t-butyl ether	0.00085	U
106-46-7	1,4-Dichlorobenzene	0.0017	U	104-51-8	n-Butylbenzene	0.00085	U
123-91-1	1,4-Dioxane	0.085	U	103-65-1	n-Propylbenzene	0.00085	U
78-93-3	2-Butanone	0.0017	U	95-47-6	o-Xylene	0.00085	U
110-75-8	2-Chloroethylvinylether	0.0017	U	135-98-8	sec-Butylbenzene	0.00085	U
591-78-6	2-Hexanone	0.0017	U	100-42-5	Styrene	0.0017	U
99-87-6	4-Isopropyltoluene	0.00085	U	75-65-0	t-Butyl Alcohol	0.0085	U
108-10-1	4-Methyl-2-Pentanone	0.0017	U	98-06-6	t-Butylbenzene	0.00085	U
67-64-1	Acetone	0.0085	U	**127-18-4**	**Tetrachloroethene**	**0.0017**	**0.0052**
107-02-8	Acrolein	0.0085	U	108-88-3	Toluene	0.00085	U
107-13-1	Acrylonitrile	0.0017	U	156-60-5	trans-1,2-Dichloroethene	0.0017	U
71-43-2	Benzene	0.00085	U	10061-02-6	trans-1,3-Dichloropropene	0.0017	U
75-27-4	Bromodichloromethane	0.0017	U	**79-01-6**	**Trichloroethene**	**0.0017**	**0.021**
75-25-2	Bromoform	0.0017	U	75-69-4	Trichlorofluoromethane	0.0017	U
74-83-9	Bromomethane	0.0017	U	75-01-4	Vinyl Chloride	0.0017	U
75-15-0	Carbon Disulfide	0.0017	U	1330-20-7	Xylenes (Total)	0.00085	U

Worksheet #: 565881

Total Target Concentration 0.034

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18955-005
Client Id: HRPB-2
Data File: 6M131894.D
Analysis Date: 08/31/20 11:10
Date Rec/Extracted: 08/28/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5.45g
Final Vol: NA
Dilution: 0.917
Solids: 72

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0025	U	56-23-5	Carbon Tetrachloride	0.0025	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0025	U	108-90-7	Chlorobenzene	0.0025	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0025	U	75-00-3	Chloroethane	0.0025	U
79-00-5	1,1,2-Trichloroethane	0.0025	U	67-66-3	Chloroform	0.0025	U
75-34-3	1,1-Dichloroethane	0.0025	U	74-87-3	Chloromethane	0.0025	U
75-35-4	1,1-Dichloroethene	0.0025	U	156-59-2	cis-1,2-Dichloroethene	0.0025	U
96-18-4	1,2,3-Trichloropropane	0.0025	U	10061-01-5	cis-1,3-Dichloropropene	0.0025	U
95-63-6	1,2,4-Trimethylbenzene	0.0013	U	124-48-1	Dibromochloromethane	0.0025	U
95-50-1	1,2-Dichlorobenzene	0.0025	U	75-71-8	Dichlorodifluoromethane	0.0025	U
107-06-2	1,2-Dichloroethane	0.0025	U	100-41-4	Ethylbenzene	0.0013	U
78-87-5	1,2-Dichloropropane	0.0025	U	98-82-8	Isopropylbenzene	0.0013	U
108-67-8	1,3,5-Trimethylbenzene	0.0013	U	79601-23-1	m&p-Xylenes	0.0013	U
541-73-1	1,3-Dichlorobenzene	0.0025	U	**75-09-2**	**Methylene Chloride**	**0.0025**	**0.0041**
142-28-9	1,3-Dichloropropane	0.0025	U	1634-04-4	Methyl-t-butyl ether	0.0013	U
106-46-7	1,4-Dichlorobenzene	0.0025	U	104-51-8	n-Butylbenzene	0.0013	U
123-91-1	1,4-Dioxane	0.13	U	103-65-1	n-Propylbenzene	0.0013	U
78-93-3	**2-Butanone**	**0.0025**	**0.0088**	95-47-6	o-Xylene	0.0013	U
110-75-8	2-Chloroethylvinylether	0.0025	U	135-98-8	sec-Butylbenzene	0.0013	U
591-78-6	2-Hexanone	0.0025	U	100-42-5	Styrene	0.0025	U
99-87-6	4-Isopropyltoluene	0.0013	U	75-65-0	t-Butyl Alcohol	0.013	U
108-10-1	4-Methyl-2-Pentanone	0.0025	U	98-06-6	t-Butylbenzene	0.0013	U
67-64-1	**Acetone**	**0.013**	**0.054**	127-18-4	Tetrachloroethene	0.0025	U
107-02-8	Acrolein	0.013	U	108-88-3	Toluene	0.0013	U
107-13-1	Acrylonitrile	0.0025	U	156-60-5	trans-1,2-Dichloroethene	0.0025	U
71-43-2	Benzene	0.0013	U	10061-02-6	trans-1,3-Dichloropropene	0.0025	U
75-27-4	Bromodichloromethane	0.0025	U	79-01-6	Trichloroethene	0.0025	U
75-25-2	Bromoform	0.0025	U	75-69-4	Trichlorofluoromethane	0.0025	U
74-83-9	Bromomethane	0.0025	U	75-01-4	Vinyl Chloride	0.0025	U
75-15-0	Carbon Disulfide	0.0025	U	1330-20-7	Xylenes (Total)	0.0013	U

Worksheet #: 565881

Total Target Concentration 0.067

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18955-006
Client Id: Trip blank
Data File: 11M82278.D
Analysis Date: 08/31/20 08:59
Date Rec/Extracted: 08/28/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 565881

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-001	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	8.5	1	0.5	100	08/31/20	852293	120ANEW	32	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	ND	1	0.5	100	08/31/20	852293	120ANEW	32	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	08/31/20	852293	120ANEW	32	MS	MS3_7700SWA
7440-22-4	Silver	0.25	ND	1	0.5	100	08/31/20	852293	120ANEW	32	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-001	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	97	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A
7440-47-3	Chromium	6.2	10	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A
7440-50-8	Copper	6.2	29	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A
7439-92-1	Lead	6.2	440	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A
7439-96-5	Manganese	12	790	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A
7439-97-6	Mercury	0.10	0.17	1	0.15	25	08/31/20	85228	H26170S	16	CV	HGCV3A
7440-02-0	Nickel	6.2	17	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A
7440-66-6	Zinc	12	73	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-002	% Solid:	79	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3 MS	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	60	1	0.5	100	08/31/20	852293	120ANEW	35	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	50	1	0.5	100	08/31/20	852293	120ANEW	35	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	51	1	0.5	100	08/31/20	852293	120ANEW	35	MS	MS3_7700SWA
7440-22-4	Silver	0.25	9.9	1	0.5	100	08/31/20	852293	120ANEW	35	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-002	% Solid:	79	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3 MS	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	86	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A
7440-47-3	Chromium	6.3	70	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A
7440-50-8	Copper	6.3	82	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A
7439-92-1	Lead	6.3	69	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A
7439-96-5	Manganese	13	330	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A
7439-97-6	Mercury	0.11	2.1	1	0.15	25	08/31/20	85228	H26170S	18	CV	HGCV3A
7440-02-0	Nickel	6.3	78	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A
7440-66-6	Zinc	13	120	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-003	% Solid:	85	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3 MSD	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	59	1	0.5	100	08/31/20	852293	120ANEW	36	MS	MS3_7700SWA
7440-41-7	Beryllium	0.24	47	1	0.5	100	08/31/20	852293	120ANEW	36	MS	MS3_7700SWA
7782-49-2	Selenium	2.4	48	1	0.5	100	08/31/20	852293	120ANEW	36	MS	MS3_7700SWA
7440-22-4	Silver	0.24	9.5	1	0.5	100	08/31/20	852293	120ANEW	36	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-003	% Solid:	85	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3 MSD	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	99	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A
7440-47-3	Chromium	5.9	67	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A
7440-50-8	Copper	5.9	81	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A
7439-92-1	Lead	5.9	64	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A
7439-96-5	Manganese	12	700	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A
7439-97-6	Mercury	0.098	1.9	1	0.15	25	08/31/20	85228	H26170S	19	CV	HGCV3A
7440-02-0	Nickel	5.9	72	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A
7440-66-6	Zinc	12	120	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-004	% Solid:	76	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	Duplicate	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.26	5.9	1	0.5	100	08/31/20	852293	120ANEW	49	MS	MS3_7700SWA
7440-41-7	Beryllium	0.26	0.37	1	0.5	100	08/31/20	852293	120ANEW	49	MS	MS3_7700SWA
7782-49-2	Selenium	2.6	ND	1	0.5	100	08/31/20	852293	120ANEW	49	MS	MS3_7700SWA
7440-22-4	Silver	0.26	ND	1	0.5	100	08/31/20	852293	120ANEW	49	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-004	% Solid:	76	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	Duplicate	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	31	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A
7440-47-3	Chromium	6.6	16	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A
7440-50-8	Copper	6.6	22	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A
7439-92-1	Lead	6.6	13	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A
7439-96-5	Manganese	13	270	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	08/31/20	85228	H26170S	27	CV	HGCV3A
7440-02-0	Nickel	6.6	25	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A
7440-66-6	Zinc	13	74	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-005	% Solid:	72	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-2	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.28	8.8	1	0.5	100	08/31/20	852293	120ANEW	50	MS	MS3_7700SWA
7440-41-7	Beryllium	0.28	0.37	1	0.5	100	08/31/20	852293	120ANEW	50	MS	MS3_7700SWA
7782-49-2	Selenium	2.8	ND	1	0.5	100	08/31/20	852293	120ANEW	50	MS	MS3_7700SWA
7440-22-4	Silver	0.28	ND	1	0.5	100	08/31/20	852293	120ANEW	50	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-005	% Solid:	72	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-2	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	14	48	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A
7440-47-3	Chromium	6.9	11	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A
7440-50-8	Copper	6.9	40	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A
7439-92-1	Lead	6.9	46	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A
7439-96-5	Manganese	14	490	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A
7439-97-6	Mercury	0.12	ND	1	0.15	25	08/31/20	85228	H26170S	28	CV	HGCV3A
7440-02-0	Nickel	6.9	20	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A
7440-66-6	Zinc	14	83	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD18955-001 | Project Number: 0082803
Matrix: Soil/Terracore | Received Date: 8/28/2020
Client SampleID: HRPB-3 | Collect Date: 8/27/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.30	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	250	mV		08/31/20	08/31/20
pH	CR6-PH	1	7.9	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.99	08/31/20	08/31/20

Lab#: AD18955-002 | Project Number: 0082803
Matrix: Soil/Terracore | Received Date: 8/28/2020
Client SampleID: HRPB-3 MS | Collect Date: 8/27/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	5.1	mg/Kg	0.30	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	250	mV		08/31/20	08/31/20
pH	CR6-PH	1	8.0	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	21	mg/Kg	1.0	08/31/20	08/31/20

Lab#: AD18955-003 | Project Number: 0082803
Matrix: Soil/Terracore | Received Date: 8/28/2020
Client SampleID: HRPB-3 MSD | Collect Date: 8/27/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	5.1	mg/Kg	0.28	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	250	mV		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
pH	CR6-PH	1	7.9	pH		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	50	400	mg/Kg	47	08/31/20	08/31/20

Lab#: AD18955-004 | Project Number: 0082803
Matrix: Soil/Terracore | Received Date: 8/28/2020
Client SampleID: Duplicate | Collect Date: 8/27/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.32	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	270	mV		08/31/20	08/31/20
pH	CR6-PH	1	7.8	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/31/20	08/31/20

Lab#: AD18955-005 | Project Number: 0082803
Matrix: Soil/Terracore | Received Date: 8/28/2020
Client SampleID: HRPB-2 | Collect Date: 8/27/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.33	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	-27	mV		08/31/20	08/31/20
pH	CR6-PH	1	7.5	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/31/20	08/31/20

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 0082803**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD18955-001	HRPB-3	Soil/Terracore	1	81	Percent			08/30/20	08/28/20	08/27/20
AD18955-002	HRPB-3 MS	Soil/Terracore	1	79	Percent			08/30/20	08/28/20	08/27/20
AD18955-003	HRPB-3 MSD	Soil/Terracore	1	85	Percent			08/30/20	08/28/20	08/27/20
AD18955-004	Duplicate	Soil/Terracore	1	76	Percent			08/30/20	08/28/20	08/27/20
AD18955-005	HRPB-2	Soil/Terracore	1	72	Percent			08/30/20	08/28/20	08/27/20

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A
7440-39-3	Barium	0.25	0.49	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/02/20	85227	H26169T	14	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A
7782-49-2	Selenium	0.50	ND	5	50	50	09/02/20	85227	T26169B4	41	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3 MS	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	0.51	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A
7440-39-3	Barium	0.25	0.87	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A
7440-43-9	Cadmium	0.050	0.53	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A
7440-47-3	Chromium	0.10	0.52	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A
7439-92-1	Lead	0.050	0.50	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A
7439-97-6	Mercury	0.00050	0.010	1	25	25	09/02/20	85227	H26169T	16	CV	HGCV3A
7440-02-0	Nickel	0.10	0.50	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A
7782-49-2	Selenium	0.50	0.57	5	50	50	09/02/20	85227	T26169B4	43	P	PEICP4A
7440-22-4	Silver	0.050	0.11	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3 MSD	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	0.55	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A
7440-39-3	Barium	0.25	0.94	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A
7440-43-9	Cadmium	0.050	0.54	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A
7440-47-3	Chromium	0.10	0.53	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A
7439-92-1	Lead	0.050	0.50	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A
7439-97-6	Mercury	0.00050	0.0095	1	25	25	09/02/20	85227	H26169T	17	CV	HGCV3A
7440-02-0	Nickel	0.10	0.51	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A
7782-49-2	Selenium	0.50	0.62	5	50	50	09/02/20	85227	T26169B4	44	P	PEICP4A
7440-22-4	Silver	0.050	0.11	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	Duplicate	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A
7440-39-3	Barium	0.25	0.35	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/02/20	85227	H26169T	20	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/02/20	85227	T26169B4	47	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-2	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A
7440-39-3	Barium	0.25	0.61	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/02/20	85227	H26169T	23	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/02/20	85227	T26169B4	48	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Chain of Custody Forms

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 00828O3

Page 1 of 1

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Customer Information

1a) Customer: HRP Associates
Address: 1 Fairchild Sq. Suite 110
Clifton Park, NY 12065
1b) Email/Cell/Fax/Ph: stefan.truex@hrpassociates.com
1c) Send Invoice to: Same ↑
1d) Send Report to: Same ↑

Project Information

2a) Project: Drafold - 7 Spruce Street - Ilion, NY
2b) Project Mgr: Stefan Truex
2c) Project Location (City/State): Ilion, NY
2d) Quote/PO # (If Applicable): HER1500.P2

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other: Standard		Other:_____

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓

Batch # AD18955

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water; S - Soil; A - Air; GW - Ground Water; SL - Sludge; WW - Waste Water; OL - Oil; OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	Ft. 315 Metals + Hex Cr + CN	TCLP RCRA Metals	EPA 8260 VOC's	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other: DI H2O	9) Comments
001/002/003	HRPB-3	Soil	8/27/20	11:00		X	X	X	X	6	3	3		9			6	MS/MSD Taken Here.
004	Duplicate	↓	"	12:00		X	X	X	X	2	1			3			2	
005	HRPB-2	↓	↓	12:45		X	X	X	X	2	1			3			2	
006	Trip Blank		↓			X			X	3								

10) Relinquished by:	Accepted by:	Date	Time
James Charter	FEDEX	8/27	
FEDEX	[illegible]	8/28/20	10:30

11) Sampler (print name): James Charter Date: 8/27/20

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.4

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

CONDITION UPON RECEIPT

Batch Number AD18955 Entered By: maxwell

Date Entered 8/28/2020 10:44:00 AM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	Yes	Are the COC seals intact?
4	T0054	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.4
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify (TB date, sample matrix, any missing info, etc.)
14	NA	Corrective actions (Specify item number and corrective action taken).
15	No	Were any samples for ortho-phosphate or dissolved ferrous iron field filtered?

PRESERVATION DOCUMENT

Batch Number AD18955 Entered By: maxwell

Date Entered 8/28/2020 10:44:00 AM

Lab#:	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD18955-001	NA	NA	NA	NA	NA	NA	NA
AD18955-002	NA	NA	NA	NA	NA	NA	NA
AD18955-003	NA	NA	NA	NA	NA	NA	NA
AD18955-004	NA	NA	NA	NA	NA	NA	NA
AD18955-005	NA	NA	NA	NA	NA	NA	NA
AD18955-006	40ML	G	VO	HCL	320554	1	HC998032

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD18955-001	08/28/20 10:30	MAXW	0	M	Received
AD18955-001	08/28/20 10:44	MAXW	0	M	Login
AD18955-001	08/28/20 11:01	R31	1	A	NONE
AD18955-001	08/31/20 07:04	WP	1	A	VOA
AD18955-001	08/31/20 07:23	R31	1	A	NONE
AD18955-001	08/28/20 11:02	F18	2	A	NONE
AD18955-001	08/31/20 08:33	SG	2	A	VOA
AD18955-001	08/28/20 11:02	F18	3	A	NONE
AD18955-001	08/28/20 16:14	R12	4	A	NONE
AD18955-001	08/31/20 12:44	EF	4	A	tclp
AD18955-001	08/31/20 12:47	EF	4	A	r12
AD18955-001	08/28/20 16:14	R12	5	A	NONE
AD18955-001	08/28/20 20:23	PA	5	A	mix
AD18955-001	08/28/20 20:24	R12	5	A	NONE
AD18955-001	08/31/20 08:14	ANS	5	A	TDSI/Hg
AD18955-001	08/31/20 09:39	BCT	5	A	CR6SEHPH
AD18955-001	08/31/20 10:41	JW	5	A	CN
AD18955-001	08/31/20 13:51	R12	5	A	NONE
AD18955-002	08/28/20 10:30	MAXW	0	M	Received
AD18955-002	08/28/20 10:44	MAXW	0	M	Login
AD18955-002	08/28/20 11:01	R31	1	A	NONE
AD18955-002	08/31/20 07:04	WP	1	A	VOA
AD18955-002	08/31/20 07:23	R31	1	A	NONE
AD18955-002	08/28/20 11:02	F18	2	A	NONE
AD18955-002	08/31/20 08:33	SG	2	A	VOA
AD18955-002	08/28/20 11:02	F18	3	A	NONE
AD18955-002	08/28/20 16:14	R12	4	A	NONE
AD18955-002	08/31/20 12:44	EF	4	A	tclp
AD18955-002	08/31/20 12:47	EF	4	A	r12
AD18955-002	08/28/20 16:14	R12	5	A	NONE
AD18955-002	08/28/20 20:23	PA	5	A	mix
AD18955-002	08/28/20 20:24	R12	5	A	NONE
AD18955-002	08/31/20 08:14	ANS	5	A	TDSI/Hg
AD18955-002	08/31/20 09:39	BCT	5	A	CR6SEHPH
AD18955-002	08/31/20 10:41	JW	5	A	CN
AD18955-002	08/31/20 13:51	R12	5	A	NONE
AD18955-003	08/28/20 10:30	MAXW	0	M	Received
AD18955-003	08/28/20 10:44	MAXW	0	M	Login
AD18955-003	08/28/20 11:01	R31	1	A	NONE
AD18955-003	08/31/20 07:04	WP	1	A	VOA
AD18955-003	08/31/20 07:23	R31	1	A	NONE
AD18955-003	08/28/20 11:02	F18	2	A	NONE
AD18955-003	08/31/20 08:33	SG	2	A	VOA
AD18955-003	08/28/20 11:02	F18	3	A	NONE
AD18955-003	08/28/20 16:14	R12	4	A	NONE
AD18955-003	08/31/20 12:44	EF	4	A	tclp
AD18955-003	08/31/20 12:47	EF	4	A	r12
AD18955-003	08/28/20 16:14	R12	5	A	NONE
AD18955-003	08/28/20 20:23	PA	5	A	mix
AD18955-003	08/28/20 20:24	R12	5	A	NONE
AD18955-003	08/31/20 08:14	ANS	5	A	TDSI/Hg
AD18955-003	08/31/20 09:39	BCT	5	A	CR6SEHPH
AD18955-003	08/31/20 10:41	JW	5	A	CN
AD18955-003	08/31/20 13:51	R12	5	A	NONE
AD18955-004	08/28/20 10:30	MAXW	0	M	Received
AD18955-004	08/28/20 10:44	MAXW	0	M	Login
AD18955-004	08/28/20 11:01	R31	1	A	NONE
AD18955-004	08/31/20 07:04	WP	1	A	VOA
AD18955-004	08/31/20 07:23	R31	1	A	NONE
AD18955-004	08/28/20 11:02	F18	2	A	NONE
AD18955-004	08/31/20 08:33	SG	2	A	VOA
AD18955-004	08/28/20 11:02	F18	3	A	NONE
AD18955-004	08/28/20 16:14	R12	4	A	NONE
AD18955-004	08/31/20 12:44	EF	4	A	tclp
AD18955-004	08/31/20 12:47	EF	4	A	r12
AD18955-004	08/28/20 16:14	R12	5	A	NONE
AD18955-004	08/28/20 20:23	PA	5	A	mix
AD18955-004	08/28/20 20:24	R12	5	A	NONE
AD18955-004	08/31/20 08:14	ANS	5	A	TDSI/Hg
AD18955-004	08/31/20 09:39	BCT	5	A	CR6SEHPH
AD18955-004	08/31/20 10:41	JW	5	A	CN
AD18955-004	08/31/20 13:51	R12	5	A	NONE
AD18955-005	08/28/20 10:30	MAXW	0	M	Received
AD18955-005	08/28/20 10:44	MAXW	0	M	Login
AD18955-005	08/28/20 11:02	F18	1	A	NONE
AD18955-005	08/31/20 08:33	SG	1	A	VOA
AD18955-005	08/28/20 11:01	R31	2	A	NONE
AD18955-005	08/31/20 07:04	WP	2	A	VOA
AD18955-005	08/31/20 07:23	R31	2	A	NONE
AD18955-005	08/28/20 11:02	F18	3	A	NONE
AD18955-005	08/28/20 16:14	R12	4	A	NONE
AD18955-005	08/31/20 12:44	EF	4	A	tclp
AD18955-005	08/31/20 12:47	EF	4	A	r12
AD18955-005	08/28/20 16:14	R12	5	A	NONE
AD18955-005	08/28/20 20:23	PA	5	A	mix
AD18955-005	08/28/20 20:24	R12	5	A	NONE
AD18955-005	08/31/20 08:14	ANS	5	A	TDSI/Hg
AD18955-005	08/31/20 09:39	BCT	5	A	CR6SEHPH
AD18955-005	08/31/20 10:41	JW	5	A	CN
AD18955-005	08/31/20 13:51	R12	5	A	NONE
AD18955-006	08/28/20 10:30	MAXW	0	M	Received
AD18955-006	08/28/20 10:44	MAXW	0	M	Login
AD18955-006	08/28/20 18:50	R31	1	A	NONE
AD18955-006	08/28/20 18:50	R31	2	A	NONE
AD18955-006	08/31/20 08:33	SG	2	A	VOA
AD18955-006	08/28/20 18:50	R31	3	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

GC/MS Volatile Data

GC/MS Volatile Data
QC Summary

FORM2

Surrogate Recovery

Method: EPA 8260C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
11M82276.D	DAILY BLANK	A	08/31/20 08:20	1		104	97	88	108		
6M131886.D	DAILY BLANK	S	08/31/20 08:25	1		107	104	94	98		
6M131892.D	AD18955-001	S	08/31/20 10:29	1		106	102	91	98		
6M131889.D	AD18955-002(MS:AD18	S	08/31/20 09:27	1		106	99	96	100		
6M131890.D	AD18955-003(MSD:AD1	S	08/31/20 09:48	1		106	100	95	95		
6M131893.D	AD18955-004	S	08/31/20 10:49	1		108	112	94	99		
6M131894.D	AD18955-005	S	08/31/20 11:10	1		106	105	97	101		
11M82278.D	AD18955-006	A	08/31/20 08:59	1		106	102	86	110		
11M82284.D	MBS87763	A	08/31/20 10:49	1		105	98	90	107		
6M131888.D	MBS87762	S	08/31/20 09:07	1		103	104	96	97		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8260C

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	73-131
S2=1,2-Dichloroethane-d4	30	78-128
S3=Toluene-d8	30	79-111
S4=Bromofluorobenzene	30	82-112

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131888.D	MBS87762	8/31/2020 9:07:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	77.0435	0	50	154*	20	130
Dichlorodifluoromethane	1	71.9361	0	50	144*	20	130
Chloromethane	1	63.4485	0	50	127	20	130
Bromomethane	1	50.5524	0	50	101	20	130
Vinyl Chloride	1	60.9187	0	50	122	20	130
Chloroethane	1	56.196	0	50	112	20	130
Trichlorofluoromethane	1	53.2772	0	50	107	20	130
Ethyl ether	1	45.2954	0	50	91	50	130
Furan	1	48.3651	0	50	97	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	53.8862	0	50	108	50	130
Methylene Chloride	1	46.9147	0	50	94	50	130
Acrolein	1	291.8958	0	200	146*	20	130
Acrylonitrile	1	41.0821	0	50	82	20	130
Iodomethane	1	65.371	0	50	131*	50	130
Acetone	1	191.2286	0	200	96	20	130
Carbon Disulfide	1	49.1955	0	50	98	50	130
t-Butyl Alcohol	1	145.0596	0	200	73	20	130
n-Hexane	1	55.5732	0	50	111	50	130
Di-isopropyl-ether	1	50.9804	0	50	102	50	130
1,1-Dichloroethene	1	54.7368	0	50	109	50	130
Methyl Acetate	1	56.1536	0	50	112	50	130
Methyl-t-butyl ether	1	53.4186	0	50	107	50	130
1,1-Dichloroethane	1	51.3318	0	50	103	50	130
trans-1,2-Dichloroethene	1	52.6015	0	50	105	50	130
Ethyl-t-butyl ether	1	46.2693	0	50	93	50	130
cis-1,2-Dichloroethene	1	50.5797	0	50	101	50	130
Bromochloromethane	1	50.2529	0	50	101	50	130
2,2-Dichloropropane	1	58.6043	0	50	117	50	130
Ethyl acetate	1	42.8638	0	50	86	50	130
1,4-Dioxane	1	1557.786	0	2500	62	50	130
1,1-Dichloropropene	1	50.9925	0	50	102	50	130
Chloroform	1	51.042	0	50	102	50	130
Cyclohexane	1	51.9312	0	50	104	50	130
1,2-Dichloroethane	1	51.3951	0	50	103	50	130
2-Butanone	1	41.0564	0	50	82	20	130
1,1,1-Trichloroethane	1	52.0174	0	50	104	50	130
Carbon Tetrachloride	1	52.2009	0	50	104	50	130
Vinyl Acetate	1	38.9192	0	50	78	50	130
Bromodichloromethane	1	50.6791	0	50	101	50	130
Methylcyclohexane	1	49.9512	0	50	100	50	130
Dibromomethane	1	51.026	0	50	102	50	130
1,2-Dichloropropane	1	50.2056	0	50	100	50	130
Trichloroethene	1	49.277	0	50	99	50	130
Benzene	1	49.4058	0	50	99	50	130
tert-Amyl methyl ether	1	49.7989	0	50	100	50	130
Iso-propylacetate	1	44.3314	0	50	89	50	130
Methyl methacrylate	1	42.8021	0	50	86	50	130
Dibromochloromethane	1	48.2256	0	50	96	50	130
2-Chloroethylvinylether	1	103.4236	0	50	207*	50	130
cis-1,3-Dichloropropene	1	48.2806	0	50	97	50	130
trans-1,3-Dichloropropene	1	49.4282	0	50	99	50	130
Ethyl methacrylate	1	45.9704	0	50	92	50	130
1,1,2-Trichloroethane	1	46.6959	0	50	93	50	130
1,2-Dibromoethane	1	46.967	0	50	94	50	130
1,3-Dichloropropane	1	46.3203	0	50	93	50	130
4-Methyl-2-Pentanone	1	39.3965	0	50	79	20	130
2-Hexanone	1	39.3843	0	50	79	20	130
Tetrachloroethene	1	45.5631	0	50	91	50	130
Toluene	1	44.3318	0	50	89	50	130
1,1,1,2-Tetrachloroethane	1	45.9037	0	50	92	50	130
Chlorobenzene	1	44.3688	0	50	89	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	44.6065	0	50	89	50	130
n-Amyl acetate	1	44.5516	0	50	89	50	130
Bromoform	**1**	**68.5695**	**0**	**50**	**137***	**20**	**130**
Ethylbenzene	**1**	**44.6076**	**0**	**50**	**89**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**43.792**	**0**	**50**	**88**	**50**	**130**
Styrene	**1**	**43.4477**	**0**	**50**	**87**	**50**	**130**
m&p-Xylenes	**1**	**87.0434**	**0**	**100**	**87**	**50**	**130**
o-Xylene	**1**	**41.9207**	**0**	**50**	**84**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	44.7106	0	50	89	20	130
1,3-Dichlorobenzene	**1**	**43.7558**	**0**	**50**	**88**	**50**	**130**
1,4-Dichlorobenzene	**1**	**42.9135**	**0**	**50**	**86**	**50**	**130**
1,2-Dichlorobenzene	**1**	**43.5856**	**0**	**50**	**87**	**50**	**130**
Isopropylbenzene	**1**	**43.989**	**0**	**50**	**88**	**50**	**130**
Cyclohexanone	1	183.5002	0	250	73	50	130
Camphene	1	46.1519	0	50	92	50	130
1,2,3-Trichloropropane	**1**	**42.6801**	**0**	**50**	**85**	**50**	**130**
2-Chlorotoluene	1	44.5685	0	50	89	50	130
p-Ethyltoluene	1	43.0244	0	50	86	50	130
4-Chlorotoluene	1	46.4898	0	50	93	50	130
n-Propylbenzene	**1**	**44.8788**	**0**	**50**	**90**	**50**	**130**
Bromobenzene	1	43.9032	0	50	88	50	130
1,3,5-Trimethylbenzene	**1**	**49.1502**	**0**	**50**	**98**	**50**	**130**
Butyl methacrylate	1	41.7019	0	50	83	50	130
t-Butylbenzene	**1**	**45.1207**	**0**	**50**	**90**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**45.2927**	**0**	**50**	**91**	**50**	**130**
sec-Butylbenzene	**1**	**47.7034**	**0**	**50**	**95**	**50**	**130**
4-Isopropyltoluene	**1**	**47.9029**	**0**	**50**	**96**	**50**	**130**
n-Butylbenzene	**1**	**49.0503**	**0**	**50**	**98**	**50**	**130**
p-Diethylbenzene	1	48.4126	0	50	97	50	130
1,2,4,5-Tetramethylbenzene	1	48.3684	0	50	97	50	130
1,2-Dibromo-3-Chloropropane	1	38.5331	0	50	77	50	130
Camphor	1	555.9057	0	500	111	50	130
Hexachlorobutadiene	1	45.011	0	50	90	50	130
1,2,4-Trichlorobenzene	1	43.352	0	50	87	50	130
1,2,3-Trichlorobenzene	1	42.4155	0	50	85	50	130
Naphthalene	1	39.7835	0	50	80	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Non Spike(If applicable):	6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	56.9035	0	50	114	20	130
Dichlorodifluoromethane	1	62.8668	0	50	126	20	130
Chloromethane	1	56.1541	0	50	112	20	130
Bromomethane	1	50.2121	0	50	100	20	130
Vinyl Chloride	1	56.1453	0	50	112	20	130
Chloroethane	1	51.908	0	50	104	20	130
Trichlorofluoromethane	1	51.1041	0	50	102	20	130
Ethyl ether	1	46.2834	0	50	93	50	130
Furan	1	46.2299	0	50	92	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	52.3408	0	50	105	50	130
Methylene Chloride	1	52.7897	5.0839	50	95	50	130
Acrolein	1	248.918	0	200	124	20	130
Acrylonitrile	1	34.3463	0	50	69	20	130
Iodomethane	1	64.5939	0	50	129	50	130
Acetone	1	157.3904	0	200	79	20	130
Carbon Disulfide	1	47.3944	0	50	95	50	130
t-Butyl Alcohol	1	116.3514	0	200	58	20	130
n-Hexane	1	54.7434	0	50	109	50	130
Di-isopropyl-ether	1	54.2364	0	50	108	50	130
1,1-Dichloroethene	1	52.2403	0	50	104	50	130
Methyl Acetate	1	46.8893	0	50	94	50	130
Methyl-t-butyl ether	1	54.3286	0	50	109	50	130
1,1-Dichloroethane	1	49.0593	0	50	98	50	130
trans-1,2-Dichloroethene	1	49.6338	0	50	99	50	130
Ethyl-t-butyl ether	1	49.3762	0	50	99	50	130
cis-1,2-Dichloroethene	1	49.1894	0	50	98	50	130
Bromochloromethane	1	50.2977	0	50	101	50	130
2,2-Dichloropropane	1	57.0601	0	50	114	50	130
Ethyl acetate	1	36.7433	0	50	73	50	130
1,4-Dioxane	1	1274.773	0	2500	51	50	130
1,1-Dichloropropene	1	48.5605	0	50	97	50	130
Chloroform	1	49.9443	0	50	100	50	130
Cyclohexane	1	50.8219	0	50	102	50	130
1,2-Dichloroethane	1	50.2019	0	50	100	50	130
2-Butanone	1	33.5103	0	50	67	20	130
1,1,1-Trichloroethane	1	49.0659	0	50	98	50	130
Carbon Tetrachloride	1	51.644	0	50	103	50	130
Vinyl Acetate	1	37.6728	0	50	75	50	130
Bromodichloromethane	1	50.2178	0	50	100	50	130
Methylcyclohexane	1	50.4394	0	50	101	50	130
Dibromomethane	1	47.858	0	50	96	50	130
1,2-Dichloropropane	1	48.2694	0	50	97	50	130
Trichloroethene	1	73.1622	21.8	50	103	50	130
Benzene	1	48.4836	0	50	97	50	130
tert-Amyl methyl ether	1	52.4065	0	50	105	50	130
Iso-propylacetate	1	41.66	0	50	83	50	130
Methyl methacrylate	1	39.8495	0	50	80	50	130
Dibromochloromethane	1	45.6697	0	50	91	50	130
2-Chloroethylvinylether	1	95.5322	0	50	191*	50	130
cis-1,3-Dichloropropene	1	45.5903	0	50	91	50	130
trans-1,3-Dichloropropene	1	44.067	0	50	88	50	130
Ethyl methacrylate	1	43.1348	0	50	86	50	130
1,1,2-Trichloroethane	1	44.5196	0	50	89	50	130
1,2-Dibromoethane	1	41.0321	0	50	82	50	130
1,3-Dichloropropane	1	42.8237	0	50	86	50	130
4-Methyl-2-Pentanone	1	33.7094	0	50	67	20	130
2-Hexanone	1	30.8066	0	50	62	20	130
Tetrachloroethene	1	50.6666	10.8224	50	80	50	130
Toluene	1	41.0645	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.0505	0	50	90	50	130
Chlorobenzene	1	39.6054	0	50	79	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	41.0364	0	50	82	50	130
n-Amyl acetate	1	38.5687	0	50	77	50	130
Bromoform	1	65.2935	0	50	131*	20	130
Ethylbenzene	1	42.9713	0	50	86	50	130
1,1,2,2-Tetrachloroethane	1	40.0258	0	50	80	50	130
Styrene	1	37.9266	0	50	76	50	130
m&p-Xylenes	1	78.4306	0	100	78	50	130
o-Xylene	1	39.2014	0	50	78	50	130
trans-1,4-Dichloro-2-butene	1	36.9711	0	50	74	20	130
1,3-Dichlorobenzene	1	35.471	0	50	71	50	130
1,4-Dichlorobenzene	1	33.9467	0	50	68	50	130
1,2-Dichlorobenzene	1	35.8729	0	50	72	50	130
Isopropylbenzene	1	40.7636	0	50	82	50	130
Cyclohexanone	1	125.4322	0	250	50	50	130
Camphene	1	41.718	0	50	83	50	130
1,2,3-Trichloropropane	1	36.3643	0	50	73	50	130
2-Chlorotoluene	1	40.2726	0	50	81	50	130
p-Ethyltoluene	1	36.6825	0	50	73	50	130
4-Chlorotoluene	1	37.6433	0	50	75	50	130
n-Propylbenzene	1	38.3835	0	50	77	50	130
Bromobenzene	1	38.8818	0	50	78	50	130
1,3,5-Trimethylbenzene	1	43.2564	0	50	87	50	130
Butyl methacrylate	1	41.2717	0	50	83	50	130
t-Butylbenzene	1	40.0099	0	50	80	50	130
1,2,4-Trimethylbenzene	1	38.5263	0	50	77	50	130
sec-Butylbenzene	1	40.366	0	50	81	50	130
4-Isopropyltoluene	1	39.5065	0	50	79	50	130
n-Butylbenzene	1	36.1879	0	50	72	50	130
p-Diethylbenzene	1	36.9323	0	50	74	50	130
1,2,4,5-Tetramethylbenzene	1	37.6781	0	50	75	50	130
1,2-Dibromo-3-Chloropropane	1	31.3599	0	50	63	50	130
Camphor	1	473.298	0	500	95	50	130
Hexachlorobutadiene	1	35.1542	0	50	70	50	130
1,2,4-Trichlorobenzene	1	28.2306	0	50	56	50	130
1,2,3-Trichlorobenzene	1	30.0156	0	50	60	50	130
Naphthalene	1	30.4916	0	50	61	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Non Spike(If applicable):	6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	53.7847	0	50	108	20	130
Dichlorodifluoromethane	1	65.4838	0	50	131*	20	130
Chloromethane	1	56.6472	0	50	113	20	130
Bromomethane	1	51.6003	0	50	103	20	130
Vinyl Chloride	1	56.8458	0	50	114	20	130
Chloroethane	1	52.3136	0	50	105	20	130
Trichlorofluoromethane	1	52.2935	0	50	105	20	130
Ethyl ether	1	49.7009	0	50	99	50	130
Furan	1	47.2611	0	50	95	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	56.3197	0	50	113	50	130
Methylene Chloride	1	54.1757	5.0839	50	98	50	130
Acrolein	1	259.5406	0	200	130	20	130
Acrylonitrile	1	35.0489	0	50	70	20	130
Iodomethane	1	65.8217	0	50	132*	50	130
Acetone	1	162.1024	0	200	81	20	130
Carbon Disulfide	1	49.643	0	50	99	50	130
t-Butyl Alcohol	1	127.633	0	200	64	20	130
n-Hexane	1	58.3019	0	50	117	50	130
Di-isopropyl-ether	1	55.5257	0	50	111	50	130
1,1-Dichloroethene	1	53.6783	0	50	107	50	130
Methyl Acetate	1	50.8647	0	50	102	50	130
Methyl-t-butyl ether	1	57.9525	0	50	116	50	130
1,1-Dichloroethane	1	52.194	0	50	104	50	130
trans-1,2-Dichloroethene	1	49.8849	0	50	100	50	130
Ethyl-t-butyl ether	1	51.0834	0	50	102	50	130
cis-1,2-Dichloroethene	1	51.2312	0	50	102	50	130
Bromochloromethane	1	53.4537	0	50	107	50	130
2,2-Dichloropropane	1	58.147	0	50	116	50	130
Ethyl acetate	1	33.6297	0	50	67	50	130
1,4-Dioxane	1	1315.993	0	2500	53	50	130
1,1-Dichloropropene	1	50.4388	0	50	101	50	130
Chloroform	1	51.9592	0	50	104	50	130
Cyclohexane	1	52.7667	0	50	106	50	130
1,2-Dichloroethane	1	52.776	0	50	106	50	130
2-Butanone	1	34.6742	0	50	69	20	130
1,1,1-Trichloroethane	1	52.2007	0	50	104	50	130
Carbon Tetrachloride	1	53.6249	0	50	107	50	130
Vinyl Acetate	1	39.662	0	50	79	50	130
Bromodichloromethane	1	52.8916	0	50	106	50	130
Methylcyclohexane	1	51.9779	0	50	104	50	130
Dibromomethane	1	50.6971	0	50	101	50	130
1,2-Dichloropropane	1	49.6665	0	50	99	50	130
Trichloroethene	1	75.2922	21.8	50	107	50	130
Benzene	1	50.3163	0	50	101	50	130
tert-Amyl methyl ether	1	56.2173	0	50	112	50	130
Iso-propylacetate	1	42.6062	0	50	85	50	130
Methyl methacrylate	1	41.2272	0	50	82	50	130
Dibromochloromethane	1	48.1401	0	50	96	50	130
2-Chloroethylvinylether	1	100.3461	0	50	201*	50	130
cis-1,3-Dichloropropene	1	46.6773	0	50	93	50	130
trans-1,3-Dichloropropene	1	47.5296	0	50	95	50	130
Ethyl methacrylate	1	46.9747	0	50	94	50	130
1,1,2-Trichloroethane	1	46.8811	0	50	94	50	130
1,2-Dibromoethane	1	44.9778	0	50	90	50	130
1,3-Dichloropropane	1	46.3511	0	50	93	50	130
4-Methyl-2-Pentanone	1	36.7572	0	50	74	20	130
2-Hexanone	1	34.1195	0	50	68	20	130
Tetrachloroethene	1	52.4352	10.8224	50	83	50	130
Toluene	1	40.7723	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.2612	0	50	91	50	130
Chlorobenzene	1	40.3151	0	50	81	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C		Matrix: Soil			QC Type: MSD		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	45.4686	0	50	91	50	130
n-Amyl acetate	1	44.7211	0	50	89	50	130
Bromoform	**1**	**70.4273**	**0**	**50**	**141***	**20**	**130**
Ethylbenzene	**1**	**42.7105**	**0**	**50**	**85**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**44.1548**	**0**	**50**	**88**	**50**	**130**
Styrene	**1**	**40.2637**	**0**	**50**	**81**	**50**	**130**
m&p-Xylenes	**1**	**78.8436**	**0**	**100**	**79**	**50**	**130**
o-Xylene	**1**	**39.4447**	**0**	**50**	**79**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	40.8268	0	50	82	20	130
1,3-Dichlorobenzene	**1**	**37.8242**	**0**	**50**	**76**	**50**	**130**
1,4-Dichlorobenzene	**1**	**36.8102**	**0**	**50**	**74**	**50**	**130**
1,2-Dichlorobenzene	**1**	**39.293**	**0**	**50**	**79**	**50**	**130**
Isopropylbenzene	**1**	**40.7047**	**0**	**50**	**81**	**50**	**130**
Cyclohexanone	1	135.2346	0	250	54	50	130
Camphene	1	42.2018	0	50	84	50	130
1,2,3-Trichloropropane	**1**	**41.2923**	**0**	**50**	**83**	**50**	**130**
2-Chlorotoluene	1	41.5022	0	50	83	50	130
p-Ethyltoluene	1	37.3405	0	50	75	50	130
4-Chlorotoluene	1	39.557	0	50	79	50	130
n-Propylbenzene	**1**	**39.5838**	**0**	**50**	**79**	**50**	**130**
Bromobenzene	1	39.8882	0	50	80	50	130
1,3,5-Trimethylbenzene	**1**	**44.2606**	**0**	**50**	**89**	**50**	**130**
Butyl methacrylate	1	44.8847	0	50	90	50	130
t-Butylbenzene	**1**	**40.8828**	**0**	**50**	**82**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**39.8077**	**0**	**50**	**80**	**50**	**130**
sec-Butylbenzene	**1**	**41.2564**	**0**	**50**	**83**	**50**	**130**
4-Isopropyltoluene	**1**	**40.7458**	**0**	**50**	**81**	**50**	**130**
n-Butylbenzene	**1**	**38.6688**	**0**	**50**	**77**	**50**	**130**
p-Diethylbenzene	1	38.5083	0	50	77	50	130
1,2,4,5-Tetramethylbenzene	1	41.4972	0	50	83	50	130
1,2-Dibromo-3-Chloropropane	1	36.9535	0	50	74	50	130
Camphor	1	547.1421	0	500	109	50	130
Hexachlorobutadiene	1	36.7858	0	50	74	50	130
1,2,4-Trichlorobenzene	1	33.9584	0	50	68	50	130
1,2,3-Trichlorobenzene	1	34.7254	0	50	69	50	130
Naphthalene	1	35.4652	0	50	71	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Duplicate(If applicable):	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	53.7847	56.9035	5.6	30
Dichlorodifluoromethane	1	65.4838	62.8668	4.1	30
Chloromethane	1	56.6472	56.1541	0.87	30
Bromomethane	1	51.6003	50.2121	2.7	30
Vinyl Chloride	1	56.8458	56.1453	1.2	40
Chloroethane	1	52.3136	51.908	0.78	30
Trichlorofluoromethane	1	52.2935	51.1041	2.3	30
Ethyl ether	1	49.7009	46.2834	7.1	30
Furan	1	47.2611	46.2299	2.2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	56.3197	52.3408	7.3	30
Methylene Chloride	1	54.1757	52.7897	2.6	30
Acrolein	1	259.5406	248.918	4.2	30
Acrylonitrile	1	35.0489	34.3463	2	30
Iodomethane	1	65.8217	64.5939	1.9	30
Acetone	1	162.1024	157.3904	2.9	30
Carbon Disulfide	1	49.643	47.3944	4.6	30
t-Butyl Alcohol	1	127.633	116.3514	9.2	30
n-Hexane	1	58.3019	54.7434	6.3	30
Di-isopropyl-ether	1	55.5257	54.2364	2.3	30
1,1-Dichloroethene	1	53.6783	52.2403	2.7	40
Methyl Acetate	1	50.8647	46.8893	8.1	30
Methyl-t-butyl ether	1	57.9525	54.3286	6.5	30
1,1-Dichloroethane	1	52.194	49.0593	6.2	40
trans-1,2-Dichloroethene	1	49.8849	49.6338	0.5	30
Ethyl-t-butyl ether	1	51.0834	49.3762	3.4	30
cis-1,2-Dichloroethene	1	51.2312	49.1894	4.1	30
Bromochloromethane	1	53.4537	50.2977	6.1	30
2,2-Dichloropropane	1	58.147	57.0601	1.9	30
Ethyl acetate	1	33.6297	36.7433	8.8	30
1,4-Dioxane	1	1315.993	1274.773	3.2	30
1,1-Dichloropropene	1	50.4388	48.5605	3.8	30
Chloroform	1	51.9592	49.9443	4	40
Cyclohexane	1	52.7667	50.8219	3.8	30
1,2-Dichloroethane	1	52.776	50.2019	5	40
2-Butanone	1	34.6742	33.5103	3.4	40
1,1,1-Trichloroethane	1	52.2007	49.0659	6.2	30
Carbon Tetrachloride	1	53.6249	51.644	3.8	40
Vinyl Acetate	1	39.662	37.6728	5.1	30
Bromodichloromethane	1	52.8916	50.2178	5.2	30
Methylcyclohexane	1	51.9779	50.4394	3	30
Dibromomethane	1	50.6971	47.858	5.8	30
1,2-Dichloropropane	1	49.6665	48.2694	2.9	30
Trichloroethene	1	75.2922	73.1622	2.9	40
Benzene	1	50.3163	48.4836	3.7	40
tert-Amyl methyl ether	1	56.2173	52.4065	7	30
Iso-propylacetate	1	42.6062	41.66	2.2	30
Methyl methacrylate	1	41.2272	39.8495	3.4	30
Dibromochloromethane	1	48.1401	45.6697	5.3	30
2-Chloroethylvinylether	1	100.3461	95.5322	4.9	30
cis-1,3-Dichloropropene	1	46.6773	45.5903	2.4	30
trans-1,3-Dichloropropene	1	47.5296	44.067	7.6	30
Ethyl methacrylate	1	46.9747	43.1348	8.5	30
1,1,2-Trichloroethane	1	46.8811	44.5196	5.2	30
1,2-Dibromoethane	1	44.9778	41.0321	9.2	30
1,3-Dichloropropane	1	46.3511	42.8237	7.9	30
4-Methyl-2-Pentanone	1	36.7572	33.7094	8.7	30
2-Hexanone	1	34.1195	30.8066	10	30
Tetrachloroethene	1	52.4352	50.6666	3.4	40
Toluene	1	40.7723	41.0645	0.71	40
1,1,1,2-Tetrachloroethane	1	45.2612	45.0505	0.47	30
Chlorobenzene	1	40.3151	39.6054	1.8	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	45.4686	41.0364	10	30
n-Amyl acetate	1	44.7211	38.5687	15	30
Bromoform	**1**	**70.4273**	**65.2935**	**7.6**	**30**
Ethylbenzene	**1**	**42.7105**	**42.9713**	**0.61**	**30**
1,1,2,2-Tetrachloroethane	**1**	**44.1548**	**40.0258**	**9.8**	**30**
Styrene	**1**	**40.2637**	**37.9266**	**6**	**30**
m&p-Xylenes	**1**	**78.8436**	**78.4306**	**0.53**	**30**
o-Xylene	**1**	**39.4447**	**39.2014**	**0.62**	**30**
trans-1,4-Dichloro-2-butene	1	40.8268	36.9711	9.9	30
1,3-Dichlorobenzene	**1**	**37.8242**	**35.471**	**6.4**	**30**
1,4-Dichlorobenzene	**1**	**36.8102**	**33.9467**	**8.1**	**40**
1,2-Dichlorobenzene	**1**	**39.293**	**35.8729**	**9.1**	**40**
Isopropylbenzene	**1**	**40.7047**	**40.7636**	**0.14**	**30**
Cyclohexanone	1	135.2346	125.4322	7.5	30
Camphene	1	42.2018	41.718	1.2	30
1,2,3-Trichloropropane	**1**	**41.2923**	**36.3643**	**13**	**30**
2-Chlorotoluene	1	41.5022	40.2726	3	30
p-Ethyltoluene	1	37.3405	36.6825	1.8	30
4-Chlorotoluene	1	39.557	37.6433	5	30
n-Propylbenzene	**1**	**39.5838**	**38.3835**	**3.1**	**40**
Bromobenzene	1	39.8882	38.8818	2.6	30
1,3,5-Trimethylbenzene	**1**	**44.2606**	**43.2564**	**2.3**	**30**
Butyl methacrylate	1	44.8847	41.2717	8.4	30
t-Butylbenzene	**1**	**40.8828**	**40.0099**	**2.2**	**30**
1,2,4-Trimethylbenzene	**1**	**39.8077**	**38.5263**	**3.3**	**30**
sec-Butylbenzene	**1**	**41.2564**	**40.366**	**2.2**	**40**
4-Isopropyltoluene	**1**	**40.7458**	**39.5065**	**3.1**	**30**
n-Butylbenzene	**1**	**38.6688**	**36.1879**	**6.6**	**30**
p-Diethylbenzene	1	38.5083	36.9323	4.2	30
1,2,4,5-Tetramethylbenzene	1	41.4972	37.6781	9.6	30
1,2-Dibromo-3-Chloropropane	1	36.9535	31.3599	16	30
Camphor	1	547.1421	473.298	14	30
Hexachlorobutadiene	1	36.7858	35.1542	4.5	30
1,2,4-Trichlorobenzene	1	33.9584	28.2306	18	30
1,2,3-Trichlorobenzene	1	34.7254	30.0156	15	30
Naphthalene	1	35.4652	30.4916	15	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87763

Data File	Sample ID:	Analysis Date
Spike or Dup: 11M82284.D	MBS87763	8/31/2020 10:49:00 AM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.9325	0	20	110	50	150
Dichlorodifluoromethane	1	24.1431	0	20	121	50	150
Chloromethane	1	19.1856	0	20	96	50	150
Bromomethane	1	16.4844	0	20	82	50	150
Vinyl Chloride	1	22.7226	0	20	114	50	150
Chloroethane	1	22.7454	0	20	114	50	150
Trichlorofluoromethane	1	25.0554	0	20	125	50	150
Ethyl ether	1	18.1456	0	20	91	50	150
Furan	1	18.467	0	20	92	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.4323	0	20	112	50	150
Methylene Chloride	1	20.2238	0	20	101	70	130
Acrolein	1	109.3642	0	100	109	50	150
Acrylonitrile	1	20.0534	0	20	100	50	150
Iodomethane	1	11.4785	0	20	57	50	150
Acetone	1	94.0859	0	100	94	50	150
Carbon Disulfide	1	20.0916	0	20	100	50	150
t-Butyl Alcohol	1	97.4229	0	100	97	50	150
n-Hexane	1	21.5774	0	20	108	70	130
Di-isopropyl-ether	1	17.9766	0	20	90	70	130
1,1-Dichloroethene	1	21.3161	0	20	107	70	130
Methyl Acetate	1	25.3756	0	20	127	50	150
Methyl-t-butyl ether	1	19.1344	0	20	96	70	130
1,1-Dichloroethane	1	19.8163	0	20	99	70	130
trans-1,2-Dichloroethene	1	20.8372	0	20	104	70	130
Ethyl-t-butyl ether	1	18.1072	0	20	91	70	130
cis-1,2-Dichloroethene	1	20.1734	0	20	101	70	130
Bromochloromethane	1	20.1302	0	20	101	70	130
2,2-Dichloropropane	1	21.3775	0	20	107	70	130
Ethyl acetate	1	16.9913	0	20	85	50	150
1,4-Dioxane	1	1064.248	0	1000	106	50	150
1,1-Dichloropropene	1	20.3721	0	20	102	70	130
Chloroform	1	20.1278	0	20	101	70	130
Cyclohexane	1	21.5077	0	20	108	70	130
1,2-Dichloroethane	1	19.5169	0	20	98	70	130
2-Butanone	1	19.4982	0	20	97	50	150
1,1,1-Trichloroethane	1	21.1395	0	20	106	70	130
Carbon Tetrachloride	1	21.1128	0	20	106	50	150
Vinyl Acetate	1	14.0318	0	20	70	50	150
Bromodichloromethane	1	21.0989	0	20	105	70	130
Methylcyclohexane	1	21.0036	0	20	105	70	130
Dibromomethane	1	19.757	0	20	99	70	130
1,2-Dichloropropane	1	19.9297	0	20	100	70	130
Trichloroethene	1	20.7788	0	20	104	70	130
Benzene	1	19.8048	0	20	99	70	130
tert-Amyl methyl ether	1	17.6114	0	20	88	70	130
Iso-propylacetate	1	14.2285	0	20	71	70	130
Methyl methacrylate	1	14.1798	0	20	71	70	130
Dibromochloromethane	1	14.8959	0	20	74	70	130
2-Chloroethylvinylether	1	35.3555	0	20	177*	70	130
cis-1,3-Dichloropropene	1	15.6128	0	20	78	70	130
trans-1,3-Dichloropropene	1	16.3149	0	20	82	70	130
Ethyl methacrylate	1	14.8494	0	20	74	70	130
1,1,2-Trichloroethane	1	14.6685	0	20	73	70	130
1,2-Dibromoethane	1	15.8482	0	20	79	70	130
1,3-Dichloropropane	1	15.3691	0	20	77	70	130
4-Methyl-2-Pentanone	1	15.8007	0	20	79	50	150
2-Hexanone	1	13.9778	0	20	70	50	150
Tetrachloroethene	1	15.9873	0	20	80	50	150
Toluene	1	15.9601	0	20	80	70	130
1,1,1,2-Tetrachloroethane	1	15.3617	0	20	77	70	130
Chlorobenzene	1	15.871	0	20	79	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87763

Method: 8260C	Matrix: Aqueous	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	14.2673	0	20	71	70	130
n-Amyl acetate	1	13.4488	0	20	67*	70	130
Bromoform	**1**	**15.5826**	**0**	**20**	**78**	**70**	**130**
Ethylbenzene	**1**	**15.8995**	**0**	**20**	**79**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**15.4148**	**0**	**20**	**77**	**70**	**130**
Styrene	**1**	**15.856**	**0**	**20**	**79**	**70**	**130**
m&p-Xylenes	**1**	**33.181**	**0**	**40**	**83**	**70**	**130**
o-Xylene	**1**	**16.124**	**0**	**20**	**81**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	14.6357	0	20	73	50	150
1,3-Dichlorobenzene	**1**	**14.5926**	**0**	**20**	**73**	**70**	**130**
1,4-Dichlorobenzene	**1**	**14.3065**	**0**	**20**	**72**	**70**	**130**
1,2-Dichlorobenzene	**1**	**14.8056**	**0**	**20**	**74**	**70**	**130**
Isopropylbenzene	**1**	**16.7641**	**0**	**20**	**84**	**70**	**130**
Cyclohexanone	1	67.6338	0	100	68	50	150
Camphene	1	15.0383	0	20	75	70	130
1,2,3-Trichloropropane	**1**	**14.547**	**0**	**20**	**73**	**70**	**130**
2-Chlorotoluene	1	15.35	0	20	77	70	130
p-Ethyltoluene	1	14.5706	0	20	73	70	130
4-Chlorotoluene	1	15.0182	0	20	75	70	130
n-Propylbenzene	**1**	**16.0218**	**0**	**20**	**80**	**70**	**130**
Bromobenzene	1	14.9379	0	20	75	70	130
1,3,5-Trimethylbenzene	**1**	**15.6441**	**0**	**20**	**78**	**70**	**130**
Butyl methacrylate	1	16.2155	0	20	81	70	130
t-Butylbenzene	**1**	**15.3438**	**0**	**20**	**77**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**14.8353**	**0**	**20**	**74**	**70**	**130**
sec-Butylbenzene	**1**	**15.3366**	**0**	**20**	**77**	**70**	**130**
4-Isopropyltoluene	**1**	**15.2528**	**0**	**20**	**76**	**70**	**130**
n-Butylbenzene	**1**	**14.8177**	**0**	**20**	**74**	**70**	**130**
p-Diethylbenzene	1	14.9483	0	20	75	70	130
1,2,4,5-Tetramethylbenzene	1	13.3689	0	20	67*	70	130
1,2-Dibromo-3-Chloropropane	1	16.5537	0	20	83	50	150
Camphor	1	124.287	0	200	62	20	150
Hexachlorobutadiene	1	15.5588	0	20	78	50	150
1,2,4-Trichlorobenzene	1	14.5121	0	20	73	70	130
1,2,3-Trichlorobenzene	1	11.9922	0	20	60*	70	130
Naphthalene	1	35.2852	0	20	176*	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 11M82276.D
Matrix: Aqueous

Blank Analysis Date: 08/31/20 08:20
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD18955-006	11M82278.D	08/31/20 08:59
MBS87763	11M82284.D	08/31/20 10:49

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M131886.D
Matrix: Soil

Blank Analysis Date: 08/31/20 08:25
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD18955-001	6M131892.D	08/31/20 10:29
AD18955-002(MS:	6M131889.D	08/31/20 09:27
AD18955-003(MSD	6M131890.D	08/31/20 09:48
AD18955-004	6M131893.D	08/31/20 10:49
AD18955-005	6M131894.D	08/31/20 11:10
MBS87762	6M131888.D	08/31/20 09:07

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6
Data File: 6M130900.D
Analysis Date: 08/01/20 11:54
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.385 to 7.397 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.5	16321	PASS
75	95	30	60	51.1	42800	PASS
95	95	100	100	100.0	83807	PASS
96	95	5	9	7.3	6128	PASS
173	174	0.00	2	1.7	1176	PASS
174	95	50	100	84.9	71135	PASS
175	174	5	9	7.4	5277	PASS
176	174	95	101	98.8	70251	PASS
177	176	5	9	6.4	4486	PASS

Data File	Sample Number	Analysis Date:
6M130901.D	BLK	08/01/20 12:09
6M130902.D	BLK	08/01/20 12:30
6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51
6M130904.D	CAL @ 1 PPB	08/01/20 13:11
6M130905.D	CAL @ 2 PPB	08/01/20 13:32
6M130906.D	CAL @ 5 PPB	08/01/20 13:52
6M130907.D	CAL @ 20 PPB	08/01/20 14:13
6M130908.D	CAL @ 50 PPB	08/01/20 14:34
6M130909.D	CAL @ 100 PPB	08/01/20 14:54
6M130910.D	BLK	08/01/20 15:15
6M130911.D	CAL @ 250 PPB	08/01/20 15:36
6M130912.D	BLK	08/01/20 15:56
6M130913.D	CAL @ 500 PPB	08/01/20 16:17
6M130914.D	BLK	08/01/20 16:37
6M130915.D	BLK	08/01/20 16:58
6M130916.D	BLK	08/01/20 17:19
6M130917.D	500 PPB	08/01/20 17:39
6M130918.D	BLK	08/01/20 18:00
6M130919.D	BLK	08/01/20 18:21
6M130920.D	250 PPB	08/01/20 18:41
6M130921.D	BLK	08/01/20 19:02
6M130922.D	BLK	08/01/20 19:22
6M130923.D	BLK	08/01/20 19:43
6M130924.D	BLK	08/01/20 20:04
6M130925.D	ICV	08/01/20 20:24
6M130926.D	BLK	08/01/20 20:45
6M130927.D	CCV	08/01/20 21:05
6M130928.D	BLK	08/01/20 21:26
6M130929.D	BLK	08/01/20 21:47
6M130930.D	BLK	08/01/20 22:07
6M130931.D	BLK	08/01/20 22:28
6M130932.D	BLK	08/01/20 22:49
6M130933.D	DAILY BLANK	08/01/20 23:09

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 11
Data File: 11M81819.D
Analysis Date: 08/17/20 12:47
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.141 to 7.180 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	16.0	3785	PASS
75	95	30	60	46.3	10988	PASS
95	95	100	100	100.0	23722	PASS
96	95	5	9	6.9	1636	PASS
173	174	0.00	2	0.8	191	PASS
174	95	50	100	99.9	23696	PASS
175	174	5	9	7.1	1692	PASS
176	174	95	101	96.3	22815	PASS
177	176	5	9	6.3	1429	PASS

Data File	Sample Number	Analysis Date:
11M81820.D	20 PPB	08/17/20 13:00
11M81824.D	CAL @ 0.5 PPB	08/17/20 14:14
11M81825.D	CAL @ 1 PPB	08/17/20 14:32
11M81826.D	CAL @ 5 PPB	08/17/20 14:51
11M81827.D	CAL @ 10 PPB	08/17/20 15:09
11M81828.D	CAL @ 20 PPB	08/17/20 15:28
11M81830.D	CAL @ 50 PPB	08/17/20 16:05
11M81831.D	500 PPB	08/17/20 16:23
11M81834.D	CAL @ 250 PPB	08/17/20 17:18
11M81837.D	CAL @ 100 PPB	08/17/20 18:14
11M81841.D	ICV	08/17/20 19:27
11M81842.D	STD	08/17/20 19:45
11M81846.D	DAILY BLANK	08/17/20 20:59
11M81847.D	1 PPB	08/17/20 21:17
11M81848.D	1 PPB	08/17/20 21:35
11M81849.D	1 PPB	08/17/20 21:54
11M81850.D	1 PPB	08/17/20 22:12
11M81851.D	BLK	08/17/20 22:30

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 11
Data File: 11M82270.D
Analysis Date: 08/31/20 06:35
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.151 to 7.157 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	17.1	6226	PASS
75	95	30	60	49.5	17977	PASS
95	95	100	100	100.0	36339	PASS
96	95	5	9	7.1	2563	PASS
173	174	0.00	2	0.3	100	PASS
174	95	50	100	93.4	33933	PASS
175	174	5	9	7.5	2560	PASS
176	174	95	101	99.3	33712	PASS
177	176	5	9	6.0	2013	PASS

Data File	Sample Number	Analysis Date:
11M82271.D	20 PPB	08/31/20 06:49
11M82272.D	CAL @ 20 PPB	08/31/20 07:07
11M82274.D	BLK	08/31/20 07:43
11M82275.D	DAILY BLANK	08/31/20 08:02
11M82276.D	DAILY BLANK	08/31/20 08:20
11M82277.D	AD18973-009	08/31/20 08:40
11M82278.D	AD18955-006	08/31/20 08:59
11M82279.D	AD18953-004	08/31/20 09:17
11M82280.D	AD18953-001	08/31/20 09:36
11M82281.D	AD18953-002	08/31/20 09:54
11M82282.D	AD18953-003(5X)	08/31/20 10:13
11M82283.D	BLK	08/31/20 10:31
11M82284.D	MBS87763	08/31/20 10:49
11M82285.D	MBS87764	08/31/20 11:08
11M82286.D	AD18953-001(MS)	08/31/20 11:26
11M82287.D	AD18953-001(MSD	08/31/20 11:44
11M82288.D	AD18942-001(MS)	08/31/20 12:02
11M82289.D	AD18942-001(MSD	08/31/20 12:21
11M82290.D	MBS87765	08/31/20 12:39
11M82291.D	AD18942-001	08/31/20 12:58
11M82292.D	BLK	08/31/20 13:16
11M82293.D	AD18930-007	08/31/20 13:35
11M82294.D	AD18930-008	08/31/20 13:53
11M82295.D	AD18930-001	08/31/20 14:11
11M82296.D	AD18930-002	08/31/20 14:30
11M82297.D	AD18930-003	08/31/20 14:48
11M82298.D	AD18930-004	08/31/20 15:06
11M82299.D	AD18930-005	08/31/20 15:25
11M82300.D	AD18930-006	08/31/20 15:43
11M82301.D	AD18927-012	08/31/20 16:02
11M82302.D	AD18926-012(8uL)	08/31/20 16:20
11M82303.D	AD18932-001	08/31/20 16:39
11M82304.D	BLK	08/31/20 16:57
11M82305.D	AD18947-002	08/31/20 17:15
11M82306.D	AD18947-001	08/31/20 17:34
11M82307.D	AD18917-001	08/31/20 17:52
11M82308.D	BLK	08/31/20 18:10
11M82309.D	BLK	08/31/20 18:29

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6
Data File: 6M131881.D
Analysis Date: 08/31/20 06:48
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.385 to 7.391 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	21.9	10471	PASS
75	95	30	60	52.9	25316	PASS
95	95	100	100	100.0	47820	PASS
96	95	5	9	6.3	3008	PASS
173	174	0.00	2	2.0	804	PASS
174	95	50	100	86.0	41140	PASS
175	174	5	9	7.2	2963	PASS
176	174	95	101	97.0	39908	PASS
177	176	5	9	6.5	2588	PASS

Data File	Sample Number	Analysis Date:
6M131882.D	CAL @ 50 PPB	08/31/20 07:03
6M131883.D	50 PPB	08/31/20 07:24
6M131884.D	BLK	08/31/20 07:44
6M131885.D	BLK	08/31/20 08:05
6M131886.D	DAILY BLANK	08/31/20 08:25
6M131887.D	AD18861-008(%SO	08/31/20 08:46
6M131888.D	MBS87762	08/31/20 09:07
6M131889.D	AD18955-002(MS:	08/31/20 09:27
6M131890.D	AD18955-003(MSD	08/31/20 09:48
6M131891.D	BLK	08/31/20 10:08
6M131892.D	AD18955-001	08/31/20 10:29
6M131893.D	AD18955-004	08/31/20 10:49
6M131894.D	AD18955-005	08/31/20 11:10
6M131895.D	AD18908-001	08/31/20 11:31
6M131896.D	AD18908-005	08/31/20 11:51
6M131897.D	AD18926-011	08/31/20 12:12
6M131898.D	AD18926-014	08/31/20 12:32
6M131899.D	AD18926-010	08/31/20 12:53
6M131900.D	AD18934-001	08/31/20 13:13
6M131901.D	AD18934-002	08/31/20 13:34
6M131902.D	AD18934-003	08/31/20 13:55
6M131903.D	AD18934-004	08/31/20 14:15
6M131904.D	AD18927-009	08/31/20 14:36
6M131905.D	AD18927-010	08/31/20 14:56
6M131906.D	AD18927-011	08/31/20 15:17
6M131907.D	AD18949-014	08/31/20 15:38
6M131908.D	AD18929-001	08/31/20 15:58
6M131909.D	AD18956-001	08/31/20 16:19
6M131910.D	AD18956-002	08/31/20 16:39
6M131911.D	AD18956-003	08/31/20 17:00
6M131912.D	AD18922-001	08/31/20 17:21
6M131913.D	AD18927-012	08/31/20 17:41
6M131914.D	BLK	08/31/20 18:02
6M131915.D	AD18917-001(5X)	08/31/20 18:22

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FORM8

Internal Standard Areas

Evaluation Std Data File: 6M130907.D Method: EPA 8260C

Analysis Date/Time: 08/01/20 14:13

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	391232	5.12	322837	6.76	175394	8.06								
Eval File Area Limit:	195616-782464		161418-645674		87697-350788									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.56-8.56									

Data File	Sample#													
6M130901.D	BLK	647108	5.13	584956	6.76	321998	8.06							
6M130902.D	BLK	662673	5.13	568512	6.76	315208	8.06							
6M130903.D	CAL @ 0.5 PPB	423816	5.13	356268	6.76	199185	8.06							
6M130904.D	CAL @ 1 PPB	378400	5.13	324090	6.76	180373	8.06							
6M130905.D	CAL @ 2 PPB	388738	5.13	331679	6.76	184301	8.06							
6M130906.D	CAL @ 5 PPB	368139	5.13	310453	6.76	178697	8.06							
6M130907.D	CAL @ 20 PPB	391232	5.12	322837	6.76	175394	8.06							
6M130908.D	CAL @ 50 PPB	376294	5.12	318043	6.76	177889	8.06							
6M130909.D	CAL @ 100 PPB	460018	5.13	373585	6.76	219087	8.06							
6M130910.D	BLK	671229	5.13	569352	6.76	321567	8.06							
6M130911.D	CAL @ 250 PPB	432672	5.13	358455	6.76	285114	8.06							
6M130912.D	BLK	642212	5.13	553729	6.76	305240	8.06							
6M130913.D	CAL @ 500 PPB	502146	5.13	414316	6.76	281684	8.06							
6M130914.D	BLK	668873	5.13	580830	6.76	327121	8.06							
6M130915.D	BLK	614880	5.13	527669	6.76	274397	8.06							
6M130916.D	BLK	617160	5.13	513148	6.76	280171	8.06							
6M130917.D	500 PPB	679447	5.13	571293	6.76	417829A	8.06							
6M130918.D	BLK	642734	5.13	541838	6.76	297229	8.06							
6M130919.D	BLK	626881	5.13	524938	6.76	282166	8.06							
6M130920.D	250 PPB	398719	5.13	331004	6.76	292306	8.06							
6M130921.D	BLK	678500	5.13	566061	6.76	310563	8.06							
6M130922.D	BLK	611781	5.13	511917	6.76	276307	8.06							
6M130923.D	BLK	645653	5.12	562098	6.76	314533	8.06							
6M130924.D	BLK	637312	5.13	544069	6.76	302683	8.06							
6M130925.D	ICV	562401	5.13	479620	6.76	275791	8.06							
6M130926.D	BLK	612242	5.13	532032	6.76	296223	8.06							
6M130927.D	CCV	479371	5.13	395051	6.76	229839	8.06							
6M130928.D	BLK	626008	5.13	553278	6.76	305603	8.06							
6M130929.D	BLK	653466	5.13	560376	6.76	310169	8.06							
6M130930.D	BLK	636660	5.13	557215	6.76	311910	8.06							
6M130931.D	BLK	624066	5.13	544071	6.76	305600	8.06							
6M130932.D	BLK	577281	5.13	502367	6.76	285043	8.06							

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 6M130907.D Method: EPA 8260C

Analysis Date/Time: 08/01/20 14:13

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	391232	5.12	322837	6.76	175394	8.06								
Eval File Area Limit:	195616-782464		161418-645674		87697-350788									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.56-8.56									
Data File Sample#														
6M130933.D DAILY BLANK	622512	5.13	537053	6.76	299436	8.06								

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 11M81828.D Method: EPA 8260C

Analysis Date/Time: 08/17/20 15:28

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	233186	4.96	222916	6.55	128435	7.82								
Eval File Area Limit:	116593-466372		111458-445832		64218-256870									
Eval File Rt Limit:	4.46-5.46		6.05-7.05		7.32-8.32									

Data File	Sample#						
11M81820.D	20 PPB	241674	4.96	230732	6.55	128886	7.82
11M81824.D	CAL @ 0.5 PPB	230511	4.96	226034	6.55	121046	7.82
11M81825.D	CAL @ 1 PPB	227797	4.96	223176	6.55	120668	7.82
11M81826.D	CAL @ 5 PPB	228906	4.96	218831	6.55	123832	7.82
11M81827.D	CAL @ 10 PPB	228049	4.96	218132	6.55	121969	7.82
11M81828.D	CAL @ 20 PPB	233186	4.96	222916	6.55	128435	7.82
11M81830.D	CAL @ 50 PPB	237895	4.96	230237	6.55	137065	7.82
11M81831.D	500 PPB	338211	4.96	350068	6.55	205084	7.82
11M81834.D	CAL @ 250 PPB	297871	4.96	258850	6.55	155842	7.82
11M81837.D	CAL @ 100 PPB	251358	4.96	243428	6.55	224715	7.82
11M81841.D	ICV	223046	4.96	219270	6.55	126571	7.82
11M81842.D	STD	231561	4.96	225276	6.55	128590	7.82
11M81846.D	DAILY BLANK	229006	4.96	229732	6.55	124399	7.82
11M81847.D	1 PPB	214221	4.96	211370	6.55	116843	7.82
11M81848.D	1 PPB	216384	4.96	221112	6.55	122155	7.82
11M81849.D	1 PPB	203535	4.96	202673	6.55	111478	7.82
11M81850.D	1 PPB	217205	4.96	212528	6.55	117445	7.82
11M81851.D	BLK	208931	4.96	204407	6.55	112161	7.82

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M131882.D Method: EPA 8260C

Analysis Date/Time: 08/31/20 07:03

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	294420	5.13	268587	6.76	163179	8.05								
Eval File Area Limit:	147210-588840		134294-537174		81590-326358									
Eval File Rt Limit:	4.63-5.63		6.26-7.26		7.55-8.55									

Data File	Sample#													
6M131883.D	50 PPB	289410	5.12	257133	6.76	153705	8.05							
6M131884.D	BLK	303504	5.13	285373	6.76	161014	8.05							
6M131885.D	BLK	300511	5.12	280208	6.76	155502	8.05							
6M131886.D	DAILY BLANK	325455	5.13	300945	6.76	168512	8.05							
6M131887.D	AD18861-008(%SOLI	294124	5.12	208592	6.76	83353	8.05							
6M131888.D	MBS87762	357661	5.13	320865	6.76	194278	8.05							
6M131889.D	AD18955-002(MS:AD	404386	5.12	365118	6.76	216510	8.06							
6M131890.D	AD18955-003(MSD:A	402783	5.12	369710	6.76	220478	8.05							
6M131891.D	BLK	370169	5.12	346259	6.76	197195	8.05							
6M131892.D	AD18955-001	369414	5.13	347677	6.76	186441	8.05							
6M131893.D	AD18955-004	318382	5.12	297989	6.76	163221	8.06							
6M131894.D	AD18955-005	352772	5.12	325778	6.76	172436	8.05							
6M131895.D	AD18908-001	341089	5.13	268680	6.76	105541	8.05							
6M131896.D	AD18908-005	172778	5.13	149525	6.76	60996 A	8.05							
6M131897.D	AD18926-011	370213	5.12	327052	6.76	163398	8.05							
6M131898.D	AD18926-014	355619	5.12	326697	6.76	172564	8.05							
6M131899.D	AD18926-010	351609	5.12	308727	6.76	154454	8.05							
6M131900.D	AD18934-001	319340	5.12	284398	6.76	131424	8.05							
6M131901.D	AD18934-002	302868	5.12	242110	6.76	108250	8.05							
6M131902.D	AD18934-003	355120	5.13	327931	6.76	173297	8.05							
6M131903.D	AD18934-004	348242	5.13	325392	6.76	167088	8.05							
6M131904.D	AD18927-009	339553	5.13	316325	6.76	156718	8.05							
6M131905.D	AD18927-010	351364	5.12	316309	6.76	149290	8.05							
6M131906.D	AD18927-011	331560	5.12	324229	6.76	176659	8.05							
6M131907.D	AD18949-014	341456	5.12	320988	6.76	167806	8.05							
6M131908.D	AD18929-001	341874	5.12	309360	6.76	153369	8.05							
6M131909.D	AD18956-001	342209	5.12	313138	6.76	160659	8.05							
6M131910.D	AD18956-002	314886	5.12	281611	6.76	138568	8.05							
6M131911.D	AD18956-003	330608	5.12	302966	6.76	152935	8.05							
6M131912.D	AD18922-001	323296	5.12	260757	6.76	94829	8.05							
6M131913.D	AD18927-012	309932	5.12	235908	6.76	130257	8.06							
6M131914.D	BLK	378432	5.12	378555	6.76	215348	8.05							

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M131882.D Method: EPA 8260C

Analysis Date/Time: 08/31/20 07:03

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	294420	5.13	268587	6.76	163179	8.05								
Eval File Area Limit:	147210-588840		134294-537174		81590-326358									
Eval File Rt Limit:	4.63-5.63		6.26-7.26		7.55-8.55									
Data File Sample#														
6M131915.D AD18917-001(5X)	338921	5.12	269470	6.76	56184A	8.06								

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0082803 0076

FORM8

Internal Standard Areas

Evaluation Std Data File: 11M82272.D Method: EPA 8260C

Analysis Date/Time: 08/31/20 07:07

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	280695	4.96	336326	6.55	207063	7.82								
Eval File Area Limit:	140348-561390		168163-672652		103532-414126									
Eval File Rt Limit:	4.46-5.46		6.05-7.05		7.32-8.32									

Data File	Sample#						
11M82271.D	20 PPB	282175	4.96	339608	6.55	206607	7.82
11M82274.D	BLK	278056	4.96	340245	6.55	202914	7.82
11M82275.D	DAILY BLANK	268952	4.96	343949	6.55	210400	7.82
11M82276.D	DAILY BLANK	269867	4.96	335774	6.55	196356	7.82
11M82277.D	AD18973-009	279781	4.96	342942	6.55	193281	7.82
11M82278.D	AD18955-006	270721	4.96	337227	6.55	192587	7.82
11M82279.D	AD18953-004	273754	4.96	338640	6.55	191283	7.82
11M82280.D	AD18953-001	265035	4.96	324265	6.55	189959	7.82
11M82281.D	AD18953-002	267758	4.96	328070	6.55	187157	7.82
11M82282.D	AD18953-003(5X)	274627	4.96	328700	6.55	191459	7.82
11M82283.D	BLK	259540	4.96	323884	6.55	187280	7.82
11M82284.D	MBS87763	275337	4.96	326746	6.55	201606	7.82
11M82285.D	MBS87764	257554	4.96	324611	6.55	215827	7.82
11M82286.D	AD18953-001(MS)	268280	4.96	322328	6.55	194772	7.82
11M82287.D	AD18953-001(MSD)	273290	4.96	329376	6.55	201700	7.82
11M82288.D	AD18942-001(MS)	253427	4.95	320908	6.55	211371	7.82
11M82289.D	AD18942-001(MSD)	264809	4.95	333425	6.55	216265	7.82
11M82290.D	MBS87765	276408	4.96	338288	6.55	206360	7.82
11M82291.D	AD18942-001	258553	4.95	335485	6.55	213408	7.82
11M82292.D	BLK	275872	4.96	340557	6.55	202793	7.82
11M82293.D	AD18930-007	251109	4.96	310962	6.55	182347	7.82
11M82294.D	AD18930-008	265709	4.96	334107	6.55	193614	7.82
11M82295.D	AD18930-001	255053	4.96	321474	6.55	189252	7.82
11M82296.D	AD18930-002	256012	4.96	322780	6.55	191400	7.82
11M82297.D	AD18930-003	254901	4.96	316323	6.55	186104	7.82
11M82298.D	AD18930-004	251148	4.96	316815	6.55	186334	7.82
11M82299.D	AD18930-005	251910	4.96	315383	6.55	182665	7.82
11M82300.D	AD18930-006	256366	4.96	318108	6.55	185498	7.82
11M82301.D	AD18927-012	242644	4.95	327180	6.55	214161	7.82
11M82302.D	AD18926-012(8uL)	276653	4.96	348621	6.55	208116	7.82
11M82303.D	AD18932-001	250211	4.96	344525	6.55	303614	7.82
11M82304.D	BLK	272408	4.96	344263	6.55	204253	7.82

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 11M82272.D Method: EPA 8260C

Analysis Date/Time: 08/31/20 07:07

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	280695	4.96	336326	6.55	207063	7.82								
Eval File Area Limit:	140348-561390		168163-672652		103532-414126									
Eval File Rt Limit:	4.46-5.46		6.05-7.05		7.32-8.32									
Data File Sample#														
11M82305.D AD18947-002	252561	4.95	342424	6.55	237781	7.82								
11M82306.D AD18947-001	251772	4.96	340905	6.55	301587	7.82								
11M82307.D AD18917-001	238884	4.96	326785	6.55	233907	7.82								
11M82308.D BLK	274898	4.96	352679	6.55	214449	7.82								
11M82309.D BLK	269478	4.96	348630	6.55	204649	7.82								

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

GC/MS Volatile Data
Sample Data

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18955-001
Client Id: HRPB-3
Data File: 6M131892.D
Analysis Date: 08/31/20 10:29
Date Rec/Extracted: 08/28/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5.99g
Final Vol: NA
Dilution: 0.835
Solids: 81

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0021	U	56-23-5	Carbon Tetrachloride	0.0021	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0021	U	108-90-7	Chlorobenzene	0.0021	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0021	U	75-00-3	Chloroethane	0.0021	U
79-00-5	1,1,2-Trichloroethane	0.0021	U	67-66-3	Chloroform	0.0021	U
75-34-3	1,1-Dichloroethane	0.0021	U	74-87-3	Chloromethane	0.0021	U
75-35-4	1,1-Dichloroethene	0.0021	U	156-59-2	cis-1,2-Dichloroethene	0.0021	U
96-18-4	1,2,3-Trichloropropane	0.0021	U	10061-01-5	cis-1,3-Dichloropropene	0.0021	U
95-63-6	1,2,4-Trimethylbenzene	0.0010	U	124-48-1	Dibromochloromethane	0.0021	U
95-50-1	1,2-Dichlorobenzene	0.0021	U	75-71-8	Dichlorodifluoromethane	0.0021	U
107-06-2	1,2-Dichloroethane	0.0021	U	100-41-4	Ethylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0021	U	98-82-8	Isopropylbenzene	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	0.0010	U	79601-23-1	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0021	U	**75-09-2**	**Methylene Chloride**	**0.0021**	**0.0052**
142-28-9	1,3-Dichloropropane	0.0021	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0021	U	104-51-8	n-Butylbenzene	0.0010	U
123-91-1	1,4-Dioxane	0.10	U	103-65-1	n-Propylbenzene	0.0010	U
78-93-3	2-Butanone	0.0021	U	95-47-6	o-Xylene	0.0010	U
110-75-8	2-Chloroethylvinylether	0.0021	U	135-98-8	sec-Butylbenzene	0.0010	U
591-78-6	2-Hexanone	0.0021	U	100-42-5	Styrene	0.0021	U
99-87-6	4-Isopropyltoluene	0.0010	U	75-65-0	t-Butyl Alcohol	0.010	U
108-10-1	4-Methyl-2-Pentanone	0.0021	U	98-06-6	t-Butylbenzene	0.0010	U
67-64-1	Acetone	0.010	U	**127-18-4**	**Tetrachloroethene**	**0.0021**	**0.011**
107-02-8	Acrolein	0.010	U	108-88-3	Toluene	0.0010	U
107-13-1	Acrylonitrile	0.0021	U	156-60-5	trans-1,2-Dichloroethene	0.0021	U
71-43-2	Benzene	0.0010	U	10061-02-6	trans-1,3-Dichloropropene	0.0021	U
75-27-4	Bromodichloromethane	0.0021	U	**79-01-6**	**Trichloroethene**	**0.0021**	**0.022**
75-25-2	Bromoform	0.0021	U	75-69-4	Trichlorofluoromethane	0.0021	U
74-83-9	Bromomethane	0.0021	U	75-01-4	Vinyl Chloride	0.0021	U
75-15-0	Carbon Disulfide	0.0021	U	1330-20-7	Xylenes (Total)	0.0010	U

Worksheet #: 565881

Total Target Concentration 0.038

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

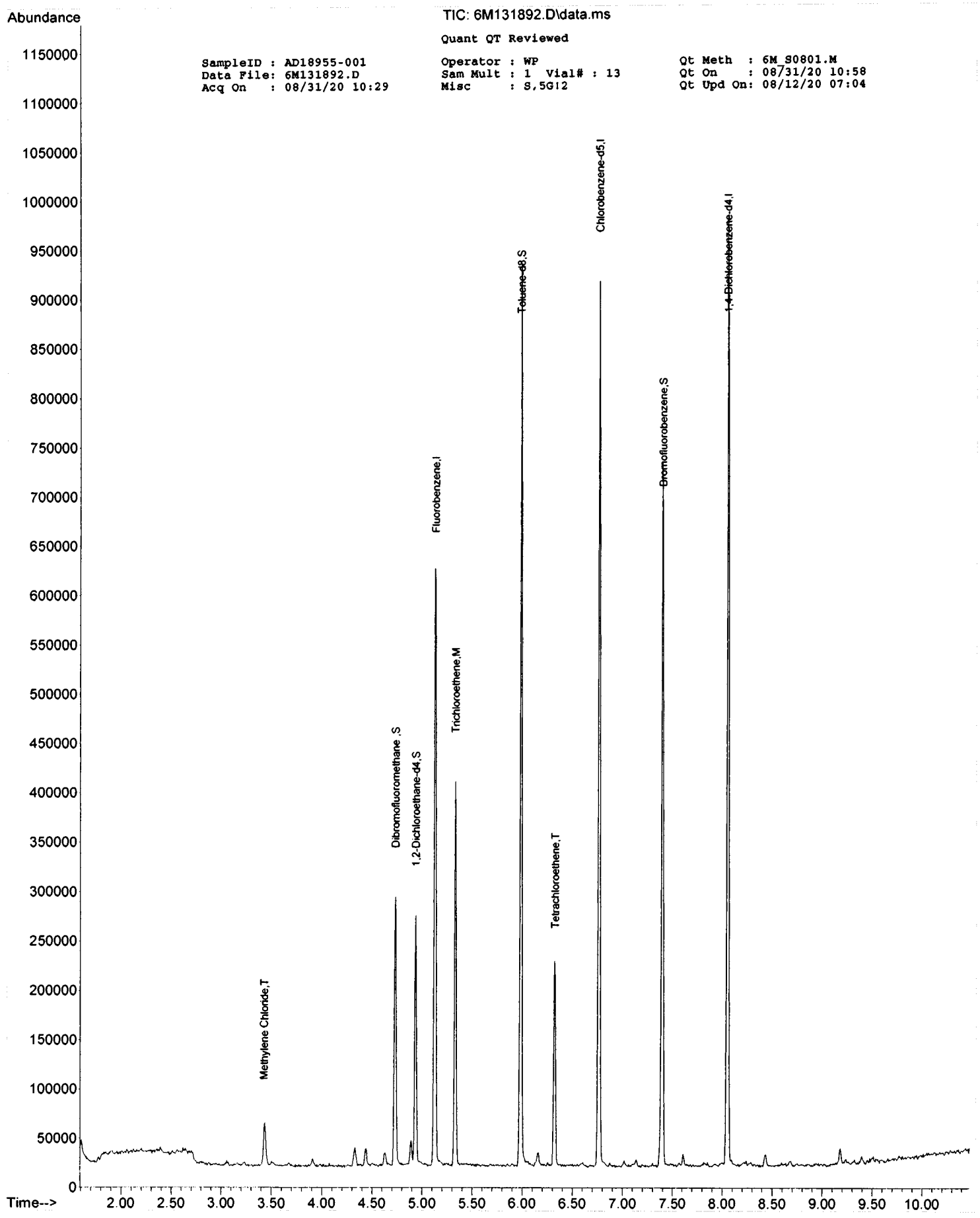
Quantitation Report (QT Reviewed)

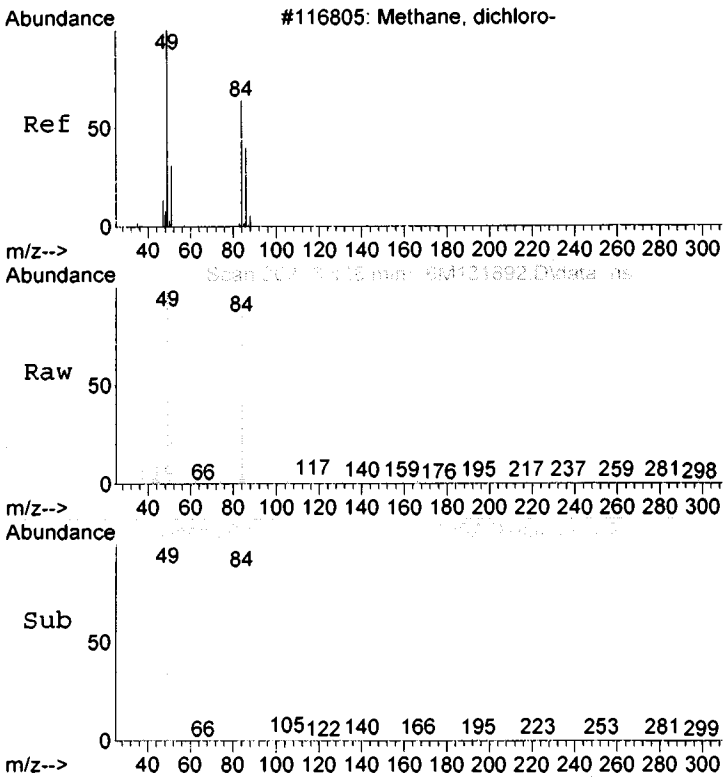
SampleID : AD18955-001 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131892.D Sam Mult : 1 Vial# : 13 Qt On : 08/31/20 10:58
Acq On : 08/31/20 10:29 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	369414	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	347677	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	186441	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	104840	31.93	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.43%			
39) 1,2-Dichloroethane-d4	4.934	67	54002	30.50	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.67%			
66) Toluene-d8	5.983	98	392998	27.39	ug/l	0.00
Spiked Amount 30.000			Recovery = 91.30%			
76) Bromofluorobenzene	7.397	174	144989	29.54	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.47%			
Target Compounds						Qvalue
15) Methylene Chloride	3.428	84	16988	5.0839	ug/l	96
49) Trichloroethene	5.330	130	78734	21.8000	ug/l	91
65) Tetrachloroethene	6.324	164	34862	10.8224	ug/l	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

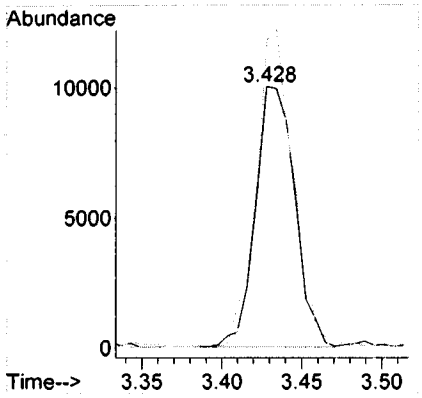

Abundance
TIC: 6M131892.D\data.ms
Quant QT Reviewed
SampleID : AD18955-001
Data File: 6M131892.D
Acq On : 08/31/20 10:29
Operator : WP
Sam Mult : 1 Vial# : 13
Misc : S,5G12
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 10:58
Qt Upd On: 08/12/20 07:04
Methylene Chloride,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

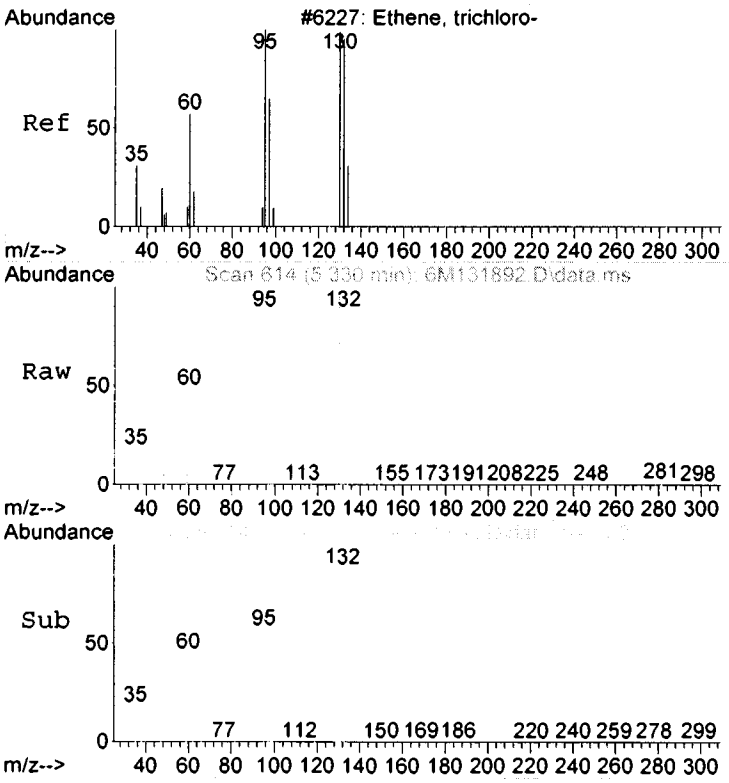


#15
Methylene Chloride
Concen: 5.08 ug/l
RT: 3.428 min Scan# 302
Delta R.T. -0.006 min
Lab File: 6M131892.D
Acq: 31 Aug 2020 10:29

Tgt Ion: 84 Resp: 16988

Ion	Ratio	Lower	Upper
84	100		
49	115.6	47.0	188.0
86	58.8	25.7	102.7

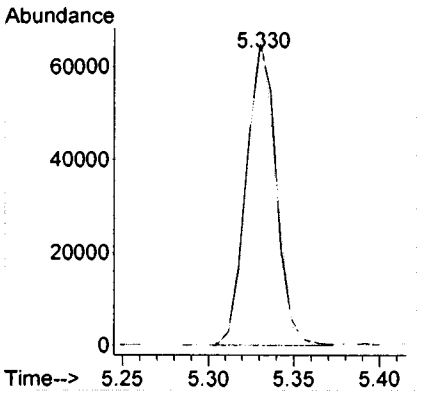


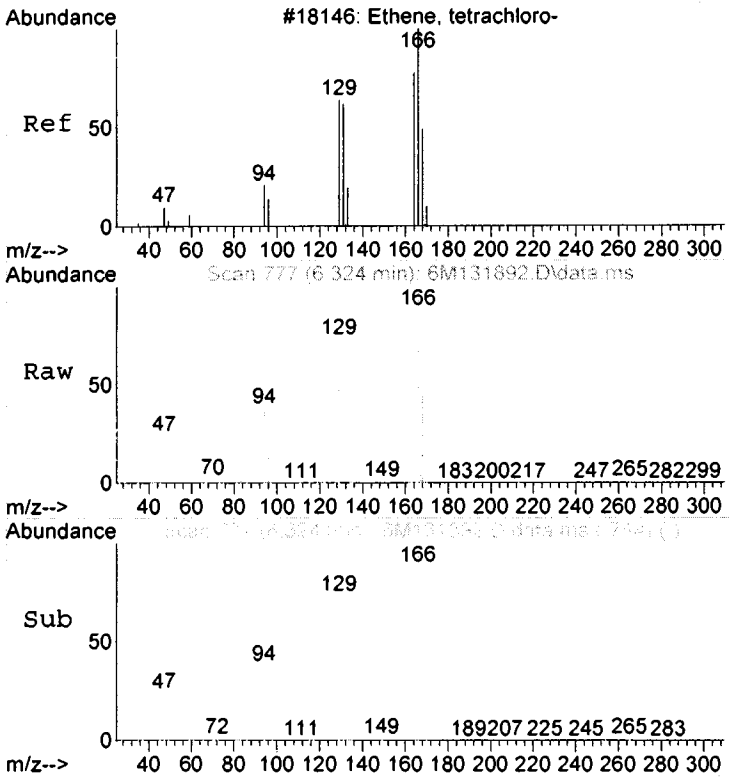


#49
Trichloroethene
Concen: 21.80 ug/l
RT: 5.330 min Scan# 614
Delta R.T. -0.000 min
Lab File: 6M131892.D
Acq: 31 Aug 2020 10:29

Tgt Ion:130 Resp: 78734

Ion	Ratio	Lower	Upper
130	100		
132	105.2	36.8	156.8
95	102.9	53.8	133.8

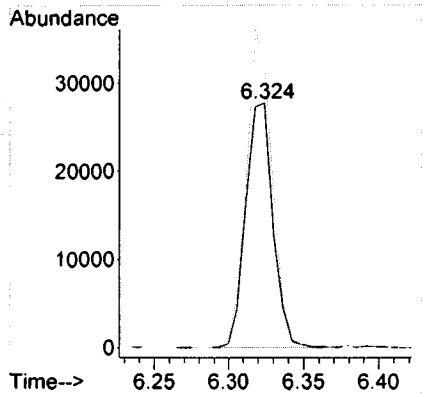




#65
Tetrachloroethene
Concen: 10.82 ug/l
RT: 6.324 min Scan# 777
Delta R.T. -0.000 min
Lab File: 6M131892.D
Acq: 31 Aug 2020 10:29

Tgt Ion:164 Resp: 34862

Ion	Ratio	Lower	Upper
164	100		
166	115.4	60.6	200.6



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18955-002(MS:AD18
Client Id: HRPB-3 MS
Data File: 6M131889.D
Analysis Date: 08/31/20 09:27
Date Rec/Extracted: 08/28/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 7.18g
Final Vol: NA
Dilution: 0.696
Solids: 79

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0018	0.043	56-23-5	Carbon Tetrachloride	0.0018	0.046
79-34-5	1,1,2,2-Tetrachloroethane	0.0018	0.035	108-90-7	Chlorobenzene	0.0018	0.035
76-13-1	1,1,2-Trichloro-1,2,2-triflu	0.0018	0.046	75-00-3	Chloroethane	0.0018	0.046
79-00-5	1,1,2-Trichloroethane	0.0018	0.039	67-66-3	Chloroform	0.0018	0.044
75-34-3	1,1-Dichloroethane	0.0018	0.043	74-87-3	Chloromethane	0.0018	0.049
75-35-4	1,1-Dichloroethene	0.0018	0.046	156-59-2	cis-1,2-Dichloroethene	0.0018	0.043
96-18-4	1,2,3-Trichloropropane	0.0018	0.032	10061-01-5	cis-1,3-Dichloropropene	0.0018	0.040
95-63-6	1,2,4-Trimethylbenzene	0.00088	0.034	124-48-1	Dibromochloromethane	0.0018	0.040
95-50-1	1,2-Dichlorobenzene	0.0018	0.032	75-71-8	Dichlorodifluoromethane	0.0018	0.055
107-06-2	1,2-Dichloroethane	0.0018	0.044	100-41-4	Ethylbenzene	0.00088	0.038
78-87-5	1,2-Dichloropropane	0.0018	0.043	98-82-8	Isopropylbenzene	0.00088	0.036
108-67-8	1,3,5-Trimethylbenzene	0.00088	0.038	79601-23-1	m&p-Xylenes	0.00088	0.069
541-73-1	1,3-Dichlorobenzene	0.0018	0.031	75-09-2	Methylene Chloride	0.0018	0.047
142-28-9	1,3-Dichloropropane	0.0018	0.038	1634-04-4	Methyl-t-butyl ether	0.00088	0.048
106-46-7	1,4-Dichlorobenzene	0.0018	0.030	104-51-8	n-Butylbenzene	0.00088	0.032
123-91-1	1,4-Dioxane	0.088	1.1	103-65-1	n-Propylbenzene	0.00088	0.034
78-93-3	2-Butanone	0.0018	0.030	95-47-6	o-Xylene	0.00088	0.035
110-75-8	2-Chloroethylvinylether	0.0018	0.084	135-98-8	sec-Butylbenzene	0.00088	0.036
591-78-6	2-Hexanone	0.0018	0.027	100-42-5	Styrene	0.0018	0.033
99-87-6	4-Isopropyltoluene	0.00088	0.035	75-65-0	t-Butyl Alcohol	0.0088	0.10
108-10-1	4-Methyl-2-Pentanone	0.0018	0.030	98-06-6	t-Butylbenzene	0.00088	0.035
67-64-1	Acetone	0.0088	0.14	127-18-4	Tetrachloroethene	0.0018	0.045
107-02-8	Acrolein	0.0088	0.22	108-88-3	Toluene	0.00088	0.036
107-13-1	Acrylonitrile	0.0018	0.030	156-60-5	trans-1,2-Dichloroethene	0.0018	0.044
71-43-2	Benzene	0.00088	0.043	10061-02-6	trans-1,3-Dichloropropene	0.0018	0.039
75-27-4	Bromodichloromethane	0.0018	0.044	79-01-6	Trichloroethene	0.0018	0.064
75-25-2	Bromoform	0.0018	0.058	75-69-4	Trichlorofluoromethane	0.0018	0.045
74-83-9	Bromomethane	0.0018	0.044	75-01-4	Vinyl Chloride	0.0018	0.049
75-15-0	Carbon Disulfide	0.0018	0.042	1330-20-7	Xylenes (Total)	0.00088	0.10

Worksheet #: 565881

Total Target Concentration 3.8

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Sample ID : AD18955-002(MS:AD18 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131889.D Sam Mult : 1 Vial# : 10 Qt On : 08/31/20 10:14
Acq On : 08/31/20 09:27 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	404386m	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	365118m	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.055	152	216510m	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	114161m	31.77	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.90%			
39) 1,2-Dichloroethane-d4	4.934	67	57432m	29.64	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.80%			
66) Toluene-d8	5.983	98	436041m	28.94	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.47%			
76) Bromofluorobenzene	7.397	174	171115m	30.02	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.07%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	241976m	56.9035	ug/l	
6) Dichlorodifluoromethane	1.636	85	174139m	62.8668	ug/l	
7) Chloromethane	1.813	50	192771m	56.1541	ug/l	
8) Bromomethane	2.233	94	127985m	50.2121	ug/l	
9) Vinyl Chloride	1.916	62	223093m	56.1453	ug/l	
10) Chloroethane	2.325	64	140340m	51.9080	ug/l	
11) Trichlorofluoromethane	2.556	101	334282m	51.1041	ug/l	
12) Ethyl ether	2.806	59	111422m	46.2834	ug/l	
13) Furan	2.843	39	250341m	46.2299	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	130267m	52.3408	ug/l	
15) Methylene Chloride	3.434	84	193096	52.7897	ug/l	96
16) Acrolein	2.922	56	117483m	248.9180	ug/l	
17) Acrylonitrile	3.642	53	49112m	34.3463	ug/l	
18) Iodomethane	3.166	142	203252m	64.5939	ug/l	
19) Acetone	3.056	43	215927m	157.3904	ug/l	
20) Carbon Disulfide	3.233	76	432373m	47.3944	ug/l	
21) t-Butyl Alcohol	3.507	59	77365m	116.3514	ug/l	
22) n-Hexane	3.910	57	194550m	54.7434	ug/l	
23) Di-isopropyl-ether	4.062	45	459214m	54.2364	ug/l	
24) 1,1-Dichloroethene	3.020	61	239332m	52.2403	ug/l	
25) Methyl Acetate	3.337	43	132577m	46.8893	ug/l	
26) Methyl-t-butyl ether	3.672	73	393946m	54.3286	ug/l	
27) 1,1-Dichloroethane	4.026	63	291073m	49.0593	ug/l	
28) trans-1,2-Dichloroethene	3.678	96	171170	49.6338	ug/l	96
29) Ethyl-t-butyl ether	4.324	59	457721	49.3762	ug/l	98
30) cis-1,2-Dichloroethene	4.440	61	295137	49.1894	ug/l	96
31) Bromochloromethane	4.593	49	138842	50.2977	ug/l	95
32) 2,2-Dichloropropane	4.446	77	275879	57.0601	ug/l	98
33) Ethyl acetate	4.465	43	156042m	36.7433	ug/l	
34) 1,4-Dioxane	5.519	88	94998m	1274.7732	ug/l	
35) 1,1-Dichloropropene	4.855	75	235113m	48.5605	ug/l	
36) Chloroform	4.635	83	312759m	49.9443	ug/l	
38) Cyclohexane	4.800	56	251972m	50.8219	ug/l	
40) 1,2-Dichloroethane	4.977	62	234998m	50.2019	ug/l	
41) 2-Butanone	4.434	43	67254m	33.5103	ug/l	
42) 1,1,1-Trichloroethane	4.763	97	275064m	49.0659	ug/l	
43) Carbon Tetrachloride	4.861	117	247208	51.6440	ug/l	99
44) Vinyl Acetate	4.056	43	380673m	37.6728	ug/l	
45) Bromodichloromethane	5.592	83	220507m	50.2178	ug/l	
46) Methylcyclohexane	5.446	83	256399m	50.4394	ug/l	
47) Dibromomethane	5.525	174	109389m	47.8580	ug/l	
48) 1,2-Dichloropropane	5.458	63	168392m	48.2694	ug/l	
49) Trichloroethene	5.330	130	289251m	73.1622	ug/l	
50) Benzene	4.977	78	661811m	48.4836	ug/l	
51) tert-Amyl methyl ether	5.019	73	418167m	52.4065	ug/l	
53) Iso-propylacetate	4.977	43	264907m	41.6600	ug/l	
54) Methyl methacrylate	5.483	41	123801m	39.8495	ug/l	
55) Dibromochloromethane	6.446	129	156496m	45.6697	ug/l	
56) 2-Chloroethylvinylether	5.733	63	92327m	95.5322	ug/l	
57) cis-1,3-Dichloropropene	5.830	75	248086m	45.5903	ug/l	
58) trans-1,3-Dichloropropene	6.117	75	209914	44.0670	ug/l	96
59) Ethyl methacrylate	6.135	41	132995m	43.1348	ug/l	
60) 1,1,2-Trichloroethane	6.220	97	139555m	44.5196	ug/l	
61) 1,2-Dibromoethane	6.525	107	133517m	41.0321	ug/l	
62) 1,3-Dichloropropane	6.318	76	237531m	42.8237	ug/l	
63) 4-Methyl-2-Pentanone	5.897	43	143574m	33.7094	ug/l	
64) 2-Hexanone	6.330	43	103361m	30.8066	ug/l	
65) Tetrachloroethene	6.318	164	171399m	50.6666	ug/l	
67) Toluene	6.019	92	405389m	41.0645	ug/l	

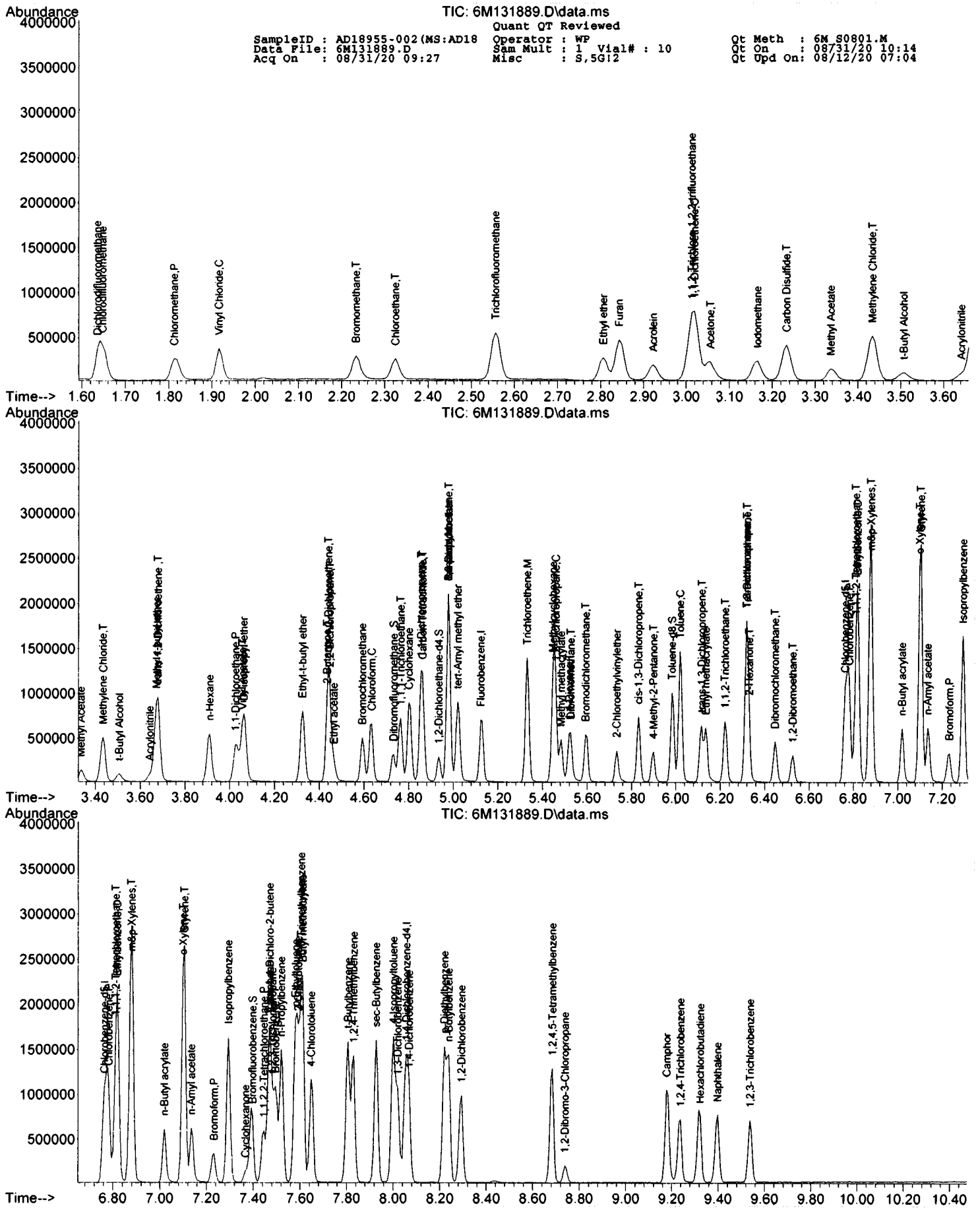
Quantitation Report (QT Reviewed)

SampleID : AD18955-002(MS:AD18 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131889.D Sam Mult : 1 Vial# : 10 Qt On : 08/31/20 10:14
Acq On : 08/31/20 09:27 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	158896m	45.0505	ug/l	
69)	Chlorobenzene	6.781	112	427255m	39.6054	ug/l	
71)	n-Butyl acrylate	7.019	55	253801m	41.0364	ug/l	
72)	n-Amyl acetate	7.135	43	225548m	38.5687	ug/l	
73)	Bromoform	7.232	173	101877m	65.2935	ug/l	
74)	Ethylbenzene	6.818	106	205504m	42.9713	ug/l	
75)	1,1,2,2-Tetrachloroethane	7.446	83	184589m	40.0258	ug/l	
77)	Styrene	7.104	104	448727m	37.9266	ug/l	
78)	m&p-Xylenes	6.879	106	562647m	78.4306	ug/l	
79)	o-Xylene	7.098	106	277297m	39.2014	ug/l	
80)	trans-1,4-Dichloro-2-b...	7.470	53	82936m	36.9711	ug/l	
81)	1,3-Dichlorobenzene	8.019	146	314004m	35.4710	ug/l	
82)	1,4-Dichlorobenzene	8.068	146	310007m	33.9467	ug/l	
83)	1,2-Dichlorobenzene	8.293	146	296586m	35.8729	ug/l	
84)	Isopropylbenzene	7.293	105	749398m	40.7636	ug/l	
85)	Cyclohexanone	7.367	55	31846m	125.4322	ug/l	
86)	Camphene	7.470	93	279094m	41.7180	ug/l	
87)	1,2,3-Trichloropropane	7.482	75	216322m	36.3643	ug/l	
88)	2-Chlorotoluene	7.592	91	443734m	40.2726	ug/l	
89)	p-Ethyltoluene	7.580	105	692055m	36.6825	ug/l	
90)	4-Chlorotoluene	7.647	91	406806m	37.6433	ug/l	
91)	n-Propylbenzene	7.519	91	827645m	38.3835	ug/l	
92)	Bromobenzene	7.495	77	439627m	38.8818	ug/l	
93)	1,3,5-Trimethylbenzene	7.604	105	571379m	43.2564	ug/l	
94)	Butyl methacrylate	7.610	41	210167m	41.2717	ug/l	
95)	t-Butylbenzene	7.805	119	601281m	40.0099	ug/l	
96)	1,2,4-Trimethylbenzene	7.830	105	574497m	38.5263	ug/l	
97)	sec-Butylbenzene	7.927	105	772048m	40.3660	ug/l	
98)	4-Isopropyltoluene	8.001	119	633873m	39.5065	ug/l	
99)	n-Butylbenzene	8.238	91	661894m	36.1879	ug/l	
100)	p-Diethylbenzene	8.220	119	351403m	36.9323	ug/l	
101)	1,2,4,5-Tetramethylben...	8.683	119	506777m	37.6781	ug/l	
102)	1,2-Dibromo-3-Chloropr...	8.738	157	38297m	31.3599	ug/l	
103)	Camphor	9.177	95	197539m	473.2980	ug/l	
104)	Hexachlorobutadiene	9.323	225	116846m	35.1542	ug/l	
105)	1,2,4-Trichlorobenzene	9.238	180	169258m	28.2306	ug/l	
106)	1,2,3-Trichlorobenzene	9.537	180	163776m	30.0156	ug/l	
107)	Naphthalene	9.397	128	457667	30.4916	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 6M131889.D\data.ms
Quant QT Reviewed
SampleID : AD18955-002(MS:AD18
Data File: 6M131889.D
Acq On : 08/31/20 09:27
Operator : WP
Sam Mult : 1 Vial# : 10
Misc : S,5G12
Qt Meth : 6M_S0801.M
Qt On : 08731/20 10:14
Qt Upd On: 08/12/20 07:04
Abundance
Time-->
Dichlorodifluoromethane
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
TIC: 6M131889.D\data.ms
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
TIC: 6M131889.D\data.ms
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2-Dibromo-3-Chloropropane
1,2,4,5-Tetramethylbenzene
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18955-003(MSD:AD
Client Id: HRPB-3 MSD
Data File: 6M131890.D
Analysis Date: 08/31/20 09:48
Date Rec/Extracted: 08/28/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 6.23g
Final Vol: NA
Dilution: 0.803
Solids: 85

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0019	0.049	56-23-5	Carbon Tetrachloride	0.0019	0.051
79-34-5	1,1,2,2-Tetrachloroethane	0.0019	0.042	108-90-7	Chlorobenzene	0.0019	0.038
76-13-1	1,1,2-Trichloro-1,2,2-triflu	0.0019	0.053	75-00-3	Chloroethane	0.0019	0.049
79-00-5	1,1,2-Trichloroethane	0.0019	0.044	67-66-3	Chloroform	0.0019	0.049
75-34-3	1,1-Dichloroethane	0.0019	0.049	74-87-3	Chloromethane	0.0019	0.053
75-35-4	1,1-Dichloroethene	0.0019	0.051	156-59-2	cis-1,2-Dichloroethene	0.0019	0.048
96-18-4	1,2,3-Trichloropropane	0.0019	0.039	10061-01-5	cis-1,3-Dichloropropene	0.0019	0.044
95-63-6	1,2,4-Trimethylbenzene	0.00094	0.038	124-48-1	Dibromochloromethane	0.0019	0.045
95-50-1	1,2-Dichlorobenzene	0.0019	0.037	75-71-8	Dichlorodifluoromethane	0.0019	0.062
107-06-2	1,2-Dichloroethane	0.0019	0.050	100-41-4	Ethylbenzene	0.00094	0.040
78-87-5	1,2-Dichloropropane	0.0019	0.047	98-82-8	Isopropylbenzene	0.00094	0.038
108-67-8	1,3,5-Trimethylbenzene	0.00094	0.042	79601-23-1	m&p-Xylenes	0.00094	0.074
541-73-1	1,3-Dichlorobenzene	0.0019	0.036	75-09-2	Methylene Chloride	0.0019	0.051
142-28-9	1,3-Dichloropropane	0.0019	0.044	1634-04-4	Methyl-t-butyl ether	0.00094	0.055
106-46-7	1,4-Dichlorobenzene	0.0019	0.035	104-51-8	n-Butylbenzene	0.00094	0.037
123-91-1	1,4-Dioxane	0.094	1.2	103-65-1	n-Propylbenzene	0.00094	0.037
78-93-3	2-Butanone	0.0019	0.033	95-47-6	o-Xylene	0.00094	0.037
110-75-8	2-Chloroethylvinylether	0.0019	0.095	135-98-8	sec-Butylbenzene	0.00094	0.039
591-78-6	2-Hexanone	0.0019	0.032	100-42-5	Styrene	0.0019	0.038
99-87-6	4-Isopropyltoluene	0.00094	0.038	75-65-0	t-Butyl Alcohol	0.0094	0.12
108-10-1	4-Methyl-2-Pentanone	0.0019	0.035	98-06-6	t-Butylbenzene	0.00094	0.039
67-64-1	Acetone	0.0094	0.15	127-18-4	Tetrachloroethene	0.0019	0.050
107-02-8	Acrolein	0.0094	0.25	108-88-3	Toluene	0.00094	0.038
107-13-1	Acrylonitrile	0.0019	0.033	156-60-5	trans-1,2-Dichloroethene	0.0019	0.047
71-43-2	Benzene	0.00094	0.048	10061-02-6	trans-1,3-Dichloropropene	0.0019	0.045
75-27-4	Bromodichloromethane	0.0019	0.050	79-01-6	Trichloroethene	0.0019	0.071
75-25-2	Bromoform	0.0019	0.066	75-69-4	Trichlorofluoromethane	0.0019	0.049
74-83-9	Bromomethane	0.0019	0.049	75-01-4	Vinyl Chloride	0.0019	0.054
75-15-0	Carbon Disulfide	0.0019	0.047	1330-20-7	Xylenes (Total)	0.00094	0.11

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

SampleID : AD18955-003(MSD:AD1 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131890.D Sam Mult : 1 Vial# : 11 Qt On : 08/31/20 10:30
Acq On : 08/31/20 09:48 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	402783m	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	369710m	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	220478m	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	113499m	31.71	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.70%			
39) 1,2-Dichloroethane-d4	4.934	67	57745m	29.92	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.73%			
66) Toluene-d8	5.983	98	434456m	28.48	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.93%			
76) Bromofluorobenzene	7.397	174	165521m	28.52	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.07%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	227807m	53.7847	ug/l	
6) Dichlorodifluoromethane	1.636	85	180669m	65.4838	ug/l	
7) Chloromethane	1.813	50	193642m	56.6472	ug/l	
8) Bromomethane	2.233	94	131002m	51.6003	ug/l	
9) Vinyl Chloride	1.916	62	224981m	56.8458	ug/l	
10) Chloroethane	2.325	64	140876m	52.3136	ug/l	
11) Trichlorofluoromethane	2.556	101	340706m	52.2935	ug/l	
12) Ethyl ether	2.806	59	119175m	49.7009	ug/l	
13) Furan	2.843	39	254911m	47.2611	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	139614m	56.3197	ug/l	
15) Methylene Chloride	3.434	84	197380m	54.1757	ug/l	
16) Acrolein	2.922	56	122011m	259.5406	ug/l	
17) Acrylonitrile	3.642	53	49918m	35.0489	ug/l	
18) Iodomethane	3.166	142	206361m	65.8217	ug/l	
19) Acetone	3.050	43	221510m	162.1024	ug/l	
20) Carbon Disulfide	3.233	76	451091m	49.6430	ug/l	
21) t-Butyl Alcohol	3.507	59	84530m	127.6330	ug/l	
22) n-Hexane	3.910	57	206375m	58.3019	ug/l	
23) Di-isopropyl-ether	4.062	45	468267m	55.5257	ug/l	
24) 1,1-Dichloroethene	3.020	61	244945m	53.6783	ug/l	
25) Methyl Acetate	3.337	43	143247m	50.8647	ug/l	
26) Methyl-t-butyl ether	3.672	73	418558m	57.9525	ug/l	
27) 1,1-Dichloroethane	4.026	63	308444m	52.1940	ug/l	
28) trans-1,2-Dichloroethene	3.678	96	171354m	49.8849	ug/l	
29) Ethyl-t-butyl ether	4.324	59	471670m	51.0834	ug/l	
30) cis-1,2-Dichloroethene	4.440	61	306169m	51.2312	ug/l	
31) Bromochloromethane	4.593	49	146969m	53.4537	ug/l	
32) 2,2-Dichloropropane	4.446	77	280020m	58.1470	ug/l	
33) Ethyl acetate	4.465	43	142253m	33.6297	ug/l	
34) 1,4-Dioxane	5.519	88	97681m	1315.9929	ug/l	
35) 1,1-Dichloropropene	4.855	75	243239m	50.4388	ug/l	
36) Chloroform	4.629	83	324087m	51.9592	ug/l	
38) Cyclohexane	4.800	56	260577m	52.7667	ug/l	
40) 1,2-Dichloroethane	4.977	62	246068m	52.7760	ug/l	
41) 2-Butanone	4.434	43	69314m	34.6742	ug/l	
42) 1,1,1-Trichloroethane	4.763	97	291478m	52.2007	ug/l	
43) Carbon Tetrachloride	4.861	117	255673m	53.6249	ug/l	
44) Vinyl Acetate	4.056	43	399185m	39.6620	ug/l	
45) Bromodichloromethane	5.592	83	231327m	52.8916	ug/l	
46) Methylcyclohexane	5.446	83	263172m	51.9779	ug/l	
47) Dibromomethane	5.525	174	115419m	50.6971	ug/l	
48) 1,2-Dichloropropane	5.458	63	172579m	49.6665	ug/l	
49) Trichloroethene	5.330	130	296492m	75.2922	ug/l	
50) Benzene	4.977	78	684105m	50.3163	ug/l	
51) tert-Amyl methyl ether	5.019	73	446797m	56.2173	ug/l	
53) Iso-propylacetate	4.977	43	274331m	42.6062	ug/l	
54) Methyl methacrylate	5.483	41	129692m	41.2272	ug/l	
55) Dibromochloromethane	6.446	129	167036m	48.1401	ug/l	
56) 2-Chloroethylvinylether	5.733	63	98199m	100.3461	ug/l	
57) cis-1,3-Dichloropropene	5.830	75	257196m	46.6773	ug/l	
58) trans-1,3-Dichloropropene	6.117	75	229256m	47.5296	ug/l	
59) Ethyl methacrylate	6.135	41	146656m	46.9747	ug/l	
60) 1,1,2-Trichloroethane	6.220	97	148806m	46.8811	ug/l	
61) 1,2-Dibromoethane	6.525	107	148197m	44.9778	ug/l	
62) 1,3-Dichloropropane	6.318	76	260330m	46.3511	ug/l	
63) 4-Methyl-2-Pentanone	5.897	43	158524m	36.7572	ug/l	
64) 2-Hexanone	6.330	43	115916m	34.1195	ug/l	
65) Tetrachloroethene	6.318	164	179613m	52.4352	ug/l	
67) Toluene	6.019	92	407567m	40.7723	ug/l	

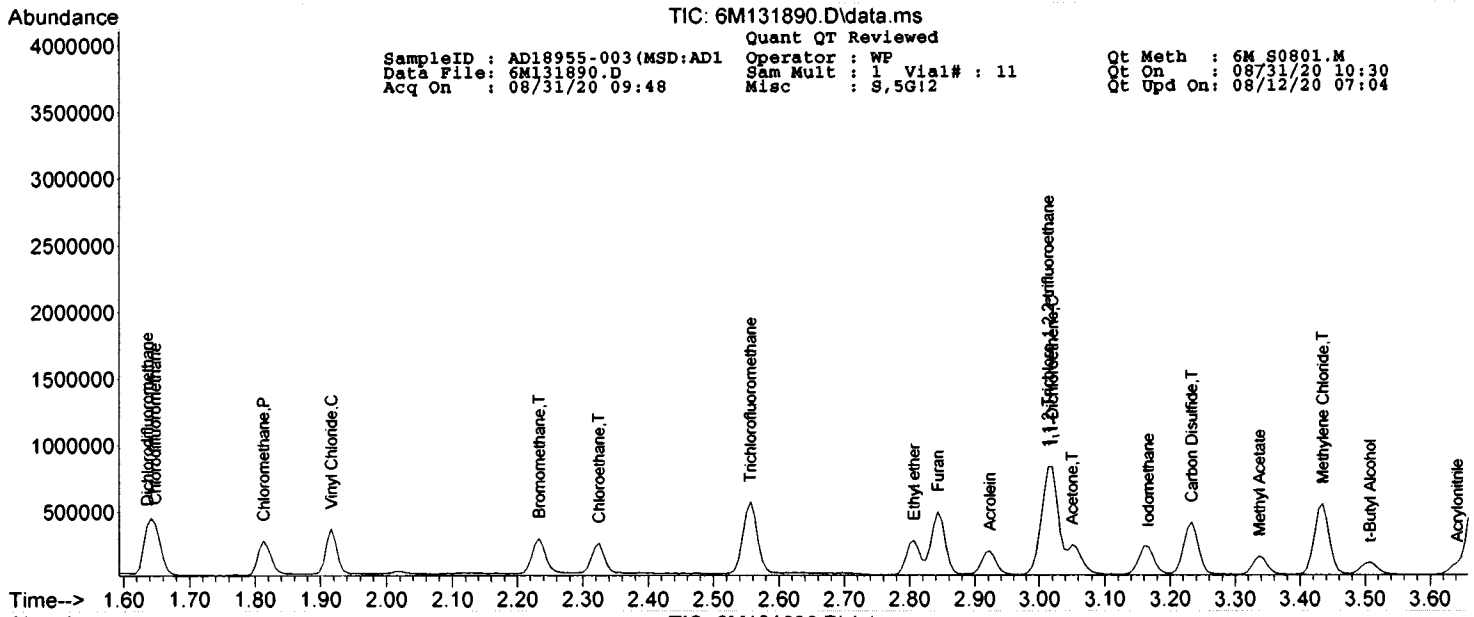
Quantitation Report (QT Reviewed)

SampleID : AD18955-003(MSD:AD1 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131890.D Sam Mult : 1 Vial# : 11 Qt On : 08/31/20 10:30
Acq On : 08/31/20 09:48 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	161647m	45.2612	ug/l	
69)	Chlorobenzene	6.781	112	440381m	40.3151	ug/l	
71)	n-Butyl acrylate	7.019	55	286367m	45.4686	ug/l	
72)	n-Amyl acetate	7.135	43	266320m	44.7211	ug/l	
73)	Bromoform	7.232	173	113513m	70.4273	ug/l	
74)	Ethylbenzene	6.818	106	208000m	42.7105	ug/l	
75)	1,1,2,2-Tetrachloroethane	7.446	83	207363	44.1548	ug/l	97
77)	Styrene	7.104	104	485109m	40.2637	ug/l	
78)	m&p-Xylenes	6.879	106	575976m	78.8436	ug/l	
79)	o-Xylene	7.098	106	284131m	39.4447	ug/l	
80)	trans-1,4-Dichloro-2-b...	7.470	53	93264	40.8268	ug/l	96
81)	1,3-Dichlorobenzene	8.019	146	340972	37.8242	ug/l	98
82)	1,4-Dichlorobenzene	8.068	146	342318	36.8102	ug/l	100
83)	1,2-Dichlorobenzene	8.293	146	330816	39.2930	ug/l	98
84)	Isopropylbenzene	7.293	105	762031	40.7047	ug/l	99
85)	Cyclohexanone	7.373	55	34964	135.2346	ug/l	94
86)	Camphene	7.470	93	287505	42.2018	ug/l	100
87)	1,2,3-Trichloropropane	7.482	75	250139	41.2923	ug/l	98
88)	2-Chlorotoluene	7.592	91	465663	41.5022	ug/l	99
89)	p-Ethyltoluene	7.580	105	717379m	37.3405	ug/l	
90)	4-Chlorotoluene	7.647	91	435321	39.5570	ug/l	98
91)	n-Propylbenzene	7.519	91	869168	39.5838	ug/l	99
92)	Bromobenzene	7.495	77	459272	39.8882	ug/l	99
93)	1,3,5-Trimethylbenzene	7.604	105	595359m	44.2606	ug/l	
94)	Butyl methacrylate	7.610	41	232180	44.8847	ug/l	89
95)	t-Butylbenzene	7.805	119	625659	40.8828	ug/l	100
96)	1,2,4-Trimethylbenzene	7.830	105	604484	39.8077	ug/l	99
97)	sec-Butylbenzene	7.927	105	803539	41.2564	ug/l	99
98)	4-Isopropyltoluene	8.001	119	665740	40.7458	ug/l	99
99)	n-Butylbenzene	8.238	91	720234	38.6688	ug/l	100
100)	p-Diethylbenzene	8.220	119	373113	38.5083	ug/l	100
101)	1,2,4,5-Tetramethylben...	8.683	119	568373	41.4972	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.744	157	45955	36.9535	ug/l	96
103)	Camphor	9.177	95	236342	547.1421	ug/l	99
104)	Hexachlorobutadiene	9.323	225	124510	36.7858	ug/l	97
105)	1,2,4-Trichlorobenzene	9.238	180	207331	33.9584	ug/l	97
106)	1,2,3-Trichlorobenzene	9.537	180	192947	34.7254	ug/l	98
107)	Naphthalene	9.397	128	542074	35.4652	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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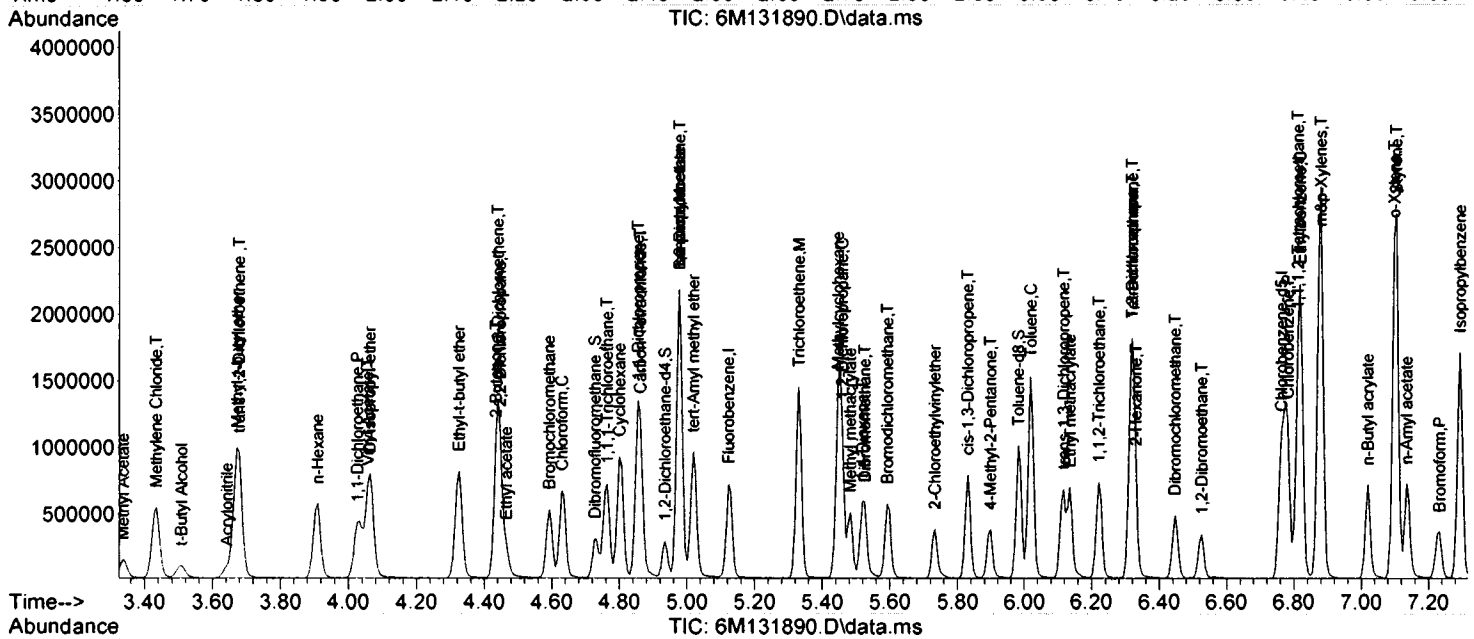
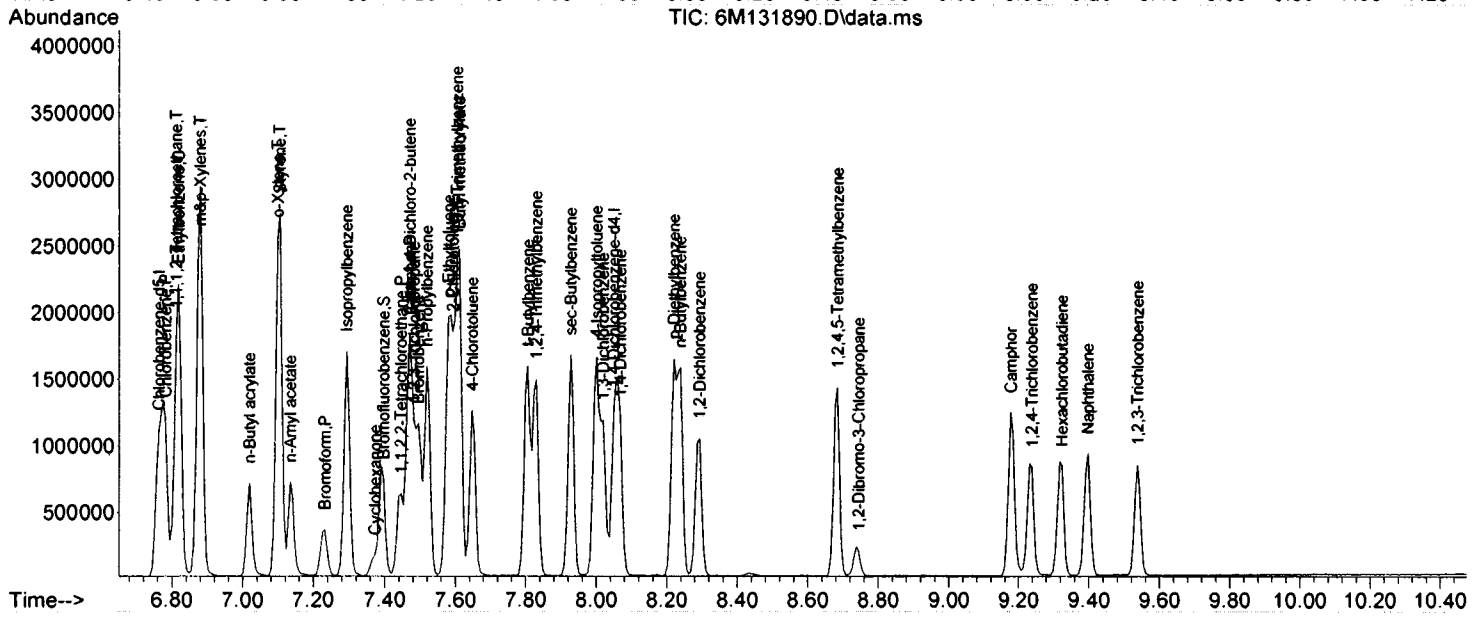
Quant QT Reviewed
SampleID : AD18955-003(MSD:AD1
Data File: 6M131890.D
Acq On : 08/31/20 09:48
Operator : WP
Sam Mult : 1 Vial# : 11
Misc : S,5G12
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 10:30
Qt Upd On: 08/12/20 07:04
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 6M131890.D\data.ms
Methyl acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 6M131890.D\data.ms
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18955-004
Client Id: Duplicate
Data File: 6M131893.D
Analysis Date: 08/31/20 10:49
Date Rec/Extracted: 08/28/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 7.7g
Final Vol: NA
Dilution: 0.649
Solids: 76

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0017	U	56-23-5	Carbon Tetrachloride	0.0017	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0017	U	108-90-7	Chlorobenzene	0.0017	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0017	U	75-00-3	Chloroethane	0.0017	U
79-00-5	1,1,2-Trichloroethane	0.0017	U	67-66-3	Chloroform	0.0017	U
75-34-3	1,1-Dichloroethane	0.0017	U	74-87-3	Chloromethane	0.0017	U
75-35-4	1,1-Dichloroethene	0.0017	U	**156-59-2**	**cis-1,2-Dichloroethene**	**0.0017**	**0.0023**
96-18-4	1,2,3-Trichloropropane	0.0017	U	10061-01-5	cis-1,3-Dichloropropene	0.0017	U
95-63-6	1,2,4-Trimethylbenzene	0.00085	U	124-48-1	Dibromochloromethane	0.0017	U
95-50-1	1,2-Dichlorobenzene	0.0017	U	75-71-8	Dichlorodifluoromethane	0.0017	U
107-06-2	1,2-Dichloroethane	0.0017	U	100-41-4	Ethylbenzene	0.00085	U
78-87-5	1,2-Dichloropropane	0.0017	U	98-82-8	Isopropylbenzene	0.00085	U
108-67-8	1,3,5-Trimethylbenzene	0.00085	U	79601-23-1	m&p-Xylenes	0.00085	U
541-73-1	1,3-Dichlorobenzene	0.0017	U	**75-09-2**	**Methylene Chloride**	**0.0017**	**0.0057**
142-28-9	1,3-Dichloropropane	0.0017	U	1634-04-4	Methyl-t-butyl ether	0.00085	U
106-46-7	1,4-Dichlorobenzene	0.0017	U	104-51-8	n-Butylbenzene	0.00085	U
123-91-1	1,4-Dioxane	0.085	U	103-65-1	n-Propylbenzene	0.00085	U
78-93-3	2-Butanone	0.0017	U	95-47-6	o-Xylene	0.00085	U
110-75-8	2-Chloroethylvinylether	0.0017	U	135-98-8	sec-Butylbenzene	0.00085	U
591-78-6	2-Hexanone	0.0017	U	100-42-5	Styrene	0.0017	U
99-87-6	4-Isopropyltoluene	0.00085	U	75-65-0	t-Butyl Alcohol	0.0085	U
108-10-1	4-Methyl-2-Pentanone	0.0017	U	98-06-6	t-Butylbenzene	0.00085	U
67-64-1	Acetone	0.0085	U	**127-18-4**	**Tetrachloroethene**	**0.0017**	**0.0052**
107-02-8	Acrolein	0.0085	U	108-88-3	Toluene	0.00085	U
107-13-1	Acrylonitrile	0.0017	U	156-60-5	trans-1,2-Dichloroethene	0.0017	U
71-43-2	Benzene	0.00085	U	10061-02-6	trans-1,3-Dichloropropene	0.0017	U
75-27-4	Bromodichloromethane	0.0017	U	**79-01-6**	**Trichloroethene**	**0.0017**	**0.021**
75-25-2	Bromoform	0.0017	U	75-69-4	Trichlorofluoromethane	0.0017	U
74-83-9	Bromomethane	0.0017	U	75-01-4	Vinyl Chloride	0.0017	U
75-15-0	Carbon Disulfide	0.0017	U	1330-20-7	Xylenes (Total)	0.00085	U

Worksheet #: 565881

Total Target Concentration 0.034

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

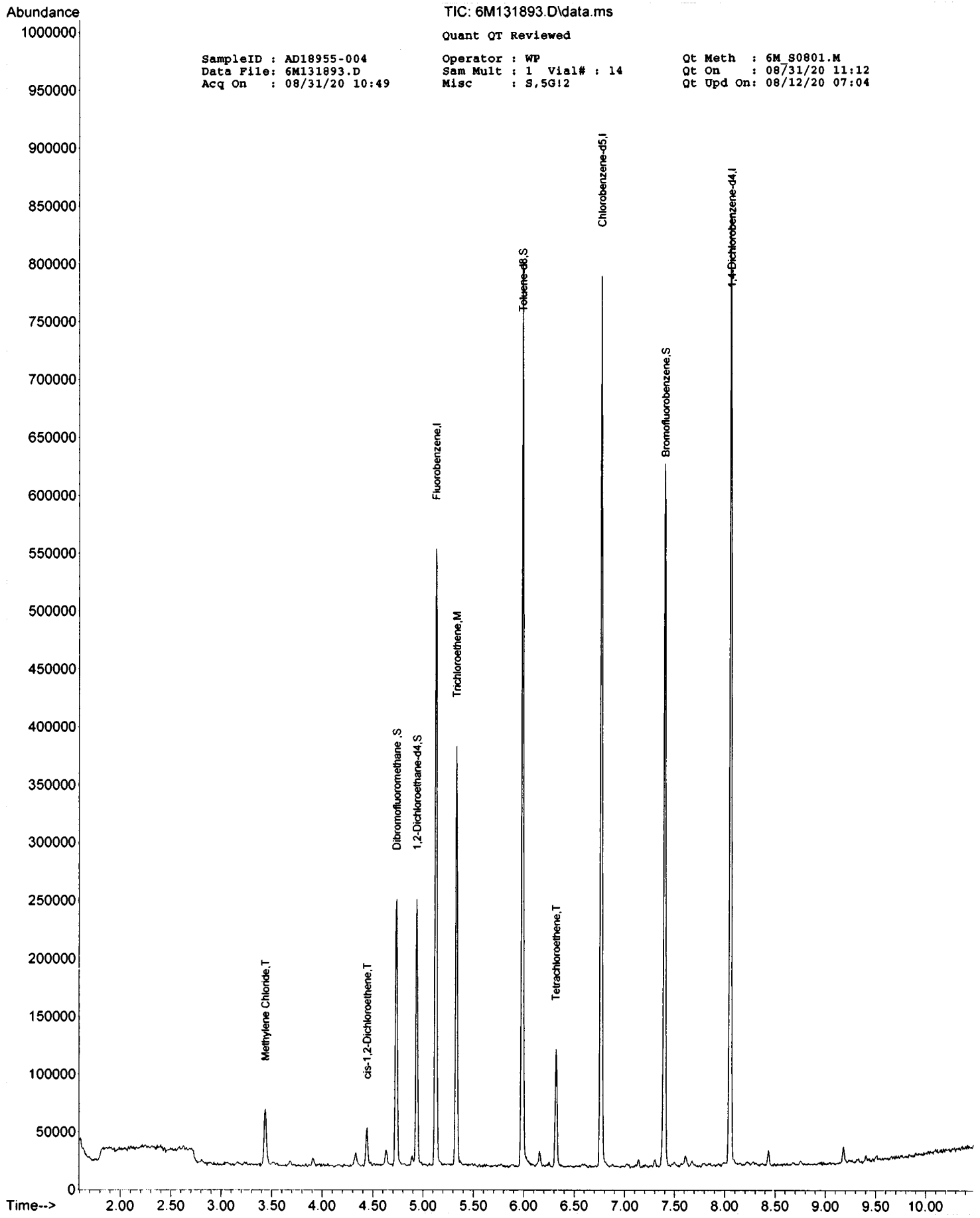
Quantitation Report (QT Reviewed)

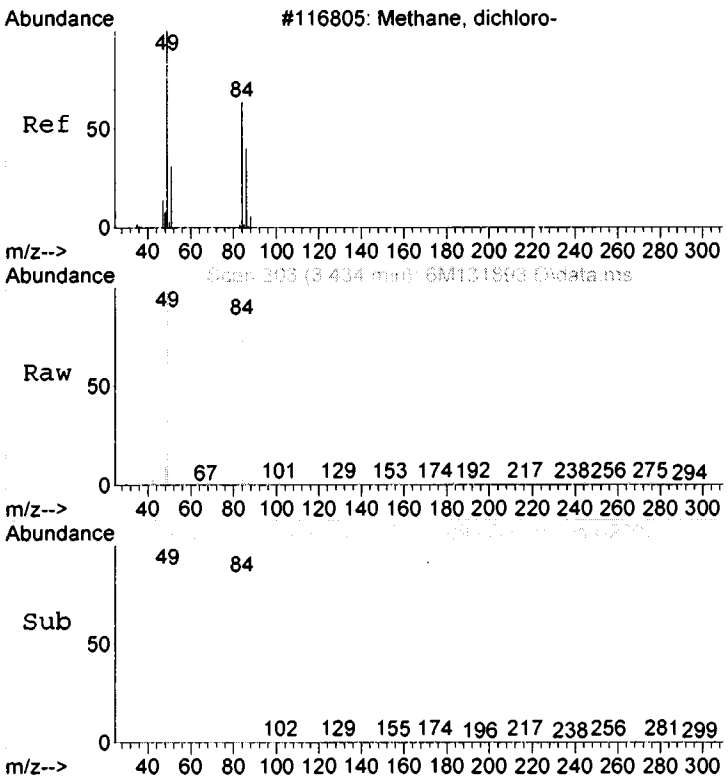
SampleID : AD18955-004 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131893.D Sam Mult : 1 Vial# : 14 Qt On : 08/31/20 11:12
Acq On : 08/31/20 10:49 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	318382	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	297989	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.055	152	163221	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	91436	32.31	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.70%			
39) 1,2-Dichloroethane-d4	4.934	67	51109	33.50	ug/l	0.00
Spiked Amount 30.000			Recovery = 111.67%			
66) Toluene-d8	5.983	98	347788	28.28	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.27%			
76) Bromofluorobenzene	7.397	174	127698	29.72	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.07%			
Target Compounds						Qvalue
15) Methylene Chloride	3.434	84	19180	6.6600	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	12748	2.6986	ug/l	92
49) Trichloroethene	5.330	130	76126	24.4564	ug/l	97
65) Tetrachloroethene	6.318	164	16685	6.0433	ug/l	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

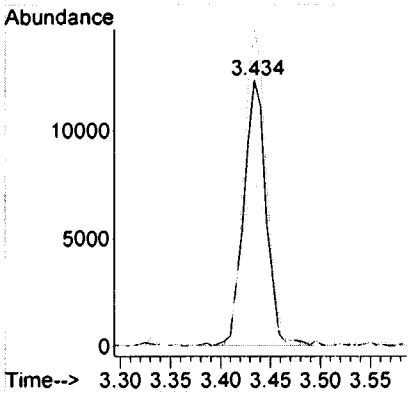

Abundance
TIC: 6M131893.D\data.ms
Quant QT Reviewed
SampleID : AD18955-004
Data File: 6M131893.D
Acq On : 08/31/20 10:49
Operator : WP
Sam Mult : 1 Vial# : 14
Misc : S,5G!2
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 11:12
Qt Upd On: 08/12/20 07:04
Methylene Chloride,T
cis-1,2-Dichloroethene,T
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

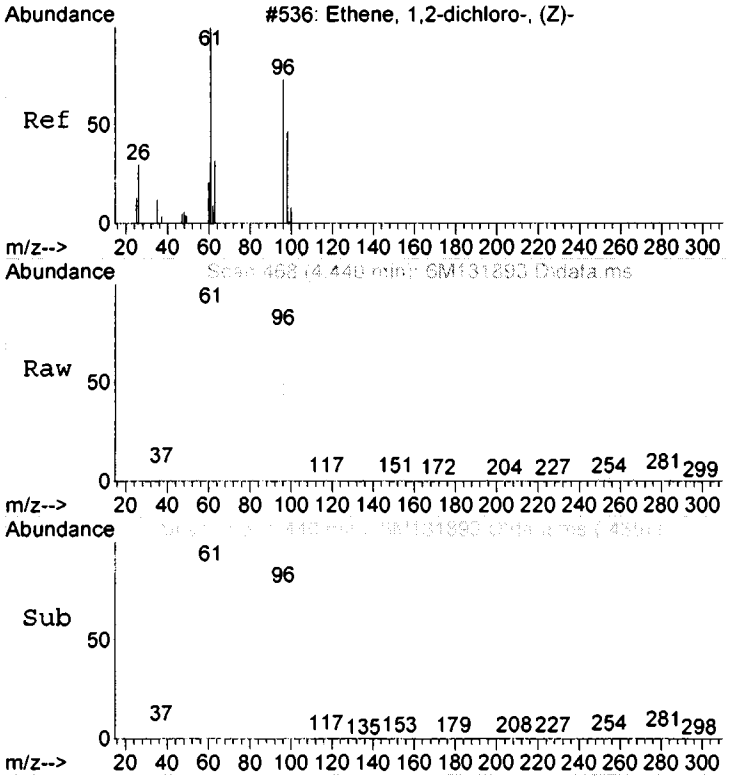


#15
Methylene Chloride
Concen: 6.66 ug/l
RT: 3.434 min Scan# 303
Delta R.T. -0.000 min
Lab File: 6M131893.D
Acq: 31 Aug 2020 10:49

Tgt Ion: 84 Resp: 19180

Ion	Ratio	Lower	Upper
84	100		
49	118.5	47.0	188.0
86	62.2	25.7	102.7

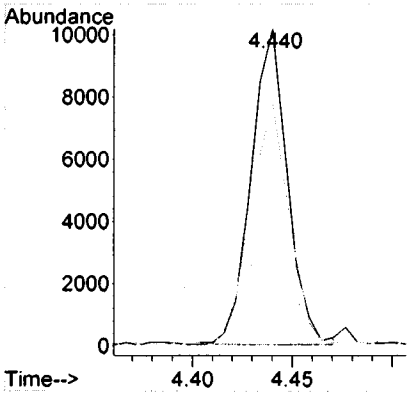


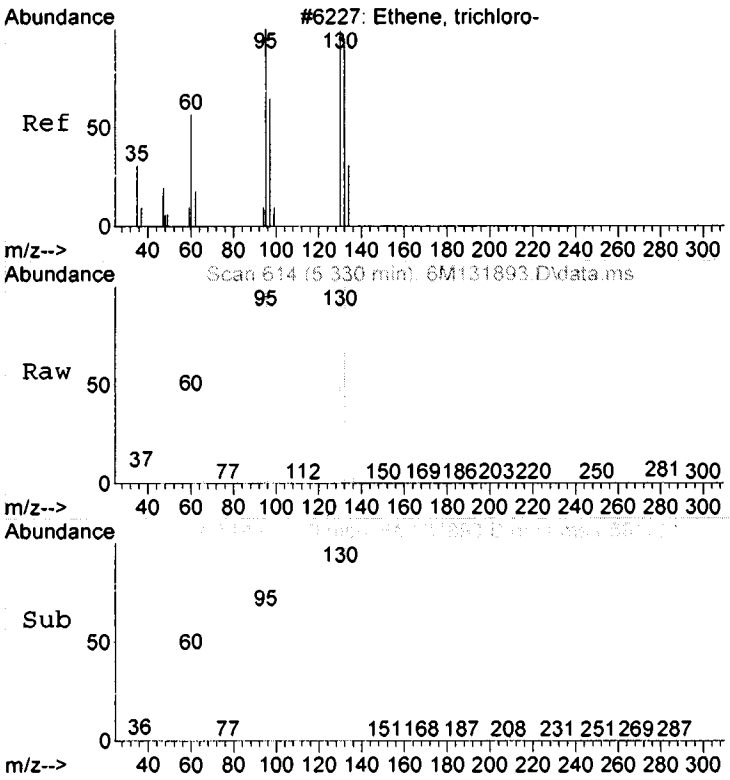


#30
cis-1,2-Dichloroethene
Concen: 2.70 ug/l
RT: 4.440 min Scan# 468
Delta R.T. -0.000 min
Lab File: 6M131893.D
Acq: 31 Aug 2020 10:49

Tgt Ion: 61 Resp: 12748

Ion	Ratio	Lower	Upper
61	100		
96	76.2	0.0	154.4
98	55.8	4.3	84.3

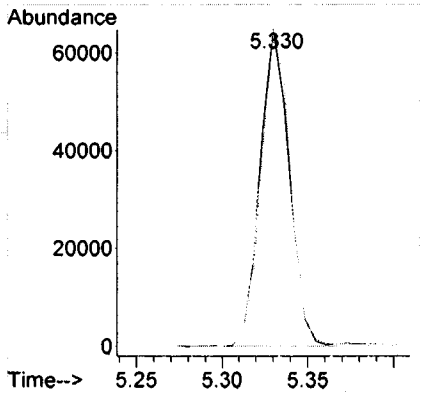


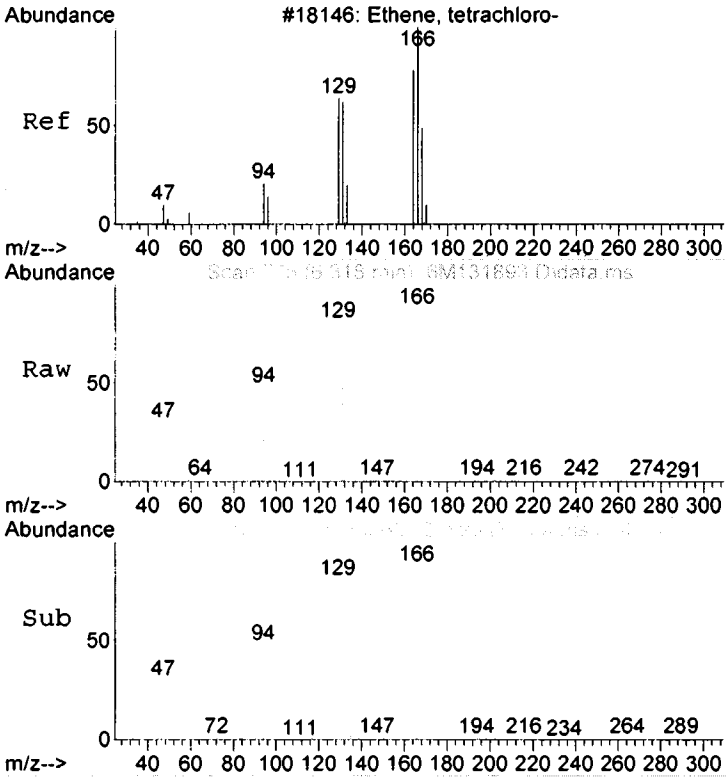


#49
Trichloroethene
Concen: 24.46 ug/l
RT: 5.330 min Scan# 614
Delta R.T. -0.000 min
Lab File: 6M131893.D
Acq: 31 Aug 2020 10:49

Tgt Ion:130 Resp: 76126

Ion	Ratio	Lower	Upper
130	100		
132	99.7	36.8	156.8
95	96.4	53.8	133.8

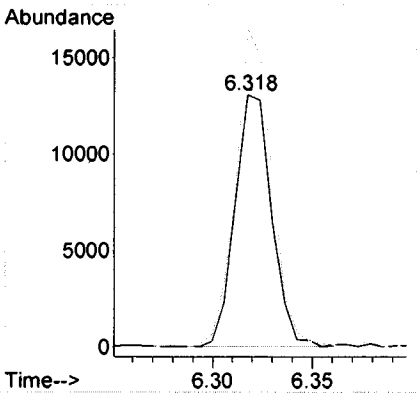




#65
Tetrachloroethene
Concen: 6.04 ug/l
RT: 6.318 min Scan# 776
Delta R.T. -0.006 min
Lab File: 6M131893.D
Acq: 31 Aug 2020 10:49

Tgt Ion:164 Resp: 16685

Ion	Ratio	Lower	Upper
164	100		
166	125.4	60.6	200.6



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18955-005
Client Id: HRPB-2
Data File: 6M131894.D
Analysis Date: 08/31/20 11:10
Date Rec/Extracted: 08/28/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5.45g
Final Vol: NA
Dilution: 0.917
Solids: 72

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0025	U	56-23-5	Carbon Tetrachloride	0.0025	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0025	U	108-90-7	Chlorobenzene	0.0025	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0025	U	75-00-3	Chloroethane	0.0025	U
79-00-5	1,1,2-Trichloroethane	0.0025	U	67-66-3	Chloroform	0.0025	U
75-34-3	1,1-Dichloroethane	0.0025	U	74-87-3	Chloromethane	0.0025	U
75-35-4	1,1-Dichloroethene	0.0025	U	156-59-2	cis-1,2-Dichloroethene	0.0025	U
96-18-4	1,2,3-Trichloropropane	0.0025	U	10061-01-5	cis-1,3-Dichloropropene	0.0025	U
95-63-6	1,2,4-Trimethylbenzene	0.0013	U	124-48-1	Dibromochloromethane	0.0025	U
95-50-1	1,2-Dichlorobenzene	0.0025	U	75-71-8	Dichlorodifluoromethane	0.0025	U
107-06-2	1,2-Dichloroethane	0.0025	U	100-41-4	Ethylbenzene	0.0013	U
78-87-5	1,2-Dichloropropane	0.0025	U	98-82-8	Isopropylbenzene	0.0013	U
108-67-8	1,3,5-Trimethylbenzene	0.0013	U	79601-23-1	m&p-Xylenes	0.0013	U
541-73-1	1,3-Dichlorobenzene	0.0025	U	**75-09-2**	**Methylene Chloride**	**0.0025**	**0.0041**
142-28-9	1,3-Dichloropropane	0.0025	U	1634-04-4	Methyl-t-butyl ether	0.0013	U
106-46-7	1,4-Dichlorobenzene	0.0025	U	104-51-8	n-Butylbenzene	0.0013	U
123-91-1	1,4-Dioxane	0.13	U	103-65-1	n-Propylbenzene	0.0013	U
78-93-3	**2-Butanone**	**0.0025**	**0.0088**	95-47-6	o-Xylene	0.0013	U
110-75-8	2-Chloroethylvinylether	0.0025	U	135-98-8	sec-Butylbenzene	0.0013	U
591-78-6	2-Hexanone	0.0025	U	100-42-5	Styrene	0.0025	U
99-87-6	4-Isopropyltoluene	0.0013	U	75-65-0	t-Butyl Alcohol	0.013	U
108-10-1	4-Methyl-2-Pentanone	0.0025	U	98-06-6	t-Butylbenzene	0.0013	U
67-64-1	**Acetone**	**0.013**	**0.054**	127-18-4	Tetrachloroethene	0.0025	U
107-02-8	Acrolein	0.013	U	108-88-3	Toluene	0.0013	U
107-13-1	Acrylonitrile	0.0025	U	156-60-5	trans-1,2-Dichloroethene	0.0025	U
71-43-2	Benzene	0.0013	U	10061-02-6	trans-1,3-Dichloropropene	0.0025	U
75-27-4	Bromodichloromethane	0.0025	U	79-01-6	Trichloroethene	0.0025	U
75-25-2	Bromoform	0.0025	U	75-69-4	Trichlorofluoromethane	0.0025	U
74-83-9	Bromomethane	0.0025	U	75-01-4	Vinyl Chloride	0.0025	U
75-15-0	Carbon Disulfide	0.0025	U	1330-20-7	Xylenes (Total)	0.0013	U

Worksheet #: 565881

Total Target Concentration 0.067

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

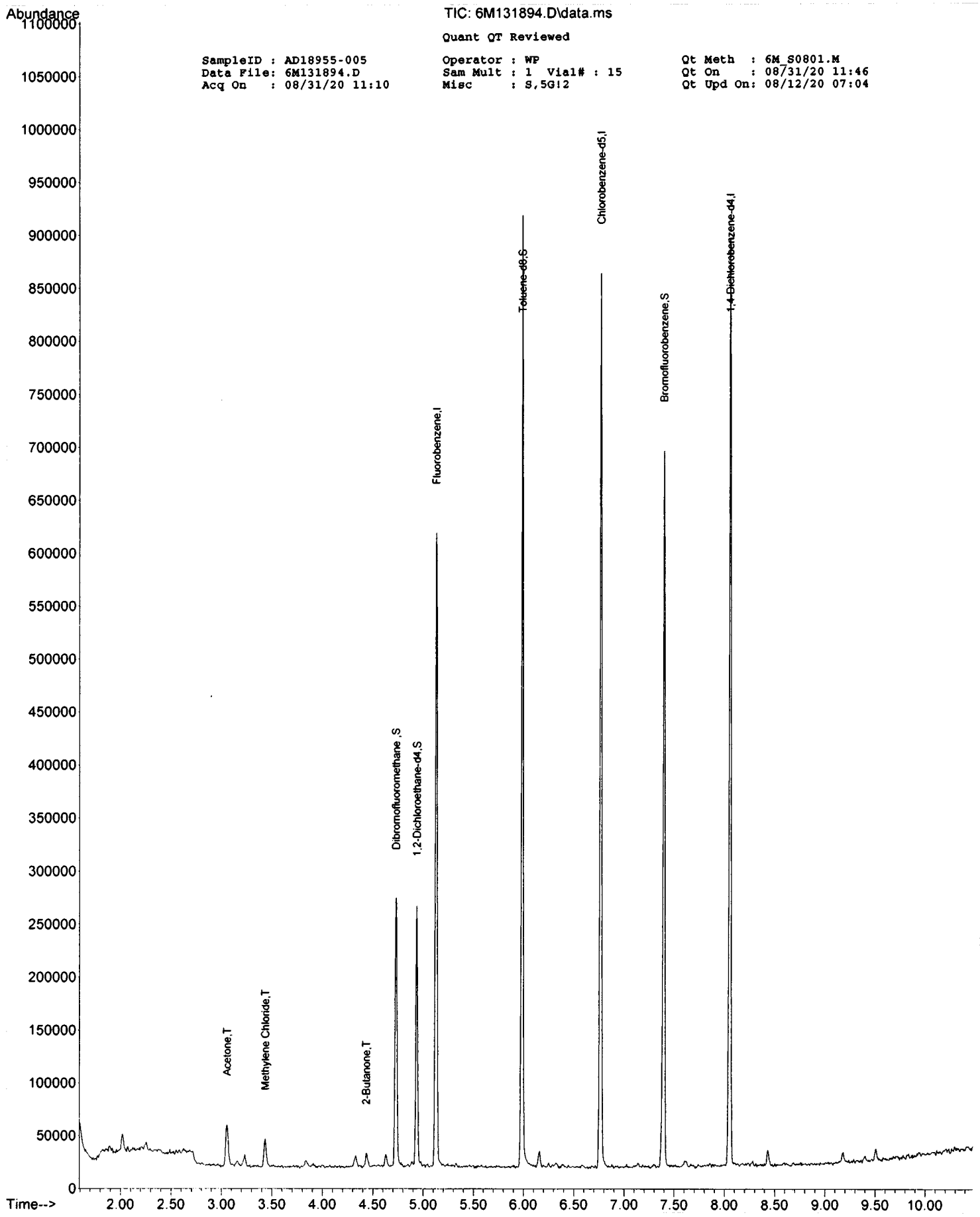
Quantitation Report (QT Reviewed)

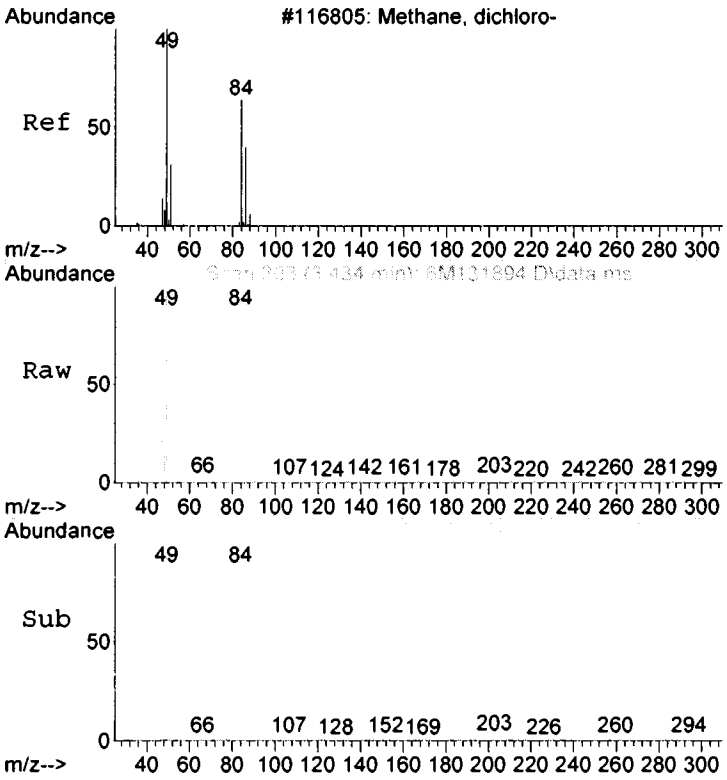
SampleID : AD18955-005 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131894.D Sam Mult : 1 Vial# : 15 Qt On : 08/31/20 11:46
Acq On : 08/31/20 11:10 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	352772	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	325778	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	172436	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	100009	31.90	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.33%			
39) 1,2-Dichloroethane-d4	4.934	67	53181	31.46	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.87%			
66) Toluene-d8	5.983	98	389444	28.97	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.57%			
76) Bromofluorobenzene	7.391	174	137693	30.33	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.10%			
Target Compounds						Qvalue
15) Methylene Chloride	3.434	84	10234	3.2072	ug/l	93
19) Acetone	3.056	43	50465	42.1661	ug/l	92
41) 2-Butanone	4.434	43	12041	6.8774	ug/l	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

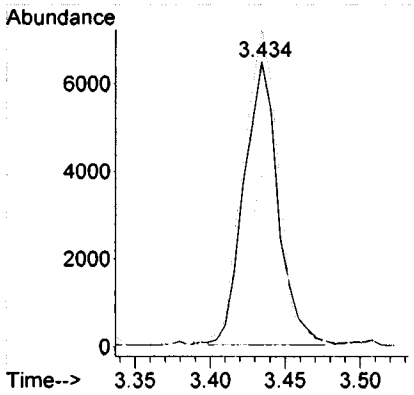

Abundance
TIC: 6M131894.D\data.ms
Quant QT Reviewed
SampleID : AD18955-005
Data File: 6M131894.D
Acq On : 08/31/20 11:10
Operator : WP
Sam Mult : 1 Vial# : 15
Misc : S,5G!2
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 11:46
Qt Upd On: 08/12/20 07:04
Acetone,T
Methylene Chloride,T
2-Butanone,T
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

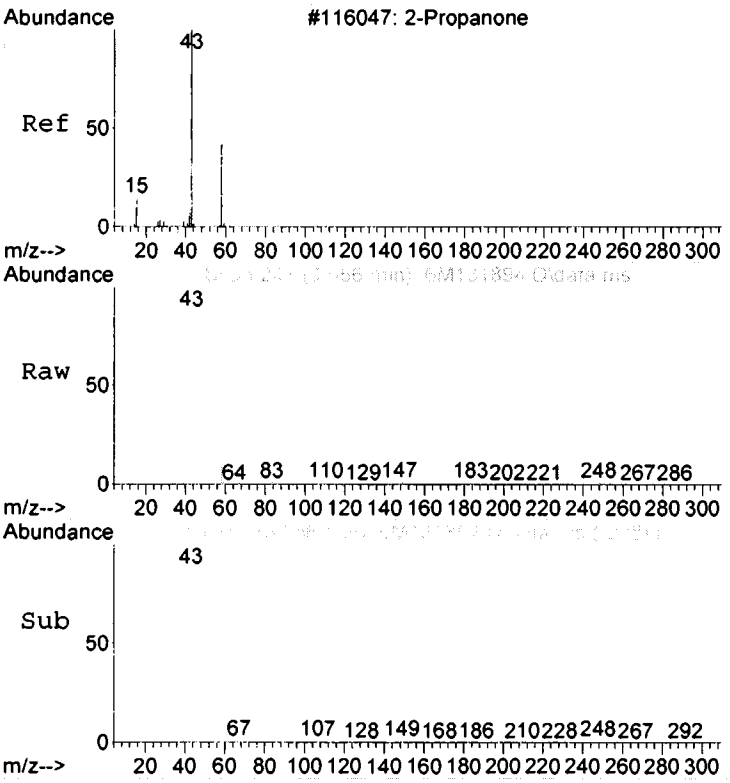


#15
Methylene Chloride
Concen: 3.21 ug/l
RT: 3.434 min Scan# 303
Delta R.T. 0.000 min
Lab File: 6M131894.D
Acq: 31 Aug 2020 11:10

Tgt Ion: 84 Resp: 10234

Ion	Ratio	Lower	Upper
84	100		
49	109.3	47.0	188.0
86	59.8	25.7	102.7

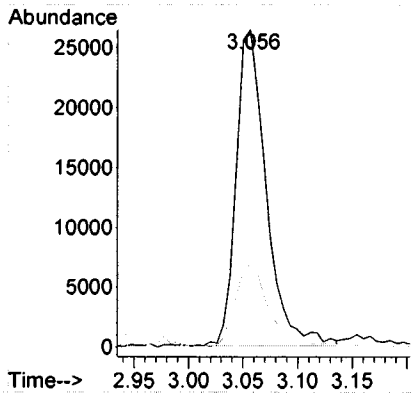


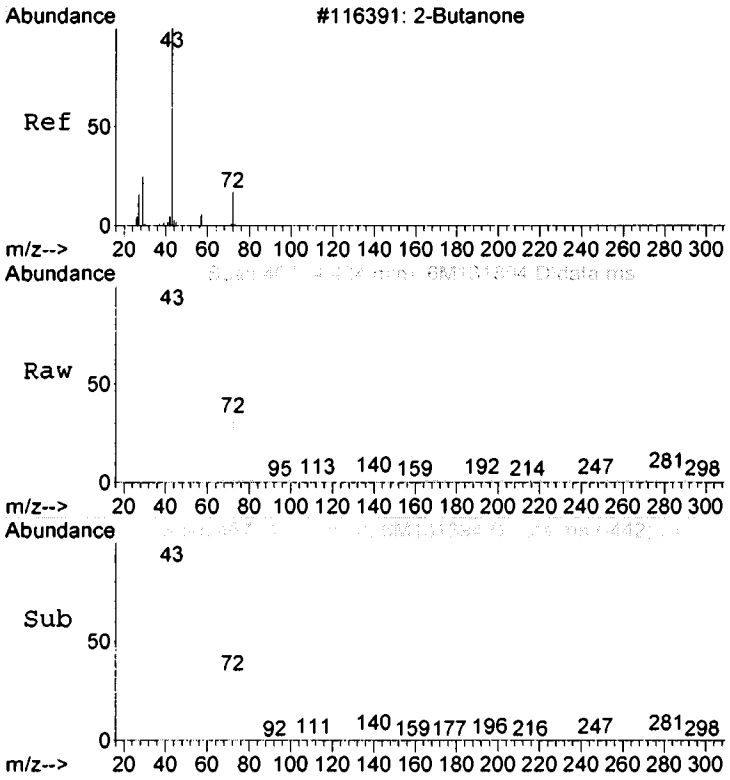


#19
Acetone
Concen: 42.17 ug/l
RT: 3.056 min Scan# 241
Delta R.T. 0.000 min
Lab File: 6M131894.D
Acq: 31 Aug 2020 11:10

Tgt Ion: 43 Resp: 50465

Ion	Ratio	Lower	Upper
43	100		
58	25.6	0.0	69.9

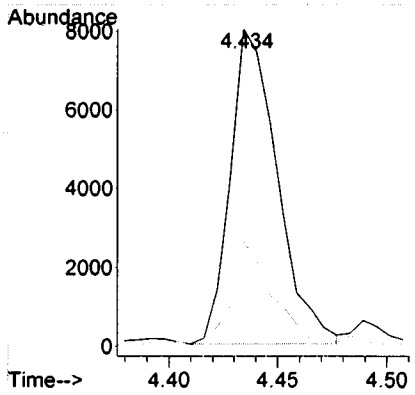




#41
2-Butanone
Concen: 6.88 ug/l
RT: 4.434 min Scan# 467
Delta R.T. 0.000 min
Lab File: 6M131894.D
Acq: 31 Aug 2020 11:10

Tgt Ion: 43 Resp: 12041

Ion	Ratio	Lower	Upper
43	100		
72	32.2	6.2	56.2



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD18955-006
Client Id: Trip blank
Data File: 11M82278.D
Analysis Date: 08/31/20 08:59
Date Rec/Extracted: 08/28/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 565881

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

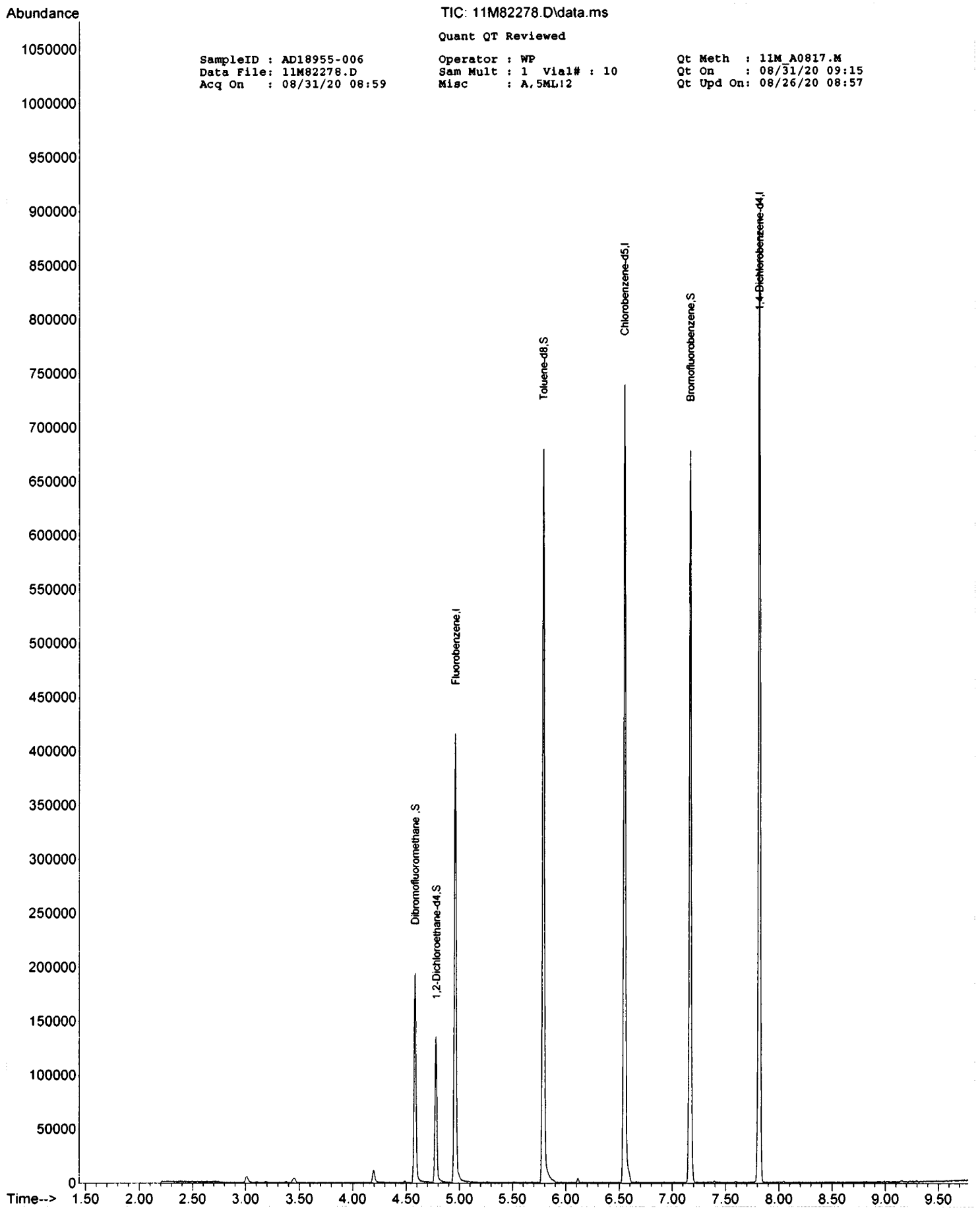
SampleID : AD18955-006 Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M82278.D Sam Mult : 1 Vial# : 10 Qt On : 08/31/20 09:15
Acq On : 08/31/20 08:59 Misc : A,5ML!2 Qt Upd On: 08/26/20 08:57

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-31-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	270721	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	337227	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	192587	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	77281	31.94	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.47%			
39) 1,2-Dichloroethane-d4	4.781	67	32638	30.66	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.20%			
66) Toluene-d8	5.787	98	337179	25.86	ug/l	0.00
Spiked Amount 30.000			Recovery = 86.20%			
76) Bromofluorobenzene	7.167	174	161936	32.95	ug/l	0.00
Spiked Amount 30.000			Recovery = 109.83%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 11M82278.D\data.ms
Quant QT Reviewed
SampleID : AD18955-006
Data File: 11M82278.D
Acq On : 08/31/20 08:59
Operator : WP
Sam Mult : 1 Vial# : 10
Misc : A,5ML;2
Qt Meth : 11M_A0817.M
Qt On : 08/31/20 09:15
Qt Upd On: 08/26/20 08:57
1050000
1000000
950000
900000
850000
800000
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->
1.50
2.00
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50

GC/MS Volatile Data
Standards Data

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M130907.D	CAL @ 20 PPB	08/01/20 14:13	2	6M130906.D	CAL @ 5 PPB	08/01/20 13:52
3	6M130905.D	CAL @ 2 PPB	08/01/20 13:32	4	6M130908.D	CAL @ 50 PPB	08/01/20 14:34
5	6M130909.D	CAL @ 100 PPB	08/01/20 14:54	6	6M130911.D	CAL @ 250 PPB	08/01/20 15:36
7	6M130913.D	CAL @ 500 PPB	08/01/20 16:17	8	6M130904.D	CAL @ 1 PPB	08/01/20 13:11
9	6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.3242	0.3766	0.3696	0.3486	0.2749	0.2732	0.2410	-----	-----	0.315	1.65	0.995	0.999	17	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dichlorodifluorometha	1	0	Avg	0.2181	0.2387	0.2337	0.2248	0.1825	0.1780	0.1623	-----	-----	0.205	1.64	0.997	1.00	15	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloromethane	1	0	Qua	0.3039	0.3449	0.3821	0.3138	0.2351	0.2269	0.1945	-----	-----	0.286	1.81	0.993	0.999	24	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromomethane	1	0	Avg	0.1809	0.2145	0.2351	0.1978	0.1570	0.1692	0.1689	-----	-----	0.189	2.23	0.999	0.999	15	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Chloride	1	0	Avg	0.3041	0.3528	0.3432	0.3247	0.2577	0.2580	0.2226	-----	-----	0.295	1.92	0.994	0.999	17	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroethane	1	0	Avg	0.2054	0.2373	0.2413	0.2180	0.1754	0.1741	0.1521	-----	-----	0.201	2.32	0.995	0.999	17	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichlorofluoromethan	1	0	Avg	0.4975	0.5513	0.5623	0.5308	0.4347	0.4376	0.3824	-----	-----	0.485	2.56	0.995	0.999	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl ether	1	0	Avg	0.1791	0.1884	0.2074	0.1831	0.1704	0.1672	0.1542	-----	-----	0.179	2.81	0.998	1.00	9.5	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Furan	1	0	Avg	0.4160	0.4753	0.4342	0.4353	0.3687	0.3632	0.3190	-----	-----	0.402	2.84	0.995	1.00	13	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1877	0.2097	0.2168	0.1972	0.1669	0.1668	0.1470	-----	-----	0.185	3.01	0.996	1.00	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methylene Chloride	1	0	Avg	0.2634	0.2964	0.3739	0.2832	0.2412	0.2330	0.2082	-----	-----	0.271	3.43	0.996	1.00	20	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acrolein	1	0	Avg	0.0358	0.0333	0.0349	0.0362	0.0361	0.0354	0.0332	-----	-----	0.0350	2.92	0.999	1.00	3.6		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Acrylonitrile	1	0	Avg	0.1111	0.1181	0.1223	0.1092	0.0967	0.0957	0.0891	-----	-----	0.106	3.64	0.999	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iodomethane	1	0	Qua	0.1647	0.1243	0.1405	0.2321	0.2322	0.2466	0.2599	-----	-----	0.200	3.17	0.999	1.00	28		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acetone	1	0	Avg	0.1057	0.1116	0.1275	0.1053	0.0914	0.0888	0.0818	-----	-----	0.102	3.06	0.998	1.00	15	0.10 a	100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Carbon Disulfide	1	0	Avg	0.6817	0.7408	0.7938	0.7350	0.6089	0.6217	0.5554	-----	-----	0.677	3.23	0.997	0.999	13	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butyl Alcohol	1	0	Avg	0.0520	0.0491	0.0522	0.0533	0.0466	0.0468	0.0450	-----	-----	0.0493	3.51	0.999	1.00	6.6		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
n-Hexane	1	0	Avg	0.2730	0.2774	0.2687	0.3058	0.2514	0.2497	0.2193	-----	-----	0.264	3.91	0.995	0.999	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Di-isopropyl-ether	1	0	Avg	0.6172	0.6209	0.6923	0.6771	0.6140	0.6071	0.5681	-----	-----	0.628	4.06	0.999	1.00	6.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1-Dichloroethene	1	0	Avg	0.3631	0.3650	0.3598	0.3828	0.3109	0.3145	0.2826	-----	-----	0.340	3.02	0.997	0.999	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl Acetate	1	0	Avg	0.2296	0.2172	0.2345	0.2212	0.1951	0.1905	0.1798	-----	-----	0.210	3.34	0.999	1.00	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl-t-butyl ether	1	0	Avg	0.5441	0.5269	0.5497	0.5497	0.5258	0.5118	0.4857	0.6095	-----	0.538	3.67	0.999	1.00	6.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethane	1	0	Avg	0.4524	0.4817	0.4543	0.4897	0.4207	0.4154	0.3666	-----	-----	0.440	4.03	0.996	1.00	9.7	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,2-Dichloroethe	1	0	Avg	0.2771	0.2919	0.2503	0.2893	0.2345	0.2378	0.2097	-----	-----	0.256	3.68	0.996	0.999	12	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl-t-butyl ether	1	0	Avg	0.6879	0.6910	0.7240	0.7260	0.6762	0.6746	0.6340	-----	-----	0.688	4.32	0.999	1.00	4.6	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,2-Dichloroethene	1	0	Avg	0.4552	0.4622	0.4795	0.4939	0.4227	0.4185	0.3835	-----	-----	0.445	4.44	0.998	1.00	8.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromochloromethane	1	0	Avg	0.2197	0.2330	0.2181	0.2191	0.1940	0.1829	0.1666	-----	-----	0.205	4.59	0.997	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2,2-Dichloropropane	1	0	Avg	0.3659	0.3861	0.3672	0.4074	0.3327	0.3418	0.3095	-----	-----	0.359	4.45	0.997	0.999	9.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl acetate	1	0	Avg	0.3062	0.3178	0.3838	0.3336	0.3021	0.2881	0.2736	-----	-----	0.315	4.46	0.999	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dioxane	1	0	Avg	0.0058	0.0051	0.0064	0.0058	0.0051	0.0054	0.0049	-----	-----	0.00553	5.52	0.998	1.00	9.3		1000.	250.0	100.0	2500.	5000.	12500	25000		
1,1-Dichloropropene	1	0	Avg	0.3662	0.3927	0.3913	0.4002	0.3336	0.3302	0.2997	-----	-----	0.359	4.85	0.997	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroform	1	0	Avg	0.4886	0.5029	0.4794	0.5092	0.4406	0.4384	0.3926	-----	-----	0.465	4.64	0.997	1.00	9.1	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromofluoromethan	1	0	Avg	0.2654	0.2692	0.2716	0.2701	0.2644	0.2586	0.2612	0.2768	0.2618	0.267	4.73	-1	-1	2.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.3863	0.3848	0.3951	0.4084	0.3448	0.3457	0.3093	-----	-----	0.368	4.80	0.997	1.00	9.6	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichloroethane-d4	1	0	Avg	0.1444	0.1461	0.1472	0.1512	0.1397	0.1348	0.1341	0.1492	0.1468	0.144	4.93	-1	-1	4.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3539	0.3790	0.3721	0.3639	0.3333	0.3213	0.3070	-----	-----	0.347	4.98	0.999	1.00	7.8	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Butanone	1	0	Avg	0.1524	0.1380	0.1574	0.1565	0.1473	0.1471	0.1433	-----	-----	0.149	4.43	1.00	1.00	4.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,1-Trichloroethane	1	0	Avg	0.4225	0.4503	0.4378	0.4587	0.3901	0.3949	0.3565	-----	-----	0.416	4.76	0.997	1.00	8.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Carbon Tetrachloride	1	0	Avg	0.3596	0.3680	0.3514	0.4003	0.3368	0.3523	0.3172	-----	-----	0.355	4.86	0.997	0.999	7.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Acetate	1	0	Avg	0.7402	0.7749	0.7104	0.7905	0.7601	0.7527	0.7183	-----	-----	0.750	4.05	0.999	1.00	3.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromodichloromethan	1	0	Avg	0.3293	0.3098	0.3224	0.3483	0.3290	0.3283	0.3129	-----	-----	0.326	5.60	0.999	1.00	3.9	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.17

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_6

Level #	Data File:	Cal Identifier:	Analysis Date/Time	Level #	Data File:	Cal Identifier:	Analysis Date/Time
1	6M130907.D	CAL @ 20 PPB	08/01/20 14:13	2	6M130906.D	CAL @ 5 PPB	08/01/20 13:52
3	6M130905.D	CAL @ 2 PPB	08/01/20 13:32	4	6M130908.D	CAL @ 50 PPB	08/01/20 14:34
5	6M130909.D	CAL @ 100 PPB	08/01/20 14:54	6	6M130911.D	CAL @ 250 PPB	08/01/20 15:36
7	6M130913.D	CAL @ 500 PPB	08/01/20 16:17	8	6M130904.D	CAL @ 1 PPB	08/01/20 13:11
9	6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.3627	0.4137	0.4004	0.4215	0.3570	0.3594	0.3249	-----	-----	0.377	5.45	0.997	1.00	9.4	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromomethane	1	0	Avg	0.1687	0.1700	0.1803	0.1759	0.1694	0.1629	0.1594	-----	-----	0.170	5.53	1.00	1.00	4.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichloropropane	1	0	Avg	0.2580	0.2704	0.2913	0.2775	0.2467	0.2412	0.2261	-----	-----	0.259	5.46	0.999	1.00	8.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichloroethene	1	0	Avg	0.2951	0.3150	0.3303	0.3244	0.2707	0.2719	0.2454	-----	-----	0.293	5.33	0.997	1.00	11	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Benzene	1	0	Avg	1.0575	1.1184	1.1183	1.1238	0.9451	0.9413	0.8289	0.9677	-----	1.01	4.98	0.996	1.00	11	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
tert-Amyl methyl ether	1	0	Avg	0.5832	0.6371	0.5915	0.6130	0.5853	0.5828	0.5504	-----	-----	0.592	5.02	0.999	1.00	4.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iso-propylacetate	1	0	Avg	0.5311	0.4961	0.5080	0.5336	0.5416	0.5296	0.5171	-----	-----	0.522	4.98	1.00	1.00	3.1	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl methacrylate	1	0	Avg	0.2673	0.2618	0.2320	0.2661	0.2667	0.2615	0.2311	-----	-----	0.255	5.48	0.996	1.00	6.4	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromochloromethan	1	0	Avg	0.2800	0.2445	0.2470	0.2892	0.3050	0.3043	0.3006	-----	-----	0.282	6.45	1.00	1.00	9.2	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chloroethylvinylethe	1	0	Avg	0.0776	0.0757	0.0963	0.0795	0.0771	0.0749	0.0744	-----	-----	0.0794	5.73	1.00	1.00	9.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,3-Dichloropropen	1	0	Avg	0.4359	0.4419	0.4185	0.4810	0.4596	0.4608	0.4319	-----	-----	0.447	5.83	0.999	1.00	4.7	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,3-Dichloroprop	1	0	Avg	0.3907	0.3619	0.3471	0.4109	0.4138	0.4154	0.3997	-----	-----	0.391	6.12	1.00	1.00	6.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl methacrylate	1	0	Avg	0.2547	0.2517	0.2586	0.2542	0.2549	0.2499	0.2490	-----	-----	0.253	6.14	1.00	1.00	1.3	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloroethane	1	0	Avg	0.2652	0.2614	0.2671	0.2643	0.2569	0.2494	0.2383	-----	-----	0.258	6.22	0.999	1.00	4.0	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromoethane	1	0	Avg	0.2662	0.2400	0.2701	0.2841	0.2789	0.2673	0.2570	0.2749	-----	0.267	6.53	0.999	1.00	5.2	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.4699	0.4626	0.4806	0.4712	0.4484	0.4353	0.4219	-----	-----	0.456	6.32	1.00	1.00	4.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Methyl-2-Pentanone	1	0	Avg	0.3436	0.3517	0.4208	0.3380	0.3387	0.3326	0.3239	-----	-----	0.350	5.90	1.00	1.00	9.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Hexanone	1	0	Avg	0.2619	0.2833	0.3365	0.2716	0.2648	0.2576	0.2538	-----	-----	0.276	6.33	1.00	1.00	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Tetrachloroethene	1	0	Avg	0.2857	0.3011	0.2675	0.3048	0.2708	0.2651	0.2503	-----	-----	0.278	6.32	0.999	1.00	7.2	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Toluene-d8	1	0	Avg	1.2292	1.2646	1.2327	1.2146	1.2462	1.2572	1.2415	1.2297	1.2250	1.24	5.98	-1	-1	1.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.8244	0.8979	0.8864	0.8420	0.7512	0.7357	0.6785	0.8725	-----	0.811	6.02	0.998	1.00	9.9	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2781	0.2929	0.2887	0.2970	0.2921	0.2946	0.2849	-----	-----	0.290	6.81	1.00	1.00	2.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chlorobenzene	1	0	Avg	0.9025	0.9069	1.0477	0.9388	0.8438	0.8162	0.7483	-----	-----	0.886	6.78	0.998	1.00	11	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Butyl acrylate	1	0	Avg	0.8717	0.8120	0.9465	0.8808	0.8809	0.6395	0.9670	-----	-----	0.857	7.02	0.972	0.993	13	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Amyl acetate	1	0	Avg	0.8056	0.8074	0.9907	0.8273	0.8238	0.6002	0.8169	-----	-----	0.810	7.14	0.982	0.993	14	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromoform	1	0	Qua	0.3481	0.2725	0.2796	0.3608	0.3695	0.2812	0.4845	-----	-----	0.342	7.23	0.958	0.993	22	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethylbenzene	1	0	Avg	0.7583	0.7104	0.7448	0.7496	0.6512	0.4819	0.5397	0.6651	-----	0.663	6.82	0.994	0.994	15	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.6681	0.6039	0.6618	0.6727	0.6455	0.4629	0.7579	-----	-----	0.639	7.45	0.963	0.992	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromofluorobenzene	1	0	Avg	0.8262	0.7768	0.7943	0.8047	0.7807	0.5882	0.9826	0.7831	0.7704	0.790	7.40	-1	-1	13		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.7406	1.6391	1.8008	1.7771	1.6199	1.1577	1.7402	-----	-----	1.64	7.10	0.971	0.992	14	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
m&p-Xylenes	1	0	Avg	1.1026	1.0390	1.0764	1.1126	0.9605	0.6838	0.8126	1.0673	1.0909	0.994	6.88	0.991	0.992	15	0.10	40.00	10.00	4.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	1.0546	1.0286	1.0198	1.0630	0.9245	0.6814	1.0385	1.0303	-----	0.980	7.10	0.971	0.992	13	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.3183	0.2869	0.3284	0.3315	0.3173	0.2377	0.3554	-----	-----	0.311	7.47	0.973	0.993	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3-Dichlorobenzene	1	0	Avg	1.3539	1.3149	1.3399	1.3406	1.2277	1.1154	0.8935	-----	-----	1.23	8.02	0.985	1.00	14	0.60	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dichlorobenzene	1	0	Avg	1.3562	1.2893	1.3347	1.3502	1.2004	1.1148	1.2116	-----	-----	1.27	8.07	0.998	0.999	7.3	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichlorobenzene	1	0	Avg	1.2632	1.1702	1.2919	1.2264	1.1316	1.0451	0.8904	-----	-----	1.15	8.29	0.992	1.00	12	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Isopropylbenzene	1	0	Avg	2.8283	2.7057	2.6028	2.8658	2.4675	1.7756	2.3961	2.7365	-----	2.55	7.29	0.982	0.992	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Avg	0.0364	0.0407	0.0421	0.0347	0.0307	0.0238	0.0374	-----	-----	0.0352	7.37	0.967	0.994	18		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Camphene	1	0	Avg	0.9815	0.9204	0.9144	1.0342	0.9031	0.6618	1.0731	-----	-----	0.927	7.47	0.963	0.992	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichloropropane	1	0	Avg	0.8311	0.7429	0.8871	0.8547	0.8368	0.6162	1.0008	-----	-----	0.824	7.48	0.964	0.992	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chlorotoluene	1	0	Avg	1.7343	1.7104	1.6176	1.7691	1.4984	1.1491	1.2078	-----	-----	1.53	7.59	0.995	0.995	17		20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.17

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M130907.D	CAL @ 20 PPB	08/01/20 14:13	2	6M130906.D	CAL @ 5 PPB	08/01/20 13:52
3	6M130905.D	CAL @ 2 PPB	08/01/20 13:32	4	6M130908.D	CAL @ 50 PPB	08/01/20 14:34
5	6M130909.D	CAL @ 100 PPB	08/01/20 14:54	6	6M130911.D	CAL @ 250 PPB	08/01/20 15:36
7	6M130913.D	CAL @ 500 PPB	08/01/20 16:17	8	6M130904.D	CAL @ 1 PPB	08/01/20 13:11
9	6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.9956	2.9458	2.4822	3.0340	2.6456	1.9674	2.2278	-----	-----	2.61	7.58	0.993	0.994	16		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Chlorotoluene	1	0	Avg	1.5729	1.5218	1.6109	1.6736	1.5502	1.3150	1.2372	-----	-----	1.50	7.65	0.997	0.999	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Propylbenzene	1	0	Avg	3.3894	3.2596	3.1553	3.4264	2.9464	2.1450	2.5093	3.0701	-----	2.99	7.53	0.991	0.993	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.6614	1.6731	1.5856	1.6780	1.5225	1.1020	1.7438	-----	-----	1.57	7.50	0.966	0.992	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3,5-Trimethylbenzen	1	0	Avg	1.9399	1.7872	2.2533	2.0330	1.8000	1.4687	1.5255	1.8343	-----	1.83	7.61	0.997	0.998	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	Qua	0.7160	0.7673	0.9715	0.7526	0.7082	0.5933	0.4857	-----	-----	0.714	7.61	0.985	1.00	21	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butylbenzene	1	0	Avg	2.2902	2.1506	2.1850	2.3903	2.0781	1.7941	1.4738	2.2964	-----	2.08	7.81	0.986	1.00	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Avg	2.2405	2.1697	2.2022	2.3099	2.0717	1.8591	1.2418	2.4344	-----	2.07	7.83	0.947	1.00	18		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	2.9235	2.8882	2.9996	3.1139	2.7230	2.4227	1.5196	2.6104	-----	2.65	7.93	0.928	0.999	19		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	2.4648	2.4179	2.3575	2.6286	2.3029	2.1137	1.2793	2.2205	-----	2.22	8.00	0.918	0.999	19		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	2.7542	2.6145	2.6688	2.9447	2.6177	2.4359	1.4395	2.7992	-----	2.53	8.24	0.910	0.998	18		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	1.4215	1.2987	1.4488	1.5173	1.3414	1.2496	0.9511	-----	-----	1.32	8.22	0.977	1.00	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4,5-Tetramethylbe	1	0	Avg	2.0569	1.9763	1.8620	2.2325	2.0312	1.5781	1.3085	-----	-----	1.86	8.68	0.983	0.998	17		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromo-3-Chloro	1	0	Avg	0.1759	0.1613	0.1976	0.1835	0.1725	0.1439	0.1495	-----	-----	0.169	8.74	0.998	0.998	11	0.05	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Camphor	1	0	Qua	0.1089	0.1137	0.1664	0.1048	0.0953	0.0717	0.1169	-----	-----	0.111	9.18	0.963	0.993	26		200.0	50.00	20.00	500.0	1000.	2500.	5000.		
Hexachlorobutadiene	1	0	Avg	0.4664	0.4663	0.4676	0.5144	0.4447	0.3336	0.5307	-----	-----	0.461	9.32	0.965	0.992	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4-Trichlorobenzen	1	0	Avg	0.8615	0.8585	0.9148	0.8672	0.8060	0.5757	0.9312	-----	-----	0.831	9.24	0.964	0.991	14	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichlorobenzen	1	0	Avg	0.7435	0.7439	0.8641	0.7774	0.7497	0.5255	0.8879	-----	-----	0.756	9.54	0.959	0.991	16		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Naphthalene	1	0	Avg	2.1328	2.0494	2.3504	2.0685	1.9919	1.4412	2.2041	2.3993	-----	2.08	9.40	0.971	0.992	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.17
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130907.D Sam Mult : 1 Vial# : 8 Qt On : 08/01/20 15:34
Acq On : 08/01/20 14:13 Misc : S,5G Qt Upd On: 08/01/20 15:33

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	391232	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	322837	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.055	152	175394	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	103838	29.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.30%			
39) 1,2-Dichloroethane-d4	4.934	67	56519	29.25	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.50%			
66) Toluene-d8	5.983	98	396832	29.90	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.67%			
76) Bromofluorobenzene	7.397	174	144919	31.54	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.13%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	84558	17.7661	ug/l	96
6) Dichlorodifluoromethane	1.636	85	56901	18.7722	ug/l	93
7) Chloromethane	1.813	50	79283	17.5213	ug/l	95
8) Bromomethane	2.233	94	47193	17.0583	ug/l	95
9) Vinyl Chloride	1.916	62	79323	17.8747	ug/l	98
10) Chloroethane	2.319	64	53595	17.6959	ug/l	97
11) Trichlorofluoromethane	2.556	101	129761	18.1514	ug/l	96
12) Ethyl ether	2.806	59	46724	18.5600	ug/l	99
13) Furan	2.843	39	108525	18.5616	ug/l	99
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	48955	18.0515	ug/l	96
15) Methylene Chloride	3.434	84	68717	16.5767	ug/l	98
16) Acrolein	2.922	56	46711	102.8732	ug/l	96
17) Acrylonitrile	3.642	53	28976	19.0572	ug/l	98
18) Iodomethane	3.166	142	42958	20.2068	ug/l	97
19) Acetone	3.056	43	137928	92.0988	ug/l	92
20) Carbon Disulfide	3.233	76	177825	18.0230	ug/l	100
21) t-Butyl Alcohol	3.508	59	67875	100.9541	ug/l	90
22) n-Hexane	3.910	57	71226	19.1190	ug/l	96
23) Di-isopropyl-ether	4.062	45	160985	18.6061	ug/l	95
24) 1,1-Dichloroethene	3.020	61	94725	19.6713	ug/l	98
25) Methyl Acetate	3.337	43	59896	20.4704	ug/l	100
26) Methyl-t-butyl ether	3.672	73	141918	19.4677	ug/l	98
27) 1,1-Dichloroethane	4.032	63	117998	19.0378	ug/l	96
28) trans-1,2-Dichloroethene	3.678	96	72289	19.9972	ug/l	94
29) Ethyl-t-butyl ether	4.324	59	179437	19.2789	ug/l	98
30) cis-1,2-Dichloroethene	4.440	61	118749	19.0268	ug/l	93
31) Bromochloromethane	4.593	49	57312	19.6714	ug/l	96
32) 2,2-Dichloropropane	4.446	77	95435	18.9123	ug/l	98
33) Ethyl acetate	4.465	43	79863	17.7447	ug/l	99
34) 1,4-Dioxane	5.519	88	76235	1008.9834	ug/l	91
35) 1,1-Dichloropropene	4.855	75	95518	18.5519	ug/l	99
36) Chloroform	4.635	83	127440	19.6540	ug/l	95
38) Cyclohexane	4.806	56	100760	19.5038	ug/l	98
40) 1,2-Dichloroethane	4.977	62	92329	19.0471	ug/l	99
41) 2-Butanone	4.440	43	39753	20.2319	ug/l	87
42) 1,1,1-Trichloroethane	4.763	97	110211	18.8215	ug/l	94
43) Carbon Tetrachloride	4.861	117	93792	19.2681	ug/l	98
44) Vinyl Acetate	4.050	43	193064	19.5138	ug/l	100
45) Bromodichloromethane	5.593	83	85912	20.1548	ug/l	94
46) Methylcyclohexane	5.446	83	94599	17.6108	ug/l	94
47) Dibromomethane	5.525	174	44017	19.2374	ug/l	94
48) 1,2-Dichloropropane	5.458	63	67307	18.4460	ug/l	100
49) Trichloroethene	5.330	130	76976	18.2584	ug/l	95
50) Benzene	4.977	78	275833	19.5467	ug/l	100
51) tert-Amyl methyl ether	5.019	73	152132	19.0020	ug/l	98
53) Iso-propylacetate	4.977	43	114307	20.7224	ug/l	100
54) Methyl methacrylate	5.483	41	57546	21.1076	ug/l	94
55) Dibromochloromethane	6.446	129	60268	21.5178	ug/l	84
56) 2-Chloroethylvinylether	5.733	63	16721	18.5311	ug/l	88
57) cis-1,3-Dichloropropene	5.830	75	93817	19.4965	ug/l	92
58) trans-1,3-Dichloropropene	6.117	75	84092	20.9293	ug/l	96
59) Ethyl methacrylate	6.135	41	54829	19.9897	ug/l	95
60) 1,1,2-Trichloroethane	6.220	97	57081	20.0678	ug/l	98
61) 1,2-Dibromoethane	6.525	107	57308	19.9204	ug/l	95
62) 1,3-Dichloropropane	6.318	76	101146	19.9333	ug/l	89
63) 4-Methyl-2-Pentanone	5.897	43	73965	18.5655	ug/l	99
64) 2-Hexanone	6.330	43	56370	17.6270	ug/l	98
65) Tetrachloroethene	6.324	164	61501	19.6257	ug/l	90
67) Toluene	6.019	92	177449	18.8502	ug/l	98

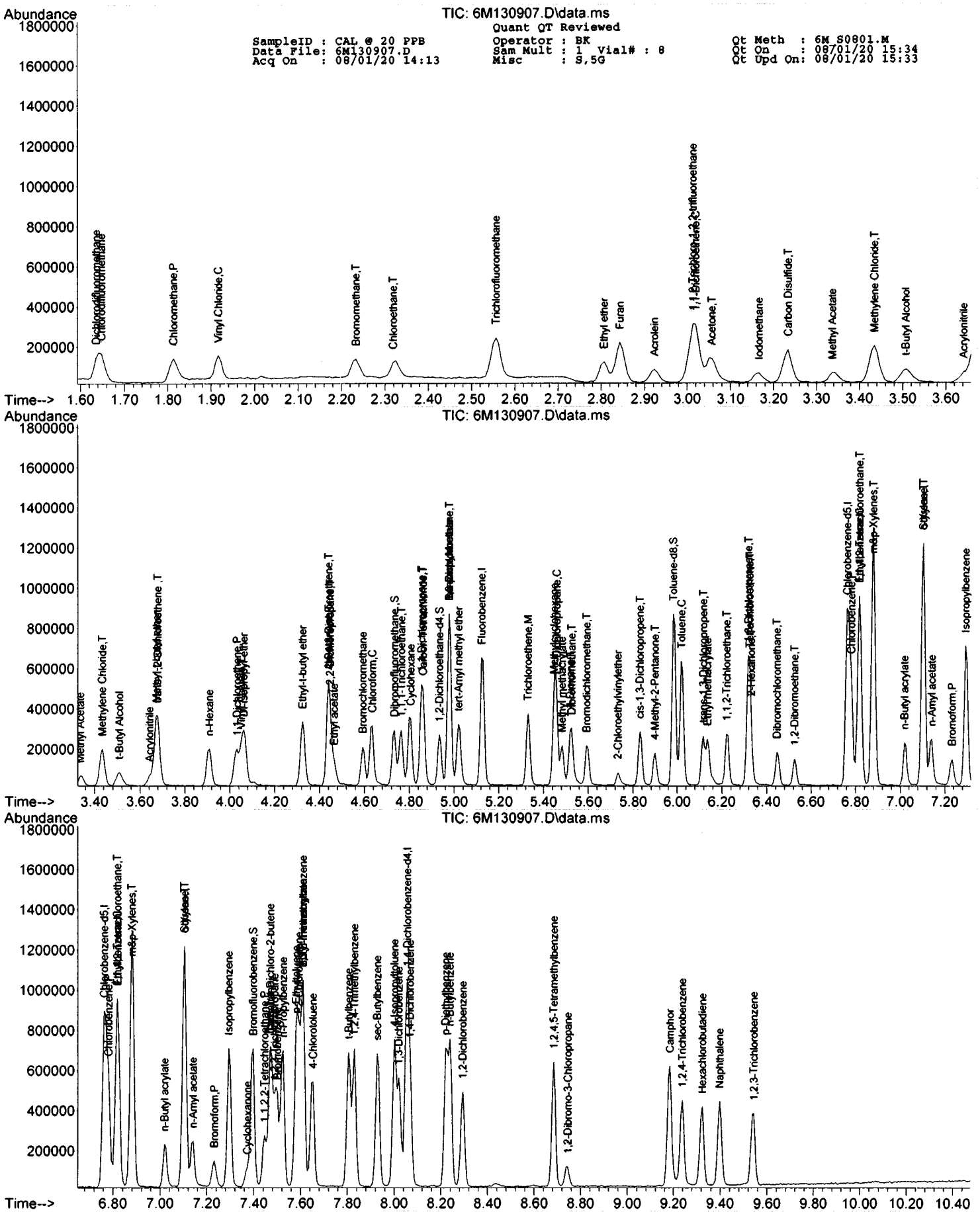
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB
Data File: 6M130907.D
Acq On : 08/01/20 14:13
Operator : BK
Sam Mult : 1 Vial# : 8
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:34
Qt Upd On: 08/01/20 15:33

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.818	133	59870	18.9945	ug/l	88
69)	Chlorobenzene	6.781	112	194254	18.7150	ug/l	98
71)	n-Butyl acrylate	7.019	55	101934	19.8170	ug/l	99
72)	n-Amyl acetate	7.141	43	94198	19.3667	ug/l	99
73)	Bromoform	7.232	173	40708	22.8783	ug/l	95
74)	Ethylbenzene	6.818	106	88670	21.1374	ug/l	96
75)	1,1,2,2-Tetrachloroethane	7.446	83	78122	20.6788	ug/l	97
77)	Styrene	7.104	104	203535	20.0188	ug/l	99
78)	m&p-Xylenes	6.879	106	257871	40.9426	ug/l	95
79)	o-Xylene	7.104	106	123316	20.3700	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.470	53	37221	20.1680	ug/l	92
81)	1,3-Dichlorobenzene	8.019	146	158315	20.3315	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	158582	20.4745	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	147705	20.5475	ug/l	98
84)	Isopropylbenzene	7.293	105	330713	20.7374	ug/l	99
85)	Cyclohexanone	7.373	55	21285	93.2209	ug/l	95
86)	Camphene	7.470	93	114775	20.5267	ug/l	98
87)	1,2,3-Trichloropropane	7.489	75	97186	20.0697	ug/l	96
88)	2-Chlorotoluene	7.592	91	202790	20.4144	ug/l	98
89)	p-Ethyltoluene	7.580	105	350282	21.2404	ug/l	99
90)	4-Chlorotoluene	7.653	91	183924	19.6356	ug/l	99
91)	n-Propylbenzene	7.525	91	396325	21.0009	ug/l	100
92)	Bromobenzene	7.501	77	194274	20.1927	ug/l	99
93)	1,3,5-Trimethylbenzene	7.610	105	226831	19.6248	ug/l	98
94)	Butyl methacrylate	7.610	41	83727	18.2741	ug/l	94
95)	t-Butylbenzene	7.806	119	267791	20.3067	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	261988	19.6620	ug/l	99
97)	sec-Butylbenzene	7.927	105	341850	19.7027	ug/l	99
98)	4-Isopropyltoluene	8.001	119	288211	20.4877	ug/l	98
99)	n-Butylbenzene	8.238	91	322053	19.9811	ug/l	100
100)	p-Diethylbenzene	8.220	119	166225	19.9995	ug/l	100
101)	1,2,4,5-Tetramethylben...	8.683	119	240512	20.3289	ug/l	97
102)	1,2-Dibromo-3-Chloropr...	8.744	157	20569	19.4549	ug/l	98
103)	Camphor	9.183	95	127332	187.3083	ug/l	98
104)	Hexachlorobutadiene	9.324	225	54540	19.3222	ug/l	99
105)	1,2,4-Trichlorobenzene	9.238	180	100742	19.5756	ug/l	97
106)	1,2,3-Trichlorobenzene	9.543	180	86945	18.7025	ug/l	96
107)	Naphthalene	9.397	128	249397	19.2416	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M130907.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 6M130907.D
Acq On : 08/01/20 14:13
Operator : BK
Sam Mult : 1 Vial# : 8
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:34
Qt Upd On: 08/01/20 15:33
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 6M130907.D\data.ms
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Time-->

Abundance
TIC: 6M130907.D\data.ms
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Cyclohexanone
Isopropylbenzene
Bromofluorobenzene,S
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130906.D Sam Mult : 1 Vial# : 7 Qt On : 08/01/20 15:33
Acq On : 08/01/20 13:52 Misc : S,5G Qt Upd On: 08/01/20 15:33

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	368139	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	310453	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	178697	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	99130	29.90	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.67%			
39) 1,2-Dichloroethane-d4	4.934	67	53818	29.51	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.37%			
66) Toluene-d8	5.983	98	392605	30.96	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.20%			
76) Bromofluorobenzene	7.397	174	138818	29.57	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.57%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	23110	5.2441	ug/l	99
6) Dichlorodifluoromethane	1.636	85	14650	5.2074	ug/l	94
7) Chloromethane	1.813	50	21164	4.9560	ug/l	100
8) Bromomethane	2.233	94	13164	4.6016	ug/l	99
9) Vinyl Chloride	1.916	62	21651	5.2826	ug/l	97
10) Chloroethane	2.325	64	14564	5.1674	ug/l	90
11) Trichlorofluoromethane	2.557	101	33830	5.0438	ug/l	93
12) Ethyl ether	2.806	59	11565	4.8252	ug/l	94
13) Furan	2.843	39	29165	5.4657	ug/l	96
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	12868	5.0641	ug/l	95
15) Methylene Chloride	3.434	84	18187	4.5103	ug/l	92
16) Acrolein	2.922	56	10217	23.4038	ug/l	84
17) Acrylonitrile	3.642	53	7250	5.1017	ug/l	84
18) Iodomethane	3.160	142	7630	4.2899	ug/l	90
19) Acetone	3.056	43	34247	23.9678	ug/l	95
20) Carbon Disulfide	3.233	76	45458	4.8460	ug/l	100
21) t-Butyl Alcohol	3.508	59	15065	23.2601	ug/l	97
22) n-Hexane	3.910	57	17022	5.1162	ug/l	82
23) Di-isopropyl-ether	4.062	45	38096	4.5338	ug/l	100
24) 1,1-Dichloroethene	3.020	61	22395	4.9142	ug/l	95
25) Methyl Acetate	3.343	43	13329	4.7655	ug/l	100
26) Methyl-t-butyl ether	3.672	73	32329	4.6244	ug/l	94
27) 1,1-Dichloroethane	4.032	63	29557	5.1025	ug/l	93
28) trans-1,2-Dichloroethene	3.678	96	17911	5.4091	ug/l	90
29) Ethyl-t-butyl ether	4.324	59	42399	4.7655	ug/l	98
30) cis-1,2-Dichloroethene	4.440	61	28363	4.7487	ug/l	96
31) Bromochloromethane	4.593	49	14296	5.3291	ug/l	98
32) 2,2-Dichloropropane	4.446	77	23694	4.9850	ug/l	93
33) Ethyl acetate	4.465	43	19504	4.4306	ug/l	92
34) 1,4-Dioxane	5.519	88	15873	211.9264	ug/l	89
35) 1,1-Dichloropropene	4.855	75	24100	4.9617	ug/l	96
36) Chloroform	4.635	83	30856	5.0862	ug/l	88
38) Cyclohexane	4.800	56	23614	4.7894	ug/l	94
40) 1,2-Dichloroethane	4.983	62	23255	5.1490	ug/l	94
41) 2-Butanone	4.440	43	8467	4.3947	ug/l	94
42) 1,1,1-Trichloroethane	4.763	97	27633	5.0227	ug/l	97
43) Carbon Tetrachloride	4.867	117	22583	4.8962	ug/l	98
44) Vinyl Acetate	4.050	43	47550	5.1631	ug/l	100
45) Bromodichloromethane	5.593	83	19011	4.6195	ug/l	98
46) Methylcyclohexane	5.446	83	25385	5.0333	ug/l	94
47) Dibromomethane	5.526	174	10433	4.7721	ug/l	93
48) 1,2-Dichloropropane	5.458	63	16593	4.7532	ug/l	96
49) Trichloroethene	5.330	130	19327	4.8102	ug/l	96
50) Benzene	4.983	78	68625	5.2267	ug/l	100
51) tert-Amyl methyl ether	5.019	73	39096	5.2899	ug/l	98
53) Iso-propylacetate	4.977	43	25670	4.7627	ug/l	96
54) Methyl methacrylate	5.483	41	13551	5.2574	ug/l	99
55) Dibromochloromethane	6.452	129	12653	4.5599	ug/l	90
56) 2-Chloroethylvinylether	5.733	63	3917	4.3050	ug/l	95
57) cis-1,3-Dichloropropene	5.830	75	22865	4.9123	ug/l	96
58) trans-1,3-Dichloropropene	6.117	75	18728	4.7741	ug/l	84
59) Ethyl methacrylate	6.135	41	13028	4.9094	ug/l	96
60) 1,1,2-Trichloroethane	6.227	97	13529	4.9196	ug/l	92
61) 1,2-Dibromoethane	6.525	107	12421	4.3421	ug/l	88
62) 1,3-Dichloropropane	6.318	76	23940	4.8605	ug/l	100
63) 4-Methyl-2-Pentanone	5.897	43	18201	4.6352	ug/l	95
64) 2-Hexanone	6.330	43	14660	4.6585	ug/l	85
65) Tetrachloroethene	6.324	164	15584	5.2616	ug/l	78
67) Toluene	6.025	92	46464	5.1785	ug/l	96

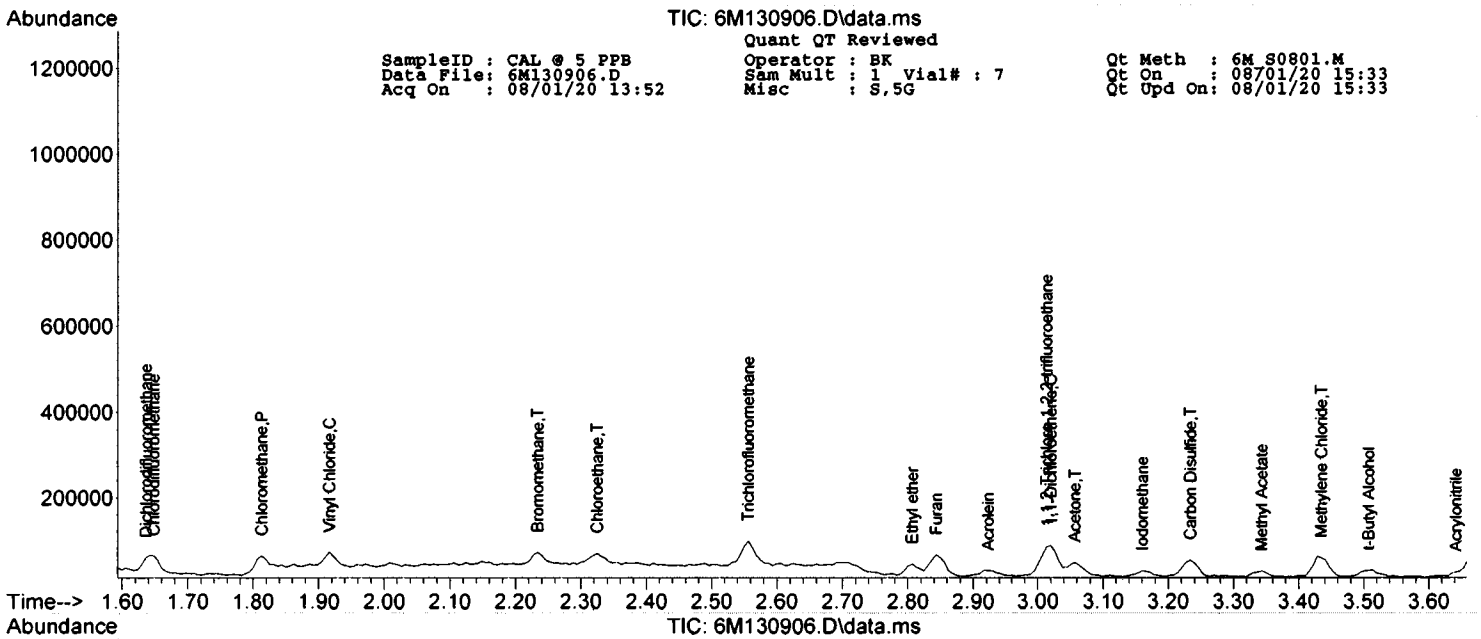
Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130906.D Sam Mult : 1 Vial# : 7 Qt On : 08/01/20 15:33
Acq On : 08/01/20 13:52 Misc : S,5G Qt Upd On: 08/01/20 15:33

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	15156	5.0004	ug/l	90
69)	Chlorobenzene	6.781	112	46928	4.5653	ug/l	95
71)	n-Butyl acrylate	7.019	55	24184	4.4435	ug/l	97
72)	n-Amyl acetate	7.141	43	24048	4.1046	ug/l	92
73)	Bromoform	7.233	173	8116	4.2544	ug/l	96
74)	Ethylbenzene	6.824	106	21159	4.9345	ug/l	99
75)	1,1,2,2-Tetrachloroethane	7.446	83	17986	4.5248	ug/l	88
77)	Styrene	7.104	104	48818	4.5812	ug/l	99
78)	m&p-Xylenes	6.879	106	61892	9.5602	ug/l	86
79)	o-Xylene	7.104	106	30636	4.9562	ug/l	96
80)	trans-1,4-Dichloro-2-b...	7.470	53	8546	4.3472	ug/l	83
81)	1,3-Dichlorobenzene	8.019	146	39162	4.9052	ug/l	94
82)	1,4-Dichlorobenzene	8.068	146	38399	4.8018	ug/l	92
83)	1,2-Dichlorobenzene	8.293	146	34852	4.6466	ug/l	94
84)	Isopropylbenzene	7.293	105	80586	4.9465	ug/l	96
85)	Cyclohexanone	7.373	55	6072	24.4457	ug/l	97
86)	Camphene	7.470	93	27414	4.7235	ug/l	95
87)	1,2,3-Trichloropropane	7.489	75	22127	4.2653	ug/l	90
88)	2-Chlorotoluene	7.592	91	50942	5.0503	ug/l	95
89)	p-Ethyltoluene	7.580	105	87735	5.3402	ug/l	100
90)	4-Chlorotoluene	7.653	91	45326	4.6335	ug/l	98
91)	n-Propylbenzene	7.525	91	97082	5.0658	ug/l	100
92)	Bromobenzene	7.495	77	49830	5.1264	ug/l	97
93)	1,3,5-Trimethylbenzene	7.610	105	53230	4.3801	ug/l	94
94)	Butyl methacrylate	7.610	41	22853	3.9862	ug/l	99
95)	t-Butylbenzene	7.806	119	64053	4.6946	ug/l	96
96)	1,2,4-Trimethylbenzene	7.830	105	64621	4.6852	ug/l	99
97)	sec-Butylbenzene	7.928	105	86020	4.9236	ug/l	99
98)	4-Isopropyltoluene	8.001	119	72012	5.0326	ug/l	99
99)	n-Butylbenzene	8.238	91	77870	4.6618	ug/l	94
100)	p-Diethylbenzene	8.220	119	38679	4.3784	ug/l	92
101)	1,2,4,5-Tetramethylben...	8.683	119	58861	4.8268	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.744	157	4804	4.2312	ug/l	93
103)	Camphor	9.177	95	33889	34.5610	ug/l	100
104)	Hexachlorobutadiene	9.324	225	13888	4.7482	ug/l	97
105)	1,2,4-Trichlorobenzene	9.238	180	25571	4.8177	ug/l	97
106)	1,2,3-Trichlorobenzene	9.543	180	22156	4.5318	ug/l	97
107)	Naphthalene	9.397	128	61039	4.5087	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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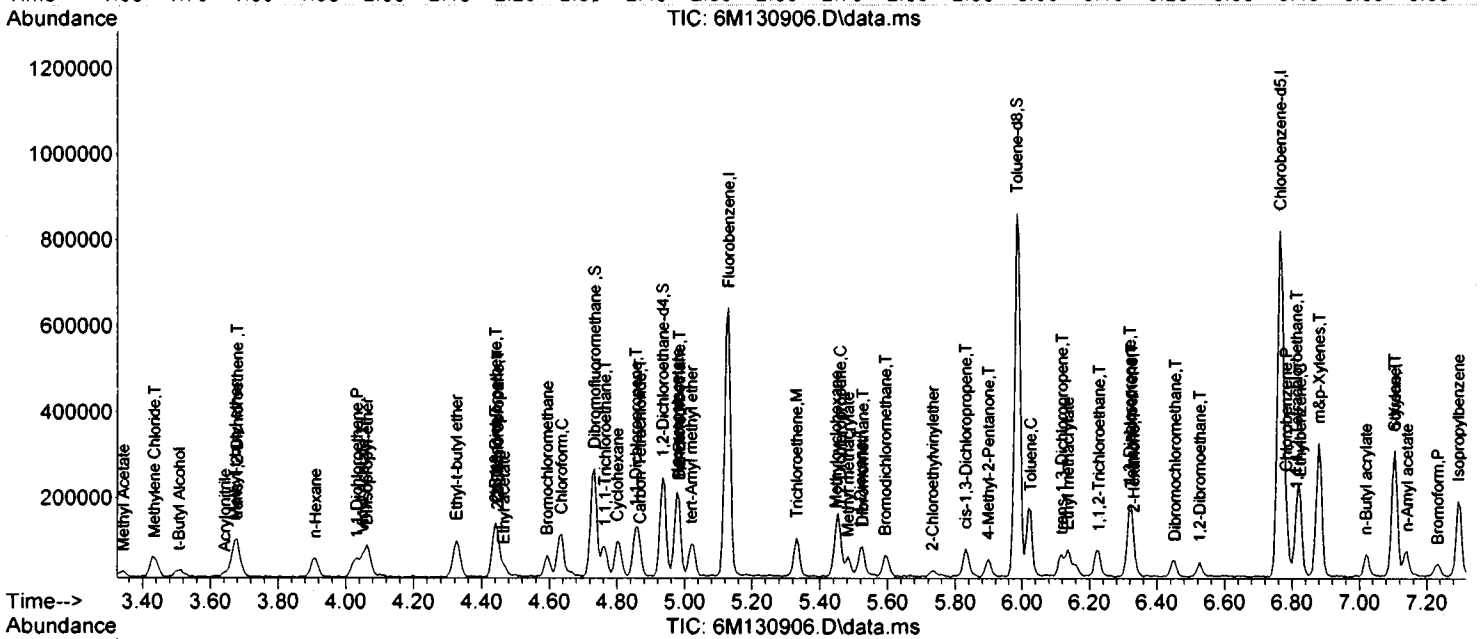
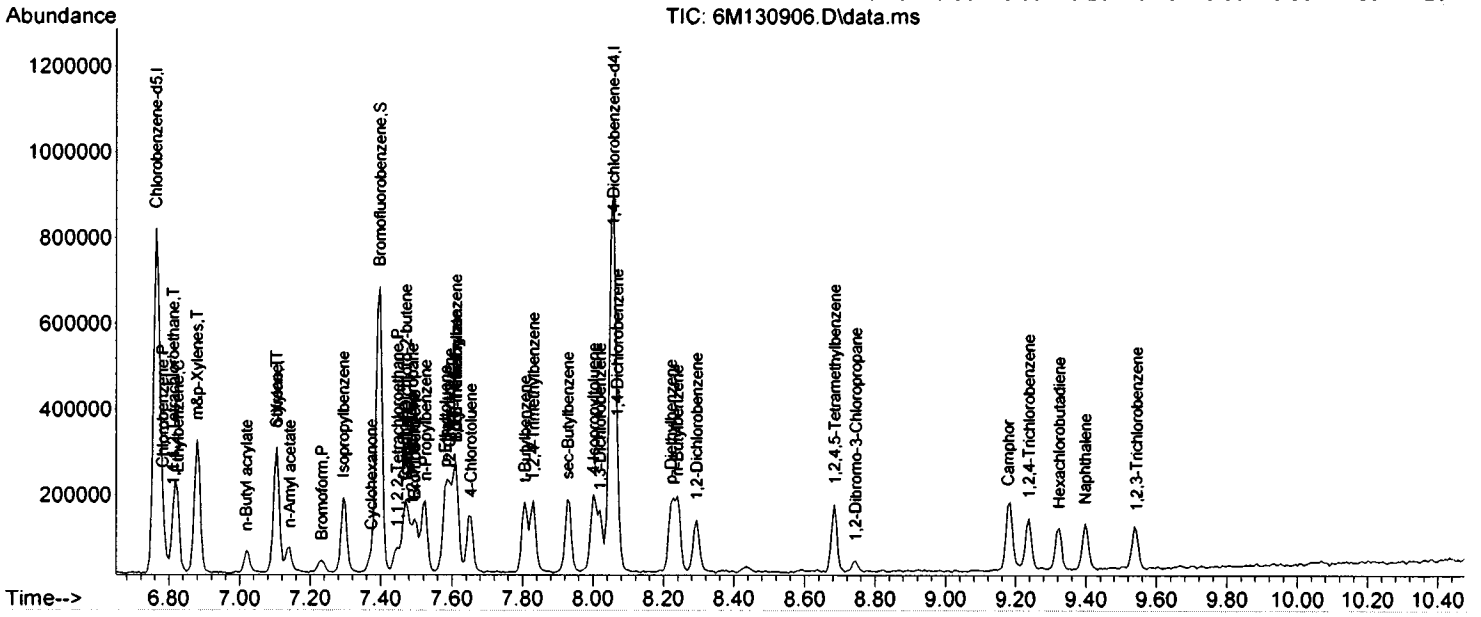
Quant QT Reviewed
SampleID : CAL @ 5 PPB
Data File: 6M130906.D
Acq On : 08/01/20 13:52
Operator : BK
Sam Mult : 1 Vial# : 7
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:33
Qt Upd On: 08/01/20 15:33
1200000
1000000
800000
600000
400000
200000
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time--> 1.60 1.70 1.80 1.90 2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80 2.90 3.00 3.10 3.20 3.30 3.40 3.50 3.60


Abundance
TIC: 6M130906.D\data.ms
1200000
1000000
800000
600000
400000
200000
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Dibromofluoromethane,S
Cyclohexane
Carbon Tetrachloride,T
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time--> 3.40 3.60 3.80 4.00 4.20 4.40 4.60 4.80 5.00 5.20 5.40 5.60 5.80 6.00 6.20 6.40 6.60 6.80 7.00 7.20


Abundance
TIC: 6M130906.D\data.ms
1200000
1000000
800000
600000
400000
200000
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
n-Propylbenzene
4-Chlorotoluene
1,4-Dichlorobenzene-d4,I
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time--> 6.80 7.00 7.20 7.40 7.60 7.80 8.00 8.20 8.40 8.60 8.80 9.00 9.20 9.40 9.60 9.80 10.00 10.20 10.40

Quantitation Report (QT Reviewed)

SampleID : CAL @ 2 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130905.D Sam Mult : 1 Vial# : 6 Qt On : 08/01/20 15:32
Acq On : 08/01/20 13:32 Misc : S,5G Qt Upd On: 08/01/20 15:24

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	388738	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	331679	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	184301	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	105591	30.22	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.73%			
39) 1,2-Dichloroethane-d4	4.934	67	57252	29.63	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.77%			
66) Toluene-d8	5.983	98	408874	30.24	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.80%			
76) Bromofluorobenzene	7.397	174	146390	30.31	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.03%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	9579	2.1205	ug/l	98
6) Dichlorodifluoromethane	1.636	85	6057	2.0793	ug/l	98
7) Chloromethane	1.813	50	9903	2.4349	ug/l	90
8) Bromomethane	2.233	94	6094	No Calib		
9) Vinyl Chloride	1.916	62	8896	2.1142	ug/l	90
10) Chloroethane	2.325	64	6254	2.2136	ug/l	99
11) Trichlorofluoromethane	2.557	101	14574	2.1189	ug/l	91
12) Ethyl ether	2.800	59	5377	2.2656	ug/l	96
13) Furan	2.843	39	11255	1.9950	ug/l	100
14) 1,1,2-Trichloro-1,2,2-...	3.020	101	5620	2.1984	ug/l	96
15) Methylene Chloride	3.434	84	9692	2.6409	ug/l	78
16) Acrolein	2.922	56	4526	9.6429	ug/l	83
17) Acrylonitrile	3.642	53	3170	2.2384	ug/l	81
18) Iodomethane	3.160	142	3643	No Calib		
19) Acetone	3.057	43	16529	12.1113	ug/l	97
20) Carbon Disulfide	3.233	76	20572	2.1599	ug/l	100
21) t-Butyl Alcohol	3.514	59	6764	9.7826	ug/l	61
22) n-Hexane	3.910	57	6964	No Calib		
23) Di-isopropyl-ether	4.062	45	17944	2.0452	ug/l	91
24) 1,1-Dichloroethene	3.014	61	9326	1.8797	ug/l	83
25) Methyl Acetate	3.337	43	6079	2.1200	ug/l	100
26) Methyl-t-butyl ether	3.672	73	14247	1.8967	ug/l	90
27) 1,1-Dichloroethane	4.032	63	11776	1.8558	ug/l	97
28) trans-1,2-Dichloroethene	3.678	96	6488	1.7306	ug/l	71
29) Ethyl-t-butyl ether	4.325	59	18764	1.9945	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	12428	1.9419	ug/l	89
31) Bromochloromethane	4.593	49	5653	1.9912	ug/l	83
32) 2,2-Dichloropropane	4.440	77	9518	1.8030	ug/l	96
33) Ethyl acetate	4.465	43	9948	2.3013	ug/l	82
34) 1,4-Dioxane	5.526	88	8302	110.4590	ug/l	89
35) 1,1-Dichloropropene	4.855	75	10142	1.9553	ug/l	91
36) Chloroform	4.629	83	12426	1.8830	ug/l	99
38) Cyclohexane	4.806	56	10241	1.9351	ug/l	95
40) 1,2-Dichloroethane	4.977	62	9645	2.0453	ug/l	73
41) 2-Butanone	4.440	43	4080	2.0110	ug/l	91
42) 1,1,1-Trichloroethane	4.764	97	11348	1.9089	ug/l	92
43) Carbon Tetrachloride	4.861	117	9107	1.7556	ug/l	87
44) Vinyl Acetate	4.062	43	18411	1.7972	ug/l	100
45) Bromodichloromethane	5.599	83	8356	1.8514	ug/l	83
46) Methylcyclohexane	5.446	83	10378	1.9000	ug/l	96
47) Dibromomethane	5.519	174	4674	2.0498	ug/l	81
48) 1,2-Dichloropropane	5.459	63	7551	2.0992	ug/l	85
49) Trichloroethene	5.330	130	8562	2.0364	ug/l	79
50) Benzene	4.977	78	28983	2.1388	ug/l	100
51) tert-Amyl methyl ether	5.020	73	15330	1.9299	ug/l	94
53) Iso-propylacetate	4.977	43	11233	1.9039	ug/l	94
54) Methyl methacrylate	5.483	41	5131	1.7441	ug/l	88
55) Dibromochloromethane	6.446	129	5463	1.7085	ug/l	91
56) 2-Chloroethylvinylether	5.739	63	2130	2.4228	ug/l	63
57) cis-1,3-Dichloropropene	5.837	75	9254	1.7399	ug/l	96
58) trans-1,3-Dichloropropene	6.117	75	7677	1.6896	ug/l	86
59) Ethyl methacrylate	6.135	41	5719	2.0347	ug/l	89
60) 1,1,2-Trichloroethane	6.221	97	5906	2.0204	ug/l	90
61) 1,2-Dibromoethane	6.525	107	5974	1.9329	ug/l	77
62) 1,3-Dichloropropane	6.318	76	10629	2.0402	ug/l	100
63) 4-Methyl-2-Pentanone	5.897	43	9306	2.4901	ug/l	79
64) 2-Hexanone	6.330	43	7441	2.4773	ug/l	86
65) Tetrachloroethene	6.324	164	5916	1.7551	ug/l	100
67) Toluene	6.026	92	19602	2.0681	ug/l	71

Quantitation Report (QT Reviewed)

SampleID : CAL @ 2 PPB
Data File: 6M130905.D
Acq On : 08/01/20 13:32

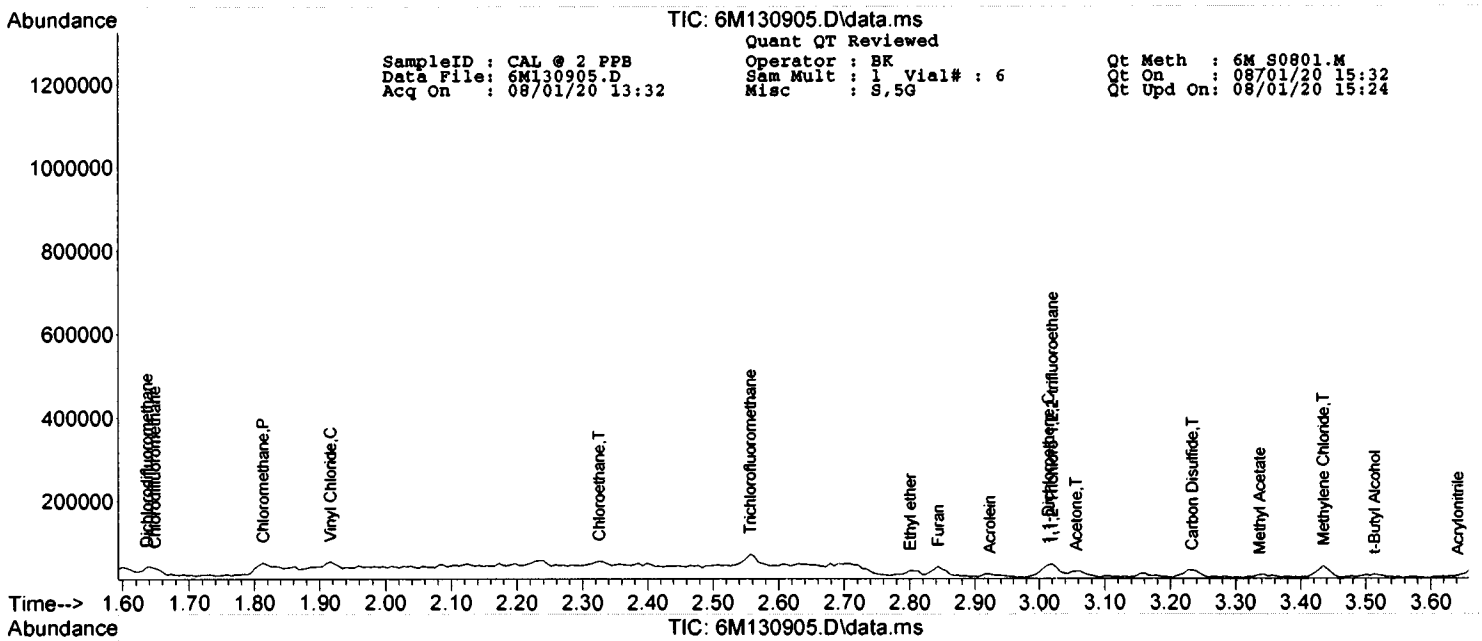
Operator : BK
Sam Mult : 1 Vial# : 6
Misc : S,5G

Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:32
Qt Upd On: 08/01/20 15:24

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.818	133	6384	1.9437	ug/l	98
69)	Chlorobenzene	6.781	112	23168	2.2319	ug/l	98
71)	n-Butyl acrylate	7.019	55	11630	2.1492	ug/l	86
72)	n-Amyl acetate	7.141	43	12173	No Calib		
73)	Bromoform	7.233	173	3436	1.5499	ug/l	95
74)	Ethylbenzene	6.824	106	9152	2.1060	ug/l	100
75)	1,1,2,2-Tetrachloroethane	7.446	83	8132	1.9675	ug/l	91
77)	Styrene	7.105	104	22126	2.0266	ug/l	88
78)	m&p-Xylenes	6.879	106	26453	3.9493	ug/l	95
79)	o-Xylene	7.098	106	12530	1.9486	ug/l	96
80)	trans-1,4-Dichloro-2-b...	7.470	53	4036	1.9813	ug/l	80
81)	1,3-Dichlorobenzene	8.019	146	16464	1.9989	ug/l	96
82)	1,4-Dichlorobenzene	8.068	146	16400	1.9770	ug/l	88
83)	1,2-Dichlorobenzene	8.293	146	15874	2.1068	ug/l	95
84)	Isopropylbenzene	7.294	105	31980	1.8584	ug/l	98
85)	Cyclohexanone	7.367	55	2589	No Calib		
86)	Camphene	7.470	93	11236	1.7684	ug/l	89
87)	1,2,3-Trichloropropane	7.483	75	10900	2.0759	ug/l	98
88)	2-Chlorotoluene	7.592	91	19876	1.8288	ug/l	97
89)	p-Ethyltoluene	7.580	105	30499	1.6363	ug/l	80
90)	4-Chlorotoluene	7.653	91	19793	1.9251	ug/l	96
91)	n-Propylbenzene	7.519	91	38769	1.9428	ug/l	99
92)	Bromobenzene	7.501	77	19483	1.8900	ug/l	93
93)	1,3,5-Trimethylbenzene	7.611	105	27686	2.3306	ug/l	78
94)	Butyl methacrylate	7.611	41	11937	No Calib		
95)	t-Butylbenzene	7.806	119	26847	1.8649	ug/l	95
96)	1,2,4-Trimethylbenzene	7.830	105	27058	1.8567	ug/l	97
97)	sec-Butylbenzene	7.928	105	36856	2.2866	ug/l	99
98)	4-Isopropyltoluene	8.001	119	28967	1.9447	ug/l	96
99)	n-Butylbenzene	8.239	91	32792	1.8586	ug/l	99
100)	p-Diethylbenzene	8.220	119	17801	1.9096	ug/l	94
101)	1,2,4,5-Tetramethylben...	8.684	119	22878	1.6681	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.745	157	2429	2.1544	ug/l	87
103)	Camphor	9.183	95	20456	No Calib		
104)	Hexachlorobutadiene	9.324	225	5746	1.8182	ug/l	93
105)	1,2,4-Trichlorobenzene	9.238	180	11241	2.1098	ug/l	91
106)	1,2,3-Trichlorobenzene	9.537	180	10617	2.2230	ug/l	96
107)	Naphthalene	9.397	128	28879	2.1043	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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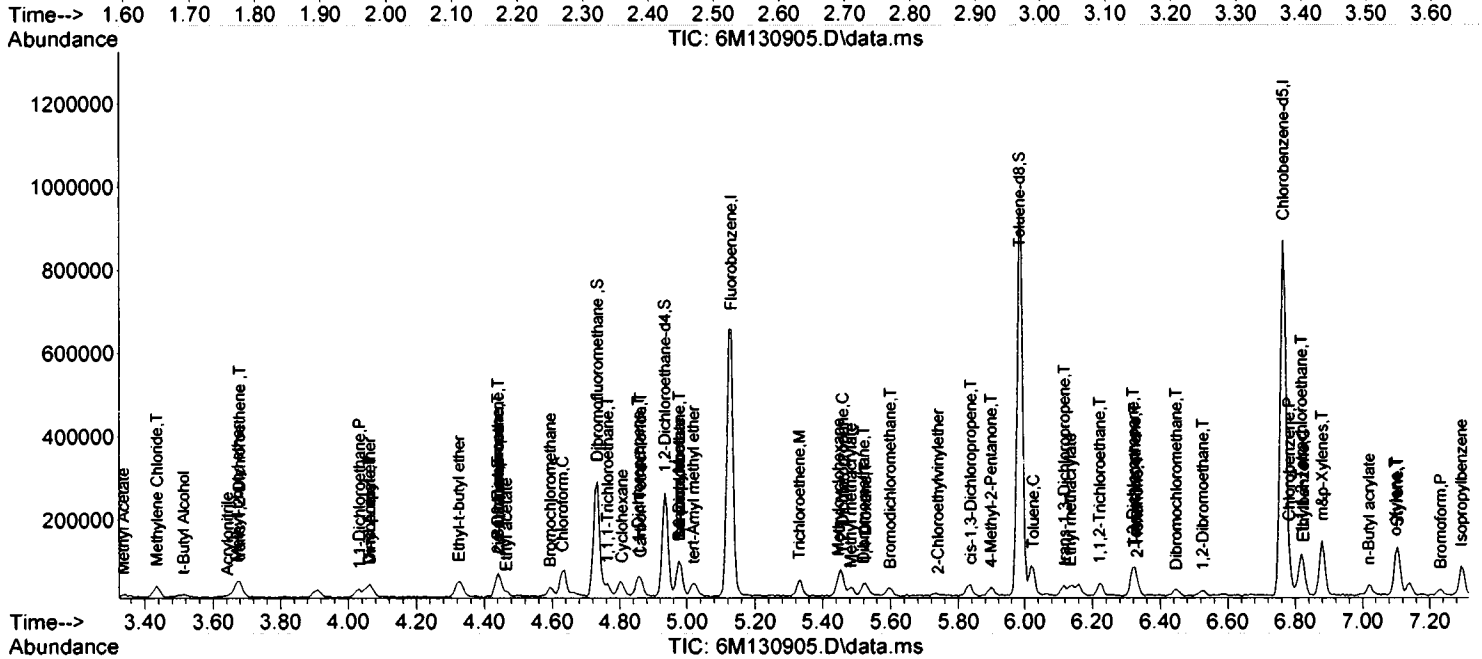
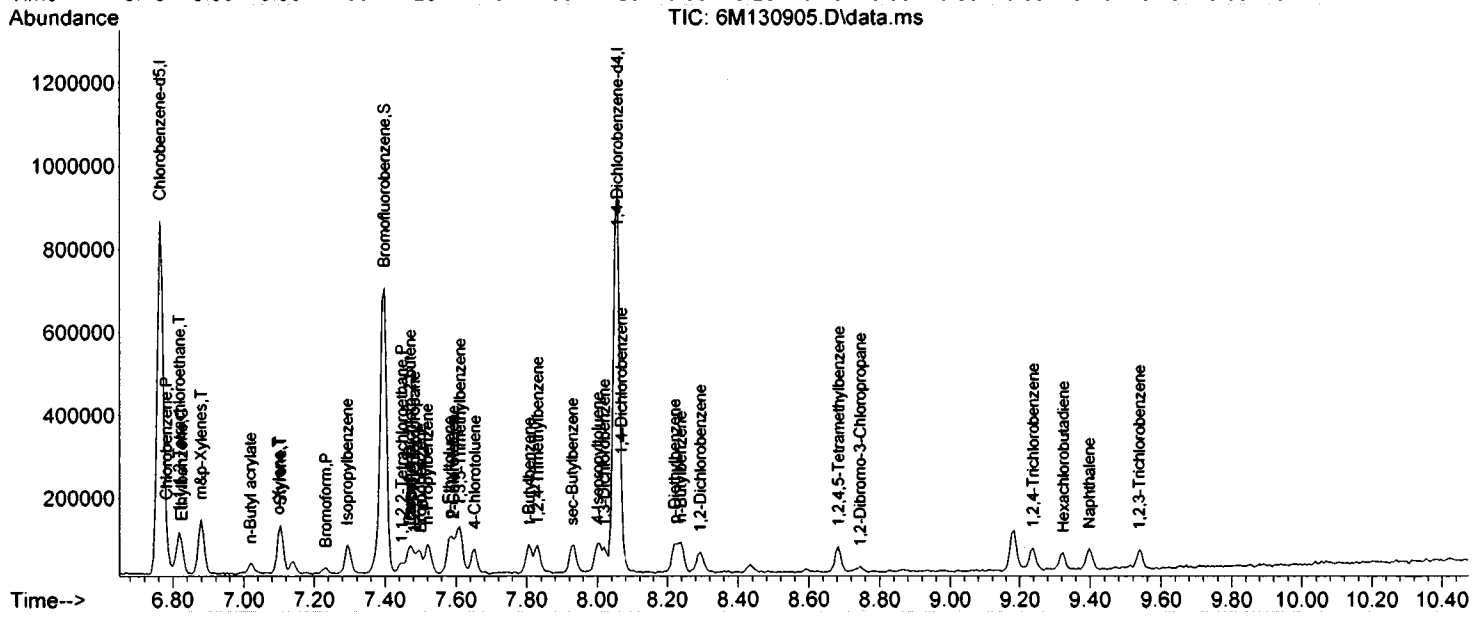
Quant QT Reviewed
SampleID : CAL @ 2 PPB
Data File: 6M130905.D
Acq On : 08/01/20 13:32
Operator : BK
Sam Mult : 1 Vial# : 6
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:32
Qt Upd On: 08/01/20 15:24
Chloromethane,P
Vinyl Chloride,C
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 6M130905.D\data.ms
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Dibromofluoromethane,S
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
o-Xylene,T
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 6M130905.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
o-Xylene,T
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
1,2,2,4-Tetrachloroethane,P
1,2,4-Trimethylbenzene
4-Chlorotoluene
sec-Butylbenzene
1,4-Isopropyltoluene
1,4-Dichlorobenzene
1,4-Dichlorobenzene-d4,I
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130908.D Sam Mult : 1 Vial# : 9 Qt On : 08/01/20 15:16
Acq On : 08/01/20 14:34 Misc : S,5G Qt Upd On: 07/26/20 16:16

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	376294	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	318043	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	177889	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	101661	29.71	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.03%			
39) 1,2-Dichloroethane-d4	4.934	67	56916	31.76	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.87%			
66) Toluene-d8	5.983	98	386315	29.13	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.10%			
76) Bromofluorobenzene	7.397	174	143155	32.31	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.70%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	218638	74.6540	ug/l	44
6) Dichlorodifluoromethane	1.636	85	140986	143.9245	ug/l	96
7) Chloromethane	1.813	50	196849	74.3520	ug/l	98
8) Bromomethane	2.227	94	124105	85.7440	ug/l	96
9) Vinyl Chloride	1.916	62	203655	78.1911	ug/l	97
10) Chloroethane	2.319	64	136743	68.9674	ug/l	97
11) Trichlorofluoromethane	2.557	101	332898	103.1225	ug/l	96
12) Ethyl ether	2.807	59	114866	57.2639	ug/l	98
13) Furan	2.843	39	273050	72.8969	ug/l	95
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	123730	151.8356	ug/l	97
15) Methylene Chloride	3.434	84	177624	60.6079	ug/l	92
16) Acrolein	2.922	56	113584	280.6000	ug/l	94
17) Acrylonitrile	3.642	53	68544	66.9078	ug/l	99
18) Iodomethane	3.166	142	145593	50.7653	ug/l	99
19) Acetone	3.056	43	330267	372.9779	ug/l	97
20) Carbon Disulfide	3.233	76	460989	67.3753	ug/l	100
21) t-Butyl Alcohol	3.508	59	167324	372.8191	ug/l	92
22) n-Hexane	3.910	57	191811	252.5697	ug/l	98
23) Di-isopropyl-ether	4.062	45	424645	62.6465	ug/l	95
24) 1,1-Dichloroethene	3.020	61	240131	78.8354	ug/l	96
25) Methyl Acetate	3.337	43	138786	67.8218	ug/l	100
26) Methyl-t-butyl ether	3.672	73	344781	53.9105	ug/l	96
27) 1,1-Dichloroethane	4.026	63	307121	67.7664	ug/l	97
28) trans-1,2-Dichloroethene	3.678	96	181453	72.6643	ug/l	100
29) Ethyl-t-butyl ether	4.325	59	455339	57.3239	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	309760	68.0787	ug/l	98
31) Bromochloromethane	4.593	49	137407	59.8470	ug/l	92
32) 2,2-Dichloropropane	4.446	77	255504	72.1930	ug/l	98
33) Ethyl acetate	4.465	43	209223	64.0788	ug/l	99
34) 1,4-Dioxane	5.519	88	181883	3750.5667	ug/l	95
35) 1,1-Dichloropropene	4.855	75	251043	75.2067	ug/l	100
36) Chloroform	4.635	83	319389	65.3579	ug/l	98
38) Cyclohexane	4.800	56	256136	129.9372	ug/l	98
40) 1,2-Dichloroethane	4.977	62	228241	59.1286	ug/l	98
41) 2-Butanone	4.440	43	98196	66.3149	ug/l	92
42) 1,1,1-Trichloroethane	4.763	97	287731	71.3964	ug/l	96
43) Carbon Tetrachloride	4.861	117	251063	75.1221	ug/l	100
44) Vinyl Acetate	4.050	43	495819	61.7704	ug/l	100
45) Bromodichloromethane	5.599	83	218445	58.1208	ug/l	98
46) Methylcyclohexane	5.452	83	264366	160.5965	ug/l	98
47) Dibromomethane	5.526	174	110359	53.6127	ug/l	99
48) 1,2-Dichloropropane	5.458	63	174094	63.9940	ug/l	98
49) Trichloroethene	5.330	130	203492	68.9152	ug/l	99
50) Benzene	4.977	78	704807	68.8165	ug/l	100
51) tert-Amyl methyl ether	5.020	73	384462	55.5815	ug/l	97
53) Iso-propylacetate	4.977	43	282874	52.9751	ug/l	99
54) Methyl methacrylate	5.483	41	141051	55.3821	ug/l	93
55) Dibromochloromethane	6.446	129	153305	49.2399	ug/l	92
56) 2-Chloroethylvinylether	5.733	63	42150	55.9807	ug/l	96
57) cis-1,3-Dichloropropene	5.830	75	255001	56.7488	ug/l	99
58) trans-1,3-Dichloropropene	6.117	75	217842	52.0913	ug/l	100
59) Ethyl methacrylate	6.135	41	134758	51.6999	ug/l	95
60) 1,1,2-Trichloroethane	6.227	97	140147	52.7004	ug/l	94
61) 1,2-Dibromoethane	6.525	107	150641	53.7348	ug/l	97
62) 1,3-Dichloropropane	6.318	76	249778	55.2768	ug/l	99
63) 4-Methyl-2-Pentanone	5.897	43	179180	54.9350	ug/l	98
64) 2-Hexanone	6.330	43	144007	59.1280	ug/l	92
65) Tetrachloroethene	6.324	164	161604	70.2092	ug/l	94
67) Toluene	6.019	92	446363	64.3948	ug/l	100

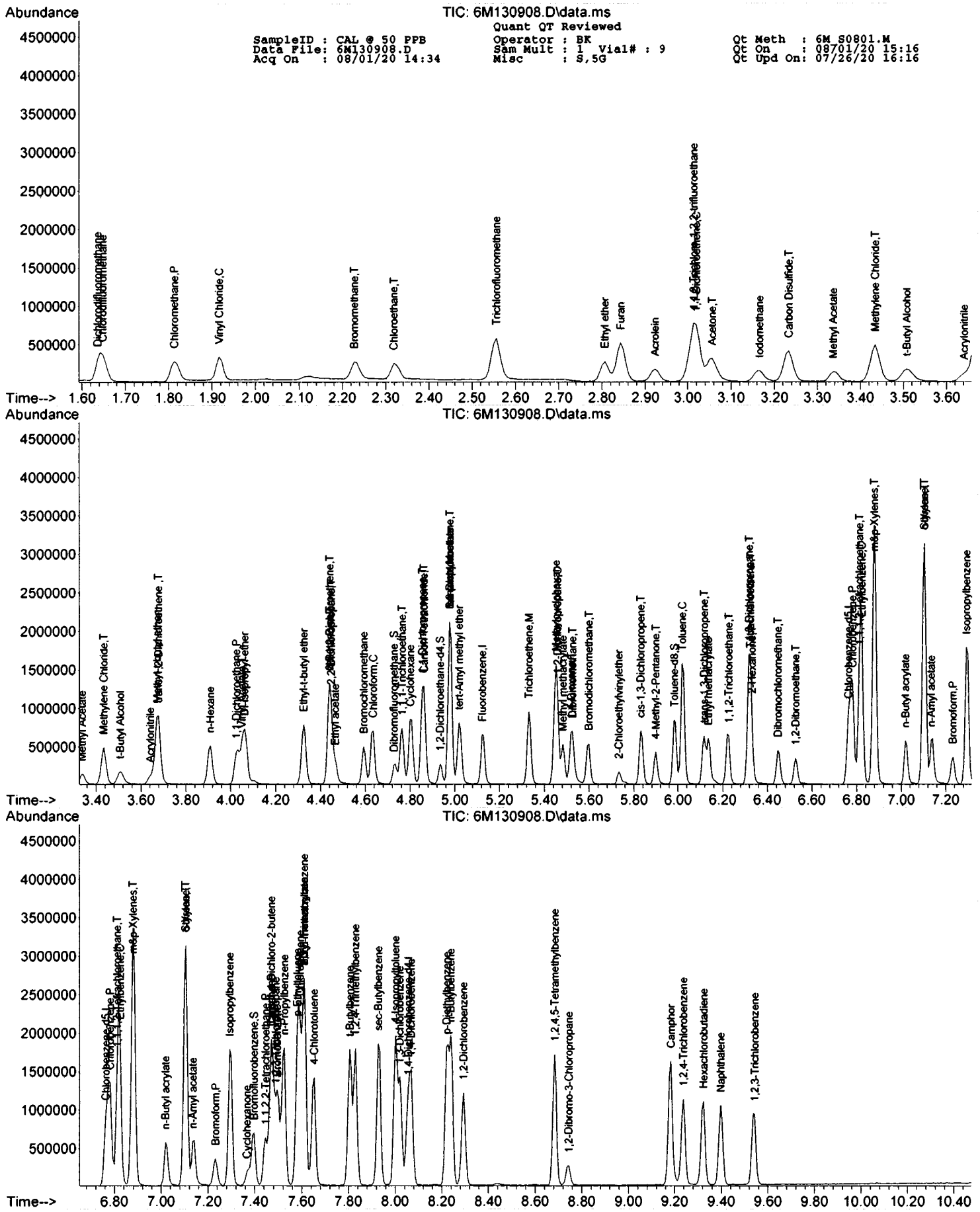
Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130908.D Sam Mult : 1 Vial# : 9 Qt On : 08/01/20 15:16
Acq On : 08/01/20 14:34 Misc : S,5G Qt Upd On: 07/26/20 16:16

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	157470	56.2443	ug/l	99
69)	Chlorobenzene	6.781	112	497677	63.5639	ug/l	96
71)	n-Butyl acrylate	7.019	55	261158	49.9243	ug/l	98
72)	n-Amyl acetate	7.135	43	245295	49.4772	ug/l	97
73)	Bromoform	7.233	173	106991	50.3241	ug/l	98
74)	Ethylbenzene	6.824	106	222252	68.0400	ug/l	91
75)	1,1,2,2-Tetrachloroethane	7.446	83	199470	54.0478	ug/l	96
77)	Styrene	7.105	104	526893	66.3205	ug/l	98
78)	m&p-Xylenes	6.879	106	659766	139.6413	ug/l	100
79)	o-Xylene	7.105	106	315175	65.6245	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.470	53	98307	68.0750	ug/l	80
81)	1,3-Dichlorobenzene	8.019	146	397491	65.5108	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	400336	63.1047	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	363623	61.9760	ug/l	97
84)	Isopropylbenzene	7.294	105	849685	72.8055	ug/l	100
85)	Cyclohexanone	7.367	55	51555	429.0829	ug/l	98
86)	Camphene	7.470	93	306627	95.4588	ug/l	100
87)	1,2,3-Trichloropropane	7.489	75	253408	53.0946	ug/l	99
88)	2-Chlorotoluene	7.592	91	524517	70.7874	ug/l	99
89)	p-Ethyltoluene	7.580	105	899550	72.4308	ug/l	99
90)	4-Chlorotoluene	7.653	91	496193	69.2146	ug/l	99
91)	n-Propylbenzene	7.525	91	1015885	75.5015	ug/l	99
92)	Bromobenzene	7.495	77	497504	63.7816	ug/l	97
93)	1,3,5-Trimethylbenzene	7.611	105	602748	69.2292	ug/l	100
94)	Butyl methacrylate	7.611	41	223146	53.7746	ug/l	88
95)	t-Butylbenzene	7.806	119	708688	72.4621	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	684846	68.4959	ug/l	100
97)	sec-Butylbenzene	7.928	105	923242	65.8154	ug/l	99
98)	4-Isopropyltoluene	8.001	119	779331	75.7200	ug/l	99
99)	n-Butylbenzene	8.238	91	873067	78.5539	ug/l	98
100)	p-Diethylbenzene	8.220	119	449869	72.0018	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.684	119	661902	70.3800	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.745	157	54411	56.4470	ug/l	99
103)	Camphor	9.183	95	310756	892.3223	ug/l	97
104)	Hexachlorobutadiene	9.324	225	152518	77.8194	ug/l	100
105)	1,2,4-Trichlorobenzene	9.238	180	257126	62.6469	ug/l	97
106)	1,2,3-Trichlorobenzene	9.543	180	230496	58.9371	ug/l	99
107)	Naphthalene	9.397	128	613296	56.7327	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
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Quant QT Reviewed
SampleID : CAL @ 50 PPB
Data File: 6M130908.D
Acq On : 08/01/20 14:34
Operator : BK
Sam Mult : 1 Vial# : 9
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08701/20 15:16
Qt Upd On: 07/26/20 16:16
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 6M130908.D\data.ms
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 6M130908.D\data.ms
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130909.D Sam Mult : 1 Vial# : 10 Qt On : 08/01/20 15:35
Acq On : 08/01/20 14:54 Misc : S,5G Qt Upd On: 08/01/20 15:34

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	460018	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	373585	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	219087	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	121665	29.47	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.23%			
39) 1,2-Dichloroethane-d4	4.934	67	64263	28.41	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.70%			
66) Toluene-d8	5.983	98	465561	30.33	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.10%			
76) Bromofluorobenzene	7.397	174	171060	29.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.50%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	421537	77.4878	ug/l	98
6) Dichlorodifluoromethane	1.636	85	279945	79.7710	ug/l	100
7) Chloromethane	1.813	50	360588	69.9400	ug/l	95
8) Bromomethane	2.233	94	240777	75.4167	ug/l	99
9) Vinyl Chloride	1.916	62	395238	77.8129	ug/l	95
10) Chloroethane	2.325	64	269095	77.8046	ug/l	96
11) Trichlorofluoromethane	2.557	101	666570	81.1754	ug/l	98
12) Ethyl ether	2.806	59	261302	89.8937	ug/l	98
13) Furan	2.843	39	565412	83.7508	ug/l	97
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	256069	82.3078	ug/l	98
15) Methylene Chloride	3.434	84	369903	79.2821	ug/l	97
16) Acrolein	2.922	56	277148	515.4018	ug/l	100
17) Acrylonitrile	3.642	53	148340	83.9628	ug/l	96
18) Iodomethane	3.166	142	356076	78.3795	ug/l	99
19) Acetone	3.056	43	700850	406.0230	ug/l	100
20) Carbon Disulfide	3.233	76	933745	82.5257	ug/l	100
21) t-Butyl Alcohol	3.508	59	357788	451.5073	ug/l	95
22) n-Hexane	3.910	57	385523	75.7017	ug/l	99
23) Di-isopropyl-ether	4.062	45	941585	94.1940	ug/l	100
24) 1,1-Dichloroethene	3.020	61	476828	84.5626	ug/l	97
25) Methyl Acetate	3.337	43	299300	86.4866	ug/l	100
26) Methyl-t-butyl ether	3.672	73	806267	94.5656	ug/l	99
27) 1,1-Dichloroethane	4.026	63	645155	89.6027	ug/l	98
28) trans-1,2-Dichloroethene	3.678	96	359672	84.6212	ug/l	95
29) Ethyl-t-butyl ether	4.324	59	1036950	95.6138	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	648265	89.4259	ug/l	96
31) Bromochloromethane	4.593	49	297479	87.1952	ug/l	97
32) 2,2-Dichloropropane	4.446	77	510173	87.1685	ug/l	98
33) Ethyl acetate	4.465	43	463245	90.0768	ug/l	97
34) 1,4-Dioxane	5.519	88	394241	4427.6846	ug/l	96
35) 1,1-Dichloropropene	4.855	75	511613	86.0672	ug/l	99
36) Chloroform	4.635	83	675674	89.0070	ug/l	100
38) Cyclohexane	4.800	56	528815	87.5986	ug/l	95
40) 1,2-Dichloroethane	4.977	62	511201	90.7707	ug/l	97
41) 2-Butanone	4.434	43	225895	97.4936	ug/l	92
42) 1,1,1-Trichloroethane	4.763	97	598231	88.1868	ug/l	100
43) Carbon Tetrachloride	4.861	117	516470	91.0686	ug/l	98
44) Vinyl Acetate	4.050	43	1165639	100.8119	ug/l	100
45) Bromodichloromethane	5.599	83	504501	100.4630	ug/l	93
46) Methylcyclohexane	5.446	83	547474	89.3475	ug/l	96
47) Dibromomethane	5.526	174	259827	97.5056	ug/l	97
48) 1,2-Dichloropropane	5.458	63	378407	89.9456	ug/l	100
49) Trichloroethene	5.330	130	415159	85.6133	ug/l	97
50) Benzene	4.977	78	1449238	87.7402	ug/l	100
51) tert-Amyl methyl ether	5.019	73	897603	96.5548	ug/l	98
53) Iso-propylacetate	4.977	43	674511	104.7239	ug/l	99
54) Methyl methacrylate	5.483	41	332129	103.8371	ug/l	99
55) Dibromochloromethane	6.446	129	379809	115.0025	ug/l	97
56) 2-Chloroethylvinylether	5.733	63	96115	93.7717	ug/l	92
57) cis-1,3-Dichloropropene	5.830	75	572406	103.4464	ug/l	100
58) trans-1,3-Dichloropropene	6.117	75	515357	109.5688	ug/l	97
59) Ethyl methacrylate	6.135	41	317420	100.0184	ug/l	99
60) 1,1,2-Trichloroethane	6.221	97	319973	97.1288	ug/l	94
61) 1,2-Dibromoethane	6.525	107	347371	104.4277	ug/l	99
62) 1,3-Dichloropropane	6.318	76	558422	95.1807	ug/l	99
63) 4-Methyl-2-Pentanone	5.897	43	421800	93.1622	ug/l	95
64) 2-Hexanone	6.330	43	329750	91.8302	ug/l	98
65) Tetrachloroethene	6.324	164	337307	93.4544	ug/l	99
67) Toluene	6.019	92	935463	86.8730	ug/l	99

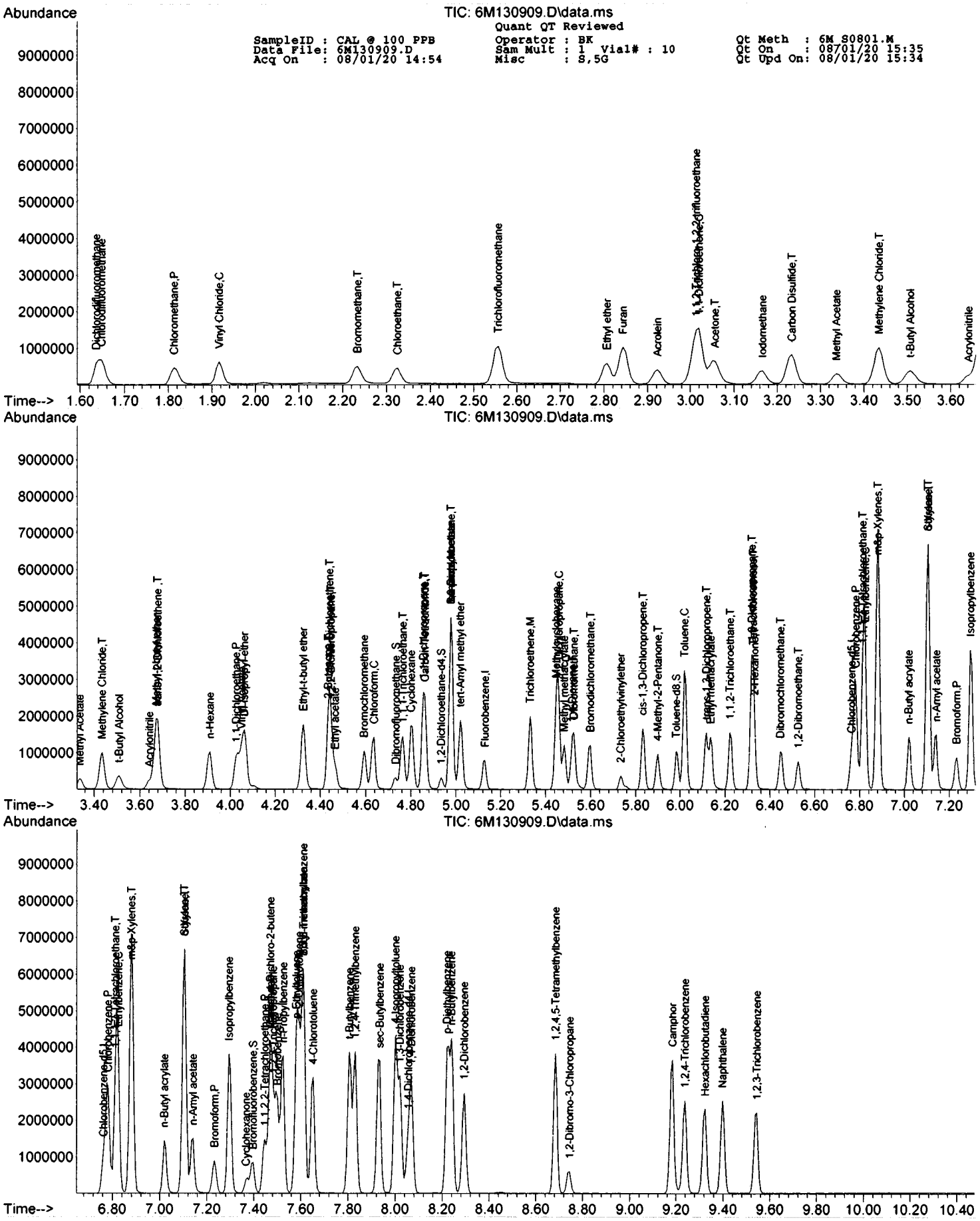
Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130909.D Sam Mult : 1 Vial# : 10 Qt On : 08/01/20 15:35
Acq On : 08/01/20 14:54 Misc : S,5G Qt Upd On: 08/01/20 15:34

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	363747	100.9962	ug/l	99
69)	Chlorobenzene	6.781	112	1050878	88.9198	ug/l	99
71)	n-Butyl acrylate	7.019	55	643371	100.3630	ug/l	99
72)	n-Amyl acetate	7.141	43	601633	96.3918	ug/l	99
73)	Bromoform	7.232	173	269870	117.2050	ug/l	97
74)	Ethylbenzene	6.824	106	475580	89.7397	ug/l	93
75)	1,1,2,2-Tetrachloroethane	7.446	83	471457	99.0655	ug/l	98
77)	Styrene	7.104	104	1183035	93.1307	ug/l	100
78)	m&p-Xylenes	6.879	106	1402903	177.6217	ug/l	99
79)	o-Xylene	7.104	106	675220	88.9632	ug/l	98
80)	trans-1,4-Dichloro-2-b...	7.470	53	231731	100.3104	ug/l	96
81)	1,3-Dichlorobenzene	8.019	146	896612	91.8023	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	876704	90.0830	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	826443	91.4139	ug/l	99
84)	Isopropylbenzene	7.293	105	1802004	89.7978	ug/l	100
85)	Cyclohexanone	7.367	55	112400	487.0385	ug/l	98
86)	Camphene	7.470	93	659522	93.8101	ug/l	99
87)	1,2,3-Trichloropropane	7.482	75	611120	100.9446	ug/l	98
88)	2-Chlorotoluene	7.592	91	1094292	87.7360	ug/l	99
89)	p-Ethyltoluene	7.580	105	1932089	92.3610	ug/l	91
90)	4-Chlorotoluene	7.653	91	1132117	97.2028	ug/l	99
91)	n-Propylbenzene	7.525	91	2151726	90.3744	ug/l	99
92)	Bromobenzene	7.501	77	1111907	92.2999	ug/l	99
93)	1,3,5-Trimethylbenzene	7.610	105	1314538	91.3915	ug/l	91
94)	Butyl methacrylate	7.610	41	517218	89.9185	ug/l	94
95)	t-Butylbenzene	7.806	119	1517655	91.8510	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	1512976	91.2111	ug/l	99
97)	sec-Butylbenzene	7.934	105	1988625	82.2493	ug/l	99
98)	4-Isopropyltoluene	8.001	119	1681838	95.2470	ug/l	99
99)	n-Butylbenzene	8.238	91	1911706	94.9714	ug/l	100
100)	p-Diethylbenzene	8.220	119	979638	94.3604	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.683	119	1483371	99.9638	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.744	157	126002	96.0639	ug/l	99
103)	Camphor	9.183	95	696562	989.4510	ug/l	99
104)	Hexachlorobutadiene	9.324	225	324785	92.9031	ug/l	98
105)	1,2,4-Trichlorobenzene	9.238	180	588616	92.0544	ug/l	98
106)	1,2,3-Trichlorobenzene	9.543	180	547555	95.8480	ug/l	99
107)	Naphthalene	9.397	128	1454703	90.5374	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M130909.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 100 PPB
Data File: 6M130909.D
Acq On : 08/01/20 14:54
Operator : BK
Sam Mult : 1 Vial# : 10
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:35
Qt Upd On: 08/01/20 15:34
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 6M130909.D\data.ms
Methyl acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 6M130909.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromochlorobenzene,S
4-Chlorotoluene
n-Propylbenzene
2-Chlorotoluene
1,3,5-Trimethylbenzene
tert-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene
p-Isopropyltoluene
1,4-Dichlorobenzene
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 250 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130911.D Sam Mult : 1 Vial# : 12 Qt On : 08/01/20 15:49
Acq On : 08/01/20 15:36 Misc : S,5G Qt Upd On: 08/01/20 15:35

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	432672	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	358455	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.055	152	285114	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	111891	28.89	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.30%			
39) 1,2-Dichloroethane-d4	4.934	67	58340	27.63	ug/l	0.00
Spiked Amount 30.000			Recovery = 92.10%			
66) Toluene-d8	5.989	98	450656	30.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.83%			
76) Bromofluorobenzene	7.397	174	167719	22.31	ug/l	0.00
Spiked Amount 30.000			Recovery = 74.37%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	985196	201.6247	ug/l	99
6) Dichlorodifluoromethane	1.636	85	642012	202.7064	ug/l	97
7) Chloromethane	1.813	50	818268	179.5369	ug/l	98
9) Vinyl Chloride	1.916	62	930481	203.8116	ug/l	96
10) Chloroethane	2.319	64	627863	201.9762	ug/l	99
11) Trichlorofluoromethane	2.556	101	1577987	212.3072	ug/l	99
12) Ethyl ether	2.806	59	603055	225.1270	ug/l	98
13) Furan	2.843	39	1309849	213.2110	ug/l	99
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	601502	213.0997	ug/l	98
15) Methylene Chloride	3.434	84	840087	199.7131	ug/l	95
16) Acrolein	2.922	56	639003	1255.6995	ug/l	99
17) Acrylonitrile	3.642	53	345385	214.7367	ug/l	97
18) Iodomethane	3.166	142	889253	227.5217	ug/l	98
19) Acetone	3.056	43	1602135	1025.3708	ug/l	99
20) Carbon Disulfide	3.233	76	2241594	218.2648	ug/l	100
21) t-Butyl Alcohol	3.507	59	844887	1156.0071	ug/l	93
23) Di-isopropyl-ether	4.062	45	2189058	235.5644	ug/l	97
24) 1,1-Dichloroethene	3.020	61	1134260	220.6812	ug/l	99
25) Methyl Acetate	3.337	43	687039	216.9396	ug/l	100
26) Methyl-t-butyl ether	3.672	73	1845504	232.2400	ug/l	99
27) 1,1-Dichloroethane	4.026	63	1498061	225.9066	ug/l	98
28) trans-1,2-Dichloroethene	3.678	96	857564	221.3210	ug/l	98
29) Ethyl-t-butyl ether	4.324	59	2432510	240.5804	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	1509155	226.1225	ug/l	98
31) Bromochloromethane	4.593	49	659504	210.9291	ug/l	96
32) 2,2-Dichloropropane	4.446	77	1232415	229.7767	ug/l	98
33) Ethyl acetate	4.465	43	1038785	219.1038	ug/l	99
34) 1,4-Dioxane	5.519	88	972723	11887.1518	ug/l	99
35) 1,1-Dichloropropene	4.855	75	1190638	219.0613	ug/l	98
36) Chloroform	4.635	83	1580979	226.4040	ug/l	99
38) Cyclohexane	4.806	56	1246540	225.1247	ug/l	97
40) 1,2-Dichloroethane	4.977	62	1158559	222.8331	ug/l	100
41) 2-Butanone	4.434	43	530517	244.6625	ug/l	91
42) 1,1,1-Trichloroethane	4.763	97	1424064	228.5936	ug/l	98
43) Carbon Tetrachloride	4.861	117	1270393	242.4966	ug/l	97
44) Vinyl Acetate	4.050	43	2714040	249.1582	ug/l	100
45) Bromodichloromethane	5.599	83	1183966	250.4363	ug/l	97
46) Methylcyclohexane	5.452	83	1295970	229.7644	ug/l	98
47) Dibromomethane	5.525	174	587657	235.6445	ug/l	96
48) 1,2-Dichloropropane	5.458	63	870004	224.3780	ug/l	96
49) Trichloroethene	5.330	130	980410	221.3247	ug/l	98
50) Benzene	4.977	78	3394218	223.0390	ug/l	100
51) tert-Amyl methyl ether	5.019	73	2101456	242.0075	ug/l	98
53) Iso-propylacetate	4.977	43	1582113	253.6094	ug/l	99
54) Methyl methacrylate	5.483	41	781400	252.6700	ug/l	99
55) Dibromochloromethane	6.446	129	909174	278.5508	ug/l	96
56) 2-Chloroethylvinylether	5.733	63	223990	230.6258	ug/l	98
57) cis-1,3-Dichloropropene	5.830	75	1376499	257.4890	ug/l	98
58) trans-1,3-Dichloropropene	6.117	75	1240876	269.7920	ug/l	99
59) Ethyl methacrylate	6.135	41	746658	245.1919	ug/l	99
60) 1,1,2-Trichloroethane	6.220	97	745069	237.0758	ug/l	93
61) 1,2-Dibromoethane	6.525	107	798591	248.3751	ug/l	99
62) 1,3-Dichloropropane	6.318	76	1300379	233.2477	ug/l	98
63) 4-Methyl-2-Pentanone	5.897	43	993721	231.9170	ug/l	97
64) 2-Hexanone	6.330	43	769708	227.1100	ug/l	97
65) Tetrachloroethene	6.324	164	791972	231.7191	ug/l	97
67) Toluene	6.025	92	2197745	217.4691	ug/l	97
68) 1,1,1,2-Tetrachloroethane	6.812	133	880220	254.2068	ug/l	98
69) Chlorobenzene	6.781	112	2438263	219.8943	ug/l	98

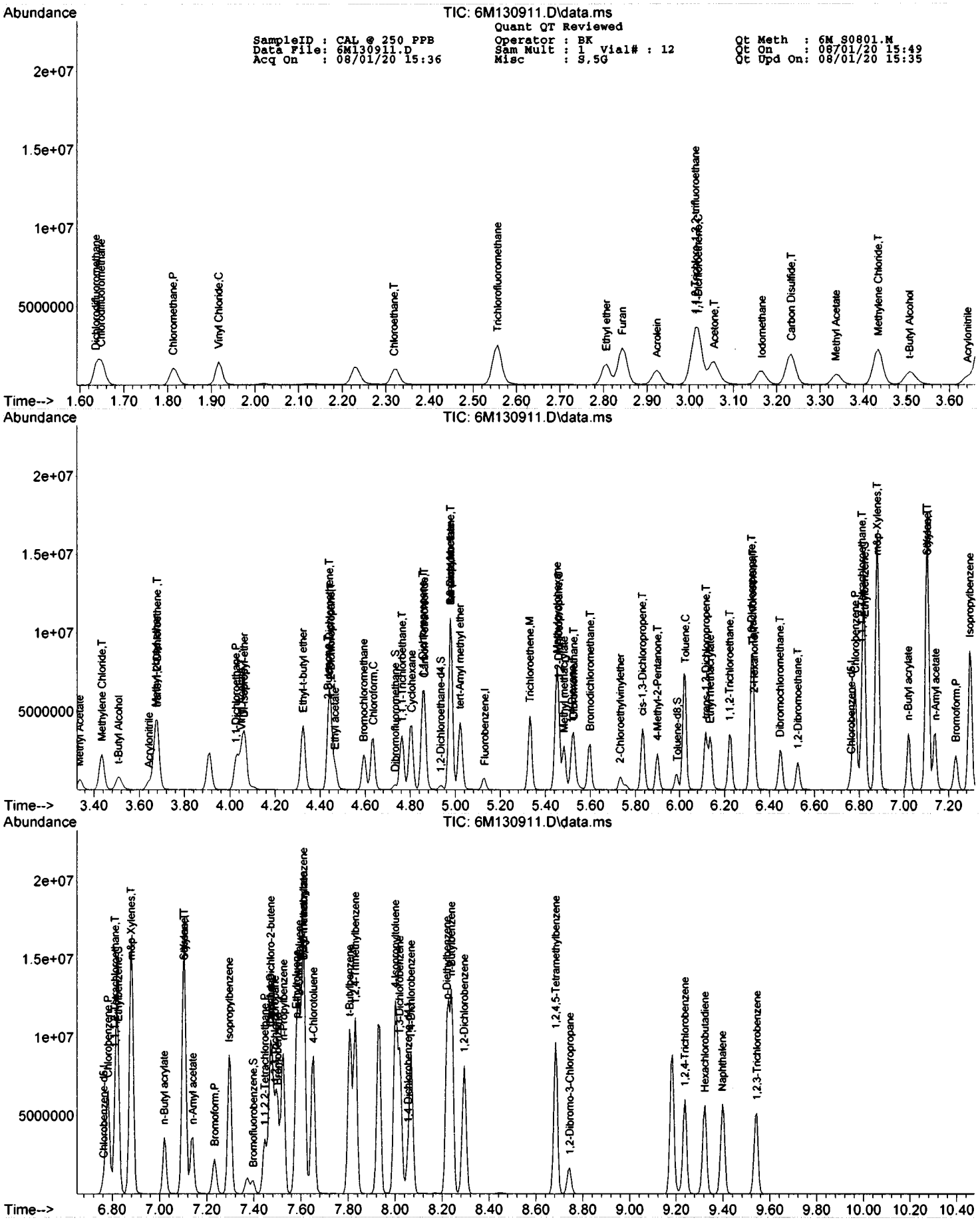
Quantitation Report (QT Reviewed)

SampleID : CAL @ 250 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130911.D Sam Mult : 1 Vial# : 12 Qt On : 08/01/20 15:49
Acq On : 08/01/20 15:36 Misc : S,5G Qt Upd On: 08/01/20 15:35

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
71)	n-Butyl acrylate	7.019	55	1519580	182.0198	ug/l	100
72)	n-Amyl acetate	7.141	43	1426151	181.7170	ug/l	100
73)	Bromoform	7.232	173	668213	215.5817	ug/l	98
74)	Ethylbenzene	6.824	106	1144973	168.9061	ug/l	91
75)	1,1,2,2-Tetrachloroethane	7.446	83	1099857	177.9209	ug/l	96
77)	Styrene	7.104	104	2750824	168.7191	ug/l	99
78)	m&p-Xylenes	6.879	106	3249527	321.2807	ug/l	96
79)	o-Xylene	7.104	106	1619109	166.9946	ug/l	99
80)	trans-1,4-Dichloro-2-b...	7.470	53	564795	187.7505	ug/l	95
81)	1,3-Dichlorobenzene	8.019	146	2650262	211.9899	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	2648802	213.3722	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	2483223	214.7512	ug/l	97
84)	Isopropylbenzene	7.293	105	4218802	164.3408	ug/l	99
86)	Camphene	7.470	93	1572545	174.0330	ug/l	100
87)	1,2,3-Trichloropropane	7.488	75	1464114	185.4855	ug/l	98
88)	2-Chlorotoluene	7.592	91	2730208	172.4343	ug/l	99
89)	p-Ethyltoluene	7.580	105	4674667	174.3800	ug/l	99
90)	4-Chlorotoluene	7.653	91	3124453	207.2984	ug/l	99
91)	n-Propylbenzene	7.525	91	5096605	167.1712	ug/l	99
92)	Bromobenzene	7.501	77	2618496	169.6380	ug/l	98
93)	1,3,5-Trimethylbenzene	7.610	105	3489758	189.1482	ug/l	99
94)	Butyl methacrylate	7.610	41	1409772	239.7873	ug/l	93
95)	t-Butylbenzene	7.806	119	4262859	200.9781	ug/l	98
96)	1,2,4-Trimethylbenzene	7.830	105	4417200	207.6678	ug/l	100
98)	4-Isopropyltoluene	8.001	119	5022133	220.2964	ug/l	99
99)	n-Butylbenzene	8.238	91	5787615	222.8049	ug/l	99
100)	p-Diethylbenzene	8.220	119	2969179	222.2720	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.683	119	3749662	194.1846	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.744	157	342093	202.0028	ug/l	96
104)	Hexachlorobutadiene	9.324	225	792653	176.7356	ug/l	99
105)	1,2,4-Trichlorobenzene	9.238	180	1368042	167.0578	ug/l	98
106)	1,2,3-Trichlorobenzene	9.543	180	1248740	169.3740	ug/l	100
107)	Naphthalene	9.397	128	3424245	166.3874	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 250 PPB
Data File: 6M130911.D
Acq On : 08/01/20 15:36
Operator : BK
Sam Mult : 1 Vial# : 12
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:49
Qt Upd On: 08/01/20 15:35
Chloromethane,P
Vinyl Chloride,C
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 6M130911.D\data.ms
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 6M130911.D\data.ms
Chlorobenzene-d5
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
n-Diethylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130913.D Sam Mult : 1 Vial# : 14 Qt On : 08/01/20 16:56
Acq On : 08/01/20 16:17 Misc : S,5G Qt Upd On: 08/01/20 15:35

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	502146	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	414316	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	281684	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	131190	29.19	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.30%			
39) 1,2-Dichloroethane-d4	4.934	67	67370	27.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 91.63%			
66) Toluene-d8	5.983	98	514407	30.17	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.57%			
76) Bromofluorobenzene	7.397	174	276800	37.27	ug/l	0.00
Spiked Amount 30.000			Recovery = 124.23%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	2017437	355.7541	ug/l	96
6) Dichlorodifluoromethane	1.636	85	1359022	369.7256	ug/l	99
7) Chloromethane	1.813	50	1627867	307.7555	ug/l	100
9) Vinyl Chloride	1.916	62	1863358	351.6790	ug/l	97
10) Chloroethane	2.319	64	1273592	353.0161	ug/l	98
11) Trichlorofluoromethane	2.550	101	3201080	371.0964	ug/l	98
12) Ethyl ether	2.806	59	1290886	415.2287	ug/l	96
13) Furan	2.843	39	2669772	374.4478	ug/l	100
14) 1,1,2-Trichloro-1,2,2-...	3.008	101	1230898	375.7479	ug/l	98
15) Methylene Chloride	3.434	84	1742681	356.9677	ug/l	96
16) Acrolein	2.922	56	1390669	2354.6989	ug/l	99
17) Acrylonitrile	3.642	53	746179	399.7372	ug/l	99
18) Iodomethane	3.160	142	2175914m	402.9896	ug/l	
19) Acetone	3.056	43	3426606	1889.6214	ug/l	100
20) Carbon Disulfide	3.233	76	4648210	389.9790	ug/l	100
21) t-Butyl Alcohol	3.508	59	1885362	2222.7233	ug/l	97
23) Di-isopropyl-ether	4.062	45	4754672	440.8611	ug/l	98
24) 1,1-Dichloroethene	3.020	61	2365634	396.5784	ug/l	100
25) Methyl Acetate	3.337	43	1505018	409.4754	ug/l	100
26) Methyl-t-butyl ether	3.672	73	4065332	440.8052	ug/l	99
27) 1,1-Dichloroethane	4.026	63	3068416	398.6965	ug/l	100
28) trans-1,2-Dichloroethene	3.678	96	1755462	390.3699	ug/l	97
29) Ethyl-t-butyl ether	4.324	59	5306374	452.2017	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	3209532	414.3624	ug/l	97
31) Bromochloromethane	4.593	49	1394482	384.2916	ug/l	96
32) 2,2-Dichloropropane	4.446	77	2590518	416.1639	ug/l	98
33) Ethyl acetate	4.465	43	2290157	416.2156	ug/l	99
34) 1,4-Dioxane	5.519	88	2065005	21743.9538	ug/l	99
35) 1,1-Dichloropropene	4.855	75	2508995	397.7539	ug/l	99
36) Chloroform	4.635	83	3285794	405.4405	ug/l	97
38) Cyclohexane	4.800	56	2588921	402.8696	ug/l	97
40) 1,2-Dichloroethane	4.977	62	2570104	425.9327	ug/l	99
41) 2-Butanone	4.434	43	1199777	476.7573	ug/l	90
42) 1,1,1-Trichloroethane	4.763	97	2984050	412.7333	ug/l	98
43) Carbon Tetrachloride	4.861	117	2655147	436.7017	ug/l	98
44) Vinyl Acetate	4.050	43	6011931	475.5561	ug/l	100
45) Bromodichloromethane	5.599	83	2618931	477.3214	ug/l	98
46) Methylcyclohexane	5.446	83	2719250	415.3992	ug/l	98
47) Dibromomethane	5.525	174	1334234	460.9928	ug/l	98
48) 1,2-Dichloropropane	5.458	63	1892419	420.5378	ug/l	98
49) Trichloroethene	5.330	130	2054440	399.6174	ug/l	99
50) Benzene	4.977	78	6937186	392.7834	ug/l	100
51) tert-Amyl methyl ether	5.019	73	4606930	457.1397	ug/l	98
53) Iso-propylacetate	4.977	43	3570890	495.2304	ug/l	100
54) Methyl methacrylate	5.483	41	1596018	446.4995	ug/l	92
55) Dibromochloromethane	6.446	129	2076290	550.3619	ug/l	95
56) 2-Chloroethylvinylether	5.733	63	514111	457.9723	ug/l	99
57) cis-1,3-Dichloropropene	5.830	75	2982708	482.7213	ug/l	99
58) trans-1,3-Dichloropropene	6.117	75	2760003	519.1744	ug/l	97
59) Ethyl methacrylate	6.135	41	1720007	488.6720	ug/l	98
60) 1,1,2-Trichloroethane	6.220	97	1646133	453.1673	ug/l	92
61) 1,2-Dibromoethane	6.525	107	1774649	477.5283	ug/l	99
62) 1,3-Dichloropropane	6.318	76	2913563	452.1420	ug/l	99
63) 4-Methyl-2-Pentanone	5.897	43	2237200	451.7268	ug/l	98
64) 2-Hexanone	6.330	43	1752811	447.4538	ug/l	95
65) Tetrachloroethene	6.324	164	1728602	437.5725	ug/l	99
67) Toluene	6.019	92	4685665	401.1386	ug/l	91
68) 1,1,1,2-Tetrachloroethane	6.812	133	1967779	491.6718	ug/l	100
69) Chlorobenzene	6.781	112	5167591	403.2037	ug/l	95

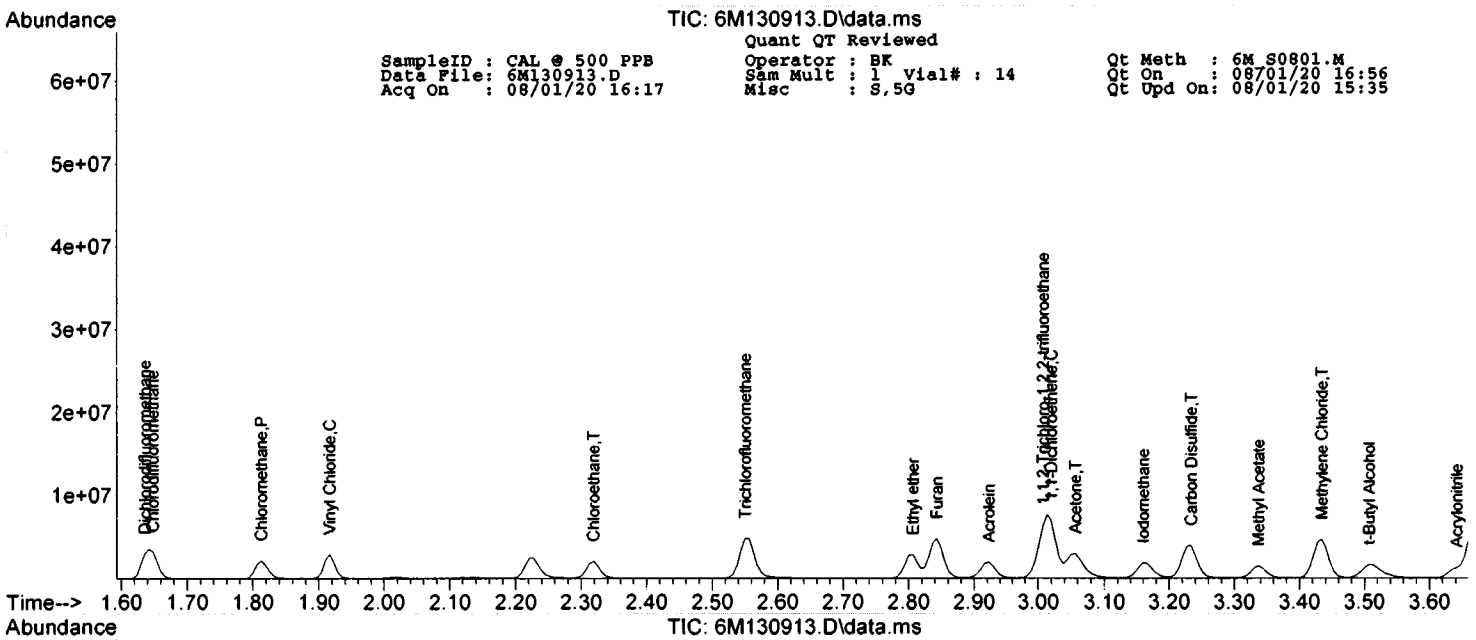
Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130913.D Sam Mult : 1 Vial# : 14 Qt On : 08/01/20 16:56
Acq On : 08/01/20 16:17 Misc : S,5G Qt Upd On: 08/01/20 15:35

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
71)	n-Butyl acrylate	7.019	55	4540242	550.4659	ug/l	100
72)	n-Amyl acetate	7.141	43	3835146	491.0376	ug/l	93
73)	Bromoform	7.232	173	2274753	742.8269	ug/l	99
74)	Ethylbenzene	6.824	106	2533762	378.3313	ug/l	79
75)	1,1,2,2-Tetrachloroethane	7.446	83	3558315	582.6282	ug/l	96
77)	Styrene	7.104	104	8169893	507.1941	ug/l	95
78)	m&p-Xylenes	6.879	106	7630447	763.6086	ug/l	58
79)	o-Xylene	7.104	106	4875760	509.0086	ug/l	85
80)	trans-1,4-Dichloro-2-b...	7.470	53	1668807	561.5039	ug/l	84
81)	1,3-Dichlorobenzene	8.025	146	4194808	339.6213	ug/l	96
82)	1,4-Dichlorobenzene	8.068	146	5688478	463.8107	ug/l	98
83)	1,2-Dichlorobenzene	8.293	146	4180484	365.9341	ug/l	96
84)	Isopropylbenzene	7.293	105	11249143	443.5392	ug/l	94
86)	Camphene	7.470	93	5038232	564.3688	ug/l	97
87)	1,2,3-Trichloropropane	7.482	75	4698878	602.5396	ug/l	98
88)	2-Chlorotoluene	7.598	91	5670598	362.5043	ug/l	93
89)	p-Ethyltoluene	7.580	105	10458943	394.9027	ug/l	94
90)	4-Chlorotoluene	7.653	91	5808725	390.0848	ug/l	95
91)	n-Propylbenzene	7.519	91	11780786	391.1210	ug/l	85
92)	Bromobenzene	7.501	77	8186911	536.8433	ug/l	97
93)	1,3,5-Trimethylbenzene	7.610	105	7162160	392.9229	ug/l	93
95)	t-Butylbenzene	7.806	119	6919225	330.1882	ug/l	94
96)	1,2,4-Trimethylbenzene	7.830	105	5830275	277.4391	ug/l	94
98)	4-Isopropyltoluene	8.001	119	6006253	266.6731	ug/l	96
99)	n-Butylbenzene	8.238	91	6758216	263.3380	ug/l	92
100)	p-Diethylbenzene	8.220	119	4465320	338.3431	ug/l	94
101)	1,2,4,5-Tetramethylben...	8.683	119	6143498	322.0288	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.744	157	702078	419.6187	ug/l	79
104)	Hexachlorobutadiene	9.324	225	2491481	562.2829	ug/l	99
105)	1,2,4-Trichlorobenzene	9.238	180	4371738	540.3533	ug/l	97
106)	1,2,3-Trichlorobenzene	9.543	180	4168590	572.2955	ug/l	99
107)	Naphthalene	9.397	128	10347976	508.9408	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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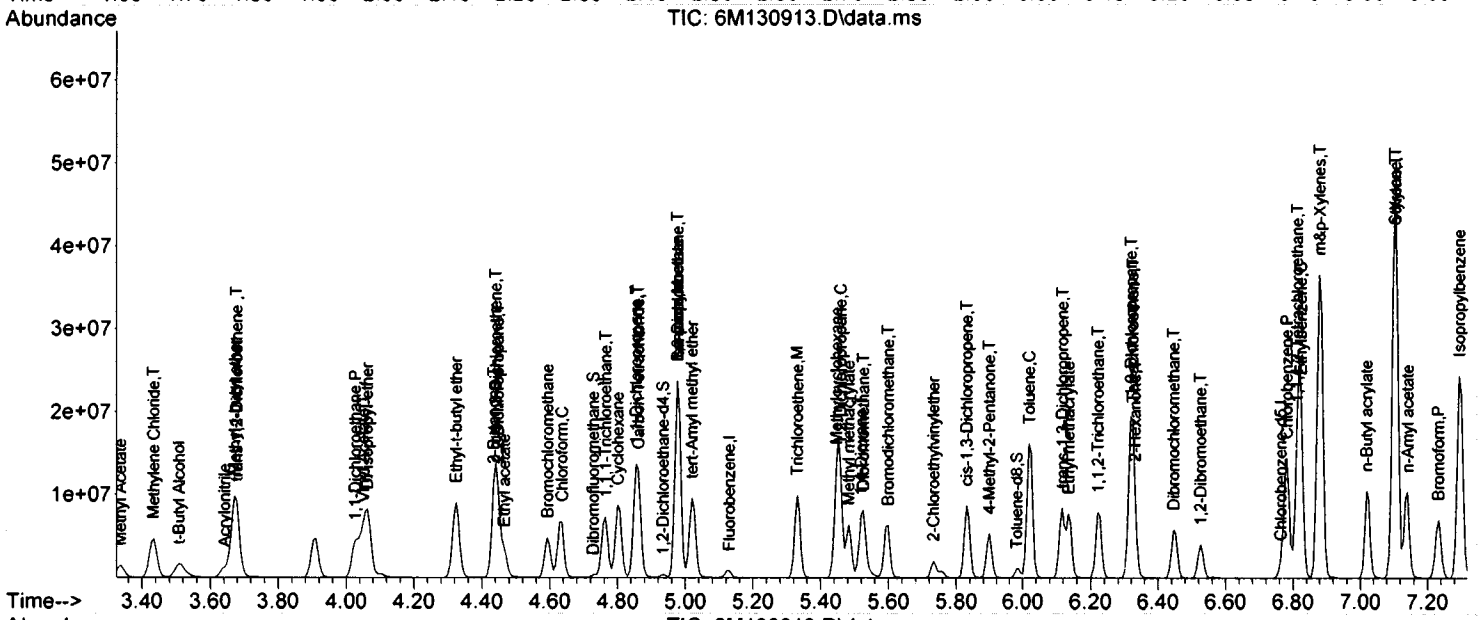
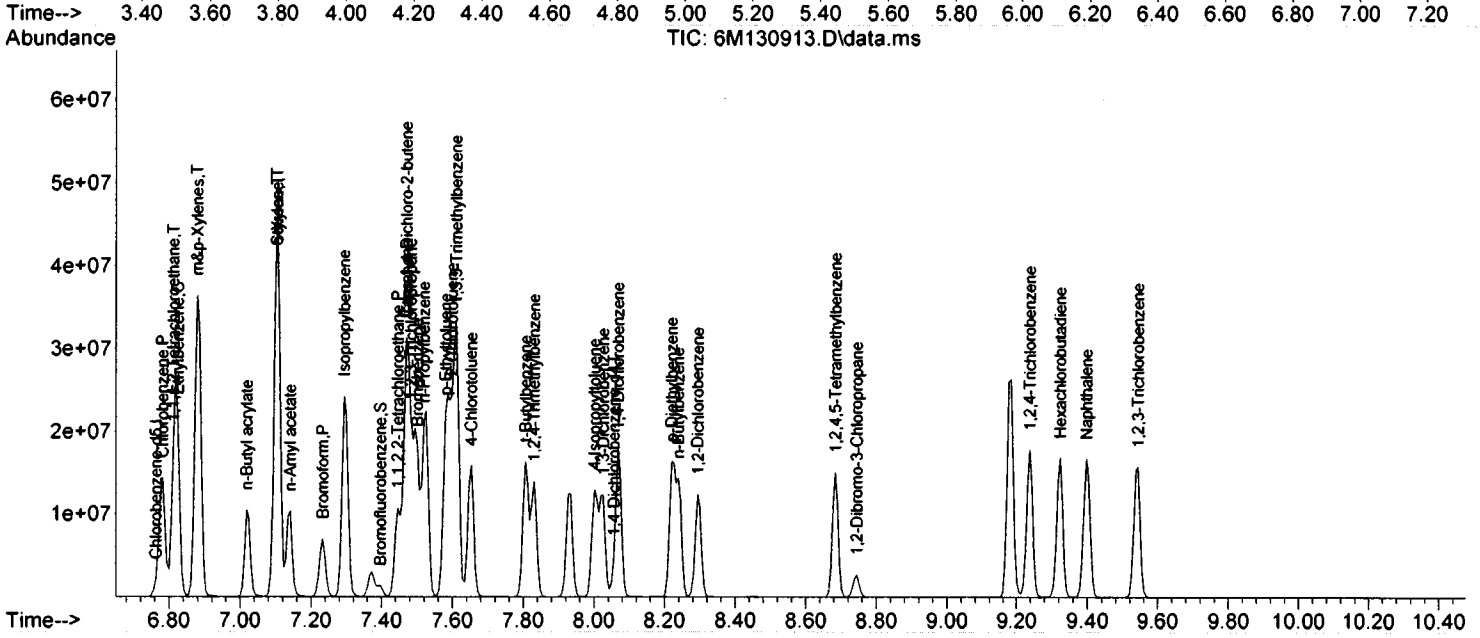
Quant QT Reviewed
SampleID : CAL @ 500 PPB
Data File: 6M130913.D
Acq On : 08/01/20 16:17
Operator : BK
Sam Mult : 1 Vial# : 14
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 16:56
Qt Upd On: 08/01/20 15:35
6e+07
5e+07
4e+07
3e+07
2e+07
1e+07
Chloromethane,P
Vinyl Chloride,C
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->
1.60 1.70 1.80 1.90 2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80 2.90 3.00 3.10 3.20 3.30 3.40 3.50 3.60


Abundance
TIC: 6M130913.D\data.ms
6e+07
5e+07
4e+07
3e+07
2e+07
1e+07
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->
3.40 3.60 3.80 4.00 4.20 4.40 4.60 4.80 5.00 5.20 5.40 5.60 5.80 6.00 6.20 6.40 6.60 6.80 7.00 7.20


Abundance
TIC: 6M130913.D\data.ms
6e+07
5e+07
4e+07
3e+07
2e+07
1e+07
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
4-Chlorotoluene
n-Propylbenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->
6.80 7.00 7.20 7.40 7.60 7.80 8.00 8.20 8.40 8.60 8.80 9.00 9.20 9.40 9.60 9.80 10.00 10.20 10.40

Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130904.D Sam Mult : 1 Vial# : 5 Qt On : 08/01/20 15:19
Acq On : 08/01/20 13:11 Misc : S,5G Qt Upd On: 08/01/20 15:19

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	378400	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	324090	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	180373	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	104773	31.23	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.10%			
39) 1,2-Dichloroethane-d4	4.934	67	56460	30.03	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.10%			
66) Toluene-d8	5.983	98	398534	30.24	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.80%			
76) Bromofluorobenzene	7.397	174	141258	29.83	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.43%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	0.000		0	N.D. d		
6) Dichlorodifluoromethane	0.000		0	N.D. d		
7) Chloromethane	0.000		0	N.D. d		
8) Bromomethane	0.000		0	N.D. d		
9) Vinyl Chloride	0.000		0	N.D. d		
10) Chloroethane	0.000		0	N.D. d		
11) Trichlorofluoromethane	0.000		0	N.D. d		
12) Ethyl ether	0.000		0	N.D. d		
13) Furan	0.000		0	N.D. d		
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D. d		
15) Methylene Chloride	0.000		0	N.D. d		
16) Acrolein	0.000		0	N.D. d		
17) Acrylonitrile	0.000		0	N.D. d		
18) Iodomethane	0.000		0	N.D. d		
19) Acetone	0.000		0	N.D. d		
20) Carbon Disulfide	0.000		0	N.D. d		
21) t-Butyl Alcohol	0.000		0	N.D. d		
22) n-Hexane	0.000		0	N.D. d		
23) Di-isopropyl-ether	0.000		0	N.D. d		
24) 1,1-Dichloroethene	0.000		0	N.D. d		
25) Methyl Acetate	0.000		0	N.D. d		
26) Methyl-t-butyl ether	3.672	73	7689	1.1088	ug/l	85
27) 1,1-Dichloroethane	0.000		0	N.D. d		
28) trans-1,2-Dichloroethene	0.000		0	N.D. d		
29) Ethyl-t-butyl ether	0.000		0	N.D. d		
30) cis-1,2-Dichloroethene	0.000		0	N.D. d		
31) Bromochloromethane	0.000		0	N.D. d		
32) 2,2-Dichloropropane	0.000		0	N.D. d		
33) Ethyl acetate	0.000		0	N.D. d		
34) 1,4-Dioxane	0.000		0	N.D. d		
35) 1,1-Dichloropropene	0.000		0	N.D. d		
36) Chloroform	0.000		0	N.D. d		
38) Cyclohexane	0.000		0	N.D. d		
40) 1,2-Dichloroethane	0.000		0	N.D. d		
41) 2-Butanone	0.000		0	N.D. d		
42) 1,1,1-Trichloroethane	0.000		0	N.D. d		
43) Carbon Tetrachloride	0.000		0	N.D. d		
44) Vinyl Acetate	0.000		0	N.D. d		
45) Bromodichloromethane	0.000		0	N.D. d		
46) Methylcyclohexane	0.000		0	N.D. d		
47) Dibromomethane	0.000		0	N.D. d		
48) 1,2-Dichloropropane	0.000		0	N.D. d		
49) Trichloroethene	0.000		0	N.D. d		
50) Benzene	4.977	78	12206	0.8611	ug/l	100
51) tert-Amyl methyl ether	0.000		0	N.D. d		
53) Iso-propylacetate	0.000		0	N.D. d		
54) Methyl methacrylate	0.000		0	N.D. d		
55) Dibromochloromethane	0.000		0	N.D. d		
56) 2-Chloroethylvinylether	0.000		0	N.D. d		
57) cis-1,3-Dichloropropene	0.000		0	N.D. d		
58) trans-1,3-Dichloropropene	0.000		0	N.D. d		
59) Ethyl methacrylate	0.000		0	N.D. d		
60) 1,1,2-Trichloroethane	0.000		0	N.D. d		
61) 1,2-Dibromoethane	6.531	107	2970	0.9674	ug/l	81
62) 1,3-Dichloropropane	0.000		0	N.D. d		
63) 4-Methyl-2-Pentanone	0.000		0	N.D. d		
64) 2-Hexanone	0.000		0	N.D. d		
65) Tetrachloroethene	0.000		0	N.D. d		
67) Toluene	6.019	92	9426	1.0362	ug/l	92

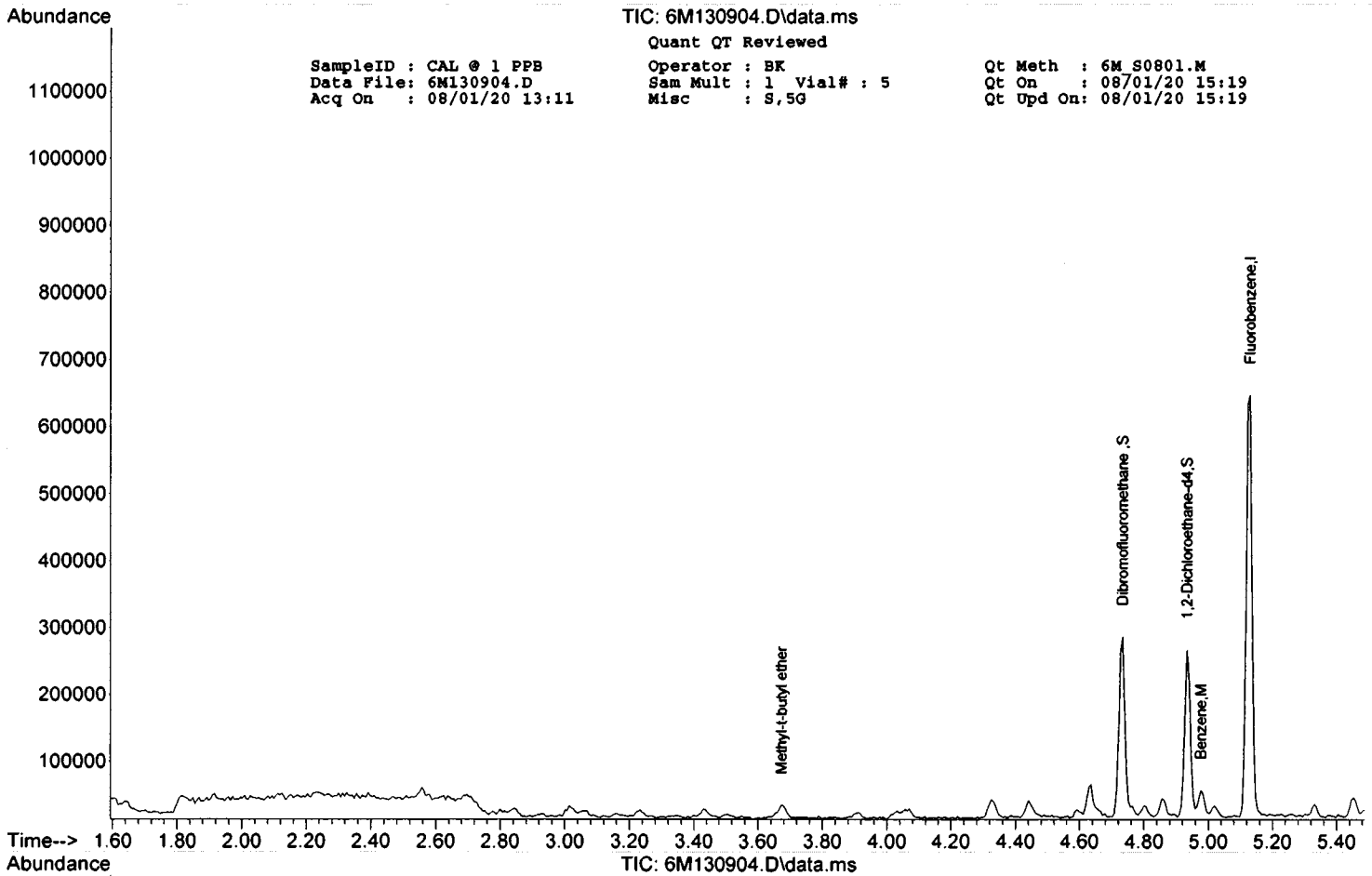
Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130904.D Sam Mult : 1 Vial# : 5 Qt On : 08/01/20 15:19
Acq On : 08/01/20 13:11 Misc : S,5G Qt Upd On: 08/01/20 15:19

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	0.000		0	N.D. d		
69)	Chlorobenzene	0.000		0	N.D. d		
71)	n-Butyl acrylate	0.000		0	N.D. d		
72)	n-Amyl acetate	0.000		0	N.D. d		
73)	Bromoform	0.000		0	N.D. d		
74)	Ethylbenzene	6.824	106	3999	0.8873	ug/l	98
75)	1,1,2,2-Tetrachloroethane	0.000		0	N.D. d		
77)	Styrene	0.000		0	N.D. d		
78)	m&p-Xylenes	6.879	106	12835	1.9375	ug/l	93
79)	o-Xylene	7.104	106	6195	0.9693	ug/l	94
80)	trans-1,4-Dichloro-2-b...	0.000		0	N.D. d		
81)	1,3-Dichlorobenzene	0.000		0	N.D. d		
82)	1,4-Dichlorobenzene	0.000		0	N.D. d		
83)	1,2-Dichlorobenzene	0.000		0	N.D. d		
84)	Isopropylbenzene	7.293	105	16453	0.9548	ug/l	91
85)	Cyclohexanone	0.000		0	N.D. d		
86)	Camphene	0.000		0	N.D. d		
87)	1,2,3-Trichloropropane	0.000		0	N.D. d		
88)	2-Chlorotoluene	0.000		0	N.D. d		
89)	p-Ethyltoluene	0.000		0	N.D. d		
90)	4-Chlorotoluene	0.000		0	N.D. d		
91)	n-Propylbenzene	7.525	91	18459	0.8960	ug/l	96
92)	Bromobenzene	0.000		0	N.D. d		
93)	1,3,5-Trimethylbenzene	7.610	105	11029	0.9023	ug/l	83
94)	Butyl methacrylate	0.000		0	N.D. d		
95)	t-Butylbenzene	7.806	119	13807	0.9607	ug/l	98
96)	1,2,4-Trimethylbenzene	7.830	105	14637	1.0539	ug/l	81
97)	sec-Butylbenzene	7.934	105	15695	No Calib		
98)	4-Isopropyltoluene	8.001	119	13351	0.8448	ug/l	98
99)	n-Butylbenzene	8.238	91	16830	0.9506	ug/l	97
100)	p-Diethylbenzene	0.000		0	N.D. d		
101)	1,2,4,5-Tetramethylben...	0.000		0	N.D. d		
102)	1,2-Dibromo-3-Chloropr...	0.000		0	N.D. d		
103)	Camphor	0.000		0	N.D. d		
104)	Hexachlorobutadiene	0.000		0	N.D. d		
105)	1,2,4-Trichlorobenzene	0.000		0	N.D. d		
106)	1,2,3-Trichlorobenzene	0.000		0	N.D. d		
107)	Naphthalene	9.397	128	14426	1.1599	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
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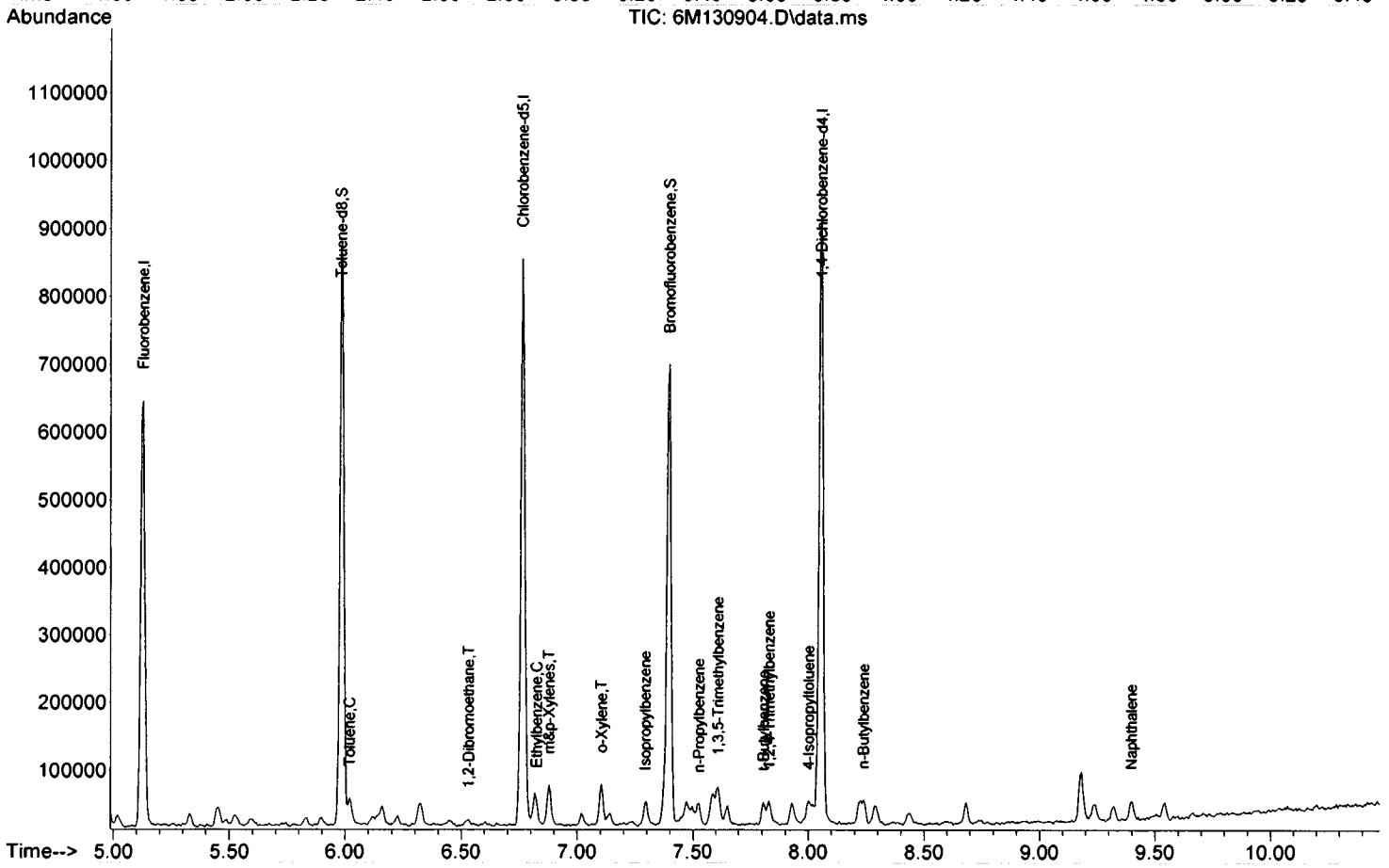
Quant QT Reviewed
SampleID : CAL @ 1 PPB
Data File: 6M130904.D
Acq On : 08/01/20 13:11
Operator : BK
Sam Mult : 1 Vial# : 5
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:19
Qt Upd On: 08/01/20 15:19
Methyl-t-butyl ether
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Benzene,M
Fluorobenzene,I
Time-->


Abundance
TIC: 6M130904.D\data.ms
Fluorobenzene,I
Toluene-d8,S
Toluene,C
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Ethylbenzene,C
m&p-Xylenes,T
o-Xylene,T
Isopropylbenzene
Bromofluorobenzene,S
n-Propylbenzene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
4-Isopropyltoluene
1,4-Dichlorobenzene-d4,I
n-Butylbenzene
Naphthalene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130903.D Sam Mult : 1 Vial# : 4 Qt On : 08/01/20 15:17
Acq On : 08/01/20 12:51 Misc : S,5G Qt Upd On: 08/01/20 15:17

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	423816	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	356268	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	199185	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	110986	29.08	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.93%			
39) 1,2-Dichloroethane-d4	4.934	67	62223	29.12	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.07%			
66) Toluene-d8	5.983	98	436450	30.26	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.87%			
76) Bromofluorobenzene	7.397	174	153460	28.72	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.73%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	0.000		0	N.D.	d	
6) Dichlorodifluoromethane	0.000		0	N.D.	d	
7) Chloromethane	0.000		0	N.D.	d	
8) Bromomethane	0.000		0	N.D.	d	
9) Vinyl Chloride	0.000		0	N.D.	d	
10) Chloroethane	0.000		0	N.D.	d	
11) Trichlorofluoromethane	0.000		0	N.D.	d	
12) Ethyl ether	0.000		0	N.D.	d	
13) Furan	0.000		0	N.D.	d	
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D.	d	
15) Methylene Chloride	0.000		0	N.D.	d	
16) Acrolein	0.000		0	N.D.	d	
17) Acrylonitrile	0.000		0	N.D.	d	
18) Iodomethane	0.000		0	N.D.	d	
19) Acetone	0.000		0	N.D.	d	
20) Carbon Disulfide	0.000		0	N.D.	d	
21) t-Butyl Alcohol	0.000		0	N.D.	d	
22) n-Hexane	0.000		0	N.D.	d	
23) Di-isopropyl-ether	0.000		0	N.D.	d	
24) 1,1-Dichloroethene	0.000		0	N.D.	d	
25) Methyl Acetate	0.000		0	N.D.	d	
26) Methyl-t-butyl ether	0.000		0	N.D.	d	
27) 1,1-Dichloroethane	0.000		0	N.D.	d	
28) trans-1,2-Dichloroethene	0.000		0	N.D.	d	
29) Ethyl-t-butyl ether	0.000		0	N.D.	d	
30) cis-1,2-Dichloroethene	0.000		0	N.D.	d	
31) Bromochloromethane	0.000		0	N.D.	d	
32) 2,2-Dichloropropane	0.000		0	N.D.	d	
33) Ethyl acetate	0.000		0	N.D.	d	
34) 1,4-Dioxane	0.000		0	N.D.	d	
35) 1,1-Dichloropropene	0.000		0	N.D.	d	
36) Chloroform	0.000		0	N.D.	d	
38) Cyclohexane	0.000		0	N.D.	d	
40) 1,2-Dichloroethane	0.000		0	N.D.	d	
41) 2-Butanone	0.000		0	N.D.	d	
42) 1,1,1-Trichloroethane	0.000		0	N.D.	d	
43) Carbon Tetrachloride	0.000		0	N.D.	d	
44) Vinyl Acetate	0.000		0	N.D.	d	
45) Bromodichloromethane	0.000		0	N.D.	d	
46) Methylcyclohexane	0.000		0	N.D.	d	
47) Dibromomethane	0.000		0	N.D.	d	
48) 1,2-Dichloropropane	0.000		0	N.D.	d	
49) Trichloroethene	0.000		0	N.D.	d	
50) Benzene	0.000		0	N.D.	d	
51) tert-Amyl methyl ether	0.000		0	N.D.	d	
53) Iso-propylacetate	0.000		0	N.D.	d	
54) Methyl methacrylate	0.000		0	N.D.	d	
55) Dibromochloromethane	0.000		0	N.D.	d	
56) 2-Chloroethylvinylether	0.000		0	N.D.	d	
57) cis-1,3-Dichloropropene	0.000		0	N.D.	d	
58) trans-1,3-Dichloropropene	0.000		0	N.D.	d	
59) Ethyl methacrylate	0.000		0	N.D.	d	
60) 1,1,2-Trichloroethane	0.000		0	N.D.	d	
61) 1,2-Dibromoethane	0.000		0	N.D.	d	
62) 1,3-Dichloropropane	0.000		0	N.D.	d	
63) 4-Methyl-2-Pentanone	0.000		0	N.D.	d	
64) 2-Hexanone	0.000		0	N.D.	d	
65) Tetrachloroethene	0.000		0	N.D.	d	
67) Toluene	0.000		0	N.D.	d	

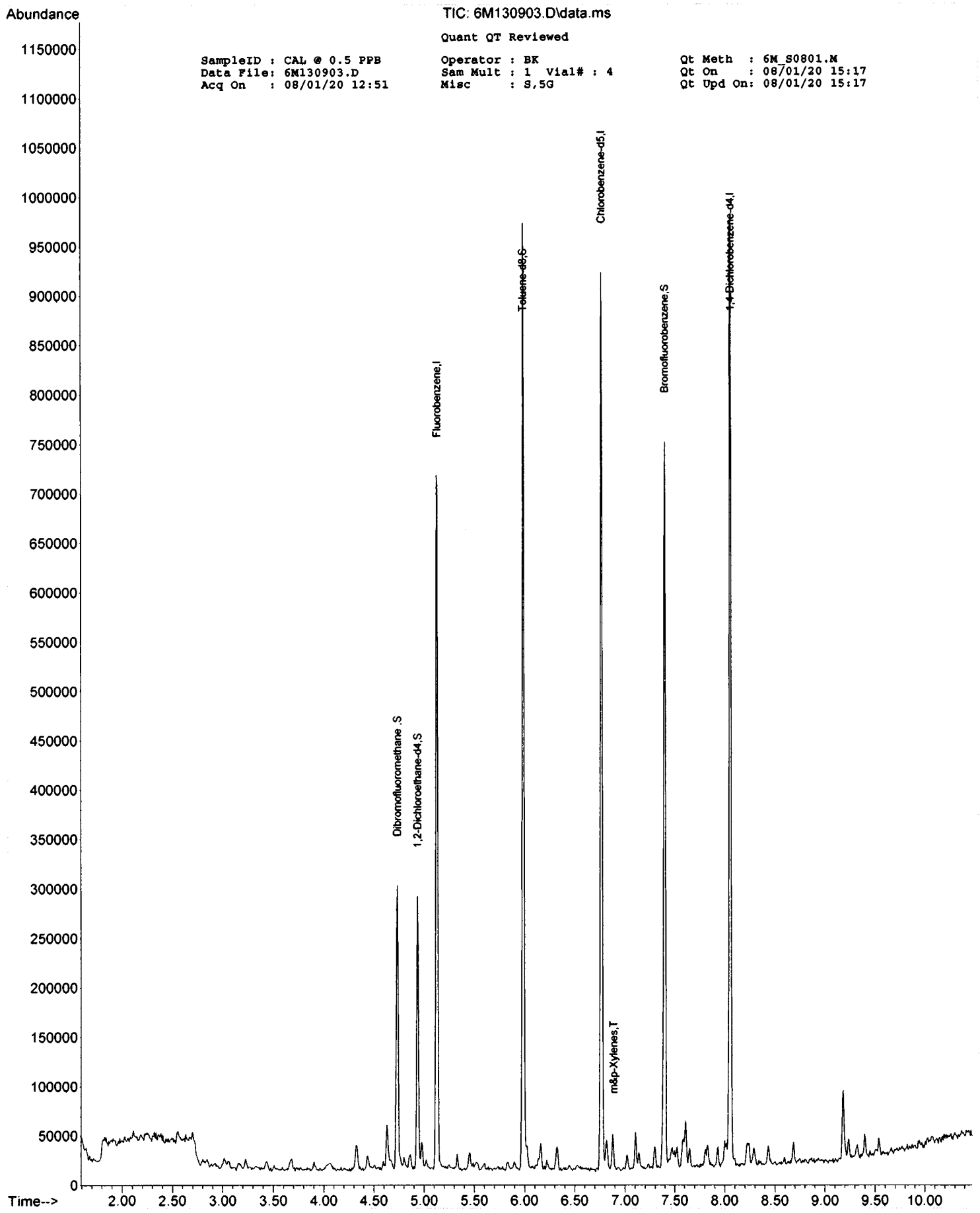
Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130903.D Sam Mult : 1 Vial# : 4 Qt On : 08/01/20 15:17
Acq On : 08/01/20 12:51 Misc : S,5G Qt Upd On: 08/01/20 15:17

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	0.000		0	N.D. d		
69)	Chlorobenzene	0.000		0	N.D. d		
71)	n-Butyl acrylate	0.000		0	N.D. d		
72)	n-Amyl acetate	0.000		0	N.D. d		
73)	Bromoform	0.000		0	N.D. d		
74)	Ethylbenzene	0.000		0	N.D. d		
75)	1,1,2,2-Tetrachloroethane	0.000		0	N.D. d		
77)	Styrene	0.000		0	N.D. d		
78)	m&p-Xylenes	6.885	106	7243	0.9804	ug/l	71
79)	o-Xylene	0.000		0	N.D. d		
80)	trans-1,4-Dichloro-2-b...	0.000		0	N.D. d		
81)	1,3-Dichlorobenzene	0.000		0	N.D. d		
82)	1,4-Dichlorobenzene	0.000		0	N.D. d		
83)	1,2-Dichlorobenzene	0.000		0	N.D. d		
84)	Isopropylbenzene	0.000		0	N.D. d		
85)	Cyclohexanone	0.000		0	N.D. d		
86)	Camphene	0.000		0	N.D. d		
87)	1,2,3-Trichloropropane	0.000		0	N.D. d		
88)	2-Chlorotoluene	0.000		0	N.D. d		
89)	p-Ethyltoluene	0.000		0	N.D. d		
90)	4-Chlorotoluene	0.000		0	N.D. d		
91)	n-Propylbenzene	0.000		0	N.D. d		
92)	Bromobenzene	0.000		0	N.D. d		
93)	1,3,5-Trimethylbenzene	0.000		0	N.D. d		
94)	Butyl methacrylate	0.000		0	N.D. d		
95)	t-Butylbenzene	0.000		0	N.D. d		
96)	1,2,4-Trimethylbenzene	0.000		0	N.D. d		
97)	sec-Butylbenzene	0.000		0	N.D. d		
98)	4-Isopropyltoluene	0.000		0	N.D. d		
99)	n-Butylbenzene	0.000		0	N.D. d		
100)	p-Diethylbenzene	0.000		0	N.D. d		
101)	1,2,4,5-Tetramethylben...	0.000		0	N.D. d		
102)	1,2-Dibromo-3-Chloropr...	0.000		0	N.D. d		
103)	Camphor	0.000		0	N.D. d		
104)	Hexachlorobutadiene	0.000		0	N.D. d		
105)	1,2,4-Trichlorobenzene	0.000		0	N.D. d		
106)	1,2,3-Trichlorobenzene	0.000		0	N.D. d		
107)	Naphthalene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M130903.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 0.5 PPB
Data File: 6M130903.D
Acq On : 08/01/20 12:51
Operator : BK
Sam Mult : 1 Vial# : 4
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:17
Qt Upd On: 08/01/20 15:17
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
m&p-Xylenes,T
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M81828.D	CAL @ 20 PPB	08/17/20 15:28	2	11M81826.D	CAL @ 5 PPB	08/17/20 14:51
3	11M81827.D	CAL @ 10 PPB	08/17/20 15:09	4	11M81830.D	CAL @ 50 PPB	08/17/20 16:05
5	11M81837.D	CAL @ 100 PPB	08/17/20 18:14	6	11M81834.D	CAL @ 250 PPB	08/17/20 17:18
7	11M81825.D	CAL @ 1 PPB	08/17/20 14:32	8	11M81824.D	CAL @ 0.5 PPB	08/17/20 14:14

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.3216	0.2788	0.3093	0.3188	0.3326	0.3031	-----	0.2990	-----	0.309	1.68	0.998	1.00	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Dichlorodifluorometha	1	0	Avg	0.2386	0.2098	0.2398	0.2154	0.2459	0.2131	-----	0.2269	-----	0.227	1.67	0.996	0.999	6.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Chloromethane	1	0	Avg	0.2177	0.2174	0.2271	0.2078	0.2247	0.1930	-----	0.2311	-----	0.217	1.85	0.996	0.999	6.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromomethane	1	0	Avg	0.2074	0.2267	0.2200	0.2014	0.2274	0.2046	-----	0.2605	-----	0.221	2.24	0.998	0.999	9.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Vinyl Chloride	1	0	Avg	0.2751	0.2551	0.2795	0.2573	0.2752	0.2401	-----	0.2994	-----	0.269	1.94	0.997	0.999	7.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Chloroethane	1	0	Avg	0.1775	0.1663	0.1834	0.1703	0.1778	0.1553	-----	0.1843	-----	0.174	2.33	0.997	1.00	6.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Trichlorofluoromethan	1	0	Avg	0.4071	0.3816	0.4235	0.3793	0.4307	0.3756	-----	0.4164	-----	0.402	2.55	0.997	0.999	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethyl ether	1	0	Avg	0.1831	0.1697	0.1860	0.1797	0.1908	0.1692	-----	0.1766	-----	0.179	2.78	0.997	1.00	4.5	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Furan	1	0	Avg	0.2996	0.2959	0.3138	0.2949	0.3053	0.2721	-----	0.3397	-----	0.303	2.82	0.998	1.00	6.8	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1896	0.1816	0.2086	0.1810	0.2158	0.1870	-----	0.1971	-----	0.194	2.97	0.996	0.998	6.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Methylene Chloride	1	0	Avg	0.2538	0.2558	0.2607	0.2474	0.2602	0.2320	-----	0.2963	-----	0.258	3.37	0.998	1.00	7.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Acrolein	1	0	Avg	0.0355	0.0335	0.0361	0.0344	0.0379	0.0338	-----	0.0396	-----	0.0359	2.89	0.998	0.999	6.2		100.0	25.00	50.00	250.0	500.0	1250.		5.00	
Acrylonitrile	1	0	Avg	0.0875	0.0760	0.0884	0.0830	0.0907	0.0794	-----	0.0774	-----	0.0832	3.57	0.997	0.999	7.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Iodomethane	1	0	Qua	0.3390	0.2296	0.2966	0.3594	0.3753	0.3481	-----	0.1691	-----	0.302	3.12	0.999	1.00	25		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Acetone	1	0	Avg	0.0661	0.0618	0.0695	0.0597	0.0654	0.0562	-----	0.0681	-----	0.0639	3.01	0.996	0.999	7.5	0.10 a	100.0	25.00	50.00	250.0	500.0	1250.		5.00	
Carbon Disulfide	1	0	Avg	0.6246	0.5833	0.6481	0.6210	0.6911	0.6185	-----	0.7015	-----	0.641	3.18	0.998	0.999	6.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
t-Butyl Alcohol	1	0	Avg	0.0205	0.0195	0.0215	0.0187	0.0220	0.0204	-----	0.0180	-----	0.0201	3.43	0.998	0.999	7.1		100.0	25.00	50.00	250.0	500.0	1250.		5.00	
n-Hexane	1	0	Avg	0.2118	0.2063	0.2288	0.2046	0.2383	0.2123	-----	0.2158	-----	0.217	3.81	0.997	0.999	5.7		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Di-isopropyl-ether	1	0	Avg	0.5446	0.5142	0.5533	0.5408	0.5687	0.5262	-----	0.5757	-----	0.546	3.95	0.999	1.00	4.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1-Dichloroethene	1	0	Avg	0.3275	0.3206	0.3361	0.3219	0.3454	0.3082	-----	0.3154	-----	0.325	2.98	0.998	1.00	3.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Methyl Acetate	1	0	Avg	0.1488	0.1411	0.1558	0.1405	0.1488	0.1292	-----	0.1507	-----	0.145	3.28	0.997	1.00	6.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Methyl-t-butyl ether	1	0	Avg	0.6222	0.5906	0.6250	0.6162	0.6754	0.6071	-----	0.5930	0.5544	0.611	3.60	0.998	0.999	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.4160	0.3968	0.4265	0.4085	0.4303	0.3879	-----	0.4406	-----	0.415	3.93	0.998	1.00	4.5	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2637	0.2595	0.2722	0.2569	0.2780	0.2495	-----	0.2664	-----	0.264	3.60	0.998	0.999	3.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethyl-t-butyl ether	1	0	Avg	0.6399	0.6221	0.6446	0.6465	0.7003	0.6244	-----	0.6521	-----	0.647	4.20	0.998	0.999	4.0	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.4118	0.3877	0.4159	0.3955	0.4252	0.3887	-----	0.3840	-----	0.401	4.31	0.999	1.00	4.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromochloromethane	1	0	Avg	0.1728	0.1685	0.1783	0.1691	0.1709	0.1447	-----	0.1764	-----	0.169	4.45	0.995	1.00	6.6		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
2,2-Dichloropropane	1	0	Avg	0.3413	0.3188	0.3340	0.3365	0.3547	0.3389	-----	0.3516	-----	0.339	4.31	1.00	1.00	3.5		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethyl acetate	1	0	Avg	0.2127	0.2080	0.2564	0.2120	0.2385	0.2183	-----	0.2182	-----	0.223	4.33	0.998	0.999	7.9		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,4-Dioxane	1	0	Avg	0.0036	0.0035	0.0037	0.0032	0.0036	0.0037	-----	0.0033	-----	0.00355	5.34	0.999	0.999	5.8		1000.	250.0	500.0	2500.	5000.	12500		50.00	
1,1-Dichloropropene	1	0	Avg	0.3573	0.3371	0.3712	0.3530	0.3859	0.3480	-----	0.3570	-----	0.359	4.70	0.998	0.999	4.4		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Chloroform	1	0	Avg	0.4592	0.4346	0.4684	0.4522	0.4767	0.4245	-----	0.4754	-----	0.456	4.49	0.998	1.00	4.4	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Dibromofluoromethan	1	0	Avg	0.2709	0.2768	0.2739	0.2770	0.2763	0.2325	-----	0.2690	0.2685	0.268	4.58	-1	-1	5.5		30.00	30.00	30.00	30.00	30.00	30.00		30.00	30.00
Cyclohexane	1	0	Avg	0.3188	0.3128	0.3481	0.3092	0.3619	0.3209	-----	0.3254	-----	0.328	4.65	0.997	0.999	5.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1184	0.1243	0.1191	0.1245	0.1170	0.1006	-----	0.1199	0.1196	0.118	4.78	-1	-1	6.4		30.00	30.00	30.00	30.00	30.00	30.00		30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3262	0.3179	0.3433	0.3307	0.3499	0.3373	-----	0.3616	0.3313	0.337	4.82	1.00	1.00	4.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	0.50
2-Butanone	1	0	Avg	0.0911	0.0971	0.0783	0.0851	0.0837	0.0759	-----	0.1061	-----	0.0882	4.31	0.998	1.00	12	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1,1-Trichloroethane	1	0	Avg	0.4190	0.4016	0.4202	0.4143	0.4504	0.4029	-----	0.3857	-----	0.414	4.61	0.998	0.999	4.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Carbon Tetrachloride	1	0	Avg	0.3703	0.3421	0.3816	0.3708	0.4216	0.3794	-----	0.3547	-----	0.374	4.71	0.998	0.999	6.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Vinyl Acetate	1	0	Avg	0.6470	0.5981	0.6150	0.6572	0.7114	0.6481	-----	0.5756	-----	0.636	3.95	0.998	1.00	7.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromodichloromethan	1	0	Avg	0.3342	0.3156	0.3393	0.3313	0.3667	0.3317	-----	0.3267	-----	0.335	5.41	0.998	0.999	4.7	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.249

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M81828.D	CAL @ 20 PPB	08/17/20 15:28	2	11M81826.D	CAL @ 5 PPB	08/17/20 14:51
3	11M81827.D	CAL @ 10 PPB	08/17/20 15:09	4	11M81830.D	CAL @ 50 PPB	08/17/20 16:05
5	11M81837.D	CAL @ 100 PPB	08/17/20 18:14	6	11M81834.D	CAL @ 250 PPB	08/17/20 17:18
7	11M81825.D	CAL @ 1 PPB	08/17/20 14:32	8	11M81824.D	CAL @ 0.5 PPB	08/17/20 14:14

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.3134	0.3007	0.3591	0.3122	0.3821	0.3373	-----	0.3421	-----	0.335	5.27	0.996	0.998	8.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Dibromomethane	1	0	Avg	0.2135	0.2018	0.2131	0.2135	0.2322	0.2124	-----	0.2099	-----	0.214	5.34	0.999	1.00	4.3		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dichloropropane	1	0	Avg	0.2407	0.2354	0.2401	0.2378	0.2542	0.2337	-----	0.2402	-----	0.240	5.28	0.999	1.00	2.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Trichloroethene	1	0	Avg	0.3247	0.3093	0.3301	0.3213	0.3462	0.3148	-----	0.3409	-----	0.327	5.16	0.998	1.00	4.1	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Benzene	1	0	Avg	1.0460	0.9995	1.0566	1.0295	1.1054	1.0586	-----	1.0687	0.9849	1.04	4.82	1.00	1.00	3.7	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.6431	0.6211	0.6351	0.6498	0.7088	0.8491	-----	0.6306	-----	0.677	4.86	0.995	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Iso-propylacetate	1	0	Avg	0.3792	0.3444	0.3788	0.3807	0.4259	0.4399	-----	0.3556	-----	0.386	4.81	0.999	1.00	9.0	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Methyl methacrylate	1	0	Avg	0.1979	0.1912	0.2137	0.2143	0.2461	0.2395	-----	0.1693	-----	0.210	5.30	0.999	0.999	13	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Dibromochloromethan	1	0	Avg	0.3130	0.2738	0.3078	0.3142	0.3392	0.4324	-----	0.2640	-----	0.321	6.24	0.992	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
2-Chloroethylvinylethe	1	0	Avg	0.0555	0.0449	0.0529	0.0561	0.0625	0.0612	-----	0.0325	-----	0.0523	5.54	1.00	1.00	20		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.3993	0.3672	0.3888	0.4109	0.4366	0.4489	-----	0.3851	-----	0.405	5.64	1.00	1.00	7.2	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
trans-1,3-Dichloroprop	1	0	Qua	0.3730	0.3187	0.3455	0.3803	0.4134	0.5505	-----	0.3009	-----	0.383	5.92	0.989	1.00	22	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethyl methacrylate	1	0	Avg	0.1978	0.1826	0.1983	0.2066	0.2238	-----	-----	0.1631	-----	0.195	5.93	0.999	1.00	11	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2528	0.2457	0.2631	0.2502	0.2689	0.3744	-----	0.2587	-----	0.273	6.02	0.986	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dibromoethane	1	0	Avg	0.2767	0.2652	0.2786	0.2734	0.2940	0.3239	-----	0.2701	-----	0.283	6.31	0.998	1.00	7.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,3-Dichloropropane	1	0	Avg	0.4295	0.4054	0.4292	0.4154	0.4498	0.5677	-----	0.4324	-----	0.447	6.11	0.992	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.2144	0.1993	0.2081	0.2067	0.2291	0.2294	-----	0.1871	-----	0.211	5.70	1.00	1.00	7.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
2-Hexanone	1	0	Avg	0.1535	0.1402	0.1472	0.1499	0.1683	0.2339	-----	0.1574	-----	0.164	6.12	0.986	1.00	19	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Tetrachloroethene	1	0	Avg	0.2609	0.2509	0.2833	0.2693	0.3006	0.3746	-----	0.2664	-----	0.287	6.11	0.993	1.00	15	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Toluene-d8	1	0	Avg	1.1749	1.1920	1.1890	1.1641	1.1615	1.1177	-----	1.1491	1.1292	1.16	5.79	-1	-1	2.3		30.00	30.00	30.00	30.00	30.00	30.00		30.00	30.00
Toluene	1	0	Avg	0.7257	0.7186	0.7409	0.7122	0.7618	0.8524	-----	0.7499	-----	0.752	5.82	0.998	1.00	6.4	0.40	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2861	0.2618	0.2851	0.2843	0.3120	0.3997	-----	0.2554	-----	0.298	6.59	0.991	1.00	16		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Chlorobenzene	1	0	Avg	0.8366	0.8121	0.8547	0.8227	0.8734	0.9456	-----	0.8517	-----	0.857	6.56	0.999	1.00	5.2	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
n-Butyl acrylate	1	0	Avg	0.8091	0.6859	0.7936	0.7987	0.5987	-----	-----	0.6866	-----	0.729	6.80	0.973	0.999	12	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
n-Amyl acetate	1	0	Avg	0.6427	0.5584	0.6335	0.6329	0.5927	-----	-----	0.5173	-----	0.596	6.91	0.999	1.00	8.4	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
Bromoform	1	0	Avg	0.3974	0.3656	0.3854	0.3885	0.3120	0.3328	-----	0.3378	-----	0.360	7.00	0.998	0.998	9.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethylbenzene	1	0	Avg	0.6579	0.6096	0.6959	0.6258	0.4451	-----	-----	0.7331	-----	0.628	6.60	0.962	0.999	16	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.5875	0.5908	0.6135	0.5523	0.4059	0.6535	-----	0.6270	-----	0.576	7.22	0.976	0.996	14	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromofluorobenzene	1	0	Avg	0.8203	0.8283	0.8350	0.8172	0.5658	0.5945	-----	0.8325	0.8305	0.766	7.17	-1	-1	15		30.00	30.00	30.00	30.00	30.00	30.00		30.00	30.00
Styrene	1	0	Avg	1.5539	1.5005	1.6167	1.5069	1.1452	-----	-----	1.5476	-----	1.48	6.88	0.976	0.999	11	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
m&p-Xylenes	1	0	Avg	0.9373	0.8981	0.9612	0.9098	0.6501	0.8875	-----	0.9857	0.8795	0.889	6.66	0.988	0.995	12	0.10	40.00	10.00	20.00	100.0	200.0	500.0		2.00	1.00
o-Xylene	1	0	Avg	0.9014	0.8689	0.9528	0.8740	0.6497	-----	-----	0.8865	-----	0.856	6.88	0.972	0.999	12	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.1995	0.1832	0.2086	0.2017	0.1595	0.2298	-----	0.1558	-----	0.191	7.24	0.985	0.997	14		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,3-Dichlorobenzene	1	0	Avg	1.1041	1.1009	1.1591	1.0797	1.1575	0.9890	-----	1.2575	-----	1.12	7.78	0.996	0.999	7.4	0.60	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,4-Dichlorobenzene	1	0	Avg	1.1205	1.0783	1.1962	1.0886	1.1795	1.3335	-----	1.2204	-----	1.17	7.83	0.997	1.00	7.6	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dichlorobenzene	1	0	Avg	1.0266	0.9804	1.0543	0.9810	1.0143	0.9924	-----	1.0750	-----	1.02	8.05	1.00	1.00	3.6	0.40	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Isopropylbenzene	1	0	Qua	2.2686	2.2150	2.4017	2.2090	1.6978	1.1877	-----	2.4125	-----	2.06	7.07	0.958	0.997	22	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Cyclohexanone	1	0	Qua	0.0180	0.0193	0.0197	0.0153	0.0126	-----	-----	0.0101	-----	0.0159	7.14	0.986	0.999	24		100.0	25.00	50.00	250.0	500.0			5.00	
Camphene	1	0	Avg	0.5893	0.5695	0.6716	0.5879	0.4655	0.8289	-----	0.6454	-----	0.623	7.24	0.969	0.997	18		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2,3-Trichloropropane	1	0	Avg	0.7041	0.6546	0.7337	0.6793	0.5369	0.9321	-----	0.6869	-----	0.704	7.25	0.971	0.997	17		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
2-Chlorotoluene	1	0	Avg	1.3312	1.3086	1.3919	1.2960	1.3555	0.9678	-----	1.4255	-----	1.30	7.36	0.976	0.999	12		20.00	5.00	10.00	50.00	100.0	250.0		1.00	

Avg Rsd: 9.249

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M81828.D	CAL @ 20 PPB	08/17/20 15:28	2	11M81826.D	CAL @ 5 PPB	08/17/20 14:51
3	11M81827.D	CAL @ 10 PPB	08/17/20 15:09	4	11M81830.D	CAL @ 50 PPB	08/17/20 16:05
5	11M81837.D	CAL @ 100 PPB	08/17/20 18:14	6	11M81834.D	CAL @ 250 PPB	08/17/20 17:18
7	11M81825.D	CAL @ 1 PPB	08/17/20 14:32	8	11M81824.D	CAL @ 0.5 PPB	08/17/20 14:14

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.5131	2.4072	2.6313	2.4658	2.3207	1.6553	-----	2.5890	-----	2.37	7.35	0.973	1.00	14		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
4-Chlorotoluene	1	0	Avg	1.2998	1.3024	1.3811	1.3105	1.2872	1.1190	-----	1.5637	-----	1.32	7.42	0.996	1.00	10		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
n-Propylbenzene	1	0	Avg	2.5366	2.5121	2.7394	2.4894	2.1048	2.2428	-----	2.6385	-----	2.47	7.29	0.999	0.999	9.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromobenzene	1	0	Avg	1.2310	1.2371	1.3182	1.1910	0.9350	1.5583	-----	1.1826	-----	1.24	7.27	0.974	0.997	15		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,3,5-Trimethylbenzen	1	0	Avg	1.7638	1.7492	1.8908	1.7530	1.8525	1.4797	-----	1.8308	-----	1.76	7.38	0.990	0.999	7.7		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Butyl methacrylate	1	0	Avg	0.5048	0.4350	0.4396	0.4855	0.4452	0.2560	-----	0.3838	-----	0.421	7.38	0.914	1.00	20	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
t-Butylbenzene	1	0	Avg	1.7582	1.7008	1.8697	1.7307	1.9016	-----	-----	1.8303	-----	1.80	7.57	0.998	1.00	4.5		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trimethylbenzen	1	0	Avg	1.8643	1.7807	1.9478	1.8422	1.9638	-----	-----	1.9312	-----	1.89	7.59	0.999	1.00	3.8		20.00	5.00	10.00	50.00	100.0			1.00	
sec-Butylbenzene	1	0	Avg	2.0809	2.0108	2.2458	2.0534	2.2621	-----	-----	2.1977	-----	2.14	7.69	0.998	1.00	5.0		20.00	5.00	10.00	50.00	100.0			1.00	
4-Isopropyltoluene	1	0	Avg	1.8303	1.7759	1.9462	1.8298	1.9658	-----	-----	1.8064	-----	1.86	7.76	0.999	1.00	4.2		20.00	5.00	10.00	50.00	100.0			1.00	
n-Butylbenzene	1	0	Avg	1.7933	1.6604	1.8700	1.7643	1.8463	-----	-----	1.8559	-----	1.80	8.00	0.999	1.00	4.4		20.00	5.00	10.00	50.00	100.0			1.00	
p-Diethylbenzene	1	0	Avg	1.1275	1.0986	1.1913	1.1222	1.0985	0.7110	-----	1.0936	-----	1.06	7.98	0.954	0.999	15		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	1.6190	1.5116	1.6270	1.5821	1.1793	1.8794	-----	1.6142	-----	1.57	8.44	0.977	0.996	13		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1282	0.1080	0.1302	0.1165	0.0923	-----	-----	0.0793	-----	0.109	8.50	0.981	1.00	19	0.05	20.00	5.00	10.00	50.00	100.0			1.00	
Camphor	1	0	Avg	0.0530	0.0389	0.0496	0.0454	0.0372	-----	-----	0.0470	0.0522	0.0462	8.94	0.986	0.999	13		200.0	50.00	100.0	500.0	1000.			10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.1973	0.1896	0.2141	0.1894	0.1446	-----	-----	0.2356	-----	0.195	9.07	0.977	0.999	16		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.4636	0.4372	0.4732	0.4277	0.3263	-----	-----	0.4708	-----	0.433	8.99	0.976	1.00	13	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.3187	0.2669	0.3061	0.2697	0.2143	0.3855	-----	0.3689	-----	0.304	9.29	0.967	0.997	20		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Naphthalene	1	0	Qua	1.0325	0.8762	0.9983	0.8754	0.6966	-----	-----	1.1535	-----	0.939	9.15	0.981	1.00	17		20.00	5.00	10.00	50.00	100.0			1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.249

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81828.D Sam Mult : 1 Vial# : 15 Qt On : 08/18/20 07:19
Acq On : 08/17/20 15:28 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
4) Fluorobenzene	4.958	96	233186	30.00	ug/l		0.00
52) Chlorobenzene-d5	6.546	117	222916	30.00	ug/l		0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	128435	30.00	ug/l		0.00
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	63189	33.45	ug/l		0.00
Spiked Amount 30.000			Recovery = 111.50%				
39) 1,2-Dichloroethane-d4	4.778	67	27621	24.99	ug/l		0.00
Spiked Amount 30.000			Recovery = 83.30%				
66) Toluene-d8	5.787	98	261924	26.96	ug/l		0.00
Spiked Amount 30.000			Recovery = 89.87%				
76) Bromofluorobenzene	7.167	174	105363	31.78	ug/l		0.00
Spiked Amount 30.000			Recovery = 105.93%				
Target Compounds							Qvalue
5) Chlorodifluoromethane	1.681	51	50005	15.7368	ug/l	#	42
6) Dichlorodifluoromethane	1.668	85	37102	27.3525	ug/l		98
7) Chloromethane	1.847	50	33846	11.4816	ug/l		100
8) Bromomethane	2.241	94	32254	28.4424	ug/l		96
9) Vinyl Chloride	1.940	62	42769	18.1234	ug/l		98
10) Chloroethane	2.331	64	27603	20.2195	ug/l		91
11) Trichlorofluoromethane	2.546	101	63298	25.0042	ug/l		96
12) Ethyl ether	2.778	59	28472	16.5737	ug/l		58
13) Furan	2.817	39	46585	13.2737	ug/l	#	41
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	29485	24.4876	ug/l		94
15) Methylene Chloride	3.373	84	39468	22.8063	ug/l		56
16) Acrolein	2.887	56	27594	55.4503	ug/l		96
17) Acrylonitrile	3.569	53	13610	11.9811	ug/l		98
18) Iodomethane	3.122	142	52700	26.6074	ug/l		98
19) Acetone	3.009	43	51403	60.9507	ug/l		99
20) Carbon Disulfide	3.186	76	97099	20.6195	ug/l		100
21) t-Butyl Alcohol	3.434	59	15945	57.1265	ug/l		97
22) n-Hexane	3.813	57	32929	12.7257	ug/l		87
23) Di-isopropyl-ether	3.952	45	84671	11.4143	ug/l		56
24) 1,1-Dichloroethene	2.981	61	50919	16.3016	ug/l		71
25) Methyl Acetate	3.280	43	23136	10.5720	ug/l		100
26) Methyl-t-butyl ether	3.595	73	96740	21.1323	ug/l		82
27) 1,1-Dichloroethane	3.923	63	64678	17.2546	ug/l		97
28) trans-1,2-Dichloroethene	3.604	96	41007	23.8397	ug/l		69
29) Ethyl-t-butyl ether	4.196	59	99490	15.9116	ug/l		83
30) cis-1,2-Dichloroethene	4.308	61	64022	16.2864	ug/l		59
31) Bromochloromethane	4.453	49	26866m	12.4639	ug/l		
32) 2,2-Dichloropropane	4.312	77	53070	20.4745	ug/l		94
33) Ethyl acetate	4.328	43	33067	11.0974	ug/l		99
34) 1,4-Dioxane	5.337	88	28303	1114.7591	ug/l		71
35) 1,1-Dichloropropene	4.701	75	55548	21.9271	ug/l		93
36) Chloroform	4.488	83	71390	23.4912	ug/l		95
38) Cyclohexane	4.652	56	49571	12.7693	ug/l	#	48
40) 1,2-Dichloroethane	4.820	62	50711	17.9273	ug/l		97
41) 2-Butanone	4.302	43	14167	11.8293	ug/l		65
42) 1,1,1-Trichloroethane	4.614	97	65147	23.2356	ug/l		94
43) Carbon Tetrachloride	4.707	117	57571	22.8098	ug/l		96
44) Vinyl Acetate	3.945	43	100592	11.4441	ug/l		100
45) Bromodichloromethane	5.411	83	51965	22.4823	ug/l		98
46) Methylcyclohexane	5.270	83	48734	20.1067	ug/l	#	66
47) Dibromomethane	5.344	174	33190	28.6785	ug/l		99
48) 1,2-Dichloropropane	5.279	63	37422	16.8090	ug/l		98
49) Trichloroethene	5.157	130	50477	25.9746	ug/l		92
50) Benzene	4.820	78	162614	22.7688	ug/l		100
51) tert-Amyl methyl ether	4.855	73	99976	20.8868	ug/l		93
53) Iso-propylacetate	4.813	43	56354	8.5433	ug/l		82
54) Methyl methacrylate	5.299	41	29410m	8.3076	ug/l		
55) Dibromochloromethane	6.238	129	46529	18.6643	ug/l		99
56) 2-Chloroethylvinylether	5.540	63	8260	11.2692	ug/l		88
57) cis-1,3-Dichloropropene	5.640	75	59354	15.2711	ug/l		96
58) trans-1,3-Dichloropropene	5.913	75	55438	14.8742	ug/l		97
59) Ethyl methacrylate	5.932	41	29401	8.7562	ug/l	#	33
60) 1,1,2-Trichloroethane	6.019	97	37582	17.9657	ug/l		88
61) 1,2-Dibromoethane	6.315	107	41122	18.0628	ug/l		100
62) 1,3-Dichloropropane	6.109	76	63830	17.1988	ug/l		99
63) 4-Methyl-2-Pentanone	5.701	43	31870	8.1767	ug/l		94
64) 2-Hexanone	6.122	43	22812	8.3498	ug/l		72
65) Tetrachloroethene	6.112	164	38785	19.0705	ug/l		98
67) Toluene	5.823	92	107853	17.7797	ug/l		99

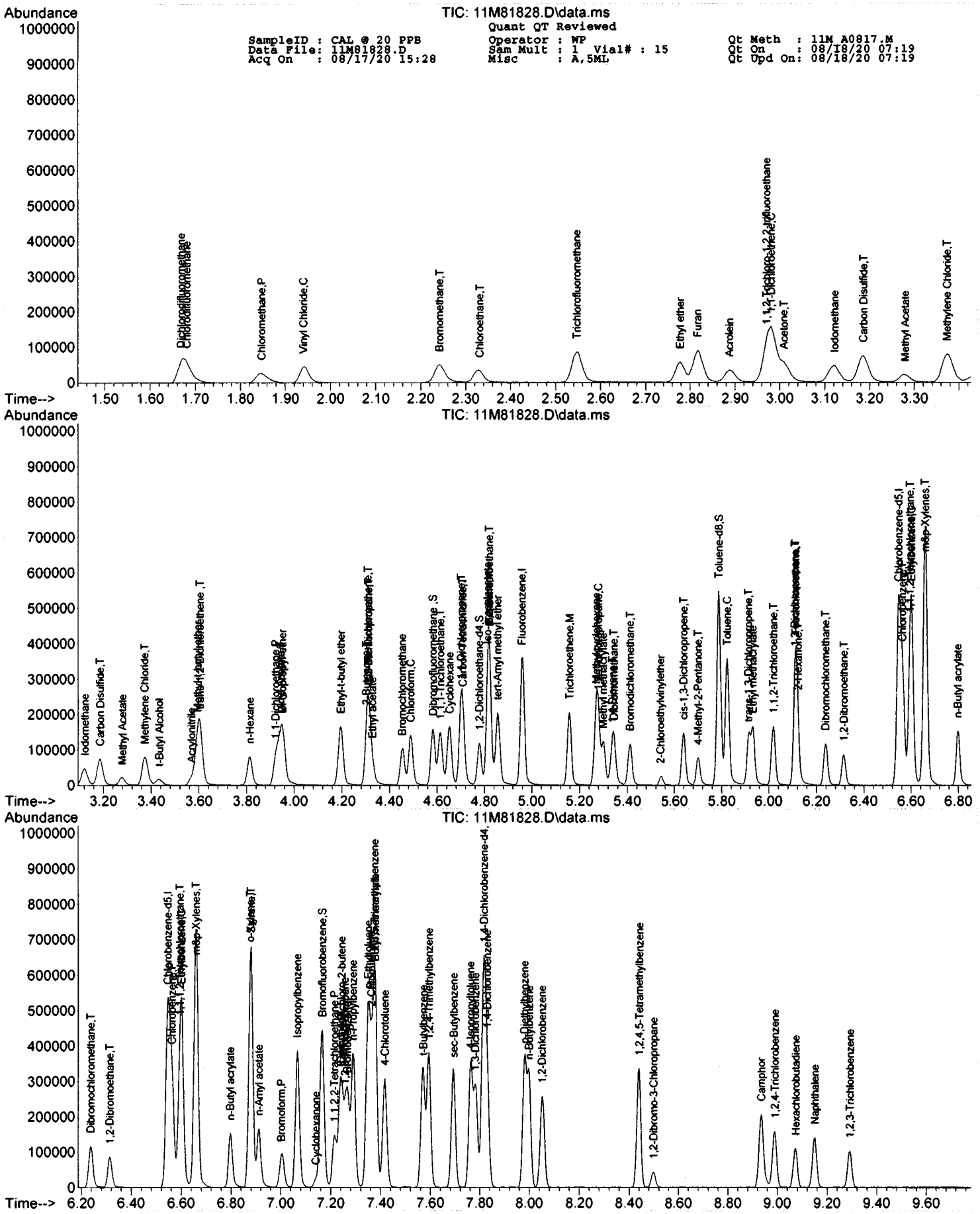
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81828.D Sam Mult : 1 Vial# : 15 Qt On : 08/18/20 07:19
Acq On : 08/17/20 15:28 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.595	133	42520	18.4200	ug/l		95
69)	Chlorobenzene	6.562	112	124337	19.1822	ug/l		97
71)	n-Butyl acrylate	6.797	55	69281	8.2992	ug/l		89
72)	n-Amyl acetate	6.913	43	55034	7.8422	ug/l		76
73)	Bromoform	7.003	173	34028	16.2955	ug/l		97
74)	Ethylbenzene	6.601	106	56336	15.5989	ug/l		99
75)	1,1,2,2-Tetrachloroethane	7.215	83	50308	14.9236	ug/l		95
77)	Styrene	6.881	104	133051	15.5969	ug/l		91
78)	m&p-Xylenes	6.659	106	160519	30.9848	ug/l		97
79)	o-Xylene	6.877	106	77188	15.5188	ug/l		98
80)	trans-1,4-Dichloro-2-b...	7.244	53	17085	8.7898	ug/l		84
81)	1,3-Dichlorobenzene	7.781	146	94542	16.3304	ug/l		97
82)	1,4-Dichlorobenzene	7.829	146	95942	16.5199	ug/l		97
83)	1,2-Dichlorobenzene	8.051	146	87907	16.6784	ug/l		97
84)	Isopropylbenzene	7.067	105	194251	15.1750	ug/l		100
85)	Cyclohexanone	7.141	55	7737	43.0999	ug/l		79
86)	Camphene	7.241	93	50462	13.8420	ug/l		95
87)	1,2,3-Trichloropropane	7.257	75	60294	13.1027	ug/l		88
88)	2-Chlorotoluene	7.363	91	113984	14.9964	ug/l		96
89)	p-Ethyltoluene	7.350	105	215181	16.9561	ug/l		99
90)	4-Chlorotoluene	7.418	91	111296	14.5396	ug/l		97
91)	n-Propylbenzene	7.289	91	217192	14.7516	ug/l		99
92)	Bromobenzene	7.266	77	105410	13.7807	ug/l		76
93)	1,3,5-Trimethylbenzene	7.376	105	151029	15.1707	ug/l		98
94)	Butyl methacrylate	7.379	41	43223	8.6632	ug/l	#	37
95)	t-Butylbenzene	7.572	119	150544	15.0741	ug/l		96
96)	1,2,4-Trimethylbenzene	7.594	105	159628	15.1207	ug/l		98
97)	sec-Butylbenzene	7.694	105	178180	14.3726	ug/l		98
98)	4-Isopropyltoluene	7.762	119	156724	14.8916	ug/l		98
99)	n-Butylbenzene	8.000	91	153550	14.4449	ug/l		96
100)	p-Diethylbenzene	7.980	119	96547	16.1820	ug/l		97
101)	1,2,4,5-Tetramethylben...	8.440	119	138630	16.5112	ug/l		97
102)	1,2-Dibromo-3-Chloropr...	8.498	157	10983	15.5842	ug/l		81
103)	Camphor	8.935	95	45459	147.8200	ug/l		96
104)	Hexachlorobutadiene	9.073	225	16896	16.0419	ug/l		98
105)	1,2,4-Trichlorobenzene	8.990	180	39700	17.0417	ug/l		99
106)	1,2,3-Trichlorobenzene	9.292	180	27293	18.1950	ug/l		98
107)	Naphthalene	9.151	128	88413	16.1860	ug/l		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 11M81828.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 11M81828.D
Acq On : 08/17/20 15:28
Operator : WP
Sam Mult : 1 Vial# : 15
Misc : A,5ML
Qt Meth : 11M_A0817.M
Qt On : 08/18/20 07:19
Qt Upd On: 08/18/20 07:19
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->

Quantitation Report (QT Reviewed)

Data File: 11M81826.D
Acq On : 08/17/20 14:51
SampleID : CAL @ 5 PPB
Operator : WP
Sam Mult : 1 Vial# : 13
Misc : A,5ML
Qt Meth : 11M_A0817.M
Qt On : 08/18/20 07:29
Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
4) Fluorobenzene	4.961	96	228906	30.00	ug/l		0.00
52) Chlorobenzene-d5	6.546	117	218831	30.00	ug/l		0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	123832	30.00	ug/l		0.00
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	63361	34.17	ug/l		0.00
Spiked Amount 30.000			Recovery = 113.90%				
39) 1,2-Dichloroethane-d4	4.778	67	28455	26.22	ug/l		0.00
Spiked Amount 30.000			Recovery = 87.40%				
66) Toluene-d8	5.787	98	260851	27.35	ug/l		0.00
Spiked Amount 30.000			Recovery = 91.17%				
76) Bromofluorobenzene	7.167	174	102572	32.08	ug/l		0.00
Spiked Amount 30.000			Recovery = 106.93%				
Target Compounds							Qvalue
5) Chlorodifluoromethane	1.678	51	10639	3.4107	ug/l	#	41
6) Dichlorodifluoromethane	1.665	85	8004	6.0111	ug/l		98
7) Chloromethane	1.848	50	8296	2.8669	ug/l		97
8) Bromomethane	2.241	94	8652	7.7722	ug/l		99
9) Vinyl Chloride	1.943	62	9735	4.2023	ug/l		92
10) Chloroethane	2.328	64	6348	4.7369	ug/l		96
11) Trichlorofluoromethane	2.546	101	14559	5.8587	ug/l		98
12) Ethyl ether	2.778	59	6475	3.8396	ug/l		56
13) Furan	2.813	39	11291	3.2774	ug/l		46
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	6931	5.8639	ug/l		93
15) Methylene Chloride	3.376	84	9759	5.7446	ug/l		52
16) Acrolein	2.887	56	6404	13.1095	ug/l		94
17) Acrylonitrile	3.569	53	2900	2.6007	ug/l		94
18) Iodomethane	3.119	142	8762	4.5065	ug/l		97
19) Acetone	3.009	43	11788	14.2389	ug/l		97
20) Carbon Disulfide	3.186	76	22256	4.8146	ug/l		100
21) t-Butyl Alcohol	3.434	59	3737	13.6390	ug/l		96
22) n-Hexane	3.813	57	7871	3.0987	ug/l		84
23) Di-isopropyl-ether	3.952	45	19620	2.6944	ug/l		53
24) 1,1-Dichloroethene	2.987	61	12234	3.9899	ug/l		77
25) Methyl Acetate	3.276	43	5384	2.5062	ug/l		100
26) Methyl-t-butyl ether	3.595	73	22532	5.0140	ug/l		83
27) 1,1-Dichloroethane	3.929	63	15140	4.1145	ug/l		100
28) trans-1,2-Dichloroethene	3.601	96	9900	5.8631	ug/l		66
29) Ethyl-t-butyl ether	4.196	59	23735	3.8670	ug/l		85
30) cis-1,2-Dichloroethene	4.305	61	14792	3.8333	ug/l		72
31) Bromochloromethane	4.453	49	6432m	3.0398	ug/l		
32) 2,2-Dichloropropane	4.315	77	12163	4.7802	ug/l		86
33) Ethyl acetate	4.328	43	7938m	2.7138	ug/l		
34) 1,4-Dioxane	5.337	88	6762	271.3120	ug/l		64
35) 1,1-Dichloropropene	4.701	75	12864	5.1729	ug/l		95
36) Chloroform	4.492	83	16584	5.5591	ug/l		100
38) Cyclohexane	4.649	56	11934	3.1316	ug/l	#	55
40) 1,2-Dichloroethane	4.820	62	12131	4.3687	ug/l		90
41) 2-Butanone	4.315	43	3708m	3.1540	ug/l		
42) 1,1,1-Trichloroethane	4.614	97	15324	5.5677	ug/l		86
43) Carbon Tetrachloride	4.707	117	13053	5.2683	ug/l		99
44) Vinyl Acetate	3.945	43	22819	2.6446	ug/l		100
45) Bromodichloromethane	5.411	83	12042	5.3073	ug/l		95
46) Methylcyclohexane	5.270	83	11474	4.8225	ug/l	#	68
47) Dibromomethane	5.344	174	7700	6.7777	ug/l		96
48) 1,2-Dichloropropane	5.279	63	8981	4.1095	ug/l		98
49) Trichloroethene	5.157	130	11802	6.1867	ug/l		89
50) Benzene	4.820	78	38135	5.4394	ug/l		100
51) tert-Amyl methyl ether	4.855	73	23698	5.0435	ug/l		96
53) Iso-propylacetate	4.813	43	12564	1.9403	ug/l		81
54) Methyl methacrylate	5.299	41	6976	2.0073	ug/l	#	38
55) Dibromochloromethane	6.238	129	9988	4.0813	ug/l		99
56) 2-Chloroethylvinylether	5.543	63	1640	2.2792	ug/l		78
57) cis-1,3-Dichloropropene	5.640	75	13394	3.5104	ug/l		99
58) trans-1,3-Dichloropropene	5.916	75	11627	3.1778	ug/l		95
59) Ethyl methacrylate	5.932	41	6661	2.0208	ug/l	#	42
60) 1,1,2-Trichloroethane	6.019	97	8962	4.3642	ug/l		85
61) 1,2-Dibromoethane	6.312	107	9673	4.3282	ug/l		87
62) 1,3-Dichloropropane	6.112	76	14787	4.0587	ug/l		94
63) 4-Methyl-2-Pentanone	5.704	43	7269	1.8998	ug/l		92
64) 2-Hexanone	6.125	43	5115	1.9072	ug/l		89
65) Tetrachloroethene	6.112	164	9154	4.5850	ug/l		97
67) Toluene	5.826	92	26210	4.4014	ug/l		95

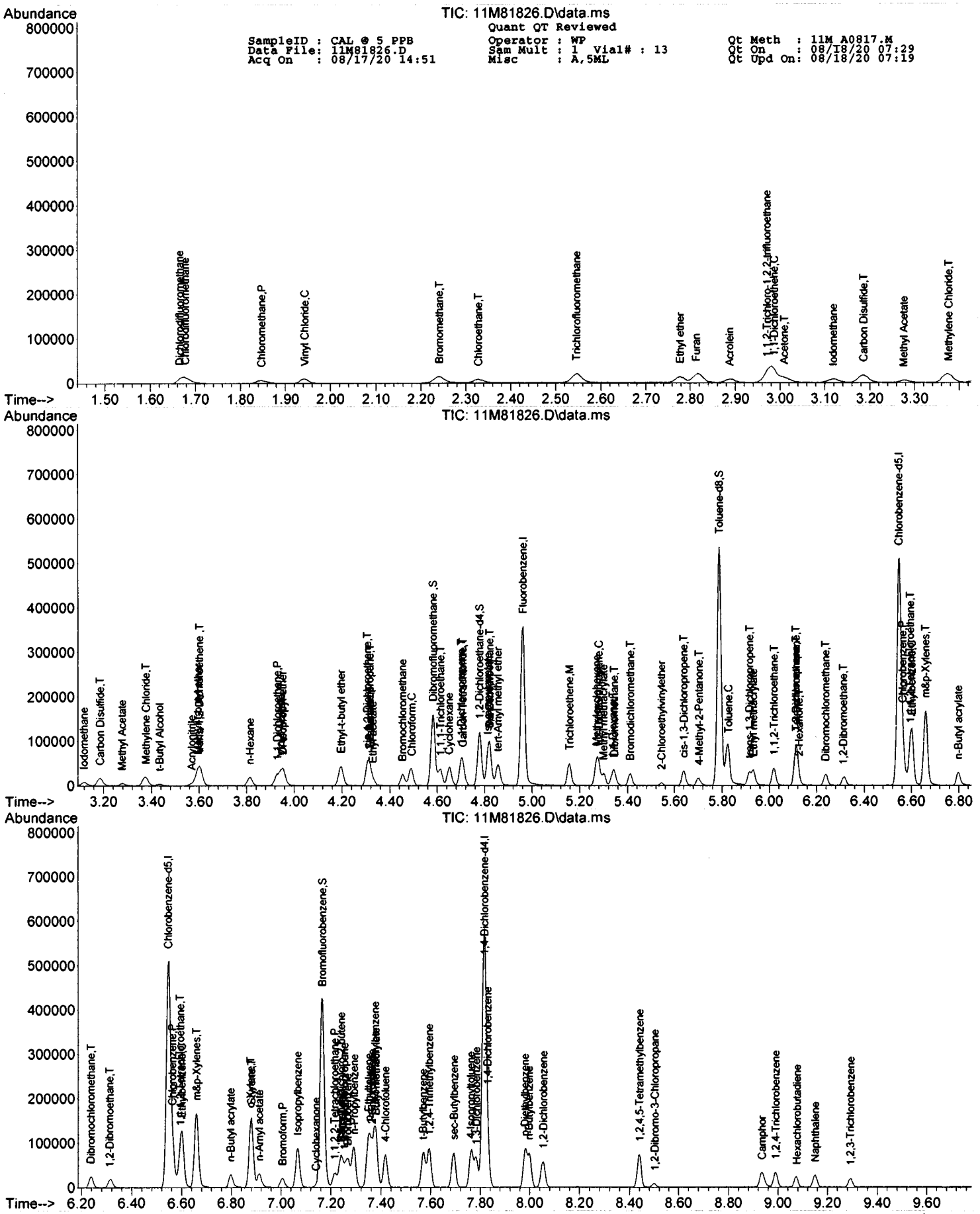
Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB
Data File: 11M81826.D
Acq On : 08/17/20 14:51
Operator : WP
Sam Mult : 1 Vial# : 13
Misc : A,5ML
Qt Meth : 11M_A0817.M
Qt On : 08/18/20 07:29
Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.595	133	9549	4.2139	ug/l		84
69)	Chlorobenzene	6.562	112	29621	4.6551	ug/l		96
71)	n-Butyl acrylate	6.797	55	14158	1.7590	ug/l		89
72)	n-Amyl acetate	6.913	43	11526	1.7035	ug/l		76
73)	Bromoform	7.006	173	7547	3.7485	ug/l		99
74)	Ethylbenzene	6.601	106	12582	3.6133	ug/l		95
75)	1,1,2,2-Tetrachloroethane	7.215	83	12194	3.7517	ug/l		93
77)	Styrene	6.881	104	30970	3.7654	ug/l		94
78)	m&p-Xylenes	6.659	106	37073	7.4222	ug/l		91
79)	o-Xylene	6.877	106	17934	3.7397	ug/l		97
80)	trans-1,4-Dichloro-2-b...	7.241	53	3781	2.0175	ug/l		95
81)	1,3-Dichlorobenzene	7.784	146	22722	4.0707	ug/l		96
82)	1,4-Dichlorobenzene	7.829	146	22256	3.9746	ug/l		96
83)	1,2-Dichlorobenzene	8.054	146	20235	3.9818	ug/l		97
84)	Isopropylbenzene	7.067	105	45715	3.7040	ug/l		99
85)	Cyclohexanone	7.141	55	1994	11.5207	ug/l		74
86)	Camphene	7.241	93	11754	3.3440	ug/l		93
87)	1,2,3-Trichloropropane	7.254	75	13512	3.0455	ug/l		86
88)	2-Chlorotoluene	7.363	91	27008	3.6854	ug/l		94
89)	p-Ethyltoluene	7.350	105	49683	4.0605	ug/l		96
90)	4-Chlorotoluene	7.418	91	26880	3.6421	ug/l		95
91)	n-Propylbenzene	7.292	91	51848	3.6524	ug/l		99
92)	Bromobenzene	7.267	77	25532	3.4620	ug/l		84
93)	1,3,5-Trimethylbenzene	7.376	105	36102	3.7612	ug/l		94
94)	Butyl methacrylate	7.379	41	8978	1.8664	ug/l	#	43
95)	t-Butylbenzene	7.569	119	35103	3.6455	ug/l		98
96)	1,2,4-Trimethylbenzene	7.595	105	36752	3.6107	ug/l		96
97)	sec-Butylbenzene	7.694	105	41502	3.4721	ug/l		97
98)	4-Isopropyltoluene	7.762	119	36654	3.6123	ug/l		97
99)	n-Butylbenzene	7.996	91	34269	3.3436	ug/l		97
100)	p-Diethylbenzene	7.980	119	22674	3.9416	ug/l		94
101)	1,2,4,5-Tetramethylben...	8.440	119	31198	3.8539	ug/l		98
102)	1,2-Dibromo-3-Chloropr...	8.501	157	2229	3.2804	ug/l		85
103)	Camphor	8.935	95	8036	27.1022	ug/l		96
104)	Hexachlorobutadiene	9.077	225	3913	3.8533	ug/l		99
105)	1,2,4-Trichlorobenzene	8.990	180	9025	4.0181	ug/l		97
106)	1,2,3-Trichlorobenzene	9.292	180	5509	3.8091	ug/l		97
107)	Naphthalene	9.151	128	18085	3.4339	ug/l		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 11M81826.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 5 PPB
Data File: 11M81826.D
Acq On : 08/17/20 14:51
Operator : WP
Sam Mult : 1 Vial# : 13
Misc : A,5ML
Qt Meth : 11M_A0817.M
Qt On : 08/18/20 07:29
Qt Upd On: 08/18/20 07:19
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81827.D Sam Mult : 1 Vial# : 14 Qt On : 08/18/20 07:30
Acq On : 08/17/20 15:09 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.958	96	228049	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	218132	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	121969	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	62481	33.82	ug/l	0.00
Spiked Amount 30.000			Recovery = 112.73%			
39) 1,2-Dichloroethane-d4	4.778	67	27175	25.14	ug/l	0.00
Spiked Amount 30.000			Recovery = 83.80%			
66) Toluene-d8	5.787	98	259375	27.28	ug/l	0.00
Spiked Amount 30.000			Recovery = 90.93%			
76) Bromofluorobenzene	7.167	174	101850	32.34	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.80%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	23519	7.5683	ug/l	# 40
6) Dichlorodifluoromethane	1.668	85	18229	13.7416	ug/l	97
7) Chloromethane	1.844	50	17264	5.9884	ug/l	93
8) Bromomethane	2.238	94	16728	15.0835	ug/l	88
9) Vinyl Chloride	1.940	62	21252	9.2084	ug/l	96
10) Chloroethane	2.325	64	13948	10.4472	ug/l	86
11) Trichlorofluoromethane	2.546	101	32195	13.0043	ug/l	97
12) Ethyl ether	2.778	59	14142	8.4176	ug/l	55
13) Furan	2.816	39	23859	6.9514	ug/l	43
14) 1,1,2-Trichloro-1,2,2-...	2.974	101	15860	13.4686	ug/l	94
15) Methylene Chloride	3.373	84	19819	11.7102	ug/l	50
16) Acrolein	2.887	56	13729	28.2100	ug/l	92
17) Acrylonitrile	3.569	53	6727	6.0553	ug/l	90
18) Iodomethane	3.119	142	22550	11.6416	ug/l	100
19) Acetone	3.009	43	26448	32.0669	ug/l	94
20) Carbon Disulfide	3.183	76	49268	10.6980	ug/l	100
21) t-Butyl Alcohol	3.431	59	8176	29.9522	ug/l	99
22) n-Hexane	3.813	57	17399	6.8754	ug/l	90
23) Di-isopropyl-ether	3.955	45	42062	5.7980	ug/l	59
24) 1,1-Dichloroethene	2.984	61	25556	8.3660	ug/l	66
25) Methyl Acetate	3.279	43	11847	5.5354	ug/l	100
26) Methyl-t-butyl ether	3.598	73	47511	10.6123	ug/l	83
27) 1,1-Dichloroethane	3.926	63	32424	8.8448	ug/l	100
28) trans-1,2-Dichloroethene	3.601	96	20698	12.3040	ug/l	68
29) Ethyl-t-butyl ether	4.196	59	49005	8.0140	ug/l	84
30) cis-1,2-Dichloroethene	4.305	61	31616	8.2239	ug/l	64
31) Bromochloromethane	4.453	49	13554m	6.4297	ug/l	
32) 2,2-Dichloropropane	4.312	77	25396	10.0185	ug/l	95
33) Ethyl acetate	4.328	43	19496	6.6903	ug/l	93
34) 1,4-Dioxane	5.334	88	14122	568.7469	ug/l	72
35) 1,1-Dichloropropene	4.701	75	28222	11.3914	ug/l	95
36) Chloroform	4.488	83	35610	11.9816	ug/l	97
38) Cyclohexane	4.652	56	26466	6.9711	ug/l	# 47
40) 1,2-Dichloroethane	4.820	62	26103	9.4358	ug/l	99
41) 2-Butanone	4.305	43	5953	5.0827	ug/l	66
42) 1,1,1-Trichloroethane	4.611	97	31949	11.6518	ug/l	96
43) Carbon Tetrachloride	4.710	117	29011	11.7531	ug/l	96
44) Vinyl Acetate	3.942	43	46756	5.4391	ug/l	100
45) Bromodichloromethane	5.411	83	25796	11.4119	ug/l	99
46) Methylcyclohexane	5.270	83	27299	11.5168	ug/l	# 65
47) Dibromomethane	5.344	174	16199	14.3124	ug/l	97
48) 1,2-Dichloropropane	5.276	63	18253	8.3835	ug/l	94
49) Trichloroethene	5.157	130	25094	13.2038	ug/l	90
50) Benzene	4.820	78	80325	11.5003	ug/l	100
51) tert-Amyl methyl ether	4.855	73	48284	10.3146	ug/l	94
53) Iso-propylacetate	4.813	43	27546	4.2676	ug/l	82
54) Methyl methacrylate	5.299	41	15543	4.4868	ug/l	# 42
55) Dibromochloromethane	6.238	129	22382	9.1750	ug/l	100
56) 2-Chloroethylvinylether	5.543	63	3853	5.3720	ug/l	70
57) cis-1,3-Dichloropropene	5.640	75	28275	7.4344	ug/l	97
58) trans-1,3-Dichloropropene	5.916	75	25122	6.8882	ug/l	98
59) Ethyl methacrylate	5.932	41	14424	4.3900	ug/l	# 37
60) 1,1,2-Trichloroethane	6.019	97	19131	9.3460	ug/l	88
61) 1,2-Dibromoethane	6.315	107	20258	9.0935	ug/l	94
62) 1,3-Dichloropropane	6.112	76	31213	8.5947	ug/l	95
63) 4-Methyl-2-Pentanone	5.701	43	15136	3.9685	ug/l	89
64) 2-Hexanone	6.122	43	10709	4.0058	ug/l	81
65) Tetrachloroethene	6.112	164	20605	10.3536	ug/l	92
67) Toluene	5.823	92	53872	9.0757	ug/l	100

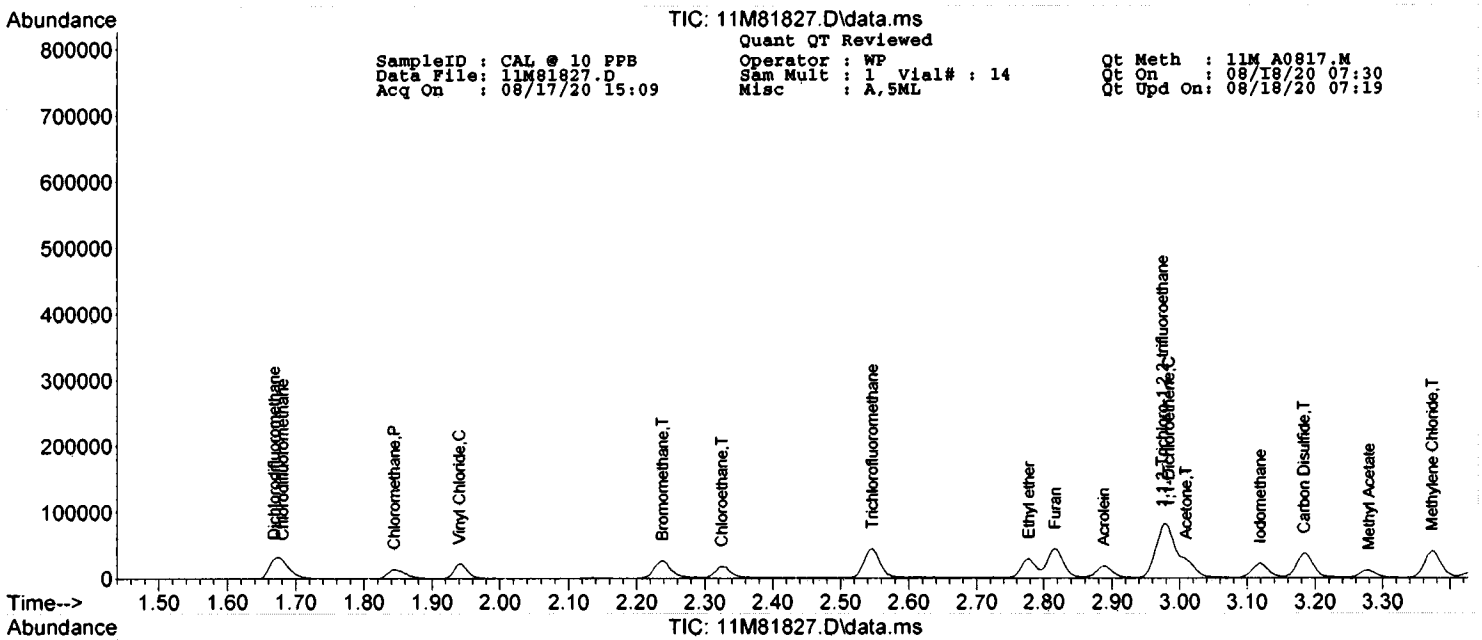
Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81827.D Sam Mult : 1 Vial# : 14 Qt On : 08/18/20 07:30
Acq On : 08/17/20 15:09 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.594	133	20732	9.1782	ug/l		97
69)	Chlorobenzene	6.562	112	62151	9.7987	ug/l		97
71)	n-Butyl acrylate	6.797	55	32268	4.0703	ug/l		90
72)	n-Amyl acetate	6.913	43	25756	3.8647	ug/l		75
73)	Bromoform	7.006	173	15671	7.9025	ug/l		100
74)	Ethylbenzene	6.604	106	28296	8.2503	ug/l		91
75)	1,1,2,2-Tetrachloroethane	7.215	83	24943	7.7915	ug/l		98
77)	Styrene	6.881	104	65730	8.1137	ug/l		95
78)	m&p-Xylenes	6.659	106	78165	15.8880	ug/l		94
79)	o-Xylene	6.877	106	38741	8.2019	ug/l		99
80)	trans-1,4-Dichloro-2-b...	7.244	53	8481	4.5946	ug/l		91
81)	1,3-Dichlorobenzene	7.784	146	47126	8.5717	ug/l		95
82)	1,4-Dichlorobenzene	7.829	146	48635	8.8182	ug/l		99
83)	1,2-Dichlorobenzene	8.054	146	42865	8.5638	ug/l		97
84)	Isopropylbenzene	7.067	105	97648	8.0327	ug/l		99
85)	Cyclohexanone	7.141	55	4016	23.5576	ug/l		80
86)	Camphene	7.238	93	27308	7.8878	ug/l		99
87)	1,2,3-Trichloropropane	7.254	75	29831	6.8263	ug/l		90
88)	2-Chlorotoluene	7.363	91	56592	7.8403	ug/l		95
89)	p-Ethyltoluene	7.350	105	106981	8.8769	ug/l		99
90)	4-Chlorotoluene	7.418	91	56152	7.7245	ug/l		95
91)	n-Propylbenzene	7.292	91	111375	7.9656	ug/l		100
92)	Bromobenzene	7.266	77	53596	7.3783	ug/l		84
93)	1,3,5-Trimethylbenzene	7.376	105	76874	8.1313	ug/l		99
94)	Butyl methacrylate	7.379	41	17876	3.7728	ug/l	#	16
95)	t-Butylbenzene	7.572	119	76016	8.0151	ug/l		97
96)	1,2,4-Trimethylbenzene	7.594	105	79192	7.8991	ug/l		98
97)	sec-Butylbenzene	7.694	105	91306	7.7555	ug/l		99
98)	4-Isopropyltoluene	7.762	119	79129	7.9173	ug/l		98
99)	n-Butylbenzene	8.000	91	76029	7.5314	ug/l		99
100)	p-Diethylbenzene	7.980	119	48434	8.5483	ug/l		93
101)	1,2,4,5-Tetramethylben...	8.440	119	66150	8.2963	ug/l		97
102)	1,2-Dibromo-3-Chloropr...	8.498	157	5297	7.9146	ug/l		78
103)	Camphor	8.935	95	20182	69.1053	ug/l		97
104)	Hexachlorobutadiene	9.073	225	8706	8.7041	ug/l		97
105)	1,2,4-Trichlorobenzene	8.990	180	19239	8.6964	ug/l		99
106)	1,2,3-Trichlorobenzene	9.295	180	12447	8.7377	ug/l		98
107)	Naphthalene	9.151	128	40591	7.8251	ug/l		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
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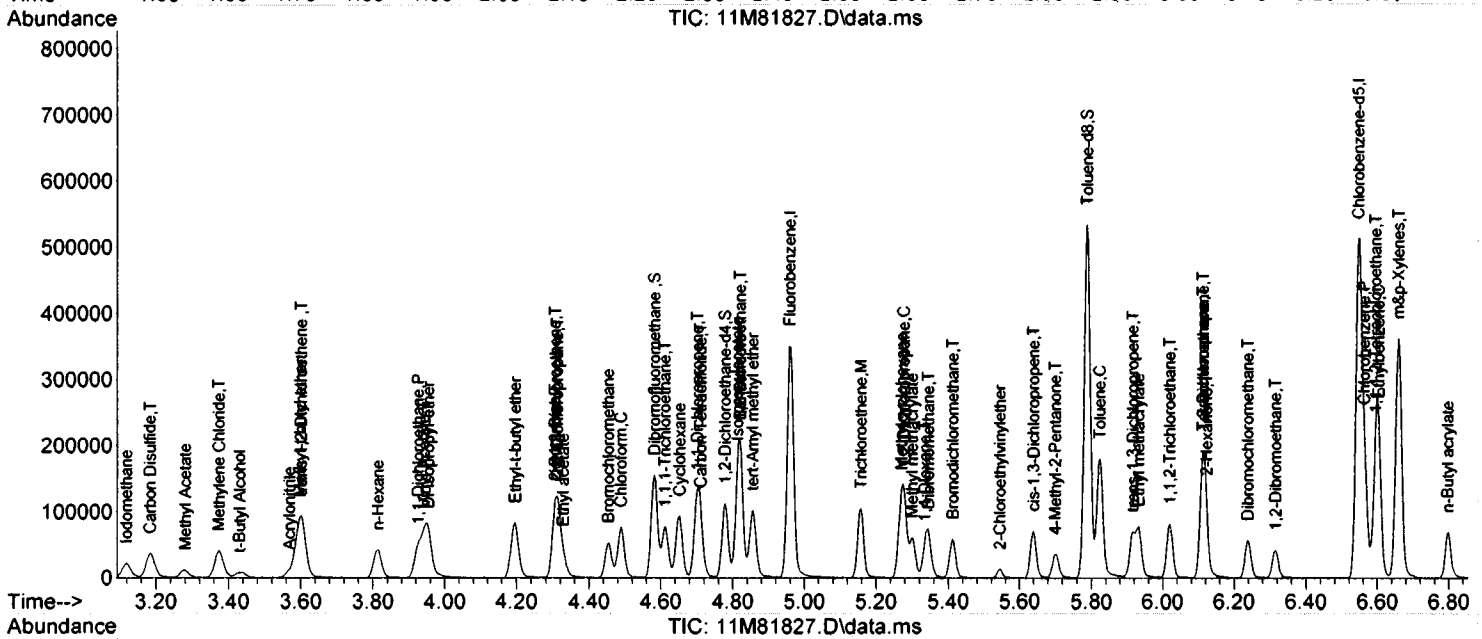
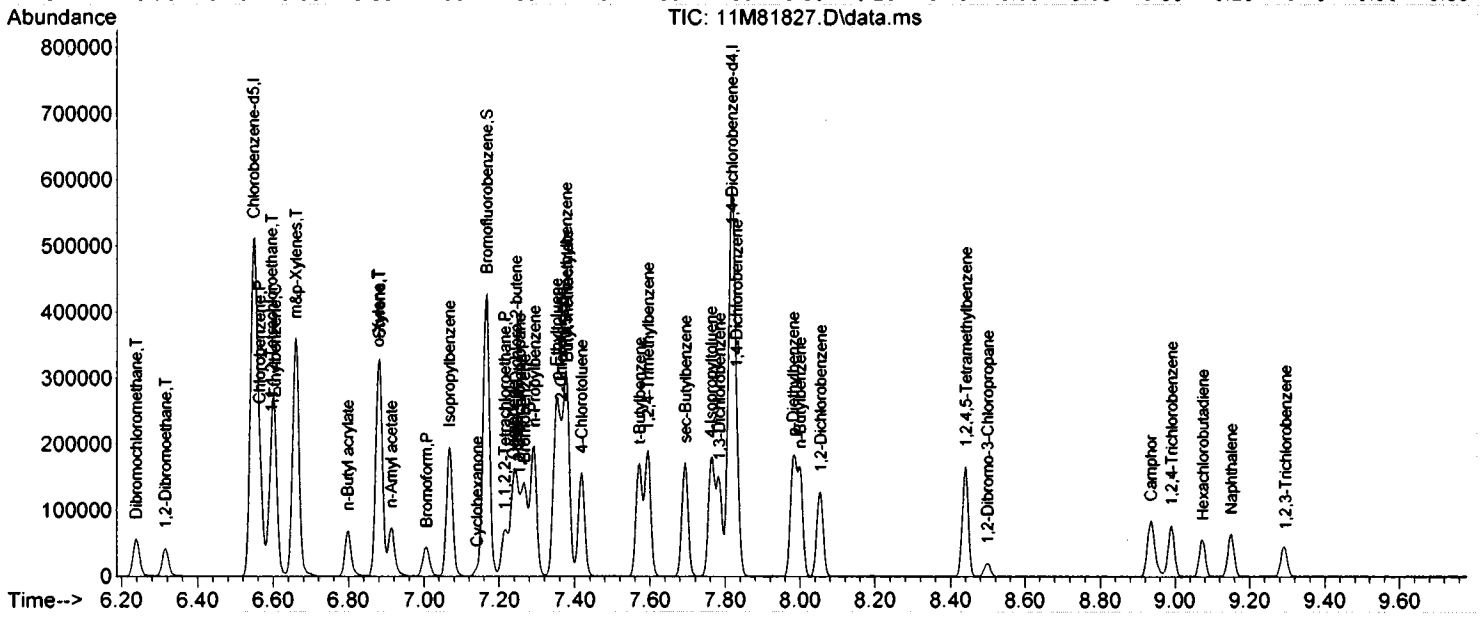
Quant QT Reviewed
SampleID : CAL @ 10 PPB
Data File: 11M81827.D
Acq On : 08/17/20 15:09
Operator : WP
Sam Mult : 1 Vial# : 14
Misc : A,5ML
Qt Meth : 11M_A0817.M
Qt On : 08/19/20 07:30
Qt Upd On: 08/18/20 07:19
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->


Abundance
TIC: 11M81827.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
Time-->


Abundance
TIC: 11M81827.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81830.D Sam Mult : 1 Vial# : 17 Qt On : 08/18/20 07:22
Acq On : 08/17/20 16:05 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
4) Fluorobenzene	4.961	96	237895	30.00	ug/l		0.00
52) Chlorobenzene-d5	6.546	117	230237	30.00	ug/l		0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	137065	30.00	ug/l		0.00
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	65900	34.20	ug/l		0.00
Spiked Amount 30.000			Recovery = 114.00%				
39) 1,2-Dichloroethane-d4	4.778	67	29619	26.26	ug/l		0.00
Spiked Amount 30.000			Recovery = 87.53%				
66) Toluene-d8	5.787	98	268035	26.71	ug/l		0.00
Spiked Amount 30.000			Recovery = 89.03%				
76) Bromofluorobenzene	7.167	174	112022	31.66	ug/l		0.00
Spiked Amount 30.000			Recovery = 105.53%				
Target Compounds							Qvalue
5) Chlorodifluoromethane	1.681	51	126431	39.0008	ug/l	#	47
6) Dichlorodifluoromethane	1.668	85	85422	61.7286	ug/l		97
7) Chloromethane	1.844	50	82403	27.4003	ug/l		99
8) Bromomethane	2.241	94	79859	69.0277	ug/l		100
9) Vinyl Chloride	1.940	62	102021	42.3757	ug/l		91
10) Chloroethane	2.324	64	67553	48.5037	ug/l		89
11) Trichlorofluoromethane	2.546	101	150388	58.2310	ug/l		96
12) Ethyl ether	2.778	59	71282	40.6723	ug/l		61
13) Furan	2.816	39	116945	32.6622	ug/l		42
14) 1,1,2-Trichloro-1,2,2-...	2.977	101	71798	58.4487	ug/l		95
15) Methylene Chloride	3.376	84	98116	55.5733	ug/l		54
16) Acrolein	2.890	56	68245	134.4241	ug/l		99
17) Acrylonitrile	3.562	53	32913	28.4004	ug/l		99
18) Iodomethane	3.119	142	142531	70.5372	ug/l		99
19) Acetone	3.009	43	118532	137.7662	ug/l		92
20) Carbon Disulfide	3.186	76	246244	51.2563	ug/l		100
21) t-Butyl Alcohol	3.434	59	37182	130.5759	ug/l		100
22) n-Hexane	3.813	57	81142	30.7372	ug/l		87
23) Di-isopropyl-ether	3.955	45	214426	28.3341	ug/l		57
24) 1,1-Dichloroethene	2.984	61	127647	40.0569	ug/l		72
25) Methyl Acetate	3.276	43	55728	24.9609	ug/l		100
26) Methyl-t-butyl ether	3.594	73	244336	52.3174	ug/l		82
27) 1,1-Dichloroethane	3.926	63	161990	42.3599	ug/l		97
28) trans-1,2-Dichloroethene	3.604	96	101865	58.0478	ug/l		71
29) Ethyl-t-butyl ether	4.196	59	256356	40.1879	ug/l		84
30) cis-1,2-Dichloroethene	4.308	61	156847	39.1102	ug/l		63
31) Bromochloromethane	4.453	49	67064m	30.4971	ug/l		
32) 2,2-Dichloropropane	4.315	77	133434	50.4601	ug/l		94
33) Ethyl acetate	4.328	43	84078	27.6583	ug/l		100
34) 1,4-Dioxane	5.337	88	63486	2451.0021	ug/l		71
35) 1,1-Dichloropropene	4.701	75	139983	54.1634	ug/l		96
36) Chloroform	4.488	83	179319	57.8378	ug/l		96
38) Cyclohexane	4.652	56	122621	30.9615	ug/l	#	48
40) 1,2-Dichloroethane	4.819	62	131146	45.4450	ug/l		99
41) 2-Butanone	4.302	43	33745	27.6189	ug/l		64
42) 1,1,1-Trichloroethane	4.610	97	164299	57.4397	ug/l		95
43) Carbon Tetrachloride	4.707	117	147018	57.0959	ug/l		98
44) Vinyl Acetate	3.945	43	260573	29.0580	ug/l		100
45) Bromodichloromethane	5.411	83	131381	55.7160	ug/l		98
46) Methylcyclohexane	5.270	83	123802	50.0673	ug/l	#	65
47) Dibromomethane	5.344	174	84683	71.7236	ug/l		98
48) 1,2-Dichloropropane	5.276	63	94306	41.5213	ug/l		97
49) Trichloroethene	5.157	130	127424	64.2723	ug/l		91
50) Benzene	4.819	78	408210	56.0252	ug/l		100
51) tert-Amyl methyl ether	4.858	73	257674	52.7672	ug/l		92
53) Iso-propylacetate	4.813	43	146102	21.4448	ug/l		79
54) Methyl methacrylate	5.299	41	82232	22.4900	ug/l		52
55) Dibromochloromethane	6.237	129	120575	46.8285	ug/l		99
56) 2-Chloroethylvinylether	5.543	63	21546	28.4608	ug/l		82
57) cis-1,3-Dichloropropene	5.639	75	157674	39.2777	ug/l		96
58) trans-1,3-Dichloropropene	5.916	75	145931	37.9089	ug/l		99
59) Ethyl methacrylate	5.932	41	79278	22.8598	ug/l	#	38
60) 1,1,2-Trichloroethane	6.019	97	96022	44.4428	ug/l		89
61) 1,2-Dibromoethane	6.315	107	104933	44.6261	ug/l		97
62) 1,3-Dichloropropane	6.109	76	159422	41.5898	ug/l		99
63) 4-Methyl-2-Pentanone	5.700	43	79315	19.7023	ug/l		92
64) 2-Hexanone	6.122	43	57533	20.3890	ug/l		82
65) Tetrachloroethene	6.112	164	103347	49.1997	ug/l		96
67) Toluene	5.823	92	273313	43.6234	ug/l		95

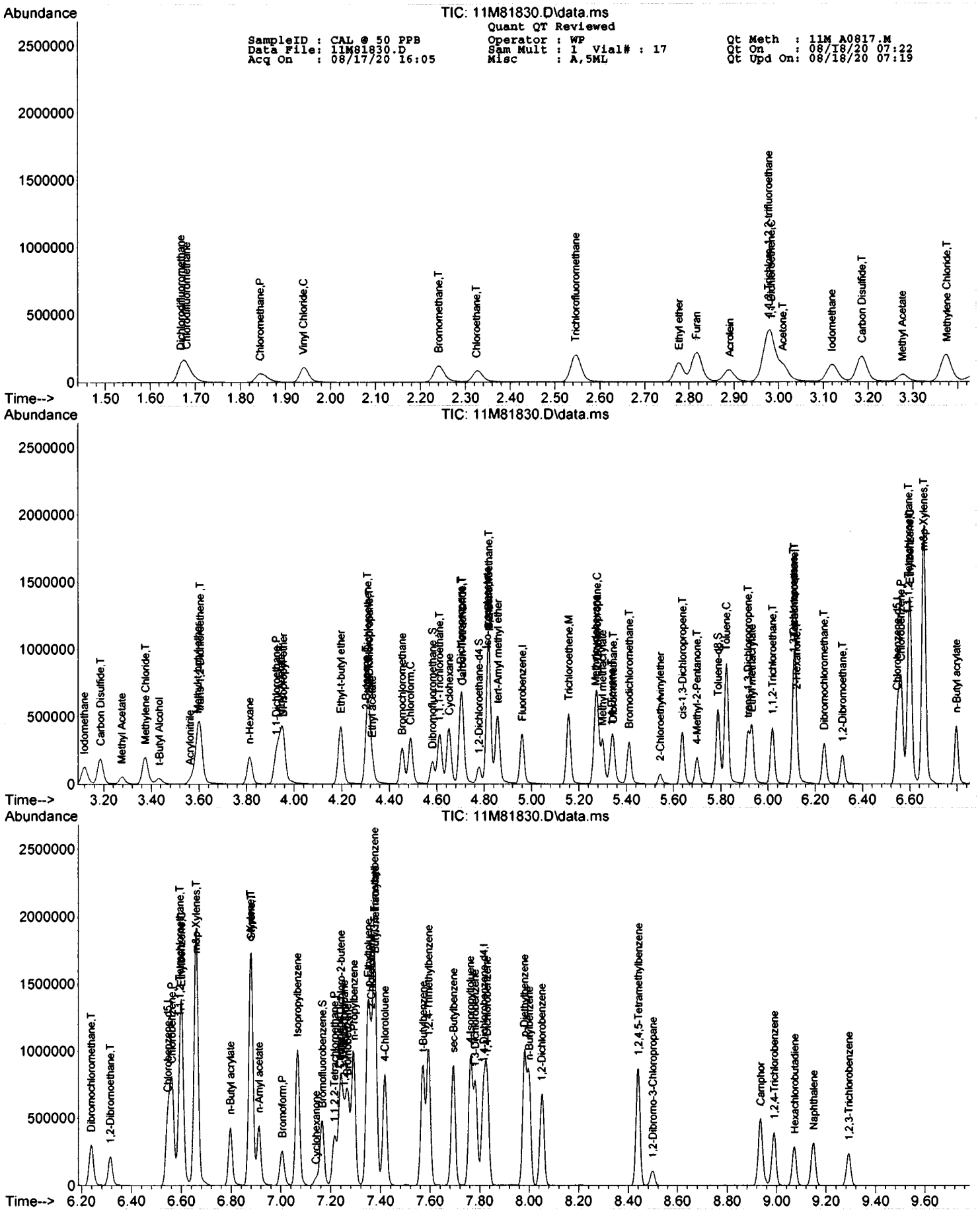
Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81830.D Sam Mult : 1 Vial# : 17 Qt On : 08/18/20 07:22
Acq On : 08/17/20 16:05 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.594	133	109109	45.7638	ug/l		99
69)	Chlorobenzene	6.562	112	315712	47.1579	ug/l		97
71)	n-Butyl acrylate	6.797	55	182471	20.4820	ug/l		89
72)	n-Amyl acetate	6.913	43	144580	19.3051	ug/l		75
73)	Bromoform	7.006	173	88754	39.8270	ug/l		98
74)	Ethylbenzene	6.601	106	142976	37.0961	ug/l		97
75)	1,1,2,2-Tetrachloroethane	7.215	83	126178	35.0733	ug/l		97
77)	Styrene	6.880	104	344240	37.8127	ug/l		91
78)	m&p-Xylenes	6.659	106	415715	75.1926	ug/l		95
79)	o-Xylene	6.877	106	199658	37.6142	ug/l		100
80)	trans-1,4-Dichloro-2-b...	7.241	53	46093	22.2206	ug/l		81
81)	1,3-Dichlorobenzene	7.781	146	246662	39.9237	ug/l		96
82)	1,4-Dichlorobenzene	7.829	146	248681	40.1235	ug/l		97
83)	1,2-Dichlorobenzene	8.051	146	224103	39.8414	ug/l		97
84)	Isopropylbenzene	7.067	105	504632	36.9401	ug/l		100
85)	Cyclohexanone	7.141	55	17548	91.5985	ug/l		82
86)	Camphene	7.237	93	134308	34.5218	ug/l		98
87)	1,2,3-Trichloropropane	7.253	75	155201	31.6036	ug/l		91
88)	2-Chlorotoluene	7.363	91	296064	36.4994	ug/l		96
89)	p-Ethyltoluene	7.350	105	563297	41.5926	ug/l		99
90)	4-Chlorotoluene	7.417	91	299392	36.6497	ug/l		96
91)	n-Propylbenzene	7.292	91	568703	36.1940	ug/l		100
92)	Bromobenzene	7.266	77	272088	33.3316	ug/l		79
93)	1,3,5-Trimethylbenzene	7.376	105	400462	37.6931	ug/l		99
94)	Butyl methacrylate	7.379	41	110925	20.8329	ug/l	#	27
95)	t-Butylbenzene	7.572	119	395375	37.0966	ug/l		96
96)	1,2,4-Trimethylbenzene	7.594	105	420839	37.3539	ug/l		99
97)	sec-Butylbenzene	7.694	105	469099	35.4566	ug/l		98
98)	4-Isopropyltoluene	7.761	119	418017	37.2184	ug/l		98
99)	n-Butylbenzene	7.999	91	403048	35.5285	ug/l		82
100)	p-Diethylbenzene	7.980	119	256358	40.2622	ug/l		82
101)	1,2,4,5-Tetramethylben...	8.440	119	361421	40.3360	ug/l		98
102)	1,2-Dibromo-3-Chloropr...	8.498	157	26620	35.3939	ug/l		80
103)	Camphor	8.935	95	103730	316.0637	ug/l		95
104)	Hexachlorobutadiene	9.073	225	43286	38.5102	ug/l		98
105)	1,2,4-Trichlorobenzene	8.990	180	97709	39.3020	ug/l		99
106)	1,2,3-Trichlorobenzene	9.292	180	61616	38.4902	ug/l		99
107)	Naphthalene	9.150	128	199996	34.3086	ug/l		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 50 PPB
Data File: 11M81830.D
Acq On : 08/17/20 16:05
Operator : WP
Sam Mult : 1 Vial# : 17
Misc : A,5ML
Qt Meth : 11M_A0817.M
Qt On : 08/18/20 07:22
Qt Upd On: 08/18/20 07:19
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81837.D Sam Mult : 1 Vial# : 24 Qt On : 08/18/20 07:27
Acq On : 08/17/20 18:14 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
4) Fluorobenzene	4.961	96	251358	30.00	ug/l		0.00
52) Chlorobenzene-d5	6.546	117	243428	30.00	ug/l		0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	224715	30.00	ug/l		0.00
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	69451	34.11	ug/l		0.00
Spiked Amount 30.000			Recovery = 113.70%				
39) 1,2-Dichloroethane-d4	4.778	67	29415	24.69	ug/l		0.00
Spiked Amount 30.000			Recovery = 82.30%				
66) Toluene-d8	5.787	98	282756	26.65	ug/l		0.00
Spiked Amount 30.000			Recovery = 88.83%				
76) Bromofluorobenzene	7.167	174	127149	21.92	ug/l		0.00
Spiked Amount 30.000			Recovery = 73.07%				
Target Compounds							Qvalue
5) Chlorodifluoromethane	1.681	51	278683m	81.3623	ug/l		
6) Dichlorodifluoromethane	1.668	85	206095	140.9537	ug/l		99
7) Chloromethane	1.844	50	188275	59.2513	ug/l		100
8) Bromomethane	2.238	94	190554	155.8872	ug/l		92
9) Vinyl Chloride	1.940	62	230602	90.6532	ug/l		92
10) Chloroethane	2.325	64	149020	101.2669	ug/l		91
11) Trichlorofluoromethane	2.546	101	360911	132.2615	ug/l		99
12) Ethyl ether	2.778	59	159882	86.3399	ug/l		60
13) Furan	2.816	39	255838	67.6272	ug/l	#	36
14) 1,1,2-Trichloro-1,2,2-...	2.974	101	180808	139.3068	ug/l		95
15) Methylene Chloride	3.373	84	218087	116.9093	ug/l		55
16) Acrolein	2.887	56	158961	296.3395	ug/l		99
17) Acrylonitrile	3.569	53	75992	62.0607	ug/l		93
18) Iodomethane	3.119	142	314525	147.3182	ug/l		99
19) Acetone	3.009	43	274112	301.5282	ug/l		89
20) Carbon Disulfide	3.186	76	579083	114.0814	ug/l		100
21) t-Butyl Alcohol	3.434	59	92538	307.5693	ug/l		95
22) n-Hexane	3.813	57	199678	71.5883	ug/l		86
23) Di-isopropyl-ether	3.955	45	476529	59.5955	ug/l		53
24) 1,1-Dichloroethene	2.980	61	289409	85.9551	ug/l		69
25) Methyl Acetate	3.276	43	124733	52.8762	ug/l		100
26) Methyl-t-butyl ether	3.595	73	565910	114.6829	ug/l		81
27) 1,1-Dichloroethane	3.926	63	360592	89.2432	ug/l		99
28) trans-1,2-Dichloroethene	3.604	96	232980	125.6527	ug/l		72
29) Ethyl-t-butyl ether	4.196	59	586760	87.0572	ug/l		84
30) cis-1,2-Dichloroethene	4.308	61	356269	84.0784	ug/l		63
31) Bromochloromethane	4.453	49	143195m	61.6296	ug/l		
32) 2,2-Dichloropropane	4.315	77	297266	106.3945	ug/l		93
33) Ethyl acetate	4.328	43	199845	62.2198	ug/l		98
34) 1,4-Dioxane	5.334	88	153436	5606.4195	ug/l		72
35) 1,1-Dichloropropene	4.701	75	323391	118.4270	ug/l		96
36) Chloroform	4.488	83	399453	121.9393	ug/l		97
38) Cyclohexane	4.652	56	303224	72.4625	ug/l	#	49
40) 1,2-Dichloroethane	4.820	62	293239	96.1712	ug/l		96
41) 2-Butanone	4.305	43	70195	54.3746	ug/l		66
42) 1,1,1-Trichloroethane	4.611	97	377426	124.8826	ug/l		94
43) Carbon Tetrachloride	4.707	117	353293	129.8559	ug/l		98
44) Vinyl Acetate	3.945	43	596063	62.9102	ug/l		100
45) Bromodichloromethane	5.411	83	307245	123.3175	ug/l		99
46) Methylcyclohexane	5.270	83	320182	122.5508	ug/l	#	68
47) Dibromomethane	5.344	174	194590	155.9837	ug/l		96
48) 1,2-Dichloropropane	5.279	63	213004	88.7589	ug/l		99
49) Trichloroethene	5.157	130	290067	138.4726	ug/l		92
50) Benzene	4.820	78	926211	120.3101	ug/l		100
51) tert-Amyl methyl ether	4.855	73	593949	115.1159	ug/l		90
53) Iso-propylacetate	4.813	43	345609	47.9795	ug/l		82
54) Methyl methacrylate	5.299	41	199738	51.6671	ug/l		51
55) Dibromochloromethane	6.238	129	275275	101.1171	ug/l		97
56) 2-Chloroethylvinylether	5.543	63	50712	63.3571	ug/l		80
57) cis-1,3-Dichloropropene	5.640	75	354287	83.4729	ug/l		98
58) trans-1,3-Dichloropropene	5.916	75	335450	82.4187	ug/l		100
59) Ethyl methacrylate	5.932	41	181640	49.5376	ug/l	#	37
60) 1,1,2-Trichloroethane	6.019	97	218221	95.5283	ug/l		87
61) 1,2-Dibromoethane	6.315	107	238590	95.9695	ug/l		97
62) 1,3-Dichloropropane	6.112	76	365028	90.0677	ug/l		98
63) 4-Methyl-2-Pentanone	5.701	43	185962	43.6909	ug/l		94
64) 2-Hexanone	6.122	43	136592	45.7836	ug/l		81
65) Tetrachloroethene	6.115	164	243974	109.8532	ug/l		97
67) Toluene	5.823	92	618163	93.3183	ug/l		98

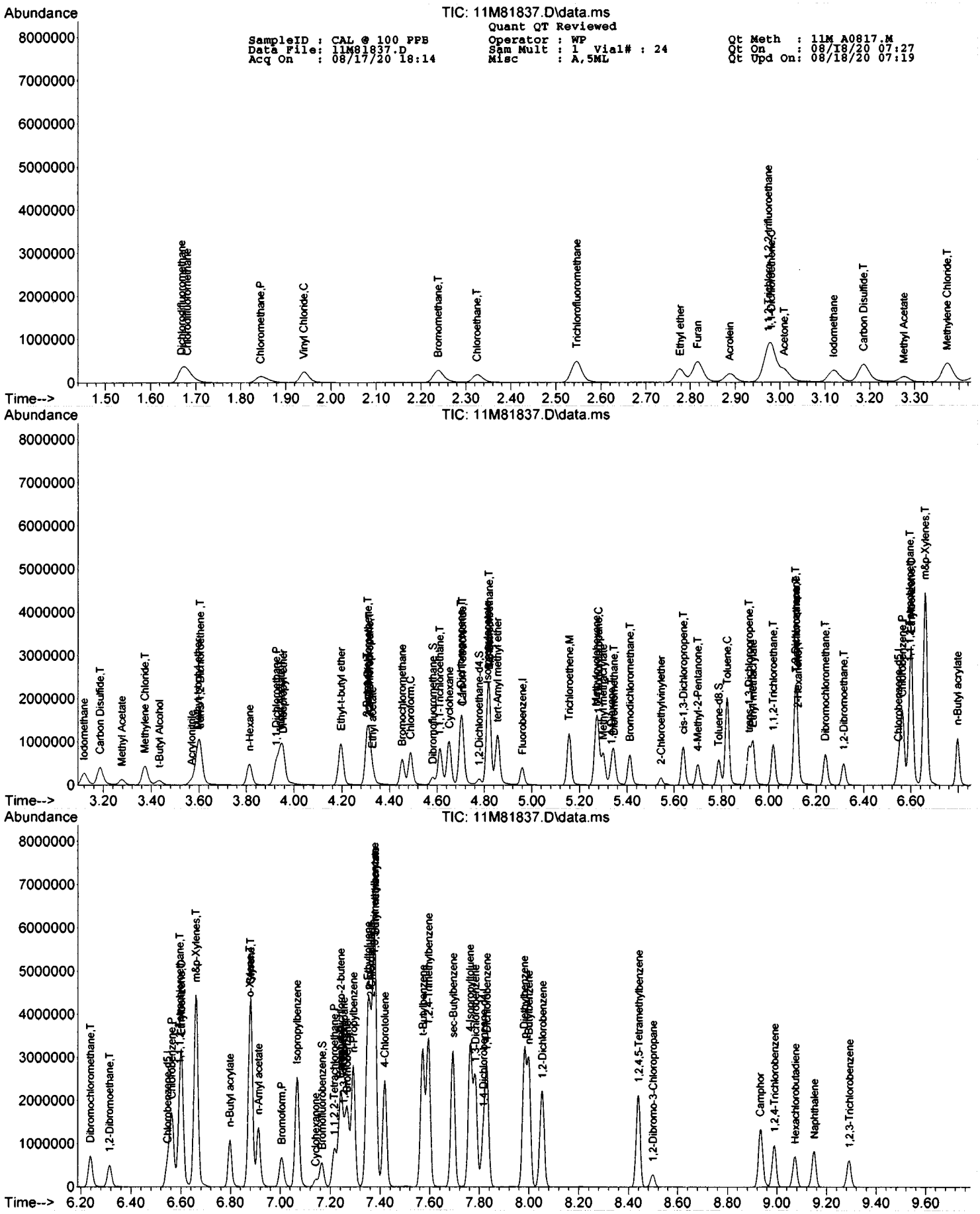
Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81837.D Sam Mult : 1 Vial# : 24 Qt On : 08/18/20 07:27
Acq On : 08/17/20 18:14 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.594	133	253207	100.4482	ug/l		100
69)	Chlorobenzene	6.562	112	708772	100.1325	ug/l		99
71)	n-Butyl acrylate	6.797	55	448462	30.7043	ug/l		88
72)	n-Amyl acetate	6.913	43	443963	36.1580	ug/l		77
73)	Bromoform	7.006	173	233750	63.9787	ug/l		99
74)	Ethylbenzene	6.601	106	333440	52.7689	ug/l		99
75)	1,1,2,2-Tetrachloroethane	7.215	83	304048	51.5502	ug/l		98
77)	Styrene	6.881	104	857861	57.4761	ug/l		92
78)	m&p-Xylenes	6.659	106	973999	107.4565	ug/l		95
79)	o-Xylene	6.877	106	486666	55.9231	ug/l		99
80)	trans-1,4-Dichloro-2-b...	7.241	53	119527	35.1464	ug/l		77
81)	1,3-Dichlorobenzene	7.784	146	867023	85.5961	ug/l		97
82)	1,4-Dichlorobenzene	7.829	146	883540	86.9514	ug/l		97
83)	1,2-Dichlorobenzene	8.054	146	759771	82.3880	ug/l		98
84)	Isopropylbenzene	7.067	105	1271778	56.7844	ug/l		100
85)	Cyclohexanone	7.141	55	47269	150.4983	ug/l		83
86)	Camphene	7.241	93	348698	54.6682	ug/l		97
87)	1,2,3-Trichloropropane	7.254	75	402207	49.9559	ug/l		92
88)	2-Chlorotoluene	7.363	91	1015378	76.3523	ug/l		96
89)	p-Ethyltoluene	7.350	105	1738331	78.2899	ug/l		100
90)	4-Chlorotoluene	7.418	91	964247	71.9967	ug/l		96
91)	n-Propylbenzene	7.292	91	1576619	61.2030	ug/l		99
92)	Bromobenzene	7.266	77	700426	52.3364	ug/l		84
93)	1,3,5-Trimethylbenzene	7.376	105	1387677	79.6680	ug/l		99
94)	Butyl methacrylate	7.379	41	333510	38.2054	ug/l	#	3
95)	t-Butylbenzene	7.572	119	1424430	81.5193	ug/l		96
96)	1,2,4-Trimethylbenzene	7.594	105	1471042	79.6414	ug/l		98
97)	sec-Butylbenzene	7.694	105	1694491	78.1207	ug/l		98
98)	4-Isopropyltoluene	7.762	119	1472545	79.9700	ug/l		98
99)	n-Butylbenzene	8.000	91	1382983	74.3587	ug/l		98
100)	p-Diethylbenzene	7.980	119	822866	78.8268	ug/l		99
101)	1,2,4,5-Tetramethylben...	8.440	119	883370	60.1335	ug/l		97
102)	1,2-Dibromo-3-Chloropr...	8.498	157	69156	56.0847	ug/l		80
103)	Camphor	8.932	95	279216	518.9256	ug/l		96
104)	Hexachlorobutadiene	9.073	225	108340	58.7910	ug/l		99
105)	1,2,4-Trichlorobenzene	8.990	180	244455	59.9754	ug/l		99
106)	1,2,3-Trichlorobenzene	9.292	180	160577	61.1835	ug/l		99
107)	Naphthalene	9.151	128	521814	54.5998	ug/l		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 100 PPB
Data File: 11M81837.D
Acq On : 08/17/20 18:14
Operator : WP
Sam Mult : 1 Vial# : 24
Misc : A,5ML
Qt Meth : 11M_A0817.M
Qt On : 08/18/20 07:27
Qt Upd On: 08/18/20 07:19
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 250 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81834.D Sam Mult : 1 Vial# : 21 Qt On : 08/18/20 07:26
Acq On : 08/17/20 17:18 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	297871	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	258850	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	155842	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	69280	28.71	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.70%			
39) 1,2-Dichloroethane-d4	4.778	67	29972	21.23	ug/l	0.00
Spiked Amount 30.000			Recovery = 70.77%			
66) Toluene-d8	5.787	98	289324	25.64	ug/l	0.00
Spiked Amount 30.000			Recovery = 85.47%			
76) Bromofluorobenzene	7.167	174	92661	23.03	ug/l	0.00
Spiked Amount 30.000			Recovery = 76.77%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.678	51	752556	185.4027	ug/l #	45
6) Dichlorodifluoromethane	1.665	85	529170	305.3999	ug/l	99
7) Chloromethane	1.841	50	479299	127.2848	ug/l	99
8) Bromomethane	2.222	94	507890	350.6118	ug/l	95
9) Vinyl Chloride	1.940	62	596061	197.7311	ug/l	91
10) Chloroethane	2.318	64	385643	221.1429	ug/l	90
11) Trichlorofluoromethane	2.540	101	932338	288.3177	ug/l	97
12) Ethyl ether	2.775	59	420052	191.4166	ug/l	62
13) Furan	2.813	39	675639	150.7076	ug/l #	36
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	464221	301.8172	ug/l	93
15) Methylene Chloride	3.369	84	576046	260.5798	ug/l	54
16) Acrolein	2.887	56	420414	661.3640	ug/l	98
17) Acrylonitrile	3.566	53	197177	135.8845	ug/l	92
18) Iodomethane	3.119	142	864069	341.5185	ug/l	100
19) Acetone	3.009	43	697616	647.5611	ug/l	92
20) Carbon Disulfide	3.186	76	1535383	255.2438	ug/l	100
21) t-Butyl Alcohol	3.434	59	253639	711.3828	ug/l	95
22) n-Hexane	3.810	57	527052	159.4519	ug/l	86
23) Di-isopropyl-ether	3.951	45	1306221	137.8496	ug/l	54
24) 1,1-Dichloroethene	2.977	61	765161	191.7683	ug/l	67
25) Methyl Acetate	3.273	43	320874	114.7831	ug/l	100
26) Methyl-t-butyl ether	3.594	73	1506991	257.7071	ug/l	81
27) 1,1-Dichloroethane	3.926	63	962894	201.0954	ug/l	99
28) trans-1,2-Dichloroethene	3.601	96	619416	281.9032	ug/l	71
29) Ethyl-t-butyl ether	4.196	59	1550153	194.0811	ug/l	83
30) cis-1,2-Dichloroethene	4.305	61	965006	192.1769	ug/l	62
31) Bromochloromethane	4.453	49	359193m	130.4529	ug/l	
32) 2,2-Dichloropropane	4.311	77	841343	254.1039	ug/l	92
33) Ethyl acetate	4.328	43	541877	142.3642	ug/l	97
34) 1,4-Dioxane	5.337	88	462750	14268.2017	ug/l	71
35) 1,1-Dichloropropene	4.701	75	863871	266.9539	ug/l	96
36) Chloroform	4.488	83	1053876	271.4764	ug/l	96
38) Cyclohexane	4.649	56	796616	160.6435	ug/l #	50
40) 1,2-Dichloroethane	4.819	62	837482	231.7732	ug/l	96
41) 2-Butanone	4.302	43	188402	123.1516	ug/l	57
42) 1,1,1-Trichloroethane	4.611	97	1000185	279.2639	ug/l	95
43) Carbon Tetrachloride	4.707	117	941866	292.1328	ug/l	99
44) Vinyl Acetate	3.942	43	1608972	143.2987	ug/l	100
45) Bromodichloromethane	5.411	83	823569	278.9359	ug/l	99
46) Methylcyclohexane	5.270	83	837266	270.4253	ug/l #	65
47) Dibromomethane	5.344	174	527385	356.7393	ug/l	98
48) 1,2-Dichloropropane	5.276	63	580334	204.0642	ug/l	97
49) Trichloroethene	5.157	130	781423	314.7865	ug/l	89
50) Benzene	4.819	78	2627900	288.0485	ug/l	100
51) tert-Amyl methyl ether	4.855	73	2107746	344.7220	ug/l	90
53) Iso-propylacetate	4.813	43	949057	123.9040	ug/l	81
54) Methyl methacrylate	5.299	41	516798	125.7179	ug/l #	47
55) Dibromochloromethane	6.237	129	932714	322.2023	ug/l	98
56) 2-Chloroethylvinylether	5.543	63	132041	155.1372	ug/l	77
57) cis-1,3-Dichloropropene	5.639	75	968423	214.5744	ug/l	98
58) trans-1,3-Dichloropropene	5.916	75	1187544	274.3910	ug/l	99
59) Ethyl methacrylate	5.932	41	722368	185.2697	ug/l #	40
60) 1,1,2-Trichloroethane	6.019	97	807725	332.5227	ug/l	87
61) 1,2-Dibromoethane	6.315	107	698872	264.3632	ug/l	98
62) 1,3-Dichloropropane	6.112	76	1224660	284.1717	ug/l	99
63) 4-Methyl-2-Pentanone	5.700	43	495028	109.3753	ug/l	94
64) 2-Hexanone	6.122	43	504640	159.0701	ug/l	84
65) Tetrachloroethene	6.115	164	808226	342.2350	ug/l	98
67) Toluene	5.823	92	1838741	261.0399	ug/l	99

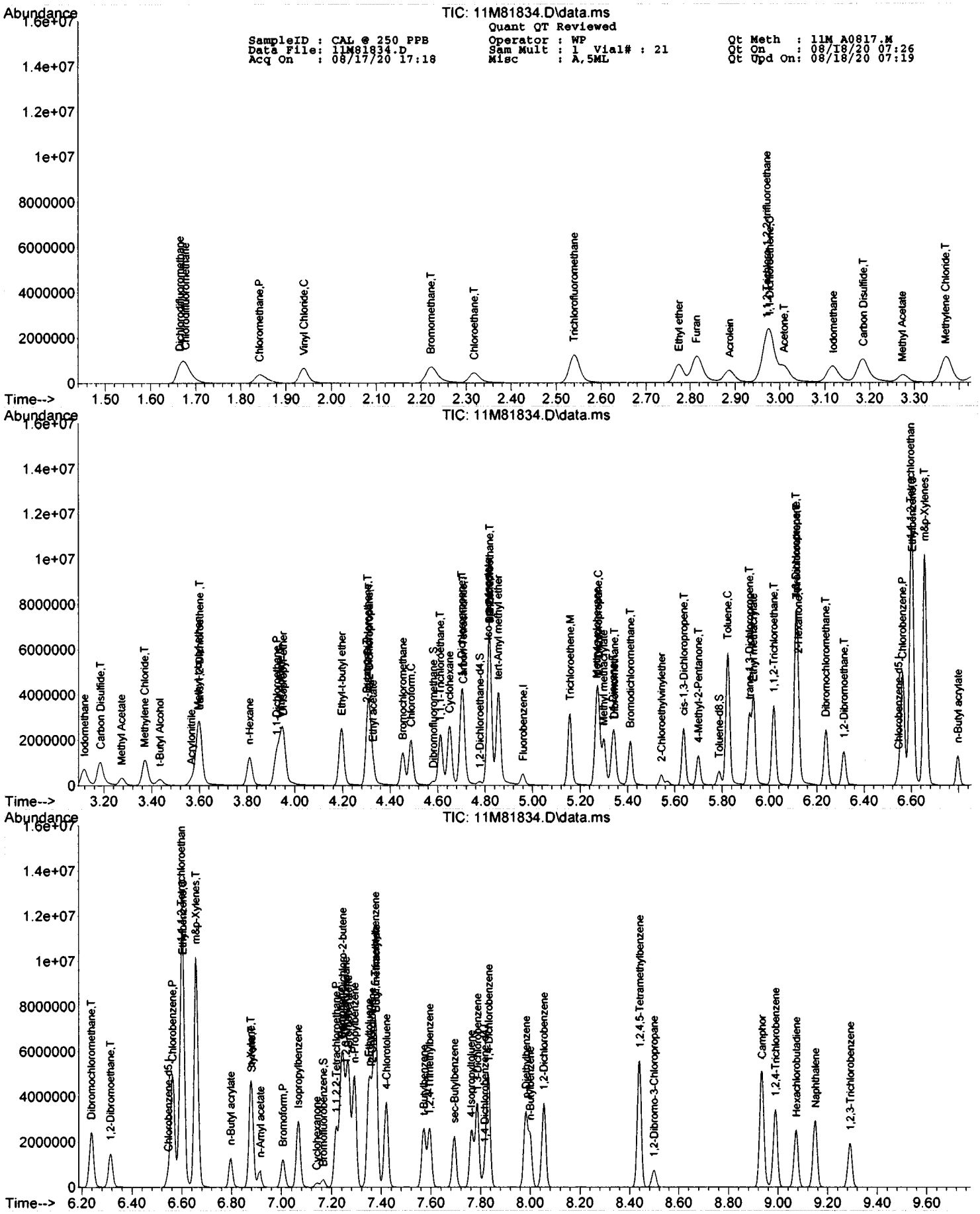
Quantitation Report (QT Reviewed)

SampleID : CAL @ 250 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81834.D Sam Mult : 1 Vial# : 21 Qt On : 08/18/20 07:26
Acq On : 08/17/20 17:18 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.598	133	862380	321.7270	ug/l		99
69)	Chlorobenzene	6.562	112	2039732	270.9966	ug/l		97
71)	n-Butyl acrylate	6.797	55	511606	50.5076	ug/l		83
72)	n-Amyl acetate	6.916	43	189504	22.2548	ug/l	#	57
73)	Bromoform	7.006	173	432246	170.5934	ug/l		98
74)	Ethylbenzene	6.604	106	1275392	291.0390	ug/l		99
75)	1,1,2,2-Tetrachloroethane	7.218	83	848772	207.5040	ug/l		96
77)	Styrene	6.881	104	988796	95.5267	ug/l		89
78)	m&p-Xylenes	6.655	106	2305211	366.7180	ug/l		90
79)	o-Xylene	6.877	106	616657	102.1766	ug/l		93
80)	trans-1,4-Dichloro-2-b...	7.244	53	298535	126.5778	ug/l		52
81)	1,3-Dichlorobenzene	7.787	146	1284498	182.8539	ug/l		92
82)	1,4-Dichlorobenzene	7.832	146	1731807	245.7521	ug/l		96
83)	1,2-Dichlorobenzene	8.054	146	1288845	201.5254	ug/l		93
84)	Isopropylbenzene	7.067	105	1542482	99.3083	ug/l		96
85)	Cyclohexanone	7.141	55	44052	202.2406	ug/l	#	57
86)	Camphene	7.241	93	1076594	243.3801	ug/l		94
87)	1,2,3-Trichloropropane	7.257	75	1210611	216.8149	ug/l		90
88)	2-Chlorotoluene	7.363	91	1256960	136.2898	ug/l		91
89)	p-Ethyltoluene	7.350	105	2149790	139.6101	ug/l		96
90)	4-Chlorotoluene	7.421	91	1453231	156.4611	ug/l		93
91)	n-Propylbenzene	7.292	91	2912791	163.0432	ug/l		94
92)	Bromobenzene	7.266	77	2023782	218.0485	ug/l		75
93)	1,3,5-Trimethylbenzene	7.376	105	1921674	159.0826	ug/l		96
94)	Butyl methacrylate	7.379	41	332585m	54.9371	ug/l		
95)	t-Butylbenzene	7.572	119	1266268	104.4942	ug/l		92
96)	1,2,4-Trimethylbenzene	7.594	105	1152465	89.9683	ug/l		94
97)	sec-Butylbenzene	7.694	105	1192035	79.2434	ug/l		91
98)	4-Isopropyltoluene	7.761	119	1214943	95.1398	ug/l		96
99)	n-Butylbenzene	7.999	91	1138489	88.2656	ug/l		71
100)	p-Diethylbenzene	7.983	119	923463	127.5592	ug/l		78
101)	1,2,4,5-Tetramethylben...	8.440	119	2440754	239.5772	ug/l		95
102)	1,2-Dibromo-3-Chloropr...	8.498	157	214681	251.0474	ug/l		70
103)	Camphor	8.935	95	1048498	2809.8293	ug/l		98
104)	Hexachlorobutadiene	9.073	225	386080	302.0976	ug/l		99
105)	1,2,4-Trichlorobenzene	8.990	180	897401	317.4742	ug/l		99
106)	1,2,3-Trichlorobenzene	9.292	180	500671	275.0749	ug/l		100
107)	Naphthalene	9.151	128	1848429	278.8855	ug/l		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 250 PPB
Data File: 11M81834.D
Acq On : 08/17/20 17:18
Operator : WP
Sam Mult : 1 Vial# : 21
Misc : A,5ML
Qt Meth : 11M_A0817.M
Qt On : 08/18/20 07:26
Qt Upd On: 08/18/20 07:19
Time-->
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Abundance
TIC: 11M81834.D\data.ms
Time-->
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5
Chlorobenzene,P
m&p-Xylenes,T
n-Butyl acrylate
Abundance
TIC: 11M81834.D\data.ms
Time-->
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5
Chlorobenzene,P
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
4-Chlorotoluene
1,2,4-Trimethylbenzene
sec-Butylbenzene
4-Isopropyltoluene
1,4-Dichlorobenzene
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene

Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81825.D Sam Mult : 1 Vial# : 12 Qt On : 08/18/20 07:21
Acq On : 08/17/20 14:32 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
4) Fluorobenzene	4.961	96	227797	30.00	ug/l		0.00
52) Chlorobenzene-d5	6.546	117	223176	30.00	ug/l		0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	120668	30.00	ug/l		0.00
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	61290	33.21	ug/l		0.00
Spiked Amount 30.000			Recovery = 110.70%				
39) 1,2-Dichloroethane-d4	4.778	67	27332	25.31	ug/l		0.00
Spiked Amount 30.000			Recovery = 84.37%				
66) Toluene-d8	5.787	98	256466	26.36	ug/l		0.00
Spiked Amount 30.000			Recovery = 87.87%				
76) Bromofluorobenzene	7.167	174	100458	32.25	ug/l		0.00
Spiked Amount 30.000			Recovery = 107.50%				
Target Compounds							Qvalue
5) Chlorodifluoromethane	1.684	51	2271	0.7316	ug/l	#	41
6) Dichlorodifluoromethane	1.665	85	1723	1.3003	ug/l		79
7) Chloromethane	1.851	50	1755m	0.6094	ug/l		
8) Bromomethane	2.247	94	1978	1.7855	ug/l		91
9) Vinyl Chloride	1.946	62	2274	0.9864	ug/l		97
10) Chloroethane	2.328	64	1400	1.0498	ug/l		99
11) Trichlorofluoromethane	2.546	101	3162	1.2786	ug/l		98
12) Ethyl ether	2.778	59	1341	0.7991	ug/l		67
13) Furan	2.816	39	2580	0.7525	ug/l		45
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	1497	1.2727	ug/l		95
15) Methylene Chloride	3.373	84	2250	1.3309	ug/l		46
16) Acrolein	2.884	56	1505	3.0959	ug/l		63
17) Acrylonitrile	3.572	53	588	0.5299	ug/l		85
18) Iodomethane	3.119	142	1284	0.6636	ug/l		82
19) Acetone	3.006	43	2589	3.1425	ug/l		86
20) Carbon Disulfide	3.189	76	5327	1.1580	ug/l		100
21) t-Butyl Alcohol	3.437	59	686	2.5159	ug/l		63
22) n-Hexane	3.813	57	1639	0.6484	ug/l		90
23) Di-isopropyl-ether	3.951	45	4372	0.6033	ug/l		63
24) 1,1-Dichloroethene	2.984	61	2395	0.7849	ug/l		72
25) Methyl Acetate	3.276	43	1145	0.5356	ug/l		100
26) Methyl-t-butyl ether	3.595	73	4503	1.0069	ug/l		65
27) 1,1-Dichloroethane	3.929	63	3346	0.9138	ug/l		85
28) trans-1,2-Dichloroethene	3.607	96	2023	1.2039	ug/l		63
29) Ethyl-t-butyl ether	4.199	59	4952	0.8107	ug/l		87
30) cis-1,2-Dichloroethene	4.305	61	2916	0.7593	ug/l		54
31) Bromochloromethane	4.453	49	1340	0.6364	ug/l		33
32) 2,2-Dichloropropane	4.312	77	2670	1.0545	ug/l		95
33) Ethyl acetate	4.324	43	1657m	0.5692	ug/l		
34) 1,4-Dioxane	5.337	88	1261	50.8415	ug/l		68
35) 1,1-Dichloropropene	4.701	75	2711	1.0955	ug/l		94
36) Chloroform	4.488	83	3610	1.2160	ug/l		96
38) Cyclohexane	4.649	56	2471	0.6516	ug/l	#	42
40) 1,2-Dichloroethane	4.820	62	2746	0.9937	ug/l		92
41) 2-Butanone	4.312	43	806m	0.6889	ug/l		
42) 1,1,1-Trichloroethane	4.611	97	2929	1.0694	ug/l		99
43) Carbon Tetrachloride	4.710	117	2694	1.0926	ug/l		84
44) Vinyl Acetate	3.948	43	4371	0.5090	ug/l		100
45) Bromodichloromethane	5.411	83	2481	1.0988	ug/l		94
46) Methylcyclohexane	5.270	83	2598	1.0972	ug/l	#	66
47) Dibromomethane	5.344	174	1594	1.4099	ug/l		85
48) 1,2-Dichloropropane	5.279	63	1824	0.8387	ug/l		98
49) Trichloroethene	5.157	130	2589	1.3638	ug/l		91
50) Benzene	4.823	78	8115	1.1631	ug/l		100
51) tert-Amyl methyl ether	4.858	73	4789	1.0242	ug/l		93
53) Iso-propylacetate	4.810	43	2646	0.4007	ug/l		88
54) Methyl methacrylate	5.302	41	1260	0.3555	ug/l	#	17
55) Dibromochloromethane	6.238	129	1964	0.7869	ug/l		99
56) 2-Chloroethylvinylether	5.540	63	242	0.3298	ug/l		53
57) cis-1,3-Dichloropropene	5.639	75	2865	0.7363	ug/l		84
58) trans-1,3-Dichloropropene	5.913	75	2239	0.6000	ug/l		88
59) Ethyl methacrylate	5.932	41	1214	0.3611	ug/l	#	31
60) 1,1,2-Trichloroethane	6.022	97	1925	0.9192	ug/l		88
61) 1,2-Dibromoethane	6.311	107	2010	0.8819	ug/l		79
62) 1,3-Dichloropropane	6.112	76	3217	0.8658	ug/l		94
63) 4-Methyl-2-Pentanone	5.701	43	1392	0.3567	ug/l		99
64) 2-Hexanone	6.125	43	1171	0.4281	ug/l		76
65) Tetrachloroethene	6.115	164	1982	0.9734	ug/l		100
67) Toluene	5.823	92	5579	0.9186	ug/l		91

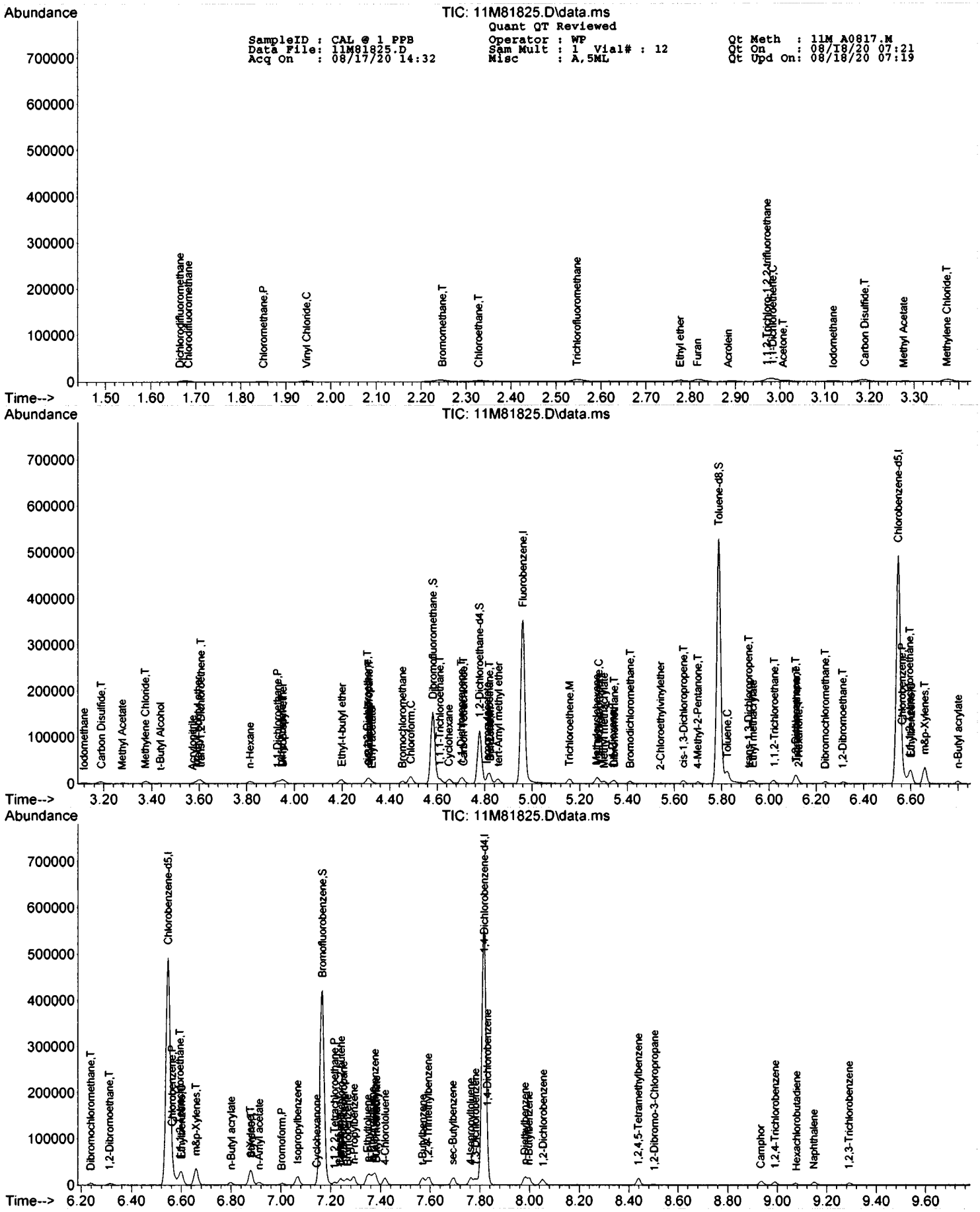
Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81825.D Sam Mult : 1 Vial# : 12 Qt On : 08/18/20 07:21
Acq On : 08/17/20 14:32 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.594	133	1900	0.8221	ug/l	#	47
69)	Chlorobenzene	6.562	112	6336	0.9764	ug/l		92
71)	n-Butyl acrylate	6.800	55	2762	0.3522	ug/l		91
72)	n-Amyl acetate	6.913	43	2081	0.3156	ug/l		74
73)	Bromoform	7.003	173	1359	0.6927	ug/l		89
74)	Ethylbenzene	6.601	106	2949	0.8691	ug/l		85
75)	1,1,2,2-Tetrachloroethane	7.215	83	2522	0.7963	ug/l		87
77)	Styrene	6.881	104	6225	0.7767	ug/l		90
78)	m&p-Xylenes	6.659	106	7930	1.6292	ug/l		86
79)	o-Xylene	6.877	106	3566	0.7631	ug/l		97
80)	trans-1,4-Dichloro-2-b...	7.241	53	627	0.3433	ug/l	#	37
81)	1,3-Dichlorobenzene	7.781	146	5058	0.9299	ug/l		95
82)	1,4-Dichlorobenzene	7.829	146	4909	0.8997	ug/l		85
83)	1,2-Dichlorobenzene	8.054	146	4324	0.8732	ug/l		96
84)	Isopropylbenzene	7.067	105	9704	0.8069	ug/l		99
85)	Cyclohexanone	7.144	55	205	1.2155	ug/l	#	25
86)	Camphene	7.237	93	2596	0.7579	ug/l		99
87)	1,2,3-Trichloropropane	7.250	75	2763	0.6391	ug/l		91
88)	2-Chlorotoluene	7.366	91	5734	0.8030	ug/l		94
89)	p-Ethyltoluene	7.347	105	10414	0.8734	ug/l		96
90)	4-Chlorotoluene	7.418	91	6290	0.8746	ug/l		95
91)	n-Propylbenzene	7.292	91	10613	0.7672	ug/l		98
92)	Bromobenzene	7.266	77	4757	0.6619	ug/l		74
93)	1,3,5-Trimethylbenzene	7.376	105	7364	0.7873	ug/l		95
94)	Butyl methacrylate	7.382	41	1544	0.3294	ug/l	#	30
95)	t-Butylbenzene	7.569	119	7362	0.7846	ug/l		96
96)	1,2,4-Trimethylbenzene	7.591	105	7768	0.7832	ug/l		97
97)	sec-Butylbenzene	7.691	105	8840	0.7590	ug/l		98
98)	4-Isopropyltoluene	7.762	119	7266	0.7348	ug/l		99
99)	n-Butylbenzene	7.996	91	7465	0.7475	ug/l		82
100)	p-Diethylbenzene	7.980	119	4399	0.7848	ug/l		80
101)	1,2,4,5-Tetramethylben...	8.437	119	6493	0.8231	ug/l		99
102)	1,2-Dibromo-3-Chloropr...	8.501	157	319	0.4818	ug/l		75
103)	Camphor	8.932	95	1891	6.5448	ug/l		92
104)	Hexachlorobutadiene	9.077	225	948	0.9580	ug/l		81
105)	1,2,4-Trichlorobenzene	8.990	180	1894	0.8654	ug/l		94
106)	1,2,3-Trichlorobenzene	9.289	180	1484	1.0530	ug/l	#	88
107)	Naphthalene	9.147	128	4640	0.9041	ug/l		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 1 PPB
Data File: 11M81825.D
Acq On : 08/17/20 14:32
Operator : WP
Sam Mult : 1 Vial# : 12
Misc : A,5ML
Qt Meth : 11M_A0817.M
Qt On : 08/19/20 07:21
Qt Upd On: 08/18/20 07:19
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81824.D Sam Mult : 1 Vial# : 11 Qt On : 08/18/20 07:32
Acq On : 08/17/20 14:14 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	230511	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	226034	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	121046	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	61896	33.15	ug/l	0.00
Spiked Amount 30.000			Recovery = 110.50%			
39) 1,2-Dichloroethane-d4	4.778	67	27591	25.25	ug/l	0.00
Spiked Amount 30.000			Recovery = 84.17%			
66) Toluene-d8	5.788	98	255243	25.91	ug/l	0.00
Spiked Amount 30.000			Recovery = 86.37%			
76) Bromofluorobenzene	7.167	174	100538	32.17	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.23%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	0.000		0	N.D. d		
6) Dichlorodifluoromethane	0.000		0	N.D. d		
7) Chloromethane	0.000		0	N.D. d		
8) Bromomethane	0.000		0	N.D. d		
9) Vinyl Chloride	0.000		0	N.D. d		
10) Chloroethane	0.000		0	N.D. d		
11) Trichlorofluoromethane	0.000		0	N.D. d		
12) Ethyl ether	0.000		0	N.D. d		
13) Furan	0.000		0	N.D. d		
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D. d		
15) Methylene Chloride	0.000		0	N.D. d		
16) Acrolein	0.000		0	N.D. d		
17) Acrylonitrile	0.000		0	N.D.		
18) Iodomethane	0.000		0	N.D. d		
19) Acetone	0.000		0	N.D. d		
20) Carbon Disulfide	0.000		0	N.D. d		
21) t-Butyl Alcohol	0.000		0	N.D.		
22) n-Hexane	0.000		0	N.D. d		
23) Di-isopropyl-ether	0.000		0	N.D. d		
24) 1,1-Dichloroethene	0.000		0	N.D. d		
25) Methyl Acetate	0.000		0	N.D. d		
26) Methyl-t-butyl ether	3.591	73	2130	0.4707	ug/l #	61
27) 1,1-Dichloroethane	0.000		0	N.D. d		
28) trans-1,2-Dichloroethene	0.000		0	N.D. d		
29) Ethyl-t-butyl ether	0.000		0	N.D. d		
30) cis-1,2-Dichloroethene	0.000		0	N.D. d		
31) Bromochloromethane	0.000		0	N.D. d		
32) 2,2-Dichloropropane	0.000		0	N.D. d		
33) Ethyl acetate	0.000		0	N.D. d		
34) 1,4-Dioxane	0.000		0	N.D. d		
35) 1,1-Dichloropropene	0.000		0	N.D. d		
36) Chloroform	0.000		0	N.D. d		
38) Cyclohexane	0.000		0	N.D. d		
40) 1,2-Dichloroethane	4.823	62	1273	0.4553	ug/l	96
41) 2-Butanone	0.000		0	N.D. d		
42) 1,1,1-Trichloroethane	0.000		0	N.D. d		
43) Carbon Tetrachloride	0.000		0	N.D. d		
44) Vinyl Acetate	0.000		0	N.D. d		
45) Bromodichloromethane	0.000		0	N.D. d		
46) Methylcyclohexane	0.000		0	N.D. d		
47) Dibromomethane	0.000		0	N.D. d		
48) 1,2-Dichloropropane	0.000		0	N.D. d		
49) Trichloroethene	0.000		0	N.D. d		
50) Benzene	4.820	78	3784	0.5360	ug/l	100
51) tert-Amyl methyl ether	0.000		0	N.D. d		
53) Iso-propylacetate	0.000		0	N.D. d		
54) Methyl methacrylate	0.000		0	N.D. d		
55) Dibromochloromethane	0.000		0	N.D. d		
56) 2-Chloroethylvinylether	0.000		0	N.D.		
57) cis-1,3-Dichloropropene	0.000		0	N.D. d		
58) trans-1,3-Dichloropropene	0.000		0	N.D. d		
59) Ethyl methacrylate	0.000		0	N.D. d		
60) 1,1,2-Trichloroethane	0.000		0	N.D. d		
61) 1,2-Dibromoethane	0.000		0	N.D. d		
62) 1,3-Dichloropropane	0.000		0	N.D. d		
63) 4-Methyl-2-Pentanone	0.000		0	N.D. d		
64) 2-Hexanone	0.000		0	N.D. d		
65) Tetrachloroethene	0.000		0	N.D. d		
67) Toluene	0.000		0	N.D. d		

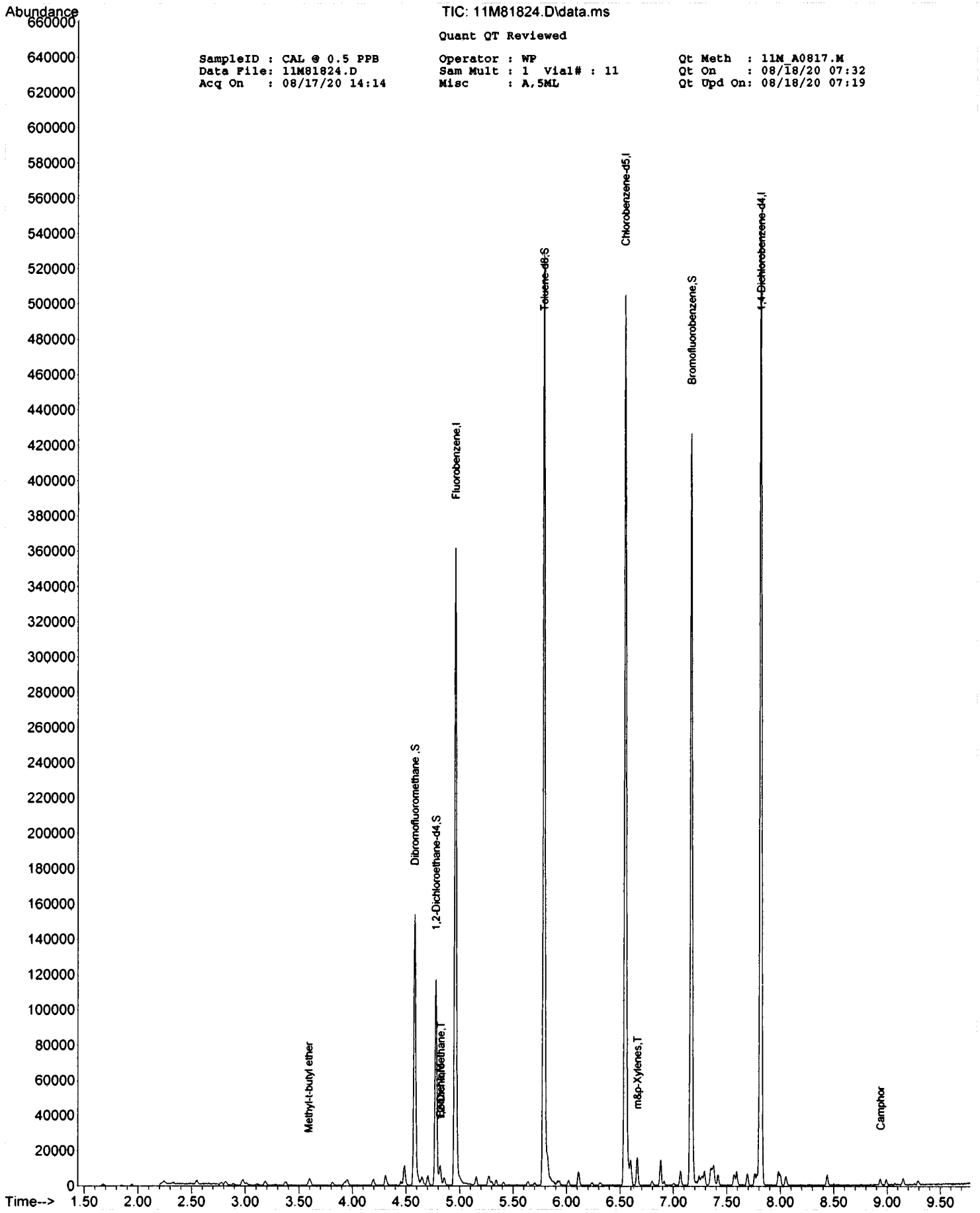
Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M81824.D Sam Mult : 1 Vial# : 11 Qt On : 08/18/20 07:32
Acq On : 08/17/20 14:14 Misc : A,5ML Qt Upd On: 08/18/20 07:19

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	0.000		0	N.D. d		
69)	Chlorobenzene	0.000		0	N.D. d		
71)	n-Butyl acrylate	0.000		0	N.D. d		
72)	n-Amyl acetate	0.000		0	N.D. d		
73)	Bromoform	0.000		0	N.D. d		
74)	Ethylbenzene	0.000		0	N.D. d		
75)	1,1,2,2-Tetrachloroethane	0.000		0	N.D. d		
77)	Styrene	0.000		0	N.D. d		
78)	m&p-Xylenes	6.659	106	3549	0.7269	ug/l	96
79)	o-Xylene	0.000		0	N.D. d		
80)	trans-1,4-Dichloro-2-b...	0.000		0	N.D. d		
81)	1,3-Dichlorobenzene	0.000		0	N.D. d		
82)	1,4-Dichlorobenzene	0.000		0	N.D. d		
83)	1,2-Dichlorobenzene	0.000		0	N.D. d		
84)	Isopropylbenzene	0.000		0	N.D. d		
85)	Cyclohexanone	0.000		0	N.D. d		
86)	Camphene	0.000		0	N.D. d		
87)	1,2,3-Trichloropropane	0.000		0	N.D. d		
88)	2-Chlorotoluene	0.000		0	N.D. d		
89)	p-Ethyltoluene	0.000		0	N.D. d		
90)	4-Chlorotoluene	0.000		0	N.D. d		
91)	n-Propylbenzene	0.000		0	N.D. d		
92)	Bromobenzene	0.000		0	N.D. d		
93)	1,3,5-Trimethylbenzene	0.000		0	N.D. d		
94)	Butyl methacrylate	0.000		0	N.D. d		
95)	t-Butylbenzene	0.000		0	N.D. d		
96)	1,2,4-Trimethylbenzene	0.000		0	N.D. d		
97)	sec-Butylbenzene	0.000		0	N.D. d		
98)	4-Isopropyltoluene	0.000		0	N.D. d		
99)	n-Butylbenzene	0.000		0	N.D. d		
100)	p-Diethylbenzene	0.000		0	N.D. d		
101)	1,2,4,5-Tetramethylben...	0.000		0	N.D. d		
102)	1,2-Dibromo-3-Chloropr...	0.000		0	N.D.		
103)	Camphor	8.935	95	1053	3.6331	ug/l	80
104)	Hexachlorobutadiene	0.000		0	N.D. d		
105)	1,2,4-Trichlorobenzene	0.000		0	N.D. d		
106)	1,2,3-Trichlorobenzene	0.000		0	N.D. d		
107)	Naphthalene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 11M81824.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 0.5 PPB
Data File: 11M81824.D
Acq On : 08/17/20 14:14
Operator : WP
Sam Mult : 1 Vial# : 11
Misc : A,5ML
Qt Meth : 11M_A0817.M
Qt On : 08/18/20 07:32
Qt Upd On: 08/18/20 07:19
Methyl-t-butyl ether
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
m&p-Xylenes,T
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Camphor
Time-->

TxtDfile: 11M81841.D ICV FORM Date/Time: 08/17/20 19:27

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
Chlorodifluoromethane	1	0		20.2565	20	101		70	130
Dichlorodifluoromethane	1	0		22.414	20	112		50	150
Chloromethane	1	0		22.5381	20	113		70	130
Bromomethane	1	0		23.4717	20	117		70	130
Vinyl Chloride	1	0		21.2925	20	106		70	130
Chloroethane	1	0		22.0735	20	110		70	130
Trichlorofluoromethane	1	0		22.2947	20	111		70	130
Ethyl ether	1	0		21.8499	20	109		70	130
Furan	1	0		20.8515	20	104		70	130
1.1.2-Trichloro-1.2.2-trifluoroethane	1	0		22.3551	20	112		70	130
Methylene Chloride	1	0		21.2798	20	106		70	130
Acrolein	1	0		99.5109	100	100		50	150
Acrylonitrile	1	0		22.801	20	114		50	150
Iodomethane	1	0		15.1401	20	76		70	130
Acetone	1	0		106.2721	100	106		50	150
Carbon Disulfide	1	0		21.1773	20	106		70	130
t-Butyl Alcohol	1	0		108.7414	100	109		50	150
n-Hexane	1	0		21.8198	20	109		70	130
Di-isopropyl-ether	1	0		20.5261	20	103		70	130
1.1-Dichloroethene	1	0		21.7206	20	109		70	130
Methyl Acetate	1	0		21.556	20	108		70	130
Methyl-t-butyl ether	1	0		21.7197	20	109		70	130
1.1-Dichloroethane	1	0		20.6962	20	103		70	130
trans-1.2-Dichloroethene	1	0		21.5999	20	108		70	130
Ethyl-t-butyl ether	1	0		21.0558	20	105		70	130
cis-1.2-Dichloroethene	1	0		20.8218	20	104		70	130
Bromochloromethane	1	0		21.2548	20	106		70	130
2.2-Dichloropropane	1	0		18.4223	20	92		70	130
Ethyl acetate	1	0		20.0304	20	100		70	130
1.4-Dioxane	1	0		1111.574	1000	111		70	130
1.1-Dichloropropene	1	0		21.4854	20	107		70	130
Chloroform	1	0		20.7919	20	104		70	130
Cyclohexane	1	0		22.3952	20	112		70	130
1.2-Dichloroethane	1	0		20.8249	20	104		70	130
2-Butanone	1	0		22.0616	20	110		70	130
1.1.1-Trichloroethane	1	0		21.6559	20	108		70	130
Carbon Tetrachloride	1	0		21.402	20	107		70	130
Vinyl Acetate	1	0		20.8636	20	104		70	130
Bromodichloromethane	1	0		21.1091	20	106		70	130
Methylcyclohexane	1	0		22.5314	20	113		70	130
Dibromomethane	1	0		21.4297	20	107		70	130
1.2-Dichloropropane	1	0		21.0433	20	105		70	130
Trichloroethene	1	0		21.1474	20	106		70	130
Benzene	1	0		21.2993	20	106		70	130
Iso-propylacetate	1	0		20.3519	20	102		70	130
Methyl methacrylate	1	0		22.1441	20	111		70	130
Dibromochloromethane	1	0		20.3462	20	102		70	130
2-Chloroethylvinylether	1	0		21.8461	20	109		70	130
cis-1.3-Dichloropropene	1	0		19.8019	20	99		70	130
trans-1.3-Dichloropropene	1	0		21.0872	20	105		70	130
Ethyl methacrylate	1	0		22.0285	20	110		70	130
1.1.2-Trichloroethane	1	0		19.0953	20	95		70	130
1.2-Dibromoethane	1	0		20.5135	20	103		70	130
1.3-Dichloropropane	1	0		20.0543	20	100		70	130
4-Methyl-2-Pentanone	1	0		20.5432	20	103		70	130
2-Hexanone	1	0		18.5851	20	93		70	130
Tetrachloroethene	1	0		20.0579	20	100		70	130
Toluene	1	0		19.6458	20	98		70	130
1.1.1.2-Tetrachloroethane	1	0		19.8702	20	99		70	130
Chlorobenzene	1	0		20.2971	20	101		70	130
n-Butyl acrylate	1	0		22.4235	20	112		70	130
n-Amyl acetate	1	0		22.1328	20	111		70	130
Bromoform	1	0		22.3816	20	112		70	130
Ethylbenzene	1	0		21.91	20	110		70	130
1.1.2.2-Tetrachloroethane	1	0		21.072	20	105		70	130
Styrene	1	0		22.1023	20	111		70	130
m&o-Xylenes	1	0		43.5473	40	109		70	130
o-Xylene	1	0		22.2749	20	111		70	130
trans-1.4-Dichloro-2-butene	1	0		21.3028	20	107		70	130
1.3-Dichlorobenzene	1	0		20.696	20	103		70	130
1.4-Dichlorobenzene	1	0		20.3839	20	102		70	130
1.2-Dichlorobenzene	1	0		21.0532	20	105		70	130
Isopropylbenzene	1	0		22.8501	20	114		70	130
1.2.3-Trichloropropane	1	0		20.4209	20	102		70	130
2-Chlorotoluene	1	0		21.1217	20	106		70	130
4-Chlorotoluene	1	0		20.7908	20	104		70	130
n-Propylbenzene	1	0		21.8214	20	109		70	130
Bromobenzene	1	0		21.0668	20	105		70	130
1.3.5-Trimethylbenzene	1	0		21.4627	20	107		70	130
Butyl methacrylate	1	0		24.9642	20	125		70	130
t-Butylbenzene	1	0		21.0968	20	105		70	130
1.2.4-Trimethylbenzene	1	0		21.0311	20	105		70	130
sec-Butylbenzene	1	0		21.1299	20	106		70	130
4-Isopropyltoluene	1	0		21.2562	20	106		70	130
n-Butylbenzene	1	0		21.3914	20	107		70	130
1.2-Dibromo-3-Chloropropane	1	0		23.146	20	116		70	130
Hexachlorobutadiene	1	0		22.1116	20	111		70	130
1.2.4-Trichlorobenzene	1	0		22.3706	20	112		70	130
1.2.3-Trichlorobenzene	1	0		21.9052	20	110		70	130
Naphthalene	1	0		21.5417	20	108		70	130

TxtDfile: 6M130925.D ICV FORM Date/Time: 08/01/20 20:24

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
Chlorodifluoromethane	1	0		37.918	50	76		70	130
Dichlorodifluoromethane	1	0		39.1803	50	78		50	150
Chloromethane	1	0		44.394	50	89		70	130
Bromomethane	1	0		40.5538	50	81		70	130
Vinyl Chloride	1	0		39.5923	50	79		70	130
Chloroethane	1	0		40.9182	50	82		70	130
Trichlorofluoromethane	1	0		39.7508	50	80		70	130
Ethyl ether	1	0		51.275	50	103		70	130
Furan	1	0		43.3933	50	87		70	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	0		39.7696	50	80		70	130
Methylene Chloride	1	0		43.643	50	87		70	130
Acrolein	1	0		238.0012	250	95		50	150
Acrylonitrile	1	0		43.5884	50	87		50	150
Iodomethane	1	0		35.7703	50	72		70	130
Acetone	1	0		193.2655	250	77		50	150
Carbon Disulfide	1	0		39.3224	50	79		70	130
t-Butyl Alcohol	1	0		200.2267	250	80		50	150
n-Hexane	1	0		43.1493	50	86		70	130
Di-isopropyl-ether	1	0		48.6109	50	97		70	130
1,1-Dichloroethene	1	0		41.2049	50	82		70	130
Methyl Acetate	1	0		46.1041	50	92		70	130
Methyl-t-butyl ether	1	0		51.7942	50	104		70	130
1,1-Dichloroethane	1	0		44.9087	50	90		70	130
trans-1,2-Dichloroethene	1	0		42.5709	50	85		70	130
Ethyl-t-butyl ether	1	0		51.2088	50	102		70	130
cis-1,2-Dichloroethene	1	0		45.1238	50	90		70	130
Bromochloromethane	1	0		50.3967	50	101		70	130
2,2-Dichloropropane	1	0		40.2065	50	80		70	130
Ethyl acetate	1	0		47.4794	50	95		70	130
1,4-Dioxane	1	0		1938.123	2500	78		70	130
1,1-Dichloropropene	1	0		41.5888	50	83		70	130
Chloroform	1	0		45.6177	50	91		70	130
Cyclohexane	1	0		41.7667	50	84		70	130
1,2-Dichloroethane	1	0		49.1215	50	98		70	130
2-Butanone	1	0		45.0879	50	90		70	130
1,1,1-Trichloroethane	1	0		41.7542	50	84		70	130
Carbon Tetrachloride	1	0		41.077	50	82		70	130
Vinyl Acetate	1	0		50.0722	50	100		70	130
Bromodichloromethane	1	0		47.8771	50	96		70	130
Methylcyclohexane	1	0		41.3787	50	83		70	130
Dibromomethane	1	0		51.5226	50	103		70	130
1,2-Dichloropropane	1	0		46.336	50	93		70	130
Trichloroethene	1	0		42.6422	50	85		70	130
Benzene	1	0		44.6377	50	89		70	130
Iso-propylacetate	1	0		51.0665	50	102		70	130
Methyl methacrylate	1	0		51.3283	50	103		70	130
Dibromochloromethane	1	0		50.7612	50	102		70	130
2-Chloroethylvinylether	1	0		48.8669	50	98		70	130
cis-1,3-Dichloropropene	1	0		47.1282	50	94		70	130
trans-1,3-Dichloropropene	1	0		48.5633	50	97		70	130
Ethyl methacrylate	1	0		51.8854	50	104		70	130
1,1,2-Trichloroethane	1	0		50.0265	50	100		70	130
1,2-Dibromoethane	1	0		51.3066	50	103		70	130
1,3-Dichloropropane	1	0		49.8571	50	100		70	130
4-Methyl-2-Pentanone	1	0		47.1566	50	94		70	130
2-Hexanone	1	0		45.5462	50	91		70	130
Tetrachloroethene	1	0		40.2801	50	81		70	130
Toluene	1	0		40.6851	50	81		70	130
1,1,1,2-Tetrachloroethane	1	0		47.0273	50	94		70	130
Chlorobenzene	1	0		43.0866	50	86		70	130
n-Butyl acrylate	1	0		53.7694	50	108		70	130
n-Amyl acetate	1	0		51.7786	50	104		70	130
Bromoform	1	0		78.182	50	156	*	70	130
Ethylbenzene	1	0		42.5621	50	85		70	130
1,1,2,2-Tetrachloroethane	1	0		50.4899	50	101		70	130
Styrene	1	0		44.933	50	90		70	130
m&p-Xylenes	1	0		86.9129	100	87		70	130
o-Xylene	1	0		43.3808	50	87		70	130
trans-1,4-Dichloro-2-butene	1	0		45.3098	50	91		70	130
1,3-Dichlorobenzene	1	0		45.5343	50	91		70	130
1,4-Dichlorobenzene	1	0		44.2284	50	88		70	130
1,2-Dichlorobenzene	1	0		46.8081	50	94		70	130
Isopropylbenzene	1	0		43.0828	50	86		70	130
1,2,3-Trichloropropane	1	0		47.9691	50	96		70	130
2-Chlorotoluene	1	0		44.8774	50	90		70	130
4-Chlorotoluene	1	0		43.4518	50	87		70	130
n-Propylbenzene	1	0		43.1464	50	86		70	130
Bromobenzene	1	0		44.8991	50	90		70	130
1,3,5-Trimethylbenzene	1	0		42.423	50	85		70	130
Butyl methacrylate	1	0		49.8923	50	100		70	130
t-Butylbenzene	1	0		43.9705	50	88		70	130
1,2,4-Trimethylbenzene	1	0		44.5312	50	89		70	130
sec-Butylbenzene	1	0		44.523	50	89		70	130
4-Isopropyltoluene	1	0		44.3629	50	89		70	130
n-Butylbenzene	1	0		42.8821	50	86		70	130
1,2-Dibromo-3-Chloropropane	1	0		48.9612	50	98		70	130
Hexachlorobutadiene	1	0		41.3306	50	83		70	130
1,2,4-Trichlorobenzene	1	0		44.0053	50	88		70	130
1,2,3-Trichlorobenzene	1	0		46.9252	50	94		70	130
Naphthalene	1	0		47.291	50	95		70	130

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M131882.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/31/2020 7:03:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.13	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.64	57.14	50	20	0.1	0.315	0.361	14.28	
Dichlorodifluoromethane	1	0		1.64	65.84	50	20	0.1	0.205	0.271	31.68	C1
Chloromethane	1	0		1.81	58.20	50	20	0.1	0.286	0.296	16.39	
Bromomethane	1	0		2.23	58.75	50	20	0.1	0.189	0.222	17.49	
Vinyl Chloride	1	0		1.92	57.71	50	20	0.1	0.295	0.340	15.42	
Chloroethane	1	0		2.32	53.03	50	20	0.1	0.201	0.213	6.07	
Trichlorofluoromethane	1	0		2.56	52.36	50	20	0.1	0.485	0.508	4.72	
Ethyl ether	1	0		2.81	44.71	50	20	0.5	0.179	0.160	10.58	
Furan	1	0		2.84	51.52	50	20	0.5	0.402	0.414	3.04	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.01	61.87	50	20	0.1	0.185	0.228	23.74	C1
Methylene Chloride	1	0		3.43	50.65	50	20	0.1	0.271	0.275	1.29	
Acrolein	1	0		2.92	300.15	250	20		0.035	0.042	20.06	
Acrylonitrile	1	0		3.64	49.35	50	20		0.106	0.105	1.29	
Iodomethane	1	0		3.16	71.52	50	20		0.200	0.335	43.05	C1
Acetone	1	0		3.05	247.69	250	20	0.1	0.102	0.101	0.92	
Carbon Disulfide	1	0		3.23	57.08	50	20	0.1	0.677	0.773	14.16	
t-Butyl Alcohol	1	0		3.50	189.41	250	20		0.049	0.037	24.23	C1
n-Hexane	1	0		3.91	65.90	50	20		0.264	0.348	31.81	C1
Di-isopropyl-ether	1	0		4.06	50.38	50	20		0.628	0.633	0.76	
1,1-Dichloroethene	1	0		3.02	61.57	50	20	0.1	0.340	0.419	23.14	C1
Methyl Acetate	1	0		3.34	48.18	50	20	0.1	0.210	0.202	3.64	
Methyl-t-butyl ether	1	0		3.67	53.01	50	20	0.1	0.538	0.570	6.03	
1,1-Dichloroethane	1	0		4.03	55.82	50	20	0.2	0.440	0.491	11.64	
trans-1,2-Dichloroethene	1	0		3.68	57.41	50	20	0.1	0.256	0.294	14.82	
Ethyl-t-butyl ether	1	0		4.32	43.55	50	20	0.5	0.688	0.599	12.91	
cis-1,2-Dichloroethene	1	0		4.44	55.26	50	20	0.1	0.445	0.492	10.52	
Bromochloromethane	1	0		4.59	55.33	50	20		0.205	0.227	10.66	
2,2-Dichloropropane	1	0		4.45	61.95	50	20		0.359	0.444	23.91	C1
Ethyl acetate	1	0		4.46	44.61	50	20		0.315	0.281	10.79	
1,4-Dioxane	1	0		5.52	1954.73	2500	20		0.006	0.004	21.81	C1
1,1-Dichloropropene	1	0		4.85	56.34	50	20		0.359	0.405	12.67	
Chloroform	1	0		4.64	54.29	50	20	0.2	0.465	0.504	8.59	
Dibromofluoromethane	1	0	S	4.73	32.05	75	**		0.267	0.285	6.84	
Cyclohexane	1	0		4.80	60.08	50	20	0.1	0.368	0.442	20.17	
1,2-Dichloroethane-d4	1	0	S	4.93	32.12	75	**		0.144	0.154	7.07	
1,2-Dichloroethane	1	0		4.98	53.73	50	20	0.1	0.347	0.373	7.47	
2-Butanone	1	0		4.43	47.50	50	20	0.1	0.149	0.141	5.01	
1,1,1-Trichloroethane	1	0		4.76	57.80	50	20	0.1	0.416	0.481	15.60	
Carbon Tetrachloride	1	0		4.86	59.99	50	20	0.1	0.355	0.426	19.97	
Vinyl Acetate	1	0		4.05	51.53	50	20		0.750	0.773	3.07	
Bromodichloromethane	1	0		5.59	52.93	50	20	0.2	0.326	0.345	5.86	
Methylcyclohexane	1	0		5.45	57.65	50	20	0.1	0.377	0.435	15.31	
Dibromomethane	1	0		5.53	53.51	50	20		0.170	0.181	7.02	
1,2-Dichloropropane	1	0		5.46	50.63	50	20	0.1	0.259	0.262	1.26	
Trichloroethene	1	0		5.33	52.21	50	20	0.2	0.293	0.306	4.41	
Benzene	1	0		4.98	52.99	50	20	0.5	1.013	1.073	5.99	
tert-Amyl methyl ether	1	0		5.02	46.61	50	20		0.592	0.552	6.78	
Chlorobenzene-d5	1	0	I	6.76	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.98	43.04	50	20	0.5	0.522	0.450	13.92	
Methyl methacrylate	1	0		5.48	45.69	50	20	0.5	0.255	0.233	8.62	
Dibromochloromethane	1	0		6.45	48.24	50	20	0.1	0.282	0.272	3.53	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M131882.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/31/2020 7:03:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.73	41.39	50	20		0.079	0.066	17.21	
cis-1,3-Dichloropropene	1	0		5.83	46.02	50	20	0.2	0.447	0.412	7.96	
trans-1,3-Dichloropropene	1	0		6.12	48.35	50	20	0.1	0.391	0.378	3.31	
Ethyl methacrylate	1	0		6.14	45.30	50	20	0.5	0.253	0.230	9.40	
1,1,2-Trichloroethane	1	0		6.22	45.12	50	20	0.1	0.258	0.232	9.77	
1,2-Dibromoethane	1	0		6.53	46.83	50	20	0.1	0.267	0.250	6.33	
1,3-Dichloropropane	1	0		6.32	46.13	50	20		0.456	0.420	7.74	
4-Methyl-2-Pentanone	1	0		5.90	40.12	50	20	0.1	0.350	0.281	19.77	
2-Hexanone	1	0		6.33	40.16	50	20	0.1	0.276	0.221	19.67	
Tetrachloroethene	1	0		6.32	50.18	50	20	0.2	0.278	0.279	0.37	
Toluene-d8	1	0	S	5.98	28.47	75	**		1.238	1.175	5.10	
Toluene	1	0		6.02	45.23	50	20	0.4	0.811	0.734	9.54	
1,1,1,2-Tetrachloroethane	1	0		6.81	45.46	50	20		0.290	0.263	9.08	
Chlorobenzene	1	0		6.78	45.00	50	20	0.5	0.886	0.798	10.00	
1,4-Dichlorobenzene-d4	1	0	I	8.05	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.02	42.48	50	20	0.5	0.857	0.728	15.05	
n-Amyl acetate	1	0		7.13	42.72	50	20	0.5	0.810	0.692	14.55	
Bromoform	1	0		7.23	67.90	50	20	0.1	0.342	0.296	35.80	C1
Ethylbenzene	1	0		6.82	48.01	50	20	0.1	0.663	0.636	3.98	
1,1,2,2-Tetrachloroethane	1	0		7.45	44.28	50	20	0.1	0.639	0.566	11.44	
Bromofluorobenzene	1	0	S	7.39	28.30	75	**		0.790	0.745	5.67	
Styrene	1	0		7.10	43.62	50	20	0.3	1.639	1.430	12.75	
m&p-Xylenes	1	0		6.88	90.27	100	20	0.1	0.994	0.897	9.73	
o-Xylene	1	0		7.10	43.40	50	20	0.3	0.980	0.851	13.21	
trans-1,4-Dichloro-2-butene	1	0		7.47	47.75	50	20		0.311	0.297	4.51	
1,3-Dichlorobenzene	1	0		8.02	45.16	50	20	0.6	1.227	1.108	9.67	
1,4-Dichlorobenzene	1	0		8.07	44.18	50	20	0.5	1.265	1.118	11.65	
1,2-Dichlorobenzene	1	0		8.29	44.71	50	20	0.4	1.146	1.024	10.57	
Isopropylbenzene	1	0		7.29	46.66	50	20	0.1	2.547	2.377	6.68	
Cyclohexanone	1	0		7.37	170.58	250	20		0.035	0.024	31.77	C1
Camphene	1	0		7.47	48.28	50	20		0.927	0.895	3.45	
1,2,3-Trichloropropane	1	0		7.48	44.04	50	20		0.824	0.726	11.92	
2-Chlorotoluene	1	0		7.59	47.11	50	20		1.527	1.439	5.77	
p-Ethyltoluene	1	0		7.58	44.71	50	20		2.614	2.338	10.57	
4-Chlorotoluene	1	0		7.65	50.30	50	20		1.497	1.506	0.59	
n-Propylbenzene	1	0		7.52	47.94	50	20		2.988	2.865	4.12	
Bromobenzene	1	0		7.49	44.92	50	20		1.567	1.407	10.17	
1,3,5-Trimethylbenzene	1	0		7.60	49.79	50	20		1.830	1.823	0.41	
Butyl methacrylate	1	0		7.61	42.99	50	20	0.5	0.714	0.606	14.02	
t-Butylbenzene	1	0		7.81	46.79	50	20		2.082	1.949	6.42	
1,2,4-Trimethylbenzene	1	0		7.83	45.36	50	20		2.066	1.874	9.28	
sec-Butylbenzene	1	0		7.93	49.91	50	20		2.650	2.645	0.18	
4-Isopropyltoluene	1	0		8.00	49.40	50	20		2.223	2.196	1.20	
n-Butylbenzene	1	0		8.24	50.56	50	20		2.534	2.563	1.13	
p-Diethylbenzene	1	0		8.22	46.09	50	20		1.318	1.215	7.82	
1,2,4,5-Tetramethylbenzene	1	0		8.68	45.70	50	20		1.864	1.703	8.59	
1,2-Dibromo-3-Chloropropane	1	0		8.74	42.81	50	20	0.05	0.169	0.145	14.37	
Camphor	1	0		9.18	624.34	500	20		0.111	0.075	24.87	C1
Hexachlorobutadiene	1	0		9.32	45.35	50	20		0.461	0.418	9.29	
1,2,4-Trichlorobenzene	1	0		9.24	43.63	50	20	0.2	0.831	0.725	12.75	
1,2,3-Trichlorobenzene	1	0		9.54	42.15	50	20		0.756	0.637	15.70	
Naphthalene	1	0		9.40	39.50	50	20		2.080	1.643	20.99	C1

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131882.D Sam Mult : 1 Vial# : 3 Qt On : 08/31/20 07:26
Acq On : 08/31/20 07:03 Misc : S,5G:.4 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	294420	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	268587	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	163179	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	83871	32.05	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.83%			
39) 1,2-Dichloroethane-d4	4.934	67	45319	32.12	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.07%			
66) Toluene-d8	5.983	98	315526	28.47	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.90%			
76) Bromofluorobenzene	7.391	174	121562	28.30	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.33%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.642	51	176913	57.1420	ug/l	87
6) Dichlorodifluoromethane	1.636	85	132785	65.8420	ug/l	95
7) Chloromethane	1.807	50	145298	58.1973	ug/l	97
8) Bromomethane	2.227	94	109020	58.7468	ug/l	95
9) Vinyl Chloride	1.916	62	166947	57.7078	ug/l	94
10) Chloroethane	2.325	64	104392	53.0333	ug/l	95
11) Trichlorofluoromethane	2.556	101	249350	52.3578	ug/l	98
12) Ethyl ether	2.806	59	78365	44.7100	ug/l	94
13) Furan	2.843	39	203124	51.5206	ug/l	98
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	112108	61.8688	ug/l	98
15) Methylene Chloride	3.434	84	134877	50.6457	ug/l	95
16) Acrolein	2.922	56	103140	300.1492	ug/l	98
17) Acrylonitrile	3.635	53	51381	49.3541	ug/l	99
18) Iodomethane	3.160	142	164158	71.5248	ug/l	97
19) Acetone	3.050	43	247409	247.6940	ug/l	98
20) Carbon Disulfide	3.233	76	379131	57.0804	ug/l	100
21) t-Butyl Alcohol	3.501	59	91697m	189.4136	ug/l	
22) n-Hexane	3.910	57	170525	65.9048	ug/l	97
23) Di-isopropyl-ether	4.062	45	310555	50.3782	ug/l	99
24) 1,1-Dichloroethene	3.020	61	205365	61.5687	ug/l	97
25) Methyl Acetate	3.337	43	99187	48.1825	ug/l	100
26) Methyl-t-butyl ether	3.672	73	279879	53.0141	ug/l	99
27) 1,1-Dichloroethane	4.026	63	241116	55.8180	ug/l	100
28) trans-1,2-Dichloroethene	3.678	96	144144	57.4084	ug/l	96
29) Ethyl-t-butyl ether	4.324	59	293901	43.5458	ug/l	100
30) cis-1,2-Dichloroethene	4.440	61	241405	55.2616	ug/l	94
31) Bromochloromethane	4.593	49	111197	55.3285	ug/l	94
32) 2,2-Dichloropropane	4.446	77	218086	61.9541	ug/l	99
33) Ethyl acetate	4.465	43	137919	44.6057	ug/l	97
34) 1,4-Dioxane	5.519	88	106057	1954.7292	ug/l	92
35) 1,1-Dichloropropene	4.855	75	198587	56.3360	ug/l	97
36) Chloroform	4.635	83	247540	54.2938	ug/l	99
38) Cyclohexane	4.800	56	216881m	60.0826	ug/l	
40) 1,2-Dichloroethane	4.977	62	183130	53.7334	ug/l	96
41) 2-Butanone	4.434	43	69402	47.4964	ug/l	85
42) 1,1,1-Trichloroethane	4.763	97	235922	57.8020	ug/l	97
43) Carbon Tetrachloride	4.861	117	209061	59.9872	ug/l	100
44) Vinyl Acetate	4.050	43	379126	51.5333	ug/l	100
45) Bromodichloromethane	5.592	83	169219	52.9313	ug/l	92
46) Methylcyclohexane	5.446	83	213374	57.6533	ug/l	97
47) Dibromomethane	5.525	174	89045	53.5081	ug/l	96
48) 1,2-Dichloropropane	5.458	63	128601	50.6319	ug/l	97
49) Trichloroethene	5.330	130	150270	52.2051	ug/l	99
50) Benzene	4.977	78	526653	52.9925	ug/l	100
51) tert-Amyl methyl ether	5.019	73	270788	46.6115	ug/l	99
53) Iso-propylacetate	4.977	43	201329	43.0408	ug/l	97
54) Methyl methacrylate	5.483	41	104418	45.6902	ug/l	99
55) Dibromochloromethane	6.446	129	121592	48.2368	ug/l	95
56) 2-Chloroethylvinylether	5.733	63	29428m	41.3933	ug/l	
57) cis-1,3-Dichloropropene	5.830	75	184215	46.0196	ug/l	100
58) trans-1,3-Dichloropropene	6.117	75	169416	48.3475	ug/l	99
59) Ethyl methacrylate	6.135	41	102743	45.2994	ug/l	98
60) 1,1,2-Trichloroethane	6.220	97	104034	45.1159	ug/l	94
61) 1,2-Dibromoethane	6.525	107	112103	46.8330	ug/l	97
62) 1,3-Dichloropropane	6.318	76	188222	46.1299	ug/l	99
63) 4-Methyl-2-Pentanone	5.897	43	125687	40.1157	ug/l	98
64) 2-Hexanone	6.330	43	99126	40.1627	ug/l	96
65) Tetrachloroethene	6.318	164	124885	50.1848	ug/l	100
67) Toluene	6.019	92	328473	45.2316	ug/l	100

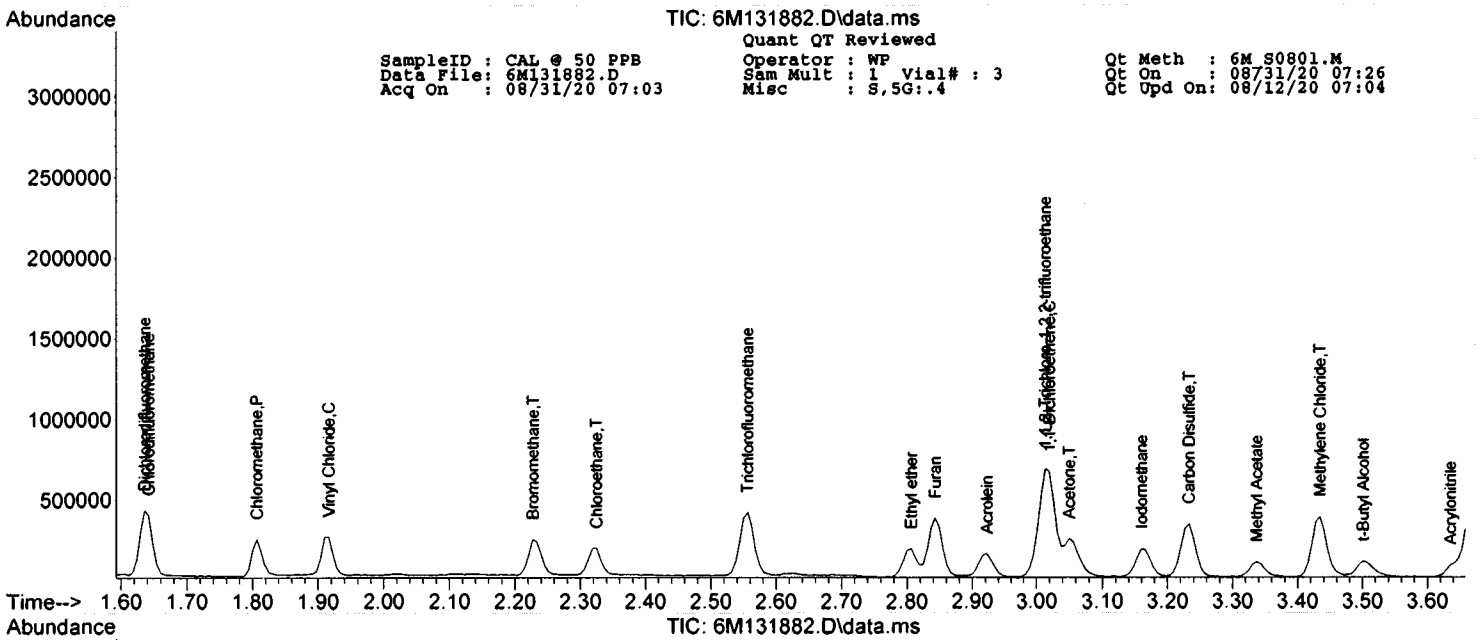
Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131882.D Sam Mult : 1 Vial# : 3 Qt On : 08/31/20 07:26
Acq On : 08/31/20 07:03 Misc : S,5G:.4 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	117951	45.4608	ug/l	97
69)	Chlorobenzene	6.781	112	357089	44.9979	ug/l	98
71)	n-Butyl acrylate	7.019	55	197992	42.4754	ug/l	97
72)	n-Amyl acetate	7.135	43	188301	42.7231	ug/l	97
73)	Bromoform	7.232	173	80431	67.8996	ug/l	98
74)	Ethylbenzene	6.818	106	173047	48.0105	ug/l	98
75)	1,1,2,2-Tetrachloroethane	7.446	83	153910	44.2807	ug/l	98
77)	Styrene	7.104	104	389003	43.6243	ug/l	96
78)	m&p-Xylenes	6.879	106	488055	90.2676	ug/l	97
79)	o-Xylene	7.098	106	231359	43.3967	ug/l	93
80)	trans-1,4-Dichloro-2-b...	7.470	53	80724	47.7458	ug/l	98
81)	1,3-Dichlorobenzene	8.019	146	301323	45.1631	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	304054	44.1764	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	278616	44.7132	ug/l	98
84)	Isopropylbenzene	7.293	105	646528	46.6617	ug/l	99
85)	Cyclohexanone	7.367	55	32640	170.5760	ug/l	98
86)	Camphene	7.470	93	243417	48.2767	ug/l	97
87)	1,2,3-Trichloropropane	7.482	75	197446	44.0390	ug/l	99
88)	2-Chlorotoluene	7.592	91	391250	47.1146	ug/l	99
89)	p-Ethyltoluene	7.580	105	635773	44.7131	ug/l	93
90)	4-Chlorotoluene	7.647	91	409653	50.2957	ug/l	97
91)	n-Propylbenzene	7.519	91	779065	47.9389	ug/l	99
92)	Bromobenzene	7.495	77	382761	44.9162	ug/l	98
93)	1,3,5-Trimethylbenzene	7.604	105	495720	49.7939	ug/l	91
94)	Butyl methacrylate	7.610	41	164807	42.9920	ug/l	98
95)	t-Butylbenzene	7.805	119	529960	46.7893	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	509772	45.3586	ug/l	100
97)	sec-Butylbenzene	7.927	105	719469	49.9111	ug/l	100
98)	4-Isopropyltoluene	8.001	119	597370	49.3996	ug/l	98
99)	n-Butylbenzene	8.238	91	697033	50.5641	ug/l	98
100)	p-Diethylbenzene	8.220	119	330498	46.0875	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.683	119	463292	45.7026	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.738	157	39406	42.8140	ug/l	100
103)	Camphor	9.177	95	202954	624.3422	ug/l	98
104)	Hexachlorobutadiene	9.317	225	113616	45.3541	ug/l	97
105)	1,2,4-Trichlorobenzene	9.238	180	197137	43.6267	ug/l	98
106)	1,2,3-Trichlorobenzene	9.537	180	173332	42.1491	ug/l	99
107)	Naphthalene	9.397	128	446873	39.5029	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
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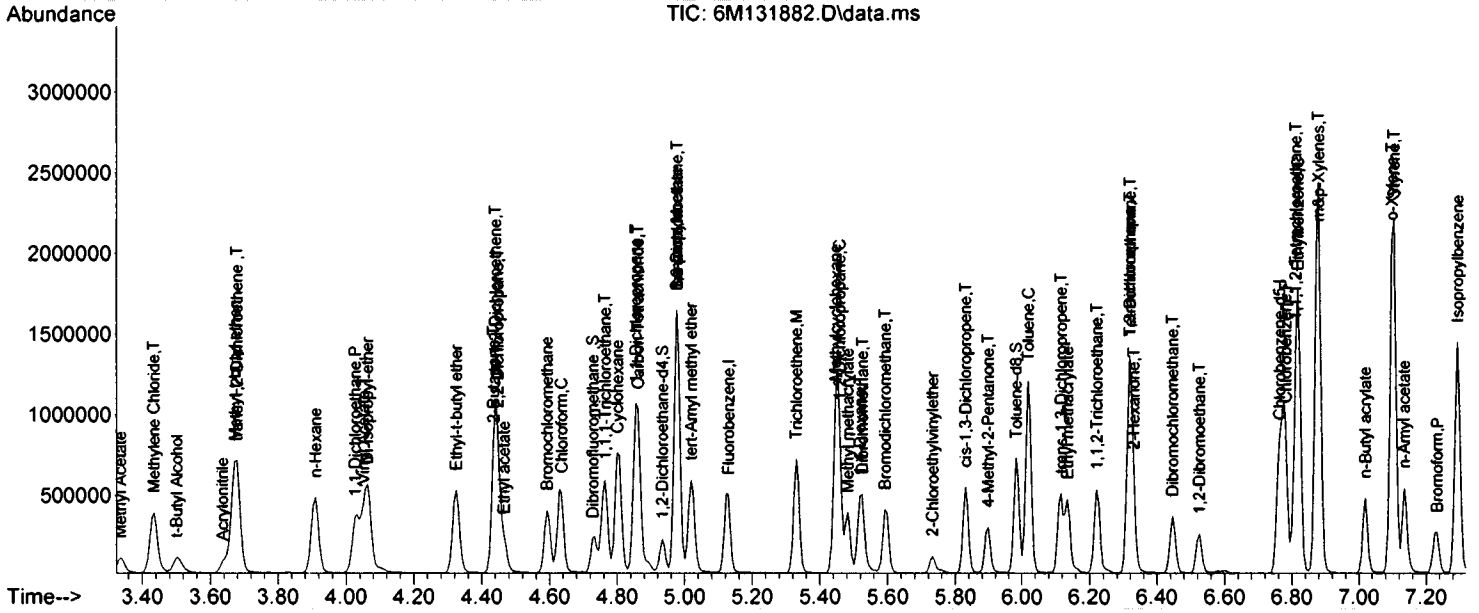
Data File: 6M131882.D
Acq On : 08/31/20 07:03
Operator : WP
Sam Mult : 1 Vial# : 3
Misc : S,5G:.4
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 07:26
Qt Upd On: 08/12/20 07:04
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
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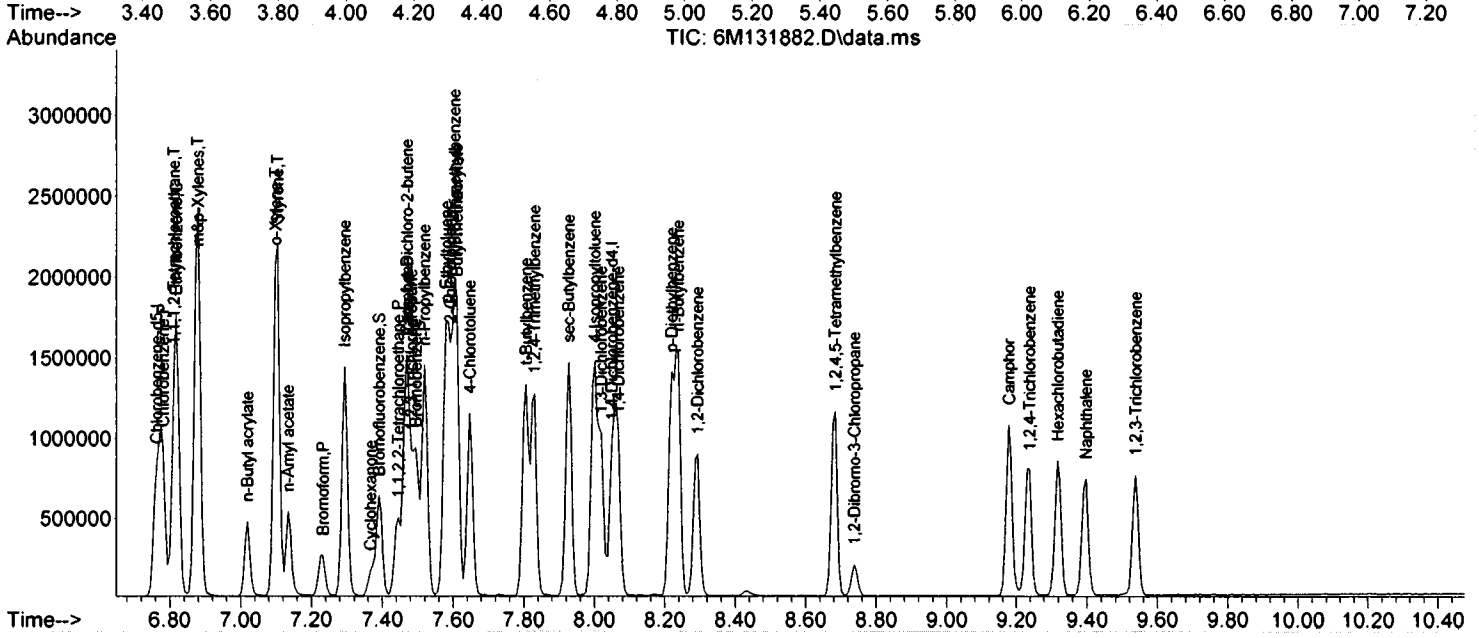
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 6M131882.D\data.ms
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M82272.D **Instrument:** GCMS 11

Cont Calibration Date/Time 8/31/2020 7:07:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.96	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.68	26.69	20	20	0.1	0.309	0.413	33.47	C1
Dichlorodifluoromethane	1	0		1.67	26.03	20	20	0.1	0.227	0.296	30.17	C1
Chloromethane	1	0		1.85	21.48	20	20	0.1	0.217	0.233	7.38	
Bromomethane	1	0		2.24	20.35	20	20	0.1	0.221	0.225	1.77	
Vinyl Chloride	1	0		1.94	23.00	20	20	0.1	0.269	0.309	15.01	
Chloroethane	1	0		2.33	23.83	20	20	0.1	0.174	0.207	19.16	
Trichlorofluoromethane	1	0		2.55	25.11	20	20	0.1	0.402	0.505	25.55	C1
Ethyl ether	1	0		2.78	20.73	20	20	0.5	0.179	0.186	3.63	
Furan	1	0		2.82	19.65	20	20	0.5	0.303	0.298	1.73	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.97	22.71	20	20	0.1	0.194	0.221	13.57	
Methylene Chloride	1	0		3.38	23.80	20	20	0.1	0.258	0.307	19.00	
Acrolein	1	0		2.89	114.00	100	20		0.036	0.041	14.00	
Acrylonitrile	1	0		3.57	23.65	20	20		0.083	0.098	18.26	
Iodomethane	1	0		3.12	16.31	20	20		0.302	0.307	18.47	
Acetone	1	0		3.01	116.29	100	20	0.1	0.064	0.074	16.29	
Carbon Disulfide	1	0		3.19	22.47	20	20	0.1	0.641	0.720	12.36	
t-Butyl Alcohol	1	0		3.43	119.96	100	20		0.020	0.024	19.96	
n-Hexane	1	0		3.81	22.37	20	20		0.217	0.243	11.85	
Di-isopropyl-ether	1	0		3.95	21.74	20	20		0.546	0.594	8.69	
1,1-Dichloroethene	1	0		2.98	23.89	20	20	0.1	0.325	0.388	19.44	
Methyl Acetate	1	0		3.28	22.23	20	20	0.1	0.145	0.161	11.16	
Methyl-t-butyl ether	1	0		3.59	23.75	20	20	0.1	0.611	0.725	18.76	
1,1-Dichloroethane	1	0		3.93	23.37	20	20	0.2	0.415	0.485	16.86	
trans-1,2-Dichloroethene	1	0		3.61	24.07	20	20	0.1	0.264	0.317	20.34	
Ethyl-t-butyl ether	1	0		4.20	21.54	20	20	0.5	0.647	0.697	7.69	
cis-1,2-Dichloroethene	1	0		4.31	23.87	20	20	0.1	0.401	0.479	19.37	
Bromochloromethane	1	0		4.45	23.35	20	20		0.169	0.197	16.73	
2,2-Dichloropropane	1	0		4.31	25.10	20	20		0.339	0.426	25.51	C1
Ethyl acetate	1	0		4.33	20.29	20	20		0.223	0.227	1.46	
1,4-Dioxane	1	0		5.33	1216.47	1000	20		0.004	0.004	21.65	C1
1,1-Dichloropropene	1	0		4.70	23.18	20	20		0.359	0.416	15.88	
Chloroform	1	0		4.49	23.63	20	20	0.2	0.456	0.539	18.15	
Dibromofluoromethane	1	0	S	4.58	32.43	30	**		0.268	0.290	8.11	
Cyclohexane	1	0		4.65	21.62	20	20	0.1	0.328	0.355	8.11	
1,2-Dichloroethane-d4	1	0	S	4.78	29.85	30	**		0.118	0.117	0.50	
1,2-Dichloroethane	1	0		4.82	23.31	20	20	0.1	0.337	0.393	16.55	
2-Butanone	1	0		4.31	19.37	20	20	0.1	0.088	0.085	3.15	
1,1,1-Trichloroethane	1	0		4.61	23.82	20	20	0.1	0.414	0.493	19.11	
Carbon Tetrachloride	1	0		4.71	23.46	20	20	0.1	0.374	0.439	17.29	
Vinyl Acetate	1	0		3.94	21.40	20	20		0.636	0.681	6.98	
Bromodichloromethane	1	0		5.41	23.53	20	20	0.2	0.335	0.394	17.65	
Methylcyclohexane	1	0		5.27	22.42	20	20	0.1	0.335	0.376	12.08	
Dibromomethane	1	0		5.34	23.73	20	20		0.214	0.254	18.64	
1,2-Dichloropropane	1	0		5.28	23.40	20	20	0.1	0.240	0.281	17.00	
Trichloroethene	1	0		5.16	24.23	20	20	0.2	0.327	0.396	21.16	C1
Benzene	1	0		4.82	23.35	20	20	0.5	1.044	1.219	16.76	
tert-Amyl methyl ether	1	0		4.85	20.87	20	20		0.677	0.706	4.34	
Chlorobenzene-d5	1	0	I	6.55	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.81	16.47	20	20	0.5	0.386	0.318	17.65	
Methyl methacrylate	1	0		5.30	17.14	20	20	0.5	0.210	0.180	14.32	
Dibromochloromethane	1	0		6.24	18.18	20	20	0.1	0.321	0.291	9.11	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M82272.D **Instrument:** GCMS 11

Cont Calibration Date/Time 8/31/2020 7:07:00 A Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.54	16.38	20	20		0.052	0.043	18.09	
cis-1,3-Dichloropropene	1	0		5.64	18.60	20	20	0.2	0.405	0.377	6.98	
trans-1,3-Dichloropropene	1	0		5.91	20.02	20	20	0.1	0.383	0.347	0.11	
Ethyl methacrylate	1	0		5.93	17.90	20	20	0.5	0.195	0.175	10.50	
1,1,2-Trichloroethane	1	0		6.02	18.17	20	20	0.1	0.273	0.248	9.17	
1,2-Dibromoethane	1	0		6.31	18.98	20	20	0.1	0.283	0.269	5.11	
1,3-Dichloropropane	1	0		6.11	17.93	20	20		0.447	0.401	10.37	
4-Methyl-2-Pentanone	1	0		5.70	18.27	20	20	0.1	0.211	0.192	8.64	
2-Hexanone	1	0		6.12	17.19	20	20	0.1	0.164	0.141	14.06	
Tetrachloroethene	1	0		6.12	17.99	20	20	0.2	0.287	0.258	10.03	
Toluene-d8	1	0	S	5.79	27.32	30	**		1.160	1.056	8.95	
Toluene	1	0		5.82	18.04	20	20	0.4	0.752	0.678	9.78	
1,1,1,2-Tetrachloroethane	1	0		6.59	18.25	20	20		0.298	0.272	8.73	
Chlorobenzene	1	0		6.56	18.58	20	20	0.5	0.857	0.796	7.10	
1,4-Dichlorobenzene-d4	1	0	I	7.82	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.80	17.72	20	20	0.5	0.729	0.646	11.39	
n-Amyl acetate	1	0		6.91	17.20	20	20	0.5	0.596	0.513	13.98	
Bromoform	1	0		7.01	19.52	20	20	0.1	0.360	0.351	2.38	
Ethylbenzene	1	0		6.60	17.85	20	20	0.1	0.628	0.561	10.73	
1,1,2,2-Tetrachloroethane	1	0		7.21	18.05	20	20	0.1	0.576	0.520	9.73	
Bromofluorobenzene	1	0	S	7.17	32.32	30	**		0.766	0.825	7.73	
Styrene	1	0		6.88	18.55	20	20	0.3	1.479	1.371	7.25	
m&p-Xylenes	1	0		6.66	36.39	40	20	0.1	0.889	0.808	9.03	
o-Xylene	1	0		6.88	18.43	20	20	0.3	0.856	0.789	7.83	
trans-1,4-Dichloro-2-butene	1	0		7.24	16.74	20	20		0.191	0.160	16.28	
1,3-Dichlorobenzene	1	0		7.78	17.55	20	20	0.6	1.121	0.984	12.27	
1,4-Dichlorobenzene	1	0		7.83	17.20	20	20	0.5	1.174	1.010	14.00	
1,2-Dichlorobenzene	1	0		8.05	17.24	20	20	0.4	1.018	0.877	13.82	
Isopropylbenzene	1	0		7.07	18.89	20	20	0.1	2.056	1.995	5.55	
Cyclohexanone	1	0		7.14	81.73	100	20		0.016	0.015	18.27	
Camphene	1	0		7.24	16.26	20	20		0.623	0.506	18.70	
1,2,3-Trichloropropane	1	0		7.26	17.67	20	20		0.704	0.622	11.65	
2-Chlorotoluene	1	0		7.36	17.44	20	20		1.297	1.131	12.79	
p-Ethyltoluene	1	0		7.35	16.34	20	20		2.369	1.936	18.28	
4-Chlorotoluene	1	0		7.42	17.63	20	20		1.323	1.166	11.86	
n-Propylbenzene	1	0		7.29	18.01	20	20		2.466	2.221	9.95	
Bromobenzene	1	0		7.27	17.54	20	20		1.236	1.084	12.29	
1,3,5-Trimethylbenzene	1	0		7.38	18.32	20	20		1.760	1.612	8.41	
Butyl methacrylate	1	0		7.38	20.22	20	20	0.5	0.421	0.426	1.11	
t-Butylbenzene	1	0		7.57	17.53	20	20		1.799	1.577	12.33	
1,2,4-Trimethylbenzene	1	0		7.59	17.74	20	20		1.888	1.675	11.29	
sec-Butylbenzene	1	0		7.69	17.61	20	20		2.142	1.886	11.96	
4-Isopropyltoluene	1	0		7.76	17.80	20	20		1.859	1.654	11.01	
n-Butylbenzene	1	0		8.00	17.54	20	20		1.798	1.578	12.28	
p-Diethylbenzene	1	0		7.98	16.80	20	20		1.063	0.893	16.01	
1,2,4,5-Tetramethylbenzene	1	0		8.44	16.44	20	20		1.573	1.293	17.79	
1,2-Dibromo-3-Chloropropane	1	0		8.50	21.03	20	20	0.05	0.109	0.115	5.17	
Camphor	1	0		8.94	181.70	200	20		0.046	0.042	9.15	
Hexachlorobutadiene	1	0		9.07	21.14	20	20		0.195	0.206	5.71	
1,2,4-Trichlorobenzene	1	0		8.99	19.98	20	20	0.2	0.433	0.433	0.12	
1,2,3-Trichlorobenzene	1	0		9.29	19.04	20	20		0.304	0.290	4.81	
Naphthalene	1	0		9.15	19.21	20	20		0.939	0.955	3.95	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M82272.D Sam Mult : 1 Vial# : 4 Qt On : 08/31/20 07:17
Acq On : 08/31/20 07:07 Misc : A,5ML Qt Upd On: 08/26/20 08:57

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-31-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	280695	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	336326	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	207063	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	81372	32.43	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.10%			
39) 1,2-Dichloroethane-d4	4.781	67	32947	29.85	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.50%			
66) Toluene-d8	5.787	98	355144	27.32	ug/l	0.00
Spiked Amount 30.000			Recovery = 91.07%			
76) Bromofluorobenzene	7.167	174	170781	32.32	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.73%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	77202m	26.6946	ug/l	
6) Dichlorodifluoromethane	1.668	85	55323	26.0347	ug/l	97
7) Chloromethane	1.847	50	43603	21.4750	ug/l	99
8) Bromomethane	2.244	94	42120	20.3530	ug/l	93
9) Vinyl Chloride	1.943	62	57863	23.0020	ug/l	90
10) Chloroethane	2.328	64	38717	23.8322	ug/l	98
11) Trichlorofluoromethane	2.546	101	94462	25.1106	ug/l	93
12) Ethyl ether	2.778	59	34776	20.7254	ug/l	55
13) Furan	2.820	39	55741m	19.6547	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.974	101	41320	22.7132	ug/l	91
15) Methylene Chloride	3.376	84	57469	23.7997	ug/l	50
16) Acrolein	2.887	56	38258	113.9989	ug/l	95
17) Acrylonitrile	3.569	53	18419	23.6512	ug/l	89
18) Iodomethane	3.122	142	57496m	16.3051	ug/l	
19) Acetone	3.013	43	69500	116.2868	ug/l	92
20) Carbon Disulfide	3.186	76	134823	22.4729	ug/l	100
21) t-Butyl Alcohol	3.434	59	22602m	119.9556	ug/l	
22) n-Hexane	3.813	57	45394	22.3699	ug/l	85
23) Di-isopropyl-ether	3.955	45	111101	21.7373	ug/l	53
24) 1,1-Dichloroethene	2.984	61	72655	23.8884	ug/l	63
25) Methyl Acetate	3.279	43	30170	22.2318	ug/l	100
26) Methyl-t-butyl ether	3.595	73	135678	23.7519	ug/l	82
27) 1,1-Dichloroethane	3.926	63	90813	23.3721	ug/l	99
28) trans-1,2-Dichloroethene	3.607	96	59401	24.0674	ug/l	70
29) Ethyl-t-butyl ether	4.196	59	130421	21.5380	ug/l	82
30) cis-1,2-Dichloroethene	4.308	61	89641	23.8744	ug/l	60
31) Bromochloromethane	4.453	49	36852m	23.3462	ug/l	
32) 2,2-Dichloropropane	4.312	77	79729	25.1028	ug/l	93
33) Ethyl acetate	4.328	43	42429	20.2916	ug/l	99
34) 1,4-Dioxane	5.334	88	40351	1216.4650	ug/l	66
35) 1,1-Dichloropropene	4.701	75	77753	23.1769	ug/l	94
36) Chloroform	4.488	83	100802	23.6307	ug/l	95
38) Cyclohexane	4.649	56	66396m	21.6221	ug/l	
40) 1,2-Dichloroethane	4.820	62	73572	23.3096	ug/l	99
41) 2-Butanone	4.305	43	15990	19.3708	ug/l	66
42) 1,1,1-Trichloroethane	4.614	97	92168	23.8224	ug/l	93
43) Carbon Tetrachloride	4.707	117	82178	23.4588	ug/l	95
44) Vinyl Acetate	3.945	43	127345	21.3965	ug/l	100
45) Bromodichloromethane	5.411	83	73780	23.5301	ug/l	97
46) Methylcyclohexane	5.270	83	70327m	22.4160	ug/l	
47) Dibromomethane	5.340	174	47468m	23.7284	ug/l	
48) 1,2-Dichloropropane	5.279	63	52619	23.4000	ug/l	100
49) Trichloroethene	5.157	130	74089	24.2313	ug/l	93
50) Benzene	4.820	78	228041	23.3519	ug/l	100
51) tert-Amyl methyl ether	4.855	73	132161	20.8684	ug/l	91
53) Iso-propylacetate	4.810	43	71344	16.4692	ug/l	77
54) Methyl methacrylate	5.299	41	40408m	17.1363	ug/l	
55) Dibromochloromethane	6.237	129	65347	18.1776	ug/l	100
56) 2-Chloroethylvinylether	5.543	63	9601	16.3825	ug/l	73
57) cis-1,3-Dichloropropene	5.639	75	84533	18.6042	ug/l	95
58) trans-1,3-Dichloropropene	5.913	75	77804	20.0223	ug/l	97
59) Ethyl methacrylate	5.932	41	39215m	17.9001	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	55686	18.1651	ug/l	83
61) 1,2-Dibromoethane	6.315	107	60251	18.9790	ug/l	97
62) 1,3-Dichloropropane	6.112	76	89850	17.9255	ug/l	98
63) 4-Methyl-2-Pentanone	5.701	43	43145	18.2714	ug/l	94
64) 2-Hexanone	6.122	43	31675	17.1883	ug/l	80
65) Tetrachloroethene	6.115	164	57822	17.9937	ug/l	97
67) Toluene	5.823	92	152049	18.0432	ug/l	93

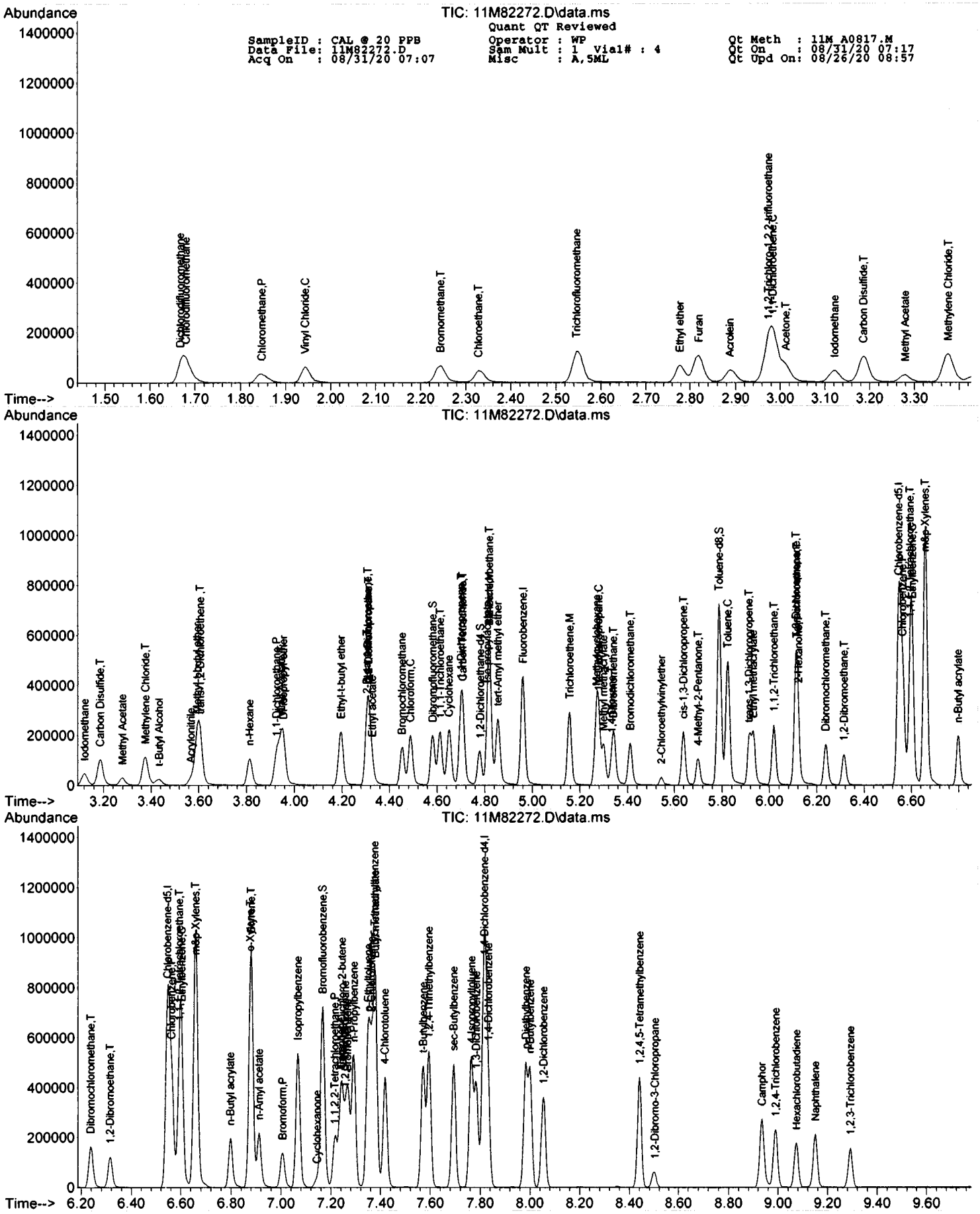
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M82272.D Sam Mult : 1 Vial# : 4 Qt On : 08/31/20 07:17
Acq On : 08/31/20 07:07 Misc : A,5ML Qt Upd On: 08/26/20 08:57

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-31-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.594	133	60941	18.2530	ug/l	94
69)	Chlorobenzene	6.562	112	178448	18.5792	ug/l	100
71)	n-Butyl acrylate	6.797	55	89150	17.7221	ug/l	88
72)	n-Amyl acetate	6.913	43	70806	17.2043	ug/l	75
73)	Bromoform	7.006	173	48510	19.5244	ug/l	100
74)	Ethylbenzene	6.604	106	77384	17.8541	ug/l	100
75)	1,1,2,2-Tetrachloroethane	7.215	83	71754	18.0543	ug/l	97
77)	Styrene	6.881	104	189308	18.5509	ug/l	91
78)	m&p-Xylenes	6.659	106	223195	36.3866	ug/l	94
79)	o-Xylene	6.877	106	108863	18.4344	ug/l	99
80)	trans-1,4-Dichloro-2-b...	7.244	53	22098	16.7445	ug/l	78
81)	1,3-Dichlorobenzene	7.784	146	135783	17.5469	ug/l	96
82)	1,4-Dichlorobenzene	7.832	146	139357	17.1997	ug/l	98
83)	1,2-Dichlorobenzene	8.054	146	121077	17.2362	ug/l	96
84)	Isopropylbenzene	7.067	105	275341	18.8909	ug/l	99
85)	Cyclohexanone	7.144	55	10052	81.7321	ug/l	77
86)	Camphene	7.241	93	69873	16.2592	ug/l	97
87)	1,2,3-Trichloropropane	7.257	75	85861	17.6700	ug/l	88
88)	2-Chlorotoluene	7.363	91	156096	17.4412	ug/l	93
89)	p-Ethyltoluene	7.350	105	267236	16.3439	ug/l	100
90)	4-Chlorotoluene	7.418	91	161024	17.6281	ug/l	95
91)	n-Propylbenzene	7.292	91	306581	18.0103	ug/l	99
92)	Bromobenzene	7.266	77	149682	17.5424	ug/l	75
93)	1,3,5-Trimethylbenzene	7.376	105	222515	18.3174	ug/l	99
94)	Butyl methacrylate	7.379	41	58826m	20.2220	ug/l	
95)	t-Butylbenzene	7.572	119	217669	17.5342	ug/l	96
96)	1,2,4-Trimethylbenzene	7.594	105	231238	17.7415	ug/l	99
97)	sec-Butylbenzene	7.694	105	260313	17.6086	ug/l	98
98)	4-Isopropyltoluene	7.765	119	228388	17.7983	ug/l	98
99)	n-Butylbenzene	7.999	91	217769	17.5441	ug/l	97
100)	p-Diethylbenzene	7.983	119	123284	16.7987	ug/l	95
101)	1,2,4,5-Tetramethylben...	8.440	119	178534	16.4414	ug/l	98
102)	1,2-Dibromo-3-Chloropr...	8.501	157	15842	21.0341	ug/l	80
103)	Camphor	8.935	95	57968	181.6975	ug/l	98
104)	Hexachlorobutadiene	9.073	225	28477	21.1425	ug/l	98
105)	1,2,4-Trichlorobenzene	8.990	180	59723	19.9750	ug/l	99
106)	1,2,3-Trichlorobenzene	9.292	180	39991	19.0379	ug/l	99
107)	Naphthalene	9.151	128	131829	19.2094	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 11M82272.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 11M82272.D
Acq On : 08/31/20 07:07
Operator : WP
Sam Mult : 1 Vial# : 4
Misc : A,5ML
Qt Meth : 11M_A0817.M
Qt On : 08/31/20 07:17
Qt Upd On: 08/26/20 08:57
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->

Abundance
TIC: 11M82272.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
Time-->

Abundance
TIC: 11M82272.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

GC/MS Volatile Data
Raw QC Data

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6
Data File: 6M130900.D
Analysis Date: 08/01/20 11:54
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.385 to 7.397 min

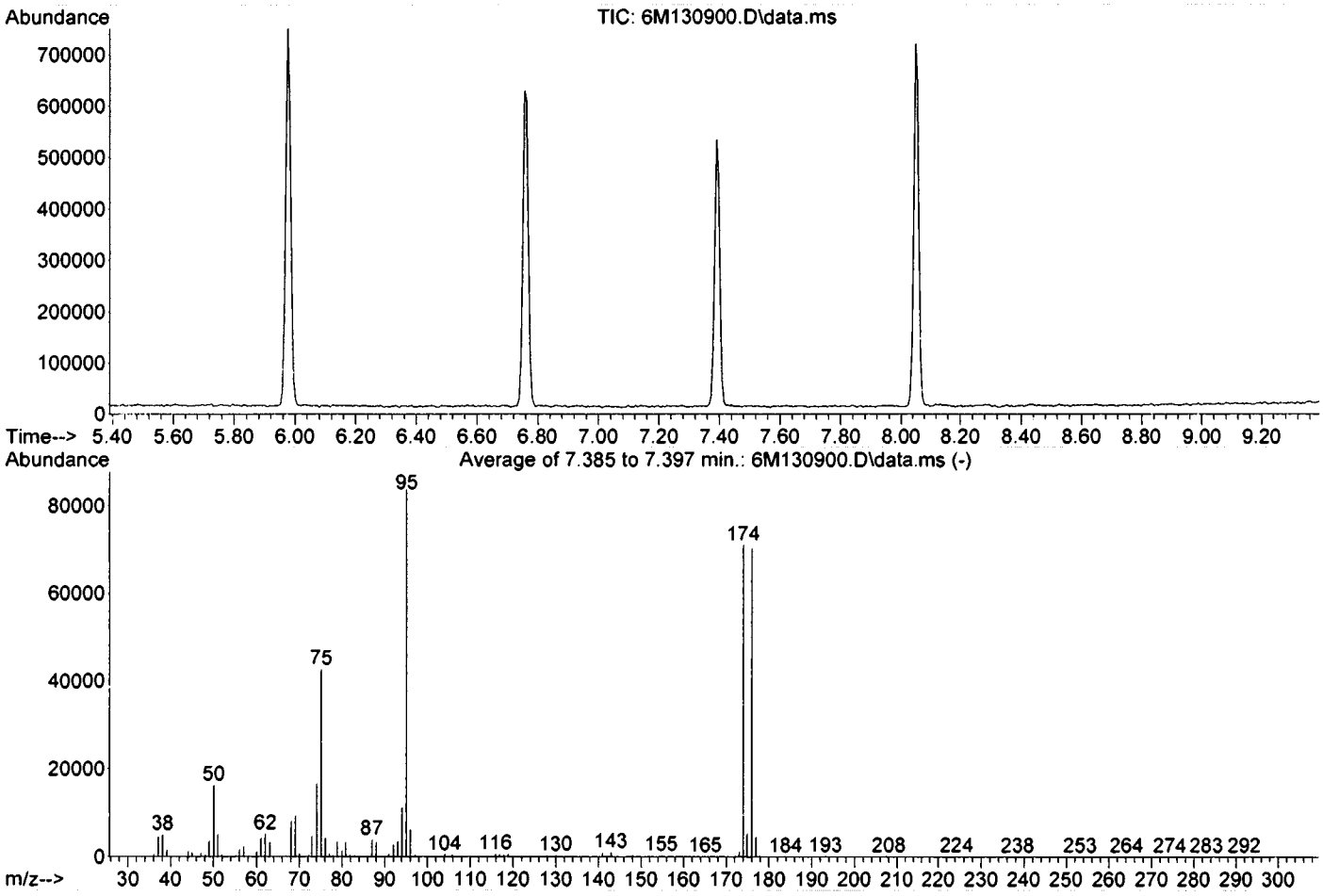
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.5	16321	PASS
75	95	30	60	51.1	42800	PASS
95	95	100	100	100.0	83807	PASS
96	95	5	9	7.3	6128	PASS
173	174	0.00	2	1.7	1176	PASS
174	95	50	100	84.9	71135	PASS
175	174	5	9	7.4	5277	PASS
176	174	95	101	98.8	70251	PASS
177	176	5	9	6.4	4486	PASS

Data File	Sample Number	Analysis Date:
6M130901.D	BLK	08/01/20 12:09
6M130902.D	BLK	08/01/20 12:30
6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51
6M130904.D	CAL @ 1 PPB	08/01/20 13:11
6M130905.D	CAL @ 2 PPB	08/01/20 13:32
6M130906.D	CAL @ 5 PPB	08/01/20 13:52
6M130907.D	CAL @ 20 PPB	08/01/20 14:13
6M130908.D	CAL @ 50 PPB	08/01/20 14:34
6M130909.D	CAL @ 100 PPB	08/01/20 14:54
6M130910.D	BLK	08/01/20 15:15
6M130911.D	CAL @ 250 PPB	08/01/20 15:36
6M130912.D	BLK	08/01/20 15:56
6M130913.D	CAL @ 500 PPB	08/01/20 16:17
6M130914.D	BLK	08/01/20 16:37
6M130915.D	BLK	08/01/20 16:58
6M130916.D	BLK	08/01/20 17:19
6M130917.D	500 PPB	08/01/20 17:39
6M130918.D	BLK	08/01/20 18:00
6M130919.D	BLK	08/01/20 18:21
6M130920.D	250 PPB	08/01/20 18:41
6M130921.D	BLK	08/01/20 19:02
6M130922.D	BLK	08/01/20 19:22
6M130923.D	BLK	08/01/20 19:43
6M130924.D	BLK	08/01/20 20:04
6M130925.D	ICV	08/01/20 20:24
6M130926.D	BLK	08/01/20 20:45
6M130927.D	CCV	08/01/20 21:05
6M130928.D	BLK	08/01/20 21:26
6M130929.D	BLK	08/01/20 21:47
6M130930.D	BLK	08/01/20 22:07
6M130931.D	BLK	08/01/20 22:28
6M130932.D	BLK	08/01/20 22:49
6M130933.D	DAILY BLANK	08/01/20 23:09

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Data File : 6M130900.D
Acq On : 01 Aug 2020 11:54
Operator : BK
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_6\METHODQT\6M_S0801.M
Title : @GCMS_6,ug,624,8260
Last Update : Sun Aug 02 08:55:28 2020



Spectrum Information: Average of 7.385 to 7.397 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	16321	PASS
75	95	30	60	51.1	42800	PASS
95	95	100	100	100.0	83807	PASS
96	95	5	9	7.3	6128	PASS
173	174	0.00	2	1.7	1176	PASS
174	95	50	100	84.9	71135	PASS
175	174	5	9	7.4	5277	PASS
176	174	95	101	98.8	70251	PASS
177	176	5	9	6.4	4486	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 11
Data File: 11M81819.D
Analysis Date: 08/17/20 12:47
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.141 to 7.180 min

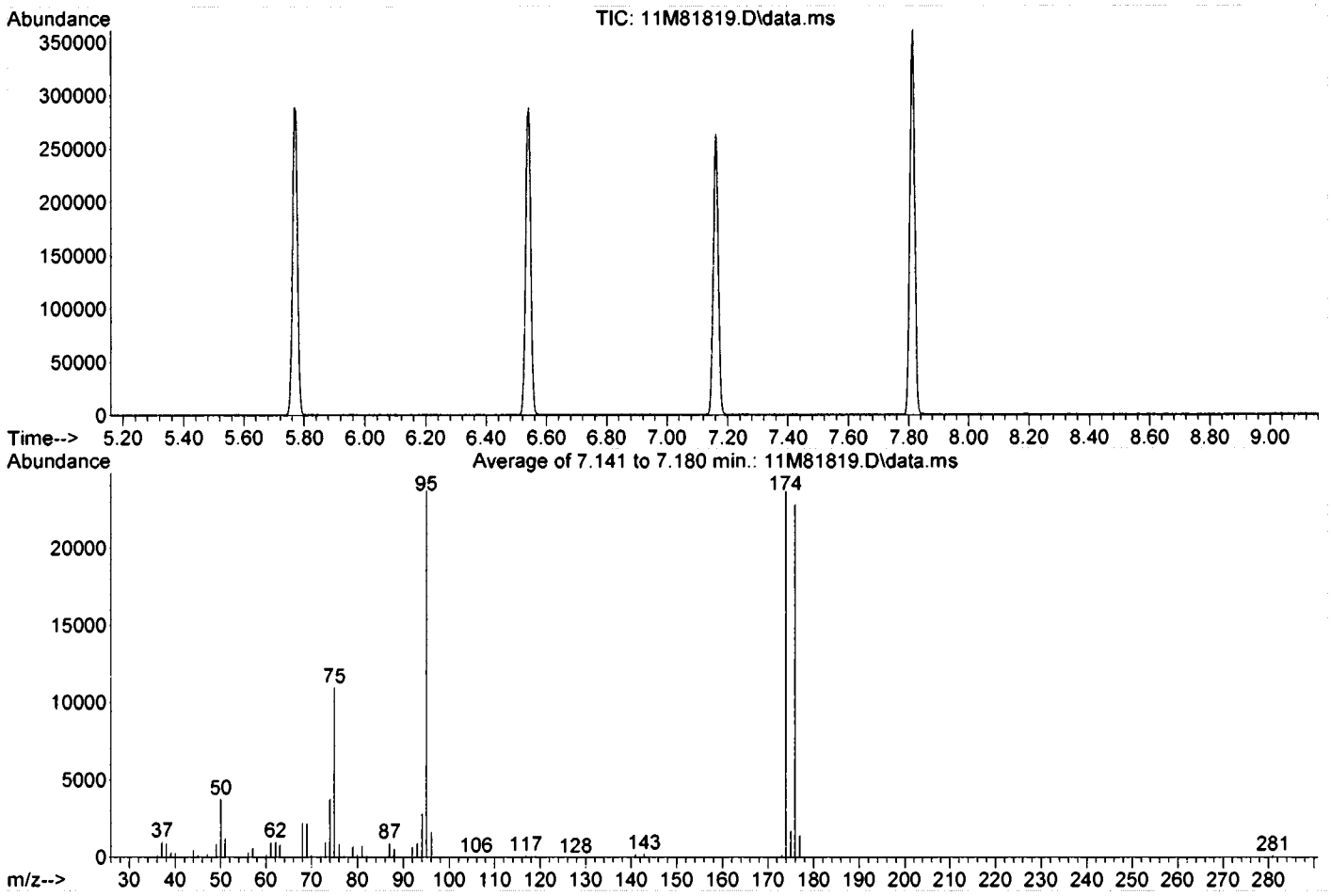
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	16.0	3785	PASS
75	95	30	60	46.3	10988	PASS
95	95	100	100	100.0	23722	PASS
96	95	5	9	6.9	1636	PASS
173	174	0.00	2	0.8	191	PASS
174	95	50	100	99.9	23696	PASS
175	174	5	9	7.1	1692	PASS
176	174	95	101	96.3	22815	PASS
177	176	5	9	6.3	1429	PASS

Data File	Sample Number	Analysis Date:
11M81820.D	20 PPB	08/17/20 13:00
11M81824.D	CAL @ 0.5 PPB	08/17/20 14:14
11M81825.D	CAL @ 1 PPB	08/17/20 14:32
11M81826.D	CAL @ 5 PPB	08/17/20 14:51
11M81827.D	CAL @ 10 PPB	08/17/20 15:09
11M81828.D	CAL @ 20 PPB	08/17/20 15:28
11M81830.D	CAL @ 50 PPB	08/17/20 16:05
11M81831.D	500 PPB	08/17/20 16:23
11M81834.D	CAL @ 250 PPB	08/17/20 17:18
11M81837.D	CAL @ 100 PPB	08/17/20 18:14
11M81841.D	ICV	08/17/20 19:27
11M81842.D	STD	08/17/20 19:45
11M81846.D	DAILY BLANK	08/17/20 20:59
11M81847.D	1 PPB	08/17/20 21:17
11M81848.D	1 PPB	08/17/20 21:35
11M81849.D	1 PPB	08/17/20 21:54
11M81850.D	1 PPB	08/17/20 22:12
11M81851.D	BLK	08/17/20 22:30

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-17-20\
Data File : 11M81819.D
Acq On : 17 Aug 2020 12:47
Operator : WP
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 6 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS_11\MethodQt\11M_A0704.M
Title : @GCMS_11,ug,624,8260
Last Update : Sun Jul 05 14:10:12 2020



Spectrum Information: Average of 7.141 to 7.180 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.0	3785	PASS
75	95	30	60	46.3	10988	PASS
95	95	100	100	100.0	23722	PASS
96	95	5	9	6.9	1636	PASS
173	174	0.00	2	0.8	191	PASS
174	95	50	100	99.9	23696	PASS
175	174	5	9	7.1	1692	PASS
176	174	95	101	96.3	22815	PASS
177	176	5	9	6.3	1429	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 11
Data File: 11M82270.D
Analysis Date: 08/31/20 06:35
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.151 to 7.157 min

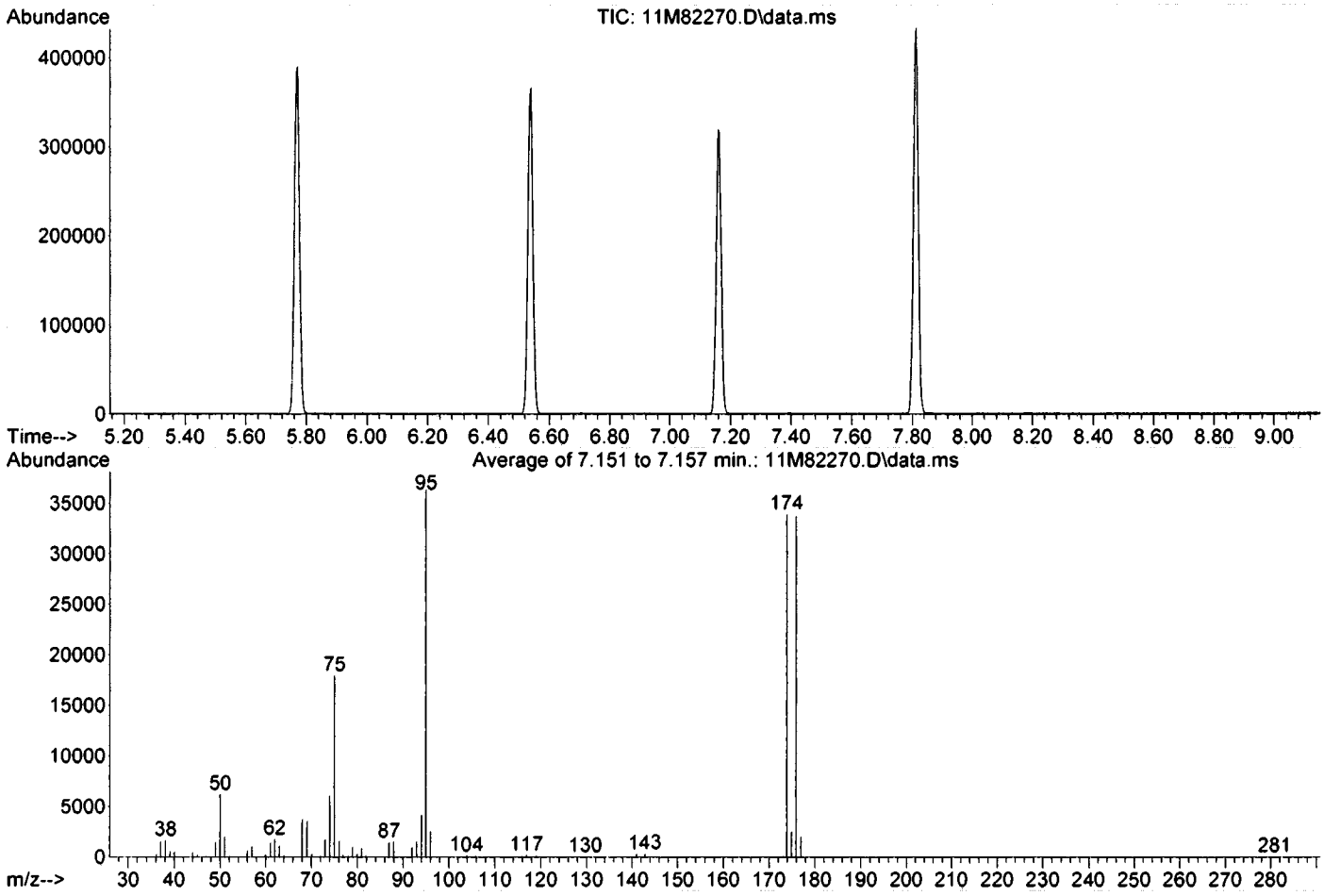
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	17.1	6226	PASS
75	95	30	60	49.5	17977	PASS
95	95	100	100	100.0	36339	PASS
96	95	5	9	7.1	2563	PASS
173	174	0.00	2	0.3	100	PASS
174	95	50	100	93.4	33933	PASS
175	174	5	9	7.5	2560	PASS
176	174	95	101	99.3	33712	PASS
177	176	5	9	6.0	2013	PASS

Data File	Sample Number	Analysis Date:
11M82271.D	20 PPB	08/31/20 06:49
11M82272.D	CAL @ 20 PPB	08/31/20 07:07
11M82274.D	BLK	08/31/20 07:43
11M82275.D	DAILY BLANK	08/31/20 08:02
11M82276.D	DAILY BLANK	08/31/20 08:20
11M82277.D	AD18973-009	08/31/20 08:40
11M82278.D	AD18955-006	08/31/20 08:59
11M82279.D	AD18953-004	08/31/20 09:17
11M82280.D	AD18953-001	08/31/20 09:36
11M82281.D	AD18953-002	08/31/20 09:54
11M82282.D	AD18953-003(5X)	08/31/20 10:13
11M82283.D	BLK	08/31/20 10:31
11M82284.D	MBS87763	08/31/20 10:49
11M82285.D	MBS87764	08/31/20 11:08
11M82286.D	AD18953-001(MS)	08/31/20 11:26
11M82287.D	AD18953-001(MSD	08/31/20 11:44
11M82288.D	AD18942-001(MS)	08/31/20 12:02
11M82289.D	AD18942-001(MSD	08/31/20 12:21
11M82290.D	MBS87765	08/31/20 12:39
11M82291.D	AD18942-001	08/31/20 12:58
11M82292.D	BLK	08/31/20 13:16
11M82293.D	AD18930-007	08/31/20 13:35
11M82294.D	AD18930-008	08/31/20 13:53
11M82295.D	AD18930-001	08/31/20 14:11
11M82296.D	AD18930-002	08/31/20 14:30
11M82297.D	AD18930-003	08/31/20 14:48
11M82298.D	AD18930-004	08/31/20 15:06
11M82299.D	AD18930-005	08/31/20 15:25
11M82300.D	AD18930-006	08/31/20 15:43
11M82301.D	AD18927-012	08/31/20 16:02
11M82302.D	AD18926-012(8uL)	08/31/20 16:20
11M82303.D	AD18932-001	08/31/20 16:39
11M82304.D	BLK	08/31/20 16:57
11M82305.D	AD18947-002	08/31/20 17:15
11M82306.D	AD18947-001	08/31/20 17:34
11M82307.D	AD18917-001	08/31/20 17:52
11M82308.D	BLK	08/31/20 18:10
11M82309.D	BLK	08/31/20 18:29

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-31-20\
Data File : 11M82270.D
Acq On : 31 Aug 2020 6:35
Operator : WP
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS_11\MethodQt\11M_A0817.M
Title : @GCMS_11,ug,624,8260
Last Update : Tue Aug 18 07:37:22 2020



Spectrum Information: Average of 7.151 to 7.157 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.1	6226	PASS
75	95	30	60	49.5	17977	PASS
95	95	100	100	100.0	36339	PASS
96	95	5	9	7.1	2563	PASS
173	174	0.00	2	0.3	100	PASS
174	95	50	100	93.4	33933	PASS
175	174	5	9	7.5	2560	PASS
176	174	95	101	99.3	33712	PASS
177	176	5	9	6.0	2013	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6
Data File: 6M131881.D
Analysis Date: 08/31/20 06:48
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.385 to 7.391 min

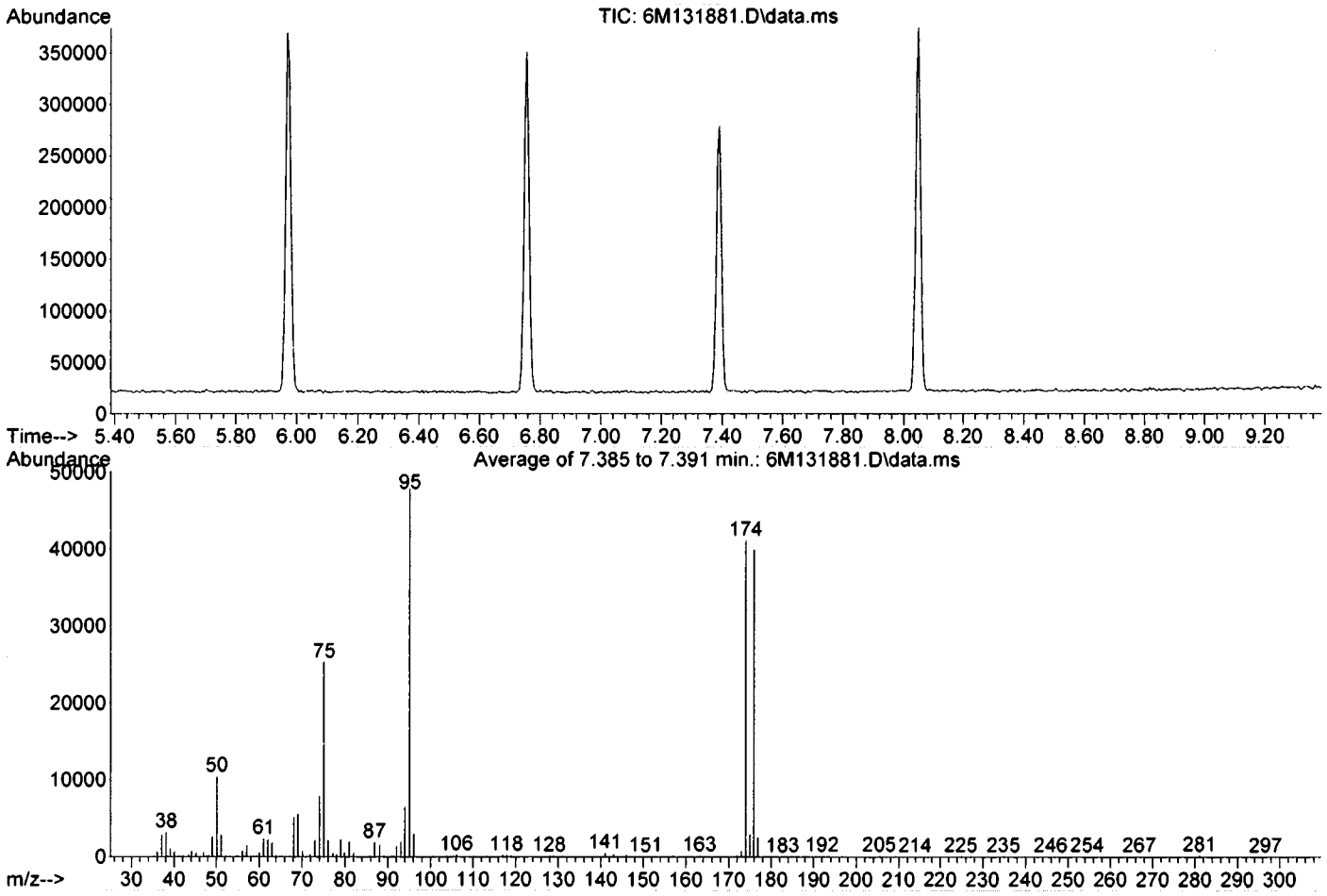
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	21.9	10471	PASS
75	95	30	60	52.9	25316	PASS
95	95	100	100	100.0	47820	PASS
96	95	5	9	6.3	3008	PASS
173	174	0.00	2	2.0	804	PASS
174	95	50	100	86.0	41140	PASS
175	174	5	9	7.2	2963	PASS
176	174	95	101	97.0	39908	PASS
177	176	5	9	6.5	2588	PASS

Data File	Sample Number	Analysis Date:
6M131882.D	CAL @ 50 PPB	08/31/20 07:03
6M131883.D	50 PPB	08/31/20 07:24
6M131884.D	BLK	08/31/20 07:44
6M131885.D	BLK	08/31/20 08:05
6M131886.D	DAILY BLANK	08/31/20 08:25
6M131887.D	AD18861-008(%SO	08/31/20 08:46
6M131888.D	MBS87762	08/31/20 09:07
6M131889.D	AD18955-002(MS:	08/31/20 09:27
6M131890.D	AD18955-003(MSD	08/31/20 09:48
6M131891.D	BLK	08/31/20 10:08
6M131892.D	AD18955-001	08/31/20 10:29
6M131893.D	AD18955-004	08/31/20 10:49
6M131894.D	AD18955-005	08/31/20 11:10
6M131895.D	AD18908-001	08/31/20 11:31
6M131896.D	AD18908-005	08/31/20 11:51
6M131897.D	AD18926-011	08/31/20 12:12
6M131898.D	AD18926-014	08/31/20 12:32
6M131899.D	AD18926-010	08/31/20 12:53
6M131900.D	AD18934-001	08/31/20 13:13
6M131901.D	AD18934-002	08/31/20 13:34
6M131902.D	AD18934-003	08/31/20 13:55
6M131903.D	AD18934-004	08/31/20 14:15
6M131904.D	AD18927-009	08/31/20 14:36
6M131905.D	AD18927-010	08/31/20 14:56
6M131906.D	AD18927-011	08/31/20 15:17
6M131907.D	AD18949-014	08/31/20 15:38
6M131908.D	AD18929-001	08/31/20 15:58
6M131909.D	AD18956-001	08/31/20 16:19
6M131910.D	AD18956-002	08/31/20 16:39
6M131911.D	AD18956-003	08/31/20 17:00
6M131912.D	AD18922-001	08/31/20 17:21
6M131913.D	AD18927-012	08/31/20 17:41
6M131914.D	BLK	08/31/20 18:02
6M131915.D	AD18917-001(5X)	08/31/20 18:22

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Data File : 6M131881.D
Acq On : 31 Aug 2020 06:48
Operator : WP
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_6\METHODQT\6M_S0801.M
Title : @GCMS_6,ug,624,8260
Last Update : Sun Aug 02 08:55:28 2020



Spectrum Information: Average of 7.385 to 7.391 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.9	10471	PASS
75	95	30	60	52.9	25316	PASS
95	95	100	100	100.0	47820	PASS
96	95	5	9	6.3	3008	PASS
173	174	0.00	2	2.0	804	PASS
174	95	50	100	86.0	41140	PASS
175	174	5	9	7.2	2963	PASS
176	174	95	101	97.0	39908	PASS
177	176	5	9	6.5	2588	PASS

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 11M82276.D
Analysis Date: 08/31/20 08:20
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U				

Worksheet #: 565881

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

SampleID : DAILY BLANK Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M82276.D Sam Mult : 1 Vial# : 8 Qt On : 08/31/20 08:34
Acq On : 08/31/20 08:20 Misc : A,5ML Qt Upd On: 08/26/20 08:57

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-31-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	269867	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	335774	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	196356	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	75285	31.21	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.03%			
39) 1,2-Dichloroethane-d4	4.778	67	31017	29.23	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.43%			
66) Toluene-d8	5.787	98	342461	26.38	ug/l	0.00
Spiked Amount 30.000			Recovery = 87.93%			
76) Bromofluorobenzene	7.167	174	161957	32.32	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.73%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

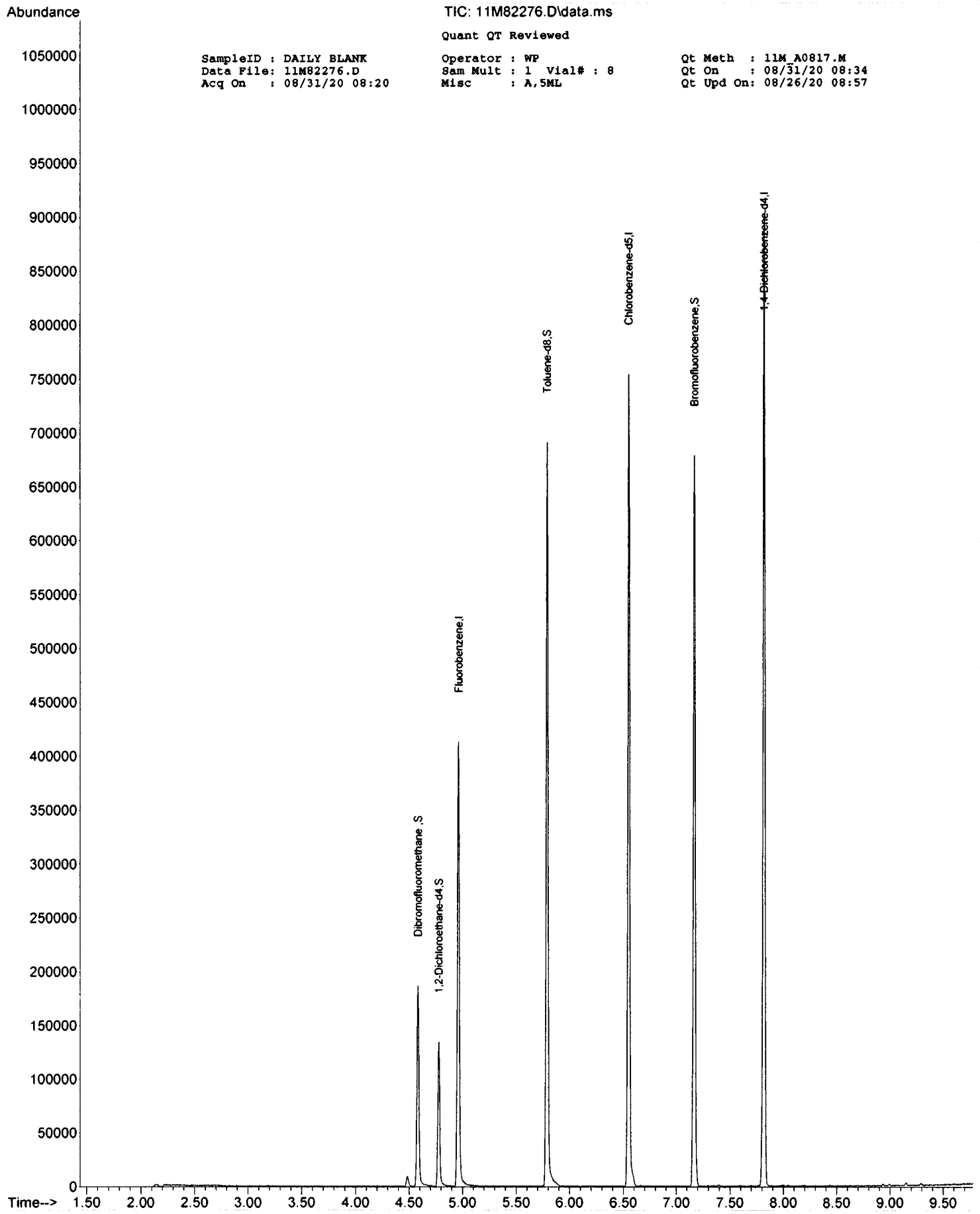
TIC: 11M82276.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK
Data File: 11M82276.D
Acq On : 08/31/20 08:20

Operator : WP
Sam Mult : 1 Vial# : 8
Misc : A,5ML

Qt Meth : 11M_A0817.M
Qt On : 08/31/20 08:34
Qt Upd On: 08/26/20 08:57



Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 6M131886.D
Analysis Date: 08/31/20 08:25
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0020	U	56-23-5	Carbon Tetrachloride	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0020	U	108-90-7	Chlorobenzene	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0020	U	75-00-3	Chloroethane	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.0020	U	67-66-3	Chloroform	0.0020	U
75-34-3	1,1-Dichloroethane	0.0020	U	74-87-3	Chloromethane	0.0020	U
75-35-4	1,1-Dichloroethene	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.0020	U
96-18-4	1,2,3-Trichloropropane	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.0020	U
95-63-6	1,2,4-Trimethylbenzene	0.0010	U	124-48-1	Dibromochloromethane	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.0020	U	75-71-8	Dichlorodifluoromethane	0.0020	U
107-06-2	1,2-Dichloroethane	0.0020	U	100-41-4	Ethylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0020	U	98-82-8	Isopropylbenzene	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	0.0010	U	79601-23-1	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0020	U	75-09-2	Methylene Chloride	0.0020	U
142-28-9	1,3-Dichloropropane	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0020	U	104-51-8	n-Butylbenzene	0.0010	U
123-91-1	1,4-Dioxane	0.10	U	103-65-1	n-Propylbenzene	0.0010	U
78-93-3	2-Butanone	0.0020	U	95-47-6	o-Xylene	0.0010	U
110-75-8	2-Chloroethylvinylether	0.0020	U	135-98-8	sec-Butylbenzene	0.0010	U
591-78-6	2-Hexanone	0.0020	U	100-42-5	Styrene	0.0020	U
99-87-6	4-Isopropyltoluene	0.0010	U	75-65-0	t-Butyl Alcohol	0.010	U
108-10-1	4-Methyl-2-Pentanone	0.0020	U	98-06-6	t-Butylbenzene	0.0010	U
67-64-1	Acetone	0.010	U	127-18-4	Tetrachloroethene	0.0020	U
107-02-8	Acrolein	0.010	U	108-88-3	Toluene	0.0010	U
107-13-1	Acrylonitrile	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0020	U
71-43-2	Benzene	0.0010	U	10061-02-6	trans-1,3-Dichloropropene	0.0020	U
75-27-4	Bromodichloromethane	0.0020	U	79-01-6	Trichloroethene	0.0020	U
75-25-2	Bromoform	0.0020	U	75-69-4	Trichlorofluoromethane	0.0020	U
74-83-9	Bromomethane	0.0020	U	75-01-4	Vinyl Chloride	0.0020	U
75-15-0	Carbon Disulfide	0.0020	U				

Worksheet #: 565881

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

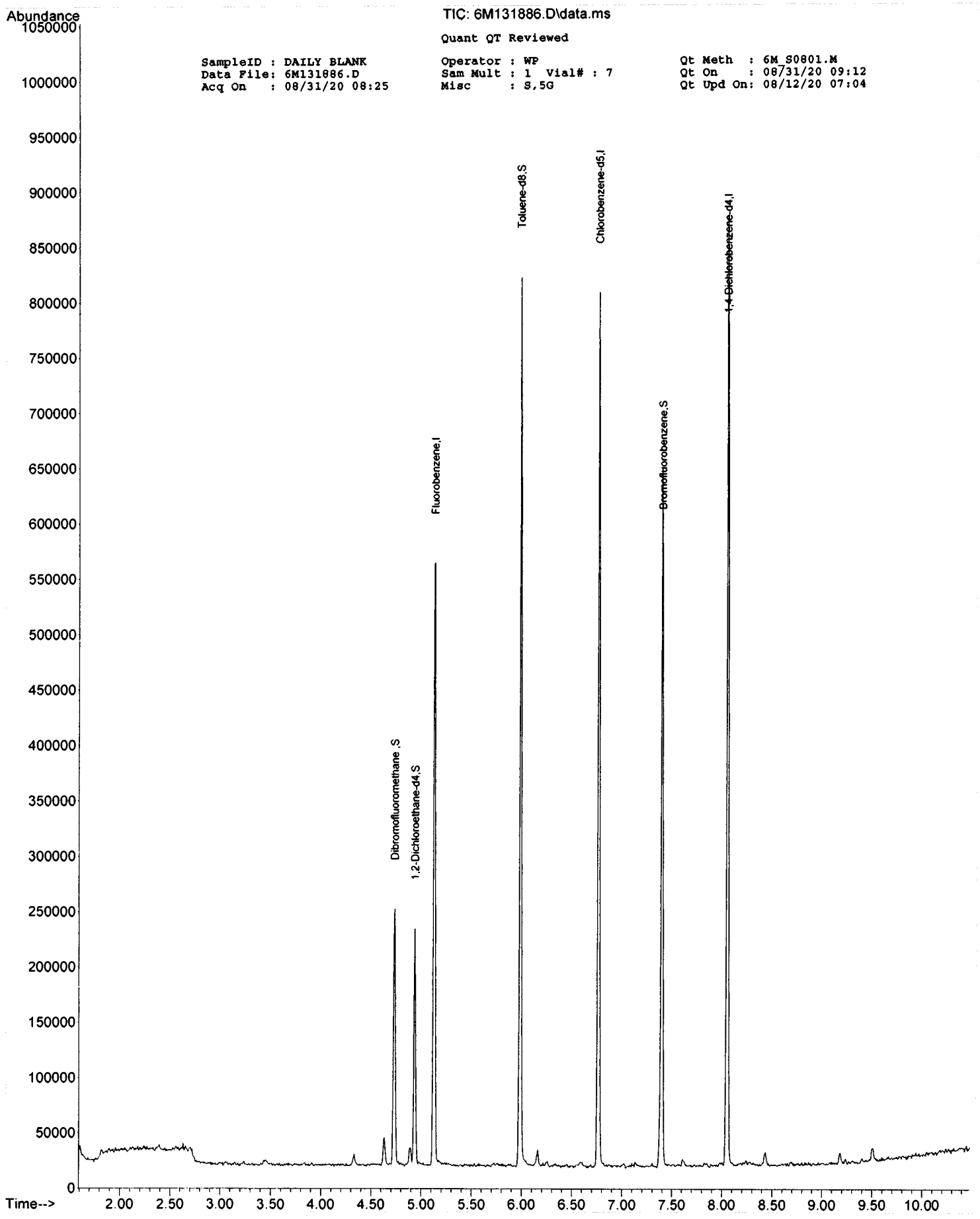
Quantitation Report (QT Reviewed)

SampleID : DAILY BLANK Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131886.D Sam Mult : 1 Vial# : 7 Qt On : 08/31/20 09:12
Acq On : 08/31/20 08:25 Misc : S,5G Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	325455	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	300945	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	168512	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	93003	32.15	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.17%			
39) 1,2-Dichloroethane-d4	4.934	67	48573	31.14	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.80%			
66) Toluene-d8	5.983	98	349765	28.17	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.90%			
76) Bromofluorobenzene	7.397	174	129990	29.30	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.67%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M131886.D\data.ms
Quant QT Reviewed
SampleID : DAILY BLANK
Data File: 6M131886.D
Acq On : 08/31/20 08:25
Operator : WP
Sam Mult : 1 Vial# : 7
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 09:12
Qt Upd On: 08/12/20 07:04
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Data File	Sample ID:	Analysis Date
Spike or Dup: 6M131888.D	MBS87762	8/31/2020 9:07:00 AM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	77.0435	0	50	154*	20	130
Dichlorodifluoromethane	1	71.9361	0	50	144*	20	130
Chloromethane	1	63.4485	0	50	127	20	130
Bromomethane	1	50.5524	0	50	101	20	130
Vinyl Chloride	1	60.9187	0	50	122	20	130
Chloroethane	1	56.196	0	50	112	20	130
Trichlorofluoromethane	1	53.2772	0	50	107	20	130
Ethyl ether	1	45.2954	0	50	91	50	130
Furan	1	48.3651	0	50	97	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	53.8862	0	50	108	50	130
Methylene Chloride	1	46.9147	0	50	94	50	130
Acrolein	1	291.8958	0	200	146*	20	130
Acrylonitrile	1	41.0821	0	50	82	20	130
Iodomethane	1	65.371	0	50	131*	50	130
Acetone	1	191.2286	0	200	96	20	130
Carbon Disulfide	1	49.1955	0	50	98	50	130
t-Butyl Alcohol	1	145.0596	0	200	73	20	130
n-Hexane	1	55.5732	0	50	111	50	130
Di-isopropyl-ether	1	50.9804	0	50	102	50	130
1,1-Dichloroethene	1	54.7368	0	50	109	50	130
Methyl Acetate	1	56.1536	0	50	112	50	130
Methyl-t-butyl ether	1	53.4186	0	50	107	50	130
1,1-Dichloroethane	1	51.3318	0	50	103	50	130
trans-1,2-Dichloroethene	1	52.6015	0	50	105	50	130
Ethyl-t-butyl ether	1	46.2693	0	50	93	50	130
cis-1,2-Dichloroethene	1	50.5797	0	50	101	50	130
Bromochloromethane	1	50.2529	0	50	101	50	130
2,2-Dichloropropane	1	58.6043	0	50	117	50	130
Ethyl acetate	1	42.8638	0	50	86	50	130
1,4-Dioxane	1	1557.786	0	2500	62	50	130
1,1-Dichloropropene	1	50.9925	0	50	102	50	130
Chloroform	1	51.042	0	50	102	50	130
Cyclohexane	1	51.9312	0	50	104	50	130
1,2-Dichloroethane	1	51.3951	0	50	103	50	130
2-Butanone	1	41.0564	0	50	82	20	130
1,1,1-Trichloroethane	1	52.0174	0	50	104	50	130
Carbon Tetrachloride	1	52.2009	0	50	104	50	130
Vinyl Acetate	1	38.9192	0	50	78	50	130
Bromodichloromethane	1	50.6791	0	50	101	50	130
Methylcyclohexane	1	49.9512	0	50	100	50	130
Dibromomethane	1	51.026	0	50	102	50	130
1,2-Dichloropropane	1	50.2056	0	50	100	50	130
Trichloroethene	1	49.277	0	50	99	50	130
Benzene	1	49.4058	0	50	99	50	130
tert-Amyl methyl ether	1	49.7989	0	50	100	50	130
Iso-propylacetate	1	44.3314	0	50	89	50	130
Methyl methacrylate	1	42.8021	0	50	86	50	130
Dibromochloromethane	1	48.2256	0	50	96	50	130
2-Chloroethylvinylether	1	103.4236	0	50	207*	50	130
cis-1,3-Dichloropropene	1	48.2806	0	50	97	50	130
trans-1,3-Dichloropropene	1	49.4282	0	50	99	50	130
Ethyl methacrylate	1	45.9704	0	50	92	50	130
1,1,2-Trichloroethane	1	46.6959	0	50	93	50	130
1,2-Dibromoethane	1	46.967	0	50	94	50	130
1,3-Dichloropropane	1	46.3203	0	50	93	50	130
4-Methyl-2-Pentanone	1	39.3965	0	50	79	20	130
2-Hexanone	1	39.3843	0	50	79	20	130
Tetrachloroethene	1	45.5631	0	50	91	50	130
Toluene	1	44.3318	0	50	89	50	130
1,1,1,2-Tetrachloroethane	1	45.9037	0	50	92	50	130
Chlorobenzene	1	44.3688	0	50	89	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C	Matrix: Soil	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	44.6065	0	50	89	50	130
n-Amyl acetate	1	44.5516	0	50	89	50	130
Bromoform	**1**	**68.5695**	**0**	**50**	**137***	**20**	**130**
Ethylbenzene	**1**	**44.6076**	**0**	**50**	**89**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**43.792**	**0**	**50**	**88**	**50**	**130**
Styrene	**1**	**43.4477**	**0**	**50**	**87**	**50**	**130**
m&p-Xylenes	**1**	**87.0434**	**0**	**100**	**87**	**50**	**130**
o-Xylene	**1**	**41.9207**	**0**	**50**	**84**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	44.7106	0	50	89	20	130
1,3-Dichlorobenzene	**1**	**43.7558**	**0**	**50**	**88**	**50**	**130**
1,4-Dichlorobenzene	**1**	**42.9135**	**0**	**50**	**86**	**50**	**130**
1,2-Dichlorobenzene	**1**	**43.5856**	**0**	**50**	**87**	**50**	**130**
Isopropylbenzene	**1**	**43.989**	**0**	**50**	**88**	**50**	**130**
Cyclohexanone	1	183.5002	0	250	73	50	130
Camphene	1	46.1519	0	50	92	50	130
1,2,3-Trichloropropane	**1**	**42.6801**	**0**	**50**	**85**	**50**	**130**
2-Chlorotoluene	1	44.5685	0	50	89	50	130
p-Ethyltoluene	1	43.0244	0	50	86	50	130
4-Chlorotoluene	1	46.4898	0	50	93	50	130
n-Propylbenzene	**1**	**44.8788**	**0**	**50**	**90**	**50**	**130**
Bromobenzene	1	43.9032	0	50	88	50	130
1,3,5-Trimethylbenzene	**1**	**49.1502**	**0**	**50**	**98**	**50**	**130**
Butyl methacrylate	1	41.7019	0	50	83	50	130
t-Butylbenzene	**1**	**45.1207**	**0**	**50**	**90**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**45.2927**	**0**	**50**	**91**	**50**	**130**
sec-Butylbenzene	**1**	**47.7034**	**0**	**50**	**95**	**50**	**130**
4-Isopropyltoluene	**1**	**47.9029**	**0**	**50**	**96**	**50**	**130**
n-Butylbenzene	**1**	**49.0503**	**0**	**50**	**98**	**50**	**130**
p-Diethylbenzene	1	48.4126	0	50	97	50	130
1,2,4,5-Tetramethylbenzene	1	48.3684	0	50	97	50	130
1,2-Dibromo-3-Chloropropane	1	38.5331	0	50	77	50	130
Camphor	1	555.9057	0	500	111	50	130
Hexachlorobutadiene	1	45.011	0	50	90	50	130
1,2,4-Trichlorobenzene	1	43.352	0	50	87	50	130
1,2,3-Trichlorobenzene	1	42.4155	0	50	85	50	130
Naphthalene	1	39.7835	0	50	80	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Quantitation Report (QT Reviewed)

SampleID : MBS
Data File: 6M131888.D
Acq On : 08/31/20 09:07
Operator : WP
Sam Mult : 1 Vial# : 9
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 10:00
Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	357661	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	320865	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.050	152	194278m	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	98633	31.03	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.43%			
39) 1,2-Dichloroethane-d4	4.934	67	53588m	31.26	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.20%			
66) Toluene-d8	5.983	98	380357	28.73	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.77%			
76) Bromofluorobenzene	7.391	174	148427m	29.02	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.73%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	289764	77.0435	ug/l	95
6) Dichlorodifluoromethane	1.636	85	176237	71.9361	ug/l	98
7) Chloromethane	1.813	50	191894	63.4485	ug/l	98
8) Bromomethane	2.233	94	113964	50.5524	ug/l	96
9) Vinyl Chloride	1.916	62	214091	60.9187	ug/l	96
10) Chloroethane	2.325	64	134378	56.1960	ug/l	99
11) Trichlorofluoromethane	2.557	101	308229	53.2772	ug/l	99
12) Ethyl ether	2.807	59	96444m	45.2954	ug/l	
13) Furan	2.843	39	231642m	48.3651	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	118617	53.8862	ug/l	97
15) Methylene Chloride	3.434	84	151778	46.9147	ug/l	99
16) Acrolein	2.922	56	121849m	291.8958	ug/l	
17) Acrylonitrile	3.642	53	51956m	41.0821	ug/l	
18) Iodomethane	3.160	142	181967m	65.3710	ug/l	
19) Acetone	3.050	43	232037m	191.2286	ug/l	
20) Carbon Disulfide	3.233	76	396947m	49.1955	ug/l	
21) t-Butyl Alcohol	3.508	59	85309m	145.0596	ug/l	
22) n-Hexane	3.910	57	174679m	55.5732	ug/l	
23) Di-isopropyl-ether	4.062	45	381771m	50.9804	ug/l	
24) 1,1-Dichloroethene	3.020	61	221794	54.7368	ug/l	99
25) Methyl Acetate	3.337	43	140426m	56.1536	ug/l	
26) Methyl-t-butyl ether	3.672	73	342591	53.4186	ug/l	99
27) 1,1-Dichloroethane	4.026	63	269366	51.3318	ug/l	97
28) trans-1,2-Dichloroethene	3.678	96	160444m	52.6015	ug/l	
29) Ethyl-t-butyl ether	4.325	59	379360	46.2693	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	268413	50.5797	ug/l	96
31) Bromochloromethane	4.593	49	122690	50.2529	ug/l	93
32) 2,2-Dichloropropane	4.446	77	250606	58.6043	ug/l	97
33) Ethyl acetate	4.465	43	161001m	42.8638	ug/l	
34) 1,4-Dioxane	5.519	88	102675m	1557.7857	ug/l	
35) 1,1-Dichloropropene	4.855	75	218361	50.9925	ug/l	98
36) Chloroform	4.635	83	282701m	51.0420	ug/l	
38) Cyclohexane	4.800	56	227722	51.9312	ug/l	97
40) 1,2-Dichloroethane	4.977	62	212785	51.3951	ug/l	96
41) 2-Butanone	4.434	43	72878m	41.0564	ug/l	
42) 1,1,1-Trichloroethane	4.763	97	257916m	52.0174	ug/l	
43) Carbon Tetrachloride	4.861	117	221002m	52.2009	ug/l	
44) Vinyl Acetate	4.056	43	347827m	38.9192	ug/l	
45) Bromodichloromethane	5.593	83	196820m	50.6791	ug/l	
46) Methylcyclohexane	5.446	83	224578	49.9512	ug/l	96
47) Dibromomethane	5.526	174	103154	51.0260	ug/l	96
48) 1,2-Dichloropropane	5.458	63	154909	50.2056	ug/l	99
49) Trichloroethene	5.330	130	172309m	49.2770	ug/l	
50) Benzene	4.977	78	596475m	49.4058	ug/l	
51) tert-Amyl methyl ether	5.020	73	351447	49.7989	ug/l	99
53) Iso-propylacetate	4.977	43	247728m	44.3314	ug/l	
54) Methyl methacrylate	5.483	41	116857m	42.8021	ug/l	
55) Dibromochloromethane	6.446	129	145225m	48.2256	ug/l	
56) 2-Chloroethylvinylether	5.733	63	87839	103.4236	ug/l	97
57) cis-1,3-Dichloropropene	5.830	75	230883	48.2806	ug/l	98
58) trans-1,3-Dichloropropene	6.117	75	206915	49.4282	ug/l	100
59) Ethyl methacrylate	6.135	41	124559m	45.9704	ug/l	
60) 1,1,2-Trichloroethane	6.221	97	128636m	46.6959	ug/l	
61) 1,2-Dibromoethane	6.525	107	134306m	46.9670	ug/l	
62) 1,3-Dichloropropane	6.318	76	225786	46.3203	ug/l	100
63) 4-Methyl-2-Pentanone	5.897	43	147459m	39.3965	ug/l	
64) 2-Hexanone	6.330	43	116125m	39.3843	ug/l	
65) Tetrachloroethene	6.318	164	135453m	45.5631	ug/l	
67) Toluene	6.019	92	384601	44.3318	ug/l	100

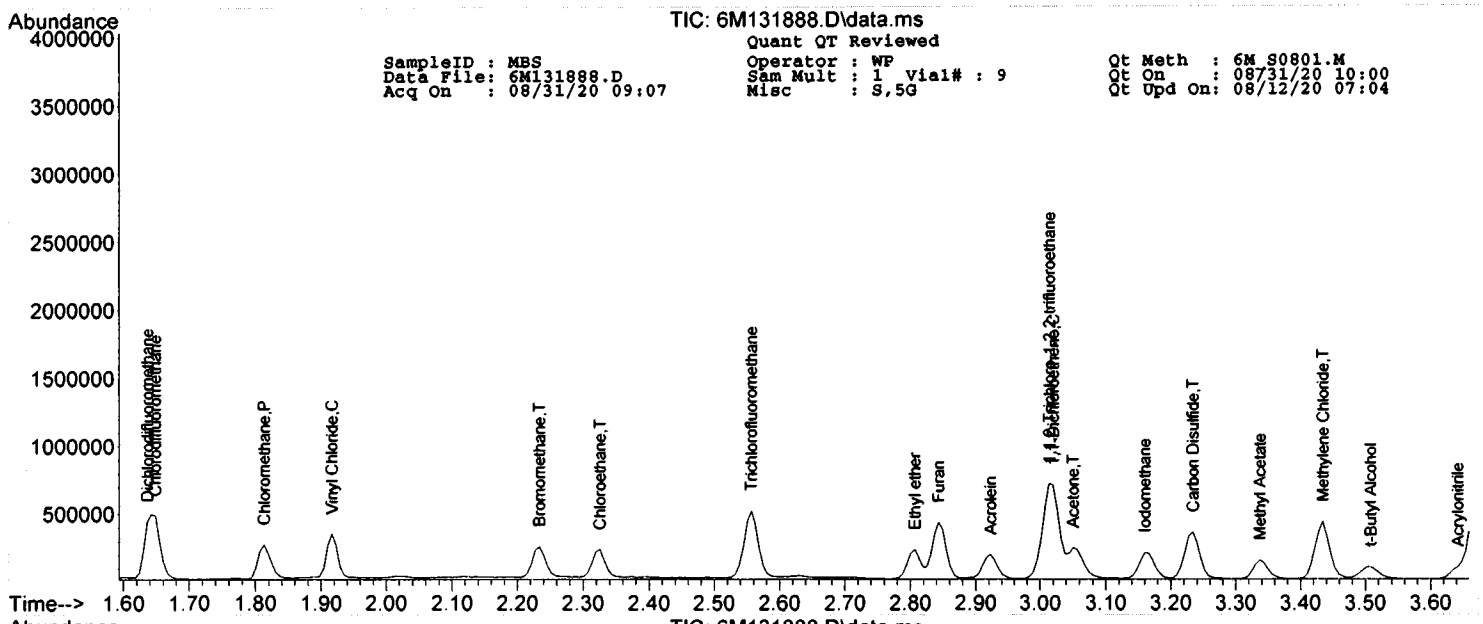
Quantitation Report (QT Reviewed)

SampleID : MBS Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131888.D Sam Mult : 1 Vial# : 9 Qt On : 08/31/20 10:00
Acq On : 08/31/20 09:07 Misc : S,5G Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	142282m	45.9037	ug/l	
69)	Chlorobenzene	6.781	112	420629m	44.3688	ug/l	
71)	n-Butyl acrylate	7.019	55	247553m	44.6065	ug/l	
72)	n-Amyl acetate	7.135	43	233783m	44.5516	ug/l	
73)	Bromoform	7.233	173	96885m	68.5695	ug/l	
74)	Ethylbenzene	6.818	106	191424m	44.6076	ug/l	
75)	1,1,2,2-Tetrachloroethane	7.446	83	181220m	43.7920	ug/l	
77)	Styrene	7.105	104	461265	43.4477	ug/l	98
78)	m&p-Xylenes	6.879	106	560315	87.0434	ug/l	99
79)	o-Xylene	7.098	106	266083m	41.9207	ug/l	
80)	trans-1,4-Dichloro-2-b...	7.470	53	89999m	44.7106	ug/l	
81)	1,3-Dichlorobenzene	8.019	146	347571m	43.7558	ug/l	
82)	1,4-Dichlorobenzene	8.068	146	351652m	42.9135	ug/l	
83)	1,2-Dichlorobenzene	8.293	146	323350m	43.5856	ug/l	
84)	Isopropylbenzene	7.294	105	725655m	43.9890	ug/l	
85)	Cyclohexanone	7.367	55	41805m	183.5002	ug/l	
86)	Camphene	7.470	93	277053m	46.1519	ug/l	
87)	1,2,3-Trichloropropane	7.483	75	227822m	42.6801	ug/l	
88)	2-Chlorotoluene	7.592	91	440643m	44.5685	ug/l	
89)	p-Ethyltoluene	7.580	105	728352m	43.0244	ug/l	
90)	4-Chlorotoluene	7.647	91	450819m	46.4898	ug/l	
91)	n-Propylbenzene	7.519	91	868332m	44.8788	ug/l	
92)	Bromobenzene	7.495	77	445430	43.9032	ug/l	98
93)	1,3,5-Trimethylbenzene	7.604	105	582566m	49.1502	ug/l	
94)	Butyl methacrylate	7.611	41	190496m	41.7019	ug/l	
95)	t-Butylbenzene	7.806	119	608460m	45.1207	ug/l	
96)	1,2,4-Trimethylbenzene	7.830	105	606044m	45.2927	ug/l	
97)	sec-Butylbenzene	7.928	105	818697m	47.7034	ug/l	
98)	4-Isopropyltoluene	8.001	119	689670	47.9029	ug/l	99
99)	n-Butylbenzene	8.238	91	805030	49.0503	ug/l	99
100)	p-Diethylbenzene	8.220	119	413336	48.4126	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.684	119	583761	48.3684	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.738	157	42225m	38.5331	ug/l	
103)	Camphor	9.177	95	211996m	555.9057	ug/l	
104)	Hexachlorobutadiene	9.318	225	134246m	45.0110	ug/l	
105)	1,2,4-Trichlorobenzene	9.238	180	233230m	43.3520	ug/l	
106)	1,2,3-Trichlorobenzene	9.537	180	207670m	42.4155	ug/l	
107)	Naphthalene	9.397	128	535818m	39.7835	ug/l	

(#) = qualifier out of range (m) = manual integration (+) = signals summed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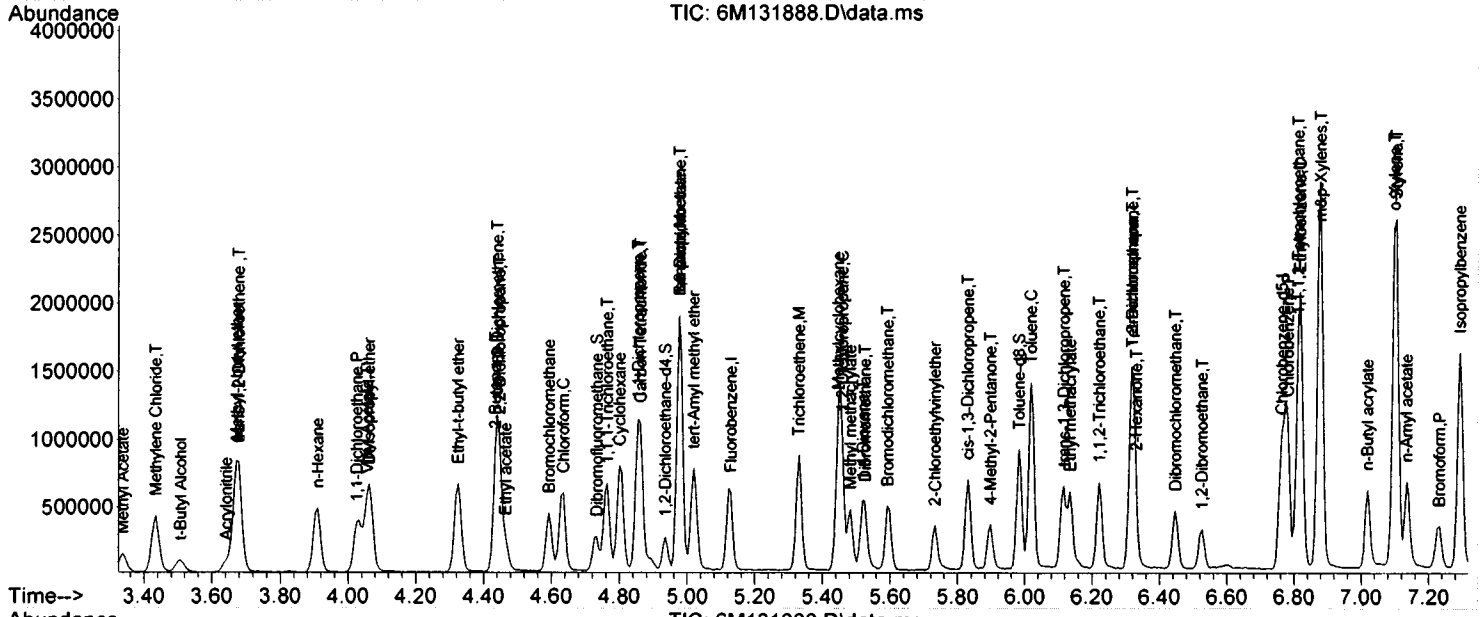
SampleID : MBS
Data File: 6M131888.D
Acq On : 08/31/20 09:07
Operator : WP
Sam Mult : 1 Vial# : 9
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08731/20 10:00
Qt Upd On: 08/12/20 07:04
Abundance
Time-->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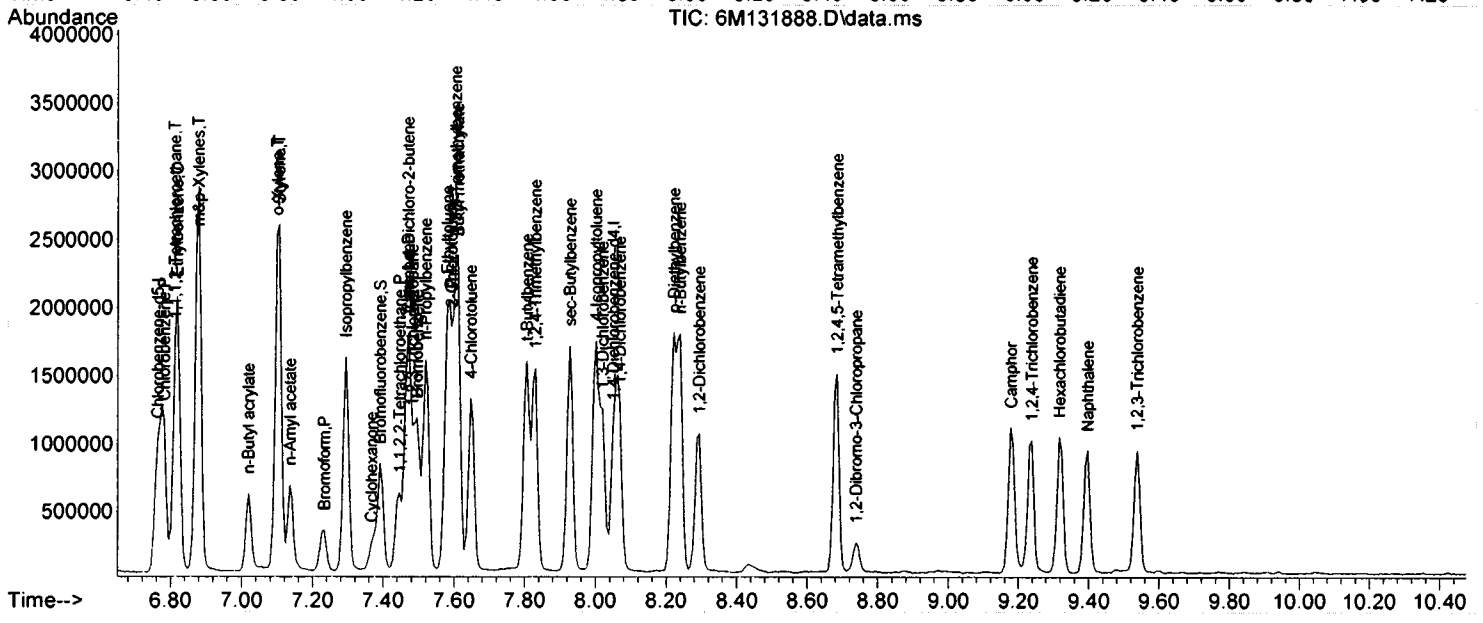
Time-->


TIC: 6M131888.D\data.ms
Abundance
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Non Spike(If applicable):	6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	56.9035	0	50	114	20	130
Dichlorodifluoromethane	1	62.8668	0	50	126	20	130
Chloromethane	1	56.1541	0	50	112	20	130
Bromomethane	1	50.2121	0	50	100	20	130
Vinyl Chloride	1	56.1453	0	50	112	20	130
Chloroethane	1	51.908	0	50	104	20	130
Trichlorofluoromethane	1	51.1041	0	50	102	20	130
Ethyl ether	1	46.2834	0	50	93	50	130
Furan	1	46.2299	0	50	92	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	52.3408	0	50	105	50	130
Methylene Chloride	1	52.7897	5.0839	50	95	50	130
Acrolein	1	248.918	0	200	124	20	130
Acrylonitrile	1	34.3463	0	50	69	20	130
Iodomethane	1	64.5939	0	50	129	50	130
Acetone	1	157.3904	0	200	79	20	130
Carbon Disulfide	1	47.3944	0	50	95	50	130
t-Butyl Alcohol	1	116.3514	0	200	58	20	130
n-Hexane	1	54.7434	0	50	109	50	130
Di-isopropyl-ether	1	54.2364	0	50	108	50	130
1,1-Dichloroethene	1	52.2403	0	50	104	50	130
Methyl Acetate	1	46.8893	0	50	94	50	130
Methyl-t-butyl ether	1	54.3286	0	50	109	50	130
1,1-Dichloroethane	1	49.0593	0	50	98	50	130
trans-1,2-Dichloroethene	1	49.6338	0	50	99	50	130
Ethyl-t-butyl ether	1	49.3762	0	50	99	50	130
cis-1,2-Dichloroethene	1	49.1894	0	50	98	50	130
Bromochloromethane	1	50.2977	0	50	101	50	130
2,2-Dichloropropane	1	57.0601	0	50	114	50	130
Ethyl acetate	1	36.7433	0	50	73	50	130
1,4-Dioxane	1	1274.773	0	2500	51	50	130
1,1-Dichloropropene	1	48.5605	0	50	97	50	130
Chloroform	1	49.9443	0	50	100	50	130
Cyclohexane	1	50.8219	0	50	102	50	130
1,2-Dichloroethane	1	50.2019	0	50	100	50	130
2-Butanone	1	33.5103	0	50	67	20	130
1,1,1-Trichloroethane	1	49.0659	0	50	98	50	130
Carbon Tetrachloride	1	51.644	0	50	103	50	130
Vinyl Acetate	1	37.6728	0	50	75	50	130
Bromodichloromethane	1	50.2178	0	50	100	50	130
Methylcyclohexane	1	50.4394	0	50	101	50	130
Dibromomethane	1	47.858	0	50	96	50	130
1,2-Dichloropropane	1	48.2694	0	50	97	50	130
Trichloroethene	1	73.1622	21.8	50	103	50	130
Benzene	1	48.4836	0	50	97	50	130
tert-Amyl methyl ether	1	52.4065	0	50	105	50	130
Iso-propylacetate	1	41.66	0	50	83	50	130
Methyl methacrylate	1	39.8495	0	50	80	50	130
Dibromochloromethane	1	45.6697	0	50	91	50	130
2-Chloroethylvinylether	1	95.5322	0	50	191*	50	130
cis-1,3-Dichloropropene	1	45.5903	0	50	91	50	130
trans-1,3-Dichloropropene	1	44.067	0	50	88	50	130
Ethyl methacrylate	1	43.1348	0	50	86	50	130
1,1,2-Trichloroethane	1	44.5196	0	50	89	50	130
1,2-Dibromoethane	1	41.0321	0	50	82	50	130
1,3-Dichloropropane	1	42.8237	0	50	86	50	130
4-Methyl-2-Pentanone	1	33.7094	0	50	67	20	130
2-Hexanone	1	30.8066	0	50	62	20	130
Tetrachloroethene	1	50.6666	10.8224	50	80	50	130
Toluene	1	41.0645	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.0505	0	50	90	50	130
Chlorobenzene	1	39.6054	0	50	79	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	41.0364	0	50	82	50	130
n-Amyl acetate	1	38.5687	0	50	77	50	130
Bromoform	1	65.2935	0	50	131*	20	130
Ethylbenzene	1	42.9713	0	50	86	50	130
1,1,2,2-Tetrachloroethane	1	40.0258	0	50	80	50	130
Styrene	1	37.9266	0	50	76	50	130
m&p-Xylenes	1	78.4306	0	100	78	50	130
o-Xylene	1	39.2014	0	50	78	50	130
trans-1,4-Dichloro-2-butene	1	36.9711	0	50	74	20	130
1,3-Dichlorobenzene	1	35.471	0	50	71	50	130
1,4-Dichlorobenzene	1	33.9467	0	50	68	50	130
1,2-Dichlorobenzene	1	35.8729	0	50	72	50	130
Isopropylbenzene	1	40.7636	0	50	82	50	130
Cyclohexanone	1	125.4322	0	250	50	50	130
Camphene	1	41.718	0	50	83	50	130
1,2,3-Trichloropropane	1	36.3643	0	50	73	50	130
2-Chlorotoluene	1	40.2726	0	50	81	50	130
p-Ethyltoluene	1	36.6825	0	50	73	50	130
4-Chlorotoluene	1	37.6433	0	50	75	50	130
n-Propylbenzene	1	38.3835	0	50	77	50	130
Bromobenzene	1	38.8818	0	50	78	50	130
1,3,5-Trimethylbenzene	1	43.2564	0	50	87	50	130
Butyl methacrylate	1	41.2717	0	50	83	50	130
t-Butylbenzene	1	40.0099	0	50	80	50	130
1,2,4-Trimethylbenzene	1	38.5263	0	50	77	50	130
sec-Butylbenzene	1	40.366	0	50	81	50	130
4-Isopropyltoluene	1	39.5065	0	50	79	50	130
n-Butylbenzene	1	36.1879	0	50	72	50	130
p-Diethylbenzene	1	36.9323	0	50	74	50	130
1,2,4,5-Tetramethylbenzene	1	37.6781	0	50	75	50	130
1,2-Dibromo-3-Chloropropane	1	31.3599	0	50	63	50	130
Camphor	1	473.298	0	500	95	50	130
Hexachlorobutadiene	1	35.1542	0	50	70	50	130
1,2,4-Trichlorobenzene	1	28.2306	0	50	56	50	130
1,2,3-Trichlorobenzene	1	30.0156	0	50	60	50	130
Naphthalene	1	30.4916	0	50	61	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Data File	Sample ID:	Analysis Date
Spike or Dup: 6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Non Spike(If applicable): 6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):		

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	53.7847	0	50	108	20	130
Dichlorodifluoromethane	1	65.4838	0	50	131*	20	130
Chloromethane	1	56.6472	0	50	113	20	130
Bromomethane	1	51.6003	0	50	103	20	130
Vinyl Chloride	1	56.8458	0	50	114	20	130
Chloroethane	1	52.3136	0	50	105	20	130
Trichlorofluoromethane	1	52.2935	0	50	105	20	130
Ethyl ether	1	49.7009	0	50	99	50	130
Furan	1	47.2611	0	50	95	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	56.3197	0	50	113	50	130
Methylene Chloride	1	54.1757	5.0839	50	98	50	130
Acrolein	1	259.5406	0	200	130	20	130
Acrylonitrile	1	35.0489	0	50	70	20	130
Iodomethane	1	65.8217	0	50	132*	50	130
Acetone	1	162.1024	0	200	81	20	130
Carbon Disulfide	1	49.643	0	50	99	50	130
t-Butyl Alcohol	1	127.633	0	200	64	20	130
n-Hexane	1	58.3019	0	50	117	50	130
Di-isopropyl-ether	1	55.5257	0	50	111	50	130
1,1-Dichloroethene	1	53.6783	0	50	107	50	130
Methyl Acetate	1	50.8647	0	50	102	50	130
Methyl-t-butyl ether	1	57.9525	0	50	116	50	130
1,1-Dichloroethane	1	52.194	0	50	104	50	130
trans-1,2-Dichloroethene	1	49.8849	0	50	100	50	130
Ethyl-t-butyl ether	1	51.0834	0	50	102	50	130
cis-1,2-Dichloroethene	1	51.2312	0	50	102	50	130
Bromochloromethane	1	53.4537	0	50	107	50	130
2,2-Dichloropropane	1	58.147	0	50	116	50	130
Ethyl acetate	1	33.6297	0	50	67	50	130
1,4-Dioxane	1	1315.993	0	2500	53	50	130
1,1-Dichloropropene	1	50.4388	0	50	101	50	130
Chloroform	1	51.9592	0	50	104	50	130
Cyclohexane	1	52.7667	0	50	106	50	130
1,2-Dichloroethane	1	52.776	0	50	106	50	130
2-Butanone	1	34.6742	0	50	69	20	130
1,1,1-Trichloroethane	1	52.2007	0	50	104	50	130
Carbon Tetrachloride	1	53.6249	0	50	107	50	130
Vinyl Acetate	1	39.662	0	50	79	50	130
Bromodichloromethane	1	52.8916	0	50	106	50	130
Methylcyclohexane	1	51.9779	0	50	104	50	130
Dibromomethane	1	50.6971	0	50	101	50	130
1,2-Dichloropropane	1	49.6665	0	50	99	50	130
Trichloroethene	1	75.2922	21.8	50	107	50	130
Benzene	1	50.3163	0	50	101	50	130
tert-Amyl methyl ether	1	56.2173	0	50	112	50	130
Iso-propylacetate	1	42.6062	0	50	85	50	130
Methyl methacrylate	1	41.2272	0	50	82	50	130
Dibromochloromethane	1	48.1401	0	50	96	50	130
2-Chloroethylvinylether	1	100.3461	0	50	201*	50	130
cis-1,3-Dichloropropene	1	46.6773	0	50	93	50	130
trans-1,3-Dichloropropene	1	47.5296	0	50	95	50	130
Ethyl methacrylate	1	46.9747	0	50	94	50	130
1,1,2-Trichloroethane	1	46.8811	0	50	94	50	130
1,2-Dibromoethane	1	44.9778	0	50	90	50	130
1,3-Dichloropropane	1	46.3511	0	50	93	50	130
4-Methyl-2-Pentanone	1	36.7572	0	50	74	20	130
2-Hexanone	1	34.1195	0	50	68	20	130
Tetrachloroethene	1	52.4352	10.8224	50	83	50	130
Toluene	1	40.7723	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.2612	0	50	91	50	130
Chlorobenzene	1	40.3151	0	50	81	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C		Matrix: Soil		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	45.4686	0	50	91	50	130
n-Amyl acetate	1	44.7211	0	50	89	50	130
Bromoform	1	70.4273	0	50	141*	20	130
Ethylbenzene	1	42.7105	0	50	85	50	130
1,1,2,2-Tetrachloroethane	1	44.1548	0	50	88	50	130
Styrene	1	40.2637	0	50	81	50	130
m&p-Xylenes	1	78.8436	0	100	79	50	130
o-Xylene	1	39.4447	0	50	79	50	130
trans-1,4-Dichloro-2-butene	1	40.8268	0	50	82	20	130
1,3-Dichlorobenzene	1	37.8242	0	50	76	50	130
1,4-Dichlorobenzene	1	36.8102	0	50	74	50	130
1,2-Dichlorobenzene	1	39.293	0	50	79	50	130
Isopropylbenzene	1	40.7047	0	50	81	50	130
Cyclohexanone	1	135.2346	0	250	54	50	130
Camphene	1	42.2018	0	50	84	50	130
1,2,3-Trichloropropane	1	41.2923	0	50	83	50	130
2-Chlorotoluene	1	41.5022	0	50	83	50	130
p-Ethyltoluene	1	37.3405	0	50	75	50	130
4-Chlorotoluene	1	39.557	0	50	79	50	130
n-Propylbenzene	1	39.5838	0	50	79	50	130
Bromobenzene	1	39.8882	0	50	80	50	130
1,3,5-Trimethylbenzene	1	44.2606	0	50	89	50	130
Butyl methacrylate	1	44.8847	0	50	90	50	130
t-Butylbenzene	1	40.8828	0	50	82	50	130
1,2,4-Trimethylbenzene	1	39.8077	0	50	80	50	130
sec-Butylbenzene	1	41.2564	0	50	83	50	130
4-Isopropyltoluene	1	40.7458	0	50	81	50	130
n-Butylbenzene	1	38.6688	0	50	77	50	130
p-Diethylbenzene	1	38.5083	0	50	77	50	130
1,2,4,5-Tetramethylbenzene	1	41.4972	0	50	83	50	130
1,2-Dibromo-3-Chloropropane	1	36.9535	0	50	74	50	130
Camphor	1	547.1421	0	500	109	50	130
Hexachlorobutadiene	1	36.7858	0	50	74	50	130
1,2,4-Trichlorobenzene	1	33.9584	0	50	68	50	130
1,2,3-Trichlorobenzene	1	34.7254	0	50	69	50	130
Naphthalene	1	35.4652	0	50	71	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch:MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Duplicate(If applicable):	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	53.7847	56.9035	5.6	30
Dichlorodifluoromethane	**1**	**65.4838**	**62.8668**	**4.1**	**30**
Chloromethane	**1**	**56.6472**	**56.1541**	**0.87**	**30**
Bromomethane	**1**	**51.6003**	**50.2121**	**2.7**	**30**
Vinyl Chloride	**1**	**56.8458**	**56.1453**	**1.2**	**40**
Chloroethane	**1**	**52.3136**	**51.908**	**0.78**	**30**
Trichlorofluoromethane	**1**	**52.2935**	**51.1041**	**2.3**	**30**
Ethyl ether	1	49.7009	46.2834	7.1	30
Furan	1	47.2611	46.2299	2.2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**56.3197**	**52.3408**	**7.3**	**30**
Methylene Chloride	**1**	**54.1757**	**52.7897**	**2.6**	**30**
Acrolein	**1**	**259.5406**	**248.918**	**4.2**	**30**
Acrylonitrile	**1**	**35.0489**	**34.3463**	**2**	**30**
Iodomethane	1	65.8217	64.5939	1.9	30
Acetone	**1**	**162.1024**	**157.3904**	**2.9**	**30**
Carbon Disulfide	**1**	**49.643**	**47.3944**	**4.6**	**30**
t-Butyl Alcohol	**1**	**127.633**	**116.3514**	**9.2**	**30**
n-Hexane	1	58.3019	54.7434	6.3	30
Di-isopropyl-ether	1	55.5257	54.2364	2.3	30
1,1-Dichloroethene	**1**	**53.6783**	**52.2403**	**2.7**	**40**
Methyl Acetate	1	50.8647	46.8893	8.1	30
Methyl-t-butyl ether	**1**	**57.9525**	**54.3286**	**6.5**	**30**
1,1-Dichloroethane	**1**	**52.194**	**49.0593**	**6.2**	**40**
trans-1,2-Dichloroethene	**1**	**49.8849**	**49.6338**	**0.5**	**30**
Ethyl-t-butyl ether	1	51.0834	49.3762	3.4	30
cis-1,2-Dichloroethene	**1**	**51.2312**	**49.1894**	**4.1**	**30**
Bromochloromethane	1	53.4537	50.2977	6.1	30
2,2-Dichloropropane	1	58.147	57.0601	1.9	30
Ethyl acetate	1	33.6297	36.7433	8.8	30
1,4-Dioxane	**1**	**1315.993**	**1274.773**	**3.2**	**30**
1,1-Dichloropropene	1	50.4388	48.5605	3.8	30
Chloroform	**1**	**51.9592**	**49.9443**	**4**	**40**
Cyclohexane	1	52.7667	50.8219	3.8	30
1,2-Dichloroethane	**1**	**52.776**	**50.2019**	**5**	**40**
2-Butanone	**1**	**34.6742**	**33.5103**	**3.4**	**40**
1,1,1-Trichloroethane	**1**	**52.2007**	**49.0659**	**6.2**	**30**
Carbon Tetrachloride	**1**	**53.6249**	**51.644**	**3.8**	**40**
Vinyl Acetate	1	39.662	37.6728	5.1	30
Bromodichloromethane	**1**	**52.8916**	**50.2178**	**5.2**	**30**
Methylcyclohexane	1	51.9779	50.4394	3	30
Dibromomethane	1	50.6971	47.858	5.8	30
1,2-Dichloropropane	**1**	**49.6665**	**48.2694**	**2.9**	**30**
Trichloroethene	**1**	**75.2922**	**73.1622**	**2.9**	**40**
Benzene	**1**	**50.3163**	**48.4836**	**3.7**	**40**
tert-Amyl methyl ether	1	56.2173	52.4065	7	30
Iso-propylacetate	1	42.6062	41.66	2.2	30
Methyl methacrylate	1	41.2272	39.8495	3.4	30
Dibromochloromethane	**1**	**48.1401**	**45.6697**	**5.3**	**30**
2-Chloroethylvinylether	**1**	**100.3461**	**95.5322**	**4.9**	**30**
cis-1,3-Dichloropropene	**1**	**46.6773**	**45.5903**	**2.4**	**30**
trans-1,3-Dichloropropene	**1**	**47.5296**	**44.067**	**7.6**	**30**
Ethyl methacrylate	1	46.9747	43.1348	8.5	30
1,1,2-Trichloroethane	**1**	**46.8811**	**44.5196**	**5.2**	**30**
1,2-Dibromoethane	1	44.9778	41.0321	9.2	30
1,3-Dichloropropane	**1**	**46.3511**	**42.8237**	**7.9**	**30**
4-Methyl-2-Pentanone	**1**	**36.7572**	**33.7094**	**8.7**	**30**
2-Hexanone	**1**	**34.1195**	**30.8066**	**10**	**30**
Tetrachloroethene	**1**	**52.4352**	**50.6666**	**3.4**	**40**
Toluene	**1**	**40.7723**	**41.0645**	**0.71**	**40**
1,1,1,2-Tetrachloroethane	1	45.2612	45.0505	0.47	30
Chlorobenzene	**1**	**40.3151**	**39.6054**	**1.8**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits

QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	45.4686	41.0364	10	30
n-Amyl acetate	1	44.7211	38.5687	15	30
Bromoform	**1**	**70.4273**	**65.2935**	**7.6**	**30**
Ethylbenzene	**1**	**42.7105**	**42.9713**	**0.61**	**30**
1,1,2,2-Tetrachloroethane	**1**	**44.1548**	**40.0258**	**9.8**	**30**
Styrene	**1**	**40.2637**	**37.9266**	**6**	**30**
m&p-Xylenes	**1**	**78.8436**	**78.4306**	**0.53**	**30**
o-Xylene	**1**	**39.4447**	**39.2014**	**0.62**	**30**
trans-1,4-Dichloro-2-butene	1	40.8268	36.9711	9.9	30
1,3-Dichlorobenzene	**1**	**37.8242**	**35.471**	**6.4**	**30**
1,4-Dichlorobenzene	**1**	**36.8102**	**33.9467**	**8.1**	**40**
1,2-Dichlorobenzene	**1**	**39.293**	**35.8729**	**9.1**	**40**
Isopropylbenzene	**1**	**40.7047**	**40.7636**	**0.14**	**30**
Cyclohexanone	1	135.2346	125.4322	7.5	30
Camphene	1	42.2018	41.718	1.2	30
1,2,3-Trichloropropane	**1**	**41.2923**	**36.3643**	**13**	**30**
2-Chlorotoluene	1	41.5022	40.2726	3	30
p-Ethyltoluene	1	37.3405	36.6825	1.8	30
4-Chlorotoluene	1	39.557	37.6433	5	30
n-Propylbenzene	**1**	**39.5838**	**38.3835**	**3.1**	**40**
Bromobenzene	1	39.8882	38.8818	2.6	30
1,3,5-Trimethylbenzene	**1**	**44.2606**	**43.2564**	**2.3**	**30**
Butyl methacrylate	1	44.8847	41.2717	8.4	30
t-Butylbenzene	**1**	**40.8828**	**40.0099**	**2.2**	**30**
1,2,4-Trimethylbenzene	**1**	**39.8077**	**38.5263**	**3.3**	**30**
sec-Butylbenzene	**1**	**41.2564**	**40.366**	**2.2**	**40**
4-Isopropyltoluene	**1**	**40.7458**	**39.5065**	**3.1**	**30**
n-Butylbenzene	**1**	**38.6688**	**36.1879**	**6.6**	**30**
p-Diethylbenzene	1	38.5083	36.9323	4.2	30
1,2,4,5-Tetramethylbenzene	1	41.4972	37.6781	9.6	30
1,2-Dibromo-3-Chloropropane	1	36.9535	31.3599	16	30
Camphor	1	547.1421	473.298	14	30
Hexachlorobutadiene	1	36.7858	35.1542	4.5	30
1,2,4-Trichlorobenzene	1	33.9584	28.2306	18	30
1,2,3-Trichlorobenzene	1	34.7254	30.0156	15	30
Naphthalene	1	35.4652	30.4916	15	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Quantitation Report (QT Reviewed)

SampleID : AD18955-002(MS:AD18 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131889.D Sam Mult : 1 Vial# : 10 Qt On : 08/31/20 10:14
Acq On : 08/31/20 09:27 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	404386m	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	365118m	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.055	152	216510m	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	114161m	31.77	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.90%			
39) 1,2-Dichloroethane-d4	4.934	67	57432m	29.64	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.80%			
66) Toluene-d8	5.983	98	436041m	28.94	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.47%			
76) Bromofluorobenzene	7.397	174	171115m	30.02	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.07%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	241976m	56.9035	ug/l	
6) Dichlorodifluoromethane	1.636	85	174139m	62.8668	ug/l	
7) Chloromethane	1.813	50	192771m	56.1541	ug/l	
8) Bromomethane	2.233	94	127985m	50.2121	ug/l	
9) Vinyl Chloride	1.916	62	223093m	56.1453	ug/l	
10) Chloroethane	2.325	64	140340m	51.9080	ug/l	
11) Trichlorofluoromethane	2.556	101	334282m	51.1041	ug/l	
12) Ethyl ether	2.806	59	111422m	46.2834	ug/l	
13) Furan	2.843	39	250341m	46.2299	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	130267m	52.3408	ug/l	
15) Methylene Chloride	3.434	84	193096	52.7897	ug/l	96
16) Acrolein	2.922	56	117483m	248.9180	ug/l	
17) Acrylonitrile	3.642	53	49112m	34.3463	ug/l	
18) Iodomethane	3.166	142	203252m	64.5939	ug/l	
19) Acetone	3.056	43	215927m	157.3904	ug/l	
20) Carbon Disulfide	3.233	76	432373m	47.3944	ug/l	
21) t-Butyl Alcohol	3.507	59	77365m	116.3514	ug/l	
22) n-Hexane	3.910	57	194550m	54.7434	ug/l	
23) Di-isopropyl-ether	4.062	45	459214m	54.2364	ug/l	
24) 1,1-Dichloroethene	3.020	61	239332m	52.2403	ug/l	
25) Methyl Acetate	3.337	43	132577m	46.8893	ug/l	
26) Methyl-t-butyl ether	3.672	73	393946m	54.3286	ug/l	
27) 1,1-Dichloroethane	4.026	63	291073m	49.0593	ug/l	
28) trans-1,2-Dichloroethene	3.678	96	171170	49.6338	ug/l	96
29) Ethyl-t-butyl ether	4.324	59	457721	49.3762	ug/l	98
30) cis-1,2-Dichloroethene	4.440	61	295137	49.1894	ug/l	96
31) Bromochloromethane	4.593	49	138842	50.2977	ug/l	95
32) 2,2-Dichloropropane	4.446	77	275879	57.0601	ug/l	98
33) Ethyl acetate	4.465	43	156042m	36.7433	ug/l	
34) 1,4-Dioxane	5.519	88	94998m	1274.7732	ug/l	
35) 1,1-Dichloropropene	4.855	75	235113m	48.5605	ug/l	
36) Chloroform	4.635	83	312759m	49.9443	ug/l	
38) Cyclohexane	4.800	56	251972m	50.8219	ug/l	
40) 1,2-Dichloroethane	4.977	62	234998m	50.2019	ug/l	
41) 2-Butanone	4.434	43	67254m	33.5103	ug/l	
42) 1,1,1-Trichloroethane	4.763	97	275064m	49.0659	ug/l	
43) Carbon Tetrachloride	4.861	117	247208	51.6440	ug/l	99
44) Vinyl Acetate	4.056	43	380673m	37.6728	ug/l	
45) Bromodichloromethane	5.592	83	220507m	50.2178	ug/l	
46) Methylcyclohexane	5.446	83	256399m	50.4394	ug/l	
47) Dibromomethane	5.525	174	109389m	47.8580	ug/l	
48) 1,2-Dichloropropane	5.458	63	168392m	48.2694	ug/l	
49) Trichloroethene	5.330	130	289251m	73.1622	ug/l	
50) Benzene	4.977	78	661811m	48.4836	ug/l	
51) tert-Amyl methyl ether	5.019	73	418167m	52.4065	ug/l	
53) Iso-propylacetate	4.977	43	264907m	41.6600	ug/l	
54) Methyl methacrylate	5.483	41	123801m	39.8495	ug/l	
55) Dibromochloromethane	6.446	129	156496m	45.6697	ug/l	
56) 2-Chloroethylvinylether	5.733	63	92327m	95.5322	ug/l	
57) cis-1,3-Dichloropropene	5.830	75	248086m	45.5903	ug/l	
58) trans-1,3-Dichloropropene	6.117	75	209914	44.0670	ug/l	96
59) Ethyl methacrylate	6.135	41	132995m	43.1348	ug/l	
60) 1,1,2-Trichloroethane	6.220	97	139555m	44.5196	ug/l	
61) 1,2-Dibromoethane	6.525	107	133517m	41.0321	ug/l	
62) 1,3-Dichloropropane	6.318	76	237531m	42.8237	ug/l	
63) 4-Methyl-2-Pentanone	5.897	43	143574m	33.7094	ug/l	
64) 2-Hexanone	6.330	43	103361m	30.8066	ug/l	
65) Tetrachloroethene	6.318	164	171399m	50.6666	ug/l	
67) Toluene	6.019	92	405389m	41.0645	ug/l	

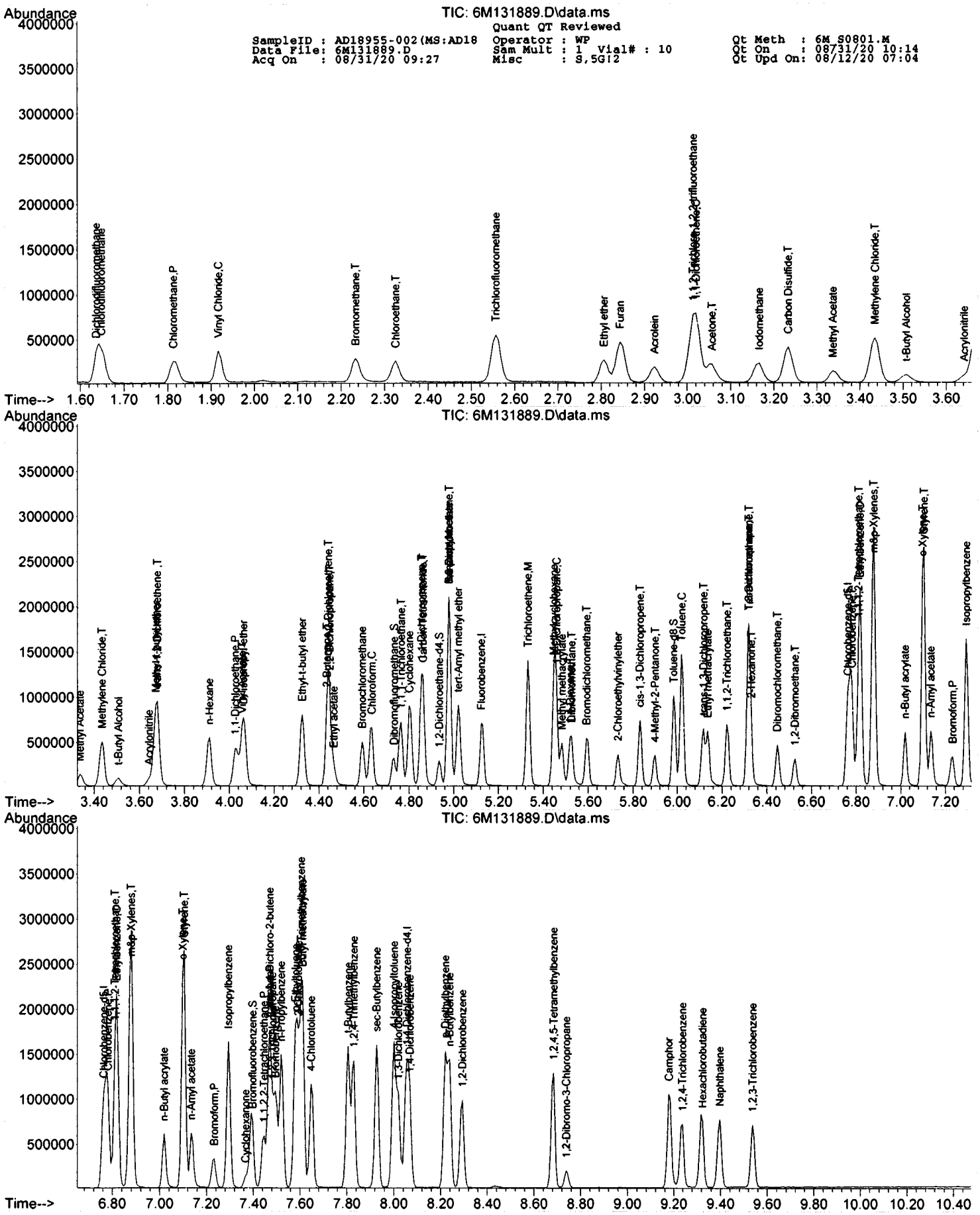
Quantitation Report (QT Reviewed)

SampleID : AD18955-002(MS:AD18 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131889.D Sam Mult : 1 Vial# : 10 Qt On : 08/31/20 10:14
Acq On : 08/31/20 09:27 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	158896m	45.0505	ug/l	
69)	Chlorobenzene	6.781	112	427255m	39.6054	ug/l	
71)	n-Butyl acrylate	7.019	55	253801m	41.0364	ug/l	
72)	n-Amyl acetate	7.135	43	225548m	38.5687	ug/l	
73)	Bromoform	7.232	173	101877m	65.2935	ug/l	
74)	Ethylbenzene	6.818	106	205504m	42.9713	ug/l	
75)	1,1,2,2-Tetrachloroethane	7.446	83	184589m	40.0258	ug/l	
77)	Styrene	7.104	104	448727m	37.9266	ug/l	
78)	m&p-Xylenes	6.879	106	562647m	78.4306	ug/l	
79)	o-Xylene	7.098	106	277297m	39.2014	ug/l	
80)	trans-1,4-Dichloro-2-b...	7.470	53	82936m	36.9711	ug/l	
81)	1,3-Dichlorobenzene	8.019	146	314004m	35.4710	ug/l	
82)	1,4-Dichlorobenzene	8.068	146	310007m	33.9467	ug/l	
83)	1,2-Dichlorobenzene	8.293	146	296586m	35.8729	ug/l	
84)	Isopropylbenzene	7.293	105	749398m	40.7636	ug/l	
85)	Cyclohexanone	7.367	55	31846m	125.4322	ug/l	
86)	Camphene	7.470	93	279094m	41.7180	ug/l	
87)	1,2,3-Trichloropropane	7.482	75	216322m	36.3643	ug/l	
88)	2-Chlorotoluene	7.592	91	443734m	40.2726	ug/l	
89)	p-Ethyltoluene	7.580	105	692055m	36.6825	ug/l	
90)	4-Chlorotoluene	7.647	91	406806m	37.6433	ug/l	
91)	n-Propylbenzene	7.519	91	827645m	38.3835	ug/l	
92)	Bromobenzene	7.495	77	439627m	38.8818	ug/l	
93)	1,3,5-Trimethylbenzene	7.604	105	571379m	43.2564	ug/l	
94)	Butyl methacrylate	7.610	41	210167m	41.2717	ug/l	
95)	t-Butylbenzene	7.805	119	601281m	40.0099	ug/l	
96)	1,2,4-Trimethylbenzene	7.830	105	574497m	38.5263	ug/l	
97)	sec-Butylbenzene	7.927	105	772048m	40.3660	ug/l	
98)	4-Isopropyltoluene	8.001	119	633873m	39.5065	ug/l	
99)	n-Butylbenzene	8.238	91	661894m	36.1879	ug/l	
100)	p-Diethylbenzene	8.220	119	351403m	36.9323	ug/l	
101)	1,2,4,5-Tetramethylben...	8.683	119	506777m	37.6781	ug/l	
102)	1,2-Dibromo-3-Chloropr...	8.738	157	38297m	31.3599	ug/l	
103)	Camphor	9.177	95	197539m	473.2980	ug/l	
104)	Hexachlorobutadiene	9.323	225	116846m	35.1542	ug/l	
105)	1,2,4-Trichlorobenzene	9.238	180	169258m	28.2306	ug/l	
106)	1,2,3-Trichlorobenzene	9.537	180	163776m	30.0156	ug/l	
107)	Naphthalene	9.397	128	457667	30.4916	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : AD18955-002(MS:AD18
Data File: 6M131889.D
Acq On : 08/31/20 09:27
Operator : WP
Sam Mult : 1 Vial# : 10
Misc : S,5G12
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 10:14
Qt Upd On: 08/12/20 07:04
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : AD18955-003(MSD:AD1 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131890.D Sam Mult : 1 Vial# : 11 Qt On : 08/31/20 10:30
Acq On : 08/31/20 09:48 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	402783m	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	369710m	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	220478m	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	113499m	31.71	ug/l	0.00
Spiked Amount 30.000			Recovery =	105.70%		
39) 1,2-Dichloroethane-d4	4.934	67	57745m	29.92	ug/l	0.00
Spiked Amount 30.000			Recovery =	99.73%		
66) Toluene-d8	5.983	98	434456m	28.48	ug/l	0.00
Spiked Amount 30.000			Recovery =	94.93%		
76) Bromofluorobenzene	7.397	174	165521m	28.52	ug/l	0.00
Spiked Amount 30.000			Recovery =	95.07%		
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	227807m	53.7847	ug/l	
6) Dichlorodifluoromethane	1.636	85	180669m	65.4838	ug/l	
7) Chloromethane	1.813	50	193642m	56.6472	ug/l	
8) Bromomethane	2.233	94	131002m	51.6003	ug/l	
9) Vinyl Chloride	1.916	62	224981m	56.8458	ug/l	
10) Chloroethane	2.325	64	140876m	52.3136	ug/l	
11) Trichlorofluoromethane	2.556	101	340706m	52.2935	ug/l	
12) Ethyl ether	2.806	59	119175m	49.7009	ug/l	
13) Furan	2.843	39	254911m	47.2611	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	139614m	56.3197	ug/l	
15) Methylene Chloride	3.434	84	197380m	54.1757	ug/l	
16) Acrolein	2.922	56	122011m	259.5406	ug/l	
17) Acrylonitrile	3.642	53	49918m	35.0489	ug/l	
18) Iodomethane	3.166	142	206361m	65.8217	ug/l	
19) Acetone	3.050	43	221510m	162.1024	ug/l	
20) Carbon Disulfide	3.233	76	451091m	49.6430	ug/l	
21) t-Butyl Alcohol	3.507	59	84530m	127.6330	ug/l	
22) n-Hexane	3.910	57	206375m	58.3019	ug/l	
23) Di-isopropyl-ether	4.062	45	468267m	55.5257	ug/l	
24) 1,1-Dichloroethene	3.020	61	244945m	53.6783	ug/l	
25) Methyl Acetate	3.337	43	143247m	50.8647	ug/l	
26) Methyl-t-butyl ether	3.672	73	418558m	57.9525	ug/l	
27) 1,1-Dichloroethane	4.026	63	308444m	52.1940	ug/l	
28) trans-1,2-Dichloroethene	3.678	96	171354m	49.8849	ug/l	
29) Ethyl-t-butyl ether	4.324	59	471670m	51.0834	ug/l	
30) cis-1,2-Dichloroethene	4.440	61	306169m	51.2312	ug/l	
31) Bromochloromethane	4.593	49	146969m	53.4537	ug/l	
32) 2,2-Dichloropropane	4.446	77	280020m	58.1470	ug/l	
33) Ethyl acetate	4.465	43	142253m	33.6297	ug/l	
34) 1,4-Dioxane	5.519	88	97681m	1315.9929	ug/l	
35) 1,1-Dichloropropene	4.855	75	243239m	50.4388	ug/l	
36) Chloroform	4.629	83	324087m	51.9592	ug/l	
38) Cyclohexane	4.800	56	260577m	52.7667	ug/l	
40) 1,2-Dichloroethane	4.977	62	246068m	52.7760	ug/l	
41) 2-Butanone	4.434	43	69314m	34.6742	ug/l	
42) 1,1,1-Trichloroethane	4.763	97	291478m	52.2007	ug/l	
43) Carbon Tetrachloride	4.861	117	255673m	53.6249	ug/l	
44) Vinyl Acetate	4.056	43	399185m	39.6620	ug/l	
45) Bromodichloromethane	5.592	83	231327m	52.8916	ug/l	
46) Methylcyclohexane	5.446	83	263172m	51.9779	ug/l	
47) Dibromomethane	5.525	174	115419m	50.6971	ug/l	
48) 1,2-Dichloropropane	5.458	63	172579m	49.6665	ug/l	
49) Trichloroethene	5.330	130	296492m	75.2922	ug/l	
50) Benzene	4.977	78	684105m	50.3163	ug/l	
51) tert-Amyl methyl ether	5.019	73	446797m	56.2173	ug/l	
53) Iso-propylacetate	4.977	43	274331m	42.6062	ug/l	
54) Methyl methacrylate	5.483	41	129692m	41.2272	ug/l	
55) Dibromochloromethane	6.446	129	167036m	48.1401	ug/l	
56) 2-Chloroethylvinylether	5.733	63	98199m	100.3461	ug/l	
57) cis-1,3-Dichloropropene	5.830	75	257196m	46.6773	ug/l	
58) trans-1,3-Dichloropropene	6.117	75	229256m	47.5296	ug/l	
59) Ethyl methacrylate	6.135	41	146656m	46.9747	ug/l	
60) 1,1,2-Trichloroethane	6.220	97	148806m	46.8811	ug/l	
61) 1,2-Dibromoethane	6.525	107	148197m	44.9778	ug/l	
62) 1,3-Dichloropropane	6.318	76	260330m	46.3511	ug/l	
63) 4-Methyl-2-Pentanone	5.897	43	158524m	36.7572	ug/l	
64) 2-Hexanone	6.330	43	115916m	34.1195	ug/l	
65) Tetrachloroethene	6.318	164	179613m	52.4352	ug/l	
67) Toluene	6.019	92	407567m	40.7723	ug/l	

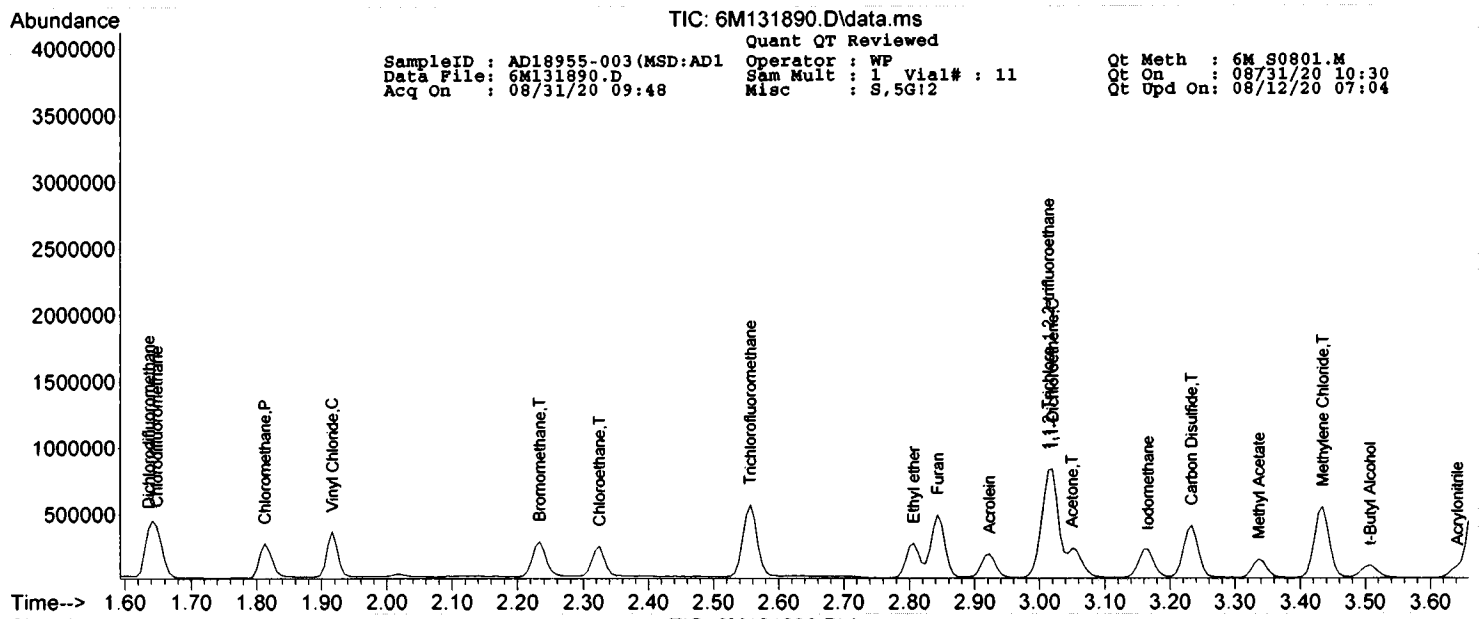
Quantitation Report (QT Reviewed)

SampleID : AD18955-003(MSD:AD1 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131890.D Sam Mult : 1 Vial# : 11 Qt On : 08/31/20 10:30
Acq On : 08/31/20 09:48 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.812	133	161647m	45.2612	ug/l	
69) Chlorobenzene	6.781	112	440381m	40.3151	ug/l	
71) n-Butyl acrylate	7.019	55	286367m	45.4686	ug/l	
72) n-Amyl acetate	7.135	43	266320m	44.7211	ug/l	
73) Bromoform	7.232	173	113513m	70.4273	ug/l	
74) Ethylbenzene	6.818	106	208000m	42.7105	ug/l	
75) 1,1,2,2-Tetrachloroethane	7.446	83	207363	44.1548	ug/l	97
77) Styrene	7.104	104	485109m	40.2637	ug/l	
78) m&p-Xylenes	6.879	106	575976m	78.8436	ug/l	
79) o-Xylene	7.098	106	284131m	39.4447	ug/l	
80) trans-1,4-Dichloro-2-b...	7.470	53	93264	40.8268	ug/l	96
81) 1,3-Dichlorobenzene	8.019	146	340972	37.8242	ug/l	98
82) 1,4-Dichlorobenzene	8.068	146	342318	36.8102	ug/l	100
83) 1,2-Dichlorobenzene	8.293	146	330816	39.2930	ug/l	98
84) Isopropylbenzene	7.293	105	762031	40.7047	ug/l	99
85) Cyclohexanone	7.373	55	34964	135.2346	ug/l	94
86) Camphene	7.470	93	287505	42.2018	ug/l	100
87) 1,2,3-Trichloropropane	7.482	75	250139	41.2923	ug/l	98
88) 2-Chlorotoluene	7.592	91	465663	41.5022	ug/l	99
89) p-Ethyltoluene	7.580	105	717379m	37.3405	ug/l	
90) 4-Chlorotoluene	7.647	91	435321	39.5570	ug/l	98
91) n-Propylbenzene	7.519	91	869168	39.5838	ug/l	99
92) Bromobenzene	7.495	77	459272	39.8882	ug/l	99
93) 1,3,5-Trimethylbenzene	7.604	105	595359m	44.2606	ug/l	
94) Butyl methacrylate	7.610	41	232180	44.8847	ug/l	89
95) t-Butylbenzene	7.805	119	625659	40.8828	ug/l	100
96) 1,2,4-Trimethylbenzene	7.830	105	604484	39.8077	ug/l	99
97) sec-Butylbenzene	7.927	105	803539	41.2564	ug/l	99
98) 4-Isopropyltoluene	8.001	119	665740	40.7458	ug/l	99
99) n-Butylbenzene	8.238	91	720234	38.6688	ug/l	100
100) p-Diethylbenzene	8.220	119	373113	38.5083	ug/l	100
101) 1,2,4,5-Tetramethylben...	8.683	119	568373	41.4972	ug/l	99
102) 1,2-Dibromo-3-Chloropr...	8.744	157	45955	36.9535	ug/l	96
103) Camphor	9.177	95	236342	547.1421	ug/l	99
104) Hexachlorobutadiene	9.323	225	124510	36.7858	ug/l	97
105) 1,2,4-Trichlorobenzene	9.238	180	207331	33.9584	ug/l	97
106) 1,2,3-Trichlorobenzene	9.537	180	192947	34.7254	ug/l	98
107) Naphthalene	9.397	128	542074	35.4652	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
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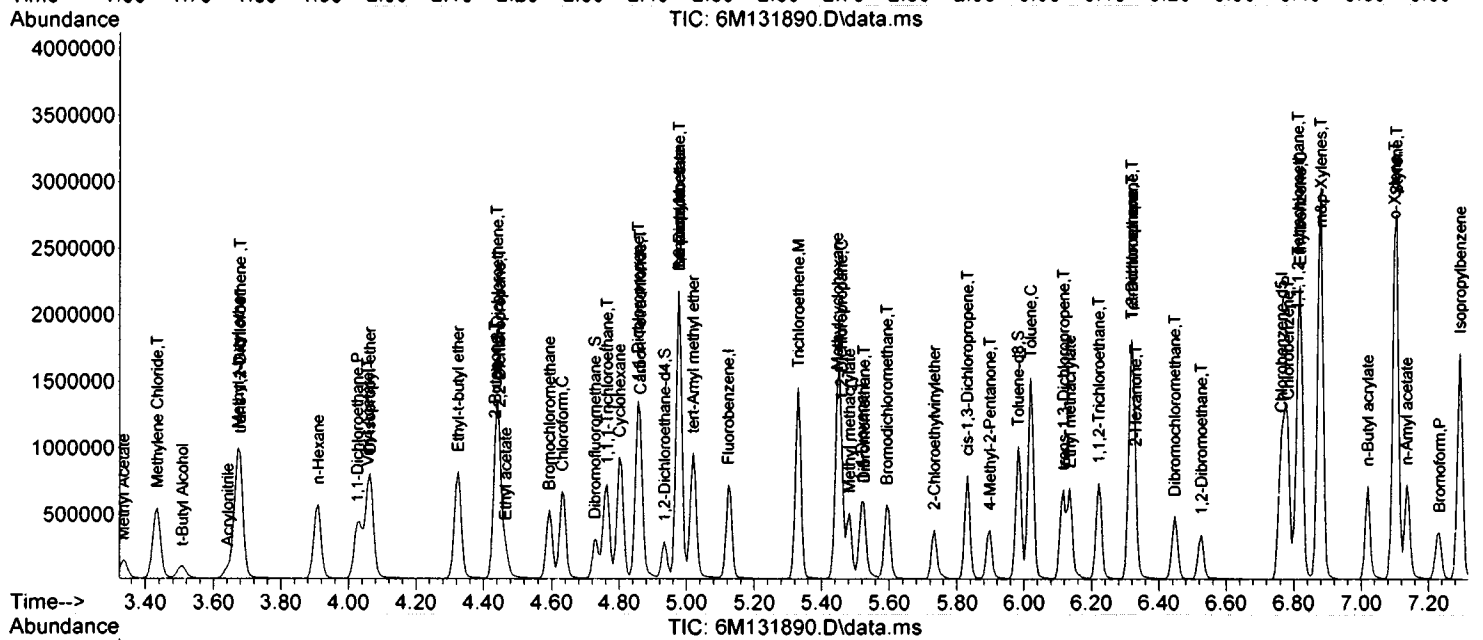
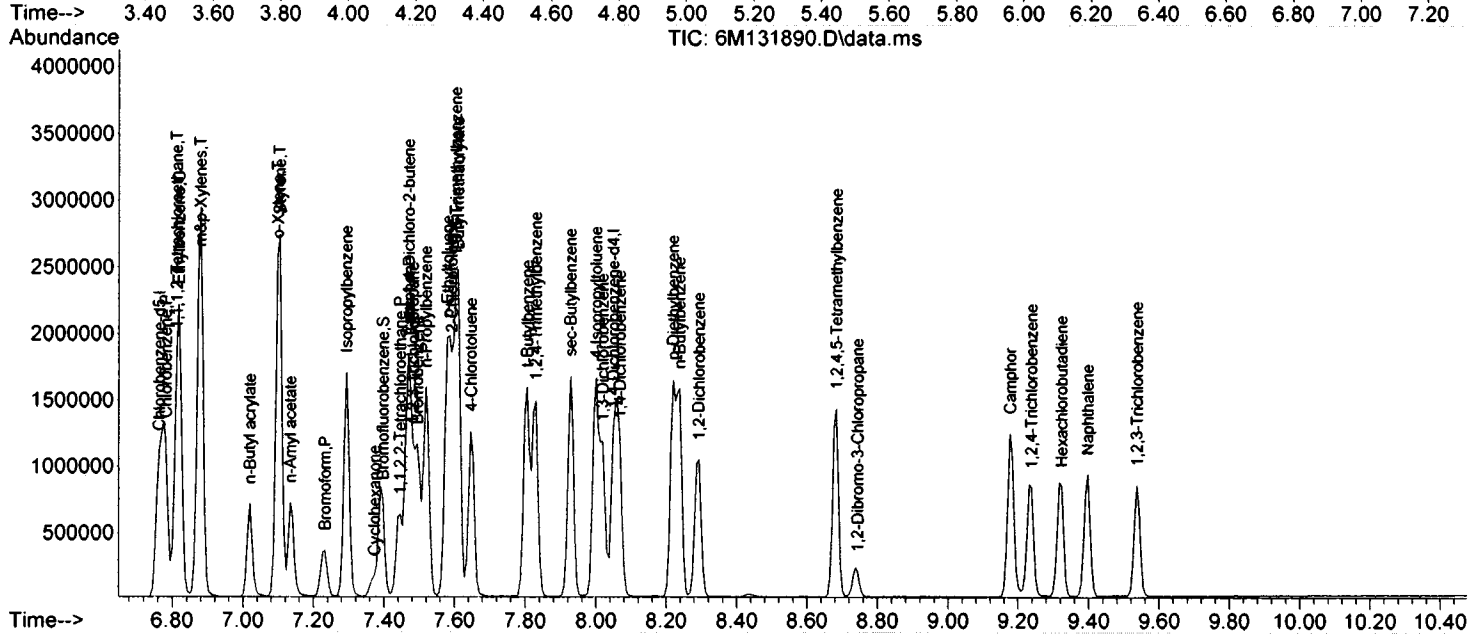
Quant QT Reviewed
SampleID : AD18955-003(MSD:AD1
Data File: 6M131890.D
Acq On : 08/31/20 09:48
Operator : WP
Sam Mult : 1 Vial# : 11
Misc : S,5G12
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 10:30
Qt Upd On: 08/12/20 07:04
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 6M131890.D\data.ms
Methyl acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 6M131890.D\data.ms
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

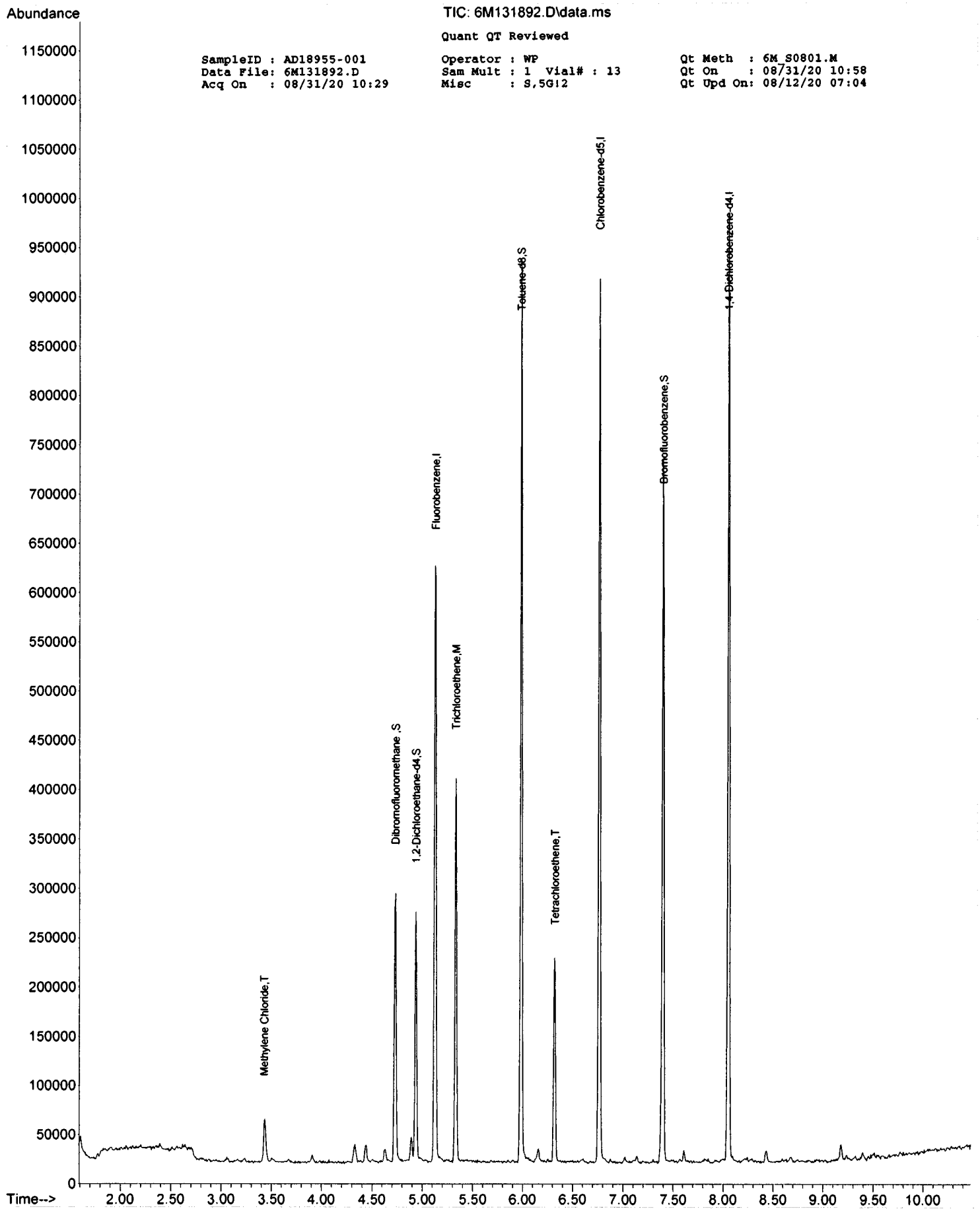
Quantitation Report (QT Reviewed)

SampleID : AD18955-001 Operator : WP Qt Meth : 6M_S0801.M
Data File: 6M131892.D Sam Mult : 1 Vial# : 13 Qt On : 08/31/20 10:58
Acq On : 08/31/20 10:29 Misc : S,5G!2 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-31-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	369414	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	347677	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	186441	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	104840	31.93	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.43%			
39) 1,2-Dichloroethane-d4	4.934	67	54002	30.50	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.67%			
66) Toluene-d8	5.983	98	392998	27.39	ug/l	0.00
Spiked Amount 30.000			Recovery = 91.30%			
76) Bromofluorobenzene	7.397	174	144989	29.54	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.47%			
Target Compounds						Qvalue
15) Methylene Chloride	3.428	84	16988	5.0839	ug/l	96
49) Trichloroethene	5.330	130	78734	21.8000	ug/l	91
65) Tetrachloroethene	6.324	164	34862	10.8224	ug/l	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M131892.D\data.ms
Quant QT Reviewed
SampleID : AD18955-001
Data File: 6M131892.D
Acq On : 08/31/20 10:29
Operator : WP
Sam Mult : 1 Vial# : 13
Misc : S,5G12
Qt Meth : 6M_S0801.M
Qt On : 08/31/20 10:58
Qt Upd On: 08/12/20 07:04
Methylene Chloride,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87763

Data File	Sample ID:	Analysis Date
Spike or Dup: 11M82284.D	MBS87763	8/31/2020 10:49:00 AM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.9325	0	20	110	50	150
Dichlorodifluoromethane	1	24.1431	0	20	121	50	150
Chloromethane	1	19.1856	0	20	96	50	150
Bromomethane	1	16.4844	0	20	82	50	150
Vinyl Chloride	1	22.7226	0	20	114	50	150
Chloroethane	1	22.7454	0	20	114	50	150
Trichlorofluoromethane	1	25.0554	0	20	125	50	150
Ethyl ether	1	18.1456	0	20	91	50	150
Furan	1	18.467	0	20	92	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.4323	0	20	112	50	150
Methylene Chloride	1	20.2238	0	20	101	70	130
Acrolein	1	109.3642	0	100	109	50	150
Acrylonitrile	1	20.0534	0	20	100	50	150
Iodomethane	1	11.4785	0	20	57	50	150
Acetone	1	94.0859	0	100	94	50	150
Carbon Disulfide	1	20.0916	0	20	100	50	150
t-Butyl Alcohol	1	97.4229	0	100	97	50	150
n-Hexane	1	21.5774	0	20	108	70	130
Di-isopropyl-ether	1	17.9766	0	20	90	70	130
1,1-Dichloroethene	1	21.3161	0	20	107	70	130
Methyl Acetate	1	25.3756	0	20	127	50	150
Methyl-t-butyl ether	1	19.1344	0	20	96	70	130
1,1-Dichloroethane	1	19.8163	0	20	99	70	130
trans-1,2-Dichloroethene	1	20.8372	0	20	104	70	130
Ethyl-t-butyl ether	1	18.1072	0	20	91	70	130
cis-1,2-Dichloroethene	1	20.1734	0	20	101	70	130
Bromochloromethane	1	20.1302	0	20	101	70	130
2,2-Dichloropropane	1	21.3775	0	20	107	70	130
Ethyl acetate	1	16.9913	0	20	85	50	150
1,4-Dioxane	1	1064.248	0	1000	106	50	150
1,1-Dichloropropene	1	20.3721	0	20	102	70	130
Chloroform	1	20.1278	0	20	101	70	130
Cyclohexane	1	21.5077	0	20	108	70	130
1,2-Dichloroethane	1	19.5169	0	20	98	70	130
2-Butanone	1	19.4982	0	20	97	50	150
1,1,1-Trichloroethane	1	21.1395	0	20	106	70	130
Carbon Tetrachloride	1	21.1128	0	20	106	50	150
Vinyl Acetate	1	14.0318	0	20	70	50	150
Bromodichloromethane	1	21.0989	0	20	105	70	130
Methylcyclohexane	1	21.0036	0	20	105	70	130
Dibromomethane	1	19.757	0	20	99	70	130
1,2-Dichloropropane	1	19.9297	0	20	100	70	130
Trichloroethene	1	20.7788	0	20	104	70	130
Benzene	1	19.8048	0	20	99	70	130
tert-Amyl methyl ether	1	17.6114	0	20	88	70	130
Iso-propylacetate	1	14.2285	0	20	71	70	130
Methyl methacrylate	1	14.1798	0	20	71	70	130
Dibromochloromethane	1	14.8959	0	20	74	70	130
2-Chloroethylvinylether	1	35.3555	0	20	177*	70	130
cis-1,3-Dichloropropene	1	15.6128	0	20	78	70	130
trans-1,3-Dichloropropene	1	16.3149	0	20	82	70	130
Ethyl methacrylate	1	14.8494	0	20	74	70	130
1,1,2-Trichloroethane	1	14.6685	0	20	73	70	130
1,2-Dibromoethane	1	15.8482	0	20	79	70	130
1,3-Dichloropropane	1	15.3691	0	20	77	70	130
4-Methyl-2-Pentanone	1	15.8007	0	20	79	50	150
2-Hexanone	1	13.9778	0	20	70	50	150
Tetrachloroethene	1	15.9873	0	20	80	50	150
Toluene	1	15.9601	0	20	80	70	130
1,1,1,2-Tetrachloroethane	1	15.3617	0	20	77	70	130
Chlorobenzene	1	15.871	0	20	79	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87763

Method: 8260C | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	14.2673	0	20	71	70	130
n-Amyl acetate	1	13.4488	0	20	67*	70	130
Bromoform	**1**	**15.5826**	**0**	**20**	**78**	**70**	**130**
Ethylbenzene	**1**	**15.8995**	**0**	**20**	**79**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**15.4148**	**0**	**20**	**77**	**70**	**130**
Styrene	**1**	**15.856**	**0**	**20**	**79**	**70**	**130**
m&p-Xylenes	**1**	**33.181**	**0**	**40**	**83**	**70**	**130**
o-Xylene	**1**	**16.124**	**0**	**20**	**81**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	14.6357	0	20	73	50	150
1,3-Dichlorobenzene	**1**	**14.5926**	**0**	**20**	**73**	**70**	**130**
1,4-Dichlorobenzene	**1**	**14.3065**	**0**	**20**	**72**	**70**	**130**
1,2-Dichlorobenzene	**1**	**14.8056**	**0**	**20**	**74**	**70**	**130**
Isopropylbenzene	**1**	**16.7641**	**0**	**20**	**84**	**70**	**130**
Cyclohexanone	1	67.6338	0	100	68	50	150
Camphene	1	15.0383	0	20	75	70	130
1,2,3-Trichloropropane	**1**	**14.547**	**0**	**20**	**73**	**70**	**130**
2-Chlorotoluene	1	15.35	0	20	77	70	130
p-Ethyltoluene	1	14.5706	0	20	73	70	130
4-Chlorotoluene	1	15.0182	0	20	75	70	130
n-Propylbenzene	**1**	**16.0218**	**0**	**20**	**80**	**70**	**130**
Bromobenzene	1	14.9379	0	20	75	70	130
1,3,5-Trimethylbenzene	**1**	**15.6441**	**0**	**20**	**78**	**70**	**130**
Butyl methacrylate	1	16.2155	0	20	81	70	130
t-Butylbenzene	**1**	**15.3438**	**0**	**20**	**77**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**14.8353**	**0**	**20**	**74**	**70**	**130**
sec-Butylbenzene	**1**	**15.3366**	**0**	**20**	**77**	**70**	**130**
4-Isopropyltoluene	**1**	**15.2528**	**0**	**20**	**76**	**70**	**130**
n-Butylbenzene	**1**	**14.8177**	**0**	**20**	**74**	**70**	**130**
p-Diethylbenzene	1	14.9483	0	20	75	70	130
1,2,4,5-Tetramethylbenzene	1	13.3689	0	20	67*	70	130
1,2-Dibromo-3-Chloropropane	1	16.5537	0	20	83	50	150
Camphor	1	124.287	0	200	62	20	150
Hexachlorobutadiene	1	15.5588	0	20	78	50	150
1,2,4-Trichlorobenzene	1	14.5121	0	20	73	70	130
1,2,3-Trichlorobenzene	1	11.9922	0	20	60*	70	130
Naphthalene	1	35.2852	0	20	176*	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Quantitation Report (QT Reviewed)

SampleID : MBS
Data File: 11M82284.D
Acq On : 08/31/20 10:49

Operator : WP
Sam Mult : 1 Vial# : 15
Misc : A,5ML

Qt Meth : 11M_A0817.M
Qt On : 08/31/20 11:07
Qt Upd On: 08/26/20 08:57

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-31-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	275337	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	326746	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	201606	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	77877	31.64	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.47%			
39) 1,2-Dichloroethane-d4	4.778	67	31763	29.34	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.80%			
66) Toluene-d8	5.787	98	340377	26.95	ug/l	0.00
Spiked Amount 30.000			Recovery = 89.83%			
76) Bromofluorobenzene	7.167	174	165793	32.23	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.43%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	62219m	21.9325	ug/l	
6) Dichlorodifluoromethane	1.668	85	50324	24.1431	ug/l	95
7) Chloromethane	1.844	50	38211	19.1856	ug/l	98
8) Bromomethane	2.244	94	33463	16.4844	ug/l	92
9) Vinyl Chloride	1.943	62	56069	22.7226	ug/l	95
10) Chloroethane	2.328	64	36246	22.7454	ug/l	98
11) Trichlorofluoromethane	2.546	101	92455	25.0554	ug/l	97
12) Ethyl ether	2.775	59	29866	18.1456	ug/l	66
13) Furan	2.816	39	51373m	18.4670	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.974	101	40030	22.4323	ug/l	95
15) Methylene Chloride	3.373	84	47902	20.2238	ug/l	52
16) Acrolein	2.887	56	36002	109.3642	ug/l	90
17) Acrylonitrile	3.569	53	15319	20.0534	ug/l	100
18) Iodomethane	3.119	142	39765	11.4785	ug/l	100
19) Acetone	3.009	43	55158	94.0859	ug/l	89
20) Carbon Disulfide	3.186	76	118236	20.0916	ug/l	100
21) t-Butyl Alcohol	3.431	59	18006	97.4229	ug/l	92
22) n-Hexane	3.816	57	42950	21.5774	ug/l	87
23) Di-isopropyl-ether	3.951	45	90126	17.9766	ug/l	59
24) 1,1-Dichloroethene	2.980	61	63594	21.3161	ug/l	69
25) Methyl Acetate	3.283	43	33779	25.3756	ug/l	100
26) Methyl-t-butyl ether	3.595	73	107215	19.1344	ug/l	82
27) 1,1-Dichloroethane	3.926	63	75527	19.8163	ug/l	100
28) trans-1,2-Dichloroethene	3.604	96	50447	20.8372	ug/l	70
29) Ethyl-t-butyl ether	4.196	59	107553	18.1072	ug/l	83
30) cis-1,2-Dichloroethene	4.308	61	74299	20.1734	ug/l	63
31) Bromochloromethane	4.453	49	31169m	20.1302	ug/l	
32) 2,2-Dichloropropane	4.312	77	66601	21.3775	ug/l	92
33) Ethyl acetate	4.328	43	34850	16.9913	ug/l	100
34) 1,4-Dioxane	5.334	88	34628	1064.2480	ug/l	70
35) 1,1-Dichloropropene	4.701	75	67039	20.3721	ug/l	90
36) Chloroform	4.488	83	84221	20.1278	ug/l	97
38) Cyclohexane	4.652	56	64784m	21.5077	ug/l	
40) 1,2-Dichloroethane	4.820	62	60425	19.5169	ug/l	96
41) 2-Butanone	4.305	43	15788	19.4982	ug/l	57
42) 1,1,1-Trichloroethane	4.611	97	80227	21.1395	ug/l	97
43) Carbon Tetrachloride	4.707	117	72548	21.1128	ug/l	94
44) Vinyl Acetate	3.948	43	81919	14.0318	ug/l	100
45) Bromodichloromethane	5.411	83	64894	21.0989	ug/l	97
46) Methylcyclohexane	5.270	83	64638m	21.0036	ug/l	
47) Dibromomethane	5.344	174	38769	19.7570	ug/l	98
48) 1,2-Dichloropropane	5.279	63	43960	19.9297	ug/l	99
49) Trichloroethene	5.157	130	62320	20.7788	ug/l	93
50) Benzene	4.820	78	189710	19.8048	ug/l	100
51) tert-Amyl methyl ether	4.855	73	109405	17.6114	ug/l	93
53) Iso-propylacetate	4.813	43	59882	14.2285	ug/l	81
54) Methyl methacrylate	5.299	41	32484m	14.1798	ug/l	
55) Dibromochloromethane	6.241	129	52024	14.8959	ug/l	97
56) 2-Chloroethylvinylether	5.543	63	20130	35.3555	ug/l	80
57) cis-1,3-Dichloropropene	5.640	75	68920	15.6128	ug/l	97
58) trans-1,3-Dichloropropene	5.913	75	61008	16.3149	ug/l	96
59) Ethyl methacrylate	5.932	41	31605m	14.8494	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	43686	14.6685	ug/l	86
61) 1,2-Dibromoethane	6.315	107	48879	15.8482	ug/l	98
62) 1,3-Dichloropropane	6.109	76	74842	15.3691	ug/l	94
63) 4-Methyl-2-Pentanone	5.701	43	36248	15.8007	ug/l	91
64) 2-Hexanone	6.125	43	25025	13.9778	ug/l	78
65) Tetrachloroethene	6.112	164	49911	15.9873	ug/l	95
67) Toluene	5.823	92	130664	15.9601	ug/l	93

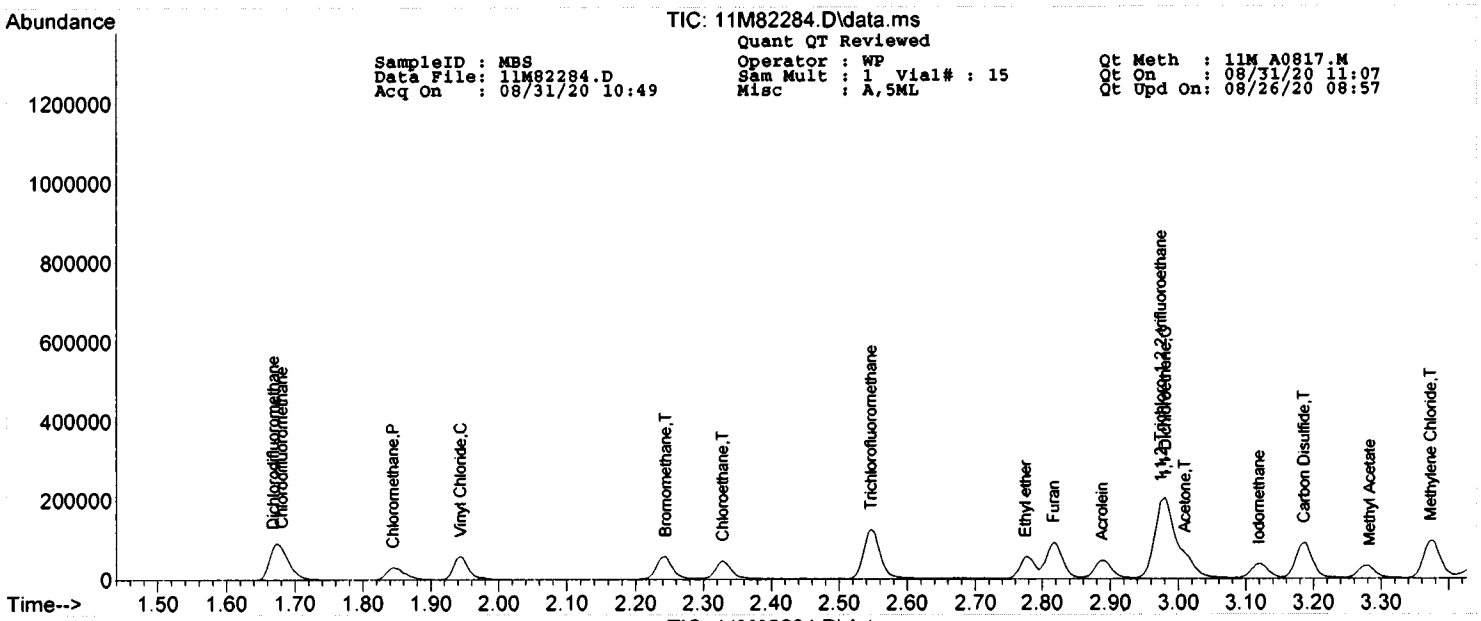
Quantitation Report (QT Reviewed)

SampleID : MBS Operator : WP Qt Meth : 11M_A0817.M
Data File: 11M82284.D Sam Mult : 1 Vial# : 15 Qt On : 08/31/20 11:07
Acq On : 08/31/20 10:49 Misc : A,5ML Qt Upd On: 08/26/20 08:57

Data Path : G:\GcMsData\2020\GCMS_11\Data\08-31-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.594	133	49827	15.3617	ug/l	95
69)	Chlorobenzene	6.562	112	148095	15.8710	ug/l	97
71)	n-Butyl acrylate	6.797	55	69879	14.2673	ug/l	88
72)	n-Amyl acetate	6.913	43	53891	13.4488	ug/l	74
73)	Bromoform	7.006	173	37696	15.5826	ug/l	93
74)	Ethylbenzene	6.604	106	67096	15.8995	ug/l	98
75)	1,1,2,2-Tetrachloroethane	7.218	83	59649	15.4148	ug/l	94
77)	Styrene	6.881	104	157543	15.8560	ug/l	90
78)	m&p-Xylenes	6.659	106	198168	33.1810	ug/l	98
79)	o-Xylene	6.881	106	92710	16.1240	ug/l	96
80)	trans-1,4-Dichloro-2-b...	7.244	53	18806	14.6357	ug/l	91
81)	1,3-Dichlorobenzene	7.784	146	109946	14.5926	ug/l	96
82)	1,4-Dichlorobenzene	7.832	146	112861	14.3065	ug/l	98
83)	1,2-Dichlorobenzene	8.054	146	101262	14.8056	ug/l	96
84)	Isopropylbenzene	7.067	105	238865	16.7641	ug/l	100
85)	Cyclohexanone	7.147	55	8212	67.6338	ug/l	77
86)	Camphene	7.241	93	62923	15.0383	ug/l	98
87)	1,2,3-Trichloropropane	7.257	75	68823	14.5470	ug/l	88
88)	2-Chlorotoluene	7.363	91	133760	15.3500	ug/l	96
89)	p-Ethyltoluene	7.350	105	231963	14.5706	ug/l	99
90)	4-Chlorotoluene	7.418	91	133568	15.0182	ug/l	98
91)	n-Propylbenzene	7.292	91	265544	16.0218	ug/l	98
92)	Bromobenzene	7.266	77	124100	14.9379	ug/l	78
93)	1,3,5-Trimethylbenzene	7.376	105	185032	15.6441	ug/l	100
94)	Butyl methacrylate	7.382	41	45928m	16.2155	ug/l	
95)	t-Butylbenzene	7.572	119	185458	15.3438	ug/l	96
96)	1,2,4-Trimethylbenzene	7.594	105	188263	14.8353	ug/l	99
97)	sec-Butylbenzene	7.694	105	220749	15.3366	ug/l	97
98)	4-Isopropyltoluene	7.765	119	190565	15.2528	ug/l	98
99)	n-Butylbenzene	8.000	91	179080	14.8177	ug/l	84
100)	p-Diethylbenzene	7.983	119	106813	14.9483	ug/l	81
101)	1,2,4,5-Tetramethylben...	8.440	119	141345	13.3689	ug/l	98
102)	1,2-Dibromo-3-Chloropr...	8.498	157	12139	16.5537	ug/l	82
103)	Camphor	8.935	95	38607	124.2870	ug/l	96
104)	Hexachlorobutadiene	9.073	225	20404	15.5588	ug/l	98
105)	1,2,4-Trichlorobenzene	8.990	180	42246	14.5121	ug/l	99
106)	1,2,3-Trichlorobenzene	9.292	180	24527	11.9922	ug/l	99
107)	Naphthalene	9.151	128	221709	35.2852	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
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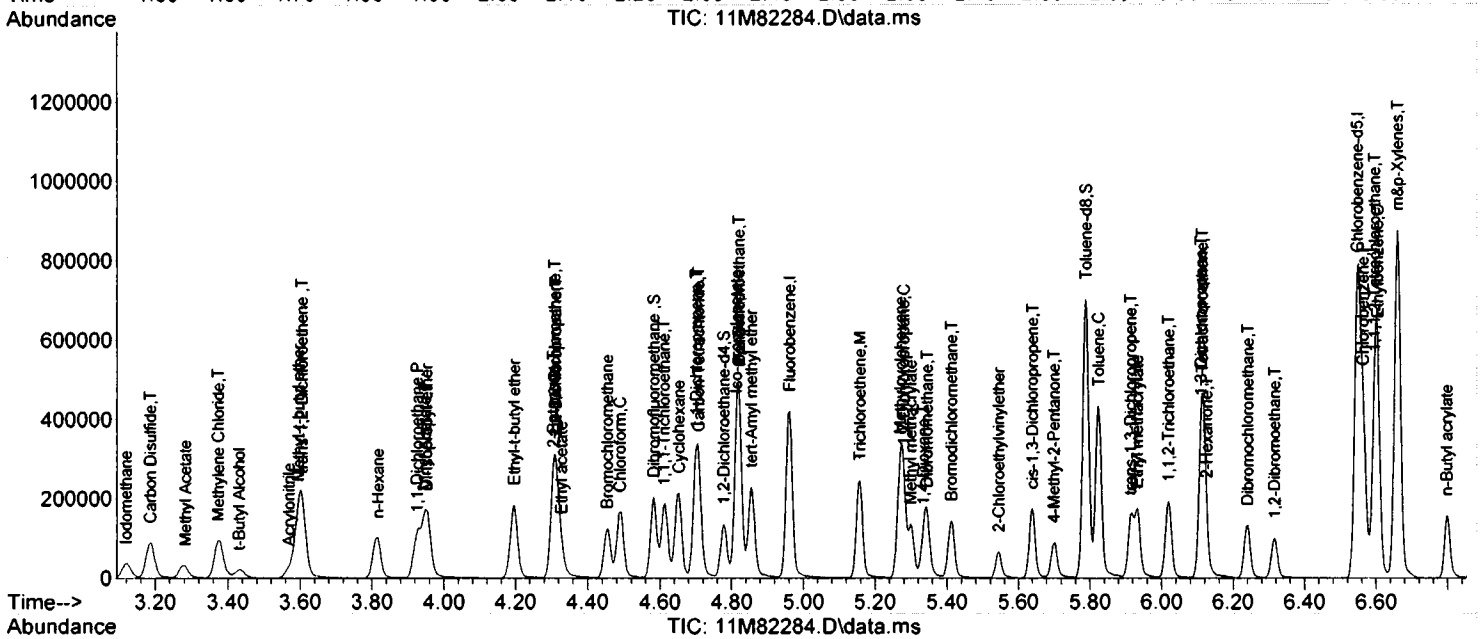
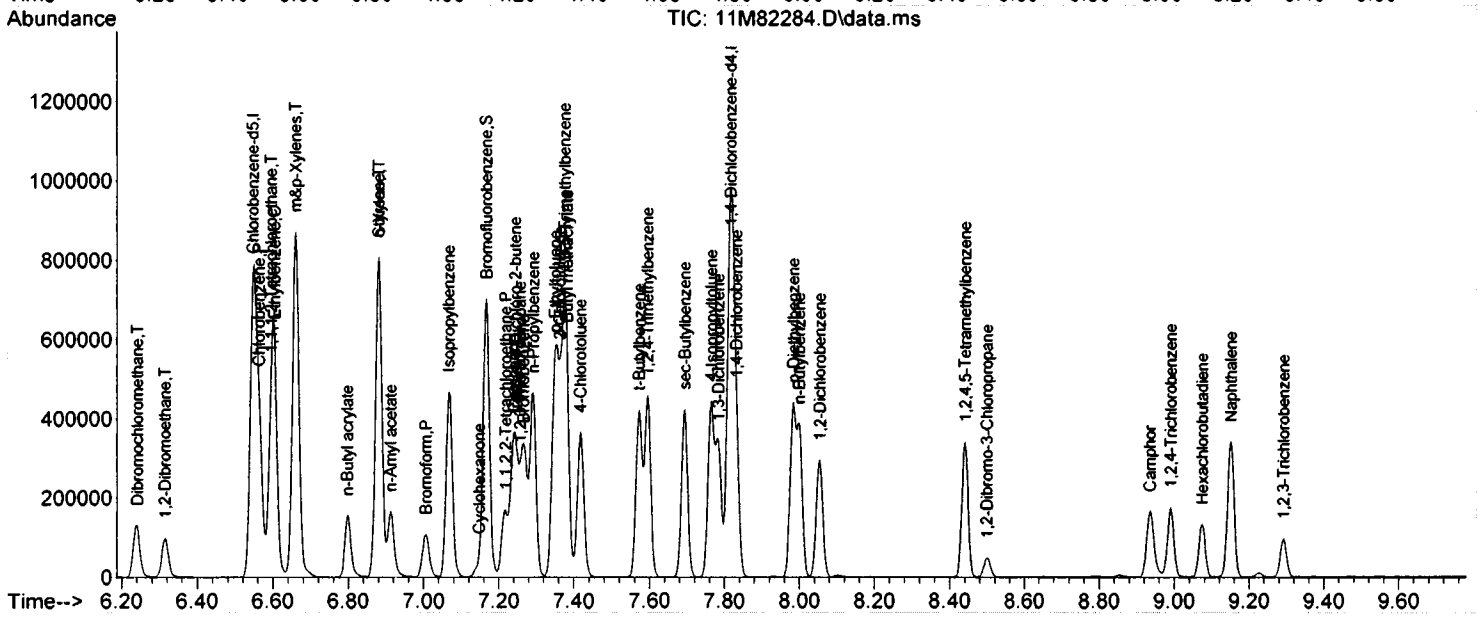
Quant QT Reviewed
SampleID : MBS
Data File: 11M82284.D
Acq On : 08/31/20 10:49
Operator : WP
Sam Mult : 1 Vial# : 15
Misc : A,5ML
Qt Meth : 11M_A0817.M
Qt On : 08/31/20 11:07
Qt Upd On: 08/26/20 08:57
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->


Abundance
TIC: 11M82284.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
Time-->


Abundance
TIC: 11M82284.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

GC/MS Volatile Data
Logbook Data

RUN LOG

Instrument: GCMS_6 Year: 2020
Analyst: BK

1-1-6M130900

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
6M130900.	BFB TUNE		V-321115,V-321040,V-331408	BK 08/02/20						08/01 11:54
6M130901.	BLK	CnAnc				Soil	1	1	8260C	08/01 12:09
6M130902.	BLK	CnAnc				Soil	1	1	8260C	08/01 12:30
6M130903.	CAL @ 0.5 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 12:51
6M130904.	CAL @ 1 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 13:11
6M130905.	CAL @ 2 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 13:32
6M130906.	CAL @ 5 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 13:52
6M130907.	CAL @ 20 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 14:13
6M130908.	CAL @ 50 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 14:34
6M130909.	CAL @ 100 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 14:54
6M130910.	BLK	Is				Soil	1	1	8260C	08/01 15:15
6M130911.	CAL @ 250 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 15:36
6M130912.	BLK					Soil	1	1	8260C	08/01 15:56
6M130913.	CAL @ 500 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 16:17
6M130914.	BLK					Soil	1	1	8260C	08/01 16:37
6M130915.	BLK					Soil	1	1	8260C	08/01 16:58
6M130916.	BLK					Soil	1	1	8260C	08/01 17:19
6M130917.	500 PPB	S8Ao				Soil	1	1	8260C	08/01 17:39
6M130918.	BLK					Soil	1	1	8260C	08/01 18:00
6M130919.	BLK					Soil	1	1	8260C	08/01 18:21
6M130920.	250 PPB					Soil	1	1	8260C	08/01 18:41
6M130921.	BLK					Soil	1	1	8260C	08/01 19:02
6M130922.	BLK					Soil	1	1	8260C	08/01 19:22
6M130923.	BLK					Soil	1	1	8260C	08/01 19:43
6M130924.	BLK					Soil	1	1	8260C	08/01 20:04
6M130925.	ICV	IvoSd	V-332451	BK 08/02/20		Soil	2.5	1	8260C	08/01 20:24
6M130926.	BLK					Soil	1	1	8260C	08/01 20:45
6M130927.	CCV					Soil	1	1	8260C	08/01 21:05
6M130928.	BLK					Soil	1	1	8260C	08/01 21:26
6M130929.	BLK					Soil	1	1	8260C	08/01 21:47
6M130930.	BLK					Soil	1	1	8260C	08/01 22:07
6M130931.	BLK					Soil	1	1	8260C	08/01 22:28
6M130932.	BLK					Soil	1	1	8260C	08/01 22:49
6M130933.	DAILY BLANK					Soil	1	1	8260C	08/01 23:09

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tdn/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for enb
B8m	Blank 8000 series missing	Eto	Tdn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evrc	Eval Mix missing drift or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmd csv for init calibration chek rls	S6	600 series surrogate out
Cme	Endion Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Co	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a samol	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_11 Year: 2020
Analyst: WP

1-1-11M81819

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
11M81819.	BFB TUNE		V-330632,V-330631,V-333162	SG 08/18/20						08/17 12:47
11M81820.	20 PPB	IsCnAnc				Aqueous	1	1	624\8260	08/17 13:00
11M81824.	CAL @ 0.5 PPB		b-29553	SG 08/18/20		Aqueous	1	1	624\8260	08/17 14:14
11M81825.	CAL @ 1 PPB		b-29553	SG 08/18/20		Aqueous	1	1	624\8260	08/17 14:32
11M81826.	CAL @ 5 PPB		b-29553	SG 08/18/20		Aqueous	1	1	624\8260	08/17 14:51
11M81827.	CAL @ 10 PPB		b-29553	SG 08/18/20		Aqueous	1	1	624\8260	08/17 15:09
11M81828.	CAL @ 20 PPB		b-29553	SG 08/18/20		Aqueous	1	1	624\8260	08/17 15:28
11M81830.	CAL @ 50 PPB		b-29553	SG 08/18/20		Aqueous	1	1	624\8260	08/17 16:05
11M81831.	500 PPB	IsS6S8	NO- GOOD	SG 08/18/20		Aqueous	1	1	624\8260	08/17 16:23
11M81834.	CAL @ 250 PPB		B-29553	SG 08/18/20		Aqueous	1	1	624\8260	08/17 17:18
11M81837.	CAL @ 100 PPB		B-29553	SG 08/18/20		Aqueous	1	1	624\8260	08/17 18:14
11M81841.	ICV		V-333379	SG 08/18/20		Aqueous	1	1	624\8260	08/17 19:27
11M81842.	STD					Aqueous	1	1	624\8260	08/17 19:45
11M81846.	DAILY BLANK		OK	SG 08/18/20		Aqueous	1	1	624\8260	08/17 20:59
11M81847.	1 PPB					Aqueous	1	1	624\8260	08/17 21:17
11M81848.	1 PPB					Aqueous	1	1	624\8260	08/17 21:35
11M81849.	1 PPB					Aqueous	1	1	624\8260	08/17 21:54
11M81850.	1 PPB					Aqueous	1	1	624\8260	08/17 22:12
11M81851.	BLK					Aqueous	1	1	624\8260	08/17 22:30

Anc	Area Not Checked	Fo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Fsm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
BBm	Blank 600 series missing	Ftm	Tclp/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for anb
BBm	Blank 8000 series missing	Fto	Tclp Extraction Performed Outside of Hold	FvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Fv	Eval Time Exceeded	Fvnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Fvrc	Eval Mix missing drll or anddo
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmd csv for init calibration chek rls	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_6 Year: 2020
Analyst: WP

1-1-6M131881

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
6M131881.	BFB TUNE		V-330632,V-330631,V-333162,V-334001	SG 08/31/20						08/31 06:48
6M131882.	CAL @ 50 PPB	C16	OK	SG 08/31/20		Soil	0.4	1	624\8260	08/31 07:03
6M131883.	50 PPB	Sd				Soil	0.4	1	8260C	08/31 07:24
6M131884.	BLK					Soil	1	1	8260C	08/31 07:44
6M131885.	BLK					Soil	1	1	8260C	08/31 08:05
6M131886.	DAILY BLANK		OK	SG 08/31/20		Soil	1	1	8260C	08/31 08:25
6M131887.	AD18861-008(%SO				VO-8260	Soil	1	1	8260C	08/31 08:46
6M131888.	MBS87762	M18	OK MBS87762	SG 08/31/20		Soil	1	1	8260C	08/31 09:07
6M131889.	AD18955-002(MS:A	M18	OK MBS87762	SG 08/31/20	VO-8260	Soil	1	1	8260C	08/31 09:27
6M131890.	AD18955-003(MSD:	M18	OK MBS87762	SG 08/31/20	VO-8260	Soil	1	1	8260C	08/31 09:48
6M131891.	BLK					Soil	1	1	8260C	08/31 10:08
6M131892.	AD18955-001		OK MBS87762	SG 08/31/20	VO-8260	Soil	1	1	8260C	08/31 10:29
6M131893.	AD18955-004		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 10:49
6M131894.	AD18955-005		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 11:10
6M131895.	AD18908-001		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 11:31
6M131896.	AD18908-005	Ao	OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 11:51
6M131897.	AD18926-011		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 12:12
6M131898.	AD18926-014		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 12:32
6M131899.	AD18926-010		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 12:53
6M131900.	AD18934-001		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 13:13
6M131901.	AD18934-002		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 13:34
6M131902.	AD18934-003		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 13:55
6M131903.	AD18934-004		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 14:15
6M131904.	AD18927-009		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 14:36
6M131905.	AD18927-010		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 14:56
6M131906.	AD18927-011		RR-5g POS CO	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 15:17
6M131907.	AD18949-014		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 15:38
6M131908.	AD18929-001		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 15:58
6M131909.	AD18956-001		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 16:19
6M131910.	AD18956-002		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 16:39
6M131911.	AD18956-003		OK	SG 09/01/20	VO-8260	Soil	1	1	8260C	08/31 17:00
6M131912.	AD18922-001		OK	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 17:21
6M131913.	AD18927-012	S8	RR-5g DIRTY	SG 09/01/20	VO15-8260	Soil	1	1	8260C	08/31 17:41
6M131914.	BLK					Soil	1	1	8260C	08/31 18:02
6M131915.	AD18917-001(5X)	S8Ao	RR-1g DIRTY	SG 09/01/20	VO-PA-FO82	Soil	1	5	8260C	08/31 18:22

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Eto	Tclo/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for enh
B8m	Blank 8000 series missing	Eto	Tclo Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evm	Eval Mix missing ddl or andrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rpd Out on Ms/Msd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rpd Out on Ms/Msd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmd csv for init calibration chek rfs	S6	600 series surrogate out
Cma	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_11 Year: 2020
Analyst: WP

1-1-11M82270

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
11M82270.	BFB TUNE		V-330632,V-330631,V-333162,V-334002	SG 08/31/20						08/31 06:35
11M82271.	20 PPB	CnAnc				Aqueous	1	1	624\8260	08/31 06:49
11M82272.	CAL @ 20 PPB		OK	SG 08/31/20		Aqueous	1	1	624\8260	08/31 07:07
11M82274.	BLK					Aqueous	1	1	624\8260	08/31 07:43
11M82275.	DAILY BLANK		OK,V-13349	SG 08/31/20		Methano	1	1	8260C	08/31 08:02
11M82276.	DAILY BLANK		OK	SG 08/31/20		Aqueous	1	1	624\8260	08/31 08:20
11M82277.	AD18973-009		OK	SG 08/31/20	VO15-8260	Aqueous	1	1	8260C	08/31 08:40
11M82278.	AD18955-006		OK	SG 08/31/20	VO-8260	Aqueous	1	1	8260C	08/31 08:59
11M82279.	AD18953-004		OK	SG 08/31/20	VO-8260	Aqueous	1	1	8260C	08/31 09:17
11M82280.	AD18953-001		OK MBS87763	SG 08/31/20	VO-8260	Aqueous	1	1	624\8260	08/31 09:36
11M82281.	AD18953-002		OK	SG 08/31/20	VO-8260	Aqueous	1	1	8260C	08/31 09:54
11M82282.	AD18953-003(5X)		OK	SG 08/31/20	VO-8260	Aqueous	1	5	8260C	08/31 10:13
11M82283.	BLK					Aqueous	1	1	624\8260	08/31 10:31
11M82284.	MBS87763	M18	OK MBS87763	SG 08/31/20		Aqueous	1	1	624\8260	08/31 10:49
11M82285.	MBS87764		OK MBS87764	SG 08/31/20		Methano	1	1	8260C	08/31 11:08
11M82286.	AD18953-001(MS)		OK MBS87763	SG 08/31/20	VO-8260	Aqueous	1	1	624\8260	08/31 11:26
11M82287.	AD18953-001(MSD)		OK MBS87763	SG 08/31/20	VO-8260	Aqueous	1	1	624\8260	08/31 11:44
11M82288.	AD18942-001(MS)		OK MBS87764	SG 08/31/20	VOBTEX-826	Methano	1	1	8260C	08/31 12:02
11M82289.	AD18942-001(MSD)		OK MBS87764	SG 08/31/20	VOBTEX-826	Methano	1	1	8260C	08/31 12:21
11M82290.	MBS87765		OK MBS87765	SG 08/31/20		Aqueous	1	1	624\8260	08/31 12:39
11M82291.	AD18942-001		RR-5g MBS87764	SG 08/31/20	VOBTEX-826	Methano	1	1	8260C	08/31 12:58
11M82292.	BLK					Aqueous	1	1	624\8260	08/31 13:16
11M82293.	AD18930-007		OK	SG 09/01/20	VO15-8260	Aqueous	1	1	8260C	08/31 13:35
11M82294.	AD18930-008		OK	SG 09/01/20	VO15-8260	Aqueous	1	1	8260C	08/31 13:53
11M82295.	AD18930-001		OK	SG 09/01/20	VO15-8260	Aqueous	1	1	8260C	08/31 14:11
11M82296.	AD18930-002		OK	SG 09/01/20	VO15-8260	Aqueous	1	1	8260C	08/31 14:30
11M82297.	AD18930-003		OK	SG 09/01/20	VO15-8260	Aqueous	1	1	8260C	08/31 14:48
11M82298.	AD18930-004		OK	SG 09/01/20	VO15-8260	Aqueous	1	1	8260C	08/31 15:06
11M82299.	AD18930-005		OK	SG 09/01/20	VO15-8260	Aqueous	1	1	8260C	08/31 15:25
11M82300.	AD18930-006		OK	SG 09/01/20	VO15-8260	Aqueous	1	1	8260C	08/31 15:43
11M82301.	AD18927-012		OK	SG 09/01/20	VO15-8260	Methano	1	1	8260C	08/31 16:02
11M82302.	AD18926-012(8uL)		OK	SG 09/01/20	VO15-8260	Methano	1	100	8260C	08/31 16:20
11M82303.	AD18932-001	Ocf	RR-800uL on #2	SG 09/01/20	VO-8260	Methano	1	1	8260C	08/31 16:39
11M82304.	BLK	S6S8	-	SG 09/01/20		Aqueous	1	1	624\8260	08/31 16:57
11M82305.	AD18947-002		ok	SG 09/01/20	VO-PA-FO82	Methano	1	1	8260C	08/31 17:15
11M82306.	AD18947-001	Ocf	RR-800uL on #2	SG 09/01/20	VO-PA-FO82	Methano	1	1	8260C	08/31 17:34
11M82307.	AD18917-001		OK	SG 09/01/20	VO-PA-FO82	Methano	1	1	8260C	08/31 17:52
11M82308.	BLK	S6S8				Aqueous	1	1	624\8260	08/31 18:10
11M82309.	BLK	S6S8				Aqueous	1	1	624\8260	08/31 18:29

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tdn/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for anb
B8m	Blank 8000 series missing	Eto	Tdn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evrc	Eval Mix missing ddl or eqdlg
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmt csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-313322

Prepared By: Revolus, Jean
Description: VOA ADD MIX
Prep Date: 10/4/2019
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 5000/25000 p
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
12762	p-Diethylbenzene	50 mg	NEAT	5000 ppm
12588	Methyl alcohol		neat neat	
12764	Cyclohexanone	250 mg	NEAT	25000 ppm
12815	p-Ethyltoluene	50 mg	NEAT	5000 ppm

Veritech Lot Number: V-313323

Prepared By: Revolus, Jean
Description: VOA ADD MIX(2nd Source)
Prep Date: 10/4/2019
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 5000/25000 p
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
12762	p-Diethylbenzene	50 mg	NEAT	5000 ppm
12588	Methyl alcohol		neat neat	
12764	Cyclohexanone	250 mg	NEAT	25000 ppm
12815	p-Ethyltoluene	50 mg	NEAT	5000 ppm

Veritech Lot Number: V-313324

Prepared By: Revolus, Jean
Description: Voa Extra Add Mix
Prep Date: 10/4/2019
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 2000-20000 p
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11935	Ethyl acetate	20 mg	Neat	2000 ppm
12588	Methyl alcohol	10 ml	neat neat	
12763	Isopropyl acetate	20 mg	NEAT	2000 ppm
11578	n-Amyl Acetate	20 mg	NEAT neat	2000 ppm
11931	Methyl methacrylate	20 mg	Neat	2000 ppm
9641	d-Camphor	200 mg	Neat	20000 ppm
12766	Ethyl methacrylate	20 mg	NEAT	2000 ppm
12761	Camphene	20 mg	NEAT	2000 ppm
11933	n-Butyl acrylate	20 mg	Neat	2000 ppm
11932	Butyl methacrylate	20 mg	Neat	2000 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-313325

Prepared By: Revolus, Jean
Description: Voa Extra Add Mix(2nd Source)
Prep Date: 10/4/2019
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 2000-20000 p
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11935	Ethyl acetate	20 mg	Neat	2000 ppm
12588	Methyl alcohol	10 ml	neat neat	
12763	Isopropyl acetate	20 mg	NEAT	2000 ppm
11578	n-Amyl Acetate	20 mg	NEAT neat	2000 ppm
11931	Methyl methacrylate	20 mg	Neat	2000 ppm
9641	d-Camphor	200 mg	Neat	20000 ppm
12766	Ethyl methacrylate	20 mg	NEAT	2000 ppm
11933	n-Butyl acrylate	20 mg	Neat	2000 ppm
12761	Camphene	20 mg	NEAT	2000 ppm
11932	Butyl methacrylate	20 mg	Neat	2000 ppm

Veritech Lot Number: V-321040

Prepared By: Previlon, Wilner
Description: VOA WORKING INT/SURR MIX
Prep Date: 2/3/2020
Expiration Date: 8/3/2020
Department: Organics
BatchNumber:
Concentration: 150 ppm
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 02/05/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	88 ml	neat neat	
12137	8260A Surrogates Mix	6 ml	2500 ppm	150 ppm
12138	8260A Internal Standard Mix	6 ml	2500 ppm	150 ppm

Veritech Lot Number: V-321115

Prepared By: Previlon, Wilner
Description: BFB Tune Mix
Prep Date: 2/3/2020
Expiration Date: 8/3/2020
Department: Organics
BatchNumber:
Concentration: 50 ppm
Final Volume: 1.5 ml
ApprovedBy: akmal
ApproveDate: 02/05/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-321040	VOA WORKING INT/SURR MIX	500 ul	150 ppm	50 ppm
12804	methyl alcohol	1000 ul	neat neat	

Veritech Lot Number: V-327582

Prepared By: Revolus, Jean
Description: Ethyl ether/Furan Mix
Prep Date: 5/13/2020
Expiration Date: 5/13/2021
Department: Organics
BatchNumber:
Concentration: 5000 ppm
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 05/18/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13224	methyl alcohol	10 ml	neat neat	
13193	Ethyl ether	50 mg	Neat	5000 ppm
11587	Furan	50 mg	NEAT neat	5000 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-327585

Prepared By: Revolus, Jean | Department: Organics | ApprovedBy: akmal
Description: Ethyl ether/Furan Mix(2ND SOURCE) | BatchNumber: | ApproveDate: 05/18/20
Prep Date: 5/13/2020 | Concentration: 5000 ppm | Checked: Yes
Expiration Date: 5/13/2021 | Final Volume: 10 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11587	Furan	50 mg	NEAT neat	5000 ppm
13193	Ethyl ether	50 mg	Neat	5000 ppm
13224	methyl alcohol	10 ml	neat neat	

Veritech Lot Number: V-328517

Prepared By: Revolus, Jean | Department: Organics | ApprovedBy: akmal
Description: 20ppm Freon VOA Working Std | BatchNumber: | ApproveDate: 06/04/20
Prep Date: 5/28/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 12/3/2020 | Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12588	Methyl alcohol	900 ul	neat neat	neat
12435	Chlorodifluoromethane(Freon #22)	100 ul	200 ppm	200 ppm

Veritech Lot Number: V-330631

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: VOA WORKING INT/SURR MIX | BatchNumber: | ApproveDate: 07/01/20
Prep Date: 7/1/2020 | Concentration: 150 ppm | Checked: Yes
Expiration Date: 1/1/2021 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	88 ml	neat neat	
12137	8260A Surrogates Mix	6 ml	2500 ppm	150 ppm
12138	8260A Internal Standard Mix	6 ml	2500 ppm	150 ppm

Veritech Lot Number: V-330632

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: BFB Tune Mix | BatchNumber: | ApproveDate: 07/01/20
Prep Date: 7/1/2020 | Concentration: 50 ppm | Checked: Yes
Expiration Date: 1/1/2021 | Final Volume: 1.5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330631	VOA WORKING INT/SURR MIX	500 ul	150 ppm	50 ppm
12804	methyl alcohol	1000 ul	neat neat	

Veritech Lot Number: V-330843

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: 200ppm VOA Working Std | BatchNumber: | ApproveDate: 07/09/20
Prep Date: 7/4/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	220 ul	neat neat	neat
12994	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
12775	502.2 Cal2000 Mega Mix	100 ul	2000 ppm	200 ppm
12907	EPA 8260 CAL. MIX 2	100 ul	2000 ppm	200 ppm
13124	Custom VOC Standard	100 ul	VARIOUS	various ppm
12774	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-313322	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-327582	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
V-313324	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
12992	Ethyl-tert-Butyl Ether(ETBTE)	100 ul	2000 ppm	200 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-330844

Prepared By: Kim, Benjamin
Description: 20ppm VOA Working Std
Prep Date: 7/4/2020
Expiration Date: 9/16/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 07/09/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	900 ul	neat neat	neat
V-330843	200ppm VOA Working Std	100 ul	VARIOUS pp	200 ppm

Veritech Lot Number: V-331408

Prepared By: Previlon, Wilner
Description: MBS
Prep Date: 7/14/2020
Expiration Date: 9/16/2020
Department: Organics
BatchNumber:
Concentration: 100 ppm
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	610 ul	neat neat	neat neat
12776	502.2 Cal Mix #1(gases)	50 ul	2000 ppm	100 ppm
12605	Epa 502/524 VO Org Mix(2nd Sources)	50 ul	2000 ppm	100 ppm
12913	EPA 8260 CAL MIX 2	50 ul	2000 ppm	100 ppm
13124	Custom VOC Standard	50 ul	VARIOUS	various ppm
12993	tert-Amyl Methyl Ether	50 ul	2000 ppm	100 ppm
V-313323	VOA ADD MIX(2nd Source)	20 ul	5000/25000 p	various ppm
V-313325	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-327585	Ethyl ether/Furan Mix(2ND SOURCE)	20 ul	5000 ppm	100 ppm
11674	Ethyl-tert-Butyl Ether(ETBE)	50 ul	2000 ppm	100 ppm

Veritech Lot Number: V-331858

Prepared By: Previlon, Wilner
Description: 200ppm VOA Working Std
Prep Date: 7/22/2020
Expiration Date: 9/16/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	220 ul	neat neat	neat
12994	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
13185	502.2 Cal2000 Mega Mix	100 ul	2000 ppm	200 ppm
12907	EPA 8260 CAL. MIX 2	100 ul	2000 ppm	200 ppm
13124	Custom VOC Standard	100 ul	VARIOUS	various ppm
12774	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-313322	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-327582	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
V-313324	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
12992	Ethyl-tert-Butyl Ether(ETBTE)	100 ul	2000 ppm	200 ppm

Veritech Lot Number: V-332441

Prepared By: Kim, Benjamin
Description: Soil8260 Stock @ 500 PPB
Prep Date: 8/1/2020
Expiration Date: 8/8/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS ppb
Final Volume: 40 ml
ApprovedBy: akmal
ApproveDate: 08/03/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331858	200ppm VOA Working Std	100 ul	VARIOUS pp	500 ppb
12833	P&T Water	40 ml	NEAT neat	neat
13197	Chlorodifluoromethane (freon #22)	100 ul	200 ppm	500 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332442

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 250 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	2.5 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	2.5 ml	VARIOUS pp	250 ppb

Veritech Lot Number: V-332443

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 100 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	1 ml	VARIOUS pp	100 ppb

Veritech Lot Number: V-332444

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 50 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.5 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.5 ml	VARIOUS pp	50 ppb

Veritech Lot Number: V-332445

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 20 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.8 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.2 ml	VARIOUS pp	20 ppb

Veritech Lot Number: V-332446

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 2 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.98 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	20 ul	VARIOUS pp	2 ppb

Veritech Lot Number: V-332447

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 5 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.95 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.05 ml	VARIOUS pp	5 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332448

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 1 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.99 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.01 ml	VARIOUS pp	1 ppb

Veritech Lot Number: V-332449

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 500 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-332441	Soil8260 Stock @ 500 PPB	5 ml	VARIOUS pp	500 ppb

Veritech Lot Number: V-332450

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 0.5 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.995 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.005 ml	VARIOUS pp	0.5 ppb

Veritech Lot Number: V-332451

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: ICV CAL @ 50 PPB | BatchNumber: | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	5 ml	NEAT neat	
V-331408	MBS	2.5 ul	100 ppm	50 ppb
13198	Chlorodifluoromethane (freon #22)	1.25 ul	200 ppm	50 ppb

Veritech Lot Number: V-333161

Prepared By: Goring, Shawn | Department: Organics | ApprovedBy: akmal
Description: 200ppm VOA Working Std | BatchNumber: | ApproveDate: 08/17/20
Prep Date: 8/13/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	220 ul	neat neat	neat
12994	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
13185	502.2 Cal2000 Mega Mix	100 ul	2000 ppm	200 ppm
12907	EPA 8260 CAL. MIX 2	100 ul	2000 ppm	200 ppm
13124	Custom VOC Standard	100 ul	VARIOUS	various ppm
12774	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-313322	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-327582	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
V-313324	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
12992	Ethyl-tert-Butyl Ether(ETBTE)	100 ul	2000 ppm	200 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333162

Prepared By: Goring, Shawn
Description: MBS
Prep Date: 8/13/2020
Expiration Date: 9/16/2020
Department: Organics
BatchNumber:
Concentration: 100 ppm
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 08/17/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	610 ul	neat neat	neat neat
13186	502.2 Cal Mix#1(Gases)	50 ul	2000 ppm	100 ppm
13185	502.2 Cal2000 Mega Mix	50 ul	2000 ppm	100 ppm
12913	EPA 8260 CAL MIX 2	50 ul	2000 ppm	100 ppm
13401	Custom VOC Standard(2nd Sources)	50 ul	VARIOUS	various ppm
12993	tert-Amyl Methyl Ether	50 ul	2000 ppm	100 ppm
V-313323	VOA ADD MIX(2nd Source)	20 ul	5000/25000 p	various ppm
V-313325	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-327585	Ethyl ether/Furan Mix(2ND SOURCE)	20 ul	5000 ppm	100 ppm
13038	Ethyl-tert-Butyl Ether (ETBE)	50 ul	2000 ppm	100 ppm

Veritech Lot Number: V-333370

Prepared By: Goring, Shawn
Description: 624/8260 CAL @ 250 PPB
Prep Date: 8/17/2020
Expiration Date: 8/24/2020
Department: Organics
BatchNumber: B-29553
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 08/18/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333161	200ppm VOA Working Std	125 ul	VARIOUS pp	250 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	125 ul	200 ppm	250 ppb

Veritech Lot Number: V-333371

Prepared By: Goring, Shawn
Description: 624/8260 CAL @ 100 PPB
Prep Date: 8/17/2020
Expiration Date: 8/24/2020
Department: Organics
BatchNumber: B-29553
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 08/18/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333161	200ppm VOA Working Std	50 ul	VARIOUS pp	100 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	50 ul	200 ppm	100 ppb

Veritech Lot Number: V-333372

Prepared By: Goring, Shawn
Description: 624/8260 CAL @ 50 PPB
Prep Date: 8/17/2020
Expiration Date: 8/24/2020
Department: Organics
BatchNumber: B-29553
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 08/18/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333161	200ppm VOA Working Std	25 ul	VARIOUS pp	50 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	25 ul	200 ppm	50 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333373

Prepared By: Goring, Shawn | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 20 PPB | BatchNumber: B-29553 | ApproveDate: 08/18/20
Prep Date: 8/17/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/24/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333161	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-333374

Prepared By: Goring, Shawn | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 10 PPB | BatchNumber: B-29553 | ApproveDate: 08/18/20
Prep Date: 8/17/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/24/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330844	20ppm VOA Working Std	50 ul	VARIOUS pp	10 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	50 ul	VARIOUS pp	10 ppb

Veritech Lot Number: V-333375

Prepared By: Goring, Shawn | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 5 PPB | BatchNumber: B-29553 | ApproveDate: 08/18/20
Prep Date: 8/17/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/24/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330844	20ppm VOA Working Std	25 ul	VARIOUS pp	5 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	25 ul	VARIOUS pp	5 ppb

Veritech Lot Number: V-333376

Prepared By: Goring, Shawn | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 1 PPB | BatchNumber: B-29553 | ApproveDate: 08/18/20
Prep Date: 8/17/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/24/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330844	20ppm VOA Working Std	5 ul	VARIOUS pp	1 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	5 ul	VARIOUS pp	1 ppb

Veritech Lot Number: V-333377

Prepared By: Goring, Shawn | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 0.5 PPB | BatchNumber: B-29553 | ApproveDate: 08/18/20
Prep Date: 8/17/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/24/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330844	20ppm VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333379

Prepared By: Goring, Shawn
Description: ICV CAL @ 20 PPB
Prep Date: 8/17/2020
Expiration Date: 8/24/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 08/18/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333162	MBS	20 ul	100 ppm	20 ppb
9712	P&T Water	100 ml	Neat neat	neat
13198	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-334001

Prepared By: Goring, Shawn
Description: CAL @ 50 PPB
Prep Date: 8/31/2020
Expiration Date: 9/1/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS ppb
Final Volume: 5 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331858	200ppm VOA Working Std	1.25 ul	VARIOUS pp	50 ppb
12833	P&T Water	5 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	1.25 ul	200 ppm	50 ppb

Veritech Lot Number: V-334002

Prepared By: Goring, Shawn
Description: CAL @ 20 PPB
Prep Date: 8/31/2020
Expiration Date: 9/7/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331858	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
12833	P&T Water	100 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 2889

Description: 1,2,4,5-TETRAMETHYLBENZENE

ApprovedBy: jean
ApproveDate: 07/30/09
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACROS ORGANI	409390050	A0214190	11/20/07	11/30/20	Revolus, Jean	1	1ML	NEAT	

Veritech Control/Receipt Number: 9641

Description: d-Camphor

ApprovedBy: jean
ApproveDate: 08/11/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11556-1G	3256300	08/11/15	10/31/20	Revolus, Jean	2	1g	Neat	

Veritech Control/Receipt Number: 9712

Description: P&T Water

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Veritech	N/A	N/A	09/28/15	09/28/20	Goring, Shawn	1	N/A	Neat	Neat

Veritech Control/Receipt Number: 11578

Description: n-Amyl Acetate

ApprovedBy: akmal
ApproveDate: 04/03/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Chem Service	N-12508-1G	6972800	04/03/18	02/27/21	Hamid, Akmal	1	1G	NEAT	NEAT

Veritech Control/Receipt Number: 11587

Description: Furan

ApprovedBy: akmal
ApproveDate: 04/05/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Aldrich	185922	SHBG4510V	04/05/18	08/31/25	Hamid, Akmal	1	5ML	NEAT	NEAT

Veritech Control/Receipt Number: 11674

Description: Ethyl-tert-Butyl Ether(ETBE)

ApprovedBy: jean
ApproveDate: 05/14/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30628	A0137814	05/10/18	05/31/23	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 11931

Description: Methyl methacrylate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-12443-1G	7530100	08/22/18	03/31/21	Revolus, Jean	1	1g	Neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11932

Description: Butyl methacrylate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11371-1G	4695500	08/22/18	01/31/23	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 11933

Description: n-Butyl acrylate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-12513-1G	7528400	08/22/18	12/31/20	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 11935

Description: Ethyl acetate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11881-1G	7518400	08/22/18	05/31/22	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 12137

Description: 8260A Surrogates Mix

ApprovedBy: jean
ApproveDate: 11/21/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30240	A0138193	11/21/18	05/31/23	Revolus, Jean	17	1ml	2500	PPM

Veritech Control/Receipt Number: 12138

Description: 8260A Internal Standard Mix

ApprovedBy: jean
ApproveDate: 11/21/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30241	A0138856	11/21/18	06/30/23	Revolus, Jean	14	1ml	2500	PPM

Veritech Control/Receipt Number: 12435

Description: Chlorodifluoromethane(Freon #22)

ApprovedBy: jean
ApproveDate: 04/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	M-REF-03	217071159	04/18/19	07/12/27	Revolus, Jean	20	1ml	200	PPM

Veritech Control/Receipt Number: 12588

Description: Methyl alcohol

ApprovedBy: akmal
ApproveDate: 06/14/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	19010891	06/11/19	04/16/21	Lopez, Jose	6	1L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12605

Description: Epa 502/524 VO Org Mix(2nd Sources)

ApprovedBy: akmal
ApproveDate: 07/08/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SIGMA-ALDRICH	502111	LRAC0242	06/14/19	09/30/20	Revolus, Jean	10	1ml	2000	PPM

Veritech Control/Receipt Number: 12761

Description: Camphene

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11395-250G	8199400	09/19/19	01/31/22	Revolus, Jean	2	250m	NEAT	

Veritech Control/Receipt Number: 12762

Description: p-Diethylbenzene

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-12771-100MG	8949700	09/19/19	08/31/23	Revolus, Jean	4	100m	NEAT	

Veritech Control/Receipt Number: 12763

Description: Isopropyl acetate

ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-12223-1G	8816500	09/19/19	04/30/24	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12764

Description: Cyclohexanone

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11531-1G	8743900	09/19/19	05/31/23	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12766

Description: Ethyl methacrylate

ApprovedBy: jean
ApproveDate: 09/25/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11903-1G	8239900	09/19/19	01/31/23	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12774

Description: tert-Amyl Methyl Ether Standard

ApprovedBy: akmal
ApproveDate: 09/23/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30629	A0143927	09/20/19	12/31/23	Revolus, Jean	6	1ml	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12775

Description: 502.2 Cal2000 Mega Mix

ApprovedBy: akmal
ApproveDate: 09/23/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30431	A0146957	09/20/19	03/31/21	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 12776

Description: 502.2 Cal Mix #1(gases)

ApprovedBy: akmal
ApproveDate: 09/23/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30042	A0150712	09/20/19	03/31/26	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 12804

Description: methyl alcohol

ApprovedBy: akmal
ApproveDate: 02/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	19010891	09/30/19	03/16/21	Lopez, Jose	36	1L	neat	neat

Veritech Control/Receipt Number: 12815

Description: p-Ethyltoluene

ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEMSERVICE	N-12776-1G	7926200	10/03/19	12/31/21	Revolus, Jean	4	250 m	NEAT	

Veritech Control/Receipt Number: 12833

Description: P&T Water

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Veritech	N/A	N/A	10/14/19	10/14/25	Goring, Shawn	1	N/A	NEAT	NEAT

Veritech Control/Receipt Number: 12907

Description: EPA 8260 CAL. MIX 2

ApprovedBy: akmal
ApproveDate: 12/03/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SIGMA-ALDRICH	46831-U	LRAC3827	12/02/19	10/31/22	Hamid, Akmal	18	1.5ML	2000	PPM

Veritech Control/Receipt Number: 12913

Description: EPA 8260 CAL MIX 2

ApprovedBy: akmal
ApproveDate: 12/09/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Sigma- Addrich	4S6831-U	LRAC0052	12/09/19	10/31/20	Hamid, Akmal	15	1.5ML	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12992

Description: Ethyl-tert-Butyl Ether(ETBTE)

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30628	A0153073	01/08/20	09/30/24	Revolus, Jean	2	1ml	2000	PPM

Veritech Control/Receipt Number: 12993

Description: tert-Amyl Methyl Ether

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30629	A0143927	01/08/20	12/31/23	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 12994

Description: 502.2 Cal Mix #1(Gases)

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30042	A0153419	01/08/20	05/31/26	Revolus, Jean	10	1ml	2000	PPM

Veritech Control/Receipt Number: 13038

Description: Ethyl-tert-Butyl Ether (ETBE)

ApprovedBy: akmal
ApproveDate: 02/05/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30628	A0157135	02/03/20	01/31/25	Revolus, Jean	3	1ml	2000	PPM

Veritech Control/Receipt Number: 13124

Description: Custom VOC Standard

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	S-16418	220031197	03/17/20	09/16/20	Revolus, Jean	5	1ml	VARIOU	

Veritech Control/Receipt Number: 13150

Description: methyl alcohol

ApprovedBy: akmal
ApproveDate: 04/01/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	19010891	03/30/20	04/16/21	Lopez, Jose	42	1L	neat	neat

Veritech Control/Receipt Number: 13185

Description: 502.2 Cal2000 Mega Mix

ApprovedBy: jean
ApproveDate: 04/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30431	A0150913	04/15/20	07/31/21	Revolus, Jean	10	1ml	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13186

Description: 502.2 Cal Mix#1(Gases)

ApprovedBy: jean
ApproveDate: 04/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30042	A0156895	04/15/20	09/30/26	Revolus, Jean	10	1ml	2000	PPM

Veritech Control/Receipt Number: 13193

Description: Ethyl ether

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11897-1G	9150400	04/17/20	11/30/21	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 13197

Description: Chlorodifluoromethane (freon #22)

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	M-REF-03	219081587	04/17/20	09/11/29	Revolus, Jean	10	1ml	200	PPM

Veritech Control/Receipt Number: 13198

Description: Chlorodifluoromethane (freon #22)

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	M-REF-03	220011384	04/17/20	01/28/30	Revolus, Jean	10	1ml	200	PPM

Veritech Control/Receipt Number: 13224

Description: methyl alcohol

ApprovedBy: akmal
ApproveDate: 05/05/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	20030219	05/04/20	03/13/22	Lopez, Jose	6	1L	neat	neat

Veritech Control/Receipt Number: 13401

Description: Custom VOC Standard(2nd Sources)

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	S-16418	220071003	07/15/20	04/21/21	Revolus, Jean	5	1ml	VARIOU	

Metal Data

Metal Data
Sample Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-001	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	97	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A
7440-47-3	Chromium	6.2	10	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A
7440-50-8	Copper	6.2	29	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A
7439-92-1	Lead	6.2	440	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A
7439-96-5	Manganese	12	790	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A
7439-97-6	Mercury	0.10	0.17	1	0.15	25	08/31/20	85228	H26170S	16	CV	HGCV3A
7440-02-0	Nickel	6.2	17	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A
7440-66-6	Zinc	12	73	1	0.5	50	08/31/20	85228	S26168A3	43	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-001	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	8.5	1	0.5	100	08/31/20	852293	120ANEW	32	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	ND	1	0.5	100	08/31/20	852293	120ANEW	32	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	08/31/20	852293	120ANEW	32	MS	MS3_7700SWA
7440-22-4	Silver	0.25	ND	1	0.5	100	08/31/20	852293	120ANEW	32	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-002	% Solid:	79	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3 MS	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	86	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A
7440-47-3	Chromium	6.3	70	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A
7440-50-8	Copper	6.3	82	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A
7439-92-1	Lead	6.3	69	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A
7439-96-5	Manganese	13	330	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A
7439-97-6	Mercury	0.11	2.1	1	0.15	25	08/31/20	85228	H26170S	18	CV	HGCV3A
7440-02-0	Nickel	6.3	78	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A
7440-66-6	Zinc	13	120	1	0.5	50	08/31/20	85228	S26168A3	45	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-002	% Solid:	79	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3 MS	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	60	1	0.5	100	08/31/20	852293	120ANEW	35	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	50	1	0.5	100	08/31/20	852293	120ANEW	35	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	51	1	0.5	100	08/31/20	852293	120ANEW	35	MS	MS3_7700SWA
7440-22-4	Silver	0.25	9.9	1	0.5	100	08/31/20	852293	120ANEW	35	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-003	% Solid:	85	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3 MSD	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	99	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A
7440-47-3	Chromium	5.9	67	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A
7440-50-8	Copper	5.9	81	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A
7439-92-1	Lead	5.9	64	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A
7439-96-5	Manganese	12	700	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A
7439-97-6	Mercury	0.098	1.9	1	0.15	25	08/31/20	85228	H26170S	19	CV	HGCV3A
7440-02-0	Nickel	5.9	72	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A
7440-66-6	Zinc	12	120	1	0.5	50	08/31/20	85228	S26168A3	46	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-003	% Solid:	85	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3 MSD	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	59	1	0.5	100	08/31/20	852293	120ANEW	36	MS	MS3_7700SWA
7440-41-7	Beryllium	0.24	47	1	0.5	100	08/31/20	852293	120ANEW	36	MS	MS3_7700SWA
7782-49-2	Selenium	2.4	48	1	0.5	100	08/31/20	852293	120ANEW	36	MS	MS3_7700SWA
7440-22-4	Silver	0.24	9.5	1	0.5	100	08/31/20	852293	120ANEW	36	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-004	% Solid:	76	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	Duplicate	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	31	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A
7440-47-3	Chromium	6.6	16	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A
7440-50-8	Copper	6.6	22	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A
7439-92-1	Lead	6.6	13	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A
7439-96-5	Manganese	13	270	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	08/31/20	85228	H26170S	27	CV	HGCV3A
7440-02-0	Nickel	6.6	25	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A
7440-66-6	Zinc	13	74	1	0.5	50	08/31/20	85228	S26168A3	56	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-004	% Solid:	76	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	Duplicate	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.26	5.9	1	0.5	100	08/31/20	852293	120ANEW	49	MS	MS3_7700SWA
7440-41-7	Beryllium	0.26	0.37	1	0.5	100	08/31/20	852293	120ANEW	49	MS	MS3_7700SWA
7782-49-2	Selenium	2.6	ND	1	0.5	100	08/31/20	852293	120ANEW	49	MS	MS3_7700SWA
7440-22-4	Silver	0.26	ND	1	0.5	100	08/31/20	852293	120ANEW	49	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-005	% Solid:	72	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-2	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	14	48	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A
7440-47-3	Chromium	6.9	11	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A
7440-50-8	Copper	6.9	40	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A
7439-92-1	Lead	6.9	46	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A
7439-96-5	Manganese	14	490	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A
7439-97-6	Mercury	0.12	ND	1	0.15	25	08/31/20	85228	H26170S	28	CV	HGCV3A
7440-02-0	Nickel	6.9	20	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A
7440-66-6	Zinc	14	83	1	0.5	50	08/31/20	85228	S26168A3	57	P	PEICP3A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-005	% Solid:	72	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-2	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.28	8.8	1	0.5	100	08/31/20	852293	120ANEW	50	MS	MS3_7700SWA
7440-41-7	Beryllium	0.28	0.37	1	0.5	100	08/31/20	852293	120ANEW	50	MS	MS3_7700SWA
7782-49-2	Selenium	2.8	ND	1	0.5	100	08/31/20	852293	120ANEW	50	MS	MS3_7700SWA
7440-22-4	Silver	0.28	ND	1	0.5	100	08/31/20	852293	120ANEW	50	MS	MS3_7700SWA

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Metal Data
QC Data

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/31/20
Data File: S26168A3
Prep Batch: 85228
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333673-5	Rec	CCV V-333673-17	Rec	CCV V-333673-27	Rec	CCV V-333673-38	Rec	CCV V-333673-49	Rec	CCV V-333673-59	Rec	CCV V-333673-69	Rec	Rec
Aluminum	5/5	4.91617	98	4.92725	99	4.91860	98	4.86265	97	4.84239	97	4.92474	98	4.94935	99	
Barium	.5/.5	0.49056	98	0.49126	98	0.48985	98	0.48456	97	0.48162	96	0.48884	98	0.49027	98	
Calcium	50/50	51.18840	102	51.06340	102	51.53440	103	50.59770	101	50.28860	101	51.44960	103	51.39680	103	
Chromium	.5/.5	0.52088	104	0.52396	105	0.52570	105	0.51553	103	0.50801	102	0.51955	104	0.51981	104	
Cobalt	.5/.5	0.49168	98	0.49442	99	0.49628	99	0.48639	97	0.48078	96	0.48990	98	0.48968	98	
Copper	.5/.5	0.49399	99	0.49738	99	0.49669	99	0.48867	98	0.48787	98	0.49639	99	0.49871	100	
Iron	5/5	4.95391	99	4.99366	100	5.01993	100	4.96048	99	4.94968	99	5.04222	101	5.06910	101	
Lead	.5/.5	0.49765	100	0.49956	100	0.49908	100	0.49103	98	0.48518	97	0.49188	98	0.49248	98	
Magnesium	50/50	51.32490	103	51.36530	103	51.20100	102	50.70370	101	50.53090	101	51.40380	103	51.56400	103	
Manganese	.5/.5	0.49394	99	0.49539	99	0.49413	99	0.48833	98	0.48718	97	0.49448	99	0.49633	99	
Nickel	.5/.5	0.49416	99	0.49705	99	0.49809	100	0.48885	98	0.48291	97	0.49251	99	0.49222	98	
Zinc	.5/.5	0.52095	104	0.52287	105	0.52755	106	0.51647	103	0.51250	102	0.52523	105	0.52633	105	

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 08/31/20
Data File: S26168A3
Prep Batch: 85226 85228
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333671	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-333662	Recovery	Low Limit	High Limit
Molybdenum	0.025	0.0271601	109	80	120	10	9.64505	96	90	110
Aluminum	2.0	2.00417	100	80	120	500	491.657	98	90	110
Arsenic	0.04	0.0421544	105	80	120	10	10.1496	101	90	110
Barium	0.1	0.103577	104	80	120	10	10.0083	100	90	110
Beryllium	0.012	0.0129819	108	80	120	5	4.91665	98	90	110
Calcium	10	10.2003	102	80	120	500	462.266	92	90	110
Cadmium	0.012	0.0100709	84	80	120	5	5.23137	105	90	110
Cobalt	0.025	0.0258329	103	80	120	5	4.61612	92	90	110
Chromium	0.05	0.0472362	94	80	120	10	9.84296	98	90	110
Copper	0.05	0.0501543	100	80	120	10	10.3208	103	90	110
Iron	2.0	1.99244	100	80	120	400	369.131	92	90	110
Potassium	NA	17.3823		80	120	200	-538.537	-270 a	90	110
Silver	0.015	0.0115914	77 a	80	120	1	1.18919	119 a	90	110
Manganese	0.1	0.0987280	99	80	120	10	9.90280	99	90	110
Silicon	0.1	0.128536	129 a	80	120	25	0.751578	3 a	90	110
Sodium	NA	2.67502		80	120	1000	1158.54	116 a	90	110
Nickel	0.05	0.0513031	103	80	120	10	9.12771	91	90	110
Lead	0.05	0.0496917	99	80	120	10	9.59483	96	90	110
Antimony	0.04	0.0391830	98	80	120	5	5.34295	107	90	110
Selenium	0.05	0.0543854	109	80	120	5	4.96152	99	90	110
Tin	0.2	0.200971	100	80	120	10	9.70371	97	90	110
Titanium	0.1	0.0993233	99	80	120	10	10.2235	102	90	110
Thallium	0.05	0.0540664	108	80	120	5	5.22158	104	90	110
Vanadium	0.1	0.0994242	99	80	120	10	10.4588	105	90	110
Zinc	0.1	0.0968929	97	80	120	10	9.39800	94	90	110
Boron	0.2	0.185147	93	80	120	5	0.0468477	.94 a	90	110
Magnesium	5.0	4.92241	98	80	120	500	473.591	95	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/31/20
Data File: H26170S
Prep Batch: 85228
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-21		CCV-33		CCV-40								
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec	
Mercury	20/10	20.33000	102	10.29000	103	10.22000	102	10.13000	101							

Notes:
a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/31/20
Data File: S083120ANEW
Prep Batch: 85229
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333618-8	Rec	CCV V-333622-18	Rec	CCV V-333622-30	Rec	CCV V-333622-42	Rec	CCV V-333622-53	Rec		Rec		Rec		Rec
Antimony	50/50	47.56400	95	47.03700	94	46.54900	93	46.60300	93	46.24800	92						
Arsenic	50/50	51.75900	104	50.31000	101	50.46700	101	51.48800	103	49.81600	100						
Beryllium	50/50	54.79900	110	53.77000	108	52.90300	106	50.68200	101	45.10600	90						
Cadmium	50/50	49.59600	99	48.97600	98	48.05400	96	48.36500	97	47.52300	95						
Selenium	50/250	53.62600	107	248.56000	99	250.20000	100	248.10900	99	239.05100	96						
Silver	10/50	9.75500	98	47.81000	96	47.08800	94	47.08100	94	45.54100	91						
Thallium	50/50	50.81900	102	50.86600	102	50.69400	101	50.70500	101	49.56300	99						
Vanadium	50/50	50.73400	101	49.80700	100	49.75500	100	50.22600	100	48.80700	98						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 08/31/20
Data File: S083120ANEW
Prep Batch: 85229
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333623	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-333621	Recovery	Low Limit	High Limit
Magnesium	500	489.741	98	80	120		50000	49997.037	100	90	110
Aluminum	500	499.368	100	80	120		15000	15142.196	101	90	110
Chromium	2	1.911	96	80	120		500	512.035	102	90	110
Copper	10	10.217	102	80	120		500	503.894	101	90	110
Iron	500	514.339	103	80	120		50000	50638.130	101	90	110
Arsenic	1	0.940	94	80	120		500	511.841	102	90	110
Barium	5	5.156	103	80	120		500	526.406	105	90	110
Beryllium	1	1.064	106	80	120		500	509.241	102	90	110
Calcium	500	493.484	99	80	120		50000	53162.984	106	90	110
Cadmium	2	1.920	96	80	120		500	513.915	103	90	110
Silver	1	0.957	96	80	120		500	1543.709	309 a	90	110
Potassium	500	501.399	100	80	120		50000	51475.400	103	90	110
Zinc	20	20.014	100	80	120		500	488.757	98	90	110
Manganese	6	5.988	100	80	120		500	519.848	104	90	110
Molybdenum	1	1.038	104	80	120		500	520.382	104	90	110
Sodium	500	477.694	96	80	120		50000	50383.955	101	90	110
Nickel	3	2.962	99	80	120		500	511.399	102	90	110
Lead	2	1.940	97	80	120		500	472.246	94	90	110
Antimony	4	3.524	88	80	120		500	495.036	99	90	110
Selenium	10	9.949	99	80	120		2500	2499.409	100	90	110
Thallium	2	1.858	93	80	120		500	478.789	96	90	110
Vanadium	1	0.963	96	80	120		500	522.595	105	90	110
Cobalt	2	1.962	98	80	120		500	507.932	102	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/31/20
Data File: S26168A3
Prep Batch: 85228
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-18	CCB V-333667-28	CCB V-333667-39	CCB V-333667-50	CCB V-333667-60	CCB V-333667-70	MB 85228 (100)-40
Aluminum	1 U	2 U	2 U	2 U	2 U	2U	2U	100 U
Barium	.05 U	.1 U	.1 U	.1 U	.1 U	.1U	.1U	5 U
Calcium	5 U	10 U	10 U	10 U	10 U	10U	10U	500 U
Chromium	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.05U	2.5 U
Cobalt	.0125 U	.025 U	.025 U	.025 U	.025 U	.025U	.025U	1.3 U
Copper	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.05U	2.5 U
Iron	1 U	2 U	2 U	2 U	2 U	2U	2U	100 U
Lead	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.05U	2.5 U
Magnesium	2.5 U	5 U	5 U	5 U	5 U	5U	5U	250 U
Manganese	.05 U	.1 U	.1 U	.1 U	.1 U	.1U	.1U	5 U
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.05U	2.5 U
Zinc	.05 U	.1 U	.1 U	.1 U	.1 U	.1U	.1U	5 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/31/20
Data File: H26170S
Prep Batch: 85228
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-41	MB 85228 (167)-11			
Mercury	.5 U	.5 U	.5 U	.5 U	83 U			

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/31/20
Data File: S083120ANEW
Prep Batch: 85229
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333619-10	CCB V-333619-19	CCB V-333619-31	CCB V-333619-43	CCB V-333619-54	MB 85229-20		
Antimony	2U	4U	4U	4U	4U	400U		
Arsenic	.5U	1U	1U	1U	1U	100U		
Beryllium	.5U	1U	1U	1U	1U	100U		
Cadmium	1U	2U	2U	2U	2U	200U		
Selenium	5U	10U	10U	10U	10U	1000U		
Silver	.5U	1U	1U	1U	1U	100U		
Thallium	1U	2U	2U	2U	2U	200U		
Vanadium	.5U	1U	1U	1U	1U	100U		

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/31/20
Data File: S26168A3
Prep Batch: 85228
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	493.117	99							
Barium	0	U								
Calcium	500	466.547	93							
Chromium	0	U								
Cobalt	0	U								
Copper	0	U								
Iron	200	190.122	95							
Lead	0	U								
Magnesium	500	498.648	100							
Manganese	0	U								
Nickel	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/31/20
Data File: S083120ANEW
Prep Batch: 85229
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333620-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	48928.13	98							
Antimony	0	U								
Arsenic	0	U								
Beryllium	0	U								
Cadmium	0	U								
Calcium	150000	154503.1	103							
Iron	125000	123556.7	99							
Magnesium	50000	48193.53	96							
Selenium	0	U								
Silver	0	U								
Thallium	0	U								
Vanadium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85228

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85228

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	42	6.4978	8.92	73		65	110
Chromium	85228	1	S26168A3	42	1.7164	2.27	76		61	114
Copper	85228	1	S26168A3	42	1.5885	2.09	76		66	110
Lead	85228	1	S26168A3	42	1.1971	1.63	73		62	110
Manganese	85228	1	S26168A3	42	4.4543	6.03	74		68	110
Mercury	85228	4	H26170S	15	5.3180	41.64	51		39	110
Nickel	85228	1	S26168A3	42	0.4134	.553	75		61	114
Zinc	85228	1	S26168A3	42	5.3061	7.13	74		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85228

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	41	6.6782	8.92	75		65	110
Chromium	85228	1	S26168A3	41	1.6950	2.27	75		61	114
Copper	85228	1	S26168A3	41	1.5670	2.09	75		66	110
Lead	85228	1	S26168A3	41	1.1739	1.63	72		62	110
Manganese	85228	1	S26168A3	41	4.5188	6.03	75		68	110
Mercury	85228	4	H26170S	14	5.0070	41.64	48		39	110
Nickel	85228	1	S26168A3	41	0.4117	.553	74		61	114
Zinc	85228	1	S26168A3	41	5.1847	7.13	73		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	46	S26168A3	43	0.8400	0.7836	0.5	11	a	75	125
Chromium	85228	1	S26168A3	46	S26168A3	43	0.5701	0.0846	0.5	97		75	125
Copper	85228	1	S26168A3	46	S26168A3	43	0.6851	0.2354	0.5	90		75	125
Lead	85228	1	S26168A3	46	S26168A3	43	0.5399	3.5540	0.5	-600	b	75	125
Manganese	85228	1	S26168A3	46	S26168A3	43	5.9788	6.4359	0.5	-91	b	75	125
Mercury	85228	1	H26170S	19	H26170S	16	9.9320	0.8380	10	91		75	125
Nickel	85228	1	S26168A3	46	S26168A3	43	0.6142	0.1404	0.5	95		75	125
Zinc	85228	1	S26168A3	46	S26168A3	43	1.0408	0.5911	0.5	90		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD18955-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	45	S26168A3	43	0.6766	0.7836	0.5	-21	a	75	125
Chromium	85228	1	S26168A3	45	S26168A3	43	0.5546	0.0846	0.5	94		75	125
Copper	85228	1	S26168A3	45	S26168A3	43	0.6499	0.2354	0.5	83		75	125
Lead	85228	1	S26168A3	45	S26168A3	43	0.5416	3.5540	0.5	-600	b	75	125
Manganese	85228	1	S26168A3	45	S26168A3	43	2.5838	6.4359	0.5	-770	b	75	125
Mercury	85228	1	H26170S	18	H26170S	16	9.9250	0.8380	10	91		75	125
Nickel	85228	1	S26168A3	45	S26168A3	43	0.6158	0.1404	0.5	95		75	125
Zinc	85228	1	S26168A3	45	S26168A3	43	0.9384	0.5911	0.5	69	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85228

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS | Matrix: SOIL | SampleID: AD18955-001

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	1	S26168A3	47	S26168A3	43	1.2230	0.7836	0.50	88		75	125
Chromium	1	S26168A3	47	S26168A3	43	0.5702	0.0846	0.50	97		75	125
Copper	1	S26168A3	47	S26168A3	43	0.7008	0.2354	0.50	93		75	125
Lead	1	S26168A3	47	S26168A3	43	3.8984	3.5540	0.50	69	b	75	125
Manganese	1	S26168A3	47	S26168A3	43	6.7625	6.4359	0.50	65	b	75	125
Nickel	1	S26168A3	47	S26168A3	43	0.5878	0.1404	0.50	89		75	125
Zinc	1	S26168A3	47	S26168A3	43	1.0291	0.5911	0.50	88		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85229

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85229

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85229	1	S083120A	22	38.6760	49.4	78		61	113
Beryllium	85229	1	S083120A	22	143.2870	187	77		66	110
Selenium	85229	1	S083120A	22	276.1240	364	76		60	112
Silver	85229	1	S083120A	22	74.6300	94.0	79		61	111

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85229

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85229	1	S083120A	21	38.5900	49.4	78		61	113
Beryllium	85229	1	S083120A	21	144.8910	187	77		66	110
Selenium	85229	1	S083120A	21	279.3350	364	77		60	112
Silver	85229	1	S083120A	21	72.8790	94.0	78		61	111

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85229	1	S083120A	36	S083120A	32	250.5400	34.4610	250	86		75	125
Beryllium	85229	1	S083120A	36	S083120A	32	200.5140	1U	250	80		75	125
Selenium	85229	1	S083120A	36	S083120A	32	203.4800	10U	250	81		75	125
Silver	85229	1	S083120A	36	S083120A	32	40.2550	1U	50	81		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD18955-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85229	1	S083120A	35	S083120A	32	235.5220	34.4610	250	80		75	125
Beryllium	85229	1	S083120A	35	S083120A	32	197.0770	1U	250	79		75	125
Selenium	85229	1	S083120A	35	S083120A	32	202.5500	10U	250	81		75	125
Silver	85229	1	S083120A	35	S083120A	32	38.9120	1U	50	78		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85229

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS | Matrix: SOIL | SampleID: AD18955-001

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	S083120A	37	S083120A	32	83.7790	34.4610	50	99		75	125
Beryllium	1	S083120A	37	S083120A	32	44.2790	1U	50	89		75	125
Selenium	1	S083120A	37	S083120A	32	229.8340	10U	250	92		75	125
Silver	1	S083120A	37	S083120A	32	45.6470	1U	50	91		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85228

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85228

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	42	S26168A3	41	6.4978	6.6782	2.7		20
Chromium	85228	S26168A3	42	S26168A3	41	1.7164	1.6950	1.3		20
Copper	85228	S26168A3	42	S26168A3	41	1.5885	1.5670	1.4		20
Lead	85228	S26168A3	42	S26168A3	41	1.1971	1.1739	2		20
Manganese	85228	S26168A3	42	S26168A3	41	4.4543	4.5188	1.4		20
Mercury	85228	H26170S	15	H26170S	14	5.3180	5.0070	6		20
Nickel	85228	S26168A3	42	S26168A3	41	0.4134	0.4117	.4		20
Zinc	85228	S26168A3	42	S26168A3	41	5.3061	5.1847	2.3		20

TxtQcType: MR Matrix: SOIL SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	44	S26168A3	43	0.8278	0.7836	5.5		20
Chromium	85228	S26168A3	44	S26168A3	43	0.1139	0.0846	29	b	20
Copper	85228	S26168A3	44	S26168A3	43	0.3037	0.2354	25	a	20
Lead	85228	S26168A3	44	S26168A3	43	2.3034	3.5540	43	a	20
Manganese	85228	S26168A3	44	S26168A3	43	6.3194	6.4359	1.8		20
Mercury	85228	H26170S	17	H26170S	16	0.6540	0.8380	25	b	20
Nickel	85228	S26168A3	44	S26168A3	43	0.1666	0.1404	17		20
Zinc	85228	S26168A3	44	S26168A3	43	0.6861	0.5911	15		20

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	46	S26168A3	45	0.8400	0.6766	22	a	20
Chromium	85228	S26168A3	46	S26168A3	45	0.5701	0.5546	2.8		20
Copper	85228	S26168A3	46	S26168A3	45	0.6851	0.6499	5.3		20
Lead	85228	S26168A3	46	S26168A3	45	0.5399	0.5416	.3		20
Manganese	85228	S26168A3	46	S26168A3	45	5.9788	2.5838	79	a	20
Mercury	85228	H26170S	19	H26170S	18	9.9320	9.9250	.071		20
Nickel	85228	S26168A3	46	S26168A3	45	0.6142	0.6158	.26		20
Zinc	85228	S26168A3	46	S26168A3	45	1.0408	0.9384	10		20

TxtQcType: SD Matrix: SOIL SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Barium	85228	S26168A3	48	S26168A3	43	5	0.1555	0.7836	0.75		10
Chromium	85228	S26168A3	48	S26168A3	43	5	0.0119	0.0846	30	a	10
Copper	85228	S26168A3	48	S26168A3	43	5	0.0469	0.2354	0.37		10
Lead	85228	S26168A3	48	S26168A3	43	5	0.7188	3.5540	1.1		10
Manganese	85228	S26168A3	48	S26168A3	43	5	1.3085	6.4359	1.7		10
Nickel	85228	S26168A3	48	S26168A3	43	5	0.0302	0.1404	7.5		10
Zinc	85228	S26168A3	48	S26168A3	43	5	0.1217	0.5911	3		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85229

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR | Matrix: SOIL | SampleID: LCS MR 85229

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Arsenic	85229	S083120A	22	S083120A	21	38.6760	38.5900	.22		20
Beryllium	85229	S083120A	22	S083120A	21	143.2870	144.8910	1.1		20
Selenium	85229	S083120A	22	S083120A	21	276.1240	279.3350	1.2		20
Silver	85229	S083120A	22	S083120A	21	74.6300	72.8790	2.4		20

TxtQcType: MR | Matrix: SOIL | SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Arsenic	85229	S083120A	33	S083120A	32	34.0100	34.4610	1.3		20
Beryllium	85229	S083120A	33	S083120A	32	1.0470	1U	---		20
Selenium	85229	S083120A	33	S083120A	32	10U	10U	---		20
Silver	85229	S083120A	33	S083120A	32	1U	1U	---		20

TxtQcType: MSD | Matrix: SOIL | SampleID: AD18955-003

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Arsenic	85229	S083120A	36	S083120A	35	250.5400	235.5220	6.2		20
Beryllium	85229	S083120A	36	S083120A	35	200.5140	197.0770	1.7		20
Selenium	85229	S083120A	36	S083120A	35	203.4800	202.5500	.46		20
Silver	85229	S083120A	36	S083120A	35	40.2550	38.9120	3.4		20

TxtQcType: SD | Matrix: SOIL | SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85229	S083120A	34	S083120A	32	5	7.3530	34.4610	6.7		20
Beryllium	85229	S083120A	34	S083120A	32	5	0.2180	0.9820	11	c	20
Selenium	85229	S083120A	34	S083120A	32	5	1.0710	4.4390	21	c	20
Silver	85229	S083120A	34	S083120A	32	5	0.0670	0.3380	0.89		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Metal Data
Verification of Instrument Parameters

INTERELEMENT CORRECTION SUMMARY PEICP3ax

	Interfering Elements								
Interfered Elements	Al	Ca	Fe	Mg	B	Ba	Cu	Mn	Mo
Al	N/A	0	0	0	0	0	0	0	23.5
Sb	0	0	0	0	0	0	0	0	-12.9
As	0	0	-0.116	0	0	0	0	0	5.29
Ba	0	0	0	0	0	N/A	0	0	0
Be	0	0	0	0	0	0	0	0	0
B	0	0	4.15	0	N/A	0	0	0	-2.34
Cd	0	0	0	0	0	0	0	0	0
Ca	0	N/A	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	N/A	0	0
Fe	0	0	N/A	0	0	0	0	0	0
Pb	-0.0911	0	0	0	0	0	0	0	0
Mg	0	0	0	N/A	0	0	0	0	0
Mn	0	0	0	0	0	0	0	N/A	0
Mo	0	0	0	0	0	0	0	0	N/A
Ni	0	0	0	0	0	0	0	0	0
K	0	0	4207.75	0	0	0	0	0	0
Se	0	0.0541	-0.495	0	0	0	0	0	0
Si	-0.0936	-0.0964	-0.285	-0.0459	-10.34	-5.45	-5.89	-4.28	11.1
Ag	0	0	0	0	0	0	0	0	0
Na	0	0	0	0	0	0	0	0	0
Tl	0	0	0	0	0	0	0	2.59	0.00
Sn	0	0	0	0	0	0	0	0	0
Ti	0	0	0	0	0	0	0	0	0
V	0	0	0.0684	0	0	0	0	0	-13.1
Zn	0	0	0	0	0	0	0	0	0

IECs run 07/15/2019. As, B Mod 12302019

INTERELEMENT CORRECTION SUMMARY PEICP3ax

Interfered Elements	Interfering Elements							
	Na	Ni	Se	Si	Sn	Ti	V	Zn
Al	0	0	0	0	0	0	0	0
Sb	0	0	0	0	0	0	0	0
As	0	0	0	0	0	0	0	0
Ba	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0.00	0	0
B	0	0	0	0	0	0	0	0
Cd	0	0	0	0	0	0	0	0
Ca	0	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	0	0
Fe	0	0	0	0	0	0	0	0
Pb	0	0	0	0	0	0	0	0
Mg	0	0	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0
Mo	0	0	0	0	0	0	0	0
Ni	0	N/A	0	0	0	0	0	0
K	0	0	0	0	0	0	0	0
Se	0	0	N/A	0	0.000	0	0	0
Si	0.0185	-5.1	0	N/A	-5.27	-2.58	-5.57	-4.92
Ag	0	0	0	0	0	0	0	0
Na	N/A	0	0	0	0	0.0	0	0
Tl	0	0	0	0	0	-11.1	-13.5	0
Sn	0	0	0	0	N/A	5.67	0	0
Ti	0	0	0	0	0	N/A	0	0
V	0	0	0	0	0	0	N/A	0
Zn	0	0	0	0	0	0	0	N/A

IECs run 07/15/2019. As, B Mod 12302019

MDL / RL SUMMARY
SOIL
PE ICP 3 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/Kg)
Ag	0.24396749	1.5
Al	16.7078017	200
As	1.37117317	4
Ba	0.67596126	10
Be	0.71383086	1.2
Ca	100.98567	1000
Cd	0.52283194	1.2
Co	0.71289903	2.5
Cr	0.67036785	5
Cu	0.61619583	5
Fe	13.1992644	200
Mg	19.5137102	500
Mn	0.64172541	10
Mo	0.27417636	2.5
Na	111.789255	250
Ni	1.10372174	5
Pb	0.61639339	5
Sb	1.03795619	4
Se	1.72784998	5
Sn	1.86972983	20
Ti	0.63640908	10
Tl	16.577423	5
V	0.95770226	10
Zn	1.50868728	10
B	5.92873987	20

COMPLETED: 12/31/2019

HGCV3 MDL/RL SUMMARY

Element: *Mercury*
Instrument: *PE FIMS 100*
Technique: *CV*

Instrument ID: *HgCV3*
Analyst *Carmela Aliano*

200 Series	METHOD	MDL (ppb)	Completed	RL (ppb)
H_2O	245.1	0.0794	12/31/2019	0.20
SW846				
H_2O	7470A	0.1740	12/31/2019	0.50
SOIL	7471 B	0.0757 (0.0126 mg/kg)	12/31/2019	0.50 (0.0833 mg/kg)

MDL/RL
Method 6020/6020A
MS3_7700
SOIL

ELEMENT	MDL (MG/KG)	Reporting Limits (MG/KG)
Al	1.5871	100
Sb	0.0225	0.8
AS	0.0175	0.2
BA	0.0568	1
BE	0.0157	0.2
CA	19.0038	100
CD	0.0141	0.4
CR	0.0859	0.4
CO	0.0109	0.4
CU	0.1937	2
FE	4.2445	100
PB	0.0374	0.4
MG	2.3285	100
MN	0.2413	1.2
MO	0.0534	0.2
NA	17.8116	100
Ni	0.0522	0.6
K	5.8233	100
Se	0.0635	2
Ag	0.0261	0.2
TL	0.0176	0.4
V	0.0108	0.2
Zn	1.4649	4

MDL analyzed 5/21/2019, 7/12/2019, 9/5/2019, 10/29/2019.
Blanks 1/24/2019-1/24/2020

Metal Data
Raw Data

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85228 (100) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85228 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-36-0	Antimony	2.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-38-2	Arsenic	2.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-39-3	Barium	5.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-41-7	Beryllium	0.60	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-42-8	Boron	10	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-43-9	Cadmium	0.60	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-70-2	Calcium	500	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-47-3	Chromium	2.5	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-48-4	Cobalt	1.2	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-50-8	Copper	2.5	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7439-89-6	Iron	100	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7439-92-1	Lead	2.5	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7439-95-4	Magnesium	250	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7439-96-5	Manganese	5.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7439-98-7	Molybdenum	1.2	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-02-0	Nickel	2.5	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-09-7	Potassium	250	ND	1	0.5	50	09/01/20	85228	S26170A4	15	P	PEICPRAD4A
7782-49-2	Selenium	2.5	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-23-5	Sodium	120	ND	1	0.5	50	09/01/20	85228	S26170A4	15	P	PEICPRAD4A
7440-28-0	Thallium	2.5	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-31-5	Tin	10	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-32-6	Titanium	5.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-62-2	Vanadium	5.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A
7440-66-6	Zinc	5.0	ND	1	0.5	50	08/31/20	85228	S26168A3	40	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85228 (167) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85228 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	08/31/20	85228	H26170S	11	CV	HGCV3A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85229 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85229 Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	50	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-36-0	Antimony	0.40	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-38-2	Arsenic	0.10	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-39-3	Barium	0.50	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-41-7	Beryllium	0.10	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-43-9	Cadmium	0.20	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-70-2	Calcium	50	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-47-3	Chromium	0.20	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-48-4	Cobalt	0.20	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-50-8	Copper	1.0	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7439-89-6	Iron	50	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7439-92-1	Lead	0.20	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7439-95-4	Magnesium	50	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7439-96-5	Manganese	0.60	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7439-98-7	Molybdenum	0.20	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-02-0	Nickel	0.30	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-09-7	Potassium	50	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7782-49-2	Selenium	1.0	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-22-4	Silver	0.10	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-23-5	Sodium	50	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-28-0	Thallium	0.20	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-62-2	Vanadium	0.10	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA
7440-66-6	Zinc	2.0	ND	1	0.5	100	08/31/20	852293	3120ANEW	20	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S26168A3.txt

Analysis Date: 08/31/20 **Instrument:** PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	16:56	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	16:59	2							V-333671(LLICV/LLCCV soil)
CALST3 V-333666	1	CAL	17:03	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	17:07	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	17:12	5							V-333673(CCV)
ICB V-333667	1	ICB	17:16	6							V-333667(ICB/CCB)
LRS V-333662	1	LRS	17:19	7	PB-SOIL	SOIL	SOIL	SW846	85226		V-333662(LRS)
ICS3 V-333666	1	ICS	17:24	8							V-333666(ICS3 - Middle Std)
RINSE	1	SMP	17:28	9		SOIL	SOIL	SW846	85226		()
LLICV V-333671	1	LLICV	17:32	10	PB-SOIL	SOIL	SOIL	SW846	85226		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	17:36	11							V-333668(ICSA)
AD18966-001	1	SMP	17:41	12	MET-1-SOIL	SOIL	SOIL	SW846	85226		()
AD18966-002	1	SMP	17:45	13	MET-1-SOIL	SOIL	SOIL	SW846	85226		()
MB 85226 (100)	1	MB	17:48	14	PB-SOIL	SOIL	SOIL	SW846	85226		()
LCS 85226	1	LCS	17:52	15	PB-SOIL	SOIL	SOIL	SW846	85226		()
LCS MR 85226	1	LCS	17:57	16	PB-SOIL	SOIL	SOIL	SW846	85226		()
CCV V-333673	1	CCV	18:02	17							V-333673(CCV)
CCB V-333667	1	CCB	18:06	18							V-333667(ICB/CCB)
AD18927-001	1	SMP	18:10	19	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-001	1	MR	18:14	20	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-001	1	MS	18:19	21	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-001	1	MSD	18:24	22	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-001	1	PS	18:29	23	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-001	5	SD	18:33	24	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-002	1	SMP	18:37	25	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-003	1	SMP	18:41	26	PB-SOIL	SOIL	SOIL	SW846	85226		()
CCV V-333673	1	CCV	18:45	27							V-333673(CCV)
CCB V-333667	1	CCB	18:49	28							V-333667(ICB/CCB)
AD18927-004	1	SMP	18:53	29	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-005	1	SMP	18:56	30	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-006	1	SMP	19:00	31	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-007	1	SMP	19:04	32	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-008	1	SMP	19:09	33	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-009	1	SMP	19:13	34	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-010	1	SMP	19:17	35	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-011	1	SMP	19:20	36	PB-SOIL	SOIL	SOIL	SW846	85226		()
AD18927-012	1	SMP	19:25	37	PB-SOIL	SOIL	SOIL	SW846	85226		()
CCV V-333673	1	CCV	19:29	38							V-333673(CCV)
CCB V-333667	1	CCB	19:34	39							V-333667(ICB/CCB)
MB 85228 (100)	1	MB	19:37	40	SRSMETALS-S	SOIL	SOIL	SW846	85228		()
LCS 85228	1	LCS	19:41	41	SRSMETALS-S	SOIL	SOIL	SW846	85228		()
LCS MR 85228	1	LCS	19:46	42	SRSMETALS-S	SOIL	SOIL	SW846	85228		()
AD18955-001	1	SMP	19:51	43	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-001	1	MR	19:56	44	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-002	1	MS	20:00	45	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-003	1	MSD	20:05	46	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-001	1	PS	20:10	47	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-001	5	SD	20:14	48	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
CCV V-333673	1	CCV	20:18	49							V-333673(CCV)
CCB V-333667	1	CCB	20:22	50							V-333667(ICB/CCB)
AD18934-001	1	SMP	20:26	51	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18934-002	1	SMP	20:31	52	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18934-003	1	SMP	20:36	53	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18934-004	1	SMP	20:41	54	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18934-005	1	SMP	20:45	55	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-004	1	SMP	20:50	56	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18955-005	1	SMP	20:55	57	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
AD18949-014	1	SMP	20:59	58	MET-TAL6010S	SOIL	SOIL	SW846	85228		()
CCV V-333673	1	CCV	21:03	59							V-333673(CCV)
CCB V-333667	1	CCB	21:07	60							V-333667(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.105 9/1/2020 2:46:07 PM

OK
ALL ELEMENTS REPORTED
Na,K NOT REPORTED

9/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S26168A3.txt

Analysis Date: 08/31/20 **Instrument:** PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
AD18950-004	1	SMP	21:10	61	MET-RCRA-S	SOIL	SOIL	SW846	85228		()
AD18932-002	1	SMP	21:15	62	MET-RCRA-S	SOIL	SOIL	SW846	85228	Ba,Pb,Zn NOT REPORTED>LR	()
AD18960-001	1	SMP	21:20	63	MET-PP6010S	SOIL	SOIL	SW846	85228		()
AD18960-003	1	SMP	21:24	64	MET-PP6010S	SOIL	SOIL	SW846	85228		()
AD18960-004	1	SMP	21:27	65	MET-PP6010S	SOIL	SOIL	SW846	85228		()
AD18960-007	1	SMP	21:32	66	MET-PP6010S	SOIL	SOIL	SW846	85228		()
AD18960-015	1	SMP	21:37	67	SRSMETALS-S	SOIL	SOIL	SW846	85228		()
AD18960-017	1	SMP	21:41	68	SRSMETALS-S	SOIL	SOIL	SW846	85228		()
CCV V-333673	1	CCV	21:45	69							V-333673(CCV)
CCB V-333667	1	CCB	21:50	70							V-333667(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.105 9/1/2020 2:46:07 PM

OK
ALL ELEMENTS REPORTED
Na,K NOT REPORTED

9/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26170S.txt

Analysis Date: 08/31/20 **Instrument:** HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	11:46	1							0
.2 PPB	1	CAL	11:47	2							0
.5 PPB	1	CAL	11:48	3							0
1 PPB	1	CAL	11:50	4							0
2 PPB	1	CAL	11:51	5							0
5 PPB	1	CAL	11:52	6							0
10 PPB	1	CAL	11:54	7							0
25 PPB	1	CAL	11:55	8							0
ICV (2)	1	ICV	11:57	9							0
ICB	1	ICB	11:59	10							0
MB 85228 (167)	1	MB	12:00	11	HG-SOIL	SOIL	SOIL	SW846	85228		0
LCS 85228	1	NA	12:02	12	HG-SOIL	SOIL	SOIL	SW846	85228	Conc. Is greater than calibration limits.	0
LCS MR 85228	1	NA	12:03	13	HG-SOIL	SOIL	SOIL	SW846	85228	Conc. Is greater than calibration limits.	0
LCS 4D	4	LCS	12:05	14	HG-SOIL	SOIL	SOIL	SW846	85228		0
LCS 4D MR	4	LCS	12:06	15	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18955-001	1	SMP	12:08	16	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18955-001	1	MR	12:09	17	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18955-002	1	MS	12:10	18	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18955-003	1	MSD	12:12	19	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18934-001	1	SMP	12:14	20	HG-SOIL	SOIL	SOIL	SW846	85228		0
CCV	1	CCV	12:15	21							0
CCB	1	CCB	12:17	22							0
AD18934-002	1	SMP	12:18	23	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18934-003	1	SMP	12:19	24	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18934-004	1	SMP	12:21	25	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18934-005	1	SMP	12:22	26	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18955-004	1	SMP	12:23	27	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18955-005	1	SMP	12:25	28	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18949-014	1	SMP	12:26	29	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18950-004	1	SMP	12:27	30	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18932-002	1	SMP	12:29	31	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18960-001	1	SMP	12:30	32	HG-SOIL	SOIL	SOIL	SW846	85228		0
CCV	1	CCV	12:32	33							0
CCB	1	CCB	12:34	34							0
AD18960-003	1	SMP	12:35	35	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18960-004	1	SMP	12:36	36	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18960-007	1	SMP	12:38	37	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18960-015	1	SMP	12:39	38	HG-SOIL	SOIL	SOIL	SW846	85228		0
AD18960-017	1	SMP	12:40	39	HG-SOIL	SOIL	SOIL	SW846	85228		0
CCV	1	CCV	12:42	40							0
CCB	1	CCB	12:43	41							0

Comments/Reviewedby:

brantsaw
192.168.1.120 8/31/2020 1:30:12 PM

OK

9/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334000

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS3_7700SWA\S083120ANEW.txt

Analysis Date: 08/31/20 **Instrument:** MS3_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	10:20	1	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
CalBlk V-333612	1	ISBLK	10:24	2		SOIL	SOIL				V-333612(Cal Blk WARNING)
CalStd1 V-333613	1	CAL	10:29	3							V-333613(Cal Std-1 WARNING)
CalStd2 V-333614	1	CAL	10:34	4							V-333614(Cal Std-2 WARNING)
CalStd3 V-333615	1	CAL	10:38	5							V-333615(Cal Std-3 WARNING)
CalStd4 V-333616	1	CAL	10:43	6							V-333616(Cal Std-4 WARNING)
CalStd5 V-333617	1	CAL	10:47	7							V-333617(Cal Std-5 WARNING)
ICV V-333618	1	ICV	10:51	8							V-333618(ICV WARNING)
LLICV V-333623	1	LLICV	10:56	9	MET-RCRA-MS	SOIL	SOIL	SW846	85229		V-333623(LL-ICV/CCV SOIL WARNING)
ICB V-333619	1	ICB	11:00	10							V-333619(ICB/CCB WARNING)
ICSA V-333620	1	ICSA	11:05	11							V-333620(ICSA WARNING)
RINSE	1	NA	11:09	12	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
LRS V-333621	1	LRS	11:14	13	MET-RCRA-MS	SOIL	SOIL	SW846	85229	Ag fail.	V-333621(LRS WARNING)
RINSE	1	NA	11:18	14	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
RINSE	1	NA	11:23	15	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
MB 85229	1	NA	11:31	16	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
RINSE	1	NA	11:35	17	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
CCV V-333622	1	CCV	11:40	18							V-333622(CCV WARNING)
CCB V-333619	1	CCB	11:44	19							V-333619(ICB/CCB WARNING)
MB 85229	1	MB	11:49	20	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
LCS 85229	1	LCS	11:53	21	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
LCS MR 85229	1	LCS	11:57	22	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
AD18960-001	1	SMP	12:02	23	MET-PP6020S	SOIL	SOIL	SW846	85229		0
AD18960-003	1	SMP	12:06	24	MET-PP6020S	SOIL	SOIL	SW846	85229		0
AD18960-004	1	SMP	12:11	25	MET-PP6020S	SOIL	SOIL	SW846	85229		0
AD18960-007	1	SMP	12:15	26	MET-PP6020S	SOIL	SOIL	SW846	85229		0
AD18960-015	1	SMP	12:19	27	MET-5-6020	SOIL	SOIL	SW846	85229		0
AD18960-017	1	SMP	12:24	28	MET-5-6020	SOIL	SOIL	SW846	85229		0
RINSE	1	NA	12:28	29	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
CCV V-333622	1	CCV	12:33	30							V-333622(CCV WARNING)
CCB V-333619	1	CCB	12:37	31							V-333619(ICB/CCB WARNING)
AD18955-001	1	SMP	12:42	32	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-001	1	MR	12:46	33	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-001	5	SD	12:50	34	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-002	1	MS	12:55	35	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-003	1	MSD	12:59	36	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-001	1	PS	13:03	37	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18951-001	1	SMP	13:08	38	MET-1-6020	SOIL	SOIL	SW846	85229		0
AD18949-014	1	SMP	13:12	39	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18950-004	1	SMP	13:17	40	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
RINSE	1	NA	13:21	41	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
CCV V-333622	1	CCV	13:26	42							V-333622(CCV WARNING)
CCB V-333619	1	CCB	13:30	43							V-333619(ICB/CCB WARNING)
AD18934-001	1	SMP	13:35	44	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18934-002	1	SMP	13:39	45	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18934-003	1	SMP	13:44	46	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18934-004	1	SMP	13:48	47	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18934-005	1	SMP	13:53	48	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-004	1	SMP	13:57	49	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18955-005	1	SMP	14:01	50	MET-TAL6020S	SOIL	SOIL	SW846	85229		0
AD18932-002	1	SMP	14:06	51	MET-RCRA-MS	SOIL	SOIL	SW846	85229	Rerun Ag, Cd (IS).	0
RINSE	1	NA	14:10	52	MET-RCRA-MS	SOIL	SOIL	SW846	85229		0
CCV V-333622	1	CCV	14:15	53							V-333622(CCV WARNING)
CCB V-333619	1	CCB	14:19	54							V-333619(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.87 9/1/2020 7:54:46 AM

Run ok. Report Ag, As, Be, Cd, Sb, Se, Tl, V. LRS fail for Ag. Ag LR = 100ppb.
Rerun Ag, Cd for 18932-002 (int. std. Fail.) PC.

9/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: N/A

Standard/Batch/SnCl2 Lot #:

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: S083120AN Sample ID: CalBlk V-333612 Sample Date 08/31/20 Sample Time: 10:24

IS ID:	Area	Area Limit		
Ho-1	2372256.93	1660579.851	-	3083934.009
In-1	1490926.09	1043648.263	-	1938203.917
Sc-1	1058582.32	741007.624	-	1376157.016
Tb-1	2402232.57	1681562.799	-	3122902.341

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-333612	2	2372256.	1490926.	1058582.	2402232.				
SMP	RINSE	1	2264284.	1401032.	998230.4	2295118.				
CAL	CalStd1 V-33361	3	2430162.	1585394.	1079901.	2447214.				
CAL	CalStd2 V-33361	4	2441222.	1532740.	1082316.	2472265.				
CAL	CalStd3 V-33361	5	2451104.	1623302.	1092594.	2496897.				
CAL	CalStd4 V-33361	6	2419750.	1533129.	1083088.	2451033.				
CAL	CalStd5 V-33361	7	2445686.	1547381.	1095393.	2462319.				
ICV	ICV V-333618	8	2460264.	1632588.	1101090.	2509770.				
LLICV	LLICV V-333623	9	2474786.	1659355.	1117399.	2537704.				
ICB	ICB V-333619	10	2499574.	1680438.	1126341.	2518847.				
ICSA	ICSA V-333620	11	2552857.	1600754.	1151379.	2605439.				
SMP	RINSE	12	2618822.	1757792.	1186523.	2652760.				
LRS	LRS V-333621	13	2529534.	1591696.	1125531.	2534456.				
SMP	RINSE	14	2609914.	1749779.	1199885.	2624318.				
SMP	RINSE	15	2535257.	1706510.	1142474.	2572079.				
MB	MB 85229	16	9746179. *	6420330. *	4626141. *	9889499. *				
SMP	RINSE	17	2499616.	1694168.	1125429.	2570588.				
CCV	CCV V-333622	18	2556159.	1681160.	1144288.	2572052.				
CCB	CCB V-333619	19	2532326.	1717662.	1140614.	2582507.				
MB	MB 85229	20	2633869.	1774787.	1174603.	2685849.				
LCS	LCS 85229	21	2700747.	1760232.	1308244.	2743398.				
MR	LCS MR 85229	22	2694818.	1724196.	1286386.	2760022.				
SMP	AD18960-001	23	2795688.	1773070.	1801066. *	2823479.				
SMP	AD18960-003	24	2890444.	1816489.	1598954. *	2915884.				
SMP	AD18960-004	25	2963573.	1813355.	1914299. *	3008937.				
SMP	AD18960-007	26	2932927.	1794507.	1746971. *	2964847.				
SMP	AD18960-015	27	2885549.	1761094.	1853757. *	2894281.				
SMP	AD18960-017	28	2824985.	1750418.	1601712. *	2858962.				
SMP	RINSE	29	2654807.	1784527.	1176246.	2680990.				
CCV	CCV V-333622	30	2589130.	1740498.	1171260.	2655144.				
CCB	CCB V-333619	31	2619238.	1760432.	1175062.	2669691.				
SMP	AD18955-001	32	2755614.	1708454.	1539594. *	2763198.				
MR	AD18955-001	33	2709844.	1654454.	1495974. *	2746614.				
SD	AD18955-001	34	2709306.	1750796.	1275625.	2706324.				
MS	AD18955-002	35	2758555.	1684461.	1615822. *	2792488.				
MSD	AD18955-003	36	2782080.	1694054.	1550329. *	2807869.				
PS	AD18955-001	37	2750381.	1677087.	1485024. *	2763899.				
SMP	AD18951-001	38	2845717.	1813214.	1408979. *	2838183.				
SMP	AD18949-014	39	2788993.	1804800.	1336584.	2829529.				
SMP	AD18950-004	40	2943425.	1792377.	2073312. *	2993299.				
SMP	RINSE	41	2753310.	1847516.	1270044.	2784613.				
CCV	CCV V-333622	42	2644639.	1765504.	1166741.	2701413.				
CCB	CCB V-333619	43	2637426.	1766810.	1236038.	2689936.				
SMP	AD18934-001	44	2961084.	1758478.	2061390. *	3047336.				
SMP	AD18934-002	45	2873456.	1681683.	1700788. *	2917314.				
SMP	AD18934-003	46	2853556.	1698823.	1616382. *	2866372.				
SMP	AD18934-004	47	2845041.	1698173.	1604682. *	2891213.				
SMP	AD18934-005	48	2889570.	1723950.	1539444. *	2914350.				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 1

SMP	AD18955-004	49	2889436.		1722413.		1617750.	* 2907197.
SMP	AD18955-005	50	2949802.		1758854.		1627590.	* 2967685.
SMP	AD18932-002	51	2875572.		2194262.	*	1474911.	* 2867233.
SMP	RINSE	52	2641892.		1746167.		1078651.	2669929.
CCV	CCV V-333622	53	2685592.		1716633.		1090165.	2695300.
CCB	CCB V-333619	54	2653454.		1763376.		1113398.	2720132.

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

Batch/FileID: S083120AN Sample ID: CalBlk V-333612 Sample Date 08/31/20 Sample Time: 10:24

IS ID:	Area	Area Limit		
Ho-2	1044049.94	730834.958	-	1357264.922
In-2	324073.06	226851.142	-	421294.978
Sc-2	55969.15	39178.405	-	72759.895
Tb-2	1053941.83	737759.281	-	1370124.379

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area		Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-333612	2	1044049.	324073.0	55969.15		1053941.				
SMP	RINSE	1	1000720.	311137.1	54087.16		1007553.				
CAL	CalStd1 V-33361	3	1053537.	329223.3	56387.14		1059170.				
CAL	CalStd2 V-33361	4	1063563.	330598.8	57055.43		1074119.				
CAL	CalStd3 V-33361	5	1064727.	331159.6	57403.36		1082694.				
CAL	CalStd4 V-33361	6	1063429.	326138.6	56156.35		1072659.				
CAL	CalStd5 V-33361	7	1076387.	324578.7	56799.72		1078997.				
ICV	ICV V-333618	8	1089115.	330881.7	57798.24		1097626.				
LLICV	LLICV V-333623	9	1109289.	342727.3	59634.74		1109671.				
ICB	ICB V-333619	10	1107024.	342491.3	59897.78		1108711.				
ICSA	ICSA V-333620	11	1112366.	330667.3	61184.39		1114779.				
SMP	RINSE	12	1155700.	360639.6	62793.99		1161726.				
LRS	LRS V-333621	13	1114130.	334364.1	60395.97		1112089.				
SMP	RINSE	14	1144215.	360605.2	63015.53		1150984.				
SMP	RINSE	15	1111947.	350788.1	59915.80		1127776.				
MB	MB 85229	16	1107325.	348201.7	60458.46		1114041.				
SMP	RINSE	17	1121030.	349104.7	59636.98		1121833.				
CCV	CCV V-333622	18	1120903.	346703.8	60224.39		1133621.				
CCB	CCB V-333619	19	1129154.	352024.0	60843.01		1136007.				
MB	MB 85229	20	1128829.	345123.1	59482.06		1134233.				
LCS	LCS 85229	21	1136783.	333120.6	59921.25		1148799.				
MR	LCS MR 85229	22	1143234.	332454.6	60446.22		1153982.				
SMP	AD18960-001	23	1187255.	341172.3	85894.83	*	1190819.				
SMP	AD18960-003	24	1215988.	349462.0	76452.58	*	1227204.				
SMP	AD18960-004	25	1253991.	345330.4	92852.58	*	1252308.				
SMP	AD18960-007	26	1233744.	343528.2	84773.20	*	1247272.				
SMP	AD18960-015	27	1201445.	334406.8	88299.98	*	1207736.				
SMP	AD18960-017	28	1130344.	312048.8	71945.75		1133816.				
SMP	RINSE	29	1154287.	353321.6	59884.30		1157905.				
CCV	CCV V-333622	30	1132562.	347883.1	60105.34		1141525.				
CCB	CCB V-333619	31	1136204.	352376.7	60858.54		1134823.				
SMP	AD18955-001	32	1131469.	316303.6	71637.11		1136660.				
MR	AD18955-001	33	1105858.	306673.6	69657.80		1113384.				
SD	AD18955-001	34	1134200.	334137.0	60960.25		1135010.				
MS	AD18955-002	35	1145665.	314598.0	76335.38	*	1149550.				
MSD	AD18955-003	36	1133283.	318850.0	71307.06		1144125.				
PS	AD18955-001	37	1115770.	306588.6	68157.94		1116366.				
SMP	AD18951-001	38	1162978.	333104.1	63256.32		1152375.				
SMP	AD18949-014	39	1143528.	332625.3	61046.95		1150601.				
SMP	AD18950-004	40	1216912.	328094.8	99557.59	*	1216904.				
SMP	RINSE	41	1096467.	330454.9	55881.06		1075036.				
CCV	CCV V-333622	42	1133671.	342823.1	58943.95		1140727.				
CCB	CCB V-333619	43	1128188.	349413.2	59111.15		1136585.				
SMP	AD18934-001	44	1237701.	330152.8	98257.30	*	1243302.				
SMP	AD18934-002	45	1174321.	312235.4	80018.47	*	1180049.				
SMP	AD18934-003	46	1133461.	307144.0	73186.48	*	1138201.				
SMP	AD18934-004	47	1120138.	300158.1	72752.42		1129312.				
SMP	AD18934-005	48	1138538.	305172.2	69375.36		1145876.				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

SMP	AD18955-004	49	1144599.	300711.5	72559.54		1151433.
SMP	AD18955-005	50	1177119.	316146.7	73875.53	*	1177012.
SMP	AD18932-002	51	1162193.	415625.2	65444.70		1158096.
SMP	RINSE	52	1061048.	309644.4	51769.52		1065960.
CCV	CCV V-333622	53	1098234.	323989.8	53776.35		1099887.
CCB	CCB V-333619	54	1101726.	330731.0	55582.63		1105219.

* Indicates Internal Standard Area outside of limits

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333595

Prepared By: Silva, Amanda
Description: 1:1 HNO3 WARNING
Prep Date: 8/24/2020
Expiration Date: 2/24/2021
Department: Metals
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13421	nitric acid	500 ml	neat neat	

Veritech Lot Number: V-333662

Prepared By: Aliano, Carmela
Description: LRS
Prep Date: 8/24/2020
Expiration Date: 10/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	335 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12915	LINEAR RANGE 1B	50 ml	neat neat	
12917	linear range 1C	50 ml	neat neat	
13092	CERIUM	12.5 ml	CONC conc	
12976	BORON	2.5 ml	CONC conc	
12977	SILICON	12.5 ml	CONC conc	

Veritech Lot Number: V-333665

Prepared By: Aliano, Carmela
Description: ICS4 High std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: various mg/l
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	434.5 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	1
12977	SILICON	5 ml	CONC conc	10

Veritech Lot Number: V-333666

Prepared By: Aliano, Carmela
Description: ICS3 - Middle Std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	944.75 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	.5
12977	SILICON	5 ml	CONC conc	5
13092	CERIUM	5 ml	CONC conc	5

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333667

Prepared By: Aliano, Carmela
Description: ICB/CCB
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: 0 mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	

Veritech Lot Number: V-333668

Prepared By: Aliano, Carmela
Description: ICSA
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: MULTI mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13176	ICSA	50 ml	NEAT neat	

Veritech Lot Number: V-333671

Prepared By: Aliano, Carmela
Description: LLICV/LLCCV soil
Prep Date: 8/24/2020
Expiration Date: 12/31/2020
Department: WetChem
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
12982	LL-SOIL	10 ml		
12976	BORON	.2 ml	CONC conc	
12977	SILICON	.1 ml	CONC conc	
13092	CERIUM	.1 ml	CONC conc	

Veritech Lot Number: V-333673

Prepared By: Aliano, Carmela
Description: CCV
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13171	ICV 1	10 ml	NEAT neat	
13170	ICV 2	10 ml	CONC conc	
12981	BORON	.5 ml	CONC conc	
13091	CERIUM	5 ml	CONC conc	
12933	silicon	5 ml	CONC conc	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-329062

Prepared By: Cousineau, Paul
Description: Antimony Intermediate 1PPM
Prep Date: 6/5/2020
Expiration Date: 2/25/2021
Department: Metals
BatchNumber:
Concentration: 1000 ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13251	nitric acid	2.5 ml	neat neat	
13296	ANTIMONY 1000 PPM	.1 ml	1000 ug/ml	

Veritech Lot Number: V-333325

Prepared By: Cousineau, Paul
Description: 6020 CALIBRATION STOCK
Prep Date: 8/16/2020
Expiration Date: 11/15/2020
Department: Metals
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 100 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13331	Nitric acid	2 ml	neat neat	
13304	ALUMINUM 10000 PPM	.725 ml	10000 ug/ml	72.5
13305	CALCIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13308	IRON 10000 PPM	2.5 ml	10000 ug/ml	250
13306	MAGNESIUM 10000PPM	2.5 ml	10000 ug/ml	250
13309	POTASSIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13307	SODIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13297	SELENIUM 1000 PPM	1 ml	1000 ug/ml	10
13323	CAL STD	12.5 ml	20 ug/ml	2.5

Veritech Lot Number: V-333595

Prepared By: Silva, Amanda
Description: 1:1 HNO3 WARNING
Prep Date: 8/24/2020
Expiration Date: 2/24/2021
Department: Metals
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13421	nitric acid	500 ml	neat neat	

Veritech Lot Number: V-333612

Prepared By: Cousineau, Paul
Description: Cal Blk WARNING
Prep Date: 8/24/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29574
Concentration: 0 ppb
Final Volume: 100 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-333613

Prepared By: Cousineau, Paul
Description: Cal Std-1 WARNING
Prep Date: 8/24/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29574
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.02 ml	VARIOUS pp	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333614

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: Cal Std-2 WARNING | BatchNumber: B-29574 | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.2 ml	VARIOUS pp	

Veritech Lot Number: V-333615

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: Cal Std-3 WARNING | BatchNumber: B-29574 | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.4 ml	VARIOUS pp	

Veritech Lot Number: V-333616

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: Cal Std-4 WARNING | BatchNumber: B-29574 | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-333617

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: Cal Std-5 WARNING | BatchNumber: B-29574 | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	4 ml	VARIOUS pp	

Veritech Lot Number: V-333618

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: ICV WARNING | BatchNumber: B-29574 | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
13315	6020 ICV	.1 ml	MULTI ug/ml	
13314	6020 ICV (Ag only)	.1 ml	10 ug/ml	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333619

Prepared By: Cousineau, Paul
Description: ICB/CCB WARNING
Prep Date: 8/24/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29574
Concentration: 0 ppb
Final Volume: 100 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-333620

Prepared By: Cousineau, Paul
Description: ICSA WARNING
Prep Date: 8/24/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29574
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	
12856	Interferents A	2.5 ml	NEAT mg/l	

Veritech Lot Number: V-333621

Prepared By: Cousineau, Paul
Description: LRS WARNING
Prep Date: 8/24/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29574
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	2.5 %
V-333325	6020 CALIBRATION STOCK	10 ml	VARIOUS pp	

Veritech Lot Number: V-333622

Prepared By: Cousineau, Paul
Description: CCV WARNING
Prep Date: 8/24/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29574
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-333623

Prepared By: Cousineau, Paul
Description: LL-ICV/CCV SOIL WARNING
Prep Date: 8/24/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29574
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
12979	LLICV/CCV SOIL	1 ml	NEAT neat	
V-329062	Antimony Intermediate 1PPM	.3 ml	1000 ppb	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Control/Receipt Number: 13067

Description
hrydrogen peroxide`

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	H325-4	197718	02/19/20	01/31/25	Lopez, Jose	4	4L	neat	neat

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13422

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T. BAKER	9530-33	253057	07/28/20	01/21/25	Burwell, John	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12915

Description
LINEAR RANGE 1B

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-40-500	7/271ab	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12917

Description
linear range 1C

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
spex	XHCV-44-500	8-002AB	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12933

Description
silicon

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-145	S191206040	12/13/19	12/30/21	Aliano, Carmela	4	500m	CONC	CONC

Veritech Control/Receipt Number: 12976

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLB9-2X	24-110BX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12977

Description
SILICON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLSI9-2X	24-93SIX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12981

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-055	S190719015	01/06/20	07/30/21	Aliano, Carmela	3	500ml	CONC	CONC

Veritech Control/Receipt Number: 12982

Description
LL-SOIL

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-31-500	8/209AB	01/06/20	12/31/20	Aliano, Carmela	1	500m		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12983

Description
CALIBRATION 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	8/214AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 12984

Description
CALIBRATION 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	8/215AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13091

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-051-585	S190710006	03/04/20	07/30/21	Aliano, Carmela	2	500ml	CONC	CONC

Veritech Control/Receipt Number: 13092

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLCE2-2X	24-15CEX	03/04/20	02/28/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13168

Description
nitric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	245675	04/07/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13169

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	04/07/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13170

Description
ICV 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S200306032	04/07/20	03/31/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13171

Description
ICV 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S200306031	04/07/20	03/31/21	Aliano, Carmela	2	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13176

Description
ICSA

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-30	9-265AB	04/07/20	03/31/21	Aliano, Carmela	4	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12856

Description
Interferents A

ApprovedBy: carmela
ApproveDate: 12/09/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-A1	CL51-020CRY	10/31/19	10/30/20	Cousineau, Paul	1		NEAT	mg/l

Veritech Control/Receipt Number: 12979

Description
LLICV/CCV SOIL

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	ZHCV-13-100	53-093CR	01/06/20	12/30/20	Aliano, Carmela	1	125ml	NEAT	NEAT

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13251

Description
nitric acid

ApprovedBy: jean
ApproveDate: 05/27/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	245675	05/19/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13296

Description
ANTIMONY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSB7-2Y	24-153SBY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13297

Description
SELENIUM 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSE2-2Y	25-14SEY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13304

Description
ALUMINUM 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLAL2-3X	AP18-72ALX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13305

Description
CALCIUM 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLCA2-3X	AZ18-49CAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13306

Description
MAGNESIUM 10000PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLMG2-3X	AP18-57MGX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13307

Description
SODIUM 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLNA2-3X	AT18-84NAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13308

Description
IRON 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLFE2-3X	AR18-89FEX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13309

Description
POTASSIUM 10000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLK2-3X	AX18-77KX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13314

Description
6020 ICV (Ag only)

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-113	S200519030	06/04/20	05/31/21	Cousineau, Paul	1	125 M	10	UG/ML

Veritech Control/Receipt Number: 13315

Description
6020 ICV

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-112	S200519029	06/04/20	05/31/21	Cousineau, Paul	1	125 M	MULTI	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13323

Description
CAL STD

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-CAL-1	CL51-013CRY	06/15/20	06/30/21	Cousineau, Paul	1	125M	20	UG/ML

Veritech Control/Receipt Number: 13331

Description
Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13391

Description
nitric acid

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	07/14/20	02/03/25	Lopez, Jose	4	2.5	neat	neat

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Control/Receipt Number: 13067

Description
hrydrogen peroxide`

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	H325-4	197718	02/19/20	01/31/25	Lopez, Jose	4	4L	neat	neat

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Method: PE3 7300DV SOIL AX Page 1 Date: 8/31/2020 4:58:41 PM

S26168A3 26168/26170

SOIL 9/1/20

Analysis Begun

Start Time: 8/31/2020 4:54:52 PM Plasma On Time: 8/31/2020 4:30:25 PM
Logged In Analyst: usermet Technique: ICP Continuous
Spectrometer Model: Optima 7300 DV, S/N No Serial #Autosampler Model: S10

Sample Information File: C:\pe\Administrator\Sample Information\08.31.20.sif
Batch ID:
Results Data Set: S26168A3
Results Library: C:\pe\Administrator\Results\Results.mdb

9/3/20

Method Loaded
Method Name: PE3 7300DV SOIL AX Method Last Saved: 8/24/2020 1:40:56 PM
IEC File: IECax071519A3.iec MSF File:
Method Description: 6010D (SOIL)

Sequence No.: 1 Autosampler Location: 1
Sample ID: CALBLK V-333667 Date Collected: 8/31/2020 4:56:11 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CALBLK V-333667

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	410872.8	4677.55	1.14%	100	%
Y 371.029	182512.8	1838.24	1.01%	100	%
Ag 328.068†	-242.4	57.58	23.76%	[0.00]	mg/L
Al 308.215†	3327.9	14.27	0.43%	[0.00]	mg/L
As 188.979†	11.5	2.88	25.14%	[0.00]	mg/L
Ba 233.527†	-19.8	13.64	68.83%	[0.00]	mg/L
Be 313.107†	-1314.1	91.44	6.96%	[0.00]	mg/L
Ca 317.933†	2714.1	86.08	3.17%	[0.00]	mg/L
Cd 228.802†	161.3	9.16	5.68%	[0.00]	mg/L
Co 228.616†	-46.0	10.08	21.88%	[0.00]	mg/L
Cr 267.716†	39.7	34.32	86.52%	[0.00]	mg/L
Cu 327.393†	-456.0	59.40	13.02%	[0.00]	mg/L
Fe 273.955†	-1263.4	10.92	0.86%	[0.00]	mg/L
K 404.721†	77186.3	851.43	1.10%	[0.00]	mg/L
Mg 279.077†	-905.8	38.99	4.30%	[0.00]	mg/L
Mn 257.610†	375.9	10.22	2.72%	[0.00]	mg/L
Mo 202.031†	228.3	4.48	1.96%	[0.00]	mg/L
Na 330.237†	576.9	33.57	5.82%	[0.00]	mg/L
Ni 231.604†	12.5	2.28	18.30%	[0.00]	mg/L
Pb 220.353†	74.0	11.24	15.20%	[0.00]	mg/L
Sb 206.836†	62.7	6.13	9.78%	[0.00]	mg/L
Se 196.026†	50.8	7.30	14.39%	[0.00]	mg/L
Sn 189.927†	2.3	2.69	117.24%	[0.00]	mg/L
Ti 334.940†	216.7	37.77	17.43%	[0.00]	mg/L
Tl 190.801†	-62.2	7.07	11.37%	[0.00]	mg/L
V 290.880†	1853.5	32.86	1.77%	[0.00]	mg/L
Zn 206.200†	-113.3	13.88	12.25%	[0.00]	mg/L
B 249.772	299.9	17.46	5.82%	[0.00]	mg/L
Si 251.611	258.2	19.27	7.46%	[0.00]	mg/L

26170/80228

All reported
Na, K NOT reported

18932-002
Ba, Zn, Pb
NOT Reported

Sequence No.: 2
Sample ID: CALST2 V-333671
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 8/31/2020 4:59:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST2 V-333671

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	398229.1	5210.68	1.31%	96.9	%
Y 371.029	176104.9	2316.27	1.32%	96.5	%
Ag 328.068†	1439.2	92.32	6.41%	[0.015]	mg/L
Al 308.215†	18042.0	51.70	0.29%	[2]	mg/L
As 188.979†	90.6	1.89	2.09%	[0.04]	mg/L
Ba 233.527†	9478.7	145.76	1.54%	[0.1]	mg/L
Be 313.107†	15421.7	66.29	0.43%	[0.012]	mg/L
Ca 317.933†	986154.3	2526.80	0.26%	[10]	mg/L
Cd 228.802†	414.3	3.47	0.84%	[0.012]	mg/L
Co 228.616†	727.1	5.81	0.80%	[0.025]	mg/L
Cr 267.716†	3650.5	60.54	1.66%	[0.05]	mg/L
Cu 327.393†	3497.6	46.15	1.32%	[0.05]	mg/L
Fe 273.955†	18783.5	120.13	0.64%	[2]	mg/L
K 404.721†	2799.7	1104.65	39.46%	[5]	mg/L
Mg 279.077†	59732.1	285.51	0.48%	[5]	mg/L
Mn 257.610†	28951.8	34.32	0.12%	[0.1]	mg/L
Mo 202.031†	295.8	12.67	4.28%	[0.025]	mg/L
Na 330.237†	902.7	23.07	2.56%	[2.5]	mg/L
Ni 231.604†	1564.8	34.31	2.19%	[0.05]	mg/L
Pb 220.353†	363.2	27.26	7.51%	[0.05]	mg/L
Sb 206.836†	94.7	3.81	4.03%	[0.04]	mg/L
Se 196.026†	113.8	1.94	1.70%	[0.05]	mg/L
Sn 189.927†	1353.1	24.77	1.83%	[0.2]	mg/L
Ti 334.940†	27132.0	47.82	0.18%	[0.1]	mg/L
Tl 190.801†	121.6	6.35	5.22%	[0.05]	mg/L
V 290.880†	4885.4	47.58	0.97%	[0.1]	mg/L
Zn 206.200†	5703.1	96.16	1.69%	[0.1]	mg/L
B 249.772	13903.4	140.38	1.01%	[0.2]	mg/L
Si 251.611	3555.5	46.39	1.30%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-333666
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 8/31/2020 5:03:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST3 V-333666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	396359.9	3423.11	0.86%	96.5	%
Y 371.029	148016.5	1449.74	0.98%	81.1	%
Ag 328.068†	10631.1	83.92	0.79%	[0.1]	mg/L
Al 308.215†	44732.5	102.70	0.23%	[5]	mg/L
As 188.979†	1126.4	11.82	1.05%	[0.5]	mg/L
Ba 233.527†	44902.6	93.96	0.21%	[0.5]	mg/L
Be 313.107†	660878.4	5962.46	0.90%	[0.5]	mg/L
Ca 317.933†	4736712.1	40690.52	0.86%	[50]	mg/L
Cd 228.802†	16518.5	229.61	1.39%	[0.5]	mg/L
Co 228.616†	14720.1	194.00	1.32%	[0.5]	mg/L
Cr 267.716†	35818.5	498.03	1.39%	[0.5]	mg/L
Cu 327.393†	34736.4	127.62	0.37%	[0.5]	mg/L
Fe 273.955†	46803.3	192.95	0.41%	[5]	mg/L
K 404.721†	4655.0	913.11	19.62%	[50]	mg/L
Mg 279.077†	583482.7	2692.52	0.46%	[50]	mg/L
Mn 257.610†	146963.7	294.21	0.20%	[0.5]	mg/L
Mo 202.031†	5762.7	76.18	1.32%	[0.5]	mg/L
Na 330.237†	19885.4	46.96	0.24%	[50]	mg/L
Ni 231.604†	15416.2	189.73	1.23%	[0.5]	mg/L
Pb 220.353†	3590.9	57.32	1.60%	[0.5]	mg/L
Sb 206.836†	1127.8	19.67	1.74%	[0.5]	mg/L
Se 196.026†	1118.9	22.72	2.03%	[0.5]	mg/L
Sn 189.927†	3369.5	53.88	1.60%	[0.5]	mg/L
Ti 334.940†	137182.1	352.42	0.26%	[0.5]	mg/L
Tl 190.801†	1136.3	22.83	2.01%	[0.5]	mg/L
V 290.880†	24206.8	156.18	0.65%	[0.5]	mg/L
Zn 206.200†	28859.5	351.55	1.22%	[0.5]	mg/L
B 249.772	36409.0	565.89	1.55%	[0.5]	mg/L
Si 251.611	117126.2	1238.57	1.06%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-333665
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 8/31/2020 5:07:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST4 V-333665

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	387108.8	2621.99	0.68%	94.2	%
Y 371.029	118872.0	972.03	0.82%	65.1	%
Ag 328.068†	17425.6	29.01	0.17%	[0.2]	mg/L
Al 308.215†	89941.9	58.24	0.06%	[10]	mg/L
As 188.979†	2273.1	22.59	0.99%	[1]	mg/L
Ba 233.527†	90195.4	83.39	0.09%	[1]	mg/L
Be 313.107†	1340682.9	1915.03	0.14%	[1]	mg/L
Ca 317.933†	9417077.5	105445.75	1.12%	[100]	mg/L
Cd 228.802†	32230.5	72.34	0.22%	[1]	mg/L
Co 228.616†	29831.9	349.32	1.17%	[1]	mg/L
Cr 267.716†	67803.9	58.15	0.09%	[1]	mg/L
Cu 327.393†	70012.1	66.03	0.09%	[1]	mg/L
Fe 273.955†	93532.4	89.25	0.10%	[10]	mg/L
K 404.721†	8043.7	619.67	7.70%	[100]	mg/L
Mg 279.077†	1148648.7	1686.18	0.15%	[100]	mg/L
Mn 257.610†	294200.0	330.01	0.11%	[1]	mg/L
Mo 202.031†	11694.8	104.86	0.90%	[1]	mg/L
Na 330.237†	42158.3	106.24	0.25%	[100]	mg/L
Ni 231.604†	31114.3	323.84	1.04%	[1]	mg/L
Pb 220.353†	7153.3	49.95	0.70%	[1]	mg/L
Sb 206.836†	2272.4	20.82	0.92%	[1]	mg/L
Se 196.026†	2249.9	17.47	0.78%	[1]	mg/L
Sn 189.927†	6803.3	81.36	1.20%	[1]	mg/L
Ti 334.940†	274598.2	107.17	0.04%	[1]	mg/L
Tl 190.801†	2248.2	32.00	1.42%	[1]	mg/L
V 290.880†	50042.6	238.94	0.48%	[1]	mg/L
Zn 206.200†	55175.8	165.58	0.30%	[1]	mg/L
B 249.772	71891.6	302.31	0.42%	[1]	mg/L
Si 251.611	231870.6	1510.26	0.65%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	412.5	88400	0.00000	0.993507	
Al 308.215	3	Lin, Calc Int	-23.8	8989	0.00000	0.999995	
As 188.979	3	Lin, Calc Int	-2.0	2271	0.00000	0.999989	
Ba 233.527	3	Lin, Calc Int	167.4	89940	0.00000	0.999981	
Be 313.107	3	Lin, Calc Int	-2025.2	1339000	0.00000	0.999974	
Ca 317.933	3	Lin, Calc Int	24939.9	94000	0.00000	0.999988	
Cd 228.802	3	Lin, Calc Int	85.9	32290	0.00000	0.999919	
Co 228.616	3	Lin, Calc Int	-44.2	29810	0.00000	0.999977	
Cr 267.716	3	Lin, Calc Int	468.3	68000	0.00000	0.999580	
Cu 327.393	3	Lin, Calc Int	-50.7	69970	0.00000	0.999992	
Fe 273.955	3	Lin, Calc Int	39.4	9351	0.00000	1.000000	
K 404.721	3	Lin, Calc Int	1196.3	69.12	0.00000	0.954810	
Mg 279.077	3	Lin, Calc Int	2713.4	11490	0.00000	0.999967	
Mn 257.610	3	Lin, Calc Int	-233.0	294400	0.00000	0.999999	
Mo 202.031	3	Lin, Calc Int	-13.9	11680	0.00000	0.999971	
Na 330.237	3	Lin, Calc Int	-286.2	420.3	0.00000	0.999584	
Ni 231.604	3	Lin, Calc Int	-21.7	31090	0.00000	0.999988	
Pb 220.353	3	Lin, Calc Int	5.1	7153	0.00000	0.999998	
Sb 206.836	3	Lin, Calc Int	0.2	2269	0.00000	0.999989	
Se 196.026	3	Lin, Calc Int	-0.5	2248	0.00000	0.999995	
Sn 189.927	3	Lin, Calc Int	-9.4	6802	0.00000	0.999987	
Ti 334.940	3	Lin, Calc Int	-167.1	274700	0.00000	0.999999	
Tl 190.801	3	Lin, Calc Int	6.4	2246	0.00000	0.999983	
V 290.880	3	Lin, Calc Int	-203.8	49970	0.00000	0.999853	
Zn 206.200	3	Lin, Calc Int	318.2	55290	0.00000	0.999707	
B 249.772	3	Lin, Calc Int	-109.0	72140	0.00000	0.999931	
Si 251.611	3	Lin, Calc Int	778.2	23140	0.00000	0.999982	

Sequence No.: 5
Sample ID: ICV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 8/31/2020 5:12:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	399552.5	97.2	%	0.33				0.34%
Y 371.029	148843.8	81.6	%	0.27				0.33%
Ag 328.068†	6753.3	0.0717286	mg/L	0.00115703	0.0717286	mg/L	0.00115703	1.61%
QC value less than the lower limit for Ag 328.068 Recovery = 71.73%								
Al 308.215†	44270.2	4.91617	mg/L	0.006168	4.91617	mg/L	0.006168	0.13%
QC value within limits for Al 308.215 Recovery = 98.32%								
As 188.979†	1123.7	0.493589	mg/L	0.0045632	0.493589	mg/L	0.0045632	0.92%
QC value within limits for As 188.979 Recovery = 98.72%								
Ba 233.527†	44288.9	0.490555	mg/L	0.0012833	0.490555	mg/L	0.0012833	0.26%
QC value within limits for Ba 233.527 Recovery = 98.11%								
Be 313.107†	644805.5	0.482947	mg/L	0.0052909	0.482947	mg/L	0.0052909	1.10%
QC value within limits for Be 313.107 Recovery = 96.59%								
Ca 317.933†	4836711.0	51.1884	mg/L	0.51571	51.1884	mg/L	0.51571	1.01%
QC value within limits for Ca 317.933 Recovery = 102.38%								
Cd 228.802†	16453.1	0.506909	mg/L	0.0039986	0.506909	mg/L	0.0039986	0.79%
QC value within limits for Cd 228.802 Recovery = 101.38%								
Co 228.616†	14611.5	0.491683	mg/L	0.0040680	0.491683	mg/L	0.0040680	0.83%
QC value within limits for Co 228.616 Recovery = 98.34%								
Cr 267.716†	35887.9	0.520879	mg/L	0.0043352	0.520879	mg/L	0.0043352	0.83%
QC value within limits for Cr 267.716 Recovery = 104.18%								
Cu 327.393†	34512.3	0.493990	mg/L	0.0010606	0.493990	mg/L	0.0010606	0.21%
QC value within limits for Cu 327.393 Recovery = 98.80%								
Fe 273.955†	46361.8	4.95391	mg/L	0.003754	4.95391	mg/L	0.003754	0.08%
QC value within limits for Fe 273.955 Recovery = 99.08%								
K 404.721†	4761.0	30.7302	mg/L	7.16890	30.7302	mg/L	7.16890	23.33%
QC value less than the lower limit for K 404.721 Recovery = 61.46%								
Mg 279.077†	592456.7	51.3249	mg/L	0.12273	51.3249	mg/L	0.12273	0.24%
QC value within limits for Mg 279.077 Recovery = 102.65%								
Mn 257.610†	145185.8	0.493942	mg/L	0.0003747	0.493942	mg/L	0.0003747	0.08%
QC value within limits for Mn 257.610 Recovery = 98.79%								
Mo 202.031†	5686.2	0.488103	mg/L	0.0038493	0.488103	mg/L	0.0038493	0.79%
QC value within limits for Mo 202.031 Recovery = 97.62%								
Na 330.237†	20475.0	49.3997	mg/L	0.15270	49.3997	mg/L	0.15270	0.31%
QC value within limits for Na 330.237 Recovery = 98.80%								
Ni 231.604†	15339.4	0.494161	mg/L	0.0043816	0.494161	mg/L	0.0043816	0.89%
QC value within limits for Ni 231.604 Recovery = 98.83%								
Pb 220.353†	3561.5	0.497647	mg/L	0.0027161	0.497647	mg/L	0.0027161	0.55%
QC value within limits for Pb 220.353 Recovery = 99.53%								
Sb 206.836†	1060.1	0.473450	mg/L	0.0283557	0.473450	mg/L	0.0283557	5.99%
QC value within limits for Sb 206.836 Recovery = 94.69%								
Se 196.026†	1096.3	0.487539	mg/L	0.0068373	0.487539	mg/L	0.0068373	1.40%
QC value within limits for Se 196.026 Recovery = 97.51%								
Sn 189.927†	3364.6	0.493205	mg/L	0.0051846	0.493205	mg/L	0.0051846	1.05%
QC value within limits for Sn 189.927 Recovery = 98.64%								
Ti 334.940†	136513.9	0.497496	mg/L	0.0011557	0.497496	mg/L	0.0011557	0.23%
QC value within limits for Ti 334.940 Recovery = 99.50%								
Tl 190.801†	1082.2	0.489934	mg/L	0.0025580	0.489934	mg/L	0.0025580	0.52%
QC value within limits for Tl 190.801 Recovery = 97.99%								
V 290.880†	24143.6	0.493319	mg/L	0.0002921	0.493319	mg/L	0.0002921	0.06%
QC value within limits for V 290.880 Recovery = 98.66%								
Zn 206.200†	29121.9	0.520947	mg/L	0.0047830	0.520947	mg/L	0.0047830	0.92%
QC value within limits for Zn 206.200 Recovery = 104.19%								
B 249.772	37719.5	0.504930	mg/L	0.0011441	0.504930	mg/L	0.0011441	0.23%
QC value within limits for B 249.772 Recovery = 100.99%								
Si 251.611	123516.5	5.33144	mg/L	0.022882	5.33144	mg/L	0.022882	0.43%
QC value within limits for Si 251.611 Recovery = 106.63%								

QC Failed. Continue with analysis.

Sequence No.: 6
Sample ID: ICB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 8/31/2020 5:16:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	408721.3	99.5	%	0.24				0.24%
Y 371.029	181200.6	99.3	%	0.22				0.22%
Ag 328.068†	-73.1	-0.0054935	mg/L	0.00017731	-0.0054935	mg/L	0.00017731	3.23%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	80.0	0.0114800	mg/L	0.00435060	0.0114800	mg/L	0.00435060	37.90%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.6	0.0011232	mg/L	0.00369699	0.0011232	mg/L	0.00369699	329.14%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-9.5	-0.0019678	mg/L	0.00006345	-0.0019678	mg/L	0.00006345	3.22%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	3.3	0.0015145	mg/L	0.00003763	0.0015145	mg/L	0.00003763	2.48%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	62.6	-0.264649	mg/L	0.0011278	-0.264649	mg/L	0.0011278	0.43%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	-3.0	-0.0027535	mg/L	0.00031650	-0.0027535	mg/L	0.00031650	11.49%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-3.1	0.0013775	mg/L	0.00019787	0.0013775	mg/L	0.00019787	14.36%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	3.9	-0.0068290	mg/L	0.00042176	-0.0068290	mg/L	0.00042176	6.18%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	33.4	0.0012018	mg/L	0.00021415	0.0012018	mg/L	0.00021415	17.82%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-5.9	-0.0048468	mg/L	0.00126928	-0.0048468	mg/L	0.00126928	26.19%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	1254.9	0.867135	mg/L	0.5266950	0.867135	mg/L	0.5266950	60.74%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	-10.7	-0.237080	mg/L	0.0005955	-0.237080	mg/L	0.0005955	0.25%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	19.5	0.0008576	mg/L	0.00002118	0.0008576	mg/L	0.00002118	2.47%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	19.2	0.0028374	mg/L	0.00046375	0.0028374	mg/L	0.00046375	16.34%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-20.7	0.631693	mg/L	0.0768543	0.631693	mg/L	0.0768543	12.17%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	12.7	0.0011088	mg/L	0.00028599	0.0011088	mg/L	0.00028599	25.79%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.7	-0.0009584	mg/L	0.00168321	-0.0009584	mg/L	0.00168321	175.62%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	8.5	0.0037201	mg/L	0.00069945	0.0037201	mg/L	0.00069945	18.80%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	11.5	0.0053520	mg/L	0.00488436	0.0053520	mg/L	0.00488436	91.26%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	11.2	0.0030195	mg/L	0.00041385	0.0030195	mg/L	0.00041385	13.71%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	78.8	0.0008952	mg/L	0.00022544	0.0008952	mg/L	0.00022544	25.18%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.2	-0.0033101	mg/L	0.00225592	-0.0033101	mg/L	0.00225592	68.15%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	2.1	0.0041587	mg/L	0.00056037	0.0041587	mg/L	0.00056037	13.47%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-0.4	-0.0057618	mg/L	0.00012006	-0.0057618	mg/L	0.00012006	2.08%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	302.6	0.0057315	mg/L	0.00066983	0.0057315	mg/L	0.00066983	11.69%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	16.4	-0.0329249	mg/L	0.00179694	-0.0329249	mg/L	0.00179694	5.46%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: LRS V-333662
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 8/31/2020 5:19:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LRS V-333662

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	354056.6	86.2	%	0.49				0.57%
Y 371.029	153995.5	84.4	%	0.59				0.70%
Ag 328.068†	105536.9	1.18919	mg/L	0.001343	1.18919	mg/L	0.001343	0.11%
QC value greater than the upper limit for Ag 328.068 Recovery = 118.92%								
Al 308.215†	4421477.1	491.657	mg/L	0.3402	491.657	mg/L	0.3402	0.07%
QC value within limits for Al 308.215 Recovery = 98.33%								
As 188.979†	23071.4	10.1496	mg/L	0.13798	10.1496	mg/L	0.13798	1.36%
QC value within limits for As 188.979 Recovery = 101.50%								
Ba 233.527†	900330.7	10.0083	mg/L	0.00925	10.0083	mg/L	0.00925	0.09%
QC value within limits for Ba 233.527 Recovery = 100.08%								
Be 313.107†	6583044.0	4.91665	mg/L	0.004672	4.91665	mg/L	0.004672	0.10%
QC value within limits for Be 313.107 Recovery = 98.33%								
Ca 317.933†	43478481.6	462.266	mg/L	0.7500	462.266	mg/L	0.7500	0.16%
QC value within limits for Ca 317.933 Recovery = 92.45%								
Cd 228.802†	168997.3	5.23137	mg/L	0.005790	5.23137	mg/L	0.005790	0.11%
QC value within limits for Cd 228.802 Recovery = 104.63%								
Co 228.616†	137549.1	4.61612	mg/L	0.004011	4.61612	mg/L	0.004011	0.09%
QC value within limits for Co 228.616 Recovery = 92.32%								
Cr 267.716†	669788.0	9.84296	mg/L	0.009405	9.84296	mg/L	0.009405	0.10%
QC value within limits for Cr 267.716 Recovery = 98.43%								
Cu 327.393†	722067.5	10.3208	mg/L	0.00355	10.3208	mg/L	0.00355	0.03%
QC value within limits for Cu 327.393 Recovery = 103.21%								
Fe 273.955†	3451664.3	369.131	mg/L	1.0110	369.131	mg/L	1.0110	0.27%
QC value within limits for Fe 273.955 Recovery = 92.28%								
K 404.721†	71327.3	-538.537	mg/L	28.6462	-538.537	mg/L	28.6462	5.32%
QC value less than the lower limit for K 404.721 Recovery = -269.27%								
Mg 279.077†	5444460.5	473.591	mg/L	0.9800	473.591	mg/L	0.9800	0.21%
QC value within limits for Mg 279.077 Recovery = 94.72%								
Mn 257.610†	2915195.8	9.90280	mg/L	0.014887	9.90280	mg/L	0.014887	0.15%
QC value within limits for Mn 257.610 Recovery = 99.03%								
Mo 202.031†	112620.8	9.64505	mg/L	0.010782	9.64505	mg/L	0.010782	0.11%
QC value within limits for Mo 202.031 Recovery = 96.45%								
Na 330.237†	486611.0	1158.54	mg/L	1.719	1158.54	mg/L	1.719	0.15%
QC value greater than the upper limit for Na 330.237 Recovery = 115.85%								
Ni 231.604†	283715.2	9.12771	mg/L	0.007251	9.12771	mg/L	0.007251	0.08%
QC value within limits for Ni 231.604 Recovery = 91.28%								
Pb 220.353†	68314.7	9.59483	mg/L	0.096851	9.59483	mg/L	0.096851	1.01%
QC value within limits for Pb 220.353 Recovery = 95.95%								
Sb 206.836†	11840.5	5.34295	mg/L	0.082073	5.34295	mg/L	0.082073	1.54%
QC value within limits for Sb 206.836 Recovery = 106.86%								
Se 196.026†	10799.7	4.96152	mg/L	0.076503	4.96152	mg/L	0.076503	1.54%
QC value within limits for Se 196.026 Recovery = 99.23%								
Sn 189.927†	66390.2	9.70371	mg/L	0.107637	9.70371	mg/L	0.107637	1.11%
QC value within limits for Sn 189.927 Recovery = 97.04%								
Ti 334.940†	2808621.0	10.2235	mg/L	0.00585	10.2235	mg/L	0.00585	0.06%
QC value within limits for Ti 334.940 Recovery = 102.24%								
Tl 190.801†	11219.0	5.22158	mg/L	0.055634	5.22158	mg/L	0.055634	1.07%
QC value within limits for Tl 190.801 Recovery = 104.43%								
V 290.880†	517347.7	10.4588	mg/L	0.00501	10.4588	mg/L	0.00501	0.05%
QC value within limits for V 290.880 Recovery = 104.59%								
Zn 206.200†	519944.3	9.39800	mg/L	0.016341	9.39800	mg/L	0.016341	0.17%
QC value within limits for Zn 206.200 Recovery = 93.98%								
B 249.772	112264.5	0.0468477	mg/L	0.01486321	0.0468477	mg/L	0.01486321	31.73%
QC value less than the lower limit for B 249.772 Recovery = 0.94%								
Si 251.611	6793.8	0.751578	mg/L	0.0054425	0.751578	mg/L	0.0054425	0.72%
QC value less than the lower limit for Si 251.611 Recovery = 3.01%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-333666
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 8/31/2020 5:24:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	399582.4	97.3	%	0.79				0.81%
Y 371.029	149289.6	81.8	%	0.66				0.81%
Ag 328.068†	10512.7	0.114256	mg/L	0.0008757	0.114256	mg/L	0.0008757	0.77%
QC value greater than the upper limit for Ag 328.068 Recovery = 114.26%								
Al 308.215†	44487.9	4.94034	mg/L	0.007539	4.94034	mg/L	0.007539	0.15%
QC value within limits for Al 308.215 Recovery = 98.81%								
As 188.979†	1109.2	0.487178	mg/L	0.0060829	0.487178	mg/L	0.0060829	1.25%
QC value within limits for As 188.979 Recovery = 97.44%								
Ba 233.527†	44739.4	0.495564	mg/L	0.0011318	0.495564	mg/L	0.0011318	0.23%
QC value within limits for Ba 233.527 Recovery = 99.11%								
Be 313.107†	649064.8	0.486127	mg/L	0.0031569	0.486127	mg/L	0.0031569	0.65%
QC value within limits for Be 313.107 Recovery = 97.23%								
Ca 317.933†	4668091.6	49.3946	mg/L	0.33854	49.3946	mg/L	0.33854	0.69%
QC value within limits for Ca 317.933 Recovery = 98.79%								
Cd 228.802†	16304.1	0.502295	mg/L	0.0046798	0.502295	mg/L	0.0046798	0.93%
QC value within limits for Cd 228.802 Recovery = 100.46%								
Co 228.616†	14527.8	0.488875	mg/L	0.0047131	0.488875	mg/L	0.0047131	0.96%
QC value within limits for Co 228.616 Recovery = 97.78%								
Cr 267.716†	35457.6	0.514551	mg/L	0.0050297	0.514551	mg/L	0.0050297	0.98%
QC value within limits for Cr 267.716 Recovery = 102.91%								
Cu 327.393†	34683.0	0.496429	mg/L	0.0008251	0.496429	mg/L	0.0008251	0.17%
QC value within limits for Cu 327.393 Recovery = 99.29%								
Fe 273.955†	46437.5	4.96200	mg/L	0.013396	4.96200	mg/L	0.013396	0.27%
QC value within limits for Fe 273.955 Recovery = 99.24%								
K 404.721†	3732.9	15.8204	mg/L	11.01785	15.8204	mg/L	11.01785	69.64%
QC value less than the lower limit for K 404.721 Recovery = 31.64%								
Mg 279.077†	578231.1	50.0869	mg/L	0.15130	50.0869	mg/L	0.15130	0.30%
QC value within limits for Mg 279.077 Recovery = 100.17%								
Mn 257.610†	146151.9	0.497223	mg/L	0.0001509	0.497223	mg/L	0.0001509	0.03%
QC value within limits for Mn 257.610 Recovery = 99.44%								
Mo 202.031†	5717.4	0.490777	mg/L	0.0053159	0.490777	mg/L	0.0053159	1.08%
QC value within limits for Mo 202.031 Recovery = 98.16%								
Na 330.237†	19614.3	47.3518	mg/L	0.13869	47.3518	mg/L	0.13869	0.29%
QC value within limits for Na 330.237 Recovery = 94.70%								
Ni 231.604†	15238.7	0.490923	mg/L	0.0048761	0.490923	mg/L	0.0048761	0.99%
QC value within limits for Ni 231.604 Recovery = 98.18%								
Pb 220.353†	3547.1	0.495632	mg/L	0.0034654	0.495632	mg/L	0.0034654	0.70%
QC value within limits for Pb 220.353 Recovery = 99.13%								
Sb 206.836†	1121.2	0.500397	mg/L	0.0036661	0.500397	mg/L	0.0036661	0.73%
QC value within limits for Sb 206.836 Recovery = 100.08%								
Se 196.026†	1110.4	0.493900	mg/L	0.0078022	0.493900	mg/L	0.0078022	1.58%
QC value within limits for Se 196.026 Recovery = 98.78%								
Sn 189.927†	3340.3	0.489630	mg/L	0.0045865	0.489630	mg/L	0.0045865	0.94%
QC value within limits for Sn 189.927 Recovery = 97.93%								
Ti 334.940†	136629.1	0.497915	mg/L	0.0003153	0.497915	mg/L	0.0003153	0.06%
QC value within limits for Ti 334.940 Recovery = 99.58%								
Tl 190.801†	1118.0	0.505875	mg/L	0.0048275	0.505875	mg/L	0.0048275	0.95%
QC value within limits for Tl 190.801 Recovery = 101.17%								
V 290.880†	24103.0	0.492540	mg/L	0.0007765	0.492540	mg/L	0.0007765	0.16%
QC value within limits for V 290.880 Recovery = 98.51%								
Zn 206.200†	28471.1	0.509176	mg/L	0.0058153	0.509176	mg/L	0.0058153	1.14%
QC value within limits for Zn 206.200 Recovery = 101.84%								
B 249.772	36246.7	0.484486	mg/L	0.0053071	0.484486	mg/L	0.0053071	1.10%
QC value within limits for B 249.772 Recovery = 96.90%								
Si 251.611	117460.5	5.06928	mg/L	0.042544	5.06928	mg/L	0.042544	0.84%
QC value within limits for Si 251.611 Recovery = 101.39%								

QC Failed. Continue with analysis.

Sequence No.: 9 **Autosampler Location: 14**
Sample ID: RINSE **Date Collected: 8/31/2020 5:28:26 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	904068.3	220	%	7.2				3.27%
Y 371.029	410152.1	225	%	7.1				3.18%
Ag 328.068†	-99.7	-0.0057937	mg/L	0.00030386	-0.0057937	mg/L	0.00030386	5.24%
Al 308.215†	-2263.8	-0.248922	mg/L	0.0015248	-0.248922	mg/L	0.0015248	0.61%
As 188.979†	-8.3	-0.0026850	mg/L	0.00181990	-0.0026850	mg/L	0.00181990	67.78%
Ba 233.527†	13.6	-0.0017110	mg/L	0.00002781	-0.0017110	mg/L	0.00002781	1.63%
Be 313.107†	963.0	0.0022311	mg/L	0.00002277	0.0022311	mg/L	0.00002277	1.02%
Ca 317.933†	-863.5	-0.274501	mg/L	0.0000763	-0.274501	mg/L	0.0000763	0.03%
Cd 228.802†	-55.9	-0.0043905	mg/L	0.00011922	-0.0043905	mg/L	0.00011922	2.72%
Co 228.616†	20.1	0.0021551	mg/L	0.00019861	0.0021551	mg/L	0.00019861	9.22%
Cr 267.716†	-28.1	-0.0072997	mg/L	0.00017001	-0.0072997	mg/L	0.00017001	2.33%
Cu 327.393†	316.6	0.0052493	mg/L	0.00085511	0.0052493	mg/L	0.00085511	16.29%
Fe 273.955†	795.7	0.0808762	mg/L	0.00104595	0.0808762	mg/L	0.00104595	1.29%
K 404.721†	-45529.3	-676.378	mg/L	9.5944	-676.378	mg/L	9.5944	1.42%
Mg 279.077†	586.4	-0.185108	mg/L	0.0009993	-0.185108	mg/L	0.0009993	0.54%
Mn 257.610†	-380.8	-0.0005021	mg/L	0.00000941	-0.0005021	mg/L	0.00000941	1.88%
Mo 202.031†	-147.1	-0.0114077	mg/L	0.00022527	-0.0114077	mg/L	0.00022527	1.97%
Na 330.237†	-238.9	0.112560	mg/L	0.0334150	0.112560	mg/L	0.0334150	29.69%
Ni 231.604†	-17.3	0.0001422	mg/L	0.00007412	0.0001422	mg/L	0.00007412	52.11%
Pb 220.353†	-43.3	-0.0067898	mg/L	0.00010156	-0.0067898	mg/L	0.00010156	1.50%
Sb 206.836†	-36.7	-0.0164151	mg/L	0.00149576	-0.0164151	mg/L	0.00149576	9.11%
Se 196.026†	-29.2	-0.0127145	mg/L	0.00090993	-0.0127145	mg/L	0.00090993	7.16%
Sn 189.927†	-0.0	0.0013773	mg/L	0.00017596	0.0013773	mg/L	0.00017596	12.78%
Ti 334.940†	-83.1	0.0003057	mg/L	0.00005147	0.0003057	mg/L	0.00005147	16.83%
Tl 190.801†	32.8	0.0114842	mg/L	0.00230018	0.0114842	mg/L	0.00230018	20.03%
V 290.880†	-1338.0	-0.0228539	mg/L	0.00042135	-0.0228539	mg/L	0.00042135	1.84%
Zn 206.200†	76.3	-0.0043748	mg/L	0.00008146	-0.0043748	mg/L	0.00008146	1.86%
B 249.772	269.2	0.0048796	mg/L	0.00076500	0.0048796	mg/L	0.00076500	15.68%
Si 251.611	-24.5	-0.0346666	mg/L	0.00035648	-0.0346666	mg/L	0.00035648	1.03%

Sequence No.: 10 Autosampler Location: 5
Sample ID: LLICV V-333671 Date Collected: 8/31/2020 5:32:13 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: LLICV V-333671

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	397913.8	96.8	%	0.74				0.77%
Y 371.029	176400.1	96.7	%	0.76				0.79%
Ag 328.068†	1437.2	0.0115914	mg/L	0.00136094	0.0115914	mg/L	0.00136094	11.74%
QC value less than the lower limit for Ag 328.068 Recovery = 77.28%								
Al 308.215†	17997.2	2.00417	mg/L	0.015764	2.00417	mg/L	0.015764	0.79%
QC value within limits for Al 308.215 Recovery = 100.21%								
As 188.979†	93.6	0.0421544	mg/L	0.00280014	0.0421544	mg/L	0.00280014	6.64%
QC value within limits for As 188.979 Recovery = 105.39%								
Ba 233.527†	9483.4	0.103577	mg/L	0.0005718	0.103577	mg/L	0.0005718	0.55%
QC value within limits for Ba 233.527 Recovery = 103.58%								
Be 313.107†	15362.0	0.0129819	mg/L	0.00007407	0.0129819	mg/L	0.00007407	0.57%
QC value within limits for Be 313.107 Recovery = 108.18%								
Ca 317.933†	983781.9	10.2003	mg/L	0.01618	10.2003	mg/L	0.01618	0.16%
QC value within limits for Ca 317.933 Recovery = 102.00%								
Cd 228.802†	411.1	0.0100709	mg/L	0.00028049	0.0100709	mg/L	0.00028049	2.79%
QC value within limits for Cd 228.802 Recovery = 83.92%								
Co 228.616†	725.8	0.0258329	mg/L	0.00044459	0.0258329	mg/L	0.00044459	1.72%
QC value within limits for Co 228.616 Recovery = 103.33%								
Cr 267.716†	3680.3	0.0472362	mg/L	0.00032854	0.0472362	mg/L	0.00032854	0.70%
QC value within limits for Cr 267.716 Recovery = 94.47%								
Cu 327.393†	3458.4	0.0501543	mg/L	0.00136290	0.0501543	mg/L	0.00136290	2.72%
QC value within limits for Cu 327.393 Recovery = 100.31%								
Fe 273.955†	18670.1	1.99244	mg/L	0.003273	1.99244	mg/L	0.003273	0.16%
QC value within limits for Fe 273.955 Recovery = 99.62%								
K 404.721†	2977.2	17.3823	mg/L	7.49144	17.3823	mg/L	7.49144	43.10%
QC value greater than the upper limit for K 404.721 Recovery = 347.65%								
Mg 279.077†	59273.8	4.92241	mg/L	0.008390	4.92241	mg/L	0.008390	0.17%
QC value within limits for Mg 279.077 Recovery = 98.45%								
Mn 257.610†	28833.0	0.0987280	mg/L	0.00021048	0.0987280	mg/L	0.00021048	0.21%
QC value within limits for Mn 257.610 Recovery = 98.73%								
Mo 202.031†	303.3	0.0271601	mg/L	0.00069826	0.0271601	mg/L	0.00069826	2.57%
QC value within limits for Mo 202.031 Recovery = 108.64%								
Na 330.237†	838.1	2.67502	mg/L	0.089404	2.67502	mg/L	0.089404	3.34%
QC value within limits for Na 330.237 Recovery = 107.00%								
Ni 231.604†	1573.0	0.0513031	mg/L	0.00031897	0.0513031	mg/L	0.00031897	0.62%
QC value within limits for Ni 231.604 Recovery = 102.61%								
Pb 220.353†	359.2	0.0496917	mg/L	0.00218273	0.0496917	mg/L	0.00218273	4.39%
QC value within limits for Pb 220.353 Recovery = 99.38%								
Sb 206.836†	88.3	0.0391830	mg/L	0.00249668	0.0391830	mg/L	0.00249668	6.37%
QC value within limits for Sb 206.836 Recovery = 97.96%								
Se 196.026†	120.8	0.0543854	mg/L	0.00573091	0.0543854	mg/L	0.00573091	10.54%
QC value within limits for Se 196.026 Recovery = 108.77%								
Sn 189.927†	1361.4	0.200971	mg/L	0.0016298	0.200971	mg/L	0.0016298	0.81%
QC value within limits for Sn 189.927 Recovery = 100.49%								
Ti 334.940†	27120.8	0.0993233	mg/L	0.00005795	0.0993233	mg/L	0.00005795	0.06%
QC value within limits for Ti 334.940 Recovery = 99.32%								
Tl 190.801†	122.9	0.0540664	mg/L	0.00122250	0.0540664	mg/L	0.00122250	2.26%
QC value within limits for Tl 190.801 Recovery = 108.13%								
V 290.880†	4753.3	0.0994242	mg/L	0.00056437	0.0994242	mg/L	0.00056437	0.57%
QC value within limits for V 290.880 Recovery = 99.42%								
Zn 206.200†	5675.5	0.0968929	mg/L	0.00025089	0.0968929	mg/L	0.00025089	0.26%
QC value within limits for Zn 206.200 Recovery = 96.89%								
B 249.772	13840.2	0.185147	mg/L	0.0027513	0.185147	mg/L	0.0027513	1.49%
QC value within limits for B 249.772 Recovery = 92.57%								
Si 251.611	3579.1	0.128536	mg/L	0.0022857	0.128536	mg/L	0.0022857	1.78%
QC value greater than the upper limit for Si 251.611 Recovery = 128.54%								

QC Failed. Continue with analysis.

Sequence No.: 11 Autosampler Location: 7
Sample ID: ICSA V-333668 Date Collected: 8/31/2020 5:36:04 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	374248.4	91.1	%	0.24				0.26%
Y 371.029	162256.1	88.9	%	0.28				0.31%
Ag 328.068†	-535.7	-0.0107262	mg/L	0.00093804	-0.0107262	mg/L	0.00093804	8.75%
Al 308.215†	4432562.0	493.117	mg/L	3.8128	493.117	mg/L	3.8128	0.77%
QC value within limits for Al 308.215 Recovery = 98.62%								
As 188.979†	-54.9	-0.0013071	mg/L	0.00210245	-0.0013071	mg/L	0.00210245	160.85%
Ba 233.527†	406.2	0.0026548	mg/L	0.00010289	0.0026548	mg/L	0.00010289	3.88%
Be 313.107†	-92.4	0.0014431	mg/L	0.00001772	0.0014431	mg/L	0.00001772	1.23%
Ca 317.933†	43880920.3	466.547	mg/L	2.6680	466.547	mg/L	2.6680	0.57%
QC value within limits for Ca 317.933 Recovery = 93.31%								
Cd 228.802†	-76.9	-0.0050420	mg/L	0.00032958	-0.0050420	mg/L	0.00032958	6.54%
Co 228.616†	56.1	0.0033644	mg/L	0.00062643	0.0033644	mg/L	0.00062643	18.62%
Cr 267.716†	-377.8	-0.0124424	mg/L	0.00054233	-0.0124424	mg/L	0.00054233	4.36%
Cu 327.393†	-2443.5	-0.0341988	mg/L	0.00025720	-0.0341988	mg/L	0.00025720	0.75%
Fe 273.955†	1777812.6	190.122	mg/L	1.1582	190.122	mg/L	1.1582	0.61%
QC value within limits for Fe 273.955 Recovery = 95.06%								
K 404.721†	34753.2	-314.477	mg/L	11.1559	-314.477	mg/L	11.1559	3.55%
Mg 279.077†	5732370.1	498.648	mg/L	2.5456	498.648	mg/L	2.5456	0.51%
QC value within limits for Mg 279.077 Recovery = 99.73%								
Mn 257.610†	-5739.8	-0.0187051	mg/L	0.00006425	-0.0187051	mg/L	0.00006425	0.34%
Mo 202.031†	73.1	0.0074528	mg/L	0.00080845	0.0074528	mg/L	0.00080845	10.85%
Na 330.237†	19.1	0.726381	mg/L	0.0378955	0.726381	mg/L	0.0378955	5.22%
Ni 231.604†	233.0	0.0081944	mg/L	0.00076920	0.0081944	mg/L	0.00076920	9.39%
Pb 220.353†	-370.3	-0.0075093	mg/L	0.00306370	-0.0075093	mg/L	0.00306370	40.80%
Sb 206.836†	17.2	0.0076022	mg/L	0.00928572	0.0076022	mg/L	0.00928572	122.14%
Se 196.026†	-138.4	0.0074326	mg/L	0.00439086	0.0074326	mg/L	0.00439086	59.08%
Sn 189.927†	-112.1	-0.0150756	mg/L	0.00147446	-0.0150756	mg/L	0.00147446	9.78%
Ti 334.940†	-1615.1	-0.0052704	mg/L	0.00003320	-0.0052704	mg/L	0.00003320	0.63%
Tl 190.801†	-23.4	-0.0130585	mg/L	0.00464253	-0.0130585	mg/L	0.00464253	35.55%
V 290.880†	592.8	0.0030295	mg/L	0.00249549	0.0030295	mg/L	0.00249549	82.37%
Zn 206.200†	45.3	-0.0049342	mg/L	0.00035197	-0.0049342	mg/L	0.00035197	7.13%
B 249.772	61028.9	0.0577207	mg/L	0.00987693	0.0577207	mg/L	0.00987693	17.11%
Si 251.611	-417.7	0.125077	mg/L	0.0008951	0.125077	mg/L	0.0008951	0.72%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: AD18966-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 8/31/2020 5:41:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18966-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	423406.1	103	%	1.6				1.59%
Y 371.029	215149.5	118	%	1.6				1.40%
Ag 328.068†	-179.4	-0.0066949	mg/L	0.00093099	-0.0066949	mg/L	0.00093099	13.91%
Al 308.215†	319104.1	35.5022	mg/L	0.05308	35.5022	mg/L	0.05308	0.15%
As 188.979†	136.3	0.0666539	mg/L	0.00241303	0.0666539	mg/L	0.00241303	3.62%
Ba 233.527†	6332.7	0.0685473	mg/L	0.00123141	0.0685473	mg/L	0.00123141	1.80%
Be 313.107†	-211.5	0.0013541	mg/L	0.00002609	0.0013541	mg/L	0.00002609	1.93%
Ca 317.933†	58751.5	0.359693	mg/L	0.0012722	0.359693	mg/L	0.0012722	0.35%
Cd 228.802†	39.7	-0.0014321	mg/L	0.00041613	-0.0014321	mg/L	0.00041613	29.06%
Co 228.616†	117.3	0.0054177	mg/L	0.00047325	0.0054177	mg/L	0.00047325	8.74%
Cr 267.716†	99143.6	1.45111	mg/L	0.003677	1.45111	mg/L	0.003677	0.25%
Cu 327.393†	4313.3	0.0623729	mg/L	0.00106018	0.0623729	mg/L	0.00106018	1.70%
Fe 273.955†	467748.5	50.0187	mg/L	0.11669	50.0187	mg/L	0.11669	0.23%
K 404.721†	6387.4	-135.361	mg/L	21.6267	-135.361	mg/L	21.6267	15.98%
Mg 279.077†	8542.1	0.507270	mg/L	0.0034098	0.507270	mg/L	0.0034098	0.67%
Mn 257.610†	8993.8	0.0313405	mg/L	0.00011713	0.0313405	mg/L	0.00011713	0.37%
Mo 202.031†	73.5	0.0074798	mg/L	0.00068822	0.0074798	mg/L	0.00068822	9.20%
Na 330.237†	-28.3	0.613553	mg/L	0.1589896	0.613553	mg/L	0.1589896	25.91%
Ni 231.604†	470.2	0.0158233	mg/L	0.00025101	0.0158233	mg/L	0.00025101	1.59%
Pb 220.353†	398.4	0.0582187	mg/L	0.00173253	0.0582187	mg/L	0.00173253	2.98%
Sb 206.836†	77.5	0.0341668	mg/L	0.00234554	0.0341668	mg/L	0.00234554	6.86%
Se 196.026†	-37.0	0.0084961	mg/L	0.00153298	0.0084961	mg/L	0.00153298	18.04%
Sn 189.927†	101.2	0.0134782	mg/L	0.00124495	0.0134782	mg/L	0.00124495	9.24%
Ti 334.940†	134415.3	0.489857	mg/L	0.0062378	0.489857	mg/L	0.0062378	1.27%
Tl 190.801†	-16.9	-0.0024385	mg/L	0.00139065	-0.0024385	mg/L	0.00139065	57.03%
V 290.880†	9232.1	0.185511	mg/L	0.0006986	0.185511	mg/L	0.0006986	0.38%
Zn 206.200†	1637.5	0.0238621	mg/L	0.00000404	0.0238621	mg/L	0.00000404	0.02%
B 249.772	18155.5	0.0454149	mg/L	0.00346559	0.0454149	mg/L	0.00346559	7.63%
Si 251.611	139728.5	6.02799	mg/L	0.108702	6.02799	mg/L	0.108702	1.80%

Sequence No.: 13
Sample ID: AD18966-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 8/31/2020 5:45:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18966-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	434556.1	106	%	0.5				0.45%
Y 371.029	265814.8	146	%	0.9				0.65%
Ag 328.068†	-275.0	-0.0077774	mg/L	0.00036331	-0.0077774	mg/L	0.00036331	4.67%
Al 308.215†	280161.2	31.1700	mg/L	0.03955	31.1700	mg/L	0.03955	0.13%
As 188.979†	58.5	0.0287467	mg/L	0.00304092	0.0287467	mg/L	0.00304092	10.58%
Ba 233.527†	4869.7	0.0522815	mg/L	0.00079623	0.0522815	mg/L	0.00079623	1.52%
Be 313.107†	469.1	0.0018623	mg/L	0.00003789	0.0018623	mg/L	0.00003789	2.03%
Ca 317.933†	94499.7	0.739988	mg/L	0.0026965	0.739988	mg/L	0.0026965	0.36%
Cd 228.802†	18.1	-0.0020996	mg/L	0.00028716	-0.0020996	mg/L	0.00028716	13.68%
Co 228.616†	62.3	0.0035720	mg/L	0.00032023	0.0035720	mg/L	0.00032023	8.97%
Cr 267.716†	42275.6	0.614816	mg/L	0.0008705	0.614816	mg/L	0.0008705	0.14%
Cu 327.393†	1464.1	0.0216502	mg/L	0.00082459	0.0216502	mg/L	0.00082459	3.81%
Fe 273.955†	173233.4	18.5221	mg/L	0.04814	18.5221	mg/L	0.04814	0.26%
K 404.721†	-564.7	-103.415	mg/L	8.1597	-103.415	mg/L	8.1597	7.89%
Mg 279.077†	9209.6	0.565359	mg/L	0.0028386	0.565359	mg/L	0.0028386	0.50%
Mn 257.610†	6913.1	0.0242727	mg/L	0.00022155	0.0242727	mg/L	0.00022155	0.91%
Mo 202.031†	21.2	0.0030017	mg/L	0.00073593	0.0030017	mg/L	0.00073593	24.52%
Na 330.237†	66.9	0.840120	mg/L	0.0728041	0.840120	mg/L	0.0728041	8.67%
Ni 231.604†	332.5	0.0113962	mg/L	0.00053075	0.0113962	mg/L	0.00053075	4.66%
Pb 220.353†	284.3	0.0418714	mg/L	0.00206925	0.0418714	mg/L	0.00206925	4.94%
Sb 206.836†	24.0	0.0105198	mg/L	0.00301990	0.0105198	mg/L	0.00301990	28.71%
Se 196.026†	-15.4	0.0024955	mg/L	0.00267140	0.0024955	mg/L	0.00267140	107.05%
Sn 189.927†	91.4	0.0130849	mg/L	0.00120514	0.0130849	mg/L	0.00120514	9.21%
Ti 334.940†	83853.4	0.305820	mg/L	0.0021762	0.305820	mg/L	0.0021762	0.71%
Tl 190.801†	-14.7	-0.0042850	mg/L	0.00313384	-0.0042850	mg/L	0.00313384	73.14%
V 290.880†	6306.7	0.129062	mg/L	0.0005403	0.129062	mg/L	0.0005403	0.42%
Zn 206.200†	1757.9	0.0260390	mg/L	0.00018950	0.0260390	mg/L	0.00018950	0.73%
B 249.772	7489.1	0.0283883	mg/L	0.00168011	0.0283883	mg/L	0.00168011	5.92%
Si 251.611	179183.2	7.72089	mg/L	0.136597	7.72089	mg/L	0.136597	1.77%

Sequence No.: 14
Sample ID: MB 85226 (100)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 8/31/2020 5:48:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85226 (100)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	416411.2	101	%	0.3				0.34%
Y 371.029	183299.8	100	%	0.4				0.39%
Ag 328.068†	50.7	-0.0040922	mg/L	0.00071158	-0.0040922	mg/L	0.00071158	17.39%
Al 308.215†	13.4	0.0041050	mg/L	0.00473364	0.0041050	mg/L	0.00473364	115.32%
As 188.979†	1.3	0.0014403	mg/L	0.00294095	0.0014403	mg/L	0.00294095	204.19%
Ba 233.527†	12.2	-0.0017263	mg/L	0.00012556	-0.0017263	mg/L	0.00012556	7.27%
Be 313.107†	60.5	0.0015572	mg/L	0.00005092	0.0015572	mg/L	0.00005092	3.27%
Ca 317.933†	1171.4	-0.252853	mg/L	0.0015547	-0.252853	mg/L	0.0015547	0.61%
Cd 228.802†	-0.8	-0.0026843	mg/L	0.00003075	-0.0026843	mg/L	0.00003075	1.15%
Co 228.616†	-11.5	0.0010970	mg/L	0.00029468	0.0010970	mg/L	0.00029468	26.86%
Cr 267.716†	44.2	-0.0062364	mg/L	0.00021591	-0.0062364	mg/L	0.00021591	3.46%
Cu 327.393†	164.1	0.0030705	mg/L	0.00060932	0.0030705	mg/L	0.00060932	19.84%
Fe 273.955†	103.5	0.0068569	mg/L	0.00144915	0.0068569	mg/L	0.00144915	21.13%
K 404.721†	-406.5	-23.2185	mg/L	9.81597	-23.2185	mg/L	9.81597	42.28%
Mg 279.077†	46.6	-0.232090	mg/L	0.0035276	-0.232090	mg/L	0.0035276	1.52%
Mn 257.610†	-208.8	0.0000819	mg/L	0.00002931	0.0000819	mg/L	0.00002931	35.80%
Mo 202.031†	4.7	0.0015918	mg/L	0.00108508	0.0015918	mg/L	0.00108508	68.17%
Na 330.237†	48.4	0.796050	mg/L	0.2077076	0.796050	mg/L	0.2077076	26.09%
Ni 231.604†	-1.4	0.0006521	mg/L	0.00007062	0.0006521	mg/L	0.00007062	10.83%
Pb 220.353†	8.3	0.0004509	mg/L	0.00210376	0.0004509	mg/L	0.00210376	466.53%
Sb 206.836†	-2.2	-0.0010470	mg/L	0.00464783	-0.0010470	mg/L	0.00464783	443.90%
Se 196.026†	10.2	0.0047896	mg/L	0.00482832	0.0047896	mg/L	0.00482832	100.81%
Sn 189.927†	88.2	0.0143467	mg/L	0.00144545	0.0143467	mg/L	0.00144545	10.08%
Ti 334.940†	220.4	0.0014105	mg/L	0.00023271	0.0014105	mg/L	0.00023271	16.50%
Tl 190.801†	-8.9	-0.0067275	mg/L	0.00357954	-0.0067275	mg/L	0.00357954	53.21%
V 290.880†	-46.4	0.0031700	mg/L	0.00047450	0.0031700	mg/L	0.00047450	14.97%
Zn 206.200†	530.4	0.0038383	mg/L	0.00024441	0.0038383	mg/L	0.00024441	6.37%
B 249.772	40.1	0.0020416	mg/L	0.00032737	0.0020416	mg/L	0.00032737	16.03%
Si 251.611	301.5	-0.0205178	mg/L	0.00158784	-0.0205178	mg/L	0.00158784	7.74%

Sequence No.: 15
Sample ID: LCS 85226
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 8/31/2020 5:52:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 85226

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	402572.4	98.0	%	0.16				0.16%
Y 371.029	205228.6	112	%	0.2				0.22%
Ag 328.068†	71655.4	0.805916	mg/L	0.0011517	0.805916	mg/L	0.0011517	0.14%
Al 308.215†	770507.7	85.6841	mg/L	0.14865	85.6841	mg/L	0.14865	0.17%
As 188.979†	808.4	0.364173	mg/L	0.0044347	0.364173	mg/L	0.0044347	1.22%
Ba 233.527†	613657.5	6.82097	mg/L	0.008250	6.82097	mg/L	0.008250	0.12%
Be 313.107†	1977049.8	1.47765	mg/L	0.004185	1.47765	mg/L	0.004185	0.28%
Ca 317.933†	16132006.3	171.350	mg/L	2.0118	171.350	mg/L	2.0118	1.17%
Cd 228.802†	48318.4	1.49382	mg/L	0.000850	1.49382	mg/L	0.000850	0.06%
Co 228.616†	62779.9	2.10769	mg/L	0.003040	2.10769	mg/L	0.003040	0.14%
Cr 267.716†	119280.0	1.74723	mg/L	0.002610	1.74723	mg/L	0.002610	0.15%
Cu 327.393†	114964.2	1.64384	mg/L	0.002291	1.64384	mg/L	0.002291	0.14%
Fe 273.955†	1253434.2	134.043	mg/L	0.3706	134.043	mg/L	0.3706	0.28%
K 404.721†	20644.5	-282.639	mg/L	1.3221	-282.639	mg/L	1.3221	0.47%
Mg 279.077†	676512.4	58.6402	mg/L	0.19488	58.6402	mg/L	0.19488	0.33%
Mn 257.610†	1391480.7	4.72721	mg/L	0.009374	4.72721	mg/L	0.009374	0.20%
Mo 202.031†	17974.5	1.54037	mg/L	0.004625	1.54037	mg/L	0.004625	0.30%
Na 330.237†	2787.3	7.31305	mg/L	0.040227	7.31305	mg/L	0.040227	0.55%
Ni 231.604†	13394.1	0.431580	mg/L	0.0011758	0.431580	mg/L	0.0011758	0.27%
Pb 220.353†	9020.3	1.26818	mg/L	0.003801	1.26818	mg/L	0.003801	0.30%
Sb 206.836†	790.9	0.368400	mg/L	0.0036830	0.368400	mg/L	0.0036830	1.00%
Se 196.026†	6160.7	2.79756	mg/L	0.001934	2.79756	mg/L	0.001934	0.07%
Sn 189.927†	8077.1	1.16524	mg/L	0.005937	1.16524	mg/L	0.005937	0.51%
Ti 334.940†	1142436.6	4.15889	mg/L	0.006345	4.15889	mg/L	0.006345	0.15%
Tl 190.801†	4148.7	1.91010	mg/L	0.009613	1.91010	mg/L	0.009613	0.50%
V 290.880†	115629.4	2.32915	mg/L	0.005151	2.32915	mg/L	0.005151	0.22%
Zn 206.200†	300702.8	5.43278	mg/L	0.010894	5.43278	mg/L	0.010894	0.20%
B 249.772	213502.9	2.40781	mg/L	0.019294	2.40781	mg/L	0.019294	0.80%
Si 251.611	126736.0	5.64776	mg/L	0.009856	5.64776	mg/L	0.009856	0.17%

Sequence No.: 16
Sample ID: LCS MR 85226
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 8/31/2020 5:57:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS MR 85226

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	401443.4	97.7	%	0.89				0.91%
Y 371.029	205015.2	112	%	1.1				0.94%
Ag 328.068†	70482.1	0.792643	mg/L	0.0010425	0.792643	mg/L	0.0010425	0.13%
Al 308.215†	759516.9	84.4614	mg/L	0.02686	84.4614	mg/L	0.02686	0.03%
As 188.979†	796.1	0.358602	mg/L	0.0003906	0.358602	mg/L	0.0003906	0.11%
Ba 233.527†	632778.4	7.03356	mg/L	0.005166	7.03356	mg/L	0.005166	0.07%
Be 313.107†	1935729.9	1.44680	mg/L	0.014787	1.44680	mg/L	0.014787	1.02%
Ca 317.933†	16433085.2	174.553	mg/L	1.8357	174.553	mg/L	1.8357	1.05%
Cd 228.802†	47853.1	1.47940	mg/L	0.001868	1.47940	mg/L	0.001868	0.13%
Co 228.616†	62306.1	2.09179	mg/L	0.002851	2.09179	mg/L	0.002851	0.14%
Cr 267.716†	118339.1	1.73340	mg/L	0.001897	1.73340	mg/L	0.001897	0.11%
Cu 327.393†	114201.5	1.63294	mg/L	0.001985	1.63294	mg/L	0.001985	0.12%
Fe 273.955†	1242043.4	132.825	mg/L	0.2173	132.825	mg/L	0.2173	0.16%
K 404.721†	19928.5	-287.872	mg/L	6.5257	-287.872	mg/L	6.5257	2.27%
Mg 279.077†	674637.2	58.4770	mg/L	0.09201	58.4770	mg/L	0.09201	0.16%
Mn 257.610†	1392765.4	4.73158	mg/L	0.004146	4.73158	mg/L	0.004146	0.09%
Mo 202.031†	17945.0	1.53784	mg/L	0.014208	1.53784	mg/L	0.014208	0.92%
Na 330.237†	2849.7	7.46161	mg/L	0.087613	7.46161	mg/L	0.087613	1.17%
Ni 231.604†	13229.9	0.426299	mg/L	0.0025740	0.426299	mg/L	0.0025740	0.60%
Pb 220.353†	8963.6	1.26015	mg/L	0.005346	1.26015	mg/L	0.005346	0.42%
Sb 206.836†	772.8	0.360394	mg/L	0.0070466	0.360394	mg/L	0.0070466	1.96%
Se 196.026†	6135.5	2.78558	mg/L	0.022965	2.78558	mg/L	0.022965	0.82%
Sn 189.927†	8104.7	1.16976	mg/L	0.005801	1.16976	mg/L	0.005801	0.50%
Ti 334.940†	1119776.4	4.07641	mg/L	0.008129	4.07641	mg/L	0.008129	0.20%
Tl 190.801†	4153.0	1.91081	mg/L	0.016381	1.91081	mg/L	0.016381	0.86%
V 290.880†	114674.5	2.31009	mg/L	0.001865	2.31009	mg/L	0.001865	0.08%
Zn 206.200†	299149.5	5.40469	mg/L	0.007870	5.40469	mg/L	0.007870	0.15%
B 249.772	211866.4	2.39018	mg/L	0.029343	2.39018	mg/L	0.029343	1.23%
Si 251.611	115628.5	5.16806	mg/L	0.066823	5.16806	mg/L	0.066823	1.29%

Sequence No.: 17 Autosampler Location: 6
Sample ID: CCV V-333673 Date Collected: 8/31/2020 6:02:32 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	399050.5	97.1	%	0.64				0.66%
Y 371.029	149145.6	81.7	%	0.55				0.67%
Ag 328.068†	6811.0	0.0723811	mg/L	0.00093098	0.0723811	mg/L	0.00093098	1.29%
QC value less than the lower limit for Ag 328.068 Recovery = 72.38%								
Al 308.215†	44370.1	4.92725	mg/L	0.027238	4.92725	mg/L	0.027238	0.55%
QC value within limits for Al 308.215 Recovery = 98.55%								
As 188.979†	1114.3	0.489442	mg/L	0.0088104	0.489442	mg/L	0.0088104	1.80%
QC value within limits for As 188.979 Recovery = 97.89%								
Ba 233.527†	44352.3	0.491261	mg/L	0.0024225	0.491261	mg/L	0.0024225	0.49%
QC value within limits for Ba 233.527 Recovery = 98.25%								
Be 313.107†	640914.0	0.480041	mg/L	0.0033126	0.480041	mg/L	0.0033126	0.69%
QC value within limits for Be 313.107 Recovery = 96.01%								
Ca 317.933†	4824954.8	51.0634	mg/L	0.31172	51.0634	mg/L	0.31172	0.61%
QC value within limits for Ca 317.933 Recovery = 102.13%								
Cd 228.802†	16567.0	0.510437	mg/L	0.0034379	0.510437	mg/L	0.0034379	0.67%
QC value within limits for Cd 228.802 Recovery = 102.09%								
Co 228.616†	14693.0	0.494417	mg/L	0.0034639	0.494417	mg/L	0.0034639	0.70%
QC value within limits for Co 228.616 Recovery = 98.88%								
Cr 267.716†	36097.3	0.523957	mg/L	0.0032023	0.523957	mg/L	0.0032023	0.61%
QC value within limits for Cr 267.716 Recovery = 104.79%								
Cu 327.393†	34749.6	0.497381	mg/L	0.0008416	0.497381	mg/L	0.0008416	0.17%
QC value within limits for Cu 327.393 Recovery = 99.48%								
Fe 273.955†	46733.5	4.99366	mg/L	0.026173	4.99366	mg/L	0.026173	0.52%
QC value within limits for Fe 273.955 Recovery = 99.87%								
K 404.721†	4749.8	30.4010	mg/L	14.74737	30.4010	mg/L	14.74737	48.51%
QC value less than the lower limit for K 404.721 Recovery = 60.80%								
Mg 279.077†	592920.0	51.3653	mg/L	0.44707	51.3653	mg/L	0.44707	0.87%
QC value within limits for Mg 279.077 Recovery = 102.73%								
Mn 257.610†	145613.2	0.495394	mg/L	0.0026320	0.495394	mg/L	0.0026320	0.53%
QC value within limits for Mn 257.610 Recovery = 99.08%								
Mo 202.031†	5705.7	0.489779	mg/L	0.0034334	0.489779	mg/L	0.0034334	0.70%
QC value within limits for Mo 202.031 Recovery = 97.96%								
Na 330.237†	20471.6	49.3915	mg/L	0.24609	49.3915	mg/L	0.24609	0.50%
QC value within limits for Na 330.237 Recovery = 98.78%								
Ni 231.604†	15429.3	0.497053	mg/L	0.0036341	0.497053	mg/L	0.0036341	0.73%
QC value within limits for Ni 231.604 Recovery = 99.41%								
Pb 220.353†	3575.2	0.499557	mg/L	0.0045137	0.499557	mg/L	0.0045137	0.90%
QC value within limits for Pb 220.353 Recovery = 99.91%								
Sb 206.836†	1060.6	0.473684	mg/L	0.0206247	0.473684	mg/L	0.0206247	4.35%
QC value within limits for Sb 206.836 Recovery = 94.74%								
Se 196.026†	1104.9	0.491403	mg/L	0.0113710	0.491403	mg/L	0.0113710	2.31%
QC value within limits for Se 196.026 Recovery = 98.28%								
Sn 189.927†	3360.8	0.492637	mg/L	0.0031373	0.492637	mg/L	0.0031373	0.64%
QC value within limits for Sn 189.927 Recovery = 98.53%								
Ti 334.940†	136997.9	0.499258	mg/L	0.0019424	0.499258	mg/L	0.0019424	0.39%
QC value within limits for Ti 334.940 Recovery = 99.85%								
Tl 190.801†	1091.2	0.493943	mg/L	0.0024698	0.493943	mg/L	0.0024698	0.50%
QC value within limits for Tl 190.801 Recovery = 98.79%								
V 290.880†	24112.0	0.492705	mg/L	0.0007061	0.492705	mg/L	0.0007061	0.14%
QC value within limits for V 290.880 Recovery = 98.54%								
Zn 206.200†	29228.1	0.522867	mg/L	0.0047777	0.522867	mg/L	0.0047777	0.91%
QC value within limits for Zn 206.200 Recovery = 104.57%								
B 249.772	38319.7	0.513088	mg/L	0.0009646	0.513088	mg/L	0.0009646	0.19%
QC value within limits for B 249.772 Recovery = 102.62%								
Si 251.611	123257.6	5.32037	mg/L	0.011953	5.32037	mg/L	0.011953	0.22%
QC value within limits for Si 251.611 Recovery = 106.41%								

QC Failed. Continue with analysis.

Sequence No.: 18 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 8/31/2020 6:06:36 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	412625.8	100	%	0.9				0.90%
Y 371.029	183697.7	101	%	0.9				0.92%
Ag 328.068†	48.8	-0.0041144	mg/L	0.00019184	-0.0041144	mg/L	0.00019184	4.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	77.2	0.0111774	mg/L	0.00357050	0.0111774	mg/L	0.00357050	31.94%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	7.1	0.0039798	mg/L	0.00419457	0.0039798	mg/L	0.00419457	105.40%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-3.8	-0.0019045	mg/L	0.00001166	-0.0019045	mg/L	0.00001166	0.61%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	54.6	0.0015528	mg/L	0.00003191	0.0015528	mg/L	0.00003191	2.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	271.0	-0.262431	mg/L	0.0012014	-0.262431	mg/L	0.0012014	0.46%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	-1.1	-0.0026955	mg/L	0.00020889	-0.0026955	mg/L	0.00020889	7.75%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.2	0.0014889	mg/L	0.00043203	0.0014889	mg/L	0.00043203	29.02%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	19.2	-0.0066043	mg/L	0.00030422	-0.0066043	mg/L	0.00030422	4.61%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	73.2	0.0017713	mg/L	0.00101619	0.0017713	mg/L	0.00101619	57.37%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-2.4	-0.0044718	mg/L	0.00206145	-0.0044718	mg/L	0.00206145	46.10%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	273.6	-13.3311	mg/L	14.80883	-13.3311	mg/L	14.80883	111.08%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	34.2	-0.233172	mg/L	0.0010989	-0.233172	mg/L	0.0010989	0.47%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-116.8	0.0003945	mg/L	0.00004458	0.0003945	mg/L	0.00004458	11.30%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	15.7	0.0025300	mg/L	0.00005728	0.0025300	mg/L	0.00005728	2.26%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-56.5	0.546570	mg/L	0.2773437	0.546570	mg/L	0.2773437	50.74%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	4.7	0.0008502	mg/L	0.00060348	0.0008502	mg/L	0.00060348	70.98%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-11.1	-0.0022600	mg/L	0.00128882	-0.0022600	mg/L	0.00128882	57.03%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.2	0.0009148	mg/L	0.00070684	0.0009148	mg/L	0.00070684	77.27%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	7.6	0.0036126	mg/L	0.00502450	0.0036126	mg/L	0.00502450	139.08%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	5.1	0.0021291	mg/L	0.00152133	0.0021291	mg/L	0.00152133	71.45%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	131.8	0.0010879	mg/L	0.00007016	0.0010879	mg/L	0.00007016	6.45%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	4.9	-0.0006073	mg/L	0.00349781	-0.0006073	mg/L	0.00349781	575.97%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-29.5	0.0035212	mg/L	0.00052676	0.0035212	mg/L	0.00052676	14.96%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	7.0	-0.0056282	mg/L	0.00002921	-0.0056282	mg/L	0.00002921	0.52%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	617.3	0.0100924	mg/L	0.00127442	0.0100924	mg/L	0.00127442	12.63%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	18.4	-0.0327920	mg/L	0.00136178	-0.0327920	mg/L	0.00136178	4.15%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 19
Sample ID: AD18927-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 8/31/2020 6:10:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	406659.0	99.0	%	0.73				0.74%
Y 371.029	208061.6	114	%	0.9				0.81%
Ag 328.068†	-264.9	-0.0076622	mg/L	0.00057143	-0.0076622	mg/L	0.00057143	7.46%
Al 308.215†	477344.0	53.1062	mg/L	0.14799	53.1062	mg/L	0.14799	0.28%
As 188.979†	103.5	0.0665751	mg/L	0.00360215	0.0665751	mg/L	0.00360215	5.41%
Ba 233.527†	26997.3	0.298302	mg/L	0.0023858	0.298302	mg/L	0.0023858	0.80%
Be 313.107†	2880.4	0.0036627	mg/L	0.00002016	0.0036627	mg/L	0.00002016	0.55%
Ca 317.933†	536440.2	5.44143	mg/L	0.016731	5.44143	mg/L	0.016731	0.31%
Cd 228.802†	0.9	-0.0026310	mg/L	0.00020346	-0.0026310	mg/L	0.00020346	7.73%
Co 228.616†	967.3	0.0339359	mg/L	0.00056488	0.0339359	mg/L	0.00056488	1.66%
Cr 267.716†	7099.2	0.0975139	mg/L	0.00089709	0.0975139	mg/L	0.00089709	0.92%
Cu 327.393†	1661.8	0.0244755	mg/L	0.00132893	0.0244755	mg/L	0.00132893	5.43%
Fe 273.955†	1626404.5	173.930	mg/L	0.4234	173.930	mg/L	0.4234	0.24%
K 404.721†	27036.5	-357.992	mg/L	20.6922	-357.992	mg/L	20.6922	5.78%
Mg 279.077†	78066.4	6.55791	mg/L	0.036271	6.55791	mg/L	0.036271	0.55%
Mn 257.610†	142570.2	0.485057	mg/L	0.0010092	0.485057	mg/L	0.0010092	0.21%
Mo 202.031†	23.9	0.0032362	mg/L	0.00088307	0.0032362	mg/L	0.00088307	27.29%
Na 330.237†	129.5	0.988946	mg/L	0.1007547	0.988946	mg/L	0.1007547	10.19%
Ni 231.604†	1451.7	0.0473984	mg/L	0.00060425	0.0473984	mg/L	0.00060425	1.27%
Pb 220.353†	487.8	0.0723222	mg/L	0.00272331	0.0723222	mg/L	0.00272331	3.77%
Sb 206.836†	16.8	0.0073642	mg/L	0.00443976	0.0073642	mg/L	0.00443976	60.29%
Se 196.026†	-155.2	0.0169283	mg/L	0.00502630	0.0169283	mg/L	0.00502630	29.69%
Sn 189.927†	89.2	0.0087965	mg/L	0.00032631	0.0087965	mg/L	0.00032631	3.71%
Ti 334.940†	275808.4	1.00450	mg/L	0.003167	1.00450	mg/L	0.003167	0.32%
Tl 190.801†	-34.5	-0.0053756	mg/L	0.00196093	-0.0053756	mg/L	0.00196093	36.48%
V 290.880†	10636.2	0.205076	mg/L	0.0025994	0.205076	mg/L	0.0025994	1.27%
Zn 206.200†	19488.3	0.346712	mg/L	0.0029472	0.346712	mg/L	0.0029472	0.85%
B 249.772	63936.3	0.165276	mg/L	0.0056369	0.165276	mg/L	0.0056369	3.41%
Si 251.611	75530.7	3.30445	mg/L	0.020560	3.30445	mg/L	0.020560	0.62%

Sequence No.: 20
Sample ID: AD18927-001 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 8/31/2020 6:14:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-001 MR

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	404149.5	98.4	%	0.10				0.11%
Y 371.029	212978.0	117	%	0.3				0.23%
Ag 328.068†	-486.2	-0.0101658	mg/L	0.00154527	-0.0101658	mg/L	0.00154527	15.20%
Al 308.215†	557855.2	62.0630	mg/L	0.14670	62.0630	mg/L	0.14670	0.24%
As 188.979†	133.9	0.0834811	mg/L	0.00133115	0.0834811	mg/L	0.00133115	1.59%
Ba 233.527†	31606.9	0.349554	mg/L	0.0008559	0.349554	mg/L	0.0008559	0.24%
Be 313.107†	3596.0	0.0041970	mg/L	0.00002109	0.0041970	mg/L	0.00002109	0.50%
Ca 317.933†	539938.1	5.47864	mg/L	0.005884	5.47864	mg/L	0.005884	0.11%
Cd 228.802†	3.8	-0.0025413	mg/L	0.00024837	-0.0025413	mg/L	0.00024837	9.77%
Co 228.616†	1173.8	0.0408635	mg/L	0.00025287	0.0408635	mg/L	0.00025287	0.62%
Cr 267.716†	6814.0	0.0933196	mg/L	0.00018409	0.0933196	mg/L	0.00018409	0.20%
Cu 327.393†	2424.0	0.0353697	mg/L	0.00039715	0.0353697	mg/L	0.00039715	1.12%
Fe 273.955†	1909628.4	204.219	mg/L	0.4651	204.219	mg/L	0.4651	0.23%
K 404.721†	32844.1	-401.415	mg/L	17.0711	-401.415	mg/L	17.0711	4.25%
Mg 279.077†	81185.2	6.82935	mg/L	0.007149	6.82935	mg/L	0.007149	0.10%
Mn 257.610†	168326.6	0.572544	mg/L	0.0008425	0.572544	mg/L	0.0008425	0.15%
Mo 202.031†	7.9	0.0018693	mg/L	0.00111637	0.0018693	mg/L	0.00111637	59.72%
Na 330.237†	175.3	1.09808	mg/L	0.108640	1.09808	mg/L	0.108640	9.89%
Ni 231.604†	1815.2	0.0590933	mg/L	0.00059484	0.0590933	mg/L	0.00059484	1.01%
Pb 220.353†	565.3	0.0839745	mg/L	0.00264946	0.0839745	mg/L	0.00264946	3.16%
Sb 206.836†	7.9	0.0034331	mg/L	0.00370831	0.0034331	mg/L	0.00370831	108.02%
Se 196.026†	-186.2	0.0181357	mg/L	0.00797097	0.0181357	mg/L	0.00797097	43.95%
Sn 189.927†	82.3	0.0069978	mg/L	0.00092216	0.0069978	mg/L	0.00092216	13.18%
Ti 334.940†	313918.7	1.14322	mg/L	0.001811	1.14322	mg/L	0.001811	0.16%
Tl 190.801†	-32.9	-0.0028927	mg/L	0.00355404	-0.0028927	mg/L	0.00355404	122.86%
V 290.880†	12191.2	0.234104	mg/L	0.0007208	0.234104	mg/L	0.0007208	0.31%
Zn 206.200†	23231.9	0.414420	mg/L	0.0009548	0.414420	mg/L	0.0009548	0.23%
B 249.772	73699.4	0.174784	mg/L	0.0083320	0.174784	mg/L	0.0083320	4.77%
Si 251.611	78658.0	3.45214	mg/L	0.002754	3.45214	mg/L	0.002754	0.08%

Sequence No.: 21
Sample ID: AD18927-001 MS 1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 8/31/2020 6:19:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-001 MS 1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	408598.9	99.4	%	0.96				0.97%
Y 371.029	220348.7	121	%	1.2				1.01%
Ag 328.068†	8196.4	0.0880538	mg/L	0.00108270	0.0880538	mg/L	0.00108270	1.23%
Al 308.215†	704977.3	78.4198	mg/L	1.49696	78.4198	mg/L	1.49696	1.91%
As 188.979†	1372.1	0.653340	mg/L	0.0117989	0.653340	mg/L	0.0117989	1.81%
Ba 233.527†	72021.1	0.798891	mg/L	0.0013290	0.798891	mg/L	0.0013290	0.17%
Be 313.107†	615704.7	0.461219	mg/L	0.0096000	0.461219	mg/L	0.0096000	2.08%
Ca 317.933†	5619695.7	59.5179	mg/L	1.12664	59.5179	mg/L	1.12664	1.89%
Cd 228.802†	15303.4	0.471302	mg/L	0.0042010	0.471302	mg/L	0.0042010	0.89%
Co 228.616†	15073.4	0.507181	mg/L	0.0051397	0.507181	mg/L	0.0051397	1.01%
Cr 267.716†	60430.7	0.881802	mg/L	0.0011260	0.881802	mg/L	0.0011260	0.13%
Cu 327.393†	33287.2	0.476480	mg/L	0.0008075	0.476480	mg/L	0.0008075	0.17%
Fe 273.955†	4095010.8	437.933	mg/L	7.8544	437.933	mg/L	7.8544	1.79%
K 404.721†	64631.6	-924.914	mg/L	70.2593	-924.914	mg/L	70.2593	7.60%
Mg 279.077†	687034.1	59.5559	mg/L	0.10036	59.5559	mg/L	0.10036	0.17%
Mn 257.610†	364904.6	1.24026	mg/L	0.002962	1.24026	mg/L	0.002962	0.24%
Mo 202.031†	5092.1	0.437235	mg/L	0.0036553	0.437235	mg/L	0.0036553	0.84%
Na 330.237†	19085.0	46.0922	mg/L	0.17952	46.0922	mg/L	0.17952	0.39%
Ni 231.604†	16316.0	0.525577	mg/L	0.0051485	0.525577	mg/L	0.0051485	0.98%
Pb 220.353†	3914.8	0.553748	mg/L	0.0036814	0.553748	mg/L	0.0036814	0.66%
Sb 206.836†	621.9	0.279662	mg/L	0.0052959	0.279662	mg/L	0.0052959	1.89%
Se 196.026†	542.6	0.454975	mg/L	0.0025549	0.454975	mg/L	0.0025549	0.56%
Sn 189.927†	3089.1	0.447125	mg/L	0.0047491	0.447125	mg/L	0.0047491	1.06%
Ti 334.940†	406544.1	1.48036	mg/L	0.012335	1.48036	mg/L	0.012335	0.83%
Tl 190.801†	1077.5	0.500532	mg/L	0.0023718	0.500532	mg/L	0.0023718	0.47%
V 290.880†	37717.8	0.734675	mg/L	0.0019731	0.734675	mg/L	0.0019731	0.27%
Zn 206.200†	54286.3	0.976073	mg/L	0.0039523	0.976073	mg/L	0.0039523	0.40%
B 249.772	197815.5	0.925412	mg/L	0.0450261	0.925412	mg/L	0.0450261	4.87%
Si 251.611	111402.2	4.97419	mg/L	0.065009	4.97419	mg/L	0.065009	1.31%

Sequence No.: 22
Sample ID: AD18927-001 MS 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 8/31/2020 6:24:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-001 MS 2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	409865.3	99.8	%	0.80				0.80%
Y 371.029	218460.6	120	%	0.9				0.74%
Ag 328.068†	8410.2	0.0904717	mg/L	0.00020904	0.0904717	mg/L	0.00020904	0.23%
Al 308.215†	707608.5	78.7124	mg/L	0.65977	78.7124	mg/L	0.65977	0.84%
As 188.979†	1212.4	0.565309	mg/L	0.0061540	0.565309	mg/L	0.0061540	1.09%
Ba 233.527†	74688.7	0.828549	mg/L	0.0032691	0.828549	mg/L	0.0032691	0.39%
Be 313.107†	614112.0	0.460030	mg/L	0.0044045	0.460030	mg/L	0.0044045	0.96%
Ca 317.933†	5184324.4	54.8864	mg/L	0.50706	54.8864	mg/L	0.50706	0.92%
Cd 228.802†	15256.1	0.469840	mg/L	0.0062675	0.469840	mg/L	0.0062675	1.33%
Co 228.616†	15055.5	0.506579	mg/L	0.0065407	0.506579	mg/L	0.0065407	1.29%
Cr 267.716†	39259.6	0.570462	mg/L	0.0015434	0.570462	mg/L	0.0015434	0.27%
Cu 327.393†	33979.7	0.486378	mg/L	0.0026967	0.486378	mg/L	0.0026967	0.55%
Fe 273.955†	2665368.5	285.041	mg/L	2.4824	285.041	mg/L	2.4824	0.87%
K 404.721†	42449.6	-602.518	mg/L	13.6230	-602.518	mg/L	13.6230	2.26%
Mg 279.077†	669378.6	58.0194	mg/L	0.13283	58.0194	mg/L	0.13283	0.23%
Mn 257.610†	360210.5	1.22431	mg/L	0.003628	1.22431	mg/L	0.003628	0.30%
Mo 202.031†	5135.1	0.440917	mg/L	0.0058842	0.440917	mg/L	0.0058842	1.33%
Na 330.237†	19090.7	46.1057	mg/L	0.05949	46.1057	mg/L	0.05949	0.13%
Ni 231.604†	16403.7	0.528400	mg/L	0.0067012	0.528400	mg/L	0.0067012	1.27%
Pb 220.353†	3786.2	0.535787	mg/L	0.0104898	0.535787	mg/L	0.0104898	1.96%
Sb 206.836†	599.6	0.269873	mg/L	0.0026422	0.269873	mg/L	0.0026422	0.98%
Se 196.026†	716.7	0.457021	mg/L	0.0102898	0.457021	mg/L	0.0102898	2.25%
Sn 189.927†	3094.2	0.446576	mg/L	0.0054683	0.446576	mg/L	0.0054683	1.22%
Ti 334.940†	469361.5	1.70901	mg/L	0.004063	1.70901	mg/L	0.004063	0.24%
Tl 190.801†	1077.1	0.502731	mg/L	0.0070645	0.502731	mg/L	0.0070645	1.41%
V 290.880†	37027.6	0.731374	mg/L	0.0024126	0.731374	mg/L	0.0024126	0.33%
Zn 206.200†	53087.0	0.954382	mg/L	0.0061508	0.954382	mg/L	0.0061508	0.64%
B 249.772	141180.6	0.775479	mg/L	0.0233647	0.775479	mg/L	0.0233647	3.01%
Si 251.611	110499.7	4.88348	mg/L	0.067980	4.88348	mg/L	0.067980	1.39%

Sequence No.: 23
Sample ID: AD18927-001 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 8/31/2020 6:29:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-001 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	409065.1	99.6	%	0.97				0.98%
Y 371.029	204286.5	112	%	0.9				0.84%
Ag 328.068†	7882.5	0.0845023	mg/L	0.00114269	0.0845023	mg/L	0.00114269	1.35%
Al 308.215†	513395.2	57.1063	mg/L	0.25406	57.1063	mg/L	0.25406	0.44%
As 188.979†	1113.3	0.508007	mg/L	0.0081879	0.508007	mg/L	0.0081879	1.61%
Ba 233.527†	65632.1	0.727855	mg/L	0.0035689	0.727855	mg/L	0.0035689	0.49%
Be 313.107†	602526.7	0.451380	mg/L	0.0031755	0.451380	mg/L	0.0031755	0.70%
Ca 317.933†	4987070.1	52.7880	mg/L	0.36451	52.7880	mg/L	0.36451	0.69%
Cd 228.802†	14964.1	0.460794	mg/L	0.0063761	0.460794	mg/L	0.0063761	1.38%
Co 228.616†	14219.6	0.478537	mg/L	0.0063517	0.478537	mg/L	0.0063517	1.33%
Cr 267.716†	37493.7	0.544493	mg/L	0.0026701	0.544493	mg/L	0.0026701	0.49%
Cu 327.393†	33694.1	0.482295	mg/L	0.0020296	0.482295	mg/L	0.0020296	0.42%
Fe 273.955†	1566221.1	167.494	mg/L	0.9601	167.494	mg/L	0.9601	0.57%
K 404.721†	24295.8	-370.563	mg/L	21.8875	-370.563	mg/L	21.8875	5.91%
Mg 279.077†	630974.9	54.6771	mg/L	0.36057	54.6771	mg/L	0.36057	0.66%
Mn 257.610†	274383.7	0.932787	mg/L	0.0041322	0.932787	mg/L	0.0041322	0.44%
Mo 202.031†	5240.6	0.449950	mg/L	0.0054138	0.449950	mg/L	0.0054138	1.20%
Na 330.237†	19260.2	46.5092	mg/L	0.40923	46.5092	mg/L	0.40923	0.88%
Ni 231.604†	15324.2	0.493673	mg/L	0.0067070	0.493673	mg/L	0.0067070	1.36%
Pb 220.353†	3673.6	0.518076	mg/L	0.0071317	0.518076	mg/L	0.0071317	1.38%
Sb 206.836†	1041.6	0.464801	mg/L	0.0062000	0.464801	mg/L	0.0062000	1.33%
Se 196.026†	869.6	0.466998	mg/L	0.0127707	0.466998	mg/L	0.0127707	2.73%
Sn 189.927†	3107.2	0.449932	mg/L	0.0067094	0.449932	mg/L	0.0067094	1.49%
Ti 334.940†	399309.4	1.45403	mg/L	0.005725	1.45403	mg/L	0.005725	0.39%
Tl 190.801†	1071.9	0.497033	mg/L	0.0111024	0.497033	mg/L	0.0111024	2.23%
V 290.880†	32107.5	0.641073	mg/L	0.0033111	0.641073	mg/L	0.0033111	0.52%
Zn 206.200†	43106.2	0.773867	mg/L	0.0051896	0.773867	mg/L	0.0051896	0.67%
B 249.772	95444.0	0.629807	mg/L	0.0097771	0.629807	mg/L	0.0097771	1.55%
Si 251.611	86691.5	3.80800	mg/L	0.027896	3.80800	mg/L	0.027896	0.73%

Sequence No.: 24
Sample ID: AD18927-001 SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 8/31/2020 6:33:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-001 SD

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	411562.3	100	%	1.2				1.19%
Y 371.029	188237.9	103	%	1.3				1.29%
Ag 328.068†	-39.4	-0.0051118	mg/L	0.00085534	-0.0051118	mg/L	0.00085534	16.73%
Al 308.215†	95981.1	10.6803	mg/L	0.03883	10.6803	mg/L	0.03883	0.36%
As 188.979†	22.3	0.0148227	mg/L	0.00310735	0.0148227	mg/L	0.00310735	20.96%
Ba 233.527†	5435.9	0.0585763	mg/L	0.00061216	0.0585763	mg/L	0.00061216	1.05%
Be 313.107†	599.2	0.0019594	mg/L	0.00007066	0.0019594	mg/L	0.00007066	3.61%
Ca 317.933†	119886.0	1.01005	mg/L	0.002388	1.01005	mg/L	0.002388	0.24%
Cd 228.802†	6.3	-0.0024648	mg/L	0.00025017	-0.0024648	mg/L	0.00025017	10.15%
Co 228.616†	189.3	0.0078337	mg/L	0.00018881	0.0078337	mg/L	0.00018881	2.41%
Cr 267.716†	1484.5	0.0149451	mg/L	0.00023791	0.0149451	mg/L	0.00023791	1.59%
Cu 327.393†	352.3	0.0057602	mg/L	0.00116373	0.0057602	mg/L	0.00116373	20.20%
Fe 273.955†	334120.4	35.7280	mg/L	0.08501	35.7280	mg/L	0.08501	0.24%
K 404.721†	4994.9	-95.3759	mg/L	18.66063	-95.3759	mg/L	18.66063	19.57%
Mg 279.077†	15884.2	1.14625	mg/L	0.004443	1.14625	mg/L	0.004443	0.39%
Mn 257.610†	29863.0	0.102227	mg/L	0.0002779	0.102227	mg/L	0.0002779	0.27%
Mo 202.031†	11.7	0.0021894	mg/L	0.00070080	0.0021894	mg/L	0.00070080	32.01%
Na 330.237†	-14.7	0.645922	mg/L	0.1273511	0.645922	mg/L	0.1273511	19.72%
Ni 231.604†	303.7	0.0104691	mg/L	0.00032801	0.0104691	mg/L	0.00032801	3.13%
Pb 220.353†	101.5	0.0144557	mg/L	0.00227093	0.0144557	mg/L	0.00227093	15.71%
Sb 206.836†	4.3	0.0018646	mg/L	0.00629484	0.0018646	mg/L	0.00629484	337.60%
Se 196.026†	-17.9	0.0098567	mg/L	0.00446335	0.0098567	mg/L	0.00446335	45.28%
Sn 189.927†	35.8	0.0054998	mg/L	0.00105859	0.0054998	mg/L	0.00105859	19.25%
Ti 334.940†	54923.6	0.200521	mg/L	0.0006394	0.200521	mg/L	0.0006394	0.32%
Tl 190.801†	-8.8	-0.0042241	mg/L	0.00093631	-0.0042241	mg/L	0.00093631	22.17%
V 290.880†	1920.2	0.0400912	mg/L	0.00077915	0.0400912	mg/L	0.00077915	1.94%
Zn 206.200†	4305.0	0.0721059	mg/L	0.00063957	0.0721059	mg/L	0.00063957	0.89%
B 249.772	13332.2	0.0379077	mg/L	0.00214383	0.0379077	mg/L	0.00214383	5.66%
Si 251.611	15332.8	0.644158	mg/L	0.0074875	0.644158	mg/L	0.0074875	1.16%

Sequence No.: 25
Sample ID: AD18927-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 8/31/2020 6:37:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-002

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	404256.0	98.4	%	0.30				0.30%
Y 371.029	199824.2	109	%	0.3				0.23%
Ag 328.068†	-283.6	-0.0078746	mg/L	0.00113293	-0.0078746	mg/L	0.00113293	14.39%
Al 308.215†	379765.5	42.2508	mg/L	0.13170	42.2508	mg/L	0.13170	0.31%
As 188.979†	197.8	0.111387	mg/L	0.0016936	0.111387	mg/L	0.0016936	1.52%
Ba 233.527†	15689.4	0.172577	mg/L	0.0016314	0.172577	mg/L	0.0016314	0.95%
Be 313.107†	2761.0	0.0035735	mg/L	0.00003019	0.0035735	mg/L	0.00003019	0.84%
Ca 317.933†	680013.1	6.96878	mg/L	0.013085	6.96878	mg/L	0.013085	0.19%
Cd 228.802†	23.3	-0.0019380	mg/L	0.00038378	-0.0019380	mg/L	0.00038378	19.80%
Co 228.616†	659.8	0.0236179	mg/L	0.00021629	0.0236179	mg/L	0.00021629	0.92%
Cr 267.716†	8402.1	0.116674	mg/L	0.0004496	0.116674	mg/L	0.0004496	0.39%
Cu 327.393†	2726.9	0.0396985	mg/L	0.00049934	0.0396985	mg/L	0.00049934	1.26%
Fe 273.955†	1890228.9	202.145	mg/L	0.3750	202.145	mg/L	0.3750	0.19%
K 404.721†	29565.3	-440.125	mg/L	17.0617	-440.125	mg/L	17.0617	3.88%
Mg 279.077†	82044.0	6.90409	mg/L	0.016397	6.90409	mg/L	0.016397	0.24%
Mn 257.610†	130624.1	0.444480	mg/L	0.0009795	0.444480	mg/L	0.0009795	0.22%
Mo 202.031†	-6.7	0.0006184	mg/L	0.00070290	0.0006184	mg/L	0.00070290	113.66%
Na 330.237†	182.8	1.11589	mg/L	0.129470	1.11589	mg/L	0.129470	11.60%
Ni 231.604†	1313.0	0.0429364	mg/L	0.00054809	0.0429364	mg/L	0.00054809	1.28%
Pb 220.353†	710.4	0.102451	mg/L	0.0025730	0.102451	mg/L	0.0025730	2.51%
Sb 206.836†	14.9	0.0065035	mg/L	0.00065958	0.0065035	mg/L	0.00065958	10.14%
Se 196.026†	-186.5	0.0168809	mg/L	0.00356304	0.0168809	mg/L	0.00356304	21.11%
Sn 189.927†	88.5	0.0091850	mg/L	0.00062852	0.0091850	mg/L	0.00062852	6.84%
Ti 334.940†	251993.0	0.917821	mg/L	0.0046983	0.917821	mg/L	0.0046983	0.51%
Tl 190.801†	-25.3	-0.0014790	mg/L	0.00354877	-0.0014790	mg/L	0.00354877	239.94%
V 290.880†	13034.7	0.251111	mg/L	0.0019252	0.251111	mg/L	0.0019252	0.77%
Zn 206.200†	15672.5	0.277700	mg/L	0.0019579	0.277700	mg/L	0.0019579	0.71%
B 249.772	73537.0	0.181147	mg/L	0.0093488	0.181147	mg/L	0.0093488	5.16%
Si 251.611	76975.1	3.37439	mg/L	0.017818	3.37439	mg/L	0.017818	0.53%

Sequence No.: 26
Sample ID: AD18927-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 8/31/2020 6:41:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-003

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	409157.3	99.6	%	0.31				0.31%
Y 371.029	183466.3	101	%	0.3				0.30%
Ag 328.068†	-90.8	-0.0056926	mg/L	0.00062214	-0.0056926	mg/L	0.00062214	10.93%
Al 308.215†	147515.2	16.4134	mg/L	0.01907	16.4134	mg/L	0.01907	0.12%
As 188.979†	28.3	0.0187777	mg/L	0.00204249	0.0187777	mg/L	0.00204249	10.88%
Ba 233.527†	3234.1	0.0340964	mg/L	0.00021906	0.0340964	mg/L	0.00021906	0.64%
Be 313.107†	344.3	0.0017691	mg/L	0.00001016	0.0017691	mg/L	0.00001016	0.57%
Ca 317.933†	146578.0	1.29401	mg/L	0.000904	1.29401	mg/L	0.000904	0.07%
Cd 228.802†	7.4	-0.0024311	mg/L	0.00039333	-0.0024311	mg/L	0.00039333	16.18%
Co 228.616†	209.0	0.0084954	mg/L	0.00030028	0.0084954	mg/L	0.00030028	3.53%
Cr 267.716†	4540.9	0.0598918	mg/L	0.00040193	0.0598918	mg/L	0.00040193	0.67%
Cu 327.393†	476.9	0.0075415	mg/L	0.00022015	0.0075415	mg/L	0.00022015	2.92%
Fe 273.955†	442104.0	47.2762	mg/L	0.16530	47.2762	mg/L	0.16530	0.35%
K 404.721†	6822.7	-117.523	mg/L	5.0760	-117.523	mg/L	5.0760	4.32%
Mg 279.077†	21538.9	1.63837	mg/L	0.005690	1.63837	mg/L	0.005690	0.35%
Mn 257.610†	24625.8	0.0844374	mg/L	0.00013909	0.0844374	mg/L	0.00013909	0.16%
Mo 202.031†	26.9	0.0034890	mg/L	0.00087293	0.0034890	mg/L	0.00087293	25.02%
Na 330.237†	17.2	0.721923	mg/L	0.1507061	0.721923	mg/L	0.1507061	20.88%
Ni 231.604†	350.8	0.0119848	mg/L	0.00008169	0.0119848	mg/L	0.00008169	0.68%
Pb 220.353†	125.8	0.0183751	mg/L	0.00133235	0.0183751	mg/L	0.00133235	7.25%
Sb 206.836†	3.3	0.0014312	mg/L	0.00445282	0.0014312	mg/L	0.00445282	311.13%
Se 196.026†	-40.3	0.0055899	mg/L	0.00344857	0.0055899	mg/L	0.00344857	61.69%
Sn 189.927†	86.5	0.0118974	mg/L	0.00083224	0.0118974	mg/L	0.00083224	7.00%
Ti 334.940†	106168.6	0.387044	mg/L	0.0004517	0.387044	mg/L	0.0004517	0.12%
Tl 190.801†	-5.1	0.0003731	mg/L	0.00342571	0.0003731	mg/L	0.00342571	918.06%
V 290.880†	4911.3	0.0991757	mg/L	0.00090835	0.0991757	mg/L	0.00090835	0.92%
Zn 206.200†	2231.9	0.0346118	mg/L	0.00010716	0.0346118	mg/L	0.00010716	0.31%
B 249.772	17237.9	0.0440788	mg/L	0.00111178	0.0440788	mg/L	0.00111178	2.52%
Si 251.611	71598.8	3.08044	mg/L	0.007498	3.08044	mg/L	0.007498	0.24%

Sequence No.: 27
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 8/31/2020 6:45:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	396306.9	96.5	%	0.32				0.34%
Y 371.029	148627.8	81.4	%	0.23				0.28%
Ag 328.068†	6805.8	0.0723231	mg/L	0.00072456	0.0723231	mg/L	0.00072456	1.00%
QC value less than the lower limit for Ag 328.068 Recovery = 72.32%								
Al 308.215†	44292.9	4.91860	mg/L	0.001747	4.91860	mg/L	0.001747	0.04%
QC value within limits for Al 308.215 Recovery = 98.37%								
As 188.979†	1125.1	0.494160	mg/L	0.0092437	0.494160	mg/L	0.0092437	1.87%
QC value within limits for As 188.979 Recovery = 98.83%								
Ba 233.527†	44225.6	0.489852	mg/L	0.0012286	0.489852	mg/L	0.0012286	0.25%
QC value within limits for Ba 233.527 Recovery = 97.97%								
Be 313.107†	647872.9	0.485237	mg/L	0.0022856	0.485237	mg/L	0.0022856	0.47%
QC value within limits for Be 313.107 Recovery = 97.05%								
Ca 317.933†	4869235.3	51.5344	mg/L	0.23551	51.5344	mg/L	0.23551	0.46%
QC value within limits for Ca 317.933 Recovery = 103.07%								
Cd 228.802†	16674.3	0.513761	mg/L	0.0053964	0.513761	mg/L	0.0053964	1.05%
QC value within limits for Cd 228.802 Recovery = 102.75%								
Co 228.616†	14748.5	0.496280	mg/L	0.0057332	0.496280	mg/L	0.0057332	1.16%
QC value within limits for Co 228.616 Recovery = 99.26%								
Cr 267.716†	36215.9	0.525701	mg/L	0.0061391	0.525701	mg/L	0.0061391	1.17%
QC value within limits for Cr 267.716 Recovery = 105.14%								
Cu 327.393†	34701.2	0.496690	mg/L	0.0008899	0.496690	mg/L	0.0008899	0.18%
QC value within limits for Cu 327.393 Recovery = 99.34%								
Fe 273.955†	46979.2	5.01993	mg/L	0.010460	5.01993	mg/L	0.010460	0.21%
QC value within limits for Fe 273.955 Recovery = 100.40%								
K 404.721†	5042.5	34.5245	mg/L	6.07626	34.5245	mg/L	6.07626	17.60%
QC value less than the lower limit for K 404.721 Recovery = 69.05%								
Mg 279.077†	591032.7	51.2010	mg/L	0.01930	51.2010	mg/L	0.01930	0.04%
QC value within limits for Mg 279.077 Recovery = 102.40%								
Mn 257.610†	145242.1	0.494133	mg/L	0.0005067	0.494133	mg/L	0.0005067	0.10%
QC value within limits for Mn 257.610 Recovery = 98.83%								
Mo 202.031†	5733.4	0.492148	mg/L	0.0059226	0.492148	mg/L	0.0059226	1.20%
QC value within limits for Mo 202.031 Recovery = 98.43%								
Na 330.237†	20500.4	49.4600	mg/L	0.27094	49.4600	mg/L	0.27094	0.55%
QC value within limits for Na 330.237 Recovery = 98.92%								
Ni 231.604†	15461.5	0.498090	mg/L	0.0055344	0.498090	mg/L	0.0055344	1.11%
QC value within limits for Ni 231.604 Recovery = 99.62%								
Pb 220.353†	3571.7	0.499076	mg/L	0.0052582	0.499076	mg/L	0.0052582	1.05%
QC value within limits for Pb 220.353 Recovery = 99.82%								
Sb 206.836†	1068.8	0.477325	mg/L	0.0235324	0.477325	mg/L	0.0235324	4.93%
QC value within limits for Sb 206.836 Recovery = 95.46%								
Se 196.026†	1103.5	0.490756	mg/L	0.0076133	0.490756	mg/L	0.0076133	1.55%
QC value within limits for Se 196.026 Recovery = 98.15%								
Sn 189.927†	3382.5	0.495829	mg/L	0.0072651	0.495829	mg/L	0.0072651	1.47%
QC value within limits for Sn 189.927 Recovery = 99.17%								
Ti 334.940†	136681.6	0.498106	mg/L	0.0005221	0.498106	mg/L	0.0005221	0.10%
QC value within limits for Ti 334.940 Recovery = 99.62%								
Tl 190.801†	1114.4	0.504295	mg/L	0.0024784	0.504295	mg/L	0.0024784	0.49%
QC value within limits for Tl 190.801 Recovery = 100.86%								
V 290.880†	24103.9	0.492572	mg/L	0.0019189	0.492572	mg/L	0.0019189	0.39%
QC value within limits for V 290.880 Recovery = 98.51%								
Zn 206.200†	29487.0	0.527550	mg/L	0.0050094	0.527550	mg/L	0.0050094	0.95%
QC value within limits for Zn 206.200 Recovery = 105.51%								
B 249.772	37041.6	0.495268	mg/L	0.0015126	0.495268	mg/L	0.0015126	0.31%
QC value within limits for B 249.772 Recovery = 99.05%								
Si 251.611	122425.2	5.28426	mg/L	0.025414	5.28426	mg/L	0.025414	0.48%
QC value within limits for Si 251.611 Recovery = 105.69%								

QC Failed. Continue with analysis.

Sequence No.: 28 **Autosampler Location:** 2
Sample ID: CCB V-333667 **Date Collected:** 8/31/2020 6:49:22 PM
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	411799.9	100	%	0.6				0.55%
Y 371.029	183582.0	101	%	0.5				0.54%
Ag 328.068†	-14.6	-0.0048317	mg/L	0.00034326	-0.0048317	mg/L	0.00034326	7.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	58.4	0.0090912	mg/L	0.00337407	0.0090912	mg/L	0.00337407	37.11%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	8.3	0.0045117	mg/L	0.00642327	0.0045117	mg/L	0.00642327	142.37%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-13.9	-0.0020166	mg/L	0.00016856	-0.0020166	mg/L	0.00016856	8.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	7.9	0.0015180	mg/L	0.00006162	0.0015180	mg/L	0.00006162	4.06%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	312.2	-0.261994	mg/L	0.0005861	-0.261994	mg/L	0.0005861	0.22%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	2.5	-0.0025835	mg/L	0.00011996	-0.0025835	mg/L	0.00011996	4.64%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-3.0	0.0013825	mg/L	0.00053324	0.0013825	mg/L	0.00053324	38.57%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3.6	-0.0069390	mg/L	0.00034390	-0.0069390	mg/L	0.00034390	4.96%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	138.5	0.0027041	mg/L	0.00048540	0.0027041	mg/L	0.00048540	17.95%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	13.6	-0.0027634	mg/L	0.00191103	-0.0027634	mg/L	0.00191103	69.16%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	129.8	-15.4196	mg/L	6.30900	-15.4196	mg/L	6.30900	40.92%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	-0.1	-0.236157	mg/L	0.0005376	-0.236157	mg/L	0.0005376	0.23%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-131.2	0.0003457	mg/L	0.00004447	0.0003457	mg/L	0.00004447	12.87%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	11.6	0.0021819	mg/L	0.00006308	0.0021819	mg/L	0.00006308	2.89%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-51.1	0.559327	mg/L	0.1266663	0.559327	mg/L	0.1266663	22.65%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	1.0	0.0007300	mg/L	0.00051006	0.0007300	mg/L	0.00051006	69.87%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-13.3	-0.0025749	mg/L	0.00080048	-0.0025749	mg/L	0.00080048	31.09%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	15.6	0.0068059	mg/L	0.00696520	0.0068059	mg/L	0.00696520	102.34%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	20.5	0.0093452	mg/L	0.00297278	0.0093452	mg/L	0.00297278	31.81%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-3.1	0.0009183	mg/L	0.00016318	0.0009183	mg/L	0.00016318	17.77%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	69.6	0.0008613	mg/L	0.00015795	0.0008613	mg/L	0.00015795	18.34%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.9	-0.0019127	mg/L	0.00170154	-0.0019127	mg/L	0.00170154	88.96%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	16.7	0.0044418	mg/L	0.00060539	0.0044418	mg/L	0.00060539	13.63%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-0.1	-0.0057563	mg/L	0.00020718	-0.0057563	mg/L	0.00020718	3.60%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	245.7	0.0049325	mg/L	0.00106938	0.0049325	mg/L	0.00106938	21.68%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-7.3	-0.0339493	mg/L	0.00078260	-0.0339493	mg/L	0.00078260	2.31%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 29
Sample ID: AD18927-004
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 31
Date Collected: 8/31/2020 6:53:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-004

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	399699.8	97.3	%	0.90				0.92%
Y 371.029	191449.2	105	%	1.0				0.91%
Ag 328.068†	-244.9	-0.0074361	mg/L	0.00062380	-0.0074361	mg/L	0.00062380	8.39%
Al 308.215†	427667.2	47.5797	mg/L	0.14535	47.5797	mg/L	0.14535	0.31%
As 188.979†	87.7	0.0542335	mg/L	0.00221709	0.0542335	mg/L	0.00221709	4.09%
Ba 233.527†	18239.8	0.200933	mg/L	0.0007438	0.200933	mg/L	0.0007438	0.37%
Be 313.107†	1762.6	0.0028281	mg/L	0.00004490	0.0028281	mg/L	0.00004490	1.59%
Ca 317.933†	664617.4	6.80500	mg/L	0.003452	6.80500	mg/L	0.003452	0.05%
Cd 228.802†	14.8	-0.0022025	mg/L	0.00018923	-0.0022025	mg/L	0.00018923	8.59%
Co 228.616†	393.1	0.0146716	mg/L	0.00027446	0.0146716	mg/L	0.00027446	1.87%
Cr 267.716†	7631.8	0.105347	mg/L	0.0004445	0.105347	mg/L	0.0004445	0.42%
Cu 327.393†	1390.6	0.0205998	mg/L	0.00038774	0.0205998	mg/L	0.00038774	1.88%
Fe 273.955†	1191859.3	127.458	mg/L	0.3822	127.458	mg/L	0.3822	0.30%
K 404.721†	20239.9	-260.784	mg/L	7.9421	-260.784	mg/L	7.9421	3.05%
Mg 279.077†	54041.8	4.46708	mg/L	0.012118	4.46708	mg/L	0.012118	0.27%
Mn 257.610†	126533.1	0.430584	mg/L	0.0010320	0.430584	mg/L	0.0010320	0.24%
Mo 202.031†	28.8	0.0036549	mg/L	0.00054393	0.0036549	mg/L	0.00054393	14.88%
Na 330.237†	141.8	1.01831	mg/L	0.121075	1.01831	mg/L	0.121075	11.89%
Ni 231.604†	899.9	0.0296487	mg/L	0.00078800	0.0296487	mg/L	0.00078800	2.66%
Pb 220.353†	527.1	0.0773149	mg/L	0.00205727	0.0773149	mg/L	0.00205727	2.66%
Sb 206.836†	12.6	0.0055075	mg/L	0.00567265	0.0055075	mg/L	0.00567265	103.00%
Se 196.026†	-117.9	0.0104445	mg/L	0.00293045	0.0104445	mg/L	0.00293045	28.06%
Sn 189.927†	112.2	0.0139532	mg/L	0.00193768	0.0139532	mg/L	0.00193768	13.89%
Ti 334.940†	189801.3	0.691453	mg/L	0.0047148	0.691453	mg/L	0.0047148	0.68%
Tl 190.801†	-20.7	-0.0021740	mg/L	0.00303180	-0.0021740	mg/L	0.00303180	139.46%
V 290.880†	11967.3	0.234899	mg/L	0.0025604	0.234899	mg/L	0.0025604	1.09%
Zn 206.200†	10841.3	0.190321	mg/L	0.0014926	0.190321	mg/L	0.0014926	0.78%
B 249.772	44472.4	0.0885193	mg/L	0.00860093	0.0885193	mg/L	0.00860093	9.72%
Si 251.611	79436.7	3.45441	mg/L	0.080546	3.45441	mg/L	0.080546	2.33%

Sequence No.: 30
Sample ID: AD18927-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 8/31/2020 6:56:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-005

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	400009.7	97.4	%	0.65				0.67%
Y 371.029	194272.5	106	%	0.6				0.59%
Ag 328.068†	-295.6	-0.0080094	mg/L	0.00056728	-0.0080094	mg/L	0.00056728	7.08%
Al 308.215†	431311.3	47.9851	mg/L	0.12232	47.9851	mg/L	0.12232	0.25%
As 188.979†	95.6	0.0615427	mg/L	0.00280658	0.0615427	mg/L	0.00280658	4.56%
Ba 233.527†	20055.7	0.221123	mg/L	0.0024048	0.221123	mg/L	0.0024048	1.09%
Be 313.107†	1159.1	0.0023775	mg/L	0.00000881	0.0023775	mg/L	0.00000881	0.37%
Ca 317.933†	3339360.6	35.2594	mg/L	0.05120	35.2594	mg/L	0.05120	0.15%
Cd 228.802†	29.4	-0.0017494	mg/L	0.00050930	-0.0017494	mg/L	0.00050930	29.11%
Co 228.616†	674.0	0.0240945	mg/L	0.00017688	0.0240945	mg/L	0.00017688	0.73%
Cr 267.716†	8599.2	0.119573	mg/L	0.0010808	0.119573	mg/L	0.0010808	0.90%
Cu 327.393†	3330.1	0.0483197	mg/L	0.00061558	0.0483197	mg/L	0.00061558	1.27%
Fe 273.955†	1501946.5	160.620	mg/L	0.3369	160.620	mg/L	0.3369	0.21%
K 404.721†	24911.3	-332.735	mg/L	17.8477	-332.735	mg/L	17.8477	5.36%
Mg 279.077†	214216.0	18.4069	mg/L	0.04378	18.4069	mg/L	0.04378	0.24%
Mn 257.610†	166721.2	0.567091	mg/L	0.0010848	0.567091	mg/L	0.0010848	0.19%
Mo 202.031†	33.2	0.0040310	mg/L	0.00043961	0.0040310	mg/L	0.00043961	10.91%
Na 330.237†	220.1	1.20467	mg/L	0.071925	1.20467	mg/L	0.071925	5.97%
Ni 231.604†	1307.0	0.0427432	mg/L	0.00080087	0.0427432	mg/L	0.00080087	1.87%
Pb 220.353†	916.5	0.131796	mg/L	0.0022408	0.131796	mg/L	0.0022408	1.70%
Sb 206.836†	1.6	0.0006755	mg/L	0.00361423	0.0006755	mg/L	0.00361423	535.02%
Se 196.026†	-135.1	0.0176791	mg/L	0.00327957	0.0176791	mg/L	0.00327957	18.55%
Sn 189.927†	61.0	0.0032556	mg/L	0.00053532	0.0032556	mg/L	0.00053532	16.44%
Ti 334.940†	343212.1	1.24984	mg/L	0.004043	1.24984	mg/L	0.004043	0.32%
Tl 190.801†	-31.3	-0.0010421	mg/L	0.00095541	-0.0010421	mg/L	0.00095541	91.68%
V 290.880†	12086.2	0.235015	mg/L	0.0029471	0.235015	mg/L	0.0029471	1.25%
Zn 206.200†	45661.3	0.820079	mg/L	0.0021481	0.820079	mg/L	0.0021481	0.26%
B 249.772	58871.0	0.150354	mg/L	0.0058768	0.150354	mg/L	0.0058768	3.91%
Si 251.611	88693.3	3.87479	mg/L	0.032445	3.87479	mg/L	0.032445	0.84%

Sequence No.: 31
Sample ID: AD18927-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 8/31/2020 7:00:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-006

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	402917.0	98.1	%	0.96				0.98%
Y 371.029	189209.4	104	%	1.0				0.95%
Ag 328.068†	-51.1	-0.0052446	mg/L	0.00026784	-0.0052446	mg/L	0.00026784	5.11%
Al 308.215†	233194.6	25.9450	mg/L	0.02971	25.9450	mg/L	0.02971	0.11%
As 188.979†	54.7	0.0329988	mg/L	0.00580820	0.0329988	mg/L	0.00580820	17.60%
Ba 233.527†	8790.7	0.0958762	mg/L	0.00070473	0.0958762	mg/L	0.00070473	0.74%
Be 313.107†	196.0	0.0016584	mg/L	0.00002191	0.0016584	mg/L	0.00002191	1.32%
Ca 317.933†	882436.0	9.12219	mg/L	0.000720	9.12219	mg/L	0.000720	0.01%
Cd 228.802†	18.5	-0.0020869	mg/L	0.00030321	-0.0020869	mg/L	0.00030321	14.53%
Co 228.616†	388.0	0.0144984	mg/L	0.00034477	0.0144984	mg/L	0.00034477	2.38%
Cr 267.716†	5167.4	0.0691050	mg/L	0.00051544	0.0691050	mg/L	0.00051544	0.75%
Cu 327.393†	2084.1	0.0305113	mg/L	0.00067592	0.0305113	mg/L	0.00067592	2.22%
Fe 273.955†	652626.7	69.7904	mg/L	0.14485	69.7904	mg/L	0.14485	0.21%
K 404.721†	11128.0	-149.966	mg/L	18.4550	-149.966	mg/L	18.4550	12.31%
Mg 279.077†	61486.4	5.11498	mg/L	0.006349	5.11498	mg/L	0.006349	0.12%
Mn 257.610†	78938.8	0.268922	mg/L	0.0005065	0.268922	mg/L	0.0005065	0.19%
Mo 202.031†	46.6	0.0051786	mg/L	0.00120253	0.0051786	mg/L	0.00120253	23.22%
Na 330.237†	20.4	0.729556	mg/L	0.1637070	0.729556	mg/L	0.1637070	22.44%
Ni 231.604†	664.8	0.0220844	mg/L	0.00018590	0.0220844	mg/L	0.00018590	0.84%
Pb 220.353†	436.2	0.0626378	mg/L	0.00079520	0.0626378	mg/L	0.00079520	1.27%
Sb 206.836†	10.0	0.0044153	mg/L	0.00434054	0.0044153	mg/L	0.00434054	98.31%
Se 196.026†	-52.5	0.0109168	mg/L	0.00250845	0.0109168	mg/L	0.00250845	22.98%
Sn 189.927†	73.6	0.0082590	mg/L	0.00090963	0.0082590	mg/L	0.00090963	11.01%
Ti 334.940†	190994.4	0.695796	mg/L	0.0006921	0.695796	mg/L	0.0006921	0.10%
Tl 190.801†	-15.5	-0.0008923	mg/L	0.00243739	-0.0008923	mg/L	0.00243739	273.15%
V 290.880†	6536.9	0.130190	mg/L	0.0005979	0.130190	mg/L	0.0005979	0.46%
Zn 206.200†	13886.5	0.245398	mg/L	0.0007256	0.245398	mg/L	0.0007256	0.30%
B 249.772	25472.4	0.0647031	mg/L	0.00312462	0.0647031	mg/L	0.00312462	4.83%
Si 251.611	79317.5	3.42669	mg/L	0.029811	3.42669	mg/L	0.029811	0.87%

Sequence No.: 32
Sample ID: AD18927-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 8/31/2020 7:04:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-007

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	405611.2	98.7	%	0.94				0.95%
Y 371.029	194647.7	107	%	1.1				1.04%
Ag 328.068†	-167.1	-0.0065568	mg/L	0.00040041	-0.0065568	mg/L	0.00040041	6.11%
Al 308.215†	490643.0	54.5855	mg/L	0.04913	54.5855	mg/L	0.04913	0.09%
As 188.979†	88.2	0.0557260	mg/L	0.00319889	0.0557260	mg/L	0.00319889	5.74%
Ba 233.527†	26752.4	0.295580	mg/L	0.0027224	0.295580	mg/L	0.0027224	0.92%
Be 313.107†	-772.7	0.0009352	mg/L	0.00004489	0.0009352	mg/L	0.00004489	4.80%
Ca 317.933†	2072473.4	21.7820	mg/L	0.04086	21.7820	mg/L	0.04086	0.19%
Cd 228.802†	48.4	-0.0011614	mg/L	0.00016495	-0.0011614	mg/L	0.00016495	14.20%
Co 228.616†	699.4	0.0249479	mg/L	0.00063867	0.0249479	mg/L	0.00063867	2.56%
Cr 267.716†	8852.7	0.123301	mg/L	0.0009806	0.123301	mg/L	0.0009806	0.80%
Cu 327.393†	4064.6	0.0588173	mg/L	0.00184265	0.0588173	mg/L	0.00184265	3.13%
Fe 273.955†	1298484.0	138.861	mg/L	0.2490	138.861	mg/L	0.2490	0.18%
K 404.721†	19905.5	-313.603	mg/L	9.8125	-313.603	mg/L	9.8125	3.13%
Mg 279.077†	150329.0	12.8469	mg/L	0.03489	12.8469	mg/L	0.03489	0.27%
Mn 257.610†	215529.3	0.732877	mg/L	0.0006681	0.732877	mg/L	0.0006681	0.09%
Mo 202.031†	111.1	0.0107042	mg/L	0.00039340	0.0107042	mg/L	0.00039340	3.68%
Na 330.237†	274.4	1.33381	mg/L	0.037774	1.33381	mg/L	0.037774	2.83%
Ni 231.604†	1103.5	0.0361990	mg/L	0.00057398	0.0361990	mg/L	0.00057398	1.59%
Pb 220.353†	2008.9	0.285123	mg/L	0.0025521	0.285123	mg/L	0.0025521	0.90%
Sb 206.836†	16.0	0.0071326	mg/L	0.00564393	0.0071326	mg/L	0.00564393	79.13%
Se 196.026†	-119.9	0.0144058	mg/L	0.00594059	0.0144058	mg/L	0.00594059	41.24%
Sn 189.927†	93.7	0.0049465	mg/L	0.00266667	0.0049465	mg/L	0.00266667	53.91%
Ti 334.940†	494212.8	1.79946	mg/L	0.000869	1.79946	mg/L	0.000869	0.05%
Tl 190.801†	-47.0	-0.0026491	mg/L	0.00135660	-0.0026491	mg/L	0.00135660	51.21%
V 290.880†	10870.7	0.212265	mg/L	0.0023403	0.212265	mg/L	0.0023403	1.10%
Zn 206.200†	23694.2	0.422780	mg/L	0.0044069	0.422780	mg/L	0.0044069	1.04%
B 249.772	52017.6	0.145758	mg/L	0.0066467	0.145758	mg/L	0.0066467	4.56%
Si 251.611	80009.9	3.49185	mg/L	0.020536	3.49185	mg/L	0.020536	0.59%

Sequence No.: 33
Sample ID: AD18927-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 8/31/2020 7:09:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-008

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	401872.5	97.8	%	0.73				0.75%
Y 371.029	209091.0	115	%	0.9				0.76%
Ag 328.068†	-330.0	-0.0083986	mg/L	0.00002915	-0.0083986	mg/L	0.00002915	0.35%
Al 308.215†	416974.1	46.3901	mg/L	0.06068	46.3901	mg/L	0.06068	0.13%
As 188.979†	210.8	0.107751	mg/L	0.0012046	0.107751	mg/L	0.0012046	1.12%
Ba 233.527†	30590.2	0.338249	mg/L	0.0045429	0.338249	mg/L	0.0045429	1.34%
Be 313.107†	2768.3	0.0035790	mg/L	0.00003641	0.0035790	mg/L	0.00003641	1.02%
Ca 317.933†	1252184.7	13.0556	mg/L	0.01354	13.0556	mg/L	0.01354	0.10%
Cd 228.802†	75.5	-0.0003225	mg/L	0.00013310	-0.0003225	mg/L	0.00013310	41.27%
Co 228.616†	669.9	0.0239564	mg/L	0.00041281	0.0239564	mg/L	0.00041281	1.72%
Cr 267.716†	7016.0	0.0962904	mg/L	0.00108543	0.0962904	mg/L	0.00108543	1.13%
Cu 327.393†	6388.2	0.0920284	mg/L	0.00127340	0.0920284	mg/L	0.00127340	1.38%
Fe 273.955†	1138918.0	121.796	mg/L	0.0452	121.796	mg/L	0.0452	0.04%
K 404.721†	20017.3	-240.182	mg/L	19.3395	-240.182	mg/L	19.3395	8.05%
Mg 279.077†	84379.6	7.10735	mg/L	0.003604	7.10735	mg/L	0.003604	0.05%
Mn 257.610†	92472.5	0.314891	mg/L	0.0001609	0.314891	mg/L	0.0001609	0.05%
Mo 202.031†	32.9	0.0040063	mg/L	0.00110138	0.0040063	mg/L	0.00110138	27.49%
Na 330.237†	505.4	1.88336	mg/L	0.083364	1.88336	mg/L	0.083364	4.43%
Ni 231.604†	1705.2	0.0555539	mg/L	0.00074133	0.0555539	mg/L	0.00074133	1.33%
Pb 220.353†	3309.5	0.466200	mg/L	0.0047192	0.466200	mg/L	0.0047192	1.01%
Sb 206.836†	11.4	0.0049928	mg/L	0.00072984	0.0049928	mg/L	0.00072984	14.62%
Se 196.026†	-102.9	0.0139841	mg/L	0.00365318	0.0139841	mg/L	0.00365318	26.12%
Sn 189.927†	159.1	0.0198249	mg/L	0.00064405	0.0198249	mg/L	0.00064405	3.25%
Ti 334.940†	239466.9	0.872227	mg/L	0.0081921	0.872227	mg/L	0.0081921	0.94%
Tl 190.801†	-28.0	-0.0032758	mg/L	0.00308152	-0.0032758	mg/L	0.00308152	94.07%
V 290.880†	11501.6	0.225973	mg/L	0.0029827	0.225973	mg/L	0.0029827	1.32%
Zn 206.200†	22721.1	0.405181	mg/L	0.0051481	0.405181	mg/L	0.0051481	1.27%
B 249.772	45770.8	0.130037	mg/L	0.0031680	0.130037	mg/L	0.0031680	2.44%
Si 251.611	96194.1	4.18001	mg/L	0.047186	4.18001	mg/L	0.047186	1.13%

Sequence No.: 34
Sample ID: AD18927-009
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 36
Date Collected: 8/31/2020 7:13:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-009

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	401315.4	97.7	%	0.86				0.88%
Y 371.029	195852.8	107	%	1.0				0.93%
Ag 328.068†	-96.7	-0.0057600	mg/L	0.00024618	-0.0057600	mg/L	0.00024618	4.27%
Al 308.215†	343261.9	38.1898	mg/L	0.09060	38.1898	mg/L	0.09060	0.24%
As 188.979†	89.6	0.0496232	mg/L	0.00148252	0.0496232	mg/L	0.00148252	2.99%
Ba 233.527†	25135.8	0.277606	mg/L	0.0009782	0.277606	mg/L	0.0009782	0.35%
Be 313.107†	2322.7	0.0032463	mg/L	0.00004101	0.0032463	mg/L	0.00004101	1.26%
Ca 317.933†	528637.7	5.35842	mg/L	0.010332	5.35842	mg/L	0.010332	0.19%
Cd 228.802†	22.0	-0.0019792	mg/L	0.00037340	-0.0019792	mg/L	0.00037340	18.87%
Co 228.616†	413.2	0.0153450	mg/L	0.00066554	0.0153450	mg/L	0.00066554	4.34%
Cr 267.716†	5860.3	0.0792957	mg/L	0.00005169	0.0792957	mg/L	0.00005169	0.07%
Cu 327.393†	4189.7	0.0606060	mg/L	0.00055454	0.0606060	mg/L	0.00055454	0.91%
Fe 273.955†	752156.7	80.4345	mg/L	0.35357	80.4345	mg/L	0.35357	0.44%
K 404.721†	13570.6	-159.414	mg/L	13.3330	-159.414	mg/L	13.3330	8.36%
Mg 279.077†	44058.5	3.59823	mg/L	0.004887	3.59823	mg/L	0.004887	0.14%
Mn 257.610†	95798.6	0.326189	mg/L	0.0007136	0.326189	mg/L	0.0007136	0.22%
Mo 202.031†	29.7	0.0037303	mg/L	0.00062854	0.0037303	mg/L	0.00062854	16.85%
Na 330.237†	209.0	1.17813	mg/L	0.030119	1.17813	mg/L	0.030119	2.56%
Ni 231.604†	1003.6	0.0329825	mg/L	0.00057036	0.0329825	mg/L	0.00057036	1.73%
Pb 220.353†	2038.1	0.287710	mg/L	0.0042282	0.287710	mg/L	0.0042282	1.47%
Sb 206.836†	10.4	0.0045508	mg/L	0.00759879	0.0045508	mg/L	0.00759879	166.98%
Se 196.026†	-61.4	0.0124131	mg/L	0.00542122	0.0124131	mg/L	0.00542122	43.67%
Sn 189.927†	190.9	0.0263223	mg/L	0.00028355	0.0263223	mg/L	0.00028355	1.08%
Ti 334.940†	150911.2	0.549900	mg/L	0.0010567	0.549900	mg/L	0.0010567	0.19%
Tl 190.801†	-23.0	-0.0055263	mg/L	0.00389198	-0.0055263	mg/L	0.00389198	70.43%
V 290.880†	8172.7	0.162178	mg/L	0.0009082	0.162178	mg/L	0.0009082	0.56%
Zn 206.200†	10493.2	0.184026	mg/L	0.0012654	0.184026	mg/L	0.0012654	0.69%
B 249.772	28639.3	0.0643830	mg/L	0.00366143	0.0643830	mg/L	0.00366143	5.69%
Si 251.611	86667.1	3.74956	mg/L	0.051659	3.74956	mg/L	0.051659	1.38%

Sequence No.: 35
Sample ID: AD18927-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 8/31/2020 7:17:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-010

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	403704.9	98.3	%	0.37				0.38%
Y 371.029	191818.4	105	%	0.4				0.33%
Ag 328.068†	-177.5	-0.0066736	mg/L	0.00065924	-0.0066736	mg/L	0.00065924	9.88%
Al 308.215†	416072.5	46.2896	mg/L	0.12402	46.2896	mg/L	0.12402	0.27%
As 188.979†	89.4	0.0580550	mg/L	0.00238051	0.0580550	mg/L	0.00238051	4.10%
Ba 233.527†	29993.0	0.331609	mg/L	0.0021611	0.331609	mg/L	0.0021611	0.65%
Be 313.107†	2938.3	0.0037059	mg/L	0.00002898	0.0037059	mg/L	0.00002898	0.78%
Ca 317.933†	1179274.2	12.2800	mg/L	0.01230	12.2800	mg/L	0.01230	0.10%
Cd 228.802†	21.1	-0.0020074	mg/L	0.00047004	-0.0020074	mg/L	0.00047004	23.41%
Co 228.616†	504.6	0.0184116	mg/L	0.00017977	0.0184116	mg/L	0.00017977	0.98%
Cr 267.716†	8915.0	0.124217	mg/L	0.0011525	0.124217	mg/L	0.0011525	0.93%
Cu 327.393†	4108.9	0.0594517	mg/L	0.00124078	0.0594517	mg/L	0.00124078	2.09%
Fe 273.955†	1444048.0	154.428	mg/L	0.3083	154.428	mg/L	0.3083	0.20%
K 404.721†	23966.8	-320.347	mg/L	17.7904	-320.347	mg/L	17.7904	5.55%
Mg 279.077†	62903.6	5.23831	mg/L	0.012548	5.23831	mg/L	0.012548	0.24%
Mn 257.610†	282558.4	0.960554	mg/L	0.0023284	0.960554	mg/L	0.0023284	0.24%
Mo 202.031†	133.2	0.0125972	mg/L	0.00050448	0.0125972	mg/L	0.00050448	4.00%
Na 330.237†	401.3	1.63566	mg/L	0.054426	1.63566	mg/L	0.054426	3.33%
Ni 231.604†	956.7	0.0314757	mg/L	0.00095108	0.0314757	mg/L	0.00095108	3.02%
Pb 220.353†	2203.3	0.311541	mg/L	0.0030854	0.311541	mg/L	0.0030854	0.99%
Sb 206.836†	11.0	0.0049246	mg/L	0.00302989	0.0049246	mg/L	0.00302989	61.53%
Se 196.026†	-146.7	0.0106900	mg/L	0.00228580	0.0106900	mg/L	0.00228580	21.38%
Sn 189.927†	113.4	0.0142744	mg/L	0.00114533	0.0142744	mg/L	0.00114533	8.02%
Ti 334.940†	183017.5	0.666761	mg/L	0.0007246	0.666761	mg/L	0.0007246	0.11%
Tl 190.801†	-30.7	-0.0086746	mg/L	0.00495308	-0.0086746	mg/L	0.00495308	57.10%
V 290.880†	10593.1	0.205670	mg/L	0.0010875	0.205670	mg/L	0.0010875	0.53%
Zn 206.200†	19362.9	0.344444	mg/L	0.0022357	0.344444	mg/L	0.0022357	0.65%
B 249.772	57177.4	0.152619	mg/L	0.0014763	0.152619	mg/L	0.0014763	0.97%
Si 251.611	84539.0	3.68850	mg/L	0.067906	3.68850	mg/L	0.067906	1.84%

Sequence No.: 36
Sample ID: AD18927-011
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 8/31/2020 7:20:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-011

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	402057.7	97.9	%	0.37				0.38%
Y 371.029	203018.7	111	%	0.4				0.40%
Ag 328.068†	-333.5	-0.0084389	mg/L	0.00057739	-0.0084389	mg/L	0.00057739	6.84%
Al 308.215†	557711.5	62.0467	mg/L	0.17559	62.0467	mg/L	0.17559	0.28%
As 188.979†	195.9	0.106756	mg/L	0.0030354	0.106756	mg/L	0.0030354	2.84%
Ba 233.527†	23134.1	0.255350	mg/L	0.0014862	0.255350	mg/L	0.0014862	0.58%
Be 313.107†	3401.9	0.0040521	mg/L	0.00000580	0.0040521	mg/L	0.00000580	0.14%
Ca 317.933†	1214661.0	12.6565	mg/L	0.04691	12.6565	mg/L	0.04691	0.37%
Cd 228.802†	27.4	-0.0018112	mg/L	0.00045100	-0.0018112	mg/L	0.00045100	24.90%
Co 228.616†	656.4	0.0235041	mg/L	0.00056174	0.0235041	mg/L	0.00056174	2.39%
Cr 267.716†	9797.3	0.137192	mg/L	0.0007357	0.137192	mg/L	0.0007357	0.54%
Cu 327.393†	3301.8	0.0479159	mg/L	0.00076676	0.0479159	mg/L	0.00076676	1.60%
Fe 273.955†	1591543.0	170.202	mg/L	0.2468	170.202	mg/L	0.2468	0.15%
K 404.721†	26467.9	-350.531	mg/L	10.5899	-350.531	mg/L	10.5899	3.02%
Mg 279.077†	80809.7	6.79667	mg/L	0.031806	6.79667	mg/L	0.031806	0.47%
Mn 257.610†	98727.3	0.336137	mg/L	0.0004835	0.336137	mg/L	0.0004835	0.14%
Mo 202.031†	164.0	0.0152355	mg/L	0.00080454	0.0152355	mg/L	0.00080454	5.28%
Na 330.237†	235.2	1.24057	mg/L	0.084707	1.24057	mg/L	0.084707	6.83%
Ni 231.604†	1244.6	0.0407376	mg/L	0.00052546	0.0407376	mg/L	0.00052546	1.29%
Pb 220.353†	735.4	0.107754	mg/L	0.0010982	0.107754	mg/L	0.0010982	1.02%
Sb 206.836†	16.0	0.0071624	mg/L	0.00050936	0.0071624	mg/L	0.00050936	7.11%
Se 196.026†	-157.8	0.0135474	mg/L	0.00953528	0.0135474	mg/L	0.00953528	70.38%
Sn 189.927†	70.4	0.0067624	mg/L	0.00231695	0.0067624	mg/L	0.00231695	34.26%
Ti 334.940†	240755.3	0.876917	mg/L	0.0010343	0.876917	mg/L	0.0010343	0.12%
Tl 190.801†	-26.2	-0.0018461	mg/L	0.00438137	-0.0018461	mg/L	0.00438137	237.33%
V 290.880†	13765.5	0.268114	mg/L	0.0018516	0.268114	mg/L	0.0018516	0.69%
Zn 206.200†	16532.8	0.293260	mg/L	0.0010759	0.293260	mg/L	0.0010759	0.37%
B 249.772	63453.1	0.174093	mg/L	0.0065304	0.174093	mg/L	0.0065304	3.75%
Si 251.611	85180.2	3.72068	mg/L	0.010597	3.72068	mg/L	0.010597	0.28%

Sequence No.: 37
Sample ID: AD18927-012
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 8/31/2020 7:25:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18927-012

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	403457.6	98.2	%	0.80				0.82%
Y 371.029	201215.1	110	%	0.8				0.76%
Ag 328.068†	-290.4	-0.0079513	mg/L	0.00029205	-0.0079513	mg/L	0.00029205	3.67%
Al 308.215†	506789.3	56.3819	mg/L	0.12315	56.3819	mg/L	0.12315	0.22%
As 188.979†	108.5	0.0693883	mg/L	0.00440372	0.0693883	mg/L	0.00440372	6.35%
Ba 233.527†	26124.0	0.288593	mg/L	0.0018699	0.288593	mg/L	0.0018699	0.65%
Be 313.107†	1710.5	0.0027892	mg/L	0.00000972	0.0027892	mg/L	0.00000972	0.35%
Ca 317.933†	2706815.1	28.5302	mg/L	0.05698	28.5302	mg/L	0.05698	0.20%
Cd 228.802†	57.6	-0.0008754	mg/L	0.00051853	-0.0008754	mg/L	0.00051853	59.23%
Co 228.616†	794.3	0.0281314	mg/L	0.00088799	0.0281314	mg/L	0.00088799	3.16%
Cr 267.716†	8496.9	0.118069	mg/L	0.0007665	0.118069	mg/L	0.0007665	0.65%
Cu 327.393†	4625.2	0.0668303	mg/L	0.00051603	0.0668303	mg/L	0.00051603	0.77%
Fe 273.955†	1676862.2	179.326	mg/L	0.5558	179.326	mg/L	0.5558	0.31%
K 404.721†	27299.3	-376.896	mg/L	30.8217	-376.896	mg/L	30.8217	8.18%
Mg 279.077†	212013.4	18.2152	mg/L	0.03578	18.2152	mg/L	0.03578	0.20%
Mn 257.610†	153667.2	0.522751	mg/L	0.0006949	0.522751	mg/L	0.0006949	0.13%
Mo 202.031†	21.5	0.0030340	mg/L	0.00056531	0.0030340	mg/L	0.00056531	18.63%
Na 330.237†	912.9	2.85302	mg/L	0.084248	2.85302	mg/L	0.084248	2.95%
Ni 231.604†	1662.7	0.0541865	mg/L	0.00057546	0.0541865	mg/L	0.00057546	1.06%
Pb 220.353†	2340.6	0.331657	mg/L	0.0054207	0.331657	mg/L	0.0054207	1.63%
Sb 206.836†	6.3	0.0027449	mg/L	0.00724914	0.0027449	mg/L	0.00724914	264.10%
Se 196.026†	-143.4	0.0235914	mg/L	0.00508201	0.0235914	mg/L	0.00508201	21.54%
Sn 189.927†	73.6	0.0057362	mg/L	0.00080661	0.0057362	mg/L	0.00080661	14.06%
Ti 334.940†	313262.6	1.14083	mg/L	0.002283	1.14083	mg/L	0.002283	0.20%
Tl 190.801†	-32.8	-0.0023108	mg/L	0.00730869	-0.0023108	mg/L	0.00730869	316.28%
V 290.880†	13806.8	0.268156	mg/L	0.0027017	0.268156	mg/L	0.0027017	1.01%
Zn 206.200†	25334.3	0.452444	mg/L	0.0030205	0.452444	mg/L	0.0030205	0.67%
B 249.772	65731.1	0.167739	mg/L	0.0090244	0.167739	mg/L	0.0090244	5.38%
Si 251.611	78598.4	3.44346	mg/L	0.054425	3.44346	mg/L	0.054425	1.58%

Sequence No.: 38
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 8/31/2020 7:29:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	402077.1	97.9	%	2.21				2.25%
Y 371.029	150799.5	82.6	%	2.08				2.51%
Ag 328.068†	6629.0	0.0703226	mg/L	0.00176304	0.0703226	mg/L	0.00176304	2.51%
QC value less than the lower limit for Ag 328.068 Recovery = 70.32%								
Al 308.215†	43787.5	4.86265	mg/L	0.085974	4.86265	mg/L	0.085974	1.77%
QC value within limits for Al 308.215 Recovery = 97.25%								
As 188.979†	1105.4	0.485548	mg/L	0.0119766	0.485548	mg/L	0.0119766	2.47%
QC value within limits for As 188.979 Recovery = 97.11%								
Ba 233.527†	43749.8	0.484562	mg/L	0.0067530	0.484562	mg/L	0.0067530	1.39%
QC value within limits for Ba 233.527 Recovery = 96.91%								
Be 313.107†	636356.8	0.476639	mg/L	0.0111260	0.476639	mg/L	0.0111260	2.33%
QC value within limits for Be 313.107 Recovery = 95.33%								
Ca 317.933†	4781181.6	50.5977	mg/L	1.18234	50.5977	mg/L	1.18234	2.34%
QC value within limits for Ca 317.933 Recovery = 101.20%								
Cd 228.802†	16303.7	0.502284	mg/L	0.0138165	0.502284	mg/L	0.0138165	2.75%
QC value within limits for Cd 228.802 Recovery = 100.46%								
Co 228.616†	14453.7	0.486391	mg/L	0.0126570	0.486391	mg/L	0.0126570	2.60%
QC value within limits for Co 228.616 Recovery = 97.28%								
Cr 267.716†	35524.3	0.515532	mg/L	0.0141677	0.515532	mg/L	0.0141677	2.75%
QC value within limits for Cr 267.716 Recovery = 103.11%								
Cu 327.393†	34140.3	0.488673	mg/L	0.0069697	0.488673	mg/L	0.0069697	1.43%
QC value within limits for Cu 327.393 Recovery = 97.73%								
Fe 273.955†	46423.3	4.96048	mg/L	0.065224	4.96048	mg/L	0.065224	1.31%
QC value within limits for Fe 273.955 Recovery = 99.21%								
K 404.721†	4302.5	24.0688	mg/L	31.80815	24.0688	mg/L	31.80815	132.16%
QC value less than the lower limit for K 404.721 Recovery = 48.14%								
Mg 279.077†	585317.9	50.7037	mg/L	0.76908	50.7037	mg/L	0.76908	1.52%
QC value within limits for Mg 279.077 Recovery = 101.41%								
Mn 257.610†	143532.8	0.488327	mg/L	0.0066091	0.488327	mg/L	0.0066091	1.35%
QC value within limits for Mn 257.610 Recovery = 97.67%								
Mo 202.031†	5596.9	0.480456	mg/L	0.0152939	0.480456	mg/L	0.0152939	3.18%
QC value within limits for Mo 202.031 Recovery = 96.09%								
Na 330.237†	20220.5	48.7942	mg/L	1.07922	48.7942	mg/L	1.07922	2.21%
QC value within limits for Na 330.237 Recovery = 97.59%								
Ni 231.604†	15174.4	0.488853	mg/L	0.0125840	0.488853	mg/L	0.0125840	2.57%
QC value within limits for Ni 231.604 Recovery = 97.77%								
Pb 220.353†	3514.2	0.491025	mg/L	0.0131890	0.491025	mg/L	0.0131890	2.69%
QC value within limits for Pb 220.353 Recovery = 98.21%								
Sb 206.836†	1044.5	0.466449	mg/L	0.0288048	0.466449	mg/L	0.0288048	6.18%
QC value within limits for Sb 206.836 Recovery = 93.29%								
Se 196.026†	1077.7	0.479291	mg/L	0.0115164	0.479291	mg/L	0.0115164	2.40%
QC value within limits for Se 196.026 Recovery = 95.86%								
Sn 189.927†	3315.6	0.486024	mg/L	0.0133307	0.486024	mg/L	0.0133307	2.74%
QC value within limits for Sn 189.927 Recovery = 97.20%								
Ti 334.940†	135064.5	0.492220	mg/L	0.0065046	0.492220	mg/L	0.0065046	1.32%
QC value within limits for Ti 334.940 Recovery = 98.44%								
Tl 190.801†	1093.7	0.494903	mg/L	0.0137718	0.494903	mg/L	0.0137718	2.78%
QC value within limits for Tl 190.801 Recovery = 98.98%								
V 290.880†	23742.2	0.485185	mg/L	0.0072140	0.485185	mg/L	0.0072140	1.49%
QC value within limits for V 290.880 Recovery = 97.04%								
Zn 206.200†	28874.5	0.516473	mg/L	0.0131934	0.516473	mg/L	0.0131934	2.55%
QC value within limits for Zn 206.200 Recovery = 103.29%								
B 249.772	37082.8	0.496059	mg/L	0.0048997	0.496059	mg/L	0.0048997	0.99%
QC value within limits for B 249.772 Recovery = 99.21%								
Si 251.611	122683.7	5.29513	mg/L	0.055696	5.29513	mg/L	0.055696	1.05%
QC value within limits for Si 251.611 Recovery = 105.90%								

QC Failed. Continue with analysis.

Sequence No.: 39
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 8/31/2020 7:34:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	409794.6	99.7	%	0.74				0.74%
Y 371.029	182628.1	100	%	0.7				0.74%
Ag 328.068†	2.1	-0.0046418	mg/L	0.00052213	-0.0046418	mg/L	0.00052213	11.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	11.0	0.0038275	mg/L	0.00297483	0.0038275	mg/L	0.00297483	77.72%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-3.6	-0.0007235	mg/L	0.00084528	-0.0007235	mg/L	0.00084528	116.84%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	6.7	-0.0017876	mg/L	0.00022777	-0.0017876	mg/L	0.00022777	12.74%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	37.3	0.0015399	mg/L	0.00002568	0.0015399	mg/L	0.00002568	1.67%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	357.3	-0.261514	mg/L	0.0010077	-0.261514	mg/L	0.0010077	0.39%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	2.9	-0.0025688	mg/L	0.00013549	-0.0025688	mg/L	0.00013549	5.27%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-4.1	0.0013438	mg/L	0.00033216	0.0013438	mg/L	0.00033216	24.72%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-4.3	-0.0069486	mg/L	0.00003322	-0.0069486	mg/L	0.00003322	0.48%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	19.1	0.0009986	mg/L	0.00120130	0.0009986	mg/L	0.00120130	120.30%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	17.5	-0.0023479	mg/L	0.00170989	-0.0023479	mg/L	0.00170989	72.83%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	787.3	-5.90878	mg/L	9.153013	-5.90878	mg/L	9.153013	154.91%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	5.4	-0.235672	mg/L	0.0034963	-0.235672	mg/L	0.0034963	1.48%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-107.8	0.0004252	mg/L	0.00002835	0.0004252	mg/L	0.00002835	6.67%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.6	0.0019285	mg/L	0.00088227	0.0019285	mg/L	0.00088227	45.75%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-55.2	0.549596	mg/L	0.0835505	0.549596	mg/L	0.0835505	15.20%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	1.9	0.0007588	mg/L	0.00058681	0.0007588	mg/L	0.00058681	77.33%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-2.2	-0.0010198	mg/L	0.00173328	-0.0010198	mg/L	0.00173328	169.97%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.7	0.0011210	mg/L	0.00517329	0.0011210	mg/L	0.00517329	461.50%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	11.4	0.0053105	mg/L	0.00123710	0.0053105	mg/L	0.00123710	23.30%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	8.1	0.0025660	mg/L	0.00257631	0.0025660	mg/L	0.00257631	100.40%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	60.7	0.0008291	mg/L	0.00032866	0.0008291	mg/L	0.00032866	39.64%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.3	-0.0033515	mg/L	0.00266640	-0.0033515	mg/L	0.00266640	79.56%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-12.3	0.0038585	mg/L	0.00015850	0.0038585	mg/L	0.00015850	4.11%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-11.7	-0.0059652	mg/L	0.00011378	-0.0059652	mg/L	0.00011378	1.91%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	182.9	0.0040606	mg/L	0.00036950	0.0040606	mg/L	0.00036950	9.10%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	7.8	-0.0333089	mg/L	0.00200981	-0.0333089	mg/L	0.00200981	6.03%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 40
Sample ID: MB 85228 (100)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 8/31/2020 7:37:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85228 (100)

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	408422.4	99.4	%	0.44				0.44%
Y 371.029	181455.9	99.4	%	0.53				0.53%
Ag 328.068†	45.0	-0.0041569	mg/L	0.00043896	-0.0041569	mg/L	0.00043896	10.56%
Al 308.215†	122.5	0.0162346	mg/L	0.00206088	0.0162346	mg/L	0.00206088	12.69%
As 188.979†	2.0	0.0017474	mg/L	0.00598130	0.0017474	mg/L	0.00598130	342.29%
Ba 233.527†	76.5	-0.0010114	mg/L	0.00002307	-0.0010114	mg/L	0.00002307	2.28%
Be 313.107†	-16.9	0.0014995	mg/L	0.00004608	0.0014995	mg/L	0.00004608	3.07%
Ca 317.933†	2011.8	-0.243913	mg/L	0.0005859	-0.243913	mg/L	0.0005859	0.24%
Cd 228.802†	16.2	-0.0021569	mg/L	0.00022471	-0.0021569	mg/L	0.00022471	10.42%
Co 228.616†	-17.2	0.0009049	mg/L	0.00013526	0.0009049	mg/L	0.00013526	14.95%
Cr 267.716†	29.8	-0.0064474	mg/L	0.00038203	-0.0064474	mg/L	0.00038203	5.93%
Cu 327.393†	100.0	0.0021549	mg/L	0.00040977	0.0021549	mg/L	0.00040977	19.02%
Fe 273.955†	295.2	0.0273599	mg/L	0.00099122	0.0273599	mg/L	0.00099122	3.62%
K 404.721†	-15.5	-17.6478	mg/L	8.97241	-17.6478	mg/L	8.97241	50.84%
Mg 279.077†	28.4	-0.233672	mg/L	0.0043864	-0.233672	mg/L	0.0043864	1.88%
Mn 257.610†	-207.9	0.0000851	mg/L	0.00004329	0.0000851	mg/L	0.00004329	50.86%
Mo 202.031†	8.0	0.0018767	mg/L	0.00075899	0.0018767	mg/L	0.00075899	40.44%
Na 330.237†	58.6	0.820424	mg/L	0.1756209	0.820424	mg/L	0.1756209	21.41%
Ni 231.604†	1.4	0.0007446	mg/L	0.00034059	0.0007446	mg/L	0.00034059	45.74%
Pb 220.353†	-6.9	-0.0016819	mg/L	0.00397800	-0.0016819	mg/L	0.00397800	236.52%
Sb 206.836†	5.8	0.0025144	mg/L	0.00296112	0.0025144	mg/L	0.00296112	117.77%
Se 196.026†	9.1	0.0042842	mg/L	0.00233674	0.0042842	mg/L	0.00233674	54.54%
Sn 189.927†	94.1	0.0152153	mg/L	0.00142734	0.0152153	mg/L	0.00142734	9.38%
Ti 334.940†	155.1	0.0011729	mg/L	0.00017208	0.0011729	mg/L	0.00017208	14.67%
Tl 190.801†	-6.3	-0.0055637	mg/L	0.00259377	-0.0055637	mg/L	0.00259377	46.62%
V 290.880†	-8.4	0.0039335	mg/L	0.00070648	0.0039335	mg/L	0.00070648	17.96%
Zn 206.200†	155.0	-0.0029508	mg/L	0.00031085	-0.0029508	mg/L	0.00031085	10.53%
B 249.772	74.5	0.0024346	mg/L	0.00008320	0.0024346	mg/L	0.00008320	3.42%
Si 251.611	340.8	-0.0188377	mg/L	0.00092039	-0.0188377	mg/L	0.00092039	4.89%

Sequence No.: 41
Sample ID: LCS 85228
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 8/31/2020 7:41:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 85228

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	402768.9	98.0	%	0.63				0.64%
Y 371.029	204160.2	112	%	0.6				0.56%
Ag 328.068†	68488.5	0.770092	mg/L	0.0011518	0.770092	mg/L	0.0011518	0.15%
Al 308.215†	676733.5	75.2527	mg/L	0.03880	75.2527	mg/L	0.03880	0.05%
As 188.979†	783.7	0.353086	mg/L	0.0024468	0.353086	mg/L	0.0024468	0.69%
Ba 233.527†	600816.4	6.67820	mg/L	0.007935	6.67820	mg/L	0.007935	0.12%
Be 313.107†	1882986.2	1.40742	mg/L	0.001204	1.40742	mg/L	0.001204	0.09%
Ca 317.933†	15477423.3	164.386	mg/L	2.5713	164.386	mg/L	2.5713	1.56%
Cd 228.802†	45647.0	1.41108	mg/L	0.002203	1.41108	mg/L	0.002203	0.16%
Co 228.616†	59549.4	1.99931	mg/L	0.002123	1.99931	mg/L	0.002123	0.11%
Cr 267.716†	115729.9	1.69503	mg/L	0.001799	1.69503	mg/L	0.001799	0.11%
Cu 327.393†	109586.8	1.56699	mg/L	0.000199	1.56699	mg/L	0.000199	0.01%
Fe 273.955†	1221580.8	130.637	mg/L	0.3147	130.637	mg/L	0.3147	0.24%
K 404.721†	20320.1	-272.999	mg/L	10.4497	-272.999	mg/L	10.4497	3.83%
Mg 279.077†	638771.5	55.3557	mg/L	0.09942	55.3557	mg/L	0.09942	0.18%
Mn 257.610†	1330125.0	4.51881	mg/L	0.005137	4.51881	mg/L	0.005137	0.11%
Mo 202.031†	17558.8	1.50477	mg/L	0.004119	1.50477	mg/L	0.004119	0.27%
Na 330.237†	2695.5	7.09463	mg/L	0.161185	7.09463	mg/L	0.161185	2.27%
Ni 231.604†	12776.4	0.411712	mg/L	0.0003709	0.411712	mg/L	0.0003709	0.09%
Pb 220.353†	8352.6	1.17387	mg/L	0.000714	1.17387	mg/L	0.000714	0.06%
Sb 206.836†	829.0	0.384701	mg/L	0.0057877	0.384701	mg/L	0.0057877	1.50%
Se 196.026†	6038.6	2.74192	mg/L	0.007841	2.74192	mg/L	0.007841	0.29%
Sn 189.927†	7945.3	1.14858	mg/L	0.002355	1.14858	mg/L	0.002355	0.21%
Ti 334.940†	1010921.9	3.68019	mg/L	0.004401	3.68019	mg/L	0.004401	0.12%
Tl 190.801†	4055.5	1.86250	mg/L	0.007718	1.86250	mg/L	0.007718	0.41%
V 290.880†	110781.7	2.23190	mg/L	0.002584	2.23190	mg/L	0.002584	0.12%
Zn 206.200†	286987.9	5.18473	mg/L	0.017139	5.18473	mg/L	0.017139	0.33%
B 249.772	203036.7	2.27680	mg/L	0.014340	2.27680	mg/L	0.014340	0.63%
Si 251.611	94480.1	4.24472	mg/L	0.047509	4.24472	mg/L	0.047509	1.12%

Sequence No.: 42
Sample ID: LCS MR 85228
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 8/31/2020 7:46:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS MR 85228

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	409154.5	99.6	%	1.06				1.06%
Y 371.029	207213.9	114	%	1.1				0.99%
Ag 328.068†	68561.8	0.770921	mg/L	0.0031585	0.770921	mg/L	0.0031585	0.41%
Al 308.215†	680135.8	75.6313	mg/L	0.86193	75.6313	mg/L	0.86193	1.14%
As 188.979†	785.4	0.353845	mg/L	0.0027939	0.353845	mg/L	0.0027939	0.79%
Ba 233.527†	584595.1	6.49784	mg/L	0.028293	6.49784	mg/L	0.028293	0.44%
Be 313.107†	1875419.2	1.40177	mg/L	0.017633	1.40177	mg/L	0.017633	1.26%
Ca 317.933†	15086226.2	160.224	mg/L	1.6748	160.224	mg/L	1.6748	1.05%
Cd 228.802†	46128.1	1.42598	mg/L	0.006801	1.42598	mg/L	0.006801	0.48%
Co 228.616†	60012.2	2.01483	mg/L	0.010206	2.01483	mg/L	0.010206	0.51%
Cr 267.716†	117185.6	1.71643	mg/L	0.007718	1.71643	mg/L	0.007718	0.45%
Cu 327.393†	111091.5	1.58849	mg/L	0.006812	1.58849	mg/L	0.006812	0.43%
Fe 273.955†	1222668.7	130.753	mg/L	1.5131	130.753	mg/L	1.5131	1.16%
K 404.721†	18518.9	-299.548	mg/L	19.5271	-299.548	mg/L	19.5271	6.52%
Mg 279.077†	637056.0	55.2064	mg/L	0.58839	55.2064	mg/L	0.58839	1.07%
Mn 257.610†	1311131.5	4.45429	mg/L	0.054550	4.45429	mg/L	0.054550	1.22%
Mo 202.031†	17498.0	1.49957	mg/L	0.015057	1.49957	mg/L	0.015057	1.00%
Na 330.237†	2729.0	7.17426	mg/L	0.063974	7.17426	mg/L	0.063974	0.89%
Ni 231.604†	12827.5	0.413355	mg/L	0.0037503	0.413355	mg/L	0.0037503	0.91%
Pb 220.353†	8518.1	1.19705	mg/L	0.013633	1.19705	mg/L	0.013633	1.14%
Sb 206.836†	833.1	0.386468	mg/L	0.0058018	0.386468	mg/L	0.0058018	1.50%
Se 196.026†	6066.8	2.75476	mg/L	0.035213	2.75476	mg/L	0.035213	1.28%
Sn 189.927†	7946.4	1.14859	mg/L	0.009153	1.14859	mg/L	0.009153	0.80%
Ti 334.940†	1018362.4	3.70728	mg/L	0.053267	3.70728	mg/L	0.053267	1.44%
Tl 190.801†	4056.5	1.86402	mg/L	0.014644	1.86402	mg/L	0.014644	0.79%
V 290.880†	113111.1	2.27844	mg/L	0.007602	2.27844	mg/L	0.007602	0.33%
Zn 206.200†	293700.9	5.30614	mg/L	0.033728	5.30614	mg/L	0.033728	0.64%
B 249.772	211078.4	2.38777	mg/L	0.046857	2.38777	mg/L	0.046857	1.96%
Si 251.611	112238.7	5.01278	mg/L	0.083239	5.01278	mg/L	0.083239	1.66%

Sequence No.: 43
Sample ID: AD18955-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 8/31/2020 7:51:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	391507.0	95.3	%	0.48				0.51%
Y 371.029	198630.4	109	%	0.5				0.44%
Ag 328.068†	-320.9	-0.0082964	mg/L	0.00062060	-0.0082964	mg/L	0.00062060	7.48%
Al 308.215†	311328.7	34.6373	mg/L	0.10023	34.6373	mg/L	0.10023	0.29%
As 188.979†	100.2	0.0617689	mg/L	0.00233402	0.0617689	mg/L	0.00233402	3.78%
Ba 233.527†	70641.5	0.783552	mg/L	0.0022016	0.783552	mg/L	0.0022016	0.28%
Be 313.107†	1621.5	0.0027227	mg/L	0.00002572	0.0027227	mg/L	0.00002572	0.94%
Ca 317.933†	42394644.0	450.736	mg/L	2.3293	450.736	mg/L	2.3293	0.52%
Cd 228.802†	41.4	-0.0013793	mg/L	0.00019891	-0.0013793	mg/L	0.00019891	14.42%
Co 228.616†	1299.5	0.0450796	mg/L	0.00018251	0.0450796	mg/L	0.00018251	0.40%
Cr 267.716†	6223.3	0.0846339	mg/L	0.00048728	0.0846339	mg/L	0.00048728	0.58%
Cu 327.393†	16420.6	0.235416	mg/L	0.0013599	0.235416	mg/L	0.0013599	0.58%
Fe 273.955†	1355356.1	144.943	mg/L	0.5139	144.943	mg/L	0.5139	0.35%
K 404.721†	21976.5	-309.232	mg/L	12.6826	-309.232	mg/L	12.6826	4.10%
Mg 279.077†	555871.1	48.1409	mg/L	0.22030	48.1409	mg/L	0.22030	0.46%
Mn 257.610†	1894510.2	6.43585	mg/L	0.020664	6.43585	mg/L	0.020664	0.32%
Mo 202.031†	41.9	0.0047789	mg/L	0.00024139	0.0047789	mg/L	0.00024139	5.05%
Na 330.237†	300.1	1.39499	mg/L	0.092615	1.39499	mg/L	0.092615	6.64%
Ni 231.604†	4343.5	0.140427	mg/L	0.0005846	0.140427	mg/L	0.0005846	0.42%
Pb 220.353†	25403.7	3.55399	mg/L	0.019074	3.55399	mg/L	0.019074	0.54%
Sb 206.836†	58.1	0.0255860	mg/L	0.00515141	0.0255860	mg/L	0.00515141	20.13%
Se 196.026†	-88.4	0.0081810	mg/L	0.00350961	0.0081810	mg/L	0.00350961	42.90%
Sn 189.927†	1818.3	0.265812	mg/L	0.0017181	0.265812	mg/L	0.0017181	0.65%
Ti 334.940†	139435.4	0.508130	mg/L	0.0039243	0.508130	mg/L	0.0039243	0.77%
Tl 190.801†	-31.9	-0.0269050	mg/L	0.00133395	-0.0269050	mg/L	0.00133395	4.96%
V 290.880†	4253.9	0.0793534	mg/L	0.00014915	0.0793534	mg/L	0.00014915	0.19%
Zn 206.200†	33000.1	0.591088	mg/L	0.0031566	0.591088	mg/L	0.0031566	0.53%
B 249.772	51172.1	0.108758	mg/L	0.0028489	0.108758	mg/L	0.0028489	2.62%
Si 251.611	70742.3	3.16090	mg/L	0.023771	3.16090	mg/L	0.023771	0.75%

Sequence No.: 44
Sample ID: AD18955-001 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 8/31/2020 7:56:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-001 MR

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	394403.1	96.0	%	1.05				1.10%
Y 371.029	203218.3	111	%	1.2				1.12%
Ag 328.068†	-408.3	-0.0092848	mg/L	0.00033346	-0.0092848	mg/L	0.00033346	3.59%
Al 308.215†	379053.3	42.1714	mg/L	0.03516	42.1714	mg/L	0.03516	0.08%
As 188.979†	139.5	0.0829283	mg/L	0.00284996	0.0829283	mg/L	0.00284996	3.44%
Ba 233.527†	74618.8	0.827772	mg/L	0.0009159	0.827772	mg/L	0.0009159	0.11%
Be 313.107†	2277.1	0.0032122	mg/L	0.00002151	0.0032122	mg/L	0.00002151	0.67%
Ca 317.933†	43324318.8	460.626	mg/L	0.3503	460.626	mg/L	0.3503	0.08%
Cd 228.802†	41.0	-0.0013903	mg/L	0.00017241	-0.0013903	mg/L	0.00017241	12.40%
Co 228.616†	1453.7	0.0502510	mg/L	0.00071343	0.0502510	mg/L	0.00071343	1.42%
Cr 267.716†	8211.4	0.113870	mg/L	0.0021505	0.113870	mg/L	0.0021505	1.89%
Cu 327.393†	21200.1	0.303726	mg/L	0.0010007	0.303726	mg/L	0.0010007	0.33%
Fe 273.955†	1668843.4	178.469	mg/L	0.4816	178.469	mg/L	0.4816	0.27%
K 404.721†	27170.7	-375.148	mg/L	11.5610	-375.148	mg/L	11.5610	3.08%
Mg 279.077†	560840.3	48.5734	mg/L	0.02823	48.5734	mg/L	0.02823	0.06%
Mn 257.610†	1860222.9	6.31939	mg/L	0.008736	6.31939	mg/L	0.008736	0.14%
Mo 202.031†	100.1	0.0097595	mg/L	0.00040537	0.0097595	mg/L	0.00040537	4.15%
Na 330.237†	229.5	1.22690	mg/L	0.039243	1.22690	mg/L	0.039243	3.20%
Ni 231.604†	5158.6	0.166649	mg/L	0.0025130	0.166649	mg/L	0.0025130	1.51%
Pb 220.353†	16453.5	2.30339	mg/L	0.034052	2.30339	mg/L	0.034052	1.48%
Sb 206.836†	54.9	0.0242559	mg/L	0.00411511	0.0242559	mg/L	0.00411511	16.97%
Se 196.026†	-126.0	0.0075009	mg/L	0.00468390	0.0075009	mg/L	0.00468390	62.44%
Sn 189.927†	785.5	0.113614	mg/L	0.0010103	0.113614	mg/L	0.0010103	0.89%
Ti 334.940†	156770.7	0.571227	mg/L	0.0083032	0.571227	mg/L	0.0083032	1.45%
Tl 190.801†	-28.0	-0.0238101	mg/L	0.00480412	-0.0238101	mg/L	0.00480412	20.18%
V 290.880†	5480.3	0.101669	mg/L	0.0018341	0.101669	mg/L	0.0018341	1.80%
Zn 206.200†	38255.7	0.686141	mg/L	0.0019624	0.686141	mg/L	0.0019624	0.29%
B 249.772	62521.9	0.126831	mg/L	0.0117152	0.126831	mg/L	0.0117152	9.24%
Si 251.611	62621.6	2.82306	mg/L	0.056391	2.82306	mg/L	0.056391	2.00%

Sequence No.: 45
Sample ID: AD18955-002 MS 1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 8/31/2020 8:00:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-002 MS 1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	395649.5	96.3	%	0.70				0.72%
Y 371.029	209595.1	115	%	0.7				0.65%
Ag 328.068†	8933.3	0.0963892	mg/L	0.00024139	0.0963892	mg/L	0.00024139	0.25%
Al 308.215†	605695.1	67.3747	mg/L	0.19373	67.3747	mg/L	0.19373	0.29%
As 188.979†	1101.9	0.502178	mg/L	0.0051572	0.502178	mg/L	0.0051572	1.03%
Ba 233.527†	61022.5	0.676604	mg/L	0.0019011	0.676604	mg/L	0.0019011	0.28%
Be 313.107†	628423.7	0.470716	mg/L	0.0015274	0.470716	mg/L	0.0015274	0.32%
Ca 317.933†	27954242.8	297.117	mg/L	0.7931	297.117	mg/L	0.7931	0.27%
Cd 228.802†	15522.4	0.478086	mg/L	0.0027786	0.478086	mg/L	0.0027786	0.58%
Co 228.616†	15428.3	0.519086	mg/L	0.0040407	0.519086	mg/L	0.0040407	0.78%
Cr 267.716†	38183.9	0.554643	mg/L	0.0012372	0.554643	mg/L	0.0012372	0.22%
Cu 327.393†	45421.1	0.649902	mg/L	0.0013632	0.649902	mg/L	0.0013632	0.21%
Fe 273.955†	1497389.1	160.133	mg/L	0.2790	160.133	mg/L	0.2790	0.17%
K 404.721†	23131.2	-356.439	mg/L	9.6178	-356.439	mg/L	9.6178	2.70%
Mg 279.077†	1645542.6	142.974	mg/L	0.5755	142.974	mg/L	0.5755	0.40%
Mn 257.610†	760443.7	2.58378	mg/L	0.006167	2.58378	mg/L	0.006167	0.24%
Mo 202.031†	5145.7	0.441826	mg/L	0.0042360	0.441826	mg/L	0.0042360	0.96%
Na 330.237†	19800.5	47.7948	mg/L	0.16175	47.7948	mg/L	0.16175	0.34%
Ni 231.604†	19119.6	0.615768	mg/L	0.0054587	0.615768	mg/L	0.0054587	0.89%
Pb 220.353†	3834.9	0.541561	mg/L	0.0071778	0.541561	mg/L	0.0071778	1.33%
Sb 206.836†	573.1	0.258209	mg/L	0.0060361	0.258209	mg/L	0.0060361	2.34%
Se 196.026†	879.2	0.454419	mg/L	0.0046558	0.454419	mg/L	0.0046558	1.02%
Sn 189.927†	3043.1	0.443656	mg/L	0.0037826	0.443656	mg/L	0.0037826	0.85%
Ti 334.940†	247165.9	0.900251	mg/L	0.0155895	0.900251	mg/L	0.0155895	1.73%
Tl 190.801†	1086.3	0.492141	mg/L	0.0054008	0.492141	mg/L	0.0054008	1.10%
V 290.880†	28953.3	0.578346	mg/L	0.0080302	0.578346	mg/L	0.0080302	1.39%
Zn 206.200†	52201.3	0.938362	mg/L	0.0052756	0.938362	mg/L	0.0052756	0.56%
B 249.772	88875.3	0.569313	mg/L	0.0112204	0.569313	mg/L	0.0112204	1.97%
Si 251.611	112745.6	4.96683	mg/L	0.006271	4.96683	mg/L	0.006271	0.13%

Sequence No.: 46
Sample ID: AD18955-003 MS 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 8/31/2020 8:05:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-003 MS 2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	395006.0	96.1	%	0.87				0.91%
Y 371.029	207174.7	114	%	0.8				0.73%
Ag 328.068†	8870.6	0.0956802	mg/L	0.00104737	0.0956802	mg/L	0.00104737	1.09%
Al 308.215†	634990.0	70.6337	mg/L	0.03485	70.6337	mg/L	0.03485	0.05%
As 188.979†	1185.8	0.542671	mg/L	0.0053439	0.542671	mg/L	0.0053439	0.98%
Ba 233.527†	75718.6	0.840000	mg/L	0.0008858	0.840000	mg/L	0.0008858	0.11%
Be 313.107†	627729.5	0.470197	mg/L	0.0003957	0.470197	mg/L	0.0003957	0.08%
Ca 317.933†	35462241.3	376.988	mg/L	1.2300	376.988	mg/L	1.2300	0.33%
Cd 228.802†	15542.5	0.478709	mg/L	0.0067881	0.478709	mg/L	0.0067881	1.42%
Co 228.616†	15447.9	0.519745	mg/L	0.0068391	0.519745	mg/L	0.0068391	1.32%
Cr 267.716†	39237.6	0.570139	mg/L	0.0006295	0.570139	mg/L	0.0006295	0.11%
Cu 327.393†	47881.9	0.685073	mg/L	0.0005746	0.685073	mg/L	0.0005746	0.08%
Fe 273.955†	1782714.5	190.647	mg/L	0.2636	190.647	mg/L	0.2636	0.14%
K 404.721†	28391.8	-408.721	mg/L	2.5891	-408.721	mg/L	2.5891	0.63%
Mg 279.077†	1340869.5	116.459	mg/L	0.0806	116.459	mg/L	0.0806	0.07%
Mn 257.610†	1759951.0	5.97879	mg/L	0.009271	5.97879	mg/L	0.009271	0.16%
Mo 202.031†	5185.8	0.445256	mg/L	0.0041388	0.445256	mg/L	0.0041388	0.93%
Na 330.237†	19860.0	47.9363	mg/L	0.08782	47.9363	mg/L	0.08782	0.18%
Ni 231.604†	19069.4	0.614153	mg/L	0.0084893	0.614153	mg/L	0.0084893	1.38%
Pb 220.353†	3821.2	0.539940	mg/L	0.0056715	0.539940	mg/L	0.0056715	1.05%
Sb 206.836†	515.6	0.232899	mg/L	0.0088129	0.232899	mg/L	0.0088129	3.78%
Se 196.026†	857.4	0.455500	mg/L	0.0091954	0.455500	mg/L	0.0091954	2.02%
Sn 189.927†	2958.7	0.431919	mg/L	0.0042860	0.431919	mg/L	0.0042860	0.99%
Ti 334.940†	214753.2	0.782274	mg/L	0.0073876	0.782274	mg/L	0.0073876	0.94%
Tl 190.801†	1067.2	0.473641	mg/L	0.0067080	0.473641	mg/L	0.0067080	1.42%
V 290.880†	29486.1	0.586966	mg/L	0.0024403	0.586966	mg/L	0.0024403	0.42%
Zn 206.200†	57864.2	1.04078	mg/L	0.001194	1.04078	mg/L	0.001194	0.11%
B 249.772	97693.5	0.564800	mg/L	0.0117274	0.564800	mg/L	0.0117274	2.08%
Si 251.611	119500.4	5.29125	mg/L	0.167549	5.29125	mg/L	0.167549	3.17%

Sequence No.: 47
Sample ID: AD18955-002 PS
Analyst:
Initial Sample Wt: -001 CJA
Dilution:

Autosampler Location: 49
Date Collected: 8/31/2020 8:10:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-002 PS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	392969.1	95.6	%	0.11				0.12%
Y 371.029	196181.3	107	%	0.1				0.10%
Ag 328.068†	8321.3	0.0894665	mg/L	0.00032219	0.0894665	mg/L	0.00032219	0.36%
Al 308.215†	348516.4	38.7636	mg/L	0.07204	38.7636	mg/L	0.07204	0.19%
As 188.979†	1151.2	0.522191	mg/L	0.0025168	0.522191	mg/L	0.0025168	0.48%
Ba 233.527†	110161.4	1.22295	mg/L	0.002763	1.22295	mg/L	0.002763	0.23%
Be 313.107†	629675.6	0.471650	mg/L	0.0008090	0.471650	mg/L	0.0008090	0.17%
Ca 317.933†	45079918.9	479.302	mg/L	2.2369	479.302	mg/L	2.2369	0.47%
Cd 228.802†	15477.0	0.476681	mg/L	0.0006516	0.476681	mg/L	0.0006516	0.14%
Co 228.616†	14653.5	0.493092	mg/L	0.0018561	0.493092	mg/L	0.0018561	0.38%
Cr 267.716†	39241.3	0.570194	mg/L	0.0011136	0.570194	mg/L	0.0011136	0.20%
Cu 327.393†	48983.4	0.700816	mg/L	0.0016974	0.700816	mg/L	0.0016974	0.24%
Fe 273.955†	1367105.4	146.200	mg/L	0.4360	146.200	mg/L	0.4360	0.30%
K 404.721†	21151.8	-326.450	mg/L	4.6518	-326.450	mg/L	4.6518	1.42%
Mg 279.077†	1088711.9	94.5137	mg/L	0.32275	94.5137	mg/L	0.32275	0.34%
Mn 257.610†	1990664.8	6.76246	mg/L	0.014194	6.76246	mg/L	0.014194	0.21%
Mo 202.031†	5363.5	0.460474	mg/L	0.0015695	0.460474	mg/L	0.0015695	0.34%
Na 330.237†	20421.4	49.2721	mg/L	0.11282	49.2721	mg/L	0.11282	0.23%
Ni 231.604†	18251.6	0.587846	mg/L	0.0017187	0.587846	mg/L	0.0017187	0.29%
Pb 220.353†	27864.2	3.89836	mg/L	0.015514	3.89836	mg/L	0.015514	0.40%
Sb 206.836†	1117.1	0.498209	mg/L	0.0050450	0.498209	mg/L	0.0050450	1.01%
Se 196.026†	936.6	0.463187	mg/L	0.0021626	0.463187	mg/L	0.0021626	0.47%
Sn 189.927†	4833.7	0.706552	mg/L	0.0016642	0.706552	mg/L	0.0016642	0.24%
Ti 334.940†	264238.9	0.962394	mg/L	0.0054649	0.962394	mg/L	0.0054649	0.57%
Tl 190.801†	1092.0	0.484123	mg/L	0.0046324	0.484123	mg/L	0.0046324	0.96%
V 290.880†	27490.9	0.550279	mg/L	0.0002659	0.550279	mg/L	0.0002659	0.05%
Zn 206.200†	57219.7	1.02912	mg/L	0.004249	1.02912	mg/L	0.004249	0.41%
B 249.772	83990.7	0.559526	mg/L	0.0019959	0.559526	mg/L	0.0019959	0.36%
Si 251.611	81672.2	3.65468	mg/L	0.018775	3.65468	mg/L	0.018775	0.51%

Sequence No.: 48
Sample ID: AD18955-002 SD
Analyst:
Initial Sample Wt: .001 cpa
Dilution:

Autosampler Location: 50
Date Collected: 8/31/2020 8:14:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-002 SD

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	406962.0	99.0	%	0.61				0.62%
Y 371.029	185405.9	102	%	0.5				0.54%
Ag 328.068†	-41.0	-0.0051300	mg/L	0.00076484	-0.0051300	mg/L	0.00076484	14.91%
Al 308.215†	62396.3	6.94411	mg/L	0.011810	6.94411	mg/L	0.011810	0.17%
As 188.979†	19.2	0.0127847	mg/L	0.00122755	0.0127847	mg/L	0.00122755	9.60%
Ba 233.527†	14155.9	0.155528	mg/L	0.0005069	0.155528	mg/L	0.0005069	0.33%
Be 313.107†	312.8	0.0017456	mg/L	0.00007391	0.0017456	mg/L	0.00007391	4.23%
Ca 317.933†	8910164.6	94.5225	mg/L	1.09355	94.5225	mg/L	1.09355	1.16%
Cd 228.802†	12.4	-0.0022765	mg/L	0.00008280	-0.0022765	mg/L	0.00008280	3.64%
Co 228.616†	264.9	0.0103693	mg/L	0.00039096	0.0103693	mg/L	0.00039096	3.77%
Cr 267.716†	1277.1	0.0118943	mg/L	0.00031140	0.0118943	mg/L	0.00031140	2.62%
Cu 327.393†	3231.4	0.0469093	mg/L	0.00041305	0.0469093	mg/L	0.00041305	0.88%
Fe 273.955†	279455.6	29.8819	mg/L	0.06966	29.8819	mg/L	0.06966	0.23%
K 404.721†	3799.5	-88.0716	mg/L	5.86447	-88.0716	mg/L	5.86447	6.66%
Mg 279.077†	115010.2	9.77311	mg/L	0.017066	9.77311	mg/L	0.017066	0.17%
Mn 257.610†	384983.1	1.30846	mg/L	0.001393	1.30846	mg/L	0.001393	0.11%
Mo 202.031†	-6.7	0.0006134	mg/L	0.00054704	0.0006134	mg/L	0.00054704	89.18%
Na 330.237†	13.7	0.713452	mg/L	0.0550300	0.713452	mg/L	0.0550300	7.71%
Ni 231.604†	916.5	0.0301830	mg/L	0.00034580	0.0301830	mg/L	0.00034580	1.15%
Pb 220.353†	5142.2	0.718814	mg/L	0.0034301	0.718814	mg/L	0.0034301	0.48%
Sb 206.836†	8.3	0.0036083	mg/L	0.00391829	0.0036083	mg/L	0.00391829	108.59%
Se 196.026†	-0.8	0.0095257	mg/L	0.00374086	0.0095257	mg/L	0.00374086	39.27%
Sn 189.927†	322.8	0.0482532	mg/L	0.00016483	0.0482532	mg/L	0.00016483	0.34%
Ti 334.940†	28000.9	0.102527	mg/L	0.0036947	0.102527	mg/L	0.0036947	3.60%
Tl 190.801†	-7.7	-0.0083734	mg/L	0.00258174	-0.0083734	mg/L	0.00258174	30.83%
V 290.880†	418.4	0.0104140	mg/L	0.00029970	0.0104140	mg/L	0.00029970	2.88%
Zn 206.200†	7049.2	0.121737	mg/L	0.0006191	0.121737	mg/L	0.0006191	0.51%
B 249.772	10999.2	0.0298498	mg/L	0.00193301	0.0298498	mg/L	0.00193301	6.48%
Si 251.611	14162.8	0.606758	mg/L	0.0115313	0.606758	mg/L	0.0115313	1.90%

Sequence No.: 49
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 8/31/2020 8:18:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	407322.9	99.1	%	0.83				0.84%
Y 371.029	153173.5	83.9	%	0.63				0.75%
Ag 328.068†	6576.7	0.0697308	mg/L	0.00073506	0.0697308	mg/L	0.00073506	1.05%
QC value less than the lower limit for Ag 328.068 Recovery = 69.73%								
Al 308.215†	43604.2	4.84239	mg/L	0.018289	4.84239	mg/L	0.018289	0.38%
QC value within limits for Al 308.215 Recovery = 96.85%								
As 188.979†	1090.3	0.478948	mg/L	0.0039410	0.478948	mg/L	0.0039410	0.82%
QC value within limits for As 188.979 Recovery = 95.79%								
Ba 233.527†	43485.2	0.481620	mg/L	0.0012468	0.481620	mg/L	0.0012468	0.26%
QC value within limits for Ba 233.527 Recovery = 96.32%								
Be 313.107†	632498.7	0.473758	mg/L	0.0069709	0.473758	mg/L	0.0069709	1.47%
QC value within limits for Be 313.107 Recovery = 94.75%								
Ca 317.933†	4752121.8	50.2886	mg/L	0.70777	50.2886	mg/L	0.70777	1.41%
QC value within limits for Ca 317.933 Recovery = 100.58%								
Cd 228.802†	16114.9	0.496435	mg/L	0.0027241	0.496435	mg/L	0.0027241	0.55%
QC value within limits for Cd 228.802 Recovery = 99.29%								
Co 228.616†	14286.5	0.480780	mg/L	0.0027163	0.480780	mg/L	0.0027163	0.56%
QC value within limits for Co 228.616 Recovery = 96.16%								
Cr 267.716†	35013.1	0.508014	mg/L	0.0028930	0.508014	mg/L	0.0028930	0.57%
QC value within limits for Cr 267.716 Recovery = 101.60%								
Cu 327.393†	34084.1	0.487870	mg/L	0.0026389	0.487870	mg/L	0.0026389	0.54%
QC value within limits for Cu 327.393 Recovery = 97.57%								
Fe 273.955†	46322.3	4.94968	mg/L	0.005829	4.94968	mg/L	0.005829	0.12%
QC value within limits for Fe 273.955 Recovery = 98.99%								
K 404.721†	2853.2	3.14481	mg/L	11.379178	3.14481	mg/L	11.379178	361.84%
QC value less than the lower limit for K 404.721 Recovery = 6.29%								
Mg 279.077†	583333.1	50.5309	mg/L	0.13724	50.5309	mg/L	0.13724	0.27%
QC value within limits for Mg 279.077 Recovery = 101.06%								
Mn 257.610†	143193.9	0.487176	mg/L	0.0012561	0.487176	mg/L	0.0012561	0.26%
QC value within limits for Mn 257.610 Recovery = 97.44%								
Mo 202.031†	5534.8	0.475141	mg/L	0.0019794	0.475141	mg/L	0.0019794	0.42%
QC value within limits for Mo 202.031 Recovery = 95.03%								
Na 330.237†	20038.8	48.3618	mg/L	0.29616	48.3618	mg/L	0.29616	0.61%
QC value within limits for Na 330.237 Recovery = 96.72%								
Ni 231.604†	14989.7	0.482913	mg/L	0.0025237	0.482913	mg/L	0.0025237	0.52%
QC value within limits for Ni 231.604 Recovery = 96.58%								
Pb 220.353†	3472.3	0.485176	mg/L	0.0050843	0.485176	mg/L	0.0050843	1.05%
QC value within limits for Pb 220.353 Recovery = 97.04%								
Sb 206.836†	1030.9	0.460404	mg/L	0.0212071	0.460404	mg/L	0.0212071	4.61%
QC value within limits for Sb 206.836 Recovery = 92.08%								
Se 196.026†	1068.9	0.475378	mg/L	0.0034233	0.475378	mg/L	0.0034233	0.72%
QC value within limits for Se 196.026 Recovery = 95.08%								
Sn 189.927†	3278.9	0.480652	mg/L	0.0030228	0.480652	mg/L	0.0030228	0.63%
QC value within limits for Sn 189.927 Recovery = 96.13%								
Ti 334.940†	134513.0	0.490213	mg/L	0.0008771	0.490213	mg/L	0.0008771	0.18%
QC value within limits for Ti 334.940 Recovery = 98.04%								
Tl 190.801†	1083.5	0.490329	mg/L	0.0054905	0.490329	mg/L	0.0054905	1.12%
QC value within limits for Tl 190.801 Recovery = 98.07%								
V 290.880†	23592.9	0.482129	mg/L	0.0021371	0.482129	mg/L	0.0021371	0.44%
QC value within limits for V 290.880 Recovery = 96.43%								
Zn 206.200†	28654.8	0.512499	mg/L	0.0022317	0.512499	mg/L	0.0022317	0.44%
QC value within limits for Zn 206.200 Recovery = 102.50%								
B 249.772	37576.3	0.502932	mg/L	0.0060287	0.502932	mg/L	0.0060287	1.20%
QC value within limits for B 249.772 Recovery = 100.59%								
Si 251.611	123961.2	5.35031	mg/L	0.040009	5.35031	mg/L	0.040009	0.75%
QC value within limits for Si 251.611 Recovery = 107.01%								

QC Failed. Continue with analysis.

Sequence No.: 50 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 8/31/2020 8:22:54 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	409120.1	99.6	%	0.68				0.68%
Y 371.029	182162.9	99.8	%	0.60				0.61%
Ag 328.068†	28.5	-0.0043436	mg/L	0.00019117	-0.0043436	mg/L	0.00019117	4.40%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	44.0	0.0074904	mg/L	0.00472928	0.0074904	mg/L	0.00472928	63.14%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	5.0	0.0030888	mg/L	0.00200011	0.0030888	mg/L	0.00200011	64.75%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-5.0	-0.0019176	mg/L	0.00007783	-0.0019176	mg/L	0.00007783	4.06%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	14.9	0.0015232	mg/L	0.00001418	0.0015232	mg/L	0.00001418	0.93%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	363.4	-0.261449	mg/L	0.0009710	-0.261449	mg/L	0.0009710	0.37%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	1.6	-0.0026094	mg/L	0.00021574	-0.0026094	mg/L	0.00021574	8.27%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-9.1	0.0011776	mg/L	0.00064338	0.0011776	mg/L	0.00064338	54.63%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	8.0	-0.0067690	mg/L	0.00028787	-0.0067690	mg/L	0.00028787	4.25%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-18.7	0.0004577	mg/L	0.00138194	0.0004577	mg/L	0.00138194	301.91%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.0	-0.0043164	mg/L	0.00046962	-0.0043164	mg/L	0.00046962	10.88%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	1169.9	-0.364394	mg/L	7.9117664	-0.364394	mg/L	7.9117664	>999.9%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	-10.6	-0.237066	mg/L	0.0014437	-0.237066	mg/L	0.0014437	0.61%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-92.6	0.0004767	mg/L	0.00005183	0.0004767	mg/L	0.00005183	10.87%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	12.3	0.0022466	mg/L	0.00085468	0.0022466	mg/L	0.00085468	38.04%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-14.0	0.647719	mg/L	0.1270049	0.647719	mg/L	0.1270049	19.61%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-13.7	0.0002582	mg/L	0.00035535	0.0002582	mg/L	0.00035535	137.61%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-10.7	-0.0022037	mg/L	0.00066233	-0.0022037	mg/L	0.00066233	30.06%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	14.0	0.0061419	mg/L	0.00605807	0.0061419	mg/L	0.00605807	98.63%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	14.5	0.0066970	mg/L	0.00387202	0.0066970	mg/L	0.00387202	57.82%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	6.8	0.0023842	mg/L	0.00251275	0.0023842	mg/L	0.00251275	105.39%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	37.7	0.0007453	mg/L	0.00018522	0.0007453	mg/L	0.00018522	24.85%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.2	-0.0033091	mg/L	0.00085249	-0.0033091	mg/L	0.00085249	25.76%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	9.4	0.0042955	mg/L	0.00049743	0.0042955	mg/L	0.00049743	11.58%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-5.1	-0.0058461	mg/L	0.00029567	-0.0058461	mg/L	0.00029567	5.06%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	302.2	0.0057228	mg/L	0.00093598	0.0057228	mg/L	0.00093598	16.36%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	64.7	-0.0308444	mg/L	0.00177322	-0.0308444	mg/L	0.00177322	5.75%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 51
Sample ID: AD18934-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 8/31/2020 8:26:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18934-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	412040.9	100	%	0.5				0.46%
Y 371.029	240647.4	132	%	0.9				0.69%
Ag 328.068†	-303.3	-0.0080972	mg/L	0.00050341	-0.0080972	mg/L	0.00050341	6.22%
Al 308.215†	1006472.6	111.971	mg/L	0.2121	111.971	mg/L	0.2121	0.19%
As 188.979†	127.5	0.0895586	mg/L	0.00319694	0.0895586	mg/L	0.00319694	3.57%
Ba 233.527†	78001.4	0.865381	mg/L	0.0025343	0.865381	mg/L	0.0025343	0.29%
Be 313.107†	7766.9	0.0073111	mg/L	0.00002484	0.0073111	mg/L	0.00002484	0.34%
Ca 317.933†	3004072.9	31.6925	mg/L	0.04299	31.6925	mg/L	0.04299	0.14%
Cd 228.802†	70.0	-0.0004936	mg/L	0.00042923	-0.0004936	mg/L	0.00042923	86.96%
Co 228.616†	3687.4	0.125191	mg/L	0.0004412	0.125191	mg/L	0.0004412	0.35%
Cr 267.716†	11299.4	0.159282	mg/L	0.0010035	0.159282	mg/L	0.0010035	0.63%
Cu 327.393†	13153.5	0.188720	mg/L	0.0009215	0.188720	mg/L	0.0009215	0.49%
Fe 273.955†	2630067.4	281.266	mg/L	1.2503	281.266	mg/L	1.2503	0.44%
K 404.721†	41222.7	-604.385	mg/L	34.6338	-604.385	mg/L	34.6338	5.73%
Mg 279.077†	512297.9	44.3488	mg/L	0.04628	44.3488	mg/L	0.04628	0.10%
Mn 257.610†	1876536.9	6.37480	mg/L	0.014131	6.37480	mg/L	0.014131	0.22%
Mo 202.031†	19.6	0.0028680	mg/L	0.00125519	0.0028680	mg/L	0.00125519	43.76%
Na 330.237†	9.3	0.703139	mg/L	0.0449890	0.703139	mg/L	0.0449890	6.40%
Ni 231.604†	7769.0	0.250626	mg/L	0.0013204	0.250626	mg/L	0.0013204	0.53%
Pb 220.353†	1069.5	0.159011	mg/L	0.0014999	0.159011	mg/L	0.0014999	0.94%
Sb 206.836†	13.5	0.0059268	mg/L	0.00262720	0.0059268	mg/L	0.00262720	44.33%
Se 196.026†	-240.3	0.0307651	mg/L	0.00184215	0.0307651	mg/L	0.00184215	5.99%
Sn 189.927†	45.1	0.0041099	mg/L	0.00051429	0.0041099	mg/L	0.00051429	12.51%
Ti 334.940†	188728.1	0.687547	mg/L	0.0039257	0.687547	mg/L	0.0039257	0.57%
Tl 190.801†	-31.7	-0.0230125	mg/L	0.00420667	-0.0230125	mg/L	0.00420667	18.28%
V 290.880†	10210.7	0.189209	mg/L	0.0012730	0.189209	mg/L	0.0012730	0.67%
Zn 206.200†	64112.0	1.15378	mg/L	0.003147	1.15378	mg/L	0.003147	0.27%
B 249.772	102801.1	0.258132	mg/L	0.0096320	0.258132	mg/L	0.0096320	3.73%
Si 251.611	85634.6	3.82042	mg/L	0.021689	3.82042	mg/L	0.021689	0.57%

Sequence No.: 52
Sample ID: AD18934-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 8/31/2020 8:31:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18934-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	397306.1	96.7	%	0.84				0.87%
Y 371.029	214091.7	117	%	1.0				0.88%
Ag 328.068†	-428.7	-0.0095156	mg/L	0.00109860	-0.0095156	mg/L	0.00109860	11.55%
Al 308.215†	628061.4	69.8732	mg/L	0.19959	69.8732	mg/L	0.19959	0.29%
As 188.979†	288.9	0.149811	mg/L	0.0054671	0.149811	mg/L	0.0054671	3.65%
Ba 233.527†	30502.3	0.337272	mg/L	0.0015170	0.337272	mg/L	0.0015170	0.45%
Be 313.107†	3612.7	0.0042094	mg/L	0.00000691	0.0042094	mg/L	0.00000691	0.16%
Ca 317.933†	24924548.2	264.886	mg/L	2.0039	264.886	mg/L	2.0039	0.76%
Cd 228.802†	72.8	-0.0004068	mg/L	0.00030999	-0.0004068	mg/L	0.00030999	76.20%
Co 228.616†	2425.1	0.0828408	mg/L	0.00029669	0.0828408	mg/L	0.00029669	0.36%
Cr 267.716†	7749.0	0.107070	mg/L	0.0009271	0.107070	mg/L	0.0009271	0.87%
Cu 327.393†	12668.1	0.181783	mg/L	0.0002485	0.181783	mg/L	0.0002485	0.14%
Fe 273.955†	1756725.7	187.867	mg/L	0.2132	187.867	mg/L	0.2132	0.11%
K 404.721†	28103.7	-401.196	mg/L	22.3344	-401.196	mg/L	22.3344	5.57%
Mg 279.077†	1401861.6	121.767	mg/L	0.7601	121.767	mg/L	0.7601	0.62%
Mn 257.610†	705435.8	2.39694	mg/L	0.005499	2.39694	mg/L	0.005499	0.23%
Mo 202.031†	36.5	0.0043126	mg/L	0.00013655	0.0043126	mg/L	0.00013655	3.17%
Na 330.237†	267.3	1.31704	mg/L	0.003004	1.31704	mg/L	0.003004	0.23%
Ni 231.604†	5839.0	0.188538	mg/L	0.0007362	0.188538	mg/L	0.0007362	0.39%
Pb 220.353†	814.8	0.119569	mg/L	0.0023006	0.119569	mg/L	0.0023006	1.92%
Sb 206.836†	7.3	0.0031920	mg/L	0.00360516	0.0031920	mg/L	0.00360516	112.94%
Se 196.026†	-148.8	0.0126206	mg/L	0.00617815	0.0126206	mg/L	0.00617815	48.95%
Sn 189.927†	-29.1	-0.0063761	mg/L	0.00151490	-0.0063761	mg/L	0.00151490	23.76%
Ti 334.940†	168179.9	0.612755	mg/L	0.0109457	0.612755	mg/L	0.0109457	1.79%
Tl 190.801†	-19.3	-0.0089491	mg/L	0.01015897	-0.0089491	mg/L	0.01015897	113.52%
V 290.880†	6698.3	0.125329	mg/L	0.0021567	0.125329	mg/L	0.0021567	1.72%
Zn 206.200†	34349.3	0.615491	mg/L	0.0043344	0.615491	mg/L	0.0043344	0.70%
B 249.772	66985.7	0.149654	mg/L	0.0057952	0.149654	mg/L	0.0057952	3.87%
Si 251.611	109479.3	4.81754	mg/L	0.093852	4.81754	mg/L	0.093852	1.95%

Sequence No.: 53
Sample ID: AD18934-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 8/31/2020 8:36:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18934-003

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	391683.1	95.3	%	0.93				0.97%
Y 371.029	208292.5	114	%	1.0				0.86%
Ag 328.068†	-458.0	-0.0098474	mg/L	0.00084598	-0.0098474	mg/L	0.00084598	8.59%
Al 308.215†	644604.8	71.7137	mg/L	0.10835	71.7137	mg/L	0.10835	0.15%
As 188.979†	125.3	0.0778358	mg/L	0.00234777	0.0778358	mg/L	0.00234777	3.02%
Ba 233.527†	39653.0	0.439012	mg/L	0.0014710	0.439012	mg/L	0.0014710	0.34%
Be 313.107†	3690.6	0.0042676	mg/L	0.00002393	0.0042676	mg/L	0.00002393	0.56%
Ca 317.933†	37749961.8	401.325	mg/L	3.4410	401.325	mg/L	3.4410	0.86%
Cd 228.802†	17.6	-0.0021154	mg/L	0.00011860	-0.0021154	mg/L	0.00011860	5.61%
Co 228.616†	1986.4	0.0681255	mg/L	0.00059122	0.0681255	mg/L	0.00059122	0.87%
Cr 267.716†	7872.2	0.108882	mg/L	0.0011683	0.108882	mg/L	0.0011683	1.07%
Cu 327.393†	12867.0	0.184626	mg/L	0.0005392	0.184626	mg/L	0.0005392	0.29%
Fe 273.955†	1759148.8	188.126	mg/L	0.5410	188.126	mg/L	0.5410	0.29%
K 404.721†	27743.7	-407.495	mg/L	12.5517	-407.495	mg/L	12.5517	3.08%
Mg 279.077†	970159.9	84.1962	mg/L	0.31318	84.1962	mg/L	0.31318	0.37%
Mn 257.610†	1024050.5	3.47917	mg/L	0.007491	3.47917	mg/L	0.007491	0.22%
Mo 202.031†	-11.7	0.0001847	mg/L	0.00054105	0.0001847	mg/L	0.00054105	292.87%
Na 330.237†	332.7	1.47250	mg/L	0.062607	1.47250	mg/L	0.062607	4.25%
Ni 231.604†	5383.4	0.173880	mg/L	0.0028534	0.173880	mg/L	0.0028534	1.64%
Pb 220.353†	6308.7	0.887807	mg/L	0.0135628	0.887807	mg/L	0.0135628	1.53%
Sb 206.836†	8.1	0.0035005	mg/L	0.00360485	0.0035005	mg/L	0.00360485	102.98%
Se 196.026†	-149.1	0.0052165	mg/L	0.00325197	0.0052165	mg/L	0.00325197	62.34%
Sn 189.927†	-20.7	-0.0045876	mg/L	0.00149430	-0.0045876	mg/L	0.00149430	32.57%
Ti 334.940†	141800.8	0.516739	mg/L	0.0086975	0.516739	mg/L	0.0086975	1.68%
Tl 190.801†	-16.6	-0.0116658	mg/L	0.00313185	-0.0116658	mg/L	0.00313185	26.85%
V 290.880†	6640.9	0.124108	mg/L	0.0033313	0.124108	mg/L	0.0033313	2.68%
Zn 206.200†	35047.1	0.628110	mg/L	0.0047184	0.628110	mg/L	0.0047184	0.75%
B 249.772	65462.7	0.127455	mg/L	0.0069219	0.127455	mg/L	0.0069219	5.43%
Si 251.611	113878.5	5.02408	mg/L	0.171400	5.02408	mg/L	0.171400	3.41%

Sequence No.: 54
Sample ID: AD18934-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 8/31/2020 8:41:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18934-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	394379.5	96.0	%	1.16				1.21%
Y 371.029	208567.2	114	%	1.3				1.17%
Ag 328.068†	-445.3	-0.0097029	mg/L	0.00034734	-0.0097029	mg/L	0.00034734	3.58%
Al 308.215†	666978.0	74.2027	mg/L	0.05265	74.2027	mg/L	0.05265	0.07%
As 188.979†	121.8	0.0792018	mg/L	0.00725386	0.0792018	mg/L	0.00725386	9.16%
Ba 233.527†	38487.3	0.426052	mg/L	0.0062013	0.426052	mg/L	0.0062013	1.46%
Be 313.107†	3416.5	0.0040629	mg/L	0.00003938	0.0040629	mg/L	0.00003938	0.97%
Ca 317.933†	39189397.3	416.638	mg/L	5.0274	416.638	mg/L	5.0274	1.21%
Cd 228.802†	20.0	-0.0020398	mg/L	0.00041651	-0.0020398	mg/L	0.00041651	20.42%
Co 228.616†	1968.4	0.0675205	mg/L	0.00072738	0.0675205	mg/L	0.00072738	1.08%
Cr 267.716†	9666.5	0.135269	mg/L	0.0022652	0.135269	mg/L	0.0022652	1.67%
Cu 327.393†	16689.0	0.239251	mg/L	0.0017366	0.239251	mg/L	0.0017366	0.73%
Fe 273.955†	1994302.5	213.275	mg/L	0.7010	213.275	mg/L	0.7010	0.33%
K 404.721†	31022.4	-465.876	mg/L	23.5835	-465.876	mg/L	23.5835	5.06%
Mg 279.077†	877706.9	76.1501	mg/L	0.21056	76.1501	mg/L	0.21056	0.28%
Mn 257.610†	1770040.4	6.01306	mg/L	0.011406	6.01306	mg/L	0.011406	0.19%
Mo 202.031†	-21.5	-0.0006492	mg/L	0.00077027	-0.0006492	mg/L	0.00077027	118.64%
Na 330.237†	358.1	1.53309	mg/L	0.097453	1.53309	mg/L	0.097453	6.36%
Ni 231.604†	5745.3	0.185523	mg/L	0.0031109	0.185523	mg/L	0.0031109	1.68%
Pb 220.353†	458.0	0.0700838	mg/L	0.00210253	0.0700838	mg/L	0.00210253	3.00%
Sb 206.836†	14.4	0.0062622	mg/L	0.00323434	0.0062622	mg/L	0.00323434	51.65%
Se 196.026†	-170.4	0.0073635	mg/L	0.00542281	0.0073635	mg/L	0.00542281	73.64%
Sn 189.927†	-15.2	-0.0027997	mg/L	0.00017225	-0.0027997	mg/L	0.00017225	6.15%
Ti 334.940†	94203.5	0.343493	mg/L	0.0046203	0.343493	mg/L	0.0046203	1.35%
Tl 190.801†	-31.2	-0.0264498	mg/L	0.00351519	-0.0264498	mg/L	0.00351519	13.29%
V 290.880†	7363.3	0.136833	mg/L	0.0022535	0.136833	mg/L	0.0022535	1.65%
Zn 206.200†	44811.5	0.804710	mg/L	0.0039917	0.804710	mg/L	0.0039917	0.50%
B 249.772	74165.9	0.143628	mg/L	0.0138657	0.143628	mg/L	0.0138657	9.65%
Si 251.611	81562.2	3.64906	mg/L	0.023064	3.64906	mg/L	0.023064	0.63%

Sequence No.: 55
Sample ID: AD18934-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 8/31/2020 8:45:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18934-005

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	398000.8	96.9	%	0.23				0.24%
Y 371.029	210389.3	115	%	0.2				0.18%
Ag 328.068†	-296.2	-0.0080162	mg/L	0.00070885	-0.0080162	mg/L	0.00070885	8.84%
Al 308.215†	417736.4	46.4749	mg/L	0.02312	46.4749	mg/L	0.02312	0.05%
As 188.979†	74.3	0.0512301	mg/L	0.00418225	0.0512301	mg/L	0.00418225	8.16%
Ba 233.527†	55138.3	0.611183	mg/L	0.0008067	0.611183	mg/L	0.0008067	0.13%
Be 313.107†	1516.5	0.0026443	mg/L	0.00000645	0.0026443	mg/L	0.00000645	0.24%
Ca 317.933†	21922446.4	232.949	mg/L	1.2151	232.949	mg/L	1.2151	0.52%
Cd 228.802†	58.6	-0.0008466	mg/L	0.00010545	-0.0008466	mg/L	0.00010545	12.46%
Co 228.616†	1656.9	0.0570713	mg/L	0.00086366	0.0570713	mg/L	0.00086366	1.51%
Cr 267.716†	8457.2	0.117485	mg/L	0.0004988	0.117485	mg/L	0.0004988	0.42%
Cu 327.393†	22931.6	0.328474	mg/L	0.0005201	0.328474	mg/L	0.0005201	0.16%
Fe 273.955†	1427218.1	152.628	mg/L	0.1316	152.628	mg/L	0.1316	0.09%
K 404.721†	22362.1	-335.990	mg/L	16.6228	-335.990	mg/L	16.6228	4.95%
Mg 279.077†	458567.7	39.6727	mg/L	0.06845	39.6727	mg/L	0.06845	0.17%
Mn 257.610†	913064.3	3.10218	mg/L	0.002654	3.10218	mg/L	0.002654	0.09%
Mo 202.031†	34.2	0.0041166	mg/L	0.00040033	0.0041166	mg/L	0.00040033	9.72%
Na 330.237†	178.7	1.10617	mg/L	0.158872	1.10617	mg/L	0.158872	14.36%
Ni 231.604†	8146.0	0.262754	mg/L	0.0011167	0.262754	mg/L	0.0011167	0.43%
Pb 220.353†	4562.1	0.641323	mg/L	0.0011907	0.641323	mg/L	0.0011907	0.19%
Sb 206.836†	13.3	0.0058364	mg/L	0.00385894	0.0058364	mg/L	0.00385894	66.12%
Se 196.026†	-109.6	0.0143769	mg/L	0.00932506	0.0143769	mg/L	0.00932506	64.86%
Sn 189.927†	132.7	0.0140660	mg/L	0.00293027	0.0140660	mg/L	0.00293027	20.83%
Ti 334.940†	330201.5	1.20249	mg/L	0.018518	1.20249	mg/L	0.018518	1.54%
Tl 190.801†	-35.9	-0.0116135	mg/L	0.00289654	-0.0116135	mg/L	0.00289654	24.94%
V 290.880†	6774.9	0.129271	mg/L	0.0012053	0.129271	mg/L	0.0012053	0.93%
Zn 206.200†	43154.4	0.774739	mg/L	0.0032020	0.774739	mg/L	0.0032020	0.41%
B 249.772	54318.1	0.120440	mg/L	0.0018678	0.120440	mg/L	0.0018678	1.55%
Si 251.611	105300.9	4.62427	mg/L	0.092104	4.62427	mg/L	0.092104	1.99%

Sequence No.: 56
Sample ID: AD18955-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 8/31/2020 8:50:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	397421.6	96.7	%	0.58				0.60%
Y 371.029	211244.9	116	%	0.8				0.70%
Ag 328.068†	-281.6	-0.0078514	mg/L	0.00038150	-0.0078514	mg/L	0.00038150	4.86%
Al 308.215†	646965.3	71.9764	mg/L	0.14060	71.9764	mg/L	0.14060	0.20%
As 188.979†	42.0	0.0391077	mg/L	0.00691798	0.0391077	mg/L	0.00691798	17.69%
Ba 233.527†	21594.5	0.238232	mg/L	0.0011719	0.238232	mg/L	0.0011719	0.49%
Be 313.107†	3868.3	0.0044003	mg/L	0.00002180	0.0044003	mg/L	0.00002180	0.50%
Ca 317.933†	18426182.9	195.756	mg/L	0.6621	195.756	mg/L	0.6621	0.34%
Cd 228.802†	-15.9	-0.0031513	mg/L	0.00038362	-0.0031513	mg/L	0.00038362	12.17%
Co 228.616†	2360.1	0.0806605	mg/L	0.00086073	0.0806605	mg/L	0.00086073	1.07%
Cr 267.716†	8496.2	0.118059	mg/L	0.0002768	0.118059	mg/L	0.0002768	0.23%
Cu 327.393†	11797.7	0.169344	mg/L	0.0008407	0.169344	mg/L	0.0008407	0.50%
Fe 273.955†	1593409.3	170.402	mg/L	0.4234	170.402	mg/L	0.4234	0.25%
K 404.721†	24708.0	-376.834	mg/L	13.9743	-376.834	mg/L	13.9743	3.71%
Mg 279.077†	1053146.0	91.4184	mg/L	0.25540	91.4184	mg/L	0.25540	0.28%
Mn 257.610†	609652.0	2.07159	mg/L	0.002896	2.07159	mg/L	0.002896	0.14%
Mo 202.031†	-33.1	-0.0016427	mg/L	0.00091982	-0.0016427	mg/L	0.00091982	56.00%
Na 330.237†	291.0	1.37344	mg/L	0.077136	1.37344	mg/L	0.077136	5.62%
Ni 231.604†	5889.2	0.190151	mg/L	0.0001017	0.190151	mg/L	0.0001017	0.05%
Pb 220.353†	685.3	0.101650	mg/L	0.0012004	0.101650	mg/L	0.0012004	1.18%
Sb 206.836†	13.7	0.0059535	mg/L	0.00721846	0.0059535	mg/L	0.00721846	121.25%
Se 196.026†	-135.5	0.0136423	mg/L	0.00475979	0.0136423	mg/L	0.00475979	34.89%
Sn 189.927†	2.3	-0.0011746	mg/L	0.00088469	-0.0011746	mg/L	0.00088469	75.32%
Ti 334.940†	139754.2	0.509290	mg/L	0.0135662	0.509290	mg/L	0.0135662	2.66%
Tl 190.801†	-26.4	-0.0126691	mg/L	0.00448087	-0.0126691	mg/L	0.00448087	35.37%
V 290.880†	5930.7	0.111085	mg/L	0.0019467	0.111085	mg/L	0.0019467	1.75%
Zn 206.200†	31473.8	0.563482	mg/L	0.0016335	0.563482	mg/L	0.0016335	0.29%
B 249.772	60657.9	0.134478	mg/L	0.0050861	0.134478	mg/L	0.0050861	3.78%
Si 251.611	85640.5	3.77114	mg/L	0.031598	3.77114	mg/L	0.031598	0.84%

Sequence No.: 57
Sample ID: AD18955-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 8/31/2020 8:55:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18955-005

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	401551.9	97.7	%	0.48				0.49%
Y 371.029	212205.8	116	%	0.4				0.37%
Ag 328.068†	-256.6	-0.0075685	mg/L	0.00113509	-0.0075685	mg/L	0.00113509	15.00%
Al 308.215†	431399.3	47.9950	mg/L	0.06589	47.9950	mg/L	0.06589	0.14%
As 188.979†	80.0	0.0550249	mg/L	0.00434655	0.0550249	mg/L	0.00434655	7.90%
Ba 233.527†	31450.3	0.347812	mg/L	0.0020688	0.347812	mg/L	0.0020688	0.59%
Be 313.107†	2922.6	0.0036942	mg/L	0.00004196	0.0036942	mg/L	0.00004196	1.14%
Ca 317.933†	13159833.1	139.731	mg/L	0.9194	139.731	mg/L	0.9194	0.66%
Cd 228.802†	9.3	-0.0023719	mg/L	0.00023247	-0.0023719	mg/L	0.00023247	9.80%
Co 228.616†	1684.4	0.0579923	mg/L	0.00080188	0.0579923	mg/L	0.00080188	1.38%
Cr 267.716†	5668.9	0.0764799	mg/L	0.00062135	0.0764799	mg/L	0.00062135	0.81%
Cu 327.393†	19943.0	0.285760	mg/L	0.0005706	0.285760	mg/L	0.0005706	0.20%
Fe 273.955†	1527456.4	163.348	mg/L	0.2840	163.348	mg/L	0.2840	0.17%
K 404.721†	24443.3	-350.986	mg/L	2.8199	-350.986	mg/L	2.8199	0.80%
Mg 279.077†	474414.2	41.0518	mg/L	0.02199	41.0518	mg/L	0.02199	0.05%
Mn 257.610†	1040092.6	3.53366	mg/L	0.002321	3.53366	mg/L	0.002321	0.07%
Mo 202.031†	17.3	0.0026711	mg/L	0.00079703	0.0026711	mg/L	0.00079703	29.84%
Na 330.237†	181.6	1.11302	mg/L	0.058596	1.11302	mg/L	0.058596	5.26%
Ni 231.604†	4379.6	0.141588	mg/L	0.0016310	0.141588	mg/L	0.0016310	1.15%
Pb 220.353†	2344.8	0.331479	mg/L	0.0040410	0.331479	mg/L	0.0040410	1.22%
Sb 206.836†	15.3	0.0066863	mg/L	0.00257772	0.0066863	mg/L	0.00257772	38.55%
Se 196.026†	-128.5	0.0163231	mg/L	0.00615778	0.0163231	mg/L	0.00615778	37.72%
Sn 189.927†	58.5	0.0077356	mg/L	0.00144929	0.0077356	mg/L	0.00144929	18.74%
Ti 334.940†	108860.8	0.396843	mg/L	0.0003381	0.396843	mg/L	0.0003381	0.09%
Tl 190.801†	-29.2	-0.0192717	mg/L	0.00708894	-0.0192717	mg/L	0.00708894	36.78%
V 290.880†	4731.8	0.0876314	mg/L	0.00047726	0.0876314	mg/L	0.00047726	0.54%
Zn 206.200†	33169.8	0.594156	mg/L	0.0012702	0.594156	mg/L	0.0012702	0.21%
B 249.772	57944.9	0.126181	mg/L	0.0021446	0.126181	mg/L	0.0021446	1.70%
Si 251.611	96157.5	4.22026	mg/L	0.075575	4.22026	mg/L	0.075575	1.79%

Sequence No.: 58
Sample ID: AD18949-014
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 8/31/2020 8:59:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18949-014

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	411391.7	100	%	0.6				0.58%
Y 371.029	187812.8	103	%	0.5				0.49%
Ag 328.068†	-89.4	-0.0056771	mg/L	0.00079013	-0.0056771	mg/L	0.00079013	13.92%
Al 308.215†	259511.8	28.8727	mg/L	0.08815	28.8727	mg/L	0.08815	0.31%
As 188.979†	73.8	0.0407245	mg/L	0.00404883	0.0407245	mg/L	0.00404883	9.94%
Ba 233.527†	8202.4	0.0893353	mg/L	0.00063287	0.0893353	mg/L	0.00063287	0.71%
Be 313.107†	938.2	0.0022125	mg/L	0.00003554	0.0022125	mg/L	0.00003554	1.61%
Ca 317.933†	164557.9	1.48528	mg/L	0.003692	1.48528	mg/L	0.003692	0.25%
Cd 228.802†	31.5	-0.0016852	mg/L	0.00028602	-0.0016852	mg/L	0.00028602	16.97%
Co 228.616†	280.8	0.0109024	mg/L	0.00040305	0.0109024	mg/L	0.00040305	3.70%
Cr 267.716†	6147.6	0.0835194	mg/L	0.00022106	0.0835194	mg/L	0.00022106	0.26%
Cu 327.393†	3196.9	0.0464165	mg/L	0.00084809	0.0464165	mg/L	0.00084809	1.83%
Fe 273.955†	597284.3	63.8718	mg/L	0.27964	63.8718	mg/L	0.27964	0.44%
K 404.721†	8851.6	-157.999	mg/L	6.6727	-157.999	mg/L	6.6727	4.22%
Mg 279.077†	41086.0	3.33954	mg/L	0.009281	3.33954	mg/L	0.009281	0.28%
Mn 257.610†	47431.7	0.161902	mg/L	0.0003525	0.161902	mg/L	0.0003525	0.22%
Mo 202.031†	38.7	0.0045063	mg/L	0.00038233	0.0045063	mg/L	0.00038233	8.48%
Na 330.237†	-29.9	0.609782	mg/L	0.1245116	0.609782	mg/L	0.1245116	20.42%
Ni 231.604†	815.3	0.0269253	mg/L	0.00038440	0.0269253	mg/L	0.00038440	1.43%
Pb 220.353†	1092.5	0.154649	mg/L	0.0018126	0.154649	mg/L	0.0018126	1.17%
Sb 206.836†	13.6	0.0059577	mg/L	0.00205928	0.0059577	mg/L	0.00205928	34.56%
Se 196.026†	-46.2	0.0111843	mg/L	0.00357152	0.0111843	mg/L	0.00357152	31.93%
Sn 189.927†	132.2	0.0182936	mg/L	0.00183362	0.0182936	mg/L	0.00183362	10.02%
Ti 334.940†	121901.5	0.444309	mg/L	0.0022415	0.444309	mg/L	0.0022415	0.50%
Tl 190.801†	-12.2	-0.0026433	mg/L	0.00199952	-0.0026433	mg/L	0.00199952	75.65%
V 290.880†	3848.1	0.0767765	mg/L	0.00084080	0.0767765	mg/L	0.00084080	1.10%
Zn 206.200†	21861.0	0.389626	mg/L	0.0021491	0.389626	mg/L	0.0021491	0.55%
B 249.772	22675.8	0.0505212	mg/L	0.00260669	0.0505212	mg/L	0.00260669	5.16%
Si 251.611	69393.9	2.99468	mg/L	0.031481	2.99468	mg/L	0.031481	1.05%

Sequence No.: 59 **Autosampler Location:** 6
Sample ID: CCV V-333673 **Date Collected:** 8/31/2020 9:03:05 PM
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	400560.7	97.5	%	0.94				0.97%
Y 371.029	150427.0	82.4	%	0.74				0.90%
Ag 328.068†	6706.3	0.0711972	mg/L	0.00069999	0.0711972	mg/L	0.00069999	0.98%
QC value less than the lower limit for Ag 328.068 Recovery = 71.20%								
Al 308.215†	44346.6	4.92474	mg/L	0.003622	4.92474	mg/L	0.003622	0.07%
QC value within limits for Al 308.215 Recovery = 98.49%								
As 188.979†	1108.8	0.487042	mg/L	0.0054777	0.487042	mg/L	0.0054777	1.12%
QC value within limits for As 188.979 Recovery = 97.41%								
Ba 233.527†	44134.2	0.488835	mg/L	0.0003113	0.488835	mg/L	0.0003113	0.06%
QC value within limits for Ba 233.527 Recovery = 97.77%								
Be 313.107†	646329.0	0.484084	mg/L	0.0101312	0.484084	mg/L	0.0101312	2.09%
QC value within limits for Be 313.107 Recovery = 96.82%								
Ca 317.933†	4861258.1	51.4496	mg/L	0.97144	51.4496	mg/L	0.97144	1.89%
QC value within limits for Ca 317.933 Recovery = 102.90%								
Cd 228.802†	16487.6	0.507979	mg/L	0.0045194	0.507979	mg/L	0.0045194	0.89%
QC value within limits for Cd 228.802 Recovery = 101.60%								
Co 228.616†	14558.2	0.489896	mg/L	0.0055537	0.489896	mg/L	0.0055537	1.13%
QC value within limits for Co 228.616 Recovery = 97.98%								
Cr 267.716†	35797.3	0.519546	mg/L	0.0052657	0.519546	mg/L	0.0052657	1.01%
QC value within limits for Cr 267.716 Recovery = 103.91%								
Cu 327.393†	34679.9	0.496385	mg/L	0.0020756	0.496385	mg/L	0.0020756	0.42%
QC value within limits for Cu 327.393 Recovery = 99.28%								
Fe 273.955†	47187.6	5.04222	mg/L	0.015504	5.04222	mg/L	0.015504	0.31%
QC value within limits for Fe 273.955 Recovery = 100.84%								
K 404.721†	4110.4	20.9455	mg/L	16.43433	20.9455	mg/L	16.43433	78.46%
QC value less than the lower limit for K 404.721 Recovery = 41.89%								
Mg 279.077†	593363.3	51.4038	mg/L	0.08762	51.4038	mg/L	0.08762	0.17%
QC value within limits for Mg 279.077 Recovery = 102.81%								
Mn 257.610†	145345.1	0.494483	mg/L	0.0007300	0.494483	mg/L	0.0007300	0.15%
QC value within limits for Mn 257.610 Recovery = 98.90%								
Mo 202.031†	5651.4	0.485125	mg/L	0.0059460	0.485125	mg/L	0.0059460	1.23%
QC value within limits for Mo 202.031 Recovery = 97.02%								
Na 330.237†	20309.7	49.0063	mg/L	0.29980	49.0063	mg/L	0.29980	0.61%
QC value within limits for Na 330.237 Recovery = 98.01%								
Ni 231.604†	15288.0	0.492508	mg/L	0.0050152	0.492508	mg/L	0.0050152	1.02%
QC value within limits for Ni 231.604 Recovery = 98.50%								
Pb 220.353†	3520.3	0.491881	mg/L	0.0057107	0.491881	mg/L	0.0057107	1.16%
QC value within limits for Pb 220.353 Recovery = 98.38%								
Sb 206.836†	1056.7	0.471900	mg/L	0.0221126	0.471900	mg/L	0.0221126	4.69%
QC value within limits for Sb 206.836 Recovery = 94.38%								
Se 196.026†	1098.3	0.488468	mg/L	0.0080463	0.488468	mg/L	0.0080463	1.65%
QC value within limits for Se 196.026 Recovery = 97.69%								
Sn 189.927†	3342.0	0.489873	mg/L	0.0081379	0.489873	mg/L	0.0081379	1.66%
QC value within limits for Sn 189.927 Recovery = 97.97%								
Ti 334.940†	136712.7	0.498219	mg/L	0.0001813	0.498219	mg/L	0.0001813	0.04%
QC value within limits for Ti 334.940 Recovery = 99.64%								
Tl 190.801†	1118.8	0.506236	mg/L	0.0032422	0.506236	mg/L	0.0032422	0.64%
QC value within limits for Tl 190.801 Recovery = 101.25%								
V 290.880†	24052.9	0.491459	mg/L	0.0018511	0.491459	mg/L	0.0018511	0.38%
QC value within limits for V 290.880 Recovery = 98.29%								
Zn 206.200†	29358.9	0.525234	mg/L	0.0059378	0.525234	mg/L	0.0059378	1.13%
QC value within limits for Zn 206.200 Recovery = 105.05%								
B 249.772	37422.1	0.500433	mg/L	0.0042628	0.500433	mg/L	0.0042628	0.85%
QC value within limits for B 249.772 Recovery = 100.09%								
Si 251.611	123880.8	5.34723	mg/L	0.052259	5.34723	mg/L	0.052259	0.98%
QC value within limits for Si 251.611 Recovery = 106.94%								

QC Failed. Continue with analysis.

Sequence No.: 60 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 8/31/2020 9:07:09 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	409037.8	99.6	%	0.80				0.80%
Y 371.029	182603.9	100	%	1.1				1.10%
Ag 328.068†	65.0	-0.0039311	mg/L	0.00028536	-0.0039311	mg/L	0.00028536	7.26%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	58.3	0.0090689	mg/L	0.00902628	0.0090689	mg/L	0.00902628	99.53%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	5.0	0.0030813	mg/L	0.00175419	0.0030813	mg/L	0.00175419	56.93%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	6.2	-0.0017931	mg/L	0.00004229	-0.0017931	mg/L	0.00004229	2.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-17.2	0.0014992	mg/L	0.00003417	0.0014992	mg/L	0.00003417	2.28%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	398.6	-0.261075	mg/L	0.0007872	-0.261075	mg/L	0.0007872	0.30%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	11.4	-0.0023075	mg/L	0.00038498	-0.0023075	mg/L	0.00038498	16.68%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-10.1	0.0011443	mg/L	0.00016152	0.0011443	mg/L	0.00016152	14.12%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	5.2	-0.0068100	mg/L	0.00008522	-0.0068100	mg/L	0.00008522	1.25%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	50.1	0.0014414	mg/L	0.00126147	0.0014414	mg/L	0.00126147	87.52%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	3.4	-0.0038492	mg/L	0.00148419	-0.0038492	mg/L	0.00148419	38.56%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	550.8	-9.32285	mg/L	7.817177	-9.32285	mg/L	7.817177	83.85%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	7.0	-0.235540	mg/L	0.0025628	-0.235540	mg/L	0.0025628	1.09%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-110.8	0.0004148	mg/L	0.00001749	0.0004148	mg/L	0.00001749	4.22%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	16.2	0.0025792	mg/L	0.00078710	0.0025792	mg/L	0.00078710	30.52%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	25.7	0.742058	mg/L	0.1574740	0.742058	mg/L	0.1574740	21.22%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-15.6	0.0001972	mg/L	0.00094271	0.0001972	mg/L	0.00094271	478.08%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.2	-0.0006797	mg/L	0.00135096	-0.0006797	mg/L	0.00135096	198.77%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	6.1	0.0026274	mg/L	0.00502320	0.0026274	mg/L	0.00502320	191.18%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	9.7	0.0045631	mg/L	0.00543644	0.0045631	mg/L	0.00543644	119.14%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.8	0.0016481	mg/L	0.00180307	0.0016481	mg/L	0.00180307	109.40%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	85.3	0.0009186	mg/L	0.00018481	0.0009186	mg/L	0.00018481	20.12%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-8.0	-0.0063277	mg/L	0.00064495	-0.0063277	mg/L	0.00064495	10.19%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-2.6	0.0040601	mg/L	0.00041944	0.0040601	mg/L	0.00041944	10.33%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-5.0	-0.0058447	mg/L	0.00033009	-0.0058447	mg/L	0.00033009	5.65%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	222.0	0.0046103	mg/L	0.00079376	0.0046103	mg/L	0.00079376	17.22%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	94.0	-0.0295929	mg/L	0.00509869	-0.0295929	mg/L	0.00509869	17.23%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 61
Sample ID: AD18950-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 8/31/2020 9:10:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18950-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	423164.4	103	%	0.3				0.31%
Y 371.029	224805.7	123	%	0.4				0.34%
Ag 328.068†	-426.6	-0.0094922	mg/L	0.00019634	-0.0094922	mg/L	0.00019634	2.07%
Al 308.215†	1122098.2	124.834	mg/L	0.1137	124.834	mg/L	0.1137	0.09%
As 188.979†	450.9	0.229183	mg/L	0.0055574	0.229183	mg/L	0.0055574	2.42%
Ba 233.527†	72044.4	0.799149	mg/L	0.0015066	0.799149	mg/L	0.0015066	0.19%
Be 313.107†	-16148.1	-0.0105447	mg/L	0.00010858	-0.0105447	mg/L	0.00010858	1.03%
Ca 317.933†	1286056.4	13.4160	mg/L	0.00462	13.4160	mg/L	0.00462	0.03%
Cd 228.802†	124.6	0.0011978	mg/L	0.00023090	0.0011978	mg/L	0.00023090	19.28%
Co 228.616†	3214.3	0.109319	mg/L	0.0006262	0.109319	mg/L	0.0006262	0.57%
Cr 267.716†	19682.4	0.282562	mg/L	0.0011146	0.282562	mg/L	0.0011146	0.39%
Cu 327.393†	83750.1	1.19772	mg/L	0.001761	1.19772	mg/L	0.001761	0.15%
Fe 273.955†	2407867.4	257.503	mg/L	0.4825	257.503	mg/L	0.4825	0.19%
K 404.721†	39180.0	-533.950	mg/L	12.3765	-533.950	mg/L	12.3765	2.32%
Mg 279.077†	355705.6	30.7207	mg/L	0.02681	30.7207	mg/L	0.02681	0.09%
Mn 257.610†	960568.5	3.26354	mg/L	0.005528	3.26354	mg/L	0.005528	0.17%
Mo 202.031†	62.3	0.0065231	mg/L	0.00104725	0.0065231	mg/L	0.00104725	16.05%
Na 330.237†	-620.1	-0.794682	mg/L	0.1124895	-0.794682	mg/L	0.1124895	14.16%
Ni 231.604†	4742.5	0.153264	mg/L	0.0006991	0.153264	mg/L	0.0006991	0.46%
Pb 220.353†	2980.2	0.427316	mg/L	0.0030234	0.427316	mg/L	0.0030234	0.71%
Sb 206.836†	23.0	0.0101325	mg/L	0.00318759	0.0101325	mg/L	0.00318759	31.46%
Se 196.026†	-240.7	0.0198318	mg/L	0.00245697	0.0198318	mg/L	0.00245697	12.39%
Sn 189.927†	246.4	-0.0152750	mg/L	0.00116550	-0.0152750	mg/L	0.00116550	7.63%
Ti 334.940†	2560785.0	9.32144	mg/L	0.015502	9.32144	mg/L	0.015502	0.17%
Tl 190.801†	-190.2	0.0134320	mg/L	0.00483440	0.0134320	mg/L	0.00483440	35.99%
V 290.880†	21050.3	0.407812	mg/L	0.0013654	0.407812	mg/L	0.0013654	0.33%
Zn 206.200†	40112.9	0.719731	mg/L	0.0018196	0.719731	mg/L	0.0018196	0.25%
B 249.772	94654.9	0.243932	mg/L	0.0034008	0.243932	mg/L	0.0034008	1.39%
Si 251.611	66430.8	2.99476	mg/L	0.015856	2.99476	mg/L	0.015856	0.53%

Sequence No.: 62
Sample ID: AD18932-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 8/31/2020 9:15:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18932-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	410105.0	99.8	%	0.22				0.22%
Y 371.029	201249.4	110	%	0.1				0.06%
Ag 328.068†	272.0	-0.0015894	mg/L	0.00029067	-0.0015894	mg/L	0.00029067	18.29%
Al 308.215†	295346.2	32.8590	mg/L	0.10547	32.8590	mg/L	0.10547	0.32%
As 188.979†	243.3	0.118585	mg/L	0.0022338	0.118585	mg/L	0.0022338	1.88%
Ba 233.527†	2332925.2	25.9363	mg/L	0.11712	25.9363	mg/L	0.11712	0.45%
Be 313.107†	-23.6	0.0014945	mg/L	0.00001480	0.0014945	mg/L	0.00001480	0.99%
Ca 317.933†	2764866.3	29.1478	mg/L	0.06058	29.1478	mg/L	0.06058	0.21%
Cd 228.802†	3925.6	0.118919	mg/L	0.0004676	0.118919	mg/L	0.0004676	0.39%
Co 228.616†	242.7	0.0096232	mg/L	0.00040993	0.0096232	mg/L	0.00040993	4.26%
Cr 267.716†	300774.1	4.41627	mg/L	0.012645	4.41627	mg/L	0.012645	0.29%
Cu 327.393†	50159.9	0.717631	mg/L	0.0022447	0.717631	mg/L	0.0022447	0.31%
Fe 273.955†	861701.1	92.1497	mg/L	0.32175	92.1497	mg/L	0.32175	0.35%
K 404.721†	13950.0	-203.219	mg/L	6.8637	-203.219	mg/L	6.8637	3.38%
Mg 279.077†	216433.7	18.5999	mg/L	0.05436	18.5999	mg/L	0.05436	0.29%
Mn 257.610†	387729.3	1.31779	mg/L	0.003572	1.31779	mg/L	0.003572	0.27%
Mo 202.031†	176.3	0.0162870	mg/L	0.00052747	0.0162870	mg/L	0.00052747	3.24%
Na 330.237†	2374.0	6.32976	mg/L	0.123404	6.32976	mg/L	0.123404	1.95%
Ni 231.604†	3187.3	0.103232	mg/L	0.0003808	0.103232	mg/L	0.0003808	0.37%
Pb 220.353†	82028.4	11.4702	mg/L	0.03289	11.4702	mg/L	0.03289	0.29%
Sb 206.836†	310.7	0.137058	mg/L	0.0071289	0.137058	mg/L	0.0071289	5.20%
Se 196.026†	-63.7	0.0159120	mg/L	0.00227622	0.0159120	mg/L	0.00227622	14.31%
Sn 189.927†	2405.1	0.349122	mg/L	0.0012705	0.349122	mg/L	0.0012705	0.36%
Ti 334.940†	283098.0	1.03104	mg/L	0.005841	1.03104	mg/L	0.005841	0.57%
Tl 190.801†	-26.9	-0.0053164	mg/L	0.00100581	-0.0053164	mg/L	0.00100581	18.92%
V 290.880†	5246.6	0.102984	mg/L	0.0012106	0.102984	mg/L	0.0012106	1.18%
Zn 206.200†	1067918.6	19.3087	mg/L	0.13346	19.3087	mg/L	0.13346	0.69%
B 249.772	34694.8	0.0996859	mg/L	0.00301252	0.0996859	mg/L	0.00301252	3.02%
Si 251.611	62544.4	2.95864	mg/L	0.023078	2.95864	mg/L	0.023078	0.78%

Sequence No.: 63
Sample ID: AD18960-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 8/31/2020 9:20:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18960-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	404790.9	98.5	%	1.33				1.35%
Y 371.029	195856.5	107	%	1.4				1.27%
Ag 328.068†	-303.3	-0.0080969	mg/L	0.00101187	-0.0080969	mg/L	0.00101187	12.50%
Al 308.215†	419277.2	46.6464	mg/L	0.09164	46.6464	mg/L	0.09164	0.20%
As 188.979†	241.7	0.136185	mg/L	0.0036720	0.136185	mg/L	0.0036720	2.70%
Ba 233.527†	11850.8	0.129899	mg/L	0.0017142	0.129899	mg/L	0.0017142	1.32%
Be 313.107†	683.3	0.0020222	mg/L	0.00001123	0.0020222	mg/L	0.00001123	0.56%
Ca 317.933†	1190980.0	12.4045	mg/L	0.03103	12.4045	mg/L	0.03103	0.25%
Cd 228.802†	39.9	-0.0014254	mg/L	0.00020197	-0.0014254	mg/L	0.00020197	14.17%
Co 228.616†	217.6	0.0087812	mg/L	0.00038899	0.0087812	mg/L	0.00038899	4.43%
Cr 267.716†	10108.5	0.141769	mg/L	0.0017343	0.141769	mg/L	0.0017343	1.22%
Cu 327.393†	4435.7	0.0641223	mg/L	0.00107293	0.0641223	mg/L	0.00107293	1.67%
Fe 273.955†	2333322.0	249.531	mg/L	0.8717	249.531	mg/L	0.8717	0.35%
K 404.721†	42415.6	-453.592	mg/L	18.1895	-453.592	mg/L	18.1895	4.01%
Mg 279.077†	41976.1	3.41701	mg/L	0.014460	3.41701	mg/L	0.014460	0.42%
Mn 257.610†	77927.8	0.265488	mg/L	0.0005221	0.265488	mg/L	0.0005221	0.20%
Mo 202.031†	-13.2	0.0000586	mg/L	0.00075147	0.0000586	mg/L	0.00075147	>999.9%
Na 330.237†	37.6	0.770403	mg/L	0.0585956	0.770403	mg/L	0.0585956	7.61%
Ni 231.604†	572.5	0.0191151	mg/L	0.00040979	0.0191151	mg/L	0.00040979	2.14%
Pb 220.353†	1113.6	0.159220	mg/L	0.0019977	0.159220	mg/L	0.0019977	1.25%
Sb 206.836†	5.5	0.0023396	mg/L	0.00210147	0.0023396	mg/L	0.00210147	89.82%
Se 196.026†	-235.5	0.0182267	mg/L	0.00238955	0.0182267	mg/L	0.00238955	13.11%
Sn 189.927†	62.3	0.0067263	mg/L	0.00077543	0.0067263	mg/L	0.00077543	11.53%
Ti 334.940†	184339.8	0.671574	mg/L	0.0014793	0.671574	mg/L	0.0014793	0.22%
Tl 190.801†	-17.1	0.0014280	mg/L	0.00274400	0.0014280	mg/L	0.00274400	192.16%
V 290.880†	18583.2	0.358900	mg/L	0.0062327	0.358900	mg/L	0.0062327	1.74%
Zn 206.200†	9478.1	0.165667	mg/L	0.0026024	0.165667	mg/L	0.0026024	1.57%
B 249.772	88543.0	0.192312	mg/L	0.0234315	0.192312	mg/L	0.0234315	12.18%
Si 251.611	74648.3	3.28874	mg/L	0.051428	3.28874	mg/L	0.051428	1.56%

Sequence No.: 64
Sample ID: AD18960-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 8/31/2020 9:24:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18960-003

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	402909.7	98.1	%	0.70				0.72%
Y 371.029	205224.0	112	%	1.0				0.90%
Ag 328.068†	-150.4	-0.0063672	mg/L	0.00010409	-0.0063672	mg/L	0.00010409	1.63%
Al 308.215†	324447.0	36.0967	mg/L	0.08167	36.0967	mg/L	0.08167	0.23%
As 188.979†	13.7	0.0172613	mg/L	0.00371101	0.0172613	mg/L	0.00371101	21.50%
Ba 233.527†	38414.1	0.425238	mg/L	0.0040737	0.425238	mg/L	0.0040737	0.96%
Be 313.107†	-893.6	0.0008449	mg/L	0.00001398	0.0008449	mg/L	0.00001398	1.65%
Ca 317.933†	2383668.8	25.0926	mg/L	0.01044	25.0926	mg/L	0.01044	0.04%
Cd 228.802†	53.8	-0.0009929	mg/L	0.00013705	-0.0009929	mg/L	0.00013705	13.80%
Co 228.616†	933.1	0.0327858	mg/L	0.00037119	0.0327858	mg/L	0.00037119	1.13%
Cr 267.716†	5668.8	0.0764792	mg/L	0.00089671	0.0764792	mg/L	0.00089671	1.17%
Cu 327.393†	27543.7	0.394391	mg/L	0.0003924	0.394391	mg/L	0.0003924	0.10%
Fe 273.955†	837695.2	89.5824	mg/L	0.11687	89.5824	mg/L	0.11687	0.13%
K 404.721†	15409.9	-171.294	mg/L	15.6395	-171.294	mg/L	15.6395	9.13%
Mg 279.077†	137455.3	11.7265	mg/L	0.02524	11.7265	mg/L	0.02524	0.22%
Mn 257.610†	445063.4	1.51253	mg/L	0.002045	1.51253	mg/L	0.002045	0.14%
Mo 202.031†	3.1	0.0014572	mg/L	0.00076508	0.0014572	mg/L	0.00076508	52.50%
Na 330.237†	316.6	1.43428	mg/L	0.031899	1.43428	mg/L	0.031899	2.22%
Ni 231.604†	2244.5	0.0729031	mg/L	0.00115984	0.0729031	mg/L	0.00115984	1.59%
Pb 220.353†	13183.4	1.84567	mg/L	0.014434	1.84567	mg/L	0.014434	0.78%
Sb 206.836†	16.5	0.0072090	mg/L	0.00328031	0.0072090	mg/L	0.00328031	45.50%
Se 196.026†	-72.8	0.0107734	mg/L	0.00941957	0.0107734	mg/L	0.00941957	87.43%
Sn 189.927†	176.1	0.0193013	mg/L	0.00116112	0.0193013	mg/L	0.00116112	6.02%
Ti 334.940†	385650.2	1.40431	mg/L	0.007054	1.40431	mg/L	0.007054	0.50%
Tl 190.801†	-28.7	-0.0022835	mg/L	0.00284268	-0.0022835	mg/L	0.00284268	124.49%
V 290.880†	5940.0	0.116841	mg/L	0.0015316	0.116841	mg/L	0.0015316	1.31%
Zn 206.200†	76796.7	1.38320	mg/L	0.006406	1.38320	mg/L	0.006406	0.46%
B 249.772	32668.1	0.0822230	mg/L	0.00506602	0.0822230	mg/L	0.00506602	6.16%
Si 251.611	59755.0	2.60782	mg/L	0.036646	2.60782	mg/L	0.036646	1.41%

Sequence No.: 65
Sample ID: AD18960-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 8/31/2020 9:27:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18960-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	405917.5	98.8	%	1.15				1.17%
Y 371.029	224018.1	123	%	1.5				1.22%
Ag 328.068†	-230.3	-0.0072710	mg/L	0.00088331	-0.0072710	mg/L	0.00088331	12.15%
Al 308.215†	528149.7	58.7583	mg/L	0.03473	58.7583	mg/L	0.03473	0.06%
As 188.979†	15.9	0.0232766	mg/L	0.00170086	0.0232766	mg/L	0.00170086	7.31%
Ba 233.527†	46699.7	0.517360	mg/L	0.0012016	0.517360	mg/L	0.0012016	0.23%
Be 313.107†	-2028.3	-0.0000023	mg/L	0.00006840	-0.0000023	mg/L	0.00006840	>999.9%
Ca 317.933†	1871962.8	19.6489	mg/L	0.02285	19.6489	mg/L	0.02285	0.12%
Cd 228.802†	-21.7	-0.0033336	mg/L	0.00012671	-0.0033336	mg/L	0.00012671	3.80%
Co 228.616†	1824.2	0.0626816	mg/L	0.00085782	0.0626816	mg/L	0.00085782	1.37%
Cr 267.716†	8387.1	0.116454	mg/L	0.0019665	0.116454	mg/L	0.0019665	1.69%
Cu 327.393†	6779.5	0.0976203	mg/L	0.00046111	0.0976203	mg/L	0.00046111	0.47%
Fe 273.955†	1243484.4	132.979	mg/L	0.1740	132.979	mg/L	0.1740	0.13%
K 404.721†	21133.9	-271.080	mg/L	17.9655	-271.080	mg/L	17.9655	6.63%
Mg 279.077†	347263.4	29.9859	mg/L	0.02812	29.9859	mg/L	0.02812	0.09%
Mn 257.610†	1101278.5	3.74149	mg/L	0.001445	3.74149	mg/L	0.001445	0.04%
Mo 202.031†	-16.4	-0.0002170	mg/L	0.00076545	-0.0002170	mg/L	0.00076545	352.82%
Na 330.237†	286.2	1.36198	mg/L	0.038556	1.36198	mg/L	0.038556	2.83%
Ni 231.604†	3687.4	0.119321	mg/L	0.0018062	0.119321	mg/L	0.0018062	1.51%
Pb 220.353†	792.9	0.115498	mg/L	0.0036823	0.115498	mg/L	0.0036823	3.19%
Sb 206.836†	19.5	0.0085326	mg/L	0.00148002	0.0085326	mg/L	0.00148002	17.35%
Se 196.026†	-113.9	0.0142975	mg/L	0.00335468	0.0142975	mg/L	0.00335468	23.46%
Sn 189.927†	63.7	-0.0063409	mg/L	0.00171378	-0.0063409	mg/L	0.00171378	27.03%
Ti 334.940†	827172.0	3.01138	mg/L	0.004109	3.01138	mg/L	0.004109	0.14%
Tl 190.801†	-74.3	-0.0097674	mg/L	0.00251584	-0.0097674	mg/L	0.00251584	25.76%
V 290.880†	8636.8	0.167819	mg/L	0.0035127	0.167819	mg/L	0.0035127	2.09%
Zn 206.200†	17042.6	0.302480	mg/L	0.0045179	0.302480	mg/L	0.0045179	1.49%
B 249.772	64731.1	0.346396	mg/L	0.0111392	0.346396	mg/L	0.0111392	3.22%
Si 251.611	89077.0	3.90190	mg/L	0.043783	3.90190	mg/L	0.043783	1.12%

Sequence No.: 66
Sample ID: AD18960-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 64
Date Collected: 8/31/2020 9:32:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18960-007

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	406658.4	99.0	%	0.91				0.92%
Y 371.029	224428.6	123	%	0.8				0.65%
Ag 328.068†	-274.5	-0.0077711	mg/L	0.00074954	-0.0077711	mg/L	0.00074954	9.65%
Al 308.215†	727696.0	80.9574	mg/L	0.87429	80.9574	mg/L	0.87429	1.08%
As 188.979†	-23.3	0.0157378	mg/L	0.00175612	0.0157378	mg/L	0.00175612	11.16%
Ba 233.527†	47489.4	0.526140	mg/L	0.0053690	0.526140	mg/L	0.0053690	1.02%
Be 313.107†	-1947.4	0.0000581	mg/L	0.00004752	0.0000581	mg/L	0.00004752	81.80%
Ca 317.933†	3547545.0	37.4741	mg/L	0.40528	37.4741	mg/L	0.40528	1.08%
Cd 228.802†	-44.8	-0.0040474	mg/L	0.00057798	-0.0040474	mg/L	0.00057798	14.28%
Co 228.616†	3738.9	0.126917	mg/L	0.0009805	0.126917	mg/L	0.0009805	0.77%
Cr 267.716†	10461.6	0.146962	mg/L	0.0015585	0.146962	mg/L	0.0015585	1.06%
Cu 327.393†	35360.3	0.506110	mg/L	0.0048414	0.506110	mg/L	0.0048414	0.96%
Fe 273.955†	2029219.4	217.009	mg/L	2.6756	217.009	mg/L	2.6756	1.23%
K 404.721†	34355.6	-433.362	mg/L	2.3294	-433.362	mg/L	2.3294	0.54%
Mg 279.077†	584010.1	50.5898	mg/L	0.61381	50.5898	mg/L	0.61381	1.21%
Mn 257.610†	1106877.1	3.76051	mg/L	0.041047	3.76051	mg/L	0.041047	1.09%
Mo 202.031†	15.2	0.0024918	mg/L	0.00046957	0.0024918	mg/L	0.00046957	18.84%
Na 330.237†	1283.6	3.73519	mg/L	0.017975	3.73519	mg/L	0.017975	0.48%
Ni 231.604†	6324.8	0.204166	mg/L	0.0022010	0.204166	mg/L	0.0022010	1.08%
Pb 220.353†	1566.7	0.225703	mg/L	0.0026303	0.225703	mg/L	0.0026303	1.17%
Sb 206.836†	17.2	0.0075439	mg/L	0.00157344	0.0075439	mg/L	0.00157344	20.86%
Se 196.026†	-206.1	0.0138679	mg/L	0.00315751	0.0138679	mg/L	0.00315751	22.77%
Sn 189.927†	267.5	0.0201804	mg/L	0.00040152	0.0201804	mg/L	0.00040152	1.99%
Ti 334.940†	993625.4	3.61724	mg/L	0.039162	3.61724	mg/L	0.039162	1.08%
Tl 190.801†	-86.3	-0.0064332	mg/L	0.00380864	-0.0064332	mg/L	0.00380864	59.20%
V 290.880†	15895.5	0.307370	mg/L	0.0035266	0.307370	mg/L	0.0035266	1.15%
Zn 206.200†	61302.7	1.10297	mg/L	0.014376	1.10297	mg/L	0.014376	1.30%
B 249.772	107824.2	0.594685	mg/L	0.0059214	0.594685	mg/L	0.0059214	1.00%
Si 251.611	70390.7	3.13870	mg/L	0.053224	3.13870	mg/L	0.053224	1.70%

Sequence No.: 67
Sample ID: AD18960-015
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 65
Date Collected: 8/31/2020 9:37:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18960-015

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	400618.7	97.5	%	0.64				0.66%
Y 371.029	208566.9	114	%	0.7				0.65%
Ag 328.068†	-243.6	-0.0074212	mg/L	0.00026583	-0.0074212	mg/L	0.00026583	3.58%
Al 308.215†	584193.8	64.9931	mg/L	0.18529	64.9931	mg/L	0.18529	0.29%
As 188.979†	20.1	0.0273044	mg/L	0.00279988	0.0273044	mg/L	0.00279988	10.25%
Ba 233.527†	37768.5	0.418059	mg/L	0.0019995	0.418059	mg/L	0.0019995	0.48%
Be 313.107†	-3524.0	-0.0011191	mg/L	0.00002763	-0.0011191	mg/L	0.00002763	2.47%
Ca 317.933†	13954970.8	148.190	mg/L	1.0620	148.190	mg/L	1.0620	0.72%
Cd 228.802†	-3.4	-0.0027660	mg/L	0.00025069	-0.0027660	mg/L	0.00025069	9.06%
Co 228.616†	2818.3	0.0960346	mg/L	0.00118059	0.0960346	mg/L	0.00118059	1.23%
Cr 267.716†	16513.9	0.235965	mg/L	0.0013062	0.235965	mg/L	0.0013062	0.55%
Cu 327.393†	12380.8	0.177677	mg/L	0.0005519	0.177677	mg/L	0.0005519	0.31%
Fe 273.955†	1420149.8	151.872	mg/L	0.5313	151.872	mg/L	0.5313	0.35%
K 404.721†	23832.3	-311.538	mg/L	2.8513	-311.538	mg/L	2.8513	0.92%
Mg 279.077†	774404.6	67.1597	mg/L	0.21444	67.1597	mg/L	0.21444	0.32%
Mn 257.610†	860002.6	2.92195	mg/L	0.008499	2.92195	mg/L	0.008499	0.29%
Mo 202.031†	-0.6	0.0011408	mg/L	0.00044038	0.0011408	mg/L	0.00044038	38.60%
Na 330.237†	932.7	2.90024	mg/L	0.104673	2.90024	mg/L	0.104673	3.61%
Ni 231.604†	20672.8	0.665733	mg/L	0.0026326	0.665733	mg/L	0.0026326	0.40%
Pb 220.353†	1737.3	0.248099	mg/L	0.0044139	0.248099	mg/L	0.0044139	1.78%
Sb 206.836†	26.8	0.0117664	mg/L	0.00354846	0.0117664	mg/L	0.00354846	30.16%
Se 196.026†	-115.8	0.0158183	mg/L	0.00432862	0.0158183	mg/L	0.00432862	27.36%
Sn 189.927†	176.9	0.0096205	mg/L	0.00102836	0.0096205	mg/L	0.00102836	10.69%
Ti 334.940†	860511.1	3.13272	mg/L	0.014002	3.13272	mg/L	0.014002	0.45%
Tl 190.801†	-72.6	-0.0044911	mg/L	0.00094369	-0.0044911	mg/L	0.00094369	21.01%
V 290.880†	12351.5	0.240885	mg/L	0.0010213	0.240885	mg/L	0.0010213	0.42%
Zn 206.200†	31979.2	0.572624	mg/L	0.0037073	0.572624	mg/L	0.0037073	0.65%
B 249.772	55082.9	0.134176	mg/L	0.0056317	0.134176	mg/L	0.0056317	4.20%
Si 251.611	100042.8	4.39576	mg/L	0.028845	4.39576	mg/L	0.028845	0.66%

Sequence No.: 68
Sample ID: AD18960-017
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 8/31/2020 9:41:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD18960-017

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	408290.4	99.4	%	1.29				1.30%
Y 371.029	199482.4	109	%	1.3				1.20%
Ag 328.068†	-85.5	-0.0056331	mg/L	0.00012492	-0.0056331	mg/L	0.00012492	2.22%
Al 308.215†	321930.1	35.8167	mg/L	0.05796	35.8167	mg/L	0.05796	0.16%
As 188.979†	22.0	0.0218763	mg/L	0.00096185	0.0218763	mg/L	0.00096185	4.40%
Ba 233.527†	33002.6	0.365071	mg/L	0.0053385	0.365071	mg/L	0.0053385	1.46%
Be 313.107†	-2670.9	-0.0004821	mg/L	0.00002782	-0.0004821	mg/L	0.00002782	5.77%
Ca 317.933†	7287385.9	77.2591	mg/L	1.71255	77.2591	mg/L	1.71255	2.22%
Cd 228.802†	8.5	-0.0023973	mg/L	0.00038372	-0.0023973	mg/L	0.00038372	16.01%
Co 228.616†	1524.6	0.0526295	mg/L	0.00089859	0.0526295	mg/L	0.00089859	1.71%
Cr 267.716†	9354.8	0.130684	mg/L	0.0022405	0.130684	mg/L	0.0022405	1.71%
Cu 327.393†	13737.3	0.197064	mg/L	0.0008401	0.197064	mg/L	0.0008401	0.43%
Fe 273.955†	913145.0	97.6513	mg/L	2.30740	97.6513	mg/L	2.30740	2.36%
K 404.721†	15292.5	-206.945	mg/L	4.8452	-206.945	mg/L	4.8452	2.34%
Mg 279.077†	365199.1	31.5469	mg/L	0.10483	31.5469	mg/L	0.10483	0.33%
Mn 257.610†	567711.1	1.92913	mg/L	0.005720	1.92913	mg/L	0.005720	0.30%
Mo 202.031†	27.2	0.0035217	mg/L	0.00187836	0.0035217	mg/L	0.00187836	53.34%
Na 330.237†	369.7	1.56064	mg/L	0.062521	1.56064	mg/L	0.062521	4.01%
Ni 231.604†	8584.2	0.276849	mg/L	0.0045321	0.276849	mg/L	0.0045321	1.64%
Pb 220.353†	2092.2	0.295051	mg/L	0.0039146	0.295051	mg/L	0.0039146	1.33%
Sb 206.836†	16.6	0.0072717	mg/L	0.00129845	0.0072717	mg/L	0.00129845	17.86%
Se 196.026†	-72.2	0.0122284	mg/L	0.00427974	0.0122284	mg/L	0.00427974	35.00%
Sn 189.927†	167.8	0.0150070	mg/L	0.00317748	0.0150070	mg/L	0.00317748	21.17%
Ti 334.940†	534529.9	1.94621	mg/L	0.044221	1.94621	mg/L	0.044221	2.27%
Tl 190.801†	-51.7	-0.0072258	mg/L	0.00301117	-0.0072258	mg/L	0.00301117	41.67%
V 290.880†	7163.2	0.140796	mg/L	0.0023754	0.140796	mg/L	0.0023754	1.69%
Zn 206.200†	25263.0	0.451154	mg/L	0.0061679	0.451154	mg/L	0.0061679	1.37%
B 249.772	39207.7	0.139359	mg/L	0.0138895	0.139359	mg/L	0.0138895	9.97%
Si 251.611	70585.5	3.08323	mg/L	0.113081	3.08323	mg/L	0.113081	3.67%

Sequence No.: 69
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 8/31/2020 9:45:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	397201.6	96.7	%	0.46				0.47%
Y 371.029	149655.6	82.0	%	0.40				0.49%
Ag 328.068†	6817.1	0.0724506	mg/L	0.00098313	0.0724506	mg/L	0.00098313	1.36%
QC value less than the lower limit for Ag 328.068 Recovery = 72.45%								
Al 308.215†	44567.9	4.94935	mg/L	0.007661	4.94935	mg/L	0.007661	0.15%
QC value within limits for Al 308.215 Recovery = 98.99%								
As 188.979†	1113.9	0.489269	mg/L	0.0032833	0.489269	mg/L	0.0032833	0.67%
QC value within limits for As 188.979 Recovery = 97.85%								
Ba 233.527†	44263.1	0.490268	mg/L	0.0006448	0.490268	mg/L	0.0006448	0.13%
QC value within limits for Ba 233.527 Recovery = 98.05%								
Be 313.107†	644912.4	0.483027	mg/L	0.0010416	0.483027	mg/L	0.0010416	0.22%
QC value within limits for Be 313.107 Recovery = 96.61%								
Ca 317.933†	4856293.9	51.3968	mg/L	0.10795	51.3968	mg/L	0.10795	0.21%
QC value within limits for Ca 317.933 Recovery = 102.79%								
Cd 228.802†	16514.8	0.508823	mg/L	0.0010485	0.508823	mg/L	0.0010485	0.21%
QC value within limits for Cd 228.802 Recovery = 101.76%								
Co 228.616†	14551.7	0.489678	mg/L	0.0006291	0.489678	mg/L	0.0006291	0.13%
QC value within limits for Co 228.616 Recovery = 97.94%								
Cr 267.716†	35815.5	0.519814	mg/L	0.0010571	0.519814	mg/L	0.0010571	0.20%
QC value within limits for Cr 267.716 Recovery = 103.96%								
Cu 327.393†	34842.4	0.498708	mg/L	0.0005912	0.498708	mg/L	0.0005912	0.12%
QC value within limits for Cu 327.393 Recovery = 99.74%								
Fe 273.955†	47438.9	5.06910	mg/L	0.016742	5.06910	mg/L	0.016742	0.33%
QC value within limits for Fe 273.955 Recovery = 101.38%								
K 404.721†	4684.0	29.1305	mg/L	7.64154	29.1305	mg/L	7.64154	26.23%
QC value less than the lower limit for K 404.721 Recovery = 58.26%								
Mg 279.077†	595203.5	51.5640	mg/L	0.17054	51.5640	mg/L	0.17054	0.33%
QC value within limits for Mg 279.077 Recovery = 103.13%								
Mn 257.610†	145888.2	0.496328	mg/L	0.0007549	0.496328	mg/L	0.0007549	0.15%
QC value within limits for Mn 257.610 Recovery = 99.27%								
Mo 202.031†	5654.8	0.485418	mg/L	0.0023991	0.485418	mg/L	0.0023991	0.49%
QC value within limits for Mo 202.031 Recovery = 97.08%								
Na 330.237†	20578.0	49.6448	mg/L	0.21541	49.6448	mg/L	0.21541	0.43%
QC value within limits for Na 330.237 Recovery = 99.29%								
Ni 231.604†	15279.2	0.492224	mg/L	0.0010225	0.492224	mg/L	0.0010225	0.21%
QC value within limits for Ni 231.604 Recovery = 98.44%								
Pb 220.353†	3524.5	0.492481	mg/L	0.0018868	0.492481	mg/L	0.0018868	0.38%
QC value within limits for Pb 220.353 Recovery = 98.50%								
Sb 206.836†	1062.6	0.474510	mg/L	0.0221565	0.474510	mg/L	0.0221565	4.67%
QC value within limits for Sb 206.836 Recovery = 94.90%								
Se 196.026†	1102.7	0.490409	mg/L	0.0039178	0.490409	mg/L	0.0039178	0.80%
QC value within limits for Se 196.026 Recovery = 98.08%								
Sn 189.927†	3344.2	0.490196	mg/L	0.0027838	0.490196	mg/L	0.0027838	0.57%
QC value within limits for Sn 189.927 Recovery = 98.04%								
Ti 334.940†	137191.6	0.499963	mg/L	0.0000979	0.499963	mg/L	0.0000979	0.02%
QC value within limits for Ti 334.940 Recovery = 99.99%								
Tl 190.801†	1120.4	0.506999	mg/L	0.0017761	0.506999	mg/L	0.0017761	0.35%
QC value within limits for Tl 190.801 Recovery = 101.40%								
V 290.880†	24285.8	0.496121	mg/L	0.0006893	0.496121	mg/L	0.0006893	0.14%
QC value within limits for V 290.880 Recovery = 99.22%								
Zn 206.200†	29419.7	0.526332	mg/L	0.0002616	0.526332	mg/L	0.0002616	0.05%
QC value within limits for Zn 206.200 Recovery = 105.27%								
B 249.772	37284.4	0.498413	mg/L	0.0012461	0.498413	mg/L	0.0012461	0.25%
QC value within limits for B 249.772 Recovery = 99.68%								
Si 251.611	123363.9	5.32493	mg/L	0.035015	5.32493	mg/L	0.035015	0.66%
QC value within limits for Si 251.611 Recovery = 106.50%								

QC Failed. Continue with analysis.

Sequence No.: 70 Autosampler Location: 1
Sample ID: CCB V-333667 Date Collected: 8/31/2020 9:50:02 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	403654.1	98.2	%	0.80				0.81%
Y 371.029	180548.4	98.9	%	0.79				0.80%
Ag 328.068†	24.8	-0.0043859	mg/L	0.00057354	-0.0043859	mg/L	0.00057354	13.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	84.5	0.0120013	mg/L	0.00362477	0.0120013	mg/L	0.00362477	30.20%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	5.1	0.0031179	mg/L	0.00512519	0.0031179	mg/L	0.00512519	164.38%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	2.5	-0.0018334	mg/L	0.00011458	-0.0018334	mg/L	0.00011458	6.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-10.6	0.0015042	mg/L	0.00001159	0.0015042	mg/L	0.00001159	0.77%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	-164.2	-0.267061	mg/L	0.0004794	-0.267061	mg/L	0.0004794	0.18%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	5.0	-0.0025048	mg/L	0.00022707	-0.0025048	mg/L	0.00022707	9.07%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.0	0.0015169	mg/L	0.00029492	0.0015169	mg/L	0.00029492	19.44%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-18.1	-0.0071528	mg/L	0.00033493	-0.0071528	mg/L	0.00033493	4.68%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	87.6	0.0019764	mg/L	0.00106008	0.0019764	mg/L	0.00106008	53.64%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-18.2	-0.0061659	mg/L	0.00168050	-0.0061659	mg/L	0.00168050	27.25%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	1923.1	10.5412	mg/L	11.71462	10.5412	mg/L	11.71462	111.13%
QC value greater than the upper limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	-9.0	-0.236928	mg/L	0.0025303	-0.236928	mg/L	0.0025303	1.07%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-208.2	0.0000840	mg/L	0.00003119	0.0000840	mg/L	0.00003119	37.14%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	11.0	0.0021315	mg/L	0.00032933	0.0021315	mg/L	0.00032933	15.45%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-40.9	0.583582	mg/L	0.1653771	0.583582	mg/L	0.1653771	28.34%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-10.6	0.0003578	mg/L	0.00015774	0.0003578	mg/L	0.00015774	44.09%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-3.8	-0.0012506	mg/L	0.00145844	-0.0012506	mg/L	0.00145844	116.62%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	10.1	0.0043856	mg/L	0.00262253	0.0043856	mg/L	0.00262253	59.80%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	3.0	0.0015831	mg/L	0.00362354	0.0015831	mg/L	0.00362354	228.89%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-3.0	0.0009298	mg/L	0.00120025	0.0009298	mg/L	0.00120025	129.08%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	134.0	0.0010958	mg/L	0.00015302	0.0010958	mg/L	0.00015302	13.96%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-5.3	-0.0051575	mg/L	0.00213251	-0.0051575	mg/L	0.00213251	41.35%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-10.5	0.0038962	mg/L	0.00032361	0.0038962	mg/L	0.00032361	8.31%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-22.3	-0.0061578	mg/L	0.00011164	-0.0061578	mg/L	0.00011164	1.81%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	229.0	0.0047159	mg/L	0.00088103	0.0047159	mg/L	0.00088103	18.68%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	51.5	-0.0314236	mg/L	0.00091233	-0.0314236	mg/L	0.00091233	2.90%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334003

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg Intermediate Standard -WARNING | BatchNumber: B-29607 | ApproveDate: 09/02/20
Prep Date: 8/31/2020 | Concentration: .25 ppm | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 500 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13311	MERCURY 1000 PPM	.125 ml	1000 ug/ml	
13421	nitric acid	12.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334004

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg intermediate Control -WARNING | BatchNumber: B-29607 | ApproveDate: 09/02/20
Prep Date: 8/31/2020 | Concentration: 1.0 ppm | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334006

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Aquaregia | BatchNumber: B-29608 | ApproveDate: 09/02/20
Prep Date: 8/31/2020 | Concentration: 0 neat | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 80 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13421	nitric acid	20 ml	neat neat	
13422	hydrochloric acid	60 ml	neat neat	

Veritech Lot Number: V-334007

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg Soil ICV Soil | BatchNumber: B-29608 | ApproveDate: 09/02/20
Prep Date: 8/31/2020 | Concentration: 20 ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334004	Hg intermediate Control -WARNING	.5 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334008

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg soil CCV 10ppb | BatchNumber: B-29608 | ApproveDate: 09/02/20
Prep Date: 8/31/2020 | Concentration: 10 ppb | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334004	Hg intermediate Control -WARNING	.25 ml	1.0 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334009

Prepared By: Silva, Amanda
Description: Hg soil standard blk
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: 0 ppm
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			

Veritech Lot Number: V-334010

Prepared By: Silva, Amanda
Description: Hg soil standard .2 ppb
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: .2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	.02 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334011

Prepared By: Silva, Amanda
Description: Hg soil standard .5 ppb
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: .5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	.05 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334012

Prepared By: Silva, Amanda
Description: Hg soil standard 1 ppb
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: 1 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	.1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334013

Prepared By: Silva, Amanda
Description: Hg soil standard 2 ppb
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: 2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	.2 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334014

Prepared By: Silva, Amanda
Description: Hg soil standard 5 ppb
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29608
Concentration: 5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	.5 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334015

Prepared By:	Silva, Amanda	Department:	Metals
Description:	Hg soil standard 10 ppb	BatchNumber:	B-29608
Prep Date:	8/31/2020	Concentration:	10 ppb
Expiration Date:	8/31/2020	Final Volume:	25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334016

Prepared By:	Silva, Amanda	Department:	Metals
Description:	Hg soil standard 25 ppb	BatchNumber:	B-29608
Prep Date:	8/31/2020	Concentration:	25 ppb
Expiration Date:	8/31/2020	Final Volume:	25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334003	Hg Intermediate Standard -WARNING	2.5 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-317822

Prepared By: Aliano, Carmela
Description: Hydroxylamine Hydrochloride WARNIN
Prep Date: 12/13/2019
Expiration Date: 1/8/2020
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 10 l
ApprovedBy: shiamala
ApproveDate: 12/16/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12651	DI H2O			
12218	Sodium Chloride	1200 g	neat neat	
12619	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-331286

Prepared By: Lucca, Daniela
Description: 5% Potassium Permanganate WARNIN
Prep Date: 7/13/2020
Expiration Date: 2/13/2021
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12621	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-333999

Prepared By: Ransaw, Brianna
Description: 3% HCL WARNING
Prep Date: 8/31/2020
Expiration Date: 9/10/2020
Department: WetChem
BatchNumber:
Concentration: 3 %
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13130	hydrochloric acid	600 ml	neat neat	3%
13084	DI H20			

Veritech Lot Number: V-334000

Prepared By: Ransaw, Brianna
Description: SnCl2 "WARNING:"
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber:
Concentration: reagent l
Final Volume: 2 l
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333999	3% HCL WARNING	2000 ml	3 %	
13089	STANNOUS CHOLORIDE	26.4 g		

Veritech Lot Number: V-334004

Prepared By: Silva, Amanda
Description: Hg intermediate Control -WARNING
Prep Date: 8/31/2020
Expiration Date: 8/31/2020
Department: Metals
BatchNumber: B-29607
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13311

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP	140-051-801	S200130001	06/04/20	12/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13422

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T. BAKER	9530-33	253057	07/28/20	01/21/25	Burwell, John	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12218

Description
Sodium Chloride

ApprovedBy: akmal
ApproveDate: 12/31/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	SX0420-5	17F145203	12/27/18	12/26/23	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12619

Description
HYDROXYLAMINE HYDROCHLORIDE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LS-1580015	190318-4C	06/25/19	06/24/23	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12621

Description
POTASSIUM PERMANGANATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-T10208	190318-3C	06/25/19	06/24/29	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12651

Description
DI H2O

ApprovedBy: janee
ApproveDate: 10/10/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	07/08/19	07/07/20	Cousineau, Paul	1			

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13089

Description
STANNOUS CHOLORIDE

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB CHEM	LC-P33805	190620-3C	02/15/20	02/14/23	Aliano, Carmela	1	1Gal		

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

H26170S
SnCl2V-334000
8/31/20
BR

Analysis Begun

Logged In Analyst: usermet
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26170S.sif
Batch ID: H26170S
Results Data Set: H26170S
Results Library: C:\data-AA\johns\Results\Results.mdb

Method Loaded
Method Name: HGCV3 Soil (7471B)
Method Last Saved: 2/11/2020 1:24:07 PM
Method Description: HgCV3 Soil (7471B)

9/3/20

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calibration Blank
Date Collected: 8/31/2020 11:46:12 AM
Analyst:
Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0008	0.0001	11:46:58	Yes
2		[0.00]	0.0001	0.0010	0.0001	11:47:31	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	1.91				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 2
Sample ID: .2 PPB
Date Collected: 8/31/2020 11:47:32 AM
Analyst:
Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0016	0.0067	0.0017	11:48:18	Yes
2		[0.2]	0.0016	0.0066	0.0017	11:48:50	Yes
Mean:		[0.2]	0.0016				
SD:		0.0	0.0000				
%RSD:		0.0	0.92				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00791 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 3
Sample ID: .5 PPB
Date Collected: 8/31/2020 11:48:52 AM
Analyst:
Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0036	0.0139	0.0037	11:49:37	Yes
2		[0.5]	0.0036	0.0136	0.0037	11:50:10	Yes
Mean:		[0.5]	0.0036				
SD:		0.0	0.0000				
%RSD:		0.0	0.76				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.998897 Slope: 0.00713 Intercept: 0.00006

Sequence No.: 4
Autosampler Location: 4
Sample ID: 1 PPB
Date Collected: 8/31/2020 11:50:11 AM
Analyst:
Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[1]	0.0071	0.0267	0.0072	11:50:57	Yes
2	[1]	0.0071	0.0265	0.0072	11:51:30	Yes
Mean:	[1]	0.0071				
SD:	0	0.0000				
%RSD:	0	0.13				

Standard number 3 applied. [1]
Correlation Coef.: 0.999727 Slope: 0.00705 Intercept: 0.00007

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: 2 PPB **Date Collected: 8/31/2020 11:51:31 AM**
Analyst: **Data Type: Original**

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0142	0.0527	0.0143	11:52:16	Yes
2		[2]	0.0142	0.0531	0.0143	11:52:49	Yes
Mean:		[2]	0.0142				
SD:		0	0.0000				
%RSD:		0	0.28				

Standard number 4 applied. [2]
Correlation Coef.: 0.999939 Slope: 0.00707 Intercept: 0.00007

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: 5 PPB **Date Collected: 8/31/2020 11:52:50 AM**
Analyst: **Data Type: Original**

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0359	0.1337	0.0360	11:53:36	Yes
2		[5]	0.0357	0.1326	0.0358	11:54:09	Yes
Mean:		[5]	0.0358				
SD:		0	0.0001				
%RSD:		0	0.33				

Standard number 5 applied. [5]
Correlation Coef.: 0.999981 Slope: 0.00715 Intercept: 0.00002

Sequence No.: 7 **Autosampler Location: 7**
Sample ID: 10 PPB **Date Collected: 8/31/2020 11:54:10 AM**
Analyst: **Data Type: Original**

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0710	0.2639	0.0711	11:54:55	Yes
2		[10]	0.0704	0.2610	0.0705	11:55:28	Yes
Mean:		[10]	0.0707				
SD:		0	0.0004				
%RSD:		0	0.56				

Standard number 6 applied. [10]
Correlation Coef.: 0.999981 Slope: 0.00707 Intercept: 0.00010

Sequence No.: 8 **Autosampler Location: 8**
Sample ID: 25 PPB **Date Collected: 8/31/2020 11:55:53 AM**
Analyst: **Data Type: Original**

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[25]	0.1698	0.6317	0.1699	11:56:43	Yes
2		[25]	0.1690	0.6278	0.1691	11:57:16	Yes
Mean:		[25]	0.1694				
SD:		0	0.0005				
%RSD:		0	0.32				

Standard number 7 applied. [25]
Correlation Coef.: 0.999835 Slope: 0.00679 Intercept: 0.00071

Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.105	0.00	1.9
.2 PPB	0.0016	0.2	0.128	0.00	0.9
.5 PPB	0.0036	0.5	0.423	0.00	0.8
1 PPB	0.0071	1.0	0.942	0.00	0.1
2 PPB	0.0142	2.0	1.987	0.00	0.3
5 PPB	0.0358	5.0	5.167	0.00	0.3
10 PPB	0.0707	10.0	10.307	0.00	0.6
25 PPB	0.1694	25.0	24.849	0.00	0.3

Correlation Coef.: 0.999835 Slope: 0.00679 Intercept: 0.00071

Sequence No.: 9 **Autosampler Location: 10**
Sample ID: ICV (2) **Date Collected: 8/31/2020 11:57:42 AM**
Analyst: **Data Type: Original**

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.37	20.37	0.1390	0.5158	0.1391	11:58:29	Yes
2	20.28	20.28	0.1384	0.5113	0.1385	11:59:01	Yes
Mean:	20.33	20.33	0.1387				
SD:	0.065	0.065	0.0004				
%RSD:	0.320	0.320	0.32				

QC value within limits for Hg 253.7 Recovery = 101.64%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 8/31/2020 11:59:24 AM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.117	-0.117	-0.0001	-0.0007	0.0000	12:00:11	Yes
2	-0.116	-0.116	-0.0001	-0.0004	0.0000	12:00:44	Yes
Mean:	-0.116	-0.116	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.027	1.027	10.25				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 11**
Sample ID: MB 85228 (167) **Date Collected: 8/31/2020 12:00:45 PM**
Analyst: **Data Type: Original**

Replicate Data: MB 85228 (167)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.059	-0.059	0.0003	0.0013	0.0004	12:01:31	Yes
2	-0.057	-0.057	0.0003	0.0013	0.0004	12:02:04	Yes
Mean:	-0.058	-0.058	0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	2.939	2.939	3.65				

Sequence No.: 12 **Autosampler Location: 12**
Sample ID: LCS 85228 **Date Collected: 8/31/2020 12:02:05 PM**
Analyst: **Data Type: Original**

Replicate Data: LCS 85228

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	22.96	22.96	0.1566	0.5798	0.1567	12:02:51	Yes
2	22.94	22.94	0.1565	0.5775	0.1566	12:03:23	Yes
Mean:	22.95	22.95	0.1565				

SD:	0.011	0.011	0.0001
%RSD:	0.047	0.047	0.05

Sequence No.: 13 Autosampler Location: 13
Sample ID: LCS MR 85228 Date Collected: 8/31/2020 12:03:47 PM
Analyst: Data Type: Original

H261705 SnCl2 V-335000 8/31/20 BR

Replicate Data: LCS MR 85228

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.55	20.55	0.1402	0.5185	0.1403	12:04:35	Yes
2	20.43	20.43	0.1394	0.5144	0.1396	12:05:08	Yes
Mean:	20.49	20.49	0.1398				
SD:	0.081	0.081	0.0005				
%RSD:	0.393	0.393	0.39				

Sequence No.: 14 Autosampler Location: 14
Sample ID: LCS 4D Date Collected: 8/31/2020 12:05:31 PM
Analyst: Data Type: Original

Replicate Data: LCS 4D

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.015	5.015	0.0348	0.1294	0.0349	12:06:20	Yes
2	4.998	4.998	0.0346	0.1284	0.0348	12:06:52	Yes
Mean:	5.007	5.007	0.0347				
SD:	0.012	0.012	0.0001				
%RSD:	0.239	0.239	0.23				

Sequence No.: 15 Autosampler Location: 15
Sample ID: LCS 4D MR Date Collected: 8/31/2020 12:06:54 PM
Analyst: Data Type: Original

Replicate Data: LCS 4D MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.336	5.336	0.0369	0.1372	0.0370	12:07:39	Yes
2	5.300	5.300	0.0367	0.1363	0.0368	12:08:11	Yes
Mean:	5.318	5.318	0.0368				
SD:	0.026	0.026	0.0002				
%RSD:	0.481	0.481	0.47				

Sequence No.: 16 Autosampler Location: 16
Sample ID: AD18955-001 Date Collected: 8/31/2020 12:08:13 PM
Analyst: Data Type: Original

Replicate Data: AD18955-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.840	0.840	0.0064	0.0238	0.0065	12:08:58	Yes
2	0.836	0.836	0.0064	0.0237	0.0065	12:09:31	Yes
Mean:	0.838	0.838	0.0064				
SD:	0.003	0.003	0.0000				
%RSD:	0.354	0.354	0.31				

Sequence No.: 17 Autosampler Location: 17
Sample ID: AD18955-001 MR Date Collected: 8/31/2020 12:09:32 PM
Analyst: Data Type: Original

Replicate Data: AD18955-001 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.658	0.658	0.0052	0.0192	0.0053	12:10:18	Yes
2	0.649	0.649	0.0051	0.0190	0.0052	12:10:50	Yes
Mean:	0.654	0.654	0.0051				
SD:	0.007	0.007	0.0000				

%RSD: 1.000 1.000 0.86

==========

Sequence No.: 18 Autosampler Location: 18
Sample ID: AD18955-002 MS 1 Date Collected: 8/31/2020 12:10:52 PM
Analyst: Data Type: Original

Replicate Data: AD18955-002 MS 1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.910	9.910	0.0680	0.2500	0.0681	12:11:37	Yes
2	9.941	9.941	0.0682	0.2493	0.0683	12:12:10	Yes
Mean:	9.925	9.925	0.0681				
SD:	0.022	0.022	0.0002				
%RSD:	0.223	0.223	0.22				

==========

Sequence No.: 19 Autosampler Location: 19
Sample ID: AD18955-003 MS 2 Date Collected: 8/31/2020 12:12:36 PM
Analyst: Data Type: Original

Replicate Data: AD18955-003 MS 2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.942	9.942	0.0682	0.2494	0.0683	12:13:22	Yes
2	9.922	9.922	0.0681	0.2483	0.0682	12:13:54	Yes
Mean:	9.932	9.932	0.0681				
SD:	0.014	0.014	0.0001				
%RSD:	0.144	0.144	0.14				

==========

Sequence No.: 20 Autosampler Location: 20
Sample ID: AD18934-001 Date Collected: 8/31/2020 12:14:16 PM
Analyst: Data Type: Original

Replicate Data: AD18934-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.232	0.232	0.0023	0.0081	0.0024	12:15:03	Yes
2	0.231	0.231	0.0023	0.0083	0.0024	12:15:35	Yes
Mean:	0.231	0.231	0.0023				
SD:	0.000	0.000	0.0000				
%RSD:	0.178	0.178	0.12				

==========

Sequence No.: 21 Autosampler Location: 9
Sample ID: CCV Date Collected: 8/31/2020 12:15:36 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.30	10.30	0.0707	0.2588	0.0708	12:16:23	Yes
2	10.28	10.28	0.0705	0.2568	0.0706	12:16:55	Yes
Mean:	10.29	10.29	0.0706				
SD:	0.020	0.020	0.0001				
%RSD:	0.198	0.198	0.20				

QC value within limits for Hg 253.7 Recovery = 102.89%
All analyte(s) passed QC.

==========

Sequence No.: 22 Autosampler Location: 1
Sample ID: CCB Date Collected: 8/31/2020 12:17:18 PM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.114	-0.114	-0.0001	-0.0001	0.0001	12:18:04	Yes
2	-0.112	-0.112	-0.0000	0.0000	0.0001	12:18:37	Yes
Mean:	-0.113	-0.113	-0.0001				

SD:	0.001	0.001	0.0000
%RSD:	1.105	1.105	15.60

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 23 Autosampler Location: 21
Sample ID: AD18934-002 Date Collected: 8/31/2020 12:18:38 PM
Analyst: Data Type: Original

Replicate Data: AD18934-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	0.0007	0.0026	0.0008	12:19:26	Yes
2	-0.002	-0.002	0.0007	0.0027	0.0008	12:19:58	Yes
Mean:	-0.004	-0.004	0.0007				
SD:	0.003	0.003	0.0000				
%RSD:	76.59	76.59	3.41				

Sequence No.: 24 Autosampler Location: 22
Sample ID: AD18934-003 Date Collected: 8/31/2020 12:19:59 PM
Analyst: Data Type: Original

Replicate Data: AD18934-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.016	0.016	0.0008	0.0030	0.0009	12:20:45	Yes
2	0.019	0.019	0.0008	0.0032	0.0010	12:21:18	Yes
Mean:	0.018	0.018	0.0008				
SD:	0.003	0.003	0.0000				
%RSD:	14.47	14.47	2.08				

Sequence No.: 25 Autosampler Location: 23
Sample ID: AD18934-004 Date Collected: 8/31/2020 12:21:19 PM
Analyst: Data Type: Original

Replicate Data: AD18934-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.033	-0.033	0.0005	0.0019	0.0006	12:22:04	Yes
2	-0.036	-0.036	0.0005	0.0015	0.0006	12:22:37	Yes
Mean:	-0.035	-0.035	0.0005				
SD:	0.002	0.002	0.0000				
%RSD:	6.500	6.500	3.22				

Sequence No.: 26 Autosampler Location: 24
Sample ID: AD18934-005 Date Collected: 8/31/2020 12:22:38 PM
Analyst: Data Type: Original

Replicate Data: AD18934-005

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.124	0.124	0.0016	0.0058	0.0017	12:23:24	Yes
2	0.129	0.129	0.0016	0.0060	0.0017	12:23:56	Yes
Mean:	0.127	0.127	0.0016				
SD:	0.003	0.003	0.0000				
%RSD:	2.317	2.317	1.27				

Sequence No.: 27 Autosampler Location: 25
Sample ID: AD18955-004 Date Collected: 8/31/2020 12:23:58 PM
Analyst: Data Type: Original

Replicate Data: AD18955-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.021	-0.021	0.0006	0.0020	0.0007	12:24:43	Yes
2	-0.019	-0.019	0.0006	0.0023	0.0007	12:25:16	Yes

Mean:	-0.020	-0.020	0.0006
SD:	0.001	0.001	0.0000
%RSD:	4.688	4.688	1.12

Sequence No.: 28 Autosampler Location: 26
Sample ID: AD18955-005 Date Collected: 8/31/2020 12:25:17 PM
Analyst: Data Type: Original

Replicate Data: AD18955-005

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.128	0.128	0.0016	0.0057	0.0017	12:26:03	Yes
2	0.130	0.130	0.0016	0.0057	0.0017	12:26:36	Yes
Mean:	0.129	0.129	0.0016				
SD:	0.001	0.001	0.0000				
%RSD:	0.784	0.784	0.43				

Sequence No.: 29 Autosampler Location: 27
Sample ID: AD18949-014 Date Collected: 8/31/2020 12:26:37 PM
Analyst: Data Type: Original

Replicate Data: AD18949-014

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.789	0.789	0.0061	0.0220	0.0062	12:27:22	Yes
2	0.791	0.791	0.0061	0.0219	0.0062	12:27:55	Yes
Mean:	0.790	0.790	0.0061				
SD:	0.001	0.001	0.0000				
%RSD:	0.172	0.172	0.15				

Sequence No.: 30 Autosampler Location: 28
Sample ID: AD18950-004 Date Collected: 8/31/2020 12:27:56 PM
Analyst: Data Type: Original

Replicate Data: AD18950-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.358	0.358	0.0031	0.0114	0.0033	12:28:45	Yes
2	0.351	0.351	0.0031	0.0110	0.0032	12:29:17	Yes
Mean:	0.355	0.355	0.0031				
SD:	0.005	0.005	0.0000				
%RSD:	1.379	1.379	1.06				

Sequence No.: 31 Autosampler Location: 29
Sample ID: AD18932-002 Date Collected: 8/31/2020 12:29:19 PM
Analyst: Data Type: Original

Replicate Data: AD18932-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.07	20.07	0.1369	0.4980	0.1371	12:30:04	Yes
2	19.93	19.93	0.1360	0.4927	0.1361	12:30:37	Yes
Mean:	20.00	20.00	0.1365				
SD:	0.095	0.095	0.0006				
%RSD:	0.476	0.476	0.47				

Sequence No.: 32 Autosampler Location: 30
Sample ID: AD18960-001 Date Collected: 8/31/2020 12:30:59 PM
Analyst: Data Type: Original

Replicate Data: AD18960-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.326	0.326	0.0029	0.0103	0.0030	12:31:46	Yes
2	0.329	0.329	0.0029	0.0104	0.0031	12:32:18	Yes
Mean:	0.327	0.327	0.0029				

SD:	0.003	0.003	0.0000
%RSD:	0.774	0.774	0.59

Sequence No.: 33 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 8/31/2020 12:32:20 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.21	10.21	0.0700	0.2541	0.0701	12:33:07	Yes
2	10.23	10.23	0.0702	0.2528	0.0703	12:33:40	Yes
Mean:	10.22	10.22	0.0701				
SD:	0.016	0.016	0.0001				
%RSD:	0.158	0.158	0.16				

QC value within limits for Hg 253.7 Recovery = 102.22%
All analyte(s) passed QC.

Sequence No.: 34 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 8/31/2020 12:34:02 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.118	-0.118	-0.0001	-0.0007	0.0000	12:34:49	Yes
2	-0.114	-0.114	-0.0001	-0.0002	0.0000	12:35:21	Yes
Mean:	-0.116	-0.116	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	2.784	2.784	28.27				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 31**
Sample ID: AD18960-003 **Date Collected: 8/31/2020 12:35:23 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18960-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.324	0.324	0.0029	0.0109	0.0030	12:36:11	Yes
2	0.324	0.324	0.0029	0.0108	0.0030	12:36:43	Yes
Mean:	0.324	0.324	0.0029				
SD:	0.000	0.000	0.0000				
%RSD:	0.106	0.106	0.08				

Sequence No.: 36 **Autosampler Location: 32**
Sample ID: AD18960-004 **Date Collected: 8/31/2020 12:36:45 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18960-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.071	-0.071	0.0002	0.0009	0.0003	12:37:30	Yes
2	-0.073	-0.073	0.0002	0.0009	0.0003	12:38:03	Yes
Mean:	-0.072	-0.072	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	2.221	2.221	4.86				

Sequence No.: 37 **Autosampler Location: 33**
Sample ID: AD18960-007 **Date Collected: 8/31/2020 12:38:04 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18960-007

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	0.169	0.169	0.0019	0.0065	0.0020	12:38:50	Yes
2	0.168	0.168	0.0019	0.0065	0.0020	12:39:22	Yes
Mean:	0.169	0.169	0.0019				
SD:	0.001	0.001	0.0000				
%RSD:	0.430	0.430	0.27				

Sequence No.: 38 **Autosampler Location: 34**
Sample ID: AD18960-015 **Date Collected: 8/31/2020 12:39:24 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18960-015

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.136	0.136	0.0016	0.0058	0.0017	12:40:09	Yes
2	0.136	0.136	0.0016	0.0059	0.0017	12:40:42	Yes
Mean:	0.136	0.136	0.0016				
SD:	0.000	0.000	0.0000				
%RSD:	0.048	0.048	0.03				

Sequence No.: 39 **Autosampler Location: 35**
Sample ID: AD18960-017 **Date Collected: 8/31/2020 12:40:43 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18960-017

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.157	0.157	0.0018	0.0063	0.0019	12:41:29	Yes
2	0.157	0.157	0.0018	0.0064	0.0019	12:42:01	Yes
Mean:	0.157	0.157	0.0018				
SD:	0.000	0.000	0.0000				
%RSD:	0.058	0.058	0.03				

Sequence No.: 40 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 8/31/2020 12:42:02 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.14	10.14	0.0696	0.2518	0.0697	12:42:51	Yes
2	10.12	10.12	0.0694	0.2511	0.0695	12:43:24	Yes
Mean:	10.13	10.13	0.0695				
SD:	0.013	0.013	0.0001				
%RSD:	0.133	0.133	0.13				

QC value within limits for Hg 253.7 Recovery = 101.31%
All analyte(s) passed QC.

Sequence No.: 41 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 8/31/2020 12:43:46 PM**
Analyst: **Data Type: Original**

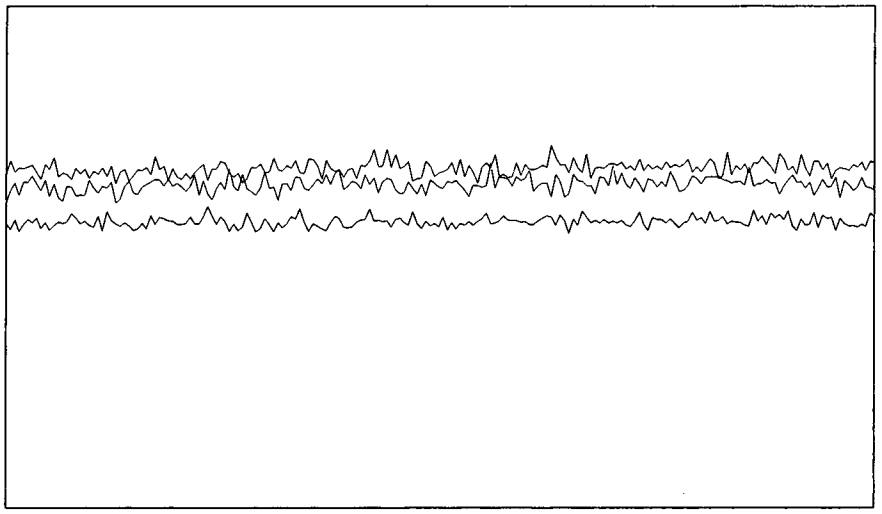
Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.119	-0.119	-0.0001	-0.0007	0.0000	12:44:33	Yes
2	-0.118	-0.118	-0.0001	-0.0006	0.0000	12:45:05	Yes
Mean:	-0.118	-0.118	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.354	0.354	3.08				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

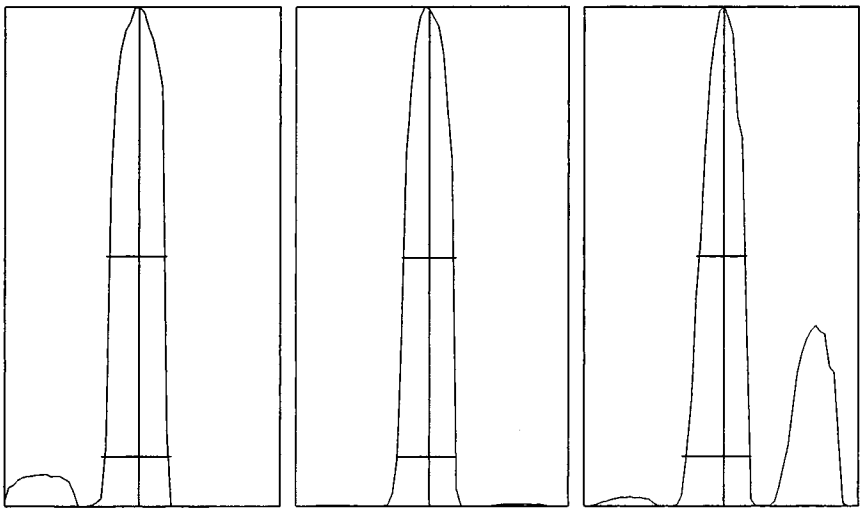
Tune Report

Tune File : ATUNE.U
Comment : TN083120



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	1.004
Doubly Charged:	70/140	1.104

m/z	Range	Count	Mean	RSD%	Background
7	100,000	57908.0	56944.7	1.80	0.50
89	100,000	68774.0	67624.7	2.04	1.90
205	100,000	63229.0	64352.0	2.21	5.30
156/140	2	1.024%	0.989%	5.20	
70/140	2	1.102%	1.127%	4.66	



m/z:	7	89	
Height:	58,020	67,160	6
Axis:	7.00	89.00	2
W-50%:	0.65	0.60	
W-10%:	0.7500	0.6500	0

Integration Time:	0.1000 sec
Acquisition Time:	22.7600 sec

Y axis : Linear

Generated : Aug 31, 2020 08:24:27
Printed : Aug 31, 2020 08:24:32

Tune Report

Tune File : ATUNE.U
Comment : TN083120

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1500 W	Extract 1	:	0 V	AMU Gain	:	127
RF Matching	:	2.5 V	Extract 2	:	-125 V	AMU Offset	:	127
Smpl Depth	:	10 mm	Omega Bias	:	-65 V	Axis Gain	:	0.9999
Torch-H	:	-1.2 mm	Omega Lens	:	6.5 V	Axis Offset	:	0.02
Torch-V	:	0.9 mm	Cell Entrance	:	-40 V	QP Bias	:	-3 V
Carrier Gas	:	0.55 L/min	Cell Exit	:	-60 V			
Dilution Mode	:	ON	Deflect	:	13 V	===Detector Parameters===		
Dilution Gas	:	0.5 L/min	Plate Bias	:	-40 V	Discriminator	:	4.5 mV
Optional Gas	:	--- %	===Octopole Parameters===			Analog HV	:	1713 V
Nebulizer Pump	:	0.1 rps	OctP RF	:	190 V	Pulse HV	:	1664 V
Sample Pump	:	--- rps	OctP Bias	:	-8 V			
S/C Temp	:	2 degC						

===Reaction Cell===								
Reaction Mode	:	OFF						
H2 Gas	:	--- mL/min	He Gas	:	4.3 mL/min	Optional Gas	:	--- %

Generated : Aug 31, 2020 08:24:27
Printed : Aug 31, 2020 08:24:34

C:\ICPMH\1\7500\QCTUNE.D

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 31 Aug 2020 08:36:29 am
Operator: PC
Misc Info:
Vial Number: 4
Current Method: C:\ICPMH\1\METHODS\TN6020.m

Minimum Response(CPS)

Element	Actual	Required	Flag
7 Li	5809720.00	0.00	
59 Co	4144000.00	0.00	
115 In	6565260.00	0.00	
205 Tl	6110990.00	0.00	

RSD (%)

Element	Actual	Required	Flag
7 Li	0.33	5.00	
59 Co	0.97	5.00	
115 In	1.06	5.00	
205 Tl	0.82	5.00	

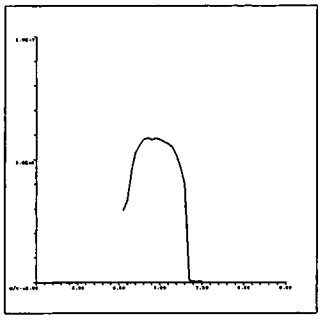
Ion Ratio

Element	Actual	Required	Flag
7 Li			
59 Co			
115 In			
205 Tl			

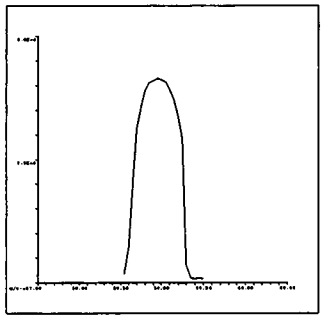
Maximum Bkg. Count(CPS)

Element	Actual	Required	Flag

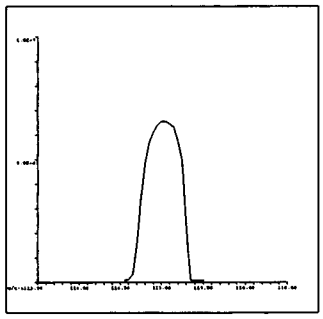
C:\ICPMH\1\7500\QCTUNE.D



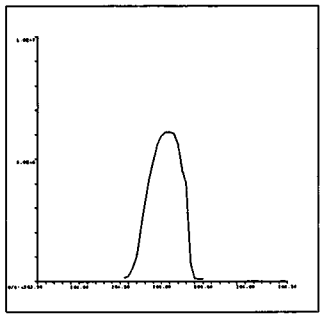
7 Li
Mass Calib.
Actual: 6.90
Required: 6.90-7.10
Flag:
Peak Width
Actual: 0.75
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.05
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.05
Required: 204.90-205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

QC Tune Result:Pass

Calibration Blank Report

File 083120A
Qe-85224
Qe. B- 24171
Rinse

Sample Name	**RINSE**
Data File Name	**001CALB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:20:22-04:00**
Type	**CalBlk**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

Report Ag, As, Be, Cd, Sb, Se, Tl, V

LRS fail for As.
Ag LR= 1000PPB

Rerun As, Cd for 18532-002 (Cont std fail)

9/1/20

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	27	45.07
Na	23	115	2	31309	1.05
Mg	24	115	2	393	15.32
Al	27	115	2	271	17.58
K	39	115	2	32764	0.23
Ca	44	115	2	216	7.93
V	51	115	2	28	38.58
Cr	52	115	2	1539	5.23
Mn	55	115	2	676	2.97
Fe	56	115	2	19517	3.49
Co	59	115	2	152	17.01
Ni	60	115	2	659	2.11
Cu	65	115	2	1929	7.96
Zn	66	115	2	1139	11.71
As	75	115	2	7	48.25
Se	78	115	2	11	47.73
Kr	83	115	1	192	14.44
Mo	95	115	1	62	3.10
Ag	107	115	1	323	25.34
Cd	111	115	1	4	95.82
Sb	121	115	1	322	20.10
Ba	137	159	1	167	7.21
Tl	205	165	1	2014	4.18
(Pb)	206	165	1	927	11.53
(Pb)	207	165	1	856	5.64
Pb	208	165	1	2011	5.91

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	998230	0.60
Sc	45	2	54087	2.40
In	115	1	1401032	1.03
In	115	2	311137	1.77
Tb	159	1	2295119	0.28
Tb	159	2	1007554	1.00
Ho	165	1	2264284	0.81
Ho	165	2	1000721	0.75

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Blank Report

Sample Name	**CalBlk V-333612**
Data File Name	**002CALB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:24:56-04:00**
Type	**CalBlk**
VialNumber	**2101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	38	13.48
Na	23	115	2	54502	0.86
Mg	24	115	2	1079	7.42
Al	27	115	2	1190	6.19
K	39	115	2	36212	1.66
Ca	44	115	2	337	11.88
V	51	115	2	42	52.57
Cr	52	115	2	1855	6.46
Mn	55	115	2	1028	10.93
Fe	56	115	2	39969	1.63
Co	59	115	2	143	22.18
Ni	60	115	2	962	3.82
Cu	65	115	2	2012	6.53
Zn	66	115	2	1819	2.50
As	75	115	2	12	19.50
Se	78	115	2	13	19.78
Kr	83	115	1	159	26.40
Mo	95	115	1	86	18.41
Ag	107	115	1	287	6.15
Cd	111	115	1	20	25.46
Sb	121	115	1	3365	4.07
Ba	137	159	1	1095	5.65
Tl	205	165	1	2381	4.72
(Pb)	206	165	1	1408	8.15
(Pb)	207	165	1	1176	2.45
Pb	208	165	1	2866	1.94

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	1058582	0.47
Sc	45	2	55969	2.40
In	115	1	1490926	0.35
In	115	2	324073	0.23
Tb	159	1	2402233	0.94
Tb	159	2	1053942	1.12
Ho	165	1	2372257	0.19
Ho	165	2	1044050	1.26

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd1 V-333613**
Data File Name	**003CALS.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:29:28-04:00**
Type	**CalStd**
VialNumber	**2102**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	5364	3.03
Na	23	115	2	151505	0.93
Mg	24	115	2	39009	2.55
Al	27	115	2	5195	1.43
K	39	115	2	67564	0.77
Ca	44	115	2	1637	3.00
V	51	115	2	2787	4.51
Cr	52	115	2	5656	2.92
Mn	55	115	2	3228	5.02
Fe	56	115	2	349786	1.52
Co	59	115	2	5942	3.19
Ni	60	115	2	2627	1.78
Cu	65	115	2	4284	5.41
Zn	66	115	2	2964	6.55
As	75	115	2	343	5.03
Se	78	115	2	148	16.16
Kr	83	115	1	122	10.32
Mo	95	115	1	4348	1.43
Ag	107	115	1	11811	1.80
Cd	111	115	1	2291	4.04
Sb	121	115	1	11942	5.67
Ba	137	159	1	4381	7.39
Tl	205	165	1	28783	2.65
(Pb)	206	165	1	9808	6.34
(Pb)	207	165	1	8248	0.61
Pb	208	165	1	20526	4.95

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1079901	0.63	1058582	102.0	70	130	
Sc	45	2	56387	1.83	55969	100.7	70	130	
In	115	1	1585394	2.89	1490926	106.3	70	130	
In	115	2	329223	0.22	324073	101.6	70	130	
Tb	159	1	2447214	1.44	2402233	101.9	70	130	
Tb	159	2	1059171	1.28	1053942	100.5	70	130	
Ho	165	1	2430162	1.60	2372257	102.4	70	130	
Ho	165	2	1053538	0.22	1044050	100.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd2 V-333614**
Data File Name	**004CALS.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:34:00-04:00**
Type	**CalStd**
VialNumber	**2103**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	54465	3.20
Na	23	115	2	800488	0.84
Mg	24	115	2	387161	1.08
Al	27	115	2	43316	1.29
K	39	115	2	293864	0.56
Ca	44	115	2	13173	1.12
V	51	115	2	28745	1.12
Cr	52	115	2	37537	2.12
Mn	55	115	2	21644	4.84
Fe	56	115	2	3180734	0.47
Co	59	115	2	58686	1.42
Ni	60	115	2	16304	0.25
Cu	65	115	2	21398	0.83
Zn	66	115	2	7093	2.59
As	75	115	2	3515	3.18
Se	78	115	2	1420	2.10
Kr	83	115	1	148	26.43
Mo	95	115	1	41400	3.05
Ag	107	115	1	114209	3.07
Cd	111	115	1	22706	2.30
Sb	121	115	1	87790	2.16
Ba	137	159	1	34203	2.64
Tl	205	165	1	270165	2.20
(Pb)	206	165	1	88503	3.67
(Pb)	207	165	1	74626	3.32
Pb	208	165	1	185340	2.49

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1082317	1.17	1058582	102.2	70	130	
Sc	45	2	57055	1.24	55969	101.9	70	130	
In	115	1	1532740	0.89	1490926	102.8	70	130	
In	115	2	330599	0.59	324073	102.0	70	130	
Tb	159	1	2472265	0.84	2402233	102.9	70	130	
Tb	159	2	1074120	1.84	1053942	101.9	70	130	
Ho	165	1	2441223	0.79	2372257	102.9	70	130	
Ho	165	2	1063564	0.87	1044050	101.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd3 V-333615**
Data File Name	**005CALS.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:38:31-04:00**
Type	**CalStd**
VialNumber	**2104**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	108340	3.15
Na	23	115	2	1709103	0.34
Mg	24	115	2	776062	0.45
Al	27	115	2	84819	0.87
K	39	115	2	559387	0.43
Ca	44	115	2	26445	2.35
V	51	115	2	57897	1.02
Cr	52	115	2	75925	2.14
Mn	55	115	2	42969	0.33
Fe	56	115	2	6347776	1.66
Co	59	115	2	117272	0.50
Ni	60	115	2	33060	1.88
Cu	65	115	2	44434	0.84
Zn	66	115	2	14363	2.98
As	75	115	2	6935	2.06
Se	78	115	2	2792	3.22
Kr	83	115	1	151	17.83
Mo	95	115	1	83176	3.18
Ag	107	115	1	231999	3.50
Cd	111	115	1	45838	2.67
Sb	121	115	1	177071	2.88
Ba	137	159	1	69163	3.99
Tl	205	165	1	545600	3.72
(Pb)	206	165	1	178575	3.00
(Pb)	207	165	1	150228	3.76
Pb	208	165	1	370478	3.90

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1092594	0.68	1058582	103.2	70	130	
Sc	45	2	57403	1.13	55969	102.6	70	130	
In	115	1	1623302	1.31	1490926	108.9	70	130	
In	115	2	331160	1.61	324073	102.2	70	130	
Tb	159	1	2496898	1.01	2402233	103.9	70	130	
Tb	159	2	1082694	0.54	1053942	102.7	70	130	
Ho	165	1	2451105	0.14	2372257	103.3	70	130	
Ho	165	2	1064727	0.79	1044050	102.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd4 V-333616**
Data File Name	**006CALS.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:43:04-04:00**
Type	**CalStd**
VialNumber	**2105**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	546910	2.77
Na	23	115	2	8160355	0.31
Mg	24	115	2	3920364	1.51
Al	27	115	2	421572	0.58
K	39	115	2	2624015	0.94
Ca	44	115	2	130687	0.58
V	51	115	2	289484	1.37
Cr	52	115	2	368731	0.82
Mn	55	115	2	209680	1.49
Fe	56	115	2	30905495	0.95
Co	59	115	2	581624	0.65
Ni	60	115	2	155668	1.18
Cu	65	115	2	205513	1.66
Zn	66	115	2	62242	0.24
As	75	115	2	35228	1.20
Se	78	115	2	14027	0.26
Kr	83	115	1	202	21.52
Mo	95	115	1	418497	2.83
Ag	107	115	1	1150564	2.84
Cd	111	115	1	231463	2.63
Sb	121	115	1	880687	3.00
Ba	137	159	1	345522	3.25
Tl	205	165	1	2946276	3.36
(Pb)	206	165	1	880255	3.68
(Pb)	207	165	1	741899	3.15
Pb	208	165	1	1972202	1.92

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1083088	0.64	1058582	102.3	70	130	
Sc	45	2	56156	0.97	55969	100.3	70	130	
In	115	1	1533129	2.52	1490926	102.8	70	130	
In	115	2	326139	0.96	324073	100.6	70	130	
Tb	159	1	2451034	1.71	2402233	102.0	70	130	
Tb	159	2	1072660	0.80	1053942	101.8	70	130	
Ho	165	1	2419751	1.50	2372257	102.0	70	130	
Ho	165	2	1063430	0.61	1044050	101.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd5 V-333617**
Data File Name	**007CALS.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:47:30-04:00**
Type	**CalStd**
VialNumber	**2106**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	1086296	1.89
Na	23	115	2	16093114	1.49
Mg	24	115	2	7621533	0.75
Al	27	115	2	826303	1.44
K	39	115	2	5149233	1.60
Ca	44	115	2	258602	2.07
V	51	115	2	573683	1.94
Cr	52	115	2	726504	1.94
Mn	55	115	2	412553	1.19
Fe	56	115	2	60860497	2.26
Co	59	115	2	1143451	1.13
Ni	60	115	2	302895	2.39
Cu	65	115	2	399688	2.41
Zn	66	115	2	120737	2.70
As	75	115	2	69705	2.34
Se	78	115	2	27698	0.71
Kr	83	115	1	214	8.84
Mo	95	115	1	822527	2.37
Ag	107	115	1	2320093	1.75
Cd	111	115	1	442983	2.76
Sb	121	115	1	1790326	2.30
Ba	137	159	1	669578	2.47
Tl	205	165	1	5663058	2.98
(Pb)	206	165	1	1779229	6.67
(Pb)	207	165	1	1430346	2.57
Pb	208	165	1	3792580	1.75

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1095393	0.48	1058582	103.5	70	130	
Sc	45	2	56800	2.56	55969	101.5	70	130	
In	115	1	1547382	2.88	1490926	103.8	70	130	
In	115	2	324579	0.77	324073	100.2	70	130	
Tb	159	1	2462319	0.75	2402233	102.5	70	130	
Tb	159	2	1078998	1.00	1053942	102.4	70	130	
Ho	165	1	2445687	1.04	2372257	103.1	70	130	
Ho	165	2	1076388	1.28	1044050	103.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Verification (ICV) - US EPA Method 6020

Sample Name	**ICV V-333618**
Data File Name	**008_ICV.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:51:53-04:00**
Type	**6-ICV**
VialNumber	**2108**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	54.80	ppb	50	555830	2.94	109.60	90	110	
Na	23	115	2	5185.74	ppb	5000	8542800	0.89	103.71	90	110	
Mg	24	115	2	5187.67	ppb	5000	4049769	0.85	103.75	90	110	
Al	27	115	2	5237.74	ppb	5000	1473614	0.17	104.75	90	110	
K	39	115	2	5271.81	ppb	5000	2788752	1.52	105.44	90	110	
Ca	44	115	2	5189.36	ppb	5000	137063	1.09	103.79	90	110	
V	51	115	2	50.73	ppb	50	296943	1.94	101.47	90	110	
Cr	52	115	2	51.52	ppb	50	383065	1.44	103.05	90	110	
Mn	55	115	2	50.67	ppb	50	214014	1.96	101.35	90	110	
Fe	56	115	2	5187.09	ppb	5000	32269886	1.64	103.74	90	110	
Co	59	115	2	51.56	ppb	50	602512	1.30	103.11	90	110	
Ni	60	115	2	52.24	ppb	50	162450	2.12	104.47	90	110	
Cu	65	115	2	52.59	ppb	50	216069	1.56	105.18	90	110	
Zn	66	115	2	52.92	ppb	50	66144	1.19	105.84	90	110	
As	75	115	2	51.76	ppb	50	36818	1.88	103.52	90	110	
Se	78	115	2	53.63	ppb	50	3045	3.89	107.25	90	110	
Mo	95	115	1	47.92	ppb	50	418334	3.56	95.84	90	110	
Ag	107	115	1	9.75	ppb	10	235448	3.13	97.55	90	110	
Cd	111	115	1	49.60	ppb	50	234504	3.68	99.19	90	110	
Sb	121	115	1	47.56	ppb	50	898866	4.09	95.13	90	110	
Ba	137	159	1	51.17	ppb	50	352211	4.03	102.33	90	110	
Tl	205	165	1	50.82	ppb	50	2923919	2.75	101.64	90	110	
Pb	208	165	1	52.26	ppb	50	2014265	3.81	104.53	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1101090	0.30	1058582	104.0	70	130	
Sc	45	2	57798	0.30	55969	103.3	70	130	
In	115	1	1632589	0.75	1490926	109.5	70	130	
In	115	2	330882	1.28	324073	102.1	70	130	
Tb	159	1	2509770	0.23	2402233	104.5	70	130	
Tb	159	2	1097627	1.01	1053942	104.1	70	130	
Ho	165	1	2460264	0.79	2372257	103.7	70	130	
Ho	165	2	1089115	1.32	1044050	104.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Low Level Initial/Continuing Calibration Verification (ICV/CCV) - US EPA Method 6020

Sample Name	**LLICV V-333623**
Data File Name	**009_LCS.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T10:56:18-04:00**
Type	**6-LCS**
VialNumber	**2110**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	ExpectedValue	%Recovery	%QC Low	%QC High	QC Flag
Be	9	165	1	1.06	ppb	1	106.4	80	120	
Na	23	115	2	477.69	ppb	500	95.5	80	120	
Mg	24	115	2	489.74	ppb	500	97.9	80	120	
Al	27	115	2	499.37	ppb	500	99.9	80	120	
K	39	115	2	501.40	ppb	500	100.3	80	120	
Ca	44	115	2	493.48	ppb	500	98.7	80	120	
V	51	115	2	0.96	ppb	1	96.3	80	120	
Cr	52	115	2	1.91	ppb	2	95.5	80	120	
Mn	55	115	2	5.99	ppb	6	99.8	80	120	
Fe	56	115	2	514.34	ppb	500	102.9	80	120	
Co	59	115	2	1.96	ppb	2	98.1	80	120	
Ni	60	115	2	2.96	ppb	3	98.7	80	120	
Cu	65	115	2	10.22	ppb	10	102.2	80	120	
Zn	66	115	2	20.01	ppb	20	100.1	80	120	
As	75	115	2	0.94	ppb	1	94.0	80	120	
Se	78	115	2	9.95	ppb	10	99.5	80	120	
Mo	95	115	1	1.04	ppb	1	103.8	80	120	
Ag	107	115	1	0.96	ppb	1	95.7	80	120	
Cd	111	115	1	1.92	ppb	2	96.0	80	120	
Sb	121	115	1	3.52	ppb	4	88.1	80	120	
Ba	137	159	1	5.16	ppb	5	103.1	80	120	
Tl	205	165	1	1.86	ppb	2	92.9	80	120	
Pb	208	165	1	1.94	ppb	2	97.0	80	120	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1117400	0.56	1058582	105.6	70	130	
Sc	45	2	59635	0.18	55969	106.5	70	130	
In	115	1	1659355	1.54	1490926	111.3	70	130	
In	115	2	342727	0.70	324073	105.8	70	130	
Tb	159	1	2537705	1.58	2402233	105.6	70	130	
Tb	159	2	1109672	0.43	1053942	105.3	70	130	
Ho	165	1	2474787	1.10	2372257	104.3	70	130	
Ho	165	2	1109290	0.69	1044050	106.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Blank (ICB) - US EPA Method 6020

Sample Name	**ICB V-333619**
Data File Name	**010_ICB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:00:49-04:00**
Type	**6-ICB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.00	ppb	0.5	
Na	23	115	2	-3.83	ppb	250	
Mg	24	115	2	-0.23	ppb	250	
Al	27	115	2	-0.52	ppb	250	
K	39	115	2	-3.98	ppb	250	
Ca	44	115	2	-2.45	ppb	250	
V	51	115	2	0.00	ppb	0.5	
Cr	52	115	2	-0.01	ppb	1	
Mn	55	115	2	-0.05	ppb	3	
Fe	56	115	2	0.20	ppb	250	
Co	59	115	2	0.00	ppb	1	
Ni	60	115	2	-0.03	ppb	1.5	
Cu	65	115	2	-0.10	ppb	5	
Zn	66	115	2	-0.13	ppb	10	
As	75	115	2	0.01	ppb	0.5	
Se	78	115	2	0.18	ppb	5	
Mo	95	115	1	0.02	ppb	0.5	
Ag	107	115	1	0.00	ppb	0.5	
Cd	111	115	1	0.00	ppb	1	
Sb	121	115	1	0.01	ppb	2	
Ba	137	159	1	-0.03	ppb	2.5	
Tl	205	165	1	-0.02	ppb	1	
Pb	208	165	1	-0.01	ppb	1	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1126342	0.48	1058582	106.4	70	130	
Sc	45	2	59898	1.29	55969	107.0	70	130	
In	115	1	1680439	1.45	1490926	112.7	70	130	
In	115	2	342491	0.80	324073	105.7	70	130	
Tb	159	1	2518847	0.64	2402233	104.9	70	130	
Tb	159	2	1108712	0.62	1053942	105.2	70	130	
Ho	165	1	2499574	1.08	2372257	105.4	70	130	
Ho	165	2	1107025	0.66	1044050	106.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Interference Check Sample A (ICS-A) - US EPA Method 6020

Sample Name	**ICSA V-333620**
Data File Name	**011ICSA.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:05:21-04:00**
Type	**6-ICSA**
VialNumber	**2107**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	124499.95	ppb	162500	
Mg	24	115	2	48193.53	ppb	65000	
Al	27	115	2	48928.13	ppb	65000	
K	39	115	2	50812.99	ppb	65000	
Ca	44	115	2	154503.07	ppb	195000	
V	51	115	2	0.06	ppb	1	
Cr	52	115	2	0.44	ppb	2	
Mn	55	115	2	1.28	ppb	6	
Fe	56	115	2	123556.71	ppb	162500	
Co	59	115	2	0.24	ppb	2	
Ni	60	115	2	0.52	ppb	3	
Cu	65	115	2	0.01	ppb	10	
Zn	66	115	2	0.03	ppb	20	
As	75	115	2	0.22	ppb	1	
Se	78	115	2	0.57	ppb	10	
Mo	95	115	1	991.30	ppb	1300	
Ag	107	115	1	0.11	ppb	1	
Cd	111	115	1	1.35	ppb	2	
Sb	121	115	1	0.17	ppb	1	
Ba	137	159	1	0.70	ppb	5	
Tl	205	165	1	-0.02	ppb	2	
Pb	208	165	1	0.00	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1151379	1.07	1058582	108.8	70	130	
Sc	45	2	61184	0.49	55969	109.3	70	130	
In	115	1	1600755	0.62	1490926	107.4	70	130	
In	115	2	330667	1.22	324073	102.0	70	130	
Tb	159	1	2605439	0.88	2402233	108.5	70	130	
Tb	159	2	1114779	0.78	1053942	105.8	70	130	
Ho	165	1	2552858	1.28	2372257	107.6	70	130	
Ho	165	2	1112366	0.57	1044050	106.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**012SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:09:45-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.00	0.00	ppb	47	37.80	550	
Na	23	115	2	-4.52	-4.52	ppb	52577	0.28	55000	
Mg	24	115	2	-0.48	-0.48	ppb	789	7.56	55000	
Al	27	115	2	-2.82	-2.82	ppb	459	7.13	16500	
K	39	115	2	-3.05	-3.05	ppb	38560	1.48	55000	
Ca	44	115	2	-4.41	-4.41	ppb	248	12.06	55000	
V	51	115	2	0.00	0.00	ppb	34	47.75	550	
Cr	52	115	2	-0.02	-0.02	ppb	1889	3.92	550	
Mn	55	115	2	-0.07	-0.07	ppb	812	9.49	550	
Fe	56	115	2	0.49	0.49	ppb	47740	4.35	55000	
Co	59	115	2	0.00	0.00	ppb	118	26.30	550	
Ni	60	115	2	-0.08	-0.08	ppb	817	4.60	550	
Cu	65	115	2	0.03	0.03	ppb	2367	5.42	550	
Zn	66	115	2	-0.48	-0.48	ppb	1385	3.46	550	
As	75	115	2	-0.01	-0.01	ppb	9	33.03	550	
Se	78	115	2	0.16	0.16	ppb	24	11.62	2750	
Mo	95	115	1	0.56	0.56	ppb	5353	11.68	550	
Ag	107	115	1	0.00	0.00	ppb	384	14.88	550	
Cd	111	115	1	0.00	0.00	ppb	24	32.91	550	
Sb	121	115	1	-0.17	-0.17	ppb	511	2.94	550	
Ba	137	159	1	-0.14	-0.14	ppb	191	8.24	550	
Tl	205	165	1	-0.02	-0.02	ppb	1270	10.62	550	
Pb	208	165	1	-0.02	-0.02	ppb	2326	3.32	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1186523	0.59	1058582	112.1	70	130	
Sc	45	2	62794	0.19	55969	112.2	70	130	
In	115	1	1757793	0.67	1490926	117.9	70	130	
In	115	2	360640	1.38	324073	111.3	70	130	
Tb	159	1	2652760	1.00	2402233	110.4	70	130	
Tb	159	2	1161727	1.70	1053942	110.2	70	130	
Ho	165	1	2618823	1.64	2372257	110.4	70	130	
Ho	165	2	1155701	0.65	1044050	110.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LRS V-333621**
Data File Name	**013SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:14:16-04:00**
Type	**Sample**
VialNumber	**2109**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	509.24	509.24	ppb	5310819	2.53	550	
Na	23	115	2	50383.95	50383.95	ppb	83386724	1.17	55000	
Mg	24	115	2	49997.04	49997.04	ppb	39432528	1.48	55000	
Al	27	115	2	15142.20	15142.20	ppb	4303027	1.65	16500	
K	39	115	2	51475.40	51475.40	ppb	27187173	1.25	55000	
Ca	44	115	2	53162.98	53162.98	ppb	1415591	3.58	55000	
V	51	115	2	522.59	522.59	ppb	3090646	2.39	550	
Cr	52	115	2	512.04	512.04	ppb	3829892	1.87	550	
Mn	55	115	2	519.85	519.85	ppb	2208692	2.21	550	
Fe	56	115	2	50638.13	50638.13	ppb	317994260	2.12	55000	
Co	59	115	2	507.93	507.93	ppb	5996932	1.06	550	
Ni	60	115	2	511.40	511.40	ppb	1598345	3.70	550	
Cu	65	115	2	503.89	503.89	ppb	2074230	1.55	550	
Zn	66	115	2	488.76	488.76	ppb	601860	1.13	550	
As	75	115	2	511.84	511.84	ppb	367785	1.24	550	
Se	78	115	2	2499.41	2499.41	ppb	142770	1.62	2750	
Mo	95	115	1	520.38	520.38	ppb	4421489	1.61	550	
Ag	107	115	1	1543.71	1543.71	ppb	36225014	1.70	550	>LDR
Cd	111	115	1	513.92	513.92	ppb	2365341	2.05	550	
Sb	121	115	1	495.04	495.04	ppb	9073233	2.22	550	
Ba	137	159	1	526.41	526.41	ppb	3648725	1.71	550	
Tl	205	165	1	478.79	478.79	ppb	28304958	1.38	550	
Pb	208	165	1	472.25	472.25	ppb	18690946	2.29	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1125531	0.35	1058582	106.3	70	130	
Sc	45	2	60396	0.53	55969	107.9	70	130	
In	115	1	1591697	4.00	1490926	106.8	70	130	
In	115	2	334364	1.27	324073	103.2	70	130	
Tb	159	1	2534457	0.55	2402233	105.5	70	130	
Tb	159	2	1112089	0.98	1053942	105.5	70	130	
Ho	165	1	2529534	0.72	2372257	106.6	70	130	
Ho	165	2	1114131	0.06	1044050	106.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**014SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:18:27-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.02	0.02	ppb	272	10.42	550	
Na	23	115	2	-1.28	-1.28	ppb	58364	0.74	55000	
Mg	24	115	2	0.00	0.00	ppb	1197	3.38	55000	
Al	27	115	2	-2.42	-2.42	ppb	582	7.77	16500	
K	39	115	2	-0.13	-0.13	ppb	40213	0.88	55000	
Ca	44	115	2	-3.79	-3.79	ppb	266	9.42	55000	
V	51	115	2	0.00	0.00	ppb	57	51.27	550	
Cr	52	115	2	-0.02	-0.02	ppb	1862	2.80	550	
Mn	55	115	2	-0.06	-0.06	ppb	883	13.78	550	
Fe	56	115	2	-0.05	-0.05	ppb	44117	2.90	55000	
Co	59	115	2	0.00	0.00	ppb	174	13.83	550	
Ni	60	115	2	-0.08	-0.08	ppb	818	8.97	550	
Cu	65	115	2	0.03	0.03	ppb	2385	3.80	550	
Zn	66	115	2	-0.58	-0.58	ppb	1256	5.60	550	
As	75	115	2	0.05	0.05	ppb	48	25.41	550	
Se	78	115	2	0.45	0.45	ppb	42	5.27	2750	
Mo	95	115	1	0.34	0.34	ppb	3299	9.23	550	
Ag	107	115	1	17.13	17.13	ppb	443356	43.40	550	
Cd	111	115	1	0.01	0.01	ppb	52	6.39	550	
Sb	121	115	1	0.12	0.12	ppb	6358	7.22	550	
Ba	137	159	1	-0.13	-0.13	ppb	238	27.69	550	
Tl	205	165	1	0.03	0.03	ppb	4251	2.34	550	
Pb	208	165	1	0.00	0.00	ppb	3294	2.14	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1199885	3.52	1058582	113.3	70	130	
Sc	45	2	63016	0.56	55969	112.6	70	130	
In	115	1	1749779	0.96	1490926	117.4	70	130	
In	115	2	360605	1.21	324073	111.3	70	130	
Tb	159	1	2624318	0.28	2402233	109.2	70	130	
Tb	159	2	1150984	0.80	1053942	109.2	70	130	
Ho	165	1	2609915	1.23	2372257	110.0	70	130	
Ho	165	2	1144216	1.25	1044050	109.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**015SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:23:49-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.03	0.03	ppb	349	3.62	550	
Na	23	115	2	-4.27	-4.27	ppb	51584	1.64	55000	
Mg	24	115	2	1.39	1.39	ppb	2316	6.64	55000	
Al	27	115	2	-2.16	-2.16	ppb	644	10.22	16500	
K	39	115	2	-1.21	-1.21	ppb	38528	0.97	55000	
Ca	44	115	2	-1.38	-1.38	ppb	326	15.54	55000	
V	51	115	2	0.02	0.02	ppb	139	22.30	550	
Cr	52	115	2	-0.01	-0.01	ppb	1947	3.68	550	
Mn	55	115	2	-0.01	-0.01	ppb	1053	4.91	550	
Fe	56	115	2	0.81	0.81	ppb	48599	1.53	55000	
Co	59	115	2	0.02	0.02	ppb	380	4.02	550	
Ni	60	115	2	-0.06	-0.06	ppb	839	8.43	550	
Cu	65	115	2	0.02	0.02	ppb	2276	5.61	550	
Zn	66	115	2	-0.55	-0.55	ppb	1263	2.28	550	
As	75	115	2	0.03	0.03	ppb	35	26.86	550	
Se	78	115	2	0.29	0.29	ppb	31	33.36	2750	
Mo	95	115	1	0.10	0.10	ppb	1010	6.89	550	
Ag	107	115	1	0.30	0.30	ppb	7899	5.39	550	
Cd	111	115	1	0.01	0.01	ppb	96	16.89	550	
Sb	121	115	1	-0.11	-0.11	ppb	1747	3.58	550	
Ba	137	159	1	-0.12	-0.12	ppb	294	14.77	550	
Tl	205	165	1	0.00	0.00	ppb	2659	4.24	550	
Pb	208	165	1	0.00	0.00	ppb	3256	3.11	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1142475	0.68	1058582	107.9	70	130	
Sc	45	2	59916	0.33	55969	107.1	70	130	
In	115	1	1706511	2.29	1490926	114.5	70	130	
In	115	2	350788	1.14	324073	108.2	70	130	
Tb	159	1	2572080	1.36	2402233	107.1	70	130	
Tb	159	2	1127776	0.86	1053942	107.0	70	130	
Ho	165	1	2535257	1.47	2372257	106.9	70	130	
Ho	165	2	1111947	1.69	1044050	106.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**MB 85229**
Data File Name	**016SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:31:04-04:00**
Type	**Sample**
VialNumber	**2201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.00	0.00	ppb	54	43.00	550	
Na	23	115	2	-6.94	-6.94	ppb	46600	0.30	55000	
Mg	24	115	2	-0.43	-0.43	ppb	807	8.31	55000	
Al	27	115	2	-1.33	-1.33	ppb	884	23.39	16500	
K	39	115	2	-3.39	-3.39	ppb	37041	0.46	55000	
Ca	44	115	2	-4.92	-4.92	ppb	226	17.32	55000	
V	51	115	2	0.00	0.00	ppb	74	40.39	550	
Cr	52	115	2	-0.01	-0.01	ppb	1877	3.82	550	
Mn	55	115	2	0.04	0.04	ppb	1266	5.89	550	
Fe	56	115	2	-0.05	-0.05	ppb	42644	4.19	55000	
Co	59	115	2	0.01	0.01	ppb	218	13.19	550	
Ni	60	115	2	-0.06	-0.06	ppb	850	6.60	550	
Cu	65	115	2	0.41	0.41	ppb	3903	1.36	550	
Zn	66	115	2	0.75	0.75	ppb	2919	5.98	550	
As	75	115	2	0.00	0.00	ppb	16	49.99	550	
Se	78	115	2	0.30	0.30	ppb	32	33.88	2750	
Mo	95	115	1	0.00	0.00	ppb	483	21.68	550	
Ag	107	115	1	0.01	0.01	ppb	2587	130.09	550	
Cd	111	115	1	0.00	0.00	ppb	15	15.63	550	
Sb	121	115	1	-0.18	-0.18	ppb	1043	14.97	550	
Ba	137	159	1	-0.15	-0.15	ppb	569	28.87	550	
Tl	205	165	1	-0.04	-0.04	ppb	1588	12.81	550	
Pb	208	165	1	-0.07	-0.07	ppb	1854	15.91	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	4626142	2.68	1058582	437.0	70	130	IS Fail
Sc	45	2	60458	0.84	55969	108.0	70	130	
In	115	1	6420331	1.81	1490926	430.6	70	130	IS Fail
In	115	2	348202	1.05	324073	107.4	70	130	
Tb	159	1	9889500	1.05	2402233	411.7	70	130	IS Fail
Tb	159	2	1114041	1.13	1053942	105.7	70	130	
Ho	165	1	9746179	1.61	2372257	410.8	70	130	IS Fail
Ho	165	2	1107326	1.07	1044050	106.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**017SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:35:34-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.02	0.02	ppb	277	11.49	550	
Na	23	115	2	-6.00	-6.00	ppb	48345	1.45	55000	
Mg	24	115	2	0.88	0.88	ppb	1889	4.71	55000	
Al	27	115	2	-2.07	-2.07	ppb	668	10.23	16500	
K	39	115	2	-3.56	-3.56	ppb	37048	0.70	55000	
Ca	44	115	2	-3.29	-3.29	ppb	271	12.07	55000	
V	51	115	2	0.01	0.01	ppb	100	31.80	550	
Cr	52	115	2	-0.02	-0.02	ppb	1821	2.26	550	
Mn	55	115	2	-0.04	-0.04	ppb	936	4.45	550	
Fe	56	115	2	0.10	0.10	ppb	43700	1.49	55000	
Co	59	115	2	0.01	0.01	ppb	336	7.05	550	
Ni	60	115	2	-0.07	-0.07	ppb	792	6.32	550	
Cu	65	115	2	0.01	0.01	ppb	2216	2.69	550	
Zn	66	115	2	-0.50	-0.50	ppb	1318	5.64	550	
As	75	115	2	0.02	0.02	ppb	25	26.95	550	
Se	78	115	2	0.19	0.19	ppb	26	41.49	2750	
Mo	95	115	1	0.06	0.06	ppb	640	9.42	550	
Ag	107	115	1	0.41	0.41	ppb	10473	2.58	550	
Cd	111	115	1	0.01	0.01	ppb	86	24.03	550	
Sb	121	115	1	-0.15	-0.15	ppb	979	9.23	550	
Ba	137	159	1	-0.13	-0.13	ppb	261	11.86	550	
Tl	205	165	1	-0.01	-0.01	ppb	2111	3.18	550	
Pb	208	165	1	-0.01	-0.01	ppb	2801	6.90	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1125429	0.64	1058582	106.3	70	130	
Sc	45	2	59637	1.38	55969	106.6	70	130	
In	115	1	1694169	1.78	1490926	113.6	70	130	
In	115	2	349105	1.21	324073	107.7	70	130	
Tb	159	1	2570589	0.52	2402233	107.0	70	130	
Tb	159	2	1121834	0.40	1053942	106.4	70	130	
Ho	165	1	2499616	0.65	2372257	105.4	70	130	
Ho	165	2	1121030	0.27	1044050	107.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-333622**
Data File Name	**0186CCV.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:40:06-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	53.77	ppb	50	566152	3.35	107.54	90	110	
Na	23	115	2	4928.08	ppb	5000	8507759	1.24	98.56	90	110	
Mg	24	115	2	4956.37	ppb	5000	4053196	1.39	99.13	90	110	
Al	27	115	2	1475.92	ppb	1500	435945	0.97	98.39	90	110	
K	39	115	2	4967.20	ppb	5000	2754765	1.38	99.34	90	110	
Ca	44	115	2	4910.49	ppb	5000	135896	0.76	98.21	90	110	
V	51	115	2	49.81	ppb	50	305389	0.78	99.61	90	110	
Cr	52	115	2	49.91	ppb	50	388755	1.92	99.83	90	110	
Mn	55	115	2	49.93	ppb	50	220895	0.93	99.85	90	110	
Fe	56	115	2	5017.95	ppb	5000	32702169	1.27	100.36	90	110	
Co	59	115	2	50.18	ppb	50	614279	1.73	100.36	90	110	
Ni	60	115	2	51.05	ppb	50	166319	0.89	102.10	90	110	
Cu	65	115	2	50.73	ppb	50	218407	0.98	101.45	90	110	
Zn	66	115	2	50.34	ppb	50	66012	1.23	100.69	90	110	
As	75	115	2	50.31	ppb	50	37487	1.00	100.62	90	110	
Se	78	115	2	248.56	ppb	250	14732	1.52	99.42	90	110	
Mo	95	115	1	48.67	ppb	50	437281	3.91	97.33	90	110	
Ag	107	115	1	47.81	ppb	50	1186468	2.90	95.62	90	110	
Cd	111	115	1	48.98	ppb	50	238347	3.21	97.95	90	110	
Sb	121	115	1	47.04	ppb	50	914917	3.89	94.07	90	110	
Ba	137	159	1	50.52	ppb	50	356067	3.12	101.03	90	110	
Tl	205	165	1	50.87	ppb	50	3038484	2.20	101.73	90	110	
Pb	208	165	1	51.02	ppb	50	2041592	2.73	102.04	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1144288	2.04	1058582	108.1	70	130	
Sc	45	2	60224	1.79	55969	107.6	70	130	
In	115	1	1681161	1.89	1490926	112.8	70	130	
In	115	2	346704	1.57	324073	107.0	70	130	
Tb	159	1	2572053	2.57	2402233	107.1	70	130	
Tb	159	2	1133621	1.56	1053942	107.6	70	130	
Ho	165	1	2556160	2.84	2372257	107.8	70	130	
Ho	165	2	1120903	0.83	1044050	107.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-333619**
Data File Name	**0196CCB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:44:30-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	-2.63	ppb	500	
Mg	24	115	2	-0.14	ppb	500	
Al	27	115	2	0.03	ppb	500	
K	39	115	2	-2.65	ppb	500	
Ca	44	115	2	-3.53	ppb	500	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	-0.01	ppb	2	
Mn	55	115	2	-0.06	ppb	6	
Fe	56	115	2	0.46	ppb	500	
Co	59	115	2	0.00	ppb	2	
Ni	60	115	2	-0.01	ppb	3	
Cu	65	115	2	-0.13	ppb	10	
Zn	66	115	2	-0.23	ppb	20	
As	75	115	2	0.01	ppb	1	
Se	78	115	2	0.01	ppb	10	
Mo	95	115	1	0.07	ppb	1	
Ag	107	115	1	0.02	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.03	ppb	4	
Ba	137	159	1	-0.02	ppb	5	
Tl	205	165	1	-0.01	ppb	2	
Pb	208	165	1	0.00	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1140614	1.28	1058582	107.7	70	130	
Sc	45	2	60843	1.13	55969	108.7	70	130	
In	115	1	1717662	2.61	1490926	115.2	70	130	
In	115	2	352024	0.52	324073	108.6	70	130	
Tb	159	1	2582507	0.34	2402233	107.5	70	130	
Tb	159	2	1136007	0.56	1053942	107.8	70	130	
Ho	165	1	2532327	0.74	2372257	106.7	70	130	
Ho	165	2	1129155	0.55	1044050	108.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**MB 85229**
Data File Name	**020SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:49:01-04:00**
Type	**Sample**
VialNumber	**2201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.01	0.01	ppb	138	9.16	550	
Na	23	115	2	0.13	0.13	ppb	58262	0.80	55000	
Mg	24	115	2	0.20	0.20	ppb	1312	3.70	55000	
Al	27	115	2	-1.83	-1.83	ppb	730	11.22	16500	
K	39	115	2	-2.11	-2.11	ppb	37414	0.79	55000	
Ca	44	115	2	0.38	0.38	ppb	369	12.27	55000	
V	51	115	2	0.11	0.11	ppb	714	11.18	550	
Cr	52	115	2	0.04	0.04	ppb	2316	6.10	550	
Mn	55	115	2	0.17	0.17	ppb	1835	5.97	550	
Fe	56	115	2	2.02	2.02	ppb	55656	2.05	55000	
Co	59	115	2	0.00	0.00	ppb	163	17.79	550	
Ni	60	115	2	-0.02	-0.02	ppb	958	8.25	550	
Cu	65	115	2	0.37	0.37	ppb	3733	1.80	550	
Zn	66	115	2	1.97	1.97	ppb	4434	2.05	550	
As	75	115	2	0.02	0.02	ppb	29	26.95	550	
Se	78	115	2	0.17	0.17	ppb	24	28.25	2750	
Mo	95	115	1	0.03	0.03	ppb	409	7.71	550	
Ag	107	115	1	0.47	0.47	ppb	12761	4.42	550	
Cd	111	115	1	0.00	0.00	ppb	40	6.47	550	
Sb	121	115	1	-0.14	-0.14	ppb	1205	6.33	550	
Ba	137	159	1	-0.09	-0.09	ppb	558	0.91	550	
Tl	205	165	1	-0.02	-0.02	ppb	1428	5.91	550	
Pb	208	165	1	0.00	0.00	ppb	3288	5.94	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1174604	1.39	1058582	111.0	70	130	
Sc	45	2	59482	1.10	55969	106.3	70	130	
In	115	1	1774787	0.51	1490926	119.0	70	130	
In	115	2	345123	0.76	324073	106.5	70	130	
Tb	159	1	2685850	0.82	2402233	111.8	70	130	
Tb	159	2	1134234	0.93	1053942	107.6	70	130	
Ho	165	1	2633870	1.46	2372257	111.0	70	130	
Ho	165	2	1128829	0.31	1044050	108.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LCS 85229**
Data File Name	**021SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:53:34-04:00**
Type	**Sample**
VialNumber	**2202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	144.89	144.89	ppb	1613333	1.74	550	
Na	23	115	2	738.59	738.59	ppb	1272986	0.44	55000	
Mg	24	115	2	5727.38	5727.38	ppb	4501399	1.25	55000	
Al	27	115	2	7467.66	7467.66	ppb	2115023	1.97	16500	
K	39	115	2	1597.78	1597.78	ppb	876871	1.69	55000	
Ca	44	115	2	17246.22	17246.22	ppb	457829	2.18	55000	
V	51	115	2	233.01	233.01	ppb	1372921	2.46	550	
Cr	52	115	2	182.81	182.81	ppb	1363619	3.10	550	
Mn	55	115	2	473.54	473.54	ppb	2004470	1.38	550	
Fe	56	115	2	11791.42	11791.42	ppb	73798275	1.58	55000	
Co	59	115	2	226.61	226.61	ppb	2665627	1.24	550	
Ni	60	115	2	43.04	43.04	ppb	134913	2.12	550	
Cu	65	115	2	167.37	167.37	ppb	687801	1.88	550	
Zn	66	115	2	539.44	539.44	ppb	661644	2.07	550	
As	75	115	2	38.59	38.59	ppb	27638	1.88	550	
Se	78	115	2	279.33	279.33	ppb	15908	0.76	2750	
Mo	95	115	1	150.79	150.79	ppb	1418441	6.26	550	
Ag	107	115	1	72.88	72.88	ppb	1893814	3.81	550	
Cd	111	115	1	142.03	142.03	ppb	723824	2.97	550	
Sb	121	115	1	30.36	30.36	ppb	619935	2.94	550	
Ba	137	159	1	706.82	706.82	ppb	5301151	1.69	550	>LDR
Tl	205	165	1	164.01	164.01	ppb	10353021	2.73	550	
Pb	208	165	1	127.37	127.37	ppb	5384386	1.91	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1308245	0.85	1058582	123.6	70	130	
Sc	45	2	59921	1.30	55969	107.1	70	130	
In	115	1	1760233	1.00	1490926	118.1	70	130	
In	115	2	333121	1.16	324073	102.8	70	130	
Tb	159	1	2743398	1.55	2402233	114.2	70	130	
Tb	159	2	1148799	1.53	1053942	109.0	70	130	
Ho	165	1	2700748	2.20	2372257	113.8	70	130	
Ho	165	2	1136784	1.39	1044050	108.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LCS MR 85229**
Data File Name	**022SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T11:57:52-04:00**
Type	**Sample**
VialNumber	**2203**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	143.29	143.29	ppb	1592234	3.16	550	
Na	23	115	2	727.34	727.34	ppb	1252141	2.26	55000	
Mg	24	115	2	5647.07	5647.07	ppb	4429590	1.63	55000	
Al	27	115	2	7368.53	7368.53	ppb	2082642	1.20	16500	
K	39	115	2	1572.86	1572.86	ppb	862008	0.56	55000	
Ca	44	115	2	17195.69	17195.69	ppb	455566	1.25	55000	
V	51	115	2	230.39	230.39	ppb	1354727	2.31	550	
Cr	52	115	2	183.25	183.25	ppb	1363971	2.16	550	
Mn	55	115	2	470.64	470.64	ppb	1988447	1.85	550	
Fe	56	115	2	11719.50	11719.50	ppb	73203502	1.51	55000	
Co	59	115	2	226.46	226.46	ppb	2658906	2.75	550	
Ni	60	115	2	42.48	42.48	ppb	132916	0.77	550	
Cu	65	115	2	167.47	167.47	ppb	686866	2.17	550	
Zn	66	115	2	539.80	539.80	ppb	660760	1.38	550	
As	75	115	2	38.68	38.68	ppb	27644	1.31	550	
Se	78	115	2	276.12	276.12	ppb	15694	0.73	2750	
Mo	95	115	1	153.00	153.00	ppb	1410405	5.03	550	
Ag	107	115	1	74.63	74.63	ppb	1900078	0.51	550	
Cd	111	115	1	146.76	146.76	ppb	732769	2.70	550	
Sb	121	115	1	32.17	32.17	ppb	643258	2.74	550	
Ba	137	159	1	695.98	695.98	ppb	5253768	3.56	550	>LDR
Tl	205	165	1	167.49	167.49	ppb	10552114	3.64	550	
Pb	208	165	1	129.49	129.49	ppb	5463478	3.13	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1286386	0.62	1058582	121.5	70	130	
Sc	45	2	60446	2.57	55969	108.0	70	130	
In	115	1	1724196	0.49	1490926	115.6	70	130	
In	115	2	332455	1.03	324073	102.6	70	130	
Tb	159	1	2760023	0.69	2402233	114.9	70	130	
Tb	159	2	1153982	0.21	1053942	109.5	70	130	
Ho	165	1	2694818	0.96	2372257	113.6	70	130	
Ho	165	2	1143235	1.01	1044050	109.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18960-001**
Data File Name	**023SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:02:11-04:00**
Type	**Sample**
VialNumber	**2309**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.94	0.94	ppb	10911	5.20	550	
Na	23	115	2	226.67	226.67	ppb	439884	1.25	55000	
Mg	24	115	2	1620.22	1620.22	ppb	1304780	0.30	55000	
Al	27	115	2	24343.81	24343.81	ppb	7057658	1.11	16500	>LDR
K	39	115	2	2192.76	2192.76	ppb	1218126	0.68	55000	
Ca	44	115	2	5800.94	5800.94	ppb	157933	1.05	55000	
V	51	115	2	191.28	191.28	ppb	1154169	1.51	550	
Cr	52	115	2	77.15	77.15	ppb	590427	1.74	550	
Mn	55	115	2	102.82	102.82	ppb	446611	1.59	550	
Fe	56	115	2	139809.23	139809.23	ppb	895703142	1.60	55000	>LDR
Co	59	115	2	2.65	2.65	ppb	32054	3.40	550	
Ni	60	115	2	5.54	5.54	ppb	18678	2.89	550	
Cu	65	115	2	39.07	39.07	ppb	166079	2.28	550	
Zn	66	115	2	73.83	73.83	ppb	94395	2.17	550	
As	75	115	2	92.24	92.24	ppb	67638	0.98	550	
Se	78	115	2	4.93	4.93	ppb	301	9.20	2750	
Mo	95	115	1	3.16	3.16	ppb	30036	2.85	550	
Ag	107	115	1	0.16	0.16	ppb	4621	1.40	550	
Cd	111	115	1	0.28	0.28	ppb	1452	4.25	550	
Sb	121	115	1	0.73	0.73	ppb	18833	2.66	550	
Ba	137	159	1	58.38	58.38	ppb	451980	4.11	550	
Tl	205	165	1	0.50	0.50	ppb	35340	4.60	550	
Pb	208	165	1	69.66	69.66	ppb	3050875	3.75	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1801067	0.62	1058582	170.1	70	130	IS Fail
Sc	45	2	85895	1.21	55969	153.5	70	130	IS Fail
In	115	1	1773070	0.79	1490926	118.9	70	130	
In	115	2	341172	1.74	324073	105.3	70	130	
Tb	159	1	2823480	1.49	2402233	117.5	70	130	
Tb	159	2	1190819	1.40	1053942	113.0	70	130	
Ho	165	1	2795689	1.35	2372257	117.8	70	130	
Ho	165	2	1187256	0.72	1044050	113.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18960-003**
Data File Name	**024SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:06:39-04:00**
Type	**Sample**
VialNumber	**2310**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.14	1.14	ppb	13594	3.55	550	
Na	23	115	2	401.44	401.44	ppb	752605	1.36	55000	
Mg	24	115	2	5815.26	5815.26	ppb	4794861	1.82	55000	
Al	27	115	2	17132.47	17132.47	ppb	5088402	1.29	16500	>LDR
K	39	115	2	1461.90	1461.90	ppb	844984	1.58	55000	
Ca	44	115	2	10609.97	10609.97	ppb	295613	1.54	55000	
V	51	115	2	44.21	44.21	ppb	273311	2.14	550	
Cr	52	115	2	33.98	33.98	ppb	267484	1.37	550	
Mn	55	115	2	740.57	740.57	ppb	3287922	0.67	550	>LDR
Fe	56	115	2	34221.59	34221.59	ppb	224602228	1.04	55000	
Co	59	115	2	14.37	14.37	ppb	177467	2.00	550	
Ni	60	115	2	34.18	34.18	ppb	112614	0.94	550	
Cu	65	115	2	171.11	171.11	ppb	737662	1.99	550	
Zn	66	115	2	363.36	363.36	ppb	468191	1.82	550	
As	75	115	2	9.58	9.58	ppb	7208	1.75	550	
Se	78	115	2	4.22	4.22	ppb	266	6.49	2750	
Mo	95	115	1	0.95	0.95	ppb	9331	6.08	550	
Ag	107	115	1	0.27	0.27	ppb	7459	4.51	550	
Cd	111	115	1	0.86	0.86	ppb	4542	4.69	550	
Sb	121	115	1	0.83	0.83	ppb	21541	2.30	550	
Ba	137	159	1	189.08	189.08	ppb	1508866	5.45	550	
Tl	205	165	1	0.16	0.16	ppb	13730	5.93	550	
Pb	208	165	1	499.63	499.63	ppb	22603267	3.82	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1598954	1.98	1058582	151.0	70	130	IS Fail
Sc	45	2	76453	1.42	55969	136.6	70	130	IS Fail
In	115	1	1816490	0.81	1490926	121.8	70	130	
In	115	2	349462	1.30	324073	107.8	70	130	
Tb	159	1	2915885	1.08	2402233	121.4	70	130	
Tb	159	2	1227204	1.02	1053942	116.4	70	130	
Ho	165	1	2890445	2.27	2372257	121.8	70	130	
Ho	165	2	1215988	1.51	1044050	116.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18960-004**
Data File Name	**025SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:11:05-04:00**
Type	**Sample**
VialNumber	**2311**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	2.37	2.37	ppb	29036	3.63	550	
Na	23	115	2	662.48	662.48	ppb	1189450	1.44	55000	
Mg	24	115	2	16225.29	16225.29	ppb	13217424	1.65	55000	
Al	27	115	2	27233.75	27233.75	ppb	7991423	1.02	16500	>LDR
K	39	115	2	4225.08	4225.08	ppb	2339955	0.56	55000	
Ca	44	115	2	8434.53	8434.53	ppb	232279	1.20	55000	
V	51	115	2	74.72	74.72	ppb	456392	1.63	550	
Cr	52	115	2	74.01	74.01	ppb	573382	1.22	550	
Mn	55	115	2	1516.48	1516.48	ppb	6652892	2.41	550	>LDR
Fe	56	115	2	46347.54	46347.54	ppb	300572451	1.32	55000	
Co	59	115	2	27.14	27.14	ppb	331055	1.49	550	
Ni	60	115	2	54.97	54.97	ppb	178346	1.79	550	
Cu	65	115	2	55.32	55.32	ppb	237099	1.14	550	
Zn	66	115	2	196.03	196.03	ppb	250488	1.79	550	
As	75	115	2	13.45	13.45	ppb	9994	1.65	550	
Se	78	115	2	6.25	6.25	ppb	382	4.51	2750	
Mo	95	115	1	0.63	0.63	ppb	6186	6.38	550	
Ag	107	115	1	0.09	0.09	ppb	2640	7.38	550	
Cd	111	115	1	0.23	0.23	ppb	1216	6.89	550	
Sb	121	115	1	0.06	0.06	ppb	5312	4.37	550	
Ba	137	159	1	255.28	255.28	ppb	2101791	4.01	550	
Tl	205	165	1	0.25	0.25	ppb	20227	3.64	550	
Pb	208	165	1	30.65	30.65	ppb	1424732	3.48	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1914299	1.40	1058582	180.8	70	130	IS Fail
Sc	45	2	92853	0.99	55969	165.9	70	130	IS Fail
In	115	1	1813356	1.18	1490926	121.6	70	130	
In	115	2	345330	1.33	324073	106.6	70	130	
Tb	159	1	3008937	0.97	2402233	125.3	70	130	
Tb	159	2	1252309	0.39	1053942	118.8	70	130	
Ho	165	1	2963574	0.41	2372257	124.9	70	130	
Ho	165	2	1253992	1.11	1044050	120.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18960-007**
Data File Name	**026SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:15:30-04:00**
Type	**Sample**
VialNumber	**2312**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	2.15	2.15	ppb	26016	2.71	550	
Na	23	115	2	1948.10	1948.10	ppb	3368198	0.83	55000	
Mg	24	115	2	20366.02	20366.02	ppb	16503717	1.74	55000	
Al	27	115	2	34922.05	34922.05	ppb	10194356	1.59	16500	>LDR
K	39	115	2	3389.14	3389.14	ppb	1875015	1.65	55000	
Ca	44	115	2	16618.46	16618.46	ppb	454955	2.45	55000	
V	51	115	2	109.89	109.89	ppb	667669	1.59	550	
Cr	52	115	2	54.64	54.64	ppb	421633	1.57	550	
Mn	55	115	2	2028.87	2028.87	ppb	8853283	1.38	550	>LDR
Fe	56	115	2	70402.43	70402.43	ppb	454178869	1.34	55000	>LDR
Co	59	115	2	60.51	60.51	ppb	734125	0.86	550	
Ni	60	115	2	85.30	85.30	ppb	274751	1.34	550	
Cu	65	115	2	172.38	172.38	ppb	730466	2.01	550	
Zn	66	115	2	394.46	394.46	ppb	499447	1.92	550	
As	75	115	2	11.78	11.78	ppb	8711	0.42	550	
Se	78	115	2	5.94	5.94	ppb	362	9.05	2750	
Mo	95	115	1	1.87	1.87	ppb	18002	3.66	550	
Ag	107	115	1	0.30	0.30	ppb	8248	0.73	550	
Cd	111	115	1	0.35	0.35	ppb	1834	2.77	550	
Sb	121	115	1	0.82	0.82	ppb	20952	2.35	550	
Ba	137	159	1	236.66	236.66	ppb	1919695	2.96	550	
Tl	205	165	1	0.25	0.25	ppb	20387	4.03	550	
Pb	208	165	1	84.18	84.18	ppb	3865267	3.60	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1746972	0.78	1058582	165.0	70	130	IS Fail
Sc	45	2	84773	1.38	55969	151.5	70	130	IS Fail
In	115	1	1794508	1.03	1490926	120.4	70	130	
In	115	2	343528	0.42	324073	106.0	70	130	
Tb	159	1	2964847	0.68	2402233	123.4	70	130	
Tb	159	2	1247272	0.78	1053942	118.3	70	130	
Ho	165	1	2932927	1.40	2372257	123.6	70	130	
Ho	165	2	1233744	1.41	1044050	118.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18960-015**
Data File Name	**027SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:19:52-04:00**
Type	**Sample**
VialNumber	**2401**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	2.14	2.14	ppb	25491	3.52	550	
Na	23	115	2	1462.26	1462.26	ppb	2475219	1.88	55000	
Mg	24	115	2	28618.88	28618.88	ppb	22575488	0.95	55000	
Al	27	115	2	30436.71	30436.71	ppb	8649595	1.42	16500	>LDR
K	39	115	2	5393.50	5393.50	ppb	2882647	1.08	55000	
Ca	44	115	2	40906.97	40906.97	ppb	1089647	1.17	55000	
V	51	115	2	103.00	103.00	ppb	609206	1.09	550	
Cr	52	115	2	122.87	122.87	ppb	920551	1.39	550	
Mn	55	115	2	2129.40	2129.40	ppb	9045350	1.30	550	>LDR
Fe	56	115	2	71054.16	71054.16	ppb	446218944	0.94	55000	>LDR
Co	59	115	2	56.91	56.91	ppb	672161	1.59	550	
Ni	60	115	2	505.62	505.62	ppb	1580436	0.94	550	
Cu	65	115	2	99.20	99.20	ppb	410083	1.86	550	
Zn	66	115	2	303.12	303.12	ppb	374066	2.26	550	
As	75	115	2	18.95	18.95	ppb	13636	3.37	550	
Se	78	115	2	4.69	4.69	ppb	281	1.95	2750	
Mo	95	115	1	1.64	1.64	ppb	15573	3.23	550	
Ag	107	115	1	0.35	0.35	ppb	9503	2.63	550	
Cd	111	115	1	0.62	0.62	ppb	3200	1.97	550	
Sb	121	115	1	0.39	0.39	ppb	11868	1.30	550	
Ba	137	159	1	250.49	250.49	ppb	1983859	3.59	550	
Tl	205	165	1	0.38	0.38	ppb	28275	4.60	550	
Pb	208	165	1	112.40	112.40	ppb	5078456	3.03	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1853757	0.29	1058582	175.1	70	130	IS Fail
Sc	45	2	88300	1.19	55969	157.8	70	130	IS Fail
In	115	1	1761095	1.11	1490926	118.1	70	130	
In	115	2	334407	0.71	324073	103.2	70	130	
Tb	159	1	2894281	1.70	2402233	120.5	70	130	
Tb	159	2	1207736	0.55	1053942	114.6	70	130	
Ho	165	1	2885549	1.06	2372257	121.6	70	130	
Ho	165	2	1201446	1.36	1044050	115.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18960-017**
Data File Name	**028SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:24:13-04:00**
Type	**Sample**
VialNumber	**2402**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.30	1.30	ppb	15198	2.28	550	
Na	23	115	2	826.61	826.61	ppb	1323741	1.66	55000	
Mg	24	115	2	18192.21	18192.21	ppb	13343601	1.80	55000	
Al	27	115	2	22650.82	22650.82	ppb	5982398	0.69	16500	>LDR
K	39	115	2	3298.55	3298.55	ppb	1651660	0.99	55000	
Ca	44	115	2	44213.53	44213.53	ppb	1095022	1.61	55000	
V	51	115	2	75.54	75.54	ppb	415276	1.39	550	
Cr	52	115	2	75.47	75.47	ppb	526122	0.46	550	
Mn	55	115	2	1142.82	1142.82	ppb	4512206	1.07	550	>LDR
Fe	56	115	2	51615.59	51615.59	ppb	301426838	1.75	55000	
Co	59	115	2	32.25	32.25	ppb	354155	1.47	550	
Ni	60	115	2	178.66	178.66	ppb	519868	1.70	550	
Cu	65	115	2	123.49	123.49	ppb	474214	1.69	550	
Zn	66	115	2	282.65	282.65	ppb	324394	1.47	550	
As	75	115	2	13.19	13.19	ppb	8816	1.39	550	
Se	78	115	2	3.93	3.93	ppb	220	4.77	2750	
Mo	95	115	1	2.70	2.70	ppb	25395	3.65	550	
Ag	107	115	1	0.84	0.84	ppb	22133	0.42	550	
Cd	111	115	1	0.49	0.49	ppb	2524	5.71	550	
Sb	121	115	1	0.33	0.33	ppb	10545	6.44	550	
Ba	137	159	1	190.89	190.89	ppb	1493281	3.03	550	
Tl	205	165	1	0.20	0.20	ppb	16314	3.66	550	
Pb	208	165	1	113.28	113.28	ppb	5009563	3.34	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1601712	0.92	1058582	151.3	70	130	IS Fail
Sc	45	2	71946	5.47	55969	128.5	70	130	
In	115	1	1750418	0.96	1490926	117.4	70	130	
In	115	2	312049	8.07	324073	96.3	70	130	
Tb	159	1	2858962	0.92	2402233	119.0	70	130	
Tb	159	2	1133816	6.48	1053942	107.6	70	130	
Ho	165	1	2824985	0.86	2372257	119.1	70	130	
Ho	165	2	1130344	6.56	1044050	108.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**029SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:28:38-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.02	0.02	ppb	208	34.64	550	
Na	23	115	2	-8.92	-8.92	ppb	43834	0.89	55000	
Mg	24	115	2	0.92	0.92	ppb	1946	2.90	55000	
Al	27	115	2	-1.81	-1.81	ppb	754	13.79	16500	
K	39	115	2	-6.63	-6.63	ppb	35785	0.89	55000	
Ca	44	115	2	-2.42	-2.42	ppb	299	16.74	55000	
V	51	115	2	0.02	0.02	ppb	194	3.57	550	
Cr	52	115	2	-0.01	-0.01	ppb	1936	7.80	550	
Mn	55	115	2	-0.05	-0.05	ppb	883	4.58	550	
Fe	56	115	2	1.97	1.97	ppb	56618	1.65	55000	
Co	59	115	2	0.01	0.01	ppb	237	13.43	550	
Ni	60	115	2	-0.07	-0.07	ppb	833	9.15	550	
Cu	65	115	2	0.07	0.07	ppb	2511	3.73	550	
Zn	66	115	2	-0.48	-0.48	ppb	1361	5.46	550	
As	75	115	2	0.02	0.02	ppb	25	9.33	550	
Se	78	115	2	0.21	0.21	ppb	27	32.55	2750	
Mo	95	115	1	0.03	0.03	ppb	431	12.57	550	
Ag	107	115	1	0.34	0.34	ppb	9366	4.38	550	
Cd	111	115	1	0.01	0.01	ppb	80	18.41	550	
Sb	121	115	1	-0.15	-0.15	ppb	887	13.05	550	
Ba	137	159	1	-0.11	-0.11	ppb	397	3.66	550	
Tl	205	165	1	-0.01	-0.01	ppb	2140	11.17	550	
Pb	208	165	1	0.02	0.02	ppb	4106	1.40	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1176246	0.46	1058582	111.1	70	130	
Sc	45	2	59884	0.84	55969	107.0	70	130	
In	115	1	1784527	0.92	1490926	119.7	70	130	
In	115	2	353322	0.36	324073	109.0	70	130	
Tb	159	1	2680990	0.47	2402233	111.6	70	130	
Tb	159	2	1157906	1.21	1053942	109.9	70	130	
Ho	165	1	2654807	1.00	2372257	111.9	70	130	
Ho	165	2	1154287	0.75	1044050	110.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-333622**
Data File Name	**0306CCV.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:33:09-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	52.90	ppb	50	564795	4.20	105.81	90	110	
Na	23	115	2	4825.70	ppb	5000	8362868	1.11	96.51	90	110	
Mg	24	115	2	4836.53	ppb	5000	3969984	1.41	96.73	90	110	
Al	27	115	2	1424.89	ppb	1500	422477	2.16	94.99	90	110	
K	39	115	2	4944.46	ppb	5000	2752242	0.41	98.89	90	110	
Ca	44	115	2	4864.20	ppb	5000	135109	1.34	97.28	90	110	
V	51	115	2	49.76	ppb	50	306177	2.29	99.51	90	110	
Cr	52	115	2	49.82	ppb	50	389478	2.37	99.63	90	110	
Mn	55	115	2	49.32	ppb	50	219020	1.92	98.64	90	110	
Fe	56	115	2	5048.93	ppb	5000	33024907	1.52	100.98	90	110	
Co	59	115	2	50.49	ppb	50	620418	0.87	100.99	90	110	
Ni	60	115	2	50.67	ppb	50	165714	2.14	101.35	90	110	
Cu	65	115	2	50.64	ppb	50	218839	1.58	101.28	90	110	
Zn	66	115	2	49.82	ppb	50	65589	0.72	99.65	90	110	
As	75	115	2	50.47	ppb	50	37742	0.70	100.93	90	110	
Se	78	115	2	250.20	ppb	250	14881	1.71	100.08	90	110	
Mo	95	115	1	48.01	ppb	50	446712	3.50	96.03	90	110	
Ag	107	115	1	47.09	ppb	50	1209959	3.45	94.18	90	110	
Cd	111	115	1	48.05	ppb	50	242155	3.28	96.11	90	110	
Sb	121	115	1	46.55	ppb	50	937625	3.39	93.10	90	110	
Ba	137	159	1	50.26	ppb	50	366052	3.45	100.53	90	110	
Tl	205	165	1	50.69	ppb	50	3070031	2.57	101.39	90	110	
Pb	208	165	1	51.30	ppb	50	2081236	2.82	102.60	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1171261	0.55	1058582	110.6	70	130	
Sc	45	2	60105	0.47	55969	107.4	70	130	
In	115	1	1740498	1.10	1490926	116.7	70	130	
In	115	2	347883	0.90	324073	107.3	70	130	
Tb	159	1	2655144	0.78	2402233	110.5	70	130	
Tb	159	2	1141526	1.13	1053942	108.3	70	130	
Ho	165	1	2589130	0.10	2372257	109.1	70	130	
Ho	165	2	1132562	0.77	1044050	108.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-333619**
Data File Name	**0316CCB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:37:33-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	-4.72	ppb	500	
Mg	24	115	2	-0.12	ppb	500	
Al	27	115	2	-0.24	ppb	500	
K	39	115	2	-4.83	ppb	500	
Ca	44	115	2	-4.53	ppb	500	
V	51	115	2	0.00	ppb	1	
Cr	52	115	2	0.01	ppb	2	
Mn	55	115	2	-0.05	ppb	6	
Fe	56	115	2	0.92	ppb	500	
Co	59	115	2	0.00	ppb	2	
Ni	60	115	2	0.00	ppb	3	
Cu	65	115	2	-0.10	ppb	10	
Zn	66	115	2	0.01	ppb	20	
As	75	115	2	0.02	ppb	1	
Se	78	115	2	0.15	ppb	10	
Mo	95	115	1	0.07	ppb	1	
Ag	107	115	1	0.03	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.03	ppb	4	
Ba	137	159	1	-0.02	ppb	5	
Tl	205	165	1	-0.01	ppb	2	
Pb	208	165	1	0.01	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1175063	1.23	1058582	111.0	70	130	
Sc	45	2	60859	0.42	55969	108.7	70	130	
In	115	1	1760432	0.72	1490926	118.1	70	130	
In	115	2	352377	1.69	324073	108.7	70	130	
Tb	159	1	2669691	1.05	2402233	111.1	70	130	
Tb	159	2	1134824	1.33	1053942	107.7	70	130	
Ho	165	1	2619239	0.71	2372257	110.4	70	130	
Ho	165	2	1136205	0.92	1044050	108.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18955-001**
Data File Name	**032SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:42:04-04:00**
Type	**Sample**
VialNumber	**2204**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.98	0.98	ppb	11198	2.61	550	
Na	23	115	2	286.99	286.99	ppb	502203	0.14	55000	
Mg	24	115	2	21394.33	21394.33	ppb	15962684	0.38	55000	
Al	27	115	2	15819.96	15819.96	ppb	4252918	1.04	16500	
K	39	115	2	2871.83	2871.83	ppb	1468253	1.04	55000	
Ca	44	115	2	267149.00	267149.00	ppb	6729074	1.34	55000	>LDR
V	51	115	2	42.59	42.59	ppb	238318	0.73	550	
Cr	52	115	2	44.99	44.99	ppb	319995	0.60	550	
Mn	55	115	2	2842.89	2842.89	ppb	11422246	1.44	550	>LDR
Fe	56	115	2	68467.37	68467.37	ppb	406709994	1.48	55000	>LDR
Co	59	115	2	20.43	20.43	ppb	228292	0.84	550	
Ni	60	115	2	66.56	66.56	ppb	197603	1.66	550	
Cu	65	115	2	136.53	136.53	ppb	533118	0.57	550	
Zn	66	115	2	285.41	285.41	ppb	333233	1.16	550	
As	75	115	2	34.46	34.46	ppb	23436	1.37	550	
Se	78	115	2	4.44	4.44	ppb	253	8.17	2750	
Mo	95	115	1	4.41	4.41	ppb	40332	3.69	550	
Ag	107	115	1	0.34	0.34	ppb	8838	3.98	550	
Cd	111	115	1	0.61	0.61	ppb	3031	2.82	550	
Sb	121	115	1	5.41	5.41	ppb	110382	2.49	550	
Ba	137	159	1	363.60	363.60	ppb	2746886	3.27	550	
Tl	205	165	1	0.34	0.34	ppb	24497	3.70	550	
Pb	208	165	1	998.20	998.20	ppb	43027294	3.78	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1539594	0.55	1058582	145.4	70	130	IS Fail
Sc	45	2	71637	1.20	55969	128.0	70	130	
In	115	1	1708455	1.72	1490926	114.6	70	130	
In	115	2	316304	0.76	324073	97.6	70	130	
Tb	159	1	2763198	1.59	2402233	115.0	70	130	
Tb	159	2	1136660	1.22	1053942	107.8	70	130	
Ho	165	1	2755614	1.45	2372257	116.2	70	130	
Ho	165	2	1131469	0.81	1044050	108.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18955-001 MR**
Data File Name	**033SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:46:26-04:00**
Type	**Sample**
VialNumber	**2205**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.05	1.05	ppb	11741	3.00	550	
Na	23	115	2	297.28	297.28	ppb	502538	0.83	55000	
Mg	24	115	2	22048.47	22048.47	ppb	15950669	1.50	55000	
Al	27	115	2	16939.36	16939.36	ppb	4415212	1.78	16500	>LDR
K	39	115	2	2814.51	2814.51	ppb	1395982	2.26	55000	
Ca	44	115	2	334778.25	334778.25	ppb	8175993	1.84	55000	>LDR
V	51	115	2	41.66	41.66	ppb	225993	1.66	550	
Cr	52	115	2	47.76	47.76	ppb	329208	1.71	550	
Mn	55	115	2	2920.79	2920.79	ppb	11377909	1.58	550	>LDR
Fe	56	115	2	62480.05	62480.05	ppb	359848310	1.71	55000	>LDR
Co	59	115	2	20.27	20.27	ppb	219601	1.55	550	
Ni	60	115	2	66.96	66.96	ppb	192737	1.96	550	
Cu	65	115	2	124.29	124.29	ppb	470742	1.64	550	
Zn	66	115	2	288.38	288.38	ppb	326444	1.97	550	
As	75	115	2	34.01	34.01	ppb	22426	1.46	550	
Se	78	115	2	4.12	4.12	ppb	228	9.94	2750	
Mo	95	115	1	4.03	4.03	ppb	35704	4.23	550	
Ag	107	115	1	0.29	0.29	ppb	7290	1.21	550	
Cd	111	115	1	0.63	0.63	ppb	3048	1.18	550	
Sb	121	115	1	3.14	3.14	ppb	63575	1.45	550	
Ba	137	159	1	361.54	361.54	ppb	2716203	1.95	550	
Tl	205	165	1	0.32	0.32	ppb	22853	4.00	550	
Pb	208	165	1	895.71	895.71	ppb	37977605	3.43	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1495974	1.20	1058582	141.3	70	130	IS Fail
Sc	45	2	69658	2.30	55969	124.5	70	130	
In	115	1	1654455	1.88	1490926	111.0	70	130	
In	115	2	306674	1.08	324073	94.6	70	130	
Tb	159	1	2746614	0.43	2402233	114.3	70	130	
Tb	159	2	1113385	1.19	1053942	105.6	70	130	
Ho	165	1	2709845	0.48	2372257	114.2	70	130	
Ho	165	2	1105858	0.99	1044050	105.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18955-001 SD**
Data File Name	**034SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:50:48-04:00**
Type	**Sample**
VialNumber	**2209**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.22	0.22	ppb	2476	7.23	550	
Na	23	115	2	62.29	62.29	ppb	159122	1.82	55000	
Mg	24	115	2	4400.79	4400.79	ppb	3469155	1.28	55000	
Al	27	115	2	3257.27	3257.27	ppb	925881	1.61	16500	
K	39	115	2	567.44	567.44	ppb	336377	0.88	55000	
Ca	44	115	2	55666.41	55666.41	ppb	1481371	1.58	55000	>LDR
V	51	115	2	8.56	8.56	ppb	50608	1.99	550	
Cr	52	115	2	9.09	9.09	ppb	69838	0.79	550	
Mn	55	115	2	590.28	590.28	ppb	2505822	1.72	550	>LDR
Fe	56	115	2	14103.61	14103.61	ppb	88522094	1.10	55000	
Co	59	115	2	4.21	4.21	ppb	49838	0.86	550	
Ni	60	115	2	13.91	13.91	ppb	44406	0.62	550	
Cu	65	115	2	29.46	29.46	ppb	123154	1.86	550	
Zn	66	115	2	64.26	64.26	ppb	80694	1.43	550	
As	75	115	2	7.35	7.35	ppb	5292	2.53	550	
Se	78	115	2	1.07	1.07	ppb	74	3.95	2750	
Mo	95	115	1	0.91	0.91	ppb	8603	3.38	550	
Ag	107	115	1	0.07	0.07	ppb	2069	3.45	550	
Cd	111	115	1	0.13	0.13	ppb	672	5.71	550	
Sb	121	115	1	1.06	1.06	ppb	25337	3.23	550	
Ba	137	159	1	75.78	75.78	ppb	561976	3.50	550	
Tl	205	165	1	0.05	0.05	ppb	6160	4.53	550	
Pb	208	165	1	222.68	222.68	ppb	9441103	2.10	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1275625	0.69	1058582	120.5	70	130	
Sc	45	2	60960	1.16	55969	108.9	70	130	
In	115	1	1750796	0.60	1490926	117.4	70	130	
In	115	2	334137	1.62	324073	103.1	70	130	
Tb	159	1	2706325	0.50	2402233	112.7	70	130	
Tb	159	2	1135011	0.91	1053942	107.7	70	130	
Ho	165	1	2709306	0.86	2372257	114.2	70	130	
Ho	165	2	1134200	0.39	1044050	108.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18955-002 MS 1**
Data File Name	**035SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:55:14-04:00**
Type	**Sample**
VialNumber	**2206**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	197.08	197.08	ppb	2241223	2.53	550	
Na	23	115	2	21959.83	21959.83	ppb	34227090	1.22	55000	
Mg	24	115	2	69357.69	69357.69	ppb	51469928	1.29	55000	>LDR
Al	27	115	2	28766.18	28766.18	ppb	7690875	2.11	16500	>LDR
K	39	115	2	23103.25	23103.25	ppb	11501131	1.29	55000	
Ca	44	115	2	142849.18	142849.18	ppb	3579051	2.86	55000	>LDR
V	51	115	2	269.74	269.74	ppb	1500801	0.34	550	
Cr	52	115	2	270.32	270.32	ppb	1903179	2.16	550	
Mn	55	115	2	1170.53	1170.53	ppb	4678152	1.72	550	>LDR
Fe	56	115	2	69207.91	69207.91	ppb	408889234	1.98	55000	>LDR
Co	59	115	2	252.87	252.87	ppb	2809310	1.78	550	
Ni	60	115	2	282.30	282.30	ppb	830568	1.75	550	
Cu	65	115	2	300.56	300.56	ppb	1164940	1.50	550	
Zn	66	115	2	428.04	428.04	ppb	496185	2.00	550	
As	75	115	2	235.52	235.52	ppb	159243	2.11	550	
Se	78	115	2	202.55	202.55	ppb	10897	0.43	2750	
Mo	95	115	1	207.62	207.62	ppb	1869483	2.65	550	
Ag	107	115	1	38.91	38.91	ppb	967907	2.73	550	
Cd	111	115	1	201.15	201.15	ppb	981092	3.05	550	
Sb	121	115	1	68.42	68.42	ppb	1332171	3.20	550	
Ba	137	159	1	303.07	303.07	ppb	2314733	3.06	550	
Tl	205	165	1	189.24	189.24	ppb	12200168	3.29	550	
Pb	208	165	1	239.25	239.25	ppb	10327512	2.48	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1615822	0.76	1058582	152.6	70	130	IS Fail
Sc	45	2	76335	2.08	55969	136.4	70	130	IS Fail
In	115	1	1684461	0.68	1490926	113.0	70	130	
In	115	2	314598	0.51	324073	97.1	70	130	
Tb	159	1	2792488	1.04	2402233	116.2	70	130	
Tb	159	2	1149551	0.54	1053942	109.1	70	130	
Ho	165	1	2758555	0.82	2372257	116.3	70	130	
Ho	165	2	1145666	0.69	1044050	109.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 7:55 AM on:9/1/2020

Sample Report

Sample Name	**AD18955-003 MS 2**
Data File Name	**036SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T12:59:29-04:00**
Type	**Sample**
VialNumber	**2207**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	200.51	200.51	ppb	2300104	2.30	550	
Na	23	115	2	22059.69	22059.69	ppb	34843896	0.10	55000	
Mg	24	115	2	43482.94	43482.94	ppb	32703463	0.83	55000	
Al	27	115	2	21970.70	21970.70	ppb	5953615	1.70	16500	>LDR
K	39	115	2	23131.57	23131.57	ppb	11670672	2.06	55000	
Ca	44	115	2	149445.26	149445.26	ppb	3794748	1.84	55000	>LDR
V	51	115	2	263.23	263.23	ppb	1484432	1.36	550	
Cr	52	115	2	266.63	266.63	ppb	1902409	1.09	550	
Mn	55	115	2	1713.06	1713.06	ppb	6938461	1.27	550	>LDR
Fe	56	115	2	59339.94	59339.94	ppb	355304164	0.67	55000	>LDR
Co	59	115	2	254.05	254.05	ppb	2860634	1.66	550	
Ni	60	115	2	266.52	266.52	ppb	794771	1.48	550	
Cu	65	115	2	285.19	285.19	ppb	1120382	1.25	550	
Zn	66	115	2	402.13	402.13	ppb	472547	1.03	550	
As	75	115	2	250.54	250.54	ppb	171680	0.92	550	
Se	78	115	2	203.48	203.48	ppb	11096	2.00	2750	
Mo	95	115	1	217.75	217.75	ppb	1972153	2.03	550	
Ag	107	115	1	40.26	40.26	ppb	1007174	2.29	550	
Cd	111	115	1	207.29	207.29	ppb	1017011	2.64	550	
Sb	121	115	1	87.56	87.56	ppb	1713737	2.11	550	
Ba	137	159	1	354.26	354.26	ppb	2720428	1.99	550	
Tl	205	165	1	195.02	195.02	ppb	12682301	2.48	550	
Pb	208	165	1	242.55	242.55	ppb	10560735	3.01	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1550330	0.67	1058582	146.5	70	130	IS Fail
Sc	45	2	71307	1.82	55969	127.4	70	130	
In	115	1	1694055	0.37	1490926	113.6	70	130	
In	115	2	318850	1.11	324073	98.4	70	130	
Tb	159	1	2807869	0.82	2402233	116.9	70	130	
Tb	159	2	1144125	0.79	1053942	108.6	70	130	
Ho	165	1	2782081	0.18	2372257	117.3	70	130	
Ho	165	2	1133284	0.96	1044050	108.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 7:55 AM on:9/1/2020

Sample Report

Sample Name	**AD18955-001 PS**
Data File Name	**037SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:03:45-04:00**
Type	**Sample**
VialNumber	**2208**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	44.28	44.28	ppb	502157	1.99	550	
Na	23	115	2	5329.81	5329.81	ppb	8134262	0.40	55000	
Mg	24	115	2	25506.43	25506.43	ppb	18444218	1.08	55000	
Al	27	115	2	16757.75	16757.75	ppb	4366227	0.30	16500	>LDR
K	39	115	2	7575.54	7575.54	ppb	3697785	0.44	55000	
Ca	44	115	2	263365.74	263365.74	ppb	6429063	0.91	55000	>LDR
V	51	115	2	92.15	92.15	ppb	499638	0.82	550	
Cr	52	115	2	94.23	94.23	ppb	647570	0.78	550	
Mn	55	115	2	2810.02	2810.02	ppb	10941707	0.83	550	>LDR
Fe	56	115	2	71918.14	71918.14	ppb	414036278	1.02	55000	>LDR
Co	59	115	2	69.32	69.32	ppb	750566	0.24	550	
Ni	60	115	2	113.90	113.90	ppb	327067	0.72	550	
Cu	65	115	2	182.89	182.89	ppb	691463	0.88	550	
Zn	66	115	2	328.54	328.54	ppb	371498	0.99	550	
As	75	115	2	83.78	83.78	ppb	55204	0.60	550	
Se	78	115	2	229.83	229.83	ppb	12049	1.75	2750	
Mo	95	115	1	52.12	52.12	ppb	467497	2.94	550	
Ag	107	115	1	45.65	45.65	ppb	1130661	2.29	550	
Cd	111	115	1	46.41	46.41	ppb	225468	2.89	550	
Sb	121	115	1	52.07	52.07	ppb	1010574	2.52	550	
Ba	137	159	1	410.42	410.42	ppb	3102191	2.15	550	
Tl	205	165	1	46.93	46.93	ppb	3019227	2.37	550	
Pb	208	165	1	1044.59	1044.59	ppb	44950503	2.84	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1485025	0.79	1058582	140.3	70	130	IS Fail
Sc	45	2	68158	1.41	55969	121.8	70	130	
In	115	1	1677088	1.25	1490926	112.5	70	130	
In	115	2	306589	1.03	324073	94.6	70	130	
Tb	159	1	2763899	0.80	2402233	115.1	70	130	
Tb	159	2	1116366	0.34	1053942	105.9	70	130	
Ho	165	1	2750381	0.65	2372257	115.9	70	130	
Ho	165	2	1115771	0.67	1044050	106.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18951-001**
Data File Name	**038SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:08:06-04:00**
Type	**Sample**
VialNumber	**2305**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.18	0.18	ppb	2167	2.68	550	
Na	23	115	2	84.00	84.00	ppb	194435	1.51	55000	
Mg	24	115	2	128.98	128.98	ppb	102443	1.23	55000	
Al	27	115	2	6246.62	6246.62	ppb	1769271	2.02	16500	
K	39	115	2	191.05	191.05	ppb	137597	0.69	55000	
Ca	44	115	2	297.05	297.05	ppb	8224	0.81	55000	
V	51	115	2	21.94	21.94	ppb	129273	0.57	550	
Cr	52	115	2	8.08	8.08	ppb	62044	0.72	550	
Mn	55	115	2	26.06	26.06	ppb	111303	1.35	550	
Fe	56	115	2	9536.49	9536.49	ppb	59687791	1.76	55000	
Co	59	115	2	1.88	1.88	ppb	22257	2.47	550	
Ni	60	115	2	2.45	2.45	ppb	8609	3.76	550	
Cu	65	115	2	3.20	3.20	ppb	15189	2.38	550	
Zn	66	115	2	8.70	8.70	ppb	12505	1.85	550	
As	75	115	2	3.92	3.92	ppb	2819	1.21	550	
Se	78	115	2	1.31	1.31	ppb	88	9.56	2750	
Mo	95	115	1	0.40	0.40	ppb	3974	2.13	550	
Ag	107	115	1	0.09	0.09	ppb	2859	6.16	550	
Cd	111	115	1	0.02	0.02	ppb	121	9.67	550	
Sb	121	115	1	0.19	0.19	ppb	8137	6.10	550	
Ba	137	159	1	18.41	18.41	ppb	144087	4.43	550	
Tl	205	165	1	0.09	0.09	ppb	8747	2.55	550	
Pb	208	165	1	4.22	4.22	ppb	191424	2.67	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1408980	0.13	1058582	133.1	70	130	IS Fail
Sc	45	2	63256	1.30	55969	113.0	70	130	
In	115	1	1813214	0.83	1490926	121.6	70	130	
In	115	2	333104	1.65	324073	102.8	70	130	
Tb	159	1	2838184	1.21	2402233	118.1	70	130	
Tb	159	2	1152376	1.63	1053942	109.3	70	130	
Ho	165	1	2845718	0.35	2372257	120.0	70	130	
Ho	165	2	1162979	1.30	1044050	111.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 7:55 AM on:9/1/2020

Sample Report

Sample Name	**AD18949-014**
Data File Name	**039SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:12:36-04:00**
Type	**Sample**
VialNumber	**2306**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.57	0.57	ppb	6644	3.24	550	
Na	23	115	2	103.68	103.68	ppb	226528	1.31	55000	
Mg	24	115	2	1557.84	1557.84	ppb	1223371	0.71	55000	
Al	27	115	2	11393.78	11393.78	ppb	3221302	1.94	16500	
K	39	115	2	707.22	707.22	ppb	408259	0.38	55000	
Ca	44	115	2	874.14	874.14	ppb	23498	3.42	55000	
V	51	115	2	29.51	29.51	ppb	173629	1.31	550	
Cr	52	115	2	29.42	29.42	ppb	220713	1.34	550	
Mn	55	115	2	85.81	85.81	ppb	363567	1.15	550	
Fe	56	115	2	23854.45	23854.45	ppb	149032671	0.77	55000	
Co	59	115	2	3.77	3.77	ppb	44380	2.09	550	
Ni	60	115	2	12.71	12.71	ppb	40479	1.29	550	
Cu	65	115	2	25.94	25.94	ppb	108203	1.45	550	
Zn	66	115	2	187.07	187.07	ppb	230326	1.57	550	
As	75	115	2	10.73	10.73	ppb	7685	1.47	550	
Se	78	115	2	1.47	1.47	ppb	97	6.71	2750	
Mo	95	115	1	1.69	1.69	ppb	16411	4.23	550	
Ag	107	115	1	0.27	0.27	ppb	7562	4.82	550	
Cd	111	115	1	0.36	0.36	ppb	1892	4.29	550	
Sb	121	115	1	0.42	0.42	ppb	12771	4.68	550	
Ba	137	159	1	39.74	39.74	ppb	308601	2.96	550	
Tl	205	165	1	0.11	0.11	ppb	10025	3.27	550	
Pb	208	165	1	76.49	76.49	ppb	3340614	2.99	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1336585	0.42	1058582	126.3	70	130	
Sc	45	2	61047	0.94	55969	109.1	70	130	
In	115	1	1804800	0.84	1490926	121.1	70	130	
In	115	2	332625	0.20	324073	102.6	70	130	
Tb	159	1	2829529	1.07	2402233	117.8	70	130	
Tb	159	2	1150601	0.68	1053942	109.2	70	130	
Ho	165	1	2788994	0.53	2372257	117.6	70	130	
Ho	165	2	1143528	1.10	1044050	109.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18950-004**
Data File Name	**040SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:17:04-04:00**
Type	**Sample**
VialNumber	**2307**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	2.75	2.75	ppb	33372	2.91	550	
Na	23	115	2	232.87	232.87	ppb	433125	1.13	55000	
Mg	24	115	2	13286.92	13286.92	ppb	10283394	1.16	55000	
Al	27	115	2	50352.76	50352.76	ppb	14037480	1.33	16500	>LDR
K	39	115	2	8605.79	8605.79	ppb	4490536	2.13	55000	
Ca	44	115	2	11447.49	11447.49	ppb	299412	2.84	55000	
V	51	115	2	176.79	176.79	ppb	1025858	0.84	550	
Cr	52	115	2	136.82	136.82	ppb	1005495	1.54	550	
Mn	55	115	2	2174.06	2174.06	ppb	9059921	1.22	550	>LDR
Fe	56	115	2	115940.60	115940.60	ppb	714307563	1.85	55000	>LDR
Co	59	115	2	40.68	40.68	ppb	471471	2.27	550	
Ni	60	115	2	73.12	73.12	ppb	225062	1.70	550	
Cu	65	115	2	702.63	702.63	ppb	2837120	0.93	550	>LDR
Zn	66	115	2	466.78	466.78	ppb	564134	1.57	550	
As	75	115	2	159.21	159.21	ppb	112267	1.36	550	
Se	78	115	2	7.97	7.97	ppb	460	5.88	2750	
Mo	95	115	1	6.17	6.17	ppb	59198	4.48	550	
Ag	107	115	1	0.43	0.43	ppb	11770	3.78	550	
Cd	111	115	1	1.35	1.35	ppb	7050	4.17	550	
Sb	121	115	1	1.70	1.70	ppb	39164	4.39	550	
Ba	137	159	1	376.96	376.96	ppb	3086258	3.73	550	
Tl	205	165	1	0.59	0.59	ppb	43326	4.83	550	
Pb	208	165	1	286.28	286.28	ppb	13188330	2.72	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	2073313	1.08	1058582	195.9	70	130	IS Fail
Sc	45	2	99558	1.57	55969	177.9	70	130	IS Fail
In	115	1	1792377	1.43	1490926	120.2	70	130	
In	115	2	328095	1.06	324073	101.2	70	130	
Tb	159	1	2993300	0.16	2402233	124.6	70	130	
Tb	159	2	1216905	0.64	1053942	115.5	70	130	
Ho	165	1	2943425	0.58	2372257	124.1	70	130	
Ho	165	2	1216913	0.58	1044050	116.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**041SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:21:25-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.02	0.02	ppb	219	4.65	550	
Na	23	115	2	-6.92	-6.92	ppb	44009	0.75	55000	
Mg	24	115	2	1.59	1.59	ppb	2324	1.72	55000	
Al	27	115	2	3.43	3.43	ppb	2056	91.06	16500	
K	39	115	2	-3.29	-3.29	ppb	35014	1.02	55000	
Ca	44	115	2	-2.66	-2.66	ppb	274	17.91	55000	
V	51	115	2	0.02	0.02	ppb	181	28.30	550	
Cr	52	115	2	0.00	0.00	ppb	1913	6.17	550	
Mn	55	115	2	0.00	0.00	ppb	1050	8.25	550	
Fe	56	115	2	4.23	4.23	ppb	66470	3.44	55000	
Co	59	115	2	0.01	0.01	ppb	269	22.50	550	
Ni	60	115	2	-0.01	-0.01	ppb	958	12.51	550	
Cu	65	115	2	0.11	0.11	ppb	2466	4.26	550	
Zn	66	115	2	-0.31	-0.31	ppb	1473	5.53	550	
As	75	115	2	0.02	0.02	ppb	24	2.66	550	
Se	78	115	2	0.10	0.10	ppb	19	26.96	2750	
Mo	95	115	1	0.04	0.04	ppb	507	14.90	550	
Ag	107	115	1	0.35	0.35	ppb	9820	2.50	550	
Cd	111	115	1	0.01	0.01	ppb	69	15.88	550	
Sb	121	115	1	-0.13	-0.13	ppb	1421	9.76	550	
Ba	137	159	1	-0.10	-0.10	ppb	524	8.27	550	
Tl	205	165	1	0.00	0.00	ppb	2708	3.33	550	
Pb	208	165	1	0.06	0.06	ppb	5936	2.41	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1270045	3.65	1058582	120.0	70	130	
Sc	45	2	55881	10.04	55969	99.8	70	130	
In	115	1	1847517	0.58	1490926	123.9	70	130	
In	115	2	330455	9.57	324073	102.0	70	130	
Tb	159	1	2784614	0.37	2402233	115.9	70	130	
Tb	159	2	1075036	9.78	1053942	102.0	70	130	
Ho	165	1	2753311	0.62	2372257	116.1	70	130	
Ho	165	2	1096467	6.06	1044050	105.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-333622**
Data File Name	**0426CCV.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:26:25-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	50.68	ppb	50	552645	3.04	101.36	90	110	
Na	23	115	2	4821.12	ppb	5000	8233003	0.60	96.42	90	110	
Mg	24	115	2	4862.19	ppb	5000	3932660	0.52	97.24	90	110	
Al	27	115	2	1415.09	ppb	1500	413460	1.32	94.34	90	110	
K	39	115	2	4933.00	ppb	5000	2706018	0.74	98.66	90	110	
Ca	44	115	2	4885.50	ppb	5000	133710	0.49	97.71	90	110	
V	51	115	2	50.23	ppb	50	304566	1.48	100.45	90	110	
Cr	52	115	2	50.15	ppb	50	386372	0.85	100.31	90	110	
Mn	55	115	2	49.29	ppb	50	215682	0.92	98.57	90	110	
Fe	56	115	2	5063.81	ppb	5000	32638041	0.35	101.28	90	110	
Co	59	115	2	50.90	ppb	50	616253	0.55	101.79	90	110	
Ni	60	115	2	51.22	ppb	50	165047	1.19	102.45	90	110	
Cu	65	115	2	51.53	ppb	50	219408	0.28	103.07	90	110	
Zn	66	115	2	50.88	ppb	50	65962	1.33	101.76	90	110	
As	75	115	2	51.49	ppb	50	37946	1.47	102.98	90	110	
Se	78	115	2	248.11	ppb	250	14543	1.64	99.24	90	110	
Mo	95	115	1	47.81	ppb	50	451367	3.41	95.62	90	110	
Ag	107	115	1	47.08	ppb	50	1227533	3.69	94.16	90	110	
Cd	111	115	1	48.36	ppb	50	247294	3.14	96.73	90	110	
Sb	121	115	1	46.60	ppb	50	952430	3.72	93.21	90	110	
Ba	137	159	1	50.03	ppb	50	370674	4.25	100.06	90	110	
Tl	205	165	1	50.70	ppb	50	3136292	2.72	101.41	90	110	
Pb	208	165	1	50.80	ppb	50	2105027	3.36	101.60	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1166742	0.72	1058582	110.2	70	130	
Sc	45	2	58944	0.92	55969	105.3	70	130	
In	115	1	1765505	0.72	1490926	118.4	70	130	
In	115	2	342823	1.16	324073	105.8	70	130	
Tb	159	1	2701414	0.60	2402233	112.5	70	130	
Tb	159	2	1140727	0.83	1053942	108.2	70	130	
Ho	165	1	2644640	0.41	2372257	111.5	70	130	
Ho	165	2	1133672	0.66	1044050	108.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-333619**
Data File Name	**0436CCB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:30:52-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	-5.24	ppb	500	
Mg	24	115	2	-0.07	ppb	500	
Al	27	115	2	-0.31	ppb	500	
K	39	115	2	-7.21	ppb	500	
Ca	44	115	2	-1.88	ppb	500	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	0.00	ppb	2	
Mn	55	115	2	-0.04	ppb	6	
Fe	56	115	2	1.13	ppb	500	
Co	59	115	2	0.00	ppb	2	
Ni	60	115	2	0.03	ppb	3	
Cu	65	115	2	-0.10	ppb	10	
Zn	66	115	2	-0.02	ppb	20	
As	75	115	2	0.03	ppb	1	
Se	78	115	2	0.22	ppb	10	
Mo	95	115	1	0.06	ppb	1	
Ag	107	115	1	0.03	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.04	ppb	4	
Ba	137	159	1	-0.02	ppb	5	
Tl	205	165	1	0.00	ppb	2	
Pb	208	165	1	0.04	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1236039	1.76	1058582	116.8	70	130	
Sc	45	2	59111	1.47	55969	105.6	70	130	
In	115	1	1766810	0.53	1490926	118.5	70	130	
In	115	2	349413	1.15	324073	107.8	70	130	
Tb	159	1	2689936	0.71	2402233	112.0	70	130	
Tb	159	2	1136586	0.25	1053942	107.8	70	130	
Ho	165	1	2637426	0.23	2372257	111.2	70	130	
Ho	165	2	1128188	1.02	1044050	108.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18934-001**
Data File Name	**044SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:35:24-04:00**
Type	**Sample**
VialNumber	**2210**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	3.33	3.33	ppb	40658	2.02	550	
Na	23	115	2	138.42	138.42	ppb	281585	0.97	55000	
Mg	24	115	2	23893.44	23893.44	ppb	18608600	1.49	55000	
Al	27	115	2	51763.68	51763.68	ppb	14522398	1.55	16500	>LDR
K	39	115	2	3690.02	3690.02	ppb	1958706	1.04	55000	
Ca	44	115	2	32976.41	32976.41	ppb	867265	1.15	55000	
V	51	115	2	93.60	93.60	ppb	546590	1.09	550	
Cr	52	115	2	81.83	81.83	ppb	605951	1.78	550	
Mn	55	115	2	4210.62	4210.62	ppb	17656081	1.06	550	>LDR
Fe	56	115	2	146006.60	146006.60	ppb	905159898	0.77	55000	>LDR
Co	59	115	2	75.41	75.41	ppb	879250	0.76	550	
Ni	60	115	2	118.83	118.83	ppb	367461	1.06	550	
Cu	65	115	2	106.89	106.89	ppb	436071	0.95	550	
Zn	66	115	2	552.69	552.69	ppb	671821	1.66	550	>LDR
As	75	115	2	49.02	49.02	ppb	34791	1.18	550	
Se	78	115	2	9.83	9.83	ppb	567	7.46	2750	
Mo	95	115	1	3.86	3.86	ppb	36411	3.44	550	
Ag	107	115	1	0.44	0.44	ppb	11688	5.48	550	
Cd	111	115	1	1.76	1.76	ppb	8985	2.80	550	
Sb	121	115	1	0.08	0.08	ppb	5607	6.41	550	
Ba	137	159	1	460.61	460.61	ppb	3839081	2.57	550	
Tl	205	165	1	0.31	0.31	ppb	24475	4.81	550	
Pb	208	165	1	74.27	74.27	ppb	3444614	3.37	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	2061390	0.82	1058582	194.7	70	130	IS Fail
Sc	45	2	98257	1.16	55969	175.6	70	130	IS Fail
In	115	1	1758478	0.49	1490926	117.9	70	130	
In	115	2	330153	1.16	324073	101.9	70	130	
Tb	159	1	3047336	0.94	2402233	126.9	70	130	
Tb	159	2	1243303	0.95	1053942	118.0	70	130	
Ho	165	1	2961085	0.57	2372257	124.8	70	130	
Ho	165	2	1237701	0.84	1044050	118.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18934-002**
Data File Name	**045SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:39:48-04:00**
Type	**Sample**
VialNumber	**2211**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.65	1.65	ppb	19627	3.16	550	
Na	23	115	2	283.38	283.38	ppb	490140	0.79	55000	
Mg	24	115	2	57450.69	57450.69	ppb	42309697	1.14	55000	>LDR
Al	27	115	2	32168.58	32168.58	ppb	8534446	0.85	16500	>LDR
K	39	115	2	4343.64	4343.64	ppb	2173953	0.12	55000	
Ca	44	115	2	135778.56	135778.56	ppb	3375909	1.20	55000	>LDR
V	51	115	2	61.46	61.46	ppb	339404	1.55	550	
Cr	52	115	2	56.16	56.16	ppb	393841	1.42	550	
Mn	55	115	2	1174.45	1174.45	ppb	4658055	0.91	550	>LDR
Fe	56	115	2	81510.57	81510.57	ppb	477884562	0.78	55000	>LDR
Co	59	115	2	40.53	40.53	ppb	446978	1.29	550	
Ni	60	115	2	90.59	90.59	ppb	265130	1.20	550	
Cu	65	115	2	98.48	98.48	ppb	380060	0.44	550	
Zn	66	115	2	302.81	302.81	ppb	348852	0.90	550	
As	75	115	2	39.42	39.42	ppb	26461	0.90	550	
Se	78	115	2	6.26	6.26	ppb	347	10.27	2750	
Mo	95	115	1	1.32	1.32	ppb	11968	5.65	550	
Ag	107	115	1	0.30	0.30	ppb	7700	2.64	550	
Cd	111	115	1	0.36	0.36	ppb	1755	4.24	550	
Sb	121	115	1	0.02	0.02	ppb	4266	5.31	550	
Ba	137	159	1	166.87	166.87	ppb	1332225	3.44	550	
Tl	205	165	1	0.24	0.24	ppb	18783	2.96	550	
Pb	208	165	1	54.95	54.95	ppb	2473954	3.89	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1700789	0.39	1058582	160.7	70	130	IS Fail
Sc	45	2	80018	1.24	55969	143.0	70	130	IS Fail
In	115	1	1681684	1.47	1490926	112.8	70	130	
In	115	2	312235	1.72	324073	96.3	70	130	
Tb	159	1	2917314	1.20	2402233	121.4	70	130	
Tb	159	2	1180049	1.14	1053942	112.0	70	130	
Ho	165	1	2873456	0.26	2372257	121.1	70	130	
Ho	165	2	1174322	0.80	1044050	112.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18934-003**
Data File Name	**046SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:44:13-04:00**
Type	**Sample**
VialNumber	**2212**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.32	1.32	ppb	15555	2.34	550	
Na	23	115	2	267.10	267.10	ppb	457452	0.86	55000	
Mg	24	115	2	37759.54	37759.54	ppb	27354667	0.88	55000	
Al	27	115	2	27242.00	27242.00	ppb	7110544	1.11	16500	>LDR
K	39	115	2	3275.70	3275.70	ppb	1621452	0.95	55000	
Ca	44	115	2	267603.07	267603.07	ppb	6545098	0.92	55000	>LDR
V	51	115	2	53.52	53.52	ppb	290737	0.83	550	
Cr	52	115	2	46.52	46.52	ppb	321186	0.55	550	
Mn	55	115	2	1951.77	1951.77	ppb	7614795	0.94	550	>LDR
Fe	56	115	2	82148.47	82148.47	ppb	473807477	0.56	55000	>LDR
Co	59	115	2	30.55	30.55	ppb	331513	1.16	550	
Ni	60	115	2	71.73	71.73	ppb	206718	2.14	550	
Cu	65	115	2	86.77	86.77	ppb	329700	1.26	550	
Zn	66	115	2	258.49	258.49	ppb	293219	1.28	550	
As	75	115	2	43.04	43.04	ppb	28419	1.51	550	
Se	78	115	2	5.44	5.44	ppb	297	5.10	2750	
Mo	95	115	1	2.20	2.20	ppb	20077	2.86	550	
Ag	107	115	1	0.14	0.14	ppb	3866	4.04	550	
Cd	111	115	1	0.42	0.42	ppb	2094	4.20	550	
Sb	121	115	1	0.05	0.05	ppb	4761	1.91	550	
Ba	137	159	1	224.97	224.97	ppb	1764568	3.45	550	
Tl	205	165	1	0.21	0.21	ppb	16611	1.83	550	
Pb	208	165	1	397.41	397.41	ppb	17746125	2.60	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1616383	0.38	1058582	152.7	70	130	IS Fail
Sc	45	2	73186	1.31	55969	130.8	70	130	IS Fail
In	115	1	1698824	0.99	1490926	113.9	70	130	
In	115	2	307144	1.04	324073	94.8	70	130	
Tb	159	1	2866372	1.22	2402233	119.3	70	130	
Tb	159	2	1138201	1.20	1053942	108.0	70	130	
Ho	165	1	2853556	1.39	2372257	120.3	70	130	
Ho	165	2	1133461	0.91	1044050	108.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18934-004**
Data File Name	**047SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:48:36-04:00**
Type	**Sample**
VialNumber	**2301**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.20	1.20	ppb	14136	2.39	550	
Na	23	115	2	358.31	358.31	ppb	582505	1.77	55000	
Mg	24	115	2	34960.67	34960.67	ppb	24753698	1.31	55000	
Al	27	115	2	26351.28	26351.28	ppb	6721912	2.11	16500	>LDR
K	39	115	2	2809.07	2809.07	ppb	1363661	0.89	55000	
Ca	44	115	2	244614.06	244614.06	ppb	5846891	0.76	55000	>LDR
V	51	115	2	52.70	52.70	ppb	279785	0.86	550	
Cr	52	115	2	66.29	66.29	ppb	446593	1.32	550	
Mn	55	115	2	1740.40	1740.40	ppb	6635850	1.47	550	>LDR
Fe	56	115	2	83965.88	83965.88	ppb	473293100	1.09	55000	>LDR
Co	59	115	2	28.18	28.18	ppb	298806	1.40	550	
Ni	60	115	2	67.34	67.34	ppb	189704	0.96	550	
Cu	65	115	2	94.26	94.26	ppb	349857	2.01	550	
Zn	66	115	2	308.12	308.12	ppb	341245	0.89	550	
As	75	115	2	46.54	46.54	ppb	30030	1.65	550	
Se	78	115	2	4.65	4.65	ppb	250	5.62	2750	
Mo	95	115	1	2.13	2.13	ppb	19419	2.35	550	
Ag	107	115	1	0.10	0.10	ppb	2783	9.60	550	
Cd	111	115	1	0.37	0.37	ppb	1852	2.82	550	
Sb	121	115	1	0.07	0.07	ppb	5147	7.27	550	
Ba	137	159	1	171.77	171.77	ppb	1358945	3.54	550	
Tl	205	165	1	0.13	0.13	ppb	11220	1.33	550	
Pb	208	165	1	32.90	32.90	ppb	1467962	2.89	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1604683	0.81	1058582	151.6	70	130	IS Fail
Sc	45	2	72752	1.82	55969	130.0	70	130	
In	115	1	1698173	0.73	1490926	113.9	70	130	
In	115	2	300158	0.37	324073	92.6	70	130	
Tb	159	1	2891214	1.01	2402233	120.4	70	130	
Tb	159	2	1129313	1.02	1053942	107.2	70	130	
Ho	165	1	2845041	0.12	2372257	119.9	70	130	
Ho	165	2	1120139	1.00	1044050	107.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18934-005**
Data File Name	**048SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:53:00-04:00**
Type	**Sample**
VialNumber	**2302**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.46	1.46	ppb	17471	2.96	550	
Na	23	115	2	256.75	256.75	ppb	438919	1.34	55000	
Mg	24	115	2	20379.95	20379.95	ppb	14670903	1.10	55000	
Al	27	115	2	20280.39	20280.39	ppb	5259722	1.39	16500	>LDR
K	39	115	2	2630.46	2630.46	ppb	1300409	2.74	55000	
Ca	44	115	2	146677.61	146677.61	ppb	3564647	1.35	55000	>LDR
V	51	115	2	49.24	49.24	ppb	265829	1.69	550	
Cr	52	115	2	53.92	53.92	ppb	369632	1.81	550	
Mn	55	115	2	1443.72	1443.72	ppb	5596767	0.92	550	>LDR
Fe	56	115	2	67331.52	67331.52	ppb	385874825	1.43	55000	>LDR
Co	59	115	2	25.29	25.29	ppb	272722	1.49	550	
Ni	60	115	2	123.42	123.42	ppb	352724	1.42	550	
Cu	65	115	2	142.53	142.53	ppb	536876	2.13	550	
Zn	66	115	2	372.32	372.32	ppb	418883	1.18	550	
As	75	115	2	28.06	28.06	ppb	18414	0.51	550	
Se	78	115	2	5.99	5.99	ppb	324	11.35	2750	
Mo	95	115	1	3.09	3.09	ppb	28577	3.35	550	
Ag	107	115	1	0.32	0.32	ppb	8391	2.87	550	
Cd	111	115	1	1.00	1.00	ppb	5012	2.76	550	
Sb	121	115	1	0.76	0.76	ppb	18954	4.49	550	
Ba	137	159	1	290.89	290.89	ppb	2319524	4.43	550	
Tl	205	165	1	0.36	0.36	ppb	27247	2.39	550	
Pb	208	165	1	332.16	332.16	ppb	15020726	3.42	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1539444	1.09	1058582	145.4	70	130	IS Fail
Sc	45	2	69375	1.13	55969	124.0	70	130	
In	115	1	1723950	1.77	1490926	115.6	70	130	
In	115	2	305172	0.41	324073	94.2	70	130	
Tb	159	1	2914351	0.85	2402233	121.3	70	130	
Tb	159	2	1145876	0.85	1053942	108.7	70	130	
Ho	165	1	2889570	0.45	2372257	121.8	70	130	
Ho	165	2	1138538	1.37	1044050	109.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18955-004**
Data File Name	**049SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T13:57:23-04:00**
Type	**Sample**
VialNumber	**2303**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.39	1.39	ppb	16582	4.22	550	
Na	23	115	2	254.53	254.53	ppb	429170	1.21	55000	
Mg	24	115	2	41303.47	41303.47	ppb	29296987	1.30	55000	
Al	27	115	2	29025.01	29025.01	ppb	7417247	1.63	16500	>LDR
K	39	115	2	3648.65	3648.65	ppb	1764161	0.79	55000	
Ca	44	115	2	104783.47	104783.47	ppb	2509289	1.29	55000	>LDR
V	51	115	2	51.51	51.51	ppb	273950	1.30	550	
Cr	52	115	2	54.44	54.44	ppb	367747	1.56	550	
Mn	55	115	2	962.39	962.39	ppb	3676731	1.84	550	>LDR
Fe	56	115	2	72192.18	72192.18	ppb	407650301	0.85	55000	>LDR
Co	59	115	2	34.98	34.98	ppb	371510	1.05	550	
Ni	60	115	2	83.85	83.85	ppb	236428	1.98	550	
Cu	65	115	2	82.56	82.56	ppb	307230	1.87	550	
Zn	66	115	2	240.77	240.77	ppb	267491	0.94	550	
As	75	115	2	22.42	22.42	ppb	14497	2.06	550	
Se	78	115	2	5.64	5.64	ppb	302	15.75	2750	
Mo	95	115	1	1.05	1.05	ppb	9722	7.12	550	
Ag	107	115	1	0.18	0.18	ppb	5022	4.82	550	
Cd	111	115	1	0.18	0.18	ppb	946	1.81	550	
Sb	121	115	1	0.07	0.07	ppb	5374	4.30	550	
Ba	137	159	1	99.26	99.26	ppb	790385	3.61	550	
Tl	205	165	1	0.15	0.15	ppb	12908	4.02	550	
Pb	208	165	1	44.01	44.01	ppb	1993099	3.84	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1617751	0.42	1058582	152.8	70	130	IS Fail
Sc	45	2	72560	1.01	55969	129.6	70	130	
In	115	1	1722414	0.13	1490926	115.5	70	130	
In	115	2	300712	1.56	324073	92.8	70	130	
Tb	159	1	2907197	0.87	2402233	121.0	70	130	
Tb	159	2	1151434	1.32	1053942	109.3	70	130	
Ho	165	1	2889437	1.00	2372257	121.8	70	130	
Ho	165	2	1144600	0.94	1044050	109.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18955-005**
Data File Name	**050SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T14:01:47-04:00**
Type	**Sample**
VialNumber	**2304**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.33	1.33	ppb	16252	2.43	550	
Na	23	115	2	227.64	227.64	ppb	409152	0.95	55000	
Mg	24	115	2	22753.74	22753.74	ppb	16968195	1.27	55000	
Al	27	115	2	24363.78	24363.78	ppb	6545431	1.58	16500	>LDR
K	39	115	2	2501.73	2501.73	ppb	1282995	1.02	55000	
Ca	44	115	2	71330.57	71330.57	ppb	1795945	1.46	55000	>LDR
V	51	115	2	49.34	49.34	ppb	275909	0.35	550	
Cr	52	115	2	45.52	45.52	ppb	323512	1.16	550	
Mn	55	115	2	1679.74	1679.74	ppb	6745407	1.62	550	>LDR
Fe	56	115	2	74665.14	74665.14	ppb	443261980	1.63	55000	>LDR
Co	59	115	2	29.37	29.37	ppb	328047	1.61	550	
Ni	60	115	2	73.37	73.37	ppb	217607	2.04	550	
Cu	65	115	2	111.86	111.86	ppb	436885	1.37	550	
Zn	66	115	2	305.71	305.71	ppb	356609	1.11	550	
As	75	115	2	31.59	31.59	ppb	21476	1.22	550	
Se	78	115	2	5.85	5.85	ppb	329	13.77	2750	
Mo	95	115	1	2.84	2.84	ppb	26811	5.01	550	
Ag	107	115	1	0.32	0.32	ppb	8674	1.58	550	
Cd	111	115	1	0.47	0.47	ppb	2434	5.05	550	
Sb	121	115	1	1.02	1.02	ppb	24731	2.12	550	
Ba	137	159	1	158.42	158.42	ppb	1286406	3.46	550	
Tl	205	165	1	0.19	0.19	ppb	15806	1.74	550	
Pb	208	165	1	140.35	140.35	ppb	6481013	2.39	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1627591	0.68	1058582	153.8	70	130	IS Fail
Sc	45	2	73876	0.90	55969	132.0	70	130	IS Fail
In	115	1	1758855	0.64	1490926	118.0	70	130	
In	115	2	316147	0.42	324073	97.6	70	130	
Tb	159	1	2967686	1.20	2402233	123.5	70	130	
Tb	159	2	1177012	1.10	1053942	111.7	70	130	
Ho	165	1	2949803	0.42	2372257	124.3	70	130	
Ho	165	2	1177119	0.91	1044050	112.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD18932-002**
Data File Name	**051SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T14:06:10-04:00**
Type	**Sample**
VialNumber	**2308**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.00	1.00	ppb	11890	3.58	550	
Na	23	115	2	2769.48	2769.48	ppb	5763923	1.27	55000	
Mg	24	115	2	5751.33	5751.33	ppb	5639737	1.05	55000	
Al	27	115	2	13626.15	13626.15	ppb	4813676	1.46	16500	
K	39	115	2	1758.78	1758.78	ppb	1199604	0.96	55000	
Ca	44	115	2	10243.87	10243.87	ppb	339477	2.28	55000	
V	51	115	2	49.26	49.26	ppb	362137	2.12	550	
Cr	52	115	2	5584.22	5584.22	ppb	51895974	1.82	550	>LDR
Mn	55	115	2	474.02	474.02	ppb	2503628	1.46	550	
Fe	56	115	2	34386.66	34386.66	ppb	268425816	1.16	55000	
Co	59	115	2	12.92	12.92	ppb	189750	2.11	550	
Ni	60	115	2	62.16	62.16	ppb	242553	1.14	550	
Cu	65	115	2	994.15	994.15	ppb	5084704	1.34	550	>LDR
Zn	66	115	2	23293.51	23293.51	ppb	35548405	1.09	550	>LDR
As	75	115	2	175.90	175.90	ppb	157128	1.32	550	
Se	78	115	2	8.21	8.21	ppb	600	6.53	2750	
Mo	95	115	1	14.45	14.45	ppb	169712	3.26	550	
Ag	107	115	1	5.51	5.51	ppb	179004	3.68	550	
Cd	111	115	1	164.08	164.08	ppb	1042831	3.69	550	
Sb	121	115	1	25.30	25.30	ppb	644884	3.48	550	
Ba	137	159	1	14256.16	14256.16	ppb	111755271	3.05	550	>LDR
Tl	205	165	1	0.37	0.37	ppb	27978	3.76	550	
Pb	208	165	1	18063.26	18063.26	ppb	812801117	3.13	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1474912	0.72	1058582	139.3	70	130	IS Fail
Sc	45	2	65445	1.13	55969	116.9	70	130	
In	115	1	2194262	0.74	1490926	147.2	70	130	IS Fail
In	115	2	415625	0.69	324073	128.3	70	130	
Tb	159	1	2867234	0.64	2402233	119.4	70	130	
Tb	159	2	1158096	0.92	1053942	109.9	70	130	
Ho	165	1	2875572	0.96	2372257	121.2	70	130	
Ho	165	2	1162194	0.93	1044050	111.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**052SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T14:10:31-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.01	0.01	ppb	157	14.74	550	
Na	23	115	2	-8.11	-8.11	ppb	39658	1.49	55000	
Mg	24	115	2	1.36	1.36	ppb	2021	2.22	55000	
Al	27	115	2	-0.88	-0.88	ppb	906	4.54	16500	
K	39	115	2	-7.10	-7.10	ppb	31132	0.51	55000	
Ca	44	115	2	-0.57	-0.57	ppb	308	15.18	55000	
V	51	115	2	0.02	0.02	ppb	132	7.70	550	
Cr	52	115	2	0.10	0.10	ppb	2455	3.13	550	
Mn	55	115	2	-0.04	-0.04	ppb	820	2.85	550	
Fe	56	115	2	3.71	3.71	ppb	59734	7.89	55000	
Co	59	115	2	0.01	0.01	ppb	210	13.84	550	
Ni	60	115	2	-0.07	-0.07	ppb	726	18.66	550	
Cu	65	115	2	0.09	0.09	ppb	2278	5.62	550	
Zn	66	115	2	0.52	0.52	ppb	2325	5.48	550	
As	75	115	2	0.03	0.03	ppb	30	17.29	550	
Se	78	115	2	-0.02	-0.02	ppb	11	20.13	2750	
Mo	95	115	1	0.04	0.04	ppb	434	6.15	550	
Ag	107	115	1	0.32	0.32	ppb	8698	3.53	550	
Cd	111	115	1	0.02	0.02	ppb	136	9.89	550	
Sb	121	115	1	0.04	0.04	ppb	4674	1.52	550	
Ba	137	159	1	8.88	8.88	ppb	65938	6.75	550	
Tl	205	165	1	-0.02	-0.02	ppb	1689	3.87	550	
Pb	208	165	1	1.73	1.73	ppb	74705	11.43	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1078652	0.98	1058582	101.9	70	130	
Sc	45	2	51770	1.03	55969	92.5	70	130	
In	115	1	1746167	1.98	1490926	117.1	70	130	
In	115	2	309644	0.33	324073	95.5	70	130	
Tb	159	1	2669930	1.98	2402233	111.1	70	130	
Tb	159	2	1065961	0.42	1053942	101.1	70	130	
Ho	165	1	2641893	2.04	2372257	111.4	70	130	
Ho	165	2	1061048	0.56	1044050	101.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 7:58 AM on:9/1/2020

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-333622**
Data File Name	**0536CCV.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T14:15:03-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	45.11	ppb	50	499515	3.04	90.21	90	110	
Na	23	115	2	4751.29	ppb	5000	7668691	1.36	95.03	90	110	
Mg	24	115	2	4742.97	ppb	5000	3625542	1.18	94.86	90	110	
Al	27	115	2	1341.92	ppb	1500	370569	2.08	89.46	90	110	>+-10%
K	39	115	2	4769.91	ppb	5000	2474017	0.53	95.40	90	110	
Ca	44	115	2	4673.57	ppb	5000	120902	1.38	93.47	90	110	
V	51	115	2	48.81	ppb	50	279689	1.35	97.61	90	110	
Cr	52	115	2	49.33	ppb	50	359151	1.89	98.66	90	110	
Mn	55	115	2	48.05	ppb	50	198759	1.46	96.11	90	110	
Fe	56	115	2	4957.90	ppb	5000	30200951	1.22	99.16	90	110	
Co	59	115	2	49.64	ppb	50	567971	1.31	99.27	90	110	
Ni	60	115	2	49.95	ppb	50	152131	2.04	99.91	90	110	
Cu	65	115	2	50.46	ppb	50	203084	1.27	100.92	90	110	
Zn	66	115	2	50.19	ppb	50	61518	1.40	100.38	90	110	
As	75	115	2	49.82	ppb	50	34695	1.00	99.63	90	110	
Se	78	115	2	239.05	ppb	250	13242	1.76	95.62	90	110	
Mo	95	115	1	45.73	ppb	50	419881	4.08	91.46	90	110	
Ag	107	115	1	45.54	ppb	50	1154830	4.12	91.08	90	110	
Cd	111	115	1	47.52	ppb	50	236310	3.43	95.05	90	110	
Sb	121	115	1	46.25	ppb	50	919265	3.48	92.50	90	110	
Ba	137	159	1	51.22	ppb	50	378566	5.92	102.44	90	110	
Tl	205	165	1	49.56	ppb	50	3113495	3.76	99.13	90	110	
Pb	208	165	1	50.20	ppb	50	2112660	3.73	100.41	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1090166	0.57	1058582	103.0	70	130	
Sc	45	2	53776	2.01	55969	96.1	70	130	
In	115	1	1716633	1.25	1490926	115.1	70	130	
In	115	2	323990	0.50	324073	100.0	70	130	
Tb	159	1	2695301	1.15	2402233	112.2	70	130	
Tb	159	2	1099888	0.87	1053942	104.4	70	130	
Ho	165	1	2685593	0.27	2372257	113.2	70	130	
Ho	165	2	1098234	0.62	1044050	105.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-333619**
Data File Name	**0546CCB.D**
DataPath	**C:\ICPMH\1\DATA\S083120A.b**
Acq Date Time	**2020-08-31T14:19:28-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

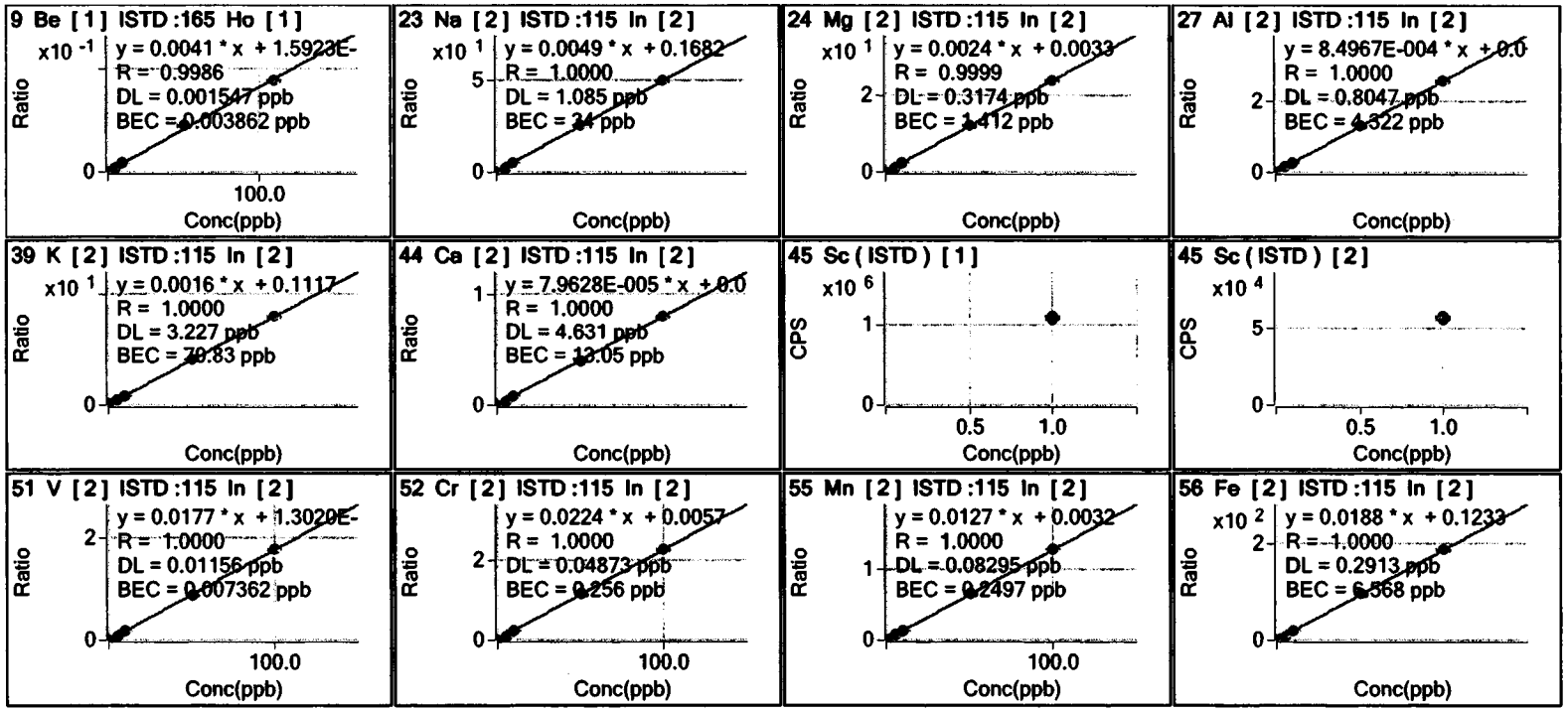
Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	-5.21	ppb	500	
Mg	24	115	2	0.12	ppb	500	
Al	27	115	2	0.01	ppb	500	
K	39	115	2	-7.52	ppb	500	
Ca	44	115	2	-2.68	ppb	500	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	0.02	ppb	2	
Mn	55	115	2	-0.05	ppb	6	
Fe	56	115	2	1.34	ppb	500	
Co	59	115	2	0.00	ppb	2	
Ni	60	115	2	-0.02	ppb	3	
Cu	65	115	2	-0.09	ppb	10	
Zn	66	115	2	0.32	ppb	20	
As	75	115	2	0.02	ppb	1	
Se	78	115	2	0.12	ppb	10	
Mo	95	115	1	0.06	ppb	1	
Ag	107	115	1	0.03	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.06	ppb	4	
Ba	137	159	1	0.63	ppb	5	
Tl	205	165	1	-0.01	ppb	2	
Pb	208	165	1	0.33	ppb	2	

QC ISTD Table

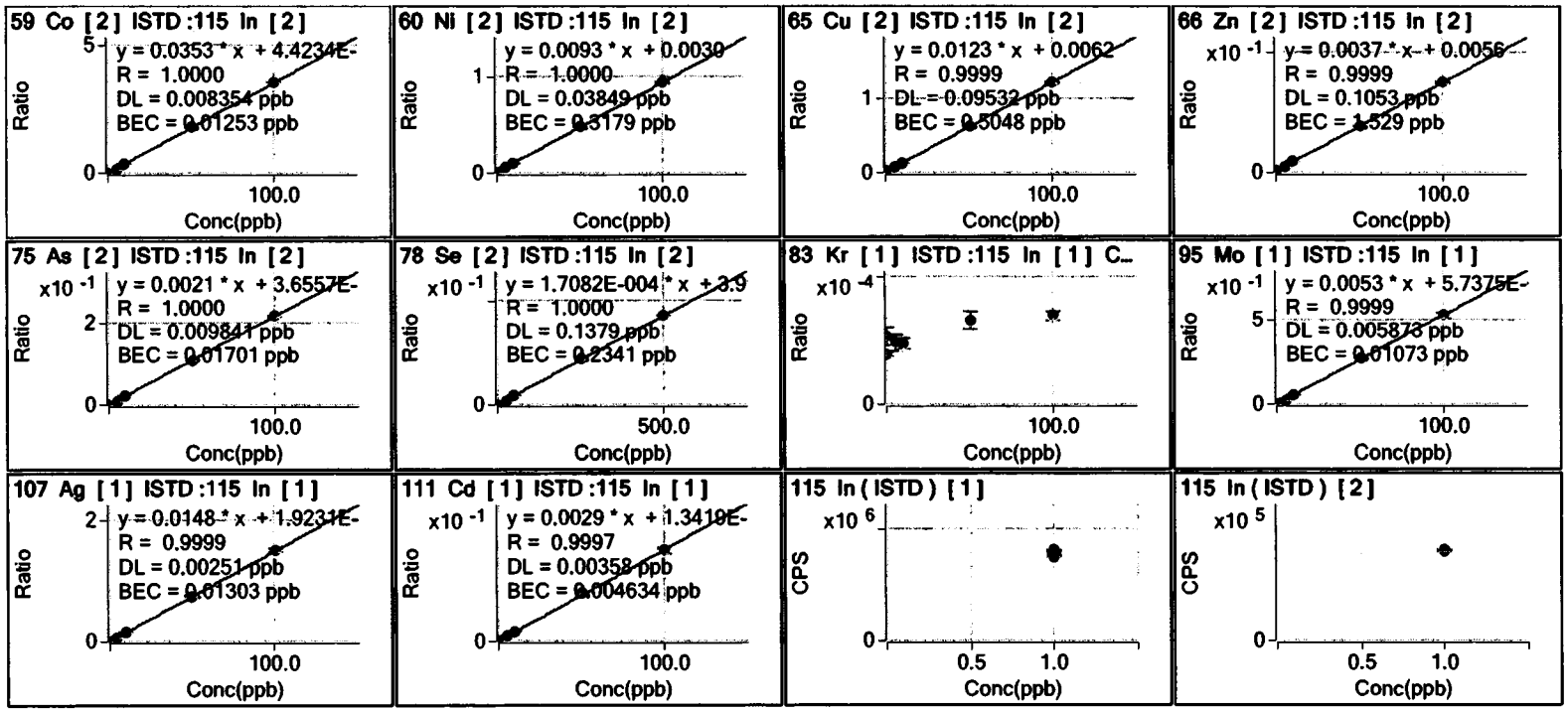
Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1113398	0.68	1058582	105.2	70	130	
Sc	45	2	55583	1.59	55969	99.3	70	130	
In	115	1	1763377	0.80	1490926	118.3	70	130	
In	115	2	330731	1.33	324073	102.1	70	130	
Tb	159	1	2720133	0.38	2402233	113.2	70	130	
Tb	159	2	1105219	1.05	1053942	104.9	70	130	
Ho	165	1	2653454	0.49	2372257	111.9	70	130	
Ho	165	2	1101726	1.01	1044050	105.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

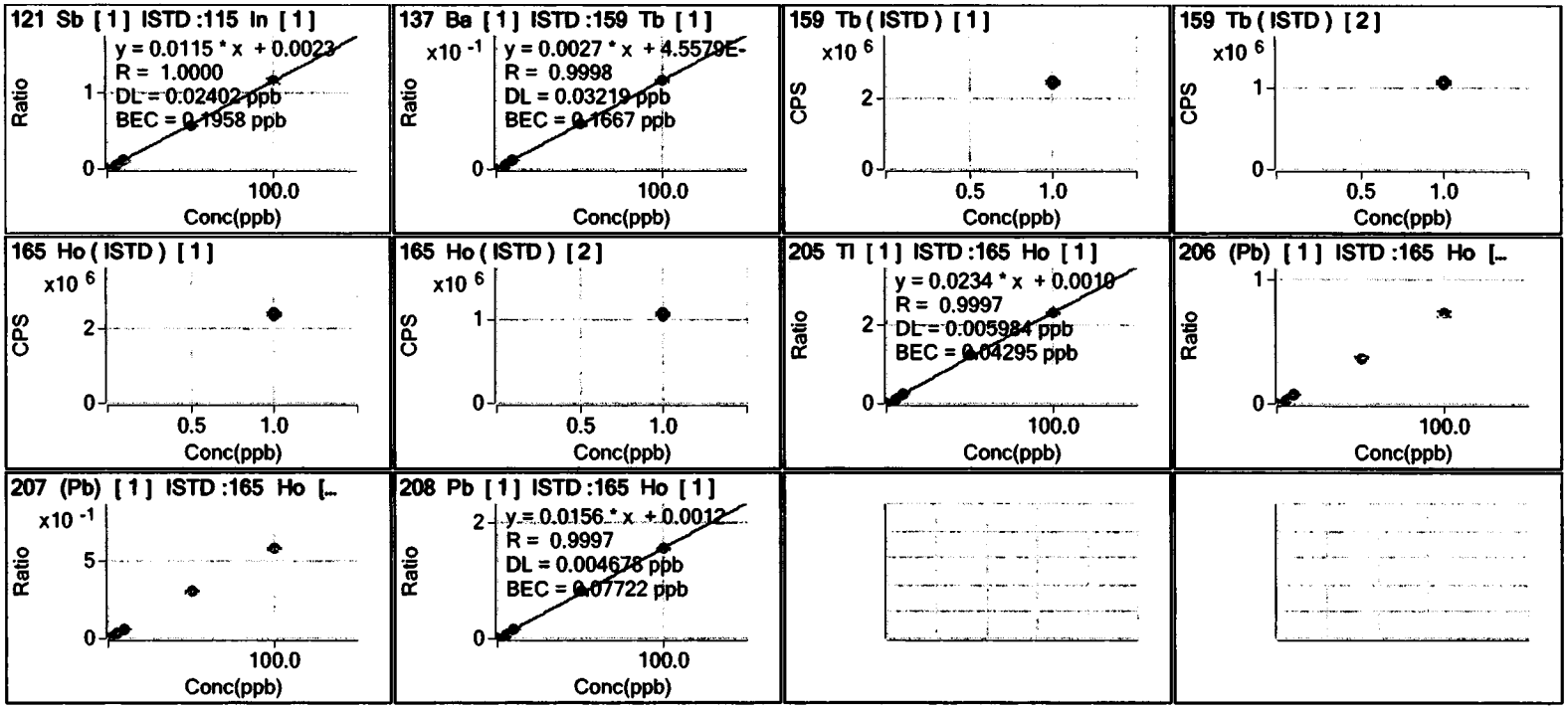
0082803 0439



0082803 0440



0082803 0441



Metal Data
Digestion Logbook Data

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A (3050B) 200.7/200.8 OTHER_____

Batch No.: 26170 Analyst: ANS

QC Number: 85228 Prep Date: 8/31/20

Matrix: soil 6010 Reviewed By: CM

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS	0.5g	~~0.5g~~				--	
LCSD						--	
1. AD 18955-001							Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -001							
MS -002							Balance used: 032
MSD -003							Pipettes used: 149, 155
2. AD 18934-001							
3. -002							Hot Block used: 5
4. -003							
5. -004							
6. -005							
7. AD 18955-004							
8. -005							
9. AD 18949-014							
10. AD 18950-004							
11. AD 18932-002							
12. AD 18960-001							
13. -003							
14. -004							
15. -007							
16. -015							
17. -017							
18.							
19.							
20.							

Hot Plate Temperature: 92.7 C (90-95° C) Start Time: 9:00am End Time: 10:30am

	Volume mL	Lot #
LCS, LCSD	0.5g	V- 13005
LLLCS, LLLCSD		V-
MS, MSD	0.25ml	V-13177, 13178,
LLMS, LLMSD		V- 331983

Acid	Vol mL	Lot#
HNO_3	2.5	V-13421
HCl	5	V-13422
H_2O_2	1.5	V-13067

Acid	Vol mL	Lot#
1:1 HNO_3	5	V- 333595
1:1 HCl		V-

Relinquished By ANS Date 8/31/20

Received By CM Date 8/31/2020

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2018 DOD.DOC

HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 7470A (7471B) OTHER_____

Batch No.:* 26170
QC Number: 85228
Matrix: soil

Analyst: ANS
Prep Date: 8/31/20
Review By: BR

LAB ID#	MERCURY INITIAL	MERCURY FINAL	COMMENTS	STANDARDS
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 334009
LCS	0.15g			
LCSD				STD 0.2 ppb V- 334010
1 AD 18955-001				STD 0.5 ppb V- 334011
MR -001				STD 1.0 ppb V- 334012
MS -002				STD 2.0 ppb V- 334013
MSD -003				STD 5.0 ppb V- 334014
2 AD 18934-001				STD 10.0 ppb V- 334015
3 -002				STD 25.0 ppb V- 334016
4 -003				ICV 10.0 ppb V- 334007
5 -004				CCV 20.0 ppb V- 334008
6 -005				
7 AD 18955-004				
8 -005				Balance used: 032
9 AD 18949-014				Pipettes used: 143, 159, 155
10 AD 18950-004				
11 ~~AD 18932~~ ANS 8/31/20				Hot Block used: 6
12 AD 18932-002				
13 AD 18960-001				
14 -003				
15 -004				
16 -007				
17 -015				
18 -017				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 331286	3.75	HNO3		V-
$K_2S_2O_8$: V-		HCl		V-
NH_2OH: V- 317822	1.5	H2SO4		V-
		Aqua Regia	1.25	V- 334006

**Block Temp.: 95.8 °C
Time in Block: 9:30 am
Time Out of Block: 10:00 am

Spike Volume & Lot # 13005 ANS 8/31/20
☐ LCS V- 334004 0.15g 0.25 ml
MS V- 334004 0.250 ml
Standards/Control Batch B- 29608

StartTime: 9:00 am
EndTime: 10:00 am

**Temperature
245.1 / 7470A: 90-95C
7471B: 92-98C

Relinquished By: ANS

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 26171 Analyst: ANS

QC Number: 85229 Prep Date: 8/31/20

Matrix: soil 6020 Reviewed By: n

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml	25ml	50ml		--	
LCS	0.1g					--	
LCSD	0.1g					--	
1. AD18955-001	0.5g						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -001							
MS -002							Balance used: 032
MSD -003							Pipettes used: 149, 155
2. AD18934-001							
3. -002							Hot Block used: 4
4. -003							
5. -004							
6. -005							
7. AD18955-004							
8. -005							
9. AD18951-001							
10. AD18949-014							
11. AD18950-004							
12. AD18932-002							
13. AD18960-001							
14. -003							
15. -004							
16. -007							
17. -015							
18. -017							
19.							
20.							

Hot Plate Temperature: 93.2 C (90-95° C) Start Time: 9:00am End Time: 10:00am

	Volume mL	Lot #
LCS, LCSD	0.1g	V- 13005
LLLCS, LLLCSD		V-
MS, MSD	0.25ml	V-13177, 13178
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2.5	V- 13421
HCl		V-
H_2O_2	1.5	V-13067

Acid	Vol mL	Lot#
1:1 HNO_3	5	V- 333595
1:1 HCl		V-

Relinquished By ANS Date 8/31/20

Received By n Date 8/31/20

Wet Chemistry Data

Wet Chemistry Data
Sample Data

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD18955-001 | Project Number: 0082803
Matrix: Soil/Terracore | Received Date: 8/28/2020
Client SampleID: HRPB-3 | Collect Date: 8/27/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.30	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	250	mV		08/31/20	08/31/20
pH	CR6-PH	1	7.9	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.99	08/31/20	08/31/20

Lab#: AD18955-002 | Project Number: 0082803
Matrix: Soil/Terracore | Received Date: 8/28/2020
Client SampleID: HRPB-3 MS | Collect Date: 8/27/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	5.1	mg/Kg	0.30	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	250	mV		08/31/20	08/31/20
pH	CR6-PH	1	8.0	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	21	mg/Kg	1.0	08/31/20	08/31/20

Lab#: AD18955-003 | Project Number: 0082803
Matrix: Soil/Terracore | Received Date: 8/28/2020
Client SampleID: HRPB-3 MSD | Collect Date: 8/27/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	5.1	mg/Kg	0.28	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	250	mV		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
pH	CR6-PH	1	7.9	pH		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	50	400	mg/Kg	47	08/31/20	08/31/20

Lab#: AD18955-004 | Project Number: 0082803
Matrix: Soil/Terracore | Received Date: 8/28/2020
Client SampleID: Duplicate | Collect Date: 8/27/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.32	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	270	mV		08/31/20	08/31/20
pH	CR6-PH	1	7.8	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/31/20	08/31/20

Lab#: AD18955-005 | Project Number: 0082803
Matrix: Soil/Terracore | Received Date: 8/28/2020
Client SampleID: HRPB-2 | Collect Date: 8/27/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.33	08/31/20	08/31/20
Oxidation Reduction Potenial	CR6-ORP	1	-27	mV		08/31/20	08/31/20
pH	CR6-PH	1	7.5	pH		08/31/20	08/31/20
Temperature	CR6-PH	1	23	C		08/31/20	08/31/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/31/20	08/31/20

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 0082803**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD18955-001	HRPB-3	Soil/Terracore	1	81	Percent			08/30/20	08/28/20	08/27/20
AD18955-002	HRPB-3 MS	Soil/Terracore	1	79	Percent			08/30/20	08/28/20	08/27/20
AD18955-003	HRPB-3 MSD	Soil/Terracore	1	85	Percent			08/30/20	08/28/20	08/27/20
AD18955-004	Duplicate	Soil/Terracore	1	76	Percent			08/30/20	08/28/20	08/27/20
AD18955-005	HRPB-2	Soil/Terracore	1	72	Percent			08/30/20	08/28/20	08/27/20

Wet Chemistry Data
QC Data

Cr-SOIL

Sample	Total Cr (mg/kg)	RL	Hexavalent Cr (mg/kg)	RL	Trivalent Cr (mg/kg)	RL
AD18955-001	10.4	6.17	ND	0.988	10.4	6.17
AD18955-004	15.5	6.58	ND	1.05	15.5	6.58
AD18955-005	10.6	6.94	ND	1.11	10.6	6.94

Calculated using 3 significant figures. Reported using 2 significant figures.

MS/MSD/DUP Recovery

0082803 0452

Prep Batch: S-2412 Sample ID: AD18955-001
Method: EPA 9012B Matrix: Soil

Qc Type: DUP

Analyte	Limits Rpd	Dil	DUP Conc	Sample Conc	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	35	1	0	0	NA		20200831132	15	08/31/20 14:00	20200831132	14	08/31/20 13:58

Qc Type: MS

Analyte	Amt	Limits Recov	Dil	MS Conc	Sample Conc	% Rec	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.3373	0	84		20200831132	16	08/31/20 14:03	20200831132	14	08/31/20 13:58

Qc Type: MSD

Analyte	Amt	Limits Recov	Rpd	Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.3596	0	90	6.4		20200831132	17	08/31/20 14:05	20200831132	14	08/31/20 13:58

LCS Recoveries

	BatchRunID/RunID:====>		202008311328-12							
	QcBatchID:====>		LCSS-2412							
	Date/Time:====>		08/31/20 13:53							
	Analytical Method:====>		EPA 9012B							
	Matrix:====>		Soil		Soil		Soil		Soil	
	EPA 9012B									
Analyte	**Amt**	**Limits**	**Amt**	**Limits**	**% Rec**	**Flags**	**% Rec**	**Flags**	**% Rec**	**Flags**	**% Rec**	**Flags**	**% Rec**	**Flags**
Cyanide	0.4	80-120			100									

Calibration Summary:

0082803 0454

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200831132	9	ICV	101	0.4	85-115
Cyanide	20200831132	21	CCV	100	0.4	85-115
Cyanide	20200831132	33	CCV	99	0.4	85-115
Cyanide	20200831132	39	CCV	101	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 8/31/20

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200831132	8/31/20 13:51	MBS-2412	11	Cyanide	ND	0.020

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200831132	8/31/20 13:49	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200831132	8/31/20 14:17	CCB	22	Cyanide	ND	0.020
20200831132	8/31/20 14:45	CCB	34	Cyanide	ND	0.020
20200831132	8/31/20 14:55	CCB	40	Cyanide	ND	0.020

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-10932

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD18966-001	82	82.26691	Percent	1.37	12.31	10.37	08/30/20	disham	0.18	5
Sample	AD18955-001	81	81.34403	Percent	1.34	11.31	9.46	08/30/20	disham		
Sample	AD18955-002	79	78.99432	Percent	1.35	13.68	11.09	08/30/20	disham		
Sample	AD18955-003	85	84.69847	Percent	1.36	12.47	10.77	08/30/20	disham		
Sample	AD18955-004	76	75.85644	Percent	1.34	13.60	10.64	08/30/20	disham		
Sample	AD18955-005	72	71.65354	Percent	1.35	12.78	9.54	08/30/20	disham		
Sample	AD18956-001	85	84.92792	Percent	1.35	8.98	7.83	08/30/20	disham		
Sample	AD18956-002	89	89.00126	Percent	1.38	9.29	8.42	08/30/20	disham		
Sample	AD18956-003	84	83.66834	Percent	1.36	9.32	8.02	08/30/20	disham		
Sample	AD18957-001	92	92.49278	Percent	1.37	11.76	10.98	08/30/20	disham		
Sample	AD18957-002	95	95.03030	Percent	1.35	9.60	9.19	08/30/20	disham		
Sample	AD18957-003	93	93.39736	Percent	1.37	9.70	9.15	08/30/20	disham		
Sample	AD18957-004	95	94.65021	Percent	1.34	11.06	10.54	08/30/20	disham		
Sample	AD18957-005	96	95.64428	Percent	1.37	12.39	11.90	08/30/20	disham		
Sample	AD18957-006	93	93.13544	Percent	1.36	12.14	11.41	08/30/20	disham		
Sample	AD18957-007	90	90.23372	Percent	1.36	13.34	12.17	08/30/20	disham		
Sample	AD18957-008	95	94.83489	Percent	1.37	13.18	12.57	08/30/20	disham		
Sample	AD18957-009	94	94.12607	Percent	1.35	15.31	14.49	08/30/20	disham		
Sample	AD18957-010	93	93.28419	Percent	1.36	13.57	12.75	08/30/20	disham		
Sample	AD18966-001	82	82.41525	Percent	1.37	15.53	13.04	08/30/20	disham		
Sample	AD18966-002	81	80.94778	Percent	1.36	11.70	9.73	08/30/20	disham		

* - Indicates Failed Rpd Criteria

Hex-Cr Soil SW-846 3060A / 7196A

Cr6 soil curve		Date	8/31/2020			Batch #	778			TestGroupID	CR6-SOIL
										TestID:	CR-HEX
STD ppm			ABS								
0			0.0001		Intercept	Constant	-0.000172124				
0.02			0.0202								
0.25			0.1769		Slope	X Coefficients	0.70800035				
0.5			0.3410								
1			0.7141								
**********											
STD mg/L			ABS		PPM	DIFF					
0			0.0001		0.000384355	-0.000384355					
0.02			0.0202		0.028774172	-0.008774172					
0.25			0.1769		0.250101746	-0.000101746					
0.5			0.3410		0.481881293	0.018118707					
1			0.7141		1.008858434	-0.008858434					
**********											
SUMMARY OUTPUT											
Regression Statistics											
Multiple R	0.999647651										
R Square	0.999295427										
Adjusted R Square	0.999060569										
Standard Error	0.008991916										
Observations	5										
ANOVA											
	df	*SS*	*MS*	*F*	*Significance F*						
Regression	1	0.344027848	0.344027848	4254.897293	7.93907E-06						
Residual	3	0.000242564	8.08546E-05								
Total	4	0.344270412									
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*			
Intercept	-0.000172124	0.005561856	-0.030947185	0.977255404	-0.017872449	0.017528201	-0.017872449	0.017528201			
X Variable 1	0.70800035	0.010853978	65.22957376	7.93907E-06	0.673458116	0.742542584	0.673458116	0.742542584			

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	Hex-Cr Soil		Q.C. DATA									
Batch#	778		QC Sample	AD18918-003 NS.Sample								
Date	8/31/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	19.10	19.10	96%	80-120%	NA	NA	PASS	
			MS(Sol)	21.98	37.52	16.81	76%	75-125%	NA	NA	PASS	
			MS(Insol)	791.63	436.99	416.29	53%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	20.70	NA	NA	NA	NA	NA		
			Sample Dup	NA	20.18	NA	NA	NA	3	20%		PASS
			PVS	21.98	43.28	22.57	103%	85-115%	NA	NA	PASS	
Lead Chromate Added : (G)	0.0112	0.0118										
Upper Calibration Abbsorbance:	0.7141											
			MS(Sol)	25.32	21.49	21.49	85%	75-125%	NA	NA	PASS	
			MS(Insol)	892.91	400.71	400.71	45%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	ND	NA	NA	NA	NA	NA		

ICV Data	ABS	Turb ABS		PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3425	0.0000	Crct. ABS	0.483999937	1	1	1	1	0.484	0.500	97	8/31/20 15:40	PASS
QC Data	**ABS**	**Turb ABS**	0.3425	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0001	0.0000	Crct. ABS	0.000384355	1	1	1	1	0.000	0.020		8/31/20 15:40	
MB.Sample	0.0001	0.0000	0.0001	0.000384355	1	2.5	1	100	0.015	0.800		8/31/20 15:40	
LCS.Sample	0.3379	0.0000	0.0001	0.477502782	1	2.5	1	100	19.100	0.800		8/31/20 15:41	
AD18918-003 NS.Sample	0.3344	0.0011	0.3379	0.471005589	0.91	2.5	1	100	20.704	0.879		8/31/20 15:42	
AD18918-003 DUP.Sample	0.3260	0.0011	0.3333	0.459141198	0.91	2.5	1	100	20.182	0.879		8/31/20 15:43	
AD18918-004 MS.Sample	0.6083	0.0042	0.3249	0.853491237	0.91	2.5	1	100	37.516	0.879		8/31/20 15:43	
AD18918-005 50X MSD.Sample	0.1410	0.0004	0.6041	0.198830589	0.91	2.5	50	100	436.990	43.956		8/31/20 15:44	
AD18918-003 PVS.Sample	0.6980	0.0011	0.1406	0.98456468	0.91	2.5	1	100	43.278	0.879		8/31/20 15:44	
			0.6969										
AD18955-001.Sample	0.0030	0.0017		0.00207927	0.81	2.5	1	100	0.103	0.988		8/31/20 15:47	
AD18955-002 MS2.Sample	0.3033	0.0030	0.0013	0.424395436	0.79	2.5	1	100	21.488	1.013		8/31/20 15:47	
AD18955-003 MSD 2.Sample	4.1905	0.0018	0.3003	5.916482821	0.85	2.5	1	100	278.423	0.941		8/31/20 15:48	
AD18955-003 MSD 50X 2.Sample	0.1218	0.0014	4.1887	0.170299523	0.85	2.5	50	100	400.705	47.059		8/31/20 15:49	
			0.1204										
Analytical Run					1	2.5	1	100					
ICV.Control	0.3425			0.483999937	1	1	1	1	0.484	0.020	97	8/31/20 15:40	PASS
ICB.Sample	0.0001		0.3425	0.000384355	1	1	1	1	0.000	0.020		8/31/20 15:40	
MB.Sample	0.0001		0.0001	0.000384355	1	2.5	1	100	0.015	0.800		8/31/20 15:40	
LCS.Sample	0.3379		0.0001	0.477502782	1	2.5	1	100	19.100	0.800		8/31/20 15:41	
AD18918-003 NS.Sample	0.3344	0.0011	0.3379	0.471005589	0.91	2.5	1	100	20.704	0.879		8/31/20 15:42	
AD18918-003 DUP.Sample	0.3260	0.0011	0.3333	0.459141198	0.91	2.5	1	100	20.182	0.879		8/31/20 15:43	
AD18918-004 MS.Sample	0.6083	0.0042	0.3249	0.853491237	0.91	2.5	1	100	37.516	0.879		8/31/20 15:43	
AD18918-005 XXX.Sample	4.0144	0.0039	0.6041	5.664788345	0.91	2.5	1	100	249.002	0.879		8/31/20 15:43	
AD18918-005 50X MSD.Sample	0.1410	0.0004	4.0105	0.198830589	0.91	2.5	50	100	436.990	43.956		8/31/20 15:44	
AD18918-003 PVS.Sample	0.6980	0.0011	0.1406	0.98456468	0.91	2.5	1	100	43.278	0.879		8/31/20 15:44	
CCV-1.Control	0.3330		0.6969	0.470581869	1	1	1	1	0.471	0.020	94	8/31/20 15:44	PASS
CCB-1.Sample	0.0003		0.3330	0.000666841	1	1	1	1	0.001	0.020		8/31/20 15:45	
AD18932-002.Sample	0.0135	0.0202	0.0003	-0.009220158	0.79	2.5	1	100	-0.467	1.013		8/31/20 15:45	
AD18934-001.Sample	0.0073	0.0075	-0.0067	-3.93727E-05	0.76	2.5	1	100	-0.002	1.053		8/31/20 15:45	
AD18934-002.Sample	0.0097	0.0105	-0.0002	-0.00088683	0.75	2.5	1	100	-0.047	1.067		8/31/20 15:46	
AD18934-003.Sample	0.0002	0.0004	-0.0008	-3.93732E-05	0.79	2.5	1	100	-0.002	1.013		8/31/20 15:46	
AD18934-004.Sample	0.0031	0.0038	-0.0002	-0.000745587	0.8	2.5	1	100	-0.037	1.000		8/31/20 15:46	
AD18934-005.Sample	0.0042	0.0029	-0.0007	0.00207927	0.77	2.5	1	100	0.108	1.039		8/31/20 15:47	
AD18955-001.Sample	0.0030	0.0017	0.0013	0.00207927	0.81	2.5	1	100	0.103	0.988		8/31/20 15:47	

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AD18955-002 MS2.Sample	0.3033	0.0030	0.0013	0.424395436	0.79	2.5	1	100	21.488	1.013		8/31/20 15:47	
AD18955-003 MSD 2.Sample	4.1905	0.0018	0.3003	5.916482821	0.85	2.5	1	100	278.423	0.941		8/31/20 15:48	
AD18955-003 MSD 50X 2.Sample	0.1218	0.0014	4.1887	0.170299523	0.85	2.5	50	100	400.705	47.059		8/31/20 15:49	
CCV-2.Control	0.3468		0.1204	0.490073378	1	1	1	1	0.490	0.020	98	8/31/20 15:49	PASS
CCB-2.Sample	0.0003		0.3468	0.000666841	1	1	1	1	0.001	0.020		8/31/20 15:49	
AD18955-004.Sample	0.0022	0.0027	0.0003	-0.000463102	0.76	2.5	1	100	-0.024	1.053		8/31/20 15:49	
AD18955-005.Sample	0.0029	0.0017	-0.0005	0.001938027	0.72	2.5	1	100	0.108	1.111		8/31/20 15:50	
AD18966-001.Sample	1.2255	0.0036	0.0012	1.7260897	0.82	2.5	1	100	84.199	0.976		8/31/20 15:51	
AD18966-001 5X.Sample	0.2678	0.0005	1.2219	0.377785304	0.82	2.5	5	100	92.143	4.878		8/31/20 15:51	
AD18966-002.Sample	0.3376	0.0040	0.2673	0.47142931	0.81	2.5	1	100	23.280	0.988		8/31/20 15:52	
AD18970-003.Sample	0.0031	0.0004	0.3336	0.00405667	0.92	2.5	1	100	0.176	0.870		8/31/20 15:52	
AD18918-003 T.Sample	0.0011		0.0027	0.001796784	0.91	2.5	1	100	0.079	0.879		8/31/20 15:52	
AD18918-004 T.Sample	0.0042		0.0011	0.006175313	0.91	2.5	1	100	0.271	0.879		8/31/20 15:53	
AD18918-005 T.Sample	0.0039		0.0042	0.005751584	0.91	2.5	1	100	0.253	0.879		8/31/20 15:53	
AD18918-005 50X T.Sample	0.0004		0.0039	0.000808084	0.91	2.5	1	100	0.036	0.879		8/31/20 15:53	
CCV-3.Control	0.3447		0.0004	0.487107291	1	1	1	1	0.487	0.020	97	8/31/20 15:53	PASS
CCB-3.Sample	0.0003		0.3447	0.000666841	1	1	1	1	0.001	0.020		8/31/20 15:54	
AD18932-002 T.Sample	0.0202		0.0003	0.028774171	0.79	2.5	1	100	1.457	1.013		8/31/20 15:54	
AD18934-001 T.Sample	0.0075		0.0202	0.010836327	0.76	2.5	1	100	0.570	1.053		8/31/20 15:54	
AD18934-002 T.Sample	0.0105		0.0075	0.015073614	0.75	2.5	1	100	0.804	1.067		8/31/20 15:55	
AD18934-003 T.Sample	0.0004		0.0105	0.000808084	0.79	2.5	1	100	0.041	1.013		8/31/20 15:55	
AD18934-004 T.Sample	0.0038		0.0004	0.005610342	0.8	2.5	1	100	0.281	1.000		8/31/20 15:55	
AD18934-005 T.Sample	0.0029		0.0038	0.004339156	0.77	2.5	1	100	0.225	1.039		8/31/20 15:56	
AD18955-001 T.Sample	0.0017		0.0029	0.002644241	0.81	2.5	1	100	0.131	0.988		8/31/20 15:56	
AD18955-002 T.Sample	0.0030		0.0017	0.004480399	0.79	2.5	1	100	0.227	1.013		8/31/20 15:56	
AD18955-003 T.Sample	0.0018		0.0030	0.002785484	0.85	2.5	1	100	0.131	0.941		8/31/20 15:57	
AD18955-003 50X T.Sample	0.0014		0.0018	0.002220513	0.85	2.5	1	100	0.104	0.941		8/31/20 15:57	
CCV-4.Control	0.3426		0.0014	0.484141162	1	1	1	1	0.484	0.020	97	8/31/20 15:57	PASS
CCB-4.Sample	0.0038		0.3426	0.005610342	1	1	1	1	0.006	0.020		8/31/20 15:57	
AD18955-004 T.Sample	0.0027		0.0038	0.00405667	0.76	2.5	1	100	0.214	1.053		8/31/20 15:58	
AD18955-005 T.Sample	0.0017		0.0027	0.002644241	0.72	2.5	1	100	0.147	1.111		8/31/20 15:58	
AD18966-001 T.Sample	0.0036		0.0017	0.005327856	0.82	2.5	1	100	0.260	0.976		8/31/20 15:58	
AD18966-001 5X T.Sample	0.0005		0.0036	0.000949327	0.82	2.5	1	100	0.046	0.976		8/31/20 15:59	
AD18966-002 T.Sample	0.0040		0.0005	0.005892828	0.81	2.5	1	100	0.291	0.988		8/31/20 15:59	
AD18970-003 T.Sample	0.0004		0.0040	0.000808084	0.92	2.5	1	100	0.035	0.870		8/31/20 15:59	
CCV-5.Control	0.3418		0.0004	0.483011242	1	1	1	1	0.483	0.020	97	8/31/20 16:00	PASS
CCB-5.Sample	0.0039		0.3418	0.005751584	1	1	1	1	0.006	0.020		8/31/20 16:00	

Hex-Cr Soil SW-846 3060A / 7196A

Cr6 soil curve		Date	8/31/2020			Batch #	779 A			TestGroupID	CR6-SOIL
										TestID:	CR-HEX
STD ppm			ABS								
0			0.0001		Intercept	Constant	-0.000172124				
0.02			0.0202								
0.25			0.1769		Slope	X Coefficients	0.70800035				
0.5			0.3410								
1			0.7141								
STD mg/L			ABS		PPM	DIFF					
0			0.0001		0.000384355	-0.000384355					
0.02			0.0202		0.028774172	-0.008774172					
0.25			0.1769		0.250101746	-0.000101746					
0.5			0.3410		0.481881293	0.018118707					
1			0.7141		1.008858434	-0.008858434					
SUMMARY OUTPUT											
Regression Statistics											
Multiple R	0.999647651										
R Square	0.999295427										
Adjusted R Square	0.999060569										
Standard Error	0.008991916										
Observations	5										
ANOVA											
	df	*SS*	*MS*	*F*	*Significance F*						
Regression	1	0.344027848	0.344027848	4254.897293	7.93907E-06						
Residual	3	0.000242564	8.08546E-05								
Total	4	0.344270412									
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*			
Intercept	-0.000172124	0.005561856	-0.030947185	0.977255404	-0.017872449	0.017528201	-0.017872449	0.017528201			
X Variable 1	0.70800035	0.010853978	65.22957376	7.93907E-06	0.673458116	0.742542584	0.673458116	0.742542584			

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	Hex-Cr Soil		Q.C. DATA									
Batch#	779 A		QC Sample	AD18918-003 NS.Sample								
Date	8/31/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	18.63	18.63	93%	80-120%	NA	NA	PASS	
			MS(Sol)	21.98	40.45	18.92	86%	75-125%	NA	NA	PASS	
			MS(Insol)	791.63	438.54	417.01	53%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	21.53	NA	NA	NA	NA	NA		
			Sample Dup	NA	21.29	NA	NA	NA	1	20%		PASS
			PVS	21.98	41.97	20.45	93%	85-115%	NA	NA	PASS	
Lead Chromate Added :	0.0112	0.0118										
Upper Calibration Abbsorbance:	0.7141											
			MS(Sol)	25.32	20.68	20.68	82%	75-125%	NA	NA	PASS	
			MS(Insol)	892.91	415.00	415.00	46%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	ND	NA	NA	NA	NA	NA		

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3256	0.0000	0.3256	0.460129889	1	1	1	1	0.460	0.500	92	8/31/20 16:05	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	-0.0007	0.0000	-0.0007	-0.000745587	1	1	1	1	-0.001	0.020		8/31/20 16:06	
MB.Sample	-0.0007	0.0000	-0.0007	-0.000745587	1	2.5	1	100	-0.030	0.800		8/31/20 16:06	
LCS.Sample	0.3295	0.0000	0.3295	0.465638348	1	2.5	1	100	18.626	0.800		8/31/20 16:06	
AD18918-003 NS.Sample	0.3492	0.0026	0.3466	0.489790908	0.91	2.5	1	100	21.529	0.879		8/31/20 16:07	
AD18918-003 DUP.Sample	0.3454	0.0026	0.3428	0.484423672	0.91	2.5	1	100	21.293	0.879		8/31/20 16:07	
AD18918-004 MS.Sample	0.6532	0.0019	0.6513	0.920157871	0.91	2.5	1	100	40.446	0.879		8/31/20 16:07	
AD18918-005 50X MSD.Sample	0.1415	0.0004	0.1411	0.199536794	0.91	2.5	50	100	438.542	43.956		8/31/20 16:08	
AD18918-003 PVS.Sample	0.6785	0.0026	0.6759	0.954903653	0.91	2.5	1	100	41.974	0.879		8/31/20 16:09	
AD18955-001.Sample	0.0104	0.0094	0.0010	0.001655541	0.81	2.5	1	100	0.082	0.988		8/31/20 16:13	
AD18955-002 MS2.Sample	0.2989	0.0099	0.2890	0.408435013	0.79	2.5	1	100	20.680	1.013		8/31/20 16:13	
AD18955-003 MSD 2.Sample	4.0644	0.0092	4.0552	5.727924176	0.85	2.5	1	100	269.549	0.941		8/31/20 16:14	
AD18955-003 MSD 50X 2.Sample	0.1243	-0.0004	0.1247	0.176372973	0.85	2.5	50	100	414.995	47.059		8/31/20 16:14	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3256		0.3256	0.460129889	1	1	1	1	0.460	0.020	92	8/31/20 16:05	PASS
ICB.Sample	-0.0007		-0.0007	-0.000745587	1	1	1	1	-0.001	0.020		8/31/20 16:06	
MB.Sample	-0.0007		-0.0007	-0.000745587	1	2.5	1	100	-0.030	0.800		8/31/20 16:06	
LCS.Sample	0.3295		0.3295	0.465638348	1	2.5	1	100	18.626	0.800		8/31/20 16:06	
AD18918-003 NS.Sample	0.3492	0.0026	0.3466	0.489790908	0.91	2.5	1	100	21.529	0.879		8/31/20 16:07	
AD18918-003 DUP.Sample	0.3454	0.0026	0.3428	0.484423672	0.91	2.5	1	100	21.293	0.879		8/31/20 16:07	
AD18918-004 MS.Sample	0.6532	0.0019	0.6513	0.920157871	0.91	2.5	1	100	40.446	0.879		8/31/20 16:07	
AD18918-005 XXX.Sample	4.1893	0.0043	4.1850	5.911257227	0.91	2.5	1	100	259.835	0.879		8/31/20 16:08	
AD18918-005 50X MSD.Sample	0.1415	0.0004	0.1411	0.199536794	0.91	2.5	50	100	438.542	43.956		8/31/20 16:08	
AD18918-003 PVS.Sample	0.6785	0.0026	0.6759	0.954903653	0.91	2.5	1	100	41.974	0.879		8/31/20 16:09	
CCV-1.Control	0.3386		0.3386	0.478491478	1	1	1	1	0.478	0.020	96	8/31/20 16:09	PASS
CCB-1.Sample	0.0028		0.0028	0.004197913	1	1	1	1	0.004	0.020		8/31/20 16:09	
AD18932-002.Sample	0.0136	0.0161	-0.0025	-0.00328796	0.79	2.5	1	100	-0.166	1.013		8/31/20 16:11	
AD18934-001.Sample	0.0081	0.0076	0.0005	0.000949327	0.76	2.5	1	100	0.050	1.053		8/31/20 16:11	
AD18934-002.Sample	0.0052	0.0039	0.0013	0.00207927	0.75	2.5	1	100	0.111	1.067		8/31/20 16:12	
AD18934-003.Sample	0.0021	0.0015	0.0006	0.00109057	0.79	2.5	1	100	0.055	1.013		8/31/20 16:12	
AD18934-004.Sample	0.0016	0.0011	0.0005	0.000949327	0.8	2.5	1	100	0.047	1.000		8/31/20 16:12	
AD18934-005.Sample	0.0044	0.0032	0.0012	0.001938027	0.77	2.5	1	100	0.101	1.039		8/31/20 16:13	
AD18955-001.Sample	0.0104	0.0094	0.0010	0.001655541	0.81	2.5	1	100	0.082	0.988		8/31/20 16:13	

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AD18955-002 MS2.Sample	0.2989	0.0099	0.2890	0.408435013	0.79	2.5	1	100	20.680	1.013		8/31/20 16:13	
AD18955-003 MSD 2.Sample	4.0644	0.0092	4.0552	5.727924176	0.85	2.5	1	100	269.549	0.941		8/31/20 16:14	
AD18955-003 MSD 50X 2.Sample	0.1243	-0.0004	0.1247	0.176372973	0.85	2.5	50	100	414.995	47.059		8/31/20 16:14	
CCV-2.Control	0.3394		0.3394	0.479621398	1	1	1	1	0.480	0.020	96	8/31/20 16:15	PASS
CCB-2.Sample	-0.0002		-0.0002	-3.93732E-05	1	1	1	1	0.000	0.020		8/31/20 16:15	
AD18955-004.Sample	-0.0002	0.0004	-0.0006	-0.000604345	0.76	2.5	1	100	-0.032	1.053		8/31/20 16:15	
AD18955-005.Sample	-0.0009	-0.0006	-0.0003	-0.000180616	0.72	2.5	1	100	-0.010	1.111		8/31/20 16:16	
AD18966-001.Sample	1.0507	0.0066	1.0441	1.474959827	0.82	2.5	1	100	71.949	0.976		8/31/20 16:16	
AD18966-001 5X.Sample	0.2604	-0.0007	0.2611	0.369028237	0.82	2.5	5	100	90.007	4.878		8/31/20 16:17	
AD18966-002.Sample	0.3182	0.0019	0.3163	0.446994293	0.81	2.5	1	100	22.074	0.988		8/31/20 16:18	
AD18970-003.Sample	0.0047	0.0027	0.0020	0.00306797	0.92	2.5	1	100	0.133	0.870		8/31/20 16:19	
AD18918-003 T.Sample	0.0026		0.0026	0.003915427	0.91	2.5	1	100	0.172	0.879		8/31/20 16:19	
AD18918-004 T.Sample	0.0019		0.0019	0.002926727	0.91	2.5	1	100	0.129	0.879		8/31/20 16:19	
AD18918-005 T.Sample	0.0043		0.0043	0.006316556	0.91	2.5	1	100	0.278	0.879		8/31/20 16:20	
AD18918-005 50X T.Sample	0.0004		0.0004	0.000808084	0.91	2.5	1	100	0.036	0.879		8/31/20 16:20	
CCV-3.Control	0.3378		0.3378	0.477361516	1	1	1	1	0.477	0.020	95	8/31/20 16:20	PASS
CCB-3.Sample	-0.0005		-0.0005	-0.000463102	1	1	1	1	0.000	0.020		8/31/20 16:21	
AD18932-002 T.Sample	0.0161		0.0161	0.022983215	0.79	2.5	1	100	1.164	1.013		8/31/20 16:22	
AD18934-001 T.Sample	0.0076		0.0076	0.010977571	0.76	2.5	1	100	0.578	1.053		8/31/20 16:22	
AD18934-002 T.Sample	0.0039		0.0039	0.005751584	0.75	2.5	1	100	0.307	1.067		8/31/20 16:22	
AD18934-003 T.Sample	0.0015		0.0015	0.002361756	0.79	2.5	1	100	0.120	1.013		8/31/20 16:22	
AD18934-004 T.Sample	0.0011		0.0011	0.001796784	0.8	2.5	1	100	0.090	1.000		8/31/20 16:23	
AD18934-005 T.Sample	0.0032		0.0032	0.004762884	0.77	2.5	1	100	0.247	1.039		8/31/20 16:23	
AD18955-001 T.Sample	0.0094		0.0094	0.013519942	0.81	2.5	1	100	0.668	0.988		8/31/20 16:23	
AD18955-002 T.Sample	0.0099		0.0099	0.014226156	0.79	2.5	1	100	0.720	1.013		8/31/20 16:24	
AD18955-003 T.Sample	0.0092		0.0092	0.013237457	0.85	2.5	1	100	0.623	0.941		8/31/20 16:24	
AD18955-003 50X T.Sample	-0.0004		-0.0004	-0.000321859	0.85	2.5	1	100	-0.015	0.941		8/31/20 16:24	
CCV-4.Control	0.3335		0.3335	0.471288075	1	1	1	1	0.471	0.020	94	8/31/20 16:24	PASS
CCB-4.Sample	-0.0007		-0.0007	-0.000745587	1	1	1	1	-0.001	0.020		8/31/20 16:25	
AD18955-004 T.Sample	0.0004		0.0004	0.000808084	0.76	2.5	1	100	0.043	1.053		8/31/20 16:25	
AD18955-005 T.Sample	-0.0006		-0.0006	-0.000604345	0.72	2.5	1	100	-0.034	1.111		8/31/20 16:25	
AD18966-001 T.Sample	0.0066		0.0066	0.009565142	0.82	2.5	1	100	0.467	0.976		8/31/20 16:25	
AD18966-001 5X T.Sample	-0.0007		-0.0007	-0.000745587	0.82	2.5	1	100	-0.036	0.976		8/31/20 16:26	
AD18966-002 T.Sample	0.0019		0.0019	0.002926727	0.81	2.5	1	100	0.145	0.988		8/31/20 16:26	
AD18970-003 T.Sample	0.0027		0.0027	0.00405667	0.92	2.5	1	100	0.176	0.870		8/31/20 16:26	
CCV-5.Control	0.3346		0.3346	0.472841751	1	1	1	1	0.473	0.020	95	8/31/20 16:27	PASS
CCB-5.Control	-0.0003		-0.0003	-0.000180616	1	1	1	1	0.000	0.020		8/31/20 16:27	

Wet Chemistry Data
Raw Data

RUN LOG

Instrument: DA1 BatchId: 202008311328 Analyzed By: jw

Run#	Qc Type	Sample ID	Flag summary:	Comments	An Date/Time:	Dil	Prep Batch	Method Blank
1	ICS	STANDARD 1		.g	08/31/20 13:28	1		
2	ICS	STANDARD 90		.g V-334039	08/31/20 13:30	1		
3	ICS	STANDARD 91		.g V-334039	08/31/20 13:32	1		
4	ICS	STANDARD 92		.g V-334039	08/31/20 13:35	1		
5	ICS	STANDARD 93		.g V-334039	08/31/20 13:37	1		
6	ICS	STANDARD 94		.g V-334039	08/31/20 13:39	1		
7	ICS	STANDARD 95		.g V-334039	08/31/20 13:42	1		
8	ICS	STANDARD 0		.g	08/31/20 13:44	1		
9	ICV	CCV		.g V-334036	08/31/20 13:46	1		
10	ICB	CCB		.g	08/31/20 13:49	1		
11	MB	MBS-2412		.g	08/31/20 13:51	1	S-2412	MBS-2412
12	LCS	LCSS-2412		.g V-334035	08/31/20 13:53	1	S-2412	MBS-2412
13	LCS	LCSS-2412 DUP		.g V-334035	08/31/20 13:56	1	S-2412	MBS-2412
14	SMP	AD18955-001		.g	08/31/20 13:58	1	S-2412	MBS-2412
15	DUP	AD18955-001 DUP		.g	08/31/20 14:00	1	S-2412	MBS-2412
16	MS	AD18955-002 MS		.g	08/31/20 14:03	1	S-2412	MBS-2412
17	MSD	AD18955-003 MSD		.g	08/31/20 14:05	1	S-2412	MBS-2412
18	SMP	AD18955-004		.g	08/31/20 14:07	1	S-2412	MBS-2412
19	SMP	AD18955-005		.g	08/31/20 14:10	1	S-2412	MBS-2412
20	SMP	AD18949-014		.g	08/31/20 14:12	1	S-2412	MBS-2412
21	CCV	CCV		.g V-334036	08/31/20 14:14	1		
22	CCB	CCB		.g	08/31/20 14:17	1		
23	SMP	AD18960-015		.g	08/31/20 14:19	1	S-2412	MBS-2412
24	SMP	AD18960-017		.g	08/31/20 14:21	1	S-2412	MBS-2412
25	SMP	AD18934-001		.g	08/31/20 14:24	1	S-2412	MBS-2412
26	SMP	AD18934-002		.g	08/31/20 14:26	1	S-2412	MBS-2412
27	SMP	AD18934-003		.g	08/31/20 14:28	1	S-2412	MBS-2412
28	SMP	AD18934-004		.g	08/31/20 14:31	1	S-2412	MBS-2412
29	SMP	AD18934-005		.g	08/31/20 14:33	1	S-2412	MBS-2412
30	SMP	AD18957-001		.g	08/31/20 14:35	1	S-2412	MBS-2412
31	SMP	AD18957-003		.g	08/31/20 14:38	1	S-2412	MBS-2412
32	SMP	AD18957-005		.g	08/31/20 14:40	1	S-2412	MBS-2412
33	CCV	CCV		.g V-334036	08/31/20 14:42	1		
34	CCB	CCB		.g	08/31/20 14:45	1		
35	SMP	AD18957-007		.g	08/31/20 14:47	1	S-2412	MBS-2412
36	SMP	AD18957-009		.g	08/31/20 14:48	1	S-2412	MBS-2412
37	SMP	AD18957-011		.g	08/31/20 14:50	1	S-2412	MBS-2412
38	SMP	AD18957-013		.g	08/31/20 14:52	1	S-2412	MBS-2412
39	CCV	CCV		.g V-334036	08/31/20 14:54	1		
40	CCB	CCB		.g	08/31/20 14:55	1		

Flag Code:	Flag Code Description		Flag Code:	Flag Code Description
Cs	CCV Out epa9056		Cw	CCV out 300.0 rev2.1
Ho	Hold Time Exceeded		I1	Init Cal x and y value problem
I2	Init Cal missing a data point		I3	Init Cal missing a Compound
I4	Init Cal Rsd < .995		Is	ICV out epa 9056
Iw	ICV Out 300.0 rev2.1		Ls	LCS Out EPA 9056
Lw	LCS Out 300.0 rev2.1		Ms	Spike Out EPA 9056
Mw	Spike Out EPA 300.0 REV2.1		Oc	Over Calibration/Linear Range

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Logo

AQ-2 Report

Serial Number:	090817
Report Requested By:	Janee
Date & Time:	Mon Aug 31 15:30:25 2020
Tray Number:	76
Tray Name:	CNS 2412

Worklist

Cup	Type	ID	Details	Tests
2	U1	MBS-2412		tCN-m
3	U2	LCSS-2412		tCN-m
4	U3	LCSS-2412 DUP		tCN-m
5	U4	AD18955-001		tCN-m
6	U5	AD18955-001 DUP		tCN-m
7	U6	AD18955-002 MS		tCN-m
8	U7	AD18955-003 MSD		tCN-m
9	U8	AD18955-004		tCN-m
10	U9	AD18955-005		tCN-m
11	U10	AD18949-014		tCN-m
12	U11	AD18960-015		tCN-m
13	U12	AD18960-017		tCN-m
14	U13	AD18934-001		tCN-m
15	U14	AD18934-002		tCN-m
16	U15	AD18934-003		tCN-m
17	U16	AD18934-004		tCN-m
18	U17	AD18934-005		tCN-m
19	U18	AD18957-001		tCN-m
20	U19	AD18957-003		tCN-m
21	U20	AD18957-005		tCN-m
22	U21	AD18957-007		tCN-m
23	U22	AD18957-009		tCN-m
24	U23	AD18957-011		tCN-m
25	U24	AD18957-013		tCN-m

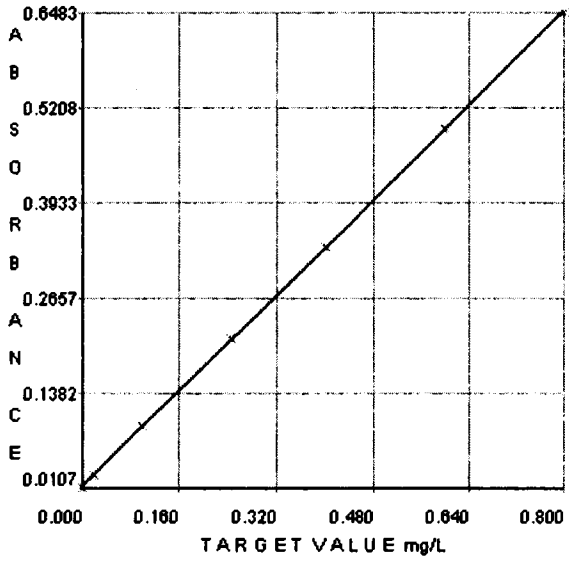
AQ2 tCN mod

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0107	-0.0046	0.0000	
S90	0.0288	0.0182	0.0200	-9.09
S91	0.0960	0.1025	0.1000	2.49
S92	0.2141	0.2506	0.2480	1.05
S93	0.3361	0.4037	0.4000	0.92
S94	0.4945	0.6023	0.6000	0.39
S95	0.6483	0.7953	0.8000	-0.58
S0	0.0110	-0.0042	0.0000	

Polynomial Order:	1
Correlation Coefficient:	0.9999
Carryover(%):	0.1
Calibration Equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured Absorbance
a =:	-1.799949E-002
b =:	1.254557E+000
Date & Time:	Mon Aug 31 13:44:30 2020

Calibration Graph



20006
6/3/20

Reagents

Name	Batch	Prepared By	Expiry Date
tCN Neutral	V-333445	JMP	Fri Sep 18 22:00:00 2020
tCN Chlor T	V-334038	JW	Tue Sep 01 22:00:00 2020
tCN Pyr Barb	V-333629	JMP	Mon Aug 31 22:00:00 2020

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
	S1	STANDARD 1	0.0107		0.010667			jw	Mon Aug 31 13:28:16 2020
	S90	STANDARD 90	0.0288		0.028841			jw	Mon Aug 31 13:30:35 2020
	S91	STANDARD 91	0.0960		0.096044			jw	Mon Aug 31 13:32:55 2020
	S92	STANDARD 92	0.2141		0.214094			jw	Mon Aug 31 13:35:14 2020
	S93	STANDARD 93	0.3361		0.336103			jw	Mon Aug 31 13:37:32 2020
	S94	STANDARD 94	0.4945		0.494475			jw	Mon Aug 31 13:39:52 2020
	S95	STANDARD 95	0.6483		0.648307			jw	Mon Aug 31 13:42:11 2020
	S0	STANDARD 0	0.0110		0.010989			jw	Mon Aug 31 13:44:30 2020
	C11	C C V	0.4051	mg/L	0.337275			jw	Mon Aug 31 13:46:49 2020
	C12	C C B	-0.0042	mg/L	0.011004			jw	Mon Aug 31 13:49:08 2020
2	U1	MBS-2412	-0.0008	mg/L	0.013718			jw	Mon Aug 31 13:51:27 2020
3	U2	LCSS-2412	0.4011	mg/L	0.334092			jw	Mon Aug 31 13:53:46 2020
4	U3	LCSS-2412 DUP	0.3940	mg/L	0.328392			jw	Mon Aug 31 13:56:05 2020
5	U4	AD18955-001	-0.0008	mg/L	0.013690			jw	Mon Aug 31 13:58:24 2020
6	U5	AD18955-001 DUP	-0.0022	mg/L	0.012612			jw	Mon Aug 31 14:00:45 2020
7	U6	AD18955-002 MS	0.3373	mg/L	0.283197			jw	Mon Aug 31 14:03:06 2020
8	U7	AD18955-003 MSD	0.3596	mg/L	0.301007			jw	Mon Aug 31 14:05:25 2020
9	U8	AD18955-004	0.0050	mg/L	0.018357			jw	Mon Aug 31 14:07:45 2020
10	U9	AD18955-005	-0.0004	mg/L	0.014053			jw	Mon Aug 31 14:10:04 2020
11	U10	AD18949-014	0.0002	mg/L	0.014501			jw	Mon Aug 31 14:12:24 2020
	C11	C C V	0.4009	mg/L	0.333941			jw	Mon Aug 31 14:14:44 2020
	C12	C C B	-0.0044	mg/L	0.010812			jw	Mon Aug 31 14:17:03 2020
12	U11	AD18960-015	0.0096	mg/L	0.022021			jw	Mon Aug 31 14:19:24 2020
13	U12	AD18960-017	0.0020	mg/L	0.015961			jw	Mon Aug 31 14:21:44 2020
14	U13	AD18934-001	0.0008	mg/L	0.014995			jw	Mon Aug 31 14:24:04 2020
15	U14	AD18934-002	-0.0011	mg/L	0.013457			jw	Mon Aug 31 14:26:24 2020
16	U15	AD18934-003	-0.0015	mg/L	0.013183			jw	Mon Aug 31 14:28:45 2020
17	U16	AD18934-004	-0.0025	mg/L	0.012356			jw	Mon Aug 31 14:31:06 2020
18	U17	AD18934-005	0.0233	mg/L	0.032950			jw	Mon Aug 31 14:33:26 2020
19	U18	AD18957-001	-0.0003	mg/L	0.014135			jw	Mon Aug 31 14:35:46 2020
20	U19	AD18957-003	0.0005	mg/L	0.014711			jw	Mon Aug 31 14:38:06 2020
21	U20	AD18957-005	-0.0012	mg/L	0.013403			jw	Mon Aug 31 14:40:25 2020
	C11	C C V	0.3962	mg/L	0.330126			jw	Mon Aug 31 14:42:47 2020
	C12	C C B	-0.0041	mg/L	0.011109			jw	Mon Aug 31 14:45:07 2020
22	U21	AD18957-007	0.0163	mg/L	0.027334			jw	Mon Aug 31 14:47:04 2020
23	U22	AD18957-009	0.0026	mg/L	0.016438			jw	Mon Aug 31 14:48:56 2020
24	U23	AD18957-011	0.0016	mg/L	0.015605			jw	Mon Aug 31 14:50:37 2020
25	U24	AD18957-013	0.0050	mg/L	0.018343			jw	Mon Aug 31 14:52:19 2020
	C11	C C V	0.4054	mg/L	0.337517			jw	Mon Aug 31 14:54:01 2020
	C12	C C B	-0.0040	mg/L	0.011151			jw	Mon Aug 31 14:55:43 2020

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-330629

Prepared By: Patel, Jessica
Description: 0.4N Sulfamic Acid
Prep Date: 7/1/2020
Expiration Date: 12/31/2020
Department: WetChem
BatchNumber:
Concentration: 0.4 n
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 07/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10606	Sulfamic Acid, ACS	10 g	neat neat	.4 n
13084	DI H20			

Veritech Lot Number: V-330630

Prepared By: Patel, Jessica
Description: CN Release Solution
Prep Date: 7/1/2020
Expiration Date: 12/31/2020
Department: WetChem
BatchNumber:
Concentration: various neat
Final Volume: 930.6 g
ApprovedBy: jessica
ApproveDate: 07/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12312	Magnesium Chloride Hexahydrate	96.6 g	neat neat	
13084	DI H20	332.4 g		
13280	sulfuric acid	417 g	neat neat	
V-330629	0.4N Sulfamic Acid	84.6 g	0.4 n	

Veritech Lot Number: V-332257

Prepared By: Trivedi, Beena
Description: 1 N NAOH
Prep Date: 7/28/2020
Expiration Date: 1/27/2021
Department: Metals
BatchNumber:
Concentration: 1 n
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 07/28/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12987	sodium hydroxide	80 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-332898

Prepared By: Patel, Jessica
Description: 0.25 N NaOH
Prep Date: 8/10/2020
Expiration Date: 2/9/2021
Department: WetChem
BatchNumber:
Concentration: 0.25 n
Final Volume: 6000 ml
ApprovedBy: jessica
ApproveDate: 08/10/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12834	sodium hydroxide	60 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-333445

Prepared By: Patel, Jessica
Description: Sodium Phosphate
Prep Date: 8/19/2020
Expiration Date: 9/18/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 08/19/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13261	sodium phosphate monobasic	34.5 g	NEAT neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333629

Prepared By:	Patel, Jessica	Department: WetChem	ApprovedBy: jessica
Description:	Pyridine/Barbaturic acid	BatchNumber:	ApproveDate: 08/24/20
Prep Date:	8/24/2020	Concentration: Reagent reag	Checked: Yes
Expiration Date:	8/31/2020	Final Volume: 250 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13135	Barbituric Acid	3.75 g	neat neat	
12769	Pyridine	18.75 ml	neat neat	
13096	hydrochloric acid	3.75 ml	neat neat	

Veritech Lot Number: V-334034

Prepared By:	Wonge, Janee	Department: WetChem	ApprovedBy: [illegible]
Description:	20 ppm CN standard	BatchNumber:	ApproveDate: 8/31/20
Prep Date:	8/31/2020	Concentration: 20 ppm	Checked: No
Expiration Date:	8/31/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13179	1000 ppm cn std	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334035

Prepared By:	Wonge, Janee	Department: WetChem	ApprovedBy:
Description:	20 ppm CN control	BatchNumber:	ApproveDate:
Prep Date:	8/31/2020	Concentration: 20 ppm	Checked: No
Expiration Date:	8/31/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13213	1000 PPM CN STD	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334036

Prepared By:	Wonge, Janee	Department: WetChem	ApprovedBy:
Description:	ICV/CCV	BatchNumber:	ApproveDate:
Prep Date:	8/31/2020	Concentration: 0.40 ppm	Checked: No
Expiration Date:	8/31/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334035	20 ppm CN control	2 ml	20 ppm	
V-332898	0.25 N NaOH	98 ml	0.25 n	

Veritech Lot Number: V-334038

Prepared By:	Wonge, Janee	Department: WetChem	ApprovedBy:
Description:	Chloramine -T (AQ2)	BatchNumber:	ApproveDate:
Prep Date:	8/31/2020	Concentration: reagent reage	Checked: No
Expiration Date:	9/1/2020	Final Volume: 50 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10778	Chloramine T trihydrate	.5 g	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334039

Prepared By: Wonge, Janee	Department: WetChem	ApprovedBy: [illegible]	
Description: 0.80 ppm Cyanide	BatchNumber:	ApproveDate: 8/31/20	
Prep Date: 8/31/2020	Concentration: 0.80 ppm	Checked: No	
Expiration Date: 8/31/2020	Final Volume: 6 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334034	20 ppm CN standard	.24 ml	20 ppm	
V-332257	1 N NAOH	1.5 ml	1 n	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10606

Description
Sulfamic Acid, ACS

ApprovedBy: janee
ApproveDate: 12/21/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Lab chem	LC254201	F308-21	12/19/16	12/18/26	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 10778

Description
Chloramine T trihydrate

ApprovedBy: janee
ApproveDate: 03/02/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Emd Millipore	1.02426.0250	K48314926 637	03/02/17	03/01/27	Wonge, Janee	1	250 g	neat	neat

Veritech Control/Receipt Number: 12312

Description
Magnesium Chloride Hexahydrate

ApprovedBy: janee
ApproveDate: 02/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	M35-500	182951	02/20/19	08/31/21	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12769

Description
Pyridine

ApprovedBy: janee
ApproveDate: 09/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	P368-1	190224	09/20/19	09/19/24	Wonge, Janee	1	1 L	neat	neat

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12987

Description
sodium hydroxide

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069931	01/07/20	01/06/25	Lopez, Jose	4	12kg	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13096

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9530-33	251602	03/10/20	01/15/25	Burwell, John	6	2.5	neat	neat

Veritech Control/Receipt Number: 13135

Description
Barbituric Acid

ApprovedBy: jessica
ApproveDate: 03/25/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
GFS chemicals	LS-1580004	17501828	03/25/20	03/24/30	Patel, Jessica	1	100 g	neat	neat

Veritech Control/Receipt Number: 13179

Description
1000 ppm cn std

ApprovedBy: jessica
ApproveDate: 04/08/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
labchem	LC135451	K070-001	04/08/20	09/20/20	Patel, Jessica	1	500M	1000	PPM

Veritech Control/Receipt Number: 13213

Description
1000 PPM CN STD

ApprovedBy: jessica
ApproveDate: 04/21/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RICCA	2543-16	4003H35	04/21/20	09/30/20	Patel, Jessica	1	500 M	1000	PPM

Veritech Control/Receipt Number: 13261

Description
sodium phosphate monobasic

ApprovedBy: jessica
ApproveDate: 05/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
lab chem	LC247751	K086-13	05/26/20	05/25/30	Patel, Jessica	3	500 G	NEAT	NEAT

Veritech Control/Receipt Number: 13280

Description
sulfuric acid

ApprovedBy: jessica
ApproveDate: 06/22/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/04/20	08/30/22	Lopez, Jose	2	2.5L	neat	neat

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 779 Analyst [illegible] Date 8/31/10

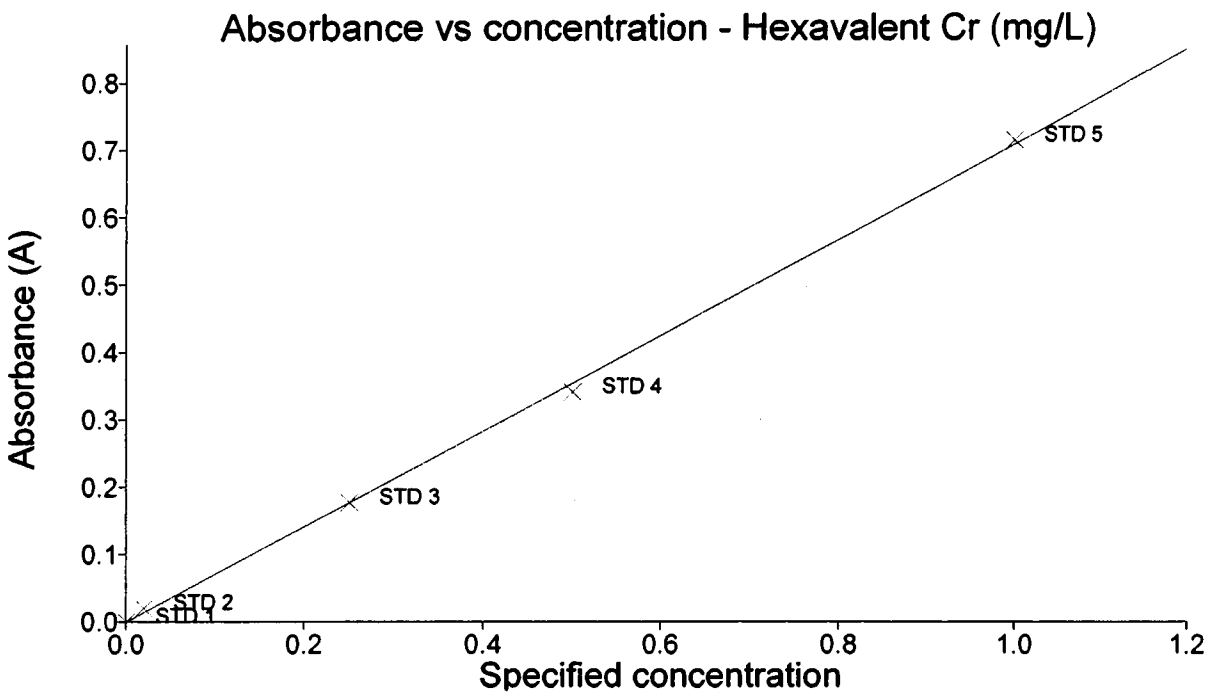
Digestion Start: 1140 Finish: 1210 Hot Plate Temp 1: 90°C Hot Plate Temp 2: 90°C

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 (100 ppm)	0.021	7.64	100	2.06	
Cal Curve 0.02 (100 ppm)	0.02	7.37		2.08	
Cal Curve 0.25 ppm	0.25	7.96		1.94	Balance used: 031
Cal Curve 0.5	0.5	7.87		1.90	Pipettes used: 11, 19
Cal Curve 1.0	1.0	7.39		1.87	
MB	2.5gm	7.15		1.73	
LCS		7.66		1.68	
~~AD18918.003~~					
PDS		7.38		2.05	
DUP		7.30		2.08	
(Sol) MS 004		7.45		1.95	
(Insol) MSD 005		7.19		1.87	
AD18918.003		7.28		1.70	
2 AD18932.003		7.20		1.66	
3 AD18934.001		7.15		1.89	
4. 002		7.61		2.08	
5. 003		7.59		2.00	
6. 004		7.30		1.94	
7. 005		7.87		1.90	
8. AD18955.001		7.90		1.87	
9. MS 002		7.95		1.71	
10. MSD 003		7.12		1.65	
11. 004		7.48		1.68	
12. 005		7.40		2.03	
13 AD18966.001		7.67		2.08	
14. 002		7.58		1.94	
15 AD18970.003		7.30		1.90	
16.					
17.					
18.					
19.					
20.					

Reagent	Lot #:		$MgCl_2$	# 12684
Digestion Solution - pH must be > 11.5. If not, discard	V- 334005	pH 13.27	Lead Chromate ($PbCrO_4$)	# 6713
Phosphate Buffer	V- 331886		Weight of $PbCrO_4$ (10-20mg)	0.0112 0.0118 g
			PVS Volume 0.5 ml	10% H_2SO_4 V: 333091
			PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3 V: 333092
			Spike Volume 0.5ml V- 331890	Col Reg. V: 333923

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9997

Calibrated on: 08/31/20 15:19:18

User name: wet chem

Method name: Hexavalent Cr

9/1/20

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	0.0004	-0.0004	0.0001
STD 2.Sample	0.0200	0.0287	-0.0087	0.0202
STD 3.Sample	0.2500	0.2501	-0.0001	0.1769
STD 4.Sample	0.5000	0.4819	0.0181	0.3410
STD 5.Sample	1.0000	1.0088	-0.0088	0.7141

Report Generated On:08/31/2020 16:01

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		08/31/20 15:40:22	0.5000	0.0159	0.3425	0.4841
ICB.Sample		08/31/20 15:40:35			0.0001	0.0004
MB.Sample		08/31/20 15:40:51			0.0001	0.0004
LCS.Sample		08/31/20 15:41:12			0.3379	0.4774
AD18918-003 NS.Sample		08/31/20 15:42:40			0.3344	0.4725
AD18918-003 DUP.Sample		08/31/20 15:43:07			0.3260	0.4607
AD18918-004 MS.Sample		08/31/20 15:43:31			0.6083	0.8594
AD18918-005 XXX.Sample		08/31/20 15:43:48			4.0144	5.6701 : Exceeded calibration limits.
AD18918-005 50X MSD.Sample	50	08/31/20 15:44:16			0.1410	0.1995
AD18918-003 PVS.Sample		08/31/20 15:44:41			0.6980	0.9861
CCV-1.Control		08/31/20 15:44:57	0.5000	0.0294	0.3330	0.4706
CCB-1.Sample		08/31/20 15:45:11			0.0003	0.0008
AD18932-002.Sample		08/31/20 15:45:39			0.0135	0.0193
AD18934-001.Sample		08/31/20 15:45:56			0.0073	0.0106
AD18934-002.Sample		08/31/20 15:46:13			0.0097	0.0139
AD18934-003.Sample		08/31/20 15:46:29			0.0002	0.0006
AD18934-004.Sample		08/31/20 15:46:50			0.0031	0.0046
AD18934-005.Sample		08/31/20 15:47:07			0.0042	0.0062
AD18955-001.Sample		08/31/20 15:47:29			0.0030	0.0046
AD18955-002 MS2.Sample		08/31/20 15:47:51			0.3033	0.4286
AD18955-003 MSD 2.Sample TV 892.91 PM		08/31/20 15:48:07			4.1905	5.9188 : Exceeded calibration limits.
AD18955-003 MSD 50X 2.Sample	50	08/31/20 15:49:11			0.1218	0.1723
CCV-2.Control		08/31/20 15:49:28	0.5000	0.0099	0.3468	0.4901
CCB-2.Sample		08/31/20 15:49:43			0.0003	0.0007
AD18955-004.Sample		08/31/20 15:49:58			0.0022	0.0034
AD18955-005.Sample		08/31/20 15:50:18			0.0029	0.0044

Report Generated On:08/31/2020 16:01

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD18966-001.Sample		08/31/20 15:51:30			1.2255	1.7312 : Exceeded calibration limits
AD18966-001 5X.Sample	5	08/31/20 15:51:52			0.2678	0.3785
AD18966-002.Sample		08/31/20 15:52:12			0.3376	0.4771
AD18970-003.Sample		08/31/20 15:52:32			0.0031	0.0047
AD18918-003 T.Sample		08/31/20 15:52:55			0.0011	0.0018
AD18918-004 T.Sample		08/31/20 15:53:12			0.0042	0.0062
AD18918-005 T.Sample		08/31/20 15:53:30			0.0039	0.0057
AD18918-005 50X T.Sample		08/31/20 15:53:45			0.0004	0.0008
CCV-3.Control		08/31/20 15:53:58	0.5000	0.0129	0.3447	0.4871
CCB-3.Sample		08/31/20 15:54:11			0.0003	0.0006
AD18932-002 T.Sample		08/31/20 15:54:29			0.0202	0.0288
AD18934-001 T.Sample		08/31/20 15:54:51			0.0075	0.0109
AD18934-002 T.Sample		08/31/20 15:55:15			0.0105	0.0151
AD18934-003 T.Sample		08/31/20 15:55:32			0.0004	0.0008
AD18934-004 T.Sample		08/31/20 15:55:47			0.0038	0.0057
AD18934-005 T.Sample		08/31/20 15:56:02			0.0029	0.0043
AD18955-001 T.Sample		08/31/20 15:56:24			0.0017	0.0027
AD18955-002 T.Sample		08/31/20 15:56:40			0.0030	0.0046
AD18955-003 T.Sample		08/31/20 15:57:10			0.0018	0.0029
AD18955-003 50X T.Sample		08/31/20 15:57:24			0.0014	0.0023
CCV-4.Control		08/31/20 15:57:39	0.5000	0.0158	0.3426	0.4842
CCB-4.Sample		08/31/20 15:57:53			0.0038	0.0056
AD18955-004 T.Sample		08/31/20 15:58:11			0.0027	0.0041
AD18955-005 T.Sample		08/31/20 15:58:29			0.0017	0.0026
AD18966-001 T.Sample		08/31/20 15:58:45			0.0036	0.0054
AD18966-001 5X T.Sample		08/31/20 15:59:02			0.0005	0.0010

Report Generated On:08/31/2020 16:01

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD18966-002 T.Sample		08/31/20 15:59:28			0.0040	0.0060
AD18970-003 T.Sample		08/31/20 15:59:44			0.0004	0.0009
CCV-5.Control		08/31/20 16:00:03	0.5000	0.0170	0.3418	0.4830
CCB-5.Sample		08/31/20 16:00:22			0.0039	0.0059

Report Generated On:08/31/2020 16:01

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Batch: 779A Analyst MM Method 3060A Date 8/31/20

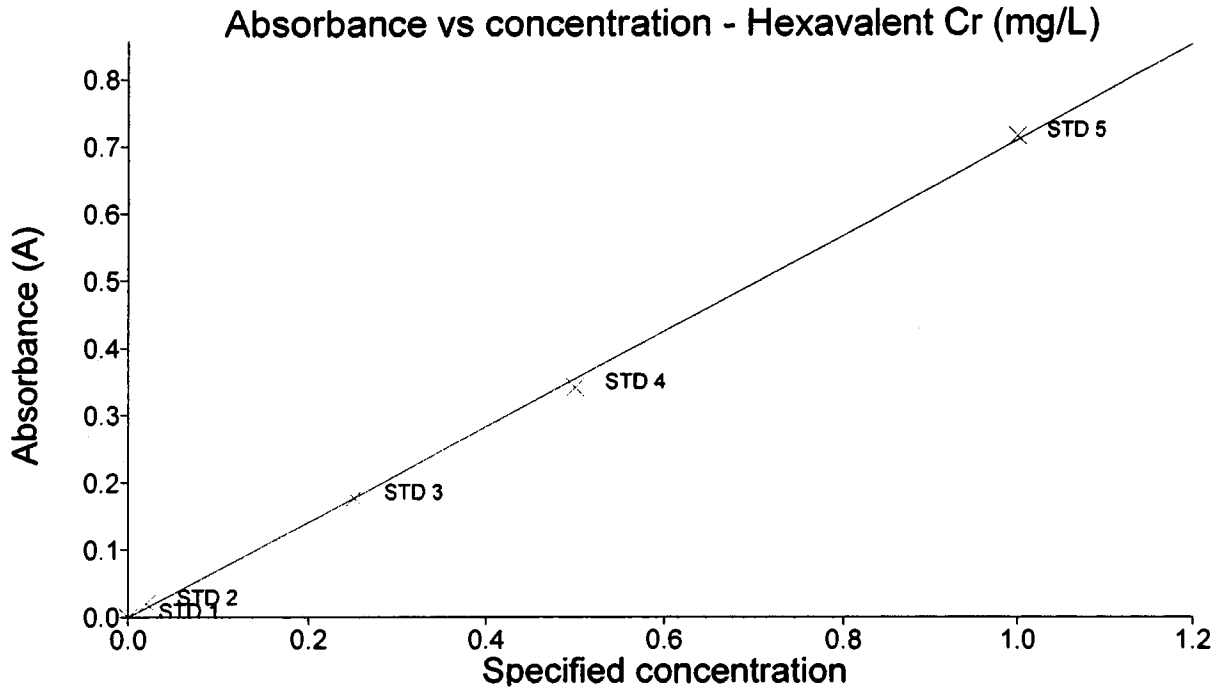
Digestion Start: 11:40 Finish: 12:40 Hot Plate Temp 1: 90°C Hot Plate Temp 2: 90°C

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 1mM	0.0ml	7.64	1	2.06	
Cal Curve 0.02 100u	0.02	7.37		2.08	
Cal Curve 0.25 1MM	0.25	7.90		1.94	Balance used: 031
Cal Curve 0.5	0.5	7.91		1.90	Pipettes used: 11,19
Cal Curve 1.0	1.0	7.37		1.87	
MB	2.5gM	7.88		2.09	
LCS		7.10		1.97	
~~CCSPB~~ AD18918.003					
PDS		7.43		1.84	
DUP		7.15		1.80	
(Sol) MS 004		7.66		2.03	
(Insol) MSD 005		7.33		1.96	
1 AD18918.003		7.19		1.95	
2 AD18932.002		7.28		1.90	
3 AD18934.001		7.10		1.84	
4. 002		7.66		1.73	
5. 003		7.45		2.02	
6. 004		7.15		2.18	
7. 005		7.81		2.15	
8 AD18955.001		7.33		1.96	
9. MS 002		7.30		1.98	
10. MSD 003		7.11		1.73	
11. 004		7.19		1.70	
12. 005		7.08		1.85	
13 AD18966.001		7.90		1.88	
14. 002		7.66		2.03	
15 AD18970.003		7.43		2.08	
16.					
17.					
18.					
19.					
20.					

Reagent	Lot #:		$MgCl_2$	#
Digestion Solution - pH must be > 11.5. If not, discard	V- 334005	pH 13.27	Lead Chromate ($PbCrO_4$)	# 6413
Phosphate Buffer	V- 331886		Weight of $PbCrO_4$ (10-20mg)	0.0112 0.0118 g
			PVS Volume 0.5 ml	10% H_2SO_4 V: 333091
			PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3 V: 333092
			Spike Volume 0.5ml V- 331890	Col Rgn. V: 333923

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9997

Calibrated on: 08/31/20 15:19:18

User name: wet chem

Method name: Hexavalent Cr

9/1/20

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	0.0004	-0.0004	0.0001
STD 2.Sample	0.0200	0.0287	-0.0087	0.0202
STD 3.Sample	0.2500	0.2501	-0.0001	0.1769
STD 4.Sample	0.5000	0.4819	0.0181	0.3410
STD 5.Sample	1.0000	1.0088	-0.0088	0.7141

Report Generated On:08/31/2020 16:28

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		08/31/20 16:05:44	0.5000	0.0398	0.3256	0.4602
ICB.Sample		08/31/20 16:06:01			-0.0007	-0.0007 : Exceeded calibration limits.
MB.Sample		08/31/20 16:06:14			-0.0007	-0.0007 : Exceeded calibration limits.
LCS.Sample		08/31/20 16:06:30			0.3295	0.4657
AD18918-003 NS.Sample		08/31/20 16:07:09			0.3492	0.4935
AD18918-003 DUP.Sample		08/31/20 16:07:37			0.3454	0.4882
AD18918-004 MS.Sample		08/31/20 16:07:59			0.6532	0.9228
AD18918-005 XXX.Sample		08/31/20 16:08:15			4.1893	5.9171 : Exceeded calibration limits.
AD18918-005 50X MSD.Sample	50	08/31/20 16:08:40			0.1415	0.2002
AD18918-003 PVS.Sample		08/31/20 16:09:04			0.6785	0.9586
CCV-1.Control		08/31/20 16:09:23	0.5000	0.0215	0.3386	0.4785
CCB-1.Sample		08/31/20 16:09:37			0.0028	0.0043
AD18932-002.Sample		08/31/20 16:11:29			0.0136	0.0195
AD18934-001.Sample		08/31/20 16:11:47			0.0081	0.0117
AD18934-002.Sample		08/31/20 16:12:06			0.0052	0.0076
AD18934-003.Sample		08/31/20 16:12:25			0.0021	0.0033
AD18934-004.Sample		08/31/20 16:12:43			0.0016	0.0026
AD18934-005.Sample		08/31/20 16:13:02			0.0044	0.0064
AD18955-001.Sample		08/31/20 16:13:33			0.0104	0.0150
AD18955-002 MS2.Sample		08/31/20 16:13:55			0.2989	0.4224
AD18955-003 MSD 2.Sample		08/31/20 16:14:12			4.0644	5.7406 : Exceeded calibration limits.
AD18955-003 MSD 50X 2.Sample	50	08/31/20 16:14:53			0.1243	0.1759
CCV-2.Control		08/31/20 16:15:07	0.5000	0.0203	0.3394	0.4797
CCB-2.Sample		08/31/20 16:15:21			-0.0002	0.0001

Report Generated On:08/31/2020 16:28

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD18955-004.Sample		08/31/20 16:15:44			-0.0002	0.0001
AD18955-005.Sample		08/31/20 16:16:02			-0.0009	-0.0010 : Exceeded calibration limits
AD18966-001.Sample		08/31/20 16:16:17			1.0507	1.4842 : Exceeded calibration limits
AD18966-001 5X.Sample	5	08/31/20 16:17:54			0.2604	0.3680
AD18966-002.Sample		08/31/20 16:18:43			0.3182	0.4497
AD18970-003.Sample		08/31/20 16:19:04			0.0047	0.0069
AD18918-003 T.Sample		08/31/20 16:19:20			0.0026	0.0039
AD18918-004 T.Sample		08/31/20 16:19:59			0.0019	0.0030
AD18918-005 T.Sample		08/31/20 16:20:13			0.0043	0.0064
AD18918-005 50X T.Sample		08/31/20 16:20:28			0.0004	0.0009
CCV-3.Control		08/31/20 16:20:44	0.5000	0.0227	0.3378	0.4773
CCB-3.Sample		08/31/20 16:21:00			-0.0005	-0.0004 : Exceeded calibration limits
AD18932-002 T.Sample		08/31/20 16:22:04			0.0161	0.0230
AD18934-001 T.Sample		08/31/20 16:22:22			0.0076	0.0110
AD18934-002 T.Sample		08/31/20 16:22:40			0.0039	0.0058
AD18934-003 T.Sample		08/31/20 16:22:59			0.0015	0.0024
AD18934-004 T.Sample		08/31/20 16:23:17			0.0011	0.0019
AD18934-005 T.Sample		08/31/20 16:23:36			0.0032	0.0048
AD18955-001 T.Sample		08/31/20 16:23:55			0.0094	0.0136
AD18955-002 T.Sample		08/31/20 16:24:10			0.0099	0.0143
AD18955-003 T.Sample		08/31/20 16:24:25			0.0092	0.0133
AD18955-003 50X T.Sample		08/31/20 16:24:40			-0.0004	-0.0003 : Exceeded calibration limits
CCV-4.Control		08/31/20 16:24:56	0.5000	0.0287	0.3335	0.4713
CCB-4.Sample		08/31/20 16:25:12			-0.0007	-0.0007 : Exceeded calibration limits

Report Generated On:08/31/2020 16:28

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD18955-004 T.Sample		08/31/20 16:25:26			0.0004	0.0009
AD18955-005 T.Sample		08/31/20 16:25:43			-0.0006	-0.0005 : Exceeded calibration limits.
AD18966-001 T.Sample		08/31/20 16:25:58			0.0066	0.0095
AD18966-001 5X T.Sample		08/31/20 16:26:11			-0.0007	-0.0006 : Exceeded calibration limits.
AD18966-002 T.Sample		08/31/20 16:26:35			0.0019	0.0029
AD18970-003 T.Sample		08/31/20 16:26:50			0.0027	0.0042
CCV-5.Control		08/31/20 16:27:05	0.5000	0.0271	0.3346	0.4729
CCB-5.Control		08/31/20 16:27:20			-0.0003	-0.0001 : Exceeded calibration limits.

Report Generated On:08/31/2020 16:28

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-325340

Prepared By: Patel, Jessica
Description: 100 ppm cr6 CCV
Prep Date: 4/7/2020
Expiration Date: 10/6/2020
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 04/07/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12101	1000 ppm Cr6 Std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-331888

Prepared By: Trivedi, Beena
Description: Phosphate Buffer
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9811	Potassium Phosphate Monobasic	68.04 g	neat neat	
12908	potassium phosphate dibasic anhydrous	87.09 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-331889

Prepared By: Trivedi, Beena
Description: 100 ppm cr6 std
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12831	1000 ppm cr6 std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-333091

Prepared By: Trivedi, Beena
Description: 10 % H2SO4
Prep Date: 8/12/2020
Expiration Date: 2/11/2021
Department: WetChem
BatchNumber:
Concentration: 10 %
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 08/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13343	sulfuric acid	200 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-333092

Prepared By: Trivedi, Beena
Description: 5 M HNO3
Prep Date: 8/12/2020
Expiration Date: 2/11/2021
Department: WetChem
BatchNumber:
Concentration: 5 m
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 08/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13331	Nitric acid	640 ml	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333923

Prepared By: Trivedi, Beena | Department: WetChem | ApprovedBy: jessica
Description: Cr6 Color Reagent | BatchNumber: | ApproveDate: 08/28/20
Prep Date: 8/28/2020 | Concentration: Reagent reag | Checked: Yes
Expiration Date: 12/29/2020 | Final Volume: 250 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11768	1,5-Diphenylcarbazide	1.25 g	neat neat	
12943	acetone	250 ml	neat neat	

Veritech Lot Number: V-334005

Prepared By: Trivedi, Beena | Department: WetChem | ApprovedBy: jessica
Description: Cr6 digestion solution | BatchNumber: | ApproveDate: 08/31/20
Prep Date: 8/31/2020 | Concentration: Reagent reag | Checked: Yes
Expiration Date: 9/30/2020 | Final Volume: 6000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12852	Sodium Carbonate, Anhydrous	180 g	neat neat	
12834	sodium hydroxide	120 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334017

Prepared By: Trivedi, Beena | Department: Wet Lab | ApprovedBy: jessica
Description: 0.02 PPM | BatchNumber: B-29609 | ApproveDate: 08/31/20
Prep Date: 8/31/2020 | Concentration: 0.02 ppm | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.02 ml	100 mg/l	
13084	DI H20			
V-334005	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334018

Prepared By: Trivedi, Beena | Department: WetChem | ApprovedBy: jessica
Description: 0.25 PPM | BatchNumber: B-29609 | ApproveDate: 08/31/20
Prep Date: 8/31/2020 | Concentration: 0.25 ppm | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334005	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.25 ml	100 mg/l	

Veritech Lot Number: V-334019

Prepared By: Trivedi, Beena | Department: Wet Lab | ApprovedBy: jessica
Description: 0.5 PPM | BatchNumber: B-29609 | ApproveDate: 08/31/20
Prep Date: 8/31/2020 | Concentration: 0.5 ppm | Checked: Yes
Expiration Date: 8/31/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334005	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334020

Prepared By: Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description: 1.0 PPM	BatchNumber: B-29609	ApproveDate: 08/31/20
Prep Date: 8/31/2020	Concentration: 1 ppm	Checked: Yes
Expiration Date: 8/31/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	1 ml	100 mg/l	
V-334005	Cr6 digestion solution	50 ml	Reagent reag	
13084	DI H20			

Veritech Lot Number: V-334021

Prepared By: Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description: ICV	BatchNumber: B-29609	ApproveDate: 08/31/20
Prep Date: 8/31/2020	Concentration: 0.5 ppm	Checked: Yes
Expiration Date: 8/31/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334005	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334022

Prepared By: Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description: CCV	BatchNumber: B-29609	ApproveDate: 08/31/20
Prep Date: 8/31/2020	Concentration: 0.5 ppm	Checked: Yes
Expiration Date: 8/31/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334005	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334023

Prepared By: Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description: LCS	BatchNumber: B-29609	ApproveDate: 08/31/20
Prep Date: 8/31/2020	Concentration: 0.5 ppm	Checked: Yes
Expiration Date: 8/31/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	
V-334005	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9811

Description
Potassium Phosphate Monobasic

ApprovedBy: janee
ApproveDate: 11/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	P285-500	151912	11/17/15	11/16/25	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 11768

Description
1,5-Diphenylcarbazide

ApprovedBy: janee
ApproveDate: 09/08/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	LC136558	H134-17	06/12/18	05/15/23	Wonge, Janee	1	25 g	neat	neat

Veritech Control/Receipt Number: 12101

Description
1000 ppm Cr6 Std

ApprovedBy: janee
ApproveDate: 11/29/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	19036-100mL	BCBV2169	11/05/18	04/30/21	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12831

Description
1000 ppm cr6 std

ApprovedBy: janee
ApproveDate: 12/26/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Hach	1466442	A9240	10/14/19	08/31/24	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12852

Description
Sodium Carbonate, Anhydrous

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Lab Chem	LC229651	J192-03	10/21/19	10/20/29	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12908

Description
potassium phosphate dibasic anhydrous

ApprovedBy: janee
ApproveDate: 12/04/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
fisher	p288-500	188106	12/04/19	12/03/29	Wonge, Janee	1	500 g	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12943

Description
acetone

ApprovedBy: akmal
ApproveDate: 12/18/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9254-03	236884	12/17/19	05/13/22	Lopez, Jose	32	4L	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13331

Description
Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6413

Description
Lead Chromate

ApprovedBy: aurora
ApproveDate: 11/05/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Pfaltz & Bauer inc	L01745	A056-5	10/27/11	10/26/21	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 12689

Description
Magnesium Chloride Anhydrous

ApprovedBy: janee
ApproveDate: 08/01/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Laboratory Sales	LC-2758812	190726-A	07/31/19	07/30/24	Wonge, Janee	1	2.5 kg	neat	neat

0082803 0488

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1106 Meter #: 16004

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.5	23.3	233.8	23.3	LCS: 4.46 23.9	25	25	8/27/20 1205	BM/SDC
AD18889·004	241.7	25.9	244.2	25.9	DUP: 8.48				
1. ↓ 004	250.1	25.6	251.3	25.6	8.54				
2. ↓ 006	277.7	25.0	279.0	25.0	8.57				
AD18890·002	236.2	24.7	238.7	24.7	8.49				
4. ↓ 004	245.9	24.5	248.1	24.5	8.59				
5. ↓ 006	260.6	25.3	261.4	25.3	8.56				
AD18892·002	264.2	25.1	264.8	25.1	8.56				
7. ↓ 004	259.4	24.6	260.1	24.6	8.67				
8. ↓ 006	266.3	24.5	267.2	24.8	8.58				
9 AD18893·002	271.2	24.2	273.0	24.2	8.51				
10. ↓ 004	271.0	24.9	268.4	24.9	8.53				
11. ↓ 006	272.9	24.6	273.6	24.6	8.60				
12 AD18908·001	259.7	24.4	258.1	24.4	8.63				
13. 002	396.2	24.4	400.8	24.4	6.38				
14. ↓ 003	358.0	24.1	355.6	24.1	7.57				
15. ↓ 004	403.3	24.3	404.2	24.3	6.47				
16. ↓ 005	344.0	24.4	340.7	24.4	8.28				
AD18918·001	488.9	24.1	490.1	24.1	4.86				
18. ↓ 002	496.6	24.1	499.9	24.1	4.69				
19. ↓ 003	506.9	24.1	507.3	24.1	4.68				
20 AD18922·001	363.3	24.1	361.5	24.1	8.37				
ZoBell's Solution (228 ± 10 mV)	233.8	23.4	233.9	23.4					

* Reading 1 and Reading 2 must agree within ± 10 mV

Solution	Manufacturer's Lot #
ZoBell's Solution	13163
4 M KCl Filling Solution	10292
LCS	V-332644

Reviewed by: [signature]

Date Reviewed: 8/27/20

0082803 0489

Hampton-Clarke

pH CALIBRATION RECORD

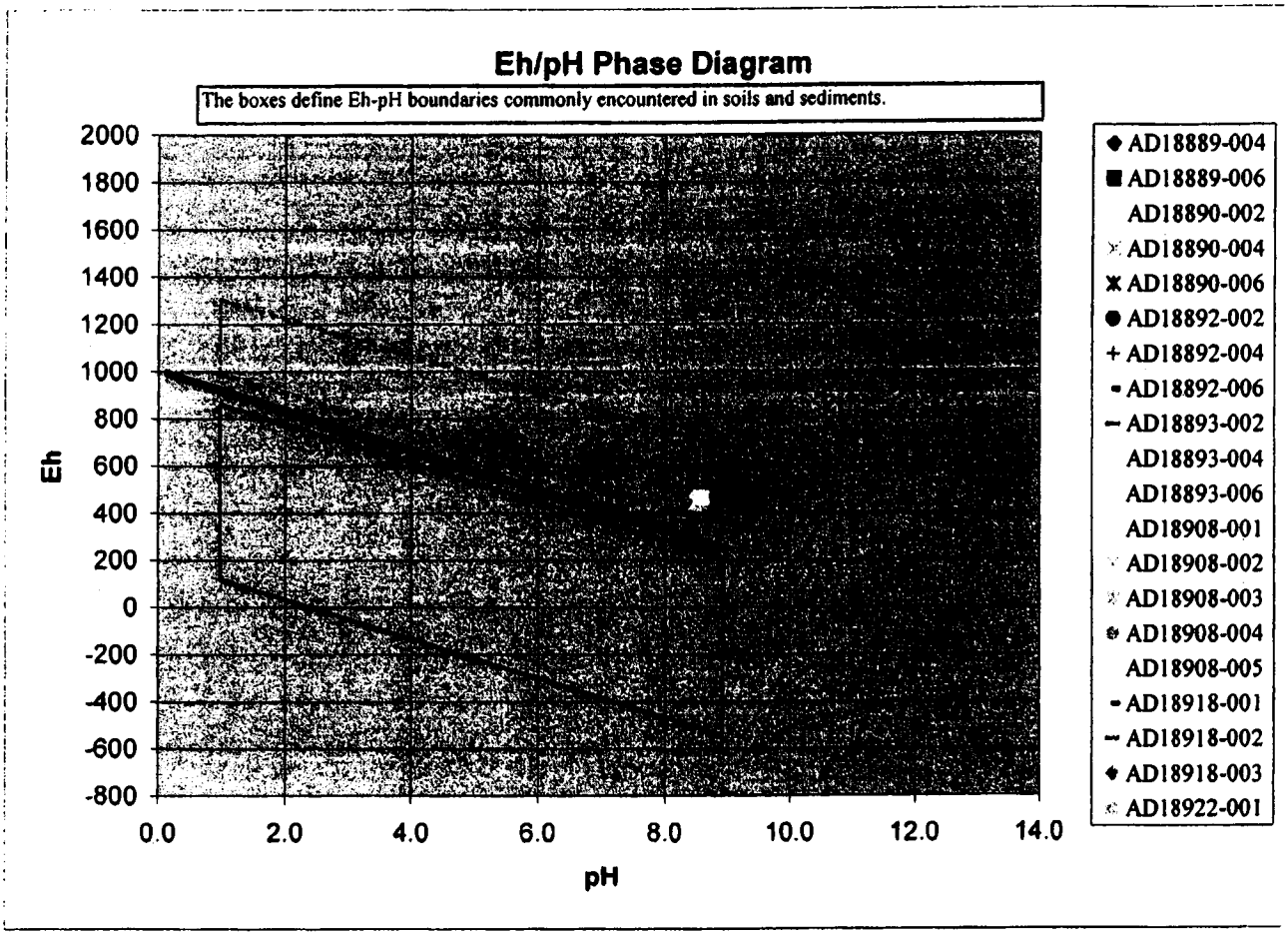
pH Meter: Orion 3 Star

Serial # 16004

Date	Calibration					Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate Buffer 1	Calibrate Buffer 2	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Buffer 1	Buffer 2	Mid point Buffer
8/20/20	DG 9:40	23.6	4.00	10.00	7.02							13022	13016	13006
8/21/20	BG 9:40	23.3	4.00	10.00	7.01									
8/24/20	BG 8:10	23.2	4.00	10.00	7.01									
8/25/20	BG 9:40	23.4	4.00	10.00	7.04									
8/26/20	BG 6:45	23.2	4.00	10.00	7.04	SDC 10:50	23.3	7.04						
8/27/20	BG 9:30	23.1	4.00	10.00	7.03	SDC 12:00	23.8	7.04						

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0 and 7.0, check with 4.0. For basic samples calibrate with 7.0 and 12. 0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-



Sample	ORP	pH
AD18889-004	250	8.5
AD18889-006	280	8.6
AD18890-002	240	8.5
AD18890-004	250	8.6
AD18890-006	260	8.6
AD18892-002	260	8.6
AD18892-004	260	8.7
AD18892-006	270	8.6
AD18893-002	270	8.5
AD18893-004	270	8.5
AD18893-006	270	8.6
AD18908-001	260	8.6
AD18908-002	400	6.4
AD18908-003	360	7.6
AD18908-004	400	6.5
AD18908-005	340	8.3
AD18918-001	490	4.9
AD18918-002	500	4.7
AD18918-003	510	4.7
AD18922-001	360	8.4

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

8/27/20

8/25/20

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332644

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: jessica	
Description: KHP LCS	BatchNumber:	ApproveDate: 08/05/20	
Prep Date: 8/5/2020	Concentration: 300 ppm	Checked: Yes	
Expiration Date: 2/4/2021	Final Volume: 2000 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE	600 mg	NEAT	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10292

Description
Potassium Chloride, 4M

ApprovedBy: janee
ApproveDate: 12/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	SP135-500	156731	07/01/16	12/31/20	Wonge, Janee	1	500 m	4	M

Veritech Control/Receipt Number: 13162

Description
zobell"s solution

ApprovedBy: jessica
ApproveDate: 04/06/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LABCHEM	LC273101	K050-17	04/06/20	02/20/21	Patel, Jessica	1	500M	NEAT	NEAT

0082803 0494

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1107 Meter #: 16004

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	227.6	23.5	228.1	23.5	LCS: 4.42 22.9	25	25	8/31/20 1100	BCT JRP
AD18929 8.004	511.8	22.5	509.6	22.5	DUP: 4.66				
1. 004	508.3	22.6	510.2	22.6	4.64				
2. 005	512.4	22.8	511.8	22.8	4.67				
AD18932.002	271.0	23.3	270.3	23.3	7.62				
AD18934.001	162.8	23.0	164.0	23.0	6.76				
5. 002	191.2	22.9	186.7	22.9	8.17				
6. 003	202.8	22.9	197.8	22.9	8.23				
7. 004	219.8	22.7	224.6	22.7	8.53				
8. 005	-3.9	22.9	-5.2	22.9	7.76				
AD18955.001	246.7	22.8	248.9	22.8	7.93				
10. 002	251.2	22.9	253.3	22.9	7.95				
11. 003	247.7	23.1	247.9	23.1	7.94				
12. 004	273.3	22.7	271.6	22.7	7.786				
13. 005	-27.3	22.8	-27.0	22.8	7.52				
AD18966.001	478.3	22.7	480.9	22.7	4.74				
15. 003	443.6	22.7	441.3	22.7	5.04				
AD18970.003	277.8	22.6	281.3	22.6	7.52				
17.									
18.									
19.									
20.									
ZoBell's Solution (228 ± 10 mV)	230.3	23.1	229.6	23.1					

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: JRP

Date Reviewed: 9/1/20

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V- 332644

0082803 0495

Hampton-Clarke

pH CALIBRATION RECORD

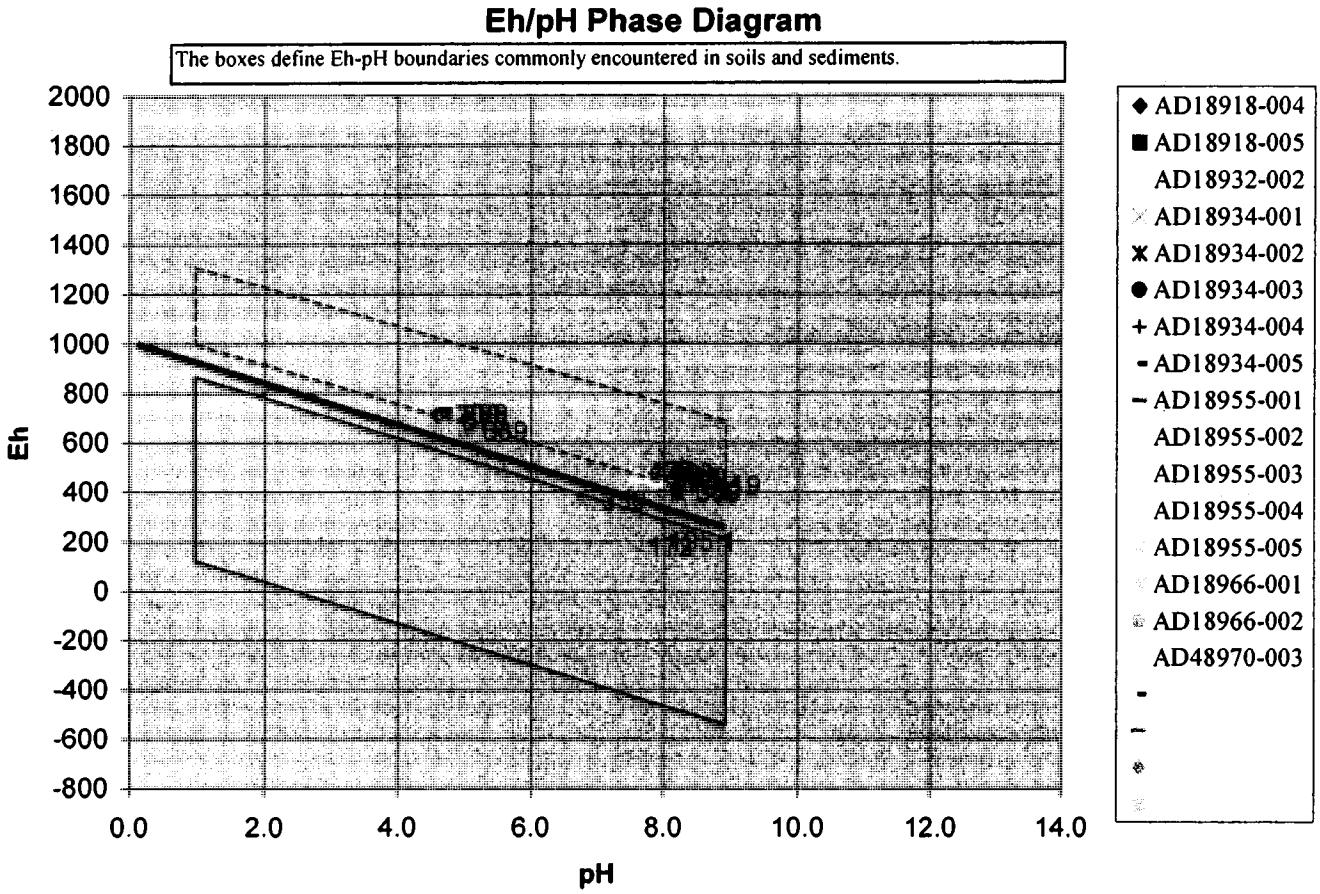
pH Meter: Orion 3 Star

Serial # 16004

Date	Calibration					Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate Buffer 1	Calibrate Buffer 2	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Buffer 1	Buffer 2	Mid point Buffer
8/20/20	BG 9:40	23.6	4.00	10.00	7.02							13022	13016	13006
8/21/20	BG 9:40	23.3	4.00	10.00	7.01									
8/24/20	BG 8:10	23.2	4.00	10.00	7.01									
8/25/20	BG 9:40	23.4	4.00	10.00	7.04									
8/26/20	JW 6:45	23.2	4.00	10.00	7.04	SDC 10:50	23.3	7.04						
8/27/20	BG 9:30	23.1	4.00	10.00	7.03	SDC 12:00	23.8	7.04						
8/28/20	BG 9:40	23.6	4.00	10.00	7.02									13384
8/31/20	JW 8:50	22.8	4.00	10.00	7.06							13022	13016	13384

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0 and 7.0, check with 4.0. For basic samples calibrate with 7.0 and 12. 0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-



Sample	ORP	pH
AD18918-004	510	4.6
AD18918-005	510	4.7
AD18932-002	270	7.6
AD18934-001	160	6.8
AD18934-002	190	8.2
AD18934-003	200	8.2
AD18934-004	220	8.5
AD18934-005	-3.9	7.8
AD18955-001	250	7.9
AD18955-002	250	8.0
AD18955-003	250	7.9
AD18955-004	270	7.8
AD18955-005	-27	7.5
AD18966-001	480	4.7
AD18966-002	440	5.0
AD48970-003	280	7.5

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

8/31/20

9/11/20

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332644

Prepared By:	Trivedi, Beena	Department: WetChem	ApprovedBy: jessica
Description:	KHP LCS	BatchNumber:	ApproveDate: 08/05/20
Prep Date:	8/5/2020	Concentration: 300 ppm	Checked: Yes
Expiration Date:	2/4/2021	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE	600 mg	NEAT	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10292

Description
Potassium Chloride, 4M

ApprovedBy: janee
ApproveDate: 12/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	SP135-500	156731	07/01/16	12/31/20	Wonge, Janee	1	500 m	4	M

Veritech Control/Receipt Number: 13162

Description
zobell"s solution

ApprovedBy: jessica
ApproveDate: 04/06/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LABCHEM	LC273101	K050-17	04/06/20	02/20/21	Patel, Jessica	1	500M	NEAT	NEAT

Wet Chemistry Data
Preparation and Distillation Logbook Data

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B ✓ Total CN⁻____ Amenable CN⁻____ OIA 1677 Avail CN⁻____ SM4500 WAD CN⁻____

Batch No. 2412 STD Cont/ Batch: _____ Distilled by: SW Start Distill. Time: 1115 End Distill. Time 1200 Date: 8/31/20 Reviewed by: DOD Date: 8/31/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
MB	✓		0.5	5.5	6.0					
LCS / LCSD		0.12								Balance Used: 023
MS AD18955-002		↓								Pipettes Used: 11, 19
MSD 003		↓								
1. 001										Micro-dist used: 2,3
Dup 1. 001										
2. 004										
3. 005										
4. AD18949-014										
5. AD18960-015										
6. 017										
7. AD18934-001										
8. 002										
9. 003										
10. 004										
Cal Curve Blank										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. 0.8 ppm		0.24								V-334089 ★

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:	V-332257	V-330630	V-334035			

★ Samples analyzed on AQ2. only 0.8 ppm std. used

0082803 0501
0065

0082803 0502

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B__✓__ **Total CN**____ **Amenable CN**____ **OIA 1677 Avail CN**____ **SM4500 WAD CN**____

Batch No. 2412 STD Cont/ Batch: _____ Distilled by: JW Start Distill. Time: 1115 End Distill. Time 1200 Date: 8/31/20 Reviewed by: [illegible] Date: 9/3/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
MB										
LCS										Balance Used:
MS										Pipettes Used:
MSD ✓ JW 8/31/20										
1.										Micro-dist used:
~~Dup 1~~ AD18934-005	✓		0.5	5.5	6.0					
2. AD18957-001										
3. 003										
4. 005										
5. 007										
6. 009										
7. 011										
8. 013										
9.										
10.										
Cal Curve Blank										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:						

9900

TCLP
Metal Data

TCLP
Metal Data
Sample Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A
7440-39-3	Barium	0.25	0.49	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/02/20	85227	H26169T	14	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A
7782-49-2	Selenium	0.50	ND	5	50	50	09/02/20	85227	T26169B4	41	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/02/20	85227	T26169B4	17	P	PEICP4A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3 MS	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	0.51	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A
7440-39-3	Barium	0.25	0.87	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A
7440-43-9	Cadmium	0.050	0.53	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A
7440-47-3	Chromium	0.10	0.52	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A
7439-92-1	Lead	0.050	0.50	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A
7439-97-6	Mercury	0.00050	0.010	1	25	25	09/02/20	85227	H26169T	16	CV	HGCV3A
7440-02-0	Nickel	0.10	0.50	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A
7782-49-2	Selenium	0.50	0.57	5	50	50	09/02/20	85227	T26169B4	43	P	PEICP4A
7440-22-4	Silver	0.050	0.11	1	50	50	09/02/20	85227	T26169B4	19	P	PEICP4A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-3 MSD	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	0.55	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A
7440-39-3	Barium	0.25	0.94	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A
7440-43-9	Cadmium	0.050	0.54	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A
7440-47-3	Chromium	0.10	0.53	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A
7439-92-1	Lead	0.050	0.50	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A
7439-97-6	Mercury	0.00050	0.0095	1	25	25	09/02/20	85227	H26169T	17	CV	HGCV3A
7440-02-0	Nickel	0.10	0.51	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A
7782-49-2	Selenium	0.50	0.62	5	50	50	09/02/20	85227	T26169B4	44	P	PEICP4A
7440-22-4	Silver	0.050	0.11	1	50	50	09/02/20	85227	T26169B4	20	P	PEICP4A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	Duplicate	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A
7440-39-3	Barium	0.25	0.35	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/02/20	85227	H26169T	20	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/02/20	85227	T26169B4	47	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/02/20	85227	T26169B4	27	P	PEICP4A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD18955-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-2	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/28/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A
7440-39-3	Barium	0.25	0.61	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/02/20	85227	H26169T	23	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/02/20	85227	T26169B4	48	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/02/20	85227	T26169B4	28	P	PEICP4A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

TCLP
Metal Data
QC Data

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/02/20
Data File: T26169B4
Prep Batch: 85227
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-329036-5	Rec	CCV V-329036-12	Rec	CCV V-329036-24	Rec	CCV V-329036-34	Rec	CCV V-329036-39	Rec	CCV V-329036-49	Rec		Rec		Rec
Arsenic	.5/.5	0.51536	103	0.50817	102	0.48546	97	0.51157	102	0.49071	98	0.48823	98				
Barium	.5/.5	0.51616	103	0.51550	103	0.50527	101	0.50555	101	0.50664	101	0.50849	102				
Beryllium	.5/.5	0.52707	105	0.52795	106	0.51792	104	0.52036	104	0.52027	104	0.52120	104				
Cadmium	.5/.5	0.51284	103	0.50907	102	0.49838	100	0.49728	99	0.49634	99	0.50037	100				
Chromium	.5/.5	0.54675	109	0.54331	109	0.53874	108	0.53873	108	0.53659	107	0.54150	108				
Copper	.5/.5	0.51401	103	0.51549	103	0.50724	101	0.50381	101	0.50400	101	0.51082	102				
Lead	.5/.5	0.53270	107	0.53324	107	0.52464	105	0.52032	104	0.51778	104	0.52348	105				
Nickel	.5/.5	0.53349	107	0.52766	106	0.51795	104	0.51387	103	0.51647	103	0.51744	103				
Selenium	.5/.5	0.53854	108	0.52577	105	0.53171	106	0.51014	102	0.51549	103	0.51908	104				
Silver	0.1/0.1	0.10535	105	0.10440	104	0.10285	103	0.10318	103	0.10307	103	0.10400	104				
Zinc	.5/.5	0.54591	109	0.53441	107	0.52585	105	0.52255	105	0.52177	104	0.52492	105				

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/02/20
Data File: T26169B4
Prep Batch: 85227
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-329037	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-329041	Recovery	Low Limit	High Limit
Magnesium	5.0	5.13336	103	80	120	500	499.237	100	90	110
Silver	0.05	0.0469496	94	80	120	1	0.797593	80 a	90	110
Aluminum	1.0	1.21115	121 a	80	120	500	505.026	101	90	110
Arsenic	0.1	0.0865862	87	80	120	10	10.1365	101	90	110
Boron	0.2	0.214803	107	80	120	5	4.51142	90	90	110
Barium	0.25	0.278486	111	80	120	10	10.2252	102	90	110
Beryllium	0.012	0.0118822	99	80	120	5	4.73962	95	90	110
Calcium	5.0	5.12623	103	80	120	500	477.080	95	90	110
Cadmium	0.05	0.0527832	106	80	120	5	4.87003	97	90	110
Cobalt	0.1	0.103153	103	80	120	5	4.30544	86 a	90	110
Chromium	0.1	0.100479	100	80	120	10	9.26315	93	90	110
Copper	0.1	0.114375	114	80	120	10	10.7238	107	90	110
Silicon	0.1	0.220096	220 a	80	120	25	23.7105	95	90	110
Iron	1.0	1.21103	121 a	80	120	200	202.653	101	90	110
Zinc	0.1	0.112243	112	80	120	10	9.50612	95	90	110
Manganese	0.1	0.105213	105	80	120	10	9.00282	90	90	110
Molybdenum	0.1	0.103046	103	80	120	10	9.20856	92	90	110
Sodium	NA	26.0835		80	120	1000	1327.97	133 a	90	110
Nickel	0.1	0.101429	101	80	120	10	8.83133	88 a	90	110
Lead	0.05	0.0494583	99	80	120	10	9.73880	97	90	110
Antimony	0.07	0.0613564	88	80	120	5	5.42643	109	90	110
Selenium	0.1	0.0903327	90	80	120	5	5.14982	103	90	110
Tin	0.1	0.104738	105	80	120	10	9.93458	99	90	110
Titanium	0.1	0.105276	105	80	120	10	9.21577	92	90	110
Thallium	0.1	0.103687	104	80	120	5	4.38306	88 a	90	110
Vanadium	0.1	0.104747	105	80	120	10	9.23199	92	90	110
Potassium	NA	-9.69745		80	120	200	-1948.58	-970 a	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/02/20
Data File: H26169T
Prep Batch: 85227
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-21		CCV-31											
Analyte	ICV/CCV Amt		Rec		Rec		Rec	Rec		Rec		Rec		Rec		Rec	
Mercury	20/10	20.26000	101	10.34000	103	10.27000	103										

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/02/20
Data File: H26169TB
Prep Batch: 85227
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-12											
Analyte	ICV/CCV Amt		Rec		Rec	Rec		Rec		Rec		Rec		Rec	
Mercury	20/10	20.05000	100	10.21000	102										

Notes:
a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/02/20
Data File: T26169B4
Prep Batch: 85227
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-329027-6	CCB V-329027-13	CCB V-329027-25	CCB V-329027-35	CCB V-329027-40	CCB V-329027-50	MB 85227 (1)-14	EF V-333973-38
Arsenic	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.1U
Barium	.125U	.25U	.25U	.25U	.25U	.25U	.13U	.25U
Beryllium	.006U	.012U	.012U	.012U	.012U	.012U	.006U	.012U
Cadmium	.025U	.05U	.05U	.05U	.05U	.05U	.025U	.05U
Chromium	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.1U
Copper	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.1U
Lead	.025U	.05U	.05U	.05U	.05U	.05U	.025U	.05U
Nickel	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.1U
Selenium	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.1U
Silver	.025U	.05U	.05U	.05U	.05U	.05U	.025U	.05U
Zinc	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.1U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/02/20
Data File: H26169T
Prep Batch: 85227
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-32	MB 85227 (1)-11				
Mercury	.5U	.5U	.5U	.5U				

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/02/20
Data File: H26169TB
Prep Batch: 85227
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-13	EF V-333973-11				
Mercury	.5U	.5U	.5U				

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/02/20
Data File: T26169B4
Prep Batch: 85227
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0082803

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-329033-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	554.24	111							
Arsenic	0	U								
Barium	0	U								
Beryllium	0	U								
Cadmium	0	U								
Calcium	500	525.687	105							
Chromium	0	U								
Copper	0	U								
Iron	200	217.915	109							
Lead	0	U								
Magnesium	500	556.404	111							
Nickel	0	U								
Selenium	0	U								
Silver	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85227

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCS MR 85227

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85227	1	T26169B4	16	0.4971	0.50	99		80	120
Barium	85227	1	T26169B4	16	0.5394	0.50	108		80	120
Cadmium	85227	1	T26169B4	16	0.5249	0.50	105		80	120
Chromium	85227	1	T26169B4	16	0.5577	0.50	112		80	120
Lead	85227	1	T26169B4	16	0.5391	0.50	108		80	120
Mercury	85227	1	H26169T	13	10.2800	10	103		80	120
Nickel	85227	1	T26169B4	16	0.5427	0.50	109		80	120
Selenium	85227	1	T26169B4	16	0.5246	0.50	105		80	120
Silver	85227	1	T26169B4	16	0.0944	0.100	94		80	120

TxtQcType: LCS Matrix: TCLP SampleID: LCS 85227

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85227	1	T26169B4	15	0.4903	0.50	98		80	120
Barium	85227	1	T26169B4	15	0.5404	0.50	108		80	120
Cadmium	85227	1	T26169B4	15	0.5219	0.50	104		80	120
Chromium	85227	1	T26169B4	15	0.5544	0.50	111		80	120
Lead	85227	1	T26169B4	15	0.5366	0.50	107		80	120
Mercury	85227	1	H26169T	12	10.3500	10	104		80	120
Nickel	85227	1	T26169B4	15	0.5407	0.50	108		80	120
Selenium	85227	1	T26169B4	15	0.5407	0.50	108		80	120
Silver	85227	1	T26169B4	15	0.0937	0.100	94		80	120

TxtQcType: MSD Matrix: TCLP SampleID: AD18955-003

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85227	1	T26169B4	20	T26169B4	17	0.5517	0.1U	0.5	110		50	
Barium	85227	1	T26169B4	20	T26169B4	17	0.9355	0.4882	0.5	89		50	
Cadmium	85227	1	T26169B4	20	T26169B4	17	0.5365	0.05U	0.5	107		50	
Chromium	85227	1	T26169B4	20	T26169B4	17	0.5325	0.1U	0.5	107		50	
Lead	85227	1	T26169B4	20	T26169B4	17	0.5037	0.05U	0.5	101		50	
Mercury	85227	1	H26169T	17	H26169T	14	9.4620	0.50U	10	95		50	
Nickel	85227	1	T26169B4	20	T26169B4	17	0.5110	0.1U	0.5	102		50	
Selenium	85227	5	T26169B4	44	T26169B4	41	0.1235	0.1U	0.5	123		50	
Silver	85227	1	T26169B4	20	T26169B4	17	0.1129	0.05U	0.10	113		50	

TxtQcType: MS Matrix: TCLP SampleID: AD18955-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85227	1	T26169B4	19	T26169B4	17	0.5150	0.1U	0.50	103		50	
Barium	85227	1	T26169B4	19	T26169B4	17	0.8723	0.4882	0.50	77		50	
Cadmium	85227	1	T26169B4	19	T26169B4	17	0.5315	0.05U	0.50	106		50	
Chromium	85227	1	T26169B4	19	T26169B4	17	0.5241	0.1U	0.50	105		50	
Lead	85227	1	T26169B4	19	T26169B4	17	0.4958	0.05U	0.50	99		50	
Mercury	85227	1	H26169T	16	H26169T	14	10.2700	0.50U	10	103		50	
Nickel	85227	1	T26169B4	19	T26169B4	17	0.4982	0.1U	0.50	100		50	
Selenium	85227	5	T26169B4	43	T26169B4	41	0.1133	0.1U	0.50	113		50	
Silver	85227	1	T26169B4	19	T26169B4	17	0.1111	0.05U	0.100	111		50	

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85227

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: TCLP SampleID: AD18955-001

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	T26169B4	21	T26169B4	17	0.5404	0.1U	0.5	108		75	125
Barium	1	T26169B4	21	T26169B4	17	0.9747	0.4882	0.5	97		75	125
Cadmium	1	T26169B4	21	T26169B4	17	0.5165	0.05U	0.5	103		75	125
Chromium	1	T26169B4	21	T26169B4	17	0.5210	0.1U	0.5	104		75	125
Lead	1	T26169B4	21	T26169B4	17	0.4909	0.05U	0.5	98		75	125
Nickel	1	T26169B4	21	T26169B4	17	0.5112	0.1U	0.5	102		75	125
Selenium	5	T26169B4	45	T26169B4	41	0.5604	0.1U	0.5	112		75	125
Silver	1	T26169B4	21	T26169B4	17	0.0961	0.05U	0.1	96		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH:85227

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCS MR 85227

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85227	T26169B4	16	T26169B4	15	0.4971	0.4903	1.4	20
Barium	85227	T26169B4	16	T26169B4	15	0.5394	0.5404	.19	20
Cadmium	85227	T26169B4	16	T26169B4	15	0.5249	0.5219	.57	20
Chromium	85227	T26169B4	16	T26169B4	15	0.5577	0.5544	.59	20
Lead	85227	T26169B4	16	T26169B4	15	0.5391	0.5366	.46	20
Mercury	85227	H26169T	13	H26169T	12	10.2800	10.3500	.68	20
Nickel	85227	T26169B4	16	T26169B4	15	0.5427	0.5407	.36	20
Selenium	85227	T26169B4	16	T26169B4	15	0.5246	0.5407	3	20
Silver	85227	T26169B4	16	T26169B4	15	0.0944	0.0937	.75	20

TxtQcType: MR Matrix: TCLP SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85227	T26169B4	18	T26169B4	17	0.1U	0.1U	---	20
Barium	85227	T26169B4	18	T26169B4	17	0.5002	0.4882	2.4	20
Cadmium	85227	T26169B4	18	T26169B4	17	0.05U	0.05U	---	20
Chromium	85227	T26169B4	18	T26169B4	17	0.1U	0.1U	---	20
Lead	85227	T26169B4	18	T26169B4	17	0.05U	0.05U	---	20
Mercury	85227	H26169T	15	H26169T	14	0.50U	0.50U	---	20
Nickel	85227	T26169B4	18	T26169B4	17	0.1U	0.1U	---	20
Selenium	85227	T26169B4	42	T26169B4	41	0.1U	0.1U	---	20
Silver	85227	T26169B4	18	T26169B4	17	0.05U	0.05U	---	20

TxtQcType: MSD Matrix: TCLP SampleID: AD18955-003

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85227	T26169B4	20	T26169B4	19	0.5517	0.5150	6.9	20
Barium	85227	T26169B4	20	T26169B4	19	0.9355	0.8723	7	20
Cadmium	85227	T26169B4	20	T26169B4	19	0.5365	0.5315	.94	20
Chromium	85227	T26169B4	20	T26169B4	19	0.5325	0.5241	1.6	20
Lead	85227	T26169B4	20	T26169B4	19	0.5037	0.4958	1.6	20
Mercury	85227	H26169T	17	H26169T	16	9.4620	10.2700	8.2	20
Nickel	85227	T26169B4	20	T26169B4	19	0.5110	0.4982	2.5	20
Selenium	85227	T26169B4	44	T26169B4	43	0.1235	0.1133	8.6	20
Silver	85227	T26169B4	20	T26169B4	19	0.1129	0.1111	1.6	20

TxtQcType: SD Matrix: TCLP SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85227	T26169B4	22	T26169B4	17	5	-0.0179	-0.0039	---		10
Barium	85227	T26169B4	22	T26169B4	17	5	0.0907	0.4882	7.1		10
Cadmium	85227	T26169B4	22	T26169B4	17	5	0.0042	0.0039	429	c	10
Chromium	85227	T26169B4	22	T26169B4	17	5	-0.0070	-0.0049	---		10
Lead	85227	T26169B4	22	T26169B4	17	5	-0.0024	-0.0068	---		10
Nickel	85227	T26169B4	22	T26169B4	17	5	-0.0020	0.0153	---		10
Selenium	85227	T26169B4	46	T26169B4	41	5	-0.0042	0.0086	---		10
Silver	85227	T26169B4	22	T26169B4	17	5	0.0085	0.0188	127	c	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

TCLP
Metal Data
Verification of Instrument Parameters

INTERELEMENT CORRECTION SUMMARY PEICP4ax

Interfered Elements	Interfering Elements								
	Al	Ca	Fe	Mg	B	Ba	Cu	Mn	Mo
Al	N/A	0	0	0	0	0	0	0	25.4
Sb	0	0	0	0	0	0	0	0	-17.50
As	0.032	0	-0.07	0	0	0	0	0	24.8
Ba	0	0	0	0	0	N/A	0	0	0
Be	0	0	0	0	0	0	0	0	0
B	0	0	3.4	0	N/A	-3.91	0	-2.61	-5.9
Cd	0	0	0	0	0	0	0	0	0
Ca	0	N/A	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0	0
Cu	0	0	-0.1	0	0	0	N/A	0	0
Fe	0	0	N/A	0	0	0	0	0	0
Pb	-0.04	0	0.125	0	0	0	3.06	0	-3.66
Mg	0	0	0	N/A	0	0	0	0	0
Mn	0	0	0	0	0	0	0	N/A	0
Mo	0	0	0.0000	0	0	0	0	0	N/A
Ni	0	0	0	0	0	0	0	0	-2.79
Se	0	-0.08	-0.5	-0.034	0	0	0	0	0
Si	-0.288	-0.234	-2.39	-0.127	-22.10	-12.4	-14.50	-19.5	3.97
Ag	0	0	-0.065	0	0	0	0	0	0
Na	0	0	0	0	0	0	0	0	0
Tl	-0.028	0.06	0	0	0	2.32	0	-3.65	4.3
Sn	0	0	0	0	0	0	0	0	0
Ti	0	-0.076	0	0	0	0	0	0	0
V	0	0	0.035	-0.058	0	0	0	0	0
Zn	0	0	0	0	0	0	0	0	0
K	0	0	10771.7	0	0	0	0	0	0

IECs run 07/15/19. Sn mod 07/19/19; Cu mod 08/12/19; V mod 01/06/20; Sb mod 01/09/20; B, Ti mod 01/18/20; Ag, As, Mo, Pb, Se, Tl mod 03/11/20.

INTERELEMENT CORRECTION SUMMARY PEICP4ax

Interfered Elements	Interfering Elements							
	Na	Ni	Se	Si	Sn	Ti	V	Zn
Al	0	0	0	0	0	0	-53.2	0
Sb	0	0	0	0	-2.52	0	-3.51	0
As	0	0	0	0	5.11	0	18.3	0
Ba	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0	0	0
B	0.0096	-3.28	-7.4	-1.39	-3.26	-3.97	-4.33	-4.06
Cd	0	0	0	0	0	0	0	0
Ca	0	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	-4.63	0
Co	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	0	0
Fe	0	0	0	0	0	0	0.0	0
Pb	0	0	0	0	0	0	0	0
Mg	0	0	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0
Mo	0	0	0	0	0	0	0	0
Ni	0	N/A	0	0	0	0	0	0
Se	0	0	N/A	0	0	0	0	0
Si	-0.0333	-12.5	-19.90	N/A	-8.16	-10.1	-12.90	-11.9
Ag	0	0	0	0	0	0	-5.03	0
Na	N/A	0	0	0	0	0	0	0
Tl	0	0	0	0	0	-4.11	3.17	0
Sn	0	0	0	0	N/A	3.64	0	0
Ti	0	0	0	0	0	N/A	0	0
V	0	0	0	0	0	0	N/A	0
Zn	0	0	0	0	0	0	0	N/A
K	0	0	0	0	0	0	0	0

IECs run 07/15/19. Sn mod 07/19/19; Cu mod 08/12/19; V mod 01/06/20; Sb mod 01/09/20; B, Ti mod 01/18/20; Ag, As, Mo, Pb, Se, Tl mod 03/11/20.

MDL / RL SUMMARY
TCLP/SPLP
PE ICP 4 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/L)
AL	0.04124271	1
SB	0.03931955	0.07
AS	0.03438659	0.1
BA	0.00333959	0.25
BE	0.00524005	0.012
B	0.02711428	0.2
CD	0.00615363	0.05
CA	2.65167871	5
CR	0.00700712	0.1
CO	0.00382472	0.1
CU	0.02781758	0.1
FE	0.58649802	1
PB	0.0133322	0.05
MG	0.84264167	5
MN	0.00845022	0.1
MO	0.00271515	0.1
NI	0.00521027	0.1
SE	0.03922213	0.1
SI*	0.27653066	0.1
AG	0.01003449	0.05
NA	3.54005202	25
TL	0.04446035	0.1
SN	0.01672084	0.1
TI	0.00534095	0.1
V	0.01672283	0.1
ZN	0.02197619	0.1

COMPLETED: 12/2019

HGCV3 MDL/RL SUMMARY

Element: *Mercury*
Instrument: *PE FIMS 100*
Technique: *CV*

Instrument ID: *HgCV3*
Analyst *Carmela Aliano*

200 Series	METHOD	MDL (ppb)	Completed	RL (ppb)
H_2O	245.1	0.0794	12/31/2019	0.20
SW846				
H_2O	7470A	0.1740	12/31/2019	0.50
SOIL	7471 B	0.0757 (0.0126 mg/kg)	12/31/2019	0.50 (0.0833 mg/kg)

TCLP
Metal Data
Raw Data

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85227 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85227 (1) Units: MG/L Lab Code:
Matrix: TCLP
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.035	ND	1	50	50	09/02/20	85227	T26169B4	14	P	PEICP4A
7440-38-2	Arsenic	0.050	ND	1	50	50	09/02/20	85227	T26169B4	14	P	PEICP4A
7440-39-3	Barium	0.12	ND	1	50	50	09/02/20	85227	T26169B4	14	P	PEICP4A
7440-41-7	Beryllium	0.0060	ND	1	50	50	09/02/20	85227	T26169B4	14	P	PEICP4A
7440-43-9	Cadmium	0.025	ND	1	50	50	09/02/20	85227	T26169B4	14	P	PEICP4A
7440-47-3	Chromium	0.050	ND	1	50	50	09/02/20	85227	T26169B4	14	P	PEICP4A
7440-50-8	Copper	0.050	ND	1	50	50	09/02/20	85227	T26169B4	14	P	PEICP4A
7439-92-1	Lead	0.025	ND	1	50	50	09/02/20	85227	T26169B4	14	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/02/20	85227	H26169T	11	CV	HGCV3A
7440-02-0	Nickel	0.050	ND	1	50	50	09/02/20	85227	T26169B4	14	P	PEICP4A
7782-49-2	Selenium	0.050	ND	1	50	50	09/02/20	85227	T26169B4	14	P	PEICP4A
7440-22-4	Silver	0.025	ND	1	50	50	09/02/20	85227	T26169B4	14	P	PEICP4A
7440-66-6	Zinc	0.050	ND	1	50	50	09/02/20	85227	T26169B4	14	P	PEICP4A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\T26169B4.txt

Analysis Date: 09/02/20 **Instrument:** PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-329027	1	CAL	16:04	1							V-329027(ICB/CCB)
CALST2 V-329037	1	CAL	16:08	2							V-329037(LLICV/CCV leachate)
CALST3 V-329028	1	CAL	16:12	3							V-329028(ICS3 - Middle Std)
CALST4 V-329029	1	CAL	16:16	4							V-329029(ICS4 High std)
ICV V-329036	1	ICV	16:21	5							V-329036(CCV)
ICB V-329027	1	ICB	16:25	6							V-329027(ICB/CCB)
LRS V-329041	1	LRS	16:29	7	METALS-TCLP	TCLP	TCLP	SW846	85227		V-329041(LRS 1/2 Fe)
ICS3 V-329028	1	ICS	16:34	8							V-329028(ICS3 - Middle Std)
RINSE	1	SMP	16:38	9		TCLP	TCLP	SW846	85227		()
LLICV V-329037	1	LLICV	16:42	10	METALS-TCLP	TCLP	TCLP	SW846	85227		V-329037(LLICV/CCV leachate)
ICSA V-329033	1	ICSA	16:46	11							V-329033(ICSA)
CCV V-329036	1	CCV	16:50	12							V-329036(CCV)
CCB V-329027	1	CCB	16:54	13							V-329027(ICB/CCB)
MB 85227 (1)	1	MB	16:58	14	METALS-TCLP	TCLP	TCLP	SW846	85227		()
LCS 85227	1	LCS	17:02	15	METALS-TCLP	TCLP	TCLP	SW846	85227		()
LCS MR 85227	1	LCS	17:06	16	METALS-TCLP	TCLP	TCLP	SW846	85227		()
AD18955-001	1	SMP	17:10	17	METALS-TCLP	TCLP	TCLP	SW846	85227	Se NOT REPORTED Ca>LR	()
AD18955-001	1	MR	17:14	18	METALS-TCLP	TCLP	TCLP	SW846	85227	Se NOT REPORTED Ca>LR	()
AD18955-002	1	MS	17:19	19	METALS-TCLP	TCLP	TCLP	SW846	85227	Se NOT REPORTED Ca>LR	()
AD18955-003	1	MSD	17:24	20	METALS-TCLP	TCLP	TCLP	SW846	85227	Se NOT REPORTED Ca>LR	()
AD18955-001	1	PS	17:28	21	METALS-TCLP	TCLP	TCLP	SW846	85227	Se NOT REPORTED Ca>LR	()
AD18955-001	5	SD	17:32	22	METALS-TCLP	TCLP	TCLP	SW846	85227	Se NOT REPORTED Ca>LR	()
AD18950-004	1	SMP	17:36	23	METALS-TCLP	TCLP	TCLP	SW846	85227		()
CCV V-329036	1	CCV	17:40	24							V-329036(CCV)
CCB V-329027	1	CCB	17:44	25							V-329027(ICB/CCB)
AD18932-002	1	SMP	17:48	26	METALS-TCLP	TCLP	TCLP	SW846	85227		()
AD18955-004	1	SMP	17:52	27	METALS-TCLP	TCLP	TCLP	SW846	85227	Se NOT REPORTED Ca>LR	()
AD18955-005	1	SMP	17:57	28	METALS-TCLP	TCLP	TCLP	SW846	85227	Se NOT REPORTED Ca>LR	()
AD18957-001	1	SMP	18:01	29	METALS-TCLP	TCLP	TCLP	SW846	85227		()
AD18957-003	1	SMP	18:05	30	METALS-TCLP	TCLP	TCLP	SW846	85227		()
AD18957-005	1	SMP	18:09	31	METALS-TCLP	TCLP	TCLP	SW846	85227		()
AD18957-007	1	SMP	18:13	32	METALS-TCLP	TCLP	TCLP	SW846	85227		()
AD18957-009	1	SMP	18:17	33	METALS-TCLP	TCLP	TCLP	SW846	85227		()
CCV V-329036	1	CCV	18:21	34							V-329036(CCV)
CCB V-329027	1	CCB	18:25	35							V-329027(ICB/CCB)
AD18957-011	1	SMP	18:29	36	METALS-TCLP	TCLP	TCLP	SW846	85227		()
AD18957-013	1	SMP	18:33	37	METALS-TCLP	TCLP	TCLP	SW846	85227		()
EF V-333973	1	EF	18:37	38	METALS-TCLP	TCLP	TCLP	SW846	85227		V-333973(EF-1 WARNING)
CCV V-329036	1	CCV	18:41	39							V-329036(CCV)
CCB V-329027	1	CCB	18:45	40							V-329027(ICB/CCB)
AD18955-001	5	SMP	18:49	41	METALS-TCLP	TCLP	TCLP	SW846	85227	Se REPORTED	()
AD18955-001	5	MR	18:53	42	METALS-TCLP	TCLP	TCLP	SW846	85227	Se REPORTED	()
AD18955-002	5	MS	18:57	43	METALS-TCLP	TCLP	TCLP	SW846	85227	Se REPORTED	()
AD18955-003	5	MSD	19:01	44	METALS-TCLP	TCLP	TCLP	SW846	85227	Se REPORTED	()
AD18955-001	5	PS	19:06	45	METALS-TCLP	TCLP	TCLP	SW846	85227	Se REPORTED	()
AD18955-001	5	SD	19:10	46	METALS-TCLP	TCLP	TCLP	SW846	85227	Se REPORTED	()
AD18955-004	2	SMP	19:14	47	METALS-TCLP	TCLP	TCLP	SW846	85227	Se REPORTED	()
AD18955-005	2	SMP	19:18	48	METALS-TCLP	TCLP	TCLP	SW846	85227	Se REPORTED	()
CCV V-329036	1	CCV	19:23	49							V-329036(CCV)
CCB V-329027	1	CCB	19:27	50							V-329027(ICB/CCB)

Comments/Reviewedby:

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

9/3/20

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26169T.txt

Analysis Date: 09/02/20 **Instrument:** HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	12:47	1							0
2 PPB	1	CAL	12:49	2							0
.5 PPB	1	CAL	12:50	3							0
1 PPB	1	CAL	12:51	4							0
2 PPB	1	CAL	12:52	5							0
5 PPB	1	CAL	12:54	6							0
10 PPB	1	CAL	12:55	7							0
25 PPB	1	CAL	12:57	8							0
ICV (2)	1	ICV	12:59	9							0
ICB	1	ICB	13:00	10							0
MB 85227 (1)	1	MB	13:02	11	HG-TCLP	TCLP	TCLP	SW846	85227		0
LCS 85227	1	LCS	13:03	12	HG-TCLP	TCLP	TCLP	SW846	85227		0
LCS 85227 MR	1	LCS	13:05	13	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18955-001	1	SMP	13:06	14	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18955-001	1	MR	13:08	15	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18955-002	1	MS	13:09	16	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18955-003	1	MSD	13:11	17	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18950-004	1	SMP	13:13	18	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18932-002	1	SMP	13:14	19	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18955-004	1	SMP	13:15	20	HG-TCLP	TCLP	TCLP	SW846	85227		0
CCV	1	CCV	13:17	21							0
CCB	1	CCB	13:18	22							0
AD18955-005	1	SMP	13:20	23	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18957-001	1	SMP	13:21	24	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18957-003	1	SMP	13:23	25	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18957-005	1	SMP	13:24	26	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18957-007	1	SMP	13:25	27	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18957-009	1	SMP	13:26	28	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18957-011	1	SMP	13:28	29	HG-TCLP	TCLP	TCLP	SW846	85227		0
AD18957-013	1	SMP	13:29	30	HG-TCLP	TCLP	TCLP	SW846	85227		0
CCV	1	CCV	13:30	31							0
CCB	1	CCB	13:32	32							0

Comments/Reviewedby:

bransaw
192.168.1.120 9/2/2020 1:48:27 PM

OK.

9/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334168

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26169TB.txt

Analysis Date: 09/02/20 **Instrument:** HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	13:40	1							0
.2 PPB	1	CAL	13:41	2							0
.5 PPB	1	CAL	13:42	3							0
1 PPB	1	CAL	13:44	4							0
2 PPB	1	CAL	13:45	5							0
5 PPB	1	CAL	13:46	6							0
10 PPB	1	CAL	13:48	7							0
25 PPB	1	CAL	13:49	8							0
ICV (2)	1	ICV	13:51	9							0
ICB	1	ICB	13:53	10							0
EF V-333973	1	EF	13:54	11	HG-TCLP	TCLP	TCLP	SW846	85227		V-333973(EF-1 WARNING)
CCV	1	CCV	13:55	12							0
CCB	1	CCB	13:57	13							0

Comments/Reviewedby:

bransaw
192.168.1.120 9/2/2020 2:04:45 PM

OK.

9/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334168

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-329027

Prepared By: Aliano, Carmela
Description: ICB/CCB
Prep Date: 6/4/2020
Expiration Date: 2/25/2021
Department: Metals
BatchNumber:
Concentration: 0 mg/l
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	

Veritech Lot Number: V-329028

Prepared By: Aliano, Carmela
Description: ICS3 - Middle Std
Prep Date: 6/4/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	944.75 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	.5
12977	SILICON	5 ml	CONC conc	5
13092	CERIUM	5 ml	CONC conc	5

Veritech Lot Number: V-329029

Prepared By: Aliano, Carmela
Description: ICS4 High std
Prep Date: 6/4/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: various mg/l
Final Volume: 500 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	434.5 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	1
12977	SILICON	5 ml	CONC conc	10

Veritech Lot Number: V-329033

Prepared By: Aliano, Carmela
Description: ICSA
Prep Date: 6/4/2020
Expiration Date: 2/25/2021
Department: Metals
BatchNumber:
Concentration: MULTI mg/l
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13176	ICSA	50 ml	NEAT neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-329036

Prepared By: Aliano, Carmela
Description: CCV
Prep Date: 6/4/2020
Expiration Date: 2/25/2021
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13171	ICV 1	10 ml	NEAT neat	
13170	ICV 2	10 ml	CONC conc	
12981	BORON	.5 ml	CONC conc	
13091	CERIUM	5 ml	CONC conc	
12933	silicon	5 ml	CONC conc	

Veritech Lot Number: V-329037

Prepared By: Aliano, Carmela
Description: LLICV/CCV leachate
Prep Date: 6/4/2020
Expiration Date: 10/30/2020
Department: WetChem
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
12918	LL-LEACH	10 ml	neat neat	
12976	BORON	.2 ml	CONC conc	0.2 ppm
12977	SILICON	.05 ml	CONC conc	0.05 ppm
13092	CERIUM	.05 ml	CONC conc	0.05 ppm

Veritech Lot Number: V-329041

Prepared By: Aliano, Carmela
Description: LRS 1/2 Fe
Prep Date: 6/4/2020
Expiration Date: 10/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 500 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	335 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12915	LINEAR RANGE 1B	50 ml	neat neat	
12917	linear range 1C	50 ml	neat neat	
13092	CERIUM	12.5 ml	CONC conc	
12976	BORON	2.5 ml	CONC conc	
12977	SILICON	12.5 ml	CONC conc	

Veritech Lot Number: V-331024

Prepared By: Silva, Amanda
Description: 1:1 HCl WARNING
Prep Date: 7/7/2020
Expiration Date: 1/7/2021
Department: Metals
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13275	hydrochloric acid	500 ml	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-331982

Prepared By:	Cousineau, Paul	Department: Metals	ApprovedBy: shiamala
Description:	B, Si, Ce INTERMEDIATE	BatchNumber:	ApproveDate: 07/28/20
Prep Date:	7/23/2020	Concentration: 100 ppm	Checked: Yes
Expiration Date:	10/23/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	5 ml	neat neat	
13169	hydrochloric acid	5 ml	neat neat	
12976	BORON	10 ml	CONC conc	100 ppm
13092	CERIUM	10 ml	CONC conc	100 ppm
12977	SILICON	10 ml	CONC conc	100 ppm

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12915

Description
LINEAR RANGE 1B

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-40-500	7/271ab	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12917

Description
linear range 1C

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
spex	XHCV-44-500	8-002AB	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12918

Description
LL-LEACH

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
spex	XHCV-25-500	8-001AB	10/19/19	10/30/20	Aliano, Carmela	1	500ml	neat	neat

Veritech Control/Receipt Number: 12933

Description
silicon

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-145	S191206040	12/13/19	12/30/21	Aliano, Carmela	4	500m	CONC	CONC

Veritech Control/Receipt Number: 12976

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLB9-2X	24-110BX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12977

Description
SILICON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLSI9-2X	24-93SIX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12981

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-055	S190719015	01/06/20	07/30/21	Aliano, Carmela	3	500ml	CONC	CONC

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12983

Description
CALIBRATION 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	8/214AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 12984

Description
CALIBRATION 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	8/215AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13091

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-051-585	S190710006	03/04/20	07/30/21	Aliano, Carmela	2	500ml	CONC	CONC

Veritech Control/Receipt Number: 13092

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLCE2-2X	24-15CEX	03/04/20	02/28/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13168

Description
nitric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	245675	04/07/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13169

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	04/07/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13170

Description: ICV 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S200306032	04/07/20	03/31/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13171

Description: ICV 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S200306031	04/07/20	03/31/21	Aliano, Carmela	2	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13176

Description: ICSA

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-30	9-265AB	04/07/20	03/31/21	Aliano, Carmela	4	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13275

Description: hydrochloric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	06/02/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Method: PE 4 8300DV LEACH AX Page 1 Date: 9/2/2020 4:07:39 PM

T26169B4 26169 | 859227

TCP 9/3/2020

Analysis Begun

Start Time: 9/2/2020 4:04:45 PM
Logged In Analyst: usermet
Spectrometer: Optima 8300 , S/N 078S1410156

Plasma On Time: 9/2/2020 12:32:53 PM
Technique: ICP Continuous
Autosampler: S10

Sample Information File: C:\Users\Public\PerkinElmer\ICP\Data\Sample Information\09.02.20.sif
Batch ID: ICP4
Results Data Set: T26169B4
Results Library: C:\Users\Public\PerkinElmer\ICP\Data\Results\Results.mdb

9/3/20

Sequence No.: 1
Sample ID: CALBLK V-329027
Analyst:
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 9/2/2020 4:04:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-329027

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	51290.1	81.02	0.16%	100	%
Y 371.029	17942.1	142.59	0.79%	100	%
Ag 328.068†	-14.2	5.80	40.74%	[0.00]	mg/L
Al 308.215†	175.9	5.70	3.24%	[0.00]	mg/L
As 188.979†	-0.9	0.37	40.63%	[0.00]	mg/L
Ba 233.527†	-1.5	1.54	99.78%	[0.00]	mg/L
Be 313.107†	-800.4	25.52	3.19%	[0.00]	mg/L
Ca 315.887†	-290.6	26.61	9.16%	[0.00]	mg/L
Cd 228.802†	19.7	1.49	7.55%	[0.00]	mg/L
Co 228.616†	-3.0	1.95	65.19%	[0.00]	mg/L
Cr 267.716†	5.7	3.42	59.47%	[0.00]	mg/L
Cu 327.393†	-185.5	11.68	6.30%	[0.00]	mg/L
Fe 273.955†	2.7	2.63	98.73%	[0.00]	mg/L
K 404.721†	-29.7	8.72	29.40%	[0.00]	mg/L
Mg 279.077†	-3.5	7.12	204.29%	[0.00]	mg/L
Mn 257.610†	29.6	3.81	12.89%	[0.00]	mg/L
Mo 202.031†	2.9	3.20	110.06%	[0.00]	mg/L
Na 330.237†	17.0	5.17	30.44%	[0.00]	mg/L
Ni 231.604†	58.6	2.75	4.69%	[0.00]	mg/L
Pb 220.353†	0.3	3.08	>999.9%	[0.00]	mg/L
Sb 206.836†	3.8	2.22	57.56%	[0.00]	mg/L
Se 196.026†	7.2	0.60	8.32%	[0.00]	mg/L
Sn 189.927†	1.8	0.22	12.17%	[0.00]	mg/L
Ti 334.940†	30.9	2.95	9.55%	[0.00]	mg/L
Tl 190.801†	-2.3	1.85	81.40%	[0.00]	mg/L
V 290.880†	91.4	4.19	4.58%	[0.00]	mg/L
Zn 206.200†	31.6	4.89	15.47%	[0.00]	mg/L
B 249.772	32.2	3.51	10.90%	[0.00]	mg/L
Si 251.611	43.4	1.00	2.30%	[0.00]	mg/L

26169 | 859227

All elements reported

18955-001, -002, -003 TAC

(5D) Se

18955-004, -005

(2D) Se Reported

Sequence No.: 2
Sample ID: CALST2 V-329037
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 9/2/2020 4:08:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST2 V-329037

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	50713.8	276.79	0.55%	98.9	%
Y 371.029	17325.9	119.90	0.69%	96.6	%
Ag 328.068†	589.5	11.36	1.93%	[0.05]	mg/L
Al 308.215†	1542.8	16.50	1.07%	[1]	mg/L
As 188.979†	10.9	0.36	3.26%	[0.1]	mg/L
Ba 233.527†	2450.1	17.86	0.73%	[0.25]	mg/L
Be 313.107†	2804.6	27.81	0.99%	[0.012]	mg/L
Ca 315.887†	17978.6	58.12	0.32%	[5]	mg/L
Cd 228.802†	125.7	1.44	1.15%	[0.05]	mg/L
Co 228.616†	222.5	2.40	1.08%	[0.1]	mg/L
Cr 267.716†	600.4	1.89	0.31%	[0.1]	mg/L
Cu 327.393†	881.9	8.10	0.92%	[0.1]	mg/L
Fe 273.955†	808.2	7.08	0.88%	[1]	mg/L
K 404.721†	26.1	2.22	8.53%	[5]	mg/L
Mg 279.077†	5393.4	0.80	0.01%	[5]	mg/L
Mn 257.610†	2703.6	5.27	0.19%	[0.1]	mg/L
Mo 202.031†	119.2	0.65	0.55%	[0.1]	mg/L
Na 330.237†	979.9	7.33	0.75%	[25]	mg/L
Ni 231.604†	335.1	4.54	1.35%	[0.1]	mg/L
Pb 220.353†	32.4	1.50	4.64%	[0.05]	mg/L
Sb 206.836†	10.4	0.80	7.70%	[0.07]	mg/L
Se 196.026†	19.5	1.84	9.43%	[0.1]	mg/L
Sn 189.927†	54.2	1.88	3.48%	[0.1]	mg/L
Ti 334.940†	2627.0	9.25	0.35%	[0.1]	mg/L
Tl 190.801†	18.3	0.71	3.89%	[0.1]	mg/L
V 290.880†	525.4	6.68	1.27%	[0.1]	mg/L
Zn 206.200†	438.9	5.36	1.22%	[0.1]	mg/L
B 249.772	1100.1	2.27	0.21%	[0.2]	mg/L
Si 251.611	296.2	1.99	0.67%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-329028
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 3
Date Collected: 9/2/2020 4:12:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST3 V-329028

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	46974.6	335.23	0.71%	91.6	%
Y 371.029	15874.4	106.64	0.67%	88.5	%
Ag 328.068†	1303.5	17.12	1.31%	[0.10]	mg/L
Al 308.215†	5732.0	42.98	0.75%	[5.0]	mg/L
As 188.979†	48.5	3.63	7.48%	[0.50]	mg/L
Ba 233.527†	4214.3	31.08	0.74%	[0.50]	mg/L
Be 313.107†	113415.7	471.64	0.42%	[0.50]	mg/L
Ca 315.887†	165374.0	526.35	0.32%	[50]	mg/L
Cd 228.802†	1213.5	8.38	0.69%	[0.50]	mg/L
Co 228.616†	1102.6	4.40	0.40%	[0.50]	mg/L
Cr 267.716†	2910.4	22.89	0.79%	[0.50]	mg/L
Cu 327.393†	3577.3	29.58	0.83%	[0.50]	mg/L
Fe 273.955†	2915.5	25.64	0.88%	[5.0]	mg/L
K 404.721†	855.1	9.97	1.17%	[50]	mg/L
Mg 279.077†	50624.7	208.14	0.41%	[50]	mg/L
Mn 257.610†	12643.7	31.87	0.25%	[0.50]	mg/L
Mo 202.031†	594.1	1.92	0.32%	[0.50]	mg/L
Na 330.237†	1794.0	23.31	1.30%	[50]	mg/L
Ni 231.604†	1581.1	11.97	0.76%	[0.50]	mg/L
Pb 220.353†	295.3	7.87	2.66%	[0.50]	mg/L
Sb 206.836†	67.3	2.52	3.74%	[0.50]	mg/L
Se 196.026†	103.0	2.03	1.97%	[0.50]	mg/L
Sn 189.927†	247.2	3.10	1.25%	[0.50]	mg/L
Ti 334.940†	12382.1	40.29	0.33%	[0.50]	mg/L
Tl 190.801†	85.5	0.87	1.02%	[0.50]	mg/L
V 290.880†	2424.9	10.60	0.44%	[0.50]	mg/L
Zn 206.200†	1729.0	14.17	0.82%	[0.50]	mg/L
B 249.772	2580.2	13.99	0.54%	[0.50]	mg/L
Si 251.611	8490.5	50.54	0.60%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-329029
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 4
Date Collected: 9/2/2020 4:16:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST4 V-329029

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	48769.7	513.74	1.05%	95.1	%
Y 371.029	15761.3	153.90	0.98%	87.8	%
Ag 328.068†	2919.2	9.35	0.32%	[0.20]	mg/L
Al 308.215†	11698.7	28.59	0.24%	[10]	mg/L
As 188.979†	95.9	1.93	2.01%	[1.00]	mg/L
Ba 233.527†	8448.2	30.88	0.37%	[1.00]	mg/L
Be 313.107†	225828.0	1980.72	0.88%	[1.00]	mg/L
Ca 315.887†	325068.8	2929.06	0.90%	[100]	mg/L
Cd 228.802†	2509.7	16.08	0.64%	[1.00]	mg/L
Co 228.616†	2216.3	23.04	1.04%	[1.00]	mg/L
Cr 267.716†	5560.0	9.43	0.17%	[1.00]	mg/L
Cu 327.393†	7287.9	15.96	0.22%	[1.00]	mg/L
Fe 273.955†	5786.0	36.14	0.62%	[10.0]	mg/L
K 404.721†	1773.3	3.35	0.19%	[100]	mg/L
Mg 279.077†	100474.7	805.45	0.80%	[100]	mg/L
Mn 257.610†	26268.5	18.84	0.07%	[1.00]	mg/L
Mo 202.031†	1195.6	10.03	0.84%	[1.00]	mg/L
Na 330.237†	3868.4	5.96	0.15%	[100]	mg/L
Ni 231.604†	3088.6	32.37	1.05%	[1.00]	mg/L
Pb 220.353†	573.6	5.63	0.98%	[1.00]	mg/L
Sb 206.836†	134.1	1.95	1.45%	[1.00]	mg/L
Se 196.026†	209.0	2.86	1.37%	[1.00]	mg/L
Sn 189.927†	494.5	2.60	0.53%	[1.00]	mg/L
Ti 334.940†	26103.2	49.94	0.19%	[1.00]	mg/L
Tl 190.801†	165.4	2.44	1.47%	[1.00]	mg/L
V 290.880†	4704.8	42.67	0.91%	[1.00]	mg/L
Zn 206.200†	3216.4	22.82	0.71%	[1.00]	mg/L
B 249.772	5004.3	79.25	1.58%	[1.00]	mg/L
Si 251.611	18119.5	240.48	1.33%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-87.3	14750	0.00000	0.997739	
Al 308.215	3	Lin, Calc Int	143.7	1150	0.00000	0.999318	
As 188.979	3	Lin, Calc Int	0.7	95.34	0.00000	0.999909	
Ba 233.527	3	Lin, Calc Int	133.3	8331	0.00000	0.998948	
Be 313.107	3	Lin, Calc Int	134.3	225900	0.00000	0.999998	
Ca 315.887	3	Lin, Calc Int	1297.4	3247	0.00000	0.999958	
Cd 228.802	3	Lin, Calc Int	-7.5	2502	0.00000	0.999847	
Co 228.616	3	Lin, Calc Int	-0.7	2215	0.00000	0.999996	
Cr 267.716	3	Lin, Calc Int	43.9	5560	0.00000	0.999704	
Cu 327.393	3	Lin, Calc Int	55.5	7203	0.00000	0.999665	
Fe 273.955	3	Lin, Calc Int	106.0	567.9	0.00000	0.999247	
K 404.721	3	Lin, Calc Int	-34.0	18.00	0.00000	0.999474	
Mg 279.077	3	Lin, Calc Int	237.5	1004	0.00000	0.999990	
Mn 257.610	3	Lin, Calc Int	-56.9	26150	0.00000	0.999770	
Mo 202.031	3	Lin, Calc Int	-0.8	1195	0.00000	0.999995	
Na 330.237	3	Lin, Calc Int	-22.9	38.48	0.00000	0.999042	
Ni 231.604	3	Lin, Calc Int	18.5	3082	0.00000	0.999913	
Pb 220.353	3	Lin, Calc Int	3.2	573.2	0.00000	0.999886	
Sb 206.836	3	Lin, Calc Int	0.5	133.7	0.00000	0.999976	
Se 196.026	3	Lin, Calc Int	-0.9	209.5	0.00000	0.999964	
Sn 189.927	3	Lin, Calc Int	2.1	492.2	0.00000	0.999954	
Ti 334.940	3	Lin, Calc Int	-116.8	25990	0.00000	0.999602	
Tl 190.801	3	Lin, Calc Int	1.3	165.0	0.00000	0.999828	
V 290.880	3	Lin, Calc Int	37.8	4690	0.00000	0.999851	
Zn 206.200	3	Lin, Calc Int	74.4	3179	0.00000	0.998939	

B 249.772	3	Lin, Calc Int	56.7	4975	0.00000	0.999729
Si 251.611	3	Lin, Calc Int	-51.4	1795	0.00000	0.999391

Sequence No.: 5 **Autosampler Location: 6**
Sample ID: ICV V-329036 **Date Collected: 9/2/2020 4:21:25 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 85 **Auto Dilution Factor: 1**

Mean Data: ICV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46617.0	90.9	%	0.63				0.70%
Y 371.029	15779.8	87.9	%	0.83				0.95%
Ag 328.068†	1421.7	0.105352	mg/L	0.0001826	0.105352	mg/L	0.0001826	0.17%
QC value within limits for Ag 328.068 Recovery = 105.35%								
Al 308.215†	6024.3	5.12907	mg/L	0.004663	5.12907	mg/L	0.004663	0.09%
QC value within limits for Al 308.215 Recovery = 102.58%								
As 188.979†	52.2	0.515364	mg/L	0.0174961	0.515364	mg/L	0.0174961	3.39%
QC value within limits for As 188.979 Recovery = 103.07%								
Ba 233.527†	4433.5	0.516162	mg/L	0.0028389	0.516162	mg/L	0.0028389	0.55%
QC value within limits for Ba 233.527 Recovery = 103.23%								
Be 313.107†	119182.5	0.527072	mg/L	0.0006944	0.527072	mg/L	0.0006944	0.13%
QC value within limits for Be 313.107 Recovery = 105.41%								
Ca 315.887†	172834.7	52.8351	mg/L	0.04514	52.8351	mg/L	0.04514	0.09%
QC value within limits for Ca 315.887 Recovery = 105.67%								
Cd 228.802†	1275.9	0.512835	mg/L	0.0024771	0.512835	mg/L	0.0024771	0.48%
QC value within limits for Cd 228.802 Recovery = 102.57%								
Co 228.616†	1165.5	0.526490	mg/L	0.0041698	0.526490	mg/L	0.0041698	0.79%
QC value within limits for Co 228.616 Recovery = 105.30%								
Cr 267.716†	3069.7	0.546750	mg/L	0.0035955	0.546750	mg/L	0.0035955	0.66%
QC value within limits for Cr 267.716 Recovery = 109.35%								
Cu 327.393†	3754.3	0.514008	mg/L	0.0015427	0.514008	mg/L	0.0015427	0.30%
QC value within limits for Cu 327.393 Recovery = 102.80%								
Fe 273.955†	3022.9	5.13664	mg/L	0.016073	5.13664	mg/L	0.016073	0.31%
QC value within limits for Fe 273.955 Recovery = 102.73%								
K 404.721†	909.7	-2.91244	mg/L	0.400037	-2.91244	mg/L	0.400037	13.74%
QC value less than the lower limit for K 404.721 Recovery = -5.82%								
Mg 279.077†	53005.8	52.5842	mg/L	0.04269	52.5842	mg/L	0.04269	0.08%
QC value within limits for Mg 279.077 Recovery = 105.17%								
Mn 257.610†	13255.0	0.509016	mg/L	0.0009459	0.509016	mg/L	0.0009459	0.19%
QC value within limits for Mn 257.610 Recovery = 101.80%								
Mo 202.031†	625.8	0.524300	mg/L	0.0033236	0.524300	mg/L	0.0033236	0.63%
QC value within limits for Mo 202.031 Recovery = 104.86%								
Na 330.237†	1865.8	49.0830	mg/L	0.12339	49.0830	mg/L	0.12339	0.25%
QC value within limits for Na 330.237 Recovery = 98.17%								
Ni 231.604†	1658.1	0.533492	mg/L	0.0012109	0.533492	mg/L	0.0012109	0.23%
QC value within limits for Ni 231.604 Recovery = 106.70%								
Pb 220.353†	308.0	0.532697	mg/L	0.0048836	0.532697	mg/L	0.0048836	0.92%
QC value within limits for Pb 220.353 Recovery = 106.54%								
Sb 206.836†	70.7	0.537755	mg/L	0.0218055	0.537755	mg/L	0.0218055	4.05%
QC value within limits for Sb 206.836 Recovery = 107.55%								
Se 196.026†	110.0	0.538538	mg/L	0.0151363	0.538538	mg/L	0.0151363	2.81%
QC value within limits for Se 196.026 Recovery = 107.71%								
Sn 189.927†	259.2	0.520469	mg/L	0.0051624	0.520469	mg/L	0.0051624	0.99%
QC value within limits for Sn 189.927 Recovery = 104.09%								
Ti 334.940†	12963.8	0.507364	mg/L	0.0010566	0.507364	mg/L	0.0010566	0.21%
QC value within limits for Ti 334.940 Recovery = 101.47%								
Tl 190.801†	88.6	0.524956	mg/L	0.0129416	0.524956	mg/L	0.0129416	2.47%
QC value within limits for Tl 190.801 Recovery = 104.99%								
V 290.880†	2549.7	0.538464	mg/L	0.0034756	0.538464	mg/L	0.0034756	0.65%
QC value within limits for V 290.880 Recovery = 107.69%								
Zn 206.200†	1810.0	0.545909	mg/L	0.0023107	0.545909	mg/L	0.0023107	0.42%
QC value within limits for Zn 206.200 Recovery = 109.18%								
B 249.772	2720.5	0.544666	mg/L	0.0016889	0.544666	mg/L	0.0016889	0.31%
QC value within limits for B 249.772 Recovery = 108.93%								
Si 251.611	8815.8	5.04656	mg/L	0.034582	5.04656	mg/L	0.034582	0.69%
QC value within limits for Si 251.611 Recovery = 100.93%								

QC Failed. Continue with analysis.

Sequence No.: 6 **Autosampler Location: 1**
Sample ID: ICB V-329027 **Date Collected: 9/2/2020 4:25:22 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	50929.3	99.3	%	0.33				0.34%
Y 371.029	17595.9	98.1	%	0.31				0.32%
Ag 328.068†	-9.7	0.0052091	mg/L	0.00065062	0.0052091	mg/L	0.00065062	12.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-13.1	-0.136803	mg/L	0.0053496	-0.136803	mg/L	0.0053496	3.91%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.1	-0.0079124	mg/L	0.01150836	-0.0079124	mg/L	0.01150836	145.45%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.4	-0.0159441	mg/L	0.00025781	-0.0159441	mg/L	0.00025781	1.62%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	38.1	-0.0004261	mg/L	0.00001813	-0.0004261	mg/L	0.00001813	4.25%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-53.0	-0.415918	mg/L	0.0011949	-0.415918	mg/L	0.0011949	0.29%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	1.0	0.0033795	mg/L	0.00122781	0.0033795	mg/L	0.00122781	36.33%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.1	0.0003431	mg/L	0.00027704	0.0003431	mg/L	0.00027704	80.75%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	3.9	-0.0072203	mg/L	0.00061367	-0.0072203	mg/L	0.00061367	8.50%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-13.8	-0.0096456	mg/L	0.00145326	-0.0096456	mg/L	0.00145326	15.07%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-0.6	-0.187722	mg/L	0.0018932	-0.187722	mg/L	0.0018932	1.01%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-7.8	3.47645	mg/L	0.451418	3.47645	mg/L	0.451418	12.99%
QC value greater than the upper limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	6.7	-0.230031	mg/L	0.0033499	-0.230031	mg/L	0.0033499	1.46%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-5.9	0.0019499	mg/L	0.00007302	0.0019499	mg/L	0.00007302	3.74%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.1	0.0006178	mg/L	0.00021679	0.0006178	mg/L	0.00021679	35.09%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	2.6	0.663074	mg/L	0.1932000	0.663074	mg/L	0.1932000	29.14%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	0.8	-0.0057203	mg/L	0.00035698	-0.0057203	mg/L	0.00035698	6.24%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.2	-0.0059304	mg/L	0.00558914	-0.0059304	mg/L	0.00558914	94.25%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.2	-0.0050632	mg/L	0.00820029	-0.0050632	mg/L	0.00820029	161.96%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.4	-0.0027029	mg/L	0.01304275	-0.0027029	mg/L	0.01304275	482.55%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.5	-0.0032221	mg/L	0.00220228	-0.0032221	mg/L	0.00220228	68.35%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-5.2	0.0042637	mg/L	0.00020782	0.0042637	mg/L	0.00020782	4.87%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.8	0.0028202	mg/L	0.01132308	0.0028202	mg/L	0.01132308	401.50%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-2.9	-0.0086890	mg/L	0.00057409	-0.0086890	mg/L	0.00057409	6.61%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-2.2	-0.0241128	mg/L	0.00032444	-0.0241128	mg/L	0.00032444	1.35%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	10.9	-0.0087553	mg/L	0.00087856	-0.0087553	mg/L	0.00087856	10.03%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-2.0	0.0259031	mg/L	0.00040296	0.0259031	mg/L	0.00040296	1.56%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: LRS V-329041
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 13
Date Collected: 9/2/2020 4:29:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LRS V-329041

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	42970.9	83.8	%	0.86				1.03%
Y 371.029	13198.8	73.6	%	0.70				0.95%
Ag 328.068†	10797.9	0.797593	mg/L	0.0022248	0.797593	mg/L	0.0022248	0.28%
QC value less than the lower limit for Ag 328.068 Recovery = 79.76%								
Al 308.215†	580595.8	505.026	mg/L	3.4958	505.026	mg/L	3.4958	0.69%
QC value within limits for Al 308.215 Recovery = 101.01%								
As 188.979†	1010.0	10.1365	mg/L	0.10358	10.1365	mg/L	0.10358	1.02%
QC value within limits for As 188.979 Recovery = 101.36%								
Ba 233.527†	85320.2	10.2252	mg/L	0.01779	10.2252	mg/L	0.01779	0.17%
QC value within limits for Ba 233.527 Recovery = 102.25%								
Be 313.107†	1070659.7	4.73962	mg/L	0.029986	4.73962	mg/L	0.029986	0.63%
QC value within limits for Be 313.107 Recovery = 94.79%								
Ca 315.887†	1550213.5	477.080	mg/L	3.3312	477.080	mg/L	3.3312	0.70%
QC value within limits for Ca 315.887 Recovery = 95.42%								
Cd 228.802†	12179.3	4.87003	mg/L	0.003155	4.87003	mg/L	0.003155	0.06%
QC value within limits for Cd 228.802 Recovery = 97.40%								
Co 228.616†	9536.0	4.30544	mg/L	0.015215	4.30544	mg/L	0.015215	0.35%
QC value less than the lower limit for Co 228.616 Recovery = 86.11%								
Cr 267.716†	51305.4	9.26315	mg/L	0.010729	9.26315	mg/L	0.010729	0.12%
QC value within limits for Cr 267.716 Recovery = 92.63%								
Cu 327.393†	77154.4	10.7238	mg/L	0.01207	10.7238	mg/L	0.01207	0.11%
QC value within limits for Cu 327.393 Recovery = 107.24%								
Fe 273.955†	115184.1	202.653	mg/L	0.6928	202.653	mg/L	0.6928	0.34%
QC value within limits for Fe 273.955 Recovery = 101.33%								
K 404.721†	4184.7	-1948.58	mg/L	7.133	-1948.58	mg/L	7.133	0.37%
QC value less than the lower limit for K 404.721 Recovery = -974.29%								
Mg 279.077†	501222.6	499.237	mg/L	3.1403	499.237	mg/L	3.1403	0.63%
QC value within limits for Mg 279.077 Recovery = 99.85%								
Mn 257.610†	235386.6	9.00282	mg/L	0.058855	9.00282	mg/L	0.058855	0.65%
QC value within limits for Mn 257.610 Recovery = 90.03%								
Mo 202.031†	11005.1	9.20856	mg/L	0.016375	9.20856	mg/L	0.016375	0.18%
QC value within limits for Mo 202.031 Recovery = 92.09%								
Na 330.237†	51076.8	1327.97	mg/L	2.959	1327.97	mg/L	2.959	0.22%
QC value greater than the upper limit for Na 330.237 Recovery = 132.80%								
Ni 231.604†	27156.2	8.83133	mg/L	0.020536	8.83133	mg/L	0.020536	0.23%
QC value less than the lower limit for Ni 231.604 Recovery = 88.31%								
Pb 220.353†	5551.6	9.73880	mg/L	0.106247	9.73880	mg/L	0.106247	1.09%
QC value within limits for Pb 220.353 Recovery = 97.39%								
Sb 206.836†	696.6	5.42643	mg/L	0.073064	5.42643	mg/L	0.073064	1.35%
QC value within limits for Sb 206.836 Recovery = 108.53%								
Se 196.026†	1040.7	5.14982	mg/L	0.092324	5.14982	mg/L	0.092324	1.79%
QC value within limits for Se 196.026 Recovery = 103.00%								
Sn 189.927†	4908.8	9.93458	mg/L	0.099726	9.93458	mg/L	0.099726	1.00%
QC value within limits for Sn 189.927 Recovery = 99.35%								
Ti 334.940†	238432.7	9.21577	mg/L	0.059117	9.21577	mg/L	0.059117	0.64%
QC value within limits for Ti 334.940 Recovery = 92.16%								
Tl 190.801†	730.6	4.38306	mg/L	0.069227	4.38306	mg/L	0.069227	1.58%
QC value less than the lower limit for Tl 190.801 Recovery = 87.66%								
V 290.880†	43232.5	9.23199	mg/L	0.010000	9.23199	mg/L	0.010000	0.11%
QC value within limits for V 290.880 Recovery = 92.32%								
Zn 206.200†	30295.6	9.50612	mg/L	0.034426	9.50612	mg/L	0.034426	0.36%
QC value within limits for Zn 206.200 Recovery = 95.06%								
B 249.772	24200.5	4.51142	mg/L	0.097528	4.51142	mg/L	0.097528	2.16%
QC value within limits for B 249.772 Recovery = 90.23%								
Si 251.611	38941.3	23.7105	mg/L	0.44632	23.7105	mg/L	0.44632	1.88%
QC value within limits for Si 251.611 Recovery = 94.84%								

QC Failed. Continue with analysis.

Sequence No.: 8 **Autosampler Location: 3**
Sample ID: ICS3 V-329028 **Date Collected: 9/2/2020 4:34:07 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 85 **Auto Dilution Factor: 1**

Mean Data: ICS3 V-329028

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46916.5	91.5	%	0.15				0.16%
Y 371.029	15817.3	88.2	%	0.66				0.74%
Ag 328.068†	1320.8	0.0983630	mg/L	0.00113642	0.0983630	mg/L	0.00113642	1.16%
QC value within limits for Ag 328.068 Recovery = 98.36%								
Al 308.215†	5809.2	4.94126	mg/L	0.031900	4.94126	mg/L	0.031900	0.65%
QC value within limits for Al 308.215 Recovery = 98.83%								
As 188.979†	49.0	0.482452	mg/L	0.0097906	0.482452	mg/L	0.0097906	2.03%
QC value within limits for As 188.979 Recovery = 96.49%								
Ba 233.527†	4251.9	0.494365	mg/L	0.0010680	0.494365	mg/L	0.0010680	0.22%
QC value within limits for Ba 233.527 Recovery = 98.87%								
Be 313.107†	114044.9	0.504326	mg/L	0.0003887	0.504326	mg/L	0.0003887	0.08%
QC value within limits for Be 313.107 Recovery = 100.87%								
Ca 315.887†	165841.3	50.6811	mg/L	0.03399	50.6811	mg/L	0.03399	0.07%
QC value within limits for Ca 315.887 Recovery = 101.36%								
Cd 228.802†	1210.6	0.486737	mg/L	0.0016270	0.486737	mg/L	0.0016270	0.33%
QC value within limits for Cd 228.802 Recovery = 97.35%								
Co 228.616†	1108.6	0.500778	mg/L	0.0038979	0.500778	mg/L	0.0038979	0.78%
QC value within limits for Co 228.616 Recovery = 100.16%								
Cr 267.716†	2931.8	0.521815	mg/L	0.0019177	0.521815	mg/L	0.0019177	0.37%
QC value within limits for Cr 267.716 Recovery = 104.36%								
Cu 327.393†	3601.5	0.492779	mg/L	0.0042212	0.492779	mg/L	0.0042212	0.86%
QC value within limits for Cu 327.393 Recovery = 98.56%								
Fe 273.955†	2889.4	4.90161	mg/L	0.027033	4.90161	mg/L	0.027033	0.55%
QC value within limits for Fe 273.955 Recovery = 98.03%								
K 404.721†	865.0	-2.86083	mg/L	1.460997	-2.86083	mg/L	1.460997	51.07%
QC value less than the lower limit for K 404.721 Recovery = -5.72%								
Mg 279.077†	50911.0	50.4966	mg/L	0.03452	50.4966	mg/L	0.03452	0.07%
QC value within limits for Mg 279.077 Recovery = 100.99%								
Mn 257.610†	12669.2	0.486619	mg/L	0.0009929	0.486619	mg/L	0.0009929	0.20%
QC value within limits for Mn 257.610 Recovery = 97.32%								
Mo 202.031†	594.8	0.498387	mg/L	0.0024680	0.498387	mg/L	0.0024680	0.50%
QC value within limits for Mo 202.031 Recovery = 99.68%								
Na 330.237†	1784.4	46.9690	mg/L	0.56915	46.9690	mg/L	0.56915	1.21%
QC value within limits for Na 330.237 Recovery = 93.94%								
Ni 231.604†	1577.0	0.507110	mg/L	0.0010225	0.507110	mg/L	0.0010225	0.20%
QC value within limits for Ni 231.604 Recovery = 101.42%								
Pb 220.353†	292.0	0.504735	mg/L	0.0043111	0.504735	mg/L	0.0043111	0.85%
QC value within limits for Pb 220.353 Recovery = 100.95%								
Sb 206.836†	67.5	0.513114	mg/L	0.0210030	0.513114	mg/L	0.0210030	4.09%
QC value within limits for Sb 206.836 Recovery = 102.62%								
Se 196.026†	103.4	0.506852	mg/L	0.0048598	0.506852	mg/L	0.0048598	0.96%
QC value within limits for Se 196.026 Recovery = 101.37%								
Sn 189.927†	247.6	0.497074	mg/L	0.0062137	0.497074	mg/L	0.0062137	1.25%
QC value within limits for Sn 189.927 Recovery = 99.41%								
Ti 334.940†	12437.5	0.486949	mg/L	0.0010259	0.486949	mg/L	0.0010259	0.21%
QC value within limits for Ti 334.940 Recovery = 97.39%								
Tl 190.801†	83.7	0.494932	mg/L	0.0075666	0.494932	mg/L	0.0075666	1.53%
QC value within limits for Tl 190.801 Recovery = 98.99%								
V 290.880†	2425.7	0.511922	mg/L	0.0011521	0.511922	mg/L	0.0011521	0.23%
QC value within limits for V 290.880 Recovery = 102.38%								
Zn 206.200†	1730.6	0.520950	mg/L	0.0025074	0.520950	mg/L	0.0025074	0.48%
QC value within limits for Zn 206.200 Recovery = 104.19%								
B 249.772	2678.8	0.535872	mg/L	0.0033861	0.535872	mg/L	0.0033861	0.63%
QC value within limits for B 249.772 Recovery = 107.17%								
Si 251.611	8492.8	4.86211	mg/L	0.018872	4.86211	mg/L	0.018872	0.39%
QC value within limits for Si 251.611 Recovery = 97.24%								

QC Failed. Continue with analysis.

Sequence No.: 9 **Autosampler Location: 14**
Sample ID: RINSE **Date Collected: 9/2/2020 4:38:06 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	51017.7	99.5	%	1.28				1.28%
Y 371.029	17493.7	97.5	%	1.06				1.09%
Ag 328.068†	4.8	0.0061961	mg/L	0.00047739	0.0061961	mg/L	0.00047739	7.70%
Al 308.215†	-4.8	-0.129493	mg/L	0.0014800	-0.129493	mg/L	0.0014800	1.14%
As 188.979†	0.1	-0.0063913	mg/L	0.01632335	-0.0063913	mg/L	0.01632335	255.40%
Ba 233.527†	0.9	-0.0158861	mg/L	0.00006565	-0.0158861	mg/L	0.00006565	0.41%
Be 313.107†	29.8	-0.0004626	mg/L	0.00008234	-0.0004626	mg/L	0.00008234	17.80%
Ca 315.887†	16.7	-0.394466	mg/L	0.0067503	-0.394466	mg/L	0.0067503	1.71%
Cd 228.802†	0.2	0.0030479	mg/L	0.00097695	0.0030479	mg/L	0.00097695	32.05%
Co 228.616†	2.7	0.0015328	mg/L	0.00196890	0.0015328	mg/L	0.00196890	128.45%
Cr 267.716†	1.6	-0.0076322	mg/L	0.00071304	-0.0076322	mg/L	0.00071304	9.34%
Cu 327.393†	-13.2	-0.0095638	mg/L	0.00015257	-0.0095638	mg/L	0.00015257	1.60%
Fe 273.955†	-0.3	-0.187113	mg/L	0.0019756	-0.187113	mg/L	0.0019756	1.06%
K 404.721†	-5.0	3.62608	mg/L	0.719720	3.62608	mg/L	0.719720	19.85%
Mg 279.077†	3.4	-0.233325	mg/L	0.0066275	-0.233325	mg/L	0.0066275	2.84%
Mn 257.610†	0.8	0.0022072	mg/L	0.00008142	0.0022072	mg/L	0.00008142	3.69%
Mo 202.031†	-0.9	-0.0000620	mg/L	0.00193633	-0.0000620	mg/L	0.00193633	>999.9%
Na 330.237†	0.5	0.609050	mg/L	0.1502420	0.609050	mg/L	0.1502420	24.67%
Ni 231.604†	2.5	-0.0051870	mg/L	0.00118222	-0.0051870	mg/L	0.00118222	22.79%
Pb 220.353†	0.4	-0.0049946	mg/L	0.00133049	-0.0049946	mg/L	0.00133049	26.64%
Sb 206.836†	-0.6	-0.0079511	mg/L	0.00451713	-0.0079511	mg/L	0.00451713	56.81%
Se 196.026†	-1.5	-0.0029686	mg/L	0.02218948	-0.0029686	mg/L	0.02218948	747.47%
Sn 189.927†	1.2	-0.0016851	mg/L	0.00219994	-0.0016851	mg/L	0.00219994	130.55%
Ti 334.940†	0.6	0.0044871	mg/L	0.00004645	0.0044871	mg/L	0.00004645	1.04%
Tl 190.801†	1.1	-0.0012244	mg/L	0.00473684	-0.0012244	mg/L	0.00473684	386.88%
V 290.880†	2.0	-0.0076434	mg/L	0.00090704	-0.0076434	mg/L	0.00090704	11.87%
Zn 206.200†	-2.5	-0.0242067	mg/L	0.00034729	-0.0242067	mg/L	0.00034729	1.43%
B 249.772	47.4	-0.0013956	mg/L	0.00149625	-0.0013956	mg/L	0.00149625	107.21%
Si 251.611	3.8	0.0293493	mg/L	0.00226393	0.0293493	mg/L	0.00226393	7.71%

Sequence No.: 10
Sample ID: LLICV V-329037
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 9/2/2020 4:42:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LLICV V-329037

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	50923.7	99.3	%	0.81				0.81%
Y 371.029	16994.0	94.7	%	1.20				1.26%
Ag 328.068†	596.1	0.0469496	mg/L	0.00022095	0.0469496	mg/L	0.00022095	0.47%
QC value within limits for Ag 328.068 Recovery = 93.90%								
Al 308.215†	1533.0	1.21115	mg/L	0.014430	1.21115	mg/L	0.014430	1.19%
QC value greater than the upper limit for Al 308.215 Recovery = 121.12%								
As 188.979†	9.4	0.0865862	mg/L	0.00754087	0.0865862	mg/L	0.00754087	8.71%
QC value within limits for As 188.979 Recovery = 86.59%								
Ba 233.527†	2453.4	0.278486	mg/L	0.0022322	0.278486	mg/L	0.0022322	0.80%
QC value within limits for Ba 233.527 Recovery = 111.39%								
Be 313.107†	2818.1	0.0118822	mg/L	0.00004700	0.0118822	mg/L	0.00004700	0.40%
QC value within limits for Be 313.107 Recovery = 99.02%								
Ca 315.887†	17940.5	5.12623	mg/L	0.004534	5.12623	mg/L	0.004534	0.09%
QC value within limits for Ca 315.887 Recovery = 102.52%								
Cd 228.802†	124.6	0.0527832	mg/L	0.00127166	0.0527832	mg/L	0.00127166	2.41%
QC value within limits for Cd 228.802 Recovery = 105.57%								
Co 228.616†	227.8	0.103153	mg/L	0.0009092	0.103153	mg/L	0.0009092	0.88%
QC value within limits for Co 228.616 Recovery = 103.15%								
Cr 267.716†	599.8	0.100479	mg/L	0.0009132	0.100479	mg/L	0.0009132	0.91%
QC value within limits for Cr 267.716 Recovery = 100.48%								
Cu 327.393†	878.5	0.114375	mg/L	0.0017207	0.114375	mg/L	0.0017207	1.50%
QC value within limits for Cu 327.393 Recovery = 114.38%								
Fe 273.955†	793.7	1.21103	mg/L	0.019640	1.21103	mg/L	0.019640	1.62%
QC value greater than the upper limit for Fe 273.955 Recovery = 121.10%								
K 404.721†	26.3	-9.69745	mg/L	0.456968	-9.69745	mg/L	0.456968	4.71%
QC value less than the lower limit for K 404.721 Recovery = -193.95%								
Mg 279.077†	5388.9	5.13336	mg/L	0.004476	5.13336	mg/L	0.004476	0.09%
QC value within limits for Mg 279.077 Recovery = 102.67%								
Mn 257.610†	2694.6	0.105213	mg/L	0.0004436	0.105213	mg/L	0.0004436	0.42%
QC value within limits for Mn 257.610 Recovery = 105.21%								
Mo 202.031†	122.3	0.103046	mg/L	0.0012308	0.103046	mg/L	0.0012308	1.19%
QC value within limits for Mo 202.031 Recovery = 103.05%								
Na 330.237†	980.8	26.0835	mg/L	0.30994	26.0835	mg/L	0.30994	1.19%
QC value within limits for Na 330.237 Recovery = 104.33%								
Ni 231.604†	330.2	0.101429	mg/L	0.0009419	0.101429	mg/L	0.0009419	0.93%
QC value within limits for Ni 231.604 Recovery = 101.43%								
Pb 220.353†	31.5	0.0494583	mg/L	0.00281776	0.0494583	mg/L	0.00281776	5.70%
QC value within limits for Pb 220.353 Recovery = 98.92%								
Sb 206.836†	8.4	0.0613564	mg/L	0.00740688	0.0613564	mg/L	0.00740688	12.07%
QC value within limits for Sb 206.836 Recovery = 87.65%								
Se 196.026†	17.7	0.0903327	mg/L	0.00920349	0.0903327	mg/L	0.00920349	10.19%
QC value within limits for Se 196.026 Recovery = 90.33%								
Sn 189.927†	53.8	0.104738	mg/L	0.0033800	0.104738	mg/L	0.0033800	3.23%
QC value within limits for Sn 189.927 Recovery = 104.74%								
Ti 334.940†	2608.9	0.105276	mg/L	0.0002573	0.105276	mg/L	0.0002573	0.24%
QC value within limits for Ti 334.940 Recovery = 105.28%								
Tl 190.801†	18.6	0.103687	mg/L	0.0082924	0.103687	mg/L	0.0082924	8.00%
QC value within limits for Tl 190.801 Recovery = 103.69%								
V 290.880†	527.9	0.104747	mg/L	0.0011095	0.104747	mg/L	0.0011095	1.06%
QC value within limits for V 290.880 Recovery = 104.75%								
Zn 206.200†	431.3	0.112243	mg/L	0.0012969	0.112243	mg/L	0.0012969	1.16%
QC value within limits for Zn 206.200 Recovery = 112.24%								
B 249.772	1122.7	0.214803	mg/L	0.0004342	0.214803	mg/L	0.0004342	0.20%
QC value within limits for B 249.772 Recovery = 107.40%								
Si 251.611	298.7	0.220096	mg/L	0.0024429	0.220096	mg/L	0.0024429	1.11%
QC value greater than the upper limit for Si 251.611 Recovery = 220.10%								

QC Failed. Continue with analysis.

Sequence No.: 11 **Autosampler Location: 7**
Sample ID: ICSA V-329033 **Date Collected: 9/2/2020 4:46:04 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICSA V-329033

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	42862.4	83.6	%	0.43				0.52%
Y 371.029	14550.8	81.1	%	0.40				0.49%
Ag 328.068†	-527.1	-0.0149580	mg/L	0.00054560	-0.0149580	mg/L	0.00054560	3.65%
Al 308.215†	637474.4	554.240	mg/L	4.7845	554.240	mg/L	4.7845	0.86%
QC value within limits for Al 308.215 Recovery = 110.85%								
As 188.979†	-2.7	-0.0402146	mg/L	0.02121735	-0.0402146	mg/L	0.02121735	52.76%
Ba 233.527†	53.1	-0.0096273	mg/L	0.00041815	-0.0096273	mg/L	0.00041815	4.34%
Be 313.107†	-109.4	-0.0010791	mg/L	0.00011871	-0.0010791	mg/L	0.00011871	11.00%
Ca 315.887†	1708023.5	525.687	mg/L	5.1139	525.687	mg/L	5.1139	0.97%
QC value within limits for Ca 315.887 Recovery = 105.14%								
Cd 228.802†	1.4	0.0035387	mg/L	0.00104360	0.0035387	mg/L	0.00104360	29.49%
Co 228.616†	1.2	0.0008609	mg/L	0.00142686	0.0008609	mg/L	0.00142686	165.73%
Cr 267.716†	-19.1	-0.0106881	mg/L	0.00114093	-0.0106881	mg/L	0.00114093	10.67%
Cu 327.393†	-179.9	-0.0108958	mg/L	0.00082867	-0.0108958	mg/L	0.00082867	7.61%
Fe 273.955†	123851.1	217.915	mg/L	0.5982	217.915	mg/L	0.5982	0.27%
QC value within limits for Fe 273.955 Recovery = 108.96%								
K 404.721†	8.2	-2344.97	mg/L	6.203	-2344.97	mg/L	6.203	0.26%
Mg 279.077†	558590.1	556.404	mg/L	5.8564	556.404	mg/L	5.8564	1.05%
QC value within limits for Mg 279.077 Recovery = 111.28%								
Mn 257.610†	-304.0	-0.0094473	mg/L	0.00016944	-0.0094473	mg/L	0.00016944	1.79%
Mo 202.031†	-5.6	-0.0039574	mg/L	0.00539505	-0.0039574	mg/L	0.00539505	136.33%
Na 330.237†	-34.3	-0.295401	mg/L	0.2019584	-0.295401	mg/L	0.2019584	68.37%
Ni 231.604†	9.2	-0.0030355	mg/L	0.00138531	-0.0030355	mg/L	0.00138531	45.64%
Pb 220.353†	-21.7	0.0197041	mg/L	0.00457949	0.0197041	mg/L	0.00457949	23.24%
Sb 206.836†	-0.2	-0.0049692	mg/L	0.01678436	-0.0049692	mg/L	0.01678436	337.77%
Se 196.026†	-31.5	0.0464509	mg/L	0.01555359	0.0464509	mg/L	0.01555359	33.48%
Sn 189.927†	-21.0	-0.0469380	mg/L	0.00630203	-0.0469380	mg/L	0.00630203	13.43%
Ti 334.940†	-213.4	0.0362344	mg/L	0.00041962	0.0362344	mg/L	0.00041962	1.16%
Tl 190.801†	-2.1	-0.0372211	mg/L	0.01017653	-0.0372211	mg/L	0.01017653	27.34%
V 290.880†	688.8	0.163452	mg/L	0.0048299	0.163452	mg/L	0.0048299	2.95%
Zn 206.200†	24.0	-0.0158680	mg/L	0.00067227	-0.0158680	mg/L	0.00067227	4.24%
B 249.772	4264.7	0.103425	mg/L	0.0085369	0.103425	mg/L	0.0085369	8.25%
Si 251.611	-5.4	0.916218	mg/L	0.0059637	0.916218	mg/L	0.0059637	0.65%

All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 6**
Sample ID: CCV V-329036 **Date Collected: 9/2/2020 4:50:48 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 85 **Auto Dilution Factor: 1**

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	46713.4	91.1	%	0.32				0.35%
Y 371.029	15624.0	87.1	%	0.28				0.32%
Ag 328.068†	1407.8	0.104400	mg/L	0.0003440	0.104400	mg/L	0.0003440	0.33%
QC value within limits for Ag 328.068 Recovery = 104.40%								
Al 308.215†	6075.9	5.17396	mg/L	0.031572	5.17396	mg/L	0.031572	0.61%
QC value within limits for Al 308.215 Recovery = 103.48%								
As 188.979†	51.5	0.508169	mg/L	0.0088942	0.508169	mg/L	0.0088942	1.75%
QC value within limits for As 188.979 Recovery = 101.63%								
Ba 233.527†	4428.0	0.515503	mg/L	0.0019145	0.515503	mg/L	0.0019145	0.37%
QC value within limits for Ba 233.527 Recovery = 103.10%								
Be 313.107†	119381.0	0.527951	mg/L	0.0013315	0.527951	mg/L	0.0013315	0.25%
QC value within limits for Be 313.107 Recovery = 105.59%								
Ca 315.887†	172610.9	52.7661	mg/L	0.04886	52.7661	mg/L	0.04886	0.09%
QC value within limits for Ca 315.887 Recovery = 105.53%								
Cd 228.802†	1266.4	0.509065	mg/L	0.0025912	0.509065	mg/L	0.0025912	0.51%
QC value within limits for Cd 228.802 Recovery = 101.81%								
Co 228.616†	1152.1	0.520426	mg/L	0.0027492	0.520426	mg/L	0.0027492	0.53%
QC value within limits for Co 228.616 Recovery = 104.09%								
Cr 267.716†	3050.6	0.543307	mg/L	0.0049493	0.543307	mg/L	0.0049493	0.91%
QC value within limits for Cr 267.716 Recovery = 108.66%								
Cu 327.393†	3765.0	0.515488	mg/L	0.0033062	0.515488	mg/L	0.0033062	0.64%
QC value within limits for Cu 327.393 Recovery = 103.10%								
Fe 273.955†	2980.0	5.06118	mg/L	0.033074	5.06118	mg/L	0.033074	0.65%
QC value within limits for Fe 273.955 Recovery = 101.22%								
K 404.721†	905.9	-2.30852	mg/L	1.041108	-2.30852	mg/L	1.041108	45.10%
QC value less than the lower limit for K 404.721 Recovery = -4.62%								
Mg 279.077†	52973.2	52.5517	mg/L	0.04483	52.5517	mg/L	0.04483	0.09%
QC value within limits for Mg 279.077 Recovery = 105.10%								
Mn 257.610†	13226.4	0.507925	mg/L	0.0014602	0.507925	mg/L	0.0014602	0.29%
QC value within limits for Mn 257.610 Recovery = 101.58%								
Mo 202.031†	620.6	0.519970	mg/L	0.0039394	0.519970	mg/L	0.0039394	0.76%
QC value within limits for Mo 202.031 Recovery = 103.99%								
Na 330.237†	1868.5	49.1530	mg/L	0.32977	49.1530	mg/L	0.32977	0.67%
QC value within limits for Na 330.237 Recovery = 98.31%								
Ni 231.604†	1640.2	0.527662	mg/L	0.0057467	0.527662	mg/L	0.0057467	1.09%
QC value within limits for Ni 231.604 Recovery = 105.53%								
Pb 220.353†	308.3	0.533242	mg/L	0.0073345	0.533242	mg/L	0.0073345	1.38%
QC value within limits for Pb 220.353 Recovery = 106.65%								
Sb 206.836†	70.4	0.535309	mg/L	0.0127989	0.535309	mg/L	0.0127989	2.39%
QC value within limits for Sb 206.836 Recovery = 107.06%								
Se 196.026†	107.3	0.525765	mg/L	0.0091287	0.525765	mg/L	0.0091287	1.74%
QC value within limits for Se 196.026 Recovery = 105.15%								
Sn 189.927†	254.3	0.510648	mg/L	0.0077447	0.510648	mg/L	0.0077447	1.52%
QC value within limits for Sn 189.927 Recovery = 102.13%								
Ti 334.940†	12891.3	0.504568	mg/L	0.0018490	0.504568	mg/L	0.0018490	0.37%
QC value within limits for Ti 334.940 Recovery = 100.91%								
Tl 190.801†	88.7	0.525449	mg/L	0.0050594	0.525449	mg/L	0.0050594	0.96%
QC value within limits for Tl 190.801 Recovery = 105.09%								
V 290.880†	2542.4	0.536913	mg/L	0.0019339	0.536913	mg/L	0.0019339	0.36%
QC value within limits for V 290.880 Recovery = 107.38%								
Zn 206.200†	1773.4	0.534406	mg/L	0.0052874	0.534406	mg/L	0.0052874	0.99%
QC value within limits for Zn 206.200 Recovery = 106.88%								
B 249.772	2688.3	0.538184	mg/L	0.0026946	0.538184	mg/L	0.0026946	0.50%
QC value within limits for B 249.772 Recovery = 107.64%								
Si 251.611	8785.7	5.02889	mg/L	0.028337	5.02889	mg/L	0.028337	0.56%
QC value within limits for Si 251.611 Recovery = 100.58%								

QC Failed. Continue with analysis.

Sequence No.: 13 **Autosampler Location: 2**
Sample ID: CCB V-329027 **Date Collected: 9/2/2020 4:54:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	50617.9	98.7	%	0.82				0.83%
Y 371.029	17281.0	96.3	%	0.17				0.17%
Ag 328.068†	2.0	0.0059979	mg/L	0.00015604	0.0059979	mg/L	0.00015604	2.60%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-12.9	-0.136658	mg/L	0.0018723	-0.136658	mg/L	0.0018723	1.37%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.1	-0.0078971	mg/L	0.02142183	-0.0078971	mg/L	0.02142183	271.26%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	2.1	-0.0157434	mg/L	0.00031165	-0.0157434	mg/L	0.00031165	1.98%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	8.8	-0.0005557	mg/L	0.00002336	-0.0005557	mg/L	0.00002336	4.20%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-64.6	-0.419509	mg/L	0.0031213	-0.419509	mg/L	0.0031213	0.74%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.9	0.0026385	mg/L	0.00058272	0.0026385	mg/L	0.00058272	22.09%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.7	0.0006273	mg/L	0.00132785	0.0006273	mg/L	0.00132785	211.68%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.6	-0.0076502	mg/L	0.00023742	-0.0076502	mg/L	0.00023742	3.10%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-14.6	-0.0097486	mg/L	0.00136354	-0.0097486	mg/L	0.00136354	13.99%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-2.6	-0.191162	mg/L	0.0036180	-0.191162	mg/L	0.0036180	1.89%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-3.5	3.75298	mg/L	0.779066	3.75298	mg/L	0.779066	20.76%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	7.9	-0.228782	mg/L	0.0075447	-0.228782	mg/L	0.0075447	3.30%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-10.3	0.0017830	mg/L	0.00004294	0.0017830	mg/L	0.00004294	2.41%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.1	0.0006061	mg/L	0.00131145	0.0006061	mg/L	0.00131145	216.37%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	0.4	0.606413	mg/L	0.0897808	0.606413	mg/L	0.0897808	14.81%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-1.8	-0.0065900	mg/L	0.00158692	-0.0065900	mg/L	0.00158692	24.08%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.1	-0.0057604	mg/L	0.00634973	-0.0057604	mg/L	0.00634973	110.23%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.3	-0.0063373	mg/L	0.01054833	-0.0063373	mg/L	0.01054833	166.45%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.6	0.0010952	mg/L	0.00994244	0.0010952	mg/L	0.00994244	907.82%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.0	-0.0041166	mg/L	0.00334438	-0.0041166	mg/L	0.00334438	81.24%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-2.8	0.0043567	mg/L	0.00018834	0.0043567	mg/L	0.00018834	4.32%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.3	-0.0001273	mg/L	0.01334001	-0.0001273	mg/L	0.01334001	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-4.0	-0.0089246	mg/L	0.00038726	-0.0089246	mg/L	0.00038726	4.34%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-12.3	-0.0272907	mg/L	0.00077496	-0.0272907	mg/L	0.00077496	2.84%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	14.0	-0.0080960	mg/L	0.00035676	-0.0080960	mg/L	0.00035676	4.41%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-4.4	0.0245858	mg/L	0.00181679	0.0245858	mg/L	0.00181679	7.39%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 14 **Autosampler Location: 85**
Sample ID: MB 85227 (1) **Date Collected: 9/2/2020 4:58:43 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: MB 85227 (1)

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	50863.7	99.2	%	0.46				0.47%
Y 371.029	17200.8	95.9	%	1.02				1.06%
Ag 328.068†	-2.5	0.0056994	mg/L	0.00065494	0.0056994	mg/L	0.00065494	11.49%
Al 308.215†	7.8	-0.118625	mg/L	0.0019161	-0.118625	mg/L	0.0019161	1.62%
As 188.979†	-0.8	-0.0152389	mg/L	0.01278222	-0.0152389	mg/L	0.01278222	83.88%
Ba 233.527†	7.2	-0.0151344	mg/L	0.00031201	-0.0151344	mg/L	0.00031201	2.06%
Be 313.107†	2.6	-0.0005832	mg/L	0.00004369	-0.0005832	mg/L	0.00004369	7.49%
Ca 315.887†	112.5	-0.364949	mg/L	0.0008119	-0.364949	mg/L	0.0008119	0.22%
Cd 228.802†	1.5	0.0035621	mg/L	0.00081326	0.0035621	mg/L	0.00081326	22.83%
Co 228.616†	1.4	0.0009559	mg/L	0.00072628	0.0009559	mg/L	0.00072628	75.98%
Cr 267.716†	3.7	-0.0072665	mg/L	0.00039719	-0.0072665	mg/L	0.00039719	5.47%
Cu 327.393†	3.3	-0.0072601	mg/L	0.00073430	-0.0072601	mg/L	0.00073430	10.11%
Fe 273.955†	35.5	-0.124163	mg/L	0.0031970	-0.124163	mg/L	0.0031970	2.57%
K 404.721†	-17.1	2.27311	mg/L	0.166952	2.27311	mg/L	0.166952	7.34%
Mg 279.077†	10.4	-0.226379	mg/L	0.0034878	-0.226379	mg/L	0.0034878	1.54%
Mn 257.610†	24.5	0.0031152	mg/L	0.00018417	0.0031152	mg/L	0.00018417	5.91%
Mo 202.031†	-0.0	0.0006513	mg/L	0.00067386	0.0006513	mg/L	0.00067386	103.47%
Na 330.237†	2.9	0.672504	mg/L	0.1536973	0.672504	mg/L	0.1536973	22.85%
Ni 231.604†	-0.3	-0.0060877	mg/L	0.00087898	-0.0060877	mg/L	0.00087898	14.44%
Pb 220.353†	2.1	-0.0020185	mg/L	0.00243092	-0.0020185	mg/L	0.00243092	120.43%
Sb 206.836†	0.6	0.0004172	mg/L	0.00655904	0.0004172	mg/L	0.00655904	>999.9%
Se 196.026†	-2.8	-0.0093042	mg/L	0.01699710	-0.0093042	mg/L	0.01699710	182.68%
Sn 189.927†	0.4	-0.0033682	mg/L	0.00272659	-0.0033682	mg/L	0.00272659	80.95%
Ti 334.940†	15.7	0.0050720	mg/L	0.00020273	0.0050720	mg/L	0.00020273	4.00%
Tl 190.801†	0.9	-0.0024657	mg/L	0.00781269	-0.0024657	mg/L	0.00781269	316.86%
V 290.880†	-1.8	-0.0084486	mg/L	0.00083558	-0.0084486	mg/L	0.00083558	9.89%
Zn 206.200†	14.4	-0.0188973	mg/L	0.00026612	-0.0188973	mg/L	0.00026612	1.41%
B 249.772	6.5	-0.0098124	mg/L	0.00067321	-0.0098124	mg/L	0.00067321	6.86%
Si 251.611	76.5	0.0697586	mg/L	0.00297118	0.0697586	mg/L	0.00297118	4.26%

Sequence No.: 15
Sample ID: LCS 85227
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 86
Date Collected: 9/2/2020 5:02:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LCS 85227

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46023.1	89.7	%	1.03				1.15%
Y 371.029	15771.7	87.9	%	1.11				1.26%
Ag 328.068†	1248.8	0.0937015	mg/L	0.00051551	0.0937015	mg/L	0.00051551	0.55%
Al 308.215†	6186.1	5.27020	mg/L	0.015088	5.27020	mg/L	0.015088	0.29%
As 188.979†	49.9	0.490252	mg/L	0.0046719	0.490252	mg/L	0.0046719	0.95%
Ba 233.527†	4635.8	0.540445	mg/L	0.0021396	0.540445	mg/L	0.0021396	0.40%
Be 313.107†	121383.2	0.536815	mg/L	0.0008300	0.536815	mg/L	0.0008300	0.15%
Ca 315.887†	179312.4	54.8303	mg/L	0.08420	54.8303	mg/L	0.08420	0.15%
Cd 228.802†	1298.5	0.521898	mg/L	0.0020211	0.521898	mg/L	0.0020211	0.39%
Co 228.616†	1176.2	0.531295	mg/L	0.0057794	0.531295	mg/L	0.0057794	1.09%
Cr 267.716†	3112.1	0.554422	mg/L	0.0041067	0.554422	mg/L	0.0041067	0.74%
Cu 327.393†	3862.7	0.529074	mg/L	0.0024733	0.529074	mg/L	0.0024733	0.47%
Fe 273.955†	3091.8	5.25807	mg/L	0.016261	5.25807	mg/L	0.016261	0.31%
K 404.721†	350.5	-35.2814	mg/L	0.58219	-35.2814	mg/L	0.58219	1.65%
Mg 279.077†	54809.2	54.3812	mg/L	0.08530	54.3812	mg/L	0.08530	0.16%
Mn 257.610†	13515.0	0.518958	mg/L	0.0007353	0.518958	mg/L	0.0007353	0.14%
Mo 202.031†	641.1	0.537087	mg/L	0.0035523	0.537087	mg/L	0.0035523	0.66%
Na 330.237†	1936.8	50.9283	mg/L	0.39381	50.9283	mg/L	0.39381	0.77%
Ni 231.604†	1680.3	0.540731	mg/L	0.0057951	0.540731	mg/L	0.0057951	1.07%
Pb 220.353†	310.2	0.536583	mg/L	0.0023314	0.536583	mg/L	0.0023314	0.43%
Sb 206.836†	73.2	0.556673	mg/L	0.0174095	0.556673	mg/L	0.0174095	3.13%
Se 196.026†	110.4	0.540720	mg/L	0.0300957	0.540720	mg/L	0.0300957	5.57%
Sn 189.927†	257.8	0.517597	mg/L	0.0094694	0.517597	mg/L	0.0094694	1.83%
Ti 334.940†	13217.0	0.517261	mg/L	0.0012705	0.517261	mg/L	0.0012705	0.25%
Tl 190.801†	89.6	0.530260	mg/L	0.0026869	0.530260	mg/L	0.0026869	0.51%
V 290.880†	2611.5	0.551750	mg/L	0.0014340	0.551750	mg/L	0.0014340	0.26%
Zn 206.200†	1819.1	0.548790	mg/L	0.0036053	0.548790	mg/L	0.0036053	0.66%
B 249.772	2862.4	0.567107	mg/L	0.0037639	0.567107	mg/L	0.0037639	0.66%
Si 251.611	1098.2	0.750975	mg/L	0.0039704	0.750975	mg/L	0.0039704	0.53%

Sequence No.: 16 **Autosampler Location: 87**
Sample ID: LCS MR 85227 **Date Collected: 9/2/2020 5:06:43 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: LCS MR 85227

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	45720.1	89.1	%	0.97				1.09%
Y 371.029	15661.1	87.3	%	1.57				1.80%
Ag 328.068†	1259.4	0.0944071	mg/L	0.00161318	0.0944071	mg/L	0.00161318	1.71%
Al 308.215†	6165.2	5.25177	mg/L	0.017819	5.25177	mg/L	0.017819	0.34%
As 188.979†	50.6	0.497059	mg/L	0.0102557	0.497059	mg/L	0.0102557	2.06%
Ba 233.527†	4627.2	0.539417	mg/L	0.0006173	0.539417	mg/L	0.0006173	0.11%
Be 313.107†	121583.1	0.537700	mg/L	0.0007092	0.537700	mg/L	0.0007092	0.13%
Ca 315.887†	178261.6	54.5066	mg/L	0.07919	54.5066	mg/L	0.07919	0.15%
Cd 228.802†	1306.0	0.524871	mg/L	0.0079037	0.524871	mg/L	0.0079037	1.51%
Co 228.616†	1185.4	0.535443	mg/L	0.0062843	0.535443	mg/L	0.0062843	1.17%
Cr 267.716†	3130.5	0.557729	mg/L	0.0058924	0.557729	mg/L	0.0058924	1.06%
Cu 327.393†	3843.2	0.526356	mg/L	0.0023032	0.526356	mg/L	0.0023032	0.44%
Fe 273.955†	3063.7	5.20847	mg/L	0.025122	5.20847	mg/L	0.025122	0.48%
K 404.721†	336.8	-35.5055	mg/L	0.89833	-35.5055	mg/L	0.89833	2.53%
Mg 279.077†	54473.0	54.0462	mg/L	0.11047	54.0462	mg/L	0.11047	0.20%
Mn 257.610†	13507.8	0.518685	mg/L	0.0009718	0.518685	mg/L	0.0009718	0.19%
Mo 202.031†	642.5	0.538305	mg/L	0.0092041	0.538305	mg/L	0.0092041	1.71%
Na 330.237†	1924.1	50.5978	mg/L	0.47985	50.5978	mg/L	0.47985	0.95%
Ni 231.604†	1686.4	0.542703	mg/L	0.0058540	0.542703	mg/L	0.0058540	1.08%
Pb 220.353†	311.6	0.539051	mg/L	0.0102478	0.539051	mg/L	0.0102478	1.90%
Sb 206.836†	74.2	0.564078	mg/L	0.0057055	0.564078	mg/L	0.0057055	1.01%
Se 196.026†	107.0	0.524608	mg/L	0.0082578	0.524608	mg/L	0.0082578	1.57%
Sn 189.927†	263.0	0.528197	mg/L	0.0069396	0.528197	mg/L	0.0069396	1.31%
Ti 334.940†	13243.7	0.518261	mg/L	0.0006358	0.518261	mg/L	0.0006358	0.12%
Tl 190.801†	90.3	0.534595	mg/L	0.0153436	0.534595	mg/L	0.0153436	2.87%
V 290.880†	2598.8	0.549019	mg/L	0.0062081	0.549019	mg/L	0.0062081	1.13%
Zn 206.200†	1812.5	0.546706	mg/L	0.0060102	0.546706	mg/L	0.0060102	1.10%
B 249.772	2838.4	0.562336	mg/L	0.0030129	0.562336	mg/L	0.0030129	0.54%
Si 251.611	1053.0	0.725108	mg/L	0.0014622	0.725108	mg/L	0.0014622	0.20%

Sequence No.: 17
Sample ID: AD18955-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 88
Date Collected: 9/2/2020 5:10:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	42504.7	82.9	%	0.56				0.68%
Y 371.029	14226.3	79.3	%	0.52				0.66%
Ag 328.068†	189.3	0.0187936	mg/L	0.00030133	0.0187936	mg/L	0.00030133	1.60%
Al 308.215†	44.4	-0.0860938	mg/L	0.00152954	-0.0860938	mg/L	0.00152954	1.78%
As 188.979†	0.4	-0.0038640	mg/L	0.01926112	-0.0038640	mg/L	0.01926112	498.48%
Ba 233.527†	4200.2	0.488157	mg/L	0.0011577	0.488157	mg/L	0.0011577	0.24%
Be 313.107†	-126.9	-0.0011565	mg/L	0.00006992	-0.0011565	mg/L	0.00006992	6.05%
Ca 315.887†	2508150.5	772.134	mg/L	4.4932	772.134	mg/L	4.4932	0.58%
Cd 228.802†	2.4	0.0039434	mg/L	0.00053021	0.0039434	mg/L	0.00053021	13.45%
Co 228.616†	5.7	0.0028856	mg/L	0.00086612	0.0028856	mg/L	0.00086612	30.02%
Cr 267.716†	16.4	-0.0048953	mg/L	0.00049204	-0.0048953	mg/L	0.00049204	10.05%
Cu 327.393†	-74.0	-0.0179897	mg/L	0.00076863	-0.0179897	mg/L	0.00076863	4.27%
Fe 273.955†	41.6	-0.113474	mg/L	0.0032493	-0.113474	mg/L	0.0032493	2.86%
K 404.721†	39.7	5.31375	mg/L	0.081220	5.31375	mg/L	0.081220	1.53%
Mg 279.077†	6764.2	6.50393	mg/L	0.018438	6.50393	mg/L	0.018438	0.28%
Mn 257.610†	71348.6	2.73038	mg/L	0.001370	2.73038	mg/L	0.001370	0.05%
Mo 202.031†	8.2	0.0075597	mg/L	0.00077436	0.0075597	mg/L	0.00077436	10.24%
Na 330.237†	72268.0	1878.68	mg/L	0.360	1878.68	mg/L	0.360	0.02%
Ni 231.604†	65.6	0.0153034	mg/L	0.00144977	0.0153034	mg/L	0.00144977	9.47%
Pb 220.353†	-0.7	-0.0068341	mg/L	0.00501865	-0.0068341	mg/L	0.00501865	73.44%
Sb 206.836†	1.5	0.0075828	mg/L	0.02198998	0.0075828	mg/L	0.02198998	290.00%
Se 196.026†	-0.7	0.0627122	mg/L	0.02019304	0.0627122	mg/L	0.02019304	32.20%
Sn 189.927†	-10.7	-0.0259623	mg/L	0.00053721	-0.0259623	mg/L	0.00053721	2.07%
Ti 334.940†	-290.7	0.0519892	mg/L	0.00059736	0.0519892	mg/L	0.00059736	1.15%
Tl 190.801†	0.4	-0.0432660	mg/L	0.00703099	-0.0432660	mg/L	0.00703099	16.25%
V 290.880†	78.0	0.0089537	mg/L	0.00119894	0.0089537	mg/L	0.00119894	13.39%
Zn 206.200†	68.1	-0.0019991	mg/L	0.00068527	-0.0019991	mg/L	0.00068527	34.28%
B 249.772	1846.0	0.353555	mg/L	0.0019315	0.353555	mg/L	0.0019315	0.55%
Si 251.611	3176.4	2.10834	mg/L	0.108022	2.10834	mg/L	0.108022	5.12%

Sequence No.: 18
Sample ID: AD18955-001 MR
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 89
Date Collected: 9/2/2020 5:14:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-001 MR

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	42214.0	82.3	%	0.33				0.40%
Y 371.029	14173.2	79.0	%	0.16				0.20%
Ag 328.068†	201.9	0.0196501	mg/L	0.00026842	0.0196501	mg/L	0.00026842	1.37%
Al 308.215†	41.3	-0.0886707	mg/L	0.00144833	-0.0886707	mg/L	0.00144833	1.63%
As 188.979†	-0.2	-0.0092936	mg/L	0.01858228	-0.0092936	mg/L	0.01858228	199.95%
Ba 233.527†	4300.3	0.500172	mg/L	0.0027574	0.500172	mg/L	0.0027574	0.55%
Be 313.107†	-139.7	-0.0012129	mg/L	0.00008197	-0.0012129	mg/L	0.00008197	6.76%
Ca 315.887†	2594807.0	798.825	mg/L	9.3335	798.825	mg/L	9.3335	1.17%
Cd 228.802†	2.5	0.0039990	mg/L	0.00076042	0.0039990	mg/L	0.00076042	19.02%
Co 228.616†	8.2	0.0040168	mg/L	0.00026633	0.0040168	mg/L	0.00026633	6.63%
Cr 267.716†	17.2	-0.0047414	mg/L	0.00030522	-0.0047414	mg/L	0.00030522	6.44%
Cu 327.393†	-74.0	-0.0179997	mg/L	0.00126110	-0.0179997	mg/L	0.00126110	7.01%
Fe 273.955†	12.9	-0.163918	mg/L	0.0042179	-0.163918	mg/L	0.0042179	2.57%
K 404.721†	35.8	5.64022	mg/L	0.293204	5.64022	mg/L	0.293204	5.20%
Mg 279.077†	6988.8	6.72772	mg/L	0.020957	6.72772	mg/L	0.020957	0.31%
Mn 257.610†	73459.2	2.81108	mg/L	0.001819	2.81108	mg/L	0.001819	0.06%
Mo 202.031†	7.6	0.0070098	mg/L	0.00130038	0.0070098	mg/L	0.00130038	18.55%
Na 330.237†	74403.4	1934.17	mg/L	7.118	1934.17	mg/L	7.118	0.37%
Ni 231.604†	64.8	0.0150478	mg/L	0.00169545	0.0150478	mg/L	0.00169545	11.27%
Pb 220.353†	-1.0	-0.0072143	mg/L	0.00317809	-0.0072143	mg/L	0.00317809	44.05%
Sb 206.836†	-0.6	-0.0083014	mg/L	0.00943846	-0.0083014	mg/L	0.00943846	113.70%
Se 196.026†	0.4	0.0703214	mg/L	0.01433595	0.0703214	mg/L	0.01433595	20.39%
Sn 189.927†	-13.2	-0.0308942	mg/L	0.00648573	-0.0308942	mg/L	0.00648573	20.99%
Ti 334.940†	-307.3	0.0533805	mg/L	0.00087800	0.0533805	mg/L	0.00087800	1.64%
Tl 190.801†	0.0	-0.0467145	mg/L	0.00810236	-0.0467145	mg/L	0.00810236	17.34%
V 290.880†	84.1	0.0102640	mg/L	0.00092030	0.0102640	mg/L	0.00092030	8.97%
Zn 206.200†	63.8	-0.0033372	mg/L	0.00137022	-0.0033372	mg/L	0.00137022	41.06%
B 249.772	1878.0	0.359841	mg/L	0.0013634	0.359841	mg/L	0.0013634	0.38%
Si 251.611	3114.4	2.08374	mg/L	0.014879	2.08374	mg/L	0.014879	0.71%

Sequence No.: 19
Sample ID: AD18955-002 MS 1
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 90
Date Collected: 9/2/2020 5:19:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-002 MS 1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	43118.5	84.1	%	0.78				0.92%
Y 371.029	14433.4	80.4	%	0.66				0.83%
Ag 328.068†	1506.1	0.111080	mg/L	0.0013589	0.111080	mg/L	0.0013589	1.22%
Al 308.215†	6066.9	5.16672	mg/L	0.013732	5.16672	mg/L	0.013732	0.27%
As 188.979†	52.2	0.514984	mg/L	0.0292088	0.514984	mg/L	0.0292088	5.67%
Ba 233.527†	7400.6	0.872315	mg/L	0.0013988	0.872315	mg/L	0.0013988	0.16%
Be 313.107†	113311.5	0.501079	mg/L	0.0060936	0.501079	mg/L	0.0060936	1.22%
Ca 315.887†	2514288.9	774.024	mg/L	8.2245	774.024	mg/L	8.2245	1.06%
Cd 228.802†	1322.6	0.531522	mg/L	0.0039123	0.531522	mg/L	0.0039123	0.74%
Co 228.616†	1101.2	0.497466	mg/L	0.0025031	0.497466	mg/L	0.0025031	0.50%
Cr 267.716†	2943.6	0.524082	mg/L	0.0023118	0.524082	mg/L	0.0023118	0.44%
Cu 327.393†	3953.1	0.541584	mg/L	0.0030070	0.541584	mg/L	0.0030070	0.56%
Fe 273.955†	2856.6	4.84389	mg/L	0.024645	4.84389	mg/L	0.024645	0.51%
K 404.721†	500.5	-22.4871	mg/L	1.15712	-22.4871	mg/L	1.15712	5.15%
Mg 279.077†	71144.9	70.6600	mg/L	0.12589	70.6600	mg/L	0.12589	0.18%
Mn 257.610†	47809.6	1.83030	mg/L	0.004582	1.83030	mg/L	0.004582	0.25%
Mo 202.031†	611.0	0.511872	mg/L	0.0003483	0.511872	mg/L	0.0003483	0.07%
Na 330.237†	77919.3	2025.54	mg/L	2.081	2025.54	mg/L	2.081	0.10%
Ni 231.604†	1549.6	0.498238	mg/L	0.0017973	0.498238	mg/L	0.0017973	0.36%
Pb 220.353†	286.9	0.495751	mg/L	0.0053183	0.495751	mg/L	0.0053183	1.07%
Sb 206.836†	75.0	0.569495	mg/L	0.0191787	0.569495	mg/L	0.0191787	3.37%
Se 196.026†	123.1	0.659103	mg/L	0.0207351	0.659103	mg/L	0.0207351	3.15%
Sn 189.927†	239.1	0.479749	mg/L	0.0025427	0.479749	mg/L	0.0025427	0.53%
Ti 334.940†	12493.8	0.544088	mg/L	0.0022505	0.544088	mg/L	0.0022505	0.41%
Tl 190.801†	78.0	0.421297	mg/L	0.0155265	0.421297	mg/L	0.0155265	3.69%
V 290.880†	2572.7	0.544427	mg/L	0.0016058	0.544427	mg/L	0.0016058	0.29%
Zn 206.200†	1779.5	0.536322	mg/L	0.0025657	0.536322	mg/L	0.0025657	0.48%
B 249.772	4370.3	0.858766	mg/L	0.0090843	0.858766	mg/L	0.0090843	1.06%
Si 251.611	3115.9	2.14621	mg/L	0.023569	2.14621	mg/L	0.023569	1.10%

Sequence No.: 20
Sample ID: AD18955-003 MS 2
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 85

Autosampler Location: 91
Date Collected: 9/2/2020 5:24:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-003 MS 2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	42321.2	82.5	%	0.21				0.26%
Y 371.029	14163.9	78.9	%	0.52				0.66%
Ag 328.068†	1532.8	0.112895	mg/L	0.0002715	0.112895	mg/L	0.0002715	0.24%
Al 308.215†	6151.6	5.24000	mg/L	0.030191	5.24000	mg/L	0.030191	0.58%
As 188.979†	55.7	0.551695	mg/L	0.0241746	0.551695	mg/L	0.0241746	4.38%
Ba 233.527†	7927.4	0.935543	mg/L	0.0006677	0.935543	mg/L	0.0006677	0.07%
Be 313.107†	115998.5	0.512975	mg/L	0.0012505	0.512975	mg/L	0.0012505	0.24%
Ca 315.887†	2684980.6	826.599	mg/L	1.4459	826.599	mg/L	1.4459	0.17%
Cd 228.802†	1335.1	0.536523	mg/L	0.0006639	0.536523	mg/L	0.0006639	0.12%
Co 228.616†	1114.2	0.503334	mg/L	0.0005451	0.503334	mg/L	0.0005451	0.11%
Cr 267.716†	2990.6	0.532544	mg/L	0.0009336	0.532544	mg/L	0.0009336	0.18%
Cu 327.393†	3979.8	0.545295	mg/L	0.0026808	0.545295	mg/L	0.0026808	0.49%
Fe 273.955†	2883.5	4.89111	mg/L	0.022559	4.89111	mg/L	0.022559	0.46%
K 404.721†	507.2	-22.6227	mg/L	0.05542	-22.6227	mg/L	0.05542	0.24%
Mg 279.077†	61260.5	60.8101	mg/L	0.06760	60.8101	mg/L	0.06760	0.11%
Mn 257.610†	37485.7	1.43554	mg/L	0.000888	1.43554	mg/L	0.000888	0.06%
Mo 202.031†	626.6	0.525001	mg/L	0.0054561	0.525001	mg/L	0.0054561	1.04%
Na 330.237†	76040.8	1976.72	mg/L	0.509	1976.72	mg/L	0.509	0.03%
Ni 231.604†	1588.7	0.510964	mg/L	0.0016324	0.510964	mg/L	0.0016324	0.32%
Pb 220.353†	291.4	0.503693	mg/L	0.0066257	0.503693	mg/L	0.0066257	1.32%
Sb 206.836†	76.3	0.579452	mg/L	0.0149987	0.579452	mg/L	0.0149987	2.59%
Se 196.026†	121.7	0.656196	mg/L	0.0037440	0.656196	mg/L	0.0037440	0.57%
Sn 189.927†	245.1	0.491927	mg/L	0.0065588	0.491927	mg/L	0.0065588	1.33%
Ti 334.940†	12597.2	0.552063	mg/L	0.0009109	0.552063	mg/L	0.0009109	0.17%
Tl 190.801†	80.7	0.432411	mg/L	0.0173058	0.432411	mg/L	0.0173058	4.00%
V 290.880†	2570.7	0.543426	mg/L	0.0018502	0.543426	mg/L	0.0018502	0.34%
Zn 206.200†	1810.8	0.546182	mg/L	0.0010821	0.546182	mg/L	0.0010821	0.20%
B 249.772	4194.4	0.823136	mg/L	0.0047760	0.823136	mg/L	0.0047760	0.58%
Si 251.611	3166.1	2.17628	mg/L	0.009915	2.17628	mg/L	0.009915	0.46%

Sequence No.: 21 **Autosampler Location: 92**
Sample ID: AD18955-001 PS **Date Collected: 9/2/2020 5:28:17 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD18955-001 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	42175.5	82.2	%	0.63				0.77%
Y 371.029	14117.0	78.7	%	1.03				1.30%
Ag 328.068†	1287.1	0.0961226	mg/L	0.00176834	0.0961226	mg/L	0.00176834	1.84%
Al 308.215†	5868.7	4.99338	mg/L	0.012338	4.99338	mg/L	0.012338	0.25%
As 188.979†	54.5	0.540414	mg/L	0.0271496	0.540414	mg/L	0.0271496	5.02%
Ba 233.527†	8253.8	0.974716	mg/L	0.0048774	0.974716	mg/L	0.0048774	0.50%
Be 313.107†	112894.3	0.499232	mg/L	0.0029662	0.499232	mg/L	0.0029662	0.59%
Ca 315.887†	2631073.4	809.995	mg/L	5.4816	809.995	mg/L	5.4816	0.68%
Cd 228.802†	1285.1	0.516533	mg/L	0.0040467	0.516533	mg/L	0.0040467	0.78%
Co 228.616†	1082.5	0.488986	mg/L	0.0043054	0.488986	mg/L	0.0043054	0.88%
Cr 267.716†	2927.2	0.521033	mg/L	0.0080796	0.521033	mg/L	0.0080796	1.55%
Cu 327.393†	3852.3	0.527564	mg/L	0.0020588	0.527564	mg/L	0.0020588	0.39%
Fe 273.955†	2758.2	4.67059	mg/L	0.022329	4.67059	mg/L	0.022329	0.48%
K 404.721†	469.3	-22.3541	mg/L	0.52734	-22.3541	mg/L	0.52734	2.36%
Mg 279.077†	54911.4	54.4831	mg/L	0.07728	54.4831	mg/L	0.07728	0.14%
Mn 257.610†	83565.2	3.19752	mg/L	0.001587	3.19752	mg/L	0.001587	0.05%
Mo 202.031†	607.8	0.509191	mg/L	0.0022464	0.509191	mg/L	0.0022464	0.44%
Na 330.237†	73786.1	1918.13	mg/L	3.815	1918.13	mg/L	3.815	0.20%
Ni 231.604†	1589.7	0.511243	mg/L	0.0030598	0.511243	mg/L	0.0030598	0.60%
Pb 220.353†	284.1	0.490907	mg/L	0.0047981	0.490907	mg/L	0.0047981	0.98%
Sb 206.836†	72.4	0.549835	mg/L	0.0208811	0.549835	mg/L	0.0208811	3.80%
Se 196.026†	120.7	0.649825	mg/L	0.0233155	0.649825	mg/L	0.0233155	3.59%
Sn 189.927†	232.0	0.465457	mg/L	0.0054844	0.465457	mg/L	0.0054844	1.18%
Ti 334.940†	12130.4	0.532840	mg/L	0.0015686	0.532840	mg/L	0.0015686	0.29%
Tl 190.801†	76.8	0.416326	mg/L	0.0149450	0.416326	mg/L	0.0149450	3.59%
V 290.880†	2479.8	0.523677	mg/L	0.0011441	0.523677	mg/L	0.0011441	0.22%
Zn 206.200†	1793.0	0.540591	mg/L	0.0063325	0.540591	mg/L	0.0063325	1.17%
B 249.772	3965.6	0.783429	mg/L	0.0046389	0.783429	mg/L	0.0046389	0.59%
Si 251.611	3951.2	2.63921	mg/L	0.013420	2.63921	mg/L	0.013420	0.51%

Sequence No.: 22
Sample ID: AD18955-001 SD
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 93
Date Collected: 9/2/2020 5:32:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-001 SD

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	47981.2	93.5	%	0.27				0.29%
Y 371.029	15707.7	87.5	%	0.61				0.69%
Ag 328.068†	39.1	0.0085378	mg/L	0.00016449	0.0085378	mg/L	0.00016449	1.93%
Al 308.215†	-3.3	-0.128124	mg/L	0.0055272	-0.128124	mg/L	0.0055272	4.31%
As 188.979†	-1.0	-0.0179287	mg/L	0.00662056	-0.0179287	mg/L	0.00662056	36.93%
Ba 233.527†	889.2	0.0907306	mg/L	0.00105887	0.0907306	mg/L	0.00105887	1.17%
Be 313.107†	-0.7	-0.0005978	mg/L	0.00008812	-0.0005978	mg/L	0.00008812	14.74%
Ca 315.887†	533439.3	163.905	mg/L	0.7825	163.905	mg/L	0.7825	0.48%
Cd 228.802†	3.0	0.0041685	mg/L	0.00076142	0.0041685	mg/L	0.00076142	18.27%
Co 228.616†	1.1	0.0007889	mg/L	0.00152328	0.0007889	mg/L	0.00152328	193.09%
Cr 267.716†	5.0	-0.0070127	mg/L	0.00037584	-0.0070127	mg/L	0.00037584	5.36%
Cu 327.393†	-47.9	-0.0143775	mg/L	0.00052257	-0.0143775	mg/L	0.00052257	3.63%
Fe 273.955†	6.5	-0.175247	mg/L	0.0045729	-0.175247	mg/L	0.0045729	2.61%
K 404.721†	0.4	3.79718	mg/L	0.511044	3.79718	mg/L	0.511044	13.46%
Mg 279.077†	1549.1	1.30703	mg/L	0.016288	1.30703	mg/L	0.016288	1.25%
Mn 257.610†	13828.1	0.530932	mg/L	0.0005774	0.530932	mg/L	0.0005774	0.11%
Mo 202.031†	2.5	0.0027906	mg/L	0.00185913	0.0027906	mg/L	0.00185913	66.62%
Na 330.237†	12102.1	315.101	mg/L	1.1954	315.101	mg/L	1.1954	0.38%
Ni 231.604†	12.4	-0.0019799	mg/L	0.00079553	-0.0019799	mg/L	0.00079553	40.18%
Pb 220.353†	1.9	-0.0023569	mg/L	0.00563064	-0.0023569	mg/L	0.00563064	238.90%
Sb 206.836†	-1.2	-0.0125077	mg/L	0.01227225	-0.0125077	mg/L	0.01227225	98.12%
Se 196.026†	-0.1	0.0168830	mg/L	0.00728538	0.0168830	mg/L	0.00728538	43.15%
Sn 189.927†	-5.9	-0.0161983	mg/L	0.00319536	-0.0161983	mg/L	0.00319536	19.73%
Ti 334.940†	-65.0	0.0144494	mg/L	0.00017991	0.0144494	mg/L	0.00017991	1.25%
Tl 190.801†	0.6	-0.0123600	mg/L	0.00884363	-0.0123600	mg/L	0.00884363	71.55%
V 290.880†	16.1	-0.0045507	mg/L	0.00050106	-0.0045507	mg/L	0.00050106	11.01%
Zn 206.200†	6.9	-0.0212338	mg/L	0.00040911	-0.0212338	mg/L	0.00040911	1.93%
B 249.772	416.2	0.0720402	mg/L	0.00041133	0.0720402	mg/L	0.00041133	0.57%
Si 251.611	702.1	0.480698	mg/L	0.0027499	0.480698	mg/L	0.0027499	0.57%

Sequence No.: 23 **Autosampler Location: 94**
Sample ID: AD18950-004 **Date Collected: 9/2/2020 5:36:49 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD18950-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	43112.4	84.1	%	0.82				0.97%
Y 371.029	14516.7	80.9	%	0.54				0.67%
Ag 328.068†	7.8	0.0065426	mg/L	0.00062164	0.0065426	mg/L	0.00062164	9.50%
Al 308.215†	99.1	-0.0377641	mg/L	0.00543219	-0.0377641	mg/L	0.00543219	14.38%
As 188.979†	-0.1	-0.0086494	mg/L	0.00381342	-0.0086494	mg/L	0.00381342	44.09%
Ba 233.527†	3588.8	0.414771	mg/L	0.0023230	0.414771	mg/L	0.0023230	0.56%
Be 313.107†	-81.6	-0.0009560	mg/L	0.00000784	-0.0009560	mg/L	0.00000784	0.82%
Ca 315.887†	162182.8	49.5542	mg/L	0.05808	49.5542	mg/L	0.05808	0.12%
Cd 228.802†	7.2	0.0058654	mg/L	0.00106762	0.0058654	mg/L	0.00106762	18.20%
Co 228.616†	1.6	0.0010027	mg/L	0.00147449	0.0010027	mg/L	0.00147449	147.05%
Cr 267.716†	7.7	-0.0064112	mg/L	0.00073571	-0.0064112	mg/L	0.00073571	11.48%
Cu 327.393†	591.0	0.0743205	mg/L	0.00139234	0.0743205	mg/L	0.00139234	1.87%
Fe 273.955†	25.6	-0.141591	mg/L	0.0010093	-0.141591	mg/L	0.0010093	0.71%
K 404.721†	28.2	4.97691	mg/L	0.462381	4.97691	mg/L	0.462381	9.29%
Mg 279.077†	11998.3	11.7198	mg/L	0.00607	11.7198	mg/L	0.00607	0.05%
Mn 257.610†	3801.8	0.147550	mg/L	0.0004841	0.147550	mg/L	0.0004841	0.33%
Mo 202.031†	0.8	0.0013212	mg/L	0.00086471	0.0013212	mg/L	0.00086471	65.45%
Na 330.237†	69101.7	1796.39	mg/L	7.050	1796.39	mg/L	7.050	0.39%
Ni 231.604†	37.8	0.0062871	mg/L	0.00078242	0.0062871	mg/L	0.00078242	12.44%
Pb 220.353†	9.1	0.0100246	mg/L	0.00445954	0.0100246	mg/L	0.00445954	44.49%
Sb 206.836†	0.9	0.0032821	mg/L	0.00925712	0.0032821	mg/L	0.00925712	282.05%
Se 196.026†	-2.4	-0.0027600	mg/L	0.01295119	-0.0027600	mg/L	0.01295119	469.24%
Sn 189.927†	-7.0	-0.0183485	mg/L	0.00406516	-0.0183485	mg/L	0.00406516	22.16%
Ti 334.940†	7.7	0.0085564	mg/L	0.00026475	0.0085564	mg/L	0.00026475	3.09%
Tl 190.801†	-1.1	-0.0179878	mg/L	0.00879732	-0.0179878	mg/L	0.00879732	48.91%
V 290.880†	129.6	0.0202581	mg/L	0.00109167	0.0202581	mg/L	0.00109167	5.39%
Zn 206.200†	682.1	0.191146	mg/L	0.0014949	0.191146	mg/L	0.0014949	0.78%
B 249.772	238.3	0.0252969	mg/L	0.00112618	0.0252969	mg/L	0.00112618	4.45%
Si 251.611	3507.6	2.06707	mg/L	0.026453	2.06707	mg/L	0.026453	1.28%

Sequence No.: 24 **Autosampler Location: 6**
Sample ID: CCV V-329036 **Date Collected: 9/2/2020 5:40:49 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	47218.0	92.1	%	0.77				0.83%
Y 371.029	15562.4	86.7	%	0.85				0.99%
Ag 328.068†	1386.1	0.102845	mg/L	0.0004641	0.102845	mg/L	0.0004641	0.45%
QC value within limits for Ag 328.068 Recovery = 102.85%								
Al 308.215†	5891.4	5.01303	mg/L	0.014602	5.01303	mg/L	0.014602	0.29%
QC value within limits for Al 308.215 Recovery = 100.26%								
As 188.979†	49.3	0.485464	mg/L	0.0215112	0.485464	mg/L	0.0215112	4.43%
QC value within limits for As 188.979 Recovery = 97.09%								
Ba 233.527†	4342.7	0.505270	mg/L	0.0024960	0.505270	mg/L	0.0024960	0.49%
QC value within limits for Ba 233.527 Recovery = 101.05%								
Be 313.107†	117115.9	0.517922	mg/L	0.0019432	0.517922	mg/L	0.0019432	0.38%
QC value within limits for Be 313.107 Recovery = 103.58%								
Ca 315.887†	168362.6	51.4576	mg/L	0.12207	51.4576	mg/L	0.12207	0.24%
QC value within limits for Ca 315.887 Recovery = 102.92%								
Cd 228.802†	1239.7	0.498379	mg/L	0.0024571	0.498379	mg/L	0.0024571	0.49%
QC value within limits for Cd 228.802 Recovery = 99.68%								
Co 228.616†	1135.0	0.512730	mg/L	0.0017090	0.512730	mg/L	0.0017090	0.33%
QC value within limits for Co 228.616 Recovery = 102.55%								
Cr 267.716†	3025.6	0.538739	mg/L	0.0022775	0.538739	mg/L	0.0022775	0.42%
QC value within limits for Cr 267.716 Recovery = 107.75%								
Cu 327.393†	3705.8	0.507242	mg/L	0.0013254	0.507242	mg/L	0.0013254	0.26%
QC value within limits for Cu 327.393 Recovery = 101.45%								
Fe 273.955†	2848.4	4.82944	mg/L	0.016467	4.82944	mg/L	0.016467	0.34%
QC value within limits for Fe 273.955 Recovery = 96.59%								
K 404.721†	879.2	-1.29671	mg/L	0.572797	-1.29671	mg/L	0.572797	44.17%
QC value less than the lower limit for K 404.721 Recovery = -2.59%								
Mg 279.077†	51861.0	51.4433	mg/L	0.24045	51.4433	mg/L	0.24045	0.47%
QC value within limits for Mg 279.077 Recovery = 102.89%								
Mn 257.610†	12910.8	0.495857	mg/L	0.0007493	0.495857	mg/L	0.0007493	0.15%
QC value within limits for Mn 257.610 Recovery = 99.17%								
Mo 202.031†	610.2	0.511202	mg/L	0.0060522	0.511202	mg/L	0.0060522	1.18%
QC value within limits for Mo 202.031 Recovery = 102.24%								
Na 330.237†	1813.9	47.7361	mg/L	0.47252	47.7361	mg/L	0.47252	0.99%
QC value within limits for Na 330.237 Recovery = 95.47%								
Ni 231.604†	1610.3	0.517950	mg/L	0.0029354	0.517950	mg/L	0.0029354	0.57%
QC value within limits for Ni 231.604 Recovery = 103.59%								
Pb 220.353†	303.4	0.524642	mg/L	0.0116340	0.524642	mg/L	0.0116340	2.22%
QC value within limits for Pb 220.353 Recovery = 104.93%								
Sb 206.836†	69.0	0.524377	mg/L	0.0144008	0.524377	mg/L	0.0144008	2.75%
QC value within limits for Sb 206.836 Recovery = 104.88%								
Se 196.026†	108.6	0.531705	mg/L	0.0029983	0.531705	mg/L	0.0029983	0.56%
QC value within limits for Se 196.026 Recovery = 106.34%								
Sn 189.927†	245.8	0.493357	mg/L	0.0039435	0.493357	mg/L	0.0039435	0.80%
QC value within limits for Sn 189.927 Recovery = 98.67%								
Ti 334.940†	12517.3	0.490077	mg/L	0.0007803	0.490077	mg/L	0.0007803	0.16%
QC value within limits for Ti 334.940 Recovery = 98.02%								
Tl 190.801†	87.5	0.518160	mg/L	0.0035431	0.518160	mg/L	0.0035431	0.68%
QC value within limits for Tl 190.801 Recovery = 103.63%								
V 290.880†	2479.9	0.523522	mg/L	0.0020415	0.523522	mg/L	0.0020415	0.39%
QC value within limits for V 290.880 Recovery = 104.70%								
Zn 206.200†	1746.2	0.525853	mg/L	0.0022261	0.525853	mg/L	0.0022261	0.42%
QC value within limits for Zn 206.200 Recovery = 105.17%								
B 249.772	2672.8	0.535451	mg/L	0.0057368	0.535451	mg/L	0.0057368	1.07%
QC value within limits for B 249.772 Recovery = 107.09%								
Si 251.611	8657.5	4.95530	mg/L	0.037010	4.95530	mg/L	0.037010	0.75%
QC value within limits for Si 251.611 Recovery = 99.11%								

QC Failed. Continue with analysis.

Sequence No.: 25
Sample ID: CCB V-329027
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 9/2/2020 5:44:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	51201.1	99.8	%	1.14				1.14%
Y 371.029	17254.1	96.2	%	0.61				0.63%
Ag 328.068†	-1.9	0.0057391	mg/L	0.00045390	0.0057391	mg/L	0.00045390	7.91%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-22.2	-0.144716	mg/L	0.0027160	-0.144716	mg/L	0.0027160	1.88%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.3	-0.0107217	mg/L	0.00361567	-0.0107217	mg/L	0.00361567	33.72%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	1.8	-0.0157767	mg/L	0.00038322	-0.0157767	mg/L	0.00038322	2.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	19.8	-0.0005069	mg/L	0.00005403	-0.0005069	mg/L	0.00005403	10.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-66.5	-0.420074	mg/L	0.0033354	-0.420074	mg/L	0.0033354	0.79%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	0.5	0.0031799	mg/L	0.00018032	0.0031799	mg/L	0.00018032	5.67%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	3.8	0.0020222	mg/L	0.00056386	0.0020222	mg/L	0.00056386	27.88%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	2.7	-0.0074431	mg/L	0.00055266	-0.0074431	mg/L	0.00055266	7.43%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-21.1	-0.0106534	mg/L	0.00096897	-0.0106534	mg/L	0.00096897	9.10%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-3.3	-0.192505	mg/L	0.0023364	-0.192505	mg/L	0.0023364	1.21%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-7.3	3.55688	mg/L	0.369181	3.55688	mg/L	0.369181	10.38%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	6.2	-0.230539	mg/L	0.0050672	-0.230539	mg/L	0.0050672	2.20%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-10.0	0.0017951	mg/L	0.00011400	0.0017951	mg/L	0.00011400	6.35%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.0	0.0007282	mg/L	0.00094703	0.0007282	mg/L	0.00094703	130.05%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-2.1	0.540748	mg/L	0.2211253	0.540748	mg/L	0.2211253	40.89%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-2.4	-0.0067700	mg/L	0.00041004	-0.0067700	mg/L	0.00041004	6.06%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.3	-0.0078056	mg/L	0.00431343	-0.0078056	mg/L	0.00431343	55.26%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.2	-0.0124681	mg/L	0.00670111	-0.0124681	mg/L	0.00670111	53.75%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-2.6	-0.0081144	mg/L	0.01662286	-0.0081144	mg/L	0.01662286	204.86%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.2	-0.0045731	mg/L	0.00282491	-0.0045731	mg/L	0.00282491	61.77%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	0.2	0.0044726	mg/L	0.00004648	0.0044726	mg/L	0.00004648	1.04%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.4	0.0004986	mg/L	0.00196871	0.0004986	mg/L	0.00196871	394.82%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-3.1	-0.0087223	mg/L	0.00035575	-0.0087223	mg/L	0.00035575	4.08%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-16.7	-0.0286551	mg/L	0.00013984	-0.0286551	mg/L	0.00013984	0.49%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	13.1	-0.0083492	mg/L	0.00094493	-0.0083492	mg/L	0.00094493	11.32%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-2.6	0.0253719	mg/L	0.00039636	0.0253719	mg/L	0.00039636	1.56%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 26
Sample ID: AD18932-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 95
Date Collected: 9/2/2020 5:48:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18932-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44688.3	87.1	%	0.26				0.30%
Y 371.029	14898.1	83.0	%	0.73				0.88%
Ag 328.068†	-23.6	0.0048491	mg/L	0.00044363	0.0048491	mg/L	0.00044363	9.15%
Al 308.215†	332.5	0.164680	mg/L	0.0056774	0.164680	mg/L	0.0056774	3.45%
As 188.979†	-0.0	-0.0071138	mg/L	0.02029511	-0.0071138	mg/L	0.02029511	285.29%
Ba 233.527†	22758.6	2.71576	mg/L	0.002385	2.71576	mg/L	0.002385	0.09%
Be 313.107†	89.1	-0.0002002	mg/L	0.00007346	-0.0002002	mg/L	0.00007346	36.70%
Ca 315.887†	92950.7	28.2301	mg/L	0.02671	28.2301	mg/L	0.02671	0.09%
Cd 228.802†	65.7	0.0292509	mg/L	0.00061324	0.0292509	mg/L	0.00061324	2.10%
Co 228.616†	18.7	0.0087603	mg/L	0.00144088	0.0087603	mg/L	0.00144088	16.45%
Cr 267.716†	143.1	0.0178928	mg/L	0.00049689	0.0178928	mg/L	0.00049689	2.78%
Cu 327.393†	67.2	0.0023557	mg/L	0.00145533	0.0023557	mg/L	0.00145533	61.78%
Fe 273.955†	4264.8	7.32367	mg/L	0.044663	7.32367	mg/L	0.044663	0.61%
K 404.721†	22.8	-75.7326	mg/L	0.51344	-75.7326	mg/L	0.51344	0.68%
Mg 279.077†	5506.5	5.25055	mg/L	0.019684	5.25055	mg/L	0.019684	0.37%
Mn 257.610†	6732.8	0.259621	mg/L	0.0009168	0.259621	mg/L	0.0009168	0.35%
Mo 202.031†	3.6	0.0037178	mg/L	0.00173703	0.0037178	mg/L	0.00173703	46.72%
Na 330.237†	70819.1	1841.03	mg/L	1.439	1841.03	mg/L	1.439	0.08%
Ni 231.604†	86.3	0.0220307	mg/L	0.00058830	0.0220307	mg/L	0.00058830	2.67%
Pb 220.353†	1154.3	2.00838	mg/L	0.029898	2.00838	mg/L	0.029898	1.49%
Sb 206.836†	3.3	0.0211701	mg/L	0.00705877	0.0211701	mg/L	0.00705877	33.34%
Se 196.026†	-6.2	-0.0185571	mg/L	0.00620323	-0.0185571	mg/L	0.00620323	33.43%
Sn 189.927†	-3.2	-0.0106328	mg/L	0.00177697	-0.0106328	mg/L	0.00177697	16.71%
Ti 334.940†	-6.3	0.0063987	mg/L	0.00023126	0.0063987	mg/L	0.00023126	3.61%
Tl 190.801†	-0.8	-0.0198253	mg/L	0.00515027	-0.0198253	mg/L	0.00515027	25.98%
V 290.880†	85.5	0.0102111	mg/L	0.00131310	0.0102111	mg/L	0.00131310	12.86%
Zn 206.200†	8262.2	2.57549	mg/L	0.006738	2.57549	mg/L	0.006738	0.26%
B 249.772	450.8	0.0604343	mg/L	0.00160817	0.0604343	mg/L	0.00160817	2.66%
Si 251.611	2698.9	1.68902	mg/L	0.007038	1.68902	mg/L	0.007038	0.42%

Sequence No.: 27
Sample ID: AD18955-004
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 96
Date Collected: 9/2/2020 5:52:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	42625.2	83.1	%	0.18				0.21%
Y 371.029	14202.3	79.2	%	0.27				0.35%
Ag 328.068†	170.3	0.0176403	mg/L	0.00048132	0.0176403	mg/L	0.00048132	2.73%
Al 308.215†	54.5	-0.0757708	mg/L	0.00225125	-0.0757708	mg/L	0.00225125	2.97%
As 188.979†	0.5	-0.0031576	mg/L	0.00518336	-0.0031576	mg/L	0.00518336	164.15%
Ba 233.527†	3054.2	0.350600	mg/L	0.0011803	0.350600	mg/L	0.0011803	0.34%
Be 313.107†	-132.3	-0.0011801	mg/L	0.00008102	-0.0011801	mg/L	0.00008102	6.87%
Ca 315.887†	2157047.8	663.991	mg/L	4.4344	663.991	mg/L	4.4344	0.67%
Cd 228.802†	3.1	0.0042310	mg/L	0.00160620	0.0042310	mg/L	0.00160620	37.96%
Co 228.616†	11.1	0.0053106	mg/L	0.00049904	0.0053106	mg/L	0.00049904	9.40%
Cr 267.716†	20.3	-0.0040698	mg/L	0.00146004	-0.0040698	mg/L	0.00146004	35.88%
Cu 327.393†	-94.1	-0.0207819	mg/L	0.00213543	-0.0207819	mg/L	0.00213543	10.28%
Fe 273.955†	65.7	-0.0709515	mg/L	0.00614832	-0.0709515	mg/L	0.00614832	8.67%
K 404.721†	37.0	4.70742	mg/L	0.976601	4.70742	mg/L	0.976601	20.75%
Mg 279.077†	23191.8	22.8742	mg/L	0.05152	22.8742	mg/L	0.05152	0.23%
Mn 257.610†	33511.5	1.28358	mg/L	0.003848	1.28358	mg/L	0.003848	0.30%
Mo 202.031†	3.0	0.0031945	mg/L	0.00260864	0.0031945	mg/L	0.00260864	81.66%
Na 330.237†	72127.4	1875.02	mg/L	7.951	1875.02	mg/L	7.951	0.42%
Ni 231.604†	17.6	-0.0002895	mg/L	0.00082485	-0.0002895	mg/L	0.00082485	284.91%
Pb 220.353†	1.6	-0.0027951	mg/L	0.00154812	-0.0027951	mg/L	0.00154812	55.39%
Sb 206.836†	-0.4	-0.0066982	mg/L	0.03400357	-0.0066982	mg/L	0.03400357	507.65%
Se 196.026†	3.1	0.0730963	mg/L	0.01618420	0.0730963	mg/L	0.01618420	22.14%
Sn 189.927†	-13.6	-0.0318664	mg/L	0.00325183	-0.0318664	mg/L	0.00325183	10.20%
Ti 334.940†	-278.9	0.0442277	mg/L	0.00055212	0.0442277	mg/L	0.00055212	1.25%
Tl 190.801†	4.1	-0.0193907	mg/L	0.00906939	-0.0193907	mg/L	0.00906939	46.77%
V 290.880†	202.9	0.0365387	mg/L	0.00029910	0.0365387	mg/L	0.00029910	0.82%
Zn 206.200†	18.0	-0.0177600	mg/L	0.00067187	-0.0177600	mg/L	0.00067187	3.78%
B 249.772	2085.2	0.396489	mg/L	0.0016481	0.396489	mg/L	0.0016481	0.42%
Si 251.611	2128.5	1.47287	mg/L	0.005204	1.47287	mg/L	0.005204	0.35%

Sequence No.: 28
Sample ID: AD18955-005
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 97
Date Collected: 9/2/2020 5:57:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-005

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	42487.7	82.8	%	0.27				0.32%
Y 371.029	14179.1	79.0	%	0.57				0.72%
Ag 328.068†	134.2	0.0151204	mg/L	0.00033562	0.0151204	mg/L	0.00033562	2.22%
Al 308.215†	47.2	-0.0831111	mg/L	0.00223487	-0.0831111	mg/L	0.00223487	2.69%
As 188.979†	-0.4	-0.0115496	mg/L	0.01511798	-0.0115496	mg/L	0.01511798	130.90%
Ba 233.527†	5178.9	0.605631	mg/L	0.0009940	0.605631	mg/L	0.0009940	0.16%
Be 313.107†	-106.8	-0.0010675	mg/L	0.00005967	-0.0010675	mg/L	0.00005967	5.59%
Ca 315.887†	1648754.7	507.432	mg/L	2.9001	507.432	mg/L	2.9001	0.57%
Cd 228.802†	3.7	0.0044539	mg/L	0.00031159	0.0044539	mg/L	0.00031159	7.00%
Co 228.616†	43.4	0.0198892	mg/L	0.00075118	0.0198892	mg/L	0.00075118	3.78%
Cr 267.716†	19.6	-0.0042872	mg/L	0.00053491	-0.0042872	mg/L	0.00053491	12.48%
Cu 327.393†	-58.9	-0.0158707	mg/L	0.00152927	-0.0158707	mg/L	0.00152927	9.64%
Fe 273.955†	213.2	0.188813	mg/L	0.0039566	0.188813	mg/L	0.0039566	2.10%
K 404.721†	20.6	0.999445	mg/L	0.6432432	0.999445	mg/L	0.6432432	64.36%
Mg 279.077†	11534.6	11.2577	mg/L	0.02426	11.2577	mg/L	0.02426	0.22%
Mn 257.610†	158200.1	6.05138	mg/L	0.037774	6.05138	mg/L	0.037774	0.62%
Mo 202.031†	4.3	0.0043210	mg/L	0.00152541	0.0043210	mg/L	0.00152541	35.30%
Na 330.237†	70894.4	1842.98	mg/L	5.241	1842.98	mg/L	5.241	0.28%
Ni 231.604†	96.3	0.0252525	mg/L	0.00118992	0.0252525	mg/L	0.00118992	4.71%
Pb 220.353†	18.5	0.0266650	mg/L	0.00137873	0.0266650	mg/L	0.00137873	5.17%
Sb 206.836†	0.1	-0.0029814	mg/L	0.01143650	-0.0029814	mg/L	0.01143650	383.59%
Se 196.026†	2.5	0.0573119	mg/L	0.00995975	0.0573119	mg/L	0.00995975	17.38%
Sn 189.927†	-11.5	-0.0276322	mg/L	0.00315427	-0.0276322	mg/L	0.00315427	11.42%
Ti 334.940†	-219.4	0.0346162	mg/L	0.00019368	0.0346162	mg/L	0.00019368	0.56%
Tl 190.801†	-1.1	-0.0246117	mg/L	0.00961414	-0.0246117	mg/L	0.00961414	39.06%
V 290.880†	115.8	0.0172863	mg/L	0.00128061	0.0172863	mg/L	0.00128061	7.41%
Zn 206.200†	381.9	0.0967214	mg/L	0.00156920	0.0967214	mg/L	0.00156920	1.62%
B 249.772	2551.9	0.503813	mg/L	0.0013232	0.503813	mg/L	0.0013232	0.26%
Si 251.611	2352.1	1.65881	mg/L	0.011889	1.65881	mg/L	0.011889	0.72%

Sequence No.: 29 **Autosampler Location: 98**
Sample ID: AD18957-001 **Date Collected: 9/2/2020 6:01:16 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD18957-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	43765.0	85.3	%	0.56				0.66%
Y 371.029	14438.5	80.5	%	0.64				0.79%
Ag 328.068†	-2.7	0.0057854	mg/L	0.00035775	0.0057854	mg/L	0.00035775	6.18%
Al 308.215†	1170.0	0.892620	mg/L	0.0172254	0.892620	mg/L	0.0172254	1.93%
As 188.979†	0.1	-0.0058781	mg/L	0.00410313	-0.0058781	mg/L	0.00410313	69.80%
Ba 233.527†	634.3	0.0601379	mg/L	0.00047725	0.0601379	mg/L	0.00047725	0.79%
Be 313.107†	-95.4	-0.0010168	mg/L	0.00004608	-0.0010168	mg/L	0.00004608	4.53%
Ca 315.887†	61769.3	18.6259	mg/L	0.01105	18.6259	mg/L	0.01105	0.06%
Cd 228.802†	2.6	0.0040349	mg/L	0.00137771	0.0040349	mg/L	0.00137771	34.14%
Co 228.616†	2.0	0.0012048	mg/L	0.00167313	0.0012048	mg/L	0.00167313	138.87%
Cr 267.716†	30.0	-0.0024771	mg/L	0.00104208	-0.0024771	mg/L	0.00104208	42.07%
Cu 327.393†	-29.7	-0.0117876	mg/L	0.00120206	-0.0117876	mg/L	0.00120206	10.20%
Fe 273.955†	346.0	0.422708	mg/L	0.0098376	0.422708	mg/L	0.0098376	2.33%
K 404.721†	23.0	-1.38698	mg/L	0.559703	-1.38698	mg/L	0.559703	40.35%
Mg 279.077†	3339.4	3.09105	mg/L	0.021243	3.09105	mg/L	0.021243	0.69%
Mn 257.610†	1147.4	0.0460516	mg/L	0.00042868	0.0460516	mg/L	0.00042868	0.93%
Mo 202.031†	2.0	0.0023488	mg/L	0.00267199	0.0023488	mg/L	0.00267199	113.76%
Na 330.237†	70298.4	1827.49	mg/L	6.733	1827.49	mg/L	6.733	0.37%
Ni 231.604†	15.0	-0.0011356	mg/L	0.00131905	-0.0011356	mg/L	0.00131905	116.15%
Pb 220.353†	6.3	0.0054486	mg/L	0.00397883	0.0054486	mg/L	0.00397883	73.03%
Sb 206.836†	1.8	0.0095506	mg/L	0.00676771	0.0095506	mg/L	0.00676771	70.86%
Se 196.026†	-3.1	-0.0087081	mg/L	0.01934093	-0.0087081	mg/L	0.01934093	222.10%
Sn 189.927†	-1.9	-0.0081130	mg/L	0.00618728	-0.0081130	mg/L	0.00618728	76.26%
Ti 334.940†	636.3	0.0303939	mg/L	0.00115172	0.0303939	mg/L	0.00115172	3.79%
Tl 190.801†	2.0	0.0031660	mg/L	0.00811892	0.0031660	mg/L	0.00811892	256.44%
V 290.880†	54.4	0.0037057	mg/L	0.00185776	0.0037057	mg/L	0.00185776	50.13%
Zn 206.200†	175.8	0.0318826	mg/L	0.00108159	0.0318826	mg/L	0.00108159	3.39%
B 249.772	4380.2	0.852433	mg/L	0.0074903	0.852433	mg/L	0.0074903	0.88%
Si 251.611	2384.4	1.44467	mg/L	0.016765	1.44467	mg/L	0.016765	1.16%

Sequence No.: 30
Sample ID: AD18957-003
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 99
Date Collected: 9/2/2020 6:05:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18957-003

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	43814.7	85.4	%	0.85				1.00%
Y 371.029	14519.3	80.9	%	1.01				1.25%
Ag 328.068†	-3.0	0.0057644	mg/L	0.00047765	0.0057644	mg/L	0.00047765	8.29%
Al 308.215†	980.2	0.727808	mg/L	0.0031637	0.727808	mg/L	0.0031637	0.43%
As 188.979†	1.2	0.0050327	mg/L	0.01046401	0.0050327	mg/L	0.01046401	207.92%
Ba 233.527†	634.7	0.0601813	mg/L	0.00009606	0.0601813	mg/L	0.00009606	0.16%
Be 313.107†	-92.9	-0.0010059	mg/L	0.00010274	-0.0010059	mg/L	0.00010274	10.21%
Ca 315.887†	66150.7	19.9754	mg/L	0.03812	19.9754	mg/L	0.03812	0.19%
Cd 228.802†	3.2	0.0042511	mg/L	0.00105708	0.0042511	mg/L	0.00105708	24.87%
Co 228.616†	1.0	0.0007508	mg/L	0.00070118	0.0007508	mg/L	0.00070118	93.39%
Cr 267.716†	22.9	-0.0037317	mg/L	0.00082713	-0.0037317	mg/L	0.00082713	22.16%
Cu 327.393†	-20.2	-0.0104923	mg/L	0.00114738	-0.0104923	mg/L	0.00114738	10.94%
Fe 273.955†	189.9	0.147711	mg/L	0.0072071	0.147711	mg/L	0.0072071	4.88%
K 404.721†	7.6	0.717616	mg/L	0.8155763	0.717616	mg/L	0.8155763	113.65%
Mg 279.077†	5941.8	5.68440	mg/L	0.012521	5.68440	mg/L	0.012521	0.22%
Mn 257.610†	2262.8	0.0887011	mg/L	0.00061413	0.0887011	mg/L	0.00061413	0.69%
Mo 202.031†	3.1	0.0033143	mg/L	0.00101043	0.0033143	mg/L	0.00101043	30.49%
Na 330.237†	70525.5	1833.39	mg/L	2.306	1833.39	mg/L	2.306	0.13%
Ni 231.604†	14.5	-0.0012778	mg/L	0.00074152	-0.0012778	mg/L	0.00074152	58.03%
Pb 220.353†	8.1	0.0087110	mg/L	0.00419590	0.0087110	mg/L	0.00419590	48.17%
Sb 206.836†	0.1	-0.0031940	mg/L	0.00185061	-0.0031940	mg/L	0.00185061	57.94%
Se 196.026†	3.6	0.0231881	mg/L	0.01184330	0.0231881	mg/L	0.01184330	51.07%
Sn 189.927†	-3.7	-0.0117578	mg/L	0.00334140	-0.0117578	mg/L	0.00334140	28.42%
Ti 334.940†	379.3	0.0206076	mg/L	0.00022982	0.0206076	mg/L	0.00022982	1.12%
Tl 190.801†	0.8	-0.0043799	mg/L	0.01198030	-0.0043799	mg/L	0.01198030	273.53%
V 290.880†	72.4	0.0077109	mg/L	0.00136284	0.0077109	mg/L	0.00136284	17.67%
Zn 206.200†	200.8	0.0397357	mg/L	0.00016679	0.0397357	mg/L	0.00016679	0.42%
B 249.772	2347.8	0.446163	mg/L	0.0031379	0.446163	mg/L	0.0031379	0.70%
Si 251.611	3669.7	2.15313	mg/L	0.026642	2.15313	mg/L	0.026642	1.24%

Sequence No.: 31
Sample ID: AD18957-005
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 100
Date Collected: 9/2/2020 6:09:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18957-005

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	43658.0	85.1	%	0.20				0.24%
Y 371.029	14548.0	81.1	%	0.58				0.72%
Ag 328.068†	-7.7	0.0054271	mg/L	0.00035869	0.0054271	mg/L	0.00035869	6.61%
Al 308.215†	903.7	0.661139	mg/L	0.0036488	0.661139	mg/L	0.0036488	0.55%
As 188.979†	-1.3	-0.0210592	mg/L	0.02462896	-0.0210592	mg/L	0.02462896	116.95%
Ba 233.527†	851.2	0.0861726	mg/L	0.00094376	0.0861726	mg/L	0.00094376	1.10%
Be 313.107†	-88.3	-0.0009856	mg/L	0.00003930	-0.0009856	mg/L	0.00003930	3.99%
Ca 315.887†	56825.8	17.1033	mg/L	0.01735	17.1033	mg/L	0.01735	0.10%
Cd 228.802†	3.4	0.0043510	mg/L	0.00037358	0.0043510	mg/L	0.00037358	8.59%
Co 228.616†	2.3	0.0013439	mg/L	0.00062090	0.0013439	mg/L	0.00062090	46.20%
Cr 267.716†	21.1	-0.0040693	mg/L	0.00049397	-0.0040693	mg/L	0.00049397	12.14%
Cu 327.393†	-20.5	-0.0105476	mg/L	0.00117261	-0.0105476	mg/L	0.00117261	11.12%
Fe 273.955†	182.3	0.134435	mg/L	0.0045483	0.134435	mg/L	0.0045483	3.38%
K 404.721†	15.5	1.30324	mg/L	0.640978	1.30324	mg/L	0.640978	49.18%
Mg 279.077†	4619.5	4.36671	mg/L	0.015829	4.36671	mg/L	0.015829	0.36%
Mn 257.610†	1630.9	0.0645385	mg/L	0.00021655	0.0645385	mg/L	0.00021655	0.34%
Mo 202.031†	1.7	0.0021040	mg/L	0.00069560	0.0021040	mg/L	0.00069560	33.06%
Na 330.237†	72164.6	1875.99	mg/L	5.760	1875.99	mg/L	5.760	0.31%
Ni 231.604†	14.3	-0.0013561	mg/L	0.00157529	-0.0013561	mg/L	0.00157529	116.16%
Pb 220.353†	6.6	0.0059730	mg/L	0.00304400	0.0059730	mg/L	0.00304400	50.96%
Sb 206.836†	0.3	-0.0013790	mg/L	0.00441920	-0.0013790	mg/L	0.00441920	320.45%
Se 196.026†	-0.9	0.0014430	mg/L	0.00869221	0.0014430	mg/L	0.00869221	602.37%
Sn 189.927†	-3.4	-0.0112720	mg/L	0.00295821	-0.0112720	mg/L	0.00295821	26.24%
Ti 334.940†	492.9	0.0247636	mg/L	0.00018031	0.0247636	mg/L	0.00018031	0.73%
Tl 190.801†	0.3	-0.0068470	mg/L	0.01985203	-0.0068470	mg/L	0.01985203	289.94%
V 290.880†	56.5	0.0042419	mg/L	0.00147560	0.0042419	mg/L	0.00147560	34.79%
Zn 206.200†	96.3	0.0068914	mg/L	0.00036568	0.0068914	mg/L	0.00036568	5.31%
B 249.772	3004.9	0.576730	mg/L	0.0029935	0.576730	mg/L	0.0029935	0.52%
Si 251.611	2525.3	1.51823	mg/L	0.013568	1.51823	mg/L	0.013568	0.89%

Sequence No.: 32
Sample ID: AD18957-007
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 101
Date Collected: 9/2/2020 6:13:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18957-007

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	43792.7	85.4	%	0.79				0.92%
Y 371.029	14431.2	80.4	%	1.18				1.46%
Ag 328.068†	1.0	0.0060218	mg/L	0.00040062	0.0060218	mg/L	0.00040062	6.65%
Al 308.215†	922.8	0.677806	mg/L	0.0062432	0.677806	mg/L	0.0062432	0.92%
As 188.979†	0.9	0.0014137	mg/L	0.01767394	0.0014137	mg/L	0.01767394	>999.9%
Ba 233.527†	1204.2	0.128546	mg/L	0.0017427	0.128546	mg/L	0.0017427	1.36%
Be 313.107†	-4.6	-0.0006150	mg/L	0.00005108	-0.0006150	mg/L	0.00005108	8.31%
Ca 315.887†	77827.8	23.5721	mg/L	0.04957	23.5721	mg/L	0.04957	0.21%
Cd 228.802†	3.6	0.0044018	mg/L	0.00055739	0.0044018	mg/L	0.00055739	12.66%
Co 228.616†	2.7	0.0015087	mg/L	0.00117597	0.0015087	mg/L	0.00117597	77.95%
Cr 267.716†	22.4	-0.0038293	mg/L	0.00078034	-0.0038293	mg/L	0.00078034	20.38%
Cu 327.393†	8.3	-0.0065639	mg/L	0.00089439	-0.0065639	mg/L	0.00089439	13.63%
Fe 273.955†	86.5	-0.0342940	mg/L	0.00251701	-0.0342940	mg/L	0.00251701	7.34%
K 404.721†	20.6	3.40270	mg/L	0.418431	3.40270	mg/L	0.418431	12.30%
Mg 279.077†	5326.6	5.07130	mg/L	0.027210	5.07130	mg/L	0.027210	0.54%
Mn 257.610†	5795.9	0.223797	mg/L	0.0000955	0.223797	mg/L	0.0000955	0.04%
Mo 202.031†	1.7	0.0021009	mg/L	0.00160724	0.0021009	mg/L	0.00160724	76.50%
Na 330.237†	74792.7	1944.29	mg/L	6.978	1944.29	mg/L	6.978	0.36%
Ni 231.604†	11.4	-0.0022924	mg/L	0.00105576	-0.0022924	mg/L	0.00105576	46.06%
Pb 220.353†	190.7	0.327155	mg/L	0.0090589	0.327155	mg/L	0.0090589	2.77%
Sb 206.836†	-0.6	-0.0078529	mg/L	0.00410379	-0.0078529	mg/L	0.00410379	52.26%
Se 196.026†	0.1	0.0068541	mg/L	0.01707553	0.0068541	mg/L	0.01707553	249.13%
Sn 189.927†	-2.0	-0.0082054	mg/L	0.00651716	-0.0082054	mg/L	0.00651716	79.43%
Ti 334.940†	165.4	0.0126518	mg/L	0.00021736	0.0126518	mg/L	0.00021736	1.72%
Tl 190.801†	1.7	0.0015231	mg/L	0.00039329	0.0015231	mg/L	0.00039329	25.82%
V 290.880†	68.5	0.0068296	mg/L	0.00073469	0.0068296	mg/L	0.00073469	10.76%
Zn 206.200†	873.3	0.251283	mg/L	0.0025963	0.251283	mg/L	0.0025963	1.03%
B 249.772	2946.7	0.574167	mg/L	0.0085971	0.574167	mg/L	0.0085971	1.50%
Si 251.611	12407.6	7.03205	mg/L	0.068245	7.03205	mg/L	0.068245	0.97%

Sequence No.: 33
Sample ID: AD18957-009
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 102
Date Collected: 9/2/2020 6:17:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18957-009

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	44002.4	85.8	%	0.79				0.92%
Y 371.029	14660.3	81.7	%	0.72				0.88%
Ag 328.068†	-6.1	0.0054858	mg/L	0.00037195	0.0054858	mg/L	0.00037195	6.78%
Al 308.215†	1604.8	1.27040	mg/L	0.026187	1.27040	mg/L	0.026187	2.06%
As 188.979†	0.8	0.0009191	mg/L	0.00803203	0.0009191	mg/L	0.00803203	873.88%
Ba 233.527†	883.4	0.0900388	mg/L	0.00195754	0.0900388	mg/L	0.00195754	2.17%
Be 313.107†	-85.0	-0.0009711	mg/L	0.00009093	-0.0009711	mg/L	0.00009093	9.36%
Ca 315.887†	12641.3	3.49404	mg/L	0.013610	3.49404	mg/L	0.013610	0.39%
Cd 228.802†	3.5	0.0043885	mg/L	0.00077768	0.0043885	mg/L	0.00077768	17.72%
Co 228.616†	3.7	0.0019555	mg/L	0.00053319	0.0019555	mg/L	0.00053319	27.27%
Cr 267.716†	28.3	-0.0028133	mg/L	0.00043142	-0.0028133	mg/L	0.00043142	15.34%
Cu 327.393†	-28.2	-0.0116191	mg/L	0.00135457	-0.0116191	mg/L	0.00135457	11.66%
Fe 273.955†	120.8	0.0261612	mg/L	0.00605386	0.0261612	mg/L	0.00605386	23.14%
K 404.721†	12.8	2.31702	mg/L	1.080870	2.31702	mg/L	1.080870	46.65%
Mg 279.077†	518.6	0.280093	mg/L	0.0049075	0.280093	mg/L	0.0049075	1.75%
Mn 257.610†	914.1	0.0371306	mg/L	0.00046524	0.0371306	mg/L	0.00046524	1.25%
Mo 202.031†	0.6	0.0011866	mg/L	0.00025649	0.0011866	mg/L	0.00025649	21.62%
Na 330.237†	70167.5	1824.09	mg/L	7.752	1824.09	mg/L	7.752	0.42%
Ni 231.604†	12.7	-0.0018712	mg/L	0.00126508	-0.0018712	mg/L	0.00126508	67.61%
Pb 220.353†	6.5	0.0059509	mg/L	0.00085890	0.0059509	mg/L	0.00085890	14.43%
Sb 206.836†	1.0	0.0040312	mg/L	0.00216891	0.0040312	mg/L	0.00216891	53.80%
Se 196.026†	2.2	0.0152399	mg/L	0.01885242	0.0152399	mg/L	0.01885242	123.70%
Sn 189.927†	-0.8	-0.0059651	mg/L	0.00447795	-0.0059651	mg/L	0.00447795	75.07%
Ti 334.940†	292.3	0.0160094	mg/L	0.00008618	0.0160094	mg/L	0.00008618	0.54%
Tl 190.801†	-0.3	-0.0098668	mg/L	0.01105956	-0.0098668	mg/L	0.01105956	112.09%
V 290.880†	16.9	-0.0044491	mg/L	0.00058479	-0.0044491	mg/L	0.00058479	13.14%
Zn 206.200†	123.9	0.0155417	mg/L	0.00081185	0.0155417	mg/L	0.00081185	5.22%
B 249.772	3042.9	0.584602	mg/L	0.0065602	0.584602	mg/L	0.0065602	1.12%
Si 251.611	1677.6	1.04050	mg/L	0.008438	1.04050	mg/L	0.008438	0.81%

Sequence No.: 34 **Autosampler Location: 6**
Sample ID: CCV V-329036 **Date Collected: 9/2/2020 6:21:20 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	46309.6	90.3	%	0.23				0.25%
Y 371.029	15242.7	85.0	%	0.87				1.02%
Ag 328.068†	1391.1	0.103180	mg/L	0.0006957	0.103180	mg/L	0.0006957	0.67%
QC value within limits for Ag 328.068 Recovery = 103.18%								
Al 308.215†	5907.0	5.02663	mg/L	0.027449	5.02663	mg/L	0.027449	0.55%
QC value within limits for Al 308.215 Recovery = 100.53%								
As 188.979†	51.8	0.511572	mg/L	0.0114319	0.511572	mg/L	0.0114319	2.23%
QC value within limits for As 188.979 Recovery = 102.31%								
Ba 233.527†	4345.0	0.505546	mg/L	0.0036526	0.505546	mg/L	0.0036526	0.72%
QC value within limits for Ba 233.527 Recovery = 101.11%								
Be 313.107†	117665.4	0.520355	mg/L	0.0004264	0.520355	mg/L	0.0004264	0.08%
QC value within limits for Be 313.107 Recovery = 104.07%								
Ca 315.887†	168644.0	51.5443	mg/L	0.02838	51.5443	mg/L	0.02838	0.06%
QC value within limits for Ca 315.887 Recovery = 103.09%								
Cd 228.802†	1236.9	0.497276	mg/L	0.0012184	0.497276	mg/L	0.0012184	0.25%
QC value within limits for Cd 228.802 Recovery = 99.46%								
Co 228.616†	1137.2	0.513685	mg/L	0.0028926	0.513685	mg/L	0.0028926	0.56%
QC value within limits for Co 228.616 Recovery = 102.74%								
Cr 267.716†	3025.6	0.538728	mg/L	0.0025724	0.538728	mg/L	0.0025724	0.48%
QC value within limits for Cr 267.716 Recovery = 107.75%								
Cu 327.393†	3681.0	0.503809	mg/L	0.0016897	0.503809	mg/L	0.0016897	0.34%
QC value within limits for Cu 327.393 Recovery = 100.76%								
Fe 273.955†	2846.4	4.82578	mg/L	0.013274	4.82578	mg/L	0.013274	0.28%
QC value within limits for Fe 273.955 Recovery = 96.52%								
K 404.721†	881.6	-1.12264	mg/L	0.592467	-1.12264	mg/L	0.592467	52.77%
QC value less than the lower limit for K 404.721 Recovery = -2.25%								
Mg 279.077†	51996.5	51.5784	mg/L	0.04639	51.5784	mg/L	0.04639	0.09%
QC value within limits for Mg 279.077 Recovery = 103.16%								
Mn 257.610†	12955.4	0.497561	mg/L	0.0009175	0.497561	mg/L	0.0009175	0.18%
QC value within limits for Mn 257.610 Recovery = 99.51%								
Mo 202.031†	608.5	0.509852	mg/L	0.0023148	0.509852	mg/L	0.0023148	0.45%
QC value within limits for Mo 202.031 Recovery = 101.97%								
Na 330.237†	1807.5	47.5679	mg/L	0.17225	47.5679	mg/L	0.17225	0.36%
QC value within limits for Na 330.237 Recovery = 95.14%								
Ni 231.604†	1597.8	0.513867	mg/L	0.0021059	0.513867	mg/L	0.0021059	0.41%
QC value within limits for Ni 231.604 Recovery = 102.77%								
Pb 220.353†	300.9	0.520315	mg/L	0.0032304	0.520315	mg/L	0.0032304	0.62%
QC value within limits for Pb 220.353 Recovery = 104.06%								
Sb 206.836†	67.2	0.511205	mg/L	0.0008282	0.511205	mg/L	0.0008282	0.16%
QC value within limits for Sb 206.836 Recovery = 102.24%								
Se 196.026†	104.1	0.510143	mg/L	0.0305667	0.510143	mg/L	0.0305667	5.99%
QC value within limits for Se 196.026 Recovery = 102.03%								
Sn 189.927†	247.7	0.497194	mg/L	0.0041193	0.497194	mg/L	0.0041193	0.83%
QC value within limits for Sn 189.927 Recovery = 99.44%								
Ti 334.940†	12538.1	0.490884	mg/L	0.0017729	0.490884	mg/L	0.0017729	0.36%
QC value within limits for Ti 334.940 Recovery = 98.18%								
Tl 190.801†	85.7	0.507419	mg/L	0.0019590	0.507419	mg/L	0.0019590	0.39%
QC value within limits for Tl 190.801 Recovery = 101.48%								
V 290.880†	2474.6	0.522412	mg/L	0.0005499	0.522412	mg/L	0.0005499	0.11%
QC value within limits for V 290.880 Recovery = 104.48%								
Zn 206.200†	1735.7	0.522547	mg/L	0.0009464	0.522547	mg/L	0.0009464	0.18%
QC value within limits for Zn 206.200 Recovery = 104.51%								
B 249.772	2639.0	0.528400	mg/L	0.0008735	0.528400	mg/L	0.0008735	0.17%
QC value within limits for B 249.772 Recovery = 105.68%								
Si 251.611	8527.7	4.88235	mg/L	0.019227	4.88235	mg/L	0.019227	0.39%
QC value within limits for Si 251.611 Recovery = 97.65%								

QC Failed. Continue with analysis.

Sequence No.: 35 **Autosampler Location: 2**
Sample ID: CCB V-329027 **Date Collected: 9/2/2020 6:25:17 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	50042.1	97.6	%	0.53				0.54%
Y 371.029	16824.2	93.8	%	0.40				0.43%
Ag 328.068†	-9.3	0.0052315	mg/L	0.00014638	0.0052315	mg/L	0.00014638	2.80%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-27.3	-0.149154	mg/L	0.0036940	-0.149154	mg/L	0.0036940	2.48%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.2	-0.0053596	mg/L	0.00652140	-0.0053596	mg/L	0.00652140	121.68%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-1.9	-0.0162230	mg/L	0.00006613	-0.0162230	mg/L	0.00006613	0.41%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	0.1	-0.0005940	mg/L	0.00010127	-0.0005940	mg/L	0.00010127	17.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-85.5	-0.425945	mg/L	0.0011260	-0.425945	mg/L	0.0011260	0.26%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	1.3	0.0034949	mg/L	0.00020859	0.0034949	mg/L	0.00020859	5.97%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.0	0.0007352	mg/L	0.00123778	0.0007352	mg/L	0.00123778	168.35%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-1.5	-0.0081928	mg/L	0.00029833	-0.0081928	mg/L	0.00029833	3.64%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-17.7	-0.0101843	mg/L	0.00087099	-0.0101843	mg/L	0.00087099	8.55%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-2.5	-0.191002	mg/L	0.0063538	-0.191002	mg/L	0.0063538	3.33%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-7.9	3.50786	mg/L	0.435935	3.50786	mg/L	0.435935	12.43%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	0.5	-0.236172	mg/L	0.0021699	-0.236172	mg/L	0.0021699	0.92%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-12.4	0.0017035	mg/L	0.00002173	0.0017035	mg/L	0.00002173	1.28%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.4	0.0003389	mg/L	0.00105662	0.0003389	mg/L	0.00105662	311.81%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.8	0.643109	mg/L	0.0665115	0.643109	mg/L	0.0665115	10.34%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	2.4	-0.0052237	mg/L	0.00151358	-0.0052237	mg/L	0.00151358	28.98%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.3	-0.0034254	mg/L	0.00026336	-0.0034254	mg/L	0.00026336	7.69%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.4	0.0063992	mg/L	0.01128852	0.0063992	mg/L	0.01128852	176.41%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.8	-0.0042537	mg/L	0.01260347	-0.0042537	mg/L	0.01260347	296.30%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.6	-0.0029071	mg/L	0.00038861	-0.0029071	mg/L	0.00038861	13.37%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	1.8	0.0045322	mg/L	0.00020194	0.0045322	mg/L	0.00020194	4.46%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.4	-0.0056891	mg/L	0.01020535	-0.0056891	mg/L	0.01020535	179.38%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-4.9	-0.0091172	mg/L	0.00035368	-0.0091172	mg/L	0.00035368	3.88%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-20.2	-0.0297805	mg/L	0.00024538	-0.0297805	mg/L	0.00024538	0.82%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	16.9	-0.0075749	mg/L	0.00094938	-0.0075749	mg/L	0.00094938	12.53%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-3.7	0.0248634	mg/L	0.00098709	0.0248634	mg/L	0.00098709	3.97%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 36 **Autosampler Location: 103**
Sample ID: AD18957-011 **Date Collected: 9/2/2020 6:29:15 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD18957-011

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	43866.1	85.5	%	0.15				0.17%
Y 371.029	14565.1	81.2	%	0.42				0.52%
Ag 328.068†	-13.9	0.0050063	mg/L	0.00038437	0.0050063	mg/L	0.00038437	7.68%
Al 308.215†	1720.9	1.37152	mg/L	0.016747	1.37152	mg/L	0.016747	1.22%
As 188.979†	-2.2	-0.0304411	mg/L	0.01157419	-0.0304411	mg/L	0.01157419	38.02%
Ba 233.527†	639.1	0.0607102	mg/L	0.00044884	0.0607102	mg/L	0.00044884	0.74%
Be 313.107†	-109.7	-0.0010803	mg/L	0.00007042	-0.0010803	mg/L	0.00007042	6.52%
Ca 315.887†	25279.8	7.38682	mg/L	0.006165	7.38682	mg/L	0.006165	0.08%
Cd 228.802†	3.3	0.0043078	mg/L	0.00079334	0.0043078	mg/L	0.00079334	18.42%
Co 228.616†	2.1	0.0012687	mg/L	0.00136757	0.0012687	mg/L	0.00136757	107.79%
Cr 267.716†	31.3	-0.0022689	mg/L	0.00053188	-0.0022689	mg/L	0.00053188	23.44%
Cu 327.393†	50.0	-0.0007341	mg/L	0.00146907	-0.0007341	mg/L	0.00146907	200.13%
Fe 273.955†	328.1	0.391216	mg/L	0.0081209	0.391216	mg/L	0.0081209	2.08%
K 404.721†	12.1	-1.65429	mg/L	0.386324	-1.65429	mg/L	0.386324	23.35%
Mg 279.077†	1287.3	1.04610	mg/L	0.011268	1.04610	mg/L	0.011268	1.08%
Mn 257.610†	1139.4	0.0457447	mg/L	0.00027110	0.0457447	mg/L	0.00027110	0.59%
Mo 202.031†	1.0	0.0015655	mg/L	0.00117489	0.0015655	mg/L	0.00117489	75.05%
Na 330.237†	72865.7	1894.21	mg/L	5.719	1894.21	mg/L	5.719	0.30%
Ni 231.604†	20.6	0.0006886	mg/L	0.00085267	0.0006886	mg/L	0.00085267	123.82%
Pb 220.353†	22.2	0.0333108	mg/L	0.00068075	0.0333108	mg/L	0.00068075	2.04%
Sb 206.836†	-0.3	-0.0062381	mg/L	0.01476065	-0.0062381	mg/L	0.01476065	236.62%
Se 196.026†	-1.3	-0.0010190	mg/L	0.00184561	-0.0010190	mg/L	0.00184561	181.13%
Sn 189.927†	-0.1	-0.0045140	mg/L	0.00269720	-0.0045140	mg/L	0.00269720	59.75%
Ti 334.940†	1109.8	0.0477632	mg/L	0.00078384	0.0477632	mg/L	0.00078384	1.64%
Tl 190.801†	1.0	-0.0022443	mg/L	0.00918643	-0.0022443	mg/L	0.00918643	409.33%
V 290.880†	37.3	-0.0000699	mg/L	0.00069472	-0.0000699	mg/L	0.00069472	994.02%
Zn 206.200†	355.0	0.0882584	mg/L	0.00065810	0.0882584	mg/L	0.00065810	0.75%
B 249.772	3142.8	0.604496	mg/L	0.0039985	0.604496	mg/L	0.0039985	0.66%
Si 251.611	3614.8	2.12505	mg/L	0.026178	2.12505	mg/L	0.026178	1.23%

Sequence No.: 37
Sample ID: AD18957-013
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 104
Date Collected: 9/2/2020 6:33:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18957-013

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	43538.8	84.9	%	0.46				0.54%
Y 371.029	14376.3	80.1	%	0.61				0.77%
Ag 328.068†	-11.4	0.0051347	mg/L	0.00028903	0.0051347	mg/L	0.00028903	5.63%
Al 308.215†	414.3	0.235192	mg/L	0.0052410	0.235192	mg/L	0.0052410	2.23%
As 188.979†	0.2	-0.0053470	mg/L	0.00898579	-0.0053470	mg/L	0.00898579	168.05%
Ba 233.527†	818.1	0.0821998	mg/L	0.00102938	0.0821998	mg/L	0.00102938	1.25%
Be 313.107†	-100.9	-0.0010411	mg/L	0.00003561	-0.0010411	mg/L	0.00003561	3.42%
Ca 315.887†	20937.7	6.04940	mg/L	0.007317	6.04940	mg/L	0.007317	0.12%
Cd 228.802†	2.0	0.0037928	mg/L	0.00023947	0.0037928	mg/L	0.00023947	6.31%
Co 228.616†	-0.2	0.0002304	mg/L	0.00139376	0.0002304	mg/L	0.00139376	605.01%
Cr 267.716†	14.4	-0.0053039	mg/L	0.00050850	-0.0053039	mg/L	0.00050850	9.59%
Cu 327.393†	-27.5	-0.0115258	mg/L	0.00020385	-0.0115258	mg/L	0.00020385	1.77%
Fe 273.955†	78.0	-0.0492167	mg/L	0.00433306	-0.0492167	mg/L	0.00433306	8.80%
K 404.721†	-1.3	2.34673	mg/L	0.498807	2.34673	mg/L	0.498807	21.26%
Mg 279.077†	904.9	0.665080	mg/L	0.0091838	0.665080	mg/L	0.0091838	1.38%
Mn 257.610†	564.7	0.0237708	mg/L	0.00034111	0.0237708	mg/L	0.00034111	1.43%
Mo 202.031†	0.3	0.0009195	mg/L	0.00202405	0.0009195	mg/L	0.00202405	220.13%
Na 330.237†	73067.7	1899.46	mg/L	4.877	1899.46	mg/L	4.877	0.26%
Ni 231.604†	19.8	0.0004330	mg/L	0.00133385	0.0004330	mg/L	0.00133385	308.03%
Pb 220.353†	41.9	0.0674733	mg/L	0.00265872	0.0674733	mg/L	0.00265872	3.94%
Sb 206.836†	-0.0	-0.0040512	mg/L	0.00559532	-0.0040512	mg/L	0.00559532	138.11%
Se 196.026†	-4.4	-0.0163442	mg/L	0.02968592	-0.0163442	mg/L	0.02968592	181.63%
Sn 189.927†	0.1	-0.0039623	mg/L	0.00615436	-0.0039623	mg/L	0.00615436	155.32%
Ti 334.940†	151.9	0.0108005	mg/L	0.00023024	0.0108005	mg/L	0.00023024	2.13%
Tl 190.801†	0.7	-0.0042029	mg/L	0.01346404	-0.0042029	mg/L	0.01346404	320.35%
V 290.880†	28.1	-0.0020237	mg/L	0.00170506	-0.0020237	mg/L	0.00170506	84.25%
Zn 206.200†	307.5	0.0733167	mg/L	0.00108121	0.0733167	mg/L	0.00108121	1.47%
B 249.772	2768.3	0.528603	mg/L	0.0017321	0.528603	mg/L	0.0017321	0.33%
Si 251.611	1312.6	0.838398	mg/L	0.0024417	0.838398	mg/L	0.0024417	0.29%

Sequence No.: 38
Sample ID: EF V-333973
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 105
Date Collected: 9/2/2020 6:37:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF V-333973

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	43468.8	84.8	%	1.10				1.30%
Y 371.029	14527.1	81.0	%	0.95				1.17%
Ag 328.068†	-3.5	0.0056503	mg/L	0.00063012	0.0056503	mg/L	0.00063012	11.15%
Al 308.215†	13.3	-0.113779	mg/L	0.0019523	-0.113779	mg/L	0.0019523	1.72%
As 188.979†	-0.3	-0.0100987	mg/L	0.01281570	-0.0100987	mg/L	0.01281570	126.91%
Ba 233.527†	45.5	-0.0105306	mg/L	0.00007798	-0.0105306	mg/L	0.00007798	0.74%
Be 313.107†	-126.1	-0.0011528	mg/L	0.00001482	-0.0011528	mg/L	0.00001482	1.29%
Ca 315.887†	353.4	-0.290749	mg/L	0.0022816	-0.290749	mg/L	0.0022816	0.78%
Cd 228.802†	1.9	0.0037511	mg/L	0.00017902	0.0037511	mg/L	0.00017902	4.77%
Co 228.616†	1.1	0.0008042	mg/L	0.00032765	0.0008042	mg/L	0.00032765	40.74%
Cr 267.716†	11.8	-0.0057884	mg/L	0.00035517	-0.0057884	mg/L	0.00035517	6.14%
Cu 327.393†	-56.7	-0.0155978	mg/L	0.00138770	-0.0155978	mg/L	0.00138770	8.90%
Fe 273.955†	3.1	-0.181157	mg/L	0.0068425	-0.181157	mg/L	0.0068425	3.78%
K 404.721†	8.5	4.30924	mg/L	0.471899	4.30924	mg/L	0.471899	10.95%
Mg 279.077†	85.4	-0.151622	mg/L	0.0049405	-0.151622	mg/L	0.0049405	3.26%
Mn 257.610†	13.2	0.0026799	mg/L	0.00010332	0.0026799	mg/L	0.00010332	3.86%
Mo 202.031†	6.9	0.0064769	mg/L	0.00248196	0.0064769	mg/L	0.00248196	38.32%
Na 330.237†	72271.0	1878.76	mg/L	7.227	1878.76	mg/L	7.227	0.38%
Ni 231.604†	13.2	-0.0017005	mg/L	0.00109187	-0.0017005	mg/L	0.00109187	64.21%
Pb 220.353†	1.3	-0.0032547	mg/L	0.00529906	-0.0032547	mg/L	0.00529906	162.81%
Sb 206.836†	1.0	0.0039786	mg/L	0.01756735	0.0039786	mg/L	0.01756735	441.55%
Se 196.026†	-5.2	-0.0207061	mg/L	0.02416318	-0.0207061	mg/L	0.02416318	116.70%
Sn 189.927†	0.3	-0.0035492	mg/L	0.00301556	-0.0035492	mg/L	0.00301556	84.97%
Ti 334.940†	16.6	0.0051124	mg/L	0.00044459	0.0051124	mg/L	0.00044459	8.70%
Tl 190.801†	1.8	0.0031581	mg/L	0.01138177	0.0031581	mg/L	0.01138177	360.40%
V 290.880†	17.7	-0.0042974	mg/L	0.00080909	-0.0042974	mg/L	0.00080909	18.83%
Zn 206.200†	-7.0	-0.0256275	mg/L	0.00026979	-0.0256275	mg/L	0.00026979	1.05%
B 249.772	251.5	0.0215398	mg/L	0.00050998	0.0215398	mg/L	0.00050998	2.37%
Si 251.611	38.2	0.111765	mg/L	0.0019888	0.111765	mg/L	0.0019888	1.78%

Sequence No.: 39
Sample ID: CCV V-329036
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/2/2020 6:41:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46251.7	90.2	%	0.70				0.78%
Y 371.029	15236.9	84.9	%	1.44				1.70%
Ag 328.068†	1389.0	0.103065	mg/L	0.0012471	0.103065	mg/L	0.0012471	1.21%
Al 308.215†	5933.5	5.04992	mg/L	0.007413	5.04992	mg/L	0.007413	0.15%
As 188.979†	49.8	0.490712	mg/L	0.0227050	0.490712	mg/L	0.0227050	4.63%
Ba 233.527†	4354.1	0.506638	mg/L	0.0009504	0.506638	mg/L	0.0009504	0.19%
Be 313.107†	117646.5	0.520271	mg/L	0.0007101	0.520271	mg/L	0.0007101	0.14%
Ca 315.887†	168999.9	51.6539	mg/L	0.03264	51.6539	mg/L	0.03264	0.06%
Cd 228.802†	1234.6	0.496340	mg/L	0.0027199	0.496340	mg/L	0.0027199	0.55%
Co 228.616†	1137.8	0.513982	mg/L	0.0047383	0.513982	mg/L	0.0047383	0.92%
Cr 267.716†	3013.6	0.536591	mg/L	0.0040025	0.536591	mg/L	0.0040025	0.75%
Cu 327.393†	3682.4	0.504003	mg/L	0.0018598	0.504003	mg/L	0.0018598	0.37%
Fe 273.955†	2872.4	4.87161	mg/L	0.034759	4.87161	mg/L	0.034759	0.71%
K 404.721†	896.5	-0.789907	mg/L	0.8671349	-0.789907	mg/L	0.8671349	109.78%
Mg 279.077†	52050.6	51.6323	mg/L	0.11029	51.6323	mg/L	0.11029	0.21%
Mn 257.610†	12994.4	0.499054	mg/L	0.0019446	0.499054	mg/L	0.0019446	0.39%
Mo 202.031†	606.0	0.507747	mg/L	0.0044644	0.507747	mg/L	0.0044644	0.88%
Na 330.237†	1811.1	47.6616	mg/L	0.31126	47.6616	mg/L	0.31126	0.65%
Ni 231.604†	1605.8	0.516474	mg/L	0.0034757	0.516474	mg/L	0.0034757	0.67%
Pb 220.353†	299.5	0.517776	mg/L	0.0109136	0.517776	mg/L	0.0109136	2.11%
Sb 206.836†	68.5	0.520828	mg/L	0.0054388	0.520828	mg/L	0.0054388	1.04%
Se 196.026†	105.2	0.515493	mg/L	0.0125816	0.515493	mg/L	0.0125816	2.44%
Sn 189.927†	246.9	0.495671	mg/L	0.0055807	0.495671	mg/L	0.0055807	1.13%
Ti 334.940†	12581.0	0.492543	mg/L	0.0011360	0.492543	mg/L	0.0011360	0.23%
Tl 190.801†	84.1	0.497229	mg/L	0.0219729	0.497229	mg/L	0.0219729	4.42%
V 290.880†	2497.4	0.527259	mg/L	0.0020624	0.527259	mg/L	0.0020624	0.39%
Zn 206.200†	1733.2	0.521766	mg/L	0.0060953	0.521766	mg/L	0.0060953	1.17%
B 249.772	2615.1	0.523519	mg/L	0.0009869	0.523519	mg/L	0.0009869	0.19%
Si 251.611	8550.4	4.89530	mg/L	0.036214	4.89530	mg/L	0.036214	0.74%

Sequence No.: 40
Sample ID: CCB V-329027
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 9/2/2020 6:45:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	50026.8	97.5	%	0.56				0.58%
Y 371.029	16905.7	94.2	%	0.49				0.52%
Ag 328.068†	1.8	0.0059866	mg/L	0.00023203	0.0059866	mg/L	0.00023203	3.88%
Al 308.215†	-17.5	-0.140594	mg/L	0.0047711	-0.140594	mg/L	0.0047711	3.39%
As 188.979†	-0.6	-0.0133038	mg/L	0.00555619	-0.0133038	mg/L	0.00555619	41.76%
Ba 233.527†	-0.9	-0.0161091	mg/L	0.00028972	-0.0161091	mg/L	0.00028972	1.80%
Be 313.107†	15.1	-0.0005278	mg/L	0.00002758	-0.0005278	mg/L	0.00002758	5.22%
Ca 315.887†	-78.7	-0.423855	mg/L	0.0005260	-0.423855	mg/L	0.0005260	0.12%
Cd 228.802†	-0.1	0.0029446	mg/L	0.00061221	0.0029446	mg/L	0.00061221	20.79%
Co 228.616†	1.1	0.0008011	mg/L	0.00050685	0.0008011	mg/L	0.00050685	63.27%
Cr 267.716†	3.8	-0.0072438	mg/L	0.00038612	-0.0072438	mg/L	0.00038612	5.33%
Cu 327.393†	-24.9	-0.0111827	mg/L	0.00094707	-0.0111827	mg/L	0.00094707	8.47%
Fe 273.955†	-4.4	-0.194338	mg/L	0.0043106	-0.194338	mg/L	0.0043106	2.22%
K 404.721†	-15.8	3.10356	mg/L	0.063410	3.10356	mg/L	0.063410	2.04%
Mg 279.077†	3.1	-0.233588	mg/L	0.0014354	-0.233588	mg/L	0.0014354	0.61%
Mn 257.610†	-10.2	0.0017879	mg/L	0.00007906	0.0017879	mg/L	0.00007906	4.42%
Mo 202.031†	-0.3	0.0004654	mg/L	0.00092325	0.0004654	mg/L	0.00092325	198.36%
Na 330.237†	3.5	0.688037	mg/L	0.0557746	0.688037	mg/L	0.0557746	8.11%
Ni 231.604†	-0.6	-0.0062012	mg/L	0.00162081	-0.0062012	mg/L	0.00162081	26.14%
Pb 220.353†	-0.9	-0.0071071	mg/L	0.00295082	-0.0071071	mg/L	0.00295082	41.52%
Sb 206.836†	-0.7	-0.0093695	mg/L	0.00500611	-0.0093695	mg/L	0.00500611	53.43%
Se 196.026†	-0.8	0.0005110	mg/L	0.00703743	0.0005110	mg/L	0.00703743	>999.9%
Sn 189.927†	0.3	-0.0036831	mg/L	0.00289901	-0.0036831	mg/L	0.00289901	78.71%
Ti 334.940†	0.2	0.0044719	mg/L	0.00032707	0.0044719	mg/L	0.00032707	7.31%
Tl 190.801†	0.4	-0.0053550	mg/L	0.00201918	-0.0053550	mg/L	0.00201918	37.71%
V 290.880†	-3.3	-0.0087729	mg/L	0.00053578	-0.0087729	mg/L	0.00053578	6.11%
Zn 206.200†	-22.7	-0.0305592	mg/L	0.00016658	-0.0305592	mg/L	0.00016658	0.55%
B 249.772	18.0	-0.0073121	mg/L	0.00071598	-0.0073121	mg/L	0.00071598	9.79%
Si 251.611	-2.4	0.0256614	mg/L	0.00125529	0.0256614	mg/L	0.00125529	4.89%

Sequence No.: 41
Sample ID: AD18955-001 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 106
Date Collected: 9/2/2020 6:49:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-001 5D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	47540.4	92.7	%	0.53				0.58%
Y 371.029	15626.0	87.1	%	0.25				0.28%
Ag 328.068†	24.5	0.0075531	mg/L	0.00071577	0.0075531	mg/L	0.00071577	9.48%
Al 308.215†	3.8	-0.121965	mg/L	0.0030044	-0.121965	mg/L	0.0030044	2.46%
As 188.979†	-0.6	-0.0131564	mg/L	0.01619378	-0.0131564	mg/L	0.01619378	123.09%
Ba 233.527†	895.0	0.0914351	mg/L	0.00074579	0.0914351	mg/L	0.00074579	0.82%
Be 313.107†	-44.8	-0.0007927	mg/L	0.00005158	-0.0007927	mg/L	0.00005158	6.51%
Ca 315.887†	529378.4	162.654	mg/L	1.5091	162.654	mg/L	1.5091	0.93%
Cd 228.802†	1.3	0.0035075	mg/L	0.00099768	0.0035075	mg/L	0.00099768	28.44%
Co 228.616†	0.3	0.0004585	mg/L	0.00098573	0.0004585	mg/L	0.00098573	215.01%
Cr 267.716†	5.7	-0.0068858	mg/L	0.00020373	-0.0068858	mg/L	0.00020373	2.96%
Cu 327.393†	-54.6	-0.0152991	mg/L	0.00041143	-0.0152991	mg/L	0.00041143	2.69%
Fe 273.955†	46.6	-0.104518	mg/L	0.0034002	-0.104518	mg/L	0.0034002	3.25%
K 404.721†	-0.7	2.97706	mg/L	0.499978	2.97706	mg/L	0.499978	16.79%
Mg 279.077†	1545.9	1.30378	mg/L	0.011685	1.30378	mg/L	0.011685	0.90%
Mn 257.610†	13878.6	0.532863	mg/L	0.0003081	0.532863	mg/L	0.0003081	0.06%
Mo 202.031†	2.5	0.0027532	mg/L	0.00088779	0.0027532	mg/L	0.00088779	32.25%
Na 330.237†	12150.5	316.359	mg/L	0.7869	316.359	mg/L	0.7869	0.25%
Ni 231.604†	12.2	-0.0020258	mg/L	0.00089602	-0.0020258	mg/L	0.00089602	44.23%
Pb 220.353†	2.1	-0.0019554	mg/L	0.00084131	-0.0019554	mg/L	0.00084131	43.02%
Sb 206.836†	0.3	-0.0012777	mg/L	0.00754875	-0.0012777	mg/L	0.00754875	590.81%
Se 196.026†	-1.8	0.0086292	mg/L	0.00107251	0.0086292	mg/L	0.00107251	12.43%
Sn 189.927†	-7.5	-0.0195257	mg/L	0.00384217	-0.0195257	mg/L	0.00384217	19.68%
Ti 334.940†	-73.0	0.0140466	mg/L	0.00019563	0.0140466	mg/L	0.00019563	1.39%
Tl 190.801†	0.6	-0.0125504	mg/L	0.01412945	-0.0125504	mg/L	0.01412945	112.58%
V 290.880†	16.7	-0.0044113	mg/L	0.00061563	-0.0044113	mg/L	0.00061563	13.96%
Zn 206.200†	-2.2	-0.0240976	mg/L	0.00041315	-0.0240976	mg/L	0.00041315	1.71%
B 249.772	398.5	0.0681661	mg/L	0.00050466	0.0681661	mg/L	0.00050466	0.74%
Si 251.611	696.7	0.477299	mg/L	0.0052229	0.477299	mg/L	0.0052229	1.09%

Sequence No.: 42
Sample ID: AD18955-001 MR 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 107
Date Collected: 9/2/2020 6:53:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-001 MR 5D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	47096.9	91.8	%	0.48				0.53%
Y 371.029	15476.6	86.3	%	0.74				0.86%
Ag 328.068†	36.2	0.0083479	mg/L	0.00034212	0.0083479	mg/L	0.00034212	4.10%
Al 308.215†	-5.0	-0.129486	mg/L	0.0046297	-0.129486	mg/L	0.0046297	3.58%
As 188.979†	0.3	-0.0036400	mg/L	0.02170138	-0.0036400	mg/L	0.02170138	596.20%
Ba 233.527†	904.9	0.0926189	mg/L	0.00127428	0.0926189	mg/L	0.00127428	1.38%
Be 313.107†	-62.8	-0.0008728	mg/L	0.00007306	-0.0008728	mg/L	0.00007306	8.37%
Ca 315.887†	538048.6	165.324	mg/L	1.1621	165.324	mg/L	1.1621	0.70%
Cd 228.802†	1.6	0.0036002	mg/L	0.00049419	0.0036002	mg/L	0.00049419	13.73%
Co 228.616†	0.1	0.0003667	mg/L	0.00069880	0.0003667	mg/L	0.00069880	190.59%
Cr 267.716†	3.7	-0.0072409	mg/L	0.00060560	-0.0072409	mg/L	0.00060560	8.36%
Cu 327.393†	-54.7	-0.0153264	mg/L	0.00057019	-0.0153264	mg/L	0.00057019	3.72%
Fe 273.955†	1.6	-0.183812	mg/L	0.0020953	-0.183812	mg/L	0.0020953	1.14%
K 404.721†	0.3	3.88530	mg/L	1.058827	3.88530	mg/L	1.058827	27.25%
Mg 279.077†	1567.5	1.32531	mg/L	0.009886	1.32531	mg/L	0.009886	0.75%
Mn 257.610†	13969.0	0.536319	mg/L	0.0013148	0.536319	mg/L	0.0013148	0.25%
Mo 202.031†	2.6	0.0028535	mg/L	0.00126243	0.0028535	mg/L	0.00126243	44.24%
Na 330.237†	12228.6	318.391	mg/L	0.4609	318.391	mg/L	0.4609	0.14%
Ni 231.604†	14.5	-0.0012794	mg/L	0.00067489	-0.0012794	mg/L	0.00067489	52.75%
Pb 220.353†	0.8	-0.0041132	mg/L	0.00294111	-0.0041132	mg/L	0.00294111	71.50%
Sb 206.836†	-0.2	-0.0049965	mg/L	0.00951130	-0.0049965	mg/L	0.00951130	190.36%
Se 196.026†	-3.5	0.0005397	mg/L	0.00807317	0.0005397	mg/L	0.00807317	>999.9%
Sn 189.927†	-6.8	-0.0180765	mg/L	0.00225922	-0.0180765	mg/L	0.00225922	12.50%
Ti 334.940†	-64.6	0.0145739	mg/L	0.00022500	0.0145739	mg/L	0.00022500	1.54%
Tl 190.801†	0.8	-0.0113250	mg/L	0.00849228	-0.0113250	mg/L	0.00849228	74.99%
V 290.880†	22.7	-0.0031457	mg/L	0.00095426	-0.0031457	mg/L	0.00095426	30.34%
Zn 206.200†	-10.0	-0.0265637	mg/L	0.00105511	-0.0265637	mg/L	0.00105511	3.97%
B 249.772	400.5	0.0687792	mg/L	0.00032228	0.0687792	mg/L	0.00032228	0.47%
Si 251.611	702.8	0.481176	mg/L	0.0028404	0.481176	mg/L	0.0028404	0.59%

Sequence No.: 43
Sample ID: AD18955-002 MS 1 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 108
Date Collected: 9/2/2020 6:57:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-002 MS 1 5D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	47459.6	92.5	%	0.95				1.02%
Y 371.029	15621.1	87.1	%	1.57				1.80%
Ag 328.068†	283.4	0.0258040	mg/L	0.00048839	0.0258040	mg/L	0.00048839	1.89%
Al 308.215†	1332.9	1.03790	mg/L	0.008307	1.03790	mg/L	0.008307	0.80%
As 188.979†	10.6	0.0986893	mg/L	0.01475475	0.0986893	mg/L	0.01475475	14.95%
Ba 233.527†	1606.6	0.176847	mg/L	0.0023375	0.176847	mg/L	0.0023375	1.32%
Be 313.107†	23468.7	0.103310	mg/L	0.0000521	0.103310	mg/L	0.0000521	0.05%
Ca 315.887†	546410.9	167.900	mg/L	2.6847	167.900	mg/L	2.6847	1.60%
Cd 228.802†	240.0	0.0988961	mg/L	0.00159409	0.0988961	mg/L	0.00159409	1.61%
Co 228.616†	222.2	0.100638	mg/L	0.0010113	0.100638	mg/L	0.0010113	1.00%
Cr 267.716†	579.9	0.0969776	mg/L	0.00087490	0.0969776	mg/L	0.00087490	0.90%
Cu 327.393†	790.2	0.102091	mg/L	0.0020997	0.102091	mg/L	0.0020997	2.06%
Fe 273.955†	653.2	0.963628	mg/L	0.0057288	0.963628	mg/L	0.0057288	0.59%
K 404.721†	81.5	-3.96355	mg/L	0.643474	-3.96355	mg/L	0.643474	16.23%
Mg 279.077†	14289.5	14.0029	mg/L	0.01946	14.0029	mg/L	0.01946	0.14%
Mn 257.610†	9429.7	0.362746	mg/L	0.0005741	0.362746	mg/L	0.0005741	0.16%
Mo 202.031†	123.1	0.103695	mg/L	0.0039206	0.103695	mg/L	0.0039206	3.78%
Na 330.237†	13257.0	345.116	mg/L	1.6147	345.116	mg/L	1.6147	0.47%
Ni 231.604†	313.5	0.0960265	mg/L	0.00113781	0.0960265	mg/L	0.00113781	1.18%
Pb 220.353†	59.2	0.0977871	mg/L	0.00279781	0.0977871	mg/L	0.00279781	2.86%
Sb 206.836†	13.8	0.102021	mg/L	0.0164322	0.102021	mg/L	0.0164322	16.11%
Se 196.026†	19.8	0.113344	mg/L	0.0078222	0.113344	mg/L	0.0078222	6.90%
Sn 189.927†	43.9	0.0846010	mg/L	0.00098994	0.0846010	mg/L	0.00098994	1.17%
Ti 334.940†	2458.0	0.111841	mg/L	0.0001501	0.111841	mg/L	0.0001501	0.13%
Tl 190.801†	16.2	0.0803973	mg/L	0.01092760	0.0803973	mg/L	0.01092760	13.59%
V 290.880†	599.8	0.120613	mg/L	0.0015535	0.120613	mg/L	0.0015535	1.29%
Zn 206.200†	325.9	0.0791103	mg/L	0.00048845	0.0791103	mg/L	0.00048845	0.62%
B 249.772	984.8	0.185342	mg/L	0.0009875	0.185342	mg/L	0.0009875	0.53%
Si 251.611	695.3	0.492808	mg/L	0.0021864	0.492808	mg/L	0.0021864	0.44%

Sequence No.: 44
Sample ID: AD18955-003 MS 2 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 109
Date Collected: 9/2/2020 7:01:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-003 MS 2 5D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	47095.3	91.8	%	0.31				0.34%
Y 371.029	15470.7	86.2	%	0.55				0.63%
Ag 328.068†	295.2	0.0266120	mg/L	0.00015177	0.0266120	mg/L	0.00015177	0.57%
Al 308.215†	1386.9	1.08491	mg/L	0.006066	1.08491	mg/L	0.006066	0.56%
As 188.979†	8.4	0.0758617	mg/L	0.00377777	0.0758617	mg/L	0.00377777	4.98%
Ba 233.527†	1772.5	0.196754	mg/L	0.0002827	0.196754	mg/L	0.0002827	0.14%
Be 313.107†	24209.5	0.106590	mg/L	0.0002228	0.106590	mg/L	0.0002228	0.21%
Ca 315.887†	588982.3	181.012	mg/L	1.6348	181.012	mg/L	1.6348	0.90%
Cd 228.802†	252.4	0.103827	mg/L	0.0013558	0.103827	mg/L	0.0013558	1.31%
Co 228.616†	227.5	0.103013	mg/L	0.0010137	0.103013	mg/L	0.0010137	0.98%
Cr 267.716†	599.3	0.100476	mg/L	0.0006848	0.100476	mg/L	0.0006848	0.68%
Cu 327.393†	821.1	0.106375	mg/L	0.0018338	0.106375	mg/L	0.0018338	1.72%
Fe 273.955†	626.6	0.916867	mg/L	0.0090181	0.916867	mg/L	0.0090181	0.98%
K 404.721†	81.3	-3.46982	mg/L	0.404302	-3.46982	mg/L	0.404302	11.65%
Mg 279.077†	12659.9	12.3791	mg/L	0.01224	12.3791	mg/L	0.01224	0.10%
Mn 257.610†	7560.8	0.291283	mg/L	0.0005876	0.291283	mg/L	0.0005876	0.20%
Mo 202.031†	127.3	0.107164	mg/L	0.0013298	0.107164	mg/L	0.0013298	1.24%
Na 330.237†	13211.6	343.935	mg/L	1.1527	343.935	mg/L	1.1527	0.34%
Ni 231.604†	320.5	0.0983070	mg/L	0.00086411	0.0983070	mg/L	0.00086411	0.88%
Pb 220.353†	62.8	0.104102	mg/L	0.0038229	0.104102	mg/L	0.0038229	3.67%
Sb 206.836†	15.1	0.111759	mg/L	0.0296159	0.111759	mg/L	0.0296159	26.50%
Se 196.026†	21.7	0.123486	mg/L	0.0157333	0.123486	mg/L	0.0157333	12.74%
Sn 189.927†	43.1	0.0829231	mg/L	0.00122423	0.0829231	mg/L	0.00122423	1.48%
Ti 334.940†	2537.1	0.115882	mg/L	0.0004980	0.115882	mg/L	0.0004980	0.43%
Tl 190.801†	18.8	0.0953886	mg/L	0.01442820	0.0953886	mg/L	0.01442820	15.13%
V 290.880†	607.3	0.122110	mg/L	0.0013635	0.122110	mg/L	0.0013635	1.12%
Zn 206.200†	340.2	0.0836043	mg/L	0.00023206	0.0836043	mg/L	0.00023206	0.28%
B 249.772	975.7	0.183729	mg/L	0.0007149	0.183729	mg/L	0.0007149	0.39%
Si 251.611	733.4	0.515908	mg/L	0.0021103	0.515908	mg/L	0.0021103	0.41%

Sequence No.: 45
Sample ID: AD18955-001 PS 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 110
Date Collected: 9/2/2020 7:06:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-001 PS 5D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46480.6	90.6	%	0.31				0.34%
Y 371.029	15143.5	84.4	%	0.57				0.68%
Ag 328.068†	1060.8	0.0808110	mg/L	0.00053176	0.0808110	mg/L	0.00053176	0.66%
Al 308.215†	6011.8	5.11797	mg/L	0.008821	5.11797	mg/L	0.008821	0.17%
As 188.979†	48.9	0.480791	mg/L	0.0104745	0.480791	mg/L	0.0104745	2.18%
Ba 233.527†	5185.2	0.606390	mg/L	0.0019500	0.606390	mg/L	0.0019500	0.32%
Be 313.107†	116836.1	0.516683	mg/L	0.0024158	0.516683	mg/L	0.0024158	0.47%
Ca 315.887†	693681.7	213.261	mg/L	1.1074	213.261	mg/L	1.1074	0.52%
Cd 228.802†	1267.7	0.509561	mg/L	0.0034977	0.509561	mg/L	0.0034977	0.69%
Co 228.616†	1134.8	0.512632	mg/L	0.0009964	0.512632	mg/L	0.0009964	0.19%
Cr 267.716†	3019.5	0.537671	mg/L	0.0029171	0.537671	mg/L	0.0029171	0.54%
Cu 327.393†	3867.4	0.529679	mg/L	0.0011061	0.529679	mg/L	0.0011061	0.21%
Fe 273.955†	2821.3	4.78165	mg/L	0.044471	4.78165	mg/L	0.044471	0.93%
K 404.721†	384.7	-28.2515	mg/L	0.39908	-28.2515	mg/L	0.39908	1.41%
Mg 279.077†	55668.2	55.2372	mg/L	0.04511	55.2372	mg/L	0.04511	0.08%
Mn 257.610†	27930.7	1.07018	mg/L	0.001401	1.07018	mg/L	0.001401	0.13%
Mo 202.031†	614.0	0.514390	mg/L	0.0065354	0.514390	mg/L	0.0065354	1.27%
Na 330.237†	15163.7	394.667	mg/L	0.7815	394.667	mg/L	0.7815	0.20%
Ni 231.604†	1606.4	0.516679	mg/L	0.0013979	0.516679	mg/L	0.0013979	0.27%
Pb 220.353†	295.5	0.510778	mg/L	0.0013901	0.510778	mg/L	0.0013901	0.27%
Sb 206.836†	71.9	0.546262	mg/L	0.0171355	0.546262	mg/L	0.0171355	3.14%
Se 196.026†	111.9	0.560392	mg/L	0.0151279	0.560392	mg/L	0.0151279	2.70%
Sn 189.927†	243.0	0.487654	mg/L	0.0044643	0.487654	mg/L	0.0044643	0.92%
Ti 334.940†	12854.0	0.515330	mg/L	0.0013728	0.515330	mg/L	0.0013728	0.27%
Tl 190.801†	81.4	0.473389	mg/L	0.0143952	0.473389	mg/L	0.0143952	3.04%
V 290.880†	2508.7	0.529896	mg/L	0.0036047	0.529896	mg/L	0.0036047	0.68%
Zn 206.200†	1757.5	0.529396	mg/L	0.0025440	0.529396	mg/L	0.0025440	0.48%
B 249.772	3033.1	0.601433	mg/L	0.0022032	0.601433	mg/L	0.0022032	0.37%
Si 251.611	1721.8	1.15710	mg/L	0.003851	1.15710	mg/L	0.003851	0.33%

Sequence No.: 46
Sample ID: AD18955-001 SD 5D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 111
Date Collected: 9/2/2020 7:10:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-001 SD 5D

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	47803.3	93.2	%	0.14				0.15%
Y 371.029	15929.1	88.8	%	0.49				0.56%
Ag 328.068†	0.7	0.0059221	mg/L	0.00052234	0.0059221	mg/L	0.00052234	8.82%
Al 308.215†	-10.4	-0.134379	mg/L	0.0040973	-0.134379	mg/L	0.0040973	3.05%
As 188.979†	-0.6	-0.0132704	mg/L	0.01088138	-0.0132704	mg/L	0.01088138	82.00%
Ba 233.527†	186.8	0.0064223	mg/L	0.00014464	0.0064223	mg/L	0.00014464	2.25%
Be 313.107†	-15.4	-0.0006628	mg/L	0.00004594	-0.0006628	mg/L	0.00004594	6.93%
Ca 315.887†	114809.4	34.9627	mg/L	0.07059	34.9627	mg/L	0.07059	0.20%
Cd 228.802†	0.4	0.0031226	mg/L	0.00054174	0.0031226	mg/L	0.00054174	17.35%
Co 228.616†	0.1	0.0003430	mg/L	0.00145292	0.0003430	mg/L	0.00145292	423.56%
Cr 267.716†	3.7	-0.0072618	mg/L	0.00055809	-0.0072618	mg/L	0.00055809	7.69%
Cu 327.393†	-37.9	-0.0129824	mg/L	0.00090720	-0.0129824	mg/L	0.00090720	6.99%
Fe 273.955†	13.5	-0.162834	mg/L	0.0034118	-0.162834	mg/L	0.0034118	2.10%
K 404.721†	-9.9	3.09031	mg/L	0.583776	3.09031	mg/L	0.583776	18.89%
Mg 279.077†	329.0	0.0911983	mg/L	0.00379436	0.0911983	mg/L	0.00379436	4.16%
Mn 257.610†	2902.4	0.113158	mg/L	0.0004459	0.113158	mg/L	0.0004459	0.39%
Mo 202.031†	1.1	0.0015813	mg/L	0.00038878	0.0015813	mg/L	0.00038878	24.59%
Na 330.237†	2105.0	55.2990	mg/L	0.57545	55.2990	mg/L	0.57545	1.04%
Ni 231.604†	5.3	-0.0042748	mg/L	0.00046403	-0.0042748	mg/L	0.00046403	10.86%
Pb 220.353†	-1.0	-0.0074154	mg/L	0.00412432	-0.0074154	mg/L	0.00412432	55.62%
Sb 206.836†	-2.7	-0.0236553	mg/L	0.01506541	-0.0236553	mg/L	0.01506541	63.69%
Se 196.026†	-2.3	-0.0041620	mg/L	0.00791040	-0.0041620	mg/L	0.00791040	190.06%
Sn 189.927†	-4.3	-0.0130140	mg/L	0.00128115	-0.0130140	mg/L	0.00128115	9.84%
Ti 334.940†	-22.5	0.0062877	mg/L	0.00021493	0.0062877	mg/L	0.00021493	3.42%
Tl 190.801†	0.3	-0.0075985	mg/L	0.00609620	-0.0075985	mg/L	0.00609620	80.23%
V 290.880†	4.4	-0.0071159	mg/L	0.00135760	-0.0071159	mg/L	0.00135760	19.08%
Zn 206.200†	-15.9	-0.0284073	mg/L	0.00024758	-0.0284073	mg/L	0.00024758	0.87%
B 249.772	99.2	0.0088314	mg/L	0.00116617	0.0088314	mg/L	0.00116617	13.20%
Si 251.611	151.8	0.124380	mg/L	0.0041756	0.124380	mg/L	0.0041756	3.36%

Sequence No.: 47
Sample ID: AD18955-004 2D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 112
Date Collected: 9/2/2020 7:14:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-004 2D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	45068.7	87.9	%	0.80				0.90%
Y 371.029	14638.3	81.6	%	0.64				0.79%
Ag 328.068†	78.3	0.0113012	mg/L	0.00044358	0.0113012	mg/L	0.00044358	3.93%
Al 308.215†	21.8	-0.105149	mg/L	0.0032746	-0.105149	mg/L	0.0032746	3.11%
As 188.979†	0.0	-0.0074228	mg/L	0.02057130	-0.0074228	mg/L	0.02057130	277.14%
Ba 233.527†	1476.1	0.161178	mg/L	0.0018733	0.161178	mg/L	0.0018733	1.16%
Be 313.107†	-100.1	-0.0010377	mg/L	0.00009934	-0.0010377	mg/L	0.00009934	9.57%
Ca 315.887†	1109748.8	341.413	mg/L	2.8801	341.413	mg/L	2.8801	0.84%
Cd 228.802†	1.3	0.0034996	mg/L	0.00063040	0.0034996	mg/L	0.00063040	18.01%
Co 228.616†	7.2	0.0035532	mg/L	0.00058998	0.0035532	mg/L	0.00058998	16.60%
Cr 267.716†	11.6	-0.0057267	mg/L	0.00047258	-0.0057267	mg/L	0.00047258	8.25%
Cu 327.393†	-77.3	-0.0184638	mg/L	0.00096343	-0.0184638	mg/L	0.00096343	5.22%
Fe 273.955†	7.9	-0.172745	mg/L	0.0022761	-0.172745	mg/L	0.0022761	1.32%
K 404.721†	13.1	4.47862	mg/L	0.614293	4.47862	mg/L	0.614293	13.72%
Mg 279.077†	11647.1	11.3697	mg/L	0.03824	11.3697	mg/L	0.03824	0.34%
Mn 257.610†	16513.3	0.633608	mg/L	0.0018679	0.633608	mg/L	0.0018679	0.29%
Mo 202.031†	0.7	0.0012874	mg/L	0.00153560	0.0012874	mg/L	0.00153560	119.28%
Na 330.237†	34184.1	888.965	mg/L	4.2359	888.965	mg/L	4.2359	0.48%
Ni 231.604†	6.4	-0.0039181	mg/L	0.00135566	-0.0039181	mg/L	0.00135566	34.60%
Pb 220.353†	1.4	-0.0030719	mg/L	0.00180991	-0.0030719	mg/L	0.00180991	58.92%
Sb 206.836†	0.0	-0.0036245	mg/L	0.00480674	-0.0036245	mg/L	0.00480674	132.62%
Se 196.026†	-0.0	0.0316813	mg/L	0.02581399	0.0316813	mg/L	0.02581399	81.48%
Sn 189.927†	-8.8	-0.0221416	mg/L	0.00348720	-0.0221416	mg/L	0.00348720	15.75%
Ti 334.940†	-138.5	0.0251119	mg/L	0.00050639	0.0251119	mg/L	0.00050639	2.02%
Tl 190.801†	1.3	-0.0189901	mg/L	0.00682365	-0.0189901	mg/L	0.00682365	35.93%
V 290.880†	113.6	0.0168353	mg/L	0.00115062	0.0168353	mg/L	0.00115062	6.83%
Zn 206.200†	-8.0	-0.0259235	mg/L	0.00079771	-0.0259235	mg/L	0.00079771	3.08%
B 249.772	1072.1	0.199214	mg/L	0.0028029	0.199214	mg/L	0.0028029	1.41%
Si 251.611	1073.4	0.755254	mg/L	0.0054334	0.755254	mg/L	0.0054334	0.72%

Sequence No.: 48
Sample ID: AD18955-005 2D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 113
Date Collected: 9/2/2020 7:18:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD18955-005 2D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	45736.0	89.2	%	0.16				0.18%
Y 371.029	15135.1	84.4	%	0.32				0.37%
Ag 328.068†	58.3	0.0099019	mg/L	0.00047018	0.0099019	mg/L	0.00047018	4.75%
Al 308.215†	19.1	-0.108080	mg/L	0.0065297	-0.108080	mg/L	0.0065297	6.04%
As 188.979†	0.1	-0.0059721	mg/L	0.00807697	-0.0059721	mg/L	0.00807697	135.25%
Ba 233.527†	2801.0	0.320207	mg/L	0.0003795	0.320207	mg/L	0.0003795	0.12%
Be 313.107†	-91.5	-0.0009998	mg/L	0.00008525	-0.0009998	mg/L	0.00008525	8.53%
Ca 315.887†	827629.1	254.518	mg/L	0.7090	254.518	mg/L	0.7090	0.28%
Cd 228.802†	2.8	0.0041017	mg/L	0.00064216	0.0041017	mg/L	0.00064216	15.66%
Co 228.616†	22.7	0.0105328	mg/L	0.00088078	0.0105328	mg/L	0.00088078	8.36%
Cr 267.716†	15.8	-0.0050217	mg/L	0.00045937	-0.0050217	mg/L	0.00045937	9.15%
Cu 327.393†	-37.6	-0.0129262	mg/L	0.00066498	-0.0129262	mg/L	0.00066498	5.14%
Fe 273.955†	99.2	-0.0118946	mg/L	0.00515153	-0.0118946	mg/L	0.00515153	43.31%
K 404.721†	13.4	2.76087	mg/L	0.643638	2.76087	mg/L	0.643638	23.31%
Mg 279.077†	5762.3	5.50554	mg/L	0.009287	5.50554	mg/L	0.009287	0.17%
Mn 257.610†	77610.3	2.96981	mg/L	0.003625	2.96981	mg/L	0.003625	0.12%
Mo 202.031†	0.4	0.0009898	mg/L	0.00161435	0.0009898	mg/L	0.00161435	163.10%
Na 330.237†	33252.4	864.752	mg/L	1.9097	864.752	mg/L	1.9097	0.22%
Ni 231.604†	45.5	0.0087719	mg/L	0.00100592	0.0087719	mg/L	0.00100592	11.47%
Pb 220.353†	9.4	0.0107201	mg/L	0.00124717	0.0107201	mg/L	0.00124717	11.63%
Sb 206.836†	0.1	-0.0028985	mg/L	0.01955714	-0.0028985	mg/L	0.01955714	674.74%
Se 196.026†	-0.3	0.0235766	mg/L	0.00883954	0.0235766	mg/L	0.00883954	37.49%
Sn 189.927†	-8.3	-0.0210474	mg/L	0.00265918	-0.0210474	mg/L	0.00265918	12.63%
Ti 334.940†	-104.9	0.0198018	mg/L	0.00017877	0.0198018	mg/L	0.00017877	0.90%
Tl 190.801†	1.1	-0.0065886	mg/L	0.01464797	-0.0065886	mg/L	0.01464797	222.32%
V 290.880†	63.1	0.0057069	mg/L	0.00078198	0.0057069	mg/L	0.00078198	13.70%
Zn 206.200†	170.7	0.0302891	mg/L	0.00129539	0.0302891	mg/L	0.00129539	4.28%
B 249.772	1318.8	0.255553	mg/L	0.0018028	0.255553	mg/L	0.0018028	0.71%
Si 251.611	1229.5	0.870183	mg/L	0.0168728	0.870183	mg/L	0.0168728	1.94%

Sequence No.: 49 **Autosampler Location: 6**
Sample ID: CCV V-329036 **Date Collected: 9/2/2020 7:23:04 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	46633.8	90.9	%	0.13				0.14%
Y 371.029	15307.0	85.3	%	0.38				0.44%
Ag 328.068†	1403.2	0.103995	mg/L	0.0005503	0.103995	mg/L	0.0005503	0.53%
QC value within limits for Ag 328.068 Recovery = 103.99%								
Al 308.215†	5921.9	5.03947	mg/L	0.004649	5.03947	mg/L	0.004649	0.09%
QC value within limits for Al 308.215 Recovery = 100.79%								
As 188.979†	49.6	0.488232	mg/L	0.0158832	0.488232	mg/L	0.0158832	3.25%
QC value within limits for As 188.979 Recovery = 97.65%								
Ba 233.527†	4369.6	0.508492	mg/L	0.0009773	0.508492	mg/L	0.0009773	0.19%
QC value within limits for Ba 233.527 Recovery = 101.70%								
Be 313.107†	117855.5	0.521197	mg/L	0.0002132	0.521197	mg/L	0.0002132	0.04%
QC value within limits for Be 313.107 Recovery = 104.24%								
Ca 315.887†	169006.4	51.6559	mg/L	0.01803	51.6559	mg/L	0.01803	0.03%
QC value within limits for Ca 315.887 Recovery = 103.31%								
Cd 228.802†	1244.7	0.500369	mg/L	0.0018337	0.500369	mg/L	0.0018337	0.37%
QC value within limits for Cd 228.802 Recovery = 100.07%								
Co 228.616†	1146.8	0.518055	mg/L	0.0023257	0.518055	mg/L	0.0023257	0.45%
QC value within limits for Co 228.616 Recovery = 103.61%								
Cr 267.716†	3041.0	0.541496	mg/L	0.0024004	0.541496	mg/L	0.0024004	0.44%
QC value within limits for Cr 267.716 Recovery = 108.30%								
Cu 327.393†	3731.6	0.510824	mg/L	0.0041532	0.510824	mg/L	0.0041532	0.81%
QC value within limits for Cu 327.393 Recovery = 102.16%								
Fe 273.955†	2855.2	4.84142	mg/L	0.028869	4.84142	mg/L	0.028869	0.60%
QC value within limits for Fe 273.955 Recovery = 96.83%								
K 404.721†	887.9	-0.944823	mg/L	0.3542299	-0.944823	mg/L	0.3542299	37.49%
QC value less than the lower limit for K 404.721 Recovery = -1.89%								
Mg 279.077†	52131.8	51.7132	mg/L	0.06404	51.7132	mg/L	0.06404	0.12%
QC value within limits for Mg 279.077 Recovery = 103.43%								
Mn 257.610†	13012.5	0.499746	mg/L	0.0009151	0.499746	mg/L	0.0009151	0.18%
QC value within limits for Mn 257.610 Recovery = 99.95%								
Mo 202.031†	609.7	0.510788	mg/L	0.0034878	0.510788	mg/L	0.0034878	0.68%
QC value within limits for Mo 202.031 Recovery = 102.16%								
Na 330.237†	1819.1	47.8703	mg/L	0.15885	47.8703	mg/L	0.15885	0.33%
QC value within limits for Na 330.237 Recovery = 95.74%								
Ni 231.604†	1608.8	0.517437	mg/L	0.0032530	0.517437	mg/L	0.0032530	0.63%
QC value within limits for Ni 231.604 Recovery = 103.49%								
Pb 220.353†	302.8	0.523475	mg/L	0.0013081	0.523475	mg/L	0.0013081	0.25%
QC value within limits for Pb 220.353 Recovery = 104.70%								
Sb 206.836†	68.8	0.522764	mg/L	0.0135622	0.522764	mg/L	0.0135622	2.59%
QC value within limits for Sb 206.836 Recovery = 104.55%								
Se 196.026†	106.0	0.519082	mg/L	0.0187904	0.519082	mg/L	0.0187904	3.62%
QC value within limits for Se 196.026 Recovery = 103.82%								
Sn 189.927†	246.3	0.494305	mg/L	0.0017730	0.494305	mg/L	0.0017730	0.36%
QC value within limits for Sn 189.927 Recovery = 98.86%								
Ti 334.940†	12570.6	0.492145	mg/L	0.0008784	0.492145	mg/L	0.0008784	0.18%
QC value within limits for Ti 334.940 Recovery = 98.43%								
Tl 190.801†	87.8	0.519963	mg/L	0.0058557	0.519963	mg/L	0.0058557	1.13%
QC value within limits for Tl 190.801 Recovery = 103.99%								
V 290.880†	2471.6	0.521767	mg/L	0.0030552	0.521767	mg/L	0.0030552	0.59%
QC value within limits for V 290.880 Recovery = 104.35%								
Zn 206.200†	1743.2	0.524923	mg/L	0.0016175	0.524923	mg/L	0.0016175	0.31%
QC value within limits for Zn 206.200 Recovery = 104.98%								
B 249.772	2670.8	0.534909	mg/L	0.0044415	0.534909	mg/L	0.0044415	0.83%
QC value within limits for B 249.772 Recovery = 106.98%								
Si 251.611	8620.5	4.93468	mg/L	0.005758	4.93468	mg/L	0.005758	0.12%
QC value within limits for Si 251.611 Recovery = 98.69%								

QC Failed. Continue with analysis.

Sequence No.: 50 **Autosampler Location: 1**
Sample ID: CCB V-329027 **Date Collected: 9/2/2020 7:27:02 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-329027

Analyte	Mean Intensity	Corrected Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	50768.3	99.0	%	0.63				0.64%
Y 371.029	17084.1	95.2	%	0.49				0.52%
Ag 328.068†	-8.7	0.0052683	mg/L	0.00064375	0.0052683	mg/L	0.00064375	12.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-20.7	-0.143453	mg/L	0.0027044	-0.143453	mg/L	0.0027044	1.89%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.2	-0.0087582	mg/L	0.01249462	-0.0087582	mg/L	0.01249462	142.66%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	1.1	-0.0158650	mg/L	0.00013209	-0.0158650	mg/L	0.00013209	0.83%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	28.3	-0.0004691	mg/L	0.00004606	-0.0004691	mg/L	0.00004606	9.82%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-47.8	-0.414322	mg/L	0.0024596	-0.414322	mg/L	0.0024596	0.59%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	0.3	0.0031091	mg/L	0.00029032	0.0031091	mg/L	0.00029032	9.34%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	3.7	0.0019659	mg/L	0.00075568	0.0019659	mg/L	0.00075568	38.44%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.1	-0.0079246	mg/L	0.00010678	-0.0079246	mg/L	0.00010678	1.35%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-22.5	-0.0108518	mg/L	0.00134991	-0.0108518	mg/L	0.00134991	12.44%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-3.0	-0.191919	mg/L	0.0066663	-0.191919	mg/L	0.0066663	3.47%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-13.3	3.21912	mg/L	0.313199	3.21912	mg/L	0.313199	9.73%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	4.9	-0.231798	mg/L	0.0066939	-0.231798	mg/L	0.0066939	2.89%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-7.8	0.0018796	mg/L	0.00002428	0.0018796	mg/L	0.00002428	1.29%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-1.4	-0.0004997	mg/L	0.00063698	-0.0004997	mg/L	0.00063698	127.48%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	0.3	0.602877	mg/L	0.0917758	0.602877	mg/L	0.0917758	15.22%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	4.2	-0.0046479	mg/L	0.00113994	-0.0046479	mg/L	0.00113994	24.53%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.3	-0.0051357	mg/L	0.00274596	-0.0051357	mg/L	0.00274596	53.47%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.8	-0.0096527	mg/L	0.01340786	-0.0096527	mg/L	0.01340786	138.90%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.4	-0.0026151	mg/L	0.02342890	-0.0026151	mg/L	0.02342890	895.91%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.1	-0.0039945	mg/L	0.00127765	-0.0039945	mg/L	0.00127765	31.99%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	0.6	0.0044876	mg/L	0.00002417	0.0044876	mg/L	0.00002417	0.54%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.5	-0.0047770	mg/L	0.00375503	-0.0047770	mg/L	0.00375503	78.61%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-8.9	-0.0099553	mg/L	0.00031517	-0.0099553	mg/L	0.00031517	3.17%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-20.0	-0.0297058	mg/L	0.00072238	-0.0297058	mg/L	0.00072238	2.43%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	16.8	-0.0075760	mg/L	0.00061649	-0.0075760	mg/L	0.00061649	8.14%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	3.8	0.0290832	mg/L	0.00197624	0.0290832	mg/L	0.00197624	6.80%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334145

Prepared By: Silva, Amanda
Description: Hg Intermediate Standard -WARNING
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: Metals
BatchNumber: B-29620
Concentration: .25 ppm
Final Volume: 500 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13311	MERCURY 1000 PPM	.125 ml	1000 ug/ml	
13421	nitric acid	12.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334146

Prepared By: Silva, Amanda
Description: Hg intermediate Control -WARNING
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: Metals
BatchNumber: B-29620
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334158

Prepared By: Silva, Amanda
Description: Hg AQ ICV 20 ppb
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: Metals
BatchNumber: B-29622
Concentration: 20 ppb
Final Volume: 25 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334146	Hg intermediate Control -WARNING	.5 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334159

Prepared By: Silva, Amanda
Description: Hg AQ CCV 10 ppb
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: Metals
BatchNumber: B-29622
Concentration: 10 ppb
Final Volume: 25 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334146	Hg intermediate Control -WARNING	.25 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334160

Prepared By: Silva, Amanda
Description: Hg AQ standard blk
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: Metals
BatchNumber: B-29622
Concentration: 0 ppb
Final Volume: 25 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334161

Prepared By: Silva, Amanda
Description: Hg AQ standard .2 ppb
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: Metals
BatchNumber: B-29622
Concentration: .2 ppb
Final Volume: 25 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334145	Hg Intermediate Standard -WARNING	.02 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334162

Prepared By: Silva, Amanda
Description: Hg AQ standard .5 ppb
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: Metals
BatchNumber: B-29622
Concentration: .5 ppb
Final Volume: 25 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334145	Hg Intermediate Standard -WARNING	.05 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334163

Prepared By: Silva, Amanda
Description: Hg AQ standard 1 ppb
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: Metals
BatchNumber: B-29622
Concentration: 1 ppb
Final Volume: 25 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334145	Hg Intermediate Standard -WARNING	.1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334164

Prepared By: Silva, Amanda
Description: Hg AQ standard 2 ppb
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: Metals
BatchNumber: B-29622
Concentration: 2 ppb
Final Volume: 25 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334145	Hg Intermediate Standard -WARNING	.2 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334165

Prepared By: Silva, Amanda
Description: Hg AQ standard 5 ppb
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: Metals
BatchNumber: B-29622
Concentration: 5 ppb
Final Volume: 25 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334145	Hg Intermediate Standard -WARNING	.5 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334166

Prepared By: Silva, Amanda
Description: Hg AQ standard 10 ppb
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: Metals
BatchNumber: B-29622
Concentration: 10 ppb
Final Volume: 25 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334145	Hg Intermediate Standard -WARNING	1 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334167

Prepared By:	Silva, Amanda	Department:	Metals	ApprovedBy:	
Description:	Hg AQ standard 25 ppb	BatchNumber:	B-29622	ApproveDate:	
Prep Date:	9/2/2020	Concentration:	25 ppb	Checked:	No
Expiration Date:	9/2/2020	Final Volume:	25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334145	Hg Intermediate Standard -WARNING	2.5 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-317822

Prepared By: Aliano, Carmela
Description: Hydroxylamine Hydrochloride WARNIN
Prep Date: 12/13/2019
Expiration Date: 1/8/2020
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 10 l
ApprovedBy: shiamala
ApproveDate: 12/16/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12651	DI H2O			
12218	Sodium Chloride	1200 g	neat neat	
12619	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-327154

Prepared By: Cousineau, Paul
Description: 5% Potassium Persulfate WARNING
Prep Date: 5/7/2020
Expiration Date: 11/6/2020
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 12620 l
ApprovedBy: shiamala
ApproveDate: 05/07/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12620	POTASSIUM PERSULFATE	500 g	NEAT neat	

Veritech Lot Number: V-331286

Prepared By: Lucca, Daniela
Description: 5% Potassium Permanganate WARNIN
Prep Date: 7/13/2020
Expiration Date: 2/13/2021
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12621	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-333999

Prepared By: Ransaw, Brianna
Description: 3% HCL WARNING
Prep Date: 8/31/2020
Expiration Date: 9/10/2020
Department: WetChem
BatchNumber:
Concentration: 3 %
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13130	hydrochloric acid	600 ml	neat neat	3%
13084	DI H20			

Veritech Lot Number: V-334146

Prepared By: Silva, Amanda
Description: Hg intermediate Control -WARNING
Prep Date: 9/2/2020
Expiration Date: 9/2/2020
Department: Metals
BatchNumber: B-29620
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334168

Prepared By:	Ransaw, Brianna	Department: Metals	ApprovedBy:
Description:	SnCl2 "WARNING:"	BatchNumber:	ApproveDate:
Prep Date:	9/2/2020	Concentration: reagent I	Checked: No
Expiration Date:	9/2/2020	Final Volume: 2 l	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333999	3% HCL WARNING	2000 ml	3 %	
13089	STANNOUS CHOLORIDE	26.4 g		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13311

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP	140-051-801	S200130001	06/04/20	12/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12218

Description
Sodium Chloride

ApprovedBy: akmal
ApproveDate: 12/31/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	SX0420-5	17F145203	12/27/18	12/26/23	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12619

Description
HYDROXYLAMINE HYDROCHLORIDE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LS-1580015	190318-4C	06/25/19	06/24/23	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12620

Description
POTASSIUM PERSULFATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-4445NG	170106-A	06/25/19	08/09/21	Balashanthan, Shi	1	2.5KG	NEAT	NEAT

Veritech Control/Receipt Number: 12621

Description
POTASSIUM PERMANGANATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-T10208	190318-3C	06/25/19	06/24/29	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12651

Description
DI H2O

ApprovedBy: janee
ApproveDate: 10/10/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	07/08/19	07/07/20	Cousineau, Paul	1			

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13089

Description
STANNOUS CHOLORIDE

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB CHEM	LC-P33805	190620-3C	02/15/20	02/14/23	Aliano, Carmela	1	1Gal		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Method: HGCV3 TCLP (7470A) Page 1 Date: 9/2/2020 12:52:26 PM

H26169T
SnCl 2V-334168
9/2/20
BR

Analysis Begun

Logged In Analyst: usermet
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26169T.sif
Batch ID: H26169T
Results Data Set: H26169T
Results Library: C:\data-AA\johns\Results\Results.mdb

Method Loaded
Method Name: HGCV3 TCLP (7470A)
Method Last Saved: 3/2/2020 12:35:25 PM
Method Description: HgCV3 TCLP (7470A)

9/3/20

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calibration Blank
Date Collected: 9/2/2020 12:47:40 PM
Analyst:
Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0001	0.0001	12:48:27	Yes
2		[0.00]	0.0001	0.0001	0.0001	12:49:00	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	12.16				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 2
Sample ID: .2 PPB
Date Collected: 9/2/2020 12:49:01 PM
Analyst:
Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0013	0.0061	0.0013	12:49:46	Yes
2		[0.2]	0.0012	0.0059	0.0013	12:50:19	Yes
Mean:		[0.2]	0.0012				
SD:		0.0	0.0000				
%RSD:		0.0	1.68				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00624 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 3
Sample ID: .5 PPB
Date Collected: 9/2/2020 12:50:20 PM
Analyst:
Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0027	0.0124	0.0027	12:51:06	Yes
2		[0.5]	0.0026	0.0121	0.0027	12:51:38	Yes
Mean:		[0.5]	0.0027				
SD:		0.0	0.0000				
%RSD:		0.0	0.90				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.996931 Slope: 0.00529 Intercept: 0.00007

Sequence No.: 4
Autosampler Location: 4
Sample ID: 1 PPB
Date Collected: 9/2/2020 12:51:40 PM
Analyst:
Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[1]	0.0051	0.0232	0.0051	12:52:25	Yes
2	[1]	0.0051	0.0231	0.0051	12:52:58	Yes
Mean:	[1]	0.0051				
SD:	0	0.0000				
%RSD:	0	0.09				

Standard number 3 applied. [1]
Correlation Coef.: 0.998730 Slope: 0.00499 Intercept: 0.00012

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: 2 PPB **Date Collected: 9/2/2020 12:52:59 PM**
Analyst: **Data Type: Original**

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0103	0.0471	0.0104	12:53:44	Yes
2		[2]	0.0104	0.0471	0.0105	12:54:17	Yes
Mean:		[2]	0.0104				
SD:		0	0.0001				
%RSD:		0	0.68				

Standard number 4 applied. [2]
Correlation Coef.: 0.999621 Slope: 0.00513 Intercept: 0.00008

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: 5 PPB **Date Collected: 9/2/2020 12:54:18 PM**
Analyst: **Data Type: Original**

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0257	0.1170	0.0258	12:55:04	Yes
2		[5]	0.0256	0.1159	0.0257	12:55:36	Yes
Mean:		[5]	0.0257				
SD:		0	0.0000				
%RSD:		0	0.16				

Standard number 5 applied. [5]
Correlation Coef.: 0.999944 Slope: 0.00512 Intercept: 0.00008

Sequence No.: 7 **Autosampler Location: 7**
Sample ID: 10 PPB **Date Collected: 9/2/2020 12:55:38 PM**
Analyst: **Data Type: Original**

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0517	0.2362	0.0518	12:56:23	Yes
2		[10]	0.0516	0.2341	0.0516	12:56:56	Yes
Mean:		[10]	0.0516				
SD:		0	0.0001				
%RSD:		0	0.17				

Standard number 6 applied. [10]
Correlation Coef.: 0.999982 Slope: 0.00515 Intercept: 0.00005

Sequence No.: 8 **Autosampler Location: 8**
Sample ID: 25 PPB **Date Collected: 9/2/2020 12:57:22 PM**
Analyst: **Data Type: Original**

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[25]	0.1235	0.5691	0.1236	12:58:12	Yes
2		[25]	0.1236	0.5657	0.1236	12:58:44	Yes
Mean:		[25]	0.1235				
SD:		0	0.0000				
%RSD:		0	0.02				

Standard number 7 applied. [25]
Correlation Coef.: 0.999845 Slope: 0.00495 Intercept: 0.00048

Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.098	0.00	12.2
.2 PPB	0.0012	0.2	0.155	0.00	1.7
.5 PPB	0.0027	0.5	0.441	0.00	0.9
1 PPB	0.0051	1.0	0.926	0.00	0.1
2 PPB	0.0104	2.0	2.002	0.00	0.7
5 PPB	0.0257	5.0	5.088	0.00	0.2
10 PPB	0.0516	10.0	10.332	0.00	0.2
25 PPB	0.1235	25.0	24.854	0.00	0.0

Correlation Coef.: 0.999845 Slope: 0.00495 Intercept: 0.00048

Sequence No.: 9 Autosampler Location: 10
Sample ID: ICV (2) Date Collected: 9/2/2020 12:59:11 PM
Analyst: Data Type: Original

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.15	20.15	0.1003	0.4600	0.1003	12:59:57	Yes
2	20.36	20.36	0.1013	0.4608	0.1014	13:00:30	Yes
Mean:	20.26	20.26	0.1008				
SD:	0.149	0.149	0.0007				
%RSD:	0.738	0.738	0.73				

QC value within limits for Hg 253.7 Recovery = 101.29%
All analyte(s) passed QC.

Sequence No.: 10 Autosampler Location: 1
Sample ID: ICB Date Collected: 9/2/2020 1:00:53 PM
Analyst: Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.107	-0.107	-0.0000	-0.0005	0.0000	13:01:39	Yes
2	-0.100	-0.100	-0.0000	-0.0001	0.0000	13:02:12	Yes
Mean:	-0.103	-0.103	-0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	5.055	5.055	92.14				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 11
Sample ID: MB 85227 (1) Date Collected: 9/2/2020 1:02:13 PM
Analyst: Data Type: Original

Replicate Data: MB 85227 (1)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0000	-0.0001	0.0000	13:03:00	Yes
2	-0.096	-0.096	0.0000	0.0000	0.0001	13:03:32	Yes
Mean:	-0.098	-0.098	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	2.031	2.031	>999.9%				

Sequence No.: 12 Autosampler Location: 12
Sample ID: LCS 85227 Date Collected: 9/2/2020 1:03:33 PM
Analyst: Data Type: Original

Replicate Data: LCS 85227

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.43	10.43	0.0521	0.2370	0.0522	13:04:19	Yes
2	10.26	10.26	0.0513	0.2316	0.0514	13:04:51	Yes
Mean:	10.35	10.35	0.0517				

SD:	0.120	0.120	0.0006
%RSD:	1.163	1.163	1.15

Sequence No.: 13 **Autosampler Location: 13**
Sample ID: LCS 85227 **Date Collected: 9/2/2020 1:05:15 PM**
Analyst: **Data Type: Original**

Replicate Data: LCS 85227

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.31	10.31	0.0516	0.2340	0.0516	13:06:03	Yes
2	10.24	10.24	0.0512	0.2308	0.0513	13:06:35	Yes
Mean:	10.28	10.28	0.0514				
SD:	0.050	0.050	0.0002				
%RSD:	0.486	0.486	0.48				

Sequence No.: 14 **Autosampler Location: 14**
Sample ID: AD18955-001 **Date Collected: 9/2/2020 1:06:59 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18955-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0000	-0.0002	0.0000	13:07:47	Yes
2	-0.098	-0.098	-0.0000	0.0001	0.0001	13:08:19	Yes
Mean:	-0.099	-0.099	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	1.763	1.763	96.59				

Sequence No.: 15 **Autosampler Location: 15**
Sample ID: AD18955-001 MR **Date Collected: 9/2/2020 1:08:21 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18955-001 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	0.0000	0.0001	0.0001	13:09:06	Yes
2	-0.093	-0.093	0.0000	0.0003	0.0001	13:09:39	Yes
Mean:	-0.093	-0.093	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.058	1.058	23.18				

Sequence No.: 16 **Autosampler Location: 16**
Sample ID: AD18955-002 MS 1 **Date Collected: 9/2/2020 1:09:40 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18955-002 MS 1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.25	10.25	0.0512	0.2307	0.0513	13:10:26	Yes
2	10.29	10.29	0.0515	0.2328	0.0515	13:10:58	Yes
Mean:	10.27	10.27	0.0513				
SD:	0.032	0.032	0.0002				
%RSD:	0.311	0.311	0.31				

Sequence No.: 17 **Autosampler Location: 17**
Sample ID: AD18955-003 MS 2 **Date Collected: 9/2/2020 1:11:23 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18955-003 MS 2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.755	9.755	0.0488	0.2200	0.0488	13:12:13	Yes
2	9.170	9.170	0.0459	0.2073	0.0459	13:12:45	Yes
Mean:	9.462	9.462	0.0473				
SD:	0.414	0.414	0.0021				

%RSD: 4.375 4.375 4.33

==========

Sequence No.: 18 Autosampler Location: 18
Sample ID: AD18950-004 Date Collected: 9/2/2020 1:13:11 PM
Analyst: Data Type: Original

Replicate Data: AD18950-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.105	-0.105	-0.0000	-0.0004	0.0000	13:14:01	Yes
2	-0.096	-0.096	0.0000	-0.0000	0.0001	13:14:34	Yes
Mean:	-0.101	-0.101	-0.0000				
SD:	0.006	0.006	0.0000				
%RSD:	5.645	5.645	196.25				

==========

Sequence No.: 19 Autosampler Location: 19
Sample ID: AD18932-002 Date Collected: 9/2/2020 1:14:35 PM
Analyst: Data Type: Original

Replicate Data: AD18932-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.096	-0.096	0.0000	-0.0000	0.0001	13:15:24	Yes
2	-0.098	-0.098	-0.0000	0.0001	0.0001	13:15:56	Yes
Mean:	-0.097	-0.097	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	0.906	0.906	146.92				

==========

Sequence No.: 20 Autosampler Location: 20
Sample ID: AD18955-004 Date Collected: 9/2/2020 1:15:58 PM
Analyst: Data Type: Original

Replicate Data: AD18955-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.098	-0.098	-0.0000	0.0001	0.0001	13:16:43	Yes
2	-0.099	-0.099	-0.0000	0.0001	0.0000	13:17:16	Yes
Mean:	-0.098	-0.098	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	0.941	0.941	135.43				

==========

Sequence No.: 21 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/2/2020 1:17:17 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.35	10.35	0.0517	0.2350	0.0518	13:18:03	Yes
2	10.32	10.32	0.0516	0.2333	0.0517	13:18:36	Yes
Mean:	10.34	10.34	0.0517				
SD:	0.020	0.020	0.0001				
%RSD:	0.189	0.189	0.19				

QC value within limits for Hg 253.7 Recovery = 103.37%
All analyte(s) passed QC.

==========

Sequence No.: 22 Autosampler Location: 1
Sample ID: CCB Date Collected: 9/2/2020 1:18:58 PM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.104	-0.104	-0.0000	-0.0003	0.0000	13:19:45	Yes
2	-0.103	-0.103	-0.0000	-0.0003	0.0000	13:20:18	Yes
Mean:	-0.104	-0.104	-0.0000				

SD: 0.001 0.001 0.0000
%RSD: 0.529 0.529 8.82
QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 21**
Sample ID: AD18955-005 **Date Collected: 9/2/2020 1:20:19 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18955-005

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.096	-0.096	0.0000	0.0000	0.0001	13:21:06	Yes
2	-0.094	-0.094	0.0000	0.0001	0.0001	13:21:39	Yes
Mean:	-0.095	-0.095	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	1.923	1.923	73.63				

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: AD18957-001 **Date Collected: 9/2/2020 1:21:40 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18957-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.098	-0.098	0.0000	0.0000	0.0001	13:22:26	Yes
2	-0.095	-0.095	0.0000	0.0001	0.0001	13:22:58	Yes
Mean:	-0.096	-0.096	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	1.899	1.899	138.21				

Sequence No.: 25 **Autosampler Location: 23**
Sample ID: AD18957-003 **Date Collected: 9/2/2020 1:23:00 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18957-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0000	-0.0001	0.0000	13:23:45	Yes
2	-0.094	-0.094	0.0000	0.0002	0.0001	13:24:17	Yes
Mean:	-0.098	-0.098	-0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	5.083	5.083	>999.9%				

Sequence No.: 26 **Autosampler Location: 24**
Sample ID: AD18957-005 **Date Collected: 9/2/2020 1:24:19 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18957-005

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.091	-0.091	0.0000	0.0003	0.0001	13:25:04	Yes
2	-0.094	-0.094	0.0000	0.0002	0.0001	13:25:36	Yes
Mean:	-0.092	-0.092	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	2.300	2.300	39.20				

Sequence No.: 27 **Autosampler Location: 25**
Sample ID: AD18957-007 **Date Collected: 9/2/2020 1:25:38 PM**
Analyst: **Data Type: Original**

Replicate Data: AD18957-007

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.090	-0.090	0.0000	0.0005	0.0001	13:26:23	Yes
2	-0.098	-0.098	-0.0000	-0.0000	0.0001	13:26:55	Yes

Mean:	-0.094	-0.094	0.0000
SD:	0.006	0.006	0.0000
%RSD:	6.365	6.365	160.51

Sequence No.: 28 Autosampler Location: 26
Sample ID: AD18957-009 Date Collected: 9/2/2020 1:26:57 PM
Analyst: Data Type: Original

Replicate Data: AD18957-009

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.091	-0.091	0.0000	0.0003	0.0001	13:27:42	Yes
2	-0.096	-0.096	0.0000	-0.0000	0.0001	13:28:15	Yes
Mean:	-0.093	-0.093	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	3.935	3.935	82.89				

Sequence No.: 29 Autosampler Location: 27
Sample ID: AD18957-011 Date Collected: 9/2/2020 1:28:16 PM
Analyst: Data Type: Original

Replicate Data: AD18957-011

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.090	-0.090	0.0000	0.0004	0.0001	13:29:02	Yes
2	-0.092	-0.092	0.0000	0.0002	0.0001	13:29:34	Yes
Mean:	-0.091	-0.091	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	2.001	2.001	27.62				

Sequence No.: 30 Autosampler Location: 28
Sample ID: AD18957-013 Date Collected: 9/2/2020 1:29:36 PM
Analyst: Data Type: Original

Replicate Data: AD18957-013

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	0.0000	0.0002	0.0001	13:30:24	Yes
2	-0.094	-0.094	0.0000	0.0001	0.0001	13:30:57	Yes
Mean:	-0.095	-0.095	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	2.152	2.152	84.19				

Sequence No.: 31 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/2/2020 1:30:58 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.21	10.21	0.0510	0.2321	0.0511	13:31:44	Yes
2	10.34	10.34	0.0517	0.2333	0.0517	13:32:17	Yes
Mean:	10.27	10.27	0.0514				
SD:	0.088	0.088	0.0004				
%RSD:	0.854	0.854	0.85				

QC value within limits for Hg 253.7 Recovery = 102.73%
All analyte(s) passed QC.

Sequence No.: 32 Autosampler Location: 1
Sample ID: CCB Date Collected: 9/2/2020 1:32:39 PM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.105	-0.105	-0.0000	-0.0003	0.0000	13:33:26	Yes

2	-0.097	-0.097	0.0000	0.0002	0.0001	13:33:59	Yes
Mean:	-0.101	-0.101	-0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	5.043	5.043	148.75				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Method: HGCV3 TCLP (7470A) Page 1 Date: 9/2/2020 1:44:50 PM

H26169TB
SnCl2 v-334168
9/2/20
BR

Analysis Begun

Logged In Analyst: usermet
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26169TB.sif
Batch ID: H26169T
Results Data Set: H26169TB
Results Library: C:\data-AA\johns\Results\Results.mdb

Method Loaded
Method Name: HGCV3 TCLP (7470A)
Method Last Saved: 3/2/2020 12:35:25 PM
Method Description: HgCV3 TCLP (7470A)

9/3/20

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calibration Blank
Date Collected: 9/2/2020 1:40:05 PM
Analyst:
Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0000	-0.0003	0.0000	13:40:50	Yes
2		[0.00]	0.0000	0.0001	0.0000	13:41:23	Yes
Mean:		[0.00]	0.0000				
SD:		0.00	0.0000				
%RSD:		0.00	89.24				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 2
Sample ID: .2 PPB
Date Collected: 9/2/2020 1:41:24 PM
Analyst:
Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0013	0.0063	0.0014	13:42:10	Yes
2		[0.2]	0.0013	0.0061	0.0014	13:42:42	Yes
Mean:		[0.2]	0.0013				
SD:		0.0	0.0000				
%RSD:		0.0	0.05				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00664 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 3
Sample ID: .5 PPB
Date Collected: 9/2/2020 1:42:44 PM
Analyst:
Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0028	0.0126	0.0028	13:43:29	Yes
2		[0.5]	0.0028	0.0126	0.0028	13:44:01	Yes
Mean:		[0.5]	0.0028				
SD:		0.0	0.0000				
%RSD:		0.0	0.38				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.995972 Slope: 0.00550 Intercept: 0.00009

Sequence No.: 4
Autosampler Location: 4
Sample ID: 1 PPB
Date Collected: 9/2/2020 1:44:03 PM
Analyst:
Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[1]	0.0052	0.0237	0.0052	13:44:48	Yes
2	[1]	0.0052	0.0236	0.0052	13:45:21	Yes
Mean:	[1]	0.0052				
SD:	0	0.0000				
%RSD:	0	0.55				

Standard number 3 applied. [1]
Correlation Coef.: 0.998073 Slope: 0.00510 Intercept: 0.00016

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: 2 PPB **Date Collected: 9/2/2020 1:45:22 PM**
Analyst: **Data Type: Original**

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0106	0.0479	0.0106	13:46:08	Yes
2		[2]	0.0105	0.0474	0.0105	13:46:40	Yes
Mean:		[2]	0.0105				
SD:		0	0.0000				
%RSD:		0	0.24				

Standard number 4 applied. [2]
Correlation Coef.: 0.999543 Slope: 0.00519 Intercept: 0.00013

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: 5 PPB **Date Collected: 9/2/2020 1:46:42 PM**
Analyst: **Data Type: Original**

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0258	0.1178	0.0258	13:47:27	Yes
2		[5]	0.0260	0.1179	0.0260	13:48:00	Yes
Mean:		[5]	0.0259				
SD:		0	0.0001				
%RSD:		0	0.58				

Standard number 5 applied. [5]
Correlation Coef.: 0.999929 Slope: 0.00515 Intercept: 0.00015

Sequence No.: 7 **Autosampler Location: 7**
Sample ID: 10 PPB **Date Collected: 9/2/2020 1:48:01 PM**
Analyst: **Data Type: Original**

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0517	0.2357	0.0517	13:48:47	Yes
2		[10]	0.0520	0.2354	0.0520	13:49:19	Yes
Mean:		[10]	0.0518				
SD:		0	0.0002				
%RSD:		0	0.38				

Standard number 6 applied. [10]
Correlation Coef.: 0.999984 Slope: 0.00517 Intercept: 0.00013

Sequence No.: 8 **Autosampler Location: 8**
Sample ID: 25 PPB **Date Collected: 9/2/2020 1:49:45 PM**
Analyst: **Data Type: Original**

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[25]	0.1257	0.5802	0.1257	13:50:35	Yes
2		[25]	0.1259	0.5769	0.1260	13:51:07	Yes
Mean:		[25]	0.1258				
SD:		0	0.0002				
%RSD:		0	0.14				

Standard number 7 applied. [25]
Correlation Coef.: 0.999935 Slope: 0.00503 Intercept: 0.00042

Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.083	0.00	89.2
.2 PPB	0.0013	0.2	0.181	0.00	0.1
.5 PPB	0.0028	0.5	0.469	0.00	0.4
1 PPB	0.0052	1.0	0.948	0.00	0.5
2 PPB	0.0105	2.0	2.010	0.00	0.2
5 PPB	0.0259	5.0	5.060	0.00	0.6
10 PPB	0.0518	10.0	10.209	0.00	0.4
25 PPB	0.1258	25.0	24.907	0.00	0.1

Correlation Coef.: 0.999935 Slope: 0.00503 Intercept: 0.00042

Sequence No.: 9 Autosampler Location: 10
Sample ID: ICV (2) Date Collected: 9/2/2020 1:51:33 PM
Analyst: Data Type: Original

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.17	20.17	0.1019	0.4673	0.1020	13:52:20	Yes
2	19.94	19.94	0.1008	0.4597	0.1008	13:52:52	Yes
Mean:	20.05	20.05	0.1014				
SD:	0.161	0.161	0.0008				
%RSD:	0.804	0.804	0.80				

QC value within limits for Hg 253.7 Recovery = 100.26%
All analyte(s) passed QC.

Sequence No.: 10 Autosampler Location: 1
Sample ID: ICB Date Collected: 9/2/2020 1:53:15 PM
Analyst: Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.090	-0.090	-0.0000	-0.0008	-0.0000	13:54:02	Yes
2	-0.086	-0.086	-0.0000	-0.0004	0.0000	13:54:34	Yes
Mean:	-0.088	-0.088	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	3.018	3.018	51.45				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 29
Sample ID: EF V-333973 Date Collected: 9/2/2020 1:54:35 PM
Analyst: Data Type: Original

Replicate Data: EF V-333973

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.073	-0.073	0.0000	0.0004	0.0001	13:55:22	Yes
2	-0.080	-0.080	0.0000	-0.0000	0.0000	13:55:55	Yes
Mean:	-0.077	-0.077	0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	6.158	6.158	77.18				

Sequence No.: 12 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/2/2020 1:55:56 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.20	10.20	0.0518	0.2362	0.0518	13:56:43	Yes
2	10.22	10.22	0.0519	0.2348	0.0519	13:57:16	Yes
Mean:	10.21	10.21	0.0518				

SD: 0.014 0.014 0.0001
%RSD: 0.140 0.140 0.14
QC value within limits for Hg 253.7 Recovery = 102.08%
All analyte(s) passed QC.

==========

Sequence No.: 13 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/2/2020 1:57:38 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.086	-0.086	-0.0000	-0.0003	0.0000	13:58:25	Yes
2	-0.083	-0.083	-0.0000	-0.0001	0.0000	13:58:58	Yes
Mean:	-0.085	-0.085	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	1.910	1.910	92.35				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

TCLP
Metal Data
Digestion Logbook Data

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: (3010A) 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 26169 Analyst: ANS

QC Number: BS227 Prep Date: 9/2/20

Matrix: TCLP Reviewed By: [signature]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS						--	
LCSD						--	
1. AD 18955-001					CFI 9/1/20 V-333973	8955-001	Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -001							
MS -002							Balance used: N/A
MSD -003							Pipettes used: 149
2. AD 18950-004							
3. AD 18932-002							Hot Block used: 9
4. AD 18955-004							
5. -005							
6. AD 18957-001							
7. -003							
8. -005							
9. -007							
10. -009							
11. -011							
12. -013							
13. CFI V-333973 9/1/20							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 93.5 C (90-95° C) Start Time: 9:30am End Time: 11:30am

	Volume mL	Lot #
LCS, LCSD	0.25ml	V-13177, 13178,
LLLCS, LLLCSD		V- 331982
MS, MSD	0.25ml	V-13177, 13178,
LLMS, LLMSD		V- 331982

Acid	Vol mL	Lot#
HNO_3	3.0	V- 13421
HCl		V-
H_2O_2		V-

Acid	Vol mL	Lot#
1:1 HNO_3		V-
1:1 HCl	5.0	V- 331074

Relinquished By ANS Date 9/2/20

Received By [signature] Date 9/2/2020

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2018 DOD.DOC

HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 (7470A) 7471B OTHER_____

Batch No.:* 26169

QC Number: 85227

Matrix: TCLP

Analyst: ANS

Prep Date: 9/2/20

Review By: BR

LAB ID#	MERCURY		COMMENTS	STANDARDS
	INITIAL	FINAL		
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 334160
LCS				
LCSD				STD 0.2 ppb V- 334161
1 AD 18955-001				STD 0.5 ppb V- 334162
MR -001				STD 1.0 ppb V- 334163
MS -002				STD 2.0 ppb V- 334164
MSD -003				STD 5.0 ppb V- 334165
2 AD 18950-004				STD 10.0 ppb V- 334166
3 AD 18932-002				STD 25.0 ppb V- 334167
4 AD 18955-004				ICV 10.0 ppb V- 334158
5 -005				CCV 20.0 ppb V- 334159
6 AD 18957-001				
7 -003				
8 -005				Balance used: N/A
9 -007				Pipettes used: 159, 143
10 -009				
11 -011				Hot Block used: 7
12 -013				
13 CF. V-333973				
14				
15				
16				
17				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 331286	3.75	HNO3	0.625	V- 13421
$K_2S_2O_8$: V- 327154	2.0	HCl		V-,
NH_3OH: V- 317822	1.5	H2SO4	1.25	V- 13343
		Aqua Regia		V-

**Block Temp.: 94.2 °C

Time In Block: 9:30am

Time Out of Block: 11:30am

Spike Volume & Lot #

☐ LCS V- 334146 0.15ml/0.25ml

☐ MS V- 334146 0.250 ml

☐ Standards/Control Batch B- 29622

StartTime: 9:30am

EndTime: 12:00pm

**Temperature
245.1 / 7470A: 90-95C
7471B : 92-98C

Relinquished By: ANS

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

Hampton-Clarke, Inc.

LEACHATE PREPARATION LOG
(TCLP, SPLP)

Start Date: 8/31/20 TIME: 14:00 Finish Date: 9/1/20

**TCLP Ext. Fluid #1 pH: 4.98 (criteria: 4.93 ± 0.05)
**TCLP Ext. Fluid #2 pH: _____ (criteria: 2.88 ± 0.05)
**SPLP Ext. Fluid #3 pH: 4.25 (criteria: 4.20 ± 0.05)

Sample #	pH (units)	pH in HCL (units)	Final pH (units)	Ext. Fluid (number)	Wt./Vol of Sample (g or mL)	Start Time	Finish Time	Filter Time	Analyst (s)	Ext. Type*	Comments
18950 - 004	7.08	1.63	4.84	333973	150g/3L	15:50	9:00	9:40	EF	T	Balance ID: 037 MET+ORG
18932 - 002	8.86	1.67	4.87					9:50			pH Meter ID: B-38168
18955 - 001	9.53	2.03	6.52		100g/2L			10:15			Pipette ID: 155 MET
- 002	9.29	1.76	6.39					10:25			
- 003	9.53	1.75	6.54					10:30			
- 004	9.37	1.70	6.34					10:35			
- 005	8.79	1.71	5.80					10:45			
18957 - 001	7.96	1.62	4.98					10:50			
- 003	7.62	1.64	4.95					11:05			
- 005	7.46	1.58	4.89					11:15			
- 007	7.94	1.63	4.95					11:30			
- 009	5.49	1.61	4.89					11:40			
- 011	8.31	1.60	4.93					11:45			
- 013	7.87	1.59	4.91					11:50			
EF1333973	4.98	—	4.94			3L		10:10		P	
18864 - 004	—	—	5.88	333404		100g/2L		11:55		P	ORG
SPLP333404	4.25	—	10.05			2L		12:00			

* Ext. Type: TCLP = T (Method 1311) LAMP=L (Methods 1311 / ANSI/NEMA C78.LL 1256-2003)
SPLP = P (Method 1312) MEP=M (Method 1320)
ZHE = Z (Method 1311/1312)

** The pH of the extraction fluid must be checked prior to use and must be within limits specified above

Hampton-Clarke
Analytical & Field Services

Last Page of Report

Hampton-Clarke
Analytical & Field Services

175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004
2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
FAX: 973-244-9787
WWW.HCVLAB.COM

Project: Duofold- 7 Spruce St.

Client PO: HER1500. P2

Report To: HRP Associates. Inc.
1 Fairchild Square
Suite 110
Clifton Park, NY 12065
Attn: Stefan Truex

Received Date: 9/10/2020

Report Date: 9/28/2020

Deliverables: NYDOH-CatB

Lab ID: AD19159

Lab Project No: 0091006

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

Sean Berls - Quality Assurance Officer OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

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SDG Narrative

HC Case Narrative

Client: HRP Associates, Inc.
Project: Duofold-7 Spruce St.

HC Project: 0091006

Hampton-Clarke (HC) received the following samples on 9/10/2020:

Client ID	HC Sample ID	Matrix	Analysis
SS-9	AD19159-001	Soil	Metals (6010D/6020B/7471B), Cr3 (Calc), Cyanide (9012B), Hexavalent Chromium (7196A), % Solids (SM2540G), TCLP Metals (6010D/7470A)
Duplicate	AD19159-002	Soil	Metals (6010D/6020B/7471B), Cr3 (Calc), Cyanide (9012B), Hexavalent Chromium (7196A), % Solids (SM2540G), TCLP Metals (6010D/7470A)
SS-5A	AD19159-003	Soil	Metals (6010D/6020B/7471B), Cr3 (Calc), Cyanide (9012B), Hexavalent Chromium (7196A), % Solids (SM2540G), TCLP Metals (6010D/7470A)
SS-5B	AD19159-004	Soil	Metals (6010D/6020B/7471B), Cr3 (Calc), Cyanide (9012B), Hexavalent Chromium (7196A), % Solids (SM2540G), TCLP Metals (6010D/7470A)
SS-5B MS	AD19159-005	Soil	Metals (6010D/6020B/7471B), Cyanide (9012B), Hexavalent Chromium (7196A), % Solids (SM2540G), TCLP Metals (6010D/7470A)
SS-5B MSD	AD19159-006	Soil	Metals (6010D/6020B/7471B), Cyanide (9012B), Hexavalent Chromium (7196A), % Solids (SM2540G), TCLP Metals (6010D/7470A)
SS-3A	AD19159-007	Soil	Metals (6010D/6020B/7471B), Cr3 (Calc), Cyanide (9012B), Hexavalent Chromium (7196A), % Solids (SM2540G), TCLP Metals (6010D/7470A)
SS-10A	AD19159-008	Soil	Metals (6010D/6020B/7471B), Cr3 (Calc), Cyanide (9012B), Hexavalent Chromium (7196A), % Solids (SM2540G), TCLP Metals (6010D/7470A)
SS-10B	AD19159-009	Soil	Metals (6010D/6020B/7471B), Cr3 (Calc), Cyanide (9012B), Hexavalent Chromium (7196A), % Solids (SM2540G), TCLP Metals (6010D/7470A)
SS-3B	AD19159-010	Soil	Metals (6010D/6020B/7471B), Cr3 (Calc), Cyanide (9012B), Hexavalent Chromium (7196A), % Solids (SM2540G), TCLP Metals (6010D/7470A)
EB	AD19159-011	Aqueous	Metals (6010D/6020B/7470A), Cyanide (9012B), Hexavalent Chromium (SM3500-Cr B), TCLP Metals (6010D/7470A)

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Metals Analysis:

The Post Spike and/or Matrix Spike and/or Matrix Spike Duplicate for batches 85269, 85270, 85272 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The RPD between the QC sample and the Method Replicate had recoveries outside QC limits in batch 85269. Please refer to the applicable Form 6/9 for the recoveries.

The serial dilution for batch 85272 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

QC samples AD19159-004, 005, 006 were reported at a dilution for Ca due to concentration over linear range.

Wet Chemistry Analysis:

The MS Insoluble and MS Soluble for Hexavalent Chromium, batch 784 , recovered outside the QC limits. The batch was reset and recoveries confirmed. The results from first analysis are reported.

The PVS, MS Insoluble and MS Soluble for Hexavalent Chromium, batch 785 , recovered outside the QC limits. The batch was reset and recoveries confirmed. The results from first analysis are reported.

The Matrix Spike , Matrix Spike Duplicate and MS/MSD RPD for Cyanide , batch 2420 , had recoveries outside QC limits. Please refer to the QC section for the recoveries.

TCLP Metals Analysis:

QC samples AD19159-004, 005, 006 were reported at a dilution for Se, Zn due to Ca over linear range.

Samples Ad19159-001-003, 009, 010 were reported at a dilution for Se due to Ca over linear range.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Sean Berls Quality Assurance Officer	Or	Jean Revolus Laboratory Director	9/28/20 Date

Reporting Limit Definitions

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

LCS = Laboratory Control Spike

MBS = Method Blank Spike

MS = Matrix Spike

MSD = Matrix Spike Duplicate

MDL = Method Detection Limit

NA = Not Applicable

ND = Not Detected

PS = Post Digestion Spike

RL* = Reporting Limit

RT = Retention Time

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Data Package Summary Forms

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0091006

Sample ID: SS-9
Lab#: AD19159-001
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		78

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.0	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.4	12

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.31	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	0.12

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		140

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		11
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	13	71
Chromium	1	mg/kg	6.4	12
Copper	1	mg/kg	6.4	41
Lead	1	mg/kg	6.4	1000
Manganese	1	mg/kg	13	470
Nickel	1	mg/kg	6.4	17
Zinc	1	mg/kg	13	140

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.26	9.9
Beryllium	1	mg/kg	0.26	0.38
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result

Sample ID: SS-9 **Collection Date:** 9/9/2020
Lab#: AD19159-001 **Receipt Date:** 9/10/2020
Matrix: Soil

Arsenic	1	mg/l	0.10	ND
Barium	**1**	**mg/l**	**0.25**	**0.71**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	**1**	**mg/l**	**0.050**	**0.24**
Nickel	1	mg/l	0.10	ND
Selenium	4	mg/l	0.40	ND
Silver	1	mg/l	0.050	ND

Sample ID: Duplicate
Lab#: AD19159-002
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		87

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.92	1.1

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	5.7	72

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.28	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.096	0.26

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		360

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.2
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	11	380
Chromium	1	mg/kg	5.7	73
Copper	1	mg/kg	5.7	100
Lead	1	mg/kg	5.7	270
Manganese	1	mg/kg	11	340
Nickel	1	mg/kg	5.7	34
Zinc	1	mg/kg	11	430

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.23	11
Beryllium	1	mg/kg	0.23	0.34
Selenium	1	mg/kg	2.3	ND
Silver	1	mg/kg	0.23	1.8

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	1.8
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	4	mg/l	0.40	ND

Sample ID: Duplicate
Lab#: AD19159-002
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND	

Sample ID: SS-5A
Lab#: AD19159-003
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		94

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.85	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	5.3	8.2

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.26	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.089	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		340

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.1
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	11	180
Chromium	1	mg/kg	5.3	8.2
Copper	1	mg/kg	5.3	17
Lead	1	mg/kg	5.3	91
Manganese	1	mg/kg	11	210
Nickel	1	mg/kg	5.3	9.6
Zinc	1	mg/kg	11	170

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.21	2.4
Beryllium	1	mg/kg	0.21	ND
Selenium	1	mg/kg	2.1	ND
Silver	1	mg/kg	0.21	0.31

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	2.0
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	4	mg/l	0.40	ND

Sample ID: SS-5A
Lab#: AD19159-003
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-5B
Lab#: AD19159-004
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		88

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.91	2.2

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	5.7	57

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.27	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.095	0.15

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		350

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.1
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	11	320
Chromium	1	mg/kg	5.7	60
Copper	1	mg/kg	5.7	84
Lead	1	mg/kg	5.7	380
Manganese	1	mg/kg	11	340
Nickel	1	mg/kg	5.7	35
Zinc	1	mg/kg	11	400

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.23	9.2
Beryllium	1	mg/kg	0.23	0.34
Selenium	1	mg/kg	2.3	ND
Silver	1	mg/kg	0.23	2.1

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	1.9
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	4	mg/l	0.40	ND

Sample ID: SS-5B
Lab#: AD19159-004
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-5B MS
Lab#: AD19159-005
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		88

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.91	12

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.27	0.62

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.095	2.1

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	0.010

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		340

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.1
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	11	620
Chromium	1	mg/kg	5.7	110
Copper	1	mg/kg	5.7	140
Lead	1	mg/kg	5.7	340
Manganese	1	mg/kg	11	400
Nickel	1	mg/kg	5.7	91
Zinc	1	mg/kg	11	460

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.23	57
Beryllium	1	mg/kg	0.23	43
Selenium	1	mg/kg	2.3	47
Silver	1	mg/kg	0.23	10

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	0.51
Barium	1	mg/l	0.25	2.6
Cadmium	1	mg/l	0.050	0.51
Chromium	1	mg/l	0.10	0.50
Lead	1	mg/l	0.050	0.49
Nickel	1	mg/l	0.10	0.48
Selenium	4	mg/l	0.40	0.70
Silver	1	mg/l	0.050	0.12

Sample ID: SS-5B MSD
Lab#: AD19159-006
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		88

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	50	mg/kg	45	560

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.27	2.2

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.095	2.0

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	0.0098

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		360

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.2
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	11	530
Chromium	1	mg/kg	5.7	100
Copper	1	mg/kg	5.7	140
Lead	1	mg/kg	5.7	350
Manganese	1	mg/kg	11	400
Nickel	1	mg/kg	5.7	84
Zinc	1	mg/kg	11	500

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.23	57
Beryllium	1	mg/kg	0.23	45
Selenium	1	mg/kg	2.3	47
Silver	1	mg/kg	0.23	11

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	0.52
Barium	1	mg/l	0.25	2.5
Cadmium	1	mg/l	0.050	0.51
Chromium	1	mg/l	0.10	0.50
Lead	1	mg/l	0.050	0.48
Nickel	1	mg/l	0.10	0.48
Selenium	4	mg/l	0.40	0.64
Silver	1	mg/l	0.050	0.12

Sample ID: SS-3A
Lab#: AD19159-007
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		81

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.99	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.2	13

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	0.42

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		450

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		7.7
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	12	58
Chromium	1	mg/kg	6.2	13
Copper	1	mg/kg	6.2	45
Lead	1	mg/kg	6.2	69
Manganese	1	mg/kg	12	430
Nickel	1	mg/kg	6.2	31
Zinc	1	mg/kg	12	95

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.25	6.6
Beryllium	1	mg/kg	0.25	0.34
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	0.56

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.56
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND

Sample ID: SS-3A
Lab#: AD19159-007
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND	

Sample ID: SS-10A
Lab#: AD19159-008
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		65

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.2	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	7.7	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.37	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.13	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		300

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.4
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	15	81
Chromium	1	mg/kg	7.7	ND
Copper	1	mg/kg	7.7	20
Lead	1	mg/kg	7.7	39
Manganese	1	mg/kg	15	120
Nickel	1	mg/kg	7.7	17
Zinc	1	mg/kg	15	79

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.31	5.7
Beryllium	1	mg/kg	0.31	0.39
Selenium	1	mg/kg	3.1	ND
Silver	1	mg/kg	0.31	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.61
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND

Sample ID: SS-10A
Lab#: AD19159-008
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-10B
Lab#: AD19159-009
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		68

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.2	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	7.4	9.5

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.35	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.12	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		280

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.0
Temperature	1	c		22

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	15	80
Chromium	1	mg/kg	7.4	9.5
Copper	1	mg/kg	7.4	22
Lead	1	mg/kg	7.4	28
Manganese	1	mg/kg	15	160
Nickel	1	mg/kg	7.4	20
Zinc	1	mg/kg	15	63

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.29	6.4
Beryllium	1	mg/kg	0.29	0.34
Selenium	1	mg/kg	2.9	ND
Silver	1	mg/kg	0.29	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.56
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	4	mg/l	0.40	ND

Sample ID: SS-10B
Lab#: AD19159-009
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND	

Sample ID: SS-3B
Lab#: AD19159-010
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		87

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.92	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	5.7	11

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.28	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.096	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		430

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		7.9
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	11	74
Chromium	1	mg/kg	5.7	11
Copper	1	mg/kg	5.7	79
Lead	1	mg/kg	5.7	140
Manganese	1	mg/kg	11	460
Nickel	1	mg/kg	5.7	26
Zinc	1	mg/kg	11	99

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.23	12
Beryllium	1	mg/kg	0.23	0.36
Selenium	1	mg/kg	2.3	ND
Silver	1	mg/kg	0.23	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.74
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	4	mg/l	0.40	ND

Sample ID: SS-3B
Lab#: AD19159-010
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: EB
Lab#: AD19159-011
Matrix: Aqueous
Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Cr (Hexavalent) 3500-Cr B11

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.02	ND

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Sodium	1	ug/l	5000	ND
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Silver	1	ug/l	1.0	ND
Thallium	1	ug/l	2.0	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	ND
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

Cr-SOIL

Sample	Total Cr (mg/kg)	RL	Hexavalent Cr (mg/kg)	RL	Trivalent Cr (mg/kg)	RL
AD19159-001	12.2	6.41	ND	1.026	12.2	6.41
AD19159-002	72.7	5.75	1.10	0.92	71.6	5.75
AD19159-003	8.20	5.32	ND	0.851	8.20	5.32
AD19159-004	59.7	5.68	2.236	0.909	57.464	5.68
AD19159-007	13.2	6.17	ND	0.988	13.2	6.17
AD19159-008	ND	7.69	ND	1.231	ND	7.69
AD19159-009	9.53	7.35	ND	1.176	9.53	7.35
AD19159-010	10.8	5.75	ND	0.920	10.8	5.75

Calculated using 3 significant figures. Reported using 2 significant figures.

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-001	% Solid:	78	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-9	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	71	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A
7440-47-3	Chromium	6.4	12	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A
7440-50-8	Copper	6.4	41	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A
7439-92-1	Lead	6.4	1000	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A
7439-96-5	Manganese	13	470	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A
7439-97-6	Mercury	0.11	0.12	1	0.15	25	09/11/20	85269	H26211S	20	CV	HGCV3A
7440-02-0	Nickel	6.4	17	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A
7440-66-6	Zinc	13	140	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-001	% Solid:	78	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-9	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.26	9.9	1	0.5	100	09/11/20	852701	120ANEW	30	MS	MS3_7700SWA
7440-41-7	Beryllium	0.26	0.38	1	0.5	100	09/11/20	852701	120ANEW	30	MS	MS3_7700SWA
7782-49-2	Selenium	2.6	ND	1	0.5	100	09/11/20	852701	120ANEW	30	MS	MS3_7700SWA
7440-22-4	Silver	0.26	ND	1	0.5	100	09/11/20	852701	120ANEW	30	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-002	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	Duplicate	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	380	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A
7440-47-3	Chromium	5.7	73	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A
7440-50-8	Copper	5.7	100	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A
7439-92-1	Lead	5.7	270	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A
7439-96-5	Manganese	11	340	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A
7439-97-6	Mercury	0.096	0.26	1	0.15	25	09/11/20	85269	H26211S	23	CV	HGCV3A
7440-02-0	Nickel	5.7	34	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A
7440-66-6	Zinc	11	430	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-002	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	Duplicate	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	11	1	0.5	100	09/11/20	852701	120ANEW	31	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	0.34	1	0.5	100	09/11/20	852701	120ANEW	31	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	ND	1	0.5	100	09/11/20	852701	120ANEW	31	MS	MS3_7700SWA
7440-22-4	Silver	0.23	1.8	1	0.5	100	09/11/20	852701	120ANEW	31	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-003	% Solid:	94	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	180	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A
7440-47-3	Chromium	5.3	8.2	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A
7440-50-8	Copper	5.3	17	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A
7439-92-1	Lead	5.3	91	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A
7439-96-5	Manganese	11	210	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A
7439-97-6	Mercury	0.089	ND	1	0.15	25	09/11/20	85269	H26211S	24	CV	HGCV3A
7440-02-0	Nickel	5.3	9.6	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A
7440-66-6	Zinc	11	170	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-003	% Solid:	94	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.21	2.4	1	0.5	100	09/11/20	852701	120ANEW	32	MS	MS3_7700SWA
7440-41-7	Beryllium	0.21	ND	1	0.5	100	09/11/20	852701	120ANEW	32	MS	MS3_7700SWA
7782-49-2	Selenium	2.1	ND	1	0.5	100	09/11/20	852701	120ANEW	32	MS	MS3_7700SWA
7440-22-4	Silver	0.21	0.31	1	0.5	100	09/11/20	852701	120ANEW	32	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-004	% Solid:	88	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	320	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A
7440-47-3	Chromium	5.7	60	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A
7440-50-8	Copper	5.7	84	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A
7439-92-1	Lead	5.7	380	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A
7439-96-5	Manganese	11	340	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A
7439-97-6	Mercury	0.095	0.15	1	0.15	25	09/11/20	85269	H26211S	16	CV	HGCV3A
7440-02-0	Nickel	5.7	35	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A
7440-66-6	Zinc	11	400	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-004	% Solid:	88	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	9.2	1	0.5	100	09/11/20	852701	120ANEW	21	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	0.34	1	0.5	100	09/11/20	852701	120ANEW	21	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	ND	1	0.5	100	09/11/20	852701	120ANEW	21	MS	MS3_7700SWA
7440-22-4	Silver	0.23	2.1	1	0.5	100	09/11/20	852701	120ANEW	21	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-005	% Solid:	88	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B MS	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	620	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A
7440-47-3	Chromium	5.7	110	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A
7440-50-8	Copper	5.7	140	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A
7439-92-1	Lead	5.7	340	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A
7439-96-5	Manganese	11	400	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A
7439-97-6	Mercury	0.095	2.1	1	0.15	25	09/11/20	85269	H26211S	18	CV	HGCV3A
7440-02-0	Nickel	5.7	91	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A
7440-66-6	Zinc	11	460	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-005	% Solid:	88	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B MS	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	57	1	0.5	100	09/11/20	852701	120ANEW	24	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	43	1	0.5	100	09/11/20	852701	120ANEW	24	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	47	1	0.5	100	09/11/20	852701	120ANEW	24	MS	MS3_7700SWA
7440-22-4	Silver	0.23	10	1	0.5	100	09/11/20	852701	120ANEW	24	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-006	% Solid:	88	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B MSD	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	530	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A
7440-47-3	Chromium	5.7	100	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A
7440-50-8	Copper	5.7	140	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A
7439-92-1	Lead	5.7	350	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A
7439-96-5	Manganese	11	400	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A
7439-97-6	Mercury	0.095	2.0	1	0.15	25	09/11/20	85269	H26211S	19	CV	HGCV3A
7440-02-0	Nickel	5.7	84	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A
7440-66-6	Zinc	11	500	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-006	% Solid:	88	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B MSD	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	57	1	0.5	100	09/11/20	852701	120ANEW	25	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	45	1	0.5	100	09/11/20	852701	120ANEW	25	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	47	1	0.5	100	09/11/20	852701	120ANEW	25	MS	MS3_7700SWA
7440-22-4	Silver	0.23	11	1	0.5	100	09/11/20	852701	120ANEW	25	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-007	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-3A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	58	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A
7440-47-3	Chromium	6.2	13	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A
7440-50-8	Copper	6.2	45	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A
7439-92-1	Lead	6.2	69	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A
7439-96-5	Manganese	12	430	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A
7439-97-6	Mercury	0.10	ND	1	0.15	25	09/11/20	85269	H26211S	25	CV	HGCV3A
7440-02-0	Nickel	6.2	31	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A
7440-66-6	Zinc	12	95	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-007	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-3A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	6.6	1	0.5	100	09/11/20	852701	120ANEW	33	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	0.34	1	0.5	100	09/11/20	852701	120ANEW	33	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	09/11/20	852701	120ANEW	33	MS	MS3_7700SWA
7440-22-4	Silver	0.25	0.56	1	0.5	100	09/11/20	852701	120ANEW	33	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-008	% Solid:	65	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-10A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	15	81	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A
7440-47-3	Chromium	7.7	ND	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A
7440-50-8	Copper	7.7	20	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A
7439-92-1	Lead	7.7	39	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A
7439-96-5	Manganese	15	120	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A
7439-97-6	Mercury	0.13	ND	1	0.15	25	09/11/20	85269	H26211S	26	CV	HGCV3A
7440-02-0	Nickel	7.7	17	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A
7440-66-6	Zinc	15	79	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-008	% Solid:	65	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-10A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.31	5.7	1	0.5	100	09/11/20	852701	120ANEW	34	MS	MS3_7700SWA
7440-41-7	Beryllium	0.31	0.39	1	0.5	100	09/11/20	852701	120ANEW	34	MS	MS3_7700SWA
7782-49-2	Selenium	3.1	ND	1	0.5	100	09/11/20	852701	120ANEW	34	MS	MS3_7700SWA
7440-22-4	Silver	0.31	ND	1	0.5	100	09/11/20	852701	120ANEW	34	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-009	% Solid:	68	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-10B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	15	80	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A
7440-47-3	Chromium	7.4	9.5	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A
7440-50-8	Copper	7.4	22	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A
7439-92-1	Lead	7.4	28	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A
7439-96-5	Manganese	15	160	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A
7439-97-6	Mercury	0.12	ND	1	0.15	25	09/11/20	85269	H26211S	27	CV	HGCV3A
7440-02-0	Nickel	7.4	20	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A
7440-66-6	Zinc	15	63	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-009	% Solid:	68	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-10B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.29	6.4	1	0.5	100	09/11/20	852701	120ANEW	35	MS	MS3_7700SWA
7440-41-7	Beryllium	0.29	0.34	1	0.5	100	09/11/20	852701	120ANEW	35	MS	MS3_7700SWA
7782-49-2	Selenium	2.9	ND	1	0.5	100	09/11/20	852701	120ANEW	35	MS	MS3_7700SWA
7440-22-4	Silver	0.29	ND	1	0.5	100	09/11/20	852701	120ANEW	35	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-010	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-3B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	74	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A
7440-47-3	Chromium	5.7	11	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A
7440-50-8	Copper	5.7	79	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A
7439-92-1	Lead	5.7	140	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A
7439-96-5	Manganese	11	460	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A
7439-97-6	Mercury	0.096	ND	1	0.15	25	09/11/20	85269	H26211S	28	CV	HGCV3A
7440-02-0	Nickel	5.7	26	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A
7440-66-6	Zinc	11	99	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-010	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-3B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	12	1	0.5	100	09/11/20	852701	120ANEW	36	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	0.36	1	0.5	100	09/11/20	852701	120ANEW	36	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	ND	1	0.5	100	09/11/20	852701	120ANEW	36	MS	MS3_7700SWA
7440-22-4	Silver	0.23	ND	1	0.5	100	09/11/20	852701	120ANEW	36	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	EB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7440-22-4	Silver	1.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	EB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/20	85272	H26214SW	18	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/14/20	85272	W26214B2	25	P	PEICPRAD2A
7440-23-5	Sodium	5000	ND	1	50	50	09/14/20	85272	W26214B2	25	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19159-001 | Project Number: 0091006
Matrix: Soil | Received Date: 9/10/2020
Client SampleID: SS-9 | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.31	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	140	MV		09/10/20	09/10/20
pH	CR6-PH	1	11	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.0	09/10/20	09/11/20

Lab#: AD19159-002 | Project Number: 0091006
Matrix: Soil | Received Date: 9/10/2020
Client SampleID: Duplicate | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.28	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	360	MV		09/10/20	09/10/20
pH	CR6-PH	1	8.2	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	1.1	mg/Kg	0.92	09/10/20	09/11/20

Lab#: AD19159-003 | Project Number: 0091006
Matrix: Soil | Received Date: 9/10/2020
Client SampleID: SS-5A | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.26	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	340	MV		09/10/20	09/10/20
pH	CR6-PH	1	8.1	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.85	09/10/20	09/11/20

Lab#: AD19159-004 | Project Number: 0091006
Matrix: Soil | Received Date: 9/10/2020
Client SampleID: SS-5B | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.27	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	350	MV		09/10/20	09/10/20
pH	CR6-PH	1	8.1	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	2.2	mg/Kg	0.91	09/14/20	09/15/20

Lab#: AD19159-005 | Project Number: 0091006
Matrix: Soil | Received Date: 9/10/2020
Client SampleID: SS-5B MS | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.62	mg/Kg	0.27	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	340	MV		09/10/20	09/10/20
pH	CR6-PH	1	8.1	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	12	mg/Kg	0.91	09/14/20	09/15/20

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19159-006 | Project Number: 0091006
Matrix: Soil | Received Date: 9/10/2020
Client SampleID: SS-5B MSD | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	2.2	mg/Kg	0.27	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	360	MV		09/10/20	09/10/20
pH	CR6-PH	1	8.2	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	50	560	mg/Kg	45	09/14/20	09/15/20

Lab#: AD19159-007 | Project Number: 0091006
Matrix: Soil | Received Date: 9/10/2020
Client SampleID: SS-3A | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.42	mg/Kg	0.30	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	450	MV		09/10/20	09/10/20
pH	CR6-PH	1	7.7	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.99	09/10/20	09/11/20

Lab#: AD19159-008 | Project Number: 0091006
Matrix: Soil | Received Date: 9/10/2020
Client SampleID: SS-10A | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.37	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	300	MV		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
pH	CR6-PH	1	8.4	PH		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.2	09/14/20	09/15/20

Lab#: AD19159-009 | Project Number: 0091006
Matrix: Soil | Received Date: 9/10/2020
Client SampleID: SS-10B | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.35	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	280	MV		09/10/20	09/10/20
pH	CR6-PH	1	8.0	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	22	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.2	09/14/20	09/15/20

Lab#: AD19159-010 | Project Number: 0091006
Matrix: Soil | Received Date: 9/10/2020
Client SampleID: SS-3B | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.28	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	430	MV		09/10/20	09/10/20
pH	CR6-PH	1	7.9	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.92	09/14/20	09/15/20

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19159-011
Matrix: Aqueous
Client SampleID: EB

Project Number: 0091006
Received Date: 9/10/2020
Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-W-9012	1	ND	mg/L	0.020	09/11/20	09/11/20
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.02	09/16/20	09/16/20

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 0091006**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD19159-001	SS-9	Soil	1	78	Percent			09/10/20	09/10/20	09/09/20
AD19159-002	Duplicate	Soil	1	87	Percent			09/10/20	09/10/20	09/09/20
AD19159-003	SS-5A	Soil	1	94	Percent			09/10/20	09/10/20	09/09/20
AD19159-004	SS-5B	Soil	1	88	Percent			09/10/20	09/10/20	09/09/20
AD19159-005	SS-5B MS	Soil	1	88	Percent			09/10/20	09/10/20	09/09/20
AD19159-006	SS-5B MSD	Soil	1	88	Percent			09/10/20	09/10/20	09/09/20
AD19159-007	SS-3A	Soil	1	81	Percent			09/10/20	09/10/20	09/09/20
AD19159-008	SS-10A	Soil	1	65	Percent			09/10/20	09/10/20	09/09/20
AD19159-009	SS-10B	Soil	1	68	Percent			09/10/20	09/10/20	09/09/20
AD19159-010	SS-3B	Soil	1	87	Percent			09/10/20	09/10/20	09/09/20

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-9	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A
7440-39-3	Barium	0.25	0.71	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A
7439-92-1	Lead	0.050	0.24	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	25	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	23	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	Duplicate	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A
7440-39-3	Barium	0.25	1.8	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	26	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	24	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A
7440-39-3	Barium	0.25	2.0	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	27	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	25	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A
7440-39-3	Barium	0.25	1.9	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	14	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	14	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B MS	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	0.51	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A
7440-39-3	Barium	0.25	2.6	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A
7440-43-9	Cadmium	0.050	0.51	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A
7440-47-3	Chromium	0.10	0.50	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A
7439-92-1	Lead	0.050	0.49	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A
7439-97-6	Mercury	0.00050	0.010	1	25	25	09/14/20	85267	H26209T	16	CV	HGCV3A
7440-02-0	Nickel	0.10	0.48	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A
7782-49-2	Selenium	0.40	0.70	4	50	50	09/14/20	85267	T26209B4	16	P	PEICP4A
7440-22-4	Silver	0.050	0.12	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B MSD	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	0.52	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A
7440-39-3	Barium	0.25	2.5	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A
7440-43-9	Cadmium	0.050	0.51	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A
7440-47-3	Chromium	0.10	0.50	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A
7439-92-1	Lead	0.050	0.48	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A
7439-97-6	Mercury	0.00050	0.0098	1	25	25	09/14/20	85267	H26209T	17	CV	HGCV3A
7440-02-0	Nickel	0.10	0.48	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A
7782-49-2	Selenium	0.40	0.64	4	50	50	09/14/20	85267	T26209B4	17	P	PEICP4A
7440-22-4	Silver	0.050	0.12	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-007	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-3A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7440-39-3	Barium	0.25	0.56	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	28	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-10A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7440-39-3	Barium	0.25	0.61	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	29	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-009	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-10B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A
7440-39-3	Barium	0.25	0.56	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	30	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	26	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-010	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-3B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A
7440-39-3	Barium	0.25	0.74	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	31	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	27	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	EB	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7440-39-3	Barium	0.25	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	32	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Chain of Custody Forms

0001005 0001600

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 005/006

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
6 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: HRP Associates
Address: 1 Fairchild Sq. Suite 110
Clifton Park, NY 12065
1b) Email/Cell/Fax/Ph: stefan.truex@hrpassociates.com
1c) Send Invoice to: Same ↑
1d) Send Report to: Same ↑

Project Information

2a) Project: Dryfold - 7 Spruce Street
Ilion, NY
2b) Project Mgr: Stefan Truex
2c) Project Location (City/State): Ilion, NY
2d) Quote/PO # (If Applicable): HER1500.P2

FOR LAB USE ONLY ↓

Batch # AD19159

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	Part 375 Metals + Hex Cr + CN	TCLP RCRA Metals	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001	SS-9	Soil	9/9/20	12:00		X	X	X	1								
002	Duplicate	Soil	9/9/20	12:00		X	X	X	1								
003	SS-5A	Soil	9/9/20	13:45		X	X	X	1								
004/004MS/004MSD	SS-5B	Soil	9/9/20	14:00		X	X	X	3								MS/MSD taken at 5B
007	SS-3A	Soil	9/9/20	14:15		X	X	X	1								
008	SS-10A	Soil	9/9/20	14:20		X	X	X	1								
009	SS-10B	Soil	9/9/20	14:25		X	X	X	1								
010	SS-3B	Soil	9/9/20	14:30		X	X	X	1								
011	EB	Water	9/9/20	14:40		X	X	X	1			1			1		

10) Relinquished by:	Accepted by:	Date	Time
James Charter	FED EX	9/9/20	18:00
FED EX		9/10/20	11:21

11) Sampler (print name): James Charter Date: 9/9/20

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 3.1

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

CONDITION UPON RECEIPT

Batch Number AD19159 Entered By: Ricardo
Date Entered 9/10/2020 11:34:00 AM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	No	Are the COC seals intact?
4	T-461	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 3.1
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify (TB date, sample matrix, any missing info, etc.)
14	NA	Corrective actions (Specify item number and corrective action taken).
15	No	Were any samples for ortho-phosphate or dissolved ferrous iron field filtered?

PRESERVATION DOCUMENT

Batch Number AD19159 Entered By: Ricardo

Date Entered 9/10/2020 11:37:00 AM

Lab#:	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD19159-001	NA	NA	NA	NA	NA	NA	NA
AD19159-002	NA	NA	NA	NA	NA	NA	NA
AD19159-003	NA	NA	NA	NA	NA	NA	NA
AD19159-004	NA	NA	NA	NA	NA	NA	NA
AD19159-005	NA	NA	NA	NA	NA	NA	NA
AD19159-006	NA	NA	NA	NA	NA	NA	NA
AD19159-007	NA	NA	NA	NA	NA	NA	NA
AD19159-008	NA	NA	NA	NA	NA	NA	NA
AD19159-009	NA	NA	NA	NA	NA	NA	NA
AD19159-010	NA	NA	NA	NA	NA	NA	NA
AD19159-011	120ML	G	CN	NAOH	316437	14	HC998032
AD19159-011	1L	P	METALS	HNO3	245675	1	HC998032

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD19159-001	09/10/20 11:21	RICAR	0	M	Received
AD19159-001	09/10/20 11:22	RICAR	0	M	Login
AD19159-001	09/10/20 11:57	R12	1	A	NONE
AD19159-001	09/10/20 12:14	BCT	1	A	solids/mixing
AD19159-001	09/10/20 12:15	BCT	1	A	cr6
AD19159-001	09/10/20 13:41	R12	1	A	NONE
AD19159-001	09/10/20 15:17	EF	1	A	TCLP
AD19159-001	09/10/20 15:17	EF	1	A	R12
AD19159-001	09/10/20 18:02	R12	1	A	NONE
AD19159-001	09/11/20 07:53	ANS	1	A	TDSI/Hg
AD19159-001	09/11/20 10:13	R12	1	A	NONE
AD19159-001	09/14/20 09:47	JW	1	A	CN
AD19159-001	09/14/20 11:21	R12	1	A	NONE
AD19159-002	09/10/20 11:21	RICAR	0	M	Received
AD19159-002	09/10/20 11:22	RICAR	0	M	Login
AD19159-002	09/10/20 11:57	R12	1	A	NONE
AD19159-002	09/10/20 12:14	BCT	1	A	solids/mixing
AD19159-002	09/10/20 12:15	BCT	1	A	cr6
AD19159-002	09/10/20 13:41	R12	1	A	NONE
AD19159-002	09/10/20 15:17	EF	1	A	R12
AD19159-002	09/10/20 15:17	EF	1	A	TCLP
AD19159-002	09/10/20 18:02	R12	1	A	NONE
AD19159-002	09/11/20 07:53	ANS	1	A	TDSI/Hg
AD19159-002	09/11/20 10:13	R12	1	A	NONE
AD19159-002	09/14/20 09:47	JW	1	A	CN
AD19159-002	09/14/20 11:21	R12	1	A	NONE
AD19159-003	09/10/20 11:21	RICAR	0	M	Received
AD19159-003	09/10/20 11:22	RICAR	0	M	Login
AD19159-003	09/10/20 11:57	R12	1	A	NONE
AD19159-003	09/10/20 12:14	BCT	1	A	solids/mixing
AD19159-003	09/10/20 12:15	BCT	1	A	cr6
AD19159-003	09/10/20 13:41	R12	1	A	NONE
AD19159-003	09/10/20 15:17	EF	1	A	TCLP
AD19159-003	09/10/20 15:17	EF	1	A	R12
AD19159-003	09/10/20 18:02	R12	1	A	NONE
AD19159-003	09/11/20 07:53	ANS	1	A	TDSI/Hg
AD19159-003	09/11/20 10:13	R12	1	A	NONE
AD19159-003	09/14/20 09:47	JW	1	A	CN
AD19159-003	09/14/20 11:21	R12	1	A	NONE
AD19159-004	09/10/20 11:21	RICAR	0	M	Received
AD19159-004	09/10/20 11:22	RICAR	0	M	Login
AD19159-004	09/10/20 11:57	R12	1	A	NONE
AD19159-004	09/10/20 12:14	BCT	1	A	solids/mixing
AD19159-004	09/10/20 12:15	BCT	1	A	cr6
AD19159-004	09/10/20 13:41	R12	1	A	NONE
AD19159-004	09/10/20 15:17	EF	1	A	TCLP
AD19159-004	09/10/20 15:17	EF	1	A	R12
AD19159-004	09/10/20 18:02	R12	1	A	NONE
AD19159-004	09/11/20 07:53	ANS	1	A	TDSI/Hg
AD19159-004	09/11/20 10:13	R12	1	A	NONE
AD19159-004	09/14/20 09:47	JW	1	A	CN
AD19159-004	09/14/20 11:21	R12	1	A	NONE
AD19159-004	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19159-004	09/14/20 15:25	R12	1	A	NONE
AD19159-005	09/10/20 11:21	RICAR	0	M	Received
AD19159-005	09/10/20 11:22	RICAR	0	M	Login
AD19159-005	09/10/20 11:57	R12	1	A	NONE
AD19159-005	09/10/20 12:14	BCT	1	A	solids/mixing
AD19159-005	09/10/20 12:15	BCT	1	A	cr6
AD19159-005	09/10/20 13:41	R12	1	A	NONE
AD19159-005	09/10/20 15:17	EF	1	A	TCLP
AD19159-005	09/10/20 15:17	EF	1	A	R12
AD19159-005	09/10/20 18:02	R12	1	A	NONE
AD19159-005	09/11/20 07:53	ANS	1	A	TDSI/Hg
AD19159-005	09/11/20 10:13	R12	1	A	NONE
AD19159-005	09/14/20 09:47	JW	1	A	CN
AD19159-005	09/14/20 11:21	R12	1	A	NONE
AD19159-005	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19159-005	09/14/20 15:25	R12	1	A	NONE
AD19159-006	09/10/20 11:21	RICAR	0	M	Received
AD19159-006	09/10/20 11:22	RICAR	0	M	Login
AD19159-006	09/10/20 11:57	R12	1	A	NONE
AD19159-006	09/10/20 12:14	BCT	1	A	solids/mixing
AD19159-006	09/10/20 12:15	BCT	1	A	cr6
AD19159-006	09/10/20 13:41	R12	1	A	NONE

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD19159-006	09/10/20 15:17	EF	1	A	R12
AD19159-006	09/10/20 15:17	EF	1	A	TCLP
AD19159-006	09/10/20 18:02	R12	1	A	NONE
AD19159-006	09/11/20 07:53	ANS	1	A	TDSI/Hg
AD19159-006	09/11/20 10:13	R12	1	A	NONE
AD19159-006	09/14/20 09:47	JW	1	A	CN
AD19159-006	09/14/20 11:21	R12	1	A	NONE
AD19159-006	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19159-006	09/14/20 15:25	R12	1	A	NONE
AD19159-007	09/10/20 11:21	RICAR	0	M	Received
AD19159-007	09/10/20 11:22	RICAR	0	M	Login
AD19159-007	09/10/20 11:57	R12	1	A	NONE
AD19159-007	09/10/20 12:14	BCT	1	A	solids/mixing
AD19159-007	09/10/20 12:15	BCT	1	A	cr6
AD19159-007	09/10/20 13:41	R12	1	A	NONE
AD19159-007	09/10/20 15:17	EF	1	A	TCLP
AD19159-007	09/10/20 15:17	EF	1	A	R12
AD19159-007	09/10/20 18:02	R12	1	A	NONE
AD19159-007	09/11/20 07:53	ANS	1	A	TDSI/Hg
AD19159-007	09/11/20 10:13	R12	1	A	NONE
AD19159-007	09/14/20 09:47	JW	1	A	CN
AD19159-007	09/14/20 11:21	R12	1	A	NONE
AD19159-008	09/10/20 11:21	RICAR	0	M	Received
AD19159-008	09/10/20 11:22	RICAR	0	M	Login
AD19159-008	09/10/20 11:57	R12	1	A	NONE
AD19159-008	09/10/20 12:14	BCT	1	A	solids/mixing
AD19159-008	09/10/20 12:15	BCT	1	A	cr6
AD19159-008	09/10/20 13:41	R12	1	A	NONE
AD19159-008	09/10/20 15:17	EF	1	A	R12
AD19159-008	09/10/20 15:17	EF	1	A	TCLP
AD19159-008	09/10/20 18:02	R12	1	A	NONE
AD19159-008	09/11/20 07:53	ANS	1	A	TDSI/Hg
AD19159-008	09/11/20 10:13	R12	1	A	NONE
AD19159-008	09/14/20 09:47	JW	1	A	CN
AD19159-008	09/14/20 11:21	R12	1	A	NONE
AD19159-008	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19159-008	09/14/20 15:25	R12	1	A	NONE
AD19159-009	09/10/20 11:21	RICAR	0	M	Received
AD19159-009	09/10/20 11:22	RICAR	0	M	Login
AD19159-009	09/10/20 11:57	R12	1	A	NONE
AD19159-009	09/10/20 12:14	BCT	1	A	solids/mixing
AD19159-009	09/10/20 12:15	BCT	1	A	cr6
AD19159-009	09/10/20 13:41	R12	1	A	NONE
AD19159-009	09/10/20 15:17	EF	1	A	TCLP
AD19159-009	09/10/20 15:17	EF	1	A	R12
AD19159-009	09/10/20 18:02	R12	1	A	NONE
AD19159-009	09/11/20 07:53	ANS	1	A	TDSI/Hg
AD19159-009	09/11/20 10:13	R12	1	A	NONE
AD19159-009	09/14/20 09:47	JW	1	A	CN
AD19159-009	09/14/20 11:21	R12	1	A	NONE
AD19159-009	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19159-009	09/14/20 15:25	R12	1	A	NONE
AD19159-010	09/10/20 11:21	RICAR	0	M	Received
AD19159-010	09/10/20 11:22	RICAR	0	M	Login
AD19159-010	09/10/20 11:57	R12	1	A	NONE
AD19159-010	09/10/20 12:14	BCT	1	A	solids/mixing
AD19159-010	09/10/20 12:15	BCT	1	A	cr6
AD19159-010	09/10/20 13:41	R12	1	A	NONE
AD19159-010	09/10/20 15:17	EF	1	A	R12
AD19159-010	09/10/20 15:17	EF	1	A	TCLP
AD19159-010	09/10/20 18:02	R12	1	A	NONE
AD19159-010	09/11/20 07:53	ANS	1	A	TDSI/Hg
AD19159-010	09/11/20 10:13	R12	1	A	NONE
AD19159-010	09/14/20 09:47	JW	1	A	CN
AD19159-010	09/14/20 11:21	R12	1	A	NONE
AD19159-010	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19159-010	09/14/20 15:25	R12	1	A	NONE
AD19159-011	09/10/20 11:21	RICAR	0	M	Received
AD19159-011	09/10/20 11:22	RICAR	0	M	Login
AD19159-011	09/10/20 11:30	JMP	1	A	CR6 F/P
AD19159-011	09/10/20 13:41	R12	1	A	NONE
AD19159-011	09/10/20 18:02	R12	1	A	NONE
AD19159-011	09/11/20 11:06	EF	1	A	TCLP
AD19159-011	09/10/20 11:57	R12	2	A	NONE
AD19159-011	09/10/20 18:02	R12	2	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD19159-011	09/11/20 09:34	JW	2	A	CN
AD19159-011	09/11/20 15:32	R12	2	A	NONE
AD19159-011	09/10/20 11:57	R12	3	A	NONE
AD19159-011	09/10/20 18:02	R12	3	A	NONE
AD19159-011	09/14/20 08:06	ANS	3	A	TDWI/Hg
AD19159-011	09/14/20 09:33	R12	3	A	NONE

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Metal Data

Metal Data
Sample Data

Cr-SOIL

Sample	Total Cr (mg/kg)	RL	Hexavalent Cr (mg/kg)	RL	Trivalent Cr (mg/kg)	RL
AD19159-001	12.2	6.41	ND	1.026	12.2	6.41
AD19159-002	72.7	5.75	1.10	0.92	71.6	5.75
AD19159-003	8.20	5.32	ND	0.851	8.20	5.32
AD19159-004	59.7	5.68	2.236	0.909	57.464	5.68
AD19159-007	13.2	6.17	ND	0.988	13.2	6.17
AD19159-008	ND	7.69	ND	1.231	ND	7.69
AD19159-009	9.53	7.35	ND	1.176	9.53	7.35
AD19159-010	10.8	5.75	ND	0.920	10.8	5.75

Calculated using 3 significant figures. Reported using 2 significant figures.

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-001	% Solid:	78	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-9	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	71	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A
7440-47-3	Chromium	6.4	12	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A
7440-50-8	Copper	6.4	41	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A
7439-92-1	Lead	6.4	1000	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A
7439-96-5	Manganese	13	470	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A
7439-97-6	Mercury	0.11	0.12	1	0.15	25	09/11/20	85269	H26211S	20	CV	HGCV3A
7440-02-0	Nickel	6.4	17	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A
7440-66-6	Zinc	13	140	1	0.5	50	09/14/20	85269	S26211A3	25	P	PEICP3A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-001	% Solid:	78	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-9	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.26	9.9	1	0.5	100	09/11/20	852701	120ANEW	30	MS	MS3_7700SWA
7440-41-7	Beryllium	0.26	0.38	1	0.5	100	09/11/20	852701	120ANEW	30	MS	MS3_7700SWA
7782-49-2	Selenium	2.6	ND	1	0.5	100	09/11/20	852701	120ANEW	30	MS	MS3_7700SWA
7440-22-4	Silver	0.26	ND	1	0.5	100	09/11/20	852701	120ANEW	30	MS	MS3_7700SWA

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-002	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	Duplicate	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	380	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A
7440-47-3	Chromium	5.7	73	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A
7440-50-8	Copper	5.7	100	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A
7439-92-1	Lead	5.7	270	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A
7439-96-5	Manganese	11	340	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A
7439-97-6	Mercury	0.096	0.26	1	0.15	25	09/11/20	85269	H26211S	23	CV	HGCV3A
7440-02-0	Nickel	5.7	34	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A
7440-66-6	Zinc	11	430	1	0.5	50	09/14/20	85269	S26211A3	26	P	PEICP3A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-002	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	Duplicate	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	11	1	0.5	100	09/11/20	852701	120ANEW	31	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	0.34	1	0.5	100	09/11/20	852701	120ANEW	31	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	ND	1	0.5	100	09/11/20	852701	120ANEW	31	MS	MS3_7700SWA
7440-22-4	Silver	0.23	1.8	1	0.5	100	09/11/20	852701	120ANEW	31	MS	MS3_7700SWA

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-003	% Solid:	94	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	180	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A
7440-47-3	Chromium	5.3	8.2	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A
7440-50-8	Copper	5.3	17	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A
7439-92-1	Lead	5.3	91	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A
7439-96-5	Manganese	11	210	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A
7439-97-6	Mercury	0.089	ND	1	0.15	25	09/11/20	85269	H26211S	24	CV	HGCV3A
7440-02-0	Nickel	5.3	9.6	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A
7440-66-6	Zinc	11	170	1	0.5	50	09/14/20	85269	S26211A3	27	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-003	% Solid:	94	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.21	2.4	1	0.5	100	09/11/20	852701	120ANEW	32	MS	MS3_7700SWA
7440-41-7	Beryllium	0.21	ND	1	0.5	100	09/11/20	852701	120ANEW	32	MS	MS3_7700SWA
7782-49-2	Selenium	2.1	ND	1	0.5	100	09/11/20	852701	120ANEW	32	MS	MS3_7700SWA
7440-22-4	Silver	0.21	0.31	1	0.5	100	09/11/20	852701	120ANEW	32	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-004	% Solid:	88	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	320	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A
7440-47-3	Chromium	5.7	60	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A
7440-50-8	Copper	5.7	84	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A
7439-92-1	Lead	5.7	380	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A
7439-96-5	Manganese	11	340	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A
7439-97-6	Mercury	0.095	0.15	1	0.15	25	09/11/20	85269	H26211S	16	CV	HGCV3A
7440-02-0	Nickel	5.7	35	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A
7440-66-6	Zinc	11	400	1	1	100	09/14/20	85269	S26211A3	17	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-004	% Solid:	88	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	9.2	1	0.5	100	09/11/20	852701	120ANEW	21	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	0.34	1	0.5	100	09/11/20	852701	120ANEW	21	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	ND	1	0.5	100	09/11/20	852701	120ANEW	21	MS	MS3_7700SWA
7440-22-4	Silver	0.23	2.1	1	0.5	100	09/11/20	852701	120ANEW	21	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-005	% Solid:	88	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B MS	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	620	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A
7440-47-3	Chromium	5.7	110	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A
7440-50-8	Copper	5.7	140	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A
7439-92-1	Lead	5.7	340	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A
7439-96-5	Manganese	11	400	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A
7439-97-6	Mercury	0.095	2.1	1	0.15	25	09/11/20	85269	H26211S	18	CV	HGCV3A
7440-02-0	Nickel	5.7	91	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A
7440-66-6	Zinc	11	460	1	0.5	50	09/14/20	85269	S26211A3	19	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-005	% Solid:	88	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B MS	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	57	1	0.5	100	09/11/20	852701	120ANEW	24	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	43	1	0.5	100	09/11/20	852701	120ANEW	24	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	47	1	0.5	100	09/11/20	852701	120ANEW	24	MS	MS3_7700SWA
7440-22-4	Silver	0.23	10	1	0.5	100	09/11/20	852701	120ANEW	24	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-006	% Solid:	88	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B MSD	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	530	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A
7440-47-3	Chromium	5.7	100	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A
7440-50-8	Copper	5.7	140	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A
7439-92-1	Lead	5.7	350	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A
7439-96-5	Manganese	11	400	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A
7439-97-6	Mercury	0.095	2.0	1	0.15	25	09/11/20	85269	H26211S	19	CV	HGCV3A
7440-02-0	Nickel	5.7	84	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A
7440-66-6	Zinc	11	500	1	0.5	50	09/14/20	85269	S26211A3	20	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-006	% Solid:	88	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B MSD	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	57	1	0.5	100	09/11/20	852701	120ANEW	25	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	45	1	0.5	100	09/11/20	852701	120ANEW	25	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	47	1	0.5	100	09/11/20	852701	120ANEW	25	MS	MS3_7700SWA
7440-22-4	Silver	0.23	11	1	0.5	100	09/11/20	852701	120ANEW	25	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-007	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-3A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	58	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A
7440-47-3	Chromium	6.2	13	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A
7440-50-8	Copper	6.2	45	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A
7439-92-1	Lead	6.2	69	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A
7439-96-5	Manganese	12	430	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A
7439-97-6	Mercury	0.10	ND	1	0.15	25	09/11/20	85269	H26211S	25	CV	HGCV3A
7440-02-0	Nickel	6.2	31	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A
7440-66-6	Zinc	12	95	1	0.5	50	09/14/20	85269	S26211A3	28	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-007	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-3A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	6.6	1	0.5	100	09/11/20	852701	120ANEW	33	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	0.34	1	0.5	100	09/11/20	852701	120ANEW	33	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	09/11/20	852701	120ANEW	33	MS	MS3_7700SWA
7440-22-4	Silver	0.25	0.56	1	0.5	100	09/11/20	852701	120ANEW	33	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-008	% Solid:	65	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-10A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	15	81	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A
7440-47-3	Chromium	7.7	ND	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A
7440-50-8	Copper	7.7	20	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A
7439-92-1	Lead	7.7	39	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A
7439-96-5	Manganese	15	120	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A
7439-97-6	Mercury	0.13	ND	1	0.15	25	09/11/20	85269	H26211S	26	CV	HGCV3A
7440-02-0	Nickel	7.7	17	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A
7440-66-6	Zinc	15	79	1	0.5	50	09/14/20	85269	S26211A3	29	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-008	% Solid:	65	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-10A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.31	5.7	1	0.5	100	09/11/20	852701	120ANEW	34	MS	MS3_7700SWA
7440-41-7	Beryllium	0.31	0.39	1	0.5	100	09/11/20	852701	120ANEW	34	MS	MS3_7700SWA
7782-49-2	Selenium	3.1	ND	1	0.5	100	09/11/20	852701	120ANEW	34	MS	MS3_7700SWA
7440-22-4	Silver	0.31	ND	1	0.5	100	09/11/20	852701	120ANEW	34	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-009	% Solid:	68	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-10B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	15	80	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A
7440-47-3	Chromium	7.4	9.5	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A
7440-50-8	Copper	7.4	22	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A
7439-92-1	Lead	7.4	28	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A
7439-96-5	Manganese	15	160	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A
7439-97-6	Mercury	0.12	ND	1	0.15	25	09/11/20	85269	H26211S	27	CV	HGCV3A
7440-02-0	Nickel	7.4	20	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A
7440-66-6	Zinc	15	63	1	0.5	50	09/14/20	85269	S26211A3	30	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-009	% Solid:	68	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-10B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.29	6.4	1	0.5	100	09/11/20	852701	120ANEW	35	MS	MS3_7700SWA
7440-41-7	Beryllium	0.29	0.34	1	0.5	100	09/11/20	852701	120ANEW	35	MS	MS3_7700SWA
7782-49-2	Selenium	2.9	ND	1	0.5	100	09/11/20	852701	120ANEW	35	MS	MS3_7700SWA
7440-22-4	Silver	0.29	ND	1	0.5	100	09/11/20	852701	120ANEW	35	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-010	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-3B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	74	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A
7440-47-3	Chromium	5.7	11	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A
7440-50-8	Copper	5.7	79	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A
7439-92-1	Lead	5.7	140	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A
7439-96-5	Manganese	11	460	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A
7439-97-6	Mercury	0.096	ND	1	0.15	25	09/11/20	85269	H26211S	28	CV	HGCV3A
7440-02-0	Nickel	5.7	26	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A
7440-66-6	Zinc	11	99	1	0.5	50	09/14/20	85269	S26211A3	33	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-010	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-3B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	12	1	0.5	100	09/11/20	852701	120ANEW	36	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	0.36	1	0.5	100	09/11/20	852701	120ANEW	36	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	ND	1	0.5	100	09/11/20	852701	120ANEW	36	MS	MS3_7700SWA
7440-22-4	Silver	0.23	ND	1	0.5	100	09/11/20	852701	120ANEW	36	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	EB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7440-22-4	Silver	1.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/14/20	852721	420ANEW	31	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	EB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/20	85272	H26214SW	18	CV	HGCV3A
7440-02-0	Nickel	50	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/14/20	85272	W26214B2	25	P	PEICPRAD2A
7440-23-5	Sodium	5000	ND	1	50	50	09/14/20	85272	W26214B2	25	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/14/20	85272	W26214A2	25	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Metal Data
QC Data

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/11/20
Data File: S091120ANEW
Prep Batch: 85270
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-334461-8	Rec	CCV V-334465-16	Rec	CCV V-334465-28	Rec	CCV V-334465-40	Rec	CCV V-334465-46	Rec		Rec		Rec		Rec
Antimony	50/50	47.13800	94	47.89100	96	48.09900	96	48.21900	96	48.97600	98						
Arsenic	50/50	50.07300	100	50.12500	100	49.53800	99	49.24500	98	48.97700	98						
Beryllium	50/50	51.53900	103	51.65100	103	50.85100	102	49.88400	100	48.28700	97						
Cadmium	50/50	49.85000	100	49.67000	99	49.46800	99	49.74300	99	50.36400	101						
Selenium	50/250	48.98300	98	255.25600	102	252.56600	101	246.57400	99	246.56800	99						
Silver	10/50	9.76000	98	53.56300	107	51.28200	103	51.53900	103	51.84300	104						
Thallium	50/50	49.05100	98	51.16300	102	51.42500	103	51.65700	103	50.29000	101						
Vanadium	50/50	49.61300	99	49.93600	100	49.26900	99	49.63600	99	48.82300	98						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/11/20
Data File: S091120ANEW
Prep Batch: 85270
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-334466	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-334464	Recovery	Low Limit	High Limit
Magnesium	500	485.757	97	80	120		50000	51109.053	102	90	110
Aluminum	500	496.990	99	80	120		15000	15514.650	103	90	110
Chromium	2	2.027	101	80	120		500	522.702	105	90	110
Copper	10	10.044	100	80	120		500	514.739	103	90	110
Iron	500	511.403	102	80	120		50000	51119.767	102	90	110
Arsenic	1	0.992	99	80	120		500	510.281	102	90	110
Barium	5	3.699	74 a	80	120		500	528.188	106	90	110
Beryllium	1	0.989	99	80	120		500	488.021	98	90	110
Calcium	500	500.903	100	80	120		50000	53586.886	107	90	110
Cadmium	2	1.910	96	80	120		500	522.028	104	90	110
Silver	1	0.924	92	80	120		500	1545.019	309 a	90	110
Potassium	500	488.491	98	80	120		50000	51834.310	104	90	110
Zinc	20	19.764	99	80	120		500	485.196	97	90	110
Manganese	6	5.936	99	80	120		500	532.178	106	90	110
Molybdenum	1	1.054	105	80	120		500	530.631	106	90	110
Sodium	500	468.022	94	80	120		50000	51835.041	104	90	110
Nickel	3	2.832	94	80	120		500	500.679	100	90	110
Lead	2	1.841	92	80	120		500	468.004	94	90	110
Antimony	4	3.674	92	80	120		500	496.388	99	90	110
Selenium	10	10.006	100	80	120		2500	2497.117	100	90	110
Thallium	2	1.816	91	80	120		500	480.314	96	90	110
Vanadium	1	0.968	97	80	120		500	534.746	107	90	110
Cobalt	2	1.934	97	80	120		500	514.163	103	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/14/20
Data File: S26211A3
Prep Batch: 85269
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333673-5	Rec	CCV V-333673-12	Rec	CCV V-333673-23	Rec	CCV V-333673-31	Rec	CCV V-333673-39	Rec	CCV V-333673-50	Rec	CCV V-333673-54	Rec	CCV V-325355-63	Rec
Aluminum	5/5	4.94987	99	4.92942	99	4.82652	97	4.85104	97	4.81360	96	4.77976	96	4.81379	96	4.57943	92
Barium	.5/.5	0.49448	99	0.49187	98	0.48267	97	0.48485	97	0.48078	96	0.47725	95	0.47946	96	0.45932	92
Calcium	50/50	51.97500	104	50.78780	102	49.66140	99	50.09990	100	49.02680	98	49.42000	99	49.13520	98	47.72880	95
Chromium	.5/.5	0.50147	100	0.49806	100	0.48963	98	0.49142	98	0.48664	97	0.48486	97	0.48585	97	0.46588	93
Cobalt	.5/.5	0.51396	103	0.48385	97	0.47579	95	0.47812	96	0.47299	95	0.47025	94	0.47256	95	0.47353	95
Copper	.5/.5	0.49929	100	0.49545	99	0.48649	97	0.48964	98	0.48417	97	0.48038	96	0.48417	97	0.46281	93
Iron	5/5	5.01413	100	4.98263	100	4.92575	99	4.97713	100	4.92811	99	4.89872	98	4.93631	99	4.71764	94
Lead	.5/.5	0.50576	101	0.50543	101	0.49149	98	0.48652	97	0.48958	98	0.48577	97	0.48594	97	0.46407	93
Magnesium	50/50	51.59370	103	51.16680	102	49.90180	100	49.63550	99	49.17830	98	49.76220	100	49.32590	99	47.24050	94
Manganese	.5/.5	0.49661	99	0.49299	99	0.48530	97	0.48783	98	0.48325	97	0.47996	96	0.48219	96	0.46160	92
Nickel	.5/.5	0.48736	97	0.48361	97	0.47494	95	0.47744	95	0.50178	100	0.47029	94	0.47260	95	0.47652	95
Vanadium	.5/.5	0.50181	100	0.49794	100	0.48944	98	0.49374	99	0.48966	98	0.48880	98	0.48614	97	0.46426	93
Zinc	.5/.5	0.50210	100	0.49754	100	0.49097	98	0.49417	99	0.48958	98	0.48905	98	0.48911	98	0.46774	94

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/14/20
Data File: S26211A3
Prep Batch: 85269
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333671	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-333662	Recovery	Low Limit	High Limit
Magnesium	5.0	5.29120	106	80	120	500	497.929	100	90	110
Silver	0.015	0.0172212	115	80	120	1	1.25555	126 a	90	110
Aluminum	2.0	2.03278	102	80	120	500	509.802	102	90	110
Arsenic	0.04	0.0460796	115	80	120	10	10.7532	108	90	110
Boron	0.2	0.204458	102	80	120	5	3.90222	78 a	90	110
Barium	0.1	0.104991	105	80	120	10	10.2486	102	90	110
Beryllium	0.012	0.0138513	115	80	120	5	5.09126	102	90	110
Calcium	10	10.5034	105	80	120	500	470.778	94	90	110
Cadmium	0.012	0.0171544	143 a	80	120	5	5.24868	105	90	110
Cobalt	0.025	0.0282737	113	80	120	5	4.80315	96	90	110
Chromium	0.05	0.0532240	106	80	120	10	10.1490	101	90	110
Copper	0.05	0.0509749	102	80	120	10	10.6394	106	90	110
Silicon	0.1	0.137124	137 a	80	120	25	0.154752	.62 a	90	110
Potassium	NA	-16.6772		80	120	200	-2448.15	- a	90	110
Zinc	0.1	0.102604	103	80	120	10	9.81568	1200 98	90	110
Manganese	0.1	0.101044	101	80	120	10	10.0681	101	90	110
Molybdenum	0.025	0.0258763	104	80	120	10	9.99740	100	90	110
Sodium	NA	2.86332		80	120	1000	1191.52	119 a	90	110
Nickel	0.05	0.0541742	108	80	120	10	9.52728	95	90	110
Lead	0.05	0.0503340	101	80	120	10	9.94191	99	90	110
Antimony	0.04	0.0405926	101	80	120	5	5.65342	113 a	90	110
Selenium	0.05	0.0555636	111	80	120	5	5.25887	105	90	110
Tin	0.2	0.205515	103	80	120	10	10.1499	101	90	110
Titanium	0.1	0.100060	100	80	120	10	10.3993	104	90	110
Thallium	0.05	0.0590761	118	80	120	5	5.19707	104	90	110
Vanadium	0.1	0.103608	104	80	120	10	10.6104	106	90	110
Iron	2.0	2.05050	103	80	120	400	383.320	96	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/14/20
Data File: A091420ANEW
Prep Batch: 85272
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-334461-8	Rec	CCV V-334465-16	Rec	CCV V-334465-28	Rec	CCV V-334465-40	Rec	CCV V-334465-48	Rec		Rec		Rec		Rec
Antimony	50/50	50.36400	101	50.82900	102	49.22900	98	50.37200	101	49.77300	100						
Arsenic	50/50	50.30000	101	50.41400	101	49.64600	99	49.21000	98	49.66800	99						
Beryllium	50/50	51.23400	102	50.94900	102	50.20400	100	50.09200	100	50.59100	101						
Cadmium	50/50	50.90100	102	51.05100	102	48.85300	98	49.96200	100	49.71600	99						
Cobalt	50/50	50.07600	100	50.13400	100	50.46600	101	49.87000	100	50.08000	100						
Lead	50/50	47.93800	96	46.56200	93	45.83100	92	46.61000	93	46.56400	93						
Selenium	50/250	51.67000	103	254.11300	102	250.46000	100	245.46800	98	245.54000	98						
Silver	10/50	9.92200	99	48.34600	97	46.19800	92	47.05900	94	46.84100	94						
Thallium	50/50	49.55700	99	51.61300	103	49.39800	99	50.57100	101	51.13800	102						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/14/20
Data File: A091420ANEW
Prep Batch: 85272
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-334467	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-334464	Recovery	Low Limit	High Limit	
Magnesium	250	247.578	99	80	120		50000	50708.314	101	90	110	
Aluminum	100	102.339	102	80	120		15000	15933.987	106	90	110	
Arsenic	1	0.974	97	80	120		500	503.322	101	90	110	
Barium	2.5	2.366	95	80	120		500	525.001	105	90	110	
Beryllium	0.5	0.523	105	80	120		500	488.426	98	90	110	
Calcium	250	254.189	102	80	120		50000	52073.260	104	90	110	
Cadmium	1	1.010	101	80	120		500	541.002	108	90	110	
Cobalt	1	0.988	99	80	120		500	514.630	103	90	110	
Chromium	1	0.953	95	80	120		500	520.052	104	90	110	
Copper	5	4.780	96	80	120		500	481.400	96	90	110	
Silver	0.5	0.517	103	80	120		500	273.851	55 a	90	110	
Potassium	250	246.922	99	80	120		50000	51279.351	103	90	110	
Zinc	10	9.676	97	80	120		500	487.524	98	90	110	
Manganese	3	2.929	98	80	120		500	533.064	107	90	110	
Molybdenum	1	1.052	105	80	120		500	545.119	109	90	110	
Sodium	250	231.859	93	80	120		50000	51449.066	103	90	110	
Nickel	1.5	1.511	101	80	120		500	479.664	96	90	110	
Lead	1.5	1.349	90	80	120		500	492.646	99	90	110	
Antimony	1.5	1.548	103	80	120		500	540.288	108	90	110	
Selenium	5	5.369	107	80	120		2500	2466.255	99	90	110	
Thallium	1	0.904	90	80	120		500	477.888	96	90	110	
Vanadium	1	1.010	101	80	120		500	531.618	106	90	110	
Iron	150	149.396	100	80	120		50000	50382.601	101	90	110	

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/14/20
Data File: SW26214A2
Prep Batch: 85272
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333673-5	Rec	CCV V-333673-12	Rec	CCV V-333673-23	Rec	CCV V-333673-32	Rec	CCV V-333673-39	Rec		Rec		Rec		Rec
Aluminum	5/5	5.14481	103	5.15743	103	4.95144	99	4.98380	100	4.85044	97						
Barium	.5/.5	0.51360	103	0.51300	103	0.49620	99	0.49857	100	0.48559	97						
Calcium	50/50	51.98890	104	51.88840	104	50.22770	100	50.45690	101	49.25220	99						
Chromium	.5/.5	0.51620	103	0.51491	103	0.49838	100	0.50195	100	0.48909	98						
Copper	.5/.5	0.51919	104	0.51872	104	0.50460	101	0.50629	101	0.49699	99						
Iron	5/5	5.18039	104	5.17938	104	5.00095	100	5.02052	100	4.88728	98						
Magnesium	50/50	52.16600	104	52.08500	104	50.31420	101	50.46920	101	49.14660	98						
Manganese	.5/.5	0.51365	103	0.51285	103	0.49628	99	0.49844	100	0.48590	97						
Nickel	.5/.5	0.51592	103	0.51334	103	0.49434	99	0.49990	100	0.48279	97						
Vanadium	.5/.5	0.51340	103	0.51229	102	0.49565	99	0.49807	100	0.48621	97						
Zinc	.5/.5	0.52039	104	0.52000	104	0.50234	100	0.50395	101	0.48869	98						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/14/20
Data File: SW26214A2
Prep Batch: 85272
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333670	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-333660	Recovery	Low Limit	High Limit
Magnesium	5.0	5.27558	106	80	120		500	494.769	99	90	110
Silver	0.02	0.0218161	109	80	120		1	1.20491	120 a	90	110
Aluminum	0.2	0.227278	114	80	120		500	496.185	99	90	110
Arsenic	0.04	0.0428522	107	80	120		10	10.5888	106	90	110
Boron	0.2	0.197054	99	80	120		5	1.86698	37 a	90	110
Barium	0.05	0.0524419	105	80	120		10	10.0344	100	90	110
Beryllium	0.012	0.0143716	120	80	120		5	4.90979	98	90	110
Calcium	5.0	5.30968	106	80	120		500	491.034	98	90	110
Cadmium	0.012	0.0157422	131 a	80	120		5	5.48435	110	90	110
Cobalt	0.02	0.0220866	110	80	120		5	4.81397	96	90	110
Chromium	0.05	0.0533703	107	80	120		10	9.93552	99	90	110
Copper	0.05	0.0544426	109	80	120		10	10.4896	105	90	110
Silicon	0.10	0.143355	143 a	80	120		25	10.7489	43 a	90	110
Potassium	NA	2.69397		80	120		200	116.439	58 a	90	110
Zinc	0.05	0.0511112	102	80	120		10	9.71392	97	90	110
Manganese	0.04	0.0428836	107	80	120		10	9.63335	96	90	110
Molybdenum	0.02	0.0215572	108	80	120		10	9.93458	99	90	110
Sodium	5.0	5.43867	109	80	120		1000	1182.01	118 a	90	110
Nickel	0.05	0.0513244	103	80	120		10	9.65142	97	90	110
Lead	0.05	0.0501592	100	80	120		10	9.58236	96	90	110
Antimony	0.05	0.0506233	101	80	120		5	5.73414	115 a	90	110
Selenium	0.05	0.0541980	108	80	120		5	5.42143	108	90	110
Tin	0.05	0.0526836	105	80	120		10	9.71217	97	90	110
Titanium	0.05	0.0539536	108	80	120		10	9.98814	100	90	110
Thallium	0.05	0.0553690	111	80	120		5	4.97359	99	90	110
Vanadium	0.05	0.0529141	106	80	120		10	10.2268	102	90	110
Iron	0.3	0.325583	109	80	120		200	191.431	96	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/14/20
Data File: SW26214B2
Prep Batch: 85272
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333673-5	Rec	CCV V-333673-12	Rec	CCV V-333673-23	Rec	CCV V-333673-29	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	50/50	49.70210	99	48.72420	97	49.16600	98	49.98290	100						
Sodium	50/50	50.73080	101	50.42150	101	50.77180	102	51.19050	102						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/14/20
Data File: SW26214B2
Prep Batch: 85272
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD2A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333670	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-333662	Recovery	Low Limit	High Limit	
Molybdenum	0.02	0.0139670	70 a	80	120		10	9.92188	99	90	110	
Boron	0.2	0.194332	97	80	120		5	-0.171497	-3.4 a	90	110	
Barium	0.05	0.0507184	101	80	120		10	10.3705	104	90	110	
Calcium	5.0	5.28203	106	80	120		500	499.480	100	90	110	
Copper	0.05	0.0578410	116	80	120		10	10.1655	102	90	110	
Iron	0.3	0.327737	109	80	120		400	385.882	96	90	110	
Potassium	5.0	5.35317	107	80	120		200	249.223	125 a	90	110	
Aluminum	0.2	0.211048	106	80	120		500	499.601	100	90	110	
Manganese	0.04	0.0423319	106	80	120		10	10.0739	101	90	110	
Zinc	0.05	0.0537820	108	80	120		10	9.98289	100	90	110	
Sodium	5.0	5.55718	111	80	120		1000	1057.00	106	90	110	
Nickel	0.05	0.0388875	78 a	80	120		10	10.2654	103	90	110	
Selenium	0.05			80	120		5			90	110	
Silicon	0.10	0.138640	139 a	80	120		25	0.429809	1.7 a	90	110	
Tin	0.05	0.0796162	159 a	80	120		10	10.6395	106	90	110	
Titanium	0.05	0.0523395	105	80	120		10	10.3285	103	90	110	
Vanadium	0.05	0.0523654	105	80	120		10	10.6253	106	90	110	
Magnesium	5.0	5.27246	105	80	120		500	487.513	98	90	110	

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/11/20
Data File: H26211S
Prep Batch: 85269
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-21		CCV-33		CCV-36								
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec	
Mercury	20/10	20.19000	101	10.08000	101	10.14000	101	9.98000	100							

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/15/20
Data File: H26214SW
Prep Batch: 85272
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-20		CCV-31		CCV-34								
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec	
Mercury	20/10	20.04000	100	10.19000	102	10.13000	101	10.11000	101							

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/11/20
Data File: S091120ANEW
Prep Batch: 85270
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-334462-10	CCB V-334462-17	CCB V-334462-29	CCB V-334462-41	CCB V-334462-47	MB 85270-18		
Antimony	2U	4U	4U	4U	4U	400U		
Arsenic	.5U	1U	1U	1U	1U	100U		
Beryllium	.5U	1U	1U	1U	1U	100U		
Cadmium	1U	2U	2U	2U	2U	200U		
Selenium	5U	10U	10U	10U	10U	1000U		
Silver	.5U	1U	1U	1U	1U	100U		
Thallium	1U	2U	2U	2U	2U	200U		
Vanadium	.5U	1U	1U	1U	1U	100U		

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/14/20
Data File: S26211A3
Prep Batch: 85269
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-24	CCB V-333667-32	CCB V-333667-40	CCB V-333667-51	CCB V-333667-55	CCB V-325347-64
Aluminum	1 U	2 U	2 U	2 U	2 U	2U	2U	2 U
Barium	.05 U	.1 U	.1 U	.1 U	.1 U	.1U	.1U	.1 U
Calcium	5 U	10 U	10 U	10 U	10 U	10U	10U	10 U
Chromium	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.05U	.05 U
Cobalt	.0125 U	.025 U	.025 U	.025 U	.025 U	.025U	.025U	.025 U
Copper	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.05U	.05 U
Iron	1 U	2 U	2 U	2 U	2 U	2U	2U	2 U
Lead	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.05U	.05 U
Magnesium	2.5 U	5 U	5 U	5 U	5 U	5U	5U	5 U
Manganese	.05 U	.1 U	.1 U	.1 U	.1 U	.1U	.1U	.1 U
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U	.05U	.05U	.05 U
Vanadium	.05 U	.1 U	.1 U	.1 U	.1 U	.1U	.1U	.1 U
Zinc	.05 U	.1 U	.1 U	.1 U	.1 U	.1U	.1U	.1 U

Analyte	MB 85269 (100)-14							
Aluminum	100 U							
Barium	5 U							
Calcium	500 U							
Chromium	2.5 U							
Cobalt	1.3 U							
Copper	2.5 U							
Iron	100 U							
Lead	2.5 U							
Magnesium	250 U							
Manganese	5 U							
Nickel	2.5 U							
Vanadium	5 U							
Zinc	5 U							

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/14/20
Data File: A091420ANEW
Prep Batch: 85272
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-334462-10	CCB V-334462-17	CCB V-334462-29	CCB V-334462-41	CCB V-334462-49	MB 85272-18		
Antimony	.75U	1.5U	1.5U	1.5U	1.5U	1.5U		
Arsenic	.5U	1U	1U	1U	1U	1U		
Beryllium	.25U	.5U	.5U	.5U	.5U	.5U		
Cadmium	.5U	1U	1U	1U	1U	1U		
Cobalt	.5U	1U	1U	1U	1U	1U		
Lead	.75U	1.5U	1.5U	1.5U	1.5U	1.5U		
Selenium	2.5U	5U	5U	5U	5U	5U		
Silver	.25U	.5U	.5U	.5U	.5U	.5U		
Thallium	.5U	1U	1U	1U	1U	1U		

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/14/20
Data File: SW26214A2
Prep Batch: 85272
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-24	CCB V-333667-33	CCB V-333667-40	MB 85272 (1)-14		
Aluminum	.1 U	.2 U	.2 U	.2 U	.2 U	.1U		
Barium	.025 U	.05 U	.05 U	.05 U	.05 U	.025U		
Calcium	2.5 U	5 U	5 U	5 U	5 U	2.5U		
Chromium	.025 U	.05 U	.05 U	.05 U	.05 U	.025U		
Copper	.025 U	.05 U	.05 U	.05 U	.05 U	.025U		
Iron	.15 U	.3 U	.3 U	.3 U	.3 U	.15U		
Magnesium	2.5 U	5 U	5 U	5 U	5 U	2.5U		
Manganese	.02 U	.04 U	.04 U	.04 U	.04 U	.02U		
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U	.025U		
Vanadium	.025 U	.05 U	.05 U	.05 U	.05 U	.025U		
Zinc	.025 U	.05 U	.05 U	.05 U	.05 U	.025U		

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/14/20
Data File: SW26214B2
Prep Batch: 85272
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-24	CCB V-333667-30	MB 85272 (1)-14			
Potassium	2.5 U	5 U	5 U	5 U	2.5 U			
Sodium	2.5 U	5 U	5 U	5 U	2.5 U			

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/11/20
Data File: H26211S
Prep Batch: 85269
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-37	MB 85269 (167)-11			
Mercury	.5U	.5U	.5U	.5U	83 U			

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/15/20
Data File: H26214SW
Prep Batch: 85272
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-21	CCB-32	CCB-35	MB 85272 (1)-11			
Mercury	.5U	.5U	.5U	.5U	.5U			

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/11/20
Data File: S091120ANEW
Prep Batch: 85270
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-334463-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	51588.44	103							
Antimony	0	U								
Arsenic	0	U								
Beryllium	0	U								
Cadmium	0	U								
Calcium	150000	163961	109							
Iron	125000	128419	103							
Magnesium	50000	50909.44	102							
Selenium	0	U								
Silver	0	U								
Thallium	0	U								
Vanadium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/14/20
Data File: S26211A3
Prep Batch: 85269
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	499.408	100							
Barium	0	U								
Calcium	500	473.756	95							
Chromium	0	U								
Cobalt	0	U								
Copper	0	U								
Iron	200	190.217	95							
Lead	0	U								
Magnesium	500	502.636	101							
Manganese	0	U								
Nickel	0	U								
Vanadium	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/14/20
Data File: A091420ANEW
Prep Batch: 85272
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-334463-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	52128.98	104							
Antimony	0	U								
Arsenic	0	U								
Beryllium	0	U								
Cadmium	0	1.383b								
Calcium	150000	162823	109							
Cobalt	0	U								
Iron	125000	126378.4	101							
Lead	0	U								
Magnesium	50000	50614.44	101							
Selenium	0	U								
Silver	0	U								
Thallium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/14/20
Data File: SW26214A2
Prep Batch: 85272
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	487.844	98							
Barium	0	U								
Calcium	500	481.739	96							
Chromium	0	U								
Copper	0	U								
Iron	200	186.585	93							
Magnesium	500	496.038	99							
Manganese	0	U								
Nickel	0	U								
Vanadium	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/14/20
Data File: SW26214B2
Prep Batch: 85272
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	508.894	102							
Calcium	500	519.677	104							
Iron	200	196.387	98							
Magnesium	500	513.087	103							
Potassium	0	U								
Sodium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85270

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85270

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	20	41.1700	49.4	83		61	113
Beryllium	85270	1	S091120A	20	147.3900	187	79		66	110
Selenium	85270	1	S091120A	20	300.0830	364	82		60	112
Silver	85270	1	S091120A	20	82.9270	94.0	88		61	111

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85270

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	19	42.0340	49.4	85		61	113
Beryllium	85270	1	S091120A	19	151.0130	187	81		66	110
Selenium	85270	1	S091120A	19	304.5110	364	84		60	112
Silver	85270	1	S091120A	19	83.1280	94.0	88		61	111

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	25	S091120A	21	249.8150	40.5900	250	84		75	125
Beryllium	85270	1	S091120A	25	S091120A	21	196.1200	1.4870	250	78		75	125
Selenium	85270	1	S091120A	25	S091120A	21	205.5270	10U	250	82		75	125
Silver	85270	1	S091120A	25	S091120A	21	47.7160	9.2420	50	77		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19159-005

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	24	S091120A	21	250.5490	40.5900	250	84		75	125
Beryllium	85270	1	S091120A	24	S091120A	21	188.3710	1.4870	250	75		75	125
Selenium	85270	1	S091120A	24	S091120A	21	204.6510	10U	250	82		75	125
Silver	85270	1	S091120A	24	S091120A	21	46.1160	9.2420	50	74	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85270

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS | Matrix: SOIL | SampleID: AD19159-004

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	S091120A	26	S091120A	21	89.2740	40.5900	50	97		75	125
Beryllium	1	S091120A	26	S091120A	21	43.1430	1.4870	50	83		75	125
Selenium	1	S091120A	26	S091120A	21	239.3490	10U	250	96		75	125
Silver	1	S091120A	26	S091120A	21	48.1730	9.2420	50	78		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85269

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85269

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	16	7.3004	8.92	82		65	110
Chromium	85269	1	S26211A3	16	1.9160	2.27	84		61	114
Copper	85269	1	S26211A3	16	1.8090	2.09	87		66	110
Lead	85269	1	S26211A3	16	1.3742	1.63	84		62	110
Manganese	85269	1	S26211A3	16	5.1743	6.03	86		68	110
Mercury	85269	4	H26211S	15	6.0430	41.64	58		39	110
Nickel	85269	1	S26211A3	16	0.4827	.553	87		61	114
Zinc	85269	1	S26211A3	16	5.9111	7.13	83		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85269

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	15	7.2814	8.92	82		65	110
Chromium	85269	1	S26211A3	15	1.9287	2.27	85		61	114
Copper	85269	1	S26211A3	15	1.8105	2.09	87		66	110
Lead	85269	1	S26211A3	15	1.3562	1.63	83		62	110
Manganese	85269	1	S26211A3	15	5.0323	6.03	83		68	110
Mercury	85269	4	H26211S	14	6.2230	41.64	60		39	110
Nickel	85269	1	S26211A3	15	0.4808	.553	87		61	114
Zinc	85269	1	S26211A3	15	5.9825	7.13	84		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	20	S26211A3	17	4.6864	2.7883	0.5	380	b	75	125
Chromium	85269	1	S26211A3	20	S26211A3	17	0.8849	0.5254	0.5	72	a	75	125
Copper	85269	1	S26211A3	20	S26211A3	17	1.2183	0.7403	0.5	96		75	125
Lead	85269	1	S26211A3	20	S26211A3	17	3.0829	3.3560	0.5	-55	b	75	125
Manganese	85269	1	S26211A3	20	S26211A3	17	3.5537	2.9865	0.5	113		75	125
Mercury	85269	1	H26211S	19	H26211S	16	10.7300	0.7820	10	99		75	125
Nickel	85269	1	S26211A3	20	S26211A3	17	0.7393	0.3054	0.5	87		75	125
Zinc	85269	1	S26211A3	20	S26211A3	17	4.4203	3.5562	0.5	173	b	75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19159-005

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	19	S26211A3	17	5.4637	2.7883	0.5	535	b	75	125
Chromium	85269	1	S26211A3	19	S26211A3	17	0.9442	0.5254	0.5	84		75	125
Copper	85269	1	S26211A3	19	S26211A3	17	1.2461	0.7403	0.5	101		75	125
Lead	85269	1	S26211A3	19	S26211A3	17	3.0330	3.3560	0.5	-65	b	75	125
Manganese	85269	1	S26211A3	19	S26211A3	17	3.4821	2.9865	0.5	99		75	125
Mercury	85269	1	H26211S	18	H26211S	16	11.1900	0.7820	10	104		75	125
Nickel	85269	1	S26211A3	19	S26211A3	17	0.7984	0.3054	0.5	99		75	125
Zinc	85269	1	S26211A3	19	S26211A3	17	4.0159	3.5562	0.5	92		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 85269

Instrument Type: ICP/HG
Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS | Matrix: SOIL | SampleID: AD19159-004

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	1	S26211A3	21	S26211A3	17	3.2328	2.7883	0.50	89		75	125
Chromium	1	S26211A3	21	S26211A3	17	1.0359	0.5254	0.50	102		75	125
Copper	1	S26211A3	21	S26211A3	17	1.2606	0.7403	0.50	104		75	125
Lead	1	S26211A3	21	S26211A3	17	3.8920	3.3560	0.50	107		75	125
Manganese	1	S26211A3	21	S26211A3	17	3.4143	2.9865	0.50	86		75	125
Nickel	1	S26211A3	21	S26211A3	17	0.8013	0.3054	0.50	99		75	125
Zinc	1	S26211A3	21	S26211A3	17	4.0097	3.5562	0.50	91		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85272

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: AQUEOUS SampleID: LCS 85272

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	85272	1	SW26214A	15	4.9901	5.00	100		80	120
Barium	85272	1	SW26214A	15	0.5027	0.50	101		80	120
Calcium	85272	1	SW26214A	15	48.8579	50.0	98		80	120
Chromium	85272	1	SW26214A	15	0.4851	0.50	97		80	120
Copper	85272	1	SW26214A	15	0.4888	0.50	98		80	120
Iron	85272	1	SW26214A	15	4.9475	5.00	99		80	120
Magnesium	85272	1	SW26214A	15	48.8974	50.0	98		80	120
Manganese	85272	1	SW26214A	15	0.4838	0.50	97		80	120
Mercury	85272	1	H26214S	12	10.5500	10	106		80	120
Nickel	85272	1	SW26214A	15	0.4909	0.50	98		80	120
Potassium	85272	1	SW26214B	15	47.6977	50	95		80	120
Silver	85272	1	SW26214A	15	0.1082	0.10	108		80	120
Sodium	85272	1	SW26214B	15	47.9991	50	96		80	120
Vanadium	85272	1	SW26214A	15	0.4897	0.50	98		80	120
Zinc	85272	1	SW26214A	15	0.4880	0.50	98		80	120

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCS MR 85272

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	85272	1	SW26214A	16	4.9213	5.00	98		80	120
Barium	85272	1	SW26214A	16	0.4961	0.50	99		80	120
Calcium	85272	1	SW26214A	16	48.9440	50.0	98		80	120
Chromium	85272	1	SW26214A	16	0.4791	0.50	96		80	120
Copper	85272	1	SW26214A	16	0.4838	0.50	97		80	120
Iron	85272	1	SW26214A	16	4.8555	5.00	97		80	120
Magnesium	85272	1	SW26214A	16	48.9194	50.0	98		80	120
Manganese	85272	1	SW26214A	16	0.4821	0.50	96		80	120
Mercury	85272	1	H26214S	13	10.5100	10	105		80	120
Nickel	85272	1	SW26214A	16	0.4825	0.50	96		80	120
Potassium	85272	1	SW26214B	16	48.3422	50	97		80	120
Silver	85272	1	SW26214A	16	0.1065	0.10	106		80	120
Sodium	85272	1	SW26214B	16	48.5187	50	97		80	120
Vanadium	85272	1	SW26214A	16	0.4834	0.50	97		80	120
Zinc	85272	1	SW26214A	16	0.4805	0.50	96		80	120

TxtQcType: MS Matrix: AQUEOUS SampleID: AD19206-004

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	85272	1	SW26214A	19	SW26214A	17	4.9453	0.2U	5.00	99		75	125
Barium	85272	1	SW26214A	19	SW26214A	17	0.6180	0.1130	0.50	101		75	125
Calcium	85272	1	SW26214A	19	SW26214A	17	225.5840	171.7830	50.0	108		75	125
Chromium	85272	1	SW26214A	19	SW26214A	17	0.4842	0.05U	0.50	97		75	125
Copper	85272	1	SW26214A	19	SW26214A	17	0.5015	0.05U	0.50	100		75	125
Iron	85272	1	SW26214A	19	SW26214A	17	5.5066	0.4376	5.00	101		75	125
Magnesium	85272	1	SW26214A	19	SW26214A	17	85.3208	35.2263	50.0	100		75	125
Manganese	85272	1	SW26214A	19	SW26214A	17	2.6046	2.0300	0.50	115		75	125
Mercury	85272	1	H26214S	16	H26214S	14	8.9630	0.50U	10	90		75	125
Nickel	85272	1	SW26214A	19	SW26214A	17	0.4871	0.05U	0.50	97		75	125
Potassium	85272	1	SW26214B	19	SW26214B	17	61.0588	9.3755	50	103		75	125
Silver	85272	1	SW26214A	19	SW26214A	17	0.1100	0.02U	0.10	110		75	125
Sodium	85272	1	SW26214B	19	SW26214B	17	117.2570	66.4272	50	102		75	125
Vanadium	85272	1	SW26214A	19	SW26214A	17	0.4908	0.05U	0.50	98		75	125
Zinc	85272	1	SW26214A	19	SW26214A	17	0.4953	0.05U	0.50	99		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85272

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD19206-004

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	85272	1	SW26214A	20	SW26214A	17	4.8853	0.2U	5.00	98		75	125
Barium	85272	1	SW26214A	20	SW26214A	17	0.6081	0.1130	0.50	99		75	125
Calcium	85272	1	SW26214A	20	SW26214A	17	220.6640	171.7830	50.0	98		75	125
Chromium	85272	1	SW26214A	20	SW26214A	17	0.4780	0.05U	0.50	96		75	125
Copper	85272	1	SW26214A	20	SW26214A	17	0.4951	0.05U	0.50	99		75	125
Iron	85272	1	SW26214A	20	SW26214A	17	5.2301	0.4376	5.00	96		75	125
Magnesium	85272	1	SW26214A	20	SW26214A	17	83.2333	35.2263	50.0	96		75	125
Manganese	85272	1	SW26214A	20	SW26214A	17	2.5316	2.0300	0.50	100		75	125
Mercury	85272	1	H26214S	17	H26214S	14	9.0300	0.50U	10	90		75	125
Nickel	85272	1	SW26214A	20	SW26214A	17	0.4822	0.05U	0.50	96		75	125
Potassium	85272	1	SW26214B	20	SW26214B	17	60.7893	9.3755	50	103		75	125
Silver	85272	1	SW26214A	20	SW26214A	17	0.1089	0.02U	0.10	109		75	125
Sodium	85272	1	SW26214B	20	SW26214B	17	116.4340	66.4272	50	100		75	125
Vanadium	85272	1	SW26214A	20	SW26214A	17	0.4841	0.05U	0.50	97		75	125
Zinc	85272	1	SW26214A	20	SW26214A	17	0.4875	0.05U	0.50	97		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85272

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: AQUEOUS SampleID: LCSW 85272

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	85272	1	A091420A	19	245.5980	250	98		80	120
Arsenic	85272	1	A091420A	19	236.9380	250	95		80	120
Beryllium	85272	1	A091420A	19	229.9250	250	92		80	120
Cadmium	85272	1	A091420A	19	227.5890	250	91		80	120
Cobalt	85272	1	A091420A	19	253.4740	250	101		80	120
Lead	85272	1	A091420A	19	236.4770	250	95		80	120
Selenium	85272	1	A091420A	19	229.8020	250	92		80	120
Silver	85272	1	A091420A	19	43.0230	50	86		80	120
Thallium	85272	1	A091420A	19	217.1640	250	87		80	120

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 85272

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	85272	1	A091420A	20	241.1820	250	96		80	120
Arsenic	85272	1	A091420A	20	239.6060	250	96		80	120
Beryllium	85272	1	A091420A	20	232.0740	250	93		80	120
Cadmium	85272	1	A091420A	20	223.5900	250	89		80	120
Cobalt	85272	1	A091420A	20	254.5650	250	102		80	120
Lead	85272	1	A091420A	20	238.8170	250	96		80	120
Selenium	85272	1	A091420A	20	230.1880	250	92		80	120
Silver	85272	1	A091420A	20	42.7230	50	85		80	120
Thallium	85272	1	A091420A	20	220.6770	250	88		80	120

TxtQcType: MS Matrix: AQUEOUS SampleID: AD19206-004

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	85272	1	A091420A	24	A091420A	21	248.4340	1.5U	250	99		75	125
Arsenic	85272	1	A091420A	24	A091420A	21	236.2870	1.4690	250	94		75	125
Beryllium	85272	1	A091420A	24	A091420A	21	209.0650	0.5U	250	84		75	125
Cadmium	85272	1	A091420A	24	A091420A	21	226.6970	1U	250	91		75	125
Cobalt	85272	1	A091420A	24	A091420A	21	243.2680	1.3980	250	97		75	125
Lead	85272	1	A091420A	24	A091420A	21	231.0310	5.2860	250	90		75	125
Selenium	85272	1	A091420A	24	A091420A	21	224.3170	5U	250	90		75	125
Silver	85272	1	A091420A	24	A091420A	21	42.4870	0.5U	50	85		75	125
Thallium	85272	1	A091420A	24	A091420A	21	208.1030	1U	250	83		75	125

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD19206-004

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	85272	1	A091420A	25	A091420A	21	242.3250	1.5U	250	97		75	125
Arsenic	85272	1	A091420A	25	A091420A	21	233.3510	1.4690	250	93		75	125
Beryllium	85272	1	A091420A	25	A091420A	21	203.9220	0.5U	250	82		75	125
Cadmium	85272	1	A091420A	25	A091420A	21	220.3460	1U	250	88		75	125
Cobalt	85272	1	A091420A	25	A091420A	21	242.9910	1.3980	250	97		75	125
Lead	85272	1	A091420A	25	A091420A	21	225.1540	5.2860	250	88		75	125
Selenium	85272	1	A091420A	25	A091420A	21	220.8520	5U	250	88		75	125
Silver	85272	1	A091420A	25	A091420A	21	41.4970	0.5U	50	83		75	125
Thallium	85272	1	A091420A	25	A091420A	21	204.4690	1U	250	82		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85272

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS | Matrix: AQUEOUS | SampleID: AD19206-004

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	SW26214A	21	SW26214A	17	4.8440	0.2U	5	97		75	125
Barium	1	SW26214A	21	SW26214A	17	0.5920	0.1130	.5	96		75	125
Calcium	1	SW26214A	21	SW26214A	17	213.3830	171.7830	50	83		75	125
Chromium	1	SW26214A	21	SW26214A	17	0.4818	0.05U	.5	96		75	125
Copper	1	SW26214A	21	SW26214A	17	0.4967	0.05U	.5	99		75	125
Iron	1	SW26214A	21	SW26214A	17	5.1710	0.4376	5	95		75	125
Magnesium	1	SW26214A	21	SW26214A	17	79.3626	35.2263	50	88		75	125
Manganese	1	SW26214A	21	SW26214A	17	2.4791	2.0300	.5	90		75	125
Nickel	1	SW26214A	21	SW26214A	17	0.4880	0.05U	.5	98		75	125
Potassium	1	SW26214B	21	SW26214B	17	57.4149	9.3755	50	96		75	125
Silver	1	SW26214A	21	SW26214A	17	0.0666	0.02U	0.1	67	a	75	125
Sodium	1	SW26214B	21	SW26214B	17	111.8580	66.4272	50	91		75	125
Vanadium	1	SW26214A	21	SW26214A	17	0.4835	0.05U	.5	97		75	125
Zinc	1	SW26214A	21	SW26214A	17	0.4870	0.05U	.5	97		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85272

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: AQUEOUS SampleID: AD19206-004

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	A091420A	26	A091420A	21	52.3140	1.5U	50	105		75	125
Arsenic	1	A091420A	26	A091420A	21	53.6140	1.4690	50	104		75	125
Beryllium	1	A091420A	26	A091420A	21	45.6610	0.5U	50	91		75	125
Cadmium	1	A091420A	26	A091420A	21	50.7920	1U	50	102		75	125
Cobalt	1	A091420A	26	A091420A	21	53.6490	1.3980	50	105		75	125
Lead	1	A091420A	26	A091420A	21	57.0360	5.2860	50	104		75	125
Selenium	1	A091420A	26	A091420A	21	245.8640	5U	250	98		75	125
Silver	1	A091420A	26	A091420A	21	38.8300	0.5U	50	78		75	125
Thallium	1	A091420A	26	A091420A	21	47.9840	1U	50	96		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85270

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR | Matrix: SOIL | SampleID: LCS MR 85270

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Arsenic	85270	S091120A	20	S091120A	19	41.1700	42.0340	2.1		20
Beryllium	85270	S091120A	20	S091120A	19	147.3900	151.0130	2.4		20
Selenium	85270	S091120A	20	S091120A	19	300.0830	304.5110	1.5		20
Silver	85270	S091120A	20	S091120A	19	82.9270	83.1280	.24		20

TxtQcType: MR | Matrix: SOIL | SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Arsenic	85270	S091120A	22	S091120A	21	45.3310	40.5900	11		20
Beryllium	85270	S091120A	22	S091120A	21	1.6950	1.4870	13		20
Selenium	85270	S091120A	22	S091120A	21	10U	10U	---		20
Silver	85270	S091120A	22	S091120A	21	10.5390	9.2420	13		20

TxtQcType: MSD | Matrix: SOIL | SampleID: AD19159-006

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Arsenic	85270	S091120A	25	S091120A	24	249.8150	250.5490	.29		20
Beryllium	85270	S091120A	25	S091120A	24	196.1200	188.3710	4		20
Selenium	85270	S091120A	25	S091120A	24	205.5270	204.6510	.43		20
Silver	85270	S091120A	25	S091120A	24	47.7160	46.1160	3.4		20

TxtQcType: SD | Matrix: SOIL | SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85270	S091120A	23	S091120A	21	5	8.2590	40.5900	1.7		20
Beryllium	85270	S091120A	23	S091120A	21	5	0.3370	1.4870	13		20
Selenium	85270	S091120A	23	S091120A	21	5	0.5970	5.1080	42	c	20
Silver	85270	S091120A	23	S091120A	21	5	1.9280	9.2420	4.3		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85269

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR | Matrix: SOIL | SampleID: LCS MR 85269

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85269	S26211A3	16	S26211A3	15	7.3004	7.2814	.26		20
Chromium	85269	S26211A3	16	S26211A3	15	1.9160	1.9287	.66		20
Copper	85269	S26211A3	16	S26211A3	15	1.8090	1.8105	.081		20
Lead	85269	S26211A3	16	S26211A3	15	1.3742	1.3562	1.3		20
Manganese	85269	S26211A3	16	S26211A3	15	5.1743	5.0323	2.8		20
Mercury	85269	H26211S	15	H26211S	14	6.0430	6.2230	2.9		20
Nickel	85269	S26211A3	16	S26211A3	15	0.4827	0.4808	.38		20
Zinc	85269	S26211A3	16	S26211A3	15	5.9111	5.9825	1.2		20

TxtQcType: MR | Matrix: SOIL | SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85269	S26211A3	18	S26211A3	17	6.2188	2.7883	76	a	20
Chromium	85269	S26211A3	18	S26211A3	17	0.5940	0.5254	12		20
Copper	85269	S26211A3	18	S26211A3	17	0.6411	0.7403	14		20
Lead	85269	S26211A3	18	S26211A3	17	2.3311	3.3560	36	a	20
Manganese	85269	S26211A3	18	S26211A3	17	2.6522	2.9865	12		20
Mercury	85269	H26211S	17	H26211S	16	0.8260	0.7820	5.5		20
Nickel	85269	S26211A3	18	S26211A3	17	0.2482	0.3054	21	b	20
Zinc	85269	S26211A3	18	S26211A3	17	4.5735	3.5562	25	a	20

TxtQcType: MSD | Matrix: SOIL | SampleID: AD19159-006

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Barium	85269	S26211A3	20	S26211A3	19	4.6864	5.4637	15	20
Chromium	85269	S26211A3	20	S26211A3	19	0.8849	0.9442	6.5	20
Copper	85269	S26211A3	20	S26211A3	19	1.2183	1.2461	2.3	20
Lead	85269	S26211A3	20	S26211A3	19	3.0829	3.0330	1.6	20
Manganese	85269	S26211A3	20	S26211A3	19	3.5537	3.4821	2	20
Mercury	85269	H26211S	19	H26211S	18	10.7300	11.1900	4.2	20
Nickel	85269	S26211A3	20	S26211A3	19	0.7393	0.7984	7.7	20
Zinc	85269	S26211A3	20	S26211A3	19	4.4203	4.0159	9.6	20

TxtQcType: SD | Matrix: SOIL | SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Barium	85269	S26211A3	22	S26211A3	17	5	0.5708	2.7883	2.3	10
Chromium	85269	S26211A3	22	S26211A3	17	5	0.1142	0.5254	8.7	10
Copper	85269	S26211A3	22	S26211A3	17	5	0.1491	0.7403	0.68	10
Lead	85269	S26211A3	22	S26211A3	17	5	0.7284	3.3560	8.5	10
Manganese	85269	S26211A3	22	S26211A3	17	5	0.6181	2.9865	3.5	10
Nickel	85269	S26211A3	22	S26211A3	17	5	0.0655	0.3054	7.2	10
Zinc	85269	S26211A3	22	S26211A3	17	5	0.7448	3.5562	4.7	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85272

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCS MR 85272

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	85272	SW26214A	16	SW26214A	15	4.9213	4.9901	1.4	20
Barium	85272	SW26214A	16	SW26214A	15	0.4961	0.5027	1.3	20
Calcium	85272	SW26214A	16	SW26214A	15	48.9440	48.8579	.18	20
Chromium	85272	SW26214A	16	SW26214A	15	0.4791	0.4851	1.2	20
Copper	85272	SW26214A	16	SW26214A	15	0.4838	0.4888	1	20
Iron	85272	SW26214A	16	SW26214A	15	4.8555	4.9475	1.9	20
Magnesium	85272	SW26214A	16	SW26214A	15	48.9194	48.8974	.045	20
Manganese	85272	SW26214A	16	SW26214A	15	0.4821	0.4838	.35	20
Mercury	85272	H26214S	13	H26214S	12	10.5100	10.5500	.38	20
Nickel	85272	SW26214A	16	SW26214A	15	0.4825	0.4909	1.7	20
Potassium	85272	SW26214B	16	SW26214B	15	48.3422	47.6977	1.3	20
Silver	85272	SW26214A	16	SW26214A	15	0.1065	0.1082	1.6	20
Sodium	85272	SW26214B	16	SW26214B	15	48.5187	47.9991	1.1	20
Vanadium	85272	SW26214A	16	SW26214A	15	0.4834	0.4897	1.3	20
Zinc	85272	SW26214A	16	SW26214A	15	0.4805	0.4880	1.5	20

TxtQcType: MR Matrix: AQUEOUS SampleID: AD19206-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	85272	SW26214A	18	SW26214A	17	0.2U	0.2U	---	20
Barium	85272	SW26214A	18	SW26214A	17	0.1106	0.1130	2.1	20
Calcium	85272	SW26214A	18	SW26214A	17	166.5330	171.7830	3.1	20
Chromium	85272	SW26214A	18	SW26214A	17	0.05U	0.05U	---	20
Copper	85272	SW26214A	18	SW26214A	17	0.05U	0.05U	---	20
Iron	85272	SW26214A	18	SW26214A	17	0.3967	0.4376	9.8	20
Magnesium	85272	SW26214A	18	SW26214A	17	34.5188	35.2263	2	20
Manganese	85272	SW26214A	18	SW26214A	17	1.9886	2.0300	2.1	20
Mercury	85272	H26214S	15	H26214S	14	0.50U	0.50U	---	20
Nickel	85272	SW26214A	18	SW26214A	17	0.05U	0.05U	---	20
Potassium	85272	SW26214B	18	SW26214B	17	9.3114	9.3755	0.69	20
Silver	85272	SW26214A	18	SW26214A	17	0.02U	0.02U	---	20
Sodium	85272	SW26214B	18	SW26214B	17	65.4646	66.4272	1.5	20
Vanadium	85272	SW26214A	18	SW26214A	17	0.05U	0.05U	---	20
Zinc	85272	SW26214A	18	SW26214A	17	0.05U	0.05U	---	20

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD19206-004

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	85272	SW26214A	20	SW26214A	19	4.8853	4.9453	1.2	20
Barium	85272	SW26214A	20	SW26214A	19	0.6081	0.6180	1.6	20
Calcium	85272	SW26214A	20	SW26214A	19	220.6640	225.5840	2.2	20
Chromium	85272	SW26214A	20	SW26214A	19	0.4780	0.4842	1.3	20
Copper	85272	SW26214A	20	SW26214A	19	0.4951	0.5015	1.3	20
Iron	85272	SW26214A	20	SW26214A	19	5.2301	5.5066	5.1	20
Magnesium	85272	SW26214A	20	SW26214A	19	83.2333	85.3208	2.5	20
Manganese	85272	SW26214A	20	SW26214A	19	2.5316	2.6046	2.8	20
Mercury	85272	H26214S	17	H26214S	16	9.0300	8.9630	.74	20
Nickel	85272	SW26214A	20	SW26214A	19	0.4822	0.4871	1	20
Potassium	85272	SW26214B	20	SW26214B	19	60.7893	61.0588	.44	20
Silver	85272	SW26214A	20	SW26214A	19	0.1089	0.1100	.97	20
Sodium	85272	SW26214B	20	SW26214B	19	116.4340	117.2570	.7	20
Vanadium	85272	SW26214A	20	SW26214A	19	0.4841	0.4908	1.4	20
Zinc	85272	SW26214A	20	SW26214A	19	0.4875	0.4953	1.6	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85272

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: SD Matrix: AQUEOUS SampleID: AD19206-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	85272	SW26214A	22	SW26214A	17	5	0.0113	0.0297	---		10
Barium	85272	SW26214A	22	SW26214A	17	5	0.0241	0.1130	6.6		10
Calcium	85272	SW26214A	22	SW26214A	17	5	35.1523	171.7830	2.3		10
Chromium	85272	SW26214A	22	SW26214A	17	5	0.0041	0.0041	400	c	10
Copper	85272	SW26214A	22	SW26214A	17	5	0.0043	0.0087	150	c	10
Iron	85272	SW26214A	22	SW26214A	17	5	0.1038	0.4376	19	c	10
Magnesium	85272	SW26214A	22	SW26214A	17	5	7.1766	35.2263	1.9		10
Manganese	85272	SW26214A	22	SW26214A	17	5	0.4112	2.0300	1.3		10
Nickel	85272	SW26214A	22	SW26214A	17	5	0.0007	0.0096	---		10
Potassium	85272	SW26214B	22	SW26214B	17	5	2.7912	9.3755	49	a	10
Silver	85272	SW26214A	22	SW26214A	17	5	-0.0007	0.0003	---		10
Sodium	85272	SW26214B	22	SW26214B	17	5	13.6268	66.4272	2.6		10
Vanadium	85272	SW26214A	22	SW26214A	17	5	0.0023	0.0005	---		10
Zinc	85272	SW26214A	22	SW26214A	17	5	0.0058	0.0143	---		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85272

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 85272

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	85272	A091420A	20	A091420A	19	241.1820	245.5980	1.8	20
Arsenic	85272	A091420A	20	A091420A	19	239.6060	236.9380	1.1	20
Beryllium	85272	A091420A	20	A091420A	19	232.0740	229.9250	.93	20
Cadmium	85272	A091420A	20	A091420A	19	223.5900	227.5890	1.8	20
Cobalt	85272	A091420A	20	A091420A	19	254.5650	253.4740	.43	20
Lead	85272	A091420A	20	A091420A	19	238.8170	236.4770	.98	20
Selenium	85272	A091420A	20	A091420A	19	230.1880	229.8020	.17	20
Silver	85272	A091420A	20	A091420A	19	42.7230	43.0230	.7	20
Thallium	85272	A091420A	20	A091420A	19	220.6770	217.1640	1.6	20

TxtQcType: MR Matrix: AQUEOUS SampleID: AD19206-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	85272	A091420A	22	A091420A	21	1.5U	1.5U	---	20
Arsenic	85272	A091420A	22	A091420A	21	1.5370	1.4690	4.5	20
Beryllium	85272	A091420A	22	A091420A	21	0.5U	0.5U	---	20
Cadmium	85272	A091420A	22	A091420A	21	1U	1U	---	20
Cobalt	85272	A091420A	22	A091420A	21	1.3880	1.3980	0.72	20
Lead	85272	A091420A	22	A091420A	21	5.4520	5.2860	3.1	20
Selenium	85272	A091420A	22	A091420A	21	5U	5U	---	20
Silver	85272	A091420A	22	A091420A	21	0.5U	0.5U	---	20
Thallium	85272	A091420A	22	A091420A	21	1U	1U	---	20

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD19206-004

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	85272	A091420A	25	A091420A	24	242.3250	248.4340	2.5	20
Arsenic	85272	A091420A	25	A091420A	24	233.3510	236.2870	1.3	20
Beryllium	85272	A091420A	25	A091420A	24	203.9220	209.0650	2.5	20
Cadmium	85272	A091420A	25	A091420A	24	220.3460	226.6970	2.8	20
Cobalt	85272	A091420A	25	A091420A	24	242.9910	243.2680	.11	20
Lead	85272	A091420A	25	A091420A	24	225.1540	231.0310	2.6	20
Selenium	85272	A091420A	25	A091420A	24	220.8520	224.3170	1.6	20
Silver	85272	A091420A	25	A091420A	24	41.4970	42.4870	2.4	20
Thallium	85272	A091420A	25	A091420A	24	204.4690	208.1030	1.8	20

TxtQcType: SD Matrix: AQUEOUS SampleID: AD19206-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Antimony	85272	A091420A	23	A091420A	21	5	0.0350	0.2410	27	c	20
Arsenic	85272	A091420A	23	A091420A	21	5	0.2660	1.4690	9.5		20
Beryllium	85272	A091420A	23	A091420A	21	5	0.0530	0.1210	119	c	20
Cadmium	85272	A091420A	23	A091420A	21	5	0.0120	0.0540	---		20
Cobalt	85272	A091420A	23	A091420A	21	5	0.2570	1.3980	8.1		20
Lead	85272	A091420A	23	A091420A	21	5	1.0900	5.2860	3.1		20
Selenium	85272	A091420A	23	A091420A	21	5	-0.0040	0.2990	---		20
Silver	85272	A091420A	23	A091420A	21	5	-0.0220	0.0680	---		20
Thallium	85272	A091420A	23	A091420A	21	5	0.0500	0.5290	53	c	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Metal Data
Verification of Instrument Parameters

INTERELEMENT CORRECTION SUMMARY PEICP3ax

Interfered Elements	Interfering Elements: Al	Ca	Fe	Mg	B	Ba	Cu	Mn	Mo
Al	N/A	0	0	0	0	0	0	0	23.5
Sb	0	0	0	0	0	0	0	0	-12.9
As	0	0	-0.116	0	0	0	0	0	5.29
Ba	0	0	0	0	0	N/A	0	0	0
Be	0	0	0	0	0	0	0	0	0
B	0	0	4.15	0	N/A	0	0	0	-2.34
Cd	0	0	0	0	0	0	0	0	0
Ca	0	N/A	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	N/A	0	0
Fe	0	0	N/A	0	0	0	0	0	0
Pb	-0.0911	0	0	0	0	0	0	0	0
Mg	0	0	0	N/A	0	0	0	0	0
Mn	0	0	0	0	0	0	0	N/A	0
Mo	0	0	0	0	0	0	0	0	N/A
Ni	0	0	0	0	0	0	0	0	0
K	0	0	4207.75	0	0	0	0	0	0
Se	0	0.0541	-0.495	0	0	0	0	0	0
Si	-0.0936	-0.0964	-0.285	-0.0459	-10.34	-5.45	-5.89	-4.28	11.1
Ag	0	0	0	0	0	0	0	0	0
Na	0	0	0	0	0	0	0	0	0
Tl	0	0	0	0	0	0	0	2.59	0.00
Sn	0	0	0	0	0	0	0	0	0
Ti	0	0	0	0	0	0	0	0	0
V	0	0	0.0684	0	0	0	0	0	-13.1
Zn	0	0	0	0	0	0	0	0	0

IECs run 07/15/2019. As, B Mod 12302019

INTERELEMENT CORRECTION SUMMARY PEICP3ax

Interfered Elements	Interfering Elements							
	Na	Ni	Se	Si	Sn	Ti	V	Zn
Al	0	0	0	0	0	0	0	0
Sb	0	0	0	0	0	0	0	0
As	0	0	0	0	0	0	0	0
Ba	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0.00	0	0
B	0	0	0	0	0	0	0	0
Cd	0	0	0	0	0	0	0	0
Ca	0	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	0	0
Fe	0	0	0	0	0	0	0	0
Pb	0	0	0	0	0	0	0	0
Mg	0	0	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0
Mo	0	0	0	0	0	0	0	0
Ni	0	N/A	0	0	0	0	0	0
K	0	0	0	0	0	0	0	0
Se	0	0	N/A	0	0.000	0	0	0
Si	0.0185	-5.1	0	N/A	-5.27	-2.58	-5.57	-4.92
Ag	0	0	0	0	0	0	0	0
Na	N/A	0	0	0	0	0.0	0	0
Tl	0	0	0	0	0	-11.1	-13.5	0
Sn	0	0	0	0	N/A	5.67	0	0
Ti	0	0	0	0	0	N/A	0	0
V	0	0	0	0	0	0	N/A	0
Zn	0	0	0	0	0	0	0	N/A

IECs run 07/15/2019. As, B Mod 12302019

INTERELEMENT CORRECTION SUMMARY PEICP2ax

Interfering Elements

Interfered Elements	Al	Ca	Fe	Mg	B	Ba	Cu	Ce	Mn	Mo
Al	N/A	0	0	0	0	0	0	11.6024	0	25.2267
Sb	0	0	0.021378	0	0	0	0	-2.02932	0	0
As	0	0	-0.034985	0.016708	0	0	0	0	0	0
Ba	0	0	0	0	0	N/A	0	0	0	0
Be	0	0	0	0	0	0	0	0.48863	0	0
B	-0.0293092	-0.0294948	4.82	0.0029074	N/A	0	0	0	0	0
Cd	0	0	0	0	0	0	0	0	0	0
Ca	0	N/A	0	0	0	0	0	0	0	0
Ce	0	0	0	0	0	0	0	N/A	0	0
Cr	0	0	0	0.0186224	0	0	0	0	0	0
Co	0.0113292	0	0	0	0	0.518	0	0	0	0
Cu	0	-0.041549	-0.111729	0	0	0	N/A	0	0	0
Fe	0	0	N/A	0	0	0	0	0	0	0
Pb	-0.037724	-0.03691	0.092674	-0.0135603	0	0	0	0.664167	0	0
Mg	0	0	0	N/A	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0	N/A	0
Mo	0	0.027752	-0.052994	0	0	0	0	0	0	N/A
Ni	0	0	0	-0.0417172	0	0	0	0	0	0
Se	0	0	-0.481859	-0.065578	0	0	0	-1.00901	0	-15.8475
Si	0	0	0	0	0	0	0	0	0	0
Ag	0	0	-0.094059	0	0	0	0	-1.01206	0	0
Na	0	0	0	0	0	0	0	-274.013	0	0
Tl	-0.0710404	-0.0118938	-0.057961	0.0434108	0	0	0	-5.06044	0	0
Sn	-0.0122194	-0.0270441	0	0	0	0	0	0	0	0
Ti	0	0	0	0	0	0	0	-0.45673	0	0.637128
V	0	0	0.0715602	0	0	0	0	0	0	0
Zn	0.0235747	0	0	0	0	0	0	0	0	0

IECs run 05/04/2020
Pb,Sb,Se 08/21/20 Ni 08/26/20 Pb,Sb,Tl,B 09/04/20 B,Sb,Pb 09/14/2020

INTERELEMENT CORRECTION SUMMARY PEICP2ax

Interfered Elements	Interfering Elements							
	Na	Ni	Se	Si	Sn	Ti	V	Zn
Al	0	0	0	0	0	0	-100.144	0
Sb	0	0	0	0	-6.63	0	-1.08969	0
As	0	0	0	0	0	0	0	0
Ba	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0
Cd	0	0	0	0	0	0	0	0
Ca	0	0	0	0	0	0	0	0
Ce	0	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	2.28636	0	0
Cu	0	0	0	0	0	-4.0928	0	0
Fe	0	0	0	0	0	0	0	0
Pb	0	1.018	0	0	0	0	0	0
Mg	0	0	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0
Mo	0	0	0	0	0	1.27944	0	0
Ni	0	N/A	0	0	0	0	0	0
Se	0	0	N/A	0	0	0	0	0
Si	0	0	0	N/A	0	0	0	0
Ag	0	0	0	0	0	0	0	0
Na	N/A	0	0	0	0	0	0	256.984
Tl	0	0	0	0	0	-4.47389	0	0
Sn	0	0	0	0	N/A	-1.2607	0	0
Ti	0	0	0	0	0	N/A	0	0
V	0	0	0	0	0	0	N/A	0
Zn	0	0	0	0	1.294	0	0	N/A

IECs run 05/04/2020

INTERELEMENT CORRECTION SUMMARY PEICP2rad

Interfered Elements	Interfering Elements								
	Al	Ca	Fe	Mg	B	Ba	Cu	Mn	Mo
Al	N/A	0	0	0	0	0	0	0	0
As	0	0	0	0	0	0	0	0	0
Ba	0	0	0	0	0	N/A	0	0	0
B	0	0	3.48	0	N/A	0	0	0	0
Ca	0	N/A	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	N/A	0	0
Fe	0	0	N/A	0	0	0	0	0	0
Mg	0	0	0	N/A	0	0	0	0	0
Mn	0	0	0	0	0	0	0	N/A	0
Mo	0	0	0	0	0	0	0	0	N/A
K	0	0	0	0	0	0	0	0	0
Ni	0	0	0	0	0	0	0	0	0
Se	0	0	-0.33	0	0	0	0	0	0
Si	0	0	-0.256	0	0	0	0.00	0.00	7.85
Na	0	0	0	0	0	0	0	0	0
Sn	0	-0.107	0	0	0	0	0	0	0
Ti	0	0	0	0	0	0	0	0	0
V	0	0	0	0	0	0	0	0	0
Zn	0	0	0	0	0	0	0	0	0

IECs run 08/05/2019.

INTERELEMENT CORRECTION SUMMARY PEICP2rad

	Interfering Elements							
Interfered Elements	Na	Ni	Se	Si	Sn	Ti	V	Zn
Al	0	0	0	0	0	0	-122.9	0
As	0	0	0	0	0	0	0	0
Ba	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0
Ca	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	0.00	0
Fe	0	0	0	0	0	0	0	0
Mg	0	0	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0
Mo	0	0	0	0	0	0	0	0
K	0	0	0	0	0	0	0	0
Ni	0	N/A	0	0	0	0	0	0
Se	0	0	N/A	0	0	0	0	0
Si	0	0	0	N/A	0	0	0	0
Na	N/A	0	0	0	0	0	0	0
Sn	0	0	0	0	N/A	0	0	0
Ti	0	0	0	0	0	N/A	0	0
V	0	0	0	0	0	0	N/A	0
Zn	0	0	0	0	0	0	0	N/A

ECs run 08/05/2019.

MDL / RL SUMMARY
SOIL
PE ICP 3 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/Kg)
Ag	0.24396749	1.5
Al	16.7078017	200
As	1.37117317	4
Ba	0.67596126	10
Be	0.71383086	1.2
Ca	100.98567	1000
Cd	0.52283194	1.2
Co	0.71289903	2.5
Cr	0.67036785	5
Cu	0.61619583	5
Fe	13.1992644	200
Mg	19.5137102	500
Mn	0.64172541	10
Mo	0.27417636	2.5
Na	111.789255	250
Ni	1.10372174	5
Pb	0.61639339	5
Sb	1.03795619	4
Se	1.72784998	5
Sn	1.86972983	20
Ti	0.63640908	10
Tl	16.577423	5
V	0.95770226	10
Zn	1.50868728	10
B	5.92873987	20

COMPLETED: 12/31/2019

MDL/RL
Method 6020/6020A
MS3_7700
SOIL

ELEMENT	MDL (MG/KG)	Reporting Limits (MG/KG)
Al	1.5871	100
Sb	0.0225	0.8
AS	0.0175	0.2
BA	0.0568	1
BE	0.0157	0.2
CA	19.0038	100
CD	0.0141	0.4
CR	0.0859	0.4
CO	0.0109	0.4
CU	0.1937	2
FE	4.2445	100
PB	0.0374	0.4
MG	2.3285	100
MN	0.2413	1.2
MO	0.0534	0.2
NA	17.8116	100
Ni	0.0522	0.6
K	5.8233	100
Se	0.0635	2
Ag	0.0261	0.2
TL	0.0176	0.4
V	0.0108	0.2
Zn	1.4649	4

MDL analyzed 5/21/2019, 7/12/2019, 9/5/2019, 10/29/2019.
Blanks 1/24/2019-1/24/2020

MDL/RL
Method 6020/6020A
MS3_7700
Aqueous

ELEMENT	MDL (ug/L)	Reporting Limits (ug/L)
Al	29.0660	200
Sb	0.3002	3
As	0.1752	2
Ba	0.5171	5
Be	0.0715	1
Cd	0.0648	2
Ca	92.8156	500
Cr	0.7300	2
Co	0.0566	2
Cu	2.4965	10
Fe	49.4310	300
Pb	0.5029	3
Mg	26.1393	500
Mn	1.6649	6
Mo	0.2909	2
Ni	0.5894	3
K	48.0303	500
Se	0.4989	10
Ag	0.3106	1
Na	109.9227	500
Tl	0.2023	2
V	0.6477	2
Zn	7.9830	20

All elements analyzed 5/8/2019, 7/18/2019, 9/5/2019, 10/29/2019.
Blanks 9/9/2018 - 9/9/2019

MDL / RL SUMMARY
SW846
PE ICP 2 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/L)
Ag	0.00166	0.02
Al	0.10472	0.2
As	0.00923	0.04
Ba	0.00477	0.05
Be	0.00484	0.012
Ca	0.33432	5
Cd	0.00312	0.012
Co	0.00304	0.02
Cr	0.01169	0.05
Cu	0.01043	0.05
Fe	0.20532	0.3
Mg	0.63182	5
Mn	0.01074	0.04
Mo	0.00697	0.02
Na	3.48291	5
Ni	0.01086	0.05
Pb	0.01069	0.05
Sb	0.01126	0.05
Se	0.01823	0.05
Sn	0.02613	0.05
Ti	0.00507	0.05
Tl	0.01693	0.05
V	0.00406	0.05
Zn	0.01975	0.05
B	0.04774	0.2
Si	0.01454	0.1

COMPLETED: 12/2019

MDL / RL SUMMARY
6010 WATER
PE ICP 2 RADIAL

ELEMENT	MDL	Reporting Limits (Mg/L)
Al	0.12019	0.2
Ca	0.57129	5
Fe	0.08194	0.3
K	1.6556	5
Mg	0.47925	5
Mn	0.00339	0.04
Na	1.00067	5
Ti	0.00459	0.05

COMPLETED 12/2019

HGCV3 MDL/RL SUMMARY

Element: *Mercury*
Instrument: *PE FIMS 100*
Technique: *CV*

Instrument ID: *HgCV3*
Analyst *Carmela Aliano*

200 Series	METHOD	MDL (ppb)	Completed	RL (ppb)
H_2O	245.1	0.0794	12/31/2019	0.20
SW846				
H_2O	7470A	0.1740	12/31/2019	0.50
SOIL	7471 B	0.0757 (0.0126 mg/kg)	12/31/2019	0.50 (0.0833 mg/kg)

Metal Data
Raw Data

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85270 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85270 Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-36-0	Antimony	0.40	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-38-2	Arsenic	0.10	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-39-3	Barium	0.50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-41-7	Beryllium	0.10	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-43-9	Cadmium	0.20	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-70-2	Calcium	50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-47-3	Chromium	0.20	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-48-4	Cobalt	0.20	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-50-8	Copper	1.0	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7439-89-6	Iron	50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7439-92-1	Lead	0.20	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7439-95-4	Magnesium	50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7439-96-5	Manganese	0.60	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7439-98-7	Molybdenum	0.20	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-02-0	Nickel	0.30	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-09-7	Potassium	50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7782-49-2	Selenium	1.0	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-22-4	Silver	0.10	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-23-5	Sodium	50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-28-0	Thallium	0.20	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-62-2	Vanadium	0.10	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-66-6	Zinc	2.0	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85269 (100) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85269 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-39-3	Barium	5.0	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-70-2	Calcium	500	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-47-3	Chromium	2.5	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-48-4	Cobalt	1.2	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-50-8	Copper	2.5	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7439-89-6	Iron	100	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7439-92-1	Lead	2.5	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7439-95-4	Magnesium	250	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7439-96-5	Manganese	5.0	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-02-0	Nickel	2.5	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-09-7	Potassium	250	ND	1	0.5	50	09/11/20	85269	S26206A4	32	P	PEICPRAD4A
7440-23-5	Sodium	120	ND	1	0.5	50	09/11/20	85269	S26206A4	32	P	PEICPRAD4A
7440-31-5	Tin	10	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-62-2	Vanadium	5.0	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-66-6	Zinc	5.0	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85272 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85272 Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-36-0	Antimony	1.5	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-38-2	Arsenic	1.0	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-39-3	Barium	2.5	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-41-7	Beryllium	0.50	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-43-9	Cadmium	1.0	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-70-2	Calcium	250	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-47-3	Chromium	1.0	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-48-4	Cobalt	1.0	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-50-8	Copper	5.0	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7439-89-6	Iron	150	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7439-92-1	Lead	1.5	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7439-95-4	Magnesium	250	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7439-96-5	Manganese	3.0	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7439-98-7	Molybdenum	1.0	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-02-0	Nickel	1.5	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-09-7	Potassium	250	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7782-49-2	Selenium	5.0	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-22-4	Silver	0.50	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-23-5	Sodium	250	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-28-0	Thallium	1.0	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-62-2	Vanadium	1.0	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA
7440-66-6	Zinc	10	ND	1	50	100	09/14/20	85272	1420ANEW	18	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85272 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85272 (1) Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	50	50	09/14/20	85272	SW26214A2	14	P	PEICP2A
7440-39-3	Barium	25	ND	1	50	50	09/14/20	85272	SW26214A2	14	P	PEICP2A
7440-70-2	Calcium	2500	ND	1	50	50	09/14/20	85272	SW26214A2	14	P	PEICP2A
7440-47-3	Chromium	25	ND	1	50	50	09/14/20	85272	SW26214A2	14	P	PEICP2A
7440-50-8	Copper	25	ND	1	50	50	09/14/20	85272	SW26214A2	14	P	PEICP2A
7439-89-6	Iron	150	ND	1	50	50	09/14/20	85272	SW26214A2	14	P	PEICP2A
7439-95-4	Magnesium	2500	ND	1	50	50	09/14/20	85272	SW26214A2	14	P	PEICP2A
7439-96-5	Manganese	20	ND	1	50	50	09/14/20	85272	SW26214A2	14	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/20	85272	H26214SW	11	CV	HGCV3A
7440-02-0	Nickel	25	ND	1	50	50	09/14/20	85272	SW26214A2	14	P	PEICP2A
7440-09-7	Potassium	2500	ND	1	50	50	09/14/20	85272	SW26214B2	14	P	PEICPRAD2A
7440-23-5	Sodium	2500	ND	1	50	50	09/14/20	85272	SW26214B2	14	P	PEICPRAD2A
7440-62-2	Vanadium	25	ND	1	50	50	09/14/20	85272	SW26214A2	14	P	PEICP2A
7440-66-6	Zinc	25	ND	1	50	50	09/14/20	85272	SW26214A2	14	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85269 (167) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85269 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	09/11/20	85269	H26211S	11	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-329062

Prepared By: Cousineau, Paul
Description: Antimony Intermediate 1PPM
Prep Date: 6/5/2020
Expiration Date: 2/25/2021
Department: Metals
BatchNumber:
Concentration: 1000 ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13251	nitric acid	2.5 ml	neat neat	
13296	ANTIMONY 1000 PPM	.1 ml	1000 ug/ml	

Veritech Lot Number: V-333325

Prepared By: Cousineau, Paul
Description: 6020 CALIBRATION STOCK
Prep Date: 8/16/2020
Expiration Date: 11/15/2020
Department: Metals
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 100 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13331	Nitric acid	2 ml	neat neat	
13304	ALUMINUM 10000 PPM	.725 ml	10000 ug/ml	72.5
13305	CALCIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13308	IRON 10000 PPM	2.5 ml	10000 ug/ml	250
13306	MAGNESIUM 10000PPM	2.5 ml	10000 ug/ml	250
13309	POTASSIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13307	SODIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13297	SELENIUM 1000 PPM	1 ml	1000 ug/ml	10
13323	CAL STD	12.5 ml	20 ug/ml	2.5

Veritech Lot Number: V-334144

Prepared By: Silva, Amanda
Description: 1:1 HNO3 WARNING
Prep Date: 9/2/2020
Expiration Date: 3/1/2021
Department: Metals
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13421	nitric acid	500 ml	neat neat	

Veritech Lot Number: V-334455

Prepared By: Cousineau, Paul
Description: Cal Blk WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: 0 ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-334456

Prepared By: Cousineau, Paul
Description: Cal Std-1 WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.02 ml	VARIOUS pp	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334457

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-2 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.2 ml	VARIOUS pp	

Veritech Lot Number: V-334458

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-3 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.4 ml	VARIOUS pp	

Veritech Lot Number: V-334459

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-4 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-334460

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-5 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	4 ml	VARIOUS pp	

Veritech Lot Number: V-334461

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: ICV WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
13315	6020 ICV	.1 ml	MULTI ug/ml	
13314	6020 ICV (Ag only)	.1 ml	10 ug/ml	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334462

Prepared By: Cousineau, Paul
Description: ICB/CCB WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: 0 ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-334463

Prepared By: Cousineau, Paul
Description: ICSA WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	
12856	Interferents A	2.5 ml	NEAT mg/l	

Veritech Lot Number: V-334464

Prepared By: Cousineau, Paul
Description: LRS WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	2.5 %
V-333325	6020 CALIBRATION STOCK	10 ml	VARIOUS pp	

Veritech Lot Number: V-334465

Prepared By: Cousineau, Paul
Description: CCV WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-334466

Prepared By: Cousineau, Paul
Description: LL-ICV/CCV SOIL WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
12979	LLICV/CCV SOIL	1 ml	NEAT neat	
V-329062	Antimony Intermediate 1PPM	.3 ml	1000 ppb	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12856

Description
Interferents A

ApprovedBy: carmela
ApproveDate: 12/09/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-A1	CL51-020CRY	10/31/19	10/30/20	Cousineau, Paul	1		NEAT	mg/l

Veritech Control/Receipt Number: 12979

Description
LLICV/CCV SOIL

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	ZHCV-13-100	53-093CR	01/06/20	12/30/20	Aliano, Carmela	1	125ml	NEAT	NEAT

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13251

Description
nitric acid

ApprovedBy: jean
ApproveDate: 05/27/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	245675	05/19/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13296

Description
ANTIMONY 1000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSB7-2Y	24-153SBY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13297

Description
SELENIUM 1000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSE2-2Y	25-14SEY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13304

Description
ALUMINUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLAL2-3X	AP18-72ALX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13305

Description
CALCIUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLCA2-3X	AZ18-49CAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13306

Description
MAGNESIUM 10000PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLMG2-3X	AP18-57MGX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13307

Description
SODIUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLNA2-3X	AT18-84NAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13308

Description
IRON 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLFE2-3X	AR18-89FEX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13309

Description
POTASSIUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLK2-3X	AX18-77KX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13314

Description
6020 ICV (Ag only)

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-113	S200519030	06/04/20	05/31/21	Cousineau, Paul	1	125 M	10	UG/ML

Veritech Control/Receipt Number: 13315

Description
6020 ICV

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-112	S200519029	06/04/20	05/31/21	Cousineau, Paul	1	125 M	MULTI	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13323

Description
CAL STD

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-CAL-1	CL51-013CRY	06/15/20	06/30/21	Cousineau, Paul	1	125M	20	UG/ML

Veritech Control/Receipt Number: 13331

Description
Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13391

Description
nitric acid

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	07/14/20	02/03/25	Lopez, Jose	4	2.5	neat	neat

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Control/Receipt Number: 13067

Description
hrydrogen peroxide`

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	H325-4	197718	02/19/20	01/31/25	Lopez, Jose	4	4L	neat	neat

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Control/Receipt Number: 13067

Description
hydrogen peroxide`

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	H325-4	197718	02/19/20	01/31/25	Lopez, Jose	4	4L	neat	neat

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333665

Prepared By: Aliano, Carmela
Description: ICS4 High std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: various mg/l
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	434.5 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	1
12977	SILICON	5 ml	CONC conc	10

Veritech Lot Number: V-333666

Prepared By: Aliano, Carmela
Description: ICS3 - Middle Std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	944.75 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	.5
12977	SILICON	5 ml	CONC conc	5
13092	CERIUM	5 ml	CONC conc	5

Veritech Lot Number: V-333667

Prepared By: Aliano, Carmela
Description: ICB/CCB
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: 0 mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	

Veritech Lot Number: V-333671

Prepared By: Aliano, Carmela
Description: LLICV/LLCCV soil
Prep Date: 8/24/2020
Expiration Date: 12/31/2020
Department: WetChem
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
12982	LL-SOIL	10 ml		
12976	BORON	.2 ml	CONC conc	
12977	SILICON	.1 ml	CONC conc	
13092	CERIUM	.1 ml	CONC conc	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333673

Prepared By: Aliano, Carmela	Department: Metals	ApprovedBy: carmela
Description: CCV	BatchNumber:	ApproveDate: 08/24/20
Prep Date: 8/24/2020	Concentration: MULTI multi	Checked: Yes
Expiration Date: 2/20/2021	Final Volume: 1000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13171	ICV 1	10 ml	NEAT neat	
13170	ICV 2	10 ml	CONC conc	
12981	BORON	.5 ml	CONC conc	
12933	silicon	5 ml	CONC conc	
13091	CERIUM	5 ml	CONC conc	

Veritech Lot Number: V-334144

Prepared By: Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description: 1:1 HNO3 WARNING	BatchNumber:	ApproveDate: 09/15/20
Prep Date: 9/2/2020	Concentration: Reagent reag	Checked: Yes
Expiration Date: 3/1/2021	Final Volume: 1000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13421	nitric acid	500 ml	neat neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12933

Description
silicon

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-145	S191206040	12/13/19	12/30/21	Aliano, Carmela	4	500m	CONC	CONC

Veritech Control/Receipt Number: 12976

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLB9-2X	24-110BX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12977

Description
SILICON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLSI9-2X	24-93SIX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12981

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-055	S190719015	01/06/20	07/30/21	Aliano, Carmela	3	500ml	CONC	CONC

Veritech Control/Receipt Number: 12982

Description
LL-SOIL

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-31-500	8/209AB	01/06/20	12/31/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 12983

Description
CALIBRATION 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	8/214AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 12984

Description
CALIBRATION 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	8/215AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13091

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-051-585	S190710006	03/04/20	07/30/21	Aliano, Carmela	2	500ml	CONC	CONC

Veritech Control/Receipt Number: 13092

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLCE2-2X	24-15CEX	03/04/20	02/28/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13168

Description
nitric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	245675	04/07/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13169

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	04/07/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13170

Description
ICV 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S200306032	04/07/20	03/31/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13171

Description
ICV 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S200306031	04/07/20	03/31/21	Aliano, Carmela	2	500ml	NEAT	NEAT

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334615

Prepared By: Ransaw, Brianna
Description: Hg Intermediate Standard -WARNING
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29664
Concentration: .25 ppm
Final Volume: 500 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13311	MERCURY 1000 PPM	.125 ml	1000 ug/ml	
13421	nitric acid	12.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334616

Prepared By: Ransaw, Brianna
Description: Hg intermediate Control -WARNING
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29664
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334661

Prepared By: Silva, Amanda
Description: Aquaregia
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29668
Concentration: 0 neat
Final Volume: 80 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13440	nitric acid	20 ml	neat neat	
13130	hydrochloric acid	60 ml	neat neat	

Veritech Lot Number: V-334662

Prepared By: Silva, Amanda
Description: Hg Soil ICV Soil
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29668
Concentration: 20 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334616	Hg intermediate Control -WARNING	.5 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334663

Prepared By: Silva, Amanda
Description: Hg soil CCV 10ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29668
Concentration: 10 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334616	Hg intermediate Control -WARNING	.25 ml	1.0 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334664

Prepared By: Silva, Amanda
Description: Hg soil standard blk
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29668
Concentration: 0 ppm
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			

Veritech Lot Number: V-334665

Prepared By: Silva, Amanda
Description: Hg soil standard .2 ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29668
Concentration: .2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.02 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334666

Prepared By: Silva, Amanda
Description: Hg soil standard .5 ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29668
Concentration: .5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.05 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334667

Prepared By: Silva, Amanda
Description: Hg soil standard 1 ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29668
Concentration: 1 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334668

Prepared By: Silva, Amanda
Description: Hg soil standard 2 ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29668
Concentration: 2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.2 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334669

Prepared By: Silva, Amanda
Description: Hg soil standard 5 ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29668
Concentration: 5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.5 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334670

Prepared By:	Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description:	Hg soil standard 10 ppb	BatchNumber: B-29668	ApproveDate: 09/15/20
Prep Date:	9/11/2020	Concentration: 10 ppb	Checked: Yes
Expiration Date:	9/11/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334671

Prepared By:	Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description:	Hg soil standard 25 ppb	BatchNumber: B-29668	ApproveDate: 09/15/20
Prep Date:	9/11/2020	Concentration: 25 ppb	Checked: Yes
Expiration Date:	9/11/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	2.5 ml	.25 ppm	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13311

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP	140-051-801	S200130001	06/04/20	12/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-317822

Prepared By: Aliano, Carmela
Description: Hydroxylamine Hydrochloride WARNIN
Prep Date: 12/13/2019
Expiration Date: 1/8/2020
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 10 l
ApprovedBy: shiamala
ApproveDate: 12/16/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12651	DI H2O			
12218	Sodium Chloride	1200 g	neat neat	
12619	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-331286

Prepared By: Lucca, Daniela
Description: 5% Potassium Permanganate WARNIN
Prep Date: 7/13/2020
Expiration Date: 2/13/2021
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12621	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-334616

Prepared By: Ransaw, Brianna
Description: Hg intermediate Control -WARNING
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29664
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334627

Prepared By: Ransaw, Brianna
Description: 3% HCL WARNING
Prep Date: 9/11/2020
Expiration Date: 9/20/2020
Department: WetChem
BatchNumber:
Concentration: 3 %
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13130	hydrochloric acid	600 ml	neat neat	3%
13084	DI H20			

Veritech Lot Number: V-334628

Prepared By: Ransaw, Brianna
Description: SnCl2 "WARNING:"
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber:
Concentration: reagent I
Final Volume: 2 l
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334627	3% HCL WARNING	2000 ml	3 %	
13089	STANNOUS CHOLORIDE	26.4 g		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12218

Description
Sodium Chloride

ApprovedBy: akmal
ApproveDate: 12/31/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	SX0420-5	17F145203	12/27/18	12/26/23	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12619

Description
HYDROXYLAMINE HYDROCHLORIDE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LS-1580015	190318-4C	06/25/19	06/24/23	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12621

Description
POTASSIUM PERMANGANATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-T10208	190318-3C	06/25/19	06/24/29	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12651

Description
DI H2O

ApprovedBy: janee
ApproveDate: 10/10/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	07/08/19	07/07/20	Cousineau, Paul	1			

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13089

Description
STANNOUS CHOLORIDE

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB CHEM	LC-P33805	190620-3C	02/15/20	02/14/23	Aliano, Carmela	1	1Gal		

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-331024

Prepared By: Silva, Amanda
Description: 1:1 HCl WARNING
Prep Date: 7/7/2020
Expiration Date: 1/7/2021
Department: Metals
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13275	hydrochloric acid	500 ml	neat neat	

Veritech Lot Number: V-331982

Prepared By: Cousineau, Paul
Description: B, Si, Ce INTERMEDIATE
Prep Date: 7/23/2020
Expiration Date: 10/23/2020
Department: Metals
BatchNumber:
Concentration: 100 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 07/28/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	5 ml	neat neat	
13169	hydrochloric acid	5 ml	neat neat	
12976	BORON	10 ml	CONC conc	100 ppm
12977	SILICON	10 ml	CONC conc	100 ppm
13092	CERIUM	10 ml	CONC conc	100 ppm

Veritech Lot Number: V-333660

Prepared By: Aliano, Carmela
Description: LRS 1/2 Fe
Prep Date: 8/24/2020
Expiration Date: 10/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	335 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12915	LINEAR RANGE 1B	50 ml	neat neat	
12917	linear range 1C	50 ml	neat neat	
13092	CERIUM	12.5 ml	CONC conc	
12976	BORON	2.5 ml	CONC conc	
12977	SILICON	12.5 ml	CONC conc	

Veritech Lot Number: V-333665

Prepared By: Aliano, Carmela
Description: ICS4 High std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: various mg/l
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	434.5 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	1
12977	SILICON	5 ml	CONC conc	10

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333666

Prepared By: Aliano, Carmela
Description: ICS3 - Middle Std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	944.75 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	.5
12977	SILICON	5 ml	CONC conc	5
13092	CERIUM	5 ml	CONC conc	5

Veritech Lot Number: V-333667

Prepared By: Aliano, Carmela
Description: ICB/CCB
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: 0 mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	

Veritech Lot Number: V-333668

Prepared By: Aliano, Carmela
Description: ICSA
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: MULTI mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13176	ICSA	50 ml	NEAT neat	

Veritech Lot Number: V-333670

Prepared By: Aliano, Carmela
Description: LLICV/LLCCV aq
Prep Date: 8/24/2020
Expiration Date: 11/20/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13421	nitric acid	25 ml	neat neat	
13329	Hydrochloric acid	25 ml	neat neat	
13359	LL AQUEOUS	5 ml	MULTI ug/ml	
12976	BORON	.1 ml	CONC conc	0.2 ppm
12977	SILICON	.05 ml	CONC conc	0.1 ppm
13092	CERIUM	.05 ml	CONC conc	0.1 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333673

Prepared By:	Aliano, Carmela	Department: Metals	ApprovedBy: carmela
Description:	CCV	BatchNumber:	ApproveDate: 08/24/20
Prep Date:	8/24/2020	Concentration: MULTI multi	Checked: Yes
Expiration Date:	2/20/2021	Final Volume: 1000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13171	ICV 1	10 ml	NEAT neat	
13170	ICV 2	10 ml	CONC conc	
12981	BORON	.5 ml	CONC conc	
13091	CERIUM	5 ml	CONC conc	
12933	silicon	5 ml	CONC conc	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12915

Description
LINEAR RANGE 1B

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-40-500	7/271ab	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12917

Description
linear range 1C

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
spex	XHCV-44-500	8-002AB	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12933

Description
silicon

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-145	S191206040	12/13/19	12/30/21	Aliano, Carmela	4	500m	CONC	CONC

Veritech Control/Receipt Number: 12976

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLB9-2X	24-110BX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12977

Description
SILICON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLSI9-2X	24-93SIX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12981

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-055	S190719015	01/06/20	07/30/21	Aliano, Carmela	3	500ml	CONC	CONC

Veritech Control/Receipt Number: 12983

Description
CALIBRATION 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	8/214AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12984

Description
CALIBRATION 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	8/215AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13091

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-051-585	S190710006	03/04/20	07/30/21	Aliano, Carmela	2	500ml	CONC	CONC

Veritech Control/Receipt Number: 13092

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLCE2-2X	24-15CEX	03/04/20	02/28/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13168

Description
nitric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	245675	04/07/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13169

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	04/07/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13170

Description
ICV 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S200306032	04/07/20	03/31/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13171

Description
ICV 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S200306031	04/07/20	03/31/21	Aliano, Carmela	2	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13176

Description
ICSA

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-30	9-265AB	04/07/20	03/31/21	Aliano, Carmela	4	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13275

Description
hydrochloric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	06/02/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13329

Description
Hydrochloric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	253057	06/16/20	01/21/25	Lopez, Jose	6	2.5	neat	neat

Veritech Control/Receipt Number: 13359

Description
LL AQUEOUS

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-43-500	2-005MF	06/29/20	06/30/21	Cousineau, Paul	1	500 M	MULTI	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-329062

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Antimony Intermediate 1PPM | BatchNumber: | ApproveDate: 06/12/20
Prep Date: 6/5/2020 | Concentration: 1000 ppb | Checked: Yes
Expiration Date: 2/25/2021 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13251	nitric acid	2.5 ml	neat neat	
13296	ANTIMONY 1000 PPM	.1 ml	1000 ug/ml	

Veritech Lot Number: V-331024

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: 1:1 HCl WARNING | BatchNumber: | ApproveDate: 07/16/20
Prep Date: 7/7/2020 | Concentration: Reagent reag | Checked: Yes
Expiration Date: 1/7/2021 | Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13275	hydrochloric acid	500 ml	neat neat	

Veritech Lot Number: V-333325

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: 6020 CALIBRATION STOCK | BatchNumber: | ApproveDate: 08/24/20
Prep Date: 8/16/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 11/15/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13331	Nitric acid	2 ml	neat neat	
13304	ALUMINUM 10000 PPM	.725 ml	10000 ug/ml	72.5
13305	CALCIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13308	IRON 10000 PPM	2.5 ml	10000 ug/ml	250
13306	MAGNESIUM 10000PPM	2.5 ml	10000 ug/ml	250
13309	POTASSIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13307	SODIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13297	SELENIUM 1000 PPM	1 ml	1000 ug/ml	10
13323	CAL STD	12.5 ml	20 ug/ml	2.5

Veritech Lot Number: V-334455

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Blk WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: 0 ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-334456

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-1 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.02 ml	VARIOUS pp	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334457

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-2 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.2 ml	VARIOUS pp	

Veritech Lot Number: V-334458

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-3 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.4 ml	VARIOUS pp	

Veritech Lot Number: V-334459

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-4 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-334460

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-5 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	4 ml	VARIOUS pp	

Veritech Lot Number: V-334461

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: ICV WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
13315	6020 ICV	.1 ml	MULTI ug/ml	
13314	6020 ICV (Ag only)	.1 ml	10 ug/ml	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334462

Prepared By: Cousineau, Paul
Description: ICB/CCB WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: 0 ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-334463

Prepared By: Cousineau, Paul
Description: ICSA WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	
12856	Interferents A	2.5 ml	NEAT mg/l	

Veritech Lot Number: V-334464

Prepared By: Cousineau, Paul
Description: LRS WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	2.5 %
V-333325	6020 CALIBRATION STOCK	10 ml	VARIOUS pp	

Veritech Lot Number: V-334465

Prepared By: Cousineau, Paul
Description: CCV WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-334467

Prepared By: Cousineau, Paul
Description: LL-ICV/CCV AQ. WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber:
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
13360	LL 6020 AQUEOUS	.5 ml	MULTI ug/ml	
V-329062	Antimony Intermediate 1PPM	.05 ml	1000 ppb	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12856

Description
Interferents A

ApprovedBy: carmela
ApproveDate: 12/09/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-A1	CL51-020CRY	10/31/19	10/30/20	Cousineau, Paul	1		NEAT	mg/l

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13251

Description
nitric acid

ApprovedBy: jean
ApproveDate: 05/27/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	245675	05/19/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13275

Description
hydrochloric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	251602	06/02/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13296

Description
ANTIMONY 1000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSB7-2Y	24-153SBY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13297

Description
SELENIUM 1000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSE2-2Y	25-14SEY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13304

Description
ALUMINUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLAL2-3X	AP18-72ALX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13305

Description
CALCIUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLCA2-3X	AZ18-49CAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13306

Description
MAGNESIUM 10000PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLMG2-3X	AP18-57MGX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13307

Description
SODIUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLNA2-3X	AT18-84NAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13308

Description
IRON 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLFE2-3X	AR18-89FEX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13309

Description
POTASSIUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLK2-3X	AX18-77KX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13314

Description
6020 ICV (Ag only)

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-113	S200519030	06/04/20	05/31/21	Cousineau, Paul	1	125 M	10	UG/ML

Veritech Control/Receipt Number: 13315

Description
6020 ICV

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-112	S200519029	06/04/20	05/31/21	Cousineau, Paul	1	125 M	MULTI	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13323

Description
CAL STD

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-CAL-1	CL51-013CRY	06/15/20	06/30/21	Cousineau, Paul	1	125M	20	UG/ML

Veritech Control/Receipt Number: 13331

Description
Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13360

Description
LL 6020 AQUEOUS

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	ZHCV-14-100	2-008MF	06/29/20	06/30/21	Cousineau, Paul	1	125 M	MULTI	UG/ML

Veritech Control/Receipt Number: 13391

Description
nitric acid

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	07/14/20	02/03/25	Lopez, Jose	4	2.5	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy: jessica
ApproveDate: 09/21/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334736

Prepared By: Silva, Amanda
Description: Hg Intermediate Standard -WARNING
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Metals
BatchNumber: B-29672
Concentration: .25 ppm
Final Volume: 500 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13311	MERCURY 1000 PPM	.125 ml	1000 ug/ml	
13421	nitric acid	12.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334737

Prepared By: Silva, Amanda
Description: Hg intermediate Control -WARNING
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Metals
BatchNumber: B-29672
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334749

Prepared By: Silva, Amanda
Description: Hg AQ ICV 20 ppb
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Metals
BatchNumber: B-29674
Concentration: 20 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334737	Hg intermediate Control -WARNING	.5 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334750

Prepared By: Silva, Amanda
Description: Hg AQ CCV 10 ppb
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Metals
BatchNumber: B-29674
Concentration: 10 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334737	Hg intermediate Control -WARNING	.25 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334751

Prepared By: Silva, Amanda
Description: Hg AQ standard blk
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Metals
BatchNumber: B-29674
Concentration: 0 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334752

Prepared By: Silva, Amanda
Description: Hg AQ standard .2 ppb
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Metals
BatchNumber: B-29674
Concentration: .2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334736	Hg Intermediate Standard -WARNING	.02 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334753

Prepared By: Silva, Amanda
Description: Hg AQ standard .5 ppb
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Metals
BatchNumber: B-29674
Concentration: .5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334736	Hg Intermediate Standard -WARNING	.05 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334754

Prepared By: Silva, Amanda
Description: Hg AQ standard 1 ppb
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Metals
BatchNumber: B-29674
Concentration: 1 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334736	Hg Intermediate Standard -WARNING	.1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334755

Prepared By: Silva, Amanda
Description: Hg AQ standard 2 ppb
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Metals
BatchNumber: B-29674
Concentration: 2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334736	Hg Intermediate Standard -WARNING	.2 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334756

Prepared By: Silva, Amanda
Description: Hg AQ standard 5 ppb
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Metals
BatchNumber: B-29674
Concentration: 5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334736	Hg Intermediate Standard -WARNING	.5 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334757

Prepared By: Silva, Amanda
Description: Hg AQ standard 10 ppb
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Metals
BatchNumber: B-29674
Concentration: 10 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334736	Hg Intermediate Standard -WARNING	1 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334758

Prepared By:	Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description:	Hg AQ standard 25 ppb	BatchNumber: B-29674	ApproveDate: 09/15/20
Prep Date:	9/14/2020	Concentration: 25 ppb	Checked: Yes
Expiration Date:	9/14/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334736	Hg Intermediate Standard -WARNING	2.5 ml	.25 ppm	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13311

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP	140-051-801	S200130001	06/04/20	12/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-317822

Prepared By: Aliano, Carmela
Description: Hydroxylamine Hydrochloride WARNIN
Prep Date: 12/13/2019
Expiration Date: 1/8/2020
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 10 l
ApprovedBy: shiamala
ApproveDate: 12/16/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12651	DI H2O			
12218	Sodium Chloride	1200 g	neat neat	
12619	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-327154

Prepared By: Cousineau, Paul
Description: 5% Potassium Persulfate WARNING
Prep Date: 5/7/2020
Expiration Date: 11/6/2020
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 12620 l
ApprovedBy: shiamala
ApproveDate: 05/07/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12620	POTASSIUM PERSULFATE	500 g	NEAT neat	

Veritech Lot Number: V-331286

Prepared By: Lucca, Daniela
Description: 5% Potassium Permanganate WARNIN
Prep Date: 7/13/2020
Expiration Date: 2/13/2021
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12621	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-334627

Prepared By: Ransaw, Brianna
Description: 3% HCL WARNING
Prep Date: 9/11/2020
Expiration Date: 9/20/2020
Department: WetChem
BatchNumber:
Concentration: 3 %
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13130	hydrochloric acid	600 ml	neat neat	3%
13084	DI H20			

Veritech Lot Number: V-334737

Prepared By: Silva, Amanda
Description: Hg intermediate Control -WARNING
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Metals
BatchNumber: B-29672
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334789

Prepared By:	Lucca, Daniela	Department: Metals	ApprovedBy:
Description:	SnCl2 "WARNING:"	BatchNumber:	ApproveDate:
Prep Date:	9/15/2020	Concentration: reagent I	Checked: No
Expiration Date:	9/15/2020	Final Volume: 2 l	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334627	3% HCL WARNING	2000 ml	3 %	
13089	STANNOUS CHOLORIDE	26.4 g		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12218

Description
Sodium Chloride

ApprovedBy: akmal
ApproveDate: 12/31/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	SX0420-5	17F145203	12/27/18	12/26/23	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12619

Description
HYDROXYLAMINE HYDROCHLORIDE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LS-1580015	190318-4C	06/25/19	06/24/23	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12620

Description
POTASSIUM PERSULFATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-4445NG	170106-A	06/25/19	08/09/21	Balashanthan, Shi	1	2.5KG	NEAT	NEAT

Veritech Control/Receipt Number: 12621

Description
POTASSIUM PERMANGANATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-T10208	190318-3C	06/25/19	06/24/29	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12651

Description
DI H2O

ApprovedBy: janee
ApproveDate: 10/10/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	07/08/19	07/07/20	Cousineau, Paul	1			

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13089

Description
STANNOUS CHOLORIDE

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB CHEM	LC-P33805	190620-3C	02/15/20	02/14/23	Aliano, Carmela	1	1Gal		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: S091120AN Sample ID: CalBlk V-334455 Sample Date 09/11/20 Sample Time: 10:35

IS ID:	Area	Area Limit		
Ho-1	2269892.73	1588924.911	-	2950860.549
In-1	1541461.12	1079022.784	-	2003899.456
Sc-1	943267.99	660287.593	-	1226248.387
Tb-1	2290443.33	1603310.331	-	2977576.329

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-334455	2	2269892.	1541461.	943267.9	2290443.				
SMP	RINSE	1	2228347.	1508709.	926682.7	2276311.				
CAL	CalStd1 V-33445	3	2290067.	1559120.	958370.8	2315697.				
CAL	CalStd2 V-33445	4	2317409.	1557419.	983537.3	2362716.				
CAL	CalStd3 V-33445	5	2281937.	1537625.	960102.6	2328559.				
CAL	CalStd4 V-33445	6	2309096.	1537039.	974320.1	2343874.				
CAL	CalStd5 V-33446	7	2315366.	1527887.	965799.1	2318148.				
ICV	ICV V-334461	8	2305545.	1569150.	985147.2	2351890.				
LLICV	LLICV V-334466	9	2322583.	1565181.	983761.7	2372178.				
ICB	ICB V-334462	10	2278721.	1539503.	965346.7	2316812.				
ICSA	ICSA V-334463	11	2454295.	1586743.	1042704.	2481062.				
SMP	RINSE	12	2493493.	1716243.	1051370.	2527037.				
LRS	LRS V-334464	13	2402584.	1578439.	1021426.	2450021.				
SMP	RINSE	14	2451830.	1668883.	1048116.	2499513.				
SMP	RINSE	15	2368689.	1605909.	992706.0	2394194.				
CCV	CCV V-334465	16	2348283.	1583182.	990178.7	2382194.				
CCB	CCB V-334462	17	2324964.	1559697.	967437.6	2356237.				
MB	MB 85270	18	2374817.	1602535.	978001.0	2414486.				
LCS	LCS 85270	19	2430451.	1590173.	1024933.	2451498.				
MR	LCS MR 85270	20	2419646.	1565816.	1010282.	2473193.				
SMP	AD19159-004	21	2468303.	1515636.	1246401.	* 2471112.				
MR	AD19159-004	22	2498897.	1528652.	1233141.	* 2516033.				
SD	AD19159-004	23	2399104.	1556448.	984079.7	2432037.				
MS	AD19159-005	24	2435132.	1521683.	1245904.	* 2468725.				
MSD	AD19159-006	25	2395423.	1471312.	1234982.	* 2413946.				
PS	AD19159-004	26	2404431.	1470559.	1201005.	2439179.				
SMP	RINSE	27	2292412.	1523140.	921325.2	2324077.				
CCV	CCV V-334465	28	2237611.	1492870.	920756.3	2260611.				
CCB	CCB V-334462	29	2178584.	1475028.	915145.4	2215051.				
SMP	AD19159-001	30	2405673.	1429974.	1265205.	* 2427716.				
SMP	AD19159-002	31	2453686.	1500636.	1155261.	2464088.				
SMP	AD19159-003	32	2417906.	1486405.	1101953.	2439783.				
SMP	AD19159-007	33	2470570.	1505702.	1278912.	* 2484354.				
SMP	AD19159-008	34	2405251.	1514227.	1045651.	2433565.				
SMP	AD19159-009	35	2429525.	1517769.	1039984.	2457214.				
SMP	AD19159-010	36	2493778.	1517846.	1297520.	* 2523242.				
SMP	AD19160-001	37	2518313.	1494785.	1509789.	* 2564768.				
SMP	AD19160-002	38	2451187.	1408047.	1311769.	* 2461661.				
SMP	RINSE	39	2254756.	1509761.	910052.1	2317717.				
CCV	CCV V-334465	40	2186500.	1457394.	900000.0	2227617.				
CCB	CCB V-334462	41	2186562.	1462742.	895292.0	2217536.				
SMP	AD19067-003	42	2257644.	1455766.	1013408.	2299851.				
SMP	AD19163-001	43	2314374.	1513091.	959024.1	2351615.				
SMP	AD19164-001	44	2237771.	1418621.	985814.9	2241230.				
SMP	RINSE	45	2120011.	1324002.	863477.2	2142706.				
CCV	CCV V-334465	46	2178006.	1400045.	881903.1	2199770.				
CCB	CCB V-334462	47	2208674.	1466800.	898491.3	2206464.				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

Batch/FileID: S091120AN Sample ID: CalBlk V-334455 Sample Date 09/11/20 Sample Time: 10:35

IS ID:	Area	Area Limit		
Ho-2	995473.27	696831.289	-	1294115.251
In-2	302667.71	211867.397	-	393468.023
Sc-2	47160.90	33012.63	-	61309.17
Tb-2	989980.19	692986.133	-	1286974.247

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-334455	2	995473.2	302667.7	47160.90	989980.1				
SMP	RINSE	1	980316.7	302431.6	46462.45	976029.5				
CAL	CalStd1 V-33445	3	1009276.	307843.6	47894.66	1008473.				
CAL	CalStd2 V-33445	4	1029425.	313065.9	49121.43	1030170.				
CAL	CalStd3 V-33445	5	1023053.	312573.7	49198.26	1027216.				
CAL	CalStd4 V-33445	6	1048254.	317005.1	49798.61	1048391.				
CAL	CalStd5 V-33446	7	1035066.	310129.2	49424.35	1030270.				
ICV	ICV V-334461	8	1042027.	316406.5	49170.25	1035812.				
LLICV	LLICV V-334466	9	1043657.	319596.4	49887.73	1036113.				
ICB	ICB V-334462	10	1021894.	315377.4	49377.47	1022136.				
ICSA	ICSA V-334463	11	1091923.	318055.0	54039.25	1086714.				
SMP	RINSE	12	1097199.	336652.8	52590.63	1090629.				
LRS	LRS V-334464	13	1072039.	320382.8	52786.71	1068393.				
SMP	RINSE	14	1082126.	336676.4	52614.04	1086492.				
SMP	RINSE	15	1042450.	323103.0	49754.16	1044124.				
CCV	CCV V-334465	16	1046820.	317933.6	50034.81	1048375.				
CCB	CCB V-334462	17	1034072.	316743.8	49055.61	1033160.				
MB	MB 85270	18	1037756.	309541.7	48606.69	1033188.				
LCS	LCS 85270	19	1045018.	303406.3	49268.34	1042615.				
MR	LCS MR 85270	20	1044758.	301317.6	48709.21	1039093.				
SMP	AD19159-004	21	1043915.	286533.6	57366.35	1036909.				
MR	AD19159-004	22	1060162.	288638.8	56935.30	1055872.				
SD	AD19159-004	23	1033998.	299129.6	48815.98	1027236.				
MS	AD19159-005	24	1049388.	288083.6	56914.30	1044429.				
MSD	AD19159-006	25	1013881.	281550.8	56189.70	1012438.				
PS	AD19159-004	26	1024165.	276180.7	55326.23	1018754.				
SMP	RINSE	27	1004030.	300352.2	45602.53	1000336.				
CCV	CCV V-334465	28	995818.6	297231.4	46117.33	990234.4				
CCB	CCB V-334462	29	997357.5	303860.4	47039.33	991048.7				
SMP	AD19159-001	30	1016861.	274023.3	57551.93	1008167.				
SMP	AD19159-002	31	1043463.	284299.0	54204.08	1027304.				
SMP	AD19159-003	32	1018045.	280029.8	52157.21	1009341.				
SMP	AD19159-007	33	1048449.	280565.0	58663.81	1035783.				
SMP	AD19159-008	34	1020270.	280702.8	49207.01	1010297.				
SMP	AD19159-009	35	1024495.	284877.2	50797.94	1021735.				
SMP	AD19159-010	36	1049938.	281866.1	59826.76	1041179.				
SMP	AD19160-001	37	1057522.	276723.1	68957.07 *	1060873.				
SMP	AD19160-002	38	1036148.	265321.2	59438.70	1020296.				
SMP	RINSE	39	980672.3	291984.7	44673.76	974554.4				
CCV	CCV V-334465	40	972036.1	289219.5	44858.42	965313.5				
CCB	CCB V-334462	41	967331.1	293146.9	45141.41	959267.4				
SMP	AD19067-003	42	985198.2	280901.7	50068.30	978922.3				
SMP	AD19163-001	43	983199.4	282380.8	45399.93	990082.1				
SMP	AD19164-001	44	980960.6	284353.3	47816.75	970041.7				
SMP	RINSE	45	959131.4	290027.9	44002.10	956598.0				
CCV	CCV V-334465	46	976642.8	290952.2	44519.99	969425.5				
CCB	CCB V-334462	47	984440.5	299959.6	46108.52	979516.9				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: A091420AN Sample ID: CalBlk V-334455 Sample Date 09/14/20 Sample Time: 18:16

IS ID:	Area	Area Limit		
Ho-1	1965072.59	1375550.813	-	2554594.367
In-1	1198701.28	839090.896	-	1558311.664
Sc-1	799258.11	559480.677	-	1039035.543
Tb-1	1977250.68	1384075.476	-	2570425.884

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-334455	2	1965072.	1198701.	799258.1	1977250.				
SMP	RINSE	1	1976686.	1203692.	801344.7	1980501.				
CAL	CalStd1 V-33445	3	1942618.	1206278.	798533.9	1978019.				
CAL	CalStd2 V-33445	4	1973270.	1202305.	803250.2	1984520.				
CAL	CalStd3 V-33445	5	1971432.	1249281.	824053.6	2002992.				
CAL	CalStd4 V-33445	6	1924434.	1174532.	787337.7	1946036.				
CAL	CalStd5 V-33446	7	1892795.	1153195.	771491.6	1918025.				
ICV	ICV V-334461	8	1911864.	1172377.	784925.6	1942250.				
LLICV	LLICV V-334467	9	1962636.	1198741.	796491.4	1980862.				
ICB	ICB V-334462	10	1917820.	1178528.	786597.2	1934251.				
ICSA	ICSA V-334463	11	1941570.	1112979.	770942.5	1963397.				
SMP	RINSE	12	2049753.	1264305.	830125.0	2078802.				
LRS	LRS V-334464	13	1914323.	1126079.	779103.2	1961275.				
SMP	RINSE	14	2040318.	1262684.	844723.1	2066366.				
SMP	RINSE	15	1956895.	1199423.	791794.6	1975091.				
CCV	CCV V-334465	16	1935928.	1168911.	783804.9	1954009.				
CCB	CCB V-334462	17	1904770.	1172716.	769303.0	1932177.				
MB	MB 85272	18	2036879.	1228580.	791258.6	2065144.				
LCS	LCSW 85272	19	2142984.	1349655.	861538.7	2168518.				
MR	LCSW MR 85272	20	2136651.	1377892.	869482.1	2161623.				
SMP	AD19206-004	21	2157799.	1262670.	898148.9	2177384.				
MR	AD19206-004	22	2136106.	1247558.	872402.7	2156262.				
SD	AD19206-004	23	2036634.	1216713.	806637.0	2068278.				
MS	AD19206-004	24	2095324.	1219542.	851420.4	2100517.				
MSD	AD19206-004	25	2101193.	1233988.	867549.9	2128521.				
PS	AD19206-004	26	2092516.	1206607.	837071.8	2098848.				
SMP	RINSE	27	1942524.	1171473.	759358.7	1970582.				
CCV	CCV V-334465	28	1910505.	1144321.	751554.6	1916723.				
CCB	CCB V-334462	29	1889554.	1143185.	749090.5	1910639.				
SMP	AD19145-010	30	2048713.	1211427.	762256.7	2079447.				
SMP	AD19159-011	31	2144523.	1251823.	805513.3	2162995.				
SMP	AD19168-001	32	2144798.	1241453.	816675.4	2165252.				
SMP	AD19168-002	33	2171917.	1267510.	828973.7	2190483.				
SMP	AD19168-003	34	2152548.	1262350.	825685.7	2161356.				
SMP	AD19168-004	35	2165940.	1258365.	826050.3	2177997.				
SMP	AD19168-005	36	2188937.	1307076.	824144.5	2192726.				
SMP	AD19168-006	37	2170739.	1282507.	824805.3	2200489.				
SMP	AD19168-007	38	2145684.	1248812.	851286.0	2165878.				
SMP	RINSE	39	2025912.	1195960.	767913.5	2028689.				
CCV	CCV V-334465	40	1938389.	1147852.	754545.0	1946234.				
CCB	CCB V-334462	41	1908727.	1148658.	740102.9	1929367.				
SMP	AD19206-001	42	2085596.	1206519.	796260.7	2087132.				
SMP	AD19206-002	43	2092108.	1213904.	813945.4	2125476.				
SMP	AD19206-003	44	2084358.	1198601.	826830.0	2103026.				
SMP	AD19139-003	45	2064487.	1214775.	887936.7	2089229.				
SMP	AD19163-003	46	2017088.	1176483.	805129.0	2033840.				
SMP	RINSE	47	1919882.	1143963.	723556.2	1930884.				
CCV	CCV V-334465	48	1866213.	1117707.	729431.0	1885950.				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 1

CCB	CCB V-334462	49	1868956.	1133672.	738582.8	1898515.

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

Batch/FileID: A091420AN Sample ID: CalBlk V-334455 Sample Date 09/14/20 Sample Time: 18:16

IS ID:	Area	Area Limit		
Ho-2	874594.73	612216.311	-	1136973.149
In-2	262579.42	183805.594	-	341353.246
Sc-2	40230.39	28161.273	-	52299.507
Tb-2	867829.54	607480.678	-	1128178.402

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-334455	2	874594.7	262579.4	40230.39	867829.5				
SMP	RINSE	1	863579.8	260843.7	39651.33	858400.0				
CAL	CalStd1 V-33445	3	874362.7	266500.0	40475.40	872975.7				
CAL	CalStd2 V-33445	4	883049.4	266840.3	40084.52	882937.2				
CAL	CalStd3 V-33445	5	887380.2	266468.5	41126.71	880713.0				
CAL	CalStd4 V-33445	6	861204.4	254575.1	39779.38	856364.7				
CAL	CalStd5 V-33446	7	847029.0	248467.3	38974.31	838123.9				
ICV	ICV V-334461	8	856773.3	256225.5	39260.61	852658.2				
LLICV	LLICV V-334467	9	874386.9	262235.2	40339.39	871693.2				
ICB	ICB V-334462	10	862387.9	260669.1	40402.97	858802.2				
ICSA	ICSA V-334463	11	863417.7	245046.9	40579.03	854466.2				
SMP	RINSE	12	897013.4	270677.5	41888.50	889689.4				
LRS	LRS V-334464	13	855639.2	251758.5	40868.34	850087.1				
SMP	RINSE	14	897623.4	272709.2	42790.59	894433.4				
SMP	RINSE	15	865328.2	264620.0	40131.23	866897.3				
CCV	CCV V-334465	16	860812.3	258864.8	39514.32	863321.1				
CCB	CCB V-334462	17	855702.8	257958.1	39114.76	852105.9				
MB	MB 85272	18	870815.0	253415.3	38433.29	867327.0				
LCS	LCSW 85272	19	903736.1	267224.3	41596.60	895083.5				
MR	LCSW MR 85272	20	895861.6	262296.0	40781.61	886869.6				
SMP	AD19206-004	21	882050.9	251777.9	40809.53	882581.8				
MR	AD19206-004	22	873895.3	244670.8	39121.31	868231.4				
SD	AD19206-004	23	863033.1	248557.2	37309.95	854015.6				
MS	AD19206-004	24	866359.2	245424.8	39219.21	857790.6				
MSD	AD19206-004	25	872099.3	246066.8	38673.66	863792.4				
PS	AD19206-004	26	850342.2	235033.0	37528.27	845921.2				
SMP	RINSE	27	837636.6	244923.5	37465.74	827495.4				
CCV	CCV V-334465	28	832960.9	242505.5	37817.63	824534.5				
CCB	CCB V-334462	29	827449.3	245829.6	37454.56	820124.9				
SMP	AD19145-010	30	857084.1	244263.5	37591.68	853110.1				
SMP	AD19159-011	31	873605.4	246912.4	38581.61	865716.1				
SMP	AD19168-001	32	879251.3	245026.1	38130.48	871983.2				
SMP	AD19168-002	33	885738.3	246375.9	38149.42	877890.1				
SMP	AD19168-003	34	886285.4	246033.2	38150.39	878296.1				
SMP	AD19168-004	35	885836.6	245435.7	38204.01	872299.8				
SMP	AD19168-005	36	885036.2	245935.1	37440.14	873244.4				
SMP	AD19168-006	37	879390.8	246965.8	37887.66	871053.6				
SMP	AD19168-007	38	876665.2	239013.5	37210.72	863410.9				
SMP	RINSE	39	813797.0	235329.9	35227.32	809109.8				
CCV	CCV V-334465	40	835403.0	240429.6	36822.33	826906.7				
CCB	CCB V-334462	41	829310.0	243470.7	36460.42	827400.8				
SMP	AD19206-001	42	859614.3	240154.4	37410.13	853505.6				
SMP	AD19206-002	43	853844.2	234687.8	36045.21	842952.2				
SMP	AD19206-003	44	862851.9	237765.5	38051.58	857442.8				
SMP	AD19139-003	45	860190.8	242712.2	39662.51	851820.4				
SMP	AD19163-003	46	858022.0	238985.5	37821.01	851234.9				
SMP	RINSE	47	828880.3	239649.0	36509.45	819813.2				
CCV	CCV V-334465	48	821510.5	239243.4	37096.08	813881.5				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

CCB	CCB V-334462	49	826511.2	243368.8	36725.42	817749.3

* Indicates Internal Standard Area outside of limits

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S26211A3.txt

Analysis Date: 09/14/20 **Instrument:** PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	10:04	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	10:08	2							V-333671(LLICV/LLCCV soil)
CALST3 V-333666	1	CAL	10:12	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	10:16	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	10:20	5							V-333673(CCV)
ICB V-333667	1	ICB	10:24	6							V-333667(ICB/CCB)
LRS V-333662	1	LRS	10:28	7	MET-TAL6010S	SOIL	SOIL	SW846	85269		V-333662(LRS)
ICS3 V-333666	1	ICS	10:32	8							V-333666(ICS3 - Middle Std)
RINSE	1	NA	10:36	9		SOIL	SOIL	SW846	85269		()
LLICV V-333671	1	LLICV	10:40	10	MET-TAL6010S	SOIL	SOIL	SW846	85269		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	10:44	11							V-333668(ICSA)
CCV V-333673	1	CCV	10:49	12							V-333673(CCV)
CCB V-333667	1	CCB	10:53	13							V-333667(ICB/CCB)
MB 85269 (100)	1	MB	10:57	14	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
LCS 85269	1	LCS	11:00	15	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
LCS MR 85269	1	LCS	11:06	16	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19159-004	1	SMP	11:10	17	MET-TAL6010S	SOIL	SOIL	SW846	85269	Ca NOT REPORTED	()
AD19159-004	1	MR	11:15	18	MET-TAL6010S	SOIL	SOIL	SW846	85269	Ca NOT REPORTED>LR	()
AD19159-005	1	MS	11:20	19	MET-TAL6010S	SOIL	SOIL	SW846	85269	Ca NOT REPORTED	()
AD19159-006	1	MSD	11:25	20	MET-TAL6010S	SOIL	SOIL	SW846	85269	Ca NOT REPORTED>LR	()
AD19159-004	1	PS	11:29	21	MET-TAL6010S	SOIL	SOIL	SW846	85269	Ca NOT REPORTED	()
AD19159-004	5	SD	11:34	22	MET-TAL6010S	SOIL	SOIL	SW846	85269	Ca NOT REPORTED	()
CCV V-333673	1	CCV	11:38	23							V-333673(CCV)
CCB V-333667	1	CCB	11:42	24							V-333667(ICB/CCB)
AD19159-001	1	SMP	11:46	25	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19159-002	1	SMP	11:51	26	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19159-003	1	SMP	11:56	27	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19159-007	1	SMP	12:00	28	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19159-008	1	SMP	12:04	29	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19159-009	1	SMP	12:08	30	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
CCV V-333673	1	CCV	12:13	31							V-333673(CCV)
CCB V-333667	1	CCB	12:17	32							V-333667(ICB/CCB)
AD19159-010	1	SMP	12:21	33	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19160-001	1	SMP	12:26	34	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19160-002	1	SMP	12:31	35	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19067-003	1	SMP	12:36	36	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19163-001	1	SMP	12:40	37	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19164-001	1	SMP	12:44	38	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
CCV V-333673	1	CCV	12:47	39							V-333673(CCV)
CCB V-333667	1	CCB	12:51	40							V-333667(ICB/CCB)
MB 85275 (100)	1	MB	12:55	41	PB-SOIL	SOIL	SOIL	SW846	85275		()
LCS 85275	1	LCS	12:59	42	PB-SOIL	SOIL	SOIL	SW846	85275		()
LCS MR 85275	1	LCS	13:04	43	PB-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-001	1	SMP	13:09	44	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-001	1	MR	13:13	45	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-001	1	MS	13:16	46	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-001	1	MSD	13:20	47	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-001	1	PS	13:24	48	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-001	5	SD	13:28	49	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
CCV V-333673	1	CCV	13:32	50							V-333673(CCV)
CCB V-333667	1	CCB	13:36	51							V-333667(ICB/CCB)
AD19192-002	1	SMP	13:40	52	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-003	1	SMP	13:44	53	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
CCV V-333673	1	CCV	13:48	54							V-333673(CCV)
CCB V-333667	1	CCB	13:52	55							V-333667(ICB/CCB)
AD19155-004	1	SMP	13:56	56	PB-SOIL	SOIL	SOIL	SW846	85275		()
AD19155-005	1	SMP	14:00	57	PB-SOIL	SOIL	SOIL	SW846	85275		()
AD19155-006	1	SMP	14:04	58	PB-SOIL	SOIL	SOIL	SW846	85275		()
AD19155-007	1	SMP	14:08	59	PB-SOIL	SOIL	SOIL	SW846	85275		()
AD19173-001	1	SMP	14:12	60	PB-SOIL	SOIL	SOIL	SW846	85275		()

Comments/Reviewedby:

olufemi
192.168.1.105 9/15/2020 1:11:37 PM

RUN IS OK
All elements reported, except Na, K

9/15/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S26211A3.txt

Analysis Date: 09/14/20

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
AD19173-002	1	SMP	14:16	61	PB-SOIL	SOIL	SOIL	SW846	85275		()
AD19173-003	1	SMP	14:20	62	PB-SOIL	SOIL	SOIL	SW846	85275		()
CCV V-325355	1	CCV	14:24	63							V-325355(CCV)
CCB V-325347	1	CCB	14:28	64							V-325347(ICB/CCB)

Comments/Reviewedby:

olutemi
192.168.1.105 9/15/2020 1:11:37 PM

RUN IS OK
All elements reported, except Na, K

9/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26211S.txt

Analysis Date: 09/11/20

Instrument: HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	11:04	1							()
.2 PPB	1	CAL	11:05	2							()
.5 PPB	1	CAL	11:07	3							()
1 PPB	1	CAL	11:08	4							()
2 PPB	1	CAL	11:09	5							()
5 PPB	1	CAL	11:11	6							()
10 PPB	1	CAL	11:12	7							()
25 PPB	1	CAL	11:14	8							()
ICV (2)	1	ICV	11:16	9							()
ICB	1	ICB	11:17	10							()
MB 85269 (167)	1	MB	11:19	11	HG-SOIL	SOIL	SOIL	SW846	85269		()
LCS 85269	1	NA	11:20	12	HG-SOIL	SOIL	SOIL	SW846	85269	Conc. Is greater than calibration limits.	()
LCS MR 85269	1	NA	11:22	13	HG-SOIL	SOIL	SOIL	SW846	85269	Conc. Is greater than calibration limits.	()
LCS 4D	4	LCS	11:23	14	HG-SOIL	SOIL	SOIL	SW846	85269		()
LCS 4D MR	4	LCS	11:25	15	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19159-004	1	SMP	11:26	16	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19159-004	1	MR	11:27	17	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19159-005	1	MS	11:29	18	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19159-006	1	MSD	11:31	19	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19159-001	1	SMP	11:32	20	HG-SOIL	SOIL	SOIL	SW846	85269		()
CCV	1	CCV	11:34	21							()
CCB	1	CCB	11:35	22							()
AD19159-002	1	SMP	11:37	23	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19159-003	1	SMP	11:38	24	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19159-007	1	SMP	11:39	25	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19159-008	1	SMP	11:41	26	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19159-009	1	SMP	11:42	27	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19159-010	1	SMP	11:43	28	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19160-001	1	SMP	11:45	29	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19160-002	1	SMP	11:46	30	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19067-003	1	SMP	11:47	31	HG-SOIL	SOIL	SOIL	SW846	85269		()
AD19163-001	1	SMP	11:49	32	HG-SOIL	SOIL	SOIL	SW846	85269		()
CCV	1	CCV	11:50	33							()
CCB	1	CCB	11:52	34							()
AD19164-001	1	SMP	11:53	35	HG-SOIL	SOIL	SOIL	SW846	85269		()
CCV	1	CCV	11:54	36							()
CCB	1	CCB	11:56	37							()

Comments/Reviewedby:

bransaw
192.168.1.120 9/11/2020 12:17:49 PM

OK.

9/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334628

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS3_7700SWA\S091120ANEW.txt

Analysis Date: 09/11/20 **Instrument:** MS3_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	10:31	1		SOIL	SOIL	SW846	85270		0
CalBlk V-334455	1	ISBLK	10:35	2		SOIL	SOIL				V-334455(Cal Blk WARNING)
CalStd1 V-334456	1	CAL	10:40	3							V-334456(Cal Std-1 WARNING)
CalStd2 V-334457	1	CAL	10:44	4							V-334457(Cal Std-2 WARNING)
CalStd3 V-334458	1	CAL	10:49	5							V-334458(Cal Std-3 WARNING)
CalStd4 V-334459	1	CAL	10:53	6							V-334459(Cal Std-4 WARNING)
CalStd5 V-334460	1	CAL	10:58	7							V-334460(Cal Std-5 WARNING)
ICV V-334461	1	ICV	11:02	8							V-334461(ICV WARNING)
LLICV V-334466	1	LLICV	11:07	9		SOIL	SOIL	SW846	85270		V-334466(LL-ICV/CCV SOIL WARNING)
ICB V-334462	1	ICB	11:11	10							V-334462(ICB/CCB WARNING)
ICSA V-334463	1	ICSA	11:16	11							V-334463(ICSA WARNING)
RINSE	1	NA	11:20	12		SOIL	SOIL	SW846	85270		0
LRS V-334464	1	LRS	11:25	13		SOIL	SOIL	SW846	85270	Ag fail	V-334464(LRS WARNING)
RINSE	1	NA	11:29	14		SOIL	SOIL	SW846	85270		0
RINSE	1	NA	11:33	15		SOIL	SOIL	SW846	85270		0
CCV V-334465	1	CCV	11:38	16							V-334465(CCV WARNING)
CCB V-334462	1	CCB	11:42	17							V-334462(ICB/CCB WARNING)
MB 85270	1	MB	11:47	18		SOIL	SOIL	SW846	85270		0
LCS 85270	1	LCS	11:51	19		SOIL	SOIL	SW846	85270		0
LCS MR 85270	1	LCS	11:56	20		SOIL	SOIL	SW846	85270		0
AD19159-004	1	SMP	12:00	21	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19159-004	1	MR	12:04	22	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19159-004	5	SD	12:09	23	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19159-005	1	MS	12:13	24	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19159-006	1	MSD	12:18	25	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19159-004	1	PS	12:22	26	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
RINSE	1	NA	12:26	27		SOIL	SOIL	SW846	85270		0
CCV V-334465	1	CCV	12:31	28							V-334465(CCV WARNING)
CCB V-334462	1	CCB	12:35	29							V-334462(ICB/CCB WARNING)
AD19159-001	1	SMP	12:40	30	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19159-002	1	SMP	12:44	31	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19159-003	1	SMP	12:48	32	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19159-007	1	SMP	12:53	33	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19159-008	1	SMP	12:57	34	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19159-009	1	SMP	13:02	35	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19159-010	1	SMP	13:06	36	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19160-001	1	SMP	13:10	37	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19160-002	1	SMP	13:15	38	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
RINSE	1	NA	13:19	39		SOIL	SOIL	SW846	85270		0
CCV V-334465	1	CCV	13:24	40							V-334465(CCV WARNING)
CCB V-334462	1	CCB	13:28	41							V-334462(ICB/CCB WARNING)
AD19067-003	1	SMP	13:33	42	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19163-001	1	SMP	13:37	43	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
AD19164-001	1	SMP	13:42	44	MET-TAL6020S	SOIL	SOIL	SW846	85270		0
RINSE	1	NA	13:46	45		SOIL	SOIL	SW846	85270		0
CCV V-334465	1	CCV	13:51	46							V-334465(CCV WARNING)
CCB V-334462	1	CCB	13:55	47							V-334462(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.87 9/14/2020 8:19:24 AM

Run ok. Report Ag, As, Be, Cd, Sb, Se, Tl, V. LRS fail for Ag. Ag LR = 100ppb. PC

9/14/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 2e 9/14/20

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\SW26214A2.txt

Analysis Date: 09/14/20

Instrument: PEICP2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	15:13	1							V-333667(ICB/CCB)
CALST2 V-333670	1	CAL	15:17	2							V-333670(LLICV/LLCCV aq)
CALST3 V-333666	1	CAL	15:21	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	15:25	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	15:30	5						Ag failed	V-333673(CCV)
ICB V-333667	1	ICB	15:35	6							V-333667(ICB/CCB)
LRS V-333660	1	LRS	15:38	7		AQUEO	AQUEO	SW846	85272		V-333660(LRS 1/2 Fe)
ICS3 V-333666	1	ICS	15:45	8							V-333666(ICS3 - Middle Std)
RINSE	1	NA	15:49	9		AQUEO	AQUEO	SW846	85272		0
LLICV V-333670	1	LLICV	15:53	10		AQUEO	AQUEO	SW846	85272		V-333670(LLICV/LLCCV aq)
ICSA V-333668	1	ICSA	15:57	11							V-333668(ICSA)
CCV V-333673	1	CCV	16:03	12							V-333673(CCV)
CCB V-333667	1	CCB	16:07	13							V-333667(ICB/CCB)
MB 85272 (1)	1	MB	16:11	14		AQUEO	AQUEO	SW846	85272		0
LCS 85272	1	LCS	16:15	15		AQUEO	AQUEO	SW846	85272		0
LCS MR 85272	1	LCS	16:19	16		AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	SMP	16:23	17	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	MR	16:28	18	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	MS	16:32	19	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	MSD	16:37	20	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	PS	16:41	21	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	5	SD	16:46	22	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
CCV V-333673	1	CCV	16:50	23							V-333673(CCV)
CCB V-333667	1	CCB	16:54	24							V-333667(ICB/CCB)
AD19159-011	1	SMP	16:58	25	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19145-010	1	SMP	17:02	26	MET-PP6010W	AQUEO	AQUEO	SW846	85272		0
AD19168-001	1	SMP	17:06	27	MET-7-SOIL	AQUEO	AQUEO	SW846	85272		0
AD19168-002	1	SMP	17:10	28	MET-7-SOIL	AQUEO	AQUEO	SW846	85272		0
AD19168-003	1	SMP	17:14	29	MET-7-SOIL	AQUEO	AQUEO	SW846	85272		0
AD19168-004	1	SMP	17:18	30	MET-7-SOIL	AQUEO	AQUEO	SW846	85272		0
AD19168-005	1	SMP	17:22	31	MET-7-SOIL	AQUEO	AQUEO	SW846	85272		0
CCV V-333673	1	CCV	17:26	32							V-333673(CCV)
CCB V-333667	1	CCB	17:31	33							V-333667(ICB/CCB)
AD19168-006	1	SMP	17:34	34	MET-7-SOIL	AQUEO	AQUEO	SW846	85272		0
AD19168-007	1	SMP	17:38	35	MET-7-SOIL	AQUEO	AQUEO	SW846	85272		0
AD19206-001	1	SMP	17:43	36	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-002	1	SMP	17:47	37	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-003	1	SMP	17:51	38	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
CCV V-333673	1	CCV	17:56	39							V-333673(CCV)
CCB V-333667	1	CCB	18:00	40							V-333667(ICB/CCB)

Comments/Reviewedby:

olufemi
192.168.1.89 9/15/2020 11:43:54 AM

RUN IS OK
All elements reported, except Na, K

9/15/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD2A\SW26214B2.txt

Analysis Date: 09/14/20

Instrument: PEICPRAD2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	18:21	1							V-333667(ICB/CCB)
CALST2 V-333670	1	CAL	18:25	2							V-333670(LLICV/LLCCV aq)
CALST3 V-333666	1	CAL	18:29	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	18:33	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	18:37	5							V-333673(CCV)
ICB V-333667	1	ICB	18:41	6							V-333667(ICB/CCB)
LRS V-333662	1	LRS	18:44	7		AQUEO	AQUEO	SW846	85272		V-333662(LRS)
ICS3 V-333666	1	ICS	18:52	8							V-333666(ICS3 - Middle Std)
RINSE	1	NA	18:56	9		AQUEO	AQUEO	SW846	85272		0
LLICV V-333670	1	LLICV	19:00	10		AQUEO	AQUEO	SW846	85272		V-333670(LLICV/LLCCV aq)
ICSA V-333668	1	ICSA	19:03	11							V-333668(ICSA)
CCV V-333673	1	CCV	19:11	12							V-333673(CCV)
CCB V-333667	1	CCB	19:15	13							V-333667(ICB/CCB)
MB 85272 (1)	1	MB	19:18	14		AQUEO	AQUEO	SW846	85272		0
LCS 85272	1	LCS	19:22	15		AQUEO	AQUEO	SW846	85272		0
LCS MR 85272	1	LCS	19:26	16		AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	SMP	19:30	17	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	MR	19:34	18	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	MS	19:38	19	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	MSD	19:42	20	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	PS	19:46	21	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	5	SD	19:50	22	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
CCV V-333673	1	CCV	19:54	23							V-333673(CCV)
CCB V-333667	1	CCB	19:58	24							V-333667(ICB/CCB)
AD19159-011	1	SMP	20:01	25	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-001	1	SMP	20:05	26	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-002	1	SMP	20:09	27	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
AD19206-003	1	SMP	20:13	28	MET-TAL6010W	AQUEO	AQUEO	SW846	85272		0
CCV V-333673	1	CCV	20:17	29							V-333673(CCV)
CCB V-333667	1	CCB	20:21	30							V-333667(ICB/CCB)

Comments/Reviewedby:

olufemi
192.168.1.89 9/15/2020 11:59:33 AM

RUN IS OK
Na, K reported

9/16/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS3_7700SWA\A091420ANEW.txt

Analysis Date: 09/14/20 **Instrument:** MS3_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	18:11	1	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
CalBlk V-334455	1	ISBLK	18:16	2		AQUEO	AQUEO				V-334455(Cal Blk WARNING)
CalStd1 V-334456	1	CAL	18:21	3							V-334456(Cal Std-1 WARNING)
CalStd2 V-334457	1	CAL	18:25	4							V-334457(Cal Std-2 WARNING)
CalStd3 V-334458	1	CAL	18:30	5							V-334458(Cal Std-3 WARNING)
CalStd4 V-334459	1	CAL	18:34	6							V-334459(Cal Std-4 WARNING)
CalStd5 V-334460	1	CAL	18:39	7							V-334460(Cal Std-5 WARNING)
ICV V-334461	1	ICV	18:43	8							V-334461(ICV WARNING)
LLICV V-334467	1	LLICV	18:47	9	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		V-334467(LL-ICV/CCV AQ. WARNING)
ICB V-334462	1	ICB	18:52	10							V-334462(ICB/CCB WARNING)
ICSA V-334463	1	ICSA	18:57	11							V-334463(ICSA WARNING)
RINSE	1	NA	19:01	12	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
LRS V-334464	1	LRS	19:06	13	MET-TAL6020W	AQUEO	AQUEO	SW846	85272	Ag fail.	V-334464(LRS WARNING)
RINSE	1	NA	19:10	14	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
RINSE	1	NA	19:14	15	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
CCV V-334465	1	CCV	19:19	16							V-334465(CCV WARNING)
CCB V-334462	1	CCB	19:23	17							V-334462(ICB/CCB WARNING)
MB 85272	1	MB	19:28	18	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
LCSW 85272	1	LCS	19:32	19	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
LCSW MR 85272	1	LCS	19:37	20	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	SMP	19:41	21	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	MR	19:46	22	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	5	SD	19:50	23	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	MS	19:55	24	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	MSD	19:59	25	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	PS	20:03	26	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
RINSE	1	NA	20:08	27	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
CCV V-334465	1	CCV	20:12	28							V-334465(CCV WARNING)
CCB V-334462	1	CCB	20:17	29							V-334462(ICB/CCB WARNING)
AD19145-010	1	SMP	20:21	30	MET-PP6020W	AQUEO	AQUEO	SW846	85272		0
AD19159-011	1	SMP	20:26	31	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
AD19168-001	1	SMP	20:30	32	MET-7-6020	AQUEO	AQUEO	SW846	85272		0
AD19168-002	1	SMP	20:35	33	MET-7-6020	AQUEO	AQUEO	SW846	85272		0
AD19168-003	1	SMP	20:40	34	MET-7-6020	AQUEO	AQUEO	SW846	85272		0
AD19168-004	1	SMP	20:44	35	MET-7-6020	AQUEO	AQUEO	SW846	85272		0
AD19168-005	1	SMP	20:49	36	MET-7-6020	AQUEO	AQUEO	SW846	85272		0
AD19168-006	1	SMP	20:53	37	MET-7-6020	AQUEO	AQUEO	SW846	85272		0
AD19168-007	1	SMP	20:58	38	MET-7-6020	AQUEO	AQUEO	SW846	85272		0
RINSE	1	NA	21:02	39	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
CCV V-334465	1	CCV	21:07	40							V-334465(CCV WARNING)
CCB V-334462	1	CCB	21:11	41							V-334462(ICB/CCB WARNING)
AD19206-001	1	SMP	21:16	42	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
AD19206-002	1	SMP	21:20	43	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
AD19206-003	1	SMP	21:25	44	MET-TAL6020W	AQUEO	AQUEO	SW846	85272		0
AD19139-003	3	SMP	21:29	45	MET-TAL6020W	AQUEO	AQUEO	SW846	85268	Report Be.	0
AD19163-003	3	SMP	21:34	46	MET-TAL6020W	AQUEO	AQUEO	SW846	85268	Report Be.	0
RINSE	1	NA	21:39	47	MET-TAL6020W	AQUEO	AQUEO	SW846	85268		0
CCV V-334465	1	CCV	21:43	48							V-334465(CCV WARNING)
CCB V-334462	1	CCB	21:48	49							V-334462(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.87 9/15/2020 9:34:08 AM

B-26210 Report Be for 19139-003, 19163-003
B-26214 Run ok. PC

9/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 20 9/14/20

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26214SW.txt

Analysis Date: 09/15/20 **Instrument:** HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	10:12	1							0
2 PPB	1	CAL	10:14	2							0
5 PPB	1	CAL	10:15	3							0
1 PPB	1	CAL	10:16	4							0
2 PPB	1	CAL	10:18	5							0
5 PPB	1	CAL	10:19	6							0
10 PPB	1	CAL	10:20	7							0
25 PPB	1	CAL	10:22	8							0
ICV (2)	1	ICV	10:24	9							0
ICB	1	ICB	10:25	10							0
MB 85272 (1)	1	MB	10:27	11	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
LCS 85272	1	LCS	10:28	12	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
LCS MR 85272	1	LCS	10:30	13	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	SMP	10:32	14	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	MR	10:33	15	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	MS	10:34	16	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19206-004	1	MSD	10:36	17	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19159-011	1	SMP	10:37	18	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19145-010	1	SMP	10:39	19	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
CCV	1	CCV	10:40	20							0
CCB	1	CCB	10:42	21							0
AD19168-001	1	SMP	10:43	22	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19168-002	1	SMP	10:44	23	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19168-003	1	SMP	10:46	24	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19168-004	1	SMP	10:47	25	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19168-005	1	SMP	10:48	26	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19168-006	1	SMP	10:50	27	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19168-007	1	SMP	10:51	28	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19206-001	1	SMP	10:52	29	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
AD19206-002	1	SMP	10:54	30	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
CCV	1	CCV	10:55	31							0
CCB	1	CCB	10:57	32							0
AD19206-003	1	SMP	10:58	33	HG-W-7470	AQUEO	AQUEO	SW846	85272		0
CCV	1	CCV	10:59	34							0
CCB	1	CCB	11:01	35							0

Comments/Reviewedby:

dlucca
192.168.1.120 9/15/2020 11:32:42 AM

OK

9/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334789

S26211A3 26211/85269 SOIL

Analysis Begun

Start Time: 9/14/2020 10:04:34 AM
Logged In Analyst: usermet
Spectrometer Model: Optima 7300 DV, S/N No Serial #
Plasma On Time: 9/14/2020 8:58:44 AM
Technique: ICP Continuous
Autosampler Model: S10

Sample Information File: C:\pe\Administrator\Sample Information\09.14.20.sif
Batch ID:
Results Data Set: S26211A3
Results Library: C:\pe\Administrator\Results\Results.mdb

Reviewed 09/15/2020.

Method Loaded
Method Name: PE3 7300DV SOIL AX
IEC File: IEC072420A.iec
Method Description: 6010D (SOIL)
Method Last Saved: 9/10/2020 5:13:24 PM
MSF File:

Sequence No.: 1
Sample ID: CALBLK V-333667
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 9/14/2020 10:04:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-333667

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	382422.9	6064.86	1.59%	100	%
Y 371.029	173455.2	2430.95	1.40%	100	%
Ag 328.068†	-295.2	68.11	23.08%	[0.00]	mg/L
Al 308.215†	2328.4	33.07	1.42%	[0.00]	mg/L
As 188.979†	2.2	0.36	15.83%	[0.00]	mg/L
Ba 233.527†	-19.2	6.93	36.03%	[0.00]	mg/L
Be 313.107†	-1084.5	53.36	4.92%	[0.00]	mg/L
Ca 317.933†	2306.6	43.02	1.87%	[0.00]	mg/L
Cd 228.802†	132.3	7.55	5.71%	[0.00]	mg/L
Co 228.616†	-41.1	10.26	24.97%	[0.00]	mg/L
Cr 267.716†	25.7	17.62	68.67%	[0.00]	mg/L
Cu 327.393†	-314.6	19.23	6.11%	[0.00]	mg/L
Fe 273.955†	-876.0	12.21	1.39%	[0.00]	mg/L
K 404.721†	55271.0	1124.13	2.03%	[0.00]	mg/L
Mg 279.077†	-609.5	17.68	2.90%	[0.00]	mg/L
Mn 257.610†	4.7	14.20	303.26%	[0.00]	mg/L
Mo 202.031†	149.3	6.48	4.34%	[0.00]	mg/L
Na 330.237†	457.4	35.41	7.74%	[0.00]	mg/L
Ni 231.604†	8.2	6.00	72.92%	[0.00]	mg/L
Pb 220.353†	48.3	2.72	5.63%	[0.00]	mg/L
Sb 206.836†	42.2	3.38	7.99%	[0.00]	mg/L
Se 196.026†	42.2	11.12	26.36%	[0.00]	mg/L
Sn 189.927†	-7.6	3.40	44.44%	[0.00]	mg/L
Ti 334.940†	191.8	34.00	17.73%	[0.00]	mg/L
Tl 190.801†	-49.5	6.58	13.28%	[0.00]	mg/L
V 290.880†	1255.2	7.10	0.57%	[0.00]	mg/L
Zn 206.200†	-102.1	5.69	5.57%	[0.00]	mg/L
B 249.772†	160.8	4.57	2.84%	[0.00]	mg/L
Si 251.611†	269.4	12.90	4.79%	[0.00]	mg/L
Ce 413.764†	-1874.4	99.45	5.31%	[0.00]	mg/L

26211/85269

All elements reported, except Na, K.

QC — 19159.004
.004 MR
MS 1 19159.005 MS1
MS 2 19159.006 MS2
} Ca NOT reported

Sequence No.: 2 Autosampler Location: 5
Sample ID: CALST2 V-333671 Date Collected: 9/14/2020 10:08:19 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CALST2 V-333671

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	374363.6	2556.72	0.68%	97.9	%
Y 371.029	169074.2	940.48	0.56%	97.5	%
Ag 328.068†	1351.8	40.16	2.97%	[0.015]	mg/L
Al 308.215†	16329.3	143.42	0.88%	[2]	mg/L
As 188.979†	63.2	2.21	3.50%	[0.04]	mg/L
Ba 233.527†	8144.9	17.18	0.21%	[0.1]	mg/L
Be 313.107†	12790.7	106.36	0.83%	[0.012]	mg/L
Ca 317.933†	829495.9	5396.04	0.65%	[10]	mg/L
Cd 228.802†	332.9	12.22	3.67%	[0.012]	mg/L
Co 228.616†	598.3	1.51	0.25%	[0.025]	mg/L
Cr 267.716†	3092.5	32.14	1.04%	[0.05]	mg/L
Cu 327.393†	3157.6	63.82	2.02%	[0.05]	mg/L
Fe 273.955†	15824.8	101.79	0.64%	[2]	mg/L
K 404.721†	713.6	329.41	46.16%	[5]	mg/L
Mg 279.077†	46946.6	349.13	0.74%	[5]	mg/L
Mn 257.610†	25533.9	116.25	0.46%	[0.1]	mg/L
Mo 202.031†	246.3	6.87	2.79%	[0.025]	mg/L
Na 330.237†	704.2	32.50	4.62%	[2.5]	mg/L
Ni 231.604†	1258.0	7.31	0.58%	[0.05]	mg/L
Pb 220.353†	281.5	6.77	2.41%	[0.05]	mg/L
Sb 206.836†	78.1	9.67	12.38%	[0.04]	mg/L
Se 196.026†	90.1	2.18	2.42%	[0.05]	mg/L
Sn 189.927†	1058.6	18.50	1.75%	[0.2]	mg/L
Ti 334.940†	24716.8	157.35	0.64%	[0.1]	mg/L
Tl 190.801†	102.9	9.46	9.19%	[0.05]	mg/L
V 290.880†	4338.3	64.78	1.49%	[0.1]	mg/L
Zn 206.200†	4132.2	10.49	0.25%	[0.1]	mg/L
B 249.772†	11714.3	188.51	1.61%	[0.2]	mg/L
Si 251.611†	2962.4	6.42	0.22%	[0.1]	mg/L
Ce 413.764†	764.1	47.19	6.18%	[0.1]	mg/L

Sequence No.: 3 Autosampler Location: 3
Sample ID: CALST3 V-333666 Date Collected: 9/14/2020 10:12:10 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CALST3 V-333666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	381707.0	3340.10	0.88%	99.8	%
Y 371.029	144025.9	1123.53	0.78%	83.0	%
Ag 328.068†	7530.9	42.38	0.56%	[0.1]	mg/L
Al 308.215†	39320.5	55.31	0.14%	[5]	mg/L
As 188.979†	837.9	4.62	0.55%	[0.5]	mg/L
Ba 233.527†	37789.6	40.63	0.11%	[0.5]	mg/L
Be 313.107†	532487.3	7664.58	1.44%	[0.5]	mg/L
Ca 317.933†	3875256.3	52219.52	1.35%	[50]	mg/L
Cd 228.802†	12919.2	21.39	0.17%	[0.5]	mg/L
Co 228.616†	11458.2	30.48	0.27%	[0.5]	mg/L
Cr 267.716†	28374.0	67.39	0.24%	[0.5]	mg/L
Cu 327.393†	30862.9	115.28	0.37%	[0.5]	mg/L
Fe 273.955†	38227.5	28.80	0.08%	[5]	mg/L
K 404.721†	1539.5	488.61	31.74%	[50]	mg/L
Mg 279.077†	430820.0	5033.29	1.17%	[50]	mg/L
Mn 257.610†	124425.0	77.59	0.06%	[0.5]	mg/L
Mo 202.031†	4786.1	44.58	0.93%	[0.5]	mg/L
Na 330.237†	17327.9	22.41	0.13%	[50]	mg/L
Ni 231.604†	11688.7	27.03	0.23%	[0.5]	mg/L
Pb 220.353†	2761.4	30.31	1.10%	[0.5]	mg/L
Sb 206.836†	910.0	15.34	1.69%	[0.5]	mg/L
Se 196.026†	807.4	9.60	1.19%	[0.5]	mg/L
Sn 189.927†	2578.7	15.43	0.60%	[0.5]	mg/L
Ti 334.940†	123577.1	309.94	0.25%	[0.5]	mg/L
Tl 190.801†	917.1	13.65	1.49%	[0.5]	mg/L
V 290.880†	21253.1	92.95	0.44%	[0.5]	mg/L
Zn 206.200†	19878.4	47.76	0.24%	[0.5]	mg/L
B 249.772†	30720.5	101.32	0.33%	[0.5]	mg/L
Si 251.611†	99025.5	9.15	0.01%	[5]	mg/L
Ce 413.764†	30960.9	527.81	1.70%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-333665
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 9/14/2020 10:16:15 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST4 V-333665

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	366232.3	3415.94	0.93%	95.8	%
Y 371.029	113705.5	832.24	0.73%	65.6	%
Ag 328.068†	15293.8	19.74	0.13%	[0.2]	mg/L
Al 308.215†	79335.8	181.71	0.23%	[10]	mg/L
As 188.979†	1676.2	7.97	0.48%	[1]	mg/L
Ba 233.527†	76125.5	161.48	0.21%	[1]	mg/L
Be 313.107†	1089050.9	11582.76	1.06%	[1]	mg/L
Ca 317.933†	7916892.0	82280.63	1.04%	[100]	mg/L
Cd 228.802†	27212.3	88.84	0.33%	[1]	mg/L
Co 228.616†	23586.6	77.25	0.33%	[1]	mg/L
Cr 267.716†	57078.3	99.11	0.17%	[1]	mg/L
Cu 327.393†	62421.8	86.43	0.14%	[1]	mg/L
Fe 273.955†	76374.2	164.01	0.21%	[10]	mg/L
K 404.721†	5347.5	603.85	11.29%	[100]	mg/L
Mg 279.077†	866544.1	10161.79	1.17%	[100]	mg/L
Mn 257.610†	249677.8	262.84	0.11%	[1]	mg/L
Mo 202.031†	9617.9	42.68	0.44%	[1]	mg/L
Na 330.237†	37009.9	180.27	0.49%	[100]	mg/L
Ni 231.604†	24193.2	106.38	0.44%	[1]	mg/L
Pb 220.353†	5437.5	18.39	0.34%	[1]	mg/L
Sb 206.836†	1824.0	8.05	0.44%	[1]	mg/L
Se 196.026†	1624.4	4.34	0.27%	[1]	mg/L
Sn 189.927†	5158.7	25.82	0.50%	[1]	mg/L
Ti 334.940†	249761.8	186.59	0.07%	[1]	mg/L
Tl 190.801†	1801.8	9.32	0.52%	[1]	mg/L
V 290.880†	43713.1	206.35	0.47%	[1]	mg/L
Zn 206.200†	39830.6	24.79	0.06%	[1]	mg/L
B 249.772†	63365.9	204.70	0.32%	[1]	mg/L
Si 251.611†	200546.8	315.38	0.16%	[10]	mg/L
Ce 413.764†	62533.4	2136.98	3.42%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	70.3	75860	0.00000	0.999850	
Al 308.215	3	Lin, Calc Int	126.1	7911	0.00000	0.999958	
As 188.979	3	Lin, Calc Int	-1.8	1678	0.00000	0.999998	
Ba 233.527	3	Lin, Calc Int	185.4	75820	0.00000	0.999960	
Be 313.107	3	Lin, Calc Int	-2317.6	1087000	0.00000	0.999935	
Ca 317.933	3	Lin, Calc Int	1338.8	78850	0.00000	0.999906	
Cd 228.802	3	Lin, Calc Int	-122.2	27090	0.00000	0.999654	
Co 228.616	3	Lin, Calc Int	-57.2	23520	0.00000	0.999888	
Cr 267.716	3	Lin, Calc Int	77.3	56930	0.00000	0.999984	
Cu 327.393	3	Lin, Calc Int	-47.3	62340	0.00000	0.999981	
Fe 273.955	3	Lin, Calc Int	238.0	7616	0.00000	0.999971	
K 404.721	3	Lin, Calc Int	-6.6	49.21	0.00000	0.962650	
Mg 279.077	3	Lin, Calc Int	1182.0	8642	0.00000	0.999984	
Mn 257.610	3	Lin, Calc Int	174.3	249300	0.00000	0.999995	
Mo 202.031	3	Lin, Calc Int	-1.5	9611	0.00000	0.999996	
Na 330.237	3	Lin, Calc Int	-314.8	369.2	0.00000	0.999485	
Ni 231.604	3	Lin, Calc Int	-52.9	24100	0.00000	0.999828	
Pb 220.353	3	Lin, Calc Int	12.1	5440	0.00000	0.999968	
Sb 206.836	3	Lin, Calc Int	2.0	1821	0.00000	0.999995	
Se 196.026	3	Lin, Calc Int	3.1	1619	0.00000	0.999977	
Sn 189.927	3	Lin, Calc Int	11.1	5148	0.00000	0.999984	
Ti 334.940	3	Lin, Calc Int	-356.9	249700	0.00000	0.999985	
Tl 190.801	3	Lin, Calc Int	8.7	1798	0.00000	0.999951	
V 290.880	3	Lin, Calc Int	-126.6	43630	0.00000	0.999890	
Zn 206.200	3	Lin, Calc Int	59.3	39750	0.00000	0.999991	
B 249.772	3	Lin, Calc Int	-587.9	63620	0.00000	0.999807	
Si 251.611	3	Lin, Calc Int	207.3	19980	0.00000	0.999962	

Ce 413.764	3	Lin, Calc Int	7.3	6240	0.00000	0.999982

Sequence No.: 5
Sample ID: ICV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 10:20:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	376617.7	98.5	%	1.70				1.73%
Y 371.029	142011.4	81.9	%	1.51				1.84%
Ag 328.068†	7675.0	0.100248	mg/L	0.0007104	0.100248	mg/L	0.0007104	0.71%
QC value within limits for Ag 328.068 Recovery = 100.25%								
Al 308.215†	39162.8	4.94987	mg/L	0.017662	4.94987	mg/L	0.017662	0.36%
QC value within limits for Al 308.215 Recovery = 99.00%								
As 188.979†	838.1	0.501334	mg/L	0.0089476	0.501334	mg/L	0.0089476	1.78%
QC value within limits for As 188.979 Recovery = 100.27%								
Ba 233.527†	37679.1	0.494484	mg/L	0.0006486	0.494484	mg/L	0.0006486	0.13%
QC value within limits for Ba 233.527 Recovery = 98.90%								
Be 313.107†	541365.6	0.500152	mg/L	0.0098044	0.500152	mg/L	0.0098044	1.96%
QC value within limits for Be 313.107 Recovery = 100.03%								
Ca 317.933†	4099660.4	51.9750	mg/L	1.00460	51.9750	mg/L	1.00460	1.93%
QC value within limits for Ca 317.933 Recovery = 103.95%								
Cd 228.802†	12915.9	0.481370	mg/L	0.0017392	0.481370	mg/L	0.0017392	0.36%
QC value within limits for Cd 228.802 Recovery = 96.27%								
Co 228.616†	12032.4	0.513958	mg/L	0.0081479	0.513958	mg/L	0.0081479	1.59%
QC value within limits for Co 228.616 Recovery = 102.79%								
Cr 267.716†	28624.3	0.501473	mg/L	0.0006544	0.501473	mg/L	0.0006544	0.13%
QC value within limits for Cr 267.716 Recovery = 100.29%								
Cu 327.393†	31079.6	0.499285	mg/L	0.0019372	0.499285	mg/L	0.0019372	0.39%
QC value within limits for Cu 327.393 Recovery = 99.86%								
Fe 273.955†	38426.4	5.01413	mg/L	0.021356	5.01413	mg/L	0.021356	0.43%
QC value within limits for Fe 273.955 Recovery = 100.28%								
K 404.721†	2491.5	0.811989	mg/L	21.9040516	0.811989	mg/L	21.9040516	>999.9%
QC value less than the lower limit for K 404.721 Recovery = 1.62%								
Mg 279.077†	447079.4	51.5937	mg/L	1.06794	51.5937	mg/L	1.06794	2.07%
QC value within limits for Mg 279.077 Recovery = 103.19%								
Mn 257.610†	123997.5	0.496609	mg/L	0.0012461	0.496609	mg/L	0.0012461	0.25%
QC value within limits for Mn 257.610 Recovery = 99.32%								
Mo 202.031†	4812.2	0.500867	mg/L	0.0074710	0.500867	mg/L	0.0074710	1.49%
QC value within limits for Mo 202.031 Recovery = 100.17%								
Na 330.237†	17924.7	49.4043	mg/L	0.30093	49.4043	mg/L	0.30093	0.61%
QC value within limits for Na 330.237 Recovery = 98.81%								
Ni 231.604†	11691.3	0.487358	mg/L	0.0004567	0.487358	mg/L	0.0004567	0.09%
QC value within limits for Ni 231.604 Recovery = 97.47%								
Pb 220.353†	2777.1	0.505756	mg/L	0.0092555	0.505756	mg/L	0.0092555	1.83%
QC value within limits for Pb 220.353 Recovery = 101.15%								
Sb 206.836†	921.9	0.523010	mg/L	0.0121005	0.523010	mg/L	0.0121005	2.31%
QC value within limits for Sb 206.836 Recovery = 104.60%								
Se 196.026†	811.0	0.500340	mg/L	0.0065614	0.500340	mg/L	0.0065614	1.31%
QC value within limits for Se 196.026 Recovery = 100.07%								
Sn 189.927†	2619.4	0.506653	mg/L	0.0075143	0.506653	mg/L	0.0075143	1.48%
QC value within limits for Sn 189.927 Recovery = 101.33%								
Ti 334.940†	124066.6	0.498338	mg/L	0.0012681	0.498338	mg/L	0.0012681	0.25%
QC value within limits for Ti 334.940 Recovery = 99.67%								
Tl 190.801†	897.5	0.533195	mg/L	0.0116029	0.533195	mg/L	0.0116029	2.18%
QC value within limits for Tl 190.801 Recovery = 106.64%								
V 290.880†	21436.1	0.501814	mg/L	0.0033847	0.501814	mg/L	0.0033847	0.67%
QC value within limits for V 290.880 Recovery = 100.36%								
Zn 206.200†	20019.2	0.502104	mg/L	0.0001589	0.502104	mg/L	0.0001589	0.03%
QC value within limits for Zn 206.200 Recovery = 100.42%								
B 249.772†	31242.2	0.529726	mg/L	0.0019391	0.529726	mg/L	0.0019391	0.37%
QC value within limits for B 249.772 Recovery = 105.95%								
Si 251.611†	101659.5	5.06967	mg/L	0.013042	5.06967	mg/L	0.013042	0.26%
QC value within limits for Si 251.611 Recovery = 101.39%								
Ce 413.764†	32815.3	5.261	mg/L	0.1777	5.261	mg/L	0.1777	3.38%
QC value within limits for Ce 413.764 Recovery = 105.23%								

QC Failed. Continue with analysis.

Sequence No.: 6 Autosampler Location: 1
Sample ID: ICB V-333667 Date Collected: 9/14/2020 10:24:25 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	382396.5	100.0	%	0.26				0.26%
Y 371.029	173859.4	100	%	0.1				0.15%
Ag 328.068†	15.6	-0.0007201	mg/L	0.00054248	-0.0007201	mg/L	0.00054248	75.34%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-19.8	-0.0185682	mg/L	0.00465489	-0.0185682	mg/L	0.00465489	25.07%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	5.8	0.0045302	mg/L	0.00392097	0.0045302	mg/L	0.00392097	86.55%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	14.8	-0.0022505	mg/L	0.00003842	-0.0022505	mg/L	0.00003842	1.71%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-38.9	0.0020962	mg/L	0.00005807	0.0020962	mg/L	0.00005807	2.77%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	96.5	-0.0157543	mg/L	0.00071544	-0.0157543	mg/L	0.00071544	4.54%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	-0.7	0.0044851	mg/L	0.00024139	0.0044851	mg/L	0.00024139	5.38%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.9	0.0024669	mg/L	0.00007056	0.0024669	mg/L	0.00007056	2.86%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	18.7	-0.0010283	mg/L	0.00014275	-0.0010283	mg/L	0.00014275	13.88%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-45.7	0.0000257	mg/L	0.00093451	0.0000257	mg/L	0.00093451	>999.9%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	18.6	-0.0288059	mg/L	0.00067245	-0.0288059	mg/L	0.00067245	2.33%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-158.2	-2.79428	mg/L	7.661652	-2.79428	mg/L	7.661652	274.19%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	18.5	-0.134622	mg/L	0.0005446	-0.134622	mg/L	0.0005446	0.40%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	0.6	-0.0006969	mg/L	0.00001742	-0.0006969	mg/L	0.00001742	2.50%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.6	0.0010541	mg/L	0.00059943	0.0010541	mg/L	0.00059943	56.86%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-3.8	0.842265	mg/L	0.0691338	0.842265	mg/L	0.0691338	8.21%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-6.6	0.0019224	mg/L	0.00053815	0.0019224	mg/L	0.00053815	27.99%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-5.4	-0.0032066	mg/L	0.00165664	-0.0032066	mg/L	0.00165664	51.66%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.0	0.0000209	mg/L	0.00142698	0.0000209	mg/L	0.00142698	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-2.3	-0.0033882	mg/L	0.00404842	-0.0033882	mg/L	0.00404842	119.49%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.5	-0.0018772	mg/L	0.00081072	-0.0018772	mg/L	0.00081072	43.19%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	10.1	0.0014698	mg/L	0.00003133	0.0014698	mg/L	0.00003133	2.13%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	5.9	-0.0016182	mg/L	0.00268839	-0.0016182	mg/L	0.00268839	166.14%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-3.2	0.0028471	mg/L	0.00049996	0.0028471	mg/L	0.00049996	17.56%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-8.6	-0.0017082	mg/L	0.00004321	-0.0017082	mg/L	0.00004321	2.53%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	243.2	0.0128936	mg/L	0.00078692	0.0128936	mg/L	0.00078692	6.10%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	23.8	-0.0092029	mg/L	0.00070283	-0.0092029	mg/L	0.00070283	7.64%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	-58.2	-0.011	mg/L	0.0087	-0.011	mg/L	0.0087	83.09%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: LRS V-333662
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 9/14/2020 10:28:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LRS V-333662

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	322765.9	84.4	%	0.29				0.34%
Y 371.029	144403.0	83.3	%	0.23				0.27%
Ag 328.068†	95314.5	1.25555	mg/L	0.002387	1.25555	mg/L	0.002387	0.19%
QC value greater than the upper limit for Ag 328.068 Recovery = 125.56%								
Al 308.215†	4035801.0	509.802	mg/L	1.3124	509.802	mg/L	1.3124	0.26%
QC value within limits for Al 308.215 Recovery = 101.96%								
As 188.979†	17933.8	10.7532	mg/L	0.13468	10.7532	mg/L	0.13468	1.25%
QC value within limits for As 188.979 Recovery = 107.53%								
Ba 233.527†	777275.2	10.2486	mg/L	0.03023	10.2486	mg/L	0.03023	0.30%
QC value within limits for Ba 233.527 Recovery = 102.49%								
Be 313.107†	5532067.1	5.09126	mg/L	0.056993	5.09126	mg/L	0.056993	1.12%
QC value within limits for Be 313.107 Recovery = 101.83%								
Ca 317.933†	37123001.1	470.778	mg/L	4.8258	470.778	mg/L	4.8258	1.03%
QC value within limits for Ca 317.933 Recovery = 94.16%								
Cd 228.802†	142040.4	5.24868	mg/L	0.019097	5.24868	mg/L	0.019097	0.36%
QC value within limits for Cd 228.802 Recovery = 104.97%								
Co 228.616†	112924.9	4.80315	mg/L	0.018890	4.80315	mg/L	0.018890	0.39%
QC value within limits for Co 228.616 Recovery = 96.06%								
Cr 267.716†	577825.3	10.1490	mg/L	0.02624	10.1490	mg/L	0.02624	0.26%
QC value within limits for Cr 267.716 Recovery = 101.49%								
Cu 327.393†	663244.8	10.6394	mg/L	0.00483	10.6394	mg/L	0.00483	0.05%
QC value within limits for Cu 327.393 Recovery = 106.39%								
Fe 273.955†	2919661.6	383.320	mg/L	1.2267	383.320	mg/L	1.2267	0.32%
QC value within limits for Fe 273.955 Recovery = 95.83%								
K 404.721†	67449.9	-2448.15	mg/L	11.910	-2448.15	mg/L	11.910	0.49%
QC value less than the lower limit for K 404.721 Recovery = -1224.08%								
Mg 279.077†	4304514.6	497.929	mg/L	1.6974	497.929	mg/L	1.6974	0.34%
QC value within limits for Mg 279.077 Recovery = 99.59%								
Mn 257.610†	2510532.9	10.0681	mg/L	0.02630	10.0681	mg/L	0.02630	0.26%
QC value within limits for Mn 257.610 Recovery = 100.68%								
Mo 202.031†	96081.3	9.99740	mg/L	0.035168	9.99740	mg/L	0.035168	0.35%
QC value within limits for Mo 202.031 Recovery = 99.97%								
Na 330.237†	439579.6	1191.52	mg/L	3.114	1191.52	mg/L	3.114	0.26%
QC value greater than the upper limit for Na 330.237 Recovery = 119.15%								
Ni 231.604†	229533.4	9.52728	mg/L	0.045278	9.52728	mg/L	0.045278	0.48%
QC value within limits for Ni 231.604 Recovery = 95.27%								
Pb 220.353†	53649.4	9.94191	mg/L	0.102228	9.94191	mg/L	0.102228	1.03%
QC value within limits for Pb 220.353 Recovery = 99.42%								
Sb 206.836†	9973.8	5.65342	mg/L	0.048581	5.65342	mg/L	0.048581	0.86%
QC value greater than the upper limit for Sb 206.836 Recovery = 113.07%								
Se 196.026†	8349.4	5.25887	mg/L	0.051683	5.25887	mg/L	0.051683	0.98%
QC value within limits for Se 196.026 Recovery = 105.18%								
Sn 189.927†	52262.9	10.1499	mg/L	0.10168	10.1499	mg/L	0.10168	1.00%
QC value within limits for Sn 189.927 Recovery = 101.50%								
Ti 334.940†	2596105.1	10.3993	mg/L	0.01899	10.3993	mg/L	0.01899	0.18%
QC value within limits for Ti 334.940 Recovery = 103.99%								
Tl 190.801†	9228.2	5.19707	mg/L	0.021674	5.19707	mg/L	0.021674	0.42%
QC value within limits for Tl 190.801 Recovery = 103.94%								
V 290.880†	457103.8	10.6104	mg/L	0.02194	10.6104	mg/L	0.02194	0.21%
QC value within limits for V 290.880 Recovery = 106.10%								
Zn 206.200†	390256.6	9.81568	mg/L	0.060008	9.81568	mg/L	0.060008	0.61%
QC value within limits for Zn 206.200 Recovery = 98.16%								
B 249.772†	104668.3	3.90222	mg/L	0.021580	3.90222	mg/L	0.021580	0.55%
QC value less than the lower limit for B 249.772 Recovery = 78.04%								
Si 251.611†	6448.1	0.154752	mg/L	0.0047362	0.154752	mg/L	0.0047362	3.06%
QC value less than the lower limit for Si 251.611 Recovery = 0.62%								
Ce 413.764†	904.7	0.455	mg/L	0.0116	0.455	mg/L	0.0116	2.55%
QC value less than the lower limit for Ce 413.764 Recovery = 1.82%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-333666
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 9/14/2020 10:32:28 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	380162.1	99.4	%	0.48				0.49%
Y 371.029	143666.9	82.8	%	0.44				0.53%
Ag 328.068†	7487.6	0.0977781	mg/L	0.00053612	0.0977781	mg/L	0.00053612	0.55%
QC value within limits for Ag 328.068 Recovery = 97.78%								
Al 308.215†	39184.7	4.95268	mg/L	0.004249	4.95268	mg/L	0.004249	0.09%
QC value within limits for Al 308.215 Recovery = 99.05%								
As 188.979†	841.1	0.503102	mg/L	0.0026948	0.503102	mg/L	0.0026948	0.54%
QC value within limits for As 188.979 Recovery = 100.62%								
Ba 233.527†	37793.5	0.495992	mg/L	0.0015853	0.495992	mg/L	0.0015853	0.32%
QC value within limits for Ba 233.527 Recovery = 99.20%								
Be 313.107†	539639.7	0.498564	mg/L	0.0054179	0.498564	mg/L	0.0054179	1.09%
QC value within limits for Be 313.107 Recovery = 99.71%								
Ca 317.933†	3936248.5	49.9026	mg/L	0.50151	49.9026	mg/L	0.50151	1.00%
QC value within limits for Ca 317.933 Recovery = 99.81%								
Cd 228.802†	12880.9	0.480077	mg/L	0.0010576	0.480077	mg/L	0.0010576	0.22%
QC value within limits for Cd 228.802 Recovery = 96.02%								
Co 228.616†	11397.8	0.486981	mg/L	0.0025607	0.486981	mg/L	0.0025607	0.53%
QC value within limits for Co 228.616 Recovery = 97.40%								
Cr 267.716†	28312.9	0.496003	mg/L	0.0004136	0.496003	mg/L	0.0004136	0.08%
QC value within limits for Cr 267.716 Recovery = 99.20%								
Cu 327.393†	30775.3	0.494404	mg/L	0.0007137	0.494404	mg/L	0.0007137	0.14%
QC value within limits for Cu 327.393 Recovery = 98.88%								
Fe 273.955†	38260.0	4.99229	mg/L	0.008001	4.99229	mg/L	0.008001	0.16%
QC value within limits for Fe 273.955 Recovery = 99.85%								
K 404.721†	1855.7	-11.8912	mg/L	9.66138	-11.8912	mg/L	9.66138	81.25%
QC value less than the lower limit for K 404.721 Recovery = -23.78%								
Mg 279.077†	437496.3	50.4849	mg/L	0.56887	50.4849	mg/L	0.56887	1.13%
QC value within limits for Mg 279.077 Recovery = 100.97%								
Mn 257.610†	124178.3	0.497334	mg/L	0.0003501	0.497334	mg/L	0.0003501	0.07%
QC value within limits for Mn 257.610 Recovery = 99.47%								
Mo 202.031†	4846.2	0.504404	mg/L	0.0004984	0.504404	mg/L	0.0004984	0.10%
QC value within limits for Mo 202.031 Recovery = 100.88%								
Na 330.237†	17343.2	47.8292	mg/L	0.14261	47.8292	mg/L	0.14261	0.30%
QC value within limits for Na 330.237 Recovery = 95.66%								
Ni 231.604†	11645.0	0.485435	mg/L	0.0015826	0.485435	mg/L	0.0015826	0.33%
QC value within limits for Ni 231.604 Recovery = 97.09%								
Pb 220.353†	2758.3	0.502297	mg/L	0.0025357	0.502297	mg/L	0.0025357	0.50%
QC value within limits for Pb 220.353 Recovery = 100.46%								
Sb 206.836†	910.2	0.516613	mg/L	0.0041730	0.516613	mg/L	0.0041730	0.81%
QC value within limits for Sb 206.836 Recovery = 103.32%								
Se 196.026†	815.9	0.503404	mg/L	0.0044722	0.503404	mg/L	0.0044722	0.89%
QC value within limits for Se 196.026 Recovery = 100.68%								
Sn 189.927†	2607.0	0.504246	mg/L	0.0021092	0.504246	mg/L	0.0021092	0.42%
QC value within limits for Sn 189.927 Recovery = 100.85%								
Ti 334.940†	123469.4	0.495946	mg/L	0.0000901	0.495946	mg/L	0.0000901	0.02%
QC value within limits for Ti 334.940 Recovery = 99.19%								
Tl 190.801†	928.3	0.550327	mg/L	0.0032379	0.550327	mg/L	0.0032379	0.59%
QC value greater than the upper limit for Tl 190.801 Recovery = 110.07%								
V 290.880†	21190.2	0.496238	mg/L	0.0023799	0.496238	mg/L	0.0023799	0.48%
QC value within limits for V 290.880 Recovery = 99.25%								
Zn 206.200†	19756.6	0.495500	mg/L	0.0012316	0.495500	mg/L	0.0012316	0.25%
QC value within limits for Zn 206.200 Recovery = 99.10%								
B 249.772†	30428.6	0.516810	mg/L	0.0033969	0.516810	mg/L	0.0033969	0.66%
QC value within limits for B 249.772 Recovery = 103.36%								
Si 251.611†	98644.5	4.91871	mg/L	0.008787	4.91871	mg/L	0.008787	0.18%
QC value within limits for Si 251.611 Recovery = 98.37%								
Ce 413.764†	32841.6	5.266	mg/L	0.1333	5.266	mg/L	0.1333	2.53%
QC value within limits for Ce 413.764 Recovery = 105.31%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 9/14/2020 10:36:33 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	387988.3	101	%	1.4				1.33%
Y 371.029	176590.0	102	%	1.4				1.35%
Ag 328.068†	9.8	-0.0007968	mg/L	0.00082833	-0.0007968	mg/L	0.00082833	103.96%
Al 308.215†	54.4	-0.0091566	mg/L	0.00217093	-0.0091566	mg/L	0.00217093	23.71%
As 188.979†	9.2	0.0065232	mg/L	0.00012517	0.0065232	mg/L	0.00012517	1.92%
Ba 233.527†	9.4	-0.0023221	mg/L	0.00018178	-0.0023221	mg/L	0.00018178	7.83%
Be 313.107†	-14.4	0.0021188	mg/L	0.00005627	0.0021188	mg/L	0.00005627	2.66%
Ca 317.933†	1060.5	-0.0035285	mg/L	0.00085127	-0.0035285	mg/L	0.00085127	24.13%
Cd 228.802†	3.1	0.0046257	mg/L	0.00038148	0.0046257	mg/L	0.00038148	8.25%
Co 228.616†	-6.6	0.0021515	mg/L	0.00077531	0.0021515	mg/L	0.00077531	36.04%
Cr 267.716†	16.2	-0.0010737	mg/L	0.00020856	-0.0010737	mg/L	0.00020856	19.43%
Cu 327.393†	-33.5	0.0002206	mg/L	0.00080759	0.0002206	mg/L	0.00080759	366.13%
Fe 273.955†	79.6	-0.0207938	mg/L	0.00200754	-0.0207938	mg/L	0.00200754	9.65%
K 404.721†	-1268.3	-25.4338	mg/L	14.29219	-25.4338	mg/L	14.29219	56.19%
Mg 279.077†	42.4	-0.131862	mg/L	0.0024669	-0.131862	mg/L	0.0024669	1.87%
Mn 257.610†	30.5	-0.0005770	mg/L	0.00001038	-0.0005770	mg/L	0.00001038	1.80%
Mo 202.031†	15.1	0.0017265	mg/L	0.00034187	0.0017265	mg/L	0.00034187	19.80%
Na 330.237†	33.4	0.942985	mg/L	0.0475761	0.942985	mg/L	0.0475761	5.05%
Ni 231.604†	-14.7	0.0015859	mg/L	0.00052796	0.0015859	mg/L	0.00052796	33.29%
Pb 220.353†	-1.2	-0.0024454	mg/L	0.00060352	-0.0024454	mg/L	0.00060352	24.68%
Sb 206.836†	0.4	-0.0008108	mg/L	0.00401023	-0.0008108	mg/L	0.00401023	494.57%
Se 196.026†	1.7	-0.0009169	mg/L	0.00798216	-0.0009169	mg/L	0.00798216	870.55%
Sn 189.927†	23.7	0.0024436	mg/L	0.00096310	0.0024436	mg/L	0.00096310	39.41%
Ti 334.940†	35.1	0.0015700	mg/L	0.00005817	0.0015700	mg/L	0.00005817	3.71%
Tl 190.801†	-1.3	-0.0056172	mg/L	0.00277989	-0.0056172	mg/L	0.00277989	49.49%
V 290.880†	2.8	0.0029939	mg/L	0.00055230	0.0029939	mg/L	0.00055230	18.45%
Zn 206.200†	30.3	-0.0007308	mg/L	0.00044728	-0.0007308	mg/L	0.00044728	61.20%
B 249.772†	208.1	0.0123887	mg/L	0.00059322	0.0123887	mg/L	0.00059322	4.79%
Si 251.611†	61.3	-0.0073325	mg/L	0.00166201	-0.0073325	mg/L	0.00166201	22.67%
Ce 413.764†	-13.0	-0.003	mg/L	0.0015	-0.003	mg/L	0.0015	44.22%

Sequence No.: 10
Sample ID: LLICV V-333671
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 9/14/2020 10:40:18 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LLICV V-333671

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	379597.4	99.3	%	0.27				0.27%
Y 371.029	171761.0	99.0	%	0.29				0.29%
Ag 328.068†	1376.6	0.0172212	mg/L	0.00059703	0.0172212	mg/L	0.00059703	3.47%
QC value within limits for Ag 328.068 Recovery = 114.81%								
Al 308.215†	16215.5	2.03278	mg/L	0.007683	2.03278	mg/L	0.007683	0.38%
QC value within limits for Al 308.215 Recovery = 101.64%								
As 188.979†	75.0	0.0460796	mg/L	0.00340951	0.0460796	mg/L	0.00340951	7.40%
QC value within limits for As 188.979 Recovery = 115.20%								
Ba 233.527†	8146.2	0.104991	mg/L	0.0001496	0.104991	mg/L	0.0001496	0.14%
QC value within limits for Ba 233.527 Recovery = 104.99%								
Be 313.107†	12739.3	0.0138513	mg/L	0.00006820	0.0138513	mg/L	0.00006820	0.49%
QC value within limits for Be 313.107 Recovery = 115.43%								
Ca 317.933†	829548.4	10.5034	mg/L	0.01980	10.5034	mg/L	0.01980	0.19%
QC value within limits for Ca 317.933 Recovery = 105.03%								
Cd 228.802†	342.5	0.0171544	mg/L	0.00023664	0.0171544	mg/L	0.00023664	1.38%
QC value greater than the upper limit for Cd 228.802 Recovery = 142.95%								
Co 228.616†	607.9	0.0282737	mg/L	0.00071830	0.0282737	mg/L	0.00071830	2.54%
QC value within limits for Co 228.616 Recovery = 113.09%								
Cr 267.716†	3107.1	0.0532240	mg/L	0.00031104	0.0532240	mg/L	0.00031104	0.58%
QC value within limits for Cr 267.716 Recovery = 106.45%								
Cu 327.393†	3130.7	0.0509749	mg/L	0.00063939	0.0509749	mg/L	0.00063939	1.25%
QC value within limits for Cu 327.393 Recovery = 101.95%								
Fe 273.955†	15854.9	2.05050	mg/L	0.006396	2.05050	mg/L	0.006396	0.31%
QC value within limits for Fe 273.955 Recovery = 102.52%								
K 404.721†	178.0	-16.6772	mg/L	4.01627	-16.6772	mg/L	4.01627	24.08%
QC value less than the lower limit for K 404.721 Recovery = -333.54%								
Mg 279.077†	46911.0	5.29120	mg/L	0.012861	5.29120	mg/L	0.012861	0.24%
QC value within limits for Mg 279.077 Recovery = 105.82%								
Mn 257.610†	25368.4	0.101044	mg/L	0.0001821	0.101044	mg/L	0.0001821	0.18%
QC value within limits for Mn 257.610 Recovery = 101.04%								
Mo 202.031†	247.2	0.0258763	mg/L	0.00043007	0.0258763	mg/L	0.00043007	1.66%
QC value within limits for Mo 202.031 Recovery = 103.51%								
Na 330.237†	742.3	2.86332	mg/L	0.099922	2.86332	mg/L	0.099922	3.49%
QC value within limits for Na 330.237 Recovery = 114.53%								
Ni 231.604†	1252.6	0.0541742	mg/L	0.00049491	0.0541742	mg/L	0.00049491	0.91%
QC value within limits for Ni 231.604 Recovery = 108.35%								
Pb 220.353†	285.0	0.0503340	mg/L	0.00174024	0.0503340	mg/L	0.00174024	3.46%
QC value within limits for Pb 220.353 Recovery = 100.67%								
Sb 206.836†	73.5	0.0405926	mg/L	0.00296900	0.0405926	mg/L	0.00296900	7.31%
QC value within limits for Sb 206.836 Recovery = 101.48%								
Se 196.026†	92.2	0.0555636	mg/L	0.00392497	0.0555636	mg/L	0.00392497	7.06%
QC value within limits for Se 196.026 Recovery = 111.13%								
Sn 189.927†	1069.1	0.205515	mg/L	0.0013141	0.205515	mg/L	0.0013141	0.64%
QC value within limits for Sn 189.927 Recovery = 102.76%								
Ti 334.940†	24625.7	0.100060	mg/L	0.0000987	0.100060	mg/L	0.0000987	0.10%
QC value within limits for Ti 334.940 Recovery = 100.06%								
Tl 190.801†	112.0	0.0590761	mg/L	0.00237284	0.0590761	mg/L	0.00237284	4.02%
QC value within limits for Tl 190.801 Recovery = 118.15%								
V 290.880†	4382.6	0.103608	mg/L	0.0009257	0.103608	mg/L	0.0009257	0.89%
QC value within limits for V 290.880 Recovery = 103.61%								
Zn 206.200†	4138.1	0.102604	mg/L	0.0003751	0.102604	mg/L	0.0003751	0.37%
QC value within limits for Zn 206.200 Recovery = 102.60%								
B 249.772†	11654.6	0.204458	mg/L	0.0013908	0.204458	mg/L	0.0013908	0.68%
QC value within limits for B 249.772 Recovery = 102.23%								
Si 251.611†	2955.3	0.137124	mg/L	0.0003555	0.137124	mg/L	0.0003555	0.26%
QC value greater than the upper limit for Si 251.611 Recovery = 137.12%								
Ce 413.764†	894.2	0.144	mg/L	0.0115	0.144	mg/L	0.0115	7.97%
QC value greater than the upper limit for Ce 413.764 Recovery = 143.78%								

QC Failed. Continue with analysis.

Sequence No.: 11 Autosampler Location: 7
Sample ID: ICSA V-333668 Date Collected: 9/14/2020 10:44:10 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	345265.7	90.3	%	0.62				0.68%
Y 371.029	154051.2	88.8	%	0.55				0.62%
Ag 328.068†	-483.2	-0.0072955	mg/L	0.00020293	-0.0072955	mg/L	0.00020293	2.78%
Al 308.215†	3950780.1	499.408	mg/L	4.1638	499.408	mg/L	4.1638	0.83%
QC value within limits for Al 308.215 Recovery = 99.88%								
As 188.979†	-44.7	0.0068912	mg/L	0.00464562	0.0068912	mg/L	0.00464562	67.41%
Ba 233.527†	359.3	0.0022925	mg/L	0.00010474	0.0022925	mg/L	0.00010474	4.57%
Be 313.107†	-189.5	0.0019577	mg/L	0.00004222	0.0019577	mg/L	0.00004222	2.16%
Ca 317.933†	37357881.3	473.756	mg/L	1.7913	473.756	mg/L	1.7913	0.38%
QC value within limits for Ca 317.933 Recovery = 94.75%								
Cd 228.802†	-50.1	0.0026625	mg/L	0.00016226	0.0026625	mg/L	0.00016226	6.09%
Co 228.616†	40.0	0.0041299	mg/L	0.00049300	0.0041299	mg/L	0.00049300	11.94%
Cr 267.716†	-328.1	-0.0071213	mg/L	0.00021492	-0.0071213	mg/L	0.00021492	3.02%
Cu 327.393†	-2066.2	-0.0323841	mg/L	0.00031375	-0.0323841	mg/L	0.00031375	0.97%
Fe 273.955†	1448961.6	190.217	mg/L	2.0342	190.217	mg/L	2.0342	1.07%
QC value within limits for Fe 273.955 Recovery = 95.11%								
K 404.721†	32467.4	-1235.19	mg/L	38.315	-1235.19	mg/L	38.315	3.10%
Mg 279.077†	4345199.8	502.636	mg/L	5.7221	502.636	mg/L	5.7221	1.14%
QC value within limits for Mg 279.077 Recovery = 100.53%								
Mn 257.610†	-4438.3	-0.0184997	mg/L	0.00006791	-0.0184997	mg/L	0.00006791	0.37%
Mo 202.031†	62.2	0.0066265	mg/L	0.00039158	0.0066265	mg/L	0.00039158	5.91%
Na 330.237†	49.7	0.987279	mg/L	0.0738935	0.987279	mg/L	0.0738935	7.48%
Ni 231.604†	200.3	0.0105075	mg/L	0.00069710	0.0105075	mg/L	0.00069710	6.63%
Pb 220.353†	-270.3	0.0004104	mg/L	0.00092497	0.0004104	mg/L	0.00092497	225.38%
Sb 206.836†	-3.0	-0.0090326	mg/L	0.00776801	-0.0090326	mg/L	0.00776801	86.00%
Se 196.026†	-127.4	-0.0292187	mg/L	0.01450755	-0.0292187	mg/L	0.01450755	49.65%
Sn 189.927†	-79.2	-0.0175510	mg/L	0.00095997	-0.0175510	mg/L	0.00095997	5.47%
Ti 334.940†	-1688.0	-0.0053314	mg/L	0.00027358	-0.0053314	mg/L	0.00027358	5.13%
Tl 190.801†	-15.6	-0.0137105	mg/L	0.00185275	-0.0137105	mg/L	0.00185275	13.51%
V 290.880†	1229.7	0.0170999	mg/L	0.00055910	0.0170999	mg/L	0.00055910	3.27%
Zn 206.200†	-3.3	-0.0015737	mg/L	0.00019936	-0.0015737	mg/L	0.00019936	12.67%
B 249.772†	52373.2	1.94789	mg/L	0.011010	1.94789	mg/L	0.011010	0.57%
Si 251.611†	271.7	0.0031164	mg/L	0.00647432	0.0031164	mg/L	0.00647432	207.75%
Ce 413.764†	-127.8	0.133	mg/L	0.0128	0.133	mg/L	0.0128	9.62%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 10:49:15 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	380261.3	99.4	%	1.39				1.40%
Y 371.029	143934.6	83.0	%	1.06				1.28%
Ag 328.068†	7552.7	0.0986373	mg/L	0.00070700	0.0986373	mg/L	0.00070700	0.72%
QC value within limits for Ag 328.068 Recovery = 98.64%								
Al 308.215†	38992.2	4.92942	mg/L	0.009374	4.92942	mg/L	0.009374	0.19%
QC value within limits for Al 308.215 Recovery = 98.59%								
As 188.979†	837.5	0.500964	mg/L	0.0075119	0.500964	mg/L	0.0075119	1.50%
QC value within limits for As 188.979 Recovery = 100.19%								
Ba 233.527†	37480.7	0.491867	mg/L	0.0008952	0.491867	mg/L	0.0008952	0.18%
QC value within limits for Ba 233.527 Recovery = 98.37%								
Be 313.107†	533768.1	0.493163	mg/L	0.0086066	0.493163	mg/L	0.0086066	1.75%
QC value within limits for Be 313.107 Recovery = 98.63%								
Ca 317.933†	4006048.1	50.7878	mg/L	0.86456	50.7878	mg/L	0.86456	1.70%
QC value within limits for Ca 317.933 Recovery = 101.58%								
Cd 228.802†	12792.9	0.476829	mg/L	0.0010190	0.476829	mg/L	0.0010190	0.21%
QC value within limits for Cd 228.802 Recovery = 95.37%								
Co 228.616†	11324.1	0.483847	mg/L	0.0009615	0.483847	mg/L	0.0009615	0.20%
QC value within limits for Co 228.616 Recovery = 96.77%								
Cr 267.716†	28430.1	0.498061	mg/L	0.0006991	0.498061	mg/L	0.0006991	0.14%
QC value within limits for Cr 267.716 Recovery = 99.61%								
Cu 327.393†	30840.7	0.495454	mg/L	0.0004789	0.495454	mg/L	0.0004789	0.10%
QC value within limits for Cu 327.393 Recovery = 99.09%								
Fe 273.955†	38186.5	4.98263	mg/L	0.004914	4.98263	mg/L	0.004914	0.10%
QC value within limits for Fe 273.955 Recovery = 99.65%								
K 404.721†	1815.7	-12.6088	mg/L	20.07999	-12.6088	mg/L	20.07999	159.25%
QC value less than the lower limit for K 404.721 Recovery = -25.22%								
Mg 279.077†	443389.8	51.1668	mg/L	0.91081	51.1668	mg/L	0.91081	1.78%
QC value within limits for Mg 279.077 Recovery = 102.33%								
Mn 257.610†	123094.3	0.492987	mg/L	0.0003633	0.492987	mg/L	0.0003633	0.07%
QC value within limits for Mn 257.610 Recovery = 98.60%								
Mo 202.031†	4779.8	0.497493	mg/L	0.0086451	0.497493	mg/L	0.0086451	1.74%
QC value within limits for Mo 202.031 Recovery = 99.50%								
Na 330.237†	17747.3	48.9239	mg/L	0.33945	48.9239	mg/L	0.33945	0.69%
QC value within limits for Na 330.237 Recovery = 97.85%								
Ni 231.604†	11601.0	0.483609	mg/L	0.0012314	0.483609	mg/L	0.0012314	0.25%
QC value within limits for Ni 231.604 Recovery = 96.72%								
Pb 220.353†	2776.1	0.505429	mg/L	0.0071386	0.505429	mg/L	0.0071386	1.41%
QC value within limits for Pb 220.353 Recovery = 101.09%								
Sb 206.836†	921.4	0.522924	mg/L	0.0067218	0.522924	mg/L	0.0067218	1.29%
QC value within limits for Sb 206.836 Recovery = 104.58%								
Se 196.026†	802.7	0.495198	mg/L	0.0195474	0.495198	mg/L	0.0195474	3.95%
QC value within limits for Se 196.026 Recovery = 99.04%								
Sn 189.927†	2619.0	0.506589	mg/L	0.0105259	0.506589	mg/L	0.0105259	2.08%
QC value within limits for Sn 189.927 Recovery = 101.32%								
Ti 334.940†	123256.7	0.495094	mg/L	0.0002936	0.495094	mg/L	0.0002936	0.06%
QC value within limits for Ti 334.940 Recovery = 99.02%								
Tl 190.801†	883.7	0.526572	mg/L	0.0089636	0.526572	mg/L	0.0089636	1.70%
QC value within limits for Tl 190.801 Recovery = 105.31%								
V 290.880†	21269.3	0.497940	mg/L	0.0018199	0.497940	mg/L	0.0018199	0.37%
QC value within limits for V 290.880 Recovery = 99.59%								
Zn 206.200†	19837.6	0.497536	mg/L	0.0005730	0.497536	mg/L	0.0005730	0.12%
QC value within limits for Zn 206.200 Recovery = 99.51%								
B 249.772†	30582.7	0.519175	mg/L	0.0026205	0.519175	mg/L	0.0026205	0.50%
QC value within limits for B 249.772 Recovery = 103.84%								
Si 251.611†	100543.8	5.01388	mg/L	0.005479	5.01388	mg/L	0.005479	0.11%
QC value within limits for Si 251.611 Recovery = 100.28%								
Ce 413.764†	33815.6	5.422	mg/L	0.0398	5.422	mg/L	0.0398	0.73%
QC value within limits for Ce 413.764 Recovery = 108.43%								

QC Failed. Continue with analysis.

Sequence No.: 13 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 9/14/2020 10:53:19 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	390440.6	102	%	1.0				0.99%
Y 371.029	177645.7	102	%	0.9				0.87%
Ag 328.068†	44.1	-0.0003444	mg/L	0.00025538	-0.0003444	mg/L	0.00025538	74.16%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	42.4	-0.0106139	mg/L	0.00481621	-0.0106139	mg/L	0.00481621	45.38%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.7	0.0006390	mg/L	0.00060049	0.0006390	mg/L	0.00060049	93.97%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	5.6	-0.0023718	mg/L	0.00012406	-0.0023718	mg/L	0.00012406	5.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-34.4	0.0021003	mg/L	0.00004316	0.0021003	mg/L	0.00004316	2.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	1062.3	-0.0035065	mg/L	0.00012452	-0.0035065	mg/L	0.00012452	3.55%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	-2.7	0.0044127	mg/L	0.00029856	0.0044127	mg/L	0.00029856	6.77%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-10.5	0.0019823	mg/L	0.00032117	0.0019823	mg/L	0.00032117	16.20%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-1.6	-0.0013864	mg/L	0.00013391	-0.0013864	mg/L	0.00013391	9.66%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-32.7	0.0002334	mg/L	0.00126974	0.0002334	mg/L	0.00126974	543.91%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	113.1	-0.0164006	mg/L	0.00409245	-0.0164006	mg/L	0.00409245	24.95%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-1746.7	-35.1993	mg/L	12.96147	-35.1993	mg/L	12.96147	36.82%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	68.6	-0.128829	mg/L	0.0029685	-0.128829	mg/L	0.0029685	2.30%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	24.8	-0.0005997	mg/L	0.00001374	-0.0005997	mg/L	0.00001374	2.29%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	5.2	0.0006972	mg/L	0.00036138	0.0006972	mg/L	0.00036138	51.83%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-7.9	0.831260	mg/L	0.0478878	0.831260	mg/L	0.0478878	5.76%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-5.4	0.0019718	mg/L	0.00051080	0.0019718	mg/L	0.00051080	25.90%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-2.6	-0.0027133	mg/L	0.00385706	-0.0027133	mg/L	0.00385706	142.15%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-6.5	-0.0046001	mg/L	0.00141533	-0.0046001	mg/L	0.00141533	30.77%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.9	-0.0013751	mg/L	0.00876551	-0.0013751	mg/L	0.00876551	637.47%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	7.8	-0.0006421	mg/L	0.00050155	-0.0006421	mg/L	0.00050155	78.11%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	21.0	0.0015137	mg/L	0.00007710	0.0015137	mg/L	0.00007710	5.09%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	4.0	-0.0025770	mg/L	0.00095609	-0.0025770	mg/L	0.00095609	37.10%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	12.1	0.0031907	mg/L	0.00074232	0.0031907	mg/L	0.00074232	23.27%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	49.7	-0.0002409	mg/L	0.00026085	-0.0002409	mg/L	0.00026085	108.29%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	221.4	0.0126244	mg/L	0.00076841	0.0126244	mg/L	0.00076841	6.09%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	112.9	-0.0047367	mg/L	0.00028103	-0.0047367	mg/L	0.00028103	5.93%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	35.0	0.004	mg/L	0.0105	0.004	mg/L	0.0105	238.14%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 14
Sample ID: MB 85269 (100)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 9/14/2020 10:57:05 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85269 (100)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	391102.0	102	%	0.4				0.36%
Y 371.029	175669.6	101	%	0.3				0.33%
Ag 328.068†	65.9	-0.0000572	mg/L	0.00050069	-0.0000572	mg/L	0.00050069	875.07%
Al 308.215†	19.0	-0.0135318	mg/L	0.00093765	-0.0135318	mg/L	0.00093765	6.93%
As 188.979†	1.8	0.0022235	mg/L	0.00337407	0.0022235	mg/L	0.00337407	151.75%
Ba 233.527†	78.0	-0.0014167	mg/L	0.00017192	-0.0014167	mg/L	0.00017192	12.14%
Be 313.107†	-7.7	0.0021249	mg/L	0.00003645	0.0021249	mg/L	0.00003645	1.72%
Ca 317.933†	3617.3	0.0288960	mg/L	0.00057568	0.0288960	mg/L	0.00057568	1.99%
Cd 228.802†	6.4	0.0047484	mg/L	0.00005991	0.0047484	mg/L	0.00005991	1.26%
Co 228.616†	1.2	0.0024801	mg/L	0.00039377	0.0024801	mg/L	0.00039377	15.88%
Cr 267.716†	27.7	-0.0008714	mg/L	0.00026687	-0.0008714	mg/L	0.00026687	30.63%
Cu 327.393†	11.8	0.0009474	mg/L	0.00158467	0.0009474	mg/L	0.00158467	167.27%
Fe 273.955†	4536.9	0.564451	mg/L	0.0040206	0.564451	mg/L	0.0040206	0.71%
K 404.721†	-2080.2	-47.7638	mg/L	13.40987	-47.7638	mg/L	13.40987	28.08%
Mg 279.077†	120.4	-0.122837	mg/L	0.0020885	-0.122837	mg/L	0.0020885	1.70%
Mn 257.610†	635.6	0.0018499	mg/L	0.00001303	0.0018499	mg/L	0.00001303	0.70%
Mo 202.031†	3.3	0.0005036	mg/L	0.00016564	0.0005036	mg/L	0.00016564	32.89%
Na 330.237†	42.7	0.968360	mg/L	0.0673987	0.968360	mg/L	0.0673987	6.96%
Ni 231.604†	1.0	0.0022354	mg/L	0.00029969	0.0022354	mg/L	0.00029969	13.41%
Pb 220.353†	-13.0	-0.0046223	mg/L	0.00174976	-0.0046223	mg/L	0.00174976	37.85%
Sb 206.836†	6.2	0.0023696	mg/L	0.00417625	0.0023696	mg/L	0.00417625	176.24%
Se 196.026†	0.6	-0.0014217	mg/L	0.00095148	-0.0014217	mg/L	0.00095148	66.93%
Sn 189.927†	66.1	0.0106758	mg/L	0.00021653	0.0106758	mg/L	0.00021653	2.03%
Ti 334.940†	87.4	0.0017794	mg/L	0.00008354	0.0017794	mg/L	0.00008354	4.69%
Tl 190.801†	1.7	-0.0038336	mg/L	0.00524517	-0.0038336	mg/L	0.00524517	136.82%
V 290.880†	-27.7	0.0022317	mg/L	0.00036918	0.0022317	mg/L	0.00036918	16.54%
Zn 206.200†	133.7	0.0018719	mg/L	0.00008750	0.0018719	mg/L	0.00008750	4.67%
B 249.772†	264.4	0.0167054	mg/L	0.00001585	0.0167054	mg/L	0.00001585	0.09%
Si 251.611†	245.8	0.0019172	mg/L	0.00082411	0.0019172	mg/L	0.00082411	42.99%
Ce 413.764†	52.9	0.008	mg/L	0.0093	0.008	mg/L	0.0093	119.98%

Sequence No.: 15
Sample ID: LCS 85269
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 9/14/2020 11:00:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 85269

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	379217.5	99.2	%	0.81				0.82%
Y 371.029	197567.3	114	%	1.1				0.95%
Ag 328.068†	69073.9	0.909637	mg/L	0.0017478	0.909637	mg/L	0.0017478	0.19%
Al 308.215†	682425.7	86.1827	mg/L	0.60784	86.1827	mg/L	0.60784	0.71%
As 188.979†	655.9	0.415478	mg/L	0.0051063	0.415478	mg/L	0.0051063	1.23%
Ba 233.527†	552290.1	7.28141	mg/L	0.007082	7.28141	mg/L	0.007082	0.10%
Be 313.107†	1741656.4	1.60434	mg/L	0.013822	1.60434	mg/L	0.013822	0.86%
Ca 317.933†	14200536.3	180.074	mg/L	2.3464	180.074	mg/L	2.3464	1.30%
Cd 228.802†	42807.9	1.58499	mg/L	0.002105	1.58499	mg/L	0.002105	0.13%
Co 228.616†	55236.5	2.35067	mg/L	0.005088	2.35067	mg/L	0.005088	0.22%
Cr 267.716†	109873.1	1.92874	mg/L	0.001998	1.92874	mg/L	0.001998	0.10%
Cu 327.393†	112821.8	1.81046	mg/L	0.000505	1.81046	mg/L	0.000505	0.03%
Fe 273.955†	1051234.9	137.996	mg/L	1.4854	137.996	mg/L	1.4854	1.08%
K 404.721†	19147.0	-985.608	mg/L	19.6758	-985.608	mg/L	19.6758	2.00%
Mg 279.077†	570521.4	65.8769	mg/L	0.21801	65.8769	mg/L	0.21801	0.33%
Mn 257.610†	1254909.5	5.03228	mg/L	0.044854	5.03228	mg/L	0.044854	0.89%
Mo 202.031†	16155.9	1.68118	mg/L	0.017503	1.68118	mg/L	0.017503	1.04%
Na 330.237†	2730.8	8.24928	mg/L	0.078025	8.24928	mg/L	0.078025	0.95%
Ni 231.604†	11533.5	0.480810	mg/L	0.0039023	0.480810	mg/L	0.0039023	0.81%
Pb 220.353†	7316.1	1.35620	mg/L	0.016649	1.35620	mg/L	0.016649	1.23%
Sb 206.836†	691.8	0.410941	mg/L	0.0043947	0.410941	mg/L	0.0043947	1.07%
Se 196.026†	4893.3	3.05787	mg/L	0.034782	3.05787	mg/L	0.034782	1.14%
Sn 189.927†	6778.6	1.31459	mg/L	0.015448	1.31459	mg/L	0.015448	1.18%
Ti 334.940†	1008299.4	4.03984	mg/L	0.031060	4.03984	mg/L	0.031060	0.77%
Tl 190.801†	3640.0	2.04869	mg/L	0.021678	2.04869	mg/L	0.021678	1.06%
V 290.880†	109241.0	2.52320	mg/L	0.009738	2.52320	mg/L	0.009738	0.39%
Zn 206.200†	237879.6	5.98253	mg/L	0.018550	5.98253	mg/L	0.018550	0.31%
B 249.772†	189894.5	3.80331	mg/L	0.020148	3.80331	mg/L	0.020148	0.53%
Si 251.611†	78384.5	3.88617	mg/L	0.011337	3.88617	mg/L	0.011337	0.29%
Ce 413.764†	2273.0	0.475	mg/L	0.0107	0.475	mg/L	0.0107	2.25%

Sequence No.: 16
Sample ID: LCS MR 85269
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 9/14/2020 11:06:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS MR 85269

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	372970.5	97.5	%	0.72				0.74%
Y 371.029	195215.8	113	%	0.7				0.59%
Ag 328.068†	69239.0	0.911813	mg/L	0.0009779	0.911813	mg/L	0.0009779	0.11%
Al 308.215†	693179.9	87.5422	mg/L	0.05328	87.5422	mg/L	0.05328	0.06%
As 188.979†	665.8	0.421933	mg/L	0.0038074	0.421933	mg/L	0.0038074	0.90%
Ba 233.527†	553733.1	7.30044	mg/L	0.010519	7.30044	mg/L	0.010519	0.14%
Be 313.107†	1773298.0	1.63345	mg/L	0.001685	1.63345	mg/L	0.001685	0.10%
Ca 317.933†	14410037.4	182.731	mg/L	2.7108	182.731	mg/L	2.7108	1.48%
Cd 228.802†	42783.6	1.58409	mg/L	0.005768	1.58409	mg/L	0.005768	0.36%
Co 228.616†	55241.6	2.35089	mg/L	0.008025	2.35089	mg/L	0.008025	0.34%
Cr 267.716†	109146.7	1.91598	mg/L	0.002606	1.91598	mg/L	0.002606	0.14%
Cu 327.393†	112730.7	1.80900	mg/L	0.001642	1.80900	mg/L	0.001642	0.09%
Fe 273.955†	1077420.3	141.434	mg/L	0.1445	141.434	mg/L	0.1445	0.10%
K 404.721†	19397.5	-1014.77	mg/L	29.207	-1014.77	mg/L	29.207	2.88%
Mg 279.077†	556876.0	64.2981	mg/L	0.09827	64.2981	mg/L	0.09827	0.15%
Mn 257.610†	1290319.4	5.17430	mg/L	0.002657	5.17430	mg/L	0.002657	0.05%
Mo 202.031†	16436.5	1.71037	mg/L	0.012649	1.71037	mg/L	0.012649	0.74%
Na 330.237†	2660.2	8.05814	mg/L	0.104922	8.05814	mg/L	0.104922	1.30%
Ni 231.604†	11577.9	0.482653	mg/L	0.0023893	0.482653	mg/L	0.0023893	0.50%
Pb 220.353†	7413.3	1.37422	mg/L	0.010744	1.37422	mg/L	0.010744	0.78%
Sb 206.836†	665.2	0.396817	mg/L	0.0050084	0.396817	mg/L	0.0050084	1.26%
Se 196.026†	5083.1	3.17602	mg/L	0.021903	3.17602	mg/L	0.021903	0.69%
Sn 189.927†	6862.3	1.33085	mg/L	0.008270	1.33085	mg/L	0.008270	0.62%
Ti 334.940†	1012767.2	4.05774	mg/L	0.000616	4.05774	mg/L	0.000616	0.02%
Tl 190.801†	3707.8	2.08711	mg/L	0.014317	2.08711	mg/L	0.014317	0.69%
V 290.880†	109078.6	2.51969	mg/L	0.001065	2.51969	mg/L	0.001065	0.04%
Zn 206.200†	235038.7	5.91107	mg/L	0.016655	5.91107	mg/L	0.016655	0.28%
B 249.772†	189788.6	3.82180	mg/L	0.007883	3.82180	mg/L	0.007883	0.21%
Si 251.611†	71538.7	3.54309	mg/L	0.007291	3.54309	mg/L	0.007291	0.21%
Ce 413.764†	2873.3	0.574	mg/L	0.0161	0.574	mg/L	0.0161	2.80%

Sequence No.: 17
Sample ID: AD19159-004
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 23
Date Collected: 9/14/2020 11:10:58 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	374155.2	97.8	%	0.33				0.34%
Y 371.029	203561.3	117	%	0.4				0.34%
Ag 328.068†	1422.9	0.0178313	mg/L	0.00024551	0.0178313	mg/L	0.00024551	1.38%
Al 308.215†	336149.2	42.4725	mg/L	0.07542	42.4725	mg/L	0.07542	0.18%
As 188.979†	89.5	0.0825279	mg/L	0.00235895	0.0825279	mg/L	0.00235895	2.86%
Ba 233.527†	211603.6	2.78828	mg/L	0.007898	2.78828	mg/L	0.007898	0.28%
Be 313.107†	2181.6	0.0041390	mg/L	0.00002269	0.0041390	mg/L	0.00002269	0.55%
Ca 317.933†	35006561.3	443.937	mg/L	2.5312	443.937	mg/L	2.5312	0.57%
Cd 228.802†	360.2	0.0178112	mg/L	0.00022327	0.0178112	mg/L	0.00022327	1.25%
Co 228.616†	1386.9	0.0613921	mg/L	0.00025503	0.0613921	mg/L	0.00025503	0.42%
Cr 267.716†	29984.1	0.525361	mg/L	0.0005965	0.525361	mg/L	0.0005965	0.11%
Cu 327.393†	46107.9	0.740344	mg/L	0.0019941	0.740344	mg/L	0.0019941	0.27%
Fe 273.955†	1257502.6	165.079	mg/L	0.5177	165.079	mg/L	0.5177	0.31%
K 404.721†	20865.5	-1220.51	mg/L	2.384	-1220.51	mg/L	2.384	0.20%
Mg 279.077†	457335.6	52.7805	mg/L	0.05939	52.7805	mg/L	0.05939	0.11%
Mn 257.610†	744825.1	2.98652	mg/L	0.006227	2.98652	mg/L	0.006227	0.21%
Mo 202.031†	108.5	0.0114472	mg/L	0.00001681	0.0114472	mg/L	0.00001681	0.15%
Na 330.237†	249.9	1.52948	mg/L	0.177828	1.52948	mg/L	0.177828	11.63%
Ni 231.604†	7305.5	0.305357	mg/L	0.0004094	0.305357	mg/L	0.0004094	0.13%
Pb 220.353†	18245.1	3.35601	mg/L	0.011274	3.35601	mg/L	0.011274	0.34%
Sb 206.836†	42.4	0.0196332	mg/L	0.00188207	0.0196332	mg/L	0.00188207	9.59%
Se 196.026†	-91.6	-0.0138854	mg/L	0.00184201	-0.0138854	mg/L	0.00184201	13.27%
Sn 189.927†	737.8	0.141155	mg/L	0.0023005	0.141155	mg/L	0.0023005	1.63%
Ti 334.940†	213344.4	0.855911	mg/L	0.0017138	0.855911	mg/L	0.0017138	0.20%
Tl 190.801†	-22.7	-0.0104887	mg/L	0.00289443	-0.0104887	mg/L	0.00289443	27.60%
V 290.880†	17586.0	0.393912	mg/L	0.0005832	0.393912	mg/L	0.0005832	0.15%
Zn 206.200†	141426.8	3.55620	mg/L	0.019484	3.55620	mg/L	0.019484	0.55%
B 249.772†	47383.3	1.72204	mg/L	0.007106	1.72204	mg/L	0.007106	0.41%
Si 251.611†	74612.5	3.72371	mg/L	0.005727	3.72371	mg/L	0.005727	0.15%
Ce 413.764†	1285.6	0.339	mg/L	0.0037	0.339	mg/L	0.0037	1.10%

Sequence No.: 18
Sample ID: AD19159-004 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 9/14/2020 11:15:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-004 MR

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	372520.1	97.4	%	1.24				1.27%
Y 371.029	195134.8	112	%	1.2				1.11%
Ag 328.068†	2014.6	0.0256317	mg/L	0.00034519	0.0256317	mg/L	0.00034519	1.35%
Al 308.215†	263598.4	33.3005	mg/L	0.06929	33.3005	mg/L	0.06929	0.21%
As 188.979†	71.3	0.0712442	mg/L	0.00220077	0.0712442	mg/L	0.00220077	3.09%
Ba 233.527†	471720.2	6.21882	mg/L	0.010267	6.21882	mg/L	0.010267	0.17%
Be 313.107†	2106.3	0.0040697	mg/L	0.00007569	0.0040697	mg/L	0.00007569	1.86%
Ca 317.933†	41981950.4	532.399	mg/L	12.0689	532.399	mg/L	12.0689	2.27%
Cd 228.802†	310.9	0.0159887	mg/L	0.00048053	0.0159887	mg/L	0.00048053	3.01%
Co 228.616†	1025.6	0.0460319	mg/L	0.00039463	0.0460319	mg/L	0.00039463	0.86%
Cr 267.716†	33890.6	0.593985	mg/L	0.0010486	0.593985	mg/L	0.0010486	0.18%
Cu 327.393†	39919.2	0.641075	mg/L	0.0013970	0.641075	mg/L	0.0013970	0.22%
Fe 273.955†	1236298.3	162.295	mg/L	0.1897	162.295	mg/L	0.1897	0.12%
K 404.721†	19496.0	-1220.61	mg/L	38.898	-1220.61	mg/L	38.898	3.19%
Mg 279.077†	439321.6	50.6961	mg/L	0.12537	50.6961	mg/L	0.12537	0.25%
Mn 257.610†	661462.2	2.65218	mg/L	0.001927	2.65218	mg/L	0.001927	0.07%
Mo 202.031†	376.0	0.0392832	mg/L	0.00086374	0.0392832	mg/L	0.00086374	2.20%
Na 330.237†	298.0	1.65981	mg/L	0.033777	1.65981	mg/L	0.033777	2.03%
Ni 231.604†	5927.1	0.248154	mg/L	0.0016688	0.248154	mg/L	0.0016688	0.67%
Pb 220.353†	12674.4	2.33110	mg/L	0.006020	2.33110	mg/L	0.006020	0.26%
Sb 206.836†	38.8	0.0174813	mg/L	0.00200427	0.0174813	mg/L	0.00200427	11.47%
Se 196.026†	-98.4	-0.0188402	mg/L	0.00885360	-0.0188402	mg/L	0.00885360	46.99%
Sn 189.927†	318.7	0.0597463	mg/L	0.00146983	0.0597463	mg/L	0.00146983	2.46%
Ti 334.940†	153860.2	0.617666	mg/L	0.0011298	0.617666	mg/L	0.0011298	0.18%
Tl 190.801†	-14.5	-0.0076165	mg/L	0.00132518	-0.0076165	mg/L	0.00132518	17.40%
V 290.880†	17848.8	0.400585	mg/L	0.0015020	0.400585	mg/L	0.0015020	0.37%
Zn 206.200†	181867.2	4.57350	mg/L	0.004424	4.57350	mg/L	0.004424	0.10%
B 249.772†	45535.9	1.67668	mg/L	0.002413	1.67668	mg/L	0.002413	0.14%
Si 251.611†	59480.2	2.96592	mg/L	0.008031	2.96592	mg/L	0.008031	0.27%
Ce 413.764†	1141.4	0.313	mg/L	0.0074	0.313	mg/L	0.0074	2.37%

Sequence No.: 19
Sample ID: AD19159-005 MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 9/14/2020 11:20:05 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-005 MS1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	370025.5	96.8	%	0.44				0.46%
Y 371.029	203049.9	117	%	0.7				0.56%
Ag 328.068†	9933.3	0.130019	mg/L	0.0003758	0.130019	mg/L	0.0003758	0.29%
Al 308.215†	396265.9	50.0596	mg/L	0.08183	50.0596	mg/L	0.08183	0.16%
As 188.979†	887.3	0.559763	mg/L	0.0034497	0.559763	mg/L	0.0034497	0.62%
Ba 233.527†	414463.3	5.46369	mg/L	0.007323	5.46369	mg/L	0.007323	0.13%
Be 313.107†	529810.6	0.489522	mg/L	0.0001947	0.489522	mg/L	0.0001947	0.04%
Ca 317.933†	34973878.7	443.522	mg/L	1.9383	443.522	mg/L	1.9383	0.44%
Cd 228.802†	13229.3	0.492941	mg/L	0.0014656	0.492941	mg/L	0.0014656	0.30%
Co 228.616†	12497.8	0.533742	mg/L	0.0015562	0.533742	mg/L	0.0015562	0.29%
Cr 267.716†	53828.1	0.944218	mg/L	0.0007123	0.944218	mg/L	0.0007123	0.08%
Cu 327.393†	77635.7	1.24606	mg/L	0.003601	1.24606	mg/L	0.003601	0.29%
Fe 273.955†	1338148.3	175.668	mg/L	0.6802	175.668	mg/L	0.6802	0.39%
K 404.721†	22831.0	-1286.06	mg/L	32.562	-1286.06	mg/L	32.562	2.53%
Mg 279.077†	898818.0	103.863	mg/L	0.2484	103.863	mg/L	0.2484	0.24%
Mn 257.610†	868386.8	3.48208	mg/L	0.007733	3.48208	mg/L	0.007733	0.22%
Mo 202.031†	4567.5	0.475404	mg/L	0.0013531	0.475404	mg/L	0.0013531	0.28%
Na 330.237†	19443.7	53.5187	mg/L	0.12999	53.5187	mg/L	0.12999	0.24%
Ni 231.604†	19186.4	0.798386	mg/L	0.0012168	0.798386	mg/L	0.0012168	0.15%
Pb 220.353†	16479.0	3.03295	mg/L	0.008026	3.03295	mg/L	0.008026	0.26%
Sb 206.836†	520.2	0.291148	mg/L	0.0006753	0.291148	mg/L	0.0006753	0.23%
Se 196.026†	665.5	0.456606	mg/L	0.0028676	0.456606	mg/L	0.0028676	0.63%
Sn 189.927†	2703.4	0.522972	mg/L	0.0024083	0.522972	mg/L	0.0024083	0.46%
Ti 334.940†	316145.1	1.26765	mg/L	0.002021	1.26765	mg/L	0.002021	0.16%
Tl 190.801†	875.8	0.496270	mg/L	0.0022943	0.496270	mg/L	0.0022943	0.46%
V 290.880†	38480.1	0.879401	mg/L	0.0033516	0.879401	mg/L	0.0033516	0.38%
Zn 206.200†	159702.4	4.01593	mg/L	0.011714	4.01593	mg/L	0.011714	0.29%
B 249.772†	77772.7	2.26181	mg/L	0.004707	2.26181	mg/L	0.004707	0.21%
Si 251.611†	79421.4	3.95708	mg/L	0.009157	3.95708	mg/L	0.009157	0.23%
Ce 413.764†	5247.3	0.982	mg/L	0.0136	0.982	mg/L	0.0136	1.38%

Sequence No.: 20
Sample ID: AD19159-006 MS2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 9/14/2020 11:25:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-006 MS2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	367973.4	96.2	%	1.00				1.04%
Y 371.029	194438.2	112	%	1.2				1.07%
Ag 328.068†	10410.2	0.136306	mg/L	0.0018362	0.136306	mg/L	0.0018362	1.35%
Al 308.215†	355336.4	44.8848	mg/L	0.07254	44.8848	mg/L	0.07254	0.16%
As 188.979†	875.9	0.550225	mg/L	0.0057445	0.550225	mg/L	0.0057445	1.04%
Ba 233.527†	355529.0	4.68643	mg/L	0.010211	4.68643	mg/L	0.010211	0.22%
Be 313.107†	530918.1	0.490541	mg/L	0.0014275	0.490541	mg/L	0.0014275	0.29%
Ca 317.933†	42113644.6	534.069	mg/L	3.9680	534.069	mg/L	3.9680	0.74%
Cd 228.802†	13194.7	0.491662	mg/L	0.0062465	0.491662	mg/L	0.0062465	1.27%
Co 228.616†	12132.2	0.518201	mg/L	0.0072339	0.518201	mg/L	0.0072339	1.40%
Cr 267.716†	50451.3	0.884899	mg/L	0.0022622	0.884899	mg/L	0.0022622	0.26%
Cu 327.393†	75904.7	1.21830	mg/L	0.001529	1.21830	mg/L	0.001529	0.13%
Fe 273.955†	1214637.8	159.451	mg/L	0.2680	159.451	mg/L	0.2680	0.17%
K 404.721†	19984.9	-1182.34	mg/L	28.903	-1182.34	mg/L	28.903	2.44%
Mg 279.077†	923704.3	106.743	mg/L	0.5265	106.743	mg/L	0.5265	0.49%
Mn 257.610†	886253.6	3.55374	mg/L	0.007777	3.55374	mg/L	0.007777	0.22%
Mo 202.031†	4524.2	0.470901	mg/L	0.0062880	0.470901	mg/L	0.0062880	1.34%
Na 330.237†	19459.6	53.5617	mg/L	0.65747	53.5617	mg/L	0.65747	1.23%
Ni 231.604†	17761.7	0.739266	mg/L	0.0094251	0.739266	mg/L	0.0094251	1.27%
Pb 220.353†	16753.2	3.08285	mg/L	0.037038	3.08285	mg/L	0.037038	1.20%
Sb 206.836†	531.5	0.298080	mg/L	0.0032626	0.298080	mg/L	0.0032626	1.09%
Se 196.026†	663.9	0.451237	mg/L	0.0021285	0.451237	mg/L	0.0021285	0.47%
Sn 189.927†	3009.2	0.582384	mg/L	0.0087743	0.582384	mg/L	0.0087743	1.51%
Ti 334.940†	332826.7	1.33446	mg/L	0.001807	1.33446	mg/L	0.001807	0.14%
Tl 190.801†	863.1	0.489233	mg/L	0.0023350	0.489233	mg/L	0.0023350	0.48%
V 290.880†	40207.1	0.920112	mg/L	0.0041734	0.920112	mg/L	0.0041734	0.45%
Zn 206.200†	175777.5	4.42031	mg/L	0.017215	4.42031	mg/L	0.017215	0.39%
B 249.772†	72067.3	2.07704	mg/L	0.009434	2.07704	mg/L	0.009434	0.45%
Si 251.611†	78807.1	3.92640	mg/L	0.031527	3.92640	mg/L	0.031527	0.80%
Ce 413.764†	4864.9	0.908	mg/L	0.0177	0.908	mg/L	0.0177	1.95%

Sequence No.: 21
Sample ID: AD19159-004 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 9/14/2020 11:29:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-004 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	371279.0	97.1	%	0.44				0.45%
Y 371.029	199141.0	115	%	0.6				0.48%
Ag 328.068†	8052.3	0.105223	mg/L	0.0004508	0.105223	mg/L	0.0004508	0.43%
Al 308.215†	371151.9	46.8834	mg/L	0.07584	46.8834	mg/L	0.07584	0.16%
As 188.979†	946.4	0.593098	mg/L	0.0048568	0.593098	mg/L	0.0048568	0.82%
Ba 233.527†	245308.9	3.23280	mg/L	0.003034	3.23280	mg/L	0.003034	0.09%
Be 313.107†	580605.9	0.536250	mg/L	0.0003014	0.536250	mg/L	0.0003014	0.06%
Ca 317.933†	38127016.1	483.511	mg/L	4.2059	483.511	mg/L	4.2059	0.87%
Cd 228.802†	14246.1	0.530479	mg/L	0.0010120	0.530479	mg/L	0.0010120	0.19%
Co 228.616†	13276.3	0.566837	mg/L	0.0012659	0.566837	mg/L	0.0012659	0.22%
Cr 267.716†	59047.3	1.03590	mg/L	0.000913	1.03590	mg/L	0.000913	0.09%
Cu 327.393†	78540.8	1.26058	mg/L	0.002450	1.26058	mg/L	0.002450	0.19%
Fe 273.955†	1254385.6	164.669	mg/L	0.1479	164.669	mg/L	0.1479	0.09%
K 404.721†	19242.2	-1249.42	mg/L	21.959	-1249.42	mg/L	21.959	1.76%
Mg 279.077†	878136.7	101.470	mg/L	0.1915	101.470	mg/L	0.1915	0.19%
Mn 257.610†	851478.9	3.41427	mg/L	0.002004	3.41427	mg/L	0.002004	0.06%
Mo 202.031†	5014.5	0.521917	mg/L	0.0025444	0.521917	mg/L	0.0025444	0.49%
Na 330.237†	19109.0	52.6121	mg/L	0.13569	52.6121	mg/L	0.13569	0.26%
Ni 231.604†	19257.3	0.801326	mg/L	0.0013338	0.801326	mg/L	0.0013338	0.17%
Pb 220.353†	21153.3	3.89199	mg/L	0.011134	3.89199	mg/L	0.011134	0.29%
Sb 206.836†	993.6	0.552647	mg/L	0.0049703	0.552647	mg/L	0.0049703	0.90%
Se 196.026†	754.7	0.508748	mg/L	0.0083344	0.508748	mg/L	0.0083344	1.64%
Sn 189.927†	3336.7	0.645987	mg/L	0.0009074	0.645987	mg/L	0.0009074	0.14%
Ti 334.940†	338374.9	1.35668	mg/L	0.001950	1.35668	mg/L	0.001950	0.14%
Tl 190.801†	968.8	0.548674	mg/L	0.0004950	0.548674	mg/L	0.0004950	0.09%
V 290.880†	40405.2	0.925079	mg/L	0.0007084	0.925079	mg/L	0.0007084	0.08%
Zn 206.200†	159452.6	4.00965	mg/L	0.006978	4.00965	mg/L	0.006978	0.17%
B 249.772†	76409.7	2.17590	mg/L	0.002881	2.17590	mg/L	0.002881	0.13%
Si 251.611†	89562.4	4.46389	mg/L	0.003641	4.46389	mg/L	0.003641	0.08%
Ce 413.764†	5356.7	0.991	mg/L	0.0286	0.991	mg/L	0.0286	2.89%

Sequence No.: 22
Sample ID: AD19159-004 SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 9/14/2020 11:34:47 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-004 SD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	393752.7	103	%	1.2				1.15%
Y 371.029	183973.0	106	%	1.2				1.12%
Ag 328.068†	369.1	0.0039389	mg/L	0.00025414	0.0039389	mg/L	0.00025414	6.45%
Al 308.215†	68667.2	8.66353	mg/L	0.033500	8.66353	mg/L	0.033500	0.39%
As 188.979†	20.6	0.0192572	mg/L	0.00147285	0.0192572	mg/L	0.00147285	7.65%
Ba 233.527†	43462.2	0.570753	mg/L	0.0010466	0.570753	mg/L	0.0010466	0.18%
Be 313.107†	449.7	0.0025457	mg/L	0.00001569	0.0025457	mg/L	0.00001569	0.62%
Ca 317.933†	7630382.6	96.7517	mg/L	1.49325	96.7517	mg/L	1.49325	1.54%
Cd 228.802†	68.9	0.0070541	mg/L	0.00010978	0.0070541	mg/L	0.00010978	1.56%
Co 228.616†	281.4	0.0143930	mg/L	0.00010142	0.0143930	mg/L	0.00010142	0.70%
Cr 267.716†	6577.7	0.114191	mg/L	0.0016344	0.114191	mg/L	0.0016344	1.43%
Cu 327.393†	9246.2	0.149070	mg/L	0.0012289	0.149070	mg/L	0.0012289	0.82%
Fe 273.955†	265160.0	34.7842	mg/L	0.12041	34.7842	mg/L	0.12041	0.35%
K 404.721†	1455.3	-316.847	mg/L	12.6974	-316.847	mg/L	12.6974	4.01%
Mg 279.077†	97647.3	11.1618	mg/L	0.04836	11.1618	mg/L	0.04836	0.43%
Mn 257.610†	154285.3	0.618083	mg/L	0.0016281	0.618083	mg/L	0.0016281	0.26%
Mo 202.031†	12.0	0.0014128	mg/L	0.00039320	0.0014128	mg/L	0.00039320	27.83%
Na 330.237†	62.3	1.02124	mg/L	0.384172	1.02124	mg/L	0.384172	37.62%
Ni 231.604†	1525.4	0.0654944	mg/L	0.00118509	0.0654944	mg/L	0.00118509	1.81%
Pb 220.353†	3970.1	0.728444	mg/L	0.0089396	0.728444	mg/L	0.0089396	1.23%
Sb 206.836†	8.6	0.0030413	mg/L	0.00219115	0.0030413	mg/L	0.00219115	72.05%
Se 196.026†	-8.1	0.0024756	mg/L	0.00604468	0.0024756	mg/L	0.00604468	244.17%
Sn 189.927†	127.9	0.0226860	mg/L	0.00181733	0.0226860	mg/L	0.00181733	8.01%
Ti 334.940†	43086.6	0.173999	mg/L	0.0001373	0.173999	mg/L	0.0001373	0.08%
Tl 190.801†	1.9	-0.0023692	mg/L	0.00253408	-0.0023692	mg/L	0.00253408	106.96%
V 290.880†	3331.2	0.0766950	mg/L	0.00102811	0.0766950	mg/L	0.00102811	1.34%
Zn 206.200†	29666.2	0.744781	mg/L	0.0038181	0.744781	mg/L	0.0038181	0.51%
B 249.772†	9983.9	0.370143	mg/L	0.0013209	0.370143	mg/L	0.0013209	0.36%
Si 251.611†	14687.7	0.724704	mg/L	0.0045813	0.724704	mg/L	0.0045813	0.63%
Ce 413.764†	282.3	0.072	mg/L	0.0050	0.072	mg/L	0.0050	6.96%

Sequence No.: 23
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 6
Date Collected: 9/14/2020 11:38:50 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	389802.3	102	%	1.3				1.26%
Y 371.029	148103.2	85.4	%	1.15				1.35%
Ag 328.068†	7474.3	0.0976027	mg/L	0.00036494	0.0976027	mg/L	0.00036494	0.37%
QC value within limits for Ag 328.068 Recovery = 97.60%								
Al 308.215†	38159.5	4.82652	mg/L	0.014438	4.82652	mg/L	0.014438	0.30%
QC value within limits for Al 308.215 Recovery = 96.53%								
As 188.979†	817.4	0.488995	mg/L	0.0029712	0.488995	mg/L	0.0029712	0.61%
QC value within limits for As 188.979 Recovery = 97.80%								
Ba 233.527†	36783.7	0.482674	mg/L	0.0009676	0.482674	mg/L	0.0009676	0.20%
QC value within limits for Ba 233.527 Recovery = 96.53%								
Be 313.107†	520287.6	0.480761	mg/L	0.0057032	0.480761	mg/L	0.0057032	1.19%
QC value within limits for Be 313.107 Recovery = 96.15%								
Ca 317.933†	3917232.1	49.6614	mg/L	0.66016	49.6614	mg/L	0.66016	1.33%
QC value within limits for Ca 317.933 Recovery = 99.32%								
Cd 228.802†	12568.8	0.468555	mg/L	0.0012499	0.468555	mg/L	0.0012499	0.27%
QC value within limits for Cd 228.802 Recovery = 93.71%								
Co 228.616†	11134.6	0.475790	mg/L	0.0009292	0.475790	mg/L	0.0009292	0.20%
QC value within limits for Co 228.616 Recovery = 95.16%								
Cr 267.716†	27950.0	0.489628	mg/L	0.0010340	0.489628	mg/L	0.0010340	0.21%
QC value within limits for Cr 267.716 Recovery = 97.93%								
Cu 327.393†	30281.8	0.486489	mg/L	0.0014473	0.486489	mg/L	0.0014473	0.30%
QC value within limits for Cu 327.393 Recovery = 97.30%								
Fe 273.955†	37753.2	4.92575	mg/L	0.003095	4.92575	mg/L	0.003095	0.06%
QC value within limits for Fe 273.955 Recovery = 98.51%								
K 404.721†	599.7	-36.7543	mg/L	21.51784	-36.7543	mg/L	21.51784	58.55%
QC value less than the lower limit for K 404.721 Recovery = -73.51%								
Mg 279.077†	432456.8	49.9018	mg/L	0.71958	49.9018	mg/L	0.71958	1.44%
QC value within limits for Mg 279.077 Recovery = 99.80%								
Mn 257.610†	121176.3	0.485295	mg/L	0.0007448	0.485295	mg/L	0.0007448	0.15%
QC value within limits for Mn 257.610 Recovery = 97.06%								
Mo 202.031†	4692.8	0.488446	mg/L	0.0052719	0.488446	mg/L	0.0052719	1.08%
QC value within limits for Mo 202.031 Recovery = 97.69%								
Na 330.237†	17408.2	48.0053	mg/L	0.36334	48.0053	mg/L	0.36334	0.76%
QC value within limits for Na 330.237 Recovery = 96.01%								
Ni 231.604†	11392.2	0.474944	mg/L	0.0015076	0.474944	mg/L	0.0015076	0.32%
QC value within limits for Ni 231.604 Recovery = 94.99%								
Pb 220.353†	2702.0	0.491488	mg/L	0.0041026	0.491488	mg/L	0.0041026	0.83%
QC value within limits for Pb 220.353 Recovery = 98.30%								
Sb 206.836†	896.6	0.509668	mg/L	0.0048020	0.509668	mg/L	0.0048020	0.94%
QC value within limits for Sb 206.836 Recovery = 101.93%								
Se 196.026†	787.2	0.485629	mg/L	0.0047582	0.485629	mg/L	0.0047582	0.98%
QC value within limits for Se 196.026 Recovery = 97.13%								
Sn 189.927†	2555.4	0.494229	mg/L	0.0061000	0.494229	mg/L	0.0061000	1.23%
QC value within limits for Sn 189.927 Recovery = 98.85%								
Ti 334.940†	121114.0	0.486512	mg/L	0.0001096	0.486512	mg/L	0.0001096	0.02%
QC value within limits for Ti 334.940 Recovery = 97.30%								
Tl 190.801†	876.1	0.524498	mg/L	0.0075613	0.524498	mg/L	0.0075613	1.44%
QC value within limits for Tl 190.801 Recovery = 104.90%								
V 290.880†	20904.6	0.489443	mg/L	0.0014752	0.489443	mg/L	0.0014752	0.30%
QC value within limits for V 290.880 Recovery = 97.89%								
Zn 206.200†	19576.5	0.490967	mg/L	0.0006983	0.490967	mg/L	0.0006983	0.14%
QC value within limits for Zn 206.200 Recovery = 98.19%								
B 249.772†	30127.7	0.511689	mg/L	0.0023041	0.511689	mg/L	0.0023041	0.45%
QC value within limits for B 249.772 Recovery = 102.34%								
Si 251.611†	98848.9	4.92919	mg/L	0.002982	4.92919	mg/L	0.002982	0.06%
QC value within limits for Si 251.611 Recovery = 98.58%								
Ce 413.764†	35886.3	5.754	mg/L	0.1136	5.754	mg/L	0.1136	1.98%
QC value greater than the upper limit for Ce 413.764 Recovery = 115.07%								

QC Failed. Continue with analysis.

Sequence No.: 24 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 9/14/2020 11:42:54 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	394083.8	103	%	0.6				0.54%
Y 371.029	179977.4	104	%	0.7				0.70%
Ag 328.068†	30.3	-0.0005274	mg/L	0.00051615	-0.0005274	mg/L	0.00051615	97.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	24.2	-0.0128335	mg/L	0.00172193	-0.0128335	mg/L	0.00172193	13.42%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.0	0.0016481	mg/L	0.00211849	0.0016481	mg/L	0.00211849	128.54%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	13.6	-0.0022661	mg/L	0.00008187	-0.0022661	mg/L	0.00008187	3.61%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	4.7	0.0021364	mg/L	0.00002653	0.0021364	mg/L	0.00002653	1.24%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	1099.8	-0.0030307	mg/L	0.00051306	-0.0030307	mg/L	0.00051306	16.93%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	-0.6	0.0044873	mg/L	0.00033437	0.0044873	mg/L	0.00033437	7.45%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	5.9	0.0026809	mg/L	0.00041148	0.0026809	mg/L	0.00041148	15.35%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	7.5	-0.0012249	mg/L	0.00058133	-0.0012249	mg/L	0.00058133	47.46%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	6.8	0.0008672	mg/L	0.00077097	0.0008672	mg/L	0.00077097	88.91%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	120.0	-0.0154946	mg/L	0.00093140	-0.0154946	mg/L	0.00093140	6.01%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-2329.4	-47.0489	mg/L	4.45312	-47.0489	mg/L	4.45312	9.46%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	39.1	-0.132236	mg/L	0.0018914	-0.132236	mg/L	0.0018914	1.43%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	38.2	-0.0005459	mg/L	0.00002384	-0.0005459	mg/L	0.00002384	4.37%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	4.1	0.0005829	mg/L	0.00021960	0.0005829	mg/L	0.00021960	37.68%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	7.5	0.872780	mg/L	0.1049192	0.872780	mg/L	0.1049192	12.02%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-7.8	0.0018723	mg/L	0.00073333	0.0018723	mg/L	0.00073333	39.17%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.3	-0.0019986	mg/L	0.00184567	-0.0019986	mg/L	0.00184567	92.35%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-3.6	-0.0030106	mg/L	0.00461474	-0.0030106	mg/L	0.00461474	153.28%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	3.7	0.0003336	mg/L	0.00576058	0.0003336	mg/L	0.00576058	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	12.8	0.0003244	mg/L	0.00153435	0.0003244	mg/L	0.00153435	473.04%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	36.4	0.0015753	mg/L	0.00014768	0.0015753	mg/L	0.00014768	9.37%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	6.6	-0.0010881	mg/L	0.00359112	-0.0010881	mg/L	0.00359112	330.04%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-9.2	0.0026997	mg/L	0.00026610	0.0026997	mg/L	0.00026610	9.86%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	43.2	-0.0004065	mg/L	0.00028736	-0.0004065	mg/L	0.00028736	70.70%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	260.6	0.0132463	mg/L	0.00036276	0.0132463	mg/L	0.00036276	2.74%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	132.5	-0.0037511	mg/L	0.00008844	-0.0037511	mg/L	0.00008844	2.36%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	107.2	0.016	mg/L	0.0236	0.016	mg/L	0.0236	147.46%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 25
Sample ID: AD19159-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 9/14/2020 11:46:40 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	394650.9	103	%	1.2				1.18%
Y 371.029	213561.1	123	%	1.3				1.09%
Ag 328.068†	-187.1	-0.0033927	mg/L	0.00087934	-0.0033927	mg/L	0.00087934	25.92%
Al 308.215†	419385.1	52.9987	mg/L	0.93255	52.9987	mg/L	0.93255	1.76%
As 188.979†	125.1	0.102418	mg/L	0.0033627	0.102418	mg/L	0.0033627	3.28%
Ba 233.527†	42249.9	0.554765	mg/L	0.0010205	0.554765	mg/L	0.0010205	0.18%
Be 313.107†	1799.1	0.0037871	mg/L	0.00001055	0.0037871	mg/L	0.00001055	0.28%
Ca 317.933†	15501205.3	196.570	mg/L	3.3052	196.570	mg/L	3.3052	1.68%
Cd 228.802†	28.0	0.0055457	mg/L	0.00045378	0.0055457	mg/L	0.00045378	8.18%
Co 228.616†	2514.3	0.109320	mg/L	0.0009785	0.109320	mg/L	0.0009785	0.90%
Cr 267.716†	5508.2	0.0954019	mg/L	0.00089784	0.0954019	mg/L	0.00089784	0.94%
Cu 327.393†	19748.8	0.317536	mg/L	0.0013112	0.317536	mg/L	0.0013112	0.41%
Fe 273.955†	1197306.8	157.175	mg/L	2.8339	157.175	mg/L	2.8339	1.80%
K 404.721†	16050.8	-1239.61	mg/L	6.670	-1239.61	mg/L	6.670	0.54%
Mg 279.077†	388162.1	44.7766	mg/L	0.79503	44.7766	mg/L	0.79503	1.78%
Mn 257.610†	909204.6	3.64579	mg/L	0.066556	3.64579	mg/L	0.066556	1.83%
Mo 202.031†	12.3	0.0014431	mg/L	0.00045523	0.0014431	mg/L	0.00045523	31.55%
Na 330.237†	131.5	1.20889	mg/L	0.101553	1.20889	mg/L	0.101553	8.40%
Ni 231.604†	3110.2	0.131263	mg/L	0.0020113	0.131263	mg/L	0.0020113	1.53%
Pb 220.353†	43638.1	8.02499	mg/L	0.016766	8.02499	mg/L	0.016766	0.21%
Sb 206.836†	188.0	0.0989214	mg/L	0.00390986	0.0989214	mg/L	0.00390986	3.95%
Se 196.026†	-96.7	-0.0191735	mg/L	0.00339133	-0.0191735	mg/L	0.00339133	17.69%
Sn 189.927†	123.3	0.0217942	mg/L	0.00099053	0.0217942	mg/L	0.00099053	4.54%
Ti 334.940†	201789.4	0.809631	mg/L	0.0024733	0.809631	mg/L	0.0024733	0.31%
Tl 190.801†	-11.9	-0.0047732	mg/L	0.00658820	-0.0047732	mg/L	0.00658820	138.02%
V 290.880†	5052.4	0.107079	mg/L	0.0032009	0.107079	mg/L	0.0032009	2.99%
Zn 206.200†	42016.9	1.05547	mg/L	0.001317	1.05547	mg/L	0.001317	0.12%
B 249.772†	45574.7	1.64727	mg/L	0.014997	1.64727	mg/L	0.014997	0.91%
Si 251.611†	129407.8	6.46631	mg/L	0.018200	6.46631	mg/L	0.018200	0.28%
Ce 413.764†	1261.8	0.328	mg/L	0.0034	0.328	mg/L	0.0034	1.05%

Sequence No.: 26
Sample ID: AD19159-002
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 30
Date Collected: 9/14/2020 11:51:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	386781.8	101	%	0.4				0.43%
Y 371.029	205550.9	119	%	0.5				0.40%
Ag 328.068†	1706.4	0.0215683	mg/L	0.00101331	0.0215683	mg/L	0.00101331	4.70%
Al 308.215†	304305.0	38.4469	mg/L	0.08917	38.4469	mg/L	0.08917	0.23%
As 188.979†	104.9	0.0937144	mg/L	0.00319772	0.0937144	mg/L	0.00319772	3.41%
Ba 233.527†	252196.4	3.32364	mg/L	0.004952	3.32364	mg/L	0.004952	0.15%
Be 313.107†	2231.3	0.0041847	mg/L	0.00000716	0.0041847	mg/L	0.00000716	0.17%
Ca 317.933†	39072027.0	495.495	mg/L	2.9157	495.495	mg/L	2.9157	0.59%
Cd 228.802†	341.8	0.0171304	mg/L	0.00026170	0.0171304	mg/L	0.00026170	1.53%
Co 228.616†	1521.3	0.0671036	mg/L	0.00021066	0.0671036	mg/L	0.00021066	0.31%
Cr 267.716†	36088.7	0.632598	mg/L	0.0019938	0.632598	mg/L	0.0019938	0.32%
Cu 327.393†	55252.4	0.887026	mg/L	0.0008090	0.887026	mg/L	0.0008090	0.09%
Fe 273.955†	1346247.0	176.731	mg/L	0.4321	176.731	mg/L	0.4321	0.24%
K 404.721†	18126.1	-1392.27	mg/L	13.825	-1392.27	mg/L	13.825	0.99%
Mg 279.077†	476909.4	55.0453	mg/L	0.12608	55.0453	mg/L	0.12608	0.23%
Mn 257.610†	727836.9	2.91839	mg/L	0.007697	2.91839	mg/L	0.007697	0.26%
Mo 202.031†	80.2	0.0085088	mg/L	0.00045456	0.0085088	mg/L	0.00045456	5.34%
Na 330.237†	262.7	1.56417	mg/L	0.247849	1.56417	mg/L	0.247849	15.85%
Ni 231.604†	7005.2	0.292895	mg/L	0.0007733	0.292895	mg/L	0.0007733	0.26%
Pb 220.353†	12995.6	2.39058	mg/L	0.008411	2.39058	mg/L	0.008411	0.35%
Sb 206.836†	29.6	0.0120155	mg/L	0.00132272	0.0120155	mg/L	0.00132272	11.01%
Se 196.026†	-112.5	-0.0236903	mg/L	0.00223888	-0.0236903	mg/L	0.00223888	9.45%
Sn 189.927†	300.3	0.0561736	mg/L	0.00143653	0.0561736	mg/L	0.00143653	2.56%
Ti 334.940†	217464.9	0.872414	mg/L	0.0011720	0.872414	mg/L	0.0011720	0.13%
Tl 190.801†	-14.2	-0.0056940	mg/L	0.00106366	-0.0056940	mg/L	0.00106366	18.68%
V 290.880†	18304.1	0.409460	mg/L	0.0024549	0.409460	mg/L	0.0024549	0.60%
Zn 206.200†	147951.8	3.72034	mg/L	0.014124	3.72034	mg/L	0.014124	0.38%
B 249.772†	51747.2	1.85896	mg/L	0.009434	1.85896	mg/L	0.009434	0.51%
Si 251.611†	65687.4	3.27707	mg/L	0.004789	3.27707	mg/L	0.004789	0.15%
Ce 413.764†	1247.4	0.342	mg/L	0.0104	0.342	mg/L	0.0104	3.06%

Sequence No.: 27
Sample ID: AD19159-003
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 31
Date Collected: 9/14/2020 11:56:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-003

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	372273.9	97.3	%	0.84				0.87%
Y 371.029	196601.2	113	%	0.9				0.78%
Ag 328.068†	-188.3	-0.0034081	mg/L	0.00040546	-0.0034081	mg/L	0.00040546	11.90%
Al 308.215†	194536.6	24.5758	mg/L	0.02614	24.5758	mg/L	0.02614	0.11%
As 188.979†	23.5	0.0286114	mg/L	0.00372544	0.0286114	mg/L	0.00372544	13.02%
Ba 233.527†	131845.0	1.73639	mg/L	0.001703	1.73639	mg/L	0.001703	0.10%
Be 313.107†	1423.5	0.0034415	mg/L	0.00002240	0.0034415	mg/L	0.00002240	0.65%
Ca 317.933†	51146311.6	648.621	mg/L	1.8491	648.621	mg/L	1.8491	0.29%
Cd 228.802†	84.3	0.0076240	mg/L	0.00001467	0.0076240	mg/L	0.00001467	0.19%
Co 228.616†	573.3	0.0268024	mg/L	0.00116320	0.0268024	mg/L	0.00116320	4.34%
Cr 267.716†	4465.7	0.0770888	mg/L	0.00058131	0.0770888	mg/L	0.00058131	0.75%
Cu 327.393†	10063.7	0.162183	mg/L	0.0005635	0.162183	mg/L	0.0005635	0.35%
Fe 273.955†	606437.1	79.5939	mg/L	0.15920	79.5939	mg/L	0.15920	0.20%
K 404.721†	6909.0	-652.453	mg/L	11.1611	-652.453	mg/L	11.1611	1.71%
Mg 279.077†	279323.7	32.1831	mg/L	0.07188	32.1831	mg/L	0.07188	0.22%
Mn 257.610†	500182.4	2.00535	mg/L	0.001164	2.00535	mg/L	0.001164	0.06%
Mo 202.031†	17.5	0.0019820	mg/L	0.00052778	0.0019820	mg/L	0.00052778	26.63%
Na 330.237†	255.4	1.54437	mg/L	0.179992	1.54437	mg/L	0.179992	11.65%
Ni 231.604†	2117.6	0.0900706	mg/L	0.00126935	0.0900706	mg/L	0.00126935	1.41%
Pb 220.353†	4677.5	0.860012	mg/L	0.0021399	0.860012	mg/L	0.0021399	0.25%
Sb 206.836†	8.2	0.0022300	mg/L	0.00540389	0.0022300	mg/L	0.00540389	242.32%
Se 196.026†	-38.4	-0.0041371	mg/L	0.01102864	-0.0041371	mg/L	0.01102864	266.58%
Sn 189.927†	11.7	0.0001082	mg/L	0.00118248	0.0001082	mg/L	0.00118248	>999.9%
Ti 334.940†	131220.2	0.526989	mg/L	0.0004353	0.526989	mg/L	0.0004353	0.08%
Tl 190.801†	-8.0	-0.0043812	mg/L	0.00123984	-0.0043812	mg/L	0.00123984	28.30%
V 290.880†	3756.3	0.0831274	mg/L	0.00156233	0.0831274	mg/L	0.00156233	1.88%
Zn 206.200†	64999.0	1.63360	mg/L	0.003544	1.63360	mg/L	0.003544	0.22%
B 249.772†	23296.1	0.842151	mg/L	0.0016846	0.842151	mg/L	0.0016846	0.20%
Si 251.611†	45984.7	2.29108	mg/L	0.005135	2.29108	mg/L	0.005135	0.22%
Ce 413.764†	1364.7	0.282	mg/L	0.0022	0.282	mg/L	0.0022	0.79%

Sequence No.: 28
Sample ID: AD19159-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 9/14/2020 12:00:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-007

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	405928.3	106	%	2.3				2.19%
Y 371.029	224002.8	129	%	2.6				2.05%
Ag 328.068†	175.9	0.0013925	mg/L	0.00062062	0.0013925	mg/L	0.00062062	44.57%
Al 308.215†	382455.2	48.3299	mg/L	0.56421	48.3299	mg/L	0.56421	1.17%
As 188.979†	44.0	0.0557753	mg/L	0.00125606	0.0557753	mg/L	0.00125606	2.25%
Ba 233.527†	35877.9	0.470729	mg/L	0.0005175	0.470729	mg/L	0.0005175	0.11%
Be 313.107†	2061.9	0.0040288	mg/L	0.00005659	0.0040288	mg/L	0.00005659	1.40%
Ca 317.933†	11903218.6	150.940	mg/L	3.5735	150.940	mg/L	3.5735	2.37%
Cd 228.802†	78.2	0.0073973	mg/L	0.00039734	0.0073973	mg/L	0.00039734	5.37%
Co 228.616†	1372.7	0.0607868	mg/L	0.00107932	0.0607868	mg/L	0.00107932	1.78%
Cr 267.716†	6151.3	0.106700	mg/L	0.0013947	0.106700	mg/L	0.0013947	1.31%
Cu 327.393†	22683.2	0.364604	mg/L	0.0024523	0.364604	mg/L	0.0024523	0.67%
Fe 273.955†	1273288.0	167.151	mg/L	2.0373	167.151	mg/L	2.0373	1.22%
K 404.721†	15436.7	-1351.49	mg/L	14.507	-1351.49	mg/L	14.507	1.07%
Mg 279.077†	412568.3	47.6005	mg/L	0.49224	47.6005	mg/L	0.49224	1.03%
Mn 257.610†	873548.5	3.50278	mg/L	0.039011	3.50278	mg/L	0.039011	1.11%
Mo 202.031†	34.6	0.0037606	mg/L	0.00072906	0.0037606	mg/L	0.00072906	19.39%
Na 330.237†	11.4	0.883582	mg/L	0.1728737	0.883582	mg/L	0.1728737	19.57%
Ni 231.604†	5941.7	0.248763	mg/L	0.0031848	0.248763	mg/L	0.0031848	1.28%
Pb 220.353†	3040.9	0.561665	mg/L	0.0077863	0.561665	mg/L	0.0077863	1.39%
Sb 206.836†	5.0	-0.0019110	mg/L	0.00444045	-0.0019110	mg/L	0.00444045	232.36%
Se 196.026†	-100.9	-0.0190854	mg/L	0.00369834	-0.0190854	mg/L	0.00369834	19.38%
Sn 189.927†	46.7	0.0069183	mg/L	0.00108587	0.0069183	mg/L	0.00108587	15.70%
Ti 334.940†	188612.0	0.756853	mg/L	0.0010828	0.756853	mg/L	0.0010828	0.14%
Tl 190.801†	-10.4	-0.0042473	mg/L	0.00449350	-0.0042473	mg/L	0.00449350	105.80%
V 290.880†	6573.4	0.141236	mg/L	0.0027964	0.141236	mg/L	0.0027964	1.98%
Zn 206.200†	30758.0	0.772246	mg/L	0.0057565	0.772246	mg/L	0.0057565	0.75%
B 249.772†	48902.0	1.75807	mg/L	0.016869	1.75807	mg/L	0.016869	0.96%
Si 251.611†	50626.1	2.52334	mg/L	0.009663	2.52334	mg/L	0.009663	0.38%
Ce 413.764†	1324.8	0.347	mg/L	0.0158	0.347	mg/L	0.0158	4.55%

Sequence No.: 29
Sample ID: AD19159-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 9/14/2020 12:04:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-008

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	397558.5	104	%	0.6				0.55%
Y 371.029	192174.7	111	%	0.4				0.40%
Ag 328.068†	-67.0	-0.0018088	mg/L	0.00024135	-0.0018088	mg/L	0.00024135	13.34%
Al 308.215†	350262.2	44.2608	mg/L	0.15674	44.2608	mg/L	0.15674	0.35%
As 188.979†	42.0	0.0420620	mg/L	0.00242398	0.0420620	mg/L	0.00242398	5.76%
Ba 233.527†	40258.1	0.528496	mg/L	0.0006091	0.528496	mg/L	0.0006091	0.12%
Be 313.107†	87.2	0.0022122	mg/L	0.00002354	0.0022122	mg/L	0.00002354	1.06%
Ca 317.933†	6452094.5	81.8086	mg/L	0.25025	81.8086	mg/L	0.25025	0.31%
Cd 228.802†	26.3	0.0054801	mg/L	0.00015266	0.0054801	mg/L	0.00015266	2.79%
Co 228.616†	1137.1	0.0507708	mg/L	0.00046792	0.0507708	mg/L	0.00046792	0.92%
Cr 267.716†	2434.5	0.0414089	mg/L	0.00023599	0.0414089	mg/L	0.00023599	0.57%
Cu 327.393†	8248.1	0.133061	mg/L	0.0002768	0.133061	mg/L	0.0002768	0.21%
Fe 273.955†	713627.6	93.6680	mg/L	0.42917	93.6680	mg/L	0.42917	0.46%
K 404.721†	7748.4	-775.615	mg/L	16.2378	-775.615	mg/L	16.2378	2.09%
Mg 279.077†	144233.7	16.5522	mg/L	0.03376	16.5522	mg/L	0.03376	0.20%
Mn 257.610†	199181.6	0.798145	mg/L	0.0014705	0.798145	mg/L	0.0014705	0.18%
Mo 202.031†	24.9	0.0027531	mg/L	0.00073269	0.0027531	mg/L	0.00073269	26.61%
Na 330.237†	1115.9	3.87519	mg/L	0.158596	3.87519	mg/L	0.158596	4.09%
Ni 231.604†	2678.4	0.113341	mg/L	0.0005433	0.113341	mg/L	0.0005433	0.48%
Pb 220.353†	1383.0	0.256534	mg/L	0.0019075	0.256534	mg/L	0.0019075	0.74%
Sb 206.836†	10.7	0.0038780	mg/L	0.00482779	0.0038780	mg/L	0.00482779	124.49%
Se 196.026†	-55.8	-0.0110800	mg/L	0.00573746	-0.0110800	mg/L	0.00573746	51.78%
Sn 189.927†	40.5	0.0057145	mg/L	0.00138825	0.0057145	mg/L	0.00138825	24.29%
Ti 334.940†	258890.5	1.03833	mg/L	0.001298	1.03833	mg/L	0.001298	0.12%
Tl 190.801†	-9.6	-0.0025796	mg/L	0.00885256	-0.0025796	mg/L	0.00885256	343.18%
V 290.880†	3448.1	0.0750353	mg/L	0.00194205	0.0750353	mg/L	0.00194205	2.59%
Zn 206.200†	20582.5	0.516275	mg/L	0.0016119	0.516275	mg/L	0.0016119	0.31%
B 249.772†	29606.9	1.02388	mg/L	0.002325	1.02388	mg/L	0.002325	0.23%
Si 251.611†	51487.9	2.56649	mg/L	0.005366	2.56649	mg/L	0.005366	0.21%
Ce 413.764†	751.2	0.195	mg/L	0.0093	0.195	mg/L	0.0093	4.77%

Sequence No.: 30
Sample ID: AD19159-009
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 9/14/2020 12:08:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-009

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	382871.9	100	%	0.9				0.90%
Y 371.029	190657.7	110	%	0.9				0.86%
Ag 328.068†	-170.5	-0.0031743	mg/L	0.00006319	-0.0031743	mg/L	0.00006319	1.99%
Al 308.215†	420113.4	53.0907	mg/L	0.22637	53.0907	mg/L	0.22637	0.43%
As 188.979†	43.0	0.0462769	mg/L	0.00317085	0.0462769	mg/L	0.00317085	6.85%
Ba 233.527†	41266.8	0.541800	mg/L	0.0008018	0.541800	mg/L	0.0008018	0.15%
Be 313.107†	-65.5	0.0020718	mg/L	0.00002186	0.0020718	mg/L	0.00002186	1.05%
Ca 317.933†	9632012.1	122.136	mg/L	1.0123	122.136	mg/L	1.0123	0.83%
Cd 228.802†	18.8	0.0052045	mg/L	0.00032345	0.0052045	mg/L	0.00032345	6.21%
Co 228.616†	1186.4	0.0528688	mg/L	0.00051093	0.0528688	mg/L	0.00051093	0.97%
Cr 267.716†	3765.4	0.0647871	mg/L	0.00101174	0.0647871	mg/L	0.00101174	1.56%
Cu 327.393†	9417.7	0.151822	mg/L	0.0002449	0.151822	mg/L	0.0002449	0.16%
Fe 273.955†	874645.2	114.810	mg/L	0.3762	114.810	mg/L	0.3762	0.33%
K 404.721†	12011.1	-899.621	mg/L	8.0167	-899.621	mg/L	8.0167	0.89%
Mg 279.077†	164623.0	18.9114	mg/L	0.02573	18.9114	mg/L	0.02573	0.14%
Mn 257.610†	264500.2	1.06011	mg/L	0.002850	1.06011	mg/L	0.002850	0.27%
Mo 202.031†	38.2	0.0041373	mg/L	0.00036872	0.0041373	mg/L	0.00036872	8.91%
Na 330.237†	886.0	3.25252	mg/L	0.071844	3.25252	mg/L	0.071844	2.21%
Ni 231.604†	3303.1	0.139265	mg/L	0.0009430	0.139265	mg/L	0.0009430	0.68%
Pb 220.353†	1028.4	0.192253	mg/L	0.0022171	0.192253	mg/L	0.0022171	1.15%
Sb 206.836†	8.7	0.0027241	mg/L	0.00509718	0.0027241	mg/L	0.00509718	187.12%
Se 196.026†	-74.6	-0.0169994	mg/L	0.00611753	-0.0169994	mg/L	0.00611753	35.99%
Sn 189.927†	27.3	0.0031409	mg/L	0.00159009	0.0031409	mg/L	0.00159009	50.63%
Ti 334.940†	334485.9	1.34110	mg/L	0.002903	1.34110	mg/L	0.002903	0.22%
Tl 190.801†	-25.3	-0.0089963	mg/L	0.00478577	-0.0089963	mg/L	0.00478577	53.20%
V 290.880†	4493.4	0.0974487	mg/L	0.00067082	0.0974487	mg/L	0.00067082	0.69%
Zn 206.200†	17032.9	0.426982	mg/L	0.0021064	0.426982	mg/L	0.0021064	0.49%
B 249.772†	35445.2	1.23962	mg/L	0.007519	1.23962	mg/L	0.007519	0.61%
Si 251.611†	60345.8	3.00979	mg/L	0.016511	3.00979	mg/L	0.016511	0.55%
Ce 413.764†	1022.5	0.256	mg/L	0.0127	0.256	mg/L	0.0127	4.95%

Sequence No.: 31
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 12:13:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	395495.1	103	%	0.3				0.33%
Y 371.029	150169.9	86.6	%	0.35				0.40%
Ag 328.068†	7468.7	0.0975299	mg/L	0.00057327	0.0975299	mg/L	0.00057327	0.59%
QC value within limits for Ag 328.068 Recovery = 97.53%								
Al 308.215†	38334.3	4.85104	mg/L	0.003399	4.85104	mg/L	0.003399	0.07%
QC value within limits for Al 308.215 Recovery = 97.02%								
As 188.979†	808.7	0.483814	mg/L	0.0033325	0.483814	mg/L	0.0033325	0.69%
QC value within limits for As 188.979 Recovery = 96.76%								
Ba 233.527†	36949.0	0.484854	mg/L	0.0004981	0.484854	mg/L	0.0004981	0.10%
QC value within limits for Ba 233.527 Recovery = 96.97%								
Be 313.107†	517586.4	0.478276	mg/L	0.0029009	0.478276	mg/L	0.0029009	0.61%
QC value within limits for Be 313.107 Recovery = 95.66%								
Ca 317.933†	3951808.2	50.0999	mg/L	0.30013	50.0999	mg/L	0.30013	0.60%
QC value within limits for Ca 317.933 Recovery = 100.20%								
Cd 228.802†	12619.7	0.470434	mg/L	0.0007034	0.470434	mg/L	0.0007034	0.15%
QC value within limits for Cd 228.802 Recovery = 94.09%								
Co 228.616†	11189.5	0.478123	mg/L	0.0012639	0.478123	mg/L	0.0012639	0.26%
QC value within limits for Co 228.616 Recovery = 95.62%								
Cr 267.716†	28052.0	0.491419	mg/L	0.0011941	0.491419	mg/L	0.0011941	0.24%
QC value within limits for Cr 267.716 Recovery = 98.28%								
Cu 327.393†	30477.9	0.489635	mg/L	0.0014468	0.489635	mg/L	0.0014468	0.30%
QC value within limits for Cu 327.393 Recovery = 97.93%								
Fe 273.955†	38144.6	4.97713	mg/L	0.010395	4.97713	mg/L	0.010395	0.21%
QC value within limits for Fe 273.955 Recovery = 99.54%								
K 404.721†	-556.9	-60.7708	mg/L	5.36761	-60.7708	mg/L	5.36761	8.83%
QC value less than the lower limit for K 404.721 Recovery = -121.54%								
Mg 279.077†	430155.2	49.6355	mg/L	0.31082	49.6355	mg/L	0.31082	0.63%
QC value within limits for Mg 279.077 Recovery = 99.27%								
Mn 257.610†	121808.8	0.487831	mg/L	0.0006332	0.487831	mg/L	0.0006332	0.13%
QC value within limits for Mn 257.610 Recovery = 97.57%								
Mo 202.031†	4636.7	0.482610	mg/L	0.0009947	0.482610	mg/L	0.0009947	0.21%
QC value within limits for Mo 202.031 Recovery = 96.52%								
Na 330.237†	17402.1	47.9887	mg/L	0.17271	47.9887	mg/L	0.17271	0.36%
QC value within limits for Na 330.237 Recovery = 95.98%								
Ni 231.604†	11452.3	0.477437	mg/L	0.0011186	0.477437	mg/L	0.0011186	0.23%
QC value within limits for Ni 231.604 Recovery = 95.49%								
Pb 220.353†	2676.9	0.486518	mg/L	0.0032566	0.486518	mg/L	0.0032566	0.67%
QC value within limits for Pb 220.353 Recovery = 97.30%								
Sb 206.836†	889.3	0.506226	mg/L	0.0039363	0.506226	mg/L	0.0039363	0.78%
QC value within limits for Sb 206.836 Recovery = 101.25%								
Se 196.026†	785.5	0.484604	mg/L	0.0083634	0.484604	mg/L	0.0083634	1.73%
QC value within limits for Se 196.026 Recovery = 96.92%								
Sn 189.927†	2535.9	0.490446	mg/L	0.0017469	0.490446	mg/L	0.0017469	0.36%
QC value within limits for Sn 189.927 Recovery = 98.09%								
Ti 334.940†	121927.9	0.489772	mg/L	0.0004491	0.489772	mg/L	0.0004491	0.09%
QC value within limits for Ti 334.940 Recovery = 97.95%								
Tl 190.801†	863.7	0.520218	mg/L	0.0036197	0.520218	mg/L	0.0036197	0.70%
QC value within limits for Tl 190.801 Recovery = 104.04%								
V 290.880†	21096.3	0.493737	mg/L	0.0011062	0.493737	mg/L	0.0011062	0.22%
QC value within limits for V 290.880 Recovery = 98.75%								
Zn 206.200†	19703.8	0.494170	mg/L	0.0001835	0.494170	mg/L	0.0001835	0.04%
QC value within limits for Zn 206.200 Recovery = 98.83%								
B 249.772†	30141.9	0.512213	mg/L	0.0033394	0.512213	mg/L	0.0033394	0.65%
QC value within limits for B 249.772 Recovery = 102.44%								
Si 251.611†	99456.4	4.95969	mg/L	0.005415	4.95969	mg/L	0.005415	0.11%
QC value within limits for Si 251.611 Recovery = 99.19%								
Ce 413.764†	38262.5	6.134	mg/L	0.0237	6.134	mg/L	0.0237	0.39%
QC value greater than the upper limit for Ce 413.764 Recovery = 122.69%								

QC Failed. Continue with analysis.

Sequence No.: 32 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 9/14/2020 12:17:44 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	396260.8	104	%	1.4				1.31%
Y 371.029	181002.8	104	%	1.3				1.22%
Ag 328.068†	35.7	-0.0004556	mg/L	0.00021628	-0.0004556	mg/L	0.00021628	47.47%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-30.0	-0.0197232	mg/L	0.01147236	-0.0197232	mg/L	0.01147236	58.17%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	2.2	0.0023751	mg/L	0.00199145	0.0023751	mg/L	0.00199145	83.85%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	27.8	-0.0020792	mg/L	0.00005881	-0.0020792	mg/L	0.00005881	2.83%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	6.5	0.0021380	mg/L	0.00005025	0.0021380	mg/L	0.00005025	2.35%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	1103.6	-0.0029823	mg/L	0.00031554	-0.0029823	mg/L	0.00031554	10.58%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	-7.4	0.0042374	mg/L	0.00029929	0.0042374	mg/L	0.00029929	7.06%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-0.1	0.0024271	mg/L	0.00020083	0.0024271	mg/L	0.00020083	8.27%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	3.5	-0.0012954	mg/L	0.00024506	-0.0012954	mg/L	0.00024506	18.92%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1.0	0.0007419	mg/L	0.00012412	0.0007419	mg/L	0.00012412	16.73%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	136.1	-0.0133813	mg/L	0.00197004	-0.0133813	mg/L	0.00197004	14.72%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-2819.7	-57.0349	mg/L	13.44914	-57.0349	mg/L	13.44914	23.58%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	52.5	-0.130689	mg/L	0.0017355	-0.130689	mg/L	0.0017355	1.33%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	34.8	-0.0005598	mg/L	0.00004185	-0.0005598	mg/L	0.00004185	7.48%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	3.2	0.0004973	mg/L	0.00076121	0.0004973	mg/L	0.00076121	153.07%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-61.4	0.686326	mg/L	0.1438071	0.686326	mg/L	0.1438071	20.95%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-4.3	0.0020193	mg/L	0.00014808	0.0020193	mg/L	0.00014808	7.33%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	5.0	-0.0013260	mg/L	0.00104717	-0.0013260	mg/L	0.00104717	78.97%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-3.2	-0.0027871	mg/L	0.00462932	-0.0027871	mg/L	0.00462932	166.10%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.5	-0.0022755	mg/L	0.00159760	-0.0022755	mg/L	0.00159760	70.21%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	9.6	-0.0002925	mg/L	0.00025083	-0.0002925	mg/L	0.00025083	85.75%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	42.0	0.0015978	mg/L	0.00010489	0.0015978	mg/L	0.00010489	6.56%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	3.9	-0.0026235	mg/L	0.00267688	-0.0026235	mg/L	0.00267688	102.03%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-24.4	0.0023502	mg/L	0.00039280	0.0023502	mg/L	0.00039280	16.71%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	46.1	-0.0003316	mg/L	0.00003306	-0.0003316	mg/L	0.00003306	9.97%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	212.6	0.0125041	mg/L	0.00026185	0.0125041	mg/L	0.00026185	2.09%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	170.4	-0.0018541	mg/L	0.00013292	-0.0018541	mg/L	0.00013292	7.17%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	54.4	0.008	mg/L	0.0071	0.008	mg/L	0.0071	94.52%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 33
Sample ID: AD19159-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 9/14/2020 12:21:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-010

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	402010.3	105	%	0.3				0.29%
Y 371.029	221398.3	128	%	0.4				0.28%
Ag 328.068†	-179.3	-0.0032902	mg/L	0.00109594	-0.0032902	mg/L	0.00109594	33.31%
Al 308.215†	415875.5	52.5548	mg/L	0.15076	52.5548	mg/L	0.15076	0.29%
As 188.979†	128.8	0.108748	mg/L	0.0041128	0.108748	mg/L	0.0041128	3.78%
Ba 233.527†	49197.1	0.646388	mg/L	0.0016115	0.646388	mg/L	0.0016115	0.25%
Be 313.107†	3094.6	0.0049789	mg/L	0.00003607	0.0049789	mg/L	0.00003607	0.72%
Ca 317.933†	11119351.0	140.999	mg/L	1.2695	140.999	mg/L	1.2695	0.90%
Cd 228.802†	59.6	0.0067100	mg/L	0.00027055	0.0067100	mg/L	0.00027055	4.03%
Co 228.616†	1552.6	0.0684340	mg/L	0.00100522	0.0684340	mg/L	0.00100522	1.47%
Cr 267.716†	5447.6	0.0943388	mg/L	0.00041030	0.0943388	mg/L	0.00041030	0.43%
Cu 327.393†	42772.0	0.686835	mg/L	0.0015531	0.686835	mg/L	0.0015531	0.23%
Fe 273.955†	1382728.4	181.521	mg/L	0.5624	181.521	mg/L	0.5624	0.31%
K 404.721†	16871.2	-1465.50	mg/L	22.284	-1465.50	mg/L	22.284	1.52%
Mg 279.077†	413502.0	47.7086	mg/L	0.14269	47.7086	mg/L	0.14269	0.30%
Mn 257.610†	1007916.3	4.04168	mg/L	0.008753	4.04168	mg/L	0.008753	0.22%
Mo 202.031†	26.6	0.0029314	mg/L	0.00026331	0.0029314	mg/L	0.00026331	8.98%
Na 330.237†	148.1	1.25375	mg/L	0.045096	1.25375	mg/L	0.045096	3.60%
Ni 231.604†	5380.0	0.225454	mg/L	0.0006357	0.225454	mg/L	0.0006357	0.28%
Pb 220.353†	6552.3	1.20759	mg/L	0.003724	1.20759	mg/L	0.003724	0.31%
Sb 206.836†	12.3	0.0016169	mg/L	0.00140114	0.0016169	mg/L	0.00140114	86.66%
Se 196.026†	-105.7	-0.0181963	mg/L	0.00158673	-0.0181963	mg/L	0.00158673	8.72%
Sn 189.927†	64.9	0.0104504	mg/L	0.00128720	0.0104504	mg/L	0.00128720	12.32%
Ti 334.940†	193621.7	0.776918	mg/L	0.0013981	0.776918	mg/L	0.0013981	0.18%
Tl 190.801†	-13.4	-0.0058180	mg/L	0.00071673	-0.0058180	mg/L	0.00071673	12.32%
V 290.880†	6016.4	0.127392	mg/L	0.0019777	0.127392	mg/L	0.0019777	1.55%
Zn 206.200†	34250.1	0.860092	mg/L	0.0040214	0.860092	mg/L	0.0040214	0.47%
B 249.772†	54461.6	1.92972	mg/L	0.002677	1.92972	mg/L	0.002677	0.14%
Si 251.611†	61267.6	3.05595	mg/L	0.009940	3.05595	mg/L	0.009940	0.33%
Ce 413.764†	1290.3	0.353	mg/L	0.0138	0.353	mg/L	0.0138	3.91%

Sequence No.: 34
Sample ID: AD19160-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 9/14/2020 12:26:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19160-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	406715.6	106	%	1.7				1.62%
Y 371.029	239972.3	138	%	2.3				1.69%
Ag 328.068†	-243.5	-0.0041355	mg/L	0.00072042	-0.0041355	mg/L	0.00072042	17.42%
Al 308.215†	553210.3	69.9154	mg/L	1.47384	69.9154	mg/L	1.47384	2.11%
As 188.979†	49.7	0.0659015	mg/L	0.00329092	0.0659015	mg/L	0.00329092	4.99%
Ba 233.527†	41412.3	0.543719	mg/L	0.0017321	0.543719	mg/L	0.0017321	0.32%
Be 313.107†	4528.1	0.0062976	mg/L	0.00004184	0.0062976	mg/L	0.00004184	0.66%
Ca 317.933†	11331329.3	143.687	mg/L	3.5907	143.687	mg/L	3.5907	2.50%
Cd 228.802†	20.4	0.0052632	mg/L	0.00019924	0.0052632	mg/L	0.00019924	3.79%
Co 228.616†	2145.7	0.0936506	mg/L	0.00056708	0.0936506	mg/L	0.00056708	0.61%
Cr 267.716†	6664.4	0.115713	mg/L	0.0009553	0.115713	mg/L	0.0009553	0.83%
Cu 327.393†	17269.1	0.277760	mg/L	0.0002136	0.277760	mg/L	0.0002136	0.08%
Fe 273.955†	1572735.4	206.469	mg/L	4.6455	206.469	mg/L	4.6455	2.25%
K 404.721†	20023.5	-1649.99	mg/L	26.926	-1649.99	mg/L	26.926	1.63%
Mg 279.077†	368647.0	42.5185	mg/L	0.85180	42.5185	mg/L	0.85180	2.00%
Mn 257.610†	844249.1	3.38527	mg/L	0.074853	3.38527	mg/L	0.074853	2.21%
Mo 202.031†	2.3	0.0003986	mg/L	0.00129589	0.0003986	mg/L	0.00129589	325.12%
Na 330.237†	54.6	1.00037	mg/L	0.152052	1.00037	mg/L	0.152052	15.20%
Ni 231.604†	5631.2	0.235875	mg/L	0.0016064	0.235875	mg/L	0.0016064	0.68%
Pb 220.353†	868.9	0.164626	mg/L	0.0015655	0.164626	mg/L	0.0015655	0.95%
Sb 206.836†	1.0	-0.0061053	mg/L	0.00387783	-0.0061053	mg/L	0.00387783	63.52%
Se 196.026†	-149.3	-0.0383391	mg/L	0.00368905	-0.0383391	mg/L	0.00368905	9.62%
Sn 189.927†	11.5	0.0000701	mg/L	0.00148993	0.0000701	mg/L	0.00148993	>999.9%
Ti 334.940†	99025.8	0.398045	mg/L	0.0005283	0.398045	mg/L	0.0005283	0.13%
Tl 190.801†	-6.4	-0.0043493	mg/L	0.00484534	-0.0043493	mg/L	0.00484534	111.41%
V 290.880†	6648.9	0.140001	mg/L	0.0007920	0.140001	mg/L	0.0007920	0.57%
Zn 206.200†	25913.6	0.650382	mg/L	0.0052242	0.650382	mg/L	0.0052242	0.80%
B 249.772†	59396.6	2.15358	mg/L	0.031870	2.15358	mg/L	0.031870	1.48%
Si 251.611†	47861.7	2.38504	mg/L	0.036602	2.38504	mg/L	0.036602	1.53%
Ce 413.764†	1363.2	0.385	mg/L	0.0069	0.385	mg/L	0.0069	1.80%

Sequence No.: 35
Sample ID: AD19160-002
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 37
Date Collected: 9/14/2020 12:31:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19160-002

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	380684.3	99.5	%	0.53				0.54%
Y 371.029	229768.5	132	%	0.7				0.56%
Ag 328.068†	-502.3	-0.0075477	mg/L	0.00053122	-0.0075477	mg/L	0.00053122	7.04%
Al 308.215†	569499.5	71.9753	mg/L	0.03692	71.9753	mg/L	0.03692	0.05%
As 188.979†	61.7	0.0758933	mg/L	0.00236027	0.0758933	mg/L	0.00236027	3.11%
Ba 233.527†	39785.6	0.522264	mg/L	0.0005299	0.522264	mg/L	0.0005299	0.10%
Be 313.107†	1760.7	0.0037517	mg/L	0.00003059	0.0037517	mg/L	0.00003059	0.82%
Ca 317.933†	25416751.6	322.319	mg/L	2.7885	322.319	mg/L	2.7885	0.87%
Cd 228.802†	-9.3	0.0041659	mg/L	0.00033773	0.0041659	mg/L	0.00033773	8.11%
Co 228.616†	1708.7	0.0750694	mg/L	0.00022054	0.0750694	mg/L	0.00022054	0.29%
Cr 267.716†	5437.9	0.0941674	mg/L	0.00049902	0.0941674	mg/L	0.00049902	0.53%
Cu 327.393†	10092.9	0.162651	mg/L	0.0007810	0.162651	mg/L	0.0007810	0.48%
Fe 273.955†	1699123.8	223.064	mg/L	0.5109	223.064	mg/L	0.5109	0.23%
K 404.721†	24975.6	-1714.69	mg/L	54.705	-1714.69	mg/L	54.705	3.19%
Mg 279.077†	672261.5	77.6490	mg/L	0.16701	77.6490	mg/L	0.16701	0.22%
Mn 257.610†	751482.6	3.01322	mg/L	0.001985	3.01322	mg/L	0.001985	0.07%
Mo 202.031†	-12.8	-0.0011718	mg/L	0.00015283	-0.0011718	mg/L	0.00015283	13.04%
Na 330.237†	177.6	1.33364	mg/L	0.016878	1.33364	mg/L	0.016878	1.27%
Ni 231.604†	4594.8	0.192871	mg/L	0.0005214	0.192871	mg/L	0.0005214	0.27%
Pb 220.353†	256.3	0.0521163	mg/L	0.00077701	0.0521163	mg/L	0.00077701	1.49%
Sb 206.836†	9.4	-0.0002284	mg/L	0.00533215	-0.0002284	mg/L	0.00533215	>999.9%
Se 196.026†	-145.3	-0.0313705	mg/L	0.00532026	-0.0313705	mg/L	0.00532026	16.96%
Sn 189.927†	-14.8	-0.0050423	mg/L	0.00168702	-0.0050423	mg/L	0.00168702	33.46%
Ti 334.940†	324231.5	1.30003	mg/L	0.000247	1.30003	mg/L	0.000247	0.02%
Tl 190.801†	-26.3	-0.0085074	mg/L	0.00516852	-0.0085074	mg/L	0.00516852	60.75%
V 290.880†	7259.0	0.152728	mg/L	0.0007180	0.152728	mg/L	0.0007180	0.47%
Zn 206.200†	17974.8	0.450677	mg/L	0.0018084	0.450677	mg/L	0.0018084	0.40%
B 249.772†	63072.8	2.30868	mg/L	0.004948	2.30868	mg/L	0.004948	0.21%
Si 251.611†	52950.8	2.63977	mg/L	0.007292	2.63977	mg/L	0.007292	0.28%
Ce 413.764†	2249.7	0.540	mg/L	0.0167	0.540	mg/L	0.0167	3.10%

Sequence No.: 36
Sample ID: AD19067-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 9/14/2020 12:36:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19067-003

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	392967.8	103	%	1.5				1.42%
Y 371.029	180205.3	104	%	1.5				1.43%
Ag 328.068†	-21.0	-0.0012034	mg/L	0.00124938	-0.0012034	mg/L	0.00124938	103.82%
Al 308.215†	229092.2	28.9428	mg/L	0.08962	28.9428	mg/L	0.08962	0.31%
As 188.979†	46.9	0.0497197	mg/L	0.00006556	0.0497197	mg/L	0.00006556	0.13%
Ba 233.527†	7357.6	0.0945903	mg/L	0.00157045	0.0945903	mg/L	0.00157045	1.66%
Be 313.107†	3278.8	0.0051483	mg/L	0.00002082	0.0051483	mg/L	0.00002082	0.40%
Ca 317.933†	513511.1	6.49538	mg/L	0.016079	6.49538	mg/L	0.016079	0.25%
Cd 228.802†	-1.2	0.0044669	mg/L	0.00012691	0.0044669	mg/L	0.00012691	2.84%
Co 228.616†	264.5	0.0136749	mg/L	0.00048116	0.0136749	mg/L	0.00048116	3.52%
Cr 267.716†	15164.8	0.265036	mg/L	0.0010512	0.265036	mg/L	0.0010512	0.40%
Cu 327.393†	785.7	0.0133604	mg/L	0.00046257	0.0133604	mg/L	0.00046257	3.46%
Fe 273.955†	924817.2	121.397	mg/L	0.3910	121.397	mg/L	0.3910	0.32%
K 404.721†	11798.0	-969.585	mg/L	22.9416	-969.585	mg/L	22.9416	2.37%
Mg 279.077†	67519.4	7.67575	mg/L	0.021740	7.67575	mg/L	0.021740	0.28%
Mn 257.610†	50473.5	0.201732	mg/L	0.0005980	0.201732	mg/L	0.0005980	0.30%
Mo 202.031†	3.1	0.0004873	mg/L	0.00061327	0.0004873	mg/L	0.00061327	125.85%
Na 330.237†	-72.0	0.657589	mg/L	0.0265540	0.657589	mg/L	0.0265540	4.04%
Ni 231.604†	513.3	0.0234982	mg/L	0.00091494	0.0234982	mg/L	0.00091494	3.89%
Pb 220.353†	136.7	0.0258224	mg/L	0.00239705	0.0258224	mg/L	0.00239705	9.28%
Sb 206.836†	10.2	0.0017217	mg/L	0.00338866	0.0017217	mg/L	0.00338866	196.82%
Se 196.026†	-91.7	-0.0257923	mg/L	0.00210845	-0.0257923	mg/L	0.00210845	8.17%
Sn 189.927†	57.8	0.0090713	mg/L	0.00177383	0.0090713	mg/L	0.00177383	19.55%
Ti 334.940†	117619.7	0.472517	mg/L	0.0007685	0.472517	mg/L	0.0007685	0.16%
Tl 190.801†	-3.0	-0.0025534	mg/L	0.00275078	-0.0025534	mg/L	0.00275078	107.73%
V 290.880†	5960.9	0.130535	mg/L	0.0019013	0.130535	mg/L	0.0019013	1.46%
Zn 206.200†	5599.2	0.139359	mg/L	0.0025826	0.139359	mg/L	0.0025826	1.85%
B 249.772†	38104.5	1.32005	mg/L	0.004157	1.32005	mg/L	0.004157	0.31%
Si 251.611†	70501.4	3.51813	mg/L	0.019202	3.51813	mg/L	0.019202	0.55%
Ce 413.764†	791.1	0.224	mg/L	0.0117	0.224	mg/L	0.0117	5.22%

Sequence No.: 37
Sample ID: AD19163-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 9/14/2020 12:40:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19163-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	403274.3	105	%	0.7				0.66%
Y 371.029	183811.0	106	%	0.6				0.57%
Ag 328.068†	33.2	-0.0004881	mg/L	0.00040639	-0.0004881	mg/L	0.00040639	83.26%
Al 308.215†	124967.4	15.7813	mg/L	0.07755	15.7813	mg/L	0.07755	0.49%
As 188.979†	13.5	0.0127637	mg/L	0.00420997	0.0127637	mg/L	0.00420997	32.98%
Ba 233.527†	9627.8	0.124530	mg/L	0.0007542	0.124530	mg/L	0.0007542	0.61%
Be 313.107†	-535.1	0.0016397	mg/L	0.00004463	0.0016397	mg/L	0.00004463	2.72%
Ca 317.933†	190927.4	2.40437	mg/L	0.009431	2.40437	mg/L	0.009431	0.39%
Cd 228.802†	8.2	0.0048119	mg/L	0.00030962	0.0048119	mg/L	0.00030962	6.43%
Co 228.616†	77.4	0.0057189	mg/L	0.00032296	0.0057189	mg/L	0.00032296	5.65%
Cr 267.716†	1980.8	0.0334377	mg/L	0.00065232	0.0334377	mg/L	0.00065232	1.95%
Cu 327.393†	865.1	0.0146343	mg/L	0.00080673	0.0146343	mg/L	0.00080673	5.51%
Fe 273.955†	163605.2	21.4501	mg/L	0.12068	21.4501	mg/L	0.12068	0.56%
K 404.721†	-1569.8	-245.475	mg/L	6.8181	-245.475	mg/L	6.8181	2.78%
Mg 279.077†	10403.5	1.06700	mg/L	0.005723	1.06700	mg/L	0.005723	0.54%
Mn 257.610†	82366.2	0.329642	mg/L	0.0014495	0.329642	mg/L	0.0014495	0.44%
Mo 202.031†	36.6	0.0039664	mg/L	0.00073238	0.0039664	mg/L	0.00073238	18.46%
Na 330.237†	102.2	1.12946	mg/L	0.168257	1.12946	mg/L	0.168257	14.90%
Ni 231.604†	169.6	0.0092324	mg/L	0.00021893	0.0092324	mg/L	0.00021893	2.37%
Pb 220.353†	144.8	0.0259783	mg/L	0.00137459	0.0259783	mg/L	0.00137459	5.29%
Sb 206.836†	-1.5	-0.0016016	mg/L	0.00246993	-0.0016016	mg/L	0.00246993	154.21%
Se 196.026†	-17.9	-0.0072039	mg/L	0.00364370	-0.0072039	mg/L	0.00364370	50.58%
Sn 189.927†	65.1	0.0104765	mg/L	0.00120593	0.0104765	mg/L	0.00120593	11.51%
Ti 334.940†	111008.0	0.446036	mg/L	0.0255108	0.446036	mg/L	0.0255108	5.72%
Tl 190.801†	-2.2	-0.0026356	mg/L	0.00223281	-0.0026356	mg/L	0.00223281	84.72%
V 290.880†	1512.8	0.0360485	mg/L	0.00022398	0.0360485	mg/L	0.00022398	0.62%
Zn 206.200†	3675.8	0.0909765	mg/L	0.00077027	0.0909765	mg/L	0.00077027	0.85%
B 249.772†	6026.0	0.229741	mg/L	0.0019962	0.229741	mg/L	0.0019962	0.87%
Si 251.611†	127539.9	6.37278	mg/L	0.224589	6.37278	mg/L	0.224589	3.52%
Ce 413.764†	484.6	0.094	mg/L	0.0094	0.094	mg/L	0.0094	10.04%

Sequence No.: 38
Sample ID: AD19164-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 9/14/2020 12:44:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19164-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	409019.9	107	%	1.7				1.58%
Y 371.029	202609.4	117	%	1.8				1.52%
Ag 328.068†	-1.4	-0.0009445	mg/L	0.00088005	-0.0009445	mg/L	0.00088005	93.17%
Al 308.215†	162710.0	20.5518	mg/L	0.12969	20.5518	mg/L	0.12969	0.63%
As 188.979†	54.3	0.0388135	mg/L	0.00071461	0.0388135	mg/L	0.00071461	1.84%
Ba 233.527†	3612.6	0.0451990	mg/L	0.00073806	0.0451990	mg/L	0.00073806	1.63%
Be 313.107†	-605.7	0.0015748	mg/L	0.00002800	0.0015748	mg/L	0.00002800	1.78%
Ca 317.933†	15164.1	0.175333	mg/L	0.0005443	0.175333	mg/L	0.0005443	0.31%
Cd 228.802†	8.9	0.0048391	mg/L	0.00005404	0.0048391	mg/L	0.00005404	1.12%
Co 228.616†	72.0	0.0054905	mg/L	0.00062479	0.0054905	mg/L	0.00062479	11.38%
Cr 267.716†	3556.2	0.0611120	mg/L	0.00066980	0.0611120	mg/L	0.00066980	1.10%
Cu 327.393†	1060.5	0.0177686	mg/L	0.00037311	0.0177686	mg/L	0.00037311	2.10%
Fe 273.955†	240297.2	31.5198	mg/L	0.12154	31.5198	mg/L	0.12154	0.39%
K 404.721†	-1179.4	-337.866	mg/L	21.1607	-337.866	mg/L	21.1607	6.26%
Mg 279.077†	6163.7	0.576425	mg/L	0.0102681	0.576425	mg/L	0.0102681	1.78%
Mn 257.610†	7712.4	0.0302324	mg/L	0.00048915	0.0302324	mg/L	0.00048915	1.62%
Mo 202.031†	35.7	0.0038701	mg/L	0.00061225	0.0038701	mg/L	0.00061225	15.82%
Na 330.237†	-47.9	0.722909	mg/L	0.0146076	0.722909	mg/L	0.0146076	2.02%
Ni 231.604†	319.4	0.0154493	mg/L	0.00112256	0.0154493	mg/L	0.00112256	7.27%
Pb 220.353†	156.2	0.0285439	mg/L	0.00152375	0.0285439	mg/L	0.00152375	5.34%
Sb 206.836†	7.2	0.0030271	mg/L	0.00345653	0.0030271	mg/L	0.00345653	114.18%
Se 196.026†	-24.3	-0.0084528	mg/L	0.00247100	-0.0084528	mg/L	0.00247100	29.23%
Sn 189.927†	71.4	0.0117152	mg/L	0.00201538	0.0117152	mg/L	0.00201538	17.20%
Ti 334.940†	114807.6	0.461254	mg/L	0.0159726	0.461254	mg/L	0.0159726	3.46%
Tl 190.801†	3.8	0.0010605	mg/L	0.00221372	0.0010605	mg/L	0.00221372	208.74%
V 290.880†	3790.4	0.0875006	mg/L	0.00160724	0.0875006	mg/L	0.00160724	1.84%
Zn 206.200†	1219.6	0.0291883	mg/L	0.00046864	0.0291883	mg/L	0.00046864	1.61%
B 249.772†	8627.8	0.329685	mg/L	0.0017991	0.329685	mg/L	0.0017991	0.55%
Si 251.611†	184234.5	9.21028	mg/L	0.183734	9.21028	mg/L	0.183734	1.99%
Ce 413.764†	713.1	0.139	mg/L	0.0109	0.139	mg/L	0.0109	7.90%

Sequence No.: 39
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 12:47:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	393352.3	103	%	1.3				1.24%
Y 371.029	150025.1	86.5	%	1.09				1.26%
Ag 328.068†	7374.7	0.0962897	mg/L	0.00032804	0.0962897	mg/L	0.00032804	0.34%
Al 308.215†	38038.8	4.81360	mg/L	0.012310	4.81360	mg/L	0.012310	0.26%
As 188.979†	808.9	0.483907	mg/L	0.0093592	0.483907	mg/L	0.0093592	1.93%
Ba 233.527†	36640.3	0.480784	mg/L	0.0011971	0.480784	mg/L	0.0011971	0.25%
Be 313.107†	513896.7	0.474882	mg/L	0.0076499	0.474882	mg/L	0.0076499	1.61%
Ca 317.933†	3867191.9	49.0268	mg/L	0.79366	49.0268	mg/L	0.79366	1.62%
Cd 228.802†	12524.3	0.466910	mg/L	0.0015570	0.466910	mg/L	0.0015570	0.33%
Co 228.616†	11068.8	0.472994	mg/L	0.0012822	0.472994	mg/L	0.0012822	0.27%
Cr 267.716†	27779.6	0.486635	mg/L	0.0011101	0.486635	mg/L	0.0011101	0.23%
Cu 327.393†	30137.4	0.484172	mg/L	0.0013331	0.484172	mg/L	0.0013331	0.28%
Fe 273.955†	37771.2	4.92811	mg/L	0.010562	4.92811	mg/L	0.010562	0.21%
K 404.721†	-492.3	-58.9692	mg/L	20.40050	-58.9692	mg/L	20.40050	34.60%
Mg 279.077†	426203.8	49.1783	mg/L	0.88301	49.1783	mg/L	0.88301	1.80%
Mn 257.610†	120667.1	0.483252	mg/L	0.0001607	0.483252	mg/L	0.0001607	0.03%
Mo 202.031†	4648.1	0.483790	mg/L	0.0090016	0.483790	mg/L	0.0090016	1.86%
Na 330.237†	17236.5	47.5402	mg/L	0.43184	47.5402	mg/L	0.43184	0.91%
Ni 231.604†	12038.9	0.501781	mg/L	0.0084769	0.501781	mg/L	0.0084769	1.69%
Pb 220.353†	2693.5	0.489584	mg/L	0.0091195	0.489584	mg/L	0.0091195	1.86%
Sb 206.836†	889.4	0.506231	mg/L	0.0029397	0.506231	mg/L	0.0029397	0.58%
Se 196.026†	789.0	0.486766	mg/L	0.0095315	0.486766	mg/L	0.0095315	1.96%
Sn 189.927†	2545.0	0.492211	mg/L	0.0087505	0.492211	mg/L	0.0087505	1.78%
Ti 334.940†	120827.3	0.485364	mg/L	0.0005752	0.485364	mg/L	0.0005752	0.12%
Tl 190.801†	877.7	0.527861	mg/L	0.0115176	0.527861	mg/L	0.0115176	2.18%
V 290.880†	20917.5	0.489662	mg/L	0.0022587	0.489662	mg/L	0.0022587	0.46%
Zn 206.200†	19521.5	0.489584	mg/L	0.0010249	0.489584	mg/L	0.0010249	0.21%
B 249.772†	29892.8	0.508011	mg/L	0.0030580	0.508011	mg/L	0.0030580	0.60%
Si 251.611†	98429.3	4.90827	mg/L	0.008633	4.90827	mg/L	0.008633	0.18%
Ce 413.764†	38157.4	6.117	mg/L	0.0609	6.117	mg/L	0.0609	1.00%

Sequence No.: 40
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/14/2020 12:51:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	398250.4	104	%	0.8				0.80%
Y 371.029	181813.9	105	%	0.9				0.82%
Ag 328.068†	36.7	-0.0004417	mg/L	0.00063846	-0.0004417	mg/L	0.00063846	144.53%
Al 308.215†	-14.6	-0.0177083	mg/L	0.00751211	-0.0177083	mg/L	0.00751211	42.42%
As 188.979†	-0.3	0.0008996	mg/L	0.00223856	0.0008996	mg/L	0.00223856	248.83%
Ba 233.527†	21.8	-0.0021580	mg/L	0.00017228	-0.0021580	mg/L	0.00017228	7.98%
Be 313.107†	16.1	0.0021468	mg/L	0.00002001	0.0021468	mg/L	0.00002001	0.93%
Ca 317.933†	1058.6	-0.0035528	mg/L	0.00056289	-0.0035528	mg/L	0.00056289	15.84%
Cd 228.802†	5.6	0.0047193	mg/L	0.00039079	0.0047193	mg/L	0.00039079	8.28%
Co 228.616†	-1.7	0.0023563	mg/L	0.00029699	0.0023563	mg/L	0.00029699	12.60%
Cr 267.716†	0.2	-0.0013540	mg/L	0.00016292	-0.0013540	mg/L	0.00016292	12.03%
Cu 327.393†	-16.7	0.0004909	mg/L	0.00038433	0.0004909	mg/L	0.00038433	78.30%
Fe 273.955†	136.9	-0.0132692	mg/L	0.00162698	-0.0132692	mg/L	0.00162698	12.26%
K 404.721†	-3143.7	-63.6210	mg/L	7.44663	-63.6210	mg/L	7.44663	11.70%
Mg 279.077†	59.3	-0.129902	mg/L	0.0016881	-0.129902	mg/L	0.0016881	1.30%
Mn 257.610†	22.9	-0.0006073	mg/L	0.00005258	-0.0006073	mg/L	0.00005258	8.66%
Mo 202.031†	-2.0	-0.0000512	mg/L	0.00037051	-0.0000512	mg/L	0.00037051	723.59%
Na 330.237†	-31.3	0.767805	mg/L	0.1083796	0.767805	mg/L	0.1083796	14.12%
Ni 231.604†	-12.7	0.0016670	mg/L	0.00017716	0.0016670	mg/L	0.00017716	10.63%
Pb 220.353†	-6.1	-0.0033774	mg/L	0.00209677	-0.0033774	mg/L	0.00209677	62.08%
Sb 206.836†	2.4	0.0002875	mg/L	0.00329161	0.0002875	mg/L	0.00329161	>999.9%
Se 196.026†	-4.1	-0.0044569	mg/L	0.00157775	-0.0044569	mg/L	0.00157775	35.40%
Sn 189.927†	13.2	0.0004010	mg/L	0.00036529	0.0004010	mg/L	0.00036529	91.09%
Ti 334.940†	31.3	0.0015546	mg/L	0.00010266	0.0015546	mg/L	0.00010266	6.60%
Tl 190.801†	10.9	0.0013001	mg/L	0.00365901	0.0013001	mg/L	0.00365901	281.44%
V 290.880†	-22.1	0.0023948	mg/L	0.00026348	0.0023948	mg/L	0.00026348	11.00%
Zn 206.200†	42.3	-0.0004273	mg/L	0.00019393	-0.0004273	mg/L	0.00019393	45.39%
B 249.772†	190.9	0.0121631	mg/L	0.00069727	0.0121631	mg/L	0.00069727	5.73%
Si 251.611†	215.2	0.0003964	mg/L	0.00643409	0.0003964	mg/L	0.00643409	>999.9%
Ce 413.764†	115.1	0.017	mg/L	0.0116	0.017	mg/L	0.0116	67.31%

Sequence No.: 41
Sample ID: MB 85275 (100)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 9/14/2020 12:55:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85275 (100)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	409182.6	107	%	0.7				0.69%
Y 371.029	184640.0	106	%	0.8				0.72%
Ag 328.068†	49.0	-0.0002797	mg/L	0.00080213	-0.0002797	mg/L	0.00080213	286.81%
Al 308.215†	-77.1	-0.0255629	mg/L	0.00678838	-0.0255629	mg/L	0.00678838	26.56%
As 188.979†	-1.2	0.0003177	mg/L	0.00390606	0.0003177	mg/L	0.00390606	>999.9%
Ba 233.527†	22.1	-0.0021538	mg/L	0.00013278	-0.0021538	mg/L	0.00013278	6.16%
Be 313.107†	45.3	0.0021737	mg/L	0.00002723	0.0021737	mg/L	0.00002723	1.25%
Ca 317.933†	2597.7	0.0159660	mg/L	0.00031313	0.0159660	mg/L	0.00031313	1.96%
Cd 228.802†	-9.2	0.0041709	mg/L	0.00017959	0.0041709	mg/L	0.00017959	4.31%
Co 228.616†	0.8	0.0024649	mg/L	0.00028062	0.0024649	mg/L	0.00028062	11.38%
Cr 267.716†	17.4	-0.0010526	mg/L	0.00003590	-0.0010526	mg/L	0.00003590	3.41%
Cu 327.393†	10.8	0.0009320	mg/L	0.00137092	0.0009320	mg/L	0.00137092	147.10%
Fe 273.955†	327.1	0.0116990	mg/L	0.00325078	0.0116990	mg/L	0.00325078	27.79%
K 404.721†	-4461.5	-90.6502	mg/L	12.83671	-90.6502	mg/L	12.83671	14.16%
Mg 279.077†	151.4	-0.119246	mg/L	0.0033092	-0.119246	mg/L	0.0033092	2.78%
Mn 257.610†	353.4	0.0007183	mg/L	0.00006063	0.0007183	mg/L	0.00006063	8.44%
Mo 202.031†	-4.4	-0.0003002	mg/L	0.00050777	-0.0003002	mg/L	0.00050777	169.16%
Na 330.237†	-6.3	0.835564	mg/L	0.1766741	0.835564	mg/L	0.1766741	21.14%
Ni 231.604†	6.9	0.0024836	mg/L	0.00054592	0.0024836	mg/L	0.00054592	21.98%
Pb 220.353†	-4.4	-0.0030638	mg/L	0.00151550	-0.0030638	mg/L	0.00151550	49.46%
Sb 206.836†	-3.0	-0.0026628	mg/L	0.00128382	-0.0026628	mg/L	0.00128382	48.21%
Se 196.026†	-6.6	-0.0060268	mg/L	0.00239419	-0.0060268	mg/L	0.00239419	39.73%
Sn 189.927†	55.6	0.0086433	mg/L	0.00190687	0.0086433	mg/L	0.00190687	22.06%
Ti 334.940†	106.6	0.0018562	mg/L	0.00022755	0.0018562	mg/L	0.00022755	12.26%
Tl 190.801†	13.1	0.0026045	mg/L	0.00266902	0.0026045	mg/L	0.00266902	102.48%
V 290.880†	-64.2	0.0014235	mg/L	0.00052949	0.0014235	mg/L	0.00052949	37.20%
Zn 206.200†	202.1	0.0035912	mg/L	0.00021920	0.0035912	mg/L	0.00021920	6.10%
B 249.772†	101.6	0.0109056	mg/L	0.00011777	0.0109056	mg/L	0.00011777	1.08%
Si 251.611†	258.5	0.0025690	mg/L	0.00339757	0.0025690	mg/L	0.00339757	132.25%
Ce 413.764†	143.2	0.022	mg/L	0.0092	0.022	mg/L	0.0092	42.21%

Sequence No.: 42
Sample ID: LCS 85275
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 9/14/2020 12:59:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 85275

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	382187.4	99.9	%	0.71				0.71%
Y 371.029	199594.6	115	%	0.9				0.82%
Ag 328.068†	66164.9	0.871289	mg/L	0.0014432	0.871289	mg/L	0.0014432	0.17%
Al 308.215†	693153.9	87.5423	mg/L	0.07577	87.5423	mg/L	0.07577	0.09%
As 188.979†	644.3	0.408714	mg/L	0.0024810	0.408714	mg/L	0.0024810	0.61%
Ba 233.527†	539054.8	7.10685	mg/L	0.015270	7.10685	mg/L	0.015270	0.21%
Be 313.107†	1708803.2	1.57412	mg/L	0.004302	1.57412	mg/L	0.004302	0.27%
Ca 317.933†	14268325.7	180.934	mg/L	1.4362	180.934	mg/L	1.4362	0.79%
Cd 228.802†	41322.7	1.53015	mg/L	0.003133	1.53015	mg/L	0.003133	0.20%
Co 228.616†	53503.5	2.27700	mg/L	0.006860	2.27700	mg/L	0.006860	0.30%
Cr 267.716†	105672.8	1.85495	mg/L	0.003161	1.85495	mg/L	0.003161	0.17%
Cu 327.393†	108675.0	1.74394	mg/L	0.003800	1.74394	mg/L	0.003800	0.22%
Fe 273.955†	1058512.2	138.951	mg/L	0.5891	138.951	mg/L	0.5891	0.42%
K 404.721†	14732.5	-1084.84	mg/L	11.406	-1084.84	mg/L	11.406	1.05%
Mg 279.077†	544795.7	62.9003	mg/L	0.19143	62.9003	mg/L	0.19143	0.30%
Mn 257.610†	1239077.5	4.96879	mg/L	0.010312	4.96879	mg/L	0.010312	0.21%
Mo 202.031†	15657.2	1.62929	mg/L	0.009966	1.62929	mg/L	0.009966	0.61%
Na 330.237†	2564.3	7.79847	mg/L	0.103104	7.79847	mg/L	0.103104	1.32%
Ni 231.604†	11183.4	0.466279	mg/L	0.0019922	0.466279	mg/L	0.0019922	0.43%
Pb 220.353†	7271.9	1.34795	mg/L	0.007841	1.34795	mg/L	0.007841	0.58%
Sb 206.836†	649.0	0.386759	mg/L	0.0014605	0.386759	mg/L	0.0014605	0.38%
Se 196.026†	4801.4	3.00133	mg/L	0.015582	3.00133	mg/L	0.015582	0.52%
Sn 189.927†	6610.1	1.28185	mg/L	0.006515	1.28185	mg/L	0.006515	0.51%
Ti 334.940†	1011651.3	4.05327	mg/L	0.005970	4.05327	mg/L	0.005970	0.15%
Tl 190.801†	3594.2	2.02433	mg/L	0.007667	2.02433	mg/L	0.007667	0.38%
V 290.880†	104855.5	2.42179	mg/L	0.000941	2.42179	mg/L	0.000941	0.04%
Zn 206.200†	229683.5	5.77635	mg/L	0.021210	5.77635	mg/L	0.021210	0.37%
B 249.772†	181999.3	3.68481	mg/L	0.014807	3.68481	mg/L	0.014807	0.40%
Si 251.611†	123698.2	6.15489	mg/L	0.066059	6.15489	mg/L	0.066059	1.07%
Ce 413.764†	3245.9	0.632	mg/L	0.0104	0.632	mg/L	0.0104	1.65%

Sequence No.: 43
Sample ID: LCS MR 85275
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 9/14/2020 1:04:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS MR 85275

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	385679.4	101	%	0.5				0.45%
Y 371.029	201371.7	116	%	0.5				0.40%
Ag 328.068†	65804.9	0.866543	mg/L	0.0014355	0.866543	mg/L	0.0014355	0.17%
Al 308.215†	681312.9	86.0460	mg/L	0.22500	86.0460	mg/L	0.22500	0.26%
As 188.979†	633.2	0.401598	mg/L	0.0018761	0.401598	mg/L	0.0018761	0.47%
Ba 233.527†	528719.6	6.97055	mg/L	0.016451	6.97055	mg/L	0.016451	0.24%
Be 313.107†	1698063.2	1.56424	mg/L	0.001988	1.56424	mg/L	0.001988	0.13%
Ca 317.933†	14348757.6	181.954	mg/L	3.0488	181.954	mg/L	3.0488	1.68%
Cd 228.802†	40962.8	1.51687	mg/L	0.002297	1.51687	mg/L	0.002297	0.15%
Co 228.616†	52968.6	2.25426	mg/L	0.002647	2.25426	mg/L	0.002647	0.12%
Cr 267.716†	104608.1	1.83625	mg/L	0.004012	1.83625	mg/L	0.004012	0.22%
Cu 327.393†	107865.2	1.73095	mg/L	0.003942	1.73095	mg/L	0.003942	0.23%
Fe 273.955†	1036673.6	136.084	mg/L	0.2448	136.084	mg/L	0.2448	0.18%
K 404.721†	13497.4	-1081.37	mg/L	14.548	-1081.37	mg/L	14.548	1.35%
Mg 279.077†	539721.5	62.3132	mg/L	0.11930	62.3132	mg/L	0.11930	0.19%
Mn 257.610†	1231339.4	4.93775	mg/L	0.011746	4.93775	mg/L	0.011746	0.24%
Mo 202.031†	15430.0	1.60564	mg/L	0.010485	1.60564	mg/L	0.010485	0.65%
Na 330.237†	2513.8	7.66160	mg/L	0.020369	7.66160	mg/L	0.020369	0.27%
Ni 231.604†	10980.4	0.457856	mg/L	0.0021846	0.457856	mg/L	0.0021846	0.48%
Pb 220.353†	7145.7	1.32454	mg/L	0.009707	1.32454	mg/L	0.009707	0.73%
Sb 206.836†	615.6	0.367856	mg/L	0.0029685	0.367856	mg/L	0.0029685	0.81%
Se 196.026†	4799.3	2.99924	mg/L	0.026864	2.99924	mg/L	0.026864	0.90%
Sn 189.927†	6515.9	1.26356	mg/L	0.005730	1.26356	mg/L	0.005730	0.45%
Ti 334.940†	977403.6	3.91610	mg/L	0.012051	3.91610	mg/L	0.012051	0.31%
Tl 190.801†	3545.8	1.99636	mg/L	0.005493	1.99636	mg/L	0.005493	0.28%
V 290.880†	104471.3	2.41282	mg/L	0.009556	2.41282	mg/L	0.009556	0.40%
Zn 206.200†	228148.5	5.73774	mg/L	0.006598	5.73774	mg/L	0.006598	0.11%
B 249.772†	181890.9	3.66629	mg/L	0.016806	3.66629	mg/L	0.016806	0.46%
Si 251.611†	110533.2	5.49637	mg/L	0.090168	5.49637	mg/L	0.090168	1.64%
Ce 413.764†	3083.7	0.603	mg/L	0.0046	0.603	mg/L	0.0046	0.76%

Sequence No.: 44
Sample ID: AD19192-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 9/14/2020 1:09:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	421415.5	110	%	0.9				0.83%
Y 371.029	190199.1	110	%	0.9				0.85%
Ag 328.068†	87.6	0.0002287	mg/L	0.00032692	0.0002287	mg/L	0.00032692	142.92%
Al 308.215†	111472.7	14.0758	mg/L	0.07991	14.0758	mg/L	0.07991	0.57%
As 188.979†	0.7	0.0029504	mg/L	0.00605438	0.0029504	mg/L	0.00605438	205.21%
Ba 233.527†	1992.2	0.0238280	mg/L	0.00015695	0.0238280	mg/L	0.00015695	0.66%
Be 313.107†	-823.4	0.0013746	mg/L	0.00004326	0.0013746	mg/L	0.00004326	3.15%
Ca 317.933†	11019.4	0.122770	mg/L	0.0016618	0.122770	mg/L	0.0016618	1.35%
Cd 228.802†	-5.2	0.0043184	mg/L	0.00050165	0.0043184	mg/L	0.00050165	11.62%
Co 228.616†	45.7	0.0043731	mg/L	0.00046462	0.0043731	mg/L	0.00046462	10.62%
Cr 267.716†	7416.9	0.128933	mg/L	0.0016182	0.128933	mg/L	0.0016182	1.26%
Cu 327.393†	249.7	0.0047640	mg/L	0.00100301	0.0047640	mg/L	0.00100301	21.05%
Fe 273.955†	67682.4	8.85545	mg/L	0.019739	8.85545	mg/L	0.019739	0.22%
K 404.721†	-4891.8	-187.505	mg/L	11.0025	-187.505	mg/L	11.0025	5.87%
Mg 279.077†	1457.4	0.0318632	mg/L	0.00153270	0.0318632	mg/L	0.00153270	4.81%
Mn 257.610†	3296.1	0.0125203	mg/L	0.00014204	0.0125203	mg/L	0.00014204	1.13%
Mo 202.031†	1.9	0.0003590	mg/L	0.00050730	0.0003590	mg/L	0.00050730	141.30%
Na 330.237†	-81.2	0.632514	mg/L	0.0707847	0.632514	mg/L	0.0707847	11.19%
Ni 231.604†	98.1	0.0062680	mg/L	0.00052856	0.0062680	mg/L	0.00052856	8.43%
Pb 220.353†	102.3	0.0179377	mg/L	0.00110395	0.0179377	mg/L	0.00110395	6.15%
Sb 206.836†	8.0	0.0041247	mg/L	0.00407819	0.0041247	mg/L	0.00407819	98.87%
Se 196.026†	-19.6	-0.0116293	mg/L	0.00477493	-0.0116293	mg/L	0.00477493	41.06%
Sn 189.927†	72.5	0.0119318	mg/L	0.00130600	0.0119318	mg/L	0.00130600	10.95%
Ti 334.940†	114638.4	0.460576	mg/L	0.0166493	0.460576	mg/L	0.0166493	3.61%
Tl 190.801†	1.1	-0.0003441	mg/L	0.00328174	-0.0003441	mg/L	0.00328174	953.71%
V 290.880†	1230.2	0.0304457	mg/L	0.00093246	0.0304457	mg/L	0.00093246	3.06%
Zn 206.200†	424.7	0.0091918	mg/L	0.00015489	0.0091918	mg/L	0.00015489	1.69%
B 249.772†	3382.4	0.114334	mg/L	0.0018655	0.114334	mg/L	0.0018655	1.63%
Si 251.611†	183520.7	9.17461	mg/L	0.178858	9.17461	mg/L	0.178858	1.95%
Ce 413.764†	804.1	0.135	mg/L	0.0020	0.135	mg/L	0.0020	1.50%

Sequence No.: 45
Sample ID: AD19192-001 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 9/14/2020 1:13:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-001 MR

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	412828.2	108	%	0.5				0.49%
Y 371.029	186829.2	108	%	0.7				0.66%
Ag 328.068†	64.5	-0.0000754	mg/L	0.00027726	-0.0000754	mg/L	0.00027726	367.58%
Al 308.215†	117464.1	14.8331	mg/L	0.05623	14.8331	mg/L	0.05623	0.38%
As 188.979†	4.5	0.0055685	mg/L	0.00184067	0.0055685	mg/L	0.00184067	33.06%
Ba 233.527†	3891.8	0.0488807	mg/L	0.00071377	0.0488807	mg/L	0.00071377	1.46%
Be 313.107†	-762.7	0.0014304	mg/L	0.00006274	0.0014304	mg/L	0.00006274	4.39%
Ca 317.933†	12309.9	0.139137	mg/L	0.0008421	0.139137	mg/L	0.0008421	0.61%
Cd 228.802†	4.5	0.0046783	mg/L	0.00015975	0.0046783	mg/L	0.00015975	3.41%
Co 228.616†	59.9	0.0049747	mg/L	0.00035912	0.0049747	mg/L	0.00035912	7.22%
Cr 267.716†	9243.2	0.161014	mg/L	0.0013631	0.161014	mg/L	0.0013631	0.85%
Cu 327.393†	367.5	0.0066524	mg/L	0.00035362	0.0066524	mg/L	0.00035362	5.32%
Fe 273.955†	81907.9	10.7233	mg/L	0.01099	10.7233	mg/L	0.01099	0.10%
K 404.721†	-3766.0	-183.235	mg/L	5.9031	-183.235	mg/L	5.9031	3.22%
Mg 279.077†	1543.4	0.0418195	mg/L	0.00125488	0.0418195	mg/L	0.00125488	3.00%
Mn 257.610†	3800.0	0.0145412	mg/L	0.00023626	0.0145412	mg/L	0.00023626	1.62%
Mo 202.031†	-1.4	0.0000113	mg/L	0.00031427	0.0000113	mg/L	0.00031427	>999.9%
Na 330.237†	-36.0	0.755187	mg/L	0.0489374	0.755187	mg/L	0.0489374	6.48%
Ni 231.604†	109.9	0.0067581	mg/L	0.00001394	0.0067581	mg/L	0.00001394	0.21%
Pb 220.353†	149.2	0.0266533	mg/L	0.00099835	0.0266533	mg/L	0.00099835	3.75%
Sb 206.836†	3.5	0.0015589	mg/L	0.00302924	0.0015589	mg/L	0.00302924	194.31%
Se 196.026†	-10.7	-0.0056222	mg/L	0.00729361	-0.0056222	mg/L	0.00729361	129.73%
Sn 189.927†	83.1	0.0139730	mg/L	0.00175716	0.0139730	mg/L	0.00175716	12.58%
Ti 334.940†	108489.1	0.435947	mg/L	0.0050791	0.435947	mg/L	0.0050791	1.17%
Tl 190.801†	-2.1	-0.0023170	mg/L	0.00239232	-0.0023170	mg/L	0.00239232	103.25%
V 290.880†	1480.9	0.0360476	mg/L	0.00030097	0.0360476	mg/L	0.00030097	0.83%
Zn 206.200†	546.2	0.0122474	mg/L	0.00038365	0.0122474	mg/L	0.00038365	3.13%
B 249.772†	3548.6	0.127900	mg/L	0.0002341	0.127900	mg/L	0.0002341	0.18%
Si 251.611†	172386.4	8.61736	mg/L	0.242687	8.61736	mg/L	0.242687	2.82%
Ce 413.764†	779.0	0.132	mg/L	0.0035	0.132	mg/L	0.0035	2.64%

Sequence No.: 46
Sample ID: AD19192-001 MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 9/14/2020 1:16:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-001 MS1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	392140.8	103	%	0.5				0.50%
Y 371.029	173747.3	100	%	0.4				0.42%
Ag 328.068†	7711.8	0.100734	mg/L	0.0006762	0.100734	mg/L	0.0006762	0.67%
Al 308.215†	277152.4	35.0076	mg/L	0.08238	35.0076	mg/L	0.08238	0.24%
As 188.979†	726.9	0.436778	mg/L	0.0068413	0.436778	mg/L	0.0068413	1.57%
Ba 233.527†	37245.7	0.488767	mg/L	0.0029777	0.488767	mg/L	0.0029777	0.61%
Be 313.107†	489049.2	0.452024	mg/L	0.0061030	0.452024	mg/L	0.0061030	1.35%
Ca 317.933†	3620342.0	45.8963	mg/L	0.60469	45.8963	mg/L	0.60469	1.32%
Cd 228.802†	11581.6	0.432106	mg/L	0.0039719	0.432106	mg/L	0.0039719	0.92%
Co 228.616†	10888.2	0.465315	mg/L	0.0046795	0.465315	mg/L	0.0046795	1.01%
Cr 267.716†	33619.9	0.589228	mg/L	0.0011209	0.589228	mg/L	0.0011209	0.19%
Cu 327.393†	29282.2	0.470454	mg/L	0.0005780	0.470454	mg/L	0.0005780	0.12%
Fe 273.955†	114062.7	14.9452	mg/L	0.05420	14.9452	mg/L	0.05420	0.36%
K 404.721†	-920.9	-167.479	mg/L	2.8920	-167.479	mg/L	2.8920	1.73%
Mg 279.077†	403639.9	46.5675	mg/L	0.54580	46.5675	mg/L	0.54580	1.17%
Mn 257.610†	115708.8	0.463366	mg/L	0.0018604	0.463366	mg/L	0.0018604	0.40%
Mo 202.031†	4330.8	0.450780	mg/L	0.0051038	0.450780	mg/L	0.0051038	1.13%
Na 330.237†	15881.3	43.8694	mg/L	0.24480	43.8694	mg/L	0.24480	0.56%
Ni 231.604†	11292.3	0.470797	mg/L	0.0038998	0.470797	mg/L	0.0038998	0.83%
Pb 220.353†	2605.5	0.481097	mg/L	0.0048160	0.481097	mg/L	0.0048160	1.00%
Sb 206.836†	632.8	0.356334	mg/L	0.0021823	0.356334	mg/L	0.0021823	0.61%
Se 196.026†	709.3	0.440254	mg/L	0.0101087	0.440254	mg/L	0.0101087	2.30%
Sn 189.927†	2410.9	0.466168	mg/L	0.0058876	0.466168	mg/L	0.0058876	1.26%
Ti 334.940†	213386.4	0.856079	mg/L	0.0198894	0.856079	mg/L	0.0198894	2.32%
Tl 190.801†	902.7	0.507592	mg/L	0.0032356	0.507592	mg/L	0.0032356	0.64%
V 290.880†	20764.8	0.484895	mg/L	0.0054657	0.484895	mg/L	0.0054657	1.13%
Zn 206.200†	18516.9	0.464314	mg/L	0.0035889	0.464314	mg/L	0.0035889	0.77%
B 249.772†	29312.2	0.557624	mg/L	0.0003615	0.557624	mg/L	0.0003615	0.06%
Si 251.611†	206537.1	10.3195	mg/L	0.18509	10.3195	mg/L	0.18509	1.79%
Ce 413.764†	4399.1	0.716	mg/L	0.0085	0.716	mg/L	0.0085	1.18%

Sequence No.: 47
Sample ID: AD19192-001 MS2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 9/14/2020 1:20:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-001 MS2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	382868.1	100	%	0.5				0.45%
Y 371.029	171885.8	99.1	%	0.44				0.45%
Ag 328.068†	8536.4	0.111605	mg/L	0.0008298	0.111605	mg/L	0.0008298	0.74%
Al 308.215†	299532.6	37.8369	mg/L	0.06513	37.8369	mg/L	0.06513	0.17%
As 188.979†	763.1	0.458491	mg/L	0.0084432	0.458491	mg/L	0.0084432	1.84%
Ba 233.527†	38861.7	0.510080	mg/L	0.0010058	0.510080	mg/L	0.0010058	0.20%
Be 313.107†	508839.2	0.470230	mg/L	0.0016560	0.470230	mg/L	0.0016560	0.35%
Ca 317.933†	3818589.7	48.4104	mg/L	0.16169	48.4104	mg/L	0.16169	0.33%
Cd 228.802†	12576.8	0.468851	mg/L	0.0018507	0.468851	mg/L	0.0018507	0.39%
Co 228.616†	11147.0	0.476318	mg/L	0.0022188	0.476318	mg/L	0.0022188	0.47%
Cr 267.716†	38251.7	0.670594	mg/L	0.0024900	0.670594	mg/L	0.0024900	0.37%
Cu 327.393†	29660.7	0.476526	mg/L	0.0009993	0.476526	mg/L	0.0009993	0.21%
Fe 273.955†	120503.1	15.7908	mg/L	0.06064	15.7908	mg/L	0.06064	0.38%
K 404.721†	487.4	-147.284	mg/L	6.8821	-147.284	mg/L	6.8821	4.67%
Mg 279.077†	419989.3	48.4592	mg/L	0.30649	48.4592	mg/L	0.30649	0.63%
Mn 257.610†	120323.4	0.481874	mg/L	0.0014496	0.481874	mg/L	0.0014496	0.30%
Mo 202.031†	4452.1	0.463394	mg/L	0.0018169	0.463394	mg/L	0.0018169	0.39%
Na 330.237†	18051.9	49.7488	mg/L	0.17838	49.7488	mg/L	0.17838	0.36%
Ni 231.604†	11543.2	0.481211	mg/L	0.0015633	0.481211	mg/L	0.0015633	0.32%
Pb 220.353†	2695.0	0.497763	mg/L	0.0021906	0.497763	mg/L	0.0021906	0.44%
Sb 206.836†	606.6	0.342358	mg/L	0.0044913	0.342358	mg/L	0.0044913	1.31%
Se 196.026†	746.1	0.463157	mg/L	0.0103936	0.463157	mg/L	0.0103936	2.24%
Sn 189.927†	2509.3	0.485282	mg/L	0.0012643	0.485282	mg/L	0.0012643	0.26%
Ti 334.940†	205601.3	0.824898	mg/L	0.0018918	0.824898	mg/L	0.0018918	0.23%
Tl 190.801†	934.7	0.526034	mg/L	0.0025507	0.526034	mg/L	0.0025507	0.48%
V 290.880†	21963.5	0.512507	mg/L	0.0053684	0.512507	mg/L	0.0053684	1.05%
Zn 206.200†	20360.4	0.510687	mg/L	0.0027232	0.510687	mg/L	0.0027232	0.53%
B 249.772†	32887.9	0.618787	mg/L	0.0016488	0.618787	mg/L	0.0016488	0.27%
Si 251.611†	189552.0	9.46917	mg/L	0.156038	9.46917	mg/L	0.156038	1.65%
Ce 413.764†	5194.5	0.844	mg/L	0.0351	0.844	mg/L	0.0351	4.16%

Sequence No.: 48
Sample ID: AD19192-001 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 9/14/2020 1:24:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-001 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	396187.6	104	%	0.6				0.58%
Y 371.029	175366.1	101	%	0.6				0.57%
Ag 328.068†	5025.1	0.0653172	mg/L	0.00097108	0.0653172	mg/L	0.00097108	1.49%
Al 308.215†	147780.9	18.6527	mg/L	0.07946	18.6527	mg/L	0.07946	0.43%
As 188.979†	790.7	0.474486	mg/L	0.0019673	0.474486	mg/L	0.0019673	0.41%
Ba 233.527†	37608.8	0.493556	mg/L	0.0004867	0.493556	mg/L	0.0004867	0.10%
Be 313.107†	506970.5	0.468511	mg/L	0.0058823	0.468511	mg/L	0.0058823	1.26%
Ca 317.933†	3699696.8	46.9026	mg/L	0.55150	46.9026	mg/L	0.55150	1.18%
Cd 228.802†	12112.9	0.451723	mg/L	0.0015126	0.451723	mg/L	0.0015126	0.33%
Co 228.616†	10813.5	0.462140	mg/L	0.0027458	0.462140	mg/L	0.0027458	0.59%
Cr 267.716†	33912.8	0.594373	mg/L	0.0012410	0.594373	mg/L	0.0012410	0.21%
Cu 327.393†	29578.1	0.475201	mg/L	0.0016227	0.475201	mg/L	0.0016227	0.34%
Fe 273.955†	102141.9	13.3800	mg/L	0.02456	13.3800	mg/L	0.02456	0.18%
K 404.721†	-1618.5	-166.062	mg/L	5.5085	-166.062	mg/L	5.5085	3.32%
Mg 279.077†	410153.1	47.3211	mg/L	0.57825	47.3211	mg/L	0.57825	1.22%
Mn 257.610†	120978.2	0.484500	mg/L	0.0002745	0.484500	mg/L	0.0002745	0.06%
Mo 202.031†	4630.0	0.481910	mg/L	0.0046349	0.481910	mg/L	0.0046349	0.96%
Na 330.237†	16319.1	45.0554	mg/L	0.14658	45.0554	mg/L	0.14658	0.33%
Ni 231.604†	11135.9	0.464310	mg/L	0.0011148	0.464310	mg/L	0.0011148	0.24%
Pb 220.353†	2717.1	0.499986	mg/L	0.0017768	0.499986	mg/L	0.0017768	0.36%
Sb 206.836†	883.3	0.494632	mg/L	0.0021061	0.494632	mg/L	0.0021061	0.43%
Se 196.026†	779.8	0.483351	mg/L	0.0055283	0.483351	mg/L	0.0055283	1.14%
Sn 189.927†	2530.9	0.489468	mg/L	0.0030842	0.489468	mg/L	0.0030842	0.63%
Ti 334.940†	234627.0	0.941151	mg/L	0.0138587	0.941151	mg/L	0.0138587	1.47%
Tl 190.801†	953.1	0.536226	mg/L	0.0043367	0.536226	mg/L	0.0043367	0.81%
V 290.880†	21385.5	0.499733	mg/L	0.0039490	0.499733	mg/L	0.0039490	0.79%
Zn 206.200†	19144.7	0.480105	mg/L	0.0019132	0.480105	mg/L	0.0019132	0.40%
B 249.772†	29937.1	0.558269	mg/L	0.0029196	0.558269	mg/L	0.0029196	0.52%
Si 251.611†	193592.4	9.67110	mg/L	0.249197	9.67110	mg/L	0.249197	2.58%
Ce 413.764†	4410.8	0.716	mg/L	0.0268	0.716	mg/L	0.0268	3.74%

Sequence No.: 49
Sample ID: AD19192-001 SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 9/14/2020 1:28:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-001 SD

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	408980.8	107	%	0.6				0.60%
Y 371.029	184770.0	107	%	0.7				0.64%
Ag 328.068†	31.6	-0.0005094	mg/L	0.00060463	-0.0005094	mg/L	0.00060463	118.69%
Al 308.215†	22544.0	2.83412	mg/L	0.015499	2.83412	mg/L	0.015499	0.55%
As 188.979†	4.2	0.0038819	mg/L	0.00206169	0.0038819	mg/L	0.00206169	53.11%
Ba 233.527†	431.2	0.0032412	mg/L	0.00016736	0.0032412	mg/L	0.00016736	5.16%
Be 313.107†	-120.4	0.0020213	mg/L	0.00002595	0.0020213	mg/L	0.00002595	1.28%
Ca 317.933†	3493.9	0.0273318	mg/L	0.00027878	0.0273318	mg/L	0.00027878	1.02%
Cd 228.802†	-0.8	0.0044812	mg/L	0.00030619	0.0044812	mg/L	0.00030619	6.83%
Co 228.616†	12.8	0.0029762	mg/L	0.00056091	0.0029762	mg/L	0.00056091	18.85%
Cr 267.716†	1540.0	0.0256951	mg/L	0.00008895	0.0256951	mg/L	0.00008895	0.35%
Cu 327.393†	67.0	0.0018327	mg/L	0.00062286	0.0018327	mg/L	0.00062286	33.99%
Fe 273.955†	13829.3	1.78453	mg/L	0.007554	1.78453	mg/L	0.007554	0.42%
K 404.721†	-4305.0	-105.132	mg/L	7.6816	-105.132	mg/L	7.6816	7.31%
Mg 279.077†	347.2	-0.0965888	mg/L	0.00196230	-0.0965888	mg/L	0.00196230	2.03%
Mn 257.610†	722.1	0.0021967	mg/L	0.00003555	0.0021967	mg/L	0.00003555	1.62%
Mo 202.031†	-10.8	-0.0009594	mg/L	0.00059910	-0.0009594	mg/L	0.00059910	62.44%
Na 330.237†	-40.6	0.742727	mg/L	0.1401755	0.742727	mg/L	0.1401755	18.87%
Ni 231.604†	1.8	0.0022686	mg/L	0.00083140	0.0022686	mg/L	0.00083140	36.65%
Pb 220.353†	17.5	0.0012434	mg/L	0.00050272	0.0012434	mg/L	0.00050272	40.43%
Sb 206.836†	2.8	0.0006297	mg/L	0.00445791	0.0006297	mg/L	0.00445791	707.91%
Se 196.026†	-7.2	-0.0058989	mg/L	0.00334000	-0.0058989	mg/L	0.00334000	56.62%
Sn 189.927†	23.2	0.0023515	mg/L	0.00147945	0.0023515	mg/L	0.00147945	62.91%
Ti 334.940†	23437.2	0.0952994	mg/L	0.01107779	0.0952994	mg/L	0.01107779	11.62%
Tl 190.801†	3.5	-0.0019636	mg/L	0.00284617	-0.0019636	mg/L	0.00284617	144.95%
V 290.880†	197.4	0.0072769	mg/L	0.00037551	0.0072769	mg/L	0.00037551	5.16%
Zn 206.200†	169.7	0.0027779	mg/L	0.00010641	0.0027779	mg/L	0.00010641	3.83%
B 249.772†	815.2	0.0325186	mg/L	0.00045819	0.0325186	mg/L	0.00045819	1.41%
Si 251.611†	37059.8	1.84444	mg/L	0.076546	1.84444	mg/L	0.076546	4.15%
Ce 413.764†	325.9	0.052	mg/L	0.0062	0.052	mg/L	0.0062	11.74%

Sequence No.: 50
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 1:32:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	392114.4	103	%	2.1				2.06%
Y 371.029	150155.7	86.6	%	1.82				2.11%
Ag 328.068†	7361.7	0.0961194	mg/L	0.00221999	0.0961194	mg/L	0.00221999	2.31%
Al 308.215†	37769.6	4.77976	mg/L	0.115232	4.77976	mg/L	0.115232	2.41%
As 188.979†	814.5	0.487267	mg/L	0.0093581	0.487267	mg/L	0.0093581	1.92%
Ba 233.527†	36372.6	0.477253	mg/L	0.0090084	0.477253	mg/L	0.0090084	1.89%
Be 313.107†	518220.8	0.478860	mg/L	0.0138817	0.478860	mg/L	0.0138817	2.90%
Ca 317.933†	3898196.4	49.4200	mg/L	1.43265	49.4200	mg/L	1.43265	2.90%
Cd 228.802†	12437.0	0.463688	mg/L	0.0096508	0.463688	mg/L	0.0096508	2.08%
Co 228.616†	11004.3	0.470249	mg/L	0.0085459	0.470249	mg/L	0.0085459	1.82%
Cr 267.716†	27678.3	0.484855	mg/L	0.0093918	0.484855	mg/L	0.0093918	1.94%
Cu 327.393†	29900.7	0.480376	mg/L	0.0096416	0.480376	mg/L	0.0096416	2.01%
Fe 273.955†	37547.3	4.89872	mg/L	0.100886	4.89872	mg/L	0.100886	2.06%
K 404.721†	100.7	-46.6258	mg/L	22.17237	-46.6258	mg/L	22.17237	47.55%
Mg 279.077†	431250.0	49.7622	mg/L	1.45753	49.7622	mg/L	1.45753	2.93%
Mn 257.610†	119847.0	0.479963	mg/L	0.0091659	0.479963	mg/L	0.0091659	1.91%
Mo 202.031†	4645.9	0.483559	mg/L	0.0122565	0.483559	mg/L	0.0122565	2.53%
Na 330.237†	17237.2	47.5421	mg/L	0.95777	47.5421	mg/L	0.95777	2.01%
Ni 231.604†	11280.0	0.470290	mg/L	0.0081413	0.470290	mg/L	0.0081413	1.73%
Pb 220.353†	2672.9	0.485770	mg/L	0.0138812	0.485770	mg/L	0.0138812	2.86%
Sb 206.836†	880.6	0.501463	mg/L	0.0170990	0.501463	mg/L	0.0170990	3.41%
Se 196.026†	780.7	0.481608	mg/L	0.0158223	0.481608	mg/L	0.0158223	3.29%
Sn 189.927†	2538.9	0.491017	mg/L	0.0138537	0.491017	mg/L	0.0138537	2.82%
Ti 334.940†	119669.6	0.480727	mg/L	0.0100434	0.480727	mg/L	0.0100434	2.09%
Tl 190.801†	874.4	0.526183	mg/L	0.0091846	0.526183	mg/L	0.0091846	1.75%
V 290.880†	20879.9	0.488801	mg/L	0.0078097	0.488801	mg/L	0.0078097	1.60%
Zn 206.200†	19500.1	0.489047	mg/L	0.0097183	0.489047	mg/L	0.0097183	1.99%
B 249.772†	29892.5	0.507833	mg/L	0.0077490	0.507833	mg/L	0.0077490	1.53%
Si 251.611†	97901.6	4.88186	mg/L	0.096818	4.88186	mg/L	0.096818	1.98%
Ce 413.764†	38334.3	6.146	mg/L	0.0758	6.146	mg/L	0.0758	1.23%

Sequence No.: 51
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/14/2020 1:36:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	406890.3	106	%	1.5				1.40%
Y 371.029	185773.0	107	%	1.4				1.31%
Ag 328.068†	75.0	0.0000625	mg/L	0.00053771	0.0000625	mg/L	0.00053771	859.91%
Al 308.215†	-86.8	-0.0268311	mg/L	0.00409015	-0.0268311	mg/L	0.00409015	15.24%
As 188.979†	1.9	0.0021524	mg/L	0.00440592	0.0021524	mg/L	0.00440592	204.70%
Ba 233.527†	21.9	-0.0021572	mg/L	0.00012143	-0.0021572	mg/L	0.00012143	5.63%
Be 313.107†	8.6	0.0021400	mg/L	0.00001639	0.0021400	mg/L	0.00001639	0.77%
Ca 317.933†	1076.4	-0.0033267	mg/L	0.00015723	-0.0033267	mg/L	0.00015723	4.73%
Cd 228.802†	3.7	0.0046472	mg/L	0.00037584	0.0046472	mg/L	0.00037584	8.09%
Co 228.616†	0.9	0.0024687	mg/L	0.00033862	0.0024687	mg/L	0.00033862	13.72%
Cr 267.716†	-10.7	-0.0015451	mg/L	0.00019584	-0.0015451	mg/L	0.00019584	12.68%
Cu 327.393†	34.7	0.0013156	mg/L	0.00030283	0.0013156	mg/L	0.00030283	23.02%
Fe 273.955†	164.3	-0.0096770	mg/L	0.00199138	-0.0096770	mg/L	0.00199138	20.58%
K 404.721†	-4460.6	-90.4189	mg/L	14.38100	-90.4189	mg/L	14.38100	15.90%
Mg 279.077†	52.6	-0.130680	mg/L	0.0038495	-0.130680	mg/L	0.0038495	2.95%
Mn 257.610†	30.8	-0.0005758	mg/L	0.00007133	-0.0005758	mg/L	0.00007133	12.39%
Mo 202.031†	-0.5	0.0001070	mg/L	0.00066148	0.0001070	mg/L	0.00066148	617.93%
Na 330.237†	-56.1	0.700616	mg/L	0.0430038	0.700616	mg/L	0.0430038	6.14%
Ni 231.604†	-9.6	0.0017992	mg/L	0.00029883	0.0017992	mg/L	0.00029883	16.61%
Pb 220.353†	-1.9	-0.0025904	mg/L	0.00135326	-0.0025904	mg/L	0.00135326	52.24%
Sb 206.836†	-1.7	-0.0020080	mg/L	0.00247131	-0.0020080	mg/L	0.00247131	123.07%
Se 196.026†	4.7	0.0009718	mg/L	0.00249971	0.0009718	mg/L	0.00249971	257.23%
Sn 189.927†	8.5	-0.0005136	mg/L	0.00158195	-0.0005136	mg/L	0.00158195	308.01%
Ti 334.940†	32.8	0.0015607	mg/L	0.00011496	0.0015607	mg/L	0.00011496	7.37%
Tl 190.801†	12.2	0.0020086	mg/L	0.00217570	0.0020086	mg/L	0.00217570	108.32%
V 290.880†	-69.7	0.0013056	mg/L	0.00077899	0.0013056	mg/L	0.00077899	59.67%
Zn 206.200†	50.6	-0.0002192	mg/L	0.00009321	-0.0002192	mg/L	0.00009321	42.53%
B 249.772†	253.0	0.0131603	mg/L	0.00078922	0.0131603	mg/L	0.00078922	6.00%
Si 251.611†	147.1	-0.0030129	mg/L	0.00050896	-0.0030129	mg/L	0.00050896	16.89%
Ce 413.764†	102.0	0.015	mg/L	0.0050	0.015	mg/L	0.0050	32.65%

Sequence No.: 52
Sample ID: AD19192-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 9/14/2020 1:40:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-002

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	411127.3	108	%	0.5				0.42%
Y 371.029	188217.4	109	%	0.6				0.52%
Ag 328.068†	48.1	-0.0002922	mg/L	0.00023690	-0.0002922	mg/L	0.00023690	81.07%
Al 308.215†	325398.1	41.1181	mg/L	0.05757	41.1181	mg/L	0.05757	0.14%
As 188.979†	13.5	0.0143867	mg/L	0.00166883	0.0143867	mg/L	0.00166883	11.60%
Ba 233.527†	2115.6	0.0254556	mg/L	0.00039965	0.0254556	mg/L	0.00039965	1.57%
Be 313.107†	-633.6	0.0015492	mg/L	0.00005564	0.0015492	mg/L	0.00005564	3.59%
Ca 317.933†	16444.3	0.191569	mg/L	0.0014250	0.191569	mg/L	0.0014250	0.74%
Cd 228.802†	0.7	0.0045383	mg/L	0.00023773	0.0045383	mg/L	0.00023773	5.24%
Co 228.616†	74.3	0.0055911	mg/L	0.00030189	0.0055911	mg/L	0.00030189	5.40%
Cr 267.716†	24029.0	0.420749	mg/L	0.0010288	0.420749	mg/L	0.0010288	0.24%
Cu 327.393†	916.4	0.0154579	mg/L	0.00069096	0.0154579	mg/L	0.00069096	4.47%
Fe 273.955†	237469.6	31.1485	mg/L	0.03301	31.1485	mg/L	0.03301	0.11%
K 404.721†	-1259.9	-335.803	mg/L	7.5793	-335.803	mg/L	7.5793	2.26%
Mg 279.077†	2973.6	0.207300	mg/L	0.0032562	0.207300	mg/L	0.0032562	1.57%
Mn 257.610†	5606.6	0.0217870	mg/L	0.00002264	0.0217870	mg/L	0.00002264	0.10%
Mo 202.031†	10.5	0.0012533	mg/L	0.00011896	0.0012533	mg/L	0.00011896	9.49%
Na 330.237†	-80.2	0.635249	mg/L	0.1641929	0.635249	mg/L	0.1641929	25.85%
Ni 231.604†	293.8	0.0143871	mg/L	0.00027231	0.0143871	mg/L	0.00027231	1.89%
Pb 220.353†	124.7	0.0248319	mg/L	0.00187657	0.0248319	mg/L	0.00187657	7.56%
Sb 206.836†	14.2	0.0069222	mg/L	0.00309545	0.0069222	mg/L	0.00309545	44.72%
Se 196.026†	-29.1	-0.0114727	mg/L	0.00205383	-0.0114727	mg/L	0.00205383	17.90%
Sn 189.927†	83.9	0.0141347	mg/L	0.00078543	0.0141347	mg/L	0.00078543	5.56%
Ti 334.940†	102775.6	0.413064	mg/L	0.0016724	0.413064	mg/L	0.0016724	0.40%
Tl 190.801†	-2.7	-0.0023372	mg/L	0.00258743	-0.0023372	mg/L	0.00258743	110.71%
V 290.880†	3728.9	0.0860761	mg/L	0.00024177	0.0860761	mg/L	0.00024177	0.28%
Zn 206.200†	1594.6	0.0386205	mg/L	0.00007723	0.0386205	mg/L	0.00007723	0.20%
B 249.772†	8705.1	0.328723	mg/L	0.0014505	0.328723	mg/L	0.0014505	0.44%
Si 251.611†	87731.1	4.38044	mg/L	0.055105	4.38044	mg/L	0.055105	1.26%
Ce 413.764†	1204.4	0.217	mg/L	0.0155	0.217	mg/L	0.0155	7.14%

Sequence No.: 53
Sample ID: AD19192-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 9/14/2020 1:44:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-003

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	414499.0	108	%	0.7				0.68%
Y 371.029	187699.8	108	%	0.8				0.72%
Ag 328.068†	56.0	-0.0001879	mg/L	0.00077447	-0.0001879	mg/L	0.00077447	412.07%
Al 308.215†	75379.1	9.51327	mg/L	0.057731	9.51327	mg/L	0.057731	0.61%
As 188.979†	5.0	0.0051945	mg/L	0.00227930	0.0051945	mg/L	0.00227930	43.88%
Ba 233.527†	1499.7	0.0173326	mg/L	0.00068095	0.0173326	mg/L	0.00068095	3.93%
Be 313.107†	-423.1	0.0017428	mg/L	0.00004780	0.0017428	mg/L	0.00004780	2.74%
Ca 317.933†	9769.2	0.106915	mg/L	0.0004355	0.106915	mg/L	0.0004355	0.41%
Cd 228.802†	-3.9	0.0043664	mg/L	0.00047491	0.0043664	mg/L	0.00047491	10.88%
Co 228.616†	17.3	0.0031670	mg/L	0.00018147	0.0031670	mg/L	0.00018147	5.73%
Cr 267.716†	4422.3	0.0763263	mg/L	0.00061383	0.0763263	mg/L	0.00061383	0.80%
Cu 327.393†	264.3	0.0049973	mg/L	0.00128771	0.0049973	mg/L	0.00128771	25.77%
Fe 273.955†	52513.7	6.86380	mg/L	0.014800	6.86380	mg/L	0.014800	0.22%
K 404.721†	-4230.8	-154.229	mg/L	6.6862	-154.229	mg/L	6.6862	4.34%
Mg 279.077†	1092.3	-0.0103782	mg/L	0.00108069	-0.0103782	mg/L	0.00108069	10.41%
Mn 257.610†	1612.3	0.0057671	mg/L	0.00003586	0.0057671	mg/L	0.00003586	0.62%
Mo 202.031†	-1.9	-0.0000362	mg/L	0.00105763	-0.0000362	mg/L	0.00105763	>999.9%
Na 330.237†	-50.4	0.716004	mg/L	0.0491857	0.716004	mg/L	0.0491857	6.87%
Ni 231.604†	65.6	0.0049193	mg/L	0.00011344	0.0049193	mg/L	0.00011344	2.31%
Pb 220.353†	61.1	0.0098981	mg/L	0.00226630	0.0098981	mg/L	0.00226630	22.90%
Sb 206.836†	-1.4	-0.0013591	mg/L	0.00369055	-0.0013591	mg/L	0.00369055	271.54%
Se 196.026†	-14.7	-0.0091320	mg/L	0.00471259	-0.0091320	mg/L	0.00471259	51.61%
Sn 189.927†	72.0	0.0118292	mg/L	0.00033034	0.0118292	mg/L	0.00033034	2.79%
Ti 334.940†	63650.7	0.256362	mg/L	0.0075325	0.256362	mg/L	0.0075325	2.94%
Tl 190.801†	5.9	0.0009162	mg/L	0.00307128	0.0009162	mg/L	0.00307128	335.23%
V 290.880†	887.1	0.0227241	mg/L	0.00038957	0.0227241	mg/L	0.00038957	1.71%
Zn 206.200†	381.4	0.0081023	mg/L	0.00042826	0.0081023	mg/L	0.00042826	5.29%
B 249.772†	2177.3	0.0837127	mg/L	0.00024441	0.0837127	mg/L	0.00024441	0.29%
Si 251.611†	135814.8	6.78700	mg/L	0.226677	6.78700	mg/L	0.226677	3.34%
Ce 413.764†	752.9	0.125	mg/L	0.0043	0.125	mg/L	0.0043	3.44%

Sequence No.: 54
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 1:48:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	390393.1	102	%	3.0				2.95%
Y 371.029	149352.2	86.1	%	2.95				3.43%
Ag 328.068†	7373.0	0.0962679	mg/L	0.00445812	0.0962679	mg/L	0.00445812	4.63%
Al 308.215†	38031.6	4.81379	mg/L	0.233191	4.81379	mg/L	0.233191	4.84%
As 188.979†	803.4	0.480661	mg/L	0.0101097	0.480661	mg/L	0.0101097	2.10%
Ba 233.527†	36539.6	0.479455	mg/L	0.0226370	0.479455	mg/L	0.0226370	4.72%
Be 313.107†	515493.4	0.476351	mg/L	0.0160615	0.476351	mg/L	0.0160615	3.37%
Ca 317.933†	3875742.0	49.1352	mg/L	1.64352	49.1352	mg/L	1.64352	3.34%
Cd 228.802†	12525.2	0.466944	mg/L	0.0226067	0.466944	mg/L	0.0226067	4.84%
Co 228.616†	11058.6	0.472560	mg/L	0.0227463	0.472560	mg/L	0.0227463	4.81%
Cr 267.716†	27734.7	0.485846	mg/L	0.0233480	0.485846	mg/L	0.0233480	4.81%
Cu 327.393†	30137.4	0.484172	mg/L	0.0223698	0.484172	mg/L	0.0223698	4.62%
Fe 273.955†	37833.7	4.93631	mg/L	0.225161	4.93631	mg/L	0.225161	4.56%
K 404.721†	50.2	-48.0259	mg/L	33.54620	-48.0259	mg/L	33.54620	69.85%
Mg 279.077†	427479.5	49.3259	mg/L	1.58090	49.3259	mg/L	1.58090	3.21%
Mn 257.610†	120400.9	0.482185	mg/L	0.0226555	0.482185	mg/L	0.0226555	4.70%
Mo 202.031†	4620.8	0.480955	mg/L	0.0120952	0.480955	mg/L	0.0120952	2.51%
Na 330.237†	17291.3	47.6887	mg/L	2.21025	47.6887	mg/L	2.21025	4.63%
Ni 231.604†	11335.7	0.472601	mg/L	0.0237674	0.472601	mg/L	0.0237674	5.03%
Pb 220.353†	2674.4	0.485935	mg/L	0.0118481	0.485935	mg/L	0.0118481	2.44%
Sb 206.836†	883.7	0.503310	mg/L	0.0099938	0.503310	mg/L	0.0099938	1.99%
Se 196.026†	783.0	0.483050	mg/L	0.0116624	0.483050	mg/L	0.0116624	2.41%
Sn 189.927†	2513.7	0.486125	mg/L	0.0103966	0.486125	mg/L	0.0103966	2.14%
Ti 334.940†	120494.1	0.484029	mg/L	0.0226968	0.484029	mg/L	0.0226968	4.69%
Tl 190.801†	880.6	0.530518	mg/L	0.0154974	0.530518	mg/L	0.0154974	2.92%
V 290.880†	20765.9	0.486142	mg/L	0.0230254	0.486142	mg/L	0.0230254	4.74%
Zn 206.200†	19502.7	0.489113	mg/L	0.0242491	0.489113	mg/L	0.0242491	4.96%
B 249.772†	29861.1	0.507561	mg/L	0.0241191	0.507561	mg/L	0.0241191	4.75%
Si 251.611†	98486.7	4.91119	mg/L	0.232094	4.91119	mg/L	0.232094	4.73%
Ce 413.764†	39148.8	6.276	mg/L	0.2432	6.276	mg/L	0.2432	3.88%

Sequence No.: 55
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/14/2020 1:52:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	406809.7	106	%	1.3				1.24%
Y 371.029	185818.5	107	%	1.1				1.06%
Ag 328.068†	91.7	0.0002822	mg/L	0.00040206	0.0002822	mg/L	0.00040206	142.48%
Al 308.215†	-90.5	-0.0272652	mg/L	0.00519300	-0.0272652	mg/L	0.00519300	19.05%
As 188.979†	1.3	0.0017980	mg/L	0.00229379	0.0017980	mg/L	0.00229379	127.57%
Ba 233.527†	19.2	-0.0021927	mg/L	0.00015075	-0.0021927	mg/L	0.00015075	6.88%
Be 313.107†	34.1	0.0021634	mg/L	0.00002757	0.0021634	mg/L	0.00002757	1.27%
Ca 317.933†	1089.5	-0.0031612	mg/L	0.00041940	-0.0031612	mg/L	0.00041940	13.27%
Cd 228.802†	-0.2	0.0045025	mg/L	0.00034772	0.0045025	mg/L	0.00034772	7.72%
Co 228.616†	-4.1	0.0022547	mg/L	0.00030560	0.0022547	mg/L	0.00030560	13.55%
Cr 267.716†	-12.8	-0.0015816	mg/L	0.00017172	-0.0015816	mg/L	0.00017172	10.86%
Cu 327.393†	49.2	0.0015475	mg/L	0.00077993	0.0015475	mg/L	0.00077993	50.40%
Fe 273.955†	168.4	-0.0091382	mg/L	0.00127081	-0.0091382	mg/L	0.00127081	13.91%
K 404.721†	-4423.0	-89.6609	mg/L	12.45239	-89.6609	mg/L	12.45239	13.89%
Mg 279.077†	70.3	-0.128635	mg/L	0.0002756	-0.128635	mg/L	0.0002756	0.21%
Mn 257.610†	31.9	-0.0005711	mg/L	0.00002719	-0.0005711	mg/L	0.00002719	4.76%
Mo 202.031†	-1.6	-0.0000094	mg/L	0.00110059	-0.0000094	mg/L	0.00110059	>999.9%
Na 330.237†	-84.3	0.624154	mg/L	0.0484026	0.624154	mg/L	0.0484026	7.75%
Ni 231.604†	-3.5	0.0020515	mg/L	0.00071513	0.0020515	mg/L	0.00071513	34.86%
Pb 220.353†	-16.3	-0.0052521	mg/L	0.00107766	-0.0052521	mg/L	0.00107766	20.52%
Sb 206.836†	-5.9	-0.0042644	mg/L	0.00193430	-0.0042644	mg/L	0.00193430	45.36%
Se 196.026†	-9.4	-0.0077404	mg/L	0.00442476	-0.0077404	mg/L	0.00442476	57.16%
Sn 189.927†	12.4	0.0002529	mg/L	0.00141233	0.0002529	mg/L	0.00141233	558.44%
Ti 334.940†	37.3	0.0015787	mg/L	0.00021965	0.0015787	mg/L	0.00021965	13.91%
Tl 190.801†	8.0	-0.0002577	mg/L	0.00436931	-0.0002577	mg/L	0.00436931	>999.9%
V 290.880†	-66.7	0.0013717	mg/L	0.00050966	0.0013717	mg/L	0.00050966	37.15%
Zn 206.200†	48.8	-0.0002648	mg/L	0.00015235	-0.0002648	mg/L	0.00015235	57.53%
B 249.772†	208.3	0.0124611	mg/L	0.00063318	0.0124611	mg/L	0.00063318	5.08%
Si 251.611†	183.8	-0.0011764	mg/L	0.00441717	-0.0011764	mg/L	0.00441717	375.48%
Ce 413.764†	138.6	0.021	mg/L	0.0064	0.021	mg/L	0.0064	30.21%

Sequence No.: 56
Sample ID: AD19155-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 9/14/2020 1:56:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19155-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	409617.4	107	%	1.3				1.19%
Y 371.029	192714.9	111	%	1.4				1.23%
Ag 328.068†	-69.9	-0.0018470	mg/L	0.00012851	-0.0018470	mg/L	0.00012851	6.96%
Al 308.215†	526260.7	66.5071	mg/L	0.14078	66.5071	mg/L	0.14078	0.21%
As 188.979†	73.6	0.0719234	mg/L	0.00443936	0.0719234	mg/L	0.00443936	6.17%
Ba 233.527†	15799.5	0.205925	mg/L	0.0003243	0.205925	mg/L	0.0003243	0.16%
Be 313.107†	691.5	0.0027681	mg/L	0.00007578	0.0027681	mg/L	0.00007578	2.74%
Ca 317.933†	833776.2	10.5570	mg/L	0.02653	10.5570	mg/L	0.02653	0.25%
Cd 228.802†	20.7	0.0052741	mg/L	0.00029947	0.0052741	mg/L	0.00029947	5.68%
Co 228.616†	411.5	0.0199250	mg/L	0.00004562	0.0199250	mg/L	0.00004562	0.23%
Cr 267.716†	12452.1	0.217383	mg/L	0.0001045	0.217383	mg/L	0.0001045	0.05%
Cu 327.393†	1567.0	0.0258939	mg/L	0.00074833	0.0258939	mg/L	0.00074833	2.89%
Fe 273.955†	1206433.3	158.373	mg/L	0.2266	158.373	mg/L	0.2266	0.14%
K 404.721†	14527.7	-1282.51	mg/L	12.489	-1282.51	mg/L	12.489	0.97%
Mg 279.077†	73307.1	8.34543	mg/L	0.013631	8.34543	mg/L	0.013631	0.16%
Mn 257.610†	50886.9	0.203389	mg/L	0.0002725	0.203389	mg/L	0.0002725	0.13%
Mo 202.031†	49.9	0.0053471	mg/L	0.00094743	0.0053471	mg/L	0.00094743	17.72%
Na 330.237†	-66.8	0.671769	mg/L	0.0729040	0.671769	mg/L	0.0729040	10.85%
Ni 231.604†	773.8	0.0343080	mg/L	0.00045159	0.0343080	mg/L	0.00045159	1.32%
Pb 220.353†	584.3	0.112031	mg/L	0.0017618	0.112031	mg/L	0.0017618	1.57%
Sb 206.836†	10.3	0.0022187	mg/L	0.00764273	0.0022187	mg/L	0.00764273	344.47%
Se 196.026†	-123.9	-0.0356674	mg/L	0.00807011	-0.0356674	mg/L	0.00807011	22.63%
Sn 189.927†	67.5	0.0109442	mg/L	0.00033898	0.0109442	mg/L	0.00033898	3.10%
Ti 334.940†	318059.7	1.27531	mg/L	0.002501	1.27531	mg/L	0.002501	0.20%
Tl 190.801†	-18.7	-0.0058358	mg/L	0.00214223	-0.0058358	mg/L	0.00214223	36.71%
V 290.880†	9890.4	0.217934	mg/L	0.0011271	0.217934	mg/L	0.0011271	0.52%
Zn 206.200†	19977.5	0.501056	mg/L	0.0014418	0.501056	mg/L	0.0014418	0.29%
B 249.772†	47466.7	1.68403	mg/L	0.002658	1.68403	mg/L	0.002658	0.16%
Si 251.611†	70207.1	3.50332	mg/L	0.017334	3.50332	mg/L	0.017334	0.49%
Ce 413.764†	945.1	0.279	mg/L	0.0113	0.279	mg/L	0.0113	4.05%

Sequence No.: 57
Sample ID: AD19155-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 9/14/2020 2:00:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19155-005

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	400942.2	105	%	1.1				1.03%
Y 371.029	197081.5	114	%	1.1				0.98%
Ag 328.068†	14.0	-0.0007418	mg/L	0.00031362	-0.0007418	mg/L	0.00031362	42.28%
Al 308.215†	142039.7	17.9378	mg/L	0.03389	17.9378	mg/L	0.03389	0.19%
As 188.979†	158.5	0.103693	mg/L	0.0017109	0.103693	mg/L	0.0017109	1.65%
Ba 233.527†	3081.8	0.0381981	mg/L	0.00025156	0.0381981	mg/L	0.00025156	0.66%
Be 313.107†	1133.0	0.0031743	mg/L	0.00007522	0.0031743	mg/L	0.00007522	2.37%
Ca 317.933†	254236.8	3.20726	mg/L	0.002338	3.20726	mg/L	0.002338	0.07%
Cd 228.802†	47.3	0.0062589	mg/L	0.00009779	0.0062589	mg/L	0.00009779	1.56%
Co 228.616†	177.1	0.0099583	mg/L	0.00051940	0.0099583	mg/L	0.00051940	5.22%
Cr 267.716†	5974.2	0.103589	mg/L	0.0010880	0.103589	mg/L	0.0010880	1.05%
Cu 327.393†	420.1	0.0074962	mg/L	0.00103121	0.0074962	mg/L	0.00103121	13.76%
Fe 273.955†	366355.3	48.0712	mg/L	0.08513	48.0712	mg/L	0.08513	0.18%
K 404.721†	1990.1	-438.356	mg/L	13.6450	-438.356	mg/L	13.6450	3.11%
Mg 279.077†	23190.8	2.54659	mg/L	0.005381	2.54659	mg/L	0.005381	0.21%
Mn 257.610†	12442.8	0.0492043	mg/L	0.00010425	0.0492043	mg/L	0.00010425	0.21%
Mo 202.031†	23.4	0.0025965	mg/L	0.00109303	0.0025965	mg/L	0.00109303	42.10%
Na 330.237†	-113.9	0.543975	mg/L	0.0808851	0.543975	mg/L	0.0808851	14.87%
Ni 231.604†	247.7	0.0124744	mg/L	0.00034394	0.0124744	mg/L	0.00034394	2.76%
Pb 220.353†	78.9	0.0140724	mg/L	0.00080072	0.0140724	mg/L	0.00080072	5.69%
Sb 206.836†	4.2	0.0008516	mg/L	0.00918953	0.0008516	mg/L	0.00918953	>999.9%
Se 196.026†	-28.5	-0.0065620	mg/L	0.00887234	-0.0065620	mg/L	0.00887234	135.21%
Sn 189.927†	71.6	0.0117544	mg/L	0.00133743	0.0117544	mg/L	0.00133743	11.38%
Ti 334.940†	102945.1	0.413742	mg/L	0.0009480	0.413742	mg/L	0.0009480	0.23%
Tl 190.801†	1.2	-0.0007238	mg/L	0.00492790	-0.0007238	mg/L	0.00492790	680.81%
V 290.880†	7100.5	0.162120	mg/L	0.0007741	0.162120	mg/L	0.0007741	0.48%
Zn 206.200†	4251.3	0.105453	mg/L	0.0005196	0.105453	mg/L	0.0005196	0.49%
B 249.772†	15059.4	0.527837	mg/L	0.0015164	0.527837	mg/L	0.0015164	0.29%
Si 251.611†	64988.7	3.24219	mg/L	0.013083	3.24219	mg/L	0.013083	0.40%
Ce 413.764†	709.8	0.152	mg/L	0.0157	0.152	mg/L	0.0157	10.35%

Sequence No.: 58
Sample ID: AD19155-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 9/14/2020 2:04:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19155-006

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	405340.3	106	%	1.3				1.22%
Y 371.029	191639.4	110	%	1.4				1.23%
Ag 328.068†	21.4	-0.0006446	mg/L	0.00034402	-0.0006446	mg/L	0.00034402	53.37%
Al 308.215†	121737.8	15.3721	mg/L	0.03120	15.3721	mg/L	0.03120	0.20%
As 188.979†	27.0	0.0259529	mg/L	0.00189676	0.0259529	mg/L	0.00189676	7.31%
Ba 233.527†	3242.3	0.0403156	mg/L	0.00086722	0.0403156	mg/L	0.00086722	2.15%
Be 313.107†	911.2	0.0029703	mg/L	0.00003728	0.0029703	mg/L	0.00003728	1.25%
Ca 317.933†	254797.8	3.21437	mg/L	0.005823	3.21437	mg/L	0.005823	0.18%
Cd 228.802†	1.6	0.0045691	mg/L	0.00022107	0.0045691	mg/L	0.00022107	4.84%
Co 228.616†	128.2	0.0078786	mg/L	0.00050460	0.0078786	mg/L	0.00050460	6.40%
Cr 267.716†	5655.2	0.0979853	mg/L	0.00137320	0.0979853	mg/L	0.00137320	1.40%
Cu 327.393†	564.3	0.0098101	mg/L	0.00096378	0.0098101	mg/L	0.00096378	9.82%
Fe 273.955†	393622.7	51.6514	mg/L	0.07016	51.6514	mg/L	0.07016	0.14%
K 404.721†	1373.6	-486.553	mg/L	16.5626	-486.553	mg/L	16.5626	3.40%
Mg 279.077†	18682.3	2.02492	mg/L	0.004232	2.02492	mg/L	0.004232	0.21%
Mn 257.610†	11149.3	0.0440167	mg/L	0.00013092	0.0440167	mg/L	0.00013092	0.30%
Mo 202.031†	5.6	0.0007473	mg/L	0.00015653	0.0007473	mg/L	0.00015653	20.95%
Na 330.237†	-52.4	0.710561	mg/L	0.0257921	0.710561	mg/L	0.0257921	3.63%
Ni 231.604†	226.6	0.0115985	mg/L	0.00081741	0.0115985	mg/L	0.00081741	7.05%
Pb 220.353†	179.3	0.0322847	mg/L	0.00320465	0.0322847	mg/L	0.00320465	9.93%
Sb 206.836†	2.3	-0.0006923	mg/L	0.00497806	-0.0006923	mg/L	0.00497806	719.09%
Se 196.026†	-35.6	-0.0099803	mg/L	0.00406182	-0.0099803	mg/L	0.00406182	40.70%
Sn 189.927†	61.3	0.0097459	mg/L	0.00191920	0.0097459	mg/L	0.00191920	19.69%
Ti 334.940†	78420.0	0.315515	mg/L	0.0014050	0.315515	mg/L	0.0014050	0.45%
Tl 190.801†	-2.2	-0.0035437	mg/L	0.00107563	-0.0035437	mg/L	0.00107563	30.35%
V 290.880†	4435.8	0.100751	mg/L	0.0023546	0.100751	mg/L	0.0023546	2.34%
Zn 206.200†	2414.3	0.0592412	mg/L	0.00100984	0.0592412	mg/L	0.00100984	1.70%
B 249.772†	16044.2	0.564311	mg/L	0.0015238	0.564311	mg/L	0.0015238	0.27%
Si 251.611†	79281.8	3.95757	mg/L	0.017377	3.95757	mg/L	0.017377	0.44%
Ce 413.764†	431.3	0.110	mg/L	0.0032	0.110	mg/L	0.0032	2.89%

Sequence No.: 59
Sample ID: AD19155-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 9/14/2020 2:08:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19155-007

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	407262.4	106	%	0.9				0.87%
Y 371.029	191819.5	111	%	0.8				0.74%
Ag 328.068†	7.8	-0.0008239	mg/L	0.00026227	-0.0008239	mg/L	0.00026227	31.84%
Al 308.215†	242876.8	30.6855	mg/L	0.01898	30.6855	mg/L	0.01898	0.06%
As 188.979†	25.3	0.0284224	mg/L	0.00114940	0.0284224	mg/L	0.00114940	4.04%
Ba 233.527†	6550.0	0.0839388	mg/L	0.00046036	0.0839388	mg/L	0.00046036	0.55%
Be 313.107†	-23.7	0.0021102	mg/L	0.00001210	0.0021102	mg/L	0.00001210	0.57%
Ca 317.933†	363429.0	4.59204	mg/L	0.001273	4.59204	mg/L	0.001273	0.03%
Cd 228.802†	8.8	0.0048352	mg/L	0.00013580	0.0048352	mg/L	0.00013580	2.81%
Co 228.616†	176.5	0.0099347	mg/L	0.00020143	0.0099347	mg/L	0.00020143	2.03%
Cr 267.716†	7212.8	0.125347	mg/L	0.0004436	0.125347	mg/L	0.0004436	0.35%
Cu 327.393†	1383.5	0.0229502	mg/L	0.00042875	0.0229502	mg/L	0.00042875	1.87%
Fe 273.955†	548165.0	71.9428	mg/L	0.10852	71.9428	mg/L	0.10852	0.15%
K 404.721†	3700.1	-641.438	mg/L	12.4924	-641.438	mg/L	12.4924	1.95%
Mg 279.077†	17552.1	1.89415	mg/L	0.006940	1.89415	mg/L	0.006940	0.37%
Mn 257.610†	31278.2	0.124746	mg/L	0.0001925	0.124746	mg/L	0.0001925	0.15%
Mo 202.031†	23.0	0.0025570	mg/L	0.00030528	0.0025570	mg/L	0.00030528	11.94%
Na 330.237†	-36.0	0.755142	mg/L	0.0561693	0.755142	mg/L	0.0561693	7.44%
Ni 231.604†	369.0	0.0175083	mg/L	0.00018825	0.0175083	mg/L	0.00018825	1.08%
Pb 220.353†	565.4	0.104795	mg/L	0.0017389	0.104795	mg/L	0.0017389	1.66%
Sb 206.836†	4.7	0.0007472	mg/L	0.00157082	0.0007472	mg/L	0.00157082	210.23%
Se 196.026†	-45.4	-0.0105305	mg/L	0.00308610	-0.0105305	mg/L	0.00308610	29.31%
Sn 189.927†	72.2	0.0118716	mg/L	0.00094585	0.0118716	mg/L	0.00094585	7.97%
Ti 334.940†	155081.7	0.622559	mg/L	0.0028309	0.622559	mg/L	0.0028309	0.45%
Tl 190.801†	1.8	0.0013056	mg/L	0.00122593	0.0013056	mg/L	0.00122593	93.90%
V 290.880†	5994.3	0.134996	mg/L	0.0008934	0.134996	mg/L	0.0008934	0.66%
Zn 206.200†	9309.5	0.232696	mg/L	0.0000917	0.232696	mg/L	0.0000917	0.04%
B 249.772†	21042.5	0.761863	mg/L	0.0008182	0.761863	mg/L	0.0008182	0.11%
Si 251.611†	84481.8	4.21780	mg/L	0.024049	4.21780	mg/L	0.024049	0.57%
Ce 413.764†	1011.0	0.219	mg/L	0.0127	0.219	mg/L	0.0127	5.81%

Sequence No.: 60
Sample ID: AD19173-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 9/14/2020 2:12:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19173-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	393606.6	103	%	1.0				0.93%
Y 371.029	181175.5	104	%	0.9				0.87%
Ag 328.068†	-62.7	-0.0017525	mg/L	0.00073309	-0.0017525	mg/L	0.00073309	41.83%
Al 308.215†	186643.8	23.5778	mg/L	0.04679	23.5778	mg/L	0.04679	0.20%
As 188.979†	56.8	0.0397410	mg/L	0.00264420	0.0397410	mg/L	0.00264420	6.65%
Ba 233.527†	10633.6	0.137795	mg/L	0.0007228	0.137795	mg/L	0.0007228	0.52%
Be 313.107†	-2435.2	-0.0001082	mg/L	0.00005772	-0.0001082	mg/L	0.00005772	53.33%
Ca 317.933†	28169422.5	357.228	mg/L	3.2244	357.228	mg/L	3.2244	0.90%
Cd 228.802†	17.4	0.0051517	mg/L	0.00024981	0.0051517	mg/L	0.00024981	4.85%
Co 228.616†	252.1	0.0131493	mg/L	0.00021584	0.0131493	mg/L	0.00021584	1.64%
Cr 267.716†	3742.4	0.0643843	mg/L	0.00060467	0.0643843	mg/L	0.00060467	0.94%
Cu 327.393†	1305.2	0.0216942	mg/L	0.00090366	0.0216942	mg/L	0.00090366	4.17%
Fe 273.955†	216213.3	28.3575	mg/L	0.08444	28.3575	mg/L	0.08444	0.30%
K 404.721†	-1422.8	-311.307	mg/L	12.9674	-311.307	mg/L	12.9674	4.17%
Mg 279.077†	172296.6	19.7993	mg/L	0.06880	19.7993	mg/L	0.06880	0.35%
Mn 257.610†	101954.0	0.408201	mg/L	0.0006592	0.408201	mg/L	0.0006592	0.16%
Mo 202.031†	50.9	0.0054608	mg/L	0.00171834	0.0054608	mg/L	0.00171834	31.47%
Na 330.237†	410.6	1.96469	mg/L	0.135449	1.96469	mg/L	0.135449	6.89%
Ni 231.604†	976.6	0.0427216	mg/L	0.00051221	0.0427216	mg/L	0.00051221	1.20%
Pb 220.353†	228.1	0.0421173	mg/L	0.00260244	0.0421173	mg/L	0.00260244	6.18%
Sb 206.836†	-3.2	-0.0010797	mg/L	0.00270517	-0.0010797	mg/L	0.00270517	250.55%
Se 196.026†	-0.1	0.0056830	mg/L	0.00248433	0.0056830	mg/L	0.00248433	43.72%
Sn 189.927†	-8.9	-0.0038888	mg/L	0.00101330	-0.0038888	mg/L	0.00101330	26.06%
Ti 334.940†	350450.2	1.40504	mg/L	0.002784	1.40504	mg/L	0.002784	0.20%
Tl 190.801†	-15.2	-0.0035897	mg/L	0.00078193	-0.0035897	mg/L	0.00078193	21.78%
V 290.880†	1515.7	0.0356262	mg/L	0.00123617	0.0356262	mg/L	0.00123617	3.47%
Zn 206.200†	42965.0	1.07932	mg/L	0.002390	1.07932	mg/L	0.002390	0.22%
B 249.772†	11158.9	0.350929	mg/L	0.0011278	0.350929	mg/L	0.0011278	0.32%
Si 251.611†	243982.8	12.2006	mg/L	0.09618	12.2006	mg/L	0.09618	0.79%
Ce 413.764†	437.1	0.092	mg/L	0.0100	0.092	mg/L	0.0100	10.86%

Sequence No.: 61
Sample ID: AD19173-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 9/14/2020 2:16:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19173-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	388530.3	102	%	0.9				0.85%
Y 371.029	181733.8	105	%	0.8				0.74%
Ag 328.068†	-168.6	-0.0031484	mg/L	0.00045515	-0.0031484	mg/L	0.00045515	14.46%
Al 308.215†	321794.5	40.6614	mg/L	0.04361	40.6614	mg/L	0.04361	0.11%
As 188.979†	17.5	0.0172693	mg/L	0.00477818	0.0172693	mg/L	0.00477818	27.67%
Ba 233.527†	21319.6	0.278727	mg/L	0.0006756	0.278727	mg/L	0.0006756	0.24%
Be 313.107†	-2602.4	-0.0002621	mg/L	0.00004623	-0.0002621	mg/L	0.00004623	17.64%
Ca 317.933†	41747334.6	529.423	mg/L	7.7240	529.423	mg/L	7.7240	1.46%
Cd 228.802†	6.2	0.0047410	mg/L	0.00035930	0.0047410	mg/L	0.00035930	7.58%
Co 228.616†	428.7	0.0206535	mg/L	0.00033470	0.0206535	mg/L	0.00033470	1.62%
Cr 267.716†	3878.2	0.0667693	mg/L	0.00053598	0.0667693	mg/L	0.00053598	0.80%
Cu 327.393†	2122.4	0.0348016	mg/L	0.00032144	0.0348016	mg/L	0.00032144	0.92%
Fe 273.955†	259205.4	34.0024	mg/L	0.07026	34.0024	mg/L	0.07026	0.21%
K 404.721†	-1297.4	-364.998	mg/L	11.6836	-364.998	mg/L	11.6836	3.20%
Mg 279.077†	343159.9	39.5695	mg/L	0.10679	39.5695	mg/L	0.10679	0.27%
Mn 257.610†	267873.9	1.07365	mg/L	0.001937	1.07365	mg/L	0.001937	0.18%
Mo 202.031†	449.5	0.0469263	mg/L	0.00052993	0.0469263	mg/L	0.00052993	1.13%
Na 330.237†	794.0	3.00315	mg/L	0.023788	3.00315	mg/L	0.023788	0.79%
Ni 231.604†	795.0	0.0351876	mg/L	0.00044087	0.0351876	mg/L	0.00044087	1.25%
Pb 220.353†	186.3	0.0363111	mg/L	0.00166115	0.0363111	mg/L	0.00166115	4.57%
Sb 206.836†	12.0	0.0088174	mg/L	0.00331639	0.0088174	mg/L	0.00331639	37.61%
Se 196.026†	11.0	0.0140722	mg/L	0.00184058	0.0140722	mg/L	0.00184058	13.08%
Sn 189.927†	4.1	-0.0013619	mg/L	0.00144675	-0.0013619	mg/L	0.00144675	106.23%
Ti 334.940†	497925.0	1.99571	mg/L	0.007049	1.99571	mg/L	0.007049	0.35%
Tl 190.801†	-25.1	-0.0049089	mg/L	0.00460636	-0.0049089	mg/L	0.00460636	93.84%
V 290.880†	2905.9	0.0677323	mg/L	0.00031264	0.0677323	mg/L	0.00031264	0.46%
Zn 206.200†	61775.9	1.55252	mg/L	0.003773	1.55252	mg/L	0.003773	0.24%
B 249.772†	16398.9	0.466394	mg/L	0.0007729	0.466394	mg/L	0.0007729	0.17%
Si 251.611†	274253.1	13.7149	mg/L	0.17761	13.7149	mg/L	0.17761	1.29%
Ce 413.764†	726.0	0.143	mg/L	0.0099	0.143	mg/L	0.0099	6.93%

Sequence No.: 62
Sample ID: AD19173-003
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 56
Date Collected: 9/14/2020 2:20:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19173-003

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	391071.3	102	%	0.4				0.39%
Y 371.029	184504.2	106	%	0.5				0.43%
Ag 328.068†	-133.0	-0.0026791	mg/L	0.00079881	-0.0026791	mg/L	0.00079881	29.82%
Al 308.215†	335926.4	42.4485	mg/L	0.06950	42.4485	mg/L	0.06950	0.16%
As 188.979†	25.5	0.0208835	mg/L	0.00053968	0.0208835	mg/L	0.00053968	2.58%
Ba 233.527†	27476.1	0.359921	mg/L	0.0000485	0.359921	mg/L	0.0000485	0.01%
Be 313.107†	-1957.7	0.0003311	mg/L	0.00004115	0.0003311	mg/L	0.00004115	12.43%
Ca 317.933†	37518767.3	475.797	mg/L	3.5118	475.797	mg/L	3.5118	0.74%
Cd 228.802†	2.0	0.0045856	mg/L	0.00030927	0.0045856	mg/L	0.00030927	6.74%
Co 228.616†	371.9	0.0182392	mg/L	0.00046442	0.0182392	mg/L	0.00046442	2.55%
Cr 267.716†	3514.6	0.0603824	mg/L	0.00043110	0.0603824	mg/L	0.00043110	0.71%
Cu 327.393†	3573.0	0.0580704	mg/L	0.00042182	0.0580704	mg/L	0.00042182	0.73%
Fe 273.955†	206096.5	27.0292	mg/L	0.03043	27.0292	mg/L	0.03043	0.11%
K 404.721†	-2424.1	-318.422	mg/L	5.2254	-318.422	mg/L	5.2254	1.64%
Mg 279.077†	455034.4	52.5142	mg/L	0.10302	52.5142	mg/L	0.10302	0.20%
Mn 257.610†	241772.7	0.968963	mg/L	0.0003295	0.968963	mg/L	0.0003295	0.03%
Mo 202.031†	340.7	0.0356074	mg/L	0.00060619	0.0356074	mg/L	0.00060619	1.70%
Na 330.237†	627.5	2.55235	mg/L	0.216892	2.55235	mg/L	0.216892	8.50%
Ni 231.604†	641.6	0.0288210	mg/L	0.00018932	0.0288210	mg/L	0.00018932	0.66%
Pb 220.353†	153.5	0.0304366	mg/L	0.00065902	0.0304366	mg/L	0.00065902	2.17%
Sb 206.836†	8.1	0.0067880	mg/L	0.00357071	0.0067880	mg/L	0.00357071	52.60%
Se 196.026†	11.7	0.0125933	mg/L	0.00376748	0.0125933	mg/L	0.00376748	29.92%
Sn 189.927†	-11.2	-0.0043352	mg/L	0.00101516	-0.0043352	mg/L	0.00101516	23.42%
Ti 334.940†	511949.8	2.05188	mg/L	0.009213	2.05188	mg/L	0.009213	0.45%
Tl 190.801†	-29.4	-0.0069080	mg/L	0.00274237	-0.0069080	mg/L	0.00274237	39.70%
V 290.880†	1741.6	0.0413837	mg/L	0.00360582	0.0413837	mg/L	0.00360582	8.71%
Zn 206.200†	24729.3	0.620590	mg/L	0.0016965	0.620590	mg/L	0.0016965	0.27%
B 249.772†	12835.6	0.369493	mg/L	0.0007492	0.369493	mg/L	0.0007492	0.20%
Si 251.611†	373438.6	18.6792	mg/L	0.03397	18.6792	mg/L	0.03397	0.18%
Ce 413.764†	756.5	0.142	mg/L	0.0063	0.142	mg/L	0.0063	4.45%

Sequence No.: 63
Sample ID: CCV V-325355
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 2:24:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-325355

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	408240.8	107	%	1.7				1.55%
Y 371.029	156815.2	90.4	%	1.41				1.57%
Ag 328.068†	7066.1	0.0922228	mg/L	0.00076392	0.0922228	mg/L	0.00076392	0.83%
Al 308.215†	36193.2	4.57943	mg/L	0.010781	4.57943	mg/L	0.010781	0.24%
As 188.979†	774.2	0.463221	mg/L	0.0051213	0.463221	mg/L	0.0051213	1.11%
Ba 233.527†	35012.8	0.459319	mg/L	0.0009727	0.459319	mg/L	0.0009727	0.21%
Be 313.107†	493574.2	0.456187	mg/L	0.0038787	0.456187	mg/L	0.0038787	0.85%
Ca 317.933†	3764838.6	47.7288	mg/L	0.46166	47.7288	mg/L	0.46166	0.97%
Cd 228.802†	11998.4	0.447494	mg/L	0.0006505	0.447494	mg/L	0.0006505	0.15%
Co 228.616†	11081.3	0.473525	mg/L	0.0077028	0.473525	mg/L	0.0077028	1.63%
Cr 267.716†	26598.3	0.465883	mg/L	0.0004028	0.465883	mg/L	0.0004028	0.09%
Cu 327.393†	28805.9	0.462814	mg/L	0.0015812	0.462814	mg/L	0.0015812	0.34%
Fe 273.955†	36168.3	4.71764	mg/L	0.006734	4.71764	mg/L	0.006734	0.14%
K 404.721†	-2715.3	-102.048	mg/L	15.2040	-102.048	mg/L	15.2040	14.90%
Mg 279.077†	409456.9	47.2405	mg/L	0.52001	47.2405	mg/L	0.52001	1.10%
Mn 257.610†	115268.7	0.461602	mg/L	0.0005577	0.461602	mg/L	0.0005577	0.12%
Mo 202.031†	4428.7	0.460965	mg/L	0.0067664	0.460965	mg/L	0.0067664	1.47%
Na 330.237†	16368.2	45.1884	mg/L	0.24469	45.1884	mg/L	0.24469	0.54%
Ni 231.604†	11430.2	0.476523	mg/L	0.0081440	0.476523	mg/L	0.0081440	1.71%
Pb 220.353†	2553.9	0.464074	mg/L	0.0095440	0.464074	mg/L	0.0095440	2.06%
Sb 206.836†	842.6	0.479690	mg/L	0.0090064	0.479690	mg/L	0.0090064	1.88%
Se 196.026†	749.4	0.462243	mg/L	0.0030547	0.462243	mg/L	0.0030547	0.66%
Sn 189.927†	2416.4	0.467224	mg/L	0.0073961	0.467224	mg/L	0.0073961	1.58%
Ti 334.940†	115833.1	0.465361	mg/L	0.0012892	0.465361	mg/L	0.0012892	0.28%
Tl 190.801†	835.5	0.502402	mg/L	0.0058911	0.502402	mg/L	0.0058911	1.17%
V 290.880†	19824.2	0.464256	mg/L	0.0031945	0.464256	mg/L	0.0031945	0.69%
Zn 206.200†	18653.0	0.467738	mg/L	0.0018919	0.467738	mg/L	0.0018919	0.40%
B 249.772†	28592.0	0.486330	mg/L	0.0032828	0.486330	mg/L	0.0032828	0.68%
Si 251.611†	95189.9	4.74650	mg/L	0.017834	4.74650	mg/L	0.017834	0.38%
Ce 413.764†	36446.8	5.843	mg/L	0.0257	5.843	mg/L	0.0257	0.44%

Sequence No.: 64 Autosampler Location: 2
Sample ID: CCB V-325347 Date Collected: 9/14/2020 2:28:52 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-325347

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	416613.8	109	%	1.1				1.03%
Y 371.029	190062.3	110	%	1.1				0.99%
Ag 328.068†	63.0	-0.0000954	mg/L	0.00064715	-0.0000954	mg/L	0.00064715	678.39%
Al 308.215†	-129.2	-0.0320901	mg/L	0.00114656	-0.0320901	mg/L	0.00114656	3.57%
As 188.979†	-1.3	0.0002714	mg/L	0.00168915	0.0002714	mg/L	0.00168915	622.46%
Ba 233.527†	13.9	-0.0022621	mg/L	0.00011745	-0.0022621	mg/L	0.00011745	5.19%
Be 313.107†	28.2	0.0021580	mg/L	0.00002837	0.0021580	mg/L	0.00002837	1.31%
Ca 317.933†	1095.0	-0.0030913	mg/L	0.00056027	-0.0030913	mg/L	0.00056027	18.12%
Cd 228.802†	-6.5	0.0042727	mg/L	0.00015788	0.0042727	mg/L	0.00015788	3.70%
Co 228.616†	6.6	0.0027095	mg/L	0.00014453	0.0027095	mg/L	0.00014453	5.33%
Cr 267.716†	-8.9	-0.0015147	mg/L	0.00030331	-0.0015147	mg/L	0.00030331	20.02%
Cu 327.393†	29.3	0.0012275	mg/L	0.00051574	0.0012275	mg/L	0.00051574	42.01%
Fe 273.955†	194.1	-0.0057635	mg/L	0.00153691	-0.0057635	mg/L	0.00153691	26.67%
K 404.721†	-5991.8	-121.575	mg/L	9.9824	-121.575	mg/L	9.9824	8.21%
Mg 279.077†	71.6	-0.128476	mg/L	0.0006080	-0.128476	mg/L	0.0006080	0.47%
Mn 257.610†	33.1	-0.0005663	mg/L	0.00004433	-0.0005663	mg/L	0.00004433	7.83%
Mo 202.031†	-9.3	-0.0008040	mg/L	0.00071884	-0.0008040	mg/L	0.00071884	89.40%
Na 330.237†	-37.5	0.751131	mg/L	0.0569763	0.751131	mg/L	0.0569763	7.59%
Ni 231.604†	2.6	0.0023018	mg/L	0.00068604	0.0023018	mg/L	0.00068604	29.81%
Pb 220.353†	5.1	-0.0013266	mg/L	0.00327372	-0.0013266	mg/L	0.00327372	246.78%
Sb 206.836†	-4.2	-0.0033623	mg/L	0.00153305	-0.0033623	mg/L	0.00153305	45.60%
Se 196.026†	-2.0	-0.0031966	mg/L	0.00440879	-0.0031966	mg/L	0.00440879	137.92%
Sn 189.927†	9.0	-0.0004034	mg/L	0.00070462	-0.0004034	mg/L	0.00070462	174.69%
Ti 334.940†	66.3	0.0016949	mg/L	0.00013985	0.0016949	mg/L	0.00013985	8.25%
Tl 190.801†	12.8	0.0024748	mg/L	0.00373257	0.0024748	mg/L	0.00373257	150.82%
V 290.880†	-96.1	0.0006855	mg/L	0.00037576	0.0006855	mg/L	0.00037576	54.81%
Zn 206.200†	57.8	-0.0000371	mg/L	0.00033053	-0.0000371	mg/L	0.00033053	892.02%
B 249.772†	204.0	0.0124128	mg/L	0.00033151	0.0124128	mg/L	0.00033151	2.67%
Si 251.611†	646.4	0.0219883	mg/L	0.01166991	0.0219883	mg/L	0.01166991	53.07%
Ce 413.764†	177.8	0.027	mg/L	0.0053	0.027	mg/L	0.0053	19.55%

Method: HGCV3 Soil (7471B) Page 1 Date: 9/11/2020 11:09:23 AM

H26211S SnCl2 v-334628 9/11/20 BR

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Analysis Begun

Logged In Analyst: usermet Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550 Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26211S.sif
Batch ID: H26211S
Results Data Set: ~~H26196T~~ H26211S BR 9/11/20
Results Library: C:\data-AA\johns\Results\Results.mdb

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Method Loaded
Method Name: HGCV3 Soil (7471B) Method Last Saved: 9/10/2020 1:02:51 PM
Method Description: HgCV3 Soil (7471B)

9/18/20

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Sequence No.: 1 Autosampler Location: 1
Sample ID: Calibration Blank Date Collected: 9/11/2020 11:04:37 AM
Analyst: Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0003	0.0021	0.0003	11:05:23	Yes
2		[0.00]	0.0002	0.0014	0.0002	11:05:56	Yes
Mean:		[0.00]	0.0003				
SD:		0.00	0.0000				
%RSD:		0.00	16.80				

Auto-zero performed.

==========

Sequence No.: 2 Autosampler Location: 2
Sample ID: .2 PPB Date Collected: 9/11/2020 11:05:57 AM
Analyst: Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0013	0.0074	0.0016	11:06:43	Yes
2		[0.2]	0.0014	0.0076	0.0016	11:07:16	Yes
Mean:		[0.2]	0.0014				
SD:		0.0	0.0000				
%RSD:		0.0	0.90				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00678 Intercept: 0.00000

==========

Sequence No.: 3 Autosampler Location: 3
Sample ID: .5 PPB Date Collected: 9/11/2020 11:07:17 AM
Analyst: Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0032	0.0159	0.0034	11:08:03	Yes
2		[0.5]	0.0032	0.0161	0.0034	11:08:35	Yes
Mean:		[0.5]	0.0032				
SD:		0.0	0.0000				
%RSD:		0.0	0.27				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999462 Slope: 0.00630 Intercept: 0.00004

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Sequence No.: 4 Autosampler Location: 4
Sample ID: 1 PPB Date Collected: 9/11/2020 11:08:37 AM
Analyst: Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[1]	0.0057	0.0277	0.0060	11:09:22	Yes
2	[1]	0.0058	0.0272	0.0060	11:09:55	Yes
Mean:	[1]	0.0057				
SD:	0	0.0000				
%RSD:	0	0.69				

Standard number 3 applied. [1]
Correlation Coef.: 0.998253 Slope: 0.00570 Intercept: 0.00014

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: 2 PPB **Date Collected: 9/11/2020 11:09:56 AM**
Analyst: **Data Type: Original**

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0117	0.0547	0.0119	11:10:42	Yes
2		[2]	0.0115	0.0522	0.0118	11:11:14	Yes
Mean:		[2]	0.0116				
SD:		0	0.0001				
%RSD:		0	0.67				

Standard number 4 applied. [2]
Correlation Coef.: 0.999611 Slope: 0.00573 Intercept: 0.00013

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: 5 PPB **Date Collected: 9/11/2020 11:11:16 AM**
Analyst: **Data Type: Original**

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0289	0.1334	0.0292	11:12:01	Yes
2		[5]	0.0302	0.1412	0.0304	11:12:34	Yes
Mean:		[5]	0.0295				
SD:		0	0.0009				
%RSD:		0	3.04				

Standard number 5 applied. [5]
Correlation Coef.: 0.999888 Slope: 0.00588 Intercept: 0.00004

Sequence No.: 7 **Autosampler Location: 7**
Sample ID: 10 PPB **Date Collected: 9/11/2020 11:12:35 AM**
Analyst: **Data Type: Original**

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0550	0.2428	0.0553	11:13:21	Yes
2		[10]	0.0556	0.2408	0.0559	11:13:53	Yes
Mean:		[10]	0.0553				
SD:		0	0.0005				
%RSD:		0	0.84				

Standard number 6 applied. [10]
Correlation Coef.: 0.999493 Slope: 0.00556 Intercept: 0.00040

Sequence No.: 8 **Autosampler Location: 8**
Sample ID: 25 PPB **Date Collected: 9/11/2020 11:14:19 AM**
Analyst: **Data Type: Original**

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[25]	0.1372	0.6371	0.1375	11:15:09	Yes
2		[25]	0.1370	0.6309	0.1372	11:15:41	Yes
Mean:		[25]	0.1371				
SD:		0	0.0002				
%RSD:		0	0.12				

Standard number 7 applied. [25]
Correlation Coef.: 0.999895 Slope: 0.00547 Intercept: 0.00058

Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.107	0.00	16.8
.2 PPB	0.0014	0.2	0.141	0.00	0.9
.5 PPB	0.0032	0.5	0.471	0.00	0.3
1 PPB	0.0057	1.0	0.943	0.00	0.7
2 PPB	0.0116	2.0	2.013	0.00	0.7
5 PPB	0.0295	5.0	5.293	0.00	3.0
10 PPB	0.0553	10.0	10.002	0.00	0.8
25 PPB	0.1371	25.0	24.943	0.00	0.1

Correlation Coef.: 0.999895 Slope: 0.00547 Intercept: 0.00058

Sequence No.: 9 Autosampler Location: 10
Sample ID: ICV (2) Date Collected: 9/11/2020 11:16:08 AM
Analyst: Data Type: Original

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.23	20.23	0.1113	0.5160	0.1115	11:16:55	Yes
2	20.15	20.15	0.1108	0.5077	0.1111	11:17:27	Yes
Mean:	20.19	20.19	0.1111				
SD:	0.053	0.053	0.0003				
%RSD:	0.262	0.262	0.26				

QC value within limits for Hg 253.7 Recovery = 100.94%
All analyte(s) passed QC.

Sequence No.: 10 Autosampler Location: 1
Sample ID: ICB Date Collected: 9/11/2020 11:17:50 AM
Analyst: Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.114	-0.114	-0.0000	0.0005	0.0002	11:18:36	Yes
2	-0.113	-0.113	-0.0000	0.0007	0.0002	11:19:09	Yes
Mean:	-0.114	-0.114	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	0.580	0.580	9.15				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 11
Sample ID: MB 85269 (167) Date Collected: 9/11/2020 11:19:10 AM
Analyst: Data Type: Original

Replicate Data: MB 85269 (167)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.152	-0.152	-0.0003	-0.0000	0.0000	11:19:57	Yes
2	-0.153	-0.153	-0.0003	-0.0001	0.0000	11:20:29	Yes
Mean:	-0.153	-0.153	-0.0003				
SD:	0.000	0.000	0.0000				
%RSD:	0.307	0.307	1.02				

Sequence No.: 12 Autosampler Location: 12
Sample ID: LCS 85269 Date Collected: 9/11/2020 11:20:31 AM
Analyst: Data Type: Original

Replicate Data: LCS 85269

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	24.87	24.87	0.1367	0.6317	0.1369	11:21:16	Yes
2	24.83	24.83	0.1365	0.6328	0.1367	11:21:49	Yes
Mean:	24.85	24.85	0.1366				

SD:	0.025	0.025	0.0001
%RSD:	0.101	0.101	0.10

Sequence No.: 13 **Autosampler Location: 13**
Sample ID: LCS MR 85269 **Date Collected: 9/11/2020 11:22:12 AM**
Analyst: **Data Type: Original**

Replicate Data: LCS MR 85269

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	24.60	24.60	0.1352	0.6284	0.1355	11:23:00	Yes
2	24.34	24.34	0.1338	0.6178	0.1340	11:23:32	Yes
Mean:	24.47	24.47	0.1345				
SD:	0.189	0.189	0.0010				
%RSD:	0.773	0.773	0.77				

Sequence No.: 14 **Autosampler Location: 14**
Sample ID: LCS 4D **Date Collected: 9/11/2020 11:23:56 AM**
Analyst: **Data Type: Original**

Replicate Data: LCS 4D

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	6.001	6.001	0.0334	0.1450	0.0337	11:24:45	Yes
2	6.446	6.446	0.0359	0.1641	0.0361	11:25:17	Yes
Mean:	6.223	6.223	0.0346				
SD:	0.315	0.315	0.0017				
%RSD:	5.065	5.065	4.98				

Sequence No.: 15 **Autosampler Location: 15**
Sample ID: LCS 4D MR **Date Collected: 9/11/2020 11:25:19 AM**
Analyst: **Data Type: Original**

Replicate Data: LCS 4D MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	6.306	6.306	0.0351	0.1658	0.0354	11:26:04	Yes
2	5.780	5.780	0.0322	0.1371	0.0325	11:26:37	Yes
Mean:	6.043	6.043	0.0337				
SD:	0.372	0.372	0.0020				
%RSD:	6.157	6.157	6.05				

Sequence No.: 16 **Autosampler Location: 16**
Sample ID: AD19159-004 **Date Collected: 9/11/2020 11:26:38 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.767	0.767	0.0048	0.0231	0.0050	11:27:24	Yes
2	0.797	0.797	0.0049	0.0241	0.0052	11:27:56	Yes
Mean:	0.782	0.782	0.0049				
SD:	0.021	0.021	0.0001				
%RSD:	2.734	2.734	2.41				

Sequence No.: 17 **Autosampler Location: 17**
Sample ID: AD19159-004 MR **Date Collected: 9/11/2020 11:27:57 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-004 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.840	0.840	0.0052	0.0251	0.0054	11:28:43	Yes
2	0.812	0.812	0.0050	0.0223	0.0053	11:29:15	Yes
Mean:	0.826	0.826	0.0051				
SD:	0.019	0.019	0.0001				

%RSD: 2.336 2.336 2.07

Sequence No.: 18 Autosampler Location: 18
Sample ID: AD19159-005 MS 1 Date Collected: 9/11/2020 11:29:17 AM
Analyst: Data Type: Original

Replicate Data: AD19159-005 MS 1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	11.24	11.24	0.0621	0.2897	0.0624	11:30:02	Yes
2	11.14	11.14	0.0615	0.2847	0.0618	11:30:35	Yes
Mean:	11.19	11.19	0.0618				
SD:	0.074	0.074	0.0004				
%RSD:	0.661	0.661	0.65				

Sequence No.: 19 Autosampler Location: 19
Sample ID: AD19159-006 MS 2 Date Collected: 9/11/2020 11:31:01 AM
Analyst: Data Type: Original

Replicate Data: AD19159-006 MS 2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.74	10.74	0.0594	0.2766	0.0596	11:31:47	Yes
2	10.71	10.71	0.0592	0.2745	0.0595	11:32:19	Yes
Mean:	10.73	10.73	0.0593				
SD:	0.023	0.023	0.0001				
%RSD:	0.214	0.214	0.21				

Sequence No.: 20 Autosampler Location: 20
Sample ID: AD19159-001 Date Collected: 9/11/2020 11:32:41 AM
Analyst: Data Type: Original

Replicate Data: AD19159-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.543	0.543	0.0036	0.0167	0.0038	11:33:28	Yes
2	0.552	0.552	0.0036	0.0166	0.0039	11:34:00	Yes
Mean:	0.547	0.547	0.0036				
SD:	0.006	0.006	0.0000				
%RSD:	1.110	1.110	0.93				

Sequence No.: 21 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/11/2020 11:34:02 AM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.10	10.10	0.0558	0.2599	0.0561	11:34:48	Yes
2	10.07	10.07	0.0557	0.2484	0.0560	11:35:20	Yes
Mean:	10.08	10.08	0.0558				
SD:	0.019	0.019	0.0001				
%RSD:	0.191	0.191	0.19				

QC value within limits for Hg 253.7 Recovery = 100.85%
All analyte(s) passed QC.

Sequence No.: 22 Autosampler Location: 1
Sample ID: CCB Date Collected: 9/11/2020 11:35:43 AM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.110	-0.110	-0.0000	0.0008	0.0002	11:36:29	Yes
2	-0.118	-0.118	-0.0001	0.0003	0.0002	11:37:02	Yes
Mean:	-0.114	-0.114	-0.0000				

SD:	0.006	0.006	0.0000
%RSD:	5.069	5.069	79.42

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 21**
Sample ID: AD19159-002 **Date Collected: 9/11/2020 11:37:03 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.379	1.379	0.0081	0.0386	0.0084	11:37:51	Yes
2	1.365	1.365	0.0081	0.0381	0.0083	11:38:23	Yes
Mean:	1.372	1.372	0.0081				
SD:	0.010	0.010	0.0001				
%RSD:	0.727	0.727	0.67				

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: AD19159-003 **Date Collected: 9/11/2020 11:38:25 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.223	0.223	0.0018	0.0093	0.0021	11:39:10	Yes
2	0.233	0.233	0.0019	0.0094	0.0021	11:39:43	Yes
Mean:	0.228	0.228	0.0018				
SD:	0.006	0.006	0.0000				
%RSD:	2.822	2.822	1.92				

Sequence No.: 25 **Autosampler Location: 23**
Sample ID: AD19159-007 **Date Collected: 9/11/2020 11:39:44 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-007

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.135	0.135	0.0013	0.0069	0.0016	11:40:29	Yes
2	0.146	0.146	0.0014	0.0072	0.0017	11:41:02	Yes
Mean:	0.141	0.141	0.0014				
SD:	0.008	0.008	0.0000				
%RSD:	5.912	5.912	3.36				

Sequence No.: 26 **Autosampler Location: 24**
Sample ID: AD19159-008 **Date Collected: 9/11/2020 11:41:03 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-008

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0006	0.0036	0.0009	11:41:48	Yes
2	0.005	0.005	0.0006	0.0035	0.0009	11:42:21	Yes
Mean:	0.004	0.004	0.0006				
SD:	0.000	0.000	0.0000				
%RSD:	8.429	8.429	0.33				

Sequence No.: 27 **Autosampler Location: 25**
Sample ID: AD19159-009 **Date Collected: 9/11/2020 11:42:22 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-009

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	0.0005	0.0033	0.0008	11:43:07	Yes
2	-0.014	-0.014	0.0005	0.0032	0.0008	11:43:40	Yes

Mean:	-0.014	-0.014	0.0005
SD:	0.000	0.000	0.0000
%RSD:	3.312	3.312	0.50

Sequence No.: 28 **Autosampler Location: 26**
Sample ID: AD19159-010 **Date Collected: 9/11/2020 11:43:41 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-010

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.157	0.157	0.0014	0.0074	0.0017	11:44:27	Yes
2	0.152	0.152	0.0014	0.0073	0.0017	11:45:00	Yes
Mean:	0.154	0.154	0.0014				
SD:	0.003	0.003	0.0000				
%RSD:	2.106	2.106	1.25				

Sequence No.: 29 **Autosampler Location: 27**
Sample ID: AD19160-001 **Date Collected: 9/11/2020 11:45:01 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19160-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.539	0.539	0.0035	0.0174	0.0038	11:45:46	Yes
2	0.533	0.533	0.0035	0.0169	0.0038	11:46:19	Yes
Mean:	0.536	0.536	0.0035				
SD:	0.004	0.004	0.0000				
%RSD:	0.820	0.820	0.68				

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: AD19160-002 **Date Collected: 9/11/2020 11:46:20 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19160-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.069	0.069	0.0010	0.0055	0.0012	11:47:09	Yes
2	0.068	0.068	0.0010	0.0053	0.0012	11:47:41	Yes
Mean:	0.068	0.068	0.0010				
SD:	0.001	0.001	0.0000				
%RSD:	1.571	1.571	0.61				

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: AD19067-003 **Date Collected: 9/11/2020 11:47:43 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19067-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.062	-0.062	0.0002	0.0020	0.0005	11:48:28	Yes
2	-0.057	-0.057	0.0003	0.0022	0.0005	11:49:00	Yes
Mean:	-0.060	-0.060	0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	5.618	5.618	7.18				

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: AD19163-001 **Date Collected: 9/11/2020 11:49:02 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19163-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.052	-0.052	0.0003	0.0023	0.0006	11:49:47	Yes
2	-0.058	-0.058	0.0003	0.0021	0.0005	11:50:20	Yes
Mean:	-0.055	-0.055	0.0003				

SD:	0.005	0.005	0.0000
%RSD:	8.573	8.573	9.09

Sequence No.: 33 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 9/11/2020 11:50:21 AM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.08	10.08	0.0558	0.2595	0.0560	11:51:08	Yes
2	10.20	10.20	0.0564	0.2613	0.0567	11:51:41	Yes
Mean:	10.14	10.14	0.0561				
SD:	0.085	0.085	0.0005				
%RSD:	0.837	0.837	0.83				

QC value within limits for Hg 253.7 Recovery = 101.42%
All analyte(s) passed QC.

Sequence No.: 34 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/11/2020 11:52:03 AM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.118	-0.118	-0.0001	0.0003	0.0002	11:52:50	Yes
2	-0.120	-0.120	-0.0001	0.0004	0.0002	11:53:23	Yes
Mean:	-0.119	-0.119	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.121	1.121	10.66				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 31**
Sample ID: AD19164-001 **Date Collected: 9/11/2020 11:53:24 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19164-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.038	-0.038	0.0004	0.0025	0.0006	11:54:12	Yes
2	-0.040	-0.040	0.0004	0.0022	0.0006	11:54:45	Yes
Mean:	-0.039	-0.039	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	3.662	3.662	2.12				

Sequence No.: 36 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 9/11/2020 11:54:46 AM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.980	9.980	0.0552	0.2581	0.0555	11:55:34	Yes
2	9.980	9.980	0.0552	0.2497	0.0555	11:56:06	Yes
Mean:	9.980	9.980	0.0552				
SD:	0.000	0.000	0.0000				
%RSD:	0.003	0.003	0.00				

QC value within limits for Hg 253.7 Recovery = 99.80%
All analyte(s) passed QC.

Sequence No.: 37 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/11/2020 11:56:29 AM**
Analyst: **Data Type: Original**

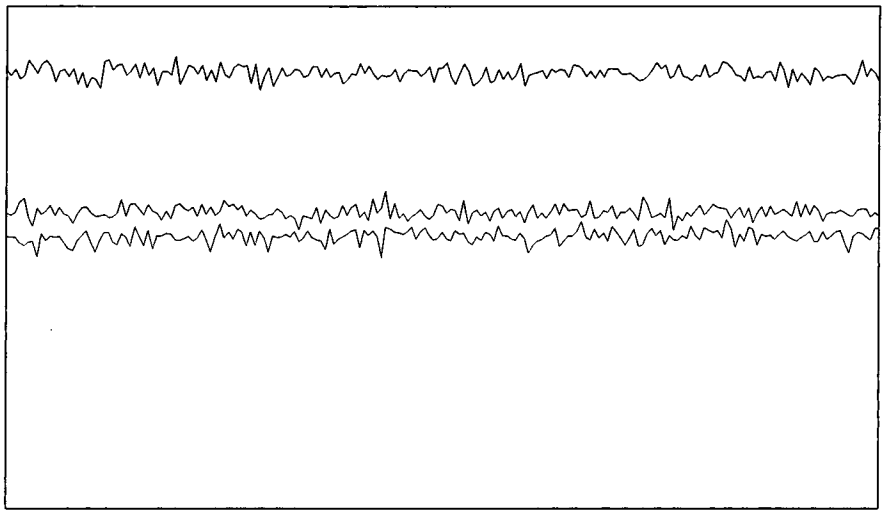
Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.123	-0.123	-0.0001	0.0001	0.0002	11:57:15	Yes
2	-0.124	-0.124	-0.0001	0.0002	0.0002	11:57:48	Yes
Mean:	-0.123	-0.123	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.253	0.253	1.86				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

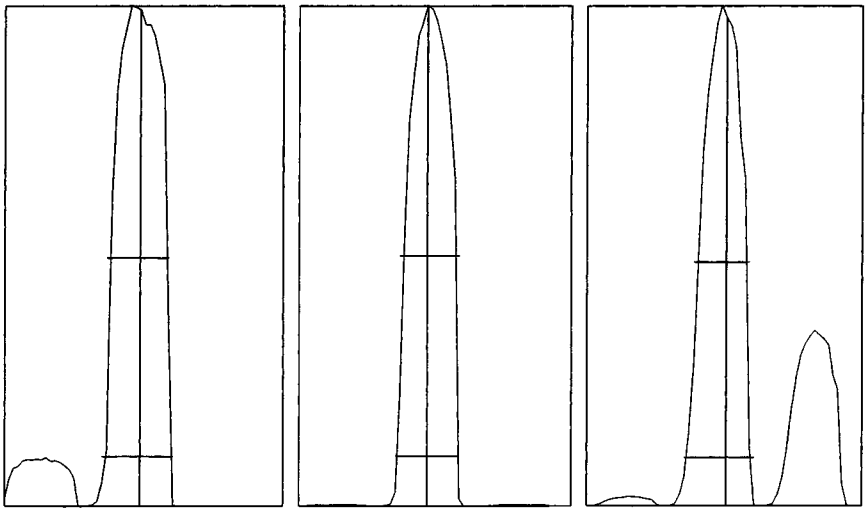
Tune Report

Tune File : ATUNE.U
Comment : TN091120



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	1.25
Doubly Charged:	70/140	0.86

m/z	Range	Count	Mean	RSD%	Background
7	50,000	42478.0	43304.7	1.52	0.50
89	100,000	58159.0	58950.9	2.07	0.90
205	100,000	55765.0	54034.1	2.38	3.70
156/140	2	1.290%	1.264%	5.02	
70/140	2	0.893%	0.858%	6.03	



m/z:	7	89	
Height:	43,604	59,339	5
Axis:	7.00	88.95	2
W-50%:	0.65	0.65	
W-10%:	0.7500	0.700	0

Integration Time:	0.1000 sec
Acquisition Time:	22.7600 sec

Y axis : Linear

Generated : Sep 11, 2020 09:16:58
Printed : Sep 11, 2020 09:17:01

Tune Report

Tune File : ATUNE.U
Comment : TN091120

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1500 W	Extract 1	:	0 V	AMU Gain	:	127
RF Matching	:	2.5 V	Extract 2	:	-120 V	AMU Offset	:	127
Smpl Depth	:	9.5 mm	Omega Bias	:	-65 V	Axis Gain	:	0.9998
Torch-H	:	-1.3 mm	Omega Lens	:	6.5 V	Axis Offset	:	0.02
Torch-V	:	0.6 mm	Cell Entrance	:	-40 V	QP Bias	:	-3 V
Carrier Gas	:	0.6 L/min	Cell Exit	:	-60 V			
Dilution Mode	:	ON	Deflect	:	13 V	===Detector Parameters===		
Dilution Gas	:	0.45 L/min	Plate Bias	:	-40 V	Discriminator	:	4.7 mV
Optional Gas	:	--- %	===Octopole Parameters===			Analog HV	:	1721 V
Nebulizer Pump	:	0.1 rps	OctP RF	:	190 V	Pulse HV	:	1656 V
Sample Pump	:	--- rps	OctP Bias	:	-8 V			
S/C Temp	:	2 degC						

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	--- mL/min	He Gas	:	4.3 mL/min	Optional Gas	:	--- %

Generated : Sep 11, 2020 09:16:58
Printed : Sep 11, 2020 09:17:04

C:\ICPMH\1\7500\QCTUNE.D

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 11 Sep 2020 09:36:28 am
Operator: PC
Misc Info:
Vial Number: 4
Current Method: C:\ICPMH\1\METHODS\TN6020.m

Minimum Response(CPS)

Element	Actual	Required	Flag
7 Li	4396510.00	0.00	
59 Co	3361220.00	0.00	
115 In	5735420.00	0.00	
205 Tl	5209340.00	0.00	

RSD (%)

Element	Actual	Required	Flag
7 Li	0.93	5.00	
59 Co	0.82	5.00	
115 In	0.40	5.00	
205 Tl	0.65	5.00	

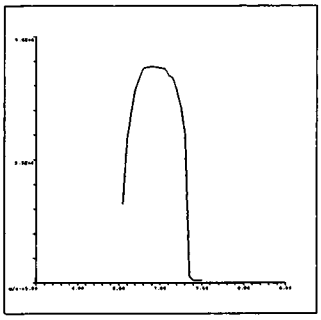
Ion Ratio

Element	Actual	Required	Flag
7 Li			
59 Co			
115 In			
205 Tl			

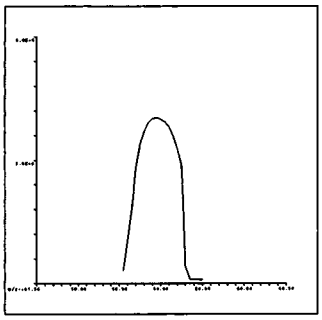
Maximum Bkg. Count(CPS)

Element	Actual	Required	Flag

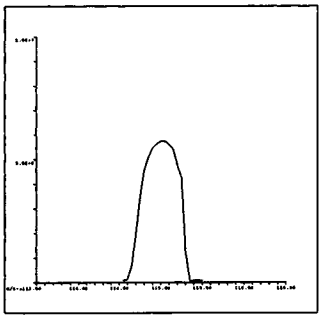
C:\ICPMH\1\7500\QCTUNE.D



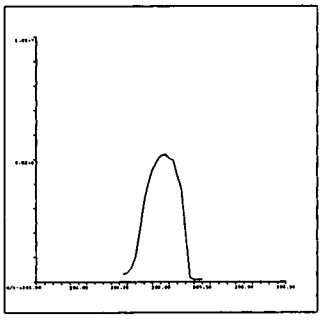
7 Li
Mass Calib.
Actual: 6.90
Required: 6.90-7.10
Flag:
Peak Width
Actual: 0.75
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.05
Required: 204.90-205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

QC Tune Result:Pass

Calibration Blank Report

File S091120A
B- 26212
QC 85270

Rmk.

Sample Name	**RINSE**
Data File Name	**001CALB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:31:16-04:00**
Type	**CalBlk**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

Report Ag, As, Be, Cd, Sb, Se, Tl, V
LRS fmd for Ag.
Ag LR = 100 PPB

Paul C
9/14/20

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	256	3.98
Na	23	115	2	24990	1.01
Mg	24	115	2	1457	7.96
Al	27	115	2	462	15.20
K	39	115	2	25779	1.25
Ca	44	115	2	287	3.08
V	51	115	2	41	9.35
Cr	52	115	2	1087	6.60
Mn	55	115	2	1647	1.07
Fe	56	115	2	37753	0.87
Co	59	115	2	714	2.57
Ni	60	115	2	729	8.97
Cu	65	115	2	1683	3.48
Zn	66	115	2	4404	4.10
As	75	115	2	17	13.35
Se	78	115	2	11	43.03
Kr	83	115	1	123	2.70
Mo	95	115	1	174	17.34
Ag	107	115	1	386	5.56
Cd	111	115	1	42	22.49
Sb	121	115	1	910	8.03
Ba	137	159	1	659	7.41
Tl	205	165	1	1609	4.88
(Pb)	206	165	1	883	12.78
(Pb)	207	165	1	698	7.19
Pb	208	165	1	1794	3.93

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	926683	0.13
Sc	45	2	46462	1.73
In	115	1	1508709	2.78
In	115	2	302432	0.90
Tb	159	1	2276312	1.75
Tb	159	2	976030	0.92
Ho	165	1	2228348	1.81
Ho	165	2	980317	0.68

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Blank Report

Sample Name	**CalBlk V-334455**
Data File Name	**002CALB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:35:48-04:00**
Type	**CalBlk**
VialNumber	**2101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	261	7.03
Na	23	115	2	14483	1.38
Mg	24	115	2	2654	1.40
Al	27	115	2	526	5.09
K	39	115	2	24518	0.85
Ca	44	115	2	149	9.32
V	51	115	2	31	6.18
Cr	52	115	2	1433	6.56
Mn	55	115	2	1139	5.26
Fe	56	115	2	31679	2.26
Co	59	115	2	638	8.27
Ni	60	115	2	602	5.54
Cu	65	115	2	614	10.27
Zn	66	115	2	731	6.92
As	75	115	2	11	36.02
Se	78	115	2	18	14.12
Kr	83	115	1	124	27.10
Mo	95	115	1	81	26.42
Ag	107	115	1	142	18.95
Cd	111	115	1	26	30.99
Sb	121	115	1	1092	3.26
Ba	137	159	1	7706	3.05
Tl	205	165	1	1510	3.61
(Pb)	206	165	1	1032	4.06
(Pb)	207	165	1	905	6.61
Pb	208	165	1	2327	1.86

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	943268	0.62
Sc	45	2	47161	0.69
In	115	1	1541461	1.23
In	115	2	302668	0.40
Tb	159	1	2290443	1.82
Tb	159	2	989980	0.47
Ho	165	1	2269893	1.55
Ho	165	2	995473	0.65

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd1 V-334456**
Data File Name	**003CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:40:20-04:00**
Type	**CalStd**
VialNumber	**2102**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	4427	1.44
Na	23	115	2	72983	0.45
Mg	24	115	2	30591	1.88
Al	27	115	2	3847	6.93
K	39	115	2	44324	0.76
Ca	44	115	2	1142	9.72
V	51	115	2	2270	2.22
Cr	52	115	2	4265	3.03
Mn	55	115	2	3584	2.75
Fe	56	115	2	297584	1.24
Co	59	115	2	5380	2.60
Ni	60	115	2	1805	6.03
Cu	65	115	2	2374	3.37
Zn	66	115	2	5073	2.80
As	75	115	2	293	6.28
Se	78	115	2	134	2.09
Kr	83	115	1	123	29.73
Mo	95	115	1	3706	8.11
Ag	107	115	1	9835	1.70
Cd	111	115	1	1988	1.86
Sb	121	115	1	8668	3.66
Ba	137	159	1	4065	3.90
Tl	205	165	1	23914	3.36
(Pb)	206	165	1	8318	2.67
(Pb)	207	165	1	6727	0.37
Pb	208	165	1	17072	1.80

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	958371	0.72	943268	101.6	70	130	
Sc	45	2	47895	1.50	47161	101.6	70	130	
In	115	1	1559121	1.15	1541461	101.1	70	130	
In	115	2	307844	0.96	302668	101.7	70	130	
Tb	159	1	2315697	0.78	2290443	101.1	70	130	
Tb	159	2	1008473	0.55	989980	101.9	70	130	
Ho	165	1	2290068	0.85	2269893	100.9	70	130	
Ho	165	2	1009277	0.15	995473	101.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd2 V-334457**
Data File Name	**004CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:44:53-04:00**
Type	**CalStd**
VialNumber	**2103**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	43112	3.06
Na	23	115	2	588725	1.08
Mg	24	115	2	282696	0.74
Al	27	115	2	31019	2.33
K	39	115	2	228298	1.10
Ca	44	115	2	10657	0.92
V	51	115	2	22816	2.61
Cr	52	115	2	30113	2.56
Mn	55	115	2	18411	2.38
Fe	56	115	2	2483481	1.49
Co	59	115	2	45494	1.90
Ni	60	115	2	13412	1.38
Cu	65	115	2	17332	2.70
Zn	66	115	2	6621	4.25
As	75	115	2	2867	2.32
Se	78	115	2	1186	1.27
Kr	83	115	1	138	33.99
Mo	95	115	1	35656	2.87
Ag	107	115	1	97014	1.85
Cd	111	115	1	19888	2.55
Sb	121	115	1	77695	2.80
Ba	137	159	1	31178	1.40
Tl	205	165	1	230335	3.54
(Pb)	206	165	1	75510	3.15
(Pb)	207	165	1	63203	3.30
Pb	208	165	1	156614	3.18

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	983537	0.71	943268	104.3	70	130	
Sc	45	2	49121	0.87	47161	104.2	70	130	
In	115	1	1557419	0.48	1541461	101.0	70	130	
In	115	2	313066	1.19	302668	103.4	70	130	
Tb	159	1	2362716	0.28	2290443	103.2	70	130	
Tb	159	2	1030170	1.04	989980	104.1	70	130	
Ho	165	1	2317409	0.12	2269893	102.1	70	130	
Ho	165	2	1029426	0.51	995473	103.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd3 V-334458**
Data File Name	**005CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:49:24-04:00**
Type	**CalStd**
VialNumber	**2104**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	83896	1.55
Na	23	115	2	1205623	0.99
Mg	24	115	2	560156	1.56
Al	27	115	2	61178	1.72
K	39	115	2	423690	1.01
Ca	44	115	2	20527	1.64
V	51	115	2	45308	0.72
Cr	52	115	2	57319	2.25
Mn	55	115	2	34184	0.72
Fe	56	115	2	4836234	1.00
Co	59	115	2	90982	0.91
Ni	60	115	2	24730	2.93
Cu	65	115	2	32168	2.65
Zn	66	115	2	10683	1.72
As	75	115	2	5780	2.62
Se	78	115	2	2391	3.95
Kr	83	115	1	132	22.88
Mo	95	115	1	70683	1.90
Ag	107	115	1	193333	2.50
Cd	111	115	1	38970	2.87
Sb	121	115	1	152045	2.80
Ba	137	159	1	61622	3.45
Tl	205	165	1	456993	2.65
(Pb)	206	165	1	147341	2.87
(Pb)	207	165	1	124110	3.30
Pb	208	165	1	308873	3.08

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	960103	0.56	943268	101.8	70	130	
Sc	45	2	49198	1.83	47161	104.3	70	130	
In	115	1	1537625	1.11	1541461	99.8	70	130	
In	115	2	312574	0.55	302668	103.3	70	130	
Tb	159	1	2328560	0.38	2290443	101.7	70	130	
Tb	159	2	1027217	1.23	989980	103.8	70	130	
Ho	165	1	2281937	0.12	2269893	100.5	70	130	
Ho	165	2	1023053	1.22	995473	102.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd4 V-334459**
Data File Name	**006CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:53:53-04:00**
Type	**CalStd**
VialNumber	**2105**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	430855	2.27
Na	23	115	2	5881104	1.73
Mg	24	115	2	2860974	1.74
Al	27	115	2	311047	1.51
K	39	115	2	2074968	1.25
Ca	44	115	2	103550	2.65
V	51	115	2	230584	3.17
Cr	52	115	2	287968	2.33
Mn	55	115	2	168550	2.13
Fe	56	115	2	24279546	2.16
Co	59	115	2	456776	2.17
Ni	60	115	2	120985	2.63
Cu	65	115	2	156140	2.44
Zn	66	115	2	49686	2.85
As	75	115	2	29373	3.00
Se	78	115	2	12122	2.67
Kr	83	115	1	133	6.61
Mo	95	115	1	363775	3.01
Ag	107	115	1	971924	2.33
Cd	111	115	1	199032	3.01
Sb	121	115	1	769311	2.40
Ba	137	159	1	311193	2.70
Tl	205	165	1	2522038	2.74
(Pb)	206	165	1	748639	3.41
(Pb)	207	165	1	632677	3.39
Pb	208	165	1	1697657	2.07

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	974320	0.74	943268	103.3	70	130	
Sc	45	2	49799	1.86	47161	105.6	70	130	
In	115	1	1537039	1.18	1541461	99.7	70	130	
In	115	2	317005	2.29	302668	104.7	70	130	
Tb	159	1	2343875	0.36	2290443	102.3	70	130	
Tb	159	2	1048392	0.72	989980	105.9	70	130	
Ho	165	1	2309096	0.55	2269893	101.7	70	130	
Ho	165	2	1048255	1.20	995473	105.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd5 V-334460**
Data File Name	**007CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:58:19-04:00**
Type	**CalStd**
VialNumber	**2106**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	849990	1.67
Na	23	115	2	11702859	1.27
Mg	24	115	2	5611922	1.17
Al	27	115	2	622576	1.87
K	39	115	2	4053067	1.59
Ca	44	115	2	204580	1.87
V	51	115	2	459806	1.52
Cr	52	115	2	566508	1.58
Mn	55	115	2	331436	1.53
Fe	56	115	2	47934527	0.96
Co	59	115	2	900519	0.84
Ni	60	115	2	238747	0.79
Cu	65	115	2	307686	1.94
Zn	66	115	2	97651	0.66
As	75	115	2	58675	0.69
Se	78	115	2	23685	1.78
Kr	83	115	1	147	7.87
Mo	95	115	1	724195	2.78
Ag	107	115	1	2048228	1.91
Cd	111	115	1	393142	2.44
Sb	121	115	1	1646398	2.18
Ba	137	159	1	621641	3.27
Tl	205	165	1	4931221	2.48
(Pb)	206	165	1	1659296	2.38
(Pb)	207	165	1	1262972	2.06
Pb	208	165	1	3374136	1.63

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	965799	0.89	943268	102.4	70	130	
Sc	45	2	49424	0.57	47161	104.8	70	130	
In	115	1	1527887	1.29	1541461	99.1	70	130	
In	115	2	310129	1.40	302668	102.5	70	130	
Tb	159	1	2318148	0.43	2290443	101.2	70	130	
Tb	159	2	1030271	1.14	989980	104.1	70	130	
Ho	165	1	2315367	1.14	2269893	102.0	70	130	
Ho	165	2	1035066	1.63	995473	104.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Verification (ICV) - US EPA Method 6020

Sample Name	**ICV V-334461**
Data File Name	**008_ICV.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:02:43-04:00**
Type	**6-ICV**
VialNumber	**2108**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	51.54	ppb	50	437682	2.77	103.08	90	110	
Na	23	115	2	5121.50	ppb	5000	6100713	1.19	102.43	90	110	
Mg	24	115	2	5106.89	ppb	5000	2923283	1.22	102.14	90	110	
Al	27	115	2	5077.90	ppb	5000	1069426	1.37	101.56	90	110	
K	39	115	2	5073.10	ppb	5000	2108219	1.32	101.46	90	110	
Ca	44	115	2	5086.10	ppb	5000	106004	0.81	101.72	90	110	
V	51	115	2	49.61	ppb	50	231828	1.38	99.23	90	110	
Cr	52	115	2	50.45	ppb	50	291797	1.43	100.89	90	110	
Mn	55	115	2	49.81	ppb	50	168755	0.55	99.63	90	110	
Fe	56	115	2	5063.02	ppb	5000	24730510	0.61	101.26	90	110	
Co	59	115	2	49.92	ppb	50	458215	0.65	99.84	90	110	
Ni	60	115	2	49.68	ppb	50	121079	1.21	99.35	90	110	
Cu	65	115	2	50.12	ppb	50	157395	1.42	100.23	90	110	
Zn	66	115	2	50.65	ppb	50	50749	1.01	101.29	90	110	
As	75	115	2	50.07	ppb	50	29852	0.97	100.15	90	110	
Se	78	115	2	48.98	ppb	50	2384	3.26	97.97	90	110	
Mo	95	115	1	48.63	ppb	50	361565	3.01	97.25	90	110	
Ag	107	115	1	9.76	ppb	10	203038	2.79	97.60	90	110	
Cd	111	115	1	49.85	ppb	50	201556	2.24	99.70	90	110	
Sb	121	115	1	47.14	ppb	50	785797	3.24	94.28	90	110	
Ba	137	159	1	49.62	ppb	50	315090	3.28	99.24	90	110	
Tl	205	165	1	49.05	ppb	50	2419796	2.52	98.10	90	110	
Pb	208	165	1	51.10	ppb	50	1719162	3.60	102.20	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	985147	0.96	943268	104.4	70	130	
Sc	45	2	49170	0.70	47161	104.3	70	130	
In	115	1	1569151	0.22	1541461	101.8	70	130	
In	115	2	316407	0.35	302668	104.5	70	130	
Tb	159	1	2351890	0.53	2290443	102.7	70	130	
Tb	159	2	1035813	0.25	989980	104.6	70	130	
Ho	165	1	2305546	1.90	2269893	101.6	70	130	
Ho	165	2	1042027	0.30	995473	104.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Low Level Initial/Continuing Calibration Verification (ICV/CCV) - US EPA Method 6020

Sample Name	**LLICV V-334466**
Data File Name	**009_LCS.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:07:10-04:00**
Type	**6-LCS**
VialNumber	**2110**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	ExpectedValue	%Recovery	%QC Low	%QC High	QC Flag
Be	9	165	1	0.99	ppb	1	98.9	80	120	
Na	23	115	2	468.02	ppb	500	93.6	80	120	
Mg	24	115	2	485.76	ppb	500	97.2	80	120	
Al	27	115	2	496.99	ppb	500	99.4	80	120	
K	39	115	2	488.49	ppb	500	97.7	80	120	
Ca	44	115	2	500.90	ppb	500	100.2	80	120	
V	51	115	2	0.97	ppb	1	96.8	80	120	
Cr	52	115	2	2.03	ppb	2	101.4	80	120	
Mn	55	115	2	5.94	ppb	6	98.9	80	120	
Fe	56	115	2	511.40	ppb	500	102.3	80	120	
Co	59	115	2	1.93	ppb	2	96.7	80	120	
Ni	60	115	2	2.83	ppb	3	94.4	80	120	
Cu	65	115	2	10.04	ppb	10	100.4	80	120	
Zn	66	115	2	19.76	ppb	20	98.8	80	120	
As	75	115	2	0.99	ppb	1	99.2	80	120	
Se	78	115	2	10.01	ppb	10	100.1	80	120	
Mo	95	115	1	1.05	ppb	1	105.4	80	120	
Ag	107	115	1	0.92	ppb	1	92.4	80	120	
Cd	111	115	1	1.91	ppb	2	95.5	80	120	
Sb	121	115	1	3.67	ppb	4	91.9	80	120	
Ba	137	159	1	3.70	ppb	5	74.0	80	120	>+-10%
Tl	205	165	1	1.82	ppb	2	90.8	80	120	
Pb	208	165	1	1.84	ppb	2	92.1	80	120	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	983762	0.23	943268	104.3	70	130	
Sc	45	2	49888	1.65	47161	105.8	70	130	
In	115	1	1565182	0.73	1541461	101.5	70	130	
In	115	2	319596	1.52	302668	105.6	70	130	
Tb	159	1	2372178	1.28	2290443	103.6	70	130	
Tb	159	2	1036113	0.91	989980	104.7	70	130	
Ho	165	1	2322583	1.04	2269893	102.3	70	130	
Ho	165	2	1043657	0.57	995473	104.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Blank (ICB) - US EPA Method 6020

Sample Name	**ICB V-334462**
Data File Name	**010_ICB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:11:42-04:00**
Type	**6-ICB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	0.5	
Na	23	115	2	6.86	ppb	250	
Mg	24	115	2	0.32	ppb	250	
Al	27	115	2	1.06	ppb	250	
K	39	115	2	3.42	ppb	250	
Ca	44	115	2	3.44	ppb	250	
V	51	115	2	0.00	ppb	0.5	
Cr	52	115	2	0.01	ppb	1	
Mn	55	115	2	0.02	ppb	3	
Fe	56	115	2	2.37	ppb	250	
Co	59	115	2	-0.01	ppb	1	
Ni	60	115	2	0.08	ppb	1.5	
Cu	65	115	2	0.96	ppb	5	
Zn	66	115	2	0.50	ppb	10	
As	75	115	2	0.00	ppb	0.5	
Se	78	115	2	-0.05	ppb	5	
Mo	95	115	1	0.03	ppb	0.5	
Ag	107	115	1	0.00	ppb	0.5	
Cd	111	115	1	0.00	ppb	1	
Sb	121	115	1	-0.01	ppb	2	
Ba	137	159	1	-1.13	ppb	2.5	
Tl	205	165	1	0.00	ppb	1	
Pb	208	165	1	-0.01	ppb	1	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	965347	0.66	943268	102.3	70	130	
Sc	45	2	49377	1.83	47161	104.7	70	130	
In	115	1	1539503	1.57	1541461	99.9	70	130	
In	115	2	315377	1.21	302668	104.2	70	130	
Tb	159	1	2316813	0.87	2290443	101.2	70	130	
Tb	159	2	1022136	0.97	989980	103.2	70	130	
Ho	165	1	2278721	1.59	2269893	100.4	70	130	
Ho	165	2	1021894	1.28	995473	102.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Interference Check Sample A (ICS-A) - US EPA Method 6020

Sample Name	**ICSA V-334463**
Data File Name	**011ICSA.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:16:14-04:00**
Type	**6-ICSA**
VialNumber	**2107**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	131709.36	ppb	162500	
Mg	24	115	2	50909.44	ppb	65000	
Al	27	115	2	51588.44	ppb	65000	
K	39	115	2	53196.29	ppb	65000	
Ca	44	115	2	163961.03	ppb	195000	
V	51	115	2	0.09	ppb	1	
Cr	52	115	2	0.51	ppb	2	
Mn	55	115	2	1.45	ppb	6	
Fe	56	115	2	128419.00	ppb	162500	
Co	59	115	2	0.20	ppb	2	
Ni	60	115	2	0.62	ppb	3	
Cu	65	115	2	0.64	ppb	10	
Zn	66	115	2	1.04	ppb	20	
As	75	115	2	0.24	ppb	1	
Se	78	115	2	0.06	ppb	10	
Mo	95	115	1	1015.70	ppb	1300	
Ag	107	115	1	0.12	ppb	1	
Cd	111	115	1	1.29	ppb	2	
Sb	121	115	1	0.31	ppb	1	
Ba	137	159	1	-0.28	ppb	5	
Tl	205	165	1	-0.01	ppb	2	
Pb	208	165	1	0.01	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1042705	0.99	943268	110.5	70	130	
Sc	45	2	54039	0.55	47161	114.6	70	130	
In	115	1	1586744	0.65	1541461	102.9	70	130	
In	115	2	318055	1.50	302668	105.1	70	130	
Tb	159	1	2481062	0.56	2290443	108.3	70	130	
Tb	159	2	1086714	1.44	989980	109.8	70	130	
Ho	165	1	2454295	0.66	2269893	108.1	70	130	
Ho	165	2	1091923	0.93	995473	109.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**012SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:20:38-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.00	0.00	ppb	301	4.99	550	
Na	23	115	2	18.28	18.28	ppb	39221	2.65	55000	
Mg	24	115	2	-2.09	-2.09	ppb	1682	1.16	55000	
Al	27	115	2	-0.26	-0.26	ppb	527	5.02	16500	
K	39	115	2	4.30	4.30	ppb	29152	1.69	55000	
Ca	44	115	2	8.53	8.53	ppb	354	2.87	55000	
V	51	115	2	0.01	0.01	ppb	63	10.52	550	
Cr	52	115	2	-0.07	-0.07	ppb	1141	2.98	550	
Mn	55	115	2	0.06	0.06	ppb	1488	4.02	550	
Fe	56	115	2	3.83	3.83	ppb	55094	0.84	55000	
Co	59	115	2	-0.03	-0.03	ppb	457	5.51	550	
Ni	60	115	2	-0.01	-0.01	ppb	651	13.35	550	
Cu	65	115	2	0.51	0.51	ppb	2395	4.62	550	
Zn	66	115	2	4.04	4.04	ppb	5061	3.86	550	
As	75	115	2	0.00	0.00	ppb	13	49.99	550	
Se	78	115	2	-0.05	-0.05	ppb	18	22.54	2750	
Mo	95	115	1	0.48	0.48	ppb	3978	3.87	550	
Ag	107	115	1	0.02	0.02	ppb	502	19.34	550	
Cd	111	115	1	0.00	0.00	ppb	49	35.12	550	
Sb	121	115	1	-0.03	-0.03	ppb	736	16.84	550	
Ba	137	159	1	-1.18	-1.18	ppb	636	7.96	550	
Tl	205	165	1	-0.01	-0.01	ppb	1392	14.80	550	
Pb	208	165	1	-0.02	-0.02	ppb	1982	4.88	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1051370	0.61	943268	111.5	70	130	
Sc	45	2	52591	1.11	47161	111.5	70	130	
In	115	1	1716244	0.47	1541461	111.3	70	130	
In	115	2	336653	0.34	302668	111.2	70	130	
Tb	159	1	2527037	1.43	2290443	110.3	70	130	
Tb	159	2	1090629	0.70	989980	110.2	70	130	
Ho	165	1	2493494	0.94	2269893	109.9	70	130	
Ho	165	2	1097199	0.73	995473	110.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LRS V-334464**
Data File Name	**013SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:25:11-04:00**
Type	**Sample**
VialNumber	**2109**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	488.02	488.02	ppb	4317806	2.36	550	
Na	23	115	2	51835.04	51835.04	ppb	62386362	1.65	55000	
Mg	24	115	2	51109.05	51109.05	ppb	29600344	2.06	55000	
Al	27	115	2	15514.65	15514.65	ppb	3307383	1.01	16500	
K	39	115	2	51834.31	51834.31	ppb	21573031	1.30	55000	
Ca	44	115	2	53586.89	53586.89	ppb	1129528	3.11	55000	
V	51	115	2	534.75	534.75	ppb	2529972	2.10	550	
Cr	52	115	2	522.70	522.70	ppb	3047568	2.37	550	
Mn	55	115	2	532.18	532.18	ppb	1813945	1.66	550	
Fe	56	115	2	51119.77	51119.77	ppb	252540038	1.66	55000	
Co	59	115	2	514.16	514.16	ppb	4772705	1.46	550	
Ni	60	115	2	500.68	500.68	ppb	1230228	5.48	550	
Cu	65	115	2	514.74	514.74	ppb	1630891	1.42	550	
Zn	66	115	2	485.20	485.20	ppb	485688	1.88	550	
As	75	115	2	510.28	510.28	ppb	307935	1.66	550	
Se	78	115	2	2497.12	2497.12	ppb	122125	1.56	2750	
Mo	95	115	1	530.63	530.63	ppb	3967928	2.94	550	
Ag	107	115	1	1545.02	1545.02	ppb	32301710	1.46	550	>LDR
Cd	111	115	1	522.03	522.03	ppb	2122545	2.74	550	
Sb	121	115	1	496.39	496.39	ppb	8312032	2.37	550	
Ba	137	159	1	528.19	528.19	ppb	3414664	2.95	550	
Tl	205	165	1	480.31	480.31	ppb	24679662	1.63	550	
Pb	208	165	1	468.00	468.00	ppb	16390401	1.37	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1021426	0.47	943268	108.3	70	130	
Sc	45	2	52787	2.07	47161	111.9	70	130	
In	115	1	1578440	2.08	1541461	102.4	70	130	
In	115	2	320383	0.90	302668	105.9	70	130	
Tb	159	1	2450022	1.62	2290443	107.0	70	130	
Tb	159	2	1068394	1.21	989980	107.9	70	130	
Ho	165	1	2402584	2.19	2269893	105.8	70	130	
Ho	165	2	1072040	1.59	995473	107.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**014SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:29:22-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.08	0.08	ppb	1019	7.18	550	
Na	23	115	2	18.17	18.17	ppb	39083	0.47	55000	
Mg	24	115	2	-1.75	-1.75	ppb	1885	3.01	55000	
Al	27	115	2	0.13	0.13	ppb	614	13.62	16500	
K	39	115	2	7.42	7.42	ppb	30511	0.23	55000	
Ca	44	115	2	6.55	6.55	ppb	311	17.02	55000	
V	51	115	2	0.00	0.00	ppb	47	53.93	550	
Cr	52	115	2	-0.08	-0.08	ppb	1128	2.81	550	
Mn	55	115	2	0.05	0.05	ppb	1433	2.33	550	
Fe	56	115	2	3.48	3.48	ppb	53281	0.90	55000	
Co	59	115	2	-0.01	-0.01	ppb	613	2.49	550	
Ni	60	115	2	0.03	0.03	ppb	740	3.58	550	
Cu	65	115	2	0.45	0.45	ppb	2186	1.68	550	
Zn	66	115	2	4.01	4.01	ppb	5020	5.38	550	
As	75	115	2	0.06	0.06	ppb	48	13.96	550	
Se	78	115	2	0.23	0.23	ppb	32	17.21	2750	
Mo	95	115	1	0.33	0.33	ppb	2737	5.91	550	
Ag	107	115	1	103.22	103.22	ppb	2281515	3.20	550	
Cd	111	115	1	0.01	0.01	ppb	63	17.55	550	
Sb	121	115	1	0.24	0.24	ppb	5397	6.00	550	
Ba	137	159	1	-1.17	-1.17	ppb	736	14.01	550	
Tl	205	165	1	0.05	0.05	ppb	4286	5.55	550	
Pb	208	165	1	0.00	0.00	ppb	2489	5.47	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1048117	0.26	943268	111.1	70	130	
Sc	45	2	52614	0.44	47161	111.6	70	130	
In	115	1	1668884	1.35	1541461	108.3	70	130	
In	115	2	336676	1.39	302668	111.2	70	130	
Tb	159	1	2499513	0.56	2290443	109.1	70	130	
Tb	159	2	1086492	0.49	989980	109.7	70	130	
Ho	165	1	2451830	0.24	2269893	108.0	70	130	
Ho	165	2	1082127	1.56	995473	108.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**015SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:33:53-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.04	0.04	ppb	658	9.01	550	
Na	23	115	2	16.95	16.95	ppb	36021	1.20	55000	
Mg	24	115	2	-0.54	-0.54	ppb	2520	3.80	55000	
Al	27	115	2	0.47	0.47	ppb	662	12.79	16500	
K	39	115	2	6.10	6.10	ppb	28728	0.66	55000	
Ca	44	115	2	9.56	9.56	ppb	362	5.23	55000	
V	51	115	2	0.01	0.01	ppb	90	14.82	550	
Cr	52	115	2	-0.07	-0.07	ppb	1127	10.80	550	
Mn	55	115	2	0.07	0.07	ppb	1445	4.26	550	
Fe	56	115	2	3.47	3.47	ppb	51085	1.37	55000	
Co	59	115	2	-0.01	-0.01	ppb	582	14.31	550	
Ni	60	115	2	0.02	0.02	ppb	698	11.10	550	
Cu	65	115	2	0.48	0.48	ppb	2196	3.26	550	
Zn	66	115	2	4.03	4.03	ppb	4843	6.86	550	
As	75	115	2	0.01	0.01	ppb	17	17.64	550	
Se	78	115	2	-0.05	-0.05	ppb	17	50.67	2750	
Mo	95	115	1	0.11	0.11	ppb	908	8.00	550	
Ag	107	115	1	0.26	0.26	ppb	5678	10.69	550	
Cd	111	115	1	0.01	0.01	ppb	71	5.04	550	
Sb	121	115	1	0.03	0.03	ppb	1611	4.56	550	
Ba	137	159	1	-1.17	-1.17	ppb	674	2.72	550	
Tl	205	165	1	0.02	0.02	ppb	2500	0.58	550	
Pb	208	165	1	0.00	0.00	ppb	2282	1.83	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	992706	0.59	943268	105.2	70	130	
Sc	45	2	49754	0.83	47161	105.5	70	130	
In	115	1	1605909	0.92	1541461	104.2	70	130	
In	115	2	323103	1.10	302668	106.8	70	130	
Tb	159	1	2394195	0.76	2290443	104.5	70	130	
Tb	159	2	1044125	0.31	989980	105.5	70	130	
Ho	165	1	2368690	0.39	2269893	104.4	70	130	
Ho	165	2	1042451	1.12	995473	104.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0166CCV.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:38:24-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	51.65	ppb	50	446930	3.27	103.30	90	110	
Na	23	115	2	5039.59	ppb	5000	6031800	0.32	100.79	90	110	
Mg	24	115	2	5114.87	ppb	5000	2941643	0.38	102.30	90	110	
Al	27	115	2	1505.36	ppb	1500	318937	1.27	100.36	90	110	
K	39	115	2	5101.27	ppb	5000	2129937	0.85	102.03	90	110	
Ca	44	115	2	5064.78	ppb	5000	106056	1.46	101.30	90	110	
V	51	115	2	49.94	ppb	50	234446	0.74	99.87	90	110	
Cr	52	115	2	50.09	ppb	50	291101	1.04	100.17	90	110	
Mn	55	115	2	50.47	ppb	50	171779	1.09	100.94	90	110	
Fe	56	115	2	5036.26	ppb	5000	24716574	0.98	100.73	90	110	
Co	59	115	2	50.01	ppb	50	461224	0.90	100.02	90	110	
Ni	60	115	2	50.27	ppb	50	123106	0.94	100.55	90	110	
Cu	65	115	2	50.52	ppb	50	159401	0.50	101.03	90	110	
Zn	66	115	2	50.46	ppb	50	50791	1.67	100.91	90	110	
As	75	115	2	50.13	ppb	50	30024	0.76	100.25	90	110	
Se	78	115	2	255.26	ppb	250	12404	0.46	102.10	90	110	
Mo	95	115	1	49.54	ppb	50	371556	3.83	99.07	90	110	
Ag	107	115	1	53.56	ppb	50	1123430	3.38	107.13	90	110	
Cd	111	115	1	49.67	ppb	50	202595	3.38	99.34	90	110	
Sb	121	115	1	47.89	ppb	50	805333	3.88	95.78	90	110	
Ba	137	159	1	50.17	ppb	50	322564	3.92	100.34	90	110	
Tl	205	165	1	51.16	ppb	50	2571242	2.77	102.33	90	110	
Pb	208	165	1	50.38	ppb	50	1726829	2.31	100.75	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	990179	0.84	943268	105.0	70	130	
Sc	45	2	50035	0.51	47161	106.1	70	130	
In	115	1	1583182	0.75	1541461	102.7	70	130	
In	115	2	317934	1.45	302668	105.0	70	130	
Tb	159	1	2382194	0.54	2290443	104.0	70	130	
Tb	159	2	1048375	0.32	989980	105.9	70	130	
Ho	165	1	2348284	0.67	2269893	103.5	70	130	
Ho	165	2	1046821	0.59	995473	105.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0176CCB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:42:50-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.02	ppb	1	
Na	23	115	2	9.53	ppb	500	
Mg	24	115	2	0.71	ppb	500	
Al	27	115	2	0.85	ppb	500	
K	39	115	2	3.54	ppb	500	
Ca	44	115	2	1.53	ppb	500	
V	51	115	2	0.00	ppb	1	
Cr	52	115	2	0.02	ppb	2	
Mn	55	115	2	-0.03	ppb	6	
Fe	56	115	2	2.51	ppb	500	
Co	59	115	2	-0.02	ppb	2	
Ni	60	115	2	0.12	ppb	3	
Cu	65	115	2	1.01	ppb	10	
Zn	66	115	2	0.53	ppb	20	
As	75	115	2	0.00	ppb	1	
Se	78	115	2	0.10	ppb	10	
Mo	95	115	1	0.08	ppb	1	
Ag	107	115	1	0.08	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.01	ppb	4	
Ba	137	159	1	-1.13	ppb	5	
Tl	205	165	1	0.01	ppb	2	
Pb	208	165	1	-0.01	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	967438	0.88	943268	102.6	70	130	
Sc	45	2	49056	2.50	47161	104.0	70	130	
In	115	1	1559697	0.58	1541461	101.2	70	130	
In	115	2	316744	0.27	302668	104.7	70	130	
Tb	159	1	2356238	0.42	2290443	102.9	70	130	
Tb	159	2	1033160	0.86	989980	104.4	70	130	
Ho	165	1	2324964	0.97	2269893	102.4	70	130	
Ho	165	2	1034072	0.33	995473	103.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**MB 85270**
Data File Name	**018SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:47:21-04:00**
Type	**Sample**
VialNumber	**2201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.01	0.01	ppb	398	1.74	550	
Na	23	115	2	12.20	12.20	ppb	28993	1.05	55000	
Mg	24	115	2	-0.32	-0.32	ppb	2536	6.36	55000	
Al	27	115	2	0.61	0.61	ppb	662	12.86	16500	
K	39	115	2	1.65	1.65	ppb	25737	0.56	55000	
Ca	44	115	2	2.69	2.69	ppb	207	26.94	55000	
V	51	115	2	0.08	0.08	ppb	397	11.37	550	
Cr	52	115	2	0.14	0.14	ppb	2269	3.82	550	
Mn	55	115	2	0.04	0.04	ppb	1292	4.79	550	
Fe	56	115	2	5.94	5.94	ppb	60764	0.64	55000	
Co	59	115	2	-0.03	-0.03	ppb	380	8.77	550	
Ni	60	115	2	-0.01	-0.01	ppb	591	8.99	550	
Cu	65	115	2	0.52	0.52	ppb	2214	2.86	550	
Zn	66	115	2	2.05	2.05	ppb	2726	7.74	550	
As	75	115	2	0.01	0.01	ppb	20	22.20	550	
Se	78	115	2	-0.06	-0.06	ppb	16	32.23	2750	
Mo	95	115	1	0.04	0.04	ppb	421	7.09	550	
Ag	107	115	1	0.10	0.10	ppb	2299	19.43	550	
Cd	111	115	1	0.00	0.00	ppb	44	32.79	550	
Sb	121	115	1	0.02	0.02	ppb	1409	5.32	550	
Ba	137	159	1	-0.40	-0.40	ppb	5610	5.44	550	
Tl	205	165	1	0.00	0.00	ppb	1516	9.06	550	
Pb	208	165	1	0.23	0.23	ppb	10495	1.70	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	978001	1.90	943268	103.7	70	130	
Sc	45	2	48607	0.79	47161	103.1	70	130	
In	115	1	1602535	0.83	1541461	104.0	70	130	
In	115	2	309542	0.91	302668	102.3	70	130	
Tb	159	1	2414486	1.58	2290443	105.4	70	130	
Tb	159	2	1033189	0.48	989980	104.4	70	130	
Ho	165	1	2374818	1.36	2269893	104.6	70	130	
Ho	165	2	1037756	0.70	995473	104.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LCS 85270**
Data File Name	**019SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:51:53-04:00**
Type	**Sample**
VialNumber	**2202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	151.01	151.01	ppb	1351794	1.71	550	
Na	23	115	2	879.26	879.26	ppb	1016537	5.26	55000	
Mg	24	115	2	6451.13	6451.13	ppb	3540159	0.85	55000	
Al	27	115	2	8734.21	8734.21	ppb	1763465	0.64	16500	
K	39	115	2	1870.28	1870.28	ppb	760833	1.04	55000	
Ca	44	115	2	19543.70	19543.70	ppb	390184	1.73	55000	
V	51	115	2	247.17	247.17	ppb	1107409	1.02	550	
Cr	52	115	2	196.49	196.49	ppb	1085736	1.68	550	
Mn	55	115	2	538.16	538.16	ppb	1737247	2.56	550	
Fe	56	115	2	13234.15	13234.15	ppb	61937620	1.66	55000	
Co	59	115	2	259.78	259.78	ppb	2283876	1.39	550	
Ni	60	115	2	48.25	48.25	ppb	112798	0.71	550	
Cu	65	115	2	185.97	185.97	ppb	558418	1.69	550	
Zn	66	115	2	599.98	599.98	ppb	568559	0.90	550	>LDR
As	75	115	2	42.03	42.03	ppb	24032	1.54	550	
Se	78	115	2	304.51	304.51	ppb	14119	1.21	2750	
Mo	95	115	1	178.91	178.91	ppb	1347822	2.25	550	
Ag	107	115	1	83.13	83.13	ppb	1751258	1.97	550	
Cd	111	115	1	170.64	170.64	ppb	699129	2.58	550	
Sb	121	115	1	40.65	40.65	ppb	686862	1.88	550	
Ba	137	159	1	842.08	842.08	ppb	5441476	1.30	550	>LDR
Tl	205	165	1	187.40	187.40	ppb	9743823	3.04	550	
Pb	208	165	1	143.86	143.86	ppb	5099663	2.63	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1024933	0.77	943268	108.7	70	130	
Sc	45	2	49268	0.75	47161	104.5	70	130	
In	115	1	1590173	1.76	1541461	103.2	70	130	
In	115	2	303406	0.91	302668	100.2	70	130	
Tb	159	1	2451499	1.32	2290443	107.0	70	130	
Tb	159	2	1042616	0.74	989980	105.3	70	130	
Ho	165	1	2430452	1.41	2269893	107.1	70	130	
Ho	165	2	1045018	0.96	995473	105.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LCS MR 85270**
Data File Name	**020SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:56:15-04:00**
Type	**Sample**
VialNumber	**2203**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	147.39	147.39	ppb	1313334	1.39	550	
Na	23	115	2	826.52	826.52	ppb	949751	1.75	55000	
Mg	24	115	2	6372.80	6372.80	ppb	3473364	1.33	55000	
Al	27	115	2	8633.40	8633.40	ppb	1731162	1.22	16500	
K	39	115	2	1844.49	1844.49	ppb	745486	0.78	55000	
Ca	44	115	2	19350.12	19350.12	ppb	383675	2.06	55000	
V	51	115	2	242.32	242.32	ppb	1078185	1.31	550	
Cr	52	115	2	193.76	193.76	ppb	1063288	1.61	550	
Mn	55	115	2	530.19	530.19	ppb	1699684	2.03	550	
Fe	56	115	2	13017.82	13017.82	ppb	60507341	1.83	55000	
Co	59	115	2	254.15	254.15	ppb	2218994	1.22	550	
Ni	60	115	2	48.74	48.74	ppb	113136	0.87	550	
Cu	65	115	2	184.71	184.71	ppb	550808	0.98	550	
Zn	66	115	2	598.38	598.38	ppb	563115	0.62	550	>LDR
As	75	115	2	41.17	41.17	ppb	23375	1.40	550	
Se	78	115	2	300.08	300.08	ppb	13817	0.31	2750	
Mo	95	115	1	176.37	176.37	ppb	1306250	3.86	550	
Ag	107	115	1	82.93	82.93	ppb	1720401	2.05	550	
Cd	111	115	1	171.51	171.51	ppb	691938	2.98	550	
Sb	121	115	1	41.41	41.41	ppb	688956	2.80	550	
Ba	137	159	1	795.60	795.60	ppb	5186949	2.56	550	>LDR
Tl	205	165	1	186.34	186.34	ppb	9644040	2.45	550	
Pb	208	165	1	144.20	144.20	ppb	5088400	2.21	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1010283	0.82	943268	107.1	70	130	
Sc	45	2	48709	1.53	47161	103.3	70	130	
In	115	1	1565816	0.67	1541461	101.6	70	130	
In	115	2	301318	1.15	302668	99.6	70	130	
Tb	159	1	2473194	1.32	2290443	108.0	70	130	
Tb	159	2	1039093	1.05	989980	105.0	70	130	
Ho	165	1	2419647	1.50	2269893	106.6	70	130	
Ho	165	2	1044758	1.08	995473	105.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-004**
Data File Name	**021SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:00:35-04:00**
Type	**Sample**
VialNumber	**2204**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.49	1.49	ppb	13798	1.98	550	
Na	23	115	2	374.26	374.26	ppb	416439	0.90	55000	
Mg	24	115	2	24699.62	24699.62	ppb	12793821	0.88	55000	
Al	27	115	2	18252.80	18252.80	ppb	3479738	0.60	16500	>LDR
K	39	115	2	2392.90	2392.90	ppb	912806	1.16	55000	
Ca	44	115	2	220637.19	220637.19	ppb	4158643	1.95	55000	>LDR
V	51	115	2	195.19	195.19	ppb	825890	1.98	550	
Cr	52	115	2	209.52	209.52	ppb	1093225	1.69	550	
Mn	55	115	2	1511.93	1511.93	ppb	4606620	0.85	550	>LDR
Fe	56	115	2	73721.07	73721.07	ppb	325666411	0.24	55000	>LDR
Co	59	115	2	27.18	27.18	ppb	226192	0.85	550	
Ni	60	115	2	124.91	124.91	ppb	274844	0.66	550	
Cu	65	115	2	329.81	329.81	ppb	934786	1.29	550	
Zn	66	115	2	1508.09	1508.09	ppb	1348597	1.35	550	>LDR
As	75	115	2	40.59	40.59	ppb	21914	0.89	550	
Se	78	115	2	5.11	5.11	ppb	241	11.33	2750	
Mo	95	115	1	6.64	6.64	ppb	47785	3.44	550	
Ag	107	115	1	9.24	9.24	ppb	185716	2.28	550	
Cd	111	115	1	6.12	6.12	ppb	23911	3.41	550	
Sb	121	115	1	2.06	2.06	ppb	34163	4.93	550	
Ba	137	159	1	1130.03	1130.03	ppb	7358508	3.27	550	>LDR
Tl	205	165	1	0.77	0.77	ppb	42491	5.25	550	
Pb	208	165	1	950.59	950.59	ppb	34205687	2.43	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1246402	1.74	943268	132.1	70	130	IS Fail
Sc	45	2	57366	1.89	47161	121.6	70	130	
In	115	1	1515636	0.61	1541461	98.3	70	130	
In	115	2	286534	1.17	302668	94.7	70	130	
Tb	159	1	2471113	0.64	2290443	107.9	70	130	
Tb	159	2	1036910	1.38	989980	104.7	70	130	
Ho	165	1	2468304	0.67	2269893	108.7	70	130	
Ho	165	2	1043916	1.42	995473	104.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-004 MR**
Data File Name	**022SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:04:58-04:00**
Type	**Sample**
VialNumber	**2205**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.69	1.69	ppb	15884	1.80	550	
Na	23	115	2	319.03	319.03	ppb	359574	1.22	55000	
Mg	24	115	2	22643.81	22643.81	ppb	11814987	0.41	55000	
Al	27	115	2	18192.93	18192.93	ppb	3493702	0.44	16500	>LDR
K	39	115	2	2516.44	2516.44	ppb	965776	1.19	55000	
Ca	44	115	2	151923.04	151923.04	ppb	2884316	0.90	55000	>LDR
V	51	115	2	198.74	198.74	ppb	847088	1.29	550	
Cr	52	115	2	261.46	261.46	ppb	1374044	2.41	550	
Mn	55	115	2	1424.07	1424.07	ppb	4371178	1.41	550	>LDR
Fe	56	115	2	90552.43	90552.43	ppb	402968332	0.70	55000	>LDR
Co	59	115	2	28.84	28.84	ppb	241772	1.98	550	
Ni	60	115	2	153.02	153.02	ppb	339042	0.92	550	
Cu	65	115	2	404.34	404.34	ppb	1154285	0.79	550	
Zn	66	115	2	1619.27	1619.27	ppb	1458504	0.37	550	>LDR
As	75	115	2	45.33	45.33	ppb	24655	1.87	550	
Se	78	115	2	5.80	5.80	ppb	273	1.24	2750	
Mo	95	115	1	8.35	8.35	ppb	60592	2.84	550	
Ag	107	115	1	10.54	10.54	ppb	213611	2.89	550	
Cd	111	115	1	6.41	6.41	ppb	25281	2.52	550	
Sb	121	115	1	2.01	2.01	ppb	33627	0.66	550	
Ba	137	159	1	1252.68	1252.68	ppb	8304729	3.12	550	>LDR
Tl	205	165	1	0.50	0.50	ppb	28452	3.02	550	
Pb	208	165	1	1310.50	1310.50	ppb	47739892	2.51	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1233142	1.18	943268	130.7	70	130	IS Fail
Sc	45	2	56935	0.93	47161	120.7	70	130	
In	115	1	1528652	1.19	1541461	99.2	70	130	
In	115	2	288639	1.12	302668	95.4	70	130	
Tb	159	1	2516034	0.90	2290443	109.8	70	130	
Tb	159	2	1055872	1.21	989980	106.7	70	130	
Ho	165	1	2498898	0.40	2269893	110.1	70	130	
Ho	165	2	1060163	1.19	995473	106.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-004 SD**
Data File Name	**023SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:09:21-04:00**
Type	**Sample**
VialNumber	**2209**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.34	0.34	ppb	3253	4.87	550	
Na	23	115	2	91.94	91.94	ppb	117581	0.53	55000	
Mg	24	115	2	5065.64	5065.64	ppb	2741121	0.62	55000	
Al	27	115	2	3797.45	3797.45	ppb	756194	1.15	16500	
K	39	115	2	488.90	488.90	ppb	213971	1.20	55000	
Ca	44	115	2	44688.12	44688.12	ppb	879344	0.96	55000	
V	51	115	2	39.00	39.00	ppb	172297	1.50	550	
Cr	52	115	2	42.12	42.12	ppb	230529	0.91	550	
Mn	55	115	2	305.52	305.52	ppb	972735	1.58	550	
Fe	56	115	2	14923.60	14923.60	ppb	68847749	0.74	55000	
Co	59	115	2	5.49	5.49	ppb	48165	1.67	550	
Ni	60	115	2	25.95	25.95	ppb	60080	1.14	550	
Cu	65	115	2	69.74	69.74	ppb	206830	1.35	550	
Zn	66	115	2	318.38	318.38	ppb	297787	1.14	550	
As	75	115	2	8.26	8.26	ppb	4664	1.18	550	
Se	78	115	2	0.60	0.60	ppb	45	15.81	2750	
Mo	95	115	1	1.32	1.32	ppb	9806	2.43	550	
Ag	107	115	1	1.93	1.93	ppb	39894	3.33	550	
Cd	111	115	1	1.28	1.28	ppb	5147	3.38	550	
Sb	121	115	1	0.41	0.41	ppb	7816	4.34	550	
Ba	137	159	1	243.66	243.66	ppb	1567884	3.39	550	
Tl	205	165	1	0.12	0.12	ppb	7507	4.17	550	
Pb	208	165	1	207.15	207.15	ppb	7244547	3.15	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	984080	0.57	943268	104.3	70	130	
Sc	45	2	48816	0.93	47161	103.5	70	130	
In	115	1	1556449	0.57	1541461	101.0	70	130	
In	115	2	299130	1.49	302668	98.8	70	130	
Tb	159	1	2432038	0.67	2290443	106.2	70	130	
Tb	159	2	1027236	0.85	989980	103.8	70	130	
Ho	165	1	2399105	1.06	2269893	105.7	70	130	
Ho	165	2	1033998	1.80	995473	103.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-005 MS 1**
Data File Name	**024SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:13:47-04:00**
Type	**Sample**
VialNumber	**2206**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	188.37	188.37	ppb	1689459	2.48	550	
Na	23	115	2	22333.23	22333.23	ppb	24176121	0.93	55000	
Mg	24	115	2	43946.26	43946.26	ppb	22884597	1.49	55000	
Al	27	115	2	24292.52	24292.52	ppb	4656236	1.62	16500	>LDR
K	39	115	2	23488.61	23488.61	ppb	8802796	0.95	55000	
Ca	44	115	2	164041.16	164041.16	ppb	3108469	1.30	55000	>LDR
V	51	115	2	466.18	466.18	ppb	1983093	1.64	550	
Cr	52	115	2	408.37	408.37	ppb	2141013	1.16	550	
Mn	55	115	2	1794.27	1794.27	ppb	5496469	1.69	550	>LDR
Fe	56	115	2	79204.75	79204.75	ppb	351804026	1.25	55000	>LDR
Co	59	115	2	254.84	254.84	ppb	2127280	1.99	550	
Ni	60	115	2	344.31	344.31	ppb	760690	1.27	550	
Cu	65	115	2	591.57	591.57	ppb	1685287	1.17	550	>LDR
Zn	66	115	2	1922.33	1922.33	ppb	1728130	0.90	550	>LDR
As	75	115	2	250.55	250.55	ppb	135953	0.72	550	
Se	78	115	2	204.65	204.65	ppb	9015	1.46	2750	
Mo	95	115	1	225.14	225.14	ppb	1623143	3.61	550	
Ag	107	115	1	46.12	46.12	ppb	929849	3.19	550	
Cd	111	115	1	216.56	216.56	ppb	849055	2.73	550	
Sb	121	115	1	90.47	90.47	ppb	1461544	2.38	550	
Ba	137	159	1	1253.08	1253.08	ppb	8150489	2.29	550	>LDR
Tl	205	165	1	193.77	193.77	ppb	10093943	2.69	550	
Pb	208	165	1	1082.23	1082.23	ppb	38419539	2.32	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1245905	1.13	943268	132.1	70	130	IS Fail
Sc	45	2	56914	1.22	47161	120.7	70	130	
In	115	1	1521684	0.08	1541461	98.7	70	130	
In	115	2	288084	0.09	302668	95.2	70	130	
Tb	159	1	2468725	0.47	2290443	107.8	70	130	
Tb	159	2	1044430	0.64	989980	105.5	70	130	
Ho	165	1	2435133	1.47	2269893	107.3	70	130	
Ho	165	2	1049388	0.93	995473	105.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-006 MS 2**
Data File Name	**025SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:18:00-04:00**
Type	**Sample**
VialNumber	**2207**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	196.12	196.12	ppb	1730077	2.48	550	
Na	23	115	2	22860.39	22860.39	ppb	24185147	0.39	55000	
Mg	24	115	2	65689.86	65689.86	ppb	33430558	0.41	55000	>LDR
Al	27	115	2	18634.27	18634.27	ppb	3490724	1.26	16500	>LDR
K	39	115	2	23811.84	23811.84	ppb	8721177	0.43	55000	
Ca	44	115	2	319347.66	319347.66	ppb	5913891	1.37	55000	>LDR
V	51	115	2	414.32	414.32	ppb	1722489	1.32	550	
Cr	52	115	2	407.95	407.95	ppb	2090312	1.53	550	
Mn	55	115	2	1534.10	1534.10	ppb	4592944	1.41	550	>LDR
Fe	56	115	2	67083.30	67083.30	ppb	291210958	0.87	55000	>LDR
Co	59	115	2	250.32	250.32	ppb	2042124	1.58	550	
Ni	60	115	2	323.33	323.33	ppb	698169	1.42	550	
Cu	65	115	2	539.96	539.96	ppb	1503432	0.45	550	
Zn	66	115	2	1797.49	1797.49	ppb	1579274	0.59	550	>LDR
As	75	115	2	249.82	249.82	ppb	132480	1.32	550	
Se	78	115	2	205.53	205.53	ppb	8849	0.54	2750	
Mo	95	115	1	239.54	239.54	ppb	1669980	3.25	550	
Ag	107	115	1	47.72	47.72	ppb	930345	2.45	550	
Cd	111	115	1	222.44	222.44	ppb	843277	2.26	550	
Sb	121	115	1	100.57	100.57	ppb	1570874	2.18	550	
Ba	137	159	1	1813.00	1813.00	ppb	11526848	2.03	550	>LDR
Tl	205	165	1	197.52	197.52	ppb	10121026	2.83	550	
Pb	208	165	1	1172.67	1172.67	ppb	40947228	1.34	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1234982	1.22	943268	130.9	70	130	IS Fail
Sc	45	2	56190	1.08	47161	119.1	70	130	
In	115	1	1471313	1.03	1541461	95.4	70	130	
In	115	2	281551	0.36	302668	93.0	70	130	
Tb	159	1	2413947	1.06	2290443	105.4	70	130	
Tb	159	2	1012439	0.15	989980	102.3	70	130	
Ho	165	1	2395424	1.02	2269893	105.5	70	130	
Ho	165	2	1013881	0.88	995473	101.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 12:19 PM on:9/11/2020

Sample Report

Sample Name	**AD19159-004 PS**
Data File Name	**026SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:22:12-04:00**
Type	**Sample**
VialNumber	**2208**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	43.14	43.14	ppb	382234	2.60	550	
Na	23	115	2	5489.42	5489.42	ppb	5706856	0.83	55000	
Mg	24	115	2	28727.92	28727.92	ppb	14342907	1.09	55000	
Al	27	115	2	19348.80	19348.80	ppb	3555622	1.19	16500	>LDR
K	39	115	2	7373.70	7373.70	ppb	2664589	0.54	55000	
Ca	44	115	2	220104.68	220104.68	ppb	3998537	1.12	55000	>LDR
V	51	115	2	240.64	240.64	ppb	981398	0.74	550	
Cr	52	115	2	261.62	261.62	ppb	1315529	2.31	550	
Mn	55	115	2	1539.39	1539.39	ppb	4521267	1.78	550	>LDR
Fe	56	115	2	76338.36	76338.36	ppb	325076882	1.40	55000	>LDR
Co	59	115	2	75.59	75.59	ppb	605365	1.42	550	
Ni	60	115	2	169.49	169.49	ppb	359261	1.08	550	
Cu	65	115	2	365.02	365.02	ppb	997182	1.75	550	
Zn	66	115	2	1465.36	1465.36	ppb	1262928	1.31	550	>LDR
As	75	115	2	89.27	89.27	ppb	46447	0.85	550	
Se	78	115	2	239.35	239.35	ppb	10106	2.01	2750	
Mo	95	115	1	57.95	57.95	ppb	403775	3.12	550	
Ag	107	115	1	48.17	48.17	ppb	938638	2.34	550	
Cd	111	115	1	54.64	54.64	ppb	207027	3.19	550	
Sb	121	115	1	50.31	50.31	ppb	785836	2.60	550	
Ba	137	159	1	1141.03	1141.03	ppb	7333290	2.26	550	>LDR
Tl	205	165	1	48.93	48.93	ppb	2517887	2.39	550	
Pb	208	165	1	969.74	969.74	ppb	33992764	2.75	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1201005	1.35	943268	127.3	70	130	
Sc	45	2	55326	0.63	47161	117.3	70	130	
In	115	1	1470559	0.69	1541461	95.4	70	130	
In	115	2	276181	0.72	302668	91.2	70	130	
Tb	159	1	2439179	0.46	2290443	106.5	70	130	
Tb	159	2	1018755	0.35	989980	102.9	70	130	
Ho	165	1	2404432	1.33	2269893	105.9	70	130	
Ho	165	2	1024166	0.20	995473	102.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**027SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:26:31-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.06	0.06	ppb	771	8.50	550	
Na	23	115	2	14.63	14.63	ppb	30871	0.70	55000	
Mg	24	115	2	-0.82	-0.82	ppb	2186	19.35	55000	
Al	27	115	2	0.83	0.83	ppb	686	34.47	16500	
K	39	115	2	2.80	2.80	ppb	25423	1.69	55000	
Ca	44	115	2	9.23	9.23	ppb	330	7.63	55000	
V	51	115	2	0.01	0.01	ppb	87	25.22	550	
Cr	52	115	2	-0.06	-0.06	ppb	1097	2.70	550	
Mn	55	115	2	0.08	0.08	ppb	1398	3.96	550	
Fe	56	115	2	3.74	3.74	ppb	48734	1.62	55000	
Co	59	115	2	-0.03	-0.03	ppb	364	6.49	550	
Ni	60	115	2	0.03	0.03	ppb	659	7.16	550	
Cu	65	115	2	0.50	0.50	ppb	2088	6.00	550	
Zn	66	115	2	3.86	3.86	ppb	4338	3.44	550	
As	75	115	2	0.01	0.01	ppb	17	9.95	550	
Se	78	115	2	-0.09	-0.09	ppb	14	39.74	2750	
Mo	95	115	1	0.09	0.09	ppb	724	21.34	550	
Ag	107	115	1	0.29	0.29	ppb	6029	4.35	550	
Cd	111	115	1	0.01	0.01	ppb	80	6.45	550	
Sb	121	115	1	0.10	0.10	ppb	2635	4.38	550	
Ba	137	159	1	-1.12	-1.12	ppb	990	1.68	550	
Tl	205	165	1	0.10	0.10	ppb	6584	5.22	550	
Pb	208	165	1	0.08	0.08	ppb	5177	7.28	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	921325	0.32	943268	97.7	70	130	
Sc	45	2	45603	1.01	47161	96.7	70	130	
In	115	1	1523141	1.03	1541461	98.8	70	130	
In	115	2	300352	0.53	302668	99.2	70	130	
Tb	159	1	2324078	0.29	2290443	101.5	70	130	
Tb	159	2	1000336	0.50	989980	101.0	70	130	
Ho	165	1	2292413	0.19	2269893	101.0	70	130	
Ho	165	2	1004031	0.33	995473	100.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0286CCV.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:31:02-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	50.85	ppb	50	419280	3.60	101.70	90	110	
Na	23	115	2	4969.68	ppb	5000	5561432	0.35	99.39	90	110	
Mg	24	115	2	5037.54	ppb	5000	2708879	0.92	100.75	90	110	
Al	27	115	2	1476.47	ppb	1500	292468	0.97	98.43	90	110	
K	39	115	2	5053.27	ppb	5000	1972685	0.46	101.07	90	110	
Ca	44	115	2	5025.21	ppb	5000	98388	1.07	100.50	90	110	
V	51	115	2	49.27	ppb	50	216260	1.01	98.54	90	110	
Cr	52	115	2	49.73	ppb	50	270213	1.65	99.45	90	110	
Mn	55	115	2	49.74	ppb	50	158313	1.45	99.49	90	110	
Fe	56	115	2	5015.47	ppb	5000	23013631	1.71	100.31	90	110	
Co	59	115	2	50.02	ppb	50	431342	1.28	100.05	90	110	
Ni	60	115	2	49.80	ppb	50	114016	0.92	99.59	90	110	
Cu	65	115	2	49.93	ppb	50	147295	0.52	99.86	90	110	
Zn	66	115	2	49.93	ppb	50	47003	0.43	99.85	90	110	
As	75	115	2	49.54	ppb	50	27743	1.22	99.08	90	110	
Se	78	115	2	252.57	ppb	250	11475	2.05	101.03	90	110	
Mo	95	115	1	48.84	ppb	50	345433	2.94	97.68	90	110	
Ag	107	115	1	51.28	ppb	50	1014152	3.14	102.56	90	110	
Cd	111	115	1	49.47	ppb	50	190253	3.10	98.94	90	110	
Sb	121	115	1	48.10	ppb	50	762651	3.50	96.20	90	110	
Ba	137	159	1	48.97	ppb	50	298860	4.12	97.93	90	110	
Tl	205	165	1	51.43	ppb	50	2462647	2.46	102.85	90	110	
Pb	208	165	1	50.78	ppb	50	1658654	3.77	101.56	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	920756	0.43	943268	97.6	70	130	
Sc	45	2	46117	0.41	47161	97.8	70	130	
In	115	1	1492870	1.88	1541461	96.8	70	130	
In	115	2	297231	0.94	302668	98.2	70	130	
Tb	159	1	2260611	1.58	2290443	98.7	70	130	
Tb	159	2	990234	0.89	989980	100.0	70	130	
Ho	165	1	2237612	0.94	2269893	98.6	70	130	
Ho	165	2	995819	1.27	995473	100.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0296CCB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:35:27-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.03	ppb	1	
Na	23	115	2	9.78	ppb	500	
Mg	24	115	2	0.58	ppb	500	
Al	27	115	2	0.93	ppb	500	
K	39	115	2	3.36	ppb	500	
Ca	44	115	2	2.47	ppb	500	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	0.01	ppb	2	
Mn	55	115	2	-0.01	ppb	6	
Fe	56	115	2	1.87	ppb	500	
Co	59	115	2	-0.03	ppb	2	
Ni	60	115	2	0.11	ppb	3	
Cu	65	115	2	0.97	ppb	10	
Zn	66	115	2	0.70	ppb	20	
As	75	115	2	0.00	ppb	1	
Se	78	115	2	-0.04	ppb	10	
Mo	95	115	1	0.07	ppb	1	
Ag	107	115	1	0.05	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.04	ppb	4	
Ba	137	159	1	-1.12	ppb	5	
Tl	205	165	1	0.03	ppb	2	
Pb	208	165	1	0.05	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	915145	1.10	943268	97.0	70	130	
Sc	45	2	47039	1.69	47161	99.7	70	130	
In	115	1	1475029	1.98	1541461	95.7	70	130	
In	115	2	303860	0.56	302668	100.4	70	130	
Tb	159	1	2215052	2.09	2290443	96.7	70	130	
Tb	159	2	991049	1.37	989980	100.1	70	130	
Ho	165	1	2178584	3.01	2269893	96.0	70	130	
Ho	165	2	997358	1.20	995473	100.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-001**
Data File Name	**030SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:40:00-04:00**
Type	**Sample**
VialNumber	**2210**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.49	1.49	ppb	13517	2.08	550	
Na	23	115	2	360.54	360.54	ppb	384067	1.08	55000	
Mg	24	115	2	25837.42	25837.42	ppb	12796696	0.76	55000	
Al	27	115	2	26571.20	26571.20	ppb	4843785	1.07	16500	>LDR
K	39	115	2	3559.18	3559.18	ppb	1287361	0.63	55000	
Ca	44	115	2	125730.14	125730.14	ppb	2266147	1.88	55000	>LDR
V	51	115	2	53.23	53.23	ppb	215367	0.88	550	
Cr	52	115	2	46.93	46.93	ppb	235170	1.44	550	
Mn	55	115	2	1753.62	1753.62	ppb	5109003	0.86	550	>LDR
Fe	56	115	2	69492.52	69492.52	ppb	293554285	0.74	55000	>LDR
Co	59	115	2	48.14	48.14	ppb	382682	1.54	550	
Ni	60	115	2	58.03	58.03	ppb	122386	1.44	550	
Cu	65	115	2	137.01	137.01	ppb	371721	2.22	550	
Zn	66	115	2	496.19	496.19	ppb	424787	2.09	550	
As	75	115	2	38.60	38.60	ppb	19925	0.67	550	
Se	78	115	2	4.45	4.45	ppb	203	10.70	2750	
Mo	95	115	1	2.58	2.58	ppb	17518	1.93	550	
Ag	107	115	1	0.35	0.35	ppb	6684	4.37	550	
Cd	111	115	1	0.72	0.72	ppb	2688	3.13	550	
Sb	121	115	1	9.80	9.80	ppb	149507	2.84	550	
Ba	137	159	1	270.48	270.48	ppb	1736550	3.70	550	
Tl	205	165	1	0.35	0.35	ppb	19801	4.59	550	
Pb	208	165	1	1990.79	1990.79	ppb	69807506	3.03	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1265205	2.13	943268	134.1	70	130	IS Fail
Sc	45	2	57552	0.91	47161	122.0	70	130	
In	115	1	1429975	6.15	1541461	92.8	70	130	
In	115	2	274023	2.02	302668	90.5	70	130	
Tb	159	1	2427716	2.73	2290443	106.0	70	130	
Tb	159	2	1008167	0.89	989980	101.8	70	130	
Ho	165	1	2405673	2.49	2269893	106.0	70	130	
Ho	165	2	1016861	1.16	995473	102.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-002**
Data File Name	**031SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:44:23-04:00**
Type	**Sample**
VialNumber	**2211**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.48	1.48	ppb	13651	2.18	550	
Na	23	115	2	535.29	535.29	ppb	584990	0.72	55000	
Mg	24	115	2	18247.23	18247.23	ppb	9377397	1.22	55000	
Al	27	115	2	20441.90	20441.90	ppb	3866039	0.91	16500	>LDR
K	39	115	2	1982.16	1982.16	ppb	754078	1.31	55000	
Ca	44	115	2	133674.97	133674.97	ppb	2499505	1.53	55000	>LDR
V	51	115	2	140.47	140.47	ppb	589639	1.27	550	
Cr	52	115	2	222.06	222.06	ppb	1149387	1.16	550	
Mn	55	115	2	1160.26	1160.26	ppb	3506749	0.30	550	>LDR
Fe	56	115	2	65942.48	65942.48	ppb	288987496	0.62	55000	>LDR
Co	59	115	2	28.84	28.84	ppb	238023	0.84	550	
Ni	60	115	2	96.23	96.23	ppb	210182	1.80	550	
Cu	65	115	2	318.43	318.43	ppb	895434	1.69	550	
Zn	66	115	2	1221.91	1221.91	ppb	1084180	1.53	550	>LDR
As	75	115	2	46.46	46.46	ppb	24885	1.16	550	
Se	78	115	2	4.24	4.24	ppb	201	11.82	2750	
Mo	95	115	1	6.32	6.32	ppb	45032	1.98	550	
Ag	107	115	1	7.75	7.75	ppb	154233	2.17	550	
Cd	111	115	1	5.00	5.00	ppb	19338	2.50	550	
Sb	121	115	1	1.74	1.74	ppb	28783	2.49	550	
Ba	137	159	1	890.42	890.42	ppb	5782747	2.35	550	>LDR
Tl	205	165	1	0.33	0.33	ppb	19009	2.36	550	
Pb	208	165	1	927.63	927.63	ppb	33174790	2.59	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1155261	3.47	943268	122.5	70	130	
Sc	45	2	54204	2.11	47161	114.9	70	130	
In	115	1	1500637	0.75	1541461	97.4	70	130	
In	115	2	284299	2.21	302668	93.9	70	130	
Tb	159	1	2464089	0.33	2290443	107.6	70	130	
Tb	159	2	1027305	1.19	989980	103.8	70	130	
Ho	165	1	2453687	0.80	2269893	108.1	70	130	
Ho	165	2	1043464	1.38	995473	104.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-003**
Data File Name	**032SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:48:49-04:00**
Type	**Sample**
VialNumber	**2212**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.79	0.79	ppb	7281	0.62	550	
Na	23	115	2	247.68	247.68	ppb	273874	0.65	55000	
Mg	24	115	2	12563.46	12563.46	ppb	6360874	0.84	55000	
Al	27	115	2	10694.09	10694.09	ppb	1992676	0.48	16500	
K	39	115	2	1610.79	1610.79	ppb	607931	0.85	55000	
Ca	44	115	2	234625.04	234625.04	ppb	4321657	1.20	55000	>LDR
V	51	115	2	36.35	36.35	ppb	150351	1.44	550	
Cr	52	115	2	31.83	31.83	ppb	163438	0.64	550	
Mn	55	115	2	921.93	921.93	ppb	2745750	0.68	550	>LDR
Fe	56	115	2	32737.44	32737.44	ppb	141360889	0.57	55000	
Co	59	115	2	11.26	11.26	ppb	91944	0.52	550	
Ni	60	115	2	33.11	33.11	ppb	71599	2.14	550	
Cu	65	115	2	66.27	66.27	ppb	184029	0.87	550	
Zn	66	115	2	574.87	574.87	ppb	502816	1.52	550	>LDR
As	75	115	2	11.12	11.12	ppb	5876	3.25	550	
Se	78	115	2	2.97	2.97	ppb	144	11.73	2750	
Mo	95	115	1	1.60	1.60	ppb	11342	3.37	550	
Ag	107	115	1	1.47	1.47	ppb	29022	2.92	550	
Cd	111	115	1	1.44	1.44	ppb	5548	1.69	550	
Sb	121	115	1	0.90	0.90	ppb	15234	2.96	550	
Ba	137	159	1	577.87	577.87	ppb	3718499	1.59	550	>LDR
Tl	205	165	1	0.16	0.16	ppb	10089	1.48	550	
Pb	208	165	1	338.87	338.87	ppb	11945780	1.02	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1101953	3.46	943268	116.8	70	130	
Sc	45	2	52157	1.04	47161	110.6	70	130	
In	115	1	1486405	1.06	1541461	96.4	70	130	
In	115	2	280030	0.65	302668	92.5	70	130	
Tb	159	1	2439784	0.87	2290443	106.5	70	130	
Tb	159	2	1009341	0.81	989980	102.0	70	130	
Ho	165	1	2417906	1.03	2269893	106.5	70	130	
Ho	165	2	1018045	0.63	995473	102.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-007**
Data File Name	**033SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:53:15-04:00**
Type	**Sample**
VialNumber	**2301**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.36	1.36	ppb	12686	2.68	550	
Na	23	115	2	300.61	300.61	ppb	330153	3.61	55000	
Mg	24	115	2	23766.96	23766.96	ppb	12054517	1.14	55000	
Al	27	115	2	21762.18	21762.18	ppb	4062374	1.09	16500	>LDR
K	39	115	2	4212.95	4212.95	ppb	1556231	0.88	55000	
Ca	44	115	2	84074.03	84074.03	ppb	1551681	1.59	55000	>LDR
V	51	115	2	60.65	60.65	ppb	251294	1.19	550	
Cr	52	115	2	37.27	37.27	ppb	191499	1.05	550	
Mn	55	115	2	1684.91	1684.91	ppb	5026724	1.01	550	>LDR
Fe	56	115	2	64343.79	64343.79	ppb	278333323	0.77	55000	>LDR
Co	59	115	2	26.83	26.83	ppb	218700	2.13	550	
Ni	60	115	2	96.35	96.35	ppb	207708	1.25	550	
Cu	65	115	2	118.66	118.66	ppb	329679	1.04	550	
Zn	66	115	2	351.21	351.21	ppb	308051	1.47	550	
As	75	115	2	26.60	26.60	ppb	14070	1.96	550	
Se	78	115	2	5.39	5.39	ppb	248	9.42	2750	
Mo	95	115	1	2.86	2.86	ppb	20458	2.62	550	
Ag	107	115	1	2.27	2.27	ppb	45393	1.96	550	
Cd	111	115	1	1.72	1.72	ppb	6694	5.03	550	
Sb	121	115	1	0.47	0.47	ppb	8511	2.98	550	
Ba	137	159	1	219.20	219.20	ppb	1441401	7.17	550	
Tl	205	165	1	0.42	0.42	ppb	24028	3.58	550	
Pb	208	165	1	243.77	243.77	ppb	8780482	2.56	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1278912	1.87	943268	135.6	70	130	IS Fail
Sc	45	2	58664	0.47	47161	124.4	70	130	
In	115	1	1505702	0.55	1541461	97.7	70	130	
In	115	2	280565	1.22	302668	92.7	70	130	
Tb	159	1	2484355	0.64	2290443	108.5	70	130	
Tb	159	2	1035784	1.19	989980	104.6	70	130	
Ho	165	1	2470570	0.33	2269893	108.8	70	130	
Ho	165	2	1048449	1.23	995473	105.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-008**
Data File Name	**034SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:57:38-04:00**
Type	**Sample**
VialNumber	**2302**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.27	1.27	ppb	11539	4.45	550	
Na	23	115	2	2506.18	2506.18	ppb	2655152	1.04	55000	
Mg	24	115	2	9403.05	9403.05	ppb	4773025	1.13	55000	
Al	27	115	2	26724.10	26724.10	ppb	4991033	0.79	16500	>LDR
K	39	115	2	2070.26	2070.26	ppb	776714	1.28	55000	
Ca	44	115	2	70109.42	70109.42	ppb	1294608	1.75	55000	>LDR
V	51	115	2	41.58	41.58	ppb	172359	0.58	550	
Cr	52	115	2	19.99	19.99	ppb	103392	1.10	550	
Mn	55	115	2	397.20	397.20	ppb	1186425	1.10	550	
Fe	56	115	2	29220.88	29220.88	ppb	126483151	0.77	55000	
Co	59	115	2	24.19	24.19	ppb	197255	1.23	550	
Ni	60	115	2	36.11	36.11	ppb	78231	1.18	550	
Cu	65	115	2	54.37	54.37	ppb	151450	0.73	550	
Zn	66	115	2	119.36	119.36	ppb	105197	2.11	550	
As	75	115	2	18.49	18.49	ppb	9788	3.07	550	
Se	78	115	2	3.05	3.05	ppb	147	7.55	2750	
Mo	95	115	1	2.10	2.10	ppb	15164	3.26	550	
Ag	107	115	1	0.14	0.14	ppb	2895	3.50	550	
Cd	111	115	1	0.43	0.43	ppb	1718	6.48	550	
Sb	121	115	1	0.33	0.33	ppb	6353	1.61	550	
Ba	137	159	1	276.88	276.88	ppb	1781741	2.46	550	
Tl	205	165	1	0.14	0.14	ppb	8564	6.08	550	
Pb	208	165	1	62.57	62.57	ppb	2195997	2.11	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1045652	0.34	943268	110.9	70	130	
Sc	45	2	49207	0.78	47161	104.3	70	130	
In	115	1	1514228	0.40	1541461	98.2	70	130	
In	115	2	280703	0.86	302668	92.7	70	130	
Tb	159	1	2433566	0.65	2290443	106.2	70	130	
Tb	159	2	1010297	1.24	989980	102.1	70	130	
Ho	165	1	2405251	0.78	2269893	106.0	70	130	
Ho	165	2	1020270	0.74	995473	102.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-009**
Data File Name	**035SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:02:05-04:00**
Type	**Sample**
VialNumber	**2303**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.15	1.15	ppb	10565	3.28	550	
Na	23	115	2	1706.07	1706.07	ppb	1838572	1.11	55000	
Mg	24	115	2	7265.20	7265.20	ppb	3742717	0.62	55000	
Al	27	115	2	20262.56	20262.56	ppb	3840463	1.06	16500	>LDR
K	39	115	2	2160.52	2160.52	ppb	821597	1.33	55000	
Ca	44	115	2	70206.75	70206.75	ppb	1315689	2.65	55000	>LDR
V	51	115	2	43.30	43.30	ppb	182162	0.90	550	
Cr	52	115	2	23.99	23.99	ppb	125622	1.69	550	
Mn	55	115	2	426.34	426.34	ppb	1292280	1.29	550	
Fe	56	115	2	36709.73	36709.73	ppb	161240053	1.84	55000	
Co	59	115	2	25.58	25.58	ppb	211713	2.37	550	
Ni	60	115	2	50.39	50.39	ppb	110573	1.55	550	
Cu	65	115	2	63.92	63.92	ppb	180581	0.96	550	
Zn	66	115	2	157.17	157.17	ppb	140342	1.24	550	
As	75	115	2	21.63	21.63	ppb	11615	1.85	550	
Se	78	115	2	2.96	2.96	ppb	146	10.11	2750	
Mo	95	115	1	3.44	3.44	ppb	24787	3.10	550	
Ag	107	115	1	0.14	0.14	ppb	2980	1.34	550	
Cd	111	115	1	0.56	0.56	ppb	2213	4.62	550	
Sb	121	115	1	0.56	0.56	ppb	10045	4.18	550	
Ba	137	159	1	278.17	278.17	ppb	1807094	2.21	550	
Tl	205	165	1	0.18	0.18	ppb	11162	3.00	550	
Pb	208	165	1	107.08	107.08	ppb	3794804	2.71	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1039984	0.68	943268	110.3	70	130	
Sc	45	2	50798	1.00	47161	107.7	70	130	
In	115	1	1517769	0.53	1541461	98.5	70	130	
In	115	2	284877	1.35	302668	94.1	70	130	
Tb	159	1	2457215	0.49	2290443	107.3	70	130	
Tb	159	2	1021736	1.56	989980	103.2	70	130	
Ho	165	1	2429526	0.17	2269893	107.0	70	130	
Ho	165	2	1024495	1.42	995473	102.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-010**
Data File Name	**036SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:06:29-04:00**
Type	**Sample**
VialNumber	**2304**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.57	1.57	ppb	14710	1.91	550	
Na	23	115	2	302.70	302.70	ppb	333917	1.20	55000	
Mg	24	115	2	20645.53	20645.53	ppb	10520482	0.96	55000	
Al	27	115	2	21691.86	21691.86	ppb	4068163	0.97	16500	>LDR
K	39	115	2	2652.95	2652.95	ppb	993045	0.73	55000	
Ca	44	115	2	68950.92	68950.92	ppb	1278459	1.22	55000	>LDR
V	51	115	2	59.17	59.17	ppb	246317	2.18	550	
Cr	52	115	2	39.75	39.75	ppb	205136	1.86	550	
Mn	55	115	2	2014.51	2014.51	ppb	6037904	0.67	550	>LDR
Fe	56	115	2	85606.24	85606.24	ppb	372034923	0.88	55000	>LDR
Co	59	115	2	27.97	27.97	ppb	228964	1.11	550	
Ni	60	115	2	87.60	87.60	ppb	189791	1.26	550	
Cu	65	115	2	314.11	314.11	ppb	875815	0.83	550	
Zn	66	115	2	343.15	343.15	ppb	302390	1.10	550	
As	75	115	2	54.31	54.31	ppb	28843	1.28	550	
Se	78	115	2	6.35	6.35	ppb	290	9.32	2750	
Mo	95	115	1	3.85	3.85	ppb	27735	2.28	550	
Ag	107	115	1	0.55	0.55	ppb	11188	0.48	550	
Cd	111	115	1	0.96	0.96	ppb	3771	2.45	550	
Sb	121	115	1	0.81	0.81	ppb	14153	3.81	550	
Ba	137	159	1	276.36	276.36	ppb	1843624	2.06	550	
Tl	205	165	1	0.52	0.52	ppb	29606	2.50	550	
Pb	208	165	1	544.15	544.15	ppb	19779824	2.81	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1297521	0.49	943268	137.6	70	130	IS Fail
Sc	45	2	59827	1.87	47161	126.9	70	130	
In	115	1	1517847	0.78	1541461	98.5	70	130	
In	115	2	281866	0.61	302668	93.1	70	130	
Tb	159	1	2523243	1.18	2290443	110.2	70	130	
Tb	159	2	1041179	1.11	989980	105.2	70	130	
Ho	165	1	2493779	1.41	2269893	109.9	70	130	
Ho	165	2	1049938	0.73	995473	105.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19160-001**
Data File Name	**037SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:10:54-04:00**
Type	**Sample**
VialNumber	**2305**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	2.13	2.13	ppb	20061	2.86	550	
Na	23	115	2	222.26	222.26	ppb	244203	1.24	55000	
Mg	24	115	2	23469.95	23469.95	ppb	11740274	0.97	55000	
Al	27	115	2	36446.01	36446.01	ppb	6709668	1.03	16500	>LDR
K	39	115	2	3811.25	3811.25	ppb	1390545	3.86	55000	
Ca	44	115	2	58506.83	58506.83	ppb	1065012	1.37	55000	>LDR
V	51	115	2	75.01	75.01	ppb	306554	1.87	550	
Cr	52	115	2	62.61	62.61	ppb	316410	1.29	550	
Mn	55	115	2	1693.49	1693.49	ppb	4983335	1.76	550	>LDR
Fe	56	115	2	106086.74	106086.74	ppb	452606678	1.38	55000	>LDR
Co	59	115	2	45.08	45.08	ppb	361908	1.23	550	
Ni	60	115	2	110.08	110.08	ppb	233988	1.87	550	
Cu	65	115	2	153.57	153.57	ppb	420666	1.55	550	
Zn	66	115	2	329.26	329.26	ppb	284886	1.75	550	
As	75	115	2	36.04	36.04	ppb	18793	1.67	550	
Se	78	115	2	8.06	8.06	ppb	357	2.19	2750	
Mo	95	115	1	4.25	4.25	ppb	30151	3.65	550	
Ag	107	115	1	0.49	0.49	ppb	9899	3.40	550	
Cd	111	115	1	1.18	1.18	ppb	4580	2.69	550	
Sb	121	115	1	0.19	0.19	ppb	4103	4.07	550	
Ba	137	159	1	309.35	309.35	ppb	2096828	2.63	550	
Tl	205	165	1	0.57	0.57	ppb	32571	3.43	550	
Pb	208	165	1	82.03	82.03	ppb	3013478	3.13	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1509789	0.52	943268	160.1	70	130	IS Fail
Sc	45	2	68957	0.73	47161	146.2	70	130	IS Fail
In	115	1	1494786	0.79	1541461	97.0	70	130	
In	115	2	276723	1.58	302668	91.4	70	130	
Tb	159	1	2564769	0.39	2290443	112.0	70	130	
Tb	159	2	1060874	1.58	989980	107.2	70	130	
Ho	165	1	2518313	0.55	2269893	110.9	70	130	
Ho	165	2	1057523	0.72	995473	106.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19160-002**
Data File Name	**038SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:15:18-04:00**
Type	**Sample**
VialNumber	**2306**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.51	1.51	ppb	13871	5.31	550	
Na	23	115	2	347.77	347.77	ppb	359214	1.67	55000	
Mg	24	115	2	35168.23	35168.23	ppb	16867275	0.78	55000	
Al	27	115	2	27601.83	27601.83	ppb	4872583	1.92	16500	>LDR
K	39	115	2	4604.65	4604.65	ppb	1606655	2.99	55000	
Ca	44	115	2	216125.58	216125.58	ppb	3771816	1.47	55000	>LDR
V	51	115	2	60.54	60.54	ppb	237227	1.12	550	
Cr	52	115	2	41.56	41.56	ppb	201786	1.34	550	
Mn	55	115	2	1679.87	1679.87	ppb	4739589	1.28	550	>LDR
Fe	56	115	2	81270.52	81270.52	ppb	332464988	1.46	55000	>LDR
Co	59	115	2	33.19	33.19	ppb	255656	1.42	550	
Ni	60	115	2	74.85	74.85	ppb	152710	1.36	550	
Cu	65	115	2	92.10	92.10	ppb	242109	1.30	550	
Zn	66	115	2	199.36	199.36	ppb	165629	1.23	550	
As	75	115	2	31.88	31.88	ppb	15940	1.98	550	
Se	78	115	2	5.77	5.77	ppb	250	5.93	2750	
Mo	95	115	1	2.31	2.31	ppb	15414	4.98	550	
Ag	107	115	1	0.26	0.26	ppb	4911	0.18	550	
Cd	111	115	1	0.62	0.62	ppb	2255	5.53	550	
Sb	121	115	1	0.15	0.15	ppb	3272	0.66	550	
Ba	137	159	1	175.09	175.09	ppb	1142862	3.60	550	
Tl	205	165	1	0.43	0.43	ppb	24039	4.39	550	
Pb	208	165	1	27.25	27.25	ppb	976237	3.47	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1311769	2.45	943268	139.1	70	130	IS Fail
Sc	45	2	59439	0.61	47161	126.0	70	130	
In	115	1	1408047	4.06	1541461	91.3	70	130	
In	115	2	265321	0.23	302668	87.7	70	130	
Tb	159	1	2461662	1.41	2290443	107.5	70	130	
Tb	159	2	1020296	0.48	989980	103.1	70	130	
Ho	165	1	2451188	1.11	2269893	108.0	70	130	
Ho	165	2	1036149	0.37	995473	104.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**039SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:19:43-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.01	0.01	ppb	328	10.87	550	
Na	23	115	2	12.98	12.98	ppb	28205	0.78	55000	
Mg	24	115	2	-0.88	-0.88	ppb	2096	5.02	55000	
Al	27	115	2	0.55	0.55	ppb	614	5.13	16500	
K	39	115	2	3.85	3.85	ppb	25112	1.61	55000	
Ca	44	115	2	12.71	12.71	ppb	388	9.47	55000	
V	51	115	2	0.02	0.02	ppb	101	3.81	550	
Cr	52	115	2	-0.07	-0.07	ppb	1022	2.64	550	
Mn	55	115	2	0.09	0.09	ppb	1366	5.08	550	
Fe	56	115	2	4.37	4.37	ppb	50242	0.94	55000	
Co	59	115	2	-0.04	-0.04	ppb	239	30.39	550	
Ni	60	115	2	-0.03	-0.03	ppb	504	13.88	550	
Cu	65	115	2	0.49	0.49	ppb	2006	6.29	550	
Zn	66	115	2	4.02	4.02	ppb	4371	4.15	550	
As	75	115	2	0.01	0.01	ppb	17	36.28	550	
Se	78	115	2	-0.09	-0.09	ppb	14	16.89	2750	
Mo	95	115	1	0.04	0.04	ppb	389	16.29	550	
Ag	107	115	1	0.31	0.31	ppb	6397	2.13	550	
Cd	111	115	1	0.01	0.01	ppb	59	5.79	550	
Sb	121	115	1	-0.04	-0.04	ppb	497	8.38	550	
Ba	137	159	1	-1.17	-1.17	ppb	667	14.81	550	
Tl	205	165	1	0.00	0.00	ppb	1647	0.81	550	
Pb	208	165	1	0.07	0.07	ppb	4565	3.55	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	910052	0.47	943268	96.5	70	130	
Sc	45	2	44674	0.91	47161	94.7	70	130	
In	115	1	1509761	0.70	1541461	97.9	70	130	
In	115	2	291985	1.17	302668	96.5	70	130	
Tb	159	1	2317718	0.67	2290443	101.2	70	130	
Tb	159	2	974554	0.17	989980	98.4	70	130	
Ho	165	1	2254756	1.41	2269893	99.3	70	130	
Ho	165	2	980672	0.85	995473	98.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0406CCV.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:24:15-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	49.88	ppb	50	401910	3.65	99.77	90	110	
Na	23	115	2	4913.99	ppb	5000	5350858	0.57	98.28	90	110	
Mg	24	115	2	4983.54	ppb	5000	2607651	1.21	99.67	90	110	
Al	27	115	2	1459.09	ppb	1500	281259	1.96	97.27	90	110	
K	39	115	2	4991.79	ppb	5000	1896607	1.30	99.84	90	110	
Ca	44	115	2	4964.42	ppb	5000	94574	0.22	99.29	90	110	
V	51	115	2	49.64	ppb	50	211990	0.54	99.27	90	110	
Cr	52	115	2	49.80	ppb	50	263304	1.43	99.60	90	110	
Mn	55	115	2	49.18	ppb	50	152290	0.52	98.35	90	110	
Fe	56	115	2	4980.76	ppb	5000	22237711	0.71	99.62	90	110	
Co	59	115	2	49.59	ppb	50	416040	0.86	99.17	90	110	
Ni	60	115	2	49.96	ppb	50	111300	1.27	99.91	90	110	
Cu	65	115	2	50.36	ppb	50	144562	1.95	100.71	90	110	
Zn	66	115	2	49.04	ppb	50	44945	1.52	98.09	90	110	
As	75	115	2	49.25	ppb	50	26836	1.49	98.49	90	110	
Se	78	115	2	246.57	ppb	250	10901	0.74	98.63	90	110	
Mo	95	115	1	49.54	ppb	50	342074	2.81	99.08	90	110	
Ag	107	115	1	51.54	ppb	50	995087	2.80	103.08	90	110	
Cd	111	115	1	49.74	ppb	50	186761	3.19	99.49	90	110	
Sb	121	115	1	48.22	ppb	50	746417	2.70	96.44	90	110	
Ba	137	159	1	49.16	ppb	50	295713	2.79	98.31	90	110	
Tl	205	165	1	51.66	ppb	50	2417281	3.67	103.31	90	110	
Pb	208	165	1	50.56	ppb	50	1613881	1.99	101.13	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	900000	0.37	943268	95.4	70	130	
Sc	45	2	44858	1.18	47161	95.1	70	130	
In	115	1	1457394	0.79	1541461	94.5	70	130	
In	115	2	289220	1.06	302668	95.6	70	130	
Tb	159	1	2227617	0.38	2290443	97.3	70	130	
Tb	159	2	965314	1.04	989980	97.5	70	130	
Ho	165	1	2186501	0.46	2269893	96.3	70	130	
Ho	165	2	972036	1.66	995473	97.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0416CCB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:28:42-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	8.60	ppb	500	
Mg	24	115	2	0.93	ppb	500	
Al	27	115	2	1.30	ppb	500	
K	39	115	2	4.41	ppb	500	
Ca	44	115	2	4.91	ppb	500	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	0.02	ppb	2	
Mn	55	115	2	-0.01	ppb	6	
Fe	56	115	2	2.02	ppb	500	
Co	59	115	2	-0.05	ppb	2	
Ni	60	115	2	0.07	ppb	3	
Cu	65	115	2	0.99	ppb	10	
Zn	66	115	2	0.63	ppb	20	
As	75	115	2	0.01	ppb	1	
Se	78	115	2	0.15	ppb	10	
Mo	95	115	1	0.06	ppb	1	
Ag	107	115	1	0.06	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.00	ppb	4	
Ba	137	159	1	-1.14	ppb	5	
Tl	205	165	1	0.01	ppb	2	
Pb	208	165	1	0.05	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	895292	0.68	943268	94.9	70	130	
Sc	45	2	45141	0.56	47161	95.7	70	130	
In	115	1	1462743	0.90	1541461	94.9	70	130	
In	115	2	293147	0.40	302668	96.9	70	130	
Tb	159	1	2217536	0.75	2290443	96.8	70	130	
Tb	159	2	959267	0.33	989980	96.9	70	130	
Ho	165	1	2186563	0.66	2269893	96.3	70	130	
Ho	165	2	967331	0.40	995473	97.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19067-003**
Data File Name	**042SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:33:14-04:00**
Type	**Sample**
VialNumber	**2307**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.35	1.35	ppb	11474	2.78	550	
Na	23	115	2	104.88	104.88	ppb	123952	0.47	55000	
Mg	24	115	2	2576.16	2576.16	ppb	1309083	1.76	55000	
Al	27	115	2	10793.51	10793.51	ppb	2015941	1.33	16500	
K	39	115	2	5245.93	5245.93	ppb	1932532	0.32	55000	
Ca	44	115	2	2887.56	2887.56	ppb	53455	1.92	55000	
V	51	115	2	46.19	46.19	ppb	191445	1.43	550	
Cr	52	115	2	106.36	106.36	ppb	544243	1.07	550	
Mn	55	115	2	94.48	94.48	ppb	282933	0.62	550	
Fe	56	115	2	43808.27	43808.27	ppb	189551251	0.31	55000	
Co	59	115	2	3.81	3.81	ppb	31575	1.98	550	
Ni	60	115	2	5.86	5.86	ppb	13165	1.57	550	
Cu	65	115	2	10.45	10.45	ppb	29579	2.16	550	
Zn	66	115	2	57.08	57.08	ppb	50641	1.79	550	
As	75	115	2	21.40	21.40	ppb	11322	0.81	550	
Se	78	115	2	1.27	1.27	ppb	71	29.69	2750	
Mo	95	115	1	1.35	1.35	ppb	9384	6.28	550	
Ag	107	115	1	0.18	0.18	ppb	3564	5.05	550	
Cd	111	115	1	0.13	0.13	ppb	499	14.99	550	
Sb	121	115	1	0.32	0.32	ppb	5943	3.07	550	
Ba	137	159	1	36.18	36.18	ppb	226769	2.53	550	
Tl	205	165	1	0.06	0.06	ppb	4483	3.78	550	
Pb	208	165	1	11.72	11.72	ppb	387788	3.86	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1013408	0.50	943268	107.4	70	130	
Sc	45	2	50068	3.95	47161	106.2	70	130	
In	115	1	1455766	0.91	1541461	94.4	70	130	
In	115	2	280902	4.07	302668	92.8	70	130	
Tb	159	1	2299852	1.88	2290443	100.4	70	130	
Tb	159	2	978922	3.90	989980	98.9	70	130	
Ho	165	1	2257645	0.70	2269893	99.5	70	130	
Ho	165	2	985198	4.00	995473	99.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19163-001**
Data File Name	**043SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:37:41-04:00**
Type	**Sample**
VialNumber	**2308**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.19	0.19	ppb	1912	1.86	550	
Na	23	115	2	328.77	328.77	ppb	362158	0.35	55000	
Mg	24	115	2	452.52	452.52	ppb	233428	0.82	55000	
Al	27	115	2	6916.03	6916.03	ppb	1299688	0.52	16500	
K	39	115	2	447.78	447.78	ppb	186929	1.10	55000	
Ca	44	115	2	1161.64	1161.64	ppb	21713	0.80	55000	
V	51	115	2	14.99	14.99	ppb	62511	0.94	550	
Cr	52	115	2	17.74	17.74	ppb	92444	1.52	550	
Mn	55	115	2	140.52	140.52	ppb	422910	1.13	550	
Fe	56	115	2	10914.85	10914.85	ppb	47546482	1.19	55000	
Co	59	115	2	0.98	0.98	ppb	8625	3.75	550	
Ni	60	115	2	2.93	2.93	ppb	6899	2.71	550	
Cu	65	115	2	8.05	8.05	ppb	23033	1.66	550	
Zn	66	115	2	40.31	40.31	ppb	36187	2.49	550	
As	75	115	2	4.86	4.86	ppb	2596	2.99	550	
Se	78	115	2	0.96	0.96	ppb	58	20.60	2750	
Mo	95	115	1	2.58	2.58	ppb	18562	3.09	550	
Ag	107	115	1	0.15	0.15	ppb	3117	2.42	550	
Cd	111	115	1	0.17	0.17	ppb	685	3.00	550	
Sb	121	115	1	0.05	0.05	ppb	1926	4.98	550	
Ba	137	159	1	51.05	51.05	ppb	323817	2.86	550	
Tl	205	165	1	0.09	0.09	ppb	5987	3.34	550	
Pb	208	165	1	10.38	10.38	ppb	352599	2.97	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	959024	0.35	943268	101.7	70	130	
Sc	45	2	45400	0.65	47161	96.3	70	130	
In	115	1	1513091	1.23	1541461	98.2	70	130	
In	115	2	282381	0.73	302668	93.3	70	130	
Tb	159	1	2351615	1.38	2290443	102.7	70	130	
Tb	159	2	990082	0.85	989980	100.0	70	130	
Ho	165	1	2314374	1.03	2269893	102.0	70	130	
Ho	165	2	983199	1.02	995473	98.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19164-001**
Data File Name	**044SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:42:13-04:00**
Type	**Sample**
VialNumber	**2309**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.13	0.13	ppb	1297	12.25	550	
Na	23	115	2	63.92	63.92	ppb	81862	0.34	55000	
Mg	24	115	2	217.65	217.65	ppb	114362	2.40	55000	
Al	27	115	2	7253.23	7253.23	ppb	1372513	0.30	16500	
K	39	115	2	290.52	290.52	ppb	130198	1.92	55000	
Ca	44	115	2	68.49	68.49	ppb	1420	7.73	55000	
V	51	115	2	18.38	18.38	ppb	77186	2.38	550	
Cr	52	115	2	17.69	17.69	ppb	92826	0.35	550	
Mn	55	115	2	11.97	11.97	ppb	37248	2.23	550	
Fe	56	115	2	6659.86	6659.86	ppb	29229060	3.41	55000	
Co	59	115	2	0.58	0.58	ppb	5338	2.99	550	
Ni	60	115	2	5.14	5.14	ppb	11766	0.36	550	
Cu	65	115	2	5.54	5.54	ppb	16159	1.37	550	
Zn	66	115	2	10.50	10.50	ppb	9998	0.72	550	
As	75	115	2	5.32	5.32	ppb	2860	5.80	550	
Se	78	115	2	1.30	1.30	ppb	73	7.58	2750	
Mo	95	115	1	0.99	0.99	ppb	6714	1.14	550	
Ag	107	115	1	0.08	0.08	ppb	1609	3.30	550	
Cd	111	115	1	0.03	0.03	ppb	147	21.56	550	
Sb	121	115	1	-0.01	-0.01	ppb	825	9.10	550	
Ba	137	159	1	12.77	12.77	ppb	82847	3.02	550	
Tl	205	165	1	0.04	0.04	ppb	3591	2.99	550	
Pb	208	165	1	10.15	10.15	ppb	333201	2.73	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	985815	0.66	943268	104.5	70	130	
Sc	45	2	47817	1.05	47161	101.4	70	130	
In	115	1	1418622	4.48	1541461	92.0	70	130	
In	115	2	284353	0.95	302668	93.9	70	130	
Tb	159	1	2241230	0.44	2290443	97.9	70	130	
Tb	159	2	970042	0.53	989980	98.0	70	130	
Ho	165	1	2237771	1.66	2269893	98.6	70	130	
Ho	165	2	980961	0.91	995473	98.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**045SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:46:44-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.01	0.01	ppb	296	5.09	550	
Na	23	115	2	11.84	11.84	ppb	26774	2.40	55000	
Mg	24	115	2	-0.40	-0.40	ppb	2329	5.69	55000	
Al	27	115	2	5.66	5.66	ppb	1589	85.99	16500	
K	39	115	2	1.88	1.88	ppb	24201	2.61	55000	
Ca	44	115	2	14.73	14.73	ppb	422	18.08	55000	
V	51	115	2	0.01	0.01	ppb	82	11.70	550	
Cr	52	115	2	-0.06	-0.06	ppb	1070	10.20	550	
Mn	55	115	2	0.10	0.10	ppb	1391	3.76	550	
Fe	56	115	2	4.35	4.35	ppb	49822	3.90	55000	
Co	59	115	2	-0.04	-0.04	ppb	288	21.68	550	
Ni	60	115	2	0.00	0.00	ppb	572	8.29	550	
Cu	65	115	2	0.41	0.41	ppb	1762	6.01	550	
Zn	66	115	2	3.96	3.96	ppb	4282	1.44	550	
As	75	115	2	0.02	0.02	ppb	20	31.95	550	
Se	78	115	2	-0.08	-0.08	ppb	14	32.87	2750	
Mo	95	115	1	0.04	0.04	ppb	307	12.82	550	
Ag	107	115	1	0.32	0.32	ppb	5785	4.03	550	
Cd	111	115	1	0.01	0.01	ppb	56	27.91	550	
Sb	121	115	1	-0.03	-0.03	ppb	479	16.36	550	
Ba	137	159	1	-1.19	-1.19	ppb	521	12.51	550	
Tl	205	165	1	0.00	0.00	ppb	1371	3.95	550	
Pb	208	165	1	0.05	0.05	ppb	3613	4.82	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	863477	0.07	943268	91.5	70	130	
Sc	45	2	44002	1.23	47161	93.3	70	130	
In	115	1	1324003	0.43	1541461	85.9	70	130	
In	115	2	290028	2.62	302668	95.8	70	130	
Tb	159	1	2142706	1.58	2290443	93.5	70	130	
Tb	159	2	956598	1.62	989980	96.6	70	130	
Ho	165	1	2120012	2.37	2269893	93.4	70	130	
Ho	165	2	959131	1.36	995473	96.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0466CCV.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:51:16-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	48.29	ppb	50	387531	3.12	96.57	90	110	
Na	23	115	2	4834.98	ppb	5000	5296612	1.03	96.70	90	110	
Mg	24	115	2	4912.22	ppb	5000	2585686	2.40	98.24	90	110	
Al	27	115	2	1434.31	ppb	1500	278128	1.82	95.62	90	110	
K	39	115	2	4980.05	ppb	5000	1903360	0.95	99.60	90	110	
Ca	44	115	2	4887.13	ppb	5000	93674	2.23	97.74	90	110	
V	51	115	2	48.82	ppb	50	209774	1.26	97.65	90	110	
Cr	52	115	2	48.72	ppb	50	259203	1.60	97.45	90	110	
Mn	55	115	2	49.02	ppb	50	152725	0.70	98.05	90	110	
Fe	56	115	2	4910.59	ppb	5000	22058745	2.36	98.21	90	110	
Co	59	115	2	49.11	ppb	50	414473	0.92	98.21	90	110	
Ni	60	115	2	49.31	ppb	50	110515	2.11	98.62	90	110	
Cu	65	115	2	49.21	ppb	50	142128	2.21	98.41	90	110	
Zn	66	115	2	48.35	ppb	50	44587	1.93	96.71	90	110	
As	75	115	2	48.98	ppb	50	26846	0.60	97.95	90	110	
Se	78	115	2	246.57	ppb	250	10965	0.14	98.63	90	110	
Mo	95	115	1	49.95	ppb	50	331156	2.79	99.90	90	110	
Ag	107	115	1	51.84	ppb	50	961043	3.08	103.69	90	110	
Cd	111	115	1	50.36	ppb	50	181540	3.12	100.73	90	110	
Sb	121	115	1	48.98	ppb	50	727756	3.04	97.95	90	110	
Ba	137	159	1	48.44	ppb	50	287864	2.48	96.88	90	110	
Tl	205	165	1	50.29	ppb	50	2344128	2.62	100.58	90	110	
Pb	208	165	1	48.14	ppb	50	1530717	7.32	96.27	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	881903	0.50	943268	93.5	70	130	
Sc	45	2	44520	1.63	47161	94.4	70	130	
In	115	1	1400045	3.49	1541461	90.8	70	130	
In	115	2	290952	1.48	302668	96.1	70	130	
Tb	159	1	2199770	0.44	2290443	96.0	70	130	
Tb	159	2	969425	0.94	989980	97.9	70	130	
Ho	165	1	2178007	0.42	2269893	96.0	70	130	
Ho	165	2	976643	0.53	995473	98.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0476CCB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:55:42-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

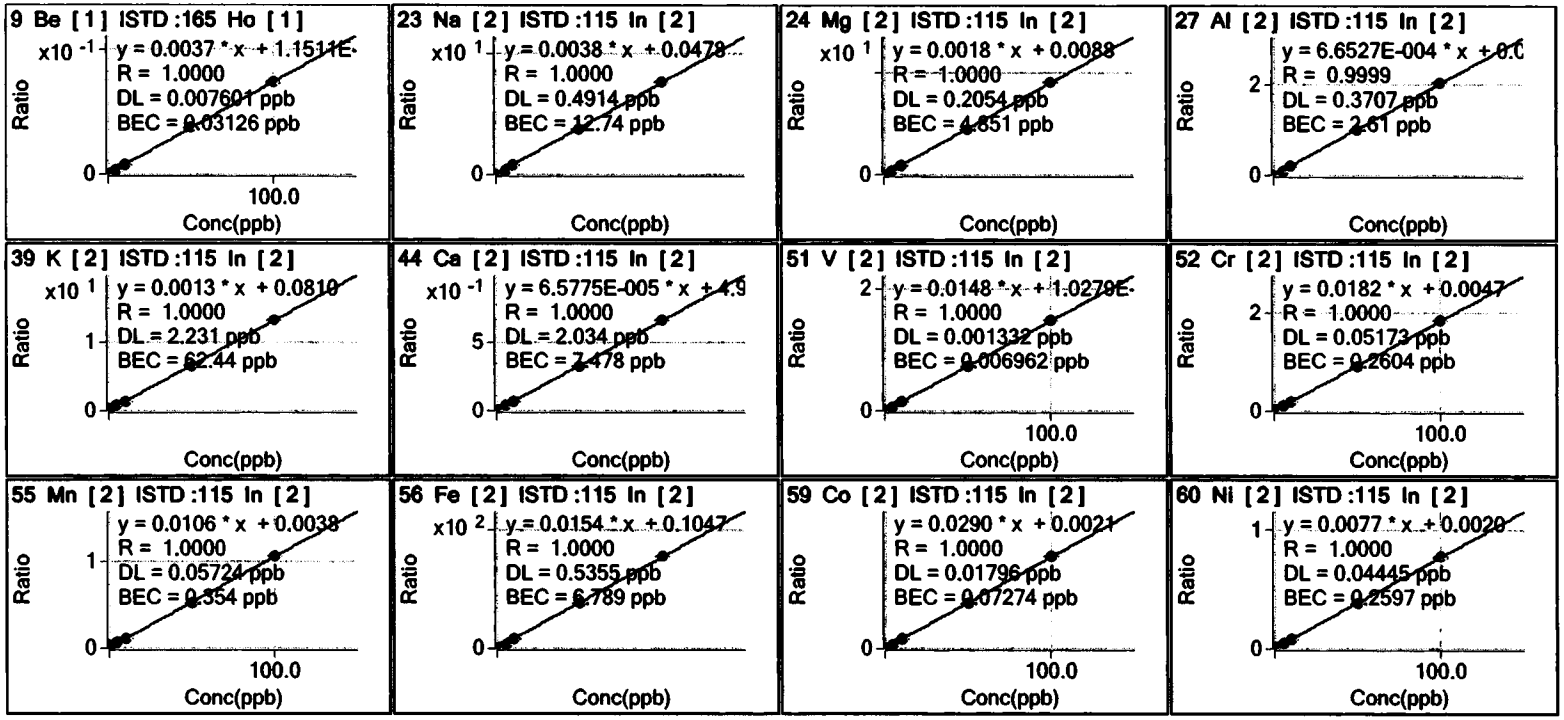
QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.00	ppb	1	
Na	23	115	2	7.44	ppb	500	
Mg	24	115	2	0.80	ppb	500	
Al	27	115	2	2.33	ppb	500	
K	39	115	2	2.41	ppb	500	
Ca	44	115	2	1.72	ppb	500	
V	51	115	2	0.00	ppb	1	
Cr	52	115	2	0.01	ppb	2	
Mn	55	115	2	0.02	ppb	6	
Fe	56	115	2	2.11	ppb	500	
Co	59	115	2	-0.04	ppb	2	
Ni	60	115	2	0.06	ppb	3	
Cu	65	115	2	0.95	ppb	10	
Zn	66	115	2	0.62	ppb	20	
As	75	115	2	0.01	ppb	1	
Se	78	115	2	0.04	ppb	10	
Mo	95	115	1	0.06	ppb	1	
Ag	107	115	1	0.07	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.00	ppb	4	
Ba	137	159	1	-1.13	ppb	5	
Tl	205	165	1	0.01	ppb	2	
Pb	208	165	1	0.04	ppb	2	

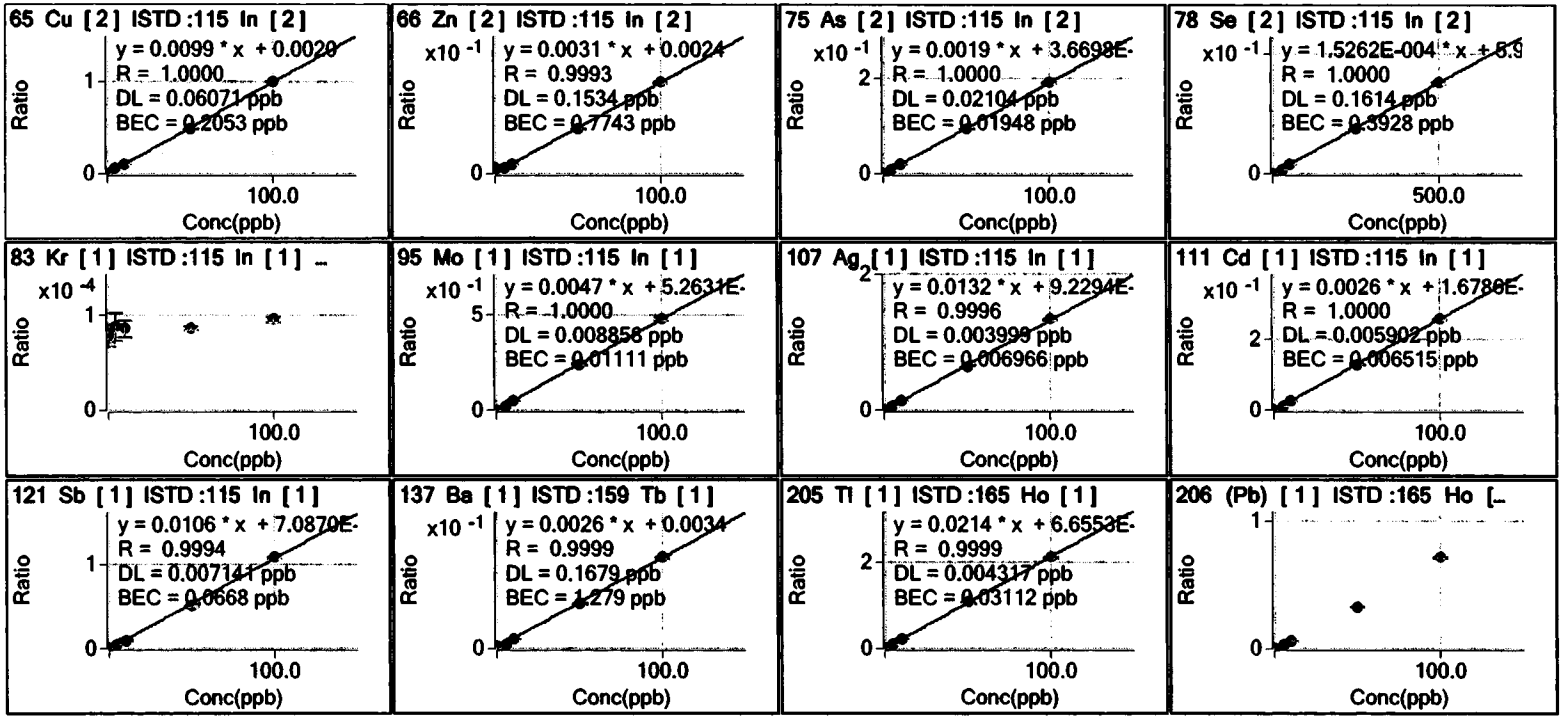
QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	898491	0.16	943268	95.3	70	130	
Sc	45	2	46109	3.12	47161	97.8	70	130	
In	115	1	1466800	1.04	1541461	95.2	70	130	
In	115	2	299960	1.84	302668	99.1	70	130	
Tb	159	1	2206465	0.82	2290443	96.3	70	130	
Tb	159	2	979517	1.93	989980	98.9	70	130	
Ho	165	1	2208674	0.71	2269893	97.3	70	130	
Ho	165	2	984441	2.60	995473	98.9	70	130	

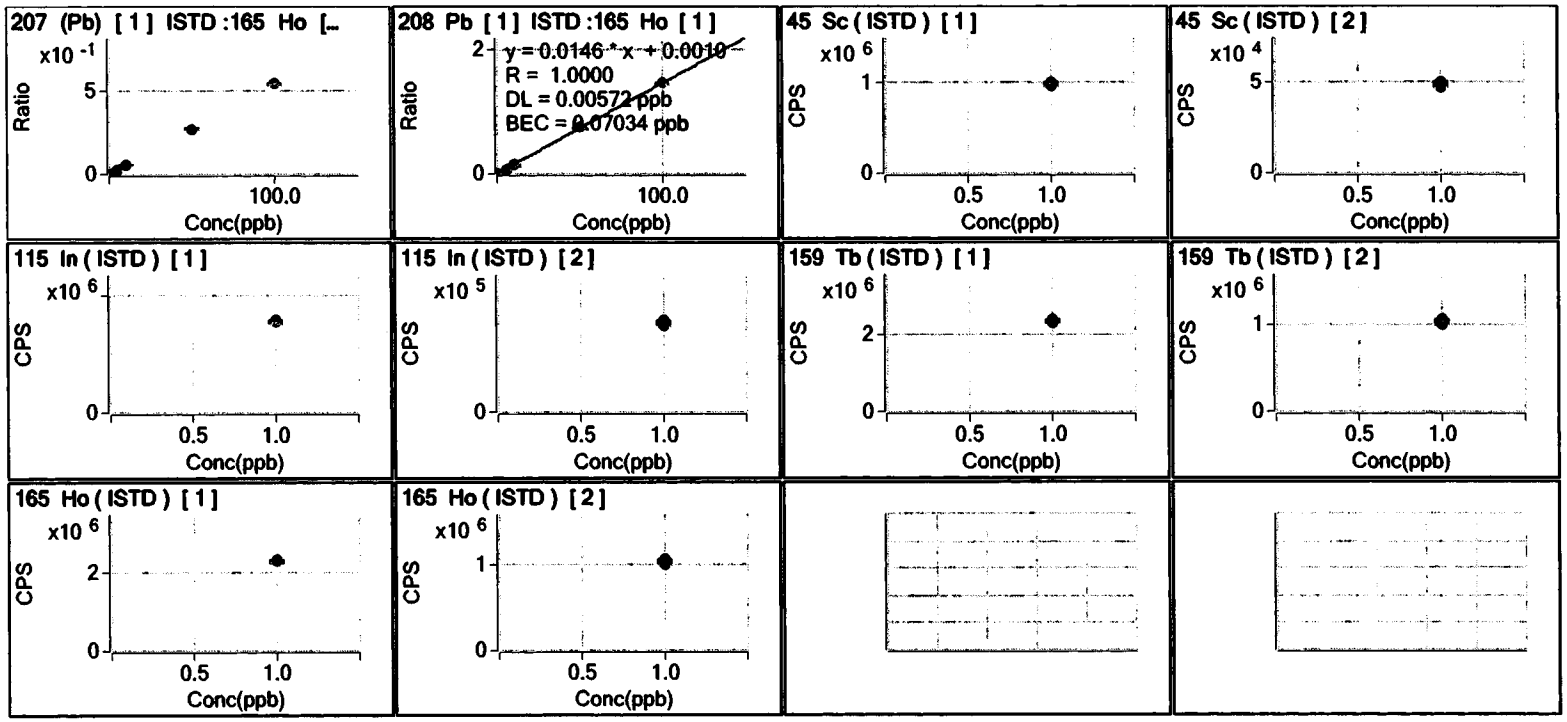
TuneStep	TuneFile
1	nogas.u
2	he.u



0091006 0336



0091006 0337



0091006 0338

Method: PE2 4300DV SWAQ AX Page 1 Date: 9/14/2020 3:16:29 PM

SW26214A2 26214/85272 SW846 H2O

Analysis Begun

Start Time: 9/14/2020 3:13:48 PM
Logged In Analyst: shiamala
Spectrometer Model: Optima 4300 DV, S/N 069N-na

Plasma On Time: 9/14/2020 8:30:16 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\administrator\Sample Information\09.14.20.sif
Batch ID:
Results Data Set: SW26214A2
Results Library: C:\pe\administrator\Results\Results.mdb

Method Loaded
Method Name: PE2 4300DV SWAQ AX
IEC File: IEC050420A2.iec
Method Description: 6010D (AQUEOUS)

Method Last Saved: 9/10/2020 12:34:43 PM
MSF File:

Sequence No.: 1
Sample ID: CALBLK V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 9/14/2020 3:13:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-333667

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1482963.7	3953.71	0.27%	100	%
Y 371.029	445147.1	1060.18	0.24%	100	%
Ag 328.068†	2797.2	44.03	1.57%	[0.00]	mg/L
Al 308.215†	7772.4	142.28	1.83%	[0.00]	mg/L
As 188.979†	62.0	2.55	4.11%	[0.00]	mg/L
Ba 233.527†	-495.8	7.63	1.54%	[0.00]	mg/L
Be 313.107†	-987.9	101.57	10.28%	[0.00]	mg/L
Ca 315.887†	5737.5	54.14	0.94%	[0.00]	mg/L
Cd 228.802†	251.1	9.20	3.66%	[0.00]	mg/L
Co 228.616†	-1390.7	14.67	1.06%	[0.00]	mg/L
Cr 267.716†	-423.9	38.21	9.02%	[0.00]	mg/L
Cu 327.393†	-6148.6	106.35	1.73%	[0.00]	mg/L
Fe 273.955†	789.6	14.74	1.87%	[0.00]	mg/L
K 404.721†	-1477.4	72.79	4.93%	[0.00]	mg/L
Mg 279.077†	-222.8	34.59	15.53%	[0.00]	mg/L
Mn 257.610†	2921.3	20.54	0.70%	[0.00]	mg/L
Mo 202.031†	-161.0	7.60	4.72%	[0.00]	mg/L
Na 330.237†	-370.4	72.97	19.70%	[0.00]	mg/L
Ni 231.604†	2334.0	22.54	0.97%	[0.00]	mg/L
Pb 220.353†	286.3	9.58	3.35%	[0.00]	mg/L
Sb 206.836†	129.5	6.68	5.15%	[0.00]	mg/L
Se 196.026†	-26.2	4.34	16.57%	[0.00]	mg/L
Sn 189.927†	-43.5	5.17	11.87%	[0.00]	mg/L
Ti 334.940†	923.2	49.71	5.38%	[0.00]	mg/L
Tl 190.801†	-50.6	3.44	6.80%	[0.00]	mg/L
V 290.880†	1504.9	64.03	4.26%	[0.00]	mg/L
Zn 206.200†	646.5	14.85	2.30%	[0.00]	mg/L
Si 251.611†	29.9	28.31	94.73%	[0.00]	mg/L
B 249.772†	1636.2	70.90	4.33%	[0.00]	mg/L
Ce 413.764	-3198.0	280.94	8.78%	[0.00]	mg/L

26214/85272

All elements reported, except Na, K.

NOTE: Ag reported from ICP-MS.

Sequence No.: 2
Sample ID: CALST2 V-333670
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 9/14/2020 3:17:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST2 V-333670

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1483271.0	19335.14	1.30%	100	%
Y 371.029	439089.6	5559.62	1.27%	98.6	%
Ag 328.068†	4694.0	101.07	2.15%	[0.02]	mg/L
Al 308.215†	7155.8	135.60	1.90%	[0.2]	mg/L
As 188.979†	69.1	7.05	10.20%	[0.040]	mg/L
Ba 233.527†	5849.3	97.37	1.66%	[0.050]	mg/L
Be 313.107†	44768.3	87.16	0.19%	[0.012]	mg/L
Ca 315.887†	744858.6	716.48	0.10%	[5]	mg/L
Cd 228.802†	903.0	21.73	2.41%	[0.012]	mg/L
Co 228.616†	1191.2	3.02	0.25%	[0.020]	mg/L
Cr 267.716†	5888.8	11.34	0.19%	[0.050]	mg/L
Cu 327.393†	8575.5	62.01	0.72%	[0.050]	mg/L
Fe 273.955†	11391.0	36.40	0.32%	[0.30]	mg/L
K 404.721†	758.5	111.58	14.71%	[5.0]	mg/L
Mg 279.077†	130740.6	110.97	0.08%	[5.0]	mg/L
Mn 257.610†	43992.2	138.07	0.31%	[0.040]	mg/L
Mo 202.031†	159.9	2.95	1.85%	[0.020]	mg/L
Na 330.237†	7137.5	38.63	0.54%	[5.0]	mg/L
Ni 231.604†	2041.7	79.85	3.91%	[0.050]	mg/L
Pb 220.353†	386.5	11.86	3.07%	[0.050]	mg/L
Sb 206.836†	119.7	5.79	4.83%	[0.050]	mg/L
Se 196.026†	44.7	9.73	21.76%	[0.050]	mg/L
Sn 189.927†	213.0	4.76	2.24%	[0.050]	mg/L
Ti 334.940†	49553.7	83.84	0.17%	[0.050]	mg/L
Tl 190.801†	80.8	1.14	1.41%	[0.050]	mg/L
V 290.880†	9420.7	10.30	0.11%	[0.050]	mg/L
Zn 206.200†	3243.9	66.16	2.04%	[0.050]	mg/L
Si 251.611†	5004.9	42.02	0.84%	[0.10]	mg/L
B 249.772†	21459.1	194.82	0.91%	[0.20]	mg/L
Ce 413.764	1810.8	149.90	8.28%	[0.10]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-333666
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 9/14/2020 3:21:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST3 V-333666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1463042.7	8077.05	0.55%	98.7	%
Y 371.029	387451.8	2680.91	0.69%	87.0	%
Ag 328.068†	20160.9	195.53	0.97%	[0.10]	mg/L
Al 308.215†	160477.1	1719.56	1.07%	[5.0]	mg/L
As 188.979†	827.3	5.96	0.72%	[0.50]	mg/L
Ba 233.527†	55252.7	479.70	0.87%	[0.50]	mg/L
Be 313.107†	1812526.8	6271.91	0.35%	[0.50]	mg/L
Ca 315.887†	6912736.6	22429.51	0.32%	[50]	mg/L
Cd 228.802†	33561.6	326.75	0.97%	[0.50]	mg/L
Co 228.616†	27779.7	211.85	0.76%	[0.50]	mg/L
Cr 267.716†	55931.6	456.03	0.82%	[0.50]	mg/L
Cu 327.393†	81092.0	595.04	0.73%	[0.50]	mg/L
Fe 273.955†	178858.5	1370.18	0.77%	[5.0]	mg/L
K 404.721†	15794.1	172.39	1.09%	[50]	mg/L
Mg 279.077†	1198250.6	4048.92	0.34%	[50]	mg/L
Mn 257.610†	517228.9	4241.40	0.82%	[0.50]	mg/L
Mo 202.031†	3658.4	28.90	0.79%	[0.50]	mg/L
Na 330.237†	72130.8	722.95	1.00%	[50]	mg/L
Ni 231.604†	19203.1	160.90	0.84%	[0.50]	mg/L
Pb 220.353†	3702.8	22.64	0.61%	[0.50]	mg/L
Sb 206.836†	1091.7	12.43	1.14%	[0.50]	mg/L
Se 196.026†	483.7	8.54	1.77%	[0.50]	mg/L
Sn 189.927†	2017.8	18.03	0.89%	[0.50]	mg/L
Ti 334.940†	466970.5	4216.64	0.90%	[0.50]	mg/L
Tl 190.801†	698.5	8.27	1.18%	[0.50]	mg/L
V 290.880†	90446.1	775.20	0.86%	[0.50]	mg/L
Zn 206.200†	31798.2	276.98	0.87%	[0.50]	mg/L
Si 251.611†	212498.3	1921.00	0.90%	[5]	mg/L
B 249.772†	55914.9	465.03	0.83%	[0.50]	mg/L
Ce 413.764	70471.3	1060.47	1.50%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-333665
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 9/14/2020 3:25:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST4 V-333665

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1436214.0	9980.72	0.69%	96.8	%
Y 371.029	352442.9	3310.55	0.94%	79.2	%
Ag 328.068†	41814.2	55.27	0.13%	[0.20]	mg/L
Al 308.215†	326607.7	206.39	0.06%	[10]	mg/L
As 188.979†	1714.1	10.07	0.59%	[1.0]	mg/L
Ba 233.527†	113227.7	89.91	0.08%	[1.0]	mg/L
Be 313.107†	3725380.3	24555.39	0.66%	[1.0]	mg/L
Ca 315.887†	14132883.7	101925.04	0.72%	[100]	mg/L
Cd 228.802†	69598.3	100.53	0.14%	[1.0]	mg/L
Co 228.616†	56517.9	90.09	0.16%	[1.0]	mg/L
Cr 267.716†	114986.0	149.11	0.13%	[1.0]	mg/L
Cu 327.393†	167324.7	110.28	0.07%	[1.0]	mg/L
Fe 273.955†	365815.6	556.33	0.15%	[10]	mg/L
K 404.721†	32799.9	95.21	0.29%	[100]	mg/L
Mg 279.077†	2424693.5	4514.66	0.19%	[100]	mg/L
Mn 257.610†	1061490.3	1379.08	0.13%	[1.0]	mg/L
Mo 202.031†	7443.0	54.35	0.73%	[1.0]	mg/L
Na 330.237†	155866.7	284.35	0.18%	[100]	mg/L
Ni 231.604†	39175.7	37.58	0.10%	[1.0]	mg/L
Pb 220.353†	7464.1	65.41	0.88%	[1.0]	mg/L
Sb 206.836†	2253.0	6.54	0.29%	[1.0]	mg/L
Se 196.026†	1021.1	2.80	0.27%	[1.0]	mg/L
Sn 189.927†	4108.7	27.12	0.66%	[1.0]	mg/L
Ti 334.940†	970617.1	815.60	0.08%	[1.0]	mg/L
Tl 190.801†	1396.6	10.13	0.73%	[1.0]	mg/L
V 290.880†	187131.7	167.08	0.09%	[1.0]	mg/L
Zn 206.200†	65412.1	152.04	0.23%	[1.0]	mg/L
Si 251.611†	442282.0	777.03	0.18%	[10]	mg/L
B 249.772†	121377.1	637.94	0.53%	[1.0]	mg/L
Ce 413.764	139262.3	3183.24	2.29%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	89.0	207200	0.00000	0.999661	
Al 308.215	3	Lin, Calc Int	-232.4	32580	0.00000	0.999953	
As 188.979	3	Lin, Calc Int	-5.2	1709	0.00000	0.999830	
Ba 233.527	3	Lin, Calc Int	-164.6	112900	0.00000	0.999911	
Be 313.107	3	Lin, Calc Int	-9102.9	3716000	0.00000	0.999902	
Ca 315.887	3	Lin, Calc Int	-10927.1	140900	0.00000	0.999921	
Cd 228.802	3	Lin, Calc Int	-194.5	69340	0.00000	0.999824	
Co 228.616	3	Lin, Calc Int	-59.7	56400	0.00000	0.999958	
Cr 267.716	3	Lin, Calc Int	-223.1	114600	0.00000	0.999891	
Cu 327.393	3	Lin, Calc Int	-376.4	166800	0.00000	0.999861	
Fe 273.955	3	Lin, Calc Int	-550.5	36490	0.00000	0.999928	
K 404.721	3	Lin, Calc Int	-508.2	331.5	0.00000	0.999644	
Mg 279.077	3	Lin, Calc Int	1702.2	24170	0.00000	0.999967	
Mn 257.610	3	Lin, Calc Int	-1778.4	1058000	0.00000	0.999903	
Mo 202.031	3	Lin, Calc Int	-6.5	7426	0.00000	0.999957	
Na 330.237	3	Lin, Calc Int	-1358.1	1552	0.00000	0.999256	
Ni 231.604	3	Lin, Calc Int	-33.1	39070	0.00000	0.999938	
Pb 220.353	3	Lin, Calc Int	0.7	7452	0.00000	0.999988	
Sb 206.836	3	Lin, Calc Int	-3.2	2243	0.00000	0.999846	
Se 196.026	3	Lin, Calc Int	-7.8	1020	0.00000	0.999644	
Sn 189.927	3	Lin, Calc Int	-3.3	4099	0.00000	0.999949	
Ti 334.940	3	Lin, Calc Int	-2897.2	966900	0.00000	0.999792	
Tl 190.801	3	Lin, Calc Int	5.0	1391	0.00000	0.999973	
V 290.880	3	Lin, Calc Int	-542.4	186600	0.00000	0.999842	
Zn 206.200	3	Lin, Calc Int	-178.3	65270	0.00000	0.999893	
Si 251.611	3	Lin, Calc Int	-1308.7	44040	0.00000	0.999786	
B 249.772	3	Lin, Calc Int	-2103.9	121900	0.00000	0.999041	
Ce 413.764	3	Lin, Calc Int	342.8	13920	0.00000	0.999982	

Sequence No.: 5
Sample ID: ICV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 3:30:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV V-333673

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1461208.1	98.5	%	0.98				0.99%
Y 371.029	390106.7	87.6	%	0.69				0.78%
Ag 328.068†	16150.7	0.0833540	mg/L	0.00094815	0.0833540	mg/L	0.00094815	1.14%
QC value less than the lower limit for Ag 328.068 Recovery = 83.35%								
Al 308.215†	168116.0	5.14481	mg/L	0.044408	5.14481	mg/L	0.044408	0.86%
QC value within limits for Al 308.215 Recovery = 102.90%								
As 188.979†	865.6	0.508792	mg/L	0.0047235	0.508792	mg/L	0.0047235	0.93%
QC value within limits for As 188.979 Recovery = 101.76%								
Ba 233.527†	57818.8	0.513602	mg/L	0.0040535	0.513602	mg/L	0.0040535	0.79%
QC value within limits for Ba 233.527 Recovery = 102.72%								
Be 313.107†	1857518.2	0.499688	mg/L	0.0037374	0.499688	mg/L	0.0037374	0.75%
QC value within limits for Be 313.107 Recovery = 99.94%								
Ca 315.887†	7312525.5	51.9889	mg/L	0.42969	51.9889	mg/L	0.42969	0.83%
QC value within limits for Ca 315.887 Recovery = 103.98%								
Cd 228.802†	35265.2	0.511395	mg/L	0.0046760	0.511395	mg/L	0.0046760	0.91%
QC value within limits for Cd 228.802 Recovery = 102.28%								
Co 228.616†	28930.7	0.512521	mg/L	0.0031771	0.512521	mg/L	0.0031771	0.62%
QC value within limits for Co 228.616 Recovery = 102.50%								
Cr 267.716†	59067.3	0.516197	mg/L	0.0039724	0.516197	mg/L	0.0039724	0.77%
QC value within limits for Cr 267.716 Recovery = 103.24%								
Cu 327.393†	85403.7	0.519189	mg/L	0.0033603	0.519189	mg/L	0.0033603	0.65%
QC value within limits for Cu 327.393 Recovery = 103.84%								
Fe 273.955†	188471.8	5.18039	mg/L	0.045482	5.18039	mg/L	0.045482	0.88%
QC value within limits for Fe 273.955 Recovery = 103.61%								
K 404.721†	16322.0	18.2353	mg/L	0.43215	18.2353	mg/L	0.43215	2.37%
QC value less than the lower limit for K 404.721 Recovery = 36.47%								
Mg 279.077†	1262731.9	52.1660	mg/L	0.42954	52.1660	mg/L	0.42954	0.82%
QC value within limits for Mg 279.077 Recovery = 104.33%								
Mn 257.610†	541829.1	0.513647	mg/L	0.0042313	0.513647	mg/L	0.0042313	0.82%
QC value within limits for Mn 257.610 Recovery = 102.73%								
Mo 202.031†	3794.3	0.510017	mg/L	0.0045811	0.510017	mg/L	0.0045811	0.90%
QC value within limits for Mo 202.031 Recovery = 102.00%								
Na 330.237†	77330.3	52.0168	mg/L	0.46192	52.0168	mg/L	0.46192	0.89%
QC value within limits for Na 330.237 Recovery = 104.03%								
Ni 231.604†	20037.0	0.515920	mg/L	0.0044324	0.515920	mg/L	0.0044324	0.86%
QC value within limits for Ni 231.604 Recovery = 103.18%								
Pb 220.353†	3857.9	0.515443	mg/L	0.0041287	0.515443	mg/L	0.0041287	0.80%
QC value within limits for Pb 220.353 Recovery = 103.09%								
Sb 206.836†	1131.4	0.528515	mg/L	0.0077609	0.528515	mg/L	0.0077609	1.47%
QC value within limits for Sb 206.836 Recovery = 105.70%								
Se 196.026†	501.8	0.511263	mg/L	0.0092571	0.511263	mg/L	0.0092571	1.81%
QC value within limits for Se 196.026 Recovery = 102.25%								
Sn 189.927†	2121.9	0.520321	mg/L	0.0046142	0.520321	mg/L	0.0046142	0.89%
QC value within limits for Sn 189.927 Recovery = 104.06%								
Ti 334.940†	492532.1	0.514796	mg/L	0.0041069	0.514796	mg/L	0.0041069	0.80%
QC value within limits for Ti 334.940 Recovery = 102.96%								
Tl 190.801†	706.8	0.532702	mg/L	0.0041471	0.532702	mg/L	0.0041471	0.78%
QC value within limits for Tl 190.801 Recovery = 106.54%								
V 290.880†	95307.5	0.513404	mg/L	0.0036814	0.513404	mg/L	0.0036814	0.72%
QC value within limits for V 290.880 Recovery = 102.68%								
Zn 206.200†	33839.0	0.520391	mg/L	0.0045706	0.520391	mg/L	0.0045706	0.88%
QC value within limits for Zn 206.200 Recovery = 104.08%								
Si 251.611†	230653.9	5.26696	mg/L	0.041438	5.26696	mg/L	0.041438	0.79%
QC value within limits for Si 251.611 Recovery = 105.34%								
B 249.772†	61300.6	0.497026	mg/L	0.0054670	0.497026	mg/L	0.0054670	1.10%
QC value within limits for B 249.772 Recovery = 99.41%								
Ce 413.764	74051.7	5.29565	mg/L	0.068903	5.29565	mg/L	0.068903	1.30%
QC value within limits for Ce 413.764 Recovery = 105.91%								

QC Failed. Continue with analysis.

Sequence No.: 6
Sample ID: ICB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 9/14/2020 3:35:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1500135.7	101	%	0.3				0.34%
Y 371.029	449972.4	101	%	0.3				0.27%
Ag 328.068†	-47.0	-0.0006488	mg/L	0.00014200	-0.0006488	mg/L	0.00014200	21.89%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	40.1	0.0085781	mg/L	0.00044996	0.0085781	mg/L	0.00044996	5.25%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-2.8	0.0014144	mg/L	0.00210496	0.0014144	mg/L	0.00210496	148.82%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	13.7	0.0015787	mg/L	0.00002770	0.0015787	mg/L	0.00002770	1.75%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	191.0	0.0024981	mg/L	0.00000879	0.0024981	mg/L	0.00000879	0.35%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	465.7	0.0808766	mg/L	0.00030302	0.0808766	mg/L	0.00030302	0.37%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	13.9	0.0030065	mg/L	0.00003367	0.0030065	mg/L	0.00003367	1.12%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	12.3	0.0012688	mg/L	0.00016693	0.0012688	mg/L	0.00016693	13.16%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	31.4	0.0022210	mg/L	0.00025625	0.0022210	mg/L	0.00025625	11.54%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	18.7	0.0023868	mg/L	0.00089276	0.0023868	mg/L	0.00089276	37.40%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	25.3	0.0157797	mg/L	0.00005825	0.0157797	mg/L	0.00005825	0.37%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-86.4	1.23770	mg/L	0.115167	1.23770	mg/L	0.115167	9.30%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	87.9	-0.0667816	mg/L	0.00143651	-0.0667816	mg/L	0.00143651	2.15%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	44.8	0.0017227	mg/L	0.00001329	0.0017227	mg/L	0.00001329	0.77%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-4.1	0.0003167	mg/L	0.00086721	0.0003167	mg/L	0.00086721	273.82%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-40.5	0.849736	mg/L	0.0460807	0.849736	mg/L	0.0460807	5.42%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	9.8	0.0010967	mg/L	0.00035752	0.0010967	mg/L	0.00035752	32.60%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-5.5	-0.0008366	mg/L	0.00065877	-0.0008366	mg/L	0.00065877	78.74%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	7.1	0.0046107	mg/L	0.00199821	0.0046107	mg/L	0.00199821	43.34%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-3.2	0.0045241	mg/L	0.00396201	0.0045241	mg/L	0.00396201	87.58%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	2.7	0.0014742	mg/L	0.00055246	0.0014742	mg/L	0.00055246	37.48%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	20.1	0.0030197	mg/L	0.00000614	0.0030197	mg/L	0.00000614	0.20%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.0	-0.0027887	mg/L	0.00115825	-0.0027887	mg/L	0.00115825	41.53%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-9.6	0.0028546	mg/L	0.00023199	0.0028546	mg/L	0.00023199	8.13%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	7.4	0.0028434	mg/L	0.00008131	0.0028434	mg/L	0.00008131	2.86%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	40.7	0.0306396	mg/L	0.00019014	0.0306396	mg/L	0.00019014	0.62%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	537.6	0.0216026	mg/L	0.00086145	0.0216026	mg/L	0.00086145	3.99%
QC value within limits for B 249.772 Recovery = Not calculated								
Ce 413.764	421.3	0.0056390	mg/L	0.00591273	0.0056390	mg/L	0.00591273	104.86%
QC value within limits for Ce 413.764 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: LRS V-333660
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 9/14/2020 3:38:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LRS V-333660

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1262925.7	85.2	%	0.74				0.87%
Y 371.029	313066.7	70.3	%	0.69				0.98%
Ag 328.068†	244347.5	1.20491	mg/L	0.004986	1.20491	mg/L	0.004986	0.41%
QC value greater than the upper limit for Ag 328.068 Recovery = 120.49%								
Al 308.215†	16141830.4	496.185	mg/L	4.9098	496.185	mg/L	4.9098	0.99%
QC value within limits for Al 308.215 Recovery = 99.24%								
As 188.979†	18115.9	10.5888	mg/L	0.15471	10.5888	mg/L	0.15471	1.46%
QC value within limits for As 188.979 Recovery = 105.89%								
Ba 233.527†	1132678.0	10.0344	mg/L	0.05133	10.0344	mg/L	0.05133	0.51%
QC value within limits for Ba 233.527 Recovery = 100.34%								
Be 313.107†	18252035.6	4.90979	mg/L	0.045370	4.90979	mg/L	0.045370	0.92%
QC value within limits for Be 313.107 Recovery = 98.20%								
Ca 315.887†	69158880.3	491.034	mg/L	4.5353	491.034	mg/L	4.5353	0.92%
QC value within limits for Ca 315.887 Recovery = 98.21%								
Cd 228.802†	380086.4	5.48435	mg/L	0.024590	5.48435	mg/L	0.024590	0.45%
QC value within limits for Cd 228.802 Recovery = 109.69%								
Co 228.616†	273344.6	4.81397	mg/L	0.020188	4.81397	mg/L	0.020188	0.42%
QC value within limits for Co 228.616 Recovery = 96.28%								
Cr 267.716†	1139883.8	9.93552	mg/L	0.051242	9.93552	mg/L	0.051242	0.52%
QC value within limits for Cr 267.716 Recovery = 99.36%								
Cu 327.393†	1735212.7	10.4896	mg/L	0.03773	10.4896	mg/L	0.03773	0.36%
QC value within limits for Cu 327.393 Recovery = 104.90%								
Fe 273.955†	6984400.4	191.431	mg/L	1.7295	191.431	mg/L	1.7295	0.90%
QC value within limits for Fe 273.955 Recovery = 95.72%								
K 404.721†	54623.8	116.439	mg/L	0.7427	116.439	mg/L	0.7427	0.64%
QC value less than the lower limit for K 404.721 Recovery = 58.22%								
Mg 279.077†	11961958.8	494.769	mg/L	4.3873	494.769	mg/L	4.3873	0.89%
QC value within limits for Mg 279.077 Recovery = 98.95%								
Mn 257.610†	10193467.3	9.63335	mg/L	0.088849	9.63335	mg/L	0.088849	0.92%
QC value within limits for Mn 257.610 Recovery = 96.33%								
Mo 202.031†	73886.6	9.93458	mg/L	0.133870	9.93458	mg/L	0.133870	1.35%
QC value within limits for Mo 202.031 Recovery = 99.35%								
Na 330.237†	1833609.0	1182.01	mg/L	6.945	1182.01	mg/L	6.945	0.59%
QC value greater than the upper limit for Na 330.237 Recovery = 118.20%								
Ni 231.604†	376206.7	9.65142	mg/L	0.045127	9.65142	mg/L	0.045127	0.47%
QC value within limits for Ni 231.604 Recovery = 96.51%								
Pb 220.353†	71410.2	9.58236	mg/L	0.061775	9.58236	mg/L	0.061775	0.64%
QC value within limits for Pb 220.353 Recovery = 95.82%								
Sb 206.836†	12309.8	5.73414	mg/L	0.074782	5.73414	mg/L	0.074782	1.30%
QC value greater than the upper limit for Sb 206.836 Recovery = 114.68%								
Se 196.026†	5356.9	5.42143	mg/L	0.067479	5.42143	mg/L	0.067479	1.24%
QC value within limits for Se 196.026 Recovery = 108.43%								
Sn 189.927†	39697.6	9.71217	mg/L	0.128516	9.71217	mg/L	0.128516	1.32%
QC value within limits for Sn 189.927 Recovery = 97.12%								
Ti 334.940†	9651281.7	9.98814	mg/L	0.093180	9.98814	mg/L	0.093180	0.93%
QC value within limits for Ti 334.940 Recovery = 99.88%								
Tl 190.801†	6761.1	4.97359	mg/L	0.062031	4.97359	mg/L	0.062031	1.25%
QC value within limits for Tl 190.801 Recovery = 99.47%								
V 290.880†	1909918.0	10.2268	mg/L	0.04013	10.2268	mg/L	0.04013	0.39%
QC value within limits for V 290.880 Recovery = 102.27%								
Zn 206.200†	635422.9	9.71392	mg/L	0.050241	9.71392	mg/L	0.050241	0.52%
QC value within limits for Zn 206.200 Recovery = 97.14%								
Si 251.611†	472085.8	10.7489	mg/L	0.03561	10.7489	mg/L	0.03561	0.33%
QC value less than the lower limit for Si 251.611 Recovery = 43.00%								
B 249.772†	334245.4	1.86698	mg/L	0.011206	1.86698	mg/L	0.011206	0.60%
QC value less than the lower limit for B 249.772 Recovery = 37.34%								
Ce 413.764	113320.1	8.11690	mg/L	0.033279	8.11690	mg/L	0.033279	0.41%
QC value less than the lower limit for Ce 413.764 Recovery = 32.47%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-333666
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 9/14/2020 3:45:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1468567.9	99.0	%	0.44				0.45%
Y 371.029	391020.0	87.8	%	0.74				0.84%
Ag 328.068†	20150.8	0.102469	mg/L	0.0013482	0.102469	mg/L	0.0013482	1.32%
QC value within limits for Ag 328.068 Recovery = 102.47%								
Al 308.215†	160131.5	4.89916	mg/L	0.058431	4.89916	mg/L	0.058431	1.19%
QC value within limits for Al 308.215 Recovery = 97.98%								
As 188.979†	825.7	0.485472	mg/L	0.0012225	0.485472	mg/L	0.0012225	0.25%
QC value within limits for As 188.979 Recovery = 97.09%								
Ba 233.527†	55094.0	0.489467	mg/L	0.0059142	0.489467	mg/L	0.0059142	1.21%
QC value within limits for Ba 233.527 Recovery = 97.89%								
Be 313.107†	1799450.1	0.484140	mg/L	0.0005114	0.484140	mg/L	0.0005114	0.11%
QC value within limits for Be 313.107 Recovery = 96.83%								
Ca 315.887†	6858207.1	48.7637	mg/L	0.05405	48.7637	mg/L	0.05405	0.11%
QC value within limits for Ca 315.887 Recovery = 97.53%								
Cd 228.802†	33447.8	0.485184	mg/L	0.0068861	0.485184	mg/L	0.0068861	1.42%
QC value within limits for Cd 228.802 Recovery = 97.04%								
Co 228.616†	27635.7	0.489639	mg/L	0.0003082	0.489639	mg/L	0.0003082	0.06%
QC value within limits for Co 228.616 Recovery = 97.93%								
Cr 267.716†	55751.5	0.487331	mg/L	0.0061407	0.487331	mg/L	0.0061407	1.26%
QC value within limits for Cr 267.716 Recovery = 97.47%								
Cu 327.393†	80975.2	0.492354	mg/L	0.0062946	0.492354	mg/L	0.0062946	1.28%
QC value within limits for Cu 327.393 Recovery = 98.47%								
Fe 273.955†	177991.1	4.89315	mg/L	0.064705	4.89315	mg/L	0.064705	1.32%
QC value within limits for Fe 273.955 Recovery = 97.86%								
K 404.721†	15566.8	16.9314	mg/L	0.99488	16.9314	mg/L	0.99488	5.88%
QC value less than the lower limit for K 404.721 Recovery = 33.86%								
Mg 279.077†	1188404.9	49.0913	mg/L	0.02567	49.0913	mg/L	0.02567	0.05%
QC value within limits for Mg 279.077 Recovery = 98.18%								
Mn 257.610†	514777.4	0.488087	mg/L	0.0062726	0.488087	mg/L	0.0062726	1.29%
QC value within limits for Mn 257.610 Recovery = 97.62%								
Mo 202.031†	3644.8	0.489987	mg/L	0.0015265	0.489987	mg/L	0.0015265	0.31%
QC value within limits for Mo 202.031 Recovery = 98.00%								
Na 330.237†	71651.8	48.3231	mg/L	0.48295	48.3231	mg/L	0.48295	1.00%
QC value within limits for Na 330.237 Recovery = 96.65%								
Ni 231.604†	19099.8	0.491802	mg/L	0.0005439	0.491802	mg/L	0.0005439	0.11%
QC value within limits for Ni 231.604 Recovery = 98.36%								
Pb 220.353†	3672.3	0.490561	mg/L	0.0008810	0.490561	mg/L	0.0008810	0.18%
QC value within limits for Pb 220.353 Recovery = 98.11%								
Sb 206.836†	1093.4	0.510734	mg/L	0.0001401	0.510734	mg/L	0.0001401	0.03%
QC value within limits for Sb 206.836 Recovery = 102.15%								
Se 196.026†	494.2	0.503229	mg/L	0.0100066	0.503229	mg/L	0.0100066	1.99%
QC value within limits for Se 196.026 Recovery = 100.65%								
Sn 189.927†	2013.0	0.493636	mg/L	0.0009430	0.493636	mg/L	0.0009430	0.19%
QC value within limits for Sn 189.927 Recovery = 98.73%								
Ti 334.940†	465264.3	0.486523	mg/L	0.0059556	0.486523	mg/L	0.0059556	1.22%
QC value within limits for Ti 334.940 Recovery = 97.30%								
Tl 190.801†	697.6	0.525195	mg/L	0.0012012	0.525195	mg/L	0.0012012	0.23%
QC value within limits for Tl 190.801 Recovery = 105.04%								
V 290.880†	89910.8	0.484498	mg/L	0.0061919	0.484498	mg/L	0.0061919	1.28%
QC value within limits for V 290.880 Recovery = 96.90%								
Zn 206.200†	31704.3	0.487725	mg/L	0.0081099	0.487725	mg/L	0.0081099	1.66%
QC value within limits for Zn 206.200 Recovery = 97.54%								
Si 251.611†	211493.2	4.83190	mg/L	0.062954	4.83190	mg/L	0.062954	1.30%
QC value within limits for Si 251.611 Recovery = 96.64%								
B 249.772†	57329.8	0.465723	mg/L	0.0060313	0.465723	mg/L	0.0060313	1.30%
QC value within limits for B 249.772 Recovery = 93.14%								
Ce 413.764	71844.3	5.13706	mg/L	0.089915	5.13706	mg/L	0.089915	1.75%
QC value within limits for Ce 413.764 Recovery = 102.74%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 9/14/2020 3:49:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1493527.1	101	%	0.6				0.55%
Y 371.029	448516.6	101	%	0.5				0.45%
Ag 328.068†	49.3	-0.0001762	mg/L	0.00012714	-0.0001762	mg/L	0.00012714	72.16%
Al 308.215†	147.5	0.0118136	mg/L	0.00370630	0.0118136	mg/L	0.00370630	31.37%
As 188.979†	0.5	0.0033079	mg/L	0.00281834	0.0033079	mg/L	0.00281834	85.20%
Ba 233.527†	17.6	0.0016136	mg/L	0.00005723	0.0016136	mg/L	0.00005723	3.55%
Be 313.107†	309.8	0.0025262	mg/L	0.00002558	0.0025262	mg/L	0.00002558	1.01%
Ca 315.887†	581.3	0.0816971	mg/L	0.00095416	0.0816971	mg/L	0.00095416	1.17%
Cd 228.802†	17.1	0.0030513	mg/L	0.00018196	0.0030513	mg/L	0.00018196	5.96%
Co 228.616†	0.5	0.0010594	mg/L	0.00015951	0.0010594	mg/L	0.00015951	15.06%
Cr 267.716†	21.2	0.0021318	mg/L	0.00026727	0.0021318	mg/L	0.00026727	12.54%
Cu 327.393†	-3.1	0.0022560	mg/L	0.00032612	0.0022560	mg/L	0.00032612	14.46%
Fe 273.955†	-43.6	0.0138920	mg/L	0.00055954	0.0138920	mg/L	0.00055954	4.03%
K 404.721†	-175.8	0.919570	mg/L	0.0404126	0.919570	mg/L	0.0404126	4.39%
Mg 279.077†	148.4	-0.0642776	mg/L	0.00244643	-0.0642776	mg/L	0.00244643	3.81%
Mn 257.610†	120.1	0.0017938	mg/L	0.00000491	0.0017938	mg/L	0.00000491	0.27%
Mo 202.031†	-4.9	0.0002019	mg/L	0.00124414	0.0002019	mg/L	0.00124414	616.33%
Na 330.237†	17.5	0.889549	mg/L	0.0534493	0.889549	mg/L	0.0534493	6.01%
Ni 231.604†	21.9	0.0014060	mg/L	0.00024100	0.0014060	mg/L	0.00024100	17.14%
Pb 220.353†	5.6	0.0006420	mg/L	0.00042272	0.0006420	mg/L	0.00042272	65.85%
Sb 206.836†	8.8	0.0053800	mg/L	0.00393083	0.0053800	mg/L	0.00393083	73.06%
Se 196.026†	7.9	0.0153799	mg/L	0.00739398	0.0153799	mg/L	0.00739398	48.08%
Sn 189.927†	2.8	0.0014938	mg/L	0.00146809	0.0014938	mg/L	0.00146809	98.28%
Ti 334.940†	108.0	0.0031142	mg/L	0.00008987	0.0031142	mg/L	0.00008987	2.89%
Tl 190.801†	3.3	-0.0011302	mg/L	0.00070751	-0.0011302	mg/L	0.00070751	62.60%
V 290.880†	40.0	0.0031207	mg/L	0.00064541	0.0031207	mg/L	0.00064541	20.68%
Zn 206.200†	-59.7	0.0018153	mg/L	0.00011678	0.0018153	mg/L	0.00011678	6.43%
Si 251.611†	76.4	0.0314508	mg/L	0.00176666	0.0314508	mg/L	0.00176666	5.62%
B 249.772†	1198.3	0.0270338	mg/L	0.00083506	0.0270338	mg/L	0.00083506	3.09%
Ce 413.764	530.7	0.0135011	mg/L	0.00659808	0.0135011	mg/L	0.00659808	48.87%

Sequence No.: 10 Autosampler Location: 5
Sample ID: LLICV V-333670 Date Collected: 9/14/2020 3:53:47 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: LLICV V-333670

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1506987.2	102	%	0.6				0.61%
Y 371.029	446928.8	100	%	0.6				0.55%
Ag 328.068†	4578.0	0.0218161	mg/L	0.00020966	0.0218161	mg/L	0.00020966	0.96%
QC value within limits for Ag 328.068 Recovery = 109.08%								
Al 308.215†	7062.9	0.227278	mg/L	0.0012923	0.227278	mg/L	0.0012923	0.57%
QC value within limits for Al 308.215 Recovery = 113.64%								
As 188.979†	68.2	0.0428522	mg/L	0.00242868	0.0428522	mg/L	0.00242868	5.67%
QC value within limits for As 188.979 Recovery = 107.13%								
Ba 233.527†	5755.9	0.0524419	mg/L	0.00042288	0.0524419	mg/L	0.00042288	0.81%
QC value within limits for Ba 233.527 Recovery = 104.88%								
Be 313.107†	44527.9	0.0143716	mg/L	0.00002324	0.0143716	mg/L	0.00002324	0.16%
QC value within limits for Be 313.107 Recovery = 119.76%								
Ca 315.887†	737024.2	5.30968	mg/L	0.008162	5.30968	mg/L	0.008162	0.15%
QC value within limits for Ca 315.887 Recovery = 106.19%								
Cd 228.802†	897.0	0.0157422	mg/L	0.00016770	0.0157422	mg/L	0.00016770	1.07%
QC value greater than the upper limit for Cd 228.802 Recovery = 131.18%								
Co 228.616†	1194.6	0.0220866	mg/L	0.00000694	0.0220866	mg/L	0.00000694	0.03%
QC value within limits for Co 228.616 Recovery = 110.43%								
Cr 267.716†	5906.8	0.0533703	mg/L	0.00034811	0.0533703	mg/L	0.00034811	0.65%
QC value within limits for Cr 267.716 Recovery = 106.74%								
Cu 327.393†	8623.5	0.0544426	mg/L	0.00077221	0.0544426	mg/L	0.00077221	1.42%
QC value within limits for Cu 327.393 Recovery = 108.89%								
Fe 273.955†	11329.4	0.325583	mg/L	0.0007372	0.325583	mg/L	0.0007372	0.23%
QC value within limits for Fe 273.955 Recovery = 108.53%								
K 404.721†	633.0	2.69397	mg/L	0.110626	2.69397	mg/L	0.110626	4.11%
QC value less than the lower limit for K 404.721 Recovery = 53.88%								
Mg 279.077†	129230.9	5.27558	mg/L	0.012027	5.27558	mg/L	0.012027	0.23%
QC value within limits for Mg 279.077 Recovery = 105.51%								
Mn 257.610†	43606.6	0.0428836	mg/L	0.00011054	0.0428836	mg/L	0.00011054	0.26%
QC value within limits for Mn 257.610 Recovery = 107.21%								
Mo 202.031†	155.1	0.0215572	mg/L	0.00029666	0.0215572	mg/L	0.00029666	1.38%
QC value within limits for Mo 202.031 Recovery = 107.79%								
Na 330.237†	7051.6	5.43867	mg/L	0.072431	5.43867	mg/L	0.072431	1.33%
QC value within limits for Na 330.237 Recovery = 108.77%								
Ni 231.604†	1963.3	0.0513244	mg/L	0.00103706	0.0513244	mg/L	0.00103706	2.02%
QC value within limits for Ni 231.604 Recovery = 102.65%								
Pb 220.353†	374.0	0.0501592	mg/L	0.00115138	0.0501592	mg/L	0.00115138	2.30%
QC value within limits for Pb 220.353 Recovery = 100.32%								
Sb 206.836†	108.2	0.0506233	mg/L	0.00128793	0.0506233	mg/L	0.00128793	2.54%
QC value within limits for Sb 206.836 Recovery = 101.25%								
Se 196.026†	46.9	0.0541980	mg/L	0.00348675	0.0541980	mg/L	0.00348675	6.43%
QC value within limits for Se 196.026 Recovery = 108.40%								
Sn 189.927†	211.8	0.0526836	mg/L	0.00020008	0.0526836	mg/L	0.00020008	0.38%
QC value within limits for Sn 189.927 Recovery = 105.37%								
Ti 334.940†	49217.9	0.0539536	mg/L	0.00009632	0.0539536	mg/L	0.00009632	0.18%
QC value within limits for Ti 334.940 Recovery = 107.91%								
Tl 190.801†	81.0	0.0553690	mg/L	0.00248264	0.0553690	mg/L	0.00248264	4.48%
QC value within limits for Tl 190.801 Recovery = 110.74%								
V 290.880†	9333.6	0.0529141	mg/L	0.00010724	0.0529141	mg/L	0.00010724	0.20%
QC value within limits for V 290.880 Recovery = 105.83%								
Zn 206.200†	3162.5	0.0511112	mg/L	0.00045115	0.0511112	mg/L	0.00045115	0.88%
QC value within limits for Zn 206.200 Recovery = 102.22%								
Si 251.611†	5004.8	0.143355	mg/L	0.0007451	0.143355	mg/L	0.0007451	0.52%
QC value greater than the upper limit for Si 251.611 Recovery = 143.35%								
B 249.772†	22080.8	0.197054	mg/L	0.0011889	0.197054	mg/L	0.0011889	0.60%
QC value within limits for B 249.772 Recovery = 98.53%								
Ce 413.764	2038.4	0.121822	mg/L	0.0049096	0.121822	mg/L	0.0049096	4.03%
QC value greater than the upper limit for Ce 413.764 Recovery = 121.82%								

QC Failed. Continue with analysis.

Sequence No.: 11 Autosampler Location: 7
Sample ID: ICSA V-333668 Date Collected: 9/14/2020 3:57:40 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1354812.2	91.4	%	0.37				0.40%
Y 371.029	397491.8	89.3	%	0.37				0.42%
Ag 328.068†	-2962.5	0.0022485	mg/L	0.00024516	0.0022485	mg/L	0.00024516	10.90%
Al 308.215†	15892008.5	487.844	mg/L	1.2294	487.844	mg/L	1.2294	0.25%
QC value within limits for Al 308.215 Recovery = 97.57%								
As 188.979†	112.7	0.0521166	mg/L	0.00269258	0.0521166	mg/L	0.00269258	5.17%
Ba 233.527†	-235.0	-0.0006238	mg/L	0.00001876	-0.0006238	mg/L	0.00001876	3.01%
Be 313.107†	-4537.1	0.0015070	mg/L	0.00001312	0.0015070	mg/L	0.00001312	0.87%
Ca 315.887†	67849618.7	481.739	mg/L	1.1441	481.739	mg/L	1.1441	0.24%
QC value within limits for Ca 315.887 Recovery = 96.35%								
Cd 228.802†	-464.9	-0.0038995	mg/L	0.00019527	-0.0038995	mg/L	0.00019527	5.01%
Co 228.616†	-132.5	-0.0068312	mg/L	0.00033469	-0.0068312	mg/L	0.00033469	4.90%
Cr 267.716†	101.2	-0.0064087	mg/L	0.00016253	-0.0064087	mg/L	0.00016253	2.54%
Cu 327.393†	-8349.6	-0.0069196	mg/L	0.00113769	-0.0069196	mg/L	0.00113769	16.44%
Fe 273.955†	6807581.9	186.585	mg/L	0.4520	186.585	mg/L	0.4520	0.24%
QC value within limits for Fe 273.955 Recovery = 93.29%								
K 404.721†	-490.3	3.55453	mg/L	0.248706	3.55453	mg/L	0.248706	7.00%
Mg 279.077†	11992615.2	496.038	mg/L	1.3136	496.038	mg/L	1.3136	0.26%
QC value within limits for Mg 279.077 Recovery = 99.21%								
Mn 257.610†	5152.4	0.0065488	mg/L	0.00001226	0.0065488	mg/L	0.00001226	0.19%
Mo 202.031†	-211.3	-0.0310730	mg/L	0.00127646	-0.0310730	mg/L	0.00127646	4.11%
Na 330.237†	-302.9	0.518688	mg/L	0.0275557	0.518688	mg/L	0.0275557	5.31%
Ni 231.604†	649.8	0.0381752	mg/L	0.00061637	0.0381752	mg/L	0.00061637	1.61%
Pb 220.353†	-186.3	0.0008803	mg/L	0.00252696	0.0008803	mg/L	0.00252696	287.05%
Sb 206.836†	171.8	0.0722734	mg/L	0.00351117	0.0722734	mg/L	0.00351117	4.86%
Se 196.026†	-144.5	0.0151878	mg/L	0.00050136	0.0151878	mg/L	0.00050136	3.30%
Sn 189.927†	-104.0	-0.0055676	mg/L	0.00222694	-0.0055676	mg/L	0.00222694	40.00%
Ti 334.940†	3308.2	0.0061574	mg/L	0.00007868	0.0061574	mg/L	0.00007868	1.28%
Tl 190.801†	-51.5	-0.0138073	mg/L	0.00309856	-0.0138073	mg/L	0.00309856	22.44%
V 290.880†	-886.3	-0.0151954	mg/L	0.00026964	-0.0151954	mg/L	0.00026964	1.77%
Zn 206.200†	1107.9	0.0082373	mg/L	0.00040593	0.0082373	mg/L	0.00040593	4.93%
Si 251.611†	-5.1	0.0295995	mg/L	0.00010521	0.0295995	mg/L	0.00010521	0.36%
B 249.772†	100728.2	-0.0264022	mg/L	0.00376196	-0.0264022	mg/L	0.00376196	14.25%
Ce 413.764	-7588.7	-0.569841	mg/L	0.0127782	-0.569841	mg/L	0.0127782	2.24%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 4:03:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1467038.4	98.9	%	0.66				0.67%
Y 371.029	391094.5	87.9	%	0.66				0.75%
Ag 328.068†	16173.2	0.0834845	mg/L	0.00120424	0.0834845	mg/L	0.00120424	1.44%
QC value less than the lower limit for Ag 328.068 Recovery = 83.48%								
Al 308.215†	168537.6	5.15743	mg/L	0.070100	5.15743	mg/L	0.070100	1.36%
QC value within limits for Al 308.215 Recovery = 103.15%								
As 188.979†	864.5	0.508142	mg/L	0.0031755	0.508142	mg/L	0.0031755	0.62%
QC value within limits for As 188.979 Recovery = 101.63%								
Ba 233.527†	57750.4	0.512997	mg/L	0.0062277	0.512997	mg/L	0.0062277	1.21%
QC value within limits for Ba 233.527 Recovery = 102.60%								
Be 313.107†	1855223.1	0.499060	mg/L	0.0003286	0.499060	mg/L	0.0003286	0.07%
QC value within limits for Be 313.107 Recovery = 99.81%								
Ca 315.887†	7298369.4	51.8884	mg/L	0.01785	51.8884	mg/L	0.01785	0.03%
QC value within limits for Ca 315.887 Recovery = 103.78%								
Cd 228.802†	35195.0	0.510382	mg/L	0.0071275	0.510382	mg/L	0.0071275	1.40%
QC value within limits for Cd 228.802 Recovery = 102.08%								
Co 228.616†	28801.3	0.510229	mg/L	0.0030277	0.510229	mg/L	0.0030277	0.59%
QC value within limits for Co 228.616 Recovery = 102.05%								
Cr 267.716†	58920.0	0.514913	mg/L	0.0061267	0.514913	mg/L	0.0061267	1.19%
QC value within limits for Cr 267.716 Recovery = 102.98%								
Cu 327.393†	85326.9	0.518720	mg/L	0.0058090	0.518720	mg/L	0.0058090	1.12%
QC value within limits for Cu 327.393 Recovery = 103.74%								
Fe 273.955†	188434.7	5.17938	mg/L	0.073947	5.17938	mg/L	0.073947	1.43%
QC value within limits for Fe 273.955 Recovery = 103.59%								
K 404.721†	16276.8	17.9656	mg/L	0.65774	17.9656	mg/L	0.65774	3.66%
QC value less than the lower limit for K 404.721 Recovery = 35.93%								
Mg 279.077†	1260772.3	52.0850	mg/L	0.05387	52.0850	mg/L	0.05387	0.10%
QC value within limits for Mg 279.077 Recovery = 104.17%								
Mn 257.610†	540986.8	0.512852	mg/L	0.0071524	0.512852	mg/L	0.0071524	1.39%
QC value within limits for Mn 257.610 Recovery = 102.57%								
Mo 202.031†	3782.2	0.508380	mg/L	0.0038651	0.508380	mg/L	0.0038651	0.76%
QC value within limits for Mo 202.031 Recovery = 101.68%								
Na 330.237†	77255.9	51.9750	mg/L	0.53939	51.9750	mg/L	0.53939	1.04%
QC value within limits for Na 330.237 Recovery = 103.95%								
Ni 231.604†	19936.5	0.513344	mg/L	0.0032535	0.513344	mg/L	0.0032535	0.63%
QC value within limits for Ni 231.604 Recovery = 102.67%								
Pb 220.353†	3838.1	0.512778	mg/L	0.0033600	0.512778	mg/L	0.0033600	0.66%
QC value within limits for Pb 220.353 Recovery = 102.56%								
Sb 206.836†	1127.1	0.526606	mg/L	0.0063200	0.526606	mg/L	0.0063200	1.20%
QC value within limits for Sb 206.836 Recovery = 105.32%								
Se 196.026†	508.1	0.517405	mg/L	0.0043862	0.517405	mg/L	0.0043862	0.85%
QC value within limits for Se 196.026 Recovery = 103.48%								
Sn 189.927†	2122.1	0.520352	mg/L	0.0023079	0.520352	mg/L	0.0023079	0.44%
QC value within limits for Sn 189.927 Recovery = 104.07%								
Ti 334.940†	491543.0	0.513783	mg/L	0.0070423	0.513783	mg/L	0.0070423	1.37%
QC value within limits for Ti 334.940 Recovery = 102.76%								
Tl 190.801†	704.3	0.531018	mg/L	0.0008348	0.531018	mg/L	0.0008348	0.16%
QC value within limits for Tl 190.801 Recovery = 106.20%								
V 290.880†	95100.1	0.512292	mg/L	0.0071300	0.512292	mg/L	0.0071300	1.39%
QC value within limits for V 290.880 Recovery = 102.46%								
Zn 206.200†	33813.2	0.519996	mg/L	0.0067927	0.519996	mg/L	0.0067927	1.31%
QC value within limits for Zn 206.200 Recovery = 104.00%								
Si 251.611†	230318.0	5.25933	mg/L	0.069507	5.25933	mg/L	0.069507	1.32%
QC value within limits for Si 251.611 Recovery = 105.19%								
B 249.772†	60457.6	0.490111	mg/L	0.0042640	0.490111	mg/L	0.0042640	0.87%
QC value within limits for B 249.772 Recovery = 98.02%								
Ce 413.764	74353.9	5.31736	mg/L	0.050268	5.31736	mg/L	0.050268	0.95%
QC value within limits for Ce 413.764 Recovery = 106.35%								

QC Failed. Continue with analysis.

Sequence No.: 13 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 9/14/2020 4:07:46 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1506106.9	102	%	0.3				0.32%
Y 371.029	452414.9	102	%	0.5				0.45%
Ag 328.068†	149.6	0.0003011	mg/L	0.00017677	0.0003011	mg/L	0.00017677	58.71%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	122.9	0.0111225	mg/L	0.00335103	0.0111225	mg/L	0.00335103	30.13%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-3.9	0.0007311	mg/L	0.00145144	0.0007311	mg/L	0.00145144	198.53%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	4.2	0.0014949	mg/L	0.00006926	0.0014949	mg/L	0.00006926	4.63%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	202.1	0.0025006	mg/L	0.00001078	0.0025006	mg/L	0.00001078	0.43%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	293.0	0.0796505	mg/L	0.00053744	0.0796505	mg/L	0.00053744	0.67%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	12.9	0.0029907	mg/L	0.00020173	0.0029907	mg/L	0.00020173	6.75%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	21.8	0.0014386	mg/L	0.00027790	0.0014386	mg/L	0.00027790	19.32%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	12.3	0.0020546	mg/L	0.00025470	0.0020546	mg/L	0.00025470	12.40%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	42.6	0.0025300	mg/L	0.00047903	0.0025300	mg/L	0.00047903	18.93%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	6.8	0.0152735	mg/L	0.00018022	0.0152735	mg/L	0.00018022	1.18%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-144.3	1.05662	mg/L	0.294518	1.05662	mg/L	0.294518	27.87%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	153.8	-0.0640569	mg/L	0.00090714	-0.0640569	mg/L	0.00090714	1.42%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	18.0	0.0016973	mg/L	0.00000877	0.0016973	mg/L	0.00000877	0.52%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.4	0.0009256	mg/L	0.00105449	0.0009256	mg/L	0.00105449	113.93%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-85.8	0.821176	mg/L	0.0254255	0.821176	mg/L	0.0254255	3.10%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-2.3	0.0007865	mg/L	0.00021666	0.0007865	mg/L	0.00021666	27.55%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.7	-0.0003273	mg/L	0.00086601	-0.0003273	mg/L	0.00086601	264.57%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	6.5	0.0043397	mg/L	0.00060178	0.0043397	mg/L	0.00060178	13.87%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.3	0.0073147	mg/L	0.00858541	0.0073147	mg/L	0.00858541	117.37%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	2.5	0.0014165	mg/L	0.00047759	0.0014165	mg/L	0.00047759	33.72%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	34.4	0.0030350	mg/L	0.00002653	0.0030350	mg/L	0.00002653	0.87%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	3.5	-0.0009891	mg/L	0.00132054	-0.0009891	mg/L	0.00132054	133.51%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	45.4	0.0031494	mg/L	0.00030846	0.0031494	mg/L	0.00030846	9.79%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-66.6	0.0017095	mg/L	0.00021446	0.0017095	mg/L	0.00021446	12.55%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	58.2	0.0310374	mg/L	0.00003494	0.0310374	mg/L	0.00003494	0.11%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	632.2	0.0223813	mg/L	0.00065583	0.0223813	mg/L	0.00065583	2.93%
QC value within limits for B 249.772 Recovery = Not calculated								
Ce 413.764	435.9	0.0066882	mg/L	0.00525105	0.0066882	mg/L	0.00525105	78.51%
QC value within limits for Ce 413.764 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: MB 85272 (1)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 9/14/2020 4:11:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85272 (1)

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1498215.7	101	%	0.3				0.28%
Y 371.029	448121.1	101	%	0.4				0.36%
Ag 328.068†	130.2	0.0002145	mg/L	0.00030741	0.0002145	mg/L	0.00030741	143.33%
Al 308.215†	850.7	0.0334246	mg/L	0.00123617	0.0334246	mg/L	0.00123617	3.70%
As 188.979†	-1.3	0.0022460	mg/L	0.00089923	0.0022460	mg/L	0.00089923	40.04%
Ba 233.527†	33.4	0.0017536	mg/L	0.00006806	0.0017536	mg/L	0.00006806	3.88%
Be 313.107†	206.3	0.0024996	mg/L	0.00003518	0.0024996	mg/L	0.00003518	1.41%
Ca 315.887†	9668.4	0.146206	mg/L	0.0003755	0.146206	mg/L	0.0003755	0.26%
Cd 228.802†	18.4	0.0030712	mg/L	0.00013478	0.0030712	mg/L	0.00013478	4.39%
Co 228.616†	24.6	0.0014859	mg/L	0.00006655	0.0014859	mg/L	0.00006655	4.48%
Cr 267.716†	76.4	0.0026137	mg/L	0.00046287	0.0026137	mg/L	0.00046287	17.71%
Cu 327.393†	116.0	0.0029770	mg/L	0.00033825	0.0029770	mg/L	0.00033825	11.36%
Fe 273.955†	1171.5	0.0471933	mg/L	0.00025452	0.0471933	mg/L	0.00025452	0.54%
K 404.721†	-101.8	1.15803	mg/L	0.247764	1.15803	mg/L	0.247764	21.40%
Mg 279.077†	219.2	-0.0613515	mg/L	0.00107566	-0.0613515	mg/L	0.00107566	1.75%
Mn 257.610†	789.6	0.0024264	mg/L	0.00002555	0.0024264	mg/L	0.00002555	1.05%
Mo 202.031†	-0.6	0.0007864	mg/L	0.00053782	0.0007864	mg/L	0.00053782	68.39%
Na 330.237†	-79.9	0.825119	mg/L	0.0144907	0.825119	mg/L	0.0144907	1.76%
Ni 231.604†	-6.4	0.0006822	mg/L	0.00029722	0.0006822	mg/L	0.00029722	43.57%
Pb 220.353†	-6.3	-0.0009547	mg/L	0.00050578	-0.0009547	mg/L	0.00050578	52.98%
Sb 206.836†	4.5	0.0035017	mg/L	0.00252281	0.0035017	mg/L	0.00252281	72.05%
Se 196.026†	-5.2	0.0025863	mg/L	0.00749797	0.0025863	mg/L	0.00749797	289.91%
Sn 189.927†	26.0	0.0071662	mg/L	0.00049461	0.0071662	mg/L	0.00049461	6.90%
Ti 334.940†	236.3	0.0032457	mg/L	0.00003896	0.0032457	mg/L	0.00003896	1.20%
Tl 190.801†	2.3	-0.0018286	mg/L	0.00237108	-0.0018286	mg/L	0.00237108	129.67%
V 290.880†	60.9	0.0032305	mg/L	0.00021573	0.0032305	mg/L	0.00021573	6.68%
Zn 206.200†	193.2	0.0056818	mg/L	0.00017350	0.0056818	mg/L	0.00017350	3.05%
Si 251.611†	940.0	0.0510598	mg/L	0.00068029	0.0510598	mg/L	0.00068029	1.33%
B 249.772†	423.8	0.0205204	mg/L	0.00022364	0.0205204	mg/L	0.00022364	1.09%
Ce 413.764	496.2	0.0110243	mg/L	0.00733797	0.0110243	mg/L	0.00733797	66.56%

Sequence No.: 15
Sample ID: LCS 85272
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 9/14/2020 4:15:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 85272

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1462806.5	98.6	%	0.28				0.29%
Y 371.029	424701.8	95.4	%	0.35				0.37%
Ag 328.068†	22297.9	0.108185	mg/L	0.0002161	0.108185	mg/L	0.0002161	0.20%
Al 308.215†	161336.9	4.99008	mg/L	0.012467	4.99008	mg/L	0.012467	0.25%
As 188.979†	811.0	0.476900	mg/L	0.0016705	0.476900	mg/L	0.0016705	0.35%
Ba 233.527†	56587.1	0.502692	mg/L	0.0017991	0.502692	mg/L	0.0017991	0.36%
Be 313.107†	1765009.9	0.477118	mg/L	0.0003347	0.477118	mg/L	0.0003347	0.07%
Ca 315.887†	6871481.0	48.8579	mg/L	0.02439	48.8579	mg/L	0.02439	0.05%
Cd 228.802†	33748.4	0.489519	mg/L	0.0010876	0.489519	mg/L	0.0010876	0.22%
Co 228.616†	27634.3	0.489600	mg/L	0.0009635	0.489600	mg/L	0.0009635	0.20%
Cr 267.716†	55492.5	0.485075	mg/L	0.0007594	0.485075	mg/L	0.0007594	0.16%
Cu 327.393†	80381.6	0.488817	mg/L	0.0012859	0.488817	mg/L	0.0012859	0.26%
Fe 273.955†	179975.1	4.94753	mg/L	0.009123	4.94753	mg/L	0.009123	0.18%
K 404.721†	6737.6	18.5255	mg/L	0.17911	18.5255	mg/L	0.17911	0.97%
Mg 279.077†	1183717.7	48.8974	mg/L	0.00829	48.8974	mg/L	0.00829	0.02%
Mn 257.610†	510244.3	0.483803	mg/L	0.0004859	0.483803	mg/L	0.0004859	0.10%
Mo 202.031†	3618.4	0.486431	mg/L	0.0047668	0.486431	mg/L	0.0047668	0.98%
Na 330.237†	73750.9	48.4164	mg/L	0.07343	48.4164	mg/L	0.07343	0.15%
Ni 231.604†	19064.4	0.490886	mg/L	0.0007425	0.490886	mg/L	0.0007425	0.15%
Pb 220.353†	3528.7	0.474322	mg/L	0.0059243	0.474322	mg/L	0.0059243	1.25%
Sb 206.836†	1080.2	0.495391	mg/L	0.0034889	0.495391	mg/L	0.0034889	0.70%
Se 196.026†	475.6	0.480431	mg/L	0.0062899	0.480431	mg/L	0.0062899	1.31%
Sn 189.927†	1982.2	0.486128	mg/L	0.0025870	0.486128	mg/L	0.0025870	0.53%
Ti 334.940†	468268.6	0.487531	mg/L	0.0007310	0.487531	mg/L	0.0007310	0.15%
Tl 190.801†	726.2	0.522566	mg/L	0.0027039	0.522566	mg/L	0.0027039	0.52%
V 290.880†	90873.1	0.489651	mg/L	0.0010697	0.489651	mg/L	0.0010697	0.22%
Zn 206.200†	31720.4	0.487981	mg/L	0.0006503	0.487981	mg/L	0.0006503	0.13%
Si 251.611†	22966.6	0.551197	mg/L	0.0013549	0.551197	mg/L	0.0013549	0.25%
B 249.772†	56632.2	0.459740	mg/L	0.0017689	0.459740	mg/L	0.0017689	0.38%
Ce 413.764	7889.7	0.542210	mg/L	0.0072586	0.542210	mg/L	0.0072586	1.34%

Sequence No.: 16
Sample ID: LCS MR 85272
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 9/14/2020 4:19:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS MR 85272

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1469702.9	99.1	%	0.94				0.94%
Y 371.029	426343.2	95.8	%	0.88				0.92%
Ag 328.068†	21947.9	0.106486	mg/L	0.0010704	0.106486	mg/L	0.0010704	1.01%
Al 308.215†	159115.3	4.92132	mg/L	0.043714	4.92132	mg/L	0.043714	0.89%
As 188.979†	801.3	0.471214	mg/L	0.0089812	0.471214	mg/L	0.0089812	1.91%
Ba 233.527†	55841.8	0.496090	mg/L	0.0042452	0.496090	mg/L	0.0042452	0.86%
Be 313.107†	1759407.9	0.475612	mg/L	0.0009290	0.475612	mg/L	0.0009290	0.20%
Ca 315.887†	6883600.7	48.9440	mg/L	0.11775	48.9440	mg/L	0.11775	0.24%
Cd 228.802†	33301.3	0.483071	mg/L	0.0039005	0.483071	mg/L	0.0039005	0.81%
Co 228.616†	27201.4	0.481933	mg/L	0.0045866	0.481933	mg/L	0.0045866	0.95%
Cr 267.716†	54805.2	0.479080	mg/L	0.0039836	0.479080	mg/L	0.0039836	0.83%
Cu 327.393†	79544.3	0.483782	mg/L	0.0040323	0.483782	mg/L	0.0040323	0.83%
Fe 273.955†	176618.3	4.85553	mg/L	0.033677	4.85553	mg/L	0.033677	0.69%
K 404.721†	6702.2	18.4253	mg/L	0.20351	18.4253	mg/L	0.20351	1.10%
Mg 279.077†	1184251.2	48.9194	mg/L	0.12771	48.9194	mg/L	0.12771	0.26%
Mn 257.610†	508445.8	0.482104	mg/L	0.0012060	0.482104	mg/L	0.0012060	0.25%
Mo 202.031†	3606.1	0.484770	mg/L	0.0081707	0.484770	mg/L	0.0081707	1.69%
Na 330.237†	73498.3	48.2554	mg/L	0.39922	48.2554	mg/L	0.39922	0.83%
Ni 231.604†	18735.0	0.482456	mg/L	0.0033098	0.482456	mg/L	0.0033098	0.69%
Pb 220.353†	3507.4	0.471484	mg/L	0.0071354	0.471484	mg/L	0.0071354	1.51%
Sb 206.836†	1070.3	0.490945	mg/L	0.0072521	0.490945	mg/L	0.0072521	1.48%
Se 196.026†	480.8	0.485444	mg/L	0.0095930	0.485444	mg/L	0.0095930	1.98%
Sn 189.927†	1972.6	0.483784	mg/L	0.0084737	0.483784	mg/L	0.0084737	1.75%
Ti 334.940†	466559.2	0.485763	mg/L	0.0009393	0.485763	mg/L	0.0009393	0.19%
Tl 190.801†	723.2	0.520383	mg/L	0.0096591	0.520383	mg/L	0.0096591	1.86%
V 290.880†	89712.2	0.483436	mg/L	0.0035229	0.483436	mg/L	0.0035229	0.73%
Zn 206.200†	31231.0	0.480487	mg/L	0.0029742	0.480487	mg/L	0.0029742	0.62%
Si 251.611†	22905.4	0.549809	mg/L	0.0034194	0.549809	mg/L	0.0034194	0.62%
B 249.772†	56526.1	0.459314	mg/L	0.0027195	0.459314	mg/L	0.0027195	0.59%
Ce 413.764	7874.8	0.541143	mg/L	0.0116399	0.541143	mg/L	0.0116399	2.15%

Sequence No.: 17
Sample ID: AD19206-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 9/14/2020 4:23:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1460444.4	98.5	%	0.73				0.74%
Y 371.029	428842.5	96.3	%	0.69				0.71%
Ag 328.068†	138.0	0.0003170	mg/L	0.00021981	0.0003170	mg/L	0.00021981	69.34%
Al 308.215†	759.2	0.0296901	mg/L	0.00366176	0.0296901	mg/L	0.00366176	12.33%
As 188.979†	8.8	0.0076046	mg/L	0.00165978	0.0076046	mg/L	0.00165978	21.83%
Ba 233.527†	12594.5	0.113017	mg/L	0.0006697	0.113017	mg/L	0.0006697	0.59%
Be 313.107†	-619.5	0.0022637	mg/L	0.00000120	0.0022637	mg/L	0.00000120	0.05%
Ca 315.887†	24187353.0	171.783	mg/L	0.9114	171.783	mg/L	0.9114	0.53%
Cd 228.802†	34.3	0.0032998	mg/L	0.00004607	0.0032998	mg/L	0.00004607	1.40%
Co 228.616†	187.4	0.0043146	mg/L	0.00023332	0.0043146	mg/L	0.00023332	5.41%
Cr 267.716†	323.4	0.0041106	mg/L	0.00007001	0.0041106	mg/L	0.00007001	1.70%
Cu 327.393†	-130.5	0.0086752	mg/L	0.00066706	0.0086752	mg/L	0.00066706	7.69%
Fe 273.955†	15416.3	0.437590	mg/L	0.0055400	0.437590	mg/L	0.0055400	1.27%
K 404.721†	1077.2	4.54304	mg/L	0.089920	4.54304	mg/L	0.089920	1.98%
Mg 279.077†	853242.3	35.2263	mg/L	0.03315	35.2263	mg/L	0.03315	0.09%
Mn 257.610†	2146673.4	2.03004	mg/L	0.001550	2.03004	mg/L	0.001550	0.08%
Mo 202.031†	97.8	0.0092972	mg/L	0.00064707	0.0092972	mg/L	0.00064707	6.96%
Na 330.237†	101242.0	66.1133	mg/L	0.70534	66.1133	mg/L	0.70534	1.07%
Ni 231.604†	284.7	0.0096050	mg/L	0.00071844	0.0096050	mg/L	0.00071844	7.48%
Pb 220.353†	61.3	0.0142787	mg/L	0.00123673	0.0142787	mg/L	0.00123673	8.66%
Sb 206.836†	-4.0	-0.0000976	mg/L	0.00311428	-0.0000976	mg/L	0.00311428	>999.9%
Se 196.026†	-18.7	-0.0081904	mg/L	0.00891170	-0.0081904	mg/L	0.00891170	108.81%
Sn 189.927†	-6.2	0.0039414	mg/L	0.00022942	0.0039414	mg/L	0.00022942	5.82%
Ti 334.940†	532.6	0.0035650	mg/L	0.00001418	0.0035650	mg/L	0.00001418	0.40%
Tl 190.801†	-19.5	-0.0168535	mg/L	0.00226296	-0.0168535	mg/L	0.00226296	13.43%
V 290.880†	-437.5	0.0005309	mg/L	0.00019789	0.0005309	mg/L	0.00019789	37.28%
Zn 206.200†	753.9	0.0142821	mg/L	0.00007289	0.0142821	mg/L	0.00007289	0.51%
Si 251.611†	461520.5	10.5090	mg/L	0.00586	10.5090	mg/L	0.00586	0.06%
B 249.772†	37305.0	0.326347	mg/L	0.0047033	0.326347	mg/L	0.0047033	1.44%
Ce 413.764	884.5	0.0389225	mg/L	0.00104976	0.0389225	mg/L	0.00104976	2.70%

Sequence No.: 18
Sample ID: AD19206-004 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 9/14/2020 4:28:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-004 MR

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1494805.4	101	%	0.3				0.27%
Y 371.029	438861.9	98.6	%	0.25				0.25%
Ag 328.068†	-5.8	-0.0003772	mg/L	0.00029172	-0.0003772	mg/L	0.00029172	77.34%
Al 308.215†	535.4	0.0226786	mg/L	0.00395872	0.0226786	mg/L	0.00395872	17.46%
As 188.979†	7.2	0.0066808	mg/L	0.00136274	0.0066808	mg/L	0.00136274	20.40%
Ba 233.527†	12324.9	0.110629	mg/L	0.0001931	0.110629	mg/L	0.0001931	0.17%
Be 313.107†	-533.7	0.0022852	mg/L	0.00001444	0.0022852	mg/L	0.00001444	0.63%
Ca 315.887†	23447812.8	166.533	mg/L	0.1937	166.533	mg/L	0.1937	0.12%
Cd 228.802†	23.1	0.0031389	mg/L	0.00015227	0.0031389	mg/L	0.00015227	4.85%
Co 228.616†	222.4	0.0049363	mg/L	0.00015952	0.0049363	mg/L	0.00015952	3.23%
Cr 267.716†	325.7	0.0041441	mg/L	0.00024840	0.0041441	mg/L	0.00024840	5.99%
Cu 327.393†	-82.3	0.0087420	mg/L	0.00037422	0.0087420	mg/L	0.00037422	4.28%
Fe 273.955†	13925.9	0.396744	mg/L	0.0088176	0.396744	mg/L	0.0088176	2.22%
K 404.721†	991.8	4.26570	mg/L	0.265287	4.26570	mg/L	0.265287	6.22%
Mg 279.077†	836138.5	34.5188	mg/L	0.04968	34.5188	mg/L	0.04968	0.14%
Mn 257.610†	2102837.9	1.98862	mg/L	0.003945	1.98862	mg/L	0.003945	0.20%
Mo 202.031†	102.6	0.0100891	mg/L	0.00080104	0.0100891	mg/L	0.00080104	7.94%
Na 330.237†	98434.6	64.3054	mg/L	1.22348	64.3054	mg/L	1.22348	1.90%
Ni 231.604†	217.9	0.0078652	mg/L	0.00066493	0.0078652	mg/L	0.00066493	8.45%
Pb 220.353†	52.2	0.0128768	mg/L	0.00017949	0.0128768	mg/L	0.00017949	1.39%
Sb 206.836†	-3.1	0.0003554	mg/L	0.00093333	0.0003554	mg/L	0.00093333	262.60%
Se 196.026†	-17.6	-0.0071533	mg/L	0.00744823	-0.0071533	mg/L	0.00744823	104.12%
Sn 189.927†	-0.5	0.0051910	mg/L	0.00116978	0.0051910	mg/L	0.00116978	22.53%
Ti 334.940†	556.2	0.0035908	mg/L	0.00014608	0.0035908	mg/L	0.00014608	4.07%
Tl 190.801†	-14.8	-0.0135075	mg/L	0.00049756	-0.0135075	mg/L	0.00049756	3.68%
V 290.880†	-601.7	-0.0003465	mg/L	0.00038147	-0.0003465	mg/L	0.00038147	110.09%
Zn 206.200†	735.1	0.0139924	mg/L	0.00016019	0.0139924	mg/L	0.00016019	1.14%
Si 251.611†	452215.3	10.2978	mg/L	0.02375	10.2978	mg/L	0.02375	0.23%
B 249.772†	36160.7	0.316999	mg/L	0.0078236	0.316999	mg/L	0.0078236	2.47%
Ce 413.764	929.4	0.0421458	mg/L	0.01306408	0.0421458	mg/L	0.01306408	31.00%

Sequence No.: 19
Sample ID: AD19206-004 MS 1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 9/14/2020 4:32:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-004 MS 1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1440148.4	97.1	%	0.34				0.35%
Y 371.029	419099.9	94.1	%	0.37				0.40%
Ag 328.068†	22666.6	0.109998	mg/L	0.0005989	0.109998	mg/L	0.0005989	0.54%
Al 308.215†	159876.4	4.94529	mg/L	0.010683	4.94529	mg/L	0.010683	0.22%
As 188.979†	846.5	0.497087	mg/L	0.0034879	0.497087	mg/L	0.0034879	0.70%
Ba 233.527†	69608.5	0.618033	mg/L	0.0013956	0.618033	mg/L	0.0013956	0.23%
Be 313.107†	1805772.6	0.488096	mg/L	0.0012487	0.488096	mg/L	0.0012487	0.26%
Ca 315.887†	31766161.4	225.584	mg/L	0.8882	225.584	mg/L	0.8882	0.39%
Cd 228.802†	34155.6	0.495393	mg/L	0.0019240	0.495393	mg/L	0.0019240	0.39%
Co 228.616†	27190.0	0.481643	mg/L	0.0034385	0.481643	mg/L	0.0034385	0.71%
Cr 267.716†	55466.4	0.484170	mg/L	0.0013937	0.484170	mg/L	0.0013937	0.29%
Cu 327.393†	81251.7	0.501474	mg/L	0.0013702	0.501474	mg/L	0.0013702	0.27%
Fe 273.955†	200374.4	5.50660	mg/L	0.017910	5.50660	mg/L	0.017910	0.33%
K 404.721†	8511.2	23.9884	mg/L	0.39600	23.9884	mg/L	0.39600	1.65%
Mg 279.077†	2064196.1	85.3208	mg/L	0.27988	85.3208	mg/L	0.27988	0.33%
Mn 257.610†	2754753.6	2.60461	mg/L	0.008595	2.60461	mg/L	0.008595	0.33%
Mo 202.031†	3704.6	0.493146	mg/L	0.0020812	0.493146	mg/L	0.0020812	0.42%
Na 330.237†	188425.2	122.295	mg/L	0.3307	122.295	mg/L	0.3307	0.27%
Ni 231.604†	18857.5	0.487110	mg/L	0.0038308	0.487110	mg/L	0.0038308	0.79%
Pb 220.353†	3622.1	0.493179	mg/L	0.0044755	0.493179	mg/L	0.0044755	0.91%
Sb 206.836†	1103.5	0.505918	mg/L	0.0033041	0.505918	mg/L	0.0033041	0.65%
Se 196.026†	477.0	0.484462	mg/L	0.0063841	0.484462	mg/L	0.0063841	1.32%
Sn 189.927†	1972.7	0.488591	mg/L	0.0022438	0.488591	mg/L	0.0022438	0.46%
Ti 334.940†	476562.1	0.496100	mg/L	0.0015238	0.496100	mg/L	0.0015238	0.31%
Tl 190.801†	699.9	0.504142	mg/L	0.0044878	0.504142	mg/L	0.0044878	0.89%
V 290.880†	91098.6	0.490820	mg/L	0.0016048	0.490820	mg/L	0.0016048	0.33%
Zn 206.200†	32197.4	0.495293	mg/L	0.0020873	0.495293	mg/L	0.0020873	0.42%
Si 251.611†	516261.7	11.7520	mg/L	0.02796	11.7520	mg/L	0.02796	0.24%
B 249.772†	97065.3	0.794051	mg/L	0.0012087	0.794051	mg/L	0.0012087	0.15%
Ce 413.764	7633.9	0.523832	mg/L	0.0120577	0.523832	mg/L	0.0120577	2.30%

Sequence No.: 20
Sample ID: AD19206-004 MS 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 9/14/2020 4:37:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-004 MS 2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1417718.6	95.6	%	0.76				0.79%
Y 371.029	413007.3	92.8	%	0.72				0.77%
Ag 328.068†	22455.3	0.108936	mg/L	0.0005486	0.108936	mg/L	0.0005486	0.50%
Al 308.215†	157935.6	4.88530	mg/L	0.012138	4.88530	mg/L	0.012138	0.25%
As 188.979†	833.7	0.489592	mg/L	0.0074328	0.489592	mg/L	0.0074328	1.52%
Ba 233.527†	68488.1	0.608108	mg/L	0.0020932	0.608108	mg/L	0.0020932	0.34%
Be 313.107†	1780118.4	0.481201	mg/L	0.0005813	0.481201	mg/L	0.0005813	0.12%
Ca 315.887†	31073092.9	220.664	mg/L	2.3337	220.664	mg/L	2.3337	1.06%
Cd 228.802†	33694.9	0.488748	mg/L	0.0003978	0.488748	mg/L	0.0003978	0.08%
Co 228.616†	26891.3	0.476367	mg/L	0.0046917	0.476367	mg/L	0.0046917	0.98%
Cr 267.716†	54760.2	0.478049	mg/L	0.0009905	0.478049	mg/L	0.0009905	0.21%
Cu 327.393†	80224.1	0.495051	mg/L	0.0011287	0.495051	mg/L	0.0011287	0.23%
Fe 273.955†	190286.7	5.23013	mg/L	0.003573	5.23013	mg/L	0.003573	0.07%
K 404.721†	8391.1	23.7269	mg/L	0.46549	23.7269	mg/L	0.46549	1.96%
Mg 279.077†	2013734.2	83.2333	mg/L	0.11525	83.2333	mg/L	0.11525	0.14%
Mn 257.610†	2677490.9	2.53161	mg/L	0.002250	2.53161	mg/L	0.002250	0.09%
Mo 202.031†	3683.4	0.490431	mg/L	0.0044760	0.490431	mg/L	0.0044760	0.91%
Na 330.237†	184603.8	119.831	mg/L	0.5378	119.831	mg/L	0.5378	0.45%
Ni 231.604†	18670.2	0.482228	mg/L	0.0050581	0.482228	mg/L	0.0050581	1.05%
Pb 220.353†	3585.4	0.488102	mg/L	0.0049707	0.488102	mg/L	0.0049707	1.02%
Sb 206.836†	1091.1	0.500256	mg/L	0.0061108	0.500256	mg/L	0.0061108	1.22%
Se 196.026†	467.5	0.474830	mg/L	0.0131340	0.474830	mg/L	0.0131340	2.77%
Sn 189.927†	1949.6	0.482807	mg/L	0.0053034	0.482807	mg/L	0.0053034	1.10%
Ti 334.940†	470337.9	0.489656	mg/L	0.0005509	0.489656	mg/L	0.0005509	0.11%
Tl 190.801†	690.9	0.497528	mg/L	0.0036616	0.497528	mg/L	0.0036616	0.74%
V 290.880†	89837.0	0.484078	mg/L	0.0009733	0.484078	mg/L	0.0009733	0.20%
Zn 206.200†	31687.6	0.487491	mg/L	0.0001874	0.487491	mg/L	0.0001874	0.04%
Si 251.611†	499522.6	11.3719	mg/L	0.01810	11.3719	mg/L	0.01810	0.16%
B 249.772†	95401.9	0.781586	mg/L	0.0038019	0.781586	mg/L	0.0038019	0.49%
Ce 413.764	7405.4	0.507420	mg/L	0.0182547	0.507420	mg/L	0.0182547	3.60%

Sequence No.: 21
Sample ID: AD19206-004 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 9/14/2020 4:41:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-004 PS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1423735.0	96.0	%	0.48				0.50%
Y 371.029	414672.7	93.2	%	0.39				0.42%
Ag 328.068†	13697.0	0.0666377	mg/L	0.00037387	0.0666377	mg/L	0.00037387	0.56%
Al 308.215†	156580.3	4.84397	mg/L	0.007265	4.84397	mg/L	0.007265	0.15%
As 188.979†	834.3	0.490042	mg/L	0.0054644	0.490042	mg/L	0.0054644	1.12%
Ba 233.527†	66670.5	0.592008	mg/L	0.0007530	0.592008	mg/L	0.0007530	0.13%
Be 313.107†	1776427.5	0.480222	mg/L	0.0006753	0.480222	mg/L	0.0006753	0.14%
Ca 315.887†	30047403.2	213.383	mg/L	2.9334	213.383	mg/L	2.9334	1.37%
Cd 228.802†	33443.3	0.485119	mg/L	0.0007382	0.485119	mg/L	0.0007382	0.15%
Co 228.616†	27095.9	0.480009	mg/L	0.0010951	0.480009	mg/L	0.0010951	0.23%
Cr 267.716†	55176.5	0.481752	mg/L	0.0009228	0.481752	mg/L	0.0009228	0.19%
Cu 327.393†	80544.2	0.496652	mg/L	0.0005394	0.496652	mg/L	0.0005394	0.11%
Fe 273.955†	188130.5	5.17104	mg/L	0.005787	5.17104	mg/L	0.005787	0.11%
K 404.721†	7885.2	22.3757	mg/L	0.19746	22.3757	mg/L	0.19746	0.88%
Mg 279.077†	1920166.4	79.3626	mg/L	0.11537	79.3626	mg/L	0.11537	0.15%
Mn 257.610†	2621902.9	2.47908	mg/L	0.003277	2.47908	mg/L	0.003277	0.13%
Mo 202.031†	3681.8	0.490418	mg/L	0.0017423	0.490418	mg/L	0.0017423	0.36%
Na 330.237†	176266.2	114.451	mg/L	0.3854	114.451	mg/L	0.3854	0.34%
Ni 231.604†	18901.6	0.487992	mg/L	0.0008326	0.487992	mg/L	0.0008326	0.17%
Pb 220.353†	3622.0	0.492758	mg/L	0.0024575	0.492758	mg/L	0.0024575	0.50%
Sb 206.836†	1092.7	0.500914	mg/L	0.0019863	0.500914	mg/L	0.0019863	0.40%
Se 196.026†	477.6	0.484387	mg/L	0.0041797	0.484387	mg/L	0.0041797	0.86%
Sn 189.927†	1949.3	0.482532	mg/L	0.0024010	0.482532	mg/L	0.0024010	0.50%
Ti 334.940†	468125.4	0.487355	mg/L	0.0004050	0.487355	mg/L	0.0004050	0.08%
Tl 190.801†	700.0	0.504003	mg/L	0.0033892	0.504003	mg/L	0.0033892	0.67%
V 290.880†	89726.8	0.483491	mg/L	0.0006161	0.483491	mg/L	0.0006161	0.13%
Zn 206.200†	31654.5	0.486985	mg/L	0.0009998	0.486985	mg/L	0.0009998	0.21%
Si 251.611†	494388.1	11.2553	mg/L	0.02371	11.2553	mg/L	0.02371	0.21%
B 249.772†	91796.0	0.752065	mg/L	0.0031156	0.752065	mg/L	0.0031156	0.41%
Ce 413.764	7009.3	0.478959	mg/L	0.0117874	0.478959	mg/L	0.0117874	2.46%

Sequence No.: 22
Sample ID: AD19206-004 SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 9/14/2020 4:46:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-004 SD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1521090.1	103	%	0.4				0.42%
Y 371.029	445546.8	100	%	0.3				0.27%
Ag 328.068†	-52.6	-0.0006558	mg/L	0.00007692	-0.0006558	mg/L	0.00007692	11.73%
Al 308.215†	139.7	0.0112747	mg/L	0.00158714	0.0112747	mg/L	0.00158714	14.08%
As 188.979†	-5.1	-0.0000970	mg/L	0.00172388	-0.0000970	mg/L	0.00172388	>999.9%
Ba 233.527†	2555.3	0.0240916	mg/L	0.00014318	0.0240916	mg/L	0.00014318	0.59%
Be 313.107†	-2.9	0.0024402	mg/L	0.00002838	0.0024402	mg/L	0.00002838	1.16%
Ca 315.887†	4940824.4	35.1523	mg/L	0.04280	35.1523	mg/L	0.04280	0.12%
Cd 228.802†	12.9	0.0029911	mg/L	0.00019150	0.0029911	mg/L	0.00019150	6.40%
Co 228.616†	94.7	0.0027184	mg/L	0.00018511	0.0027184	mg/L	0.00018511	6.81%
Cr 267.716†	263.9	0.0041138	mg/L	0.00014023	0.0041138	mg/L	0.00014023	3.41%
Cu 327.393†	100.2	0.0043419	mg/L	0.00009273	0.0043419	mg/L	0.00009273	2.14%
Fe 273.955†	3237.1	0.103804	mg/L	0.0023756	0.103804	mg/L	0.0023756	2.29%
K 404.721†	152.0	1.88434	mg/L	0.376679	1.88434	mg/L	0.376679	19.99%
Mg 279.077†	175183.7	7.17655	mg/L	0.061586	7.17655	mg/L	0.061586	0.86%
Mn 257.610†	433437.6	0.411230	mg/L	0.0003633	0.411230	mg/L	0.0003633	0.09%
Mo 202.031†	46.5	0.0061679	mg/L	0.00074723	0.0061679	mg/L	0.00074723	12.11%
Na 330.237†	18575.8	12.8469	mg/L	0.09247	12.8469	mg/L	0.09247	0.72%
Ni 231.604†	-16.7	0.0007183	mg/L	0.00036465	0.0007183	mg/L	0.00036465	50.77%
Pb 220.353†	-5.0	0.0004969	mg/L	0.00052314	0.0004969	mg/L	0.00052314	105.28%
Sb 206.836†	-4.5	-0.0004261	mg/L	0.00116258	-0.0004261	mg/L	0.00116258	272.83%
Se 196.026†	-7.1	0.0011831	mg/L	0.00367575	0.0011831	mg/L	0.00367575	310.69%
Sn 189.927†	8.0	0.0037161	mg/L	0.00054470	0.0037161	mg/L	0.00054470	14.66%
Ti 334.940†	-35.8	0.0029673	mg/L	0.00001741	0.0029673	mg/L	0.00001741	0.59%
Tl 190.801†	-4.3	-0.0064507	mg/L	0.00275341	-0.0064507	mg/L	0.00275341	42.68%
V 290.880†	-105.1	0.0023364	mg/L	0.00025426	0.0023364	mg/L	0.00025426	10.88%
Zn 206.200†	201.2	0.0058112	mg/L	0.00009271	0.0058112	mg/L	0.00009271	1.60%
Si 251.611†	90708.6	2.08935	mg/L	0.020923	2.08935	mg/L	0.020923	1.00%
B 249.772†	8085.4	0.0841499	mg/L	0.00044849	0.0841499	mg/L	0.00044849	0.53%
Ce 413.764	585.0	0.0174005	mg/L	0.00866804	0.0174005	mg/L	0.00866804	49.81%

Sequence No.: 23
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 4:50:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1522744.6	103	%	0.7				0.68%
Y 371.029	406531.5	91.3	%	0.91				1.00%
Ag 328.068†	15523.0	0.0803061	mg/L	0.00106819	0.0803061	mg/L	0.00106819	1.33%
QC value less than the lower limit for Ag 328.068 Recovery = 80.31%								
Al 308.215†	161861.3	4.95144	mg/L	0.082855	4.95144	mg/L	0.082855	1.67%
QC value within limits for Al 308.215 Recovery = 99.03%								
As 188.979†	833.5	0.490062	mg/L	0.0053292	0.490062	mg/L	0.0053292	1.09%
QC value within limits for As 188.979 Recovery = 98.01%								
Ba 233.527†	55853.6	0.496195	mg/L	0.0077559	0.496195	mg/L	0.0077559	1.56%
QC value within limits for Ba 233.527 Recovery = 99.24%								
Be 313.107†	1798850.1	0.483902	mg/L	0.0014038	0.483902	mg/L	0.0014038	0.29%
QC value within limits for Be 313.107 Recovery = 96.78%								
Ca 315.887†	7064428.2	50.2277	mg/L	0.12216	50.2277	mg/L	0.12216	0.24%
QC value within limits for Ca 315.887 Recovery = 100.46%								
Cd 228.802†	34040.9	0.493739	mg/L	0.0076608	0.493739	mg/L	0.0076608	1.55%
QC value within limits for Cd 228.802 Recovery = 98.75%								
Co 228.616†	27950.5	0.495190	mg/L	0.0030929	0.495190	mg/L	0.0030929	0.62%
QC value within limits for Co 228.616 Recovery = 99.04%								
Cr 267.716†	57020.2	0.498375	mg/L	0.0082863	0.498375	mg/L	0.0082863	1.66%
QC value within limits for Cr 267.716 Recovery = 99.67%								
Cu 327.393†	82997.8	0.504599	mg/L	0.0083038	0.504599	mg/L	0.0083038	1.65%
QC value within limits for Cu 327.393 Recovery = 100.92%								
Fe 273.955†	181924.2	5.00095	mg/L	0.079053	5.00095	mg/L	0.079053	1.58%
QC value within limits for Fe 273.955 Recovery = 100.02%								
K 404.721†	15955.1	17.1406	mg/L	0.97045	17.1406	mg/L	0.97045	5.66%
QC value less than the lower limit for K 404.721 Recovery = 34.28%								
Mg 279.077†	1217966.7	50.3142	mg/L	0.17686	50.3142	mg/L	0.17686	0.35%
QC value within limits for Mg 279.077 Recovery = 100.63%								
Mn 257.610†	523444.5	0.496276	mg/L	0.0079661	0.496276	mg/L	0.0079661	1.61%
QC value within limits for Mn 257.610 Recovery = 99.26%								
Mo 202.031†	3679.2	0.494569	mg/L	0.0030634	0.494569	mg/L	0.0030634	0.62%
QC value within limits for Mo 202.031 Recovery = 98.91%								
Na 330.237†	74201.8	50.0052	mg/L	0.64229	50.0052	mg/L	0.64229	1.28%
QC value within limits for Na 330.237 Recovery = 100.01%								
Ni 231.604†	19197.1	0.494344	mg/L	0.0039413	0.494344	mg/L	0.0039413	0.80%
QC value within limits for Ni 231.604 Recovery = 98.87%								
Pb 220.353†	3696.2	0.493705	mg/L	0.0047248	0.493705	mg/L	0.0047248	0.96%
QC value within limits for Pb 220.353 Recovery = 98.74%								
Sb 206.836†	1085.9	0.507846	mg/L	0.0061798	0.507846	mg/L	0.0061798	1.22%
QC value within limits for Sb 206.836 Recovery = 101.57%								
Se 196.026†	485.4	0.494922	mg/L	0.0009111	0.494922	mg/L	0.0009111	0.18%
QC value within limits for Se 196.026 Recovery = 98.98%								
Sn 189.927†	2042.1	0.500779	mg/L	0.0026660	0.500779	mg/L	0.0026660	0.53%
QC value within limits for Sn 189.927 Recovery = 100.16%								
Ti 334.940†	475880.1	0.497574	mg/L	0.0078246	0.497574	mg/L	0.0078246	1.57%
QC value within limits for Ti 334.940 Recovery = 99.51%								
Tl 190.801†	683.3	0.515756	mg/L	0.0024901	0.515756	mg/L	0.0024901	0.48%
QC value within limits for Tl 190.801 Recovery = 103.15%								
V 290.880†	91993.1	0.495651	mg/L	0.0079115	0.495651	mg/L	0.0079115	1.60%
QC value within limits for V 290.880 Recovery = 99.13%								
Zn 206.200†	32658.7	0.502337	mg/L	0.0081809	0.502337	mg/L	0.0081809	1.63%
QC value within limits for Zn 206.200 Recovery = 100.47%								
Si 251.611†	223005.4	5.09329	mg/L	0.084421	5.09329	mg/L	0.084421	1.66%
QC value within limits for Si 251.611 Recovery = 101.87%								
B 249.772†	58804.9	0.477353	mg/L	0.0064767	0.477353	mg/L	0.0064767	1.36%
QC value within limits for B 249.772 Recovery = 95.47%								
Ce 413.764	74024.4	5.29369	mg/L	0.017194	5.29369	mg/L	0.017194	0.32%
QC value within limits for Ce 413.764 Recovery = 105.87%								

QC Failed. Continue with analysis.

Sequence No.: 24 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 9/14/2020 4:54:51 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1515296.8	102	%	0.5				0.44%
Y 371.029	454507.8	102	%	0.5				0.50%
Ag 328.068†	-27.6	-0.0005677	mg/L	0.00017580	-0.0005677	mg/L	0.00017580	30.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-98.4	0.0044453	mg/L	0.00318382	0.0044453	mg/L	0.00318382	71.62%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-4.3	0.0005455	mg/L	0.00096306	0.0005455	mg/L	0.00096306	176.54%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	12.3	0.0015669	mg/L	0.00004909	0.0015669	mg/L	0.00004909	3.13%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	154.6	0.0024943	mg/L	0.00001474	0.0024943	mg/L	0.00001474	0.59%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-85.6	0.0769634	mg/L	0.00072878	0.0769634	mg/L	0.00072878	0.95%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	13.2	0.0029951	mg/L	0.00008761	0.0029951	mg/L	0.00008761	2.93%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	39.0	0.0017429	mg/L	0.00005602	0.0017429	mg/L	0.00005602	3.21%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	9.7	0.0020314	mg/L	0.00020477	0.0020314	mg/L	0.00020477	10.08%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	193.6	0.0034353	mg/L	0.00032494	0.0034353	mg/L	0.00032494	9.46%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-34.2	0.0141488	mg/L	0.00012351	0.0141488	mg/L	0.00012351	0.87%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-99.5	1.27318	mg/L	0.355275	1.27318	mg/L	0.355275	27.90%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	81.4	-0.0670519	mg/L	0.00199674	-0.0670519	mg/L	0.00199674	2.98%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	23.7	0.0017028	mg/L	0.00003547	0.0017028	mg/L	0.00003547	2.08%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	3.1	0.0012794	mg/L	0.00096944	0.0012794	mg/L	0.00096944	75.77%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-92.9	0.813000	mg/L	0.0882697	0.813000	mg/L	0.0882697	10.86%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-27.5	0.0001419	mg/L	0.00037548	0.0001419	mg/L	0.00037548	264.60%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-12.2	-0.0017323	mg/L	0.00024354	-0.0017323	mg/L	0.00024354	14.06%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.9	0.0027149	mg/L	0.00233640	0.0027149	mg/L	0.00233640	86.06%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.0	0.0086109	mg/L	0.00962424	0.0086109	mg/L	0.00962424	111.77%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.2	0.0008544	mg/L	0.00190516	0.0008544	mg/L	0.00190516	222.99%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	35.7	0.0030302	mg/L	0.00003585	0.0030302	mg/L	0.00003585	1.18%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.5	-0.0032266	mg/L	0.00222228	-0.0032266	mg/L	0.00222228	68.87%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-4.3	0.0028833	mg/L	0.00060390	0.0028833	mg/L	0.00060390	20.94%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-80.9	0.0014913	mg/L	0.00011956	0.0014913	mg/L	0.00011956	8.02%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	131.2	0.0326964	mg/L	0.00036177	0.0326964	mg/L	0.00036177	1.11%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	622.1	0.0223035	mg/L	0.00076272	0.0223035	mg/L	0.00076272	3.42%
QC value within limits for B 249.772 Recovery = Not calculated								
Ce 413.764	250.9	-0.0065988	mg/L	0.00170166	-0.0065988	mg/L	0.00170166	25.79%
QC value within limits for Ce 413.764 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 25
Sample ID: AD19159-011
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 9/14/2020 4:58:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-011

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1535711.1	104	%	1.4				1.32%
Y 371.029	456185.8	102	%	1.1				1.11%
Ag 328.068†	-96.4	-0.0008722	mg/L	0.00022533	-0.0008722	mg/L	0.00022533	25.83%
Al 308.215†	76.0	0.0095103	mg/L	0.00178577	0.0095103	mg/L	0.00178577	18.78%
As 188.979†	-1.3	0.0022462	mg/L	0.00270905	0.0022462	mg/L	0.00270905	120.61%
Ba 233.527†	46.8	0.0018722	mg/L	0.00008289	0.0018722	mg/L	0.00008289	4.43%
Be 313.107†	195.1	0.0024925	mg/L	0.00000768	0.0024925	mg/L	0.00000768	0.31%
Ca 315.887†	8550.7	0.138272	mg/L	0.0005537	0.138272	mg/L	0.0005537	0.40%
Cd 228.802†	6.7	0.0029019	mg/L	0.00026333	0.0029019	mg/L	0.00026333	9.07%
Co 228.616†	46.5	0.0018760	mg/L	0.00060785	0.0018760	mg/L	0.00060785	32.40%
Cr 267.716†	94.2	0.0027686	mg/L	0.00008151	0.0027686	mg/L	0.00008151	2.94%
Cu 327.393†	259.4	0.0038341	mg/L	0.00030859	0.0038341	mg/L	0.00030859	8.05%
Fe 273.955†	447.9	0.0273617	mg/L	0.00081617	0.0273617	mg/L	0.00081617	2.98%
K 404.721†	-208.1	0.786532	mg/L	0.2527328	0.786532	mg/L	0.2527328	32.13%
Mg 279.077†	145.9	-0.0643829	mg/L	0.00136516	-0.0643829	mg/L	0.00136516	2.12%
Mn 257.610†	545.9	0.0021962	mg/L	0.00007361	0.0021962	mg/L	0.00007361	3.35%
Mo 202.031†	1.2	0.0010302	mg/L	0.00100363	0.0010302	mg/L	0.00100363	97.42%
Na 330.237†	326.9	1.08993	mg/L	0.032440	1.08993	mg/L	0.032440	2.98%
Ni 231.604†	-59.9	-0.0006893	mg/L	0.00100870	-0.0006893	mg/L	0.00100870	146.33%
Pb 220.353†	-14.8	-0.0020962	mg/L	0.00071374	-0.0020962	mg/L	0.00071374	34.05%
Sb 206.836†	0.7	0.0018136	mg/L	0.00060287	0.0018136	mg/L	0.00060287	33.24%
Se 196.026†	1.5	0.0091653	mg/L	0.00357143	0.0091653	mg/L	0.00357143	38.97%
Sn 189.927†	5.2	0.0020882	mg/L	0.00010661	0.0020882	mg/L	0.00010661	5.11%
Ti 334.940†	171.9	0.0031830	mg/L	0.00004091	0.0031830	mg/L	0.00004091	1.29%
Tl 190.801†	0.4	-0.0031615	mg/L	0.00155256	-0.0031615	mg/L	0.00155256	49.11%
V 290.880†	4.9	0.0029318	mg/L	0.00019290	0.0029318	mg/L	0.00019290	6.58%
Zn 206.200†	77.6	0.0039174	mg/L	0.00016680	0.0039174	mg/L	0.00016680	4.26%
Si 251.611†	3867.4	0.117530	mg/L	0.0005252	0.117530	mg/L	0.0005252	0.45%
B 249.772†	186.5	0.0186679	mg/L	0.00038520	0.0186679	mg/L	0.00038520	2.06%
Ce 413.764	611.7	0.0193202	mg/L	0.00298259	0.0193202	mg/L	0.00298259	15.44%

Sequence No.: 26
Sample ID: AD19145-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 9/14/2020 5:02:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19145-010

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1527273.7	103	%	0.8				0.75%
Y 371.029	455073.5	102	%	0.9				0.87%
Ag 328.068†	-65.6	-0.0007492	mg/L	0.00005066	-0.0007492	mg/L	0.00005066	6.76%
Al 308.215†	185.1	0.0131356	mg/L	0.00143980	0.0131356	mg/L	0.00143980	10.96%
As 188.979†	-4.3	0.0005045	mg/L	0.00126481	0.0005045	mg/L	0.00126481	250.72%
Ba 233.527†	68.8	0.0020671	mg/L	0.00004426	0.0020671	mg/L	0.00004426	2.14%
Be 313.107†	174.1	0.0024988	mg/L	0.00001849	0.0024988	mg/L	0.00001849	0.74%
Ca 315.887†	15258.2	0.185888	mg/L	0.0005492	0.185888	mg/L	0.0005492	0.30%
Cd 228.802†	-4.2	0.0027450	mg/L	0.00002495	0.0027450	mg/L	0.00002495	0.91%
Co 228.616†	49.7	0.0019324	mg/L	0.00016436	0.0019324	mg/L	0.00016436	8.51%
Cr 267.716†	49.0	0.0023743	mg/L	0.00021994	0.0023743	mg/L	0.00021994	9.26%
Cu 327.393†	221.0	0.0036048	mg/L	0.00073054	0.0036048	mg/L	0.00073054	20.27%
Fe 273.955†	126.9	0.0185647	mg/L	0.00056373	0.0185647	mg/L	0.00056373	3.04%
K 404.721†	-21.4	1.50027	mg/L	0.152435	1.50027	mg/L	0.152435	10.16%
Mg 279.077†	563.8	-0.0470967	mg/L	0.00073135	-0.0470967	mg/L	0.00073135	1.55%
Mn 257.610†	552.8	0.0022027	mg/L	0.00002190	0.0022027	mg/L	0.00002190	0.99%
Mo 202.031†	1.0	0.0009955	mg/L	0.00019834	0.0009955	mg/L	0.00019834	19.92%
Na 330.237†	403.7	1.13032	mg/L	0.096708	1.13032	mg/L	0.096708	8.56%
Ni 231.604†	-68.0	-0.0008941	mg/L	0.00070844	-0.0008941	mg/L	0.00070844	79.23%
Pb 220.353†	-5.8	-0.0008633	mg/L	0.00020236	-0.0008633	mg/L	0.00020236	23.44%
Sb 206.836†	-2.9	0.0001655	mg/L	0.00423174	0.0001655	mg/L	0.00423174	>999.9%
Se 196.026†	-1.8	0.0058259	mg/L	0.00383203	0.0058259	mg/L	0.00383203	65.78%
Sn 189.927†	7.3	0.0025949	mg/L	0.00036810	0.0025949	mg/L	0.00036810	14.19%
Ti 334.940†	143.0	0.0031419	mg/L	0.00001102	0.0031419	mg/L	0.00001102	0.35%
Tl 190.801†	-1.4	-0.0045898	mg/L	0.00152613	-0.0045898	mg/L	0.00152613	33.25%
V 290.880†	-12.4	0.0028395	mg/L	0.00027856	0.0028395	mg/L	0.00027856	9.81%
Zn 206.200†	691.3	0.0133203	mg/L	0.00037435	0.0133203	mg/L	0.00037435	2.81%
Si 251.611†	11726.3	0.295976	mg/L	0.0005394	0.295976	mg/L	0.0005394	0.18%
B 249.772†	179.4	0.0186530	mg/L	0.00014949	0.0186530	mg/L	0.00014949	0.80%
Ce 413.764	270.3	-0.0052078	mg/L	0.00825089	-0.0052078	mg/L	0.00825089	158.43%

Sequence No.: 27
Sample ID: AD19168-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 9/14/2020 5:06:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19168-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1524142.5	103	%	0.7				0.66%
Y 371.029	448331.2	101	%	0.6				0.59%
Ag 328.068†	-137.0	-0.0009080	mg/L	0.00009826	-0.0009080	mg/L	0.00009826	10.82%
Al 308.215†	46450.8	1.43323	mg/L	0.030149	1.43323	mg/L	0.030149	2.10%
As 188.979†	1.0	0.0034900	mg/L	0.00371717	0.0034900	mg/L	0.00371717	106.51%
Ba 233.527†	4586.8	0.0420865	mg/L	0.00012850	0.0420865	mg/L	0.00012850	0.31%
Be 313.107†	421.1	0.0025537	mg/L	0.00002975	0.0025537	mg/L	0.00002975	1.17%
Ca 315.887†	2869302.6	20.4466	mg/L	0.05427	20.4466	mg/L	0.05427	0.27%
Cd 228.802†	13.0	0.0029925	mg/L	0.00013244	0.0029925	mg/L	0.00013244	4.43%
Co 228.616†	104.2	0.0027068	mg/L	0.00014203	0.0027068	mg/L	0.00014203	5.25%
Cr 267.716†	486.8	0.0060526	mg/L	0.00031307	0.0060526	mg/L	0.00031307	5.17%
Cu 327.393†	654.7	0.0075179	mg/L	0.00052319	0.0075179	mg/L	0.00052319	6.96%
Fe 273.955†	62973.3	1.74095	mg/L	0.008560	1.74095	mg/L	0.008560	0.49%
K 404.721†	249.4	2.17119	mg/L	0.550712	2.17119	mg/L	0.550712	25.36%
Mg 279.077†	182673.4	7.48638	mg/L	0.033010	7.48638	mg/L	0.033010	0.44%
Mn 257.610†	108395.3	0.104102	mg/L	0.0003596	0.104102	mg/L	0.0003596	0.35%
Mo 202.031†	32.9	0.0047328	mg/L	0.00036448	0.0047328	mg/L	0.00036448	7.70%
Na 330.237†	33404.6	22.3980	mg/L	0.01600	22.3980	mg/L	0.01600	0.07%
Ni 231.604†	33.3	0.0020114	mg/L	0.00063474	0.0020114	mg/L	0.00063474	31.56%
Pb 220.353†	0.7	0.0005429	mg/L	0.00074509	0.0005429	mg/L	0.00074509	137.25%
Sb 206.836†	-1.9	0.0006824	mg/L	0.00113314	0.0006824	mg/L	0.00113314	166.05%
Se 196.026†	-4.4	0.0047411	mg/L	0.00647085	0.0047411	mg/L	0.00647085	136.48%
Sn 189.927†	0.5	0.0015856	mg/L	0.00042634	0.0015856	mg/L	0.00042634	26.89%
Ti 334.940†	65871.2	0.0711294	mg/L	0.01030741	0.0711294	mg/L	0.01030741	14.49%
Tl 190.801†	-3.0	-0.0052132	mg/L	0.00060426	-0.0052132	mg/L	0.00060426	11.59%
V 290.880†	509.5	0.0055138	mg/L	0.00028478	0.0055138	mg/L	0.00028478	5.16%
Zn 206.200†	1096.4	0.0194946	mg/L	0.00024876	0.0194946	mg/L	0.00024876	1.28%
Si 251.611†	215716.1	4.92778	mg/L	0.129762	4.92778	mg/L	0.129762	2.63%
B 249.772†	4703.5	0.0481206	mg/L	0.00050992	0.0481206	mg/L	0.00050992	1.06%
Ce 413.764	600.9	0.0185461	mg/L	0.00192017	0.0185461	mg/L	0.00192017	10.35%

Sequence No.: 28
Sample ID: AD19168-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 9/14/2020 5:10:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19168-002

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1515433.3	102	%	0.8				0.76%
Y 371.029	445884.8	100	%	0.9				0.85%
Ag 328.068†	-109.7	-0.0008188	mg/L	0.00023635	-0.0008188	mg/L	0.00023635	28.87%
Al 308.215†	30457.2	0.942286	mg/L	0.0197204	0.942286	mg/L	0.0197204	2.09%
As 188.979†	5.9	0.0063620	mg/L	0.00197244	0.0063620	mg/L	0.00197244	31.00%
Ba 233.527†	4303.2	0.0395746	mg/L	0.00043116	0.0395746	mg/L	0.00043116	1.09%
Be 313.107†	419.8	0.0025554	mg/L	0.00001736	0.0025554	mg/L	0.00001736	0.68%
Ca 315.887†	2831886.1	20.1810	mg/L	0.02724	20.1810	mg/L	0.02724	0.13%
Cd 228.802†	13.1	0.0029946	mg/L	0.00014132	0.0029946	mg/L	0.00014132	4.72%
Co 228.616†	79.9	0.0023366	mg/L	0.00051396	0.0023366	mg/L	0.00051396	22.00%
Cr 267.716†	398.2	0.0052823	mg/L	0.00021778	0.0052823	mg/L	0.00021778	4.12%
Cu 327.393†	612.2	0.0071072	mg/L	0.00014410	0.0071072	mg/L	0.00014410	2.03%
Fe 273.955†	47954.7	1.32935	mg/L	0.014854	1.32935	mg/L	0.014854	1.12%
K 404.721†	297.0	2.34001	mg/L	0.379200	2.34001	mg/L	0.379200	16.21%
Mg 279.077†	179525.1	7.35614	mg/L	0.095602	7.35614	mg/L	0.095602	1.30%
Mn 257.610†	105982.5	0.101822	mg/L	0.0012262	0.101822	mg/L	0.0012262	1.20%
Mo 202.031†	31.4	0.0045460	mg/L	0.00057765	0.0045460	mg/L	0.00057765	12.71%
Na 330.237†	33084.9	22.1919	mg/L	0.23879	22.1919	mg/L	0.23879	1.08%
Ni 231.604†	32.7	0.0019920	mg/L	0.00029365	0.0019920	mg/L	0.00029365	14.74%
Pb 220.353†	-3.0	0.0000542	mg/L	0.00140522	0.0000542	mg/L	0.00140522	>999.9%
Sb 206.836†	0.7	0.0018480	mg/L	0.00271539	0.0018480	mg/L	0.00271539	146.94%
Se 196.026†	-1.1	0.0076898	mg/L	0.00533992	0.0076898	mg/L	0.00533992	69.44%
Sn 189.927†	3.2	0.0021962	mg/L	0.00140118	0.0021962	mg/L	0.00140118	63.80%
Ti 334.940†	42542.2	0.0470005	mg/L	0.00312990	0.0470005	mg/L	0.00312990	6.66%
Tl 190.801†	-2.6	-0.0050947	mg/L	0.00068148	-0.0050947	mg/L	0.00068148	13.38%
V 290.880†	420.7	0.0050672	mg/L	0.00023048	0.0050672	mg/L	0.00023048	4.55%
Zn 206.200†	838.7	0.0155570	mg/L	0.00029789	0.0155570	mg/L	0.00029789	1.91%
Si 251.611†	165863.2	3.79582	mg/L	0.070397	3.79582	mg/L	0.070397	1.85%
B 249.772†	4496.9	0.0483859	mg/L	0.00093112	0.0483859	mg/L	0.00093112	1.92%
Ce 413.764	543.8	0.0144446	mg/L	0.00920400	0.0144446	mg/L	0.00920400	63.72%

Sequence No.: 29
Sample ID: AD19168-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 9/14/2020 5:14:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19168-003

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1522741.8	103	%	0.1				0.11%
Y 371.029	446979.5	100	%	0.2				0.24%
Ag 328.068†	-99.4	-0.0007914	mg/L	0.00013414	-0.0007914	mg/L	0.00013414	16.95%
Al 308.215†	28060.8	0.868616	mg/L	0.0043603	0.868616	mg/L	0.0043603	0.50%
As 188.979†	-3.1	0.0011137	mg/L	0.00111619	0.0011137	mg/L	0.00111619	100.22%
Ba 233.527†	4013.6	0.0370089	mg/L	0.00009617	0.0370089	mg/L	0.00009617	0.26%
Be 313.107†	309.5	0.0025250	mg/L	0.00002200	0.0025250	mg/L	0.00002200	0.87%
Ca 315.887†	2853262.2	20.3328	mg/L	0.02224	20.3328	mg/L	0.02224	0.11%
Cd 228.802†	19.1	0.0030807	mg/L	0.00005866	0.0030807	mg/L	0.00005866	1.90%
Co 228.616†	107.3	0.0028216	mg/L	0.00023864	0.0028216	mg/L	0.00023864	8.46%
Cr 267.716†	327.0	0.0046613	mg/L	0.00039215	0.0046613	mg/L	0.00039215	8.41%
Cu 327.393†	492.9	0.0063755	mg/L	0.00045539	0.0063755	mg/L	0.00045539	7.14%
Fe 273.955†	38822.8	1.07907	mg/L	0.006765	1.07907	mg/L	0.006765	0.63%
K 404.721†	272.1	2.25665	mg/L	0.121609	2.25665	mg/L	0.121609	5.39%
Mg 279.077†	179733.9	7.36478	mg/L	0.070427	7.36478	mg/L	0.070427	0.96%
Mn 257.610†	64407.4	0.0625381	mg/L	0.00058165	0.0625381	mg/L	0.00058165	0.93%
Mo 202.031†	41.0	0.0058232	mg/L	0.00096477	0.0058232	mg/L	0.00096477	16.57%
Na 330.237†	33672.2	22.5714	mg/L	0.16705	22.5714	mg/L	0.16705	0.74%
Ni 231.604†	4.9	0.0012799	mg/L	0.00024689	0.0012799	mg/L	0.00024689	19.29%
Pb 220.353†	-0.7	0.0003860	mg/L	0.00145784	0.0003860	mg/L	0.00145784	377.64%
Sb 206.836†	-2.6	0.0003713	mg/L	0.00120979	0.0003713	mg/L	0.00120979	325.82%
Se 196.026†	-3.6	0.0051880	mg/L	0.00381655	0.0051880	mg/L	0.00381655	73.56%
Sn 189.927†	6.0	0.0028759	mg/L	0.00116939	0.0028759	mg/L	0.00116939	40.66%
Ti 334.940†	43863.3	0.0483673	mg/L	0.01001578	0.0483673	mg/L	0.01001578	20.71%
Tl 190.801†	0.1	-0.0031521	mg/L	0.00092664	-0.0031521	mg/L	0.00092664	29.40%
V 290.880†	312.5	0.0045050	mg/L	0.00035517	0.0045050	mg/L	0.00035517	7.88%
Zn 206.200†	663.4	0.0128724	mg/L	0.00026330	0.0128724	mg/L	0.00026330	2.05%
Si 251.611†	164193.1	3.75790	mg/L	0.099918	3.75790	mg/L	0.099918	2.66%
B 249.772†	4407.3	0.0488581	mg/L	0.00031126	0.0488581	mg/L	0.00031126	0.64%
Ce 413.764	562.4	0.0157757	mg/L	0.00993262	0.0157757	mg/L	0.00993262	62.96%

Sequence No.: 30
Sample ID: AD19168-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 9/14/2020 5:18:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19168-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1507016.2	102	%	0.8				0.82%
Y 371.029	442258.6	99.4	%	0.65				0.65%
Ag 328.068†	-44.6	-0.0004768	mg/L	0.00047480	-0.0004768	mg/L	0.00047480	99.59%
Al 308.215†	44100.6	1.36120	mg/L	0.017245	1.36120	mg/L	0.017245	1.27%
As 188.979†	2.3	0.0042589	mg/L	0.00222755	0.0042589	mg/L	0.00222755	52.30%
Ba 233.527†	4589.8	0.0421130	mg/L	0.00026481	0.0421130	mg/L	0.00026481	0.63%
Be 313.107†	427.2	0.0025602	mg/L	0.00001985	0.0025602	mg/L	0.00001985	0.78%
Ca 315.887†	2917424.8	20.7883	mg/L	0.03284	20.7883	mg/L	0.03284	0.16%
Cd 228.802†	17.2	0.0030539	mg/L	0.00008248	0.0030539	mg/L	0.00008248	2.70%
Co 228.616†	94.0	0.0025446	mg/L	0.00031864	0.0025446	mg/L	0.00031864	12.52%
Cr 267.716†	460.3	0.0058187	mg/L	0.00010356	0.0058187	mg/L	0.00010356	1.78%
Cu 327.393†	694.4	0.0077319	mg/L	0.00075959	0.0077319	mg/L	0.00075959	9.82%
Fe 273.955†	61005.6	1.68702	mg/L	0.012747	1.68702	mg/L	0.012747	0.76%
K 404.721†	232.5	2.18081	mg/L	0.103167	2.18081	mg/L	0.103167	4.73%
Mg 279.077†	186544.8	7.64653	mg/L	0.069452	7.64653	mg/L	0.069452	0.91%
Mn 257.610†	106344.4	0.102164	mg/L	0.0008517	0.102164	mg/L	0.0008517	0.83%
Mo 202.031†	36.2	0.0051825	mg/L	0.00055229	0.0051825	mg/L	0.00055229	10.66%
Na 330.237†	34505.2	23.1049	mg/L	0.23258	23.1049	mg/L	0.23258	1.01%
Ni 231.604†	43.1	0.0022689	mg/L	0.00025154	0.0022689	mg/L	0.00025154	11.09%
Pb 220.353†	3.9	0.0009818	mg/L	0.00135533	0.0009818	mg/L	0.00135533	138.05%
Sb 206.836†	-5.0	-0.0007119	mg/L	0.00173656	-0.0007119	mg/L	0.00173656	243.93%
Se 196.026†	-5.3	0.0038561	mg/L	0.00438700	0.0038561	mg/L	0.00438700	113.77%
Sn 189.927†	3.1	0.0022043	mg/L	0.00039228	0.0022043	mg/L	0.00039228	17.80%
Ti 334.940†	58311.3	0.0633063	mg/L	0.00636893	0.0633063	mg/L	0.00636893	10.06%
Tl 190.801†	-2.2	-0.0046838	mg/L	0.00263262	-0.0046838	mg/L	0.00263262	56.21%
V 290.880†	525.6	0.0056039	mg/L	0.00035885	0.0056039	mg/L	0.00035885	6.40%
Zn 206.200†	983.2	0.0177607	mg/L	0.00008537	0.0177607	mg/L	0.00008537	0.48%
Si 251.611†	211228.7	4.82589	mg/L	0.030744	4.82589	mg/L	0.030744	0.64%
B 249.772†	5051.3	0.0512419	mg/L	0.00031428	0.0512419	mg/L	0.00031428	0.61%
Ce 413.764	463.9	0.0087034	mg/L	0.00263722	0.0087034	mg/L	0.00263722	30.30%

Sequence No.: 31
Sample ID: AD19168-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 9/14/2020 5:22:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19168-005

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1519705.0	102	%	0.1				0.12%
Y 371.029	445795.2	100	%	0.0				0.04%
Ag 328.068†	-124.0	-0.0009525	mg/L	0.00020171	-0.0009525	mg/L	0.00020171	21.18%
Al 308.215†	14350.7	0.447667	mg/L	0.0007826	0.447667	mg/L	0.0007826	0.17%
As 188.979†	-0.8	0.0024717	mg/L	0.00452879	0.0024717	mg/L	0.00452879	183.23%
Ba 233.527†	3887.0	0.0358877	mg/L	0.00013139	0.0358877	mg/L	0.00013139	0.37%
Be 313.107†	138.1	0.0024789	mg/L	0.00001107	0.0024789	mg/L	0.00001107	0.45%
Ca 315.887†	2888629.4	20.5838	mg/L	0.05155	20.5838	mg/L	0.05155	0.25%
Cd 228.802†	17.2	0.0030532	mg/L	0.00007883	0.0030532	mg/L	0.00007883	2.58%
Co 228.616†	65.3	0.0021407	mg/L	0.00014172	0.0021407	mg/L	0.00014172	6.62%
Cr 267.716†	234.3	0.0038539	mg/L	0.00036813	0.0038539	mg/L	0.00036813	9.55%
Cu 327.393†	543.1	0.0065322	mg/L	0.00029544	0.0065322	mg/L	0.00029544	4.52%
Fe 273.955†	22394.4	0.628832	mg/L	0.0006217	0.628832	mg/L	0.0006217	0.10%
K 404.721†	253.7	2.20136	mg/L	0.283521	2.20136	mg/L	0.283521	12.88%
Mg 279.077†	178110.6	7.29762	mg/L	0.034917	7.29762	mg/L	0.034917	0.48%
Mn 257.610†	80581.3	0.0778205	mg/L	0.00031697	0.0778205	mg/L	0.00031697	0.41%
Mo 202.031†	33.4	0.0048083	mg/L	0.00082125	0.0048083	mg/L	0.00082125	17.08%
Na 330.237†	33323.4	22.3455	mg/L	0.07729	22.3455	mg/L	0.07729	0.35%
Ni 231.604†	-14.1	0.0007905	mg/L	0.00051928	0.0007905	mg/L	0.00051928	65.69%
Pb 220.353†	-5.2	-0.0001813	mg/L	0.00084204	-0.0001813	mg/L	0.00084204	464.49%
Sb 206.836†	0.5	0.0017710	mg/L	0.00195943	0.0017710	mg/L	0.00195943	110.64%
Se 196.026†	-7.5	0.0011289	mg/L	0.00851014	0.0011289	mg/L	0.00851014	753.86%
Sn 189.927†	2.1	0.0018957	mg/L	0.00036307	0.0018957	mg/L	0.00036307	19.15%
Ti 334.940†	19061.8	0.0227174	mg/L	0.00353786	0.0227174	mg/L	0.00353786	15.57%
Tl 190.801†	-2.7	-0.0053390	mg/L	0.00145639	-0.0053390	mg/L	0.00145639	27.28%
V 290.880†	80.8	0.0032954	mg/L	0.00019416	0.0032954	mg/L	0.00019416	5.89%
Zn 206.200†	949.0	0.0172595	mg/L	0.00008841	0.0172595	mg/L	0.00008841	0.51%
Si 251.611†	125396.6	2.87698	mg/L	0.041447	2.87698	mg/L	0.041447	1.44%
B 249.772†	4208.6	0.0493917	mg/L	0.00035767	0.0493917	mg/L	0.00035767	0.72%
Ce 413.764	562.1	0.0157563	mg/L	0.00622196	0.0157563	mg/L	0.00622196	39.49%

Sequence No.: 32
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 5:26:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1496806.4	101	%	0.7				0.70%
Y 371.029	398719.7	89.6	%	0.54				0.60%
Ag 328.068†	15690.9	0.0810368	mg/L	0.00081514	0.0810368	mg/L	0.00081514	1.01%
QC value less than the lower limit for Ag 328.068 Recovery = 81.04%								
Al 308.215†	162882.1	4.98380	mg/L	0.047549	4.98380	mg/L	0.047549	0.95%
QC value within limits for Al 308.215 Recovery = 99.68%								
As 188.979†	837.2	0.492210	mg/L	0.0092605	0.492210	mg/L	0.0092605	1.88%
QC value within limits for As 188.979 Recovery = 98.44%								
Ba 233.527†	56121.1	0.498565	mg/L	0.0037809	0.498565	mg/L	0.0037809	0.76%
QC value within limits for Ba 233.527 Recovery = 99.71%								
Be 313.107†	1804265.8	0.485399	mg/L	0.0014507	0.485399	mg/L	0.0014507	0.30%
QC value within limits for Be 313.107 Recovery = 97.08%								
Ca 315.887†	7096719.0	50.4569	mg/L	0.14438	50.4569	mg/L	0.14438	0.29%
QC value within limits for Ca 315.887 Recovery = 100.91%								
Cd 228.802†	34191.4	0.495908	mg/L	0.0047665	0.495908	mg/L	0.0047665	0.96%
QC value within limits for Cd 228.802 Recovery = 99.18%								
Co 228.616†	28192.1	0.499469	mg/L	0.0068769	0.499469	mg/L	0.0068769	1.38%
QC value within limits for Co 228.616 Recovery = 99.89%								
Cr 267.716†	57430.7	0.501953	mg/L	0.0039167	0.501953	mg/L	0.0039167	0.78%
QC value within limits for Cr 267.716 Recovery = 100.39%								
Cu 327.393†	83276.3	0.506290	mg/L	0.0048868	0.506290	mg/L	0.0048868	0.97%
QC value within limits for Cu 327.393 Recovery = 101.26%								
Fe 273.955†	182638.6	5.02052	mg/L	0.049131	5.02052	mg/L	0.049131	0.98%
QC value within limits for Fe 273.955 Recovery = 100.41%								
K 404.721†	15958.3	17.6443	mg/L	0.61479	17.6443	mg/L	0.61479	3.48%
QC value less than the lower limit for K 404.721 Recovery = 35.29%								
Mg 279.077†	1221713.3	50.4692	mg/L	0.16245	50.4692	mg/L	0.16245	0.32%
QC value within limits for Mg 279.077 Recovery = 100.94%								
Mn 257.610†	525731.9	0.498437	mg/L	0.0048114	0.498437	mg/L	0.0048114	0.97%
QC value within limits for Mn 257.610 Recovery = 99.69%								
Mo 202.031†	3723.7	0.500555	mg/L	0.0074424	0.500555	mg/L	0.0074424	1.49%
QC value within limits for Mo 202.031 Recovery = 100.11%								
Na 330.237†	75120.0	50.5744	mg/L	0.33152	50.5744	mg/L	0.33152	0.66%
QC value within limits for Na 330.237 Recovery = 101.15%								
Ni 231.604†	19414.0	0.499902	mg/L	0.0084618	0.499902	mg/L	0.0084618	1.69%
QC value within limits for Ni 231.604 Recovery = 99.98%								
Pb 220.353†	3736.6	0.499187	mg/L	0.0088527	0.499187	mg/L	0.0088527	1.77%
QC value within limits for Pb 220.353 Recovery = 99.84%								
Sb 206.836†	1089.1	0.509231	mg/L	0.0087159	0.509231	mg/L	0.0087159	1.71%
QC value within limits for Sb 206.836 Recovery = 101.85%								
Se 196.026†	490.5	0.499885	mg/L	0.0063927	0.499885	mg/L	0.0063927	1.28%
QC value within limits for Se 196.026 Recovery = 99.98%								
Sn 189.927†	2064.0	0.506138	mg/L	0.0080359	0.506138	mg/L	0.0080359	1.59%
QC value within limits for Sn 189.927 Recovery = 101.23%								
Ti 334.940†	477976.3	0.499705	mg/L	0.0043191	0.499705	mg/L	0.0043191	0.86%
QC value within limits for Ti 334.940 Recovery = 99.94%								
Tl 190.801†	694.8	0.523608	mg/L	0.0065228	0.523608	mg/L	0.0065228	1.25%
QC value within limits for Tl 190.801 Recovery = 104.72%								
V 290.880†	92444.2	0.498067	mg/L	0.0040393	0.498067	mg/L	0.0040393	0.81%
QC value within limits for V 290.880 Recovery = 99.61%								
Zn 206.200†	32764.7	0.503953	mg/L	0.0050947	0.503953	mg/L	0.0050947	1.01%
QC value within limits for Zn 206.200 Recovery = 100.79%								
Si 251.611†	223817.6	5.11174	mg/L	0.046875	5.11174	mg/L	0.046875	0.92%
QC value within limits for Si 251.611 Recovery = 102.23%								
B 249.772†	58953.1	0.478483	mg/L	0.0072795	0.478483	mg/L	0.0072795	1.52%
QC value within limits for B 249.772 Recovery = 95.70%								
Ce 413.764	72905.0	5.21327	mg/L	0.114540	5.21327	mg/L	0.114540	2.20%
QC value within limits for Ce 413.764 Recovery = 104.27%								

QC Failed. Continue with analysis.

Sequence No.: 33
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/14/2020 5:31:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1522960.6	103	%	0.2				0.24%
Y 371.029	456692.6	103	%	0.3				0.27%
Ag 328.068†	-83.5	-0.0008448	mg/L	0.00025435	-0.0008448	mg/L	0.00025435	30.11%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-125.3	0.0036286	mg/L	0.00289680	0.0036286	mg/L	0.00289680	79.83%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-5.5	-0.0002022	mg/L	0.00299451	-0.0002022	mg/L	0.00299451	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	17.0	0.0016082	mg/L	0.00003637	0.0016082	mg/L	0.00003637	2.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	231.8	0.0025185	mg/L	0.00003183	0.0025185	mg/L	0.00003183	1.26%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-201.2	0.0761421	mg/L	0.00080580	0.0761421	mg/L	0.00080580	1.06%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	4.5	0.0028705	mg/L	0.00025141	0.0028705	mg/L	0.00025141	8.76%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	50.6	0.0019480	mg/L	0.00049107	0.0019480	mg/L	0.00049107	25.21%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	53.5	0.0024133	mg/L	0.00029976	0.0024133	mg/L	0.00029976	12.42%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	129.9	0.0030529	mg/L	0.00035933	0.0030529	mg/L	0.00035933	11.77%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-41.1	0.0139591	mg/L	0.00043482	0.0139591	mg/L	0.00043482	3.11%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-29.7	1.52739	mg/L	0.156248	1.52739	mg/L	0.156248	10.23%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	38.5	-0.0688265	mg/L	0.00210410	-0.0688265	mg/L	0.00210410	3.06%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-38.6	0.0016439	mg/L	0.00002220	0.0016439	mg/L	0.00002220	1.35%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	11.7	0.0024434	mg/L	0.00051947	0.0024434	mg/L	0.00051947	21.26%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-32.2	0.850101	mg/L	0.0309705	0.850101	mg/L	0.0309705	3.64%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-45.4	-0.0003168	mg/L	0.00014487	-0.0003168	mg/L	0.00014487	45.73%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-10.2	-0.0014506	mg/L	0.00044800	-0.0014506	mg/L	0.00044800	30.88%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.3	0.0008803	mg/L	0.00249535	0.0008803	mg/L	0.00249535	283.47%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	5.9	0.0133809	mg/L	0.00763615	0.0133809	mg/L	0.00763615	57.07%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	3.0	0.0015431	mg/L	0.00139884	0.0015431	mg/L	0.00139884	90.65%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	3.1	0.0029933	mg/L	0.00007626	0.0029933	mg/L	0.00007626	2.55%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.1	-0.0021293	mg/L	0.00056875	-0.0021293	mg/L	0.00056875	26.71%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-89.2	0.0024280	mg/L	0.00051791	0.0024280	mg/L	0.00051791	21.33%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-72.1	0.0016254	mg/L	0.00024113	0.0016254	mg/L	0.00024113	14.83%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	102.6	0.0320464	mg/L	0.00102522	0.0320464	mg/L	0.00102522	3.20%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	446.5	0.0208638	mg/L	0.00090775	0.0208638	mg/L	0.00090775	4.35%
QC value within limits for B 249.772 Recovery = Not calculated								
Ce 413.764	152.2	-0.0136908	mg/L	0.00579281	-0.0136908	mg/L	0.00579281	42.31%
QC value within limits for Ce 413.764 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 34
Sample ID: AD19168-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 9/14/2020 5:34:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19168-006

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1528307.3	103	%	1.3				1.22%
Y 371.029	448154.4	101	%	1.2				1.17%
Ag 328.068†	-121.7	-0.0009469	mg/L	0.00010361	-0.0009469	mg/L	0.00010361	10.94%
Al 308.215†	12555.0	0.392594	mg/L	0.0130399	0.392594	mg/L	0.0130399	3.32%
As 188.979†	-1.2	0.0022158	mg/L	0.00164514	0.0022158	mg/L	0.00164514	74.25%
Ba 233.527†	3715.2	0.0343660	mg/L	0.00018929	0.0343660	mg/L	0.00018929	0.55%
Be 313.107†	256.4	0.0025129	mg/L	0.00002072	0.0025129	mg/L	0.00002072	0.82%
Ca 315.887†	2771994.5	19.7558	mg/L	0.02831	19.7558	mg/L	0.02831	0.14%
Cd 228.802†	15.4	0.0030271	mg/L	0.00020595	0.0030271	mg/L	0.00020595	6.80%
Co 228.616†	70.7	0.0022446	mg/L	0.00011620	0.0022446	mg/L	0.00011620	5.18%
Cr 267.716†	226.3	0.0037879	mg/L	0.00014581	0.0037879	mg/L	0.00014581	3.85%
Cu 327.393†	523.8	0.0063700	mg/L	0.00054655	0.0063700	mg/L	0.00054655	8.58%
Fe 273.955†	22089.6	0.620480	mg/L	0.0078126	0.620480	mg/L	0.0078126	1.26%
K 404.721†	251.6	2.22210	mg/L	0.268986	2.22210	mg/L	0.268986	12.11%
Mg 279.077†	172386.2	7.06082	mg/L	0.108759	7.06082	mg/L	0.108759	1.54%
Mn 257.610†	81023.8	0.0782387	mg/L	0.00118645	0.0782387	mg/L	0.00118645	1.52%
Mo 202.031†	36.6	0.0052560	mg/L	0.00070351	0.0052560	mg/L	0.00070351	13.38%
Na 330.237†	32239.8	21.6473	mg/L	0.25641	21.6473	mg/L	0.25641	1.18%
Ni 231.604†	-18.7	0.0006638	mg/L	0.00074443	0.0006638	mg/L	0.00074443	112.14%
Pb 220.353†	-10.7	-0.0009488	mg/L	0.00137529	-0.0009488	mg/L	0.00137529	144.95%
Sb 206.836†	-4.6	-0.0005156	mg/L	0.00090668	-0.0005156	mg/L	0.00090668	175.85%
Se 196.026†	-7.9	0.0006386	mg/L	0.00153704	0.0006386	mg/L	0.00153704	240.71%
Sn 189.927†	1.6	0.0017457	mg/L	0.00139979	0.0017457	mg/L	0.00139979	80.18%
Ti 334.940†	16521.3	0.0200880	mg/L	0.00087898	0.0200880	mg/L	0.00087898	4.38%
Tl 190.801†	-1.0	-0.0041175	mg/L	0.00065119	-0.0041175	mg/L	0.00065119	15.82%
V 290.880†	96.7	0.0033810	mg/L	0.00062841	0.0033810	mg/L	0.00062841	18.59%
Zn 206.200†	654.6	0.0127499	mg/L	0.00029345	0.0127499	mg/L	0.00029345	2.30%
Si 251.611†	114478.6	2.62908	mg/L	0.063510	2.62908	mg/L	0.063510	2.42%
B 249.772†	4042.7	0.0480440	mg/L	0.00043611	0.0480440	mg/L	0.00043611	0.91%
Ce 413.764	500.4	0.0113247	mg/L	0.00981395	0.0113247	mg/L	0.00981395	86.66%

Sequence No.: 35
Sample ID: AD19168-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 9/14/2020 5:38:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19168-007

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1513609.8	102	%	1.0				0.96%
Y 371.029	444562.6	99.9	%	1.03				1.03%
Ag 328.068†	-88.1	-0.0006991	mg/L	0.00013782	-0.0006991	mg/L	0.00013782	19.71%
Al 308.215†	13953.5	0.435434	mg/L	0.0048689	0.435434	mg/L	0.0048689	1.12%
As 188.979†	10.8	0.0091436	mg/L	0.00276014	0.0091436	mg/L	0.00276014	30.19%
Ba 233.527†	7252.8	0.0657009	mg/L	0.00083417	0.0657009	mg/L	0.00083417	1.27%
Be 313.107†	193.9	0.0024959	mg/L	0.00001128	0.0024959	mg/L	0.00001128	0.45%
Ca 315.887†	4828463.9	34.3546	mg/L	0.01756	34.3546	mg/L	0.01756	0.05%
Cd 228.802†	42.7	0.0034210	mg/L	0.00025539	0.0034210	mg/L	0.00025539	7.47%
Co 228.616†	103.9	0.0028236	mg/L	0.00016012	0.0028236	mg/L	0.00016012	5.67%
Cr 267.716†	375.7	0.0049442	mg/L	0.00036082	0.0049442	mg/L	0.00036082	7.30%
Cu 327.393†	783.0	0.0086199	mg/L	0.00048225	0.0086199	mg/L	0.00048225	5.59%
Fe 273.955†	55147.0	1.52646	mg/L	0.018431	1.52646	mg/L	0.018431	1.21%
K 404.721†	1009.5	4.50571	mg/L	0.113387	4.50571	mg/L	0.113387	2.52%
Mg 279.077†	363835.8	14.9807	mg/L	0.19492	14.9807	mg/L	0.19492	1.30%
Mn 257.610†	3304808.2	3.12435	mg/L	0.001723	3.12435	mg/L	0.001723	0.06%
Mo 202.031†	45.3	0.0060777	mg/L	0.00020658	0.0060777	mg/L	0.00020658	3.40%
Na 330.237†	32332.1	21.7066	mg/L	0.30923	21.7066	mg/L	0.30923	1.42%
Ni 231.604†	107.9	0.0042335	mg/L	0.00044036	0.0042335	mg/L	0.00044036	10.40%
Pb 220.353†	23.1	0.0041437	mg/L	0.00022180	0.0041437	mg/L	0.00022180	5.35%
Sb 206.836†	3.8	0.0032156	mg/L	0.00158631	0.0032156	mg/L	0.00158631	49.33%
Se 196.026†	-1.9	0.0075096	mg/L	0.01107913	0.0075096	mg/L	0.01107913	147.53%
Sn 189.927†	1.4	0.0020942	mg/L	0.00045235	0.0020942	mg/L	0.00045235	21.60%
Ti 334.940†	13635.6	0.0171038	mg/L	0.00010101	0.0171038	mg/L	0.00010101	0.59%
Tl 190.801†	-15.0	-0.0143495	mg/L	0.00097999	-0.0143495	mg/L	0.00097999	6.83%
V 290.880†	-5.4	0.0027693	mg/L	0.00037244	0.0027693	mg/L	0.00037244	13.45%
Zn 206.200†	735.3	0.0139862	mg/L	0.00025425	0.0139862	mg/L	0.00025425	1.82%
Si 251.611†	672193.5	15.2926	mg/L	0.04401	15.2926	mg/L	0.04401	0.29%
B 249.772†	9598.1	0.0896995	mg/L	0.00155630	0.0896995	mg/L	0.00155630	1.74%
Ce 413.764	506.5	0.0117641	mg/L	0.00557733	0.0117641	mg/L	0.00557733	47.41%

Sequence No.: 36
Sample ID: AD19206-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 9/14/2020 5:43:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1476319.2	99.6	%	0.43				0.43%
Y 371.029	435005.4	97.7	%	0.28				0.29%
Ag 328.068†	19.6	-0.0003348	mg/L	0.00018880	-0.0003348	mg/L	0.00018880	56.39%
Al 308.215†	1319.8	0.0475230	mg/L	0.00192840	0.0475230	mg/L	0.00192840	4.06%
As 188.979†	2.5	0.0042009	mg/L	0.00139149	0.0042009	mg/L	0.00139149	33.12%
Ba 233.527†	8941.7	0.0806610	mg/L	0.00039319	0.0806610	mg/L	0.00039319	0.49%
Be 313.107†	-100.1	0.0024247	mg/L	0.00001174	0.0024247	mg/L	0.00001174	0.48%
Ca 315.887†	9388306.7	66.7248	mg/L	0.80035	66.7248	mg/L	0.80035	1.20%
Cd 228.802†	32.3	0.0032707	mg/L	0.00014309	0.0032707	mg/L	0.00014309	4.37%
Co 228.616†	27.0	0.0014872	mg/L	0.00031709	0.0014872	mg/L	0.00031709	21.32%
Cr 267.716†	265.5	0.0039560	mg/L	0.00014522	0.0039560	mg/L	0.00014522	3.67%
Cu 327.393†	-304.9	0.0032222	mg/L	0.00021629	0.0032222	mg/L	0.00021629	6.71%
Fe 273.955†	1203.6	0.0480723	mg/L	0.00028014	0.0480723	mg/L	0.00028014	0.58%
K 404.721†	705.5	3.68899	mg/L	0.437563	3.68899	mg/L	0.437563	11.86%
Mg 279.077†	398097.8	16.3980	mg/L	0.03920	16.3980	mg/L	0.03920	0.24%
Mn 257.610†	1923.0	0.0034974	mg/L	0.00004076	0.0034974	mg/L	0.00004076	1.17%
Mo 202.031†	61.3	0.0072707	mg/L	0.00135389	0.0072707	mg/L	0.00135389	18.62%
Na 330.237†	64740.4	42.5776	mg/L	0.05126	42.5776	mg/L	0.05126	0.12%
Ni 231.604†	571.3	0.0161553	mg/L	0.00033717	0.0161553	mg/L	0.00033717	2.09%
Pb 220.353†	-24.4	-0.0010753	mg/L	0.00097681	-0.0010753	mg/L	0.00097681	90.84%
Sb 206.836†	-8.2	-0.0020828	mg/L	0.00044289	-0.0020828	mg/L	0.00044289	21.26%
Se 196.026†	-2.8	0.0059547	mg/L	0.00627755	0.0059547	mg/L	0.00627755	105.42%
Sn 189.927†	1.7	0.0030295	mg/L	0.00006393	0.0030295	mg/L	0.00006393	2.11%
Ti 334.940†	831.5	0.0038542	mg/L	0.00031928	0.0038542	mg/L	0.00031928	8.28%
Tl 190.801†	-8.0	-0.0092264	mg/L	0.00229468	-0.0092264	mg/L	0.00229468	24.87%
V 290.880†	-441.2	0.0005390	mg/L	0.00031326	0.0005390	mg/L	0.00031326	58.12%
Zn 206.200†	2120.5	0.0352177	mg/L	0.00007857	0.0352177	mg/L	0.00007857	0.22%
Si 251.611†	312024.3	7.11457	mg/L	0.001206	7.11457	mg/L	0.001206	0.02%
B 249.772†	8019.3	0.0848084	mg/L	0.00031250	0.0848084	mg/L	0.00031250	0.37%
Ce 413.764	279.2	-0.0045645	mg/L	0.00701937	-0.0045645	mg/L	0.00701937	153.78%

Sequence No.: 37
Sample ID: AD19206-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 9/14/2020 5:47:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-002

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1508666.3	102	%	1.1				1.06%
Y 371.029	440661.3	99.0	%	1.21				1.22%
Ag 328.068†	-19.5	-0.0004258	mg/L	0.00032334	-0.0004258	mg/L	0.00032334	75.94%
Al 308.215†	684.2	0.0275154	mg/L	0.00311688	0.0275154	mg/L	0.00311688	11.33%
As 188.979†	3.3	0.0047223	mg/L	0.00300177	0.0047223	mg/L	0.00300177	63.57%
Ba 233.527†	14176.5	0.127030	mg/L	0.0010872	0.127030	mg/L	0.0010872	0.86%
Be 313.107†	-461.3	0.0023099	mg/L	0.00001267	0.0023099	mg/L	0.00001267	0.55%
Ca 315.887†	18350969.2	130.350	mg/L	1.1093	130.350	mg/L	1.1093	0.85%
Cd 228.802†	24.8	0.0031629	mg/L	0.00006604	0.0031629	mg/L	0.00006604	2.09%
Co 228.616†	212.5	0.0047532	mg/L	0.00029633	0.0047532	mg/L	0.00029633	6.23%
Cr 267.716†	1588.9	0.0154814	mg/L	0.00014128	0.0154814	mg/L	0.00014128	0.91%
Cu 327.393†	-304.5	0.0059395	mg/L	0.00087462	0.0059395	mg/L	0.00087462	14.73%
Fe 273.955†	25022.9	0.700871	mg/L	0.0074979	0.700871	mg/L	0.0074979	1.07%
K 404.721†	798.3	3.74765	mg/L	0.273300	3.74765	mg/L	0.273300	7.29%
Mg 279.077†	422097.5	17.3908	mg/L	0.13850	17.3908	mg/L	0.13850	0.80%
Mn 257.610†	4852097.2	4.58636	mg/L	0.025527	4.58636	mg/L	0.025527	0.56%
Mo 202.031†	91.5	0.0096149	mg/L	0.00083273	0.0096149	mg/L	0.00083273	8.66%
Na 330.237†	37076.6	24.7704	mg/L	0.23246	24.7704	mg/L	0.23246	0.94%
Ni 231.604†	1403.3	0.0374937	mg/L	0.00121056	0.0374937	mg/L	0.00121056	3.23%
Pb 220.353†	-33.4	0.0001361	mg/L	0.00132684	0.0001361	mg/L	0.00132684	974.99%
Sb 206.836†	-4.6	-0.0003671	mg/L	0.00022632	-0.0003671	mg/L	0.00022632	61.65%
Se 196.026†	-15.6	-0.0062153	mg/L	0.00787246	-0.0062153	mg/L	0.00787246	126.66%
Sn 189.927†	5.3	0.0056100	mg/L	0.00066846	0.0056100	mg/L	0.00066846	11.92%
Ti 334.940†	411.4	0.0034362	mg/L	0.00013173	0.0034362	mg/L	0.00013173	3.83%
Tl 190.801†	-29.5	-0.0237825	mg/L	0.00009511	-0.0237825	mg/L	0.00009511	0.40%
V 290.880†	-401.5	0.0007052	mg/L	0.00016482	0.0007052	mg/L	0.00016482	23.37%
Zn 206.200†	342.0	0.0079683	mg/L	0.00030815	0.0079683	mg/L	0.00030815	3.87%
Si 251.611†	339390.7	7.73595	mg/L	0.044769	7.73595	mg/L	0.044769	0.58%
B 249.772†	21976.2	0.198070	mg/L	0.0005783	0.198070	mg/L	0.0005783	0.29%
Ce 413.764	780.3	0.0314328	mg/L	0.00205695	0.0314328	mg/L	0.00205695	6.54%

Sequence No.: 38
Sample ID: AD19206-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 9/14/2020 5:51:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-003

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1520478.6	103	%	1.8				1.77%
Y 371.029	447086.3	100	%	1.8				1.84%
Ag 328.068†	-453.8	-0.0013793	mg/L	0.00025598	-0.0013793	mg/L	0.00025598	18.56%
Al 308.215†	1288.9	0.0469870	mg/L	0.00167606	0.0469870	mg/L	0.00167606	3.57%
As 188.979†	273.5	0.163149	mg/L	0.0044929	0.163149	mg/L	0.0044929	2.75%
Ba 233.527†	54596.9	0.485063	mg/L	0.0024316	0.485063	mg/L	0.0024316	0.50%
Be 313.107†	-342.9	0.0023773	mg/L	0.00000455	0.0023773	mg/L	0.00000455	0.19%
Ca 315.887†	11585360.6	82.3216	mg/L	2.13551	82.3216	mg/L	2.13551	2.59%
Cd 228.802†	336.8	0.0076624	mg/L	0.00008565	0.0076624	mg/L	0.00008565	1.12%
Co 228.616†	178.1	0.0039584	mg/L	0.00076450	0.0039584	mg/L	0.00076450	19.31%
Cr 267.716†	358.6	0.0045817	mg/L	0.00030142	0.0045817	mg/L	0.00030142	6.58%
Cu 327.393†	850.6	0.0123132	mg/L	0.00039757	0.0123132	mg/L	0.00039757	3.23%
Fe 273.955†	496575.7	13.6244	mg/L	0.08162	13.6244	mg/L	0.08162	0.60%
K 404.721†	9467.2	30.3425	mg/L	0.47637	30.3425	mg/L	0.47637	1.57%
Mg 279.077†	640361.7	26.4199	mg/L	0.15160	26.4199	mg/L	0.15160	0.57%
Mn 257.610†	753628.0	0.713774	mg/L	0.0045843	0.713774	mg/L	0.0045843	0.64%
Mo 202.031†	112.7	0.0144881	mg/L	0.00029599	0.0144881	mg/L	0.00029599	2.04%
Na 330.237†	160024.4	103.959	mg/L	0.9074	103.959	mg/L	0.9074	0.87%
Ni 231.604†	210.8	0.0073451	mg/L	0.00114944	0.0073451	mg/L	0.00114944	15.65%
Pb 220.353†	-21.2	-0.0017138	mg/L	0.00040216	-0.0017138	mg/L	0.00040216	23.47%
Sb 206.836†	-3.5	-0.0002438	mg/L	0.00454705	-0.0002438	mg/L	0.00454705	>999.9%
Se 196.026†	-19.3	-0.0030150	mg/L	0.00550945	-0.0030150	mg/L	0.00550945	182.74%
Sn 189.927†	-3.0	0.0022829	mg/L	0.00166594	0.0022829	mg/L	0.00166594	72.98%
Ti 334.940†	278.0	0.0032651	mg/L	0.00014014	0.0032651	mg/L	0.00014014	4.29%
Tl 190.801†	-5.1	-0.0067966	mg/L	0.00233608	-0.0067966	mg/L	0.00233608	34.37%
V 290.880†	-140.8	0.0011774	mg/L	0.00033335	0.0011774	mg/L	0.00033335	28.31%
Zn 206.200†	2433.7	0.0400181	mg/L	0.00102817	0.0400181	mg/L	0.00102817	2.57%
Si 251.611†	471476.1	10.7351	mg/L	0.06124	10.7351	mg/L	0.06124	0.57%
B 249.772†	98901.3	0.765647	mg/L	0.0006684	0.765647	mg/L	0.0006684	0.09%
Ce 413.764	-229.2	-0.0410961	mg/L	0.00506695	-0.0410961	mg/L	0.00506695	12.33%

Sequence No.: 39
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 5:56:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1535181.4	104	%	0.3				0.33%
Y 371.029	408849.1	91.8	%	0.70				0.76%
Ag 328.068†	15294.4	0.0791234	mg/L	0.00083320	0.0791234	mg/L	0.00083320	1.05%
QC value less than the lower limit for Ag 328.068 Recovery = 79.12%								
Al 308.215†	158569.9	4.85044	mg/L	0.041072	4.85044	mg/L	0.041072	0.85%
QC value within limits for Al 308.215 Recovery = 97.01%								
As 188.979†	809.0	0.475700	mg/L	0.0006506	0.475700	mg/L	0.0006506	0.14%
QC value within limits for As 188.979 Recovery = 95.14%								
Ba 233.527†	54655.9	0.485586	mg/L	0.0032567	0.485586	mg/L	0.0032567	0.67%
QC value within limits for Ba 233.527 Recovery = 97.12%								
Be 313.107†	1764931.0	0.474809	mg/L	0.0018349	0.474809	mg/L	0.0018349	0.39%
QC value within limits for Be 313.107 Recovery = 94.96%								
Ca 315.887†	6927015.6	49.2522	mg/L	0.13168	49.2522	mg/L	0.13168	0.27%
QC value within limits for Ca 315.887 Recovery = 98.50%								
Cd 228.802†	33269.2	0.482609	mg/L	0.0028495	0.482609	mg/L	0.0028495	0.59%
QC value within limits for Cd 228.802 Recovery = 96.52%								
Co 228.616†	27361.3	0.484774	mg/L	0.0013243	0.484774	mg/L	0.0013243	0.27%
QC value within limits for Co 228.616 Recovery = 96.95%								
Cr 267.716†	55953.7	0.489094	mg/L	0.0029503	0.489094	mg/L	0.0029503	0.60%
QC value within limits for Cr 267.716 Recovery = 97.82%								
Cu 327.393†	81745.2	0.496994	mg/L	0.0042307	0.496994	mg/L	0.0042307	0.85%
QC value within limits for Cu 327.393 Recovery = 99.40%								
Fe 273.955†	177776.8	4.88728	mg/L	0.033691	4.88728	mg/L	0.033691	0.69%
QC value within limits for Fe 273.955 Recovery = 97.75%								
K 404.721†	15698.0	16.7828	mg/L	0.72193	16.7828	mg/L	0.72193	4.30%
QC value less than the lower limit for K 404.721 Recovery = 33.57%								
Mg 279.077†	1189741.4	49.1466	mg/L	0.19904	49.1466	mg/L	0.19904	0.40%
QC value within limits for Mg 279.077 Recovery = 98.29%								
Mn 257.610†	512461.6	0.485899	mg/L	0.0035927	0.485899	mg/L	0.0035927	0.74%
QC value within limits for Mn 257.610 Recovery = 97.18%								
Mo 202.031†	3623.2	0.487061	mg/L	0.0008472	0.487061	mg/L	0.0008472	0.17%
QC value within limits for Mo 202.031 Recovery = 97.41%								
Na 330.237†	72997.6	49.2143	mg/L	0.31178	49.2143	mg/L	0.31178	0.63%
QC value within limits for Na 330.237 Recovery = 98.43%								
Ni 231.604†	18747.5	0.482786	mg/L	0.0011021	0.482786	mg/L	0.0011021	0.23%
QC value within limits for Ni 231.604 Recovery = 96.56%								
Pb 220.353†	3624.5	0.484101	mg/L	0.0010667	0.484101	mg/L	0.0010667	0.22%
QC value within limits for Pb 220.353 Recovery = 96.82%								
Sb 206.836†	1051.2	0.492038	mg/L	0.0040175	0.492038	mg/L	0.0040175	0.82%
QC value within limits for Sb 206.836 Recovery = 98.41%								
Se 196.026†	478.8	0.488256	mg/L	0.0089200	0.488256	mg/L	0.0089200	1.83%
QC value within limits for Se 196.026 Recovery = 97.65%								
Sn 189.927†	1999.2	0.490286	mg/L	0.0015762	0.490286	mg/L	0.0015762	0.32%
QC value within limits for Sn 189.927 Recovery = 98.06%								
Ti 334.940†	466303.0	0.487638	mg/L	0.0036349	0.487638	mg/L	0.0036349	0.75%
QC value within limits for Ti 334.940 Recovery = 97.53%								
Tl 190.801†	669.5	0.505482	mg/L	0.0025474	0.505482	mg/L	0.0025474	0.50%
QC value within limits for Tl 190.801 Recovery = 101.10%								
V 290.880†	90230.4	0.486211	mg/L	0.0035031	0.486211	mg/L	0.0035031	0.72%
QC value within limits for V 290.880 Recovery = 97.24%								
Zn 206.200†	31766.8	0.488688	mg/L	0.0023308	0.488688	mg/L	0.0023308	0.48%
QC value within limits for Zn 206.200 Recovery = 97.74%								
Si 251.611†	218165.1	4.98339	mg/L	0.042029	4.98339	mg/L	0.042029	0.84%
QC value within limits for Si 251.611 Recovery = 99.67%								
B 249.772†	58036.0	0.471559	mg/L	0.0023364	0.471559	mg/L	0.0023364	0.50%
QC value within limits for B 249.772 Recovery = 94.31%								
Ce 413.764	73077.8	5.22568	mg/L	0.055389	5.22568	mg/L	0.055389	1.06%
QC value within limits for Ce 413.764 Recovery = 104.51%								

QC Failed. Continue with analysis.

Sequence No.: 40
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 9/14/2020 6:00:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1534579.3	103	%	0.6				0.62%
Y 371.029	458789.0	103	%	0.8				0.74%
Ag 328.068†	-163.2	-0.0011995	mg/L	0.00016372	-0.0011995	mg/L	0.00016372	13.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-87.5	0.0044876	mg/L	0.00165133	0.0044876	mg/L	0.00165133	36.80%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-10.1	-0.0028945	mg/L	0.00262519	-0.0028945	mg/L	0.00262519	90.70%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	33.2	0.0017516	mg/L	0.00009378	0.0017516	mg/L	0.00009378	5.35%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	186.2	0.0024919	mg/L	0.00003153	0.0024919	mg/L	0.00003153	1.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	181.0	0.0788556	mg/L	0.00050728	0.0788556	mg/L	0.00050728	0.64%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-3.3	0.0027574	mg/L	0.00016400	0.0027574	mg/L	0.00016400	5.95%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	72.2	0.0023305	mg/L	0.00026719	0.0023305	mg/L	0.00026719	11.46%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	32.5	0.0022306	mg/L	0.00012771	0.0022306	mg/L	0.00012771	5.73%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	258.9	0.0038271	mg/L	0.00069319	0.0038271	mg/L	0.00069319	18.11%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-7.3	0.0148853	mg/L	0.00032754	0.0148853	mg/L	0.00032754	2.20%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-143.9	1.00210	mg/L	0.307524	1.00210	mg/L	0.307524	30.69%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	69.3	-0.0675516	mg/L	0.00066638	-0.0675516	mg/L	0.00066638	0.99%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-14.1	0.0016670	mg/L	0.00002108	0.0016670	mg/L	0.00002108	1.26%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	4.4	0.0014564	mg/L	0.00085269	0.0014564	mg/L	0.00085269	58.55%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-35.0	0.856194	mg/L	0.0480115	0.856194	mg/L	0.0480115	5.61%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-102.3	-0.0017748	mg/L	0.00058613	-0.0017748	mg/L	0.00058613	33.03%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-16.6	-0.0023295	mg/L	0.00097271	-0.0023295	mg/L	0.00097271	41.76%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.4	0.0016529	mg/L	0.00033951	0.0016529	mg/L	0.00033951	20.54%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.9	0.0057784	mg/L	0.00045077	0.0057784	mg/L	0.00045077	7.80%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.8	0.0012423	mg/L	0.00080791	0.0012423	mg/L	0.00080791	65.04%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	54.3	0.0030597	mg/L	0.00003343	0.0030597	mg/L	0.00003343	1.09%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.2	-0.0025747	mg/L	0.00289077	-0.0025747	mg/L	0.00289077	112.28%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-61.4	0.0025771	mg/L	0.00032818	0.0025771	mg/L	0.00032818	12.73%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-19.7	0.0024289	mg/L	0.00002455	0.0024289	mg/L	0.00002455	1.01%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	140.1	0.0328978	mg/L	0.00047200	0.0328978	mg/L	0.00047200	1.43%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	399.3	0.0204723	mg/L	0.00113452	0.0204723	mg/L	0.00113452	5.54%
QC value within limits for B 249.772 Recovery = Not calculated								
Ce 413.764	561.9	0.0157441	mg/L	0.00334436	0.0157441	mg/L	0.00334436	21.24%
QC value within limits for Ce 413.764 Recovery = Not calculated								

All analyte(s) passed QC.

Method: PE2 4300DV SWAQ RD Page 1 Date: 9/14/2020 6:24:11 PM

SW26214B2 262147/85272 SW8465b

Analysis Begun

Start Time: 9/14/2020 6:21:37 PM
Logged In Analyst: shiamala
Spectrometer Model: Optima 4300 DV, S/N 069N-na
Plasma On Time: 9/14/2020 6:21:01 PM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\administrator\Sample Information\09.14.20.sif
Batch ID:
Results Data Set: SW26214B2
Results Library: C:\pe\administrator\Results\Results.mdb

9/15/2020.

9/18/20

Method Loaded
Method Name: PE2 4300DV SWAQ RD
IEC File: IECrd080519B2.iec
Method Description: 6010D (AQUEOUS)
Method Last Saved: 9/10/2020 12:37:44 PM
MSF File:

Sequence No.: 1
Sample ID: CALBLK V-333667
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 9/14/2020 6:21:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-333667

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	17634.0	186.57	1.06%	100	%
Y 371.029	3995.4	47.45	1.19%	100	%
Al 308.215†	82.1	7.62	9.27%	[0.00]	mg/L
Ba 233.527†	-14.3	2.26	15.77%	[0.00]	mg/L
Ca 315.887†	156.8	1.44	0.92%	[0.00]	mg/L
Cu 327.393†	-332.8	2.63	0.79%	[0.00]	mg/L
Fe 273.955†	-60.0	5.41	9.02%	[0.00]	mg/L
K 766.490	-1823.7	47.42	2.60%	[0.00]	mg/L
Mg 279.077†	-2.6	4.98	189.07%	[0.00]	mg/L
Mn 257.610†	54.2	6.71	12.38%	[0.00]	mg/L
Mo 202.031†	-10.8	1.84	17.07%	[0.00]	mg/L
Na 589.592	1115.9	12.42	1.11%	[0.00]	mg/L
Ni 231.604†	63.0	3.32	5.27%	[0.00]	mg/L
Se 196.026†	-1.4	1.00	73.66%	[0.00]	mg/L
Sn 189.927†	-1.0	1.83	180.53%	[0.00]	mg/L
Ti 334.940†	119.4	4.04	3.38%	[0.00]	mg/L
V 290.880†	11.9	6.17	52.01%	[0.00]	mg/L
Zn 206.200†	18.7	0.39	2.09%	[0.00]	mg/L
Si 251.611†	55.8	0.65	1.17%	[0.00]	mg/L
B 249.772†	40.2	2.52	6.27%	[0.00]	mg/L

262147/85272

Na, K reported.

Sequence No.: 2
Sample ID: CALST2 V-333670
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 9/14/2020 6:25:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST2 V-333670

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	17849.4	65.53	0.37%	101	%
Y 371.029	4005.1	27.32	0.68%	100	%
Al 308.215†	54.1	0.64	1.19%	[0.2]	mg/L
Ba 233.527†	34.0	2.30	6.77%	[0.050]	mg/L
Ca 315.887†	7159.9	10.86	0.15%	[5]	mg/L
Cu 327.393†	79.8	5.46	6.84%	[0.050]	mg/L
Fe 273.955†	94.0	3.12	3.32%	[0.30]	mg/L
K 766.490	2692.8	68.53	2.55%	[5]	mg/L
Mg 279.077†	1141.8	15.12	1.32%	[5.0]	mg/L
Mn 257.610†	336.6	4.43	1.32%	[0.040]	mg/L
Mo 202.031†	0.5	2.48	463.60%	[0.020]	mg/L
Na 589.592	16556.6	19.84	0.12%	[5]	mg/L
Ni 231.604†	7.5	0.98	13.09%	[0.050]	mg/L
Se 196.026†	-1.2	1.57	125.85%	[0.050]	mg/L
No calibration curve because standard intensity and concentration values are not in the same order.					
Sn 189.927†	1.0	0.55	53.74%	[0.050]	mg/L
Ti 334.940†	500.3	11.68	2.33%	[0.050]	mg/L
V 290.880†	79.4	1.68	2.11%	[0.050]	mg/L
Zn 206.200†	33.5	1.18	3.53%	[0.050]	mg/L
Si 251.611†	50.4	3.35	6.65%	[0.10]	mg/L
B 249.772†	215.0	2.23	1.04%	[0.20]	mg/L

Sequence No.: 3 **Autosampler Location:** 3
Sample ID: CALST3 V-333666 **Date Collected:** 9/14/2020 6:29:07 PM
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CALST3 V-333666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	18023.5	158.45	0.88%	102	%
Y 371.029	3777.2	37.46	0.99%	94.5	%
Al 308.215†	1313.7	14.40	1.10%	[5.0]	mg/L
Ba 233.527†	314.1	3.37	1.07%	[0.50]	mg/L
Ca 315.887†	67208.6	220.04	0.33%	[50]	mg/L
Cu 327.393†	648.1	11.81	1.82%	[0.50]	mg/L
Fe 273.955†	1432.4	11.32	0.79%	[5.0]	mg/L
K 766.490	28939.0	326.66	1.13%	[50]	mg/L
Mg 279.077†	10657.2	41.48	0.39%	[50]	mg/L
Mn 257.610†	3981.8	16.35	0.41%	[0.50]	mg/L
Mo 202.031†	25.4	1.49	5.87%	[0.50]	mg/L
Na 589.592	159290.9	2173.23	1.36%	[50]	mg/L
Ni 231.604†	124.5	3.40	2.73%	[0.50]	mg/L
Se 196.026†	8.2	1.58	19.14%	[0.50]	mg/L
No calibration curve because standard intensity and concentration values are not in the same order.					
Sn 189.927†	14.9	0.66	4.42%	[0.50]	mg/L
Ti 334.940†	4991.2	8.71	0.17%	[0.50]	mg/L
V 290.880†	759.8	11.46	1.51%	[0.50]	mg/L
Zn 206.200†	323.9	3.78	1.17%	[0.50]	mg/L
Si 251.611†	2117.2	22.27	1.05%	[5]	mg/L
B 249.772†	537.0	5.49	1.02%	[0.50]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-333665
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 9/14/2020 6:33:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST4 V-333665

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	18222.8	96.73	0.53%	103	%
Y 371.029	3513.9	13.81	0.39%	87.9	%
Al 308.215†	2683.9	6.97	0.26%	[10]	mg/L
Ba 233.527†	633.0	5.82	0.92%	[1.0]	mg/L
Ca 315.887†	135431.6	376.63	0.28%	[100]	mg/L
Cu 327.393†	1317.2	12.68	0.96%	[1.0]	mg/L
Fe 273.955†	2942.5	13.53	0.46%	[10]	mg/L
K 766.490	60599.8	328.00	0.54%	[100]	mg/L
Mg 279.077†	21771.7	81.39	0.37%	[100]	mg/L
Mn 257.610†	8133.5	36.03	0.44%	[1.0]	mg/L
Mo 202.031†	52.2	2.33	4.46%	[1.0]	mg/L
Na 589.592	330166.0	801.30	0.24%	[100]	mg/L
Ni 231.604†	250.6	4.34	1.73%	[1.0]	mg/L
Se 196.026†	15.9	1.11	7.01%	[1.0]	mg/L
No calibration curve because standard intensity and concentration values are not in the same order.					
Sn 189.927†	31.3	2.09	6.67%	[1.0]	mg/L
Ti 334.940†	10296.8	14.39	0.14%	[1.0]	mg/L
V 290.880†	1546.5	4.86	0.31%	[1.0]	mg/L
Zn 206.200†	650.7	6.49	1.00%	[1.0]	mg/L
Si 251.611†	4400.8	17.18	0.39%	[10]	mg/L
B 249.772†	1128.6	2.34	0.21%	[1.0]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Al 308.215	3	Lin, Calc Int	-5.0	267.9	0.00000	0.999939	
Ba 233.527	3	Lin, Calc Int	0.6	631.4	0.00000	0.999982	
Ca 315.887	3	Lin, Calc Int	82.1	1351	0.00000	0.999985	
Cu 327.393	3	Lin, Calc Int	4.4	1308	0.00000	0.999889	
Fe 273.955	3	Lin, Calc Int	-4.5	293.3	0.00000	0.999895	
K 766.490	3	Lin, Calc Int	-401.2	605.4	0.00000	0.999740	
Mg 279.077	3	Lin, Calc Int	-17.9	217.0	0.00000	0.999928	
Mn 257.610	3	Lin, Calc Int	-10.4	8113	0.00000	0.999934	
Mo 202.031	3	Lin, Calc Int	-0.4	52.37	0.00000	0.999900	
Na 589.592	3	Lin, Calc Int	-1038.9	3291	0.00000	0.999826	
Ni 231.604	3	Lin, Calc Int	-2.4	253.1	0.00000	0.999839	
Sn 189.927	3	Lin, Calc Int	-0.4	31.43	0.00000	0.999699	
Ti 334.940	3	Lin, Calc Int	-35.3	10280	0.00000	0.999874	
V 290.880	3	Lin, Calc Int	-1.5	1543	0.00000	0.999953	
Zn 206.200	3	Lin, Calc Int	0.2	649.9	0.00000	0.999995	
Si 251.611	3	Lin, Calc Int	-12.2	438.2	0.00000	0.999799	
B 249.772	3	Lin, Calc Int	-9.8	1129	0.00000	0.999657	

Sequence No.: 5
Sample ID: ICV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 6:37:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV V-333673

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	17942.7	102	%	0.6				0.57%
Y 371.029	3749.9	93.9	%	0.50				0.53%
Al 308.215†	1319.7	5.00697	mg/L	0.050653	5.00697	mg/L	0.050653	1.01%
QC value within limits for Al 308.215 Recovery = 100.14%								
Ba 233.527†	316.7	0.500619	mg/L	0.0069453	0.500619	mg/L	0.0069453	1.39%
QC value within limits for Ba 233.527 Recovery = 100.12%								
Ca 315.887†	69426.6	51.3119	mg/L	0.20011	51.3119	mg/L	0.20011	0.39%
QC value within limits for Ca 315.887 Recovery = 102.62%								
Cu 327.393†	656.2	0.498305	mg/L	0.0046219	0.498305	mg/L	0.0046219	0.93%
QC value within limits for Cu 327.393 Recovery = 99.66%								
Fe 273.955†	1455.9	4.97969	mg/L	0.054273	4.97969	mg/L	0.054273	1.09%
QC value within limits for Fe 273.955 Recovery = 99.59%								
K 766.490	29688.2	49.7021	mg/L	0.13299	49.7021	mg/L	0.13299	0.27%
QC value within limits for K 766.490 Recovery = 99.40%								
Mg 279.077†	10968.4	50.6171	mg/L	0.21451	50.6171	mg/L	0.21451	0.42%
QC value within limits for Mg 279.077 Recovery = 101.23%								
Mn 257.610†	3989.2	0.493007	mg/L	0.0024592	0.493007	mg/L	0.0024592	0.50%
QC value within limits for Mn 257.610 Recovery = 98.60%								
Mo 202.031†	23.8	0.460883	mg/L	0.0046675	0.460883	mg/L	0.0046675	1.01%
QC value within limits for Mo 202.031 Recovery = 92.18%								
Na 589.592	165937.1	50.7308	mg/L	0.34525	50.7308	mg/L	0.34525	0.68%
QC value within limits for Na 589.592 Recovery = 101.46%								
Ni 231.604†	123.3	0.496701	mg/L	0.0140052	0.496701	mg/L	0.0140052	2.82%
QC value within limits for Ni 231.604 Recovery = 99.34%								
Se 196.026†	6.3						1.56	24.86%
Unable to evaluate QC.								
Sn 189.927†	15.9	0.522268	mg/L	0.0169558	0.522268	mg/L	0.0169558	3.25%
QC value within limits for Sn 189.927 Recovery = 104.45%								
Ti 334.940†	5020.6	0.491964	mg/L	0.0029590	0.491964	mg/L	0.0029590	0.60%
QC value within limits for Ti 334.940 Recovery = 98.39%								
V 290.880†	773.3	0.502104	mg/L	0.0110734	0.502104	mg/L	0.0110734	2.21%
QC value within limits for V 290.880 Recovery = 100.42%								
Zn 206.200†	332.3	0.511016	mg/L	0.0130612	0.511016	mg/L	0.0130612	2.56%
QC value within limits for Zn 206.200 Recovery = 102.20%								
Si 251.611†	2205.5	5.05838	mg/L	0.049211	5.05838	mg/L	0.049211	0.97%
QC value within limits for Si 251.611 Recovery = 101.17%								
B 249.772†	570.6	0.496584	mg/L	0.0096043	0.496584	mg/L	0.0096043	1.93%
QC value within limits for B 249.772 Recovery = 99.32%								

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 6
Sample ID: ICB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 9/14/2020 6:41:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	18105.8	103	%	1.2				1.22%
Y 371.029	4117.6	103	%	0.7				0.71%
Al 308.215†	0.6	0.0204113	mg/L	0.01291105	0.0204113	mg/L	0.01291105	63.25%
QC value within limits for Al 308.215 Recovery = Not calculated								
Ba 233.527†	0.3	-0.0005404	mg/L	0.00541172	-0.0005404	mg/L	0.00541172	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Ca 315.887†	-0.2	-0.0609191	mg/L	0.00465446	-0.0609191	mg/L	0.00465446	7.64%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cu 327.393†	26.1	0.0166184	mg/L	0.00418341	0.0166184	mg/L	0.00418341	25.17%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	1.6	0.0208059	mg/L	0.00340510	0.0208059	mg/L	0.00340510	16.37%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490	117.4	0.856576	mg/L	0.0946444	0.856576	mg/L	0.0946444	11.05%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	5.6	0.108138	mg/L	0.0315766	0.108138	mg/L	0.0315766	29.20%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	2.1	0.0015462	mg/L	0.00055604	0.0015462	mg/L	0.00055604	35.96%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.2	0.0110009	mg/L	0.02104697	0.0110009	mg/L	0.02104697	191.32%
QC value greater than the upper limit for Mo 202.031 Recovery = Not calculated								
Na 589.592	-5.3	0.314040	mg/L	0.0245526	0.314040	mg/L	0.0245526	7.82%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-5.5	-0.0119954	mg/L	0.00190169	-0.0119954	mg/L	0.00190169	15.85%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Se 196.026†	-0.1						1.40	>999.9%
Unable to evaluate QC.								
Sn 189.927†	-1.8	-0.0464391	mg/L	0.01461430	-0.0464391	mg/L	0.01461430	31.47%
QC value less than the lower limit for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-21.8	0.0013137	mg/L	0.00182908	0.0013137	mg/L	0.00182908	139.23%
QC value within limits for Ti 334.940 Recovery = Not calculated								
V 290.880†	-4.3	-0.0018076	mg/L	0.00419218	-0.0018076	mg/L	0.00419218	231.92%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-0.2	-0.0005686	mg/L	0.00175735	-0.0005686	mg/L	0.00175735	309.08%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	-3.6	0.0196256	mg/L	0.00745966	0.0196256	mg/L	0.00745966	38.01%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	8.3	0.0158920	mg/L	0.00315584	0.0158920	mg/L	0.00315584	19.86%
QC value within limits for B 249.772 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: LRS V-333662
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 9/14/2020 6:44:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LRS V-333662

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	16539.2	93.8	%	0.77				0.83%
Y 371.029	3655.7	91.5	%	0.81				0.88%
Al 308.215†	133471.2	499.601	mg/L	0.9750	499.601	mg/L	0.9750	0.20%
QC value within limits for Al 308.215 Recovery = 99.92%								
Ba 233.527†	6548.4	10.3705	mg/L	0.02441	10.3705	mg/L	0.02441	0.24%
QC value within limits for Ba 233.527 Recovery = 103.70%								
Ca 315.887†	675094.0	499.480	mg/L	0.7443	499.480	mg/L	0.7443	0.15%
QC value within limits for Ca 315.887 Recovery = 99.90%								
Cu 327.393†	13328.9	10.1855	mg/L	0.03007	10.1855	mg/L	0.03007	0.30%
QC value within limits for Cu 327.393 Recovery = 101.86%								
Fe 273.955†	113161.5	385.882	mg/L	0.4562	385.882	mg/L	0.4562	0.12%
QC value within limits for Fe 273.955 Recovery = 96.47%								
K 766.490	150477.1	249.223	mg/L	1.9402	249.223	mg/L	1.9402	0.78%
QC value greater than the upper limit for K 766.490 Recovery = 124.61%								
Mg 279.077†	105795.5	487.513	mg/L	1.1761	487.513	mg/L	1.1761	0.24%
QC value within limits for Mg 279.077 Recovery = 97.50%								
Mn 257.610†	81717.2	10.0739	mg/L	0.01134	10.0739	mg/L	0.01134	0.11%
QC value within limits for Mn 257.610 Recovery = 100.74%								
Mo 202.031†	519.3	9.92188	mg/L	0.079768	9.92188	mg/L	0.079768	0.80%
QC value within limits for Mo 202.031 Recovery = 99.22%								
Na 589.592	3477986.5	1057.00	mg/L	12.519	1057.00	mg/L	12.519	1.18%
QC value within limits for Na 589.592 Recovery = 105.70%								
Ni 231.604†	2595.4	10.2654	mg/L	0.08383	10.2654	mg/L	0.08383	0.82%
QC value within limits for Ni 231.604 Recovery = 102.65%								
Se 196.026†	85.6						0.66	0.78%
Unable to evaluate QC.								
Sn 189.927†	332.4	10.6395	mg/L	0.07525	10.6395	mg/L	0.07525	0.71%
QC value within limits for Sn 189.927 Recovery = 106.40%								
Ti 334.940†	106112.6	10.3285	mg/L	0.01637	10.3285	mg/L	0.01637	0.16%
QC value within limits for Ti 334.940 Recovery = 103.29%								
V 290.880†	16394.5	10.6253	mg/L	0.00447	10.6253	mg/L	0.00447	0.04%
QC value within limits for V 290.880 Recovery = 106.25%								
Zn 206.200†	6488.5	9.98289	mg/L	0.024308	9.98289	mg/L	0.024308	0.24%
QC value within limits for Zn 206.200 Recovery = 99.83%								
Si 251.611†	166.9	0.429809	mg/L	0.0095973	0.429809	mg/L	0.0095973	2.23%
QC value less than the lower limit for Si 251.611 Recovery = 1.72%								
B 249.772†	1313.8	-0.171497	mg/L	0.0084536	-0.171497	mg/L	0.0084536	4.93%
QC value less than the lower limit for B 249.772 Recovery = -3.43%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-333666
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 3
Date Collected: 9/14/2020 6:52:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	17940.3	102	%	0.2				0.17%
Y 371.029	3753.7	94.0	%	0.32				0.34%
Al 308.215†	1321.1	5.01140	mg/L	0.019385	5.01140	mg/L	0.019385	0.39%
QC value within limits for Al 308.215 Recovery = 100.23%								
Ba 233.527†	319.7	0.505373	mg/L	0.0029093	0.505373	mg/L	0.0029093	0.58%
QC value within limits for Ba 233.527 Recovery = 101.07%								
Ca 315.887†	67330.0	49.7605	mg/L	0.17133	49.7605	mg/L	0.17133	0.34%
QC value within limits for Ca 315.887 Recovery = 99.52%								
Cu 327.393†	633.3	0.480802	mg/L	0.0066418	0.480802	mg/L	0.0066418	1.38%
QC value within limits for Cu 327.393 Recovery = 96.16%								
Fe 273.955†	1444.8	4.94189	mg/L	0.033967	4.94189	mg/L	0.033967	0.69%
QC value within limits for Fe 273.955 Recovery = 98.84%								
K 766.490	29321.0	49.0955	mg/L	0.12734	49.0955	mg/L	0.12734	0.26%
QC value within limits for K 766.490 Recovery = 98.19%								
Mg 279.077†	10644.2	49.1232	mg/L	0.14113	49.1232	mg/L	0.14113	0.29%
QC value within limits for Mg 279.077 Recovery = 98.25%								
Mn 257.610†	3990.4	0.493156	mg/L	0.0015059	0.493156	mg/L	0.0015059	0.31%
QC value within limits for Mn 257.610 Recovery = 98.63%								
Mo 202.031†	27.0	0.521927	mg/L	0.0407407	0.521927	mg/L	0.0407407	7.81%
QC value within limits for Mo 202.031 Recovery = 104.39%								
Na 589.592	160559.1	49.0968	mg/L	0.53289	49.0968	mg/L	0.53289	1.09%
QC value within limits for Na 589.592 Recovery = 98.19%								
Ni 231.604†	126.1	0.507857	mg/L	0.0041608	0.507857	mg/L	0.0041608	0.82%
QC value within limits for Ni 231.604 Recovery = 101.57%								
Se 196.026†	9.6						1.09	11.39%
Unable to evaluate QC.								
Sn 189.927†	14.7	0.486083	mg/L	0.0598823	0.486083	mg/L	0.0598823	12.32%
QC value within limits for Sn 189.927 Recovery = 97.22%								
Ti 334.940†	4992.8	0.489252	mg/L	0.0030197	0.489252	mg/L	0.0030197	0.62%
QC value within limits for Ti 334.940 Recovery = 97.85%								
V 290.880†	766.1	0.497473	mg/L	0.0019701	0.497473	mg/L	0.0019701	0.40%
QC value within limits for V 290.880 Recovery = 99.49%								
Zn 206.200†	331.8	0.510281	mg/L	0.0014410	0.510281	mg/L	0.0014410	0.28%
QC value within limits for Zn 206.200 Recovery = 102.06%								
Si 251.611†	2135.0	4.89692	mg/L	0.007532	4.89692	mg/L	0.007532	0.15%
QC value within limits for Si 251.611 Recovery = 97.94%								
B 249.772†	532.7	0.463199	mg/L	0.0026959	0.463199	mg/L	0.0026959	0.58%
QC value within limits for B 249.772 Recovery = 92.64%								

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 9/14/2020 6:56:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	17781.8	101	%	0.4				0.36%
Y 371.029	4027.0	101	%	0.4				0.35%
Al 308.215†	-2.3	0.0106045	mg/L	0.04887520	0.0106045	mg/L	0.04887520	460.89%
Ba 233.527†	1.1	0.0007496	mg/L	0.00420955	0.0007496	mg/L	0.00420955	561.58%
Ca 315.887†	14.2	-0.0502073	mg/L	0.00624486	-0.0502073	mg/L	0.00624486	12.44%
Cu 327.393†	15.0	0.0081303	mg/L	0.01364717	0.0081303	mg/L	0.01364717	167.86%
Fe 273.955†	2.6	0.0243288	mg/L	0.01438381	0.0243288	mg/L	0.01438381	59.12%
K 766.490	127.9	0.873891	mg/L	0.0916721	0.873891	mg/L	0.0916721	10.49%
Mg 279.077†	5.3	0.106546	mg/L	0.0258166	0.106546	mg/L	0.0258166	24.23%
Mn 257.610†	-0.1	0.0012715	mg/L	0.00029550	0.0012715	mg/L	0.00029550	23.24%
Mo 202.031†	-0.4	-0.0013530	mg/L	0.02388255	-0.0013530	mg/L	0.02388255	>999.9%
Na 589.592	756.9	0.545609	mg/L	0.0247246	0.545609	mg/L	0.0247246	4.53%
Ni 231.604†	-2.9	-0.0019893	mg/L	0.00929037	-0.0019893	mg/L	0.00929037	467.01%
Se 196.026†	-1.2						1.83	147.14%
Sn 189.927†	-0.7	-0.0098058	mg/L	0.04127728	-0.0098058	mg/L	0.04127728	420.95%
Ti 334.940†	-22.9	0.0012060	mg/L	0.00021797	0.0012060	mg/L	0.00021797	18.07%
V 290.880†	6.3	0.0050736	mg/L	0.00314228	0.0050736	mg/L	0.00314228	61.93%
Zn 206.200†	0.5	0.0005301	mg/L	0.00097897	0.0005301	mg/L	0.00097897	184.69%
Si 251.611†	-0.4	0.0269309	mg/L	0.00621208	0.0269309	mg/L	0.00621208	23.07%
B 249.772†	3.0	0.0112271	mg/L	0.00174671	0.0112271	mg/L	0.00174671	15.56%

Sequence No.: 10
Sample ID: LLICV V-333670
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 9/14/2020 7:00:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LLICV V-333670

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	18040.2	102	%	1.1				1.10%
Y 371.029	4030.8	101	%	1.3				1.32%
Al 308.215†	49.9	0.211048	mg/L	0.0369122	0.211048	mg/L	0.0369122	17.49%
QC value within limits for Al 308.215 Recovery = 105.52%								
Ba 233.527†	32.6	0.0507184	mg/L	0.00195855	0.0507184	mg/L	0.00195855	3.86%
QC value within limits for Ba 233.527 Recovery = 101.44%								
Ca 315.887†	7220.4	5.28203	mg/L	0.009474	5.28203	mg/L	0.009474	0.18%
QC value within limits for Ca 315.887 Recovery = 105.64%								
Cu 327.393†	80.0	0.0578410	mg/L	0.00405485	0.0578410	mg/L	0.00405485	7.01%
QC value within limits for Cu 327.393 Recovery = 115.68%								
Fe 273.955†	91.6	0.327737	mg/L	0.0063909	0.327737	mg/L	0.0063909	1.95%
QC value within limits for Fe 273.955 Recovery = 109.25%								
K 766.490	2839.6	5.35317	mg/L	0.030695	5.35317	mg/L	0.030695	0.57%
QC value within limits for K 766.490 Recovery = 107.06%								
Mg 279.077†	1126.5	5.27246	mg/L	0.022898	5.27246	mg/L	0.022898	0.43%
QC value within limits for Mg 279.077 Recovery = 105.45%								
Mn 257.610†	333.0	0.0423319	mg/L	0.00049698	0.0423319	mg/L	0.00049698	1.17%
QC value within limits for Mn 257.610 Recovery = 105.83%								
Mo 202.031†	0.4	0.0139670	mg/L	0.02209746	0.0139670	mg/L	0.02209746	158.21%
QC value less than the lower limit for Mo 202.031 Recovery = 69.84%								
Na 589.592	17252.1	5.55718	mg/L	0.043138	5.55718	mg/L	0.043138	0.78%
QC value within limits for Na 589.592 Recovery = 111.14%								
Ni 231.604†	7.4	0.0388875	mg/L	0.01276914	0.0388875	mg/L	0.01276914	32.84%
QC value less than the lower limit for Ni 231.604 Recovery = 77.78%								
Se 196.026†	-0.4						1.52	350.11%
Unable to evaluate QC.								
Sn 189.927†	2.1	0.0796162	mg/L	0.05991577	0.0796162	mg/L	0.05991577	75.26%
QC value greater than the upper limit for Sn 189.927 Recovery = 159.23%								
Ti 334.940†	502.6	0.0523395	mg/L	0.00032480	0.0523395	mg/L	0.00032480	0.62%
QC value within limits for Ti 334.940 Recovery = 104.68%								
V 290.880†	79.3	0.0523654	mg/L	0.00357559	0.0523654	mg/L	0.00357559	6.83%
QC value within limits for V 290.880 Recovery = 104.73%								
Zn 206.200†	35.1	0.0537820	mg/L	0.00557870	0.0537820	mg/L	0.00557870	10.37%
QC value within limits for Zn 206.200 Recovery = 107.56%								
Si 251.611†	48.5	0.138640	mg/L	0.0004923	0.138640	mg/L	0.0004923	0.36%
QC value greater than the upper limit for Si 251.611 Recovery = 138.64%								
B 249.772†	211.0	0.194332	mg/L	0.0037240	0.194332	mg/L	0.0037240	1.92%
QC value within limits for B 249.772 Recovery = 97.17%								

QC Failed. Continue with analysis.

Sequence No.: 11
Sample ID: ICSA V-333668
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 9/14/2020 7:03:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	17278.7	98.0	%	0.86				0.88%
Y 371.029	3783.6	94.7	%	0.89				0.94%
Al 308.215†	136311.3	508.894	mg/L	8.2534	508.894	mg/L	8.2534	1.62%
QC value within limits for Al 308.215 Recovery = 101.78%								
Ba 233.527†	0.9	0.0005196	mg/L	0.00357004	0.0005196	mg/L	0.00357004	687.14%
Ca 315.887†	702389.2	519.677	mg/L	9.0053	519.677	mg/L	9.0053	1.73%
QC value within limits for Ca 315.887 Recovery = 103.94%								
Cu 327.393†	-44.5	-0.0373217	mg/L	0.01103500	-0.0373217	mg/L	0.01103500	29.57%
Fe 273.955†	57589.1	196.387	mg/L	0.3716	196.387	mg/L	0.3716	0.19%
QC value within limits for Fe 273.955 Recovery = 98.19%								
K 766.490	444.7	1.39718	mg/L	0.071817	1.39718	mg/L	0.071817	5.14%
Mg 279.077†	111346.1	513.087	mg/L	9.1674	513.087	mg/L	9.1674	1.79%
QC value within limits for Mg 279.077 Recovery = 102.62%								
Mn 257.610†	53.3	0.0078544	mg/L	0.00008068	0.0078544	mg/L	0.00008068	1.03%
Mo 202.031†	5.3	0.108587	mg/L	0.0267573	0.108587	mg/L	0.0267573	24.64%
Na 589.592	1196.0	0.679021	mg/L	0.0275776	0.679021	mg/L	0.0275776	4.06%
Ni 231.604†	-5.5	-0.0120415	mg/L	0.01562499	-0.0120415	mg/L	0.01562499	129.76%
Se 196.026†	-2.1						1.48	70.95%
Sn 189.927†	-4.6	-0.0786770	mg/L	0.01297279	-0.0786770	mg/L	0.01297279	16.49%
Ti 334.940†	277.6	0.0304481	mg/L	0.00229025	0.0304481	mg/L	0.00229025	7.52%
V 290.880†	-56.9	-0.0359031	mg/L	0.00230671	-0.0359031	mg/L	0.00230671	6.42%
Zn 206.200†	7.5	0.0113760	mg/L	0.00159700	0.0113760	mg/L	0.00159700	14.04%
Si 251.611†	30.8	0.147734	mg/L	0.0066826	0.147734	mg/L	0.0066826	4.52%
B 249.772†	668.2	-0.0833823	mg/L	0.01013311	-0.0833823	mg/L	0.01013311	12.15%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 7:11:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	17814.4	101	%	0.9				0.92%
Y 371.029	3704.7	92.7	%	1.14				1.23%
Al 308.215†	1311.0	4.97340	mg/L	0.063219	4.97340	mg/L	0.063219	1.27%
QC value within limits for Al 308.215 Recovery = 99.47%								
Ba 233.527†	315.2	0.498254	mg/L	0.0074102	0.498254	mg/L	0.0074102	1.49%
QC value within limits for Ba 233.527 Recovery = 99.65%								
Ca 315.887†	68954.6	50.9627	mg/L	0.07327	50.9627	mg/L	0.07327	0.14%
QC value within limits for Ca 315.887 Recovery = 101.93%								
Cu 327.393†	628.4	0.476988	mg/L	0.0057792	0.476988	mg/L	0.0057792	1.21%
QC value within limits for Cu 327.393 Recovery = 95.40%								
Fe 273.955†	1435.0	4.90851	mg/L	0.043320	4.90851	mg/L	0.043320	0.88%
QC value within limits for Fe 273.955 Recovery = 98.17%								
K 766.490	29096.2	48.7242	mg/L	0.22536	48.7242	mg/L	0.22536	0.46%
QC value within limits for K 766.490 Recovery = 97.45%								
Mg 279.077†	10853.5	50.0876	mg/L	0.04197	50.0876	mg/L	0.04197	0.08%
QC value within limits for Mg 279.077 Recovery = 100.18%								
Mn 257.610†	3966.3	0.490180	mg/L	0.0012521	0.490180	mg/L	0.0012521	0.26%
QC value within limits for Mn 257.610 Recovery = 98.04%								
Mo 202.031†	25.5	0.494250	mg/L	0.0140812	0.494250	mg/L	0.0140812	2.85%
QC value within limits for Mo 202.031 Recovery = 98.85%								
Na 589.592	164919.0	50.4215	mg/L	0.54964	50.4215	mg/L	0.54964	1.09%
QC value within limits for Na 589.592 Recovery = 100.84%								
Ni 231.604†	126.2	0.508101	mg/L	0.0167795	0.508101	mg/L	0.0167795	3.30%
QC value within limits for Ni 231.604 Recovery = 101.62%								
Se 196.026†	6.7						3.08	45.81%
Unable to evaluate QC.								
Sn 189.927†	16.8	0.551875	mg/L	0.0615508	0.551875	mg/L	0.0615508	11.15%
QC value greater than the upper limit for Sn 189.927 Recovery = 110.37%								
Ti 334.940†	4997.9	0.489754	mg/L	0.0040345	0.489754	mg/L	0.0040345	0.82%
QC value within limits for Ti 334.940 Recovery = 97.95%								
V 290.880†	761.9	0.494708	mg/L	0.0053992	0.494708	mg/L	0.0053992	1.09%
QC value within limits for V 290.880 Recovery = 98.94%								
Zn 206.200†	331.0	0.508977	mg/L	0.0060629	0.508977	mg/L	0.0060629	1.19%
QC value within limits for Zn 206.200 Recovery = 101.80%								
Si 251.611†	2184.9	5.01095	mg/L	0.042879	5.01095	mg/L	0.042879	0.86%
QC value within limits for Si 251.611 Recovery = 100.22%								
B 249.772†	546.1	0.475177	mg/L	0.0093336	0.475177	mg/L	0.0093336	1.96%
QC value within limits for B 249.772 Recovery = 95.04%								

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/14/2020 7:15:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Sc 361.383	17532.1	99.4	%	1.02				1.03%
Y 371.029	3983.2	99.7	%	0.95				0.95%
Al 308.215†	1.0	0.0223040	mg/L	0.02648320	0.0223040	mg/L	0.02648320	118.74%
QC value within limits for Al 308.215 Recovery = Not calculated								
Ba 233.527†	-0.6	-0.0019028	mg/L	0.00105843	-0.0019028	mg/L	0.00105843	55.63%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Ca 315.887†	26.1	-0.0414485	mg/L	0.00874109	-0.0414485	mg/L	0.00874109	21.09%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cu 327.393†	7.8	0.0026222	mg/L	0.00378998	0.0026222	mg/L	0.00378998	144.54%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	1.4	0.0202027	mg/L	0.02530571	0.0202027	mg/L	0.02530571	125.26%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490	-8.0	0.649427	mg/L	0.0632914	0.649427	mg/L	0.0632914	9.75%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	0.7	0.0853979	mg/L	0.00601389	0.0853979	mg/L	0.00601389	7.04%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-2.6	0.0009682	mg/L	0.00014163	0.0009682	mg/L	0.00014163	14.63%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.2	0.0023300	mg/L	0.01033215	0.0023300	mg/L	0.01033215	443.45%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592	27.0	0.323846	mg/L	0.0345882	0.323846	mg/L	0.0345882	10.68%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-8.0	-0.0222336	mg/L	0.00625093	-0.0222336	mg/L	0.00625093	28.11%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Se 196.026†	-2.0						1.62	82.24%
Unable to evaluate QC.								
Sn 189.927†	-0.8	-0.0136343	mg/L	0.06591077	-0.0136343	mg/L	0.06591077	483.42%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-25.1	0.0009938	mg/L	0.00049123	0.0009938	mg/L	0.00049123	49.43%
QC value within limits for Ti 334.940 Recovery = Not calculated								
V 290.880†	-2.1	-0.0003541	mg/L	0.00242539	-0.0003541	mg/L	0.00242539	684.87%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	0.5	0.0005120	mg/L	0.00545195	0.0005120	mg/L	0.00545195	>999.9%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	-1.5	0.0245032	mg/L	0.00696578	0.0245032	mg/L	0.00696578	28.43%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	7.1	0.0148864	mg/L	0.00214206	0.0148864	mg/L	0.00214206	14.39%
QC value within limits for B 249.772 Recovery = Not calculated								

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 14
Sample ID: MB 85272 (1)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 9/14/2020 7:18:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85272 (1)

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	17797.4	101	%	1.8				1.81%
Y 371.029	4005.7	100	%	2.0				2.01%
Al 308.215†	0.1	0.0184129	mg/L	0.00919706	0.0184129	mg/L	0.00919706	49.95%
Ba 233.527†	-0.3	-0.0014933	mg/L	0.00243220	-0.0014933	mg/L	0.00243220	162.87%
Ca 315.887†	95.8	0.0101057	mg/L	0.00562519	0.0101057	mg/L	0.00562519	55.66%
Cu 327.393†	16.1	0.0089544	mg/L	0.00676655	0.0089544	mg/L	0.00676655	75.57%
Fe 273.955†	12.3	0.0571392	mg/L	0.01530956	0.0571392	mg/L	0.01530956	26.79%
K 766.490	-53.6	0.574170	mg/L	0.0916299	0.574170	mg/L	0.0916299	15.96%
Mg 279.077†	5.2	0.106401	mg/L	0.0037066	0.106401	mg/L	0.0037066	3.48%
Mn 257.610†	8.9	0.0023766	mg/L	0.00040646	0.0023766	mg/L	0.00040646	17.10%
Mo 202.031†	0.2	0.0111041	mg/L	0.03067019	0.0111041	mg/L	0.03067019	276.21%
Na 589.592	47.6	0.330106	mg/L	0.0128617	0.330106	mg/L	0.0128617	3.90%
Ni 231.604†	-4.4	-0.0078279	mg/L	0.00208796	-0.0078279	mg/L	0.00208796	26.67%
Se 196.026†	0.9						0.60	67.13%
Sn 189.927†	-0.4	0.0005391	mg/L	0.06161143	0.0005391	mg/L	0.06161143	>999.9%
Ti 334.940†	-23.2	0.0011856	mg/L	0.00071578	0.0011856	mg/L	0.00071578	60.37%
V 290.880†	-5.8	-0.0027575	mg/L	0.00446571	-0.0027575	mg/L	0.00446571	161.95%
Zn 206.200†	3.4	0.0049715	mg/L	0.00112786	0.0049715	mg/L	0.00112786	22.69%
Si 251.611†	11.6	0.0543070	mg/L	0.01425703	0.0543070	mg/L	0.01425703	26.25%
B 249.772†	2.2	0.0104230	mg/L	0.00156472	0.0104230	mg/L	0.00156472	15.01%

Sequence No.: 15
Sample ID: LCS 85272
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 9/14/2020 7:22:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 85272

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	17127.0	97.1	%	3.56				3.67%
Y 371.029	3781.8	94.7	%	3.62				3.83%
Al 308.215†	1334.6	5.06337	mg/L	0.137401	5.06337	mg/L	0.137401	2.71%
Ba 233.527†	329.3	0.520498	mg/L	0.0177721	0.520498	mg/L	0.0177721	3.41%
Ca 315.887†	69926.7	51.6820	mg/L	2.51155	51.6820	mg/L	2.51155	4.86%
Cu 327.393†	632.5	0.480171	mg/L	0.0063544	0.480171	mg/L	0.0063544	1.32%
Fe 273.955†	1479.6	5.06069	mg/L	0.150755	5.06069	mg/L	0.150755	2.98%
K 766.490	28474.8	47.6977	mg/L	0.90640	47.6977	mg/L	0.90640	1.90%
Mg 279.077†	11020.8	50.8582	mg/L	2.34808	50.8582	mg/L	2.34808	4.62%
Mn 257.610†	4085.0	0.504809	mg/L	0.0250099	0.504809	mg/L	0.0250099	4.95%
Mo 202.031†	24.6	0.477482	mg/L	0.0223424	0.477482	mg/L	0.0223424	4.68%
Na 589.592	156945.9	47.9991	mg/L	0.61813	47.9991	mg/L	0.61813	1.29%
Ni 231.604†	125.8	0.506601	mg/L	0.0279086	0.506601	mg/L	0.0279086	5.51%
Se 196.026†	6.8						2.29	33.45%
Sn 189.927†	16.1	0.531068	mg/L	0.0502282	0.531068	mg/L	0.0502282	9.46%
Ti 334.940†	5146.2	0.504181	mg/L	0.0241435	0.504181	mg/L	0.0241435	4.79%
V 290.880†	783.4	0.508639	mg/L	0.0112377	0.508639	mg/L	0.0112377	2.21%
Zn 206.200†	337.5	0.519083	mg/L	0.0148088	0.519083	mg/L	0.0148088	2.85%
Si 251.611†	237.9	0.568244	mg/L	0.0174598	0.568244	mg/L	0.0174598	3.07%
B 249.772†	553.8	0.481403	mg/L	0.0189581	0.481403	mg/L	0.0189581	3.94%

Sequence No.: 16
Sample ID: LCS MR 85272
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 9/14/2020 7:26:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS MR 85272

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	17574.6	99.7	%	1.62				1.62%
Y 371.029	3912.5	97.9	%	1.54				1.58%
Al 308.215†	1322.3	5.01592	mg/L	0.082636	5.01592	mg/L	0.082636	1.65%
Ba 233.527†	324.7	0.513349	mg/L	0.0089407	0.513349	mg/L	0.0089407	1.74%
Ca 315.887†	68655.3	50.7412	mg/L	0.10006	50.7412	mg/L	0.10006	0.20%
Cu 327.393†	626.5	0.475537	mg/L	0.0066878	0.475537	mg/L	0.0066878	1.41%
Fe 273.955†	1452.6	4.96858	mg/L	0.073634	4.96858	mg/L	0.073634	1.48%
K 766.490	28865.0	48.3422	mg/L	0.69551	48.3422	mg/L	0.69551	1.44%
Mg 279.077†	10818.0	49.9241	mg/L	0.11351	49.9241	mg/L	0.11351	0.23%
Mn 257.610†	3996.0	0.493840	mg/L	0.0003871	0.493840	mg/L	0.0003871	0.08%
Mo 202.031†	24.2	0.468595	mg/L	0.0156932	0.468595	mg/L	0.0156932	3.35%
Na 589.592	158656.2	48.5187	mg/L	0.36983	48.5187	mg/L	0.36983	0.76%
Ni 231.604†	123.4	0.497046	mg/L	0.0118956	0.497046	mg/L	0.0118956	2.39%
Se 196.026†	7.3						2.80	38.52%
Sn 189.927†	17.3	0.568411	mg/L	0.0301978	0.568411	mg/L	0.0301978	5.31%
Ti 334.940†	5031.4	0.493010	mg/L	0.0003920	0.493010	mg/L	0.0003920	0.08%
V 290.880†	765.7	0.497170	mg/L	0.0103019	0.497170	mg/L	0.0103019	2.07%
Zn 206.200†	333.0	0.512098	mg/L	0.0082418	0.512098	mg/L	0.0082418	1.61%
Si 251.611†	232.2	0.555455	mg/L	0.0046458	0.555455	mg/L	0.0046458	0.84%
B 249.772†	553.6	0.481553	mg/L	0.0053032	0.481553	mg/L	0.0053032	1.10%

Sequence No.: 17
Sample ID: AD19206-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 9/14/2020 7:30:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-004

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	18106.6	103	%	0.7				0.72%
Y 371.029	4019.7	101	%	0.7				0.73%
Al 308.215†	-1.0	0.0150265	mg/L	0.02986618	0.0150265	mg/L	0.02986618	198.76%
Ba 233.527†	70.5	0.110755	mg/L	0.0023061	0.110755	mg/L	0.0023061	2.08%
Ca 315.887†	242445.4	179.338	mg/L	1.4063	179.338	mg/L	1.4063	0.78%
Cu 327.393†	26.9	0.0172147	mg/L	0.00534360	0.0172147	mg/L	0.00534360	31.04%
Fe 273.955†	118.4	0.418941	mg/L	0.0126957	0.418941	mg/L	0.0126957	3.03%
K 766.490	5274.7	9.37553	mg/L	0.071573	9.37553	mg/L	0.071573	0.76%
Mg 279.077†	7723.2	35.6653	mg/L	0.05049	35.6653	mg/L	0.05049	0.14%
Mn 257.610†	16671.8	2.05629	mg/L	0.004452	2.05629	mg/L	0.004452	0.22%
Mo 202.031†	4.7	0.0970850	mg/L	0.01853826	0.0970850	mg/L	0.01853826	19.09%
Na 589.592	217600.6	66.4272	mg/L	0.25274	66.4272	mg/L	0.25274	0.38%
Ni 231.604†	-8.4	-0.0234515	mg/L	0.01037628	-0.0234515	mg/L	0.01037628	44.25%
Se 196.026†	-0.3						3.12	894.11%
Sn 189.927†	-0.9	0.0016246	mg/L	0.01841849	0.0016246	mg/L	0.01841849	>999.9%
Ti 334.940†	84.4	0.0116465	mg/L	0.00088908	0.0116465	mg/L	0.00088908	7.63%
V 290.880†	-0.4	0.0006923	mg/L	0.00262534	0.0006923	mg/L	0.00262534	379.21%
Zn 206.200†	7.9	0.0119524	mg/L	0.00302778	0.0119524	mg/L	0.00302778	25.33%
Si 251.611†	4655.9	10.6515	mg/L	0.05940	10.6515	mg/L	0.05940	0.56%
B 249.772†	352.2	0.319040	mg/L	0.0054042	0.319040	mg/L	0.0054042	1.69%

Sequence No.: 18
Sample ID: AD19206-004 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 9/14/2020 7:34:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-004 MR

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	17839.6	101	%	1.2				1.21%
Y 371.029	3966.6	99.3	%	1.09				1.10%
Al 308.215†	-0.5	0.0167336	mg/L	0.01274818	0.0167336	mg/L	0.01274818	76.18%
Ba 233.527†	75.3	0.118289	mg/L	0.0025882	0.118289	mg/L	0.0025882	2.19%
Ca 315.887†	242007.9	179.015	mg/L	1.2614	179.015	mg/L	1.2614	0.70%
Cu 327.393†	21.0	0.0127460	mg/L	0.00523663	0.0127460	mg/L	0.00523663	41.08%
Fe 273.955†	118.0	0.417855	mg/L	0.0027606	0.417855	mg/L	0.0027606	0.66%
K 766.490	5235.9	9.31138	mg/L	0.091971	9.31138	mg/L	0.091971	0.99%
Mg 279.077†	7718.9	35.6457	mg/L	0.12840	35.6457	mg/L	0.12840	0.36%
Mn 257.610†	16750.2	2.06596	mg/L	0.008595	2.06596	mg/L	0.008595	0.42%
Mo 202.031†	5.3	0.107765	mg/L	0.0205321	0.107765	mg/L	0.0205321	19.05%
Na 589.592	214432.3	65.4646	mg/L	0.50528	65.4646	mg/L	0.50528	0.77%
Ni 231.604†	-5.4	-0.0119688	mg/L	0.00368410	-0.0119688	mg/L	0.00368410	30.78%
Se 196.026†	-1.9						1.21	63.28%
Sn 189.927†	-2.1	-0.0366414	mg/L	0.04855900	-0.0366414	mg/L	0.04855900	132.52%
Ti 334.940†	99.1	0.0130785	mg/L	0.00050513	0.0130785	mg/L	0.00050513	3.86%
V 290.880†	-0.2	0.0008337	mg/L	0.00476208	0.0008337	mg/L	0.00476208	571.20%
Zn 206.200†	8.4	0.0127601	mg/L	0.00304198	0.0127601	mg/L	0.00304198	23.84%
Si 251.611†	4681.9	10.7108	mg/L	0.04984	10.7108	mg/L	0.04984	0.47%
B 249.772†	354.0	0.320666	mg/L	0.0021947	0.320666	mg/L	0.0021947	0.68%

Sequence No.: 19
Sample ID: AD19206-004 MS 1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 9/14/2020 7:38:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-004 MS 1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	17947.7	102	%	1.0				0.95%
Y 371.029	3951.1	98.9	%	0.48				0.48%
Al 308.215†	1294.0	4.90981	mg/L	0.043143	4.90981	mg/L	0.043143	0.88%
Ba 233.527†	397.7	0.628975	mg/L	0.0067516	0.628975	mg/L	0.0067516	1.07%
Ca 315.887†	314582.7	232.717	mg/L	2.8311	232.717	mg/L	2.8311	1.22%
Cu 327.393†	630.3	0.478498	mg/L	0.0020736	0.478498	mg/L	0.0020736	0.43%
Fe 273.955†	1604.8	5.48762	mg/L	0.049528	5.48762	mg/L	0.049528	0.90%
K 766.490	36563.5	61.0588	mg/L	0.53616	61.0588	mg/L	0.53616	0.88%
Mg 279.077†	18476.1	85.2072	mg/L	0.19902	85.2072	mg/L	0.19902	0.23%
Mn 257.610†	21102.3	2.60241	mg/L	0.004679	2.60241	mg/L	0.004679	0.18%
Mo 202.031†	30.6	0.591834	mg/L	0.0239577	0.591834	mg/L	0.0239577	4.05%
Na 589.592	384902.4	117.257	mg/L	0.4194	117.257	mg/L	0.4194	0.36%
Ni 231.604†	120.5	0.485804	mg/L	0.0206682	0.485804	mg/L	0.0206682	4.25%
Se 196.026†	5.5						3.36	61.50%
Sn 189.927†	14.7	0.503254	mg/L	0.0420736	0.503254	mg/L	0.0420736	8.36%
Ti 334.940†	5087.9	0.498504	mg/L	0.0027388	0.498504	mg/L	0.0027388	0.55%
V 290.880†	756.3	0.491114	mg/L	0.0046701	0.491114	mg/L	0.0046701	0.95%
Zn 206.200†	329.9	0.507314	mg/L	0.0042545	0.507314	mg/L	0.0042545	0.84%
Si 251.611†	5114.7	11.6958	mg/L	0.03014	11.6958	mg/L	0.03014	0.26%
B 249.772†	911.0	0.796328	mg/L	0.0087320	0.796328	mg/L	0.0087320	1.10%

Sequence No.: 20
Sample ID: AD19206-004 MS 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 9/14/2020 7:42:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-004 MS 2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	17717.6	100	%	0.5				0.53%
Y 371.029	3906.5	97.8	%	0.57				0.59%
Al 308.215†	1303.1	4.94333	mg/L	0.064298	4.94333	mg/L	0.064298	1.30%
Ba 233.527†	396.3	0.626675	mg/L	0.0062693	0.626675	mg/L	0.0062693	1.00%
Ca 315.887†	315141.9	233.131	mg/L	3.0235	233.131	mg/L	3.0235	1.30%
Cu 327.393†	628.9	0.477395	mg/L	0.0072587	0.477395	mg/L	0.0072587	1.52%
Fe 273.955†	1548.3	5.29470	mg/L	0.037415	5.29470	mg/L	0.037415	0.71%
K 766.490	36400.4	60.7893	mg/L	0.22547	60.7893	mg/L	0.22547	0.37%
Mg 279.077†	18481.0	85.2299	mg/L	0.15092	85.2299	mg/L	0.15092	0.18%
Mn 257.610†	20996.8	2.58940	mg/L	0.003855	2.58940	mg/L	0.003855	0.15%
Mo 202.031†	29.1	0.561865	mg/L	0.0253494	0.561865	mg/L	0.0253494	4.51%
Na 589.592	382193.5	116.434	mg/L	0.8511	116.434	mg/L	0.8511	0.73%
Ni 231.604†	120.2	0.484433	mg/L	0.0059888	0.484433	mg/L	0.0059888	1.24%
Se 196.026†	8.6						2.65	30.93%
Sn 189.927†	15.6	0.532017	mg/L	0.0431717	0.532017	mg/L	0.0431717	8.11%
Ti 334.940†	5130.3	0.502636	mg/L	0.0021990	0.502636	mg/L	0.0021990	0.44%
V 290.880†	754.7	0.490063	mg/L	0.0027021	0.490063	mg/L	0.0027021	0.55%
Zn 206.200†	330.5	0.508263	mg/L	0.0028783	0.508263	mg/L	0.0028783	0.57%
Si 251.611†	5052.6	11.5544	mg/L	0.01258	11.5544	mg/L	0.01258	0.11%
B 249.772†	911.9	0.797779	mg/L	0.0125156	0.797779	mg/L	0.0125156	1.57%

Sequence No.: 21
Sample ID: AD19206-004 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 9/14/2020 7:46:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-004 PS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	17772.7	101	%	0.7				0.68%
Y 371.029	3919.3	98.1	%	0.28				0.29%
Al 308.215†	1295.2	4.91405	mg/L	0.025227	4.91405	mg/L	0.025227	0.51%
Ba 233.527†	388.8	0.614839	mg/L	0.0017649	0.614839	mg/L	0.0017649	0.29%
Ca 315.887†	304265.9	225.083	mg/L	3.4231	225.083	mg/L	3.4231	1.52%
Cu 327.393†	641.6	0.487093	mg/L	0.0037820	0.487093	mg/L	0.0037820	0.78%
Fe 273.955†	1540.4	5.26780	mg/L	0.032208	5.26780	mg/L	0.032208	0.61%
K 766.490	34357.5	57.4149	mg/L	0.48368	57.4149	mg/L	0.48368	0.84%
Mg 279.077†	17652.9	81.4144	mg/L	0.21184	81.4144	mg/L	0.21184	0.26%
Mn 257.610†	20584.8	2.53862	mg/L	0.006504	2.53862	mg/L	0.006504	0.26%
Mo 202.031†	28.1	0.544072	mg/L	0.0186051	0.544072	mg/L	0.0186051	3.42%
Na 589.592	367133.5	111.858	mg/L	0.8386	111.858	mg/L	0.8386	0.75%
Ni 231.604†	121.2	0.488443	mg/L	0.0046309	0.488443	mg/L	0.0046309	0.95%
Se 196.026†	9.3						2.70	29.09%
Sn 189.927†	16.6	0.562963	mg/L	0.0260358	0.562963	mg/L	0.0260358	4.62%
Ti 334.940†	5155.1	0.505044	mg/L	0.0062501	0.505044	mg/L	0.0062501	1.24%
V 290.880†	756.9	0.491463	mg/L	0.0056539	0.491463	mg/L	0.0056539	1.15%
Zn 206.200†	336.7	0.517766	mg/L	0.0099153	0.517766	mg/L	0.0099153	1.92%
Si 251.611†	5004.8	11.4454	mg/L	0.01086	11.4454	mg/L	0.01086	0.09%
B 249.772†	881.1	0.770531	mg/L	0.0058439	0.770531	mg/L	0.0058439	0.76%

Sequence No.: 22
Sample ID: AD19206-004 SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 9/14/2020 7:50:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-004 SD

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	18003.5	102	%	0.7				0.66%
Y 371.029	4014.1	100	%	0.4				0.37%
Al 308.215†	-3.5	0.0057058	mg/L	0.04035761	0.0057058	mg/L	0.04035761	707.31%
Ba 233.527†	15.7	0.0238848	mg/L	0.00426309	0.0238848	mg/L	0.00426309	17.85%
Ca 315.887†	49308.6	36.4255	mg/L	0.09768	36.4255	mg/L	0.09768	0.27%
Cu 327.393†	24.0	0.0150297	mg/L	0.00668604	0.0150297	mg/L	0.00668604	44.49%
Fe 273.955†	31.7	0.123582	mg/L	0.0128389	0.123582	mg/L	0.0128389	10.39%
K 766.490	1288.6	2.79123	mg/L	0.076000	2.79123	mg/L	0.076000	2.72%
Mg 279.077†	1575.5	7.34116	mg/L	0.037414	7.34116	mg/L	0.037414	0.51%
Mn 257.610†	3399.7	0.420342	mg/L	0.0016231	0.420342	mg/L	0.0016231	0.39%
Mo 202.031†	0.2	0.0099533	mg/L	0.03290537	0.0099533	mg/L	0.03290537	330.60%
Na 589.592	43812.7	13.6268	mg/L	0.11401	13.6268	mg/L	0.11401	0.84%
Ni 231.604†	-5.8	-0.0134769	mg/L	0.00586560	-0.0134769	mg/L	0.00586560	43.52%
Se 196.026†	-1.0						1.26	130.03%
Sn 189.927†	-1.6	-0.0344176	mg/L	0.02585337	-0.0344176	mg/L	0.02585337	75.12%
Ti 334.940†	-1.8	0.0032614	mg/L	0.00138818	0.0032614	mg/L	0.00138818	42.56%
V 290.880†	2.4	0.0025346	mg/L	0.00465503	0.0025346	mg/L	0.00465503	183.66%
Zn 206.200†	1.6	0.0022071	mg/L	0.00195332	0.0022071	mg/L	0.00195332	88.50%
Si 251.611†	930.4	2.15090	mg/L	0.015215	2.15090	mg/L	0.015215	0.71%
B 249.772†	80.1	0.0791712	mg/L	0.00114943	0.0791712	mg/L	0.00114943	1.45%

Sequence No.: 23
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 7:54:11 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	17811.8	101	%	1.2				1.15%
Y 371.029	3711.7	92.9	%	1.15				1.24%
Al 308.215†	1323.3	5.02026	mg/L	0.100875	5.02026	mg/L	0.100875	2.01%
QC value within limits for Al 308.215 Recovery = 100.41%								
Ba 233.527†	316.7	0.500623	mg/L	0.0070105	0.500623	mg/L	0.0070105	1.40%
QC value within limits for Ba 233.527 Recovery = 100.12%								
Ca 315.887†	68920.0	50.9371	mg/L	0.05420	50.9371	mg/L	0.05420	0.11%
QC value within limits for Ca 315.887 Recovery = 101.87%								
Cu 327.393†	640.2	0.486017	mg/L	0.0089476	0.486017	mg/L	0.0089476	1.84%
QC value within limits for Cu 327.393 Recovery = 97.20%								
Fe 273.955†	1451.6	4.96504	mg/L	0.055958	4.96504	mg/L	0.055958	1.13%
QC value within limits for Fe 273.955 Recovery = 99.30%								
K 766.490	29363.7	49.1660	mg/L	0.42483	49.1660	mg/L	0.42483	0.86%
QC value within limits for K 766.490 Recovery = 98.33%								
Mg 279.077†	10810.3	49.8886	mg/L	0.07501	49.8886	mg/L	0.07501	0.15%
QC value within limits for Mg 279.077 Recovery = 99.78%								
Mn 257.610†	3964.7	0.489984	mg/L	0.0008393	0.489984	mg/L	0.0008393	0.17%
QC value within limits for Mn 257.610 Recovery = 98.00%								
Mo 202.031†	25.8	0.499520	mg/L	0.0357943	0.499520	mg/L	0.0357943	7.17%
QC value within limits for Mo 202.031 Recovery = 99.90%								
Na 589.592	166072.0	50.7718	mg/L	0.10610	50.7718	mg/L	0.10610	0.21%
QC value within limits for Na 589.592 Recovery = 101.54%								
Ni 231.604†	122.9	0.495344	mg/L	0.0101678	0.495344	mg/L	0.0101678	2.05%
QC value within limits for Ni 231.604 Recovery = 99.07%								
Se 196.026†	7.6						2.78	36.38%
Unable to evaluate QC.								
Sn 189.927†	16.9	0.553440	mg/L	0.0022315	0.553440	mg/L	0.0022315	0.40%
QC value greater than the upper limit for Sn 189.927 Recovery = 110.69%								
Ti 334.940†	4998.8	0.489842	mg/L	0.0034232	0.489842	mg/L	0.0034232	0.70%
QC value within limits for Ti 334.940 Recovery = 97.97%								
V 290.880†	771.4	0.500848	mg/L	0.0045987	0.500848	mg/L	0.0045987	0.92%
QC value within limits for V 290.880 Recovery = 100.17%								
Zn 206.200†	333.9	0.513518	mg/L	0.0061174	0.513518	mg/L	0.0061174	1.19%
QC value within limits for Zn 206.200 Recovery = 102.70%								
Si 251.611†	2212.1	5.07302	mg/L	0.058374	5.07302	mg/L	0.058374	1.15%
QC value within limits for Si 251.611 Recovery = 101.46%								
B 249.772†	559.6	0.486921	mg/L	0.0077032	0.486921	mg/L	0.0077032	1.58%
QC value within limits for B 249.772 Recovery = 97.38%								

QC Failed. Continue with analysis.

Sequence No.: 24
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/14/2020 7:58:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	17803.5	101	%	0.4				0.40%
Y 371.029	4014.8	100	%	0.3				0.28%
Al 308.215†	-4.1	0.0033784	mg/L	0.01248614	0.0033784	mg/L	0.01248614	369.58%
QC value within limits for Al 308.215 Recovery = Not calculated								
Ba 233.527†	2.3	0.0026715	mg/L	0.00567127	0.0026715	mg/L	0.00567127	212.29%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Ca 315.887†	23.7	-0.0432332	mg/L	0.00054830	-0.0432332	mg/L	0.00054830	1.27%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cu 327.393†	30.7	0.0201204	mg/L	0.00166678	0.0201204	mg/L	0.00166678	8.28%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	4.3	0.0299622	mg/L	0.02063475	0.0299622	mg/L	0.02063475	68.87%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490	124.0	0.867463	mg/L	0.0683841	0.867463	mg/L	0.0683841	7.88%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	4.8	0.104601	mg/L	0.0071591	0.104601	mg/L	0.0071591	6.84%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-0.8	0.0011813	mg/L	0.00018307	0.0011813	mg/L	0.00018307	15.50%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	1.0	0.0267453	mg/L	0.00990732	0.0267453	mg/L	0.00990732	37.04%
QC value greater than the upper limit for Mo 202.031 Recovery = Not calculated								
Na 589.592	258.3	0.394131	mg/L	0.0312019	0.394131	mg/L	0.0312019	7.92%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-6.5	-0.0161964	mg/L	0.00949039	-0.0161964	mg/L	0.00949039	58.60%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Se 196.026†	-0.7						1.31	192.29%
Unable to evaluate QC.								
Sn 189.927†	0.8	0.0357730	mg/L	0.01635396	0.0357730	mg/L	0.01635396	45.72%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-24.7	0.0010346	mg/L	0.00081999	0.0010346	mg/L	0.00081999	79.26%
QC value within limits for Ti 334.940 Recovery = Not calculated								
V 290.880†	-0.0	0.0009653	mg/L	0.00127290	0.0009653	mg/L	0.00127290	131.87%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	1.7	0.0023225	mg/L	0.00190599	0.0023225	mg/L	0.00190599	82.07%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	0.2	0.0280904	mg/L	0.00668778	0.0280904	mg/L	0.00668778	23.81%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	6.3	0.0141183	mg/L	0.00186077	0.0141183	mg/L	0.00186077	13.18%
QC value within limits for B 249.772 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 25
Sample ID: AD19159-011
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 9/14/2020 8:01:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-011

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	17721.5	100	%	0.8				0.77%
Y 371.029	3998.7	100	%	0.9				0.91%
Al 308.215†	-7.0	-0.0073658	mg/L	0.02292538	-0.0073658	mg/L	0.02292538	311.24%
Ba 233.527†	0.6	-0.0000854	mg/L	0.00118228	-0.0000854	mg/L	0.00118228	>999.9%
Ca 315.887†	109.0	0.0198778	mg/L	0.01071957	0.0198778	mg/L	0.01071957	53.93%
Cu 327.393†	22.2	0.0136556	mg/L	0.00188344	0.0136556	mg/L	0.00188344	13.79%
Fe 273.955†	8.6	0.0445729	mg/L	0.00863087	0.0445729	mg/L	0.00863087	19.36%
K 766.490	51.8	0.748195	mg/L	0.0553421	0.748195	mg/L	0.0553421	7.40%
Mg 279.077†	0.0	0.0824927	mg/L	0.03326973	0.0824927	mg/L	0.03326973	40.33%
Mn 257.610†	8.7	0.0023528	mg/L	0.00016703	0.0023528	mg/L	0.00016703	7.10%
Mo 202.031†	-0.0	0.0060929	mg/L	0.00450957	0.0060929	mg/L	0.00450957	74.01%
Na 589.592	1055.5	0.636322	mg/L	0.0053460	0.636322	mg/L	0.0053460	0.84%
Ni 231.604†	-5.1	-0.0104138	mg/L	0.01208107	-0.0104138	mg/L	0.01208107	116.01%
Se 196.026†	-1.9						0.35	17.90%
Sn 189.927†	-0.5	-0.0025620	mg/L	0.04796195	-0.0025620	mg/L	0.04796195	>999.9%
Ti 334.940†	-21.0	0.0013951	mg/L	0.00003054	0.0013951	mg/L	0.00003054	2.19%
V 290.880†	2.5	0.0025969	mg/L	0.00366640	0.0025969	mg/L	0.00366640	141.19%
Zn 206.200†	2.1	0.0029910	mg/L	0.00189708	0.0029910	mg/L	0.00189708	63.43%
Si 251.611†	42.5	0.124765	mg/L	0.0119352	0.124765	mg/L	0.0119352	9.57%
B 249.772†	0.8	0.0092131	mg/L	0.00167039	0.0092131	mg/L	0.00167039	18.13%

Sequence No.: 26
Sample ID: AD19206-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 9/14/2020 8:05:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	17853.4	101	%	0.2				0.16%
Y 371.029	3970.6	99.4	%	0.33				0.33%
Al 308.215†	5.8	0.0398856	mg/L	0.03490526	0.0398856	mg/L	0.03490526	87.51%
Ba 233.527†	49.8	0.0779293	mg/L	0.00378325	0.0779293	mg/L	0.00378325	4.85%
Ca 315.887†	93187.3	68.8938	mg/L	0.21240	68.8938	mg/L	0.21240	0.31%
Cu 327.393†	18.9	0.0110969	mg/L	0.00236767	0.0110969	mg/L	0.00236767	21.34%
Fe 273.955†	7.9	0.0423545	mg/L	0.02100600	0.0423545	mg/L	0.02100600	49.60%
K 766.490	3470.3	6.39489	mg/L	0.074920	6.39489	mg/L	0.074920	1.17%
Mg 279.077†	3562.2	16.4944	mg/L	0.13360	16.4944	mg/L	0.13360	0.81%
Mn 257.610†	14.0	0.0030163	mg/L	0.00006623	0.0030163	mg/L	0.00006623	2.20%
Mo 202.031†	1.8	0.0412222	mg/L	0.01229627	0.0412222	mg/L	0.01229627	29.83%
Na 589.592	140317.7	42.9471	mg/L	0.06061	42.9471	mg/L	0.06061	0.14%
Ni 231.604†	-2.0	0.0017094	mg/L	0.00622123	0.0017094	mg/L	0.00622123	363.95%
Se 196.026†	-0.6						2.45	439.66%
Sn 189.927†	0.2	0.0268890	mg/L	0.02239657	0.0268890	mg/L	0.02239657	83.29%
Ti 334.940†	41.4	0.0074679	mg/L	0.00078265	0.0074679	mg/L	0.00078265	10.48%
V 290.880†	-5.2	-0.0023881	mg/L	0.00085701	-0.0023881	mg/L	0.00085701	35.89%
Zn 206.200†	23.1	0.0352348	mg/L	0.00255138	0.0352348	mg/L	0.00255138	7.24%
Si 251.611†	3165.8	7.25153	mg/L	0.030228	7.25153	mg/L	0.030228	0.42%
B 249.772†	78.6	0.0781319	mg/L	0.00171538	0.0781319	mg/L	0.00171538	2.20%

Sequence No.: 27
Sample ID: AD19206-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 9/14/2020 8:09:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-002

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	18271.0	104	%	0.6				0.57%
Y 371.029	4063.4	102	%	0.8				0.82%
Al 308.215†	-0.6	0.0162771	mg/L	0.00634856	0.0162771	mg/L	0.00634856	39.00%
Ba 233.527†	80.3	0.126138	mg/L	0.0059024	0.126138	mg/L	0.0059024	4.68%
Ca 315.887†	183519.1	135.735	mg/L	0.3206	135.735	mg/L	0.3206	0.24%
Cu 327.393†	18.3	0.0106637	mg/L	0.00443223	0.0106637	mg/L	0.00443223	41.56%
Fe 273.955†	205.7	0.716806	mg/L	0.0024007	0.716806	mg/L	0.0024007	0.33%
K 766.490	4224.9	7.64134	mg/L	0.141495	7.64134	mg/L	0.141495	1.85%
Mg 279.077†	3826.4	17.7118	mg/L	0.02450	17.7118	mg/L	0.02450	0.14%
Mn 257.610†	38118.2	4.69982	mg/L	0.010872	4.69982	mg/L	0.010872	0.23%
Mo 202.031†	4.3	0.0886719	mg/L	0.03847230	0.0886719	mg/L	0.03847230	43.39%
Na 589.592	83808.7	25.7785	mg/L	0.17838	25.7785	mg/L	0.17838	0.69%
Ni 231.604†	1.3	0.0148814	mg/L	0.00446105	0.0148814	mg/L	0.00446105	29.98%
Se 196.026†	-2.3						2.05	89.99%
Sn 189.927†	-0.7	0.0030302	mg/L	0.01080375	0.0030302	mg/L	0.01080375	356.54%
Ti 334.940†	60.3	0.0093058	mg/L	0.00053076	0.0093058	mg/L	0.00053076	5.70%
V 290.880†	-2.9	-0.0008940	mg/L	0.00340033	-0.0008940	mg/L	0.00340033	380.35%
Zn 206.200†	2.8	0.0040914	mg/L	0.00460751	0.0040914	mg/L	0.00460751	112.61%
Si 251.611†	3455.6	7.91258	mg/L	0.019203	7.91258	mg/L	0.019203	0.24%
B 249.772†	209.6	0.191731	mg/L	0.0028763	0.191731	mg/L	0.0028763	1.50%

Sequence No.: 28
Sample ID: AD19206-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 9/14/2020 8:13:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19206-003

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	18301.2	104	%	0.9				0.82%
Y 371.029	4054.4	101	%	0.3				0.26%
Al 308.215†	1.0	0.0222516	mg/L	0.02493283	0.0222516	mg/L	0.02493283	112.05%
Ba 233.527†	323.0	0.510514	mg/L	0.0020241	0.510514	mg/L	0.0020241	0.40%
Ca 315.887†	117361.0	86.7813	mg/L	1.56515	86.7813	mg/L	1.56515	1.80%
Cu 327.393†	36.5	0.0245849	mg/L	0.00210483	0.0245849	mg/L	0.00210483	8.56%
Fe 273.955†	4149.6	14.1651	mg/L	0.07137	14.1651	mg/L	0.07137	0.50%
K 766.490	45687.3	76.1296	mg/L	0.52315	76.1296	mg/L	0.52315	0.69%
Mg 279.077†	5977.8	27.6237	mg/L	0.17300	27.6237	mg/L	0.17300	0.63%
Mn 257.610†	6015.7	0.742790	mg/L	0.0037382	0.742790	mg/L	0.0037382	0.50%
Mo 202.031†	2.0	0.0449407	mg/L	0.02536747	0.0449407	mg/L	0.02536747	56.45%
Na 589.592	351638.8	107.151	mg/L	0.6836	107.151	mg/L	0.6836	0.64%
Ni 231.604†	-6.2	-0.0150484	mg/L	0.00509160	-0.0150484	mg/L	0.00509160	33.83%
Se 196.026†	0.0						1.93	>999.9%
Sn 189.927†	-0.7	-0.0002082	mg/L	0.01064437	-0.0002082	mg/L	0.01064437	>999.9%
Ti 334.940†	38.9	0.0072224	mg/L	0.00053018	0.0072224	mg/L	0.00053018	7.34%
V 290.880†	-2.9	-0.0009229	mg/L	0.00975851	-0.0009229	mg/L	0.00975851	>999.9%
Zn 206.200†	25.3	0.0387456	mg/L	0.00276979	0.0387456	mg/L	0.00276979	7.15%
Si 251.611†	4908.4	11.2316	mg/L	0.05798	11.2316	mg/L	0.05798	0.52%
B 249.772†	967.6	0.816197	mg/L	0.0020721	0.816197	mg/L	0.0020721	0.25%

Sequence No.: 29
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 8:17:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	18055.9	102	%	1.0				0.99%
Y 371.029	3750.8	93.9	%	1.20				1.27%
Al 308.215†	1303.1	4.94355	mg/L	0.099611	4.94355	mg/L	0.099611	2.01%
QC value within limits for Al 308.215 Recovery = 98.87%								
Ba 233.527†	316.6	0.500473	mg/L	0.0081780	0.500473	mg/L	0.0081780	1.63%
QC value within limits for Ba 233.527 Recovery = 100.09%								
Ca 315.887†	69041.3	51.0269	mg/L	0.12221	51.0269	mg/L	0.12221	0.24%
QC value within limits for Ca 315.887 Recovery = 102.05%								
Cu 327.393†	639.4	0.485466	mg/L	0.0035181	0.485466	mg/L	0.0035181	0.72%
QC value within limits for Cu 327.393 Recovery = 97.09%								
Fe 273.955†	1430.4	4.89295	mg/L	0.076266	4.89295	mg/L	0.076266	1.56%
QC value within limits for Fe 273.955 Recovery = 97.86%								
K 766.490	29858.2	49.9829	mg/L	0.27386	49.9829	mg/L	0.27386	0.55%
QC value within limits for K 766.490 Recovery = 99.97%								
Mg 279.077†	10821.3	49.9393	mg/L	0.30913	49.9393	mg/L	0.30913	0.62%
QC value within limits for Mg 279.077 Recovery = 99.88%								
Mn 257.610†	3962.6	0.489726	mg/L	0.0008702	0.489726	mg/L	0.0008702	0.18%
QC value within limits for Mn 257.610 Recovery = 97.95%								
Mo 202.031†	25.9	0.501427	mg/L	0.0142497	0.501427	mg/L	0.0142497	2.84%
QC value within limits for Mo 202.031 Recovery = 100.29%								
Na 589.592	167450.3	51.1905	mg/L	0.71128	51.1905	mg/L	0.71128	1.39%
QC value within limits for Na 589.592 Recovery = 102.38%								
Ni 231.604†	121.5	0.489748	mg/L	0.0089885	0.489748	mg/L	0.0089885	1.84%
QC value within limits for Ni 231.604 Recovery = 97.95%								
Se 196.026†	5.6						0.66	11.76%
Unable to evaluate QC.								
Sn 189.927†	15.7	0.516975	mg/L	0.0326132	0.516975	mg/L	0.0326132	6.31%
QC value within limits for Sn 189.927 Recovery = 103.39%								
Ti 334.940†	4974.8	0.487505	mg/L	0.0015487	0.487505	mg/L	0.0015487	0.32%
QC value within limits for Ti 334.940 Recovery = 97.50%								
V 290.880†	754.7	0.490038	mg/L	0.0087492	0.490038	mg/L	0.0087492	1.79%
QC value within limits for V 290.880 Recovery = 98.01%								
Zn 206.200†	331.8	0.510291	mg/L	0.0082675	0.510291	mg/L	0.0082675	1.62%
QC value within limits for Zn 206.200 Recovery = 102.06%								
Si 251.611†	2187.4	5.01674	mg/L	0.078393	5.01674	mg/L	0.078393	1.56%
QC value within limits for Si 251.611 Recovery = 100.33%								
B 249.772†	551.3	0.479812	mg/L	0.0082621	0.479812	mg/L	0.0082621	1.72%
QC value within limits for B 249.772 Recovery = 95.96%								

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 30
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 9/14/2020 8:21:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

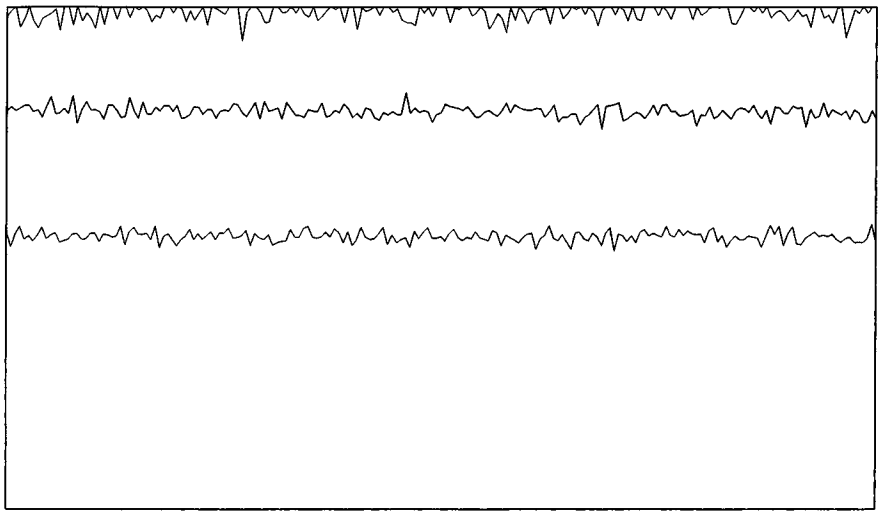
Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	17984.1	102	%	1.0				1.00%
Y 371.029	4064.9	102	%	0.3				0.27%
Al 308.215†	-10.1	-0.0187797	mg/L	0.02647404	-0.0187797	mg/L	0.02647404	140.97%
QC value within limits for Al 308.215 Recovery = Not calculated								
Ba 233.527†	-1.0	-0.0025069	mg/L	0.00255486	-0.0025069	mg/L	0.00255486	101.91%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Ca 315.887†	3.7	-0.0579984	mg/L	0.00442314	-0.0579984	mg/L	0.00442314	7.63%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cu 327.393†	24.5	0.0153785	mg/L	0.00107662	0.0153785	mg/L	0.00107662	7.00%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.1	0.0116235	mg/L	0.01343508	0.0116235	mg/L	0.01343508	115.59%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490	164.4	0.934152	mg/L	0.0329145	0.934152	mg/L	0.0329145	3.52%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	-0.3	0.0809363	mg/L	0.01400574	0.0809363	mg/L	0.01400574	17.30%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	1.2	0.0014385	mg/L	0.00041563	0.0014385	mg/L	0.00041563	28.89%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.4	-0.0011295	mg/L	0.00826530	-0.0011295	mg/L	0.00826530	731.78%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592	192.3	0.374071	mg/L	0.0176857	0.374071	mg/L	0.0176857	4.73%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-6.0	-0.0142388	mg/L	0.01912641	-0.0142388	mg/L	0.01912641	134.33%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Se 196.026†	1.1						0.55	51.12%
Unable to evaluate QC.								
Sn 189.927†	-1.4	-0.0337026	mg/L	0.02146923	-0.0337026	mg/L	0.02146923	63.70%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-20.1	0.0014795	mg/L	0.00026134	0.0014795	mg/L	0.00026134	17.66%
QC value within limits for Ti 334.940 Recovery = Not calculated								
V 290.880†	2.6	0.0026375	mg/L	0.00215670	0.0026375	mg/L	0.00215670	81.77%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-0.1	-0.0003938	mg/L	0.00397867	-0.0003938	mg/L	0.00397867	>999.9%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Si 251.611†	-0.4	0.0269842	mg/L	0.01232158	0.0269842	mg/L	0.01232158	45.66%
QC value within limits for Si 251.611 Recovery = Not calculated								
B 249.772†	6.5	0.0143552	mg/L	0.00212731	0.0143552	mg/L	0.00212731	14.82%
QC value within limits for B 249.772 Recovery = Not calculated								

All analyte(s) passed QC. One or more analytes were not evaluated.

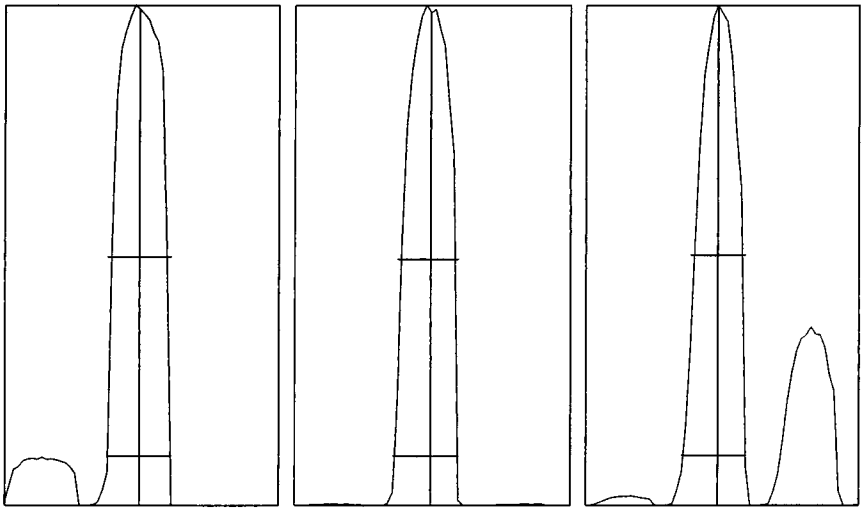
Tune Report

Tune File : ATUNE.U
Comment : TN091420



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	1.05
Doubly Charged:	70/140	0.97

m/z	Range	Count	Mean	RSD%	Background
7	50,000	38821.0	39561.8	1.46	0.60
89	100,000	53153.0	54247.6	1.98	1.40
205	50,000	51478.0	49640.9	2.12	2.60
156/140	2	1.105%	1.070%	6.18	
70/140	2	0.947%	0.960%	5.50	



m/z:	7	89	
Height:	39,787	53,521	4
Axis:	7.00	89.00	2
W-50%:	0.70	0.65	
W-10%:	0.700	0.700	

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Sep 14, 2020 08:45:28
Printed : Sep 14, 2020 08:45:32

Tune Report

Tune File : ATUNE.U
Comment : TN091420

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1500 W	Extract 1	:	0 V	AMU Gain	:	127
RF Matching	:	2.5 V	Extract 2	:	-115 V	AMU Offset	:	127
Smpl Depth	:	9.5 mm	Omega Bias	:	-65 V	Axis Gain	:	0.9998
Torch-H	:	-1.3 mm	Omega Lens	:	6.5 V	Axis Offset	:	0.02
Torch-V	:	0.6 mm	Cell Entrance	:	-40 V	QP Bias	:	-3 V
Carrier Gas	:	0.6 L/min	Cell Exit	:	-60 V			
Dilution Mode	:	ON	Deflect	:	13 V	===Detector Parameters===		
Dilution Gas	:	0.45 L/min	Plate Bias	:	-40 V	Discriminator	:	4.7 mV
Optional Gas	:	--- %	===Octopole Parameters===			Analog HV	:	1721 V
Nebulizer Pump	:	0.1 rps	OctP RF	:	190 V	Pulse HV	:	1656 V
Sample Pump	:	--- rps	OctP Bias	:	-8 V			
S/C Temp	:	2 degC						

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	--- mL/min	He Gas	:	4.3 mL/min	Optional Gas	:	--- %

Generated : Sep 14, 2020 08:45:28
Printed : Sep 14, 2020 08:45:34

C:\ICPMH\1\7500\QCTUNE.D

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 14 Sep 2020 08:57:25 am
Operator: PC
Misc Info:
Vial Number: 4
Current Method: C:\ICPMH\1\METHODS\TN6020.m

Minimum Response(CPS)

Element	Actual	Required	Flag
7 Li	4233390.00	0.00	
59 Co	3276590.00	0.00	
115 In	5395530.00	0.00	
205 Tl	4915160.00	0.00	

RSD (%)

Element	Actual	Required	Flag
7 Li	2.32	5.00	
59 Co	1.48	5.00	
115 In	0.68	5.00	
205 Tl	0.82	5.00	

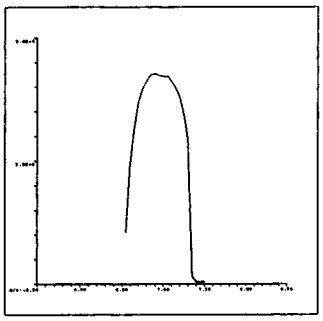
Ion Ratio

Element	Actual	Required	Flag
7 Li			
59 Co			
115 In			
205 Tl			

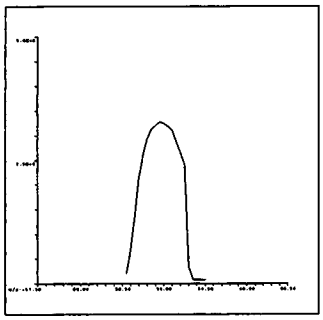
Maximum Bkg. Count(CPS)

Element	Actual	Required	Flag

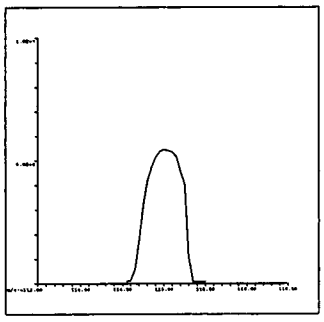
C:\ICPMH\1\7500\QCTUNE.D



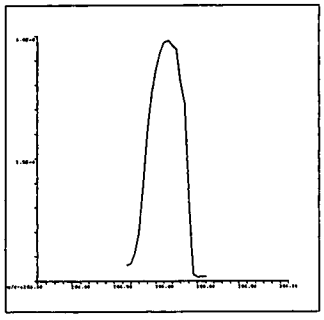
7 Li
Mass Calib.
Actual: 6.95
Required: 6.90-7.10
Flag:
Peak Width
Actual: 0.75
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.05
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.05
Required: 204.90-205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

QC Tune Result:Pass

Calibration Blank Report

File A091420A
B - 26214
QC 85272

Rnok.

Sample Name	**RINSE**
Data File Name	**001CALB.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T18:11:55-04:00**
Type	**CalBlk**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

Repeat Ag, As, Be, Cd, Co, Pb, Sb, Se
LRS for Ag
Ag LR = 100 PPB

9/15/20

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	267	10.23
Na	23	115	2	16043	2.72
Mg	24	115	2	2315	3.54
Al	27	115	2	780	9.20
K	39	115	2	23686	0.26
Ca	44	115	2	148	14.33
V	51	115	2	106	27.59
Cr	52	115	2	829	11.77
Mn	55	115	2	669	2.08
Fe	56	115	2	38374	2.48
Co	59	115	2	200	18.33
Ni	60	115	2	314	10.83
Cu	65	115	2	731	16.50
Zn	66	115	2	684	7.03
As	75	115	2	9	45.10
Se	78	115	2	14	22.81
Kr	83	115	1	77	47.03
Mo	95	115	1	281	24.02
Ag	107	115	1	2715	6.63
Cd	111	115	1	39	24.73
Sb	121	115	1	336	22.04
Ba	137	159	1	410	36.02
Tl	205	165	1	1227	6.94
(Pb)	206	165	1	1928	8.82
(Pb)	207	165	1	1650	3.97
Pb	208	165	1	3787	6.96

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	801345	1.08
Sc	45	2	39651	0.28
In	115	1	1203692	0.69
In	115	2	260844	1.49
Tb	159	1	1980502	1.25
Tb	159	2	858400	0.61
Ho	165	1	1976687	1.46
Ho	165	2	863580	0.80

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Blank Report

Sample Name	**CalBlk V-334455**
Data File Name	**002CALB.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T18:16:27-04:00**
Type	**CalBlk**
VialNumber	**2101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	200	6.67
Na	23	115	2	19257	1.54
Mg	24	115	2	2786	4.92
Al	27	115	2	659	4.53
K	39	115	2	24285	0.92
Ca	44	115	2	141	7.22
V	51	115	2	49	57.98
Cr	52	115	2	1301	15.76
Mn	55	115	2	683	5.93
Fe	56	115	2	33869	0.42
Co	59	115	2	170	21.21
Ni	60	115	2	346	21.27
Cu	65	115	2	1222	7.30
Zn	66	115	2	980	18.88
As	75	115	2	7	36.41
Se	78	115	2	11	5.97
Kr	83	115	1	111	15.10
Mo	95	115	1	130	29.57
Ag	107	115	1	1002	2.03
Cd	111	115	1	17	38.99
Sb	121	115	1	343	15.17
Ba	137	159	1	826	5.86
Tl	205	165	1	915	9.58
(Pb)	206	165	1	1619	11.55
(Pb)	207	165	1	1347	3.51
Pb	208	165	1	3378	7.48

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	799258	0.38
Sc	45	2	40230	0.90
In	115	1	1198701	0.55
In	115	2	262579	1.03
Tb	159	1	1977251	1.39
Tb	159	2	867830	0.82
Ho	165	1	1965073	0.76
Ho	165	2	874595	1.44

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd1 V-334456**
Data File Name	**003CALS.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T18:21:00-04:00**
Type	**CalStd**
VialNumber	**2102**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	3530	2.18
Na	23	115	2	66271	2.69
Mg	24	115	2	26427	3.38
Al	27	115	2	3588	3.29
K	39	115	2	41160	0.14
Ca	44	115	2	1063	2.37
V	51	115	2	2119	6.57
Cr	52	115	2	3839	4.94
Mn	55	115	2	2744	4.30
Fe	56	115	2	272098	2.73
Co	59	115	2	3997	7.03
Ni	60	115	2	1520	6.59
Cu	65	115	2	1991	3.53
Zn	66	115	2	4801	5.27
As	75	115	2	244	10.05
Se	78	115	2	111	19.28
Kr	83	115	1	111	32.91
Mo	95	115	1	3047	7.89
Ag	107	115	1	8841	3.19
Cd	111	115	1	1600	6.63
Sb	121	115	1	6536	5.54
Ba	137	159	1	3377	1.88
Tl	205	165	1	19738	2.98
(Pb)	206	165	1	7645	3.34
(Pb)	207	165	1	6623	5.24
Pb	208	165	1	15963	2.26

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	798534	0.62	799258	99.9	70	130	
Sc	45	2	40475	0.96	40230	100.6	70	130	
In	115	1	1206279	0.49	1198701	100.6	70	130	
In	115	2	266500	1.86	262579	101.5	70	130	
Tb	159	1	1978019	0.54	1977251	100.0	70	130	
Tb	159	2	872976	1.25	867830	100.6	70	130	
Ho	165	1	1942619	0.99	1965073	98.9	70	130	
Ho	165	2	874363	1.52	874595	100.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd2 V-334457**
Data File Name	**004CALS.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T18:25:31-04:00**
Type	**CalStd**
VialNumber	**2103**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	33158	4.26
Na	23	115	2	484310	0.75
Mg	24	115	2	235808	1.62
Al	27	115	2	26525	2.81
K	39	115	2	196202	0.65
Ca	44	115	2	8827	0.81
V	51	115	2	18987	2.12
Cr	52	115	2	24774	1.35
Mn	55	115	2	14936	2.54
Fe	56	115	2	2118978	2.12
Co	59	115	2	38650	1.06
Ni	60	115	2	10421	0.94
Cu	65	115	2	13656	1.08
Zn	66	115	2	5066	1.47
As	75	115	2	2436	1.23
Se	78	115	2	1007	4.89
Kr	83	115	1	99	21.41
Mo	95	115	1	28379	3.82
Ag	107	115	1	78782	4.22
Cd	111	115	1	15741	5.40
Sb	121	115	1	61168	3.65
Ba	137	159	1	25315	4.46
Tl	205	165	1	186374	4.44
(Pb)	206	165	1	62174	5.39
(Pb)	207	165	1	51270	4.51
Pb	208	165	1	127636	3.79

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	803250	0.19	799258	100.5	70	130	
Sc	45	2	40085	0.85	40230	99.6	70	130	
In	115	1	1202305	0.12	1198701	100.3	70	130	
In	115	2	266840	1.10	262579	101.6	70	130	
Tb	159	1	1984521	0.84	1977251	100.4	70	130	
Tb	159	2	882937	0.96	867830	101.7	70	130	
Ho	165	1	1973270	1.04	1965073	100.4	70	130	
Ho	165	2	883049	1.15	874595	101.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd3 V-334458**
Data File Name	**005CALS.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T18:30:04-04:00**
Type	**CalStd**
VialNumber	**2104**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	67828	6.12
Na	23	115	2	961565	1.40
Mg	24	115	2	479987	0.25
Al	27	115	2	52933	0.79
K	39	115	2	372644	0.64
Ca	44	115	2	17807	1.61
V	51	115	2	38905	2.11
Cr	52	115	2	49138	0.53
Mn	55	115	2	28722	0.61
Fe	56	115	2	4178794	0.22
Co	59	115	2	77486	0.51
Ni	60	115	2	20828	1.71
Cu	65	115	2	27332	2.27
Zn	66	115	2	8798	1.21
As	75	115	2	5010	3.04
Se	78	115	2	1995	1.02
Kr	83	115	1	111	27.88
Mo	95	115	1	57647	5.96
Ag	107	115	1	158455	4.96
Cd	111	115	1	32265	5.09
Sb	121	115	1	123280	5.69
Ba	137	159	1	50148	4.12
Tl	205	165	1	378258	5.44
(Pb)	206	165	1	123211	5.31
(Pb)	207	165	1	102450	5.45
Pb	208	165	1	256295	4.57

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	824054	2.60	799258	103.1	70	130	
Sc	45	2	41127	2.18	40230	102.2	70	130	
In	115	1	1249282	6.03	1198701	104.2	70	130	
In	115	2	266469	1.71	262579	101.5	70	130	
Tb	159	1	2002992	1.72	1977251	101.3	70	130	
Tb	159	2	880713	0.53	867830	101.5	70	130	
Ho	165	1	1971433	2.20	1965073	100.3	70	130	
Ho	165	2	887380	0.78	874595	101.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd4 V-334459**
Data File Name	**006CALS.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T18:34:34-04:00**
Type	**CalStd**
VialNumber	**2105**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	327950	3.42
Na	23	115	2	4888299	0.68
Mg	24	115	2	2337548	1.16
Al	27	115	2	252861	1.68
K	39	115	2	1751686	0.59
Ca	44	115	2	85429	0.84
V	51	115	2	188269	1.33
Cr	52	115	2	231159	1.70
Mn	55	115	2	135426	1.82
Fe	56	115	2	19768575	1.19
Co	59	115	2	367876	0.92
Ni	60	115	2	97666	0.76
Cu	65	115	2	125974	0.65
Zn	66	115	2	39592	2.61
As	75	115	2	23746	1.02
Se	78	115	2	9788	1.54
Kr	83	115	1	109	16.86
Mo	95	115	1	282213	4.07
Ag	107	115	1	763262	4.72
Cd	111	115	1	155327	4.67
Sb	121	115	1	596103	3.87
Ba	137	159	1	247073	4.68
Tl	205	165	1	2060808	4.92
(Pb)	206	165	1	597151	5.52
(Pb)	207	165	1	499123	5.58
Pb	208	165	1	1236454	5.36

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	787338	0.38	799258	98.5	70	130	
Sc	45	2	39779	1.11	40230	98.9	70	130	
In	115	1	1174532	0.10	1198701	98.0	70	130	
In	115	2	254575	0.87	262579	97.0	70	130	
Tb	159	1	1946037	0.79	1977251	98.4	70	130	
Tb	159	2	856365	0.40	867830	98.7	70	130	
Ho	165	1	1924434	0.69	1965073	97.9	70	130	
Ho	165	2	861204	0.76	874595	98.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd5 V-334460**
Data File Name	**007CALS.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T18:39:00-04:00**
Type	**CalStd**
VialNumber	**2106**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	45	1	656589	3.56
Na	23	115	2	9558378	1.13
Mg	24	115	2	4577194	1.32
Al	27	115	2	499383	1.54
K	39	115	2	3372694	0.64
Ca	44	115	2	166877	2.16
V	51	115	2	371720	2.11
Cr	52	115	2	456613	1.51
Mn	55	115	2	267632	1.77
Fe	56	115	2	38872709	1.01
Co	59	115	2	718781	1.73
Ni	60	115	2	190299	1.58
Cu	65	115	2	245534	1.49
Zn	66	115	2	76959	1.15
As	75	115	2	46855	2.04
Se	78	115	2	19063	2.13
Kr	83	115	1	112	17.90
Mo	95	115	1	567643	4.39
Ag	107	115	1	1627131	2.92
Cd	111	115	1	309685	3.43
Sb	121	115	1	1212565	3.48
Ba	137	159	1	502785	3.85
Tl	205	165	1	4105522	3.24
(Pb)	206	165	1	1215219	4.50
(Pb)	207	165	1	1021148	4.40
Pb	208	165	1	2795050	3.82

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	771492	0.18	799258	96.5	70	130	
Sc	45	2	38974	1.10	40230	96.9	70	130	
In	115	1	1153196	0.76	1198701	96.2	70	130	
In	115	2	248467	0.32	262579	94.6	70	130	
Tb	159	1	1918025	0.90	1977251	97.0	70	130	
Tb	159	2	838124	0.96	867830	96.6	70	130	
Ho	165	1	1892795	0.57	1965073	96.3	70	130	
Ho	165	2	847029	0.85	874595	96.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Verification (ICV) - US EPA Method 6020

Sample Name	**ICV V-334461**
Data File Name	**008_ICV.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T18:43:27-04:00**
Type	**6-ICV**
VialNumber	**2108**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	45	1	51.23	ppb	50	340767	3.35	102.47	90	110	
Na	23	115	2	5127.88	ppb	5000	5055642	0.75	102.56	90	110	
Mg	24	115	2	5092.34	ppb	5000	2402466	1.40	101.85	90	110	
Al	27	115	2	5109.34	ppb	5000	874123	1.21	102.19	90	110	
K	39	115	2	5115.04	ppb	5000	1792384	0.88	102.30	90	110	
Ca	44	115	2	5022.98	ppb	5000	86457	0.28	100.46	90	110	
V	51	115	2	49.13	ppb	50	187859	1.27	98.26	90	110	
Cr	52	115	2	49.79	ppb	50	234349	1.19	99.58	90	110	
Mn	55	115	2	49.86	ppb	50	137535	2.13	99.73	90	110	
Fe	56	115	2	5069.64	ppb	5000	20305616	1.47	101.39	90	110	
Co	59	115	2	50.08	ppb	50	371163	0.92	100.15	90	110	
Ni	60	115	2	49.67	ppb	50	97651	1.46	99.34	90	110	
Cu	65	115	2	50.17	ppb	50	127513	1.67	100.34	90	110	
Zn	66	115	2	51.08	ppb	50	40933	1.17	102.15	90	110	
As	75	115	2	50.30	ppb	50	24253	2.11	100.60	90	110	
Se	78	115	2	51.67	ppb	50	2041	3.04	103.34	90	110	
Mo	95	115	1	49.32	ppb	50	283149	3.63	98.64	90	110	
Ag	107	115	1	9.92	ppb	10	162268	3.47	99.22	90	110	
Cd	111	115	1	50.90	ppb	50	159721	3.21	101.80	90	110	
Sb	121	115	1	50.36	ppb	50	616350	3.97	100.73	90	110	
Ba	137	159	1	50.00	ppb	50	253109	3.74	99.99	90	110	
Tl	205	165	1	49.56	ppb	50	2047793	3.25	99.11	90	110	
Pb	208	165	1	47.94	ppb	50	1288320	3.20	95.88	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	784926	0.61	799258	98.2	70	130	
Sc	45	2	39261	0.21	40230	97.6	70	130	
In	115	1	1172378	0.29	1198701	97.8	70	130	
In	115	2	256226	1.16	262579	97.6	70	130	
Tb	159	1	1942251	0.51	1977251	98.2	70	130	
Tb	159	2	852658	0.36	867830	98.3	70	130	
Ho	165	1	1911864	0.46	1965073	97.3	70	130	
Ho	165	2	856773	0.20	874595	98.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

LL-ICV/CCV - US EPA Method 6020

Sample Name	**LLICV V-334467**
Data File Name	**009_LCS.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T18:47:54-04:00**
Type	**6-LCS**
VialNumber	**2111**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	45	1	0.52	ppb	0.5	3728	6.22	104.66	80	120	
Na	23	115	2	231.86	ppb	250	252329	0.82	92.74	80	120	
Mg	24	115	2	247.58	ppb	250	122190	1.38	99.03	80	120	
Al	27	115	2	102.34	ppb	100	18566	2.81	102.34	80	120	
K	39	115	2	246.92	ppb	250	111644	1.08	98.77	80	120	
Ca	44	115	2	254.19	ppb	250	4612	4.51	101.68	80	120	
V	51	115	2	1.01	ppb	1	4003	6.04	101.04	80	120	
Cr	52	115	2	0.95	ppb	1	5867	3.26	95.29	80	120	
Mn	55	115	2	2.93	ppb	3	8910	1.38	97.63	80	120	
Fe	56	115	2	149.40	ppb	150	645259	1.47	99.60	80	120	
Co	59	115	2	0.99	ppb	1	7665	3.07	98.84	80	120	
Ni	60	115	2	1.51	ppb	1.5	3375	3.84	100.73	80	120	
Cu	65	115	2	4.78	ppb	5	13540	3.18	95.59	80	120	
Zn	66	115	2	9.68	ppb	10	8730	2.79	96.76	80	120	
As	75	115	2	0.97	ppb	1	487	4.81	97.37	80	120	
Se	78	115	2	5.37	ppb	5	227	3.92	107.39	80	120	
Mo	95	115	1	1.05	ppb	1	6302	4.20	105.22	80	120	
Ag	107	115	1	0.52	ppb	0.5	9587	8.97	103.35	80	120	
Cd	111	115	1	1.01	ppb	1	3257	5.50	101.00	80	120	
Sb	121	115	1	1.55	ppb	1.5	19694	3.35	103.17	80	120	
Ba	137	159	1	2.37	ppb	2.5	13006	3.88	94.65	80	120	
Tl	205	165	1	0.90	ppb	1	39240	4.33	90.40	80	120	
Pb	208	165	1	1.35	ppb	1.5	40473	5.59	89.90	80	120	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	796491	0.76	799258	99.7	70	130	
Sc	45	2	40339	1.06	40230	100.3	70	130	
In	115	1	1198741	0.51	1198701	100.0	70	130	
In	115	2	262235	0.70	262579	99.9	70	130	
Tb	159	1	1980863	0.70	1977251	100.2	70	130	
Tb	159	2	871693	1.31	867830	100.4	70	130	
Ho	165	1	1962636	0.81	1965073	99.9	70	130	
Ho	165	2	874387	1.13	874595	100.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Blank (ICB) - US EPA Method 6020

Sample Name	**ICB V-334462**
Data File Name	**010_ICB.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T18:52:28-04:00**
Type	**6-ICB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	45	1	0.03	ppb	0.25	
Na	23	115	2	-1.50	ppb	125	
Mg	24	115	2	1.05	ppb	125	
Al	27	115	2	0.90	ppb	50	
K	39	115	2	2.44	ppb	125	
Ca	44	115	2	0.21	ppb	125	
V	51	115	2	0.01	ppb	0.5	
Cr	52	115	2	-0.03	ppb	0.5	
Mn	55	115	2	-0.02	ppb	1.5	
Fe	56	115	2	-0.60	ppb	75	
Co	59	115	2	0.02	ppb	0.5	
Ni	60	115	2	0.14	ppb	0.75	
Cu	65	115	2	-0.28	ppb	2.5	
Zn	66	115	2	-0.04	ppb	5	
As	75	115	2	0.02	ppb	0.5	
Se	78	115	2	0.20	ppb	2.5	
Mo	95	115	1	0.03	ppb	0.5	
Ag	107	115	1	0.06	ppb	0.25	
Cd	111	115	1	0.01	ppb	0.5	
Sb	121	115	1	0.03	ppb	0.75	
Ba	137	159	1	-0.05	ppb	1.25	
Tl	205	165	1	0.02	ppb	0.5	
Pb	208	165	1	0.00	ppb	0.75	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	786597	2.55	799258	98.4	70	130	
Sc	45	2	40403	2.23	40230	100.4	70	130	
In	115	1	1178528	2.18	1198701	98.3	70	130	
In	115	2	260669	2.66	262579	99.3	70	130	
Tb	159	1	1934251	2.54	1977251	97.8	70	130	
Tb	159	2	858802	1.03	867830	99.0	70	130	
Ho	165	1	1917821	2.37	1965073	97.6	70	130	
Ho	165	2	862388	1.60	874595	98.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Interference Check Sample A (ICS-A) - US EPA Method 6020

Sample Name	**ICSA V-334463**
Data File Name	**011ICSA.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T18:57:01-04:00**
Type	**6-ICSA**
VialNumber	**2107**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	45	1	0.02	ppb	1	
Na	23	115	2	129842.11	ppb	150000	
Mg	24	115	2	50614.44	ppb	60000	
Al	27	115	2	52128.97	ppb	60000	
K	39	115	2	51581.04	ppb	60000	
Ca	44	115	2	162823.05	ppb	180000	
V	51	115	2	0.09	ppb	2	
Cr	52	115	2	0.44	ppb	2	
Mn	55	115	2	1.45	ppb	6	
Fe	56	115	2	126378.36	ppb	150000	
Co	59	115	2	0.22	ppb	2	
Ni	60	115	2	0.72	ppb	3	
Cu	65	115	2	0.19	ppb	10	
Zn	66	115	2	0.55	ppb	20	
As	75	115	2	0.25	ppb	2	
Se	78	115	2	0.27	ppb	10	
Mo	95	115	1	1065.13	ppb	1200	
Ag	107	115	1	0.09	ppb	1	
Cd	111	115	1	1.38	ppb	2	
Sb	121	115	1	0.35	ppb	2	
Ba	137	159	1	0.81	ppb	5	
Tl	205	165	1	0.01	ppb	2	
Pb	208	165	1	0.00	ppb	3	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	770943	0.42	799258	96.5	70	130	
Sc	45	2	40579	2.49	40230	100.9	70	130	
In	115	1	1112980	0.70	1198701	92.8	70	130	
In	115	2	245047	0.84	262579	93.3	70	130	
Tb	159	1	1963397	0.18	1977251	99.3	70	130	
Tb	159	2	854466	0.60	867830	98.5	70	130	
Ho	165	1	1941571	1.30	1965073	98.8	70	130	
Ho	165	2	863418	0.37	874595	98.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**012SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:01:28-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.01	0.01	ppb	309	5.10	550	
Na	23	115	2	10.13	10.13	ppb	30354	4.51	55000	
Mg	24	115	2	-0.36	-0.36	ppb	2689	6.42	55000	
Al	27	115	2	0.91	0.91	ppb	843	3.16	16500	
K	39	115	2	2.85	2.85	ppb	26076	1.31	55000	
Ca	44	115	2	3.62	3.62	ppb	211	12.67	55000	
V	51	115	2	0.01	0.01	ppb	94	7.35	550	
Cr	52	115	2	-0.11	-0.11	ppb	821	8.68	550	
Mn	55	115	2	-0.02	-0.02	ppb	636	9.91	550	
Fe	56	115	2	6.19	6.19	ppb	61044	4.34	55000	
Co	59	115	2	0.00	0.00	ppb	206	13.11	550	
Ni	60	115	2	-0.03	-0.03	ppb	289	8.35	550	
Cu	65	115	2	-0.11	-0.11	ppb	980	3.92	550	
Zn	66	115	2	-0.56	-0.56	ppb	552	5.86	550	
As	75	115	2	0.00	0.00	ppb	10	23.99	550	
Se	78	115	2	0.04	0.04	ppb	13	35.66	2750	
Mo	95	115	1	0.63	0.63	ppb	4023	9.58	550	
Ag	107	115	1	0.10	0.10	ppb	2737	5.25	550	
Cd	111	115	1	0.01	0.01	ppb	52	16.36	550	
Sb	121	115	1	0.01	0.01	ppb	449	10.51	550	
Ba	137	159	1	-0.10	-0.10	ppb	322	6.89	550	
Tl	205	165	1	0.01	0.01	ppb	1476	12.28	550	
Pb	208	165	1	0.00	0.00	ppb	3441	5.48	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	830125	0.39	799258	103.9	70	130	
Sc	45	2	41888	0.72	40230	104.1	70	130	
In	115	1	1264305	0.41	1198701	105.5	70	130	
In	115	2	270678	0.55	262579	103.1	70	130	
Tb	159	1	2078803	0.35	1977251	105.1	70	130	
Tb	159	2	889689	0.66	867830	102.5	70	130	
Ho	165	1	2049754	0.49	1965073	104.3	70	130	
Ho	165	2	897013	0.22	874595	102.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LRS V-334464**
Data File Name	**013SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:06:01-04:00**
Type	**Sample**
VialNumber	**2109**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	488.43	488.43	ppb	3222767	2.96	550	
Na	23	115	2	51449.07	51449.07	ppb	49675741	1.54	55000	
Mg	24	115	2	50708.31	50708.31	ppb	23483152	1.95	55000	
Al	27	115	2	15933.99	15933.99	ppb	2677457	2.30	16500	
K	39	115	2	51279.35	51279.35	ppb	17447076	1.72	55000	
Ca	44	115	2	52073.26	52073.26	ppb	879582	2.45	55000	
V	51	115	2	531.62	531.62	ppb	1996795	0.94	550	
Cr	52	115	2	520.05	520.05	ppb	2393423	2.03	550	
Mn	55	115	2	533.06	533.06	ppb	1438273	2.51	550	
Fe	56	115	2	50382.60	50382.60	ppb	197992937	1.91	55000	
Co	59	115	2	514.63	514.63	ppb	3746842	2.32	550	
Ni	60	115	2	479.66	479.66	ppb	923691	1.85	550	
Cu	65	115	2	481.40	481.40	ppb	1192302	2.13	550	
Zn	66	115	2	487.52	487.52	ppb	375883	2.47	550	
As	75	115	2	503.32	503.32	ppb	238390	2.04	550	
Se	78	115	2	2466.26	2466.26	ppb	95231	1.08	2750	
Mo	95	115	1	545.12	545.12	ppb	3004440	3.68	550	
Ag	107	115	1	273.85	273.85	ppb	4276290	2.51	550	
Cd	111	115	1	541.00	541.00	ppb	1630276	3.66	550	
Sb	121	115	1	540.29	540.29	ppb	6347453	2.81	550	
Ba	137	159	1	525.00	525.00	ppb	2675041	3.11	550	
Tl	205	165	1	477.89	477.89	ppb	19762257	2.44	550	
Pb	208	165	1	492.65	492.65	ppb	13225668	3.00	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	779103	0.39	799258	97.5	70	130	
Sc	45	2	40868	1.77	40230	101.6	70	130	
In	115	1	1126080	0.50	1198701	93.9	70	130	
In	115	2	251759	1.47	262579	95.9	70	130	
Tb	159	1	1961275	1.74	1977251	99.2	70	130	
Tb	159	2	850087	0.47	867830	98.0	70	130	
Ho	165	1	1914324	2.18	1965073	97.4	70	130	
Ho	165	2	855639	0.58	874595	97.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**014SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:10:14-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.12	0.12	ppb	1035	15.56	550	
Na	23	115	2	10.54	10.54	ppb	31009	2.76	55000	
Mg	24	115	2	0.40	0.40	ppb	3094	6.07	55000	
Al	27	115	2	1.44	1.44	ppb	946	6.13	16500	
K	39	115	2	7.44	7.44	ppb	27957	1.14	55000	
Ca	44	115	2	3.90	3.90	ppb	218	3.54	55000	
V	51	115	2	0.02	0.02	ppb	122	29.42	550	
Cr	52	115	2	-0.09	-0.09	ppb	925	4.90	550	
Mn	55	115	2	-0.01	-0.01	ppb	688	14.96	550	
Fe	56	115	2	5.18	5.18	ppb	57229	1.55	55000	
Co	59	115	2	0.02	0.02	ppb	361	5.93	550	
Ni	60	115	2	-0.02	-0.02	ppb	308	19.68	550	
Cu	65	115	2	-0.13	-0.13	ppb	910	4.22	550	
Zn	66	115	2	-0.60	-0.60	ppb	521	13.13	550	
As	75	115	2	0.06	0.06	ppb	39	4.32	550	
Se	78	115	2	0.39	0.39	ppb	27	13.04	2750	
Mo	95	115	1	0.42	0.42	ppb	2753	6.71	550	
Ag	107	115	1	0.13	0.13	ppb	3282	7.79	550	
Cd	111	115	1	0.03	0.03	ppb	106	8.36	550	
Sb	121	115	1	0.40	0.40	ppb	5626	6.47	550	
Ba	137	159	1	-0.09	-0.09	ppb	360	15.30	550	
Tl	205	165	1	0.08	0.08	ppb	4301	7.30	550	
Pb	208	165	1	0.02	0.02	ppb	4190	7.13	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	844723	0.62	799258	105.7	70	130	
Sc	45	2	42791	0.28	40230	106.4	70	130	
In	115	1	1262684	0.41	1198701	105.3	70	130	
In	115	2	272709	1.18	262579	103.9	70	130	
Tb	159	1	2066367	0.46	1977251	104.5	70	130	
Tb	159	2	894433	0.43	867830	103.1	70	130	
Ho	165	1	2040318	1.02	1965073	103.8	70	130	
Ho	165	2	897623	0.34	874595	102.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**015SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:14:48-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.08	0.08	ppb	701	2.14	550	
Na	23	115	2	4.99	4.99	ppb	24468	0.45	55000	
Mg	24	115	2	0.42	0.42	ppb	3011	2.08	55000	
Al	27	115	2	1.27	1.27	ppb	889	2.13	16500	
K	39	115	2	2.83	2.83	ppb	25483	0.82	55000	
Ca	44	115	2	4.70	4.70	ppb	226	6.99	55000	
V	51	115	2	0.01	0.01	ppb	86	35.35	550	
Cr	52	115	2	-0.09	-0.09	ppb	867	2.14	550	
Mn	55	115	2	-0.01	-0.01	ppb	652	11.03	550	
Fe	56	115	2	3.75	3.75	ppb	49633	1.68	55000	
Co	59	115	2	0.02	0.02	ppb	334	6.64	550	
Ni	60	115	2	-0.03	-0.03	ppb	284	8.80	550	
Cu	65	115	2	-0.14	-0.14	ppb	858	6.85	550	
Zn	66	115	2	-0.57	-0.57	ppb	531	8.36	550	
As	75	115	2	0.01	0.01	ppb	14	16.89	550	
Se	78	115	2	0.38	0.38	ppb	26	19.05	2750	
Mo	95	115	1	0.13	0.13	ppb	910	11.51	550	
Ag	107	115	1	0.11	0.11	ppb	2791	1.56	550	
Cd	111	115	1	0.02	0.02	ppb	70	23.91	550	
Sb	121	115	1	0.09	0.09	ppb	1455	6.80	550	
Ba	137	159	1	-0.06	-0.06	ppb	492	43.98	550	
Tl	205	165	1	0.04	0.04	ppb	2469	2.65	550	
Pb	208	165	1	0.01	0.01	ppb	3726	1.83	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	791795	0.95	799258	99.1	70	130	
Sc	45	2	40131	1.31	40230	99.8	70	130	
In	115	1	1199423	0.91	1198701	100.1	70	130	
In	115	2	264620	0.78	262579	100.8	70	130	
Tb	159	1	1975091	1.10	1977251	99.9	70	130	
Tb	159	2	866897	0.97	867830	99.9	70	130	
Ho	165	1	1956895	1.45	1965073	99.6	70	130	
Ho	165	2	865328	1.17	874595	98.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0166CCV.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:19:21-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	45	1	50.95	ppb	50	338400	3.73	101.90	90	110	
Na	23	115	2	5030.34	ppb	5000	5010739	0.57	100.61	90	110	
Mg	24	115	2	5089.91	ppb	5000	2425888	0.56	101.80	90	110	
Al	27	115	2	1506.12	ppb	1500	260787	1.21	100.41	90	110	
K	39	115	2	5111.33	ppb	5000	1809590	0.89	102.23	90	110	
Ca	44	115	2	5021.25	ppb	5000	87327	2.13	100.42	90	110	
V	51	115	2	50.12	ppb	50	193622	2.03	100.24	90	110	
Cr	52	115	2	49.83	ppb	50	236952	1.40	99.66	90	110	
Mn	55	115	2	50.16	ppb	50	139753	1.68	100.31	90	110	
Fe	56	115	2	5043.01	ppb	5000	20406376	1.48	100.86	90	110	
Co	59	115	2	50.13	ppb	50	375426	1.51	100.27	90	110	
Ni	60	115	2	49.87	ppb	50	99058	2.09	99.75	90	110	
Cu	65	115	2	50.19	ppb	50	128883	1.42	100.38	90	110	
Zn	66	115	2	50.74	ppb	50	41082	2.01	101.48	90	110	
As	75	115	2	50.41	ppb	50	24557	1.34	100.83	90	110	
Se	78	115	2	254.11	ppb	250	10098	1.14	101.65	90	110	
Mo	95	115	1	50.87	ppb	50	291174	4.39	101.74	90	110	
Ag	107	115	1	48.35	ppb	50	784495	3.64	96.69	90	110	
Cd	111	115	1	51.05	ppb	50	159713	3.91	102.10	90	110	
Sb	121	115	1	50.83	ppb	50	620184	4.60	101.66	90	110	
Ba	137	159	1	50.33	ppb	50	256277	4.21	100.66	90	110	
Tl	205	165	1	51.61	ppb	50	2159868	3.72	103.23	90	110	
Pb	208	165	1	46.56	ppb	50	1267347	4.96	93.12	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	783805	0.09	799258	98.1	70	130	
Sc	45	2	39514	1.47	40230	98.2	70	130	
In	115	1	1168911	0.18	1198701	97.5	70	130	
In	115	2	258865	1.20	262579	98.6	70	130	
Tb	159	1	1954010	1.41	1977251	98.8	70	130	
Tb	159	2	863321	0.45	867830	99.5	70	130	
Ho	165	1	1935929	0.74	1965073	98.5	70	130	
Ho	165	2	860812	0.77	874595	98.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0176CCB.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:23:48-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	45	1	0.06	ppb	0.5	
Na	23	115	2	2.73	ppb	250	
Mg	24	115	2	1.20	ppb	250	
Al	27	115	2	1.20	ppb	100	
K	39	115	2	2.84	ppb	250	
Ca	44	115	2	3.17	ppb	250	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	-0.02	ppb	1	
Mn	55	115	2	0.00	ppb	3	
Fe	56	115	2	0.01	ppb	150	
Co	59	115	2	0.03	ppb	1	
Ni	60	115	2	0.16	ppb	1.5	
Cu	65	115	2	-0.22	ppb	5	
Zn	66	115	2	-0.11	ppb	10	
As	75	115	2	0.02	ppb	1	
Se	78	115	2	0.33	ppb	5	
Mo	95	115	1	0.10	ppb	1	
Ag	107	115	1	0.07	ppb	0.5	
Cd	111	115	1	0.01	ppb	1	
Sb	121	115	1	0.08	ppb	1.5	
Ba	137	159	1	-0.04	ppb	2.5	
Tl	205	165	1	0.04	ppb	1	
Pb	208	165	1	0.00	ppb	1.5	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	769303	0.48	799258	96.3	70	130	
Sc	45	2	39115	0.57	40230	97.2	70	130	
In	115	1	1172717	0.74	1198701	97.8	70	130	
In	115	2	257958	0.51	262579	98.2	70	130	
Tb	159	1	1932177	0.59	1977251	97.7	70	130	
Tb	159	2	852106	0.79	867830	98.2	70	130	
Ho	165	1	1904771	0.55	1965073	96.9	70	130	
Ho	165	2	855703	0.81	874595	97.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**MB 85272**
Data File Name	**018SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:28:20-04:00**
Type	**Sample**
VialNumber	**3301**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.04	0.04	ppb	433	9.64	550	
Na	23	115	2	23.94	23.94	ppb	41840	1.08	55000	
Mg	24	115	2	0.27	0.27	ppb	2811	1.65	55000	
Al	27	115	2	4.18	4.18	ppb	1342	1.37	16500	
K	39	115	2	9.28	9.28	ppb	26610	1.06	55000	
Ca	44	115	2	19.30	19.30	ppb	464	11.40	55000	
V	51	115	2	0.38	0.38	ppb	1488	1.59	550	
Cr	52	115	2	0.12	0.12	ppb	1800	4.36	550	
Mn	55	115	2	0.06	0.06	ppb	820	4.93	550	
Fe	56	115	2	3.49	3.49	ppb	46465	2.09	55000	
Co	59	115	2	-0.01	-0.01	ppb	103	3.23	550	
Ni	60	115	2	0.08	0.08	ppb	483	14.84	550	
Cu	65	115	2	0.97	0.97	ppb	3584	6.21	550	
Zn	66	115	2	2.11	2.11	ppb	2581	8.44	550	
As	75	115	2	0.05	0.05	ppb	32	12.25	550	
Se	78	115	2	0.20	0.20	ppb	18	14.12	2750	
Mo	95	115	1	0.03	0.03	ppb	326	28.79	550	
Ag	107	115	1	0.04	0.04	ppb	1629	3.61	550	
Cd	111	115	1	0.02	0.02	ppb	80	7.87	550	
Sb	121	115	1	0.14	0.14	ppb	2137	2.71	550	
Ba	137	159	1	-0.02	-0.02	ppb	742	10.21	550	
Tl	205	165	1	0.05	0.05	ppb	3173	11.67	550	
Pb	208	165	1	0.05	0.05	ppb	4813	2.68	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	791259	0.55	799258	99.0	70	130	
Sc	45	2	38433	1.24	40230	95.5	70	130	
In	115	1	1228581	0.33	1198701	102.5	70	130	
In	115	2	253415	1.32	262579	96.5	70	130	
Tb	159	1	2065144	1.50	1977251	104.4	70	130	
Tb	159	2	867327	0.80	867830	99.9	70	130	
Ho	165	1	2036879	0.53	1965073	103.7	70	130	
Ho	165	2	870815	0.89	874595	99.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LCSW 85272**
Data File Name	**019SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:32:54-04:00**
Type	**Sample**
VialNumber	**3302**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	229.92	229.92	ppb	1677794	3.35	550	
Na	23	115	2	24595.23	24595.23	ppb	25218187	2.15	55000	
Mg	24	115	2	23906.34	23906.34	ppb	11752427	1.67	55000	
Al	27	115	2	2351.74	2351.74	ppb	420017	2.18	16500	
K	39	115	2	23749.84	23749.84	ppb	8590580	2.14	55000	
Ca	44	115	2	23620.49	23620.49	ppb	423560	2.20	55000	
V	51	115	2	241.36	241.36	ppb	962381	2.06	550	
Cr	52	115	2	245.51	245.51	ppb	1200213	3.71	550	
Mn	55	115	2	237.20	237.20	ppb	679701	1.91	550	
Fe	56	115	2	2472.87	2472.87	ppb	10347981	2.17	55000	
Co	59	115	2	253.47	253.47	ppb	1958869	2.03	550	
Ni	60	115	2	235.70	235.70	ppb	481958	2.09	550	
Cu	65	115	2	243.51	243.51	ppb	640746	1.75	550	
Zn	66	115	2	235.67	235.67	ppb	193365	1.36	550	
As	75	115	2	236.94	236.94	ppb	119124	2.67	550	
Se	78	115	2	229.80	229.80	ppb	9429	4.14	2750	
Mo	95	115	1	243.80	243.80	ppb	1608643	3.01	550	
Ag	107	115	1	43.02	43.02	ppb	805490	4.43	550	
Cd	111	115	1	227.59	227.59	ppb	821182	3.37	550	
Sb	121	115	1	245.60	245.60	ppb	3454805	3.49	550	
Ba	137	159	1	247.16	247.16	ppb	1393144	5.20	550	
Tl	205	165	1	217.16	217.16	ppb	10055678	3.32	550	
Pb	208	165	1	236.48	236.48	ppb	7109471	3.74	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	861539	0.60	799258	107.8	70	130	
Sc	45	2	41597	1.44	40230	103.4	70	130	
In	115	1	1349656	4.70	1198701	112.6	70	130	
In	115	2	267224	1.41	262579	101.8	70	130	
Tb	159	1	2168518	1.11	1977251	109.7	70	130	
Tb	159	2	895084	1.20	867830	103.1	70	130	
Ho	165	1	2142984	0.82	1965073	109.1	70	130	
Ho	165	2	903736	1.25	874595	103.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LCSW MR 85272**
Data File Name	**020SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:37:17-04:00**
Type	**Sample**
VialNumber	**3303**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	232.07	232.07	ppb	1709312	3.30	550	
Na	23	115	2	24976.89	24976.89	ppb	25134537	1.31	55000	
Mg	24	115	2	24305.14	24305.14	ppb	11727108	0.99	55000	
Al	27	115	2	2377.40	2377.40	ppb	416741	1.73	16500	
K	39	115	2	24069.14	24069.14	ppb	8544025	1.04	55000	
Ca	44	115	2	23627.77	23627.77	ppb	415846	1.56	55000	
V	51	115	2	243.06	243.06	ppb	951217	1.12	550	
Cr	52	115	2	241.74	241.74	ppb	1159750	1.57	550	
Mn	55	115	2	238.70	238.70	ppb	671402	2.21	550	
Fe	56	115	2	2467.49	2467.49	ppb	10134675	1.75	55000	
Co	59	115	2	254.57	254.57	ppb	1930750	1.93	550	
Ni	60	115	2	237.55	237.55	ppb	476727	1.20	550	
Cu	65	115	2	244.31	244.31	ppb	630933	1.06	550	
Zn	66	115	2	237.43	237.43	ppb	191216	2.13	550	
As	75	115	2	239.61	239.61	ppb	118235	1.53	550	
Se	78	115	2	230.19	230.19	ppb	9270	1.60	2750	
Mo	95	115	1	241.71	241.71	ppb	1628268	3.95	550	
Ag	107	115	1	42.72	42.72	ppb	816210	3.49	550	
Cd	111	115	1	223.59	223.59	ppb	823342	3.68	550	
Sb	121	115	1	241.18	241.18	ppb	3461797	3.07	550	
Ba	137	159	1	252.21	252.21	ppb	1417313	5.39	550	
Tl	205	165	1	220.68	220.68	ppb	10189065	2.36	550	
Pb	208	165	1	238.82	238.82	ppb	7159435	2.72	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	869482	0.40	799258	108.8	70	130	
Sc	45	2	40782	1.14	40230	101.4	70	130	
In	115	1	1377892	4.42	1198701	114.9	70	130	
In	115	2	262296	1.55	262579	99.9	70	130	
Tb	159	1	2161624	0.96	1977251	109.3	70	130	
Tb	159	2	886870	1.21	867830	102.2	70	130	
Ho	165	1	2136652	0.58	1965073	108.7	70	130	
Ho	165	2	895862	0.91	874595	102.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19206-004**
Data File Name	**021SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:41:40-04:00**
Type	**Sample**
VialNumber	**3304**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.12	0.12	ppb	1148	6.02	550	
Na	23	115	2	33001.85	33001.85	ppb	31872945	1.52	55000	
Mg	24	115	2	17478.06	17478.06	ppb	8096040	1.80	55000	
Al	27	115	2	2.13	2.13	ppb	990	5.51	16500	
K	39	115	2	4216.75	4216.75	ppb	1456071	1.91	55000	
Ca	44	115	2	88278.02	88278.02	ppb	1491023	1.13	55000	>LDR
V	51	115	2	1.61	1.61	ppb	6099	0.28	550	
Cr	52	115	2	0.13	0.13	ppb	1838	7.98	550	
Mn	55	115	2	1044.15	1044.15	ppb	2816772	1.63	550	>LDR
Fe	56	115	2	195.53	195.53	ppb	800780	1.59	55000	
Co	59	115	2	1.40	1.40	ppb	10338	0.40	550	
Ni	60	115	2	4.65	4.65	ppb	9290	2.73	550	
Cu	65	115	2	3.32	3.32	ppb	9399	2.22	550	
Zn	66	115	2	9.27	9.27	ppb	8067	3.78	550	
As	75	115	2	1.47	1.47	ppb	703	1.91	550	
Se	78	115	2	0.30	0.30	ppb	22	16.33	2750	
Mo	95	115	1	0.70	0.70	ppb	4487	4.73	550	
Ag	107	115	1	0.07	0.07	ppb	2238	4.72	550	
Cd	111	115	1	0.05	0.05	ppb	201	9.71	550	
Sb	121	115	1	0.24	0.24	ppb	3541	5.06	550	
Ba	137	159	1	51.74	51.74	ppb	293682	4.34	550	
Tl	205	165	1	0.53	0.53	ppb	25655	5.96	550	
Pb	208	165	1	5.29	5.29	ppb	163642	5.44	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	898149	0.91	799258	112.4	70	130	
Sc	45	2	40810	0.45	40230	101.4	70	130	
In	115	1	1262671	0.54	1198701	105.3	70	130	
In	115	2	251778	0.57	262579	95.9	70	130	
Tb	159	1	2177385	0.49	1977251	110.1	70	130	
Tb	159	2	882582	0.41	867830	101.7	70	130	
Ho	165	1	2157800	1.35	1965073	109.8	70	130	
Ho	165	2	882051	0.70	874595	100.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19206-004 MR**
Data File Name	**022SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:46:08-04:00**
Type	**Sample**
VialNumber	**3305**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.07	0.07	ppb	766	6.83	550	
Na	23	115	2	33304.98	33304.98	ppb	31257560	0.79	55000	
Mg	24	115	2	17686.02	17686.02	ppb	7961209	1.08	55000	
Al	27	115	2	1.92	1.92	ppb	927	3.11	16500	
K	39	115	2	4220.19	4220.19	ppb	1416130	0.82	55000	
Ca	44	115	2	88446.31	88446.31	ppb	1451695	1.03	55000	>LDR
V	51	115	2	1.60	1.60	ppb	5882	2.92	550	
Cr	52	115	2	0.11	0.11	ppb	1703	5.51	550	
Mn	55	115	2	1045.71	1045.71	ppb	2741445	1.99	550	>LDR
Fe	56	115	2	197.23	197.23	ppb	784691	1.75	55000	
Co	59	115	2	1.39	1.39	ppb	9978	5.05	550	
Ni	60	115	2	4.69	4.69	ppb	9101	3.45	550	
Cu	65	115	2	3.43	3.43	ppb	9383	4.16	550	
Zn	66	115	2	7.91	7.91	ppb	6830	3.42	550	
As	75	115	2	1.54	1.54	ppb	714	5.33	550	
Se	78	115	2	0.24	0.24	ppb	19	5.88	2750	
Mo	95	115	1	0.57	0.57	ppb	3593	6.42	550	
Ag	107	115	1	0.05	0.05	ppb	1965	4.82	550	
Cd	111	115	1	0.04	0.04	ppb	146	13.99	550	
Sb	121	115	1	0.19	0.19	ppb	2768	2.85	550	
Ba	137	159	1	53.25	53.25	ppb	299236	3.97	550	
Tl	205	165	1	0.11	0.11	ppb	6090	7.66	550	
Pb	208	165	1	5.45	5.45	ppb	166981	4.30	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	872403	0.20	799258	109.2	70	130	
Sc	45	2	39121	2.82	40230	97.2	70	130	
In	115	1	1247559	0.50	1198701	104.1	70	130	
In	115	2	244671	0.79	262579	93.2	70	130	
Tb	159	1	2156263	0.44	1977251	109.1	70	130	
Tb	159	2	868231	1.12	867830	100.0	70	130	
Ho	165	1	2136106	0.48	1965073	108.7	70	130	
Ho	165	2	873895	1.25	874595	99.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19206-004 SD**
Data File Name	**023SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:50:36-04:00**
Type	**Sample**
VialNumber	**3309**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.05	0.05	ppb	567	8.34	550	
Na	23	115	2	6399.93	6399.93	ppb	6116718	1.03	55000	
Mg	24	115	2	3495.30	3495.30	ppb	1600545	1.57	55000	
Al	27	115	2	-1.19	-1.19	ppb	427	16.03	16500	
K	39	115	2	780.46	780.46	ppb	284797	0.94	55000	
Ca	44	115	2	16446.89	16446.89	ppb	274347	1.19	55000	
V	51	115	2	0.49	0.49	ppb	1878	1.95	550	
Cr	52	115	2	-0.08	-0.08	ppb	889	12.97	550	
Mn	55	115	2	198.29	198.29	ppb	528613	1.49	550	
Fe	56	115	2	34.68	34.68	ppb	166573	1.30	55000	
Co	59	115	2	0.26	0.26	ppb	2007	4.26	550	
Ni	60	115	2	0.83	0.83	ppb	1910	6.57	550	
Cu	65	115	2	0.70	0.70	ppb	2866	5.00	550	
Zn	66	115	2	3.94	3.94	ppb	3921	5.78	550	
As	75	115	2	0.27	0.27	ppb	131	18.59	550	
Se	78	115	2	0.00	0.00	ppb	10	72.89	2750	
Mo	95	115	1	0.13	0.13	ppb	909	8.27	550	
Ag	107	115	1	-0.02	-0.02	ppb	650	9.24	550	
Cd	111	115	1	0.01	0.01	ppb	56	22.34	550	
Sb	121	115	1	0.03	0.03	ppb	787	8.35	550	
Ba	137	159	1	10.56	10.56	ppb	57625	4.54	550	
Tl	205	165	1	0.05	0.05	ppb	3128	4.66	550	
Pb	208	165	1	1.09	1.09	ppb	34638	0.85	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	806637	0.05	799258	100.9	70	130	
Sc	45	2	37310	1.74	40230	92.7	70	130	
In	115	1	1216713	0.66	1198701	101.5	70	130	
In	115	2	248557	0.89	262579	94.7	70	130	
Tb	159	1	2068279	0.86	1977251	104.6	70	130	
Tb	159	2	854016	0.84	867830	98.4	70	130	
Ho	165	1	2036635	1.70	1965073	103.6	70	130	
Ho	165	2	863033	0.79	874595	98.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19206-004 MS 1**
Data File Name	**024SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:55:11-04:00**
Type	**Sample**
VialNumber	**3306**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	209.07	209.07	ppb	1507680	2.55	550	
Na	23	115	2	57447.64	57447.64	ppb	54069189	1.64	55000	>LDR
Mg	24	115	2	40673.11	40673.11	ppb	18361444	1.52	55000	
Al	27	115	2	2319.59	2319.59	ppb	380460	1.93	16500	
K	39	115	2	27601.96	27601.96	ppb	9165117	0.98	55000	
Ca	44	115	2	112523.20	112523.20	ppb	1852502	1.75	55000	>LDR
V	51	115	2	235.69	235.69	ppb	863076	1.50	550	
Cr	52	115	2	231.78	231.78	ppb	1040504	2.33	550	
Mn	55	115	2	1264.03	1264.03	ppb	3323712	2.24	550	>LDR
Fe	56	115	2	2687.10	2687.10	ppb	10323566	2.85	55000	
Co	59	115	2	243.27	243.27	ppb	1726522	1.77	550	
Ni	60	115	2	226.52	226.52	ppb	425396	1.31	550	
Cu	65	115	2	230.78	230.78	ppb	557750	1.22	550	
Zn	66	115	2	230.41	230.41	ppb	173641	2.18	550	
As	75	115	2	236.29	236.29	ppb	109097	1.59	550	
Se	78	115	2	224.32	224.32	ppb	8453	1.24	2750	
Mo	95	115	1	247.20	247.20	ppb	1475715	2.94	550	
Ag	107	115	1	42.49	42.49	ppb	719422	4.11	550	
Cd	111	115	1	226.70	226.70	ppb	739900	3.53	550	
Sb	121	115	1	248.43	248.43	ppb	3161207	3.05	550	
Ba	137	159	1	301.52	301.52	ppb	1646479	2.99	550	
Tl	205	165	1	208.10	208.10	ppb	9421057	3.10	550	
Pb	208	165	1	231.03	231.03	ppb	6790543	2.56	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	851420	0.65	799258	106.5	70	130	
Sc	45	2	39219	1.55	40230	97.5	70	130	
In	115	1	1219542	0.30	1198701	101.7	70	130	
In	115	2	245425	0.12	262579	93.5	70	130	
Tb	159	1	2100518	0.50	1977251	106.2	70	130	
Tb	159	2	857791	0.59	867830	98.8	70	130	
Ho	165	1	2095324	1.37	1965073	106.6	70	130	
Ho	165	2	866359	1.25	874595	99.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19206-004 MS 2**
Data File Name	**025SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T19:59:31-04:00**
Type	**Sample**
VialNumber	**3307**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	203.92	203.92	ppb	1498676	3.61	550	
Na	23	115	2	56344.17	56344.17	ppb	53169695	0.44	55000	>LDR
Mg	24	115	2	39834.84	39834.84	ppb	18030659	1.36	55000	
Al	27	115	2	2291.35	2291.35	ppb	376849	2.33	16500	
K	39	115	2	27036.08	27036.08	ppb	9001481	1.33	55000	
Ca	44	115	2	109724.83	109724.83	ppb	1811219	1.20	55000	>LDR
V	51	115	2	234.83	234.83	ppb	862202	1.77	550	
Cr	52	115	2	229.74	229.74	ppb	1034114	1.90	550	
Mn	55	115	2	1242.06	1242.06	ppb	3274554	0.89	550	>LDR
Fe	56	115	2	2566.84	2566.84	ppb	9889159	1.20	55000	
Co	59	115	2	242.99	242.99	ppb	1729104	1.22	550	
Ni	60	115	2	226.09	226.09	ppb	425718	2.26	550	
Cu	65	115	2	230.59	230.59	ppb	558802	1.79	550	
Zn	66	115	2	228.21	228.21	ppb	172460	2.22	550	
As	75	115	2	233.35	233.35	ppb	108030	1.84	550	
Se	78	115	2	220.85	220.85	ppb	8345	2.81	2750	
Mo	95	115	1	242.22	242.22	ppb	1463253	3.12	550	
Ag	107	115	1	41.50	41.50	ppb	711110	3.88	550	
Cd	111	115	1	220.35	220.35	ppb	727797	3.90	550	
Sb	121	115	1	242.33	242.33	ppb	3120310	3.20	550	
Ba	137	159	1	293.79	293.79	ppb	1625884	4.09	550	
Tl	205	165	1	204.47	204.47	ppb	9283388	3.31	550	
Pb	208	165	1	225.15	225.15	ppb	6637258	3.60	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	867550	0.85	799258	108.5	70	130	
Sc	45	2	38674	1.39	40230	96.1	70	130	
In	115	1	1233988	1.16	1198701	102.9	70	130	
In	115	2	246067	0.67	262579	93.7	70	130	
Tb	159	1	2128522	0.19	1977251	107.7	70	130	
Tb	159	2	863792	0.68	867830	99.5	70	130	
Ho	165	1	2101193	0.38	1965073	106.9	70	130	
Ho	165	2	872099	0.45	874595	99.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19206-004 PS**
Data File Name	**026SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T20:03:51-04:00**
Type	**Sample**
VialNumber	**3308**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	45.66	45.66	ppb	323961	3.85	550	
Na	23	115	2	37098.06	37098.06	ppb	33442860	0.62	55000	
Mg	24	115	2	22108.29	22108.29	ppb	9558651	0.49	55000	
Al	27	115	2	1491.46	1491.46	ppb	234475	0.77	16500	
K	39	115	2	9010.18	9010.18	ppb	2879497	0.59	55000	
Ca	44	115	2	89454.76	89454.76	ppb	1410509	2.21	55000	>LDR
V	51	115	2	53.56	53.56	ppb	187867	1.84	550	
Cr	52	115	2	52.91	52.91	ppb	228370	1.57	550	
Mn	55	115	2	1052.33	1052.33	ppb	2649987	1.09	550	>LDR
Fe	56	115	2	5436.96	5436.96	ppb	19972872	0.88	55000	
Co	59	115	2	53.65	53.65	ppb	364746	0.85	550	
Ni	60	115	2	55.56	55.56	ppb	100144	0.29	550	
Cu	65	115	2	56.17	56.17	ppb	130834	0.92	550	
Zn	66	115	2	61.26	61.26	ppb	44865	2.49	550	
As	75	115	2	53.61	53.61	ppb	23712	1.73	550	
Se	78	115	2	245.86	245.86	ppb	8873	3.46	2750	
Mo	95	115	1	52.32	52.32	ppb	309190	4.23	550	
Ag	107	115	1	38.83	38.83	ppb	650711	4.27	550	
Cd	111	115	1	50.79	50.79	ppb	164059	4.11	550	
Sb	121	115	1	52.31	52.31	ppb	658994	4.32	550	
Ba	137	159	1	98.95	98.95	ppb	540704	4.81	550	
Tl	205	165	1	47.98	47.98	ppb	2170925	4.48	550	
Pb	208	165	1	57.04	57.04	ppb	1677596	4.36	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	837072	0.62	799258	104.7	70	130	
Sc	45	2	37528	0.72	40230	93.3	70	130	
In	115	1	1206608	1.10	1198701	100.7	70	130	
In	115	2	235033	1.07	262579	89.5	70	130	
Tb	159	1	2098848	1.14	1977251	106.1	70	130	
Tb	159	2	845921	0.66	867830	97.5	70	130	
Ho	165	1	2092516	2.21	1965073	106.5	70	130	
Ho	165	2	850342	0.44	874595	97.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**027SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T20:08:17-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.12	0.12	ppb	930	7.32	550	
Na	23	115	2	14.52	14.52	ppb	31598	1.19	55000	
Mg	24	115	2	1.49	1.49	ppb	3267	1.57	55000	
Al	27	115	2	1.15	1.15	ppb	802	6.91	16500	
K	39	115	2	3.40	3.40	ppb	23775	0.65	55000	
Ca	44	115	2	7.29	7.29	ppb	251	18.41	55000	
V	51	115	2	0.06	0.06	ppb	251	19.43	550	
Cr	52	115	2	-0.08	-0.08	ppb	858	11.87	550	
Mn	55	115	2	0.01	0.01	ppb	656	7.44	550	
Fe	56	115	2	3.37	3.37	ppb	44493	1.91	55000	
Co	59	115	2	0.01	0.01	ppb	247	12.01	550	
Ni	60	115	2	-0.01	-0.01	ppb	300	3.33	550	
Cu	65	115	2	0.07	0.07	ppb	1319	6.24	550	
Zn	66	115	2	-0.53	-0.53	ppb	520	2.22	550	
As	75	115	2	0.03	0.03	ppb	21	21.54	550	
Se	78	115	2	0.13	0.13	ppb	15	26.35	2750	
Mo	95	115	1	0.11	0.11	ppb	764	6.26	550	
Ag	107	115	1	0.10	0.10	ppb	2537	2.45	550	
Cd	111	115	1	0.02	0.02	ppb	92	4.82	550	
Sb	121	115	1	0.08	0.08	ppb	1277	11.15	550	
Ba	137	159	1	-0.08	-0.08	ppb	399	9.97	550	
Tl	205	165	1	0.33	0.33	ppb	14804	6.61	550	
Pb	208	165	1	0.04	0.04	ppb	4537	8.21	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	759359	1.33	799258	95.0	70	130	
Sc	45	2	37466	1.48	40230	93.1	70	130	
In	115	1	1171474	1.47	1198701	97.7	70	130	
In	115	2	244924	0.58	262579	93.3	70	130	
Tb	159	1	1970583	0.94	1977251	99.7	70	130	
Tb	159	2	827495	0.49	867830	95.4	70	130	
Ho	165	1	1942524	0.16	1965073	98.9	70	130	
Ho	165	2	837637	0.61	874595	95.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0286CCV.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T20:12:50-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	45	1	50.20	ppb	50	319685	4.94	100.41	90	110	
Na	23	115	2	5144.93	ppb	5000	4801042	1.66	102.90	90	110	
Mg	24	115	2	5120.49	ppb	5000	2286354	2.00	102.41	90	110	
Al	27	115	2	1493.39	ppb	1500	242249	2.56	99.56	90	110	
K	39	115	2	5089.77	ppb	5000	1688212	0.58	101.80	90	110	
Ca	44	115	2	4934.60	ppb	5000	80397	0.87	98.69	90	110	
V	51	115	2	49.74	ppb	50	180020	2.07	99.49	90	110	
Cr	52	115	2	50.10	ppb	50	223187	1.98	100.20	90	110	
Mn	55	115	2	50.02	ppb	50	130569	1.59	100.04	90	110	
Fe	56	115	2	5020.65	ppb	5000	19032309	1.84	100.41	90	110	
Co	59	115	2	50.47	ppb	50	354029	1.20	100.93	90	110	
Ni	60	115	2	50.42	ppb	50	93813	0.68	100.85	90	110	
Cu	65	115	2	50.87	ppb	50	122375	2.60	101.75	90	110	
Zn	66	115	2	50.41	ppb	50	38250	0.70	100.83	90	110	
As	75	115	2	49.65	ppb	50	22655	2.34	99.29	90	110	
Se	78	115	2	250.46	ppb	250	9325	1.54	100.18	90	110	
Mo	95	115	1	48.10	ppb	50	269526	4.60	96.21	90	110	
Ag	107	115	1	46.20	ppb	50	733856	4.82	92.40	90	110	
Cd	111	115	1	48.85	ppb	50	149612	4.71	97.71	90	110	
Sb	121	115	1	49.23	ppb	50	587984	4.66	98.46	90	110	
Ba	137	159	1	48.00	ppb	50	239839	5.11	96.01	90	110	
Tl	205	165	1	49.40	ppb	50	2039409	4.81	98.80	90	110	
Pb	208	165	1	45.83	ppb	50	1230720	5.15	91.66	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	751555	0.51	799258	94.0	70	130	
Sc	45	2	37818	0.61	40230	94.0	70	130	
In	115	1	1144322	0.30	1198701	95.5	70	130	
In	115	2	242506	0.27	262579	92.4	70	130	
Tb	159	1	1916724	0.57	1977251	96.9	70	130	
Tb	159	2	824535	0.74	867830	95.0	70	130	
Ho	165	1	1910505	0.75	1965073	97.2	70	130	
Ho	165	2	832961	0.49	874595	95.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0296CCB.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T20:17:16-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	45	1	0.08	ppb	0.5	
Na	23	115	2	7.74	ppb	250	
Mg	24	115	2	0.98	ppb	250	
Al	27	115	2	1.05	ppb	100	
K	39	115	2	1.69	ppb	250	
Ca	44	115	2	2.81	ppb	250	
V	51	115	2	0.02	ppb	1	
Cr	52	115	2	-0.02	ppb	1	
Mn	55	115	2	0.02	ppb	3	
Fe	56	115	2	0.30	ppb	150	
Co	59	115	2	0.01	ppb	1	
Ni	60	115	2	0.15	ppb	1.5	
Cu	65	115	2	-0.18	ppb	5	
Zn	66	115	2	-0.03	ppb	10	
As	75	115	2	0.03	ppb	1	
Se	78	115	2	0.28	ppb	5	
Mo	95	115	1	0.11	ppb	1	
Ag	107	115	1	0.06	ppb	0.5	
Cd	111	115	1	0.02	ppb	1	
Sb	121	115	1	0.08	ppb	1.5	
Ba	137	159	1	-0.04	ppb	2.5	
Tl	205	165	1	0.08	ppb	1	
Pb	208	165	1	0.03	ppb	1.5	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	749091	0.64	799258	93.7	70	130	
Sc	45	2	37455	1.04	40230	93.1	70	130	
In	115	1	1143186	0.39	1198701	95.4	70	130	
In	115	2	245830	1.74	262579	93.6	70	130	
Tb	159	1	1910639	2.23	1977251	96.6	70	130	
Tb	159	2	820125	1.17	867830	94.5	70	130	
Ho	165	1	1889555	1.35	1965073	96.2	70	130	
Ho	165	2	827449	0.40	874595	94.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19145-010**
Data File Name	**030SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T20:21:49-04:00**
Type	**Sample**
VialNumber	**3311**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.07	0.07	ppb	650	7.18	550	
Na	23	115	2	183.85	183.85	ppb	190083	1.40	55000	
Mg	24	115	2	7.46	7.46	ppb	5942	2.13	55000	
Al	27	115	2	4.05	4.05	ppb	1271	12.76	16500	
K	39	115	2	2.10	2.10	ppb	23285	0.93	55000	
Ca	44	115	2	57.86	57.86	ppb	1079	2.17	55000	
V	51	115	2	0.65	0.65	ppb	2422	4.72	550	
Cr	52	115	2	0.14	0.14	ppb	1831	5.88	550	
Mn	55	115	2	0.25	0.25	ppb	1297	5.89	550	
Fe	56	115	2	0.84	0.84	ppb	34726	1.02	55000	
Co	59	115	2	0.00	0.00	ppb	150	15.56	550	
Ni	60	115	2	0.02	0.02	ppb	359	6.18	550	
Cu	65	115	2	2.06	2.06	ppb	6069	4.59	550	
Zn	66	115	2	3.07	3.07	ppb	3206	3.76	550	
As	75	115	2	0.14	0.14	ppb	73	19.98	550	
Se	78	115	2	0.20	0.20	ppb	17	46.20	2750	
Mo	95	115	1	0.03	0.03	ppb	307	35.04	550	
Ag	107	115	1	0.04	0.04	ppb	1631	7.47	550	
Cd	111	115	1	0.01	0.01	ppb	51	15.68	550	
Sb	121	115	1	0.07	0.07	ppb	1208	7.27	550	
Ba	137	159	1	0.17	0.17	ppb	1796	4.09	550	
Tl	205	165	1	0.08	0.08	ppb	4564	2.86	550	
Pb	208	165	1	0.06	0.06	ppb	5195	3.80	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	762257	0.73	799258	95.4	70	130	
Sc	45	2	37592	1.63	40230	93.4	70	130	
In	115	1	1211428	0.81	1198701	101.1	70	130	
In	115	2	244264	0.91	262579	93.0	70	130	
Tb	159	1	2079448	1.12	1977251	105.2	70	130	
Tb	159	2	853110	1.06	867830	98.3	70	130	
Ho	165	1	2048713	0.49	1965073	104.3	70	130	
Ho	165	2	857084	1.57	874595	98.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-011**
Data File Name	**031SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T20:26:23-04:00**
Type	**Sample**
VialNumber	**3310**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.06	0.06	ppb	590	10.22	550	
Na	23	115	2	196.45	196.45	ppb	204050	1.07	55000	
Mg	24	115	2	7.52	7.52	ppb	6032	1.14	55000	
Al	27	115	2	15.95	15.95	ppb	3247	1.18	16500	
K	39	115	2	9.23	9.23	ppb	25909	0.25	55000	
Ca	44	115	2	177.65	177.65	ppb	3075	1.16	55000	
V	51	115	2	0.65	0.65	ppb	2454	5.14	550	
Cr	52	115	2	1.30	1.30	ppb	7088	2.29	550	
Mn	55	115	2	6.10	6.10	ppb	16773	1.27	550	
Fe	56	115	2	1926.13	1926.13	ppb	7453001	1.63	55000	
Co	59	115	2	0.10	0.10	ppb	897	6.83	550	
Ni	60	115	2	0.78	0.78	ppb	1790	2.91	550	
Cu	65	115	2	6.35	6.35	ppb	16559	1.94	550	
Zn	66	115	2	2139.72	2139.72	ppb	1614407	2.95	550	>LDR
As	75	115	2	0.32	0.32	ppb	157	18.48	550	
Se	78	115	2	0.09	0.09	ppb	13	62.89	2750	
Mo	95	115	1	0.20	0.20	ppb	1367	5.99	550	
Ag	107	115	1	0.04	0.04	ppb	1770	5.87	550	
Cd	111	115	1	0.01	0.01	ppb	47	23.12	550	
Sb	121	115	1	0.11	0.11	ppb	1770	4.57	550	
Ba	137	159	1	1.38	1.38	ppb	8652	3.62	550	
Tl	205	165	1	0.03	0.03	ppb	2530	6.90	550	
Pb	208	165	1	0.51	0.51	ppb	18903	2.65	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	805513	0.16	799258	100.8	70	130	
Sc	45	2	38582	0.48	40230	95.9	70	130	
In	115	1	1251824	0.93	1198701	104.4	70	130	
In	115	2	246912	0.97	262579	94.0	70	130	
Tb	159	1	2162996	0.36	1977251	109.4	70	130	
Tb	159	2	865716	0.66	867830	99.8	70	130	
Ho	165	1	2144524	0.62	1965073	109.1	70	130	
Ho	165	2	873605	1.01	874595	99.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19168-001**
Data File Name	**032SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T20:30:57-04:00**
Type	**Sample**
VialNumber	**3312**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.08	0.08	ppb	759	1.27	550	
Na	23	115	2	12312.21	12312.21	ppb	11583116	1.25	55000	
Mg	24	115	2	3991.39	3991.39	ppb	1801347	1.90	55000	
Al	27	115	2	548.17	548.17	ppb	90222	0.76	16500	
K	39	115	2	1669.30	1669.30	ppb	574688	1.53	55000	
Ca	44	115	2	11007.07	11007.07	ppb	181043	1.62	55000	
V	51	115	2	2.46	2.46	ppb	9026	3.33	550	
Cr	52	115	2	1.59	1.59	ppb	8312	2.53	550	
Mn	55	115	2	65.84	65.84	ppb	173457	2.23	550	
Fe	56	115	2	851.25	851.25	ppb	3286596	0.99	55000	
Co	59	115	2	0.44	0.44	ppb	3260	4.33	550	
Ni	60	115	2	1.47	1.47	ppb	3080	3.99	550	
Cu	65	115	2	3.20	3.20	ppb	8835	0.31	550	
Zn	66	115	2	8.95	8.95	ppb	7610	1.22	550	
As	75	115	2	0.95	0.95	ppb	443	4.77	550	
Se	78	115	2	0.38	0.38	ppb	24	19.82	2750	
Mo	95	115	1	0.50	0.50	ppb	3144	7.40	550	
Ag	107	115	1	0.02	0.02	ppb	1370	4.44	550	
Cd	111	115	1	0.03	0.03	ppb	121	5.20	550	
Sb	121	115	1	0.18	0.18	ppb	2630	4.53	550	
Ba	137	159	1	18.44	18.44	ppb	104697	4.85	550	
Tl	205	165	1	0.03	0.03	ppb	2530	3.46	550	
Pb	208	165	1	1.32	1.32	ppb	43517	3.73	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	816675	0.64	799258	102.2	70	130	
Sc	45	2	38130	1.34	40230	94.8	70	130	
In	115	1	1241453	1.06	1198701	103.6	70	130	
In	115	2	245026	1.32	262579	93.3	70	130	
Tb	159	1	2165253	1.47	1977251	109.5	70	130	
Tb	159	2	871983	1.36	867830	100.5	70	130	
Ho	165	1	2144798	1.63	1965073	109.1	70	130	
Ho	165	2	879251	0.98	874595	100.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19168-002**
Data File Name	**033SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T20:35:30-04:00**
Type	**Sample**
VialNumber	**3401**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.07	0.07	ppb	679	3.55	550	
Na	23	115	2	11427.31	11427.31	ppb	10811657	0.96	55000	
Mg	24	115	2	3579.06	3579.06	ppb	1624400	1.01	55000	
Al	27	115	2	374.13	374.13	ppb	62117	3.25	16500	
K	39	115	2	1534.48	1534.48	ppb	533019	0.84	55000	
Ca	44	115	2	9393.95	9393.95	ppb	155380	1.89	55000	
V	51	115	2	2.21	2.21	ppb	8178	3.59	550	
Cr	52	115	2	1.08	1.08	ppb	6083	1.86	550	
Mn	55	115	2	47.64	47.64	ppb	126382	2.43	550	
Fe	56	115	2	646.15	646.15	ppb	2516368	2.52	55000	
Co	59	115	2	0.34	0.34	ppb	2577	0.91	550	
Ni	60	115	2	1.14	1.14	ppb	2466	3.40	550	
Cu	65	115	2	2.90	2.90	ppb	8163	0.50	550	
Zn	66	115	2	7.86	7.86	ppb	6837	3.68	550	
As	75	115	2	0.89	0.89	ppb	418	6.31	550	
Se	78	115	2	0.30	0.30	ppb	21	36.34	2750	
Mo	95	115	1	0.43	0.43	ppb	2815	2.20	550	
Ag	107	115	1	0.01	0.01	ppb	1231	3.79	550	
Cd	111	115	1	0.02	0.02	ppb	91	15.62	550	
Sb	121	115	1	0.16	0.16	ppb	2528	1.46	550	
Ba	137	159	1	16.98	16.98	ppb	97547	4.34	550	
Tl	205	165	1	0.02	0.02	ppb	1989	3.58	550	
Pb	208	165	1	1.20	1.20	ppb	40325	2.35	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	828974	0.41	799258	103.7	70	130	
Sc	45	2	38149	1.50	40230	94.8	70	130	
In	115	1	1267510	0.79	1198701	105.7	70	130	
In	115	2	246376	0.37	262579	93.8	70	130	
Tb	159	1	2190484	0.20	1977251	110.8	70	130	
Tb	159	2	877890	0.58	867830	101.2	70	130	
Ho	165	1	2171918	0.24	1965073	110.5	70	130	
Ho	165	2	885738	0.53	874595	101.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19168-003**
Data File Name	**034SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T20:40:04-04:00**
Type	**Sample**
VialNumber	**3402**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.06	0.06	ppb	622	9.44	550	
Na	23	115	2	12095.34	12095.34	ppb	11426823	1.62	55000	
Mg	24	115	2	3759.33	3759.33	ppb	1703765	1.65	55000	
Al	27	115	2	362.15	362.15	ppb	60086	6.02	16500	
K	39	115	2	1626.24	1626.24	ppb	562762	1.53	55000	
Ca	44	115	2	9867.27	9867.27	ppb	162985	2.19	55000	
V	51	115	2	2.18	2.18	ppb	8065	2.57	550	
Cr	52	115	2	0.93	0.93	ppb	5405	5.46	550	
Mn	55	115	2	29.88	29.88	ppb	79405	2.15	550	
Fe	56	115	2	576.92	576.92	ppb	2245823	8.08	55000	
Co	59	115	2	0.28	0.28	ppb	2156	10.21	550	
Ni	60	115	2	1.02	1.02	ppb	2244	6.56	550	
Cu	65	115	2	2.69	2.69	ppb	7656	3.38	550	
Zn	66	115	2	6.81	6.81	ppb	6039	4.20	550	
As	75	115	2	0.85	0.85	ppb	399	8.95	550	
Se	78	115	2	0.44	0.44	ppb	27	16.67	2750	
Mo	95	115	1	0.45	0.45	ppb	2929	1.55	550	
Ag	107	115	1	0.01	0.01	ppb	1147	4.80	550	
Cd	111	115	1	0.02	0.02	ppb	79	10.04	550	
Sb	121	115	1	0.22	0.22	ppb	3255	2.66	550	
Ba	137	159	1	16.68	16.68	ppb	94556	4.54	550	
Tl	205	165	1	0.02	0.02	ppb	1811	6.17	550	
Pb	208	165	1	0.82	0.82	ppb	28363	4.94	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	825686	1.17	799258	103.3	70	130	
Sc	45	2	38150	1.33	40230	94.8	70	130	
In	115	1	1262350	1.15	1198701	105.3	70	130	
In	115	2	246033	0.84	262579	93.7	70	130	
Tb	159	1	2161357	0.93	1977251	109.3	70	130	
Tb	159	2	878296	1.24	867830	101.2	70	130	
Ho	165	1	2152549	0.83	1965073	109.5	70	130	
Ho	165	2	886285	0.59	874595	101.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 7:47 AM on:9/15/2020

Sample Report

Sample Name	**AD19168-004**
Data File Name	**035SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T20:44:38-04:00**
Type	**Sample**
VialNumber	**3403**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.07	0.07	ppb	671	2.35	550	
Na	23	115	2	11925.83	11925.83	ppb	11239030	1.27	55000	
Mg	24	115	2	3774.60	3774.60	ppb	1706568	2.30	55000	
Al	27	115	2	534.77	534.77	ppb	88192	6.56	16500	
K	39	115	2	1629.46	1629.46	ppb	562451	1.13	55000	
Ca	44	115	2	9677.52	9677.52	ppb	159462	2.11	55000	
V	51	115	2	2.51	2.51	ppb	9242	2.18	550	
Cr	52	115	2	1.40	1.40	ppb	7482	3.32	550	
Mn	55	115	2	47.49	47.49	ppb	125492	1.35	550	
Fe	56	115	2	822.90	822.90	ppb	3183923	2.63	55000	
Co	59	115	2	0.41	0.41	ppb	3084	2.13	550	
Ni	60	115	2	1.34	1.34	ppb	2846	6.12	550	
Cu	65	115	2	3.03	3.03	ppb	8450	2.09	550	
Zn	66	115	2	8.88	8.88	ppb	7574	3.56	550	
As	75	115	2	0.95	0.95	ppb	446	3.15	550	
Se	78	115	2	0.28	0.28	ppb	20	33.34	2750	
Mo	95	115	1	0.47	0.47	ppb	3038	4.52	550	
Ag	107	115	1	0.01	0.01	ppb	1198	4.02	550	
Cd	111	115	1	0.03	0.03	ppb	104	6.86	550	
Sb	121	115	1	0.17	0.17	ppb	2613	1.99	550	
Ba	137	159	1	17.89	17.89	ppb	102146	4.57	550	
Tl	205	165	1	0.02	0.02	ppb	1834	4.34	550	
Pb	208	165	1	1.22	1.22	ppb	40654	6.16	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	826050	0.62	799258	103.4	70	130	
Sc	45	2	38204	0.90	40230	95.0	70	130	
In	115	1	1258365	0.64	1198701	105.0	70	130	
In	115	2	245436	0.79	262579	93.5	70	130	
Tb	159	1	2177997	1.02	1977251	110.2	70	130	
Tb	159	2	872300	0.28	867830	100.5	70	130	
Ho	165	1	2165940	1.31	1965073	110.2	70	130	
Ho	165	2	885837	0.73	874595	101.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19168-005**
Data File Name	**036SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T20:49:11-04:00**
Type	**Sample**
VialNumber	**3404**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.04	0.04	ppb	496	1.40	550	
Na	23	115	2	11999.14	11999.14	ppb	11330578	1.23	55000	
Mg	24	115	2	3717.06	3717.06	ppb	1683792	1.32	55000	
Al	27	115	2	166.61	166.61	ppb	27950	2.88	16500	
K	39	115	2	1640.12	1640.12	ppb	567030	0.79	55000	
Ca	44	115	2	9899.52	9899.52	ppb	163430	1.66	55000	
V	51	115	2	1.74	1.74	ppb	6418	1.85	550	
Cr	52	115	2	0.50	0.50	ppb	3453	5.49	550	
Mn	55	115	2	37.06	37.06	ppb	98272	1.97	550	
Fe	56	115	2	302.72	302.72	ppb	1193515	1.60	55000	
Co	59	115	2	0.16	0.16	ppb	1263	6.09	550	
Ni	60	115	2	0.90	0.90	ppb	2022	3.67	550	
Cu	65	115	2	2.45	2.45	ppb	7056	2.31	550	
Zn	66	115	2	9.42	9.42	ppb	7991	0.34	550	
As	75	115	2	0.75	0.75	ppb	354	0.31	550	
Se	78	115	2	0.30	0.30	ppb	21	33.27	2750	
Mo	95	115	1	0.44	0.44	ppb	2967	5.18	550	
Ag	107	115	1	-0.01	-0.01	ppb	929	7.18	550	
Cd	111	115	1	0.02	0.02	ppb	73	15.02	550	
Sb	121	115	1	0.21	0.21	ppb	3289	4.09	550	
Ba	137	159	1	15.83	15.83	ppb	91088	3.46	550	
Tl	205	165	1	0.01	0.01	ppb	1477	11.40	550	
Pb	208	165	1	0.74	0.74	ppb	26611	3.74	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	824145	0.52	799258	103.1	70	130	
Sc	45	2	37440	0.76	40230	93.1	70	130	
In	115	1	1307077	5.30	1198701	109.0	70	130	
In	115	2	245935	1.78	262579	93.7	70	130	
Tb	159	1	2192727	0.18	1977251	110.9	70	130	
Tb	159	2	873244	0.87	867830	100.6	70	130	
Ho	165	1	2188938	0.73	1965073	111.4	70	130	
Ho	165	2	885036	0.73	874595	101.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19168-006**
Data File Name	**037SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T20:53:45-04:00**
Type	**Sample**
VialNumber	**3405**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.04	0.04	ppb	474	7.07	550	
Na	23	115	2	11274.63	11274.63	ppb	10693026	1.15	55000	
Mg	24	115	2	3487.24	3487.24	ppb	1586619	1.98	55000	
Al	27	115	2	142.80	142.80	ppb	24153	3.17	16500	
K	39	115	2	1525.12	1525.12	ppb	531179	0.97	55000	
Ca	44	115	2	9174.31	9174.31	ppb	152115	1.70	55000	
V	51	115	2	1.74	1.74	ppb	6464	4.13	550	
Cr	52	115	2	0.62	0.62	ppb	4031	3.57	550	
Mn	55	115	2	36.27	36.27	ppb	96589	1.93	550	
Fe	56	115	2	289.23	289.23	ppb	1146661	1.77	55000	
Co	59	115	2	0.16	0.16	ppb	1270	8.14	550	
Ni	60	115	2	0.82	0.82	ppb	1870	5.32	550	
Cu	65	115	2	2.23	2.23	ppb	6570	3.08	550	
Zn	66	115	2	6.59	6.59	ppb	5895	2.05	550	
As	75	115	2	0.76	0.76	ppb	357	5.48	550	
Se	78	115	2	0.31	0.31	ppb	22	22.93	2750	
Mo	95	115	1	0.45	0.45	ppb	2976	2.11	550	
Ag	107	115	1	0.00	0.00	ppb	1018	7.33	550	
Cd	111	115	1	0.02	0.02	ppb	70	23.01	550	
Sb	121	115	1	0.16	0.16	ppb	2496	0.47	550	
Ba	137	159	1	14.82	14.82	ppb	85663	3.42	550	
Tl	205	165	1	0.01	0.01	ppb	1329	5.53	550	
Pb	208	165	1	0.54	0.54	ppb	20160	4.61	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	824805	0.66	799258	103.2	70	130	
Sc	45	2	37888	1.08	40230	94.2	70	130	
In	115	1	1282507	0.21	1198701	107.0	70	130	
In	115	2	246966	0.42	262579	94.1	70	130	
Tb	159	1	2200489	0.36	1977251	111.3	70	130	
Tb	159	2	871054	0.71	867830	100.4	70	130	
Ho	165	1	2170740	0.75	1965073	110.5	70	130	
Ho	165	2	879391	1.03	874595	100.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19168-007**
Data File Name	**038SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T20:58:19-04:00**
Type	**Sample**
VialNumber	**3406**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.04	0.04	ppb	476	14.54	550	
Na	23	115	2	11252.25	11252.25	ppb	10328500	1.95	55000	
Mg	24	115	2	7447.96	7447.96	ppb	3276665	1.70	55000	
Al	27	115	2	176.24	176.24	ppb	28704	0.69	16500	
K	39	115	2	4801.08	4801.08	ppb	1570771	0.92	55000	
Ca	44	115	2	16279.87	16279.87	ppb	261145	1.99	55000	
V	51	115	2	1.73	1.73	ppb	6222	4.34	550	
Cr	52	115	2	0.98	0.98	ppb	5462	2.00	550	
Mn	55	115	2	1572.42	1572.42	ppb	4026655	1.88	550	>LDR
Fe	56	115	2	777.89	777.89	ppb	2932519	1.97	55000	
Co	59	115	2	0.54	0.54	ppb	3854	0.61	550	
Ni	60	115	2	2.25	2.25	ppb	4423	5.25	550	
Cu	65	115	2	3.31	3.31	ppb	8890	2.14	550	
Zn	66	115	2	7.64	7.64	ppb	6474	3.84	550	
As	75	115	2	2.98	2.98	ppb	1345	2.48	550	
Se	78	115	2	0.17	0.17	ppb	16	22.44	2750	
Mo	95	115	1	0.60	0.60	ppb	3779	2.56	550	
Ag	107	115	1	0.00	0.00	ppb	1098	7.59	550	
Cd	111	115	1	0.11	0.11	ppb	379	10.54	550	
Sb	121	115	1	0.16	0.16	ppb	2416	11.10	550	
Ba	137	159	1	28.97	28.97	ppb	163958	5.20	550	
Tl	205	165	1	0.01	0.01	ppb	1325	7.53	550	
Pb	208	165	1	2.62	2.62	ppb	82419	4.87	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	851286	0.53	799258	106.5	70	130	
Sc	45	2	37211	1.60	40230	92.5	70	130	
In	115	1	1248813	1.08	1198701	104.2	70	130	
In	115	2	239013	1.15	262579	91.0	70	130	
Tb	159	1	2165878	0.81	1977251	109.5	70	130	
Tb	159	2	863411	1.10	867830	99.5	70	130	
Ho	165	1	2145684	0.97	1965073	109.2	70	130	
Ho	165	2	876665	1.28	874595	100.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 7:48 AM on:9/15/2020

Sample Report

Sample Name	**RINSE**
Data File Name	**039SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T21:02:47-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.02	0.02	ppb	340	12.97	550	
Na	23	115	2	9.05	9.05	ppb	25253	0.16	55000	
Mg	24	115	2	1.98	1.98	ppb	3342	7.12	55000	
Al	27	115	2	3.19	3.19	ppb	1066	26.11	16500	
K	39	115	2	3.14	3.14	ppb	22609	0.21	55000	
Ca	44	115	2	5.86	5.86	ppb	214	21.22	55000	
V	51	115	2	0.07	0.07	ppb	287	9.08	550	
Cr	52	115	2	-0.08	-0.08	ppb	827	5.43	550	
Mn	55	115	2	0.02	0.02	ppb	651	7.67	550	
Fe	56	115	2	3.22	3.22	ppb	41850	2.53	55000	
Co	59	115	2	0.01	0.01	ppb	202	12.59	550	
Ni	60	115	2	-0.02	-0.02	ppb	270	6.87	550	
Cu	65	115	2	0.03	0.03	ppb	1153	8.52	550	
Zn	66	115	2	-0.53	-0.53	ppb	491	13.13	550	
As	75	115	2	0.01	0.01	ppb	13	35.68	550	
Se	78	115	2	0.16	0.16	ppb	15	29.58	2750	
Mo	95	115	1	0.05	0.05	ppb	410	7.45	550	
Ag	107	115	1	0.10	0.10	ppb	2685	5.03	550	
Cd	111	115	1	0.02	0.02	ppb	70	12.99	550	
Sb	121	115	1	0.01	0.01	ppb	471	6.54	550	
Ba	137	159	1	-0.09	-0.09	ppb	369	1.38	550	
Tl	205	165	1	0.02	0.02	ppb	1906	3.42	550	
Pb	208	165	1	0.01	0.01	ppb	3861	4.95	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	767914	1.73	799258	96.1	70	130	
Sc	45	2	35227	9.46	40230	87.6	70	130	
In	115	1	1195961	1.80	1198701	99.8	70	130	
In	115	2	235330	9.66	262579	89.6	70	130	
Tb	159	1	2028690	3.07	1977251	102.6	70	130	
Tb	159	2	809110	9.17	867830	93.2	70	130	
Ho	165	1	2025912	1.71	1965073	103.1	70	130	
Ho	165	2	813797	9.72	874595	93.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0406CCV.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T21:07:18-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	45	1	50.09	ppb	50	320319	4.42	100.18	90	110	
Na	23	115	2	5033.25	ppb	5000	4656766	0.26	100.66	90	110	
Mg	24	115	2	5065.33	ppb	5000	2242413	1.09	101.31	90	110	
Al	27	115	2	1463.98	ppb	1500	235475	2.10	97.60	90	110	
K	39	115	2	4991.07	ppb	5000	1641738	0.95	99.82	90	110	
Ca	44	115	2	4908.60	ppb	5000	79296	2.40	98.17	90	110	
V	51	115	2	49.04	ppb	50	175973	1.69	98.08	90	110	
Cr	52	115	2	49.57	ppb	50	218956	1.20	99.15	90	110	
Mn	55	115	2	49.28	ppb	50	127558	1.39	98.57	90	110	
Fe	56	115	2	5008.09	ppb	5000	18823984	2.21	100.16	90	110	
Co	59	115	2	49.87	ppb	50	346881	1.90	99.74	90	110	
Ni	60	115	2	49.86	ppb	50	91972	1.27	99.71	90	110	
Cu	65	115	2	50.12	ppb	50	119539	1.60	100.23	90	110	
Zn	66	115	2	49.74	ppb	50	37426	0.54	99.48	90	110	
As	75	115	2	49.21	ppb	50	22265	2.42	98.42	90	110	
Se	78	115	2	245.47	ppb	250	9062	2.25	98.19	90	110	
Mo	95	115	1	48.75	ppb	50	274059	4.83	97.50	90	110	
Ag	107	115	1	47.06	ppb	50	749982	4.49	94.12	90	110	
Cd	111	115	1	49.96	ppb	50	153512	4.10	99.92	90	110	
Sb	121	115	1	50.37	ppb	50	603620	4.40	100.74	90	110	
Ba	137	159	1	48.80	ppb	50	247559	5.15	97.60	90	110	
Tl	205	165	1	50.57	ppb	50	2118613	3.48	101.14	90	110	
Pb	208	165	1	46.61	ppb	50	1270042	4.66	93.22	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	754545	0.23	799258	94.4	70	130	
Sc	45	2	36822	1.14	40230	91.5	70	130	
In	115	1	1147852	0.78	1198701	95.8	70	130	
In	115	2	240430	0.87	262579	91.6	70	130	
Tb	159	1	1946234	0.49	1977251	98.4	70	130	
Tb	159	2	826907	1.00	867830	95.3	70	130	
Ho	165	1	1938389	0.69	1965073	98.6	70	130	
Ho	165	2	835403	0.88	874595	95.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0416CCB.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T21:11:47-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	45	1	0.03	ppb	0.5	
Na	23	115	2	3.65	ppb	250	
Mg	24	115	2	1.32	ppb	250	
Al	27	115	2	0.50	ppb	100	
K	39	115	2	-0.53	ppb	250	
Ca	44	115	2	1.18	ppb	250	
V	51	115	2	0.03	ppb	1	
Cr	52	115	2	-0.04	ppb	1	
Mn	55	115	2	0.04	ppb	3	
Fe	56	115	2	0.28	ppb	150	
Co	59	115	2	0.00	ppb	1	
Ni	60	115	2	0.14	ppb	1.5	
Cu	65	115	2	-0.20	ppb	5	
Zn	66	115	2	0.02	ppb	10	
As	75	115	2	0.02	ppb	1	
Se	78	115	2	0.23	ppb	5	
Mo	95	115	1	0.09	ppb	1	
Ag	107	115	1	0.06	ppb	0.5	
Cd	111	115	1	0.02	ppb	1	
Sb	121	115	1	0.06	ppb	1.5	
Ba	137	159	1	-0.04	ppb	2.5	
Tl	205	165	1	0.04	ppb	1	
Pb	208	165	1	0.01	ppb	1.5	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	740103	0.87	799258	92.6	70	130	
Sc	45	2	36460	0.29	40230	90.6	70	130	
In	115	1	1148659	0.84	1198701	95.8	70	130	
In	115	2	243471	0.51	262579	92.7	70	130	
Tb	159	1	1929367	0.68	1977251	97.6	70	130	
Tb	159	2	827401	1.17	867830	95.3	70	130	
Ho	165	1	1908727	0.39	1965073	97.1	70	130	
Ho	165	2	829310	0.72	874595	94.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19206-001**
Data File Name	**042SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T21:16:21-04:00**
Type	**Sample**
VialNumber	**3407**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.04	0.04	ppb	448	10.54	550	
Na	23	115	2	22180.83	22180.83	ppb	20439570	1.66	55000	
Mg	24	115	2	8272.63	8272.63	ppb	3656508	1.82	55000	
Al	27	115	2	19.51	19.51	ppb	3730	7.04	16500	
K	39	115	2	2850.37	2850.37	ppb	946065	1.36	55000	
Ca	44	115	2	32868.81	32868.81	ppb	529604	1.85	55000	
V	51	115	2	1.09	1.09	ppb	3934	5.17	550	
Cr	52	115	2	0.33	0.33	ppb	2641	3.87	550	
Mn	55	115	2	0.70	0.70	ppb	2435	1.90	550	
Fe	56	115	2	11.97	11.97	ppb	75851	4.94	55000	
Co	59	115	2	0.05	0.05	ppb	519	3.54	550	
Ni	60	115	2	8.01	8.01	ppb	15026	3.41	550	
Cu	65	115	2	1.92	1.92	ppb	5656	3.45	550	
Zn	66	115	2	18.18	18.18	ppb	14233	3.86	550	
As	75	115	2	0.26	0.26	ppb	124	15.57	550	
Se	78	115	2	4.83	4.83	ppb	188	11.41	2750	
Mo	95	115	1	0.02	0.02	ppb	259	8.28	550	
Ag	107	115	1	0.00	0.00	ppb	929	10.11	550	
Cd	111	115	1	0.07	0.07	ppb	229	4.72	550	
Sb	121	115	1	0.07	0.07	ppb	1198	5.02	550	
Ba	137	159	1	36.97	36.97	ppb	201424	4.43	550	
Tl	205	165	1	0.03	0.03	ppb	2416	3.81	550	
Pb	208	165	1	0.04	0.04	ppb	4840	1.61	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	796261	1.47	799258	99.6	70	130	
Sc	45	2	37410	0.46	40230	93.0	70	130	
In	115	1	1206520	1.12	1198701	100.7	70	130	
In	115	2	240154	0.63	262579	91.5	70	130	
Tb	159	1	2087132	1.35	1977251	105.6	70	130	
Tb	159	2	853506	0.79	867830	98.3	70	130	
Ho	165	1	2085597	1.14	1965073	106.1	70	130	
Ho	165	2	859614	0.94	874595	98.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19206-002**
Data File Name	**043SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T21:20:55-04:00**
Type	**Sample**
VialNumber	**3408**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.01	0.01	ppb	298	17.35	550	
Na	23	115	2	12715.87	12715.87	ppb	11457673	0.77	55000	
Mg	24	115	2	8783.96	8783.96	ppb	3793850	0.63	55000	
Al	27	115	2	3.83	3.83	ppb	1188	7.32	16500	
K	39	115	2	3378.49	3378.49	ppb	1091762	1.32	55000	
Ca	44	115	2	63729.43	63729.43	ppb	1003354	1.81	55000	>LDR
V	51	115	2	0.81	0.81	ppb	2863	2.98	550	
Cr	52	115	2	5.73	5.73	ppb	25735	2.95	550	
Mn	55	115	2	2365.79	2365.79	ppb	5948092	1.57	550	>LDR
Fe	56	115	2	364.56	364.56	ppb	1365495	0.20	55000	
Co	59	115	2	1.27	1.27	ppb	8786	2.46	550	
Ni	60	115	2	19.78	19.78	ppb	35808	1.41	550	
Cu	65	115	2	1.96	1.96	ppb	5607	0.45	550	
Zn	66	115	2	5.56	5.56	ppb	4861	2.34	550	
As	75	115	2	0.48	0.48	ppb	219	11.50	550	
Se	78	115	2	0.13	0.13	ppb	14	30.78	2750	
Mo	95	115	1	0.61	0.61	ppb	3771	7.89	550	
Ag	107	115	1	-0.01	-0.01	ppb	867	4.07	550	
Cd	111	115	1	0.06	0.06	ppb	219	1.02	550	
Sb	121	115	1	0.07	0.07	ppb	1258	2.92	550	
Ba	137	159	1	58.16	58.16	ppb	322007	4.36	550	
Tl	205	165	1	0.01	0.01	ppb	1297	9.34	550	
Pb	208	165	1	0.15	0.15	ppb	7989	4.42	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	813945	0.60	799258	101.8	70	130	
Sc	45	2	36045	1.91	40230	89.6	70	130	
In	115	1	1213905	0.50	1198701	101.3	70	130	
In	115	2	234688	0.67	262579	89.4	70	130	
Tb	159	1	2125477	0.73	1977251	107.5	70	130	
Tb	159	2	842952	1.24	867830	97.1	70	130	
Ho	165	1	2092108	0.48	1965073	106.5	70	130	
Ho	165	2	853844	1.30	874595	97.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19206-003**
Data File Name	**044SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T21:25:27-04:00**
Type	**Sample**
VialNumber	**3409**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.02	0.02	ppb	326	9.29	550	
Na	23	115	2	53018.26	53018.26	ppb	48342365	1.56	55000	
Mg	24	115	2	13443.95	13443.95	ppb	5881179	1.64	55000	
Al	27	115	2	12.46	12.46	ppb	2571	21.66	16500	
K	39	115	2	36560.96	36560.96	ppb	11753237	1.54	55000	
Ca	44	115	2	40963.59	40963.59	ppb	653384	2.33	55000	
V	51	115	2	1.92	1.92	ppb	6866	3.14	550	
Cr	52	115	2	0.60	0.60	ppb	3803	4.30	550	
Mn	55	115	2	355.51	355.51	ppb	906008	2.45	550	
Fe	56	115	2	7011.11	7011.11	ppb	26044315	1.99	55000	
Co	59	115	2	0.88	0.88	ppb	6227	2.21	550	
Ni	60	115	2	4.49	4.49	ppb	8478	3.45	550	
Cu	65	115	2	5.61	5.61	ppb	14203	6.72	550	
Zn	66	115	2	20.50	20.50	ppb	15776	3.56	550	
As	75	115	2	81.29	81.29	ppb	36365	2.01	550	
Se	78	115	2	0.23	0.23	ppb	18	38.88	2750	
Mo	95	115	1	3.31	3.31	ppb	19562	3.50	550	
Ag	107	115	1	-0.01	-0.01	ppb	881	9.50	550	
Cd	111	115	1	0.07	0.07	ppb	231	6.54	550	
Sb	121	115	1	0.24	0.24	ppb	3328	6.16	550	
Ba	137	159	1	222.13	222.13	ppb	1214454	6.08	550	
Tl	205	165	1	0.00	0.00	ppb	1103	4.57	550	
Pb	208	165	1	0.45	0.45	ppb	16705	2.85	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	826830	0.44	799258	103.4	70	130	
Sc	45	2	38052	1.00	40230	94.6	70	130	
In	115	1	1198602	0.84	1198701	100.0	70	130	
In	115	2	237766	0.71	262579	90.5	70	130	
Tb	159	1	2103027	1.06	1977251	106.4	70	130	
Tb	159	2	857443	1.27	867830	98.8	70	130	
Ho	165	1	2084358	0.50	1965073	106.1	70	130	
Ho	165	2	862852	0.54	874595	98.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19139-003 3X**
Data File Name	**045SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T21:29:57-04:00**
Type	**Sample**
VialNumber	**3410**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.15	0.15	ppb	1331	15.99	550	
Na	23	115	2	2166.26	2166.26	ppb	2033385	0.86	55000	
Mg	24	115	2	553.68	553.68	ppb	249734	1.92	55000	
Al	27	115	2	19639.47	19639.47	ppb	3181149	1.39	16500	>LDR
K	39	115	2	377.04	377.04	ppb	145934	0.05	55000	
Ca	44	115	2	2092.39	2092.39	ppb	34192	2.17	55000	
V	51	115	2	39.63	39.63	ppb	143545	1.67	550	
Cr	52	115	2	24.88	24.88	ppb	111541	2.40	550	
Mn	55	115	2	12.31	12.31	ppb	32639	2.59	550	
Fe	56	115	2	17001.38	17001.38	ppb	64431355	1.59	55000	
Co	59	115	2	0.99	0.99	ppb	7114	2.65	550	
Ni	60	115	2	5.38	5.38	ppb	10302	2.44	550	
Cu	65	115	2	4.81	4.81	ppb	12607	1.05	550	
Zn	66	115	2	19.81	19.81	ppb	15594	2.51	550	
As	75	115	2	5.50	5.50	ppb	2519	0.60	550	
Se	78	115	2	1.03	1.03	ppb	48	19.90	2750	
Mo	95	115	1	1.32	1.32	ppb	7995	2.35	550	
Ag	107	115	1	0.00	0.00	ppb	1022	11.18	550	
Cd	111	115	1	0.03	0.03	ppb	121	4.69	550	
Sb	121	115	1	0.08	0.08	ppb	1331	4.73	550	
Ba	137	159	1	16.31	16.31	ppb	89417	4.25	550	
Tl	205	165	1	0.07	0.07	ppb	3960	1.43	550	
Pb	208	165	1	6.08	6.08	ppb	179604	3.29	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	887937	0.86	799258	111.1	70	130	
Sc	45	2	39663	1.40	40230	98.6	70	130	
In	115	1	1214776	1.09	1198701	101.3	70	130	
In	115	2	242712	1.36	262579	92.4	70	130	
Tb	159	1	2089230	0.88	1977251	105.7	70	130	
Tb	159	2	851820	0.62	867830	98.2	70	130	
Ho	165	1	2064488	0.64	1965073	105.1	70	130	
Ho	165	2	860191	0.51	874595	98.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19163-003 3X**
Data File Name	**046SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T21:34:29-04:00**
Type	**Sample**
VialNumber	**3411**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.13	0.13	ppb	1111	3.73	550	
Na	23	115	2	7985.01	7985.01	ppb	7333501	1.44	55000	
Mg	24	115	2	1358.66	1358.66	ppb	599707	0.99	55000	
Al	27	115	2	4518.04	4518.04	ppb	721080	1.91	16500	
K	39	115	2	963.14	963.14	ppb	332746	1.07	55000	
Ca	44	115	2	2912.17	2912.17	ppb	46811	1.18	55000	
V	51	115	2	11.47	11.47	ppb	40932	2.24	550	
Cr	52	115	2	6.68	6.68	ppb	30371	0.84	550	
Mn	55	115	2	20.88	20.88	ppb	54078	2.33	550	
Fe	56	115	2	6073.97	6073.97	ppb	22685583	1.57	55000	
Co	59	115	2	1.59	1.59	ppb	11158	0.75	550	
Ni	60	115	2	3.47	3.47	ppb	6648	4.19	550	
Cu	65	115	2	3.70	3.70	ppb	9803	2.18	550	
Zn	66	115	2	9.82	9.82	ppb	8065	4.30	550	
As	75	115	2	2.61	2.61	ppb	1179	5.83	550	
Se	78	115	2	0.42	0.42	ppb	25	44.19	2750	
Mo	95	115	1	1.41	1.41	ppb	8227	2.42	550	
Ag	107	115	1	0.01	0.01	ppb	1183	1.02	550	
Cd	111	115	1	0.02	0.02	ppb	82	2.71	550	
Sb	121	115	1	0.13	0.13	ppb	1992	4.80	550	
Ba	137	159	1	19.73	19.73	ppb	105113	3.43	550	
Tl	205	165	1	0.05	0.05	ppb	3090	0.76	550	
Pb	208	165	1	2.30	2.30	ppb	68473	4.67	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	805129	0.71	799258	100.7	70	130	
Sc	45	2	37821	0.78	40230	94.0	70	130	
In	115	1	1176484	0.36	1198701	98.1	70	130	
In	115	2	238986	1.12	262579	91.0	70	130	
Tb	159	1	2033841	0.71	1977251	102.9	70	130	
Tb	159	2	851235	0.75	867830	98.1	70	130	
Ho	165	1	2017089	0.55	1965073	102.6	70	130	
Ho	165	2	858022	1.38	874595	98.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**047SMPL.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T21:39:01-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	45	1	0.02	0.02	ppb	302	4.97	550	
Na	23	115	2	6.44	6.44	ppb	23488	0.51	55000	
Mg	24	115	2	1.09	1.09	ppb	3021	3.57	55000	
Al	27	115	2	1.69	1.69	ppb	871	12.14	16500	
K	39	115	2	-1.64	-1.64	ppb	21635	1.88	55000	
Ca	44	115	2	5.75	5.75	ppb	221	26.64	55000	
V	51	115	2	0.07	0.07	ppb	297	11.68	550	
Cr	52	115	2	-0.10	-0.10	ppb	770	10.98	550	
Mn	55	115	2	0.01	0.01	ppb	646	5.76	550	
Fe	56	115	2	3.62	3.62	ppb	44431	1.01	55000	
Co	59	115	2	0.00	0.00	ppb	179	12.68	550	
Ni	60	115	2	-0.02	-0.02	ppb	287	5.33	550	
Cu	65	115	2	-0.10	-0.10	ppb	870	7.96	550	
Zn	66	115	2	-0.46	-0.46	ppb	560	8.99	550	
As	75	115	2	0.01	0.01	ppb	11	79.39	550	
Se	78	115	2	0.08	0.08	ppb	13	43.52	2750	
Mo	95	115	1	0.05	0.05	ppb	399	12.77	550	
Ag	107	115	1	0.09	0.09	ppb	2310	4.69	550	
Cd	111	115	1	0.02	0.02	ppb	63	7.65	550	
Sb	121	115	1	0.01	0.01	ppb	401	4.73	550	
Ba	137	159	1	-0.07	-0.07	ppb	434	6.20	550	
Tl	205	165	1	0.02	0.02	ppb	1635	4.10	550	
Pb	208	165	1	0.01	0.01	ppb	3588	4.53	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	723556	0.48	799258	90.5	70	130	
Sc	45	2	36509	2.15	40230	90.8	70	130	
In	115	1	1143964	0.26	1198701	95.4	70	130	
In	115	2	239649	0.57	262579	91.3	70	130	
Tb	159	1	1930885	0.72	1977251	97.7	70	130	
Tb	159	2	819813	0.42	867830	94.5	70	130	
Ho	165	1	1919882	0.19	1965073	97.7	70	130	
Ho	165	2	828880	0.91	874595	94.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0486CCV.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T21:43:33-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	45	1	50.59	ppb	50	312766	4.09	101.18	90	110	
Na	23	115	2	5012.64	ppb	5000	4615097	0.72	100.25	90	110	
Mg	24	115	2	5047.05	ppb	5000	2223281	1.20	100.94	90	110	
Al	27	115	2	1471.46	ppb	1500	235496	1.52	98.10	90	110	
K	39	115	2	5020.23	ppb	5000	1643118	1.37	100.40	90	110	
Ca	44	115	2	4934.06	ppb	5000	79310	1.09	98.68	90	110	
V	51	115	2	49.00	ppb	50	174942	1.10	98.00	90	110	
Cr	52	115	2	49.60	ppb	50	218000	1.26	99.20	90	110	
Mn	55	115	2	49.12	ppb	50	126499	2.04	98.23	90	110	
Fe	56	115	2	4995.60	ppb	5000	18682940	1.68	99.91	90	110	
Co	59	115	2	50.08	ppb	50	346611	1.59	100.16	90	110	
Ni	60	115	2	49.86	ppb	50	91525	2.23	99.72	90	110	
Cu	65	115	2	49.74	ppb	50	118071	1.00	99.49	90	110	
Zn	66	115	2	50.19	ppb	50	37575	0.54	100.39	90	110	
As	75	115	2	49.67	ppb	50	22360	0.91	99.34	90	110	
Se	78	115	2	245.54	ppb	250	9019	1.68	98.22	90	110	
Mo	95	115	1	48.96	ppb	50	267993	4.34	97.91	90	110	
Ag	107	115	1	46.84	ppb	50	726955	4.44	93.68	90	110	
Cd	111	115	1	49.72	ppb	50	148752	4.04	99.43	90	110	
Sb	121	115	1	49.77	ppb	50	580858	5.85	99.55	90	110	
Ba	137	159	1	48.87	ppb	50	240213	4.73	97.73	90	110	
Tl	205	165	1	51.14	ppb	50	2062623	3.89	102.28	90	110	
Pb	208	165	1	46.56	ppb	50	1221561	5.09	93.13	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	729431	0.60	799258	91.3	70	130	
Sc	45	2	37096	1.93	40230	92.2	70	130	
In	115	1	1117707	1.31	1198701	93.2	70	130	
In	115	2	239243	0.46	262579	91.1	70	130	
Tb	159	1	1885950	0.65	1977251	95.4	70	130	
Tb	159	2	813882	1.32	867830	93.8	70	130	
Ho	165	1	1866214	0.47	1965073	95.0	70	130	
Ho	165	2	821511	0.37	874595	93.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0496CCB.D**
DataPath	**C:\ICPMH\1\DATA\A091420A.b**
Acq Date Time	**2020-09-14T21:48:01-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 AQUEOUS**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

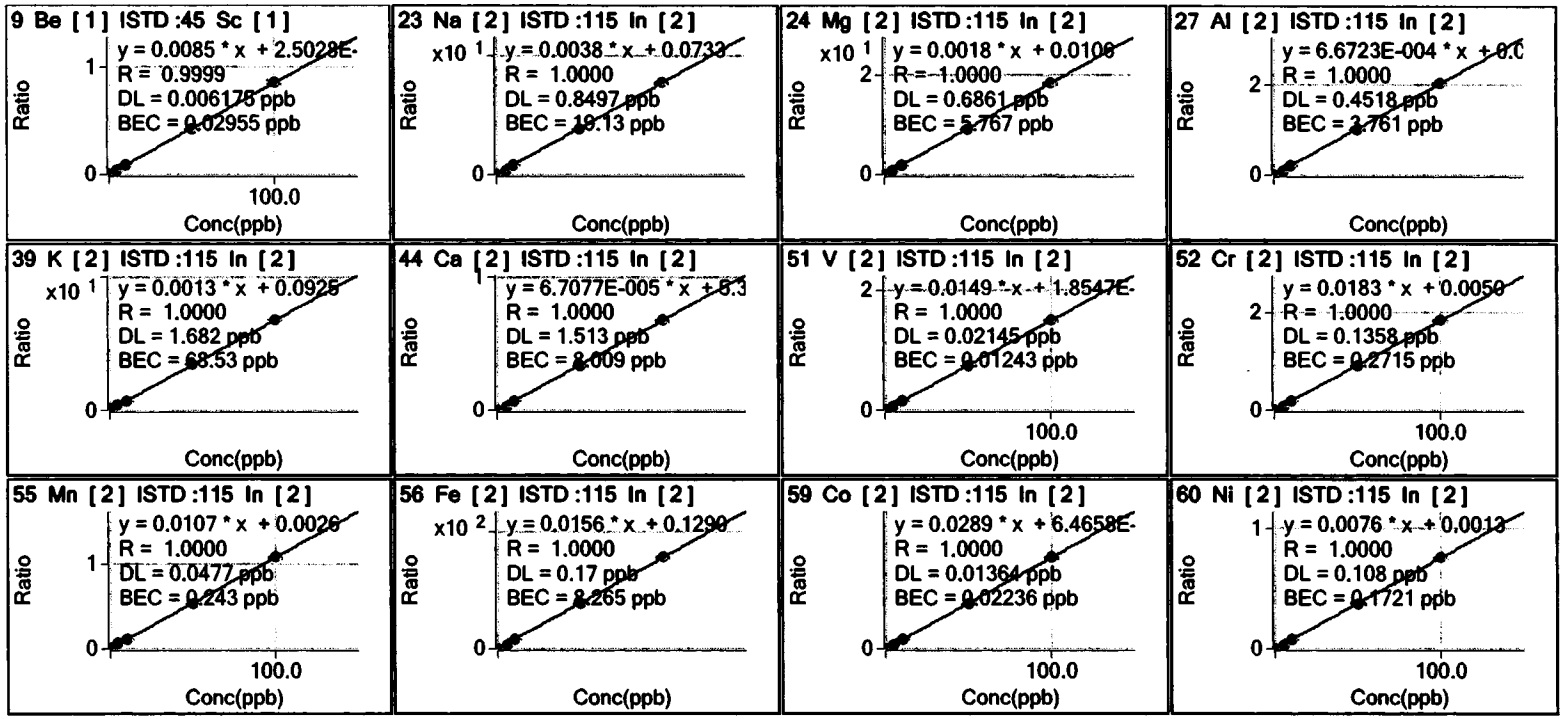
QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	45	1	0.03	ppb	0.5	
Na	23	115	2	4.50	ppb	250	
Mg	24	115	2	2.00	ppb	250	
Al	27	115	2	1.09	ppb	100	
K	39	115	2	0.91	ppb	250	
Ca	44	115	2	1.73	ppb	250	
V	51	115	2	0.03	ppb	1	
Cr	52	115	2	-0.03	ppb	1	
Mn	55	115	2	0.02	ppb	3	
Fe	56	115	2	0.45	ppb	150	
Co	59	115	2	0.01	ppb	1	
Ni	60	115	2	0.21	ppb	1.5	
Cu	65	115	2	-0.21	ppb	5	
Zn	66	115	2	-0.09	ppb	10	
As	75	115	2	0.02	ppb	1	
Se	78	115	2	0.20	ppb	5	
Mo	95	115	1	0.08	ppb	1	
Ag	107	115	1	0.05	ppb	0.5	
Cd	111	115	1	0.01	ppb	1	
Sb	121	115	1	0.06	ppb	1.5	
Ba	137	159	1	-0.04	ppb	2.5	
Tl	205	165	1	0.03	ppb	1	
Pb	208	165	1	0.01	ppb	1.5	

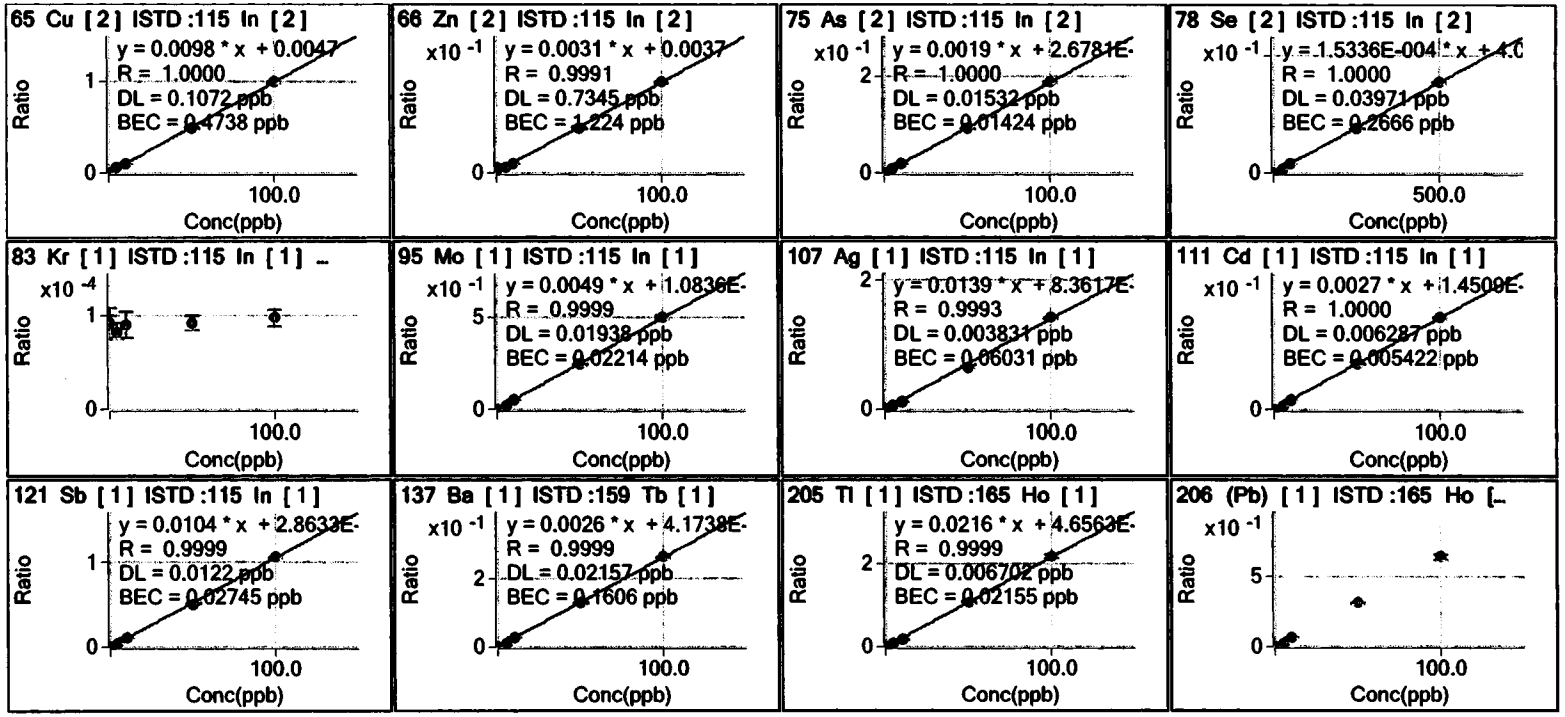
QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	738583	0.75	799258	92.4	70	130	
Sc	45	2	36725	0.35	40230	91.3	70	130	
In	115	1	1133672	0.24	1198701	94.6	70	130	
In	115	2	243369	1.23	262579	92.7	70	130	
Tb	159	1	1898515	1.68	1977251	96.0	70	130	
Tb	159	2	817749	0.66	867830	94.2	70	130	
Ho	165	1	1868957	1.93	1965073	95.1	70	130	
Ho	165	2	826511	0.76	874595	94.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u



0091006 0462



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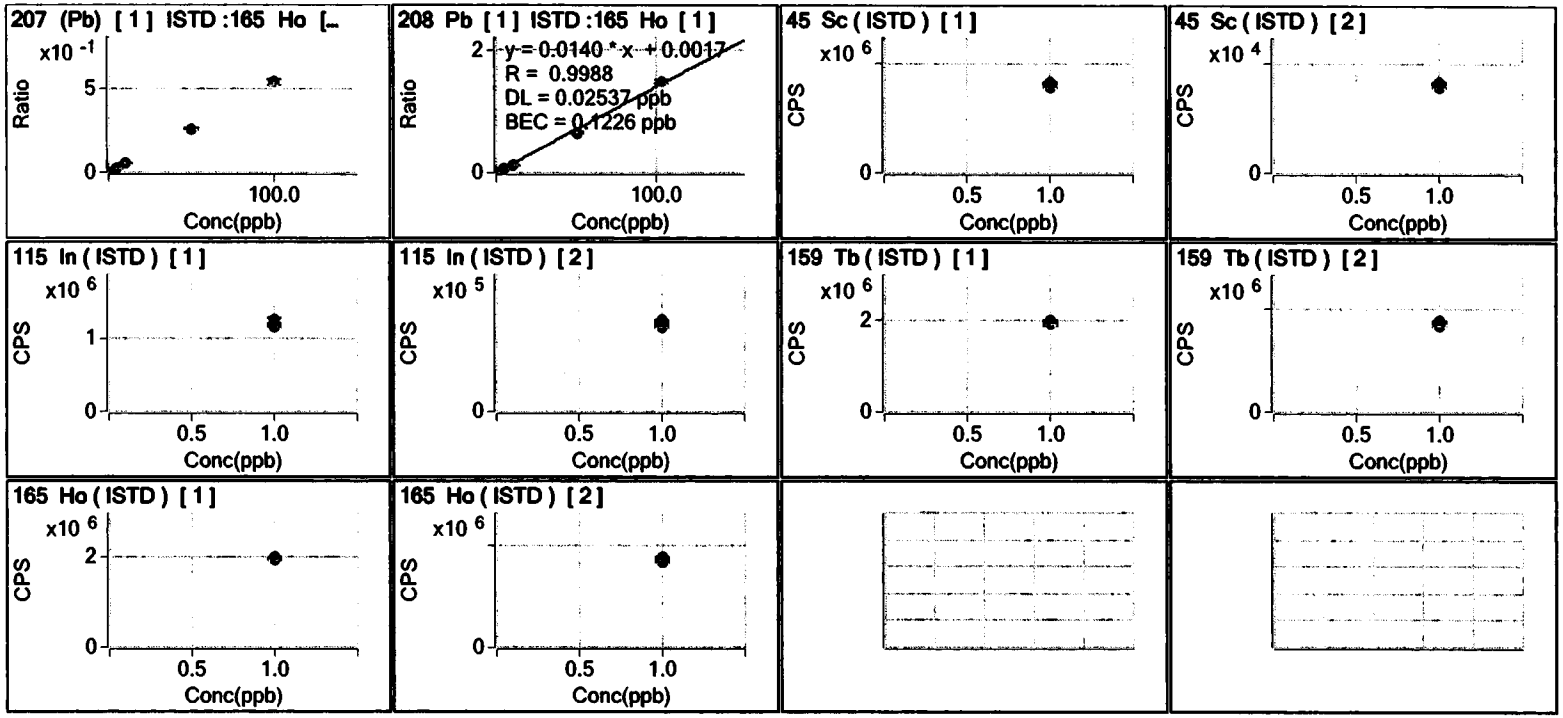

0091006 0464

Method: HGCV3 SWH2O (7470A) Page 1 Date: 9/15/2020 10:17:34 AM

==========

Analysis Begun

Logged In Analyst: usermet Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550 Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26214SW.sif
Batch ID: H26214SW
Results Data Set: H26214SW
Results Library: C:\data-AA\johns\Results\Results.mdb

H26214SW
SnCl2 V-33478
9/15/20
DL

==========

Method Loaded
Method Name: HGCV3 SWH2O (7470A) Method Last Saved: 2/13/2020 4:19:05 PM
Method Description: HgCV3 SW846H2O (7470A)

9/15/20

==========

Sequence No.: 1 Autosampler Location: 1
Sample ID: Calibration Blank Date Collected: 9/15/2020 10:12:48 AM
Analyst: Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0000	-0.0005	0.0000	10:13:34	Yes
2		[0.00]	0.0000	-0.0005	0.0000	10:14:07	Yes
Mean:		[0.00]	0.0000				
SD:		0.00	0.0000				
%RSD:		0.00	20.83				

Auto-zero performed.

==========

Sequence No.: 2 Autosampler Location: 2
Sample ID: .2 PPB Date Collected: 9/15/2020 10:14:08 AM
Analyst: Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0011	0.0047	0.0011	10:14:54	Yes
2		[0.2]	0.0011	0.0050	0.0011	10:15:26	Yes
Mean:		[0.2]	0.0011				
SD:		0.0	0.0000				
%RSD:		0.0	2.56				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00556 Intercept: 0.00000

==========

Sequence No.: 3 Autosampler Location: 3
Sample ID: .5 PPB Date Collected: 9/15/2020 10:15:27 AM
Analyst: Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0026	0.0114	0.0026	10:16:13	Yes
2		[0.5]	0.0026	0.0109	0.0026	10:16:46	Yes
Mean:		[0.5]	0.0026				
SD:		0.0	0.0000				
%RSD:		0.0	1.18				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999606 Slope: 0.00522 Intercept: 0.00003

==========

Sequence No.: 4 Autosampler Location: 4
Sample ID: 1 PPB Date Collected: 9/15/2020 10:16:47 AM
Analyst: Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[1]	0.0051	0.0221	0.0051	10:17:32	Yes
2	[1]	0.0050	0.0210	0.0050	10:18:05	Yes
Mean:	[1]	0.0050				
SD:	0	0.0001				
%RSD:	0	1.55				

Standard number 3 applied. [1]
Correlation Coef.: 0.999659 Slope: 0.00502 Intercept: 0.00006

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: 2 PPB **Date Collected: 9/15/2020 10:18:06 AM**
Analyst: **Data Type: Original**

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0098	0.0423	0.0098	10:18:52	Yes
2		[2]	0.0097	0.0421	0.0097	10:19:24	Yes
Mean:		[2]	0.0097				
SD:		0	0.0000				
%RSD:		0	0.15				

Standard number 4 applied. [2]
Correlation Coef.: 0.999744 Slope: 0.00485 Intercept: 0.00012

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: 5 PPB **Date Collected: 9/15/2020 10:19:26 AM**
Analyst: **Data Type: Original**

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0243	0.1064	0.0243	10:20:11	Yes
2		[5]	0.0242	0.1058	0.0242	10:20:44	Yes
Mean:		[5]	0.0242				
SD:		0	0.0000				
%RSD:		0	0.20				

Standard number 5 applied. [5]
Correlation Coef.: 0.999961 Slope: 0.00483 Intercept: 0.00013

Sequence No.: 7 **Autosampler Location: 7**
Sample ID: 10 PPB **Date Collected: 9/15/2020 10:20:45 AM**
Analyst: **Data Type: Original**

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0492	0.2173	0.0492	10:21:31	Yes
2		[10]	0.0489	0.2145	0.0489	10:22:03	Yes
Mean:		[10]	0.0490				
SD:		0	0.0003				
%RSD:		0	0.55				

Standard number 6 applied. [10]
Correlation Coef.: 0.999970 Slope: 0.00489 Intercept: 0.00007

Sequence No.: 8 **Autosampler Location: 8**
Sample ID: 25 PPB **Date Collected: 9/15/2020 10:22:29 AM**
Analyst: **Data Type: Original**

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[25]	0.1203	0.5342	0.1203	10:23:19	Yes
2		[25]	0.1192	0.5263	0.1192	10:23:51	Yes
Mean:		[25]	0.1197				
SD:		0	0.0008				
%RSD:		0	0.68				

Standard number 7 applied. [25]
Correlation Coef.: 0.999960 Slope: 0.00479 Intercept: 0.00027

Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.056	0.00	20.8
.2 PPB	0.0011	0.2	0.177	0.00	2.6
.5 PPB	0.0026	0.5	0.491	0.00	1.2
1 PPB	0.0050	1.0	0.997	0.00	1.6
2 PPB	0.0097	2.0	1.979	0.00	0.2
5 PPB	0.0242	5.0	5.003	0.00	0.2
10 PPB	0.0490	10.0	10.179	0.00	0.5
25 PPB	0.1197	25.0	24.930	0.00	0.7

Correlation Coef.: 0.999960 Slope: 0.00479 Intercept: 0.00027

Sequence No.: 9 Autosampler Location: 10
Sample ID: ICV (2) Date Collected: 9/15/2020 10:24:17 AM
Analyst: Data Type: Original

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.08	20.08	0.0965	0.4268	0.0965	10:25:04	Yes
2	20.00	20.00	0.0961	0.4238	0.0961	10:25:36	Yes
Mean:	20.04	20.04	0.0963				
SD:	0.061	0.061	0.0003				
%RSD:	0.305	0.305	0.30				

QC value within limits for Hg 253.7 Recovery = 100.21%
All analyte(s) passed QC.

Sequence No.: 10 Autosampler Location: 1
Sample ID: ICB Date Collected: 9/15/2020 10:25:59 AM
Analyst: Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.054	-0.054	0.0000	-0.0007	0.0000	10:26:45	Yes
2	-0.060	-0.060	-0.0000	-0.0007	-0.0000	10:27:18	Yes
Mean:	-0.057	-0.057	-0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	7.999	7.999	304.80				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 11
Sample ID: MB 85272 (1) Date Collected: 9/15/2020 10:27:19 AM
Analyst: Data Type: Original

Replicate Data: MB 85272 (1)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.025	-0.025	0.0001	0.0002	0.0002	10:28:05	Yes
2	-0.026	-0.026	0.0001	0.0002	0.0001	10:28:38	Yes
Mean:	-0.026	-0.026	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.714	3.714	3.19				

Sequence No.: 12 Autosampler Location: 12
Sample ID: LCS 85272 Date Collected: 9/15/2020 10:28:39 AM
Analyst: Data Type: Original

Replicate Data: LCS 85272

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.57	10.57	0.0509	0.2229	0.0509	10:29:24	Yes
2	10.53	10.53	0.0508	0.2211	0.0508	10:29:57	Yes
Mean:	10.55	10.55	0.0508				

SD:	0.027	0.027	0.0001
%RSD:	0.253	0.253	0.25

Sequence No.: 13 Autosampler Location: 13
Sample ID: LCS MR 85272 Date Collected: 9/15/2020 10:30:20 AM
Analyst: Data Type: Original

Replicate Data: LCS MR 85272

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.57	10.57	0.0509	0.2224	0.0510	10:31:08	Yes
2	10.45	10.45	0.0503	0.2191	0.0504	10:31:41	Yes
Mean:	10.51	10.51	0.0506				
SD:	0.088	0.088	0.0004				
%RSD:	0.838	0.838	0.83				

Sequence No.: 14 Autosampler Location: 14
Sample ID: AD19206-004 Date Collected: 9/15/2020 10:32:05 AM
Analyst: Data Type: Original

Replicate Data: AD19206-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.021	-0.021	0.0002	0.0002	0.0002	10:32:53	Yes
2	-0.019	-0.019	0.0002	0.0001	0.0002	10:33:25	Yes
Mean:	-0.020	-0.020	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	5.114	5.114	2.86				

Sequence No.: 15 Autosampler Location: 15
Sample ID: AD19206-004 MR Date Collected: 9/15/2020 10:33:27 AM
Analyst: Data Type: Original

Replicate Data: AD19206-004 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.019	-0.019	0.0002	0.0002	0.0002	10:34:12	Yes
2	-0.017	-0.017	0.0002	0.0003	0.0002	10:34:45	Yes
Mean:	-0.018	-0.018	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	9.569	9.569	4.65				

Sequence No.: 16 Autosampler Location: 16
Sample ID: AD19206-004 MS 1 Date Collected: 9/15/2020 10:34:46 AM
Analyst: Data Type: Original

Replicate Data: AD19206-004 MS 1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	8.992	8.992	0.0434	0.1931	0.0434	10:35:32	Yes
2	8.934	8.934	0.0431	0.1907	0.0431	10:36:04	Yes
Mean:	8.963	8.963	0.0432				
SD:	0.041	0.041	0.0002				
%RSD:	0.455	0.455	0.45				

Sequence No.: 17 Autosampler Location: 17
Sample ID: AD19206-004 MS 2 Date Collected: 9/15/2020 10:36:06 AM
Analyst: Data Type: Original

Replicate Data: AD19206-004 MS 2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.044	9.044	0.0436	0.1931	0.0436	10:36:51	Yes
2	9.015	9.015	0.0435	0.1917	0.0435	10:37:24	Yes
Mean:	9.030	9.030	0.0435				
SD:	0.020	0.020	0.0001				

%RSD: 0.225 0.225 0.22

Sequence No.: 18 **Autosampler Location: 18**
Sample ID: AD19159-011 **Date Collected: 9/15/2020 10:37:49 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-011

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.037	-0.037	0.0001	-0.0001	0.0001	10:38:39	Yes
2	-0.038	-0.038	0.0001	0.0000	0.0001	10:39:12	Yes
Mean:	-0.037	-0.037	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	1.257	1.257	2.55				

Sequence No.: 19 **Autosampler Location: 19**
Sample ID: AD19145-010 **Date Collected: 9/15/2020 10:39:13 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19145-010

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.029	-0.029	0.0001	0.0004	0.0001	10:40:02	Yes
2	-0.029	-0.029	0.0001	0.0004	0.0001	10:40:34	Yes
Mean:	-0.029	-0.029	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.247	0.247	0.27				

Sequence No.: 20 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 9/15/2020 10:40:35 AM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.22	10.22	0.0492	0.2158	0.0492	10:41:21	Yes
2	10.17	10.17	0.0490	0.2142	0.0490	10:41:53	Yes
Mean:	10.19	10.19	0.0491				
SD:	0.031	0.031	0.0001				
%RSD:	0.307	0.307	0.30				

QC value within limits for Hg 253.7 Recovery = 101.95%
All analyte(s) passed QC.

Sequence No.: 21 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/15/2020 10:42:16 AM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.057	-0.057	-0.0000	-0.0003	0.0000	10:43:02	Yes
2	-0.058	-0.058	-0.0000	-0.0003	-0.0000	10:43:34	Yes
Mean:	-0.057	-0.057	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.081	1.081	34.67				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 22 **Autosampler Location: 20**
Sample ID: AD19168-001 **Date Collected: 9/15/2020 10:43:36 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19168-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	0.0002	0.0007	0.0002	10:44:22	Yes

2	-0.014	-0.014	0.0002	0.0007	0.0002	10:44:55	Yes
Mean:	-0.015	-0.015	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	5.673	5.673	2.11				

Sequence No.: 23 Autosampler Location: 21
Sample ID: AD19168-002 Date Collected: 9/15/2020 10:44:56 AM
Analyst: Data Type: Original

Replicate Data: AD19168-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0002	0.0007	0.0002	10:45:42	Yes
2	-0.014	-0.014	0.0002	0.0005	0.0002	10:46:14	Yes
Mean:	-0.012	-0.012	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	17.14	17.14	4.79				

Sequence No.: 24 Autosampler Location: 22
Sample ID: AD19168-003 Date Collected: 9/15/2020 10:46:15 AM
Analyst: Data Type: Original

Replicate Data: AD19168-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	0.0002	0.0007	0.0002	10:47:00	Yes
2	-0.020	-0.020	0.0002	0.0003	0.0002	10:47:33	Yes
Mean:	-0.017	-0.017	0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	23.20	23.20	10.09				

Sequence No.: 25 Autosampler Location: 23
Sample ID: AD19168-004 Date Collected: 9/15/2020 10:47:34 AM
Analyst: Data Type: Original

Replicate Data: AD19168-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.020	-0.020	0.0002	0.0003	0.0002	10:48:20	Yes
2	-0.017	-0.017	0.0002	0.0005	0.0002	10:48:52	Yes
Mean:	-0.018	-0.018	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	11.02	11.02	5.42				

Sequence No.: 26 Autosampler Location: 24
Sample ID: AD19168-005 Date Collected: 9/15/2020 10:48:54 AM
Analyst: Data Type: Original

Replicate Data: AD19168-005

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.027	-0.027	0.0001	0.0001	0.0001	10:49:39	Yes
2	-0.027	-0.027	0.0001	0.0002	0.0001	10:50:12	Yes
Mean:	-0.027	-0.027	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	1.327	1.327	1.25				

Sequence No.: 27 Autosampler Location: 25
Sample ID: AD19168-006 Date Collected: 9/15/2020 10:50:13 AM
Analyst: Data Type: Original

Replicate Data: AD19168-006

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.025	-0.025	0.0001	0.0003	0.0002	10:50:58	Yes
2	-0.025	-0.025	0.0001	0.0001	0.0002	10:51:31	Yes

Mean:	-0.025	-0.025	0.0001
SD:	0.000	0.000	0.0000
%RSD:	0.167	0.167	0.14

Sequence No.: 28 **Autosampler Location: 26**
Sample ID: AD19168-007 **Date Collected: 9/15/2020 10:51:32 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19168-007

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.026	-0.026	0.0001	0.0003	0.0001	10:52:18	Yes
2	-0.027	-0.027	0.0001	0.0002	0.0001	10:52:51	Yes
Mean:	-0.026	-0.026	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.212	3.212	2.92				

Sequence No.: 29 **Autosampler Location: 27**
Sample ID: AD19206-001 **Date Collected: 9/15/2020 10:52:52 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19206-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.026	-0.026	0.0001	0.0003	0.0001	10:53:37	Yes
2	-0.030	-0.030	0.0001	0.0000	0.0001	10:54:10	Yes
Mean:	-0.028	-0.028	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	10.72	10.72	10.98				

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: AD19206-002 **Date Collected: 9/15/2020 10:54:11 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19206-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.029	-0.029	0.0001	0.0001	0.0001	10:55:00	Yes
2	-0.022	-0.022	0.0002	0.0003	0.0002	10:55:32	Yes
Mean:	-0.026	-0.026	0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	19.20	19.20	16.55				

Sequence No.: 31 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 9/15/2020 10:55:33 AM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.14	10.14	0.0489	0.2135	0.0489	10:56:19	Yes
2	10.12	10.12	0.0488	0.2113	0.0488	10:56:52	Yes
Mean:	10.13	10.13	0.0488				
SD:	0.015	0.015	0.0001				
%RSD:	0.143	0.143	0.14				

QC value within limits for Hg 253.7 Recovery = 101.31%
All analyte(s) passed QC.

Sequence No.: 32 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/15/2020 10:57:14 AM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.058	-0.058	-0.0000	-0.0004	-0.0000	10:58:01	Yes

2	-0.057	-0.057	-0.0000	-0.0001	0.0000	10:58:33	Yes
Mean:	-0.057	-0.057	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.818	0.818	25.98				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 33 **Autosampler Location: 29**
Sample ID: AD19206-003 **Date Collected: 9/15/2020 10:58:35 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19206-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0002	0.0009	0.0002	10:59:22	Yes
2	-0.010	-0.010	0.0002	0.0010	0.0002	10:59:55	Yes
Mean:	-0.010	-0.010	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	8.771	8.771	1.98				

Sequence No.: 34 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 9/15/2020 10:59:56 AM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.11	10.11	0.0487	0.2133	0.0487	11:00:43	Yes
2	10.11	10.11	0.0487	0.2125	0.0487	11:01:15	Yes
Mean:	10.11	10.11	0.0487				
SD:	0.003	0.003	0.0000				
%RSD:	0.026	0.026	0.03				

QC value within limits for Hg 253.7 Recovery = 101.10%
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/15/2020 11:01:38 AM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.054	-0.054	0.0000	-0.0001	0.0000	11:02:24	Yes
2	-0.057	-0.057	-0.0000	-0.0001	0.0000	11:02:57	Yes
Mean:	-0.055	-0.055	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	3.248	3.248	>999.9%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Metal Data
Digestion Logbook Data

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A (3050B) 200.7/200.8 OTHER_____

Batch No.: 26211 Analyst: ANS

QC Number: 85269 Prep Date: 9/11/20

Matrix: SOIL 6010 Reviewed By: [signature]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS	0.5g					--	
LCSD	0.5g					--	
1. AD19159-004	0.5g						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -004							
MS -005							Balance used: 032
MSD -006							Pipettes used: 155,149
2. AD19159-001							
3. -002							Hot Block used: 5
4. -003							
5. -007							
6. -008							
7. -009							
8. -010							
9. 19160-001							
10. -002							
11. 19067-003							
12. 19163-001							
13. 19164-001							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 93.9 C (90-95° C) Start Time: 8:00am End Time: 10:30am

	Volume mL	Lot #
LCS, LCSD	0.5g	V- 13005
LLLCS, LLLCSD		V-
MS, MSD	0.25ml	V- 13177, 13178,
LLMS, LLMSD		V- 33982

Acid	Vol mL	Lot#
HNO_3	2.5	V-13440
HCl	5.0	V-13130
H_2O_2	1.5	V-13067

Acid	Vol mL	Lot#
1:1 HNO_3	5.0	V-334144
1:1 HCl		V-

Relinquished By ANS Date 9/11/20

Received By [signature] Date 9/11/2020

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HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 7470A (7471B) OTHER_____

Batch No.:* 26211

QC Number: 85269

Matrix: Soil

Analyst: ANS

Prep Date: 9/11/20

Review By: DL

LAB ID#	MERCURY		COMMENTS	STANDARDS
	INITIAL	FINAL		
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 334664
LCS	0.15g	↓		
LCSD	↓	↓		STD 0.2 ppb V- 334665
1 AD 19159-004	↓	↓		STD 0.5 ppb V- 334666
MR -004	↓	↓		STD 1.0 ppb V- 334667
MS -005	↓	↓		STD 2.0 ppb V- 334668
MSD -006	↓	↓		STD 5.0 ppb V- 334669
2 AD 19159-001	↓	↓		STD 10.0 ppb V- 334670
3 -002	↓	↓		STD 25.0 ppb V- 334671
4 -003	↓	↓		ICV 10.0 ppb V- 334662
5 -007	↓	↓		CCV 20.0 ppb V- 334663
6 -008	↓	↓		
7 -009	↓	↓		
8 -010	↓	↓		Balance used: 032
9 AD 19160-001	↓	↓		Pipettes used: 159, 143, 155
10 -002	↓	↓		
11 AD 19067-003	↓	↓		Hot Block used: 7
12 AD 19163-001	↓	↓		
13 AD 19164-001	↓	↓		
14				
15				
16				
17				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 331286	3.75	HNO_3		V-
$K_2S_2O_8$: V-		HCl		V-
NH_2OH: V- 317822	1.5	H_2SO_4		V-
		Aqua Regia	1.25	V- 334661

**Block Temp. : °C 92.8

Time In Block: 8:00 am

Time Out of Block: 8:30 am

Spike Volume & Lot #

☐ LCS V- 13005 (0.15g/0.25 ml)

☐ MS V- 334616 0.250 ml

☐ Standards/Control Batch B- 29668

Start time: ~~9:28~~ 8:00 am End Time: 9:00 am

**Temperature
245.1 / 7470A: 90-95C
7471B : 92-98C

Relinquished By: ANS

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

HG PREP 2016

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A (3050B) 200.7/200.8 OTHER_____

Batch No.: 26212 Analyst: ANS

QC Number: 85270 Prep Date: 9/11/20

Matrix: soil 6020 Reviewed By: K

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml	25ml	50ml		--	
LCS	0.1g					--	
LCSD	0.1g					--	
1. AO 19159-004	0.5g						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -004							
MS -005							Balance used: 032
MSD -006							Pipettes used: 155, 149
2. 19159-001							
3. -002							Hot Block used: 4
4. -003							
5. -007							
6. -008							
7. -009							
8. -010							
9. 19160-001							
10. -002							
11. 19067-003							
12. 19163-001							
13. 19164-001							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 92.8 C (90-95° C) Start Time: 8:00am End Time: 10:00am

	Volume mL	Lot #
LCS, LCSD	0.1g	V- 13005
LLLCS, LLLCSD		V-
MS, MSD	0.25ml	V- 13177, 13178
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2.5	V- 13440
HCl		V-
H_2O_2	1.5	V- 13067

Acid	Vol mL	Lot#
1:1 HNO_3	5.0	V- 334144
1:1 HCl		V-

Relinquished By ANS Date 9/11/20

Received By K Date 9/14/20

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Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: (3010A) 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 26214 Analyst: ANS

QC Number: 85272 Prep Date: 9/14/20

Matrix: SW846 6010/6020 Reviewed By: [signature]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml	10ml	20ml		--	
LCS	↓	↓	↓	↓		--	
LCSD	↓	↓	↓	↓		--	
1. AD 19206-004	↓	↓	↓	↓			Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate	↓	↓	↓	↓			
MR -004	↓	↓	↓	↓			
MS -004	↓	↓	↓	↓			Balance used: N/A
MSD -004	↓	↓	↓	↓			Pipettes used: ~~135~~ 149 AMS 9/14/20
2. 19159-001 CB	↓	↓	↓	↓			
3. 19145-010 RB	↓	↓	↓	↓			Hot Block used: 9
4. 19168-001	↓	↓	↓	↓			
5. -002	↓	↓	↓	↓			
6. -003	↓	↓	↓	↓			
7. -004	↓	↓	↓	↓			
8. -005	↓	↓	↓	↓			
9. -006	↓	↓	↓	↓			
10. -007	↓	↓	↓	↓			
11. 19206-001	↓	↓	↓	↓			
12. -002	↓	↓	↓	↓			
13. -003	↓	↓	↓	↓			
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 94.2 C (90-95° C) Start Time: 8:00am End Time: 10:00am

	Volume mL	Lot #
LCS, LCSD	0.25ml	V-13177, 13178
LLLCS, LLLCSD		V- 331982
MS, MSD	0.25ml	V-13177, 13178
LLMS, LLMSD		V- 331982

Acid	Vol mL	Lot#
HNO_3	3.0ml	V-13440
HCl		V-
H_2O_2		V-

Acid	Vol mL	Lot#
1:1 HNO_3		V-
1:1 HCl	5.0ml	V-331024

Relinquished By ANS Date 9/14/20

Received By [signature] Date 9/14/20

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HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 (7470A) 7471B OTHER_____

Batch No.:* 26214

QC Number: 85272

Matrix: SW 846

Analyst: ANS

Prep Date: 9/14/20

Review By: DL

LAB ID#	MERCURY		COMMENTS	STANDARDS
	INITIAL	FINAL		
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 334751
LCS				
LCSD				STD 0.2 ppb V- 334752
1 AO 19206-004				STD 0.5 ppb V- 334753
MR -004				STD 1.0 ppb V- 334754
MS -004				STD 2.0 ppb V- 334755
MSD -004				STD 5.0 ppb V- 334756
2 19159-011				STD 10.0 ppb V- 334757
3 19145-010				STD 25.0 ppb V- 334758
4 19168-001				ICV 10.0 ppb V- 334749
5 -002				CCV 20.0 ppb V- 334750
6 -003				
7 -004				
8 -005				Balance used: N/A
9 -006				Pipettes used: 159, 143
10 -007				
11 19206-001				Hot Block used: 7
12 -002				
13 -003				
14				
15				
16				
17				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 331286	3.75	HNO3	0.625	V- 13421
$K_2S_2O_8$: V- 327154	2.0	HCl		V-
NH_2OH: V- 317822	1.5	H2SO4	1.5	V- 13343
		Aqua Regia		V-

**Block Temp.: 93.3 °C

Time In Block: 8:00am

Time Out of Block: 10:30am

Spike Volume & Lot #

☐ LCS V- 334737 0.15g (0.25 ml)

☐ MS V- 334737 0.250 ml

☐ Standards/Control Batch B- 29674

Start time: 8:00am End Time: 10:30am

**Temperature
245.1 / 7470A: 90-95C
7471B : 92-98C

Relinquished By: ANS

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

HG PREP 2016

Wet Chemistry Data

Wet Chemistry Data
Sample Data

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19159-001 | Project Number: 0091006
Matrix Soil | Received Date: 9/10/2020
Client SampleID: SS-9 | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.31	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	140	MV		09/10/20	09/10/20
pH	CR6-PH	1	11	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.0	09/10/20	09/11/20

Lab#: AD19159-002 | Project Number: 0091006
Matrix Soil | Received Date: 9/10/2020
Client SampleID: Duplicate | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.28	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	360	MV		09/10/20	09/10/20
pH	CR6-PH	1	8.2	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	1.1	mg/Kg	0.92	09/10/20	09/11/20

Lab#: AD19159-003 | Project Number: 0091006
Matrix Soil | Received Date: 9/10/2020
Client SampleID: SS-5A | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.26	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	340	MV		09/10/20	09/10/20
pH	CR6-PH	1	8.1	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.85	09/10/20	09/11/20

Lab#: AD19159-004 | Project Number: 0091006
Matrix Soil | Received Date: 9/10/2020
Client SampleID: SS-5B | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.27	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	350	MV		09/10/20	09/10/20
pH	CR6-PH	1	8.1	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	2.2	mg/Kg	0.91	09/14/20	09/15/20

Lab#: AD19159-005 | Project Number: 0091006
Matrix Soil | Received Date: 9/10/2020
Client SampleID: SS-5B MS | Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.62	mg/Kg	0.27	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	340	MV		09/10/20	09/10/20
pH	CR6-PH	1	8.1	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	12	mg/Kg	0.91	09/14/20	09/15/20

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19159-006
Matrix Soil
Client SampleID: SS-5B MSD
Project Number: 0091006
Received Date: 9/10/2020
Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	2.2	mg/Kg	0.27	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	360	MV		09/10/20	09/10/20
pH	CR6-PH	1	8.2	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	50	560	mg/Kg	45	09/14/20	09/15/20

Lab#: AD19159-007
Matrix Soil
Client SampleID: SS-3A
Project Number: 0091006
Received Date: 9/10/2020
Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.42	mg/Kg	0.30	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	450	MV		09/10/20	09/10/20
pH	CR6-PH	1	7.7	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.99	09/10/20	09/11/20

Lab#: AD19159-008
Matrix Soil
Client SampleID: SS-10A
Project Number: 0091006
Received Date: 9/10/2020
Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.37	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	300	MV		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
pH	CR6-PH	1	8.4	PH		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.2	09/14/20	09/15/20

Lab#: AD19159-009
Matrix Soil
Client SampleID: SS-10B
Project Number: 0091006
Received Date: 9/10/2020
Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.35	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	280	MV		09/10/20	09/10/20
pH	CR6-PH	1	8.0	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	22	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.2	09/14/20	09/15/20

Lab#: AD19159-010
Matrix Soil
Client SampleID: SS-3B
Project Number: 0091006
Received Date: 9/10/2020
Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.28	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	430	MV		09/10/20	09/10/20
pH	CR6-PH	1	7.9	PH		09/10/20	09/10/20
Temperature	CR6-PH	1	23	C		09/10/20	09/10/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.92	09/14/20	09/15/20

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19159-011
Matrix Aqueous
Client SampleID: EB

Project Number: 0091006
Received Date: 9/10/2020
Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-W-9012	1	ND	mg/L	0.020	09/11/20	09/11/20
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.02	09/16/20	09/16/20

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 0091006**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD19159-001	SS-9	Soil	1	78	Percent			09/10/20	09/10/20	09/09/20
AD19159-002	Duplicate	Soil	1	87	Percent			09/10/20	09/10/20	09/09/20
AD19159-003	SS-5A	Soil	1	94	Percent			09/10/20	09/10/20	09/09/20
AD19159-004	SS-5B	Soil	1	88	Percent			09/10/20	09/10/20	09/09/20
AD19159-005	SS-5B MS	Soil	1	88	Percent			09/10/20	09/10/20	09/09/20
AD19159-006	SS-5B MSD	Soil	1	88	Percent			09/10/20	09/10/20	09/09/20
AD19159-007	SS-3A	Soil	1	81	Percent			09/10/20	09/10/20	09/09/20
AD19159-008	SS-10A	Soil	1	65	Percent			09/10/20	09/10/20	09/09/20
AD19159-009	SS-10B	Soil	1	68	Percent			09/10/20	09/10/20	09/09/20
AD19159-010	SS-3B	Soil	1	87	Percent			09/10/20	09/10/20	09/09/20

Wet Chemistry Data
QC Data

Hex-Cr Soil SW-846 3060A / 7196A

Cr6 soil curve		Date	9/15/2020		Batch # 785		TestGroupID	CR6-SOIL
							TestID	CR-HEX
STD ppm		ABS						
	0		-0.0001	Intercept	Constant	0.005916596		
	0.02		0.0208					
	0.25		0.1671	Slope	X Coefficients	0.640009617		
	0.5		0.3321					
	1		0.6425					

STD mg/L	ABS	PPM	DIFF
0	-0.0001	-0.00940079	0.00940079
0.02	0.0208	0.02325497	-0.00325497
0.25	0.1671	0.251845285	-0.001845285
0.5	0.3321	0.509653911	-0.009653911
1	0.6425	0.994646624	0.005353376

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.999836682
R Square	0.999673391
Adjusted R Square	0.999564522
Standard Error	0.005533171
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.28112512	0.28112512	9182.300572	2.50538E-06
Residual	3	9.18479E-05	3.0616E-05		
Total	4	0.281216968			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.005916596	0.003422485	1.728742578	0.182299251	-0.00497529	0.016808481	-0.00497529	0.016808481
X Variable 1	0.640009617	0.006678989	95.8243214	2.50538E-06	0.618754072	0.661265161	0.618754072	0.661265161

	Hex-Cr Soil
Batch#	785
Date	9/14/2020
Analyst	BCT
PrepBy	BCT

Q.C. DATA

QC Sample **AD19159-004 NS.Sample**

	Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
	PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
LCS	20.00	19.96	19.96	100%	80-120%	NA	NA	PASS	
MS(Sol)	22.73	12.38	10.14	45%	75-125%	NA	NA	FAIL	
MS(Insol)	1096.36	562.79	560.55	51%	75-125%	NA	20%	FAIL	PASS
Sample	NA	2.24	NA	NA	NA	NA	NA		
Sample Dup	NA	2.65	NA	NA	NA	17	20%		PASS
PVS	22.73	15.90	13.67	60%	85-115%	NA	NA	FAIL	
MS(Sol)	43.48	55.99	26.81	62%	75-125%	NA	NA	FAIL	
MS(Insol)	978.78	544.43	515.26	53%	75-125%	NA	20%	FAIL	PASS
Sample	NA	29.18	NA	NA	NA	NA	NA		

Lead Chromate Added	0.015	0.014 g
Upper Calibration Abbsorbance	0.6425	

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate

Hex-Cr Soil SW-846 3060A / 7196A

ICV.Control	0.3163	0.0000	0.3163	0.484966789	1	1	1	1	0.485	0.500	97	9/15/20 12:33	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	-0.0002	0.0000	-0.0002	-0.009557037	1	1	1	1	-0.010	0.020		9/15/20 12:33	
MB.Sample	-0.0028	0.0000	-0.0028	-0.013619476	1	2.5	1	100	-0.545	0.800		9/15/20 12:33	
LCS.Sample	0.3253	0.0000	0.3253	0.499029083	1	2.5	1	100	19.961	0.800		9/15/20 12:33	
AD19159-004 NS.Sample	0.0415	0.0041	0.0374	0.049192077	0.88	2.5	1	100	2.236	0.909		9/15/20 12:34	
AD19159-004 DUP.Sample	0.0473	0.0041	0.0432	0.058254443	0.88	2.5	1	100	2.648	0.909		9/15/20 12:34	
AD19159-005 MS.Sample	0.1872	0.0070	0.1802	0.272313719	0.88	2.5	1	100	12.378	0.909		9/15/20 12:35	
AD19159-006 50X MSD.Sample	0.1651	0.0007	0.1644	0.247626588	0.88	2.5	50	100	562.788	45.455		9/15/20 12:36	
AD19159-004 PVS.Sample	0.2339	0.0041	0.2298	0.349812556	0.88	2.5	1	100	15.901	0.909		9/15/20 12:37	
AD19192-002.Sample	0.4456	0.0102	0.4354	0.67105774	0.92	2.5	1	100	29.176	0.870		9/15/20 12:46	
AD19192-004MS2.Sample	0.8015	0.0079	0.7936	1.230736862	0.92	2.5	1	100	53.510	0.870		9/15/20 12:47	
AD19192-004MS2 2X.Sample	0.4259	0.0079	0.4180	0.643870664	0.92	2.5	2	100	55.989	1.739		9/15/20 12:48	
AD19192-005MSD2.Sample	3.9658	0.0076	3.9582	6.175350103	0.92	2.5	1	100	268.493	0.870		9/15/20 12:48	
AD19192-005 50XMSD2.Sample	0.1672	0.0010	0.1662	0.250439055	0.92	2.5	50	100	544.433	43.478		9/15/20 12:51	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3163		0.3163	0.484966789	1	1	1	1	0.485	0.020	97	9/15/20 12:33	PASS
ICB.Sample	-0.0002		-0.0002	-0.009557037	1	1	1	1	-0.010	0.020		9/15/20 12:33	
MB.Sample	-0.0028		-0.0028	-0.013619476	1	2.5	1	100	-0.545	0.800		9/15/20 12:33	
LCS.Sample	0.3253		0.3253	0.499029083	1	2.5	1	100	19.961	0.800		9/15/20 12:33	
AD19159-004 NS.Sample	0.0415	0.0041	0.0374	0.049192077	0.88	2.5	1	100	2.236	0.909		9/15/20 12:34	
AD19159-004 DUP.Sample	0.0473	0.0041	0.0432	0.058254443	0.88	2.5	1	100	2.648	0.909		9/15/20 12:34	
AD19159-005 MS.Sample	0.1872	0.0070	0.1802	0.272313719	0.88	2.5	1	100	12.378	0.909		9/15/20 12:35	
AD19159-006 XXX.Sample	3.7897	0.0068	3.7829	5.901447944	0.88	2.5	1	100	268.248	0.909		9/15/20 12:35	
AD19159-006 50X MSD.Sample	0.1651	0.0007	0.1644	0.247626588	0.88	2.5	50	100	562.788	45.455		9/15/20 12:36	
AD19159-004 PVS.Sample	0.2339	0.0041	0.2298	0.349812556	0.88	2.5	1	100	15.901	0.909		9/15/20 12:37	
CCV-1.Control	0.3236		0.3236	0.496372852	1	1	1	1	0.496	0.020	99	9/15/20 12:37	PASS
CCB-1.Sample	0.0011		0.0011	-0.007525818	1	1	1	1	-0.008	0.020		9/15/20 12:37	
AD19159-008.Sample	0.0017	0.0022	-0.0005	-0.01002578	0.65	2.5	1	100	-0.617	1.231		9/15/20 12:38	
AD19159-009.Sample	0.0044	0.0030	0.0014	-0.007057075	0.68	2.5	1	100	-0.415	1.176		9/15/20 12:38	
AD19159-010.Sample	-0.0012	-0.0008	-0.0004	-0.009869533	0.87	2.5	1	100	-0.454	0.920		9/15/20 12:38	
AD19160-001.Sample	0.0065	0.0031	0.0034	-0.003932122	0.65	2.5	1	100	-0.242	1.231		9/15/20 12:39	
AD19160-002.Sample	-0.0033	0.0023	-0.0056	-0.017994411	0.78	2.5	1	100	-0.923	1.026		9/15/20 12:39	
AD19178-001.Sample	0.0571	0.0616	-0.0045	-0.016275683	0.9	2.5	1	100	-0.723	0.889		9/15/20 12:40	
AD19178-002.Sample	0.0166	0.0124	0.0042	-0.002682142	0.91	2.5	1	100	-0.118	0.879		9/15/20 12:40	
AD19178-003.Sample	0.0702	0.0639	0.0063	0.000599064	0.79	2.5	1	100	0.030	1.013		9/15/20 12:41	
AD19178-004.Sample	0.0153	0.0127	0.0026	-0.005182103	0.86	2.5	1	100	-0.241	0.930		9/15/20 12:42	
AD19178-005.Sample	0.0599	0.0660	-0.0061	-0.018775647	0.93	2.5	1	100	-0.808	0.860		9/15/20 12:42	
CCV-2.Control	0.3225		0.3225	0.494654122	1	1	1	1	0.495	0.020	99	9/15/20 12:43	PASS
CCB-2.Sample	-0.0024		-0.0024	-0.012994486	1	1	1	1	-0.013	0.020		9/15/20 12:43	
AD19178-006.Sample	0.0176	0.0175	0.0001	-0.009088295	0.87	2.5	1	100	-0.418	0.920		9/15/20 12:43	
AD19178-007.Sample	0.0157	0.0130	0.0027	-0.005025857	0.81	2.5	1	100	-0.248	0.988		9/15/20 12:44	
AD19178-008.Sample	0.0294	0.0350	-0.0056	-0.01799441	0.82	2.5	1	100	-0.878	0.976		9/15/20 12:44	
AD19178-009.Sample	0.0238	0.0302	-0.0064	-0.019244392	0.81	2.5	1	100	-0.950	0.988		9/15/20 12:44	
AD19178-010.Sample	0.0114	0.0141	-0.0027	-0.013463229	0.83	2.5	1	100	-0.649	0.964		9/15/20 12:44	
AD19180-001.Sample	0.0142	0.0000	0.0142	0.012942625	0.92	2.5	1	100	0.563	0.870		9/15/20 12:46	
AD19192-002.Sample	0.4456	0.0102	0.4354	0.67105774	0.92	2.5	1	100	29.176	0.870		9/15/20 12:46	
AD19192-004MS2.Sample	0.8015	0.0079	0.7936	1.230736862	0.92	2.5	1	100	53.510	0.870		9/15/20 12:47	
AD19192-004MS2 2X.Sample	0.4259	0.0079	0.4180	0.643870664	0.92	2.5	2	100	55.989	1.739		9/15/20 12:48	
AD19192-005MSD2.Sample	3.9658	0.0076	3.9582	6.175350103	0.92	2.5	1	100	268.493	0.870		9/15/20 12:48	
CCV-3.Control.Cycle1	0.3207		0.3207	0.491841663	1	1	1	1	0.492	0.020	98	9/15/20 12:50	PASS
CCB-3.Sample	0.0013		0.0013	-0.007213322	1	1	1	1	-0.007	0.020		9/15/20 12:50	
AD19192-005 50XMSD2.Sample	0.1672	0.0010	0.1662	0.250439055	0.92	2.5	50	100	544.433	43.478		9/15/20 12:51	
AD19159-004 T.Sample	0.0041		0.0041	-0.002838388	0.88	2.5	1	100	-0.129	0.909		9/15/20 12:54	
AD19159-005 T.Sample	0.0070		0.0070	0.001692794	0.88	2.5	1	100	0.077	0.909		9/15/20 12:54	
AD19159-006 T.Sample	0.0068		0.0068	0.001380299	0.88	2.5	1	100	0.063	0.909		9/15/20 12:54	
AD19159-006 50X T.Sample	0.0007		0.0007	-0.008150808	0.88	2.5	1	100	-0.370	0.909		9/15/20 12:55	

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AD19159-008 T.Sample	0.0022	0.0022	-0.005807094	0.65	2.5	1	100	-0.357	1.231		9/15/20 12:55	
AD19159-009 T.Sample	0.0030	0.0030	-0.004557112	0.68	2.5	1	100	-0.268	1.176		9/15/20 12:55	
AD19159-010 T.Sample	-0.0008	-0.0008	-0.010494523	0.87	2.5	1	100	-0.483	0.920		9/15/20 12:56	
AD19160-001 T.Sample	0.0031	0.0031	-0.004400865	0.65	2.5	1	100	-0.271	1.231		9/15/20 12:56	
AD19160-002 T.Sample	0.0023	0.0023	-0.005650846	0.78	2.5	1	100	-0.290	1.026		9/15/20 12:56	
CCV-4.Control	0.3193	0.3193	0.489654205	1	1	1	1	0.490	0.020	98	9/15/20 12:56	PASS
CCB-4.Sample	0.0007	0.0007	-0.008150808	1	1	1	1	-0.008	0.020		9/15/20 12:57	
AD19178-001 T.Sample	0.0616	0.0616	0.087004011	0.9	2.5	1	100	3.867	0.889		9/15/20 12:57	
AD19178-002 T.Sample	0.0124	0.0124	0.010130167	0.91	2.5	1	100	0.445	0.879		9/15/20 12:58	
AD19178-003 T.Sample.Cycle1	0.0639	0.0639	0.09059771	0.79	2.5	1	100	4.587	1.013		9/15/20 12:59	
AD19178-004 T.Sample	0.0127	0.0127	0.01059891	0.86	2.5	1	100	0.493	0.930		9/15/20 13:00	
AD19178-005 T.Sample	0.0660	0.0660	0.093878908	0.93	2.5	1	100	4.038	0.860		9/15/20 13:00	
AD19178-006 T.Sample	0.0175	0.0175	0.018098797	0.87	2.5	1	100	0.832	0.920		9/15/20 13:01	
AD19178-007 T.Sample	0.0130	0.0130	0.011067653	0.81	2.5	1	100	0.547	0.988		9/15/20 13:01	
AD19178-008 T.Sample	0.0350	0.0350	0.045442137	0.82	2.5	1	100	2.217	0.976		9/15/20 13:02	
AD19178-009 T.Sample	0.0302	0.0302	0.03794225	0.81	2.5	1	100	1.874	0.988		9/15/20 13:03	
AD19178-010 T.Sample	0.0141	0.0141	0.012786377	0.83	2.5	1	100	0.616	0.964		9/15/20 13:03	
CCV-5.Control	0.3174	0.3174	0.486685519	1	1	1	1	0.487	0.020	97	9/15/20 13:03	PASS
CCB-5.Sample	0.0001	0.0001	-0.009088294	1	1	1	1	-0.009	0.020		9/15/20 13:03	
AD19180-001 T.Sample	0.0000	0.0000	-0.009244542	0.92	2.5	1	100	-0.402	0.870		9/15/20 13:04	
AD19192-002 T.Sample	0.0102	0.0102	0.006692719	0.92	2.5	1	100	0.291	0.870		9/15/20 13:05	
AD19192-004 T.Sample	0.0079	0.0079	0.003099022	0.92	2.5	1	100	0.135	0.870		9/15/20 13:05	
AD19192-005 T.Sample	0.0076	0.0076	0.00263028	0.92	2.5	1	100	0.114	0.870		9/15/20 13:05	
AD19192-005 50X T.Sample	0.0010	0.0010	-0.007682065	0.92	2.5	1	100	-0.334	0.870		9/15/20 13:06	
CCV-6.Control	0.3166	0.3166	0.485435517	1	1	1	1	0.485	0.020	97	9/15/20 13:06	PASS
CCB-6.Sample	0.0001	0.0001	-0.009088294	1	1	1	1	-0.009	0.020		9/15/20 13:07	

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	Hex-Cr Soil
Batch#	785 A
Date	9/14/2020
Analyst	BCT
PrepBy	BCT

Q.C. DATA
QC Sample AD19159-004 NS.Sample

	Spike Amount PPM	Result PPM	Adjusted Conc PPM	% REC	Limits	RPD	Limits	%REC PASS/FAIL	RPD PASS/FAIL
LCS	20.00	19.30	19.30	96%	80-120%	NA	NA	PASS	
MS(Sol)	22.73	14.01	12.56	55%	75-125%	NA	NA	FAIL	
MS(Insol)	1096.36	511.65	510.20	47%	75-125%	NA	20%	FAIL	PASS
Sample	NA	1.45	NA	NA	NA	NA	NA		
Sample Dup	NA	1.59	NA	NA	NA	9	20%		PASS
PVS	22.73	18.71	17.27	76%	85-115%	NA	NA	FAIL	
MS(Sol)	43.48	53.87	26.10	60%	75-125%	NA	NA	FAIL	
MS(Insol)	978.78	518.62	490.85	50%	75-125%	NA	20%	FAIL	PASS
Sample	NA	27.77	NA	NA	NA	NA	NA		

Lead Chromate Added	0.015	0.014 G
Upper Calibration Abbsorbance	0.6425	

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV Control	0.3288	0.0000	0.3288	0.504497727	1	1	1	1	0.504	0.500	101	9/15/20 13:22	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB Sample	-0.0007	0.0000	-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB Sample	0.0036	0.0000	0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS Sample	0.3147	0.0000	0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 50X MSD Sample	0.1534	0.0034	0.1500	0.225126943	0.88	2.5	50	100	511.652	45.455		9/15/20 13:25	
AD19159-004 PVS Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
AD19192-002 Sample	0.4208	0.0061	0.4147	0.638714473	0.92	2.5	1	100	27.770	0.870		9/15/20 13:33	
AD19192-004MS2 Sample	0.7877	0.0068	0.7809	1.21089337	0.92	2.5	1	100	52.648	0.870		9/15/20 13:34	
AD19192-004MS2 2X Sample	0.4092	0.0068	0.4024	0.61949603	0.92	2.5	2	100	53.869	1.739		9/15/20 13:34	
AD19192-005MSD2 Sample	4.3662	0.0062	4.3600	6.80315305	0.92	2.5	1	100	295.789	0.870		9/15/20 13:35	
AD19192-005 50XMSD2 Sample	0.1579	-0.0007	0.1586	0.238564243	0.92	2.5	50	100	518.618	43.478		9/15/20 13:36	
Analytical Run					1	2.5	1	100					
ICV Control	0.3288		0.3288	0.504497727	1	1	1	1	0.504	0.020	101	9/15/20 13:22	PASS
ICB Sample	-0.0007		-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB Sample	0.0036		0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS Sample	0.3147		0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 XXX Sample	3.9269	0.0081	3.9188	6.113788314	0.88	2.5	1	100	277.899	0.909		9/15/20 13:24	
AD19159-006 50X MSD Sample	0.1534	0.0081	0.1453	0.217783303	0.88	2.5	50	100	494.962	45.455		9/15/20 13:25	
AD19159-004 PVS Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
CCV-1 Control	0.3268		0.3268	0.501372768	1	1	1	1	0.501	0.020	100	9/15/20 13:26	PASS
CCB-1 Sample	-0.0005		-0.0005	-0.01002578	1	1	1	1	-0.010	0.020		9/15/20 13:27	
AD19159-008 Sample	0.0099	0.0068	0.0031	-0.004400865	0.65	2.5	1	100	-0.271	1.231		9/15/20 13:27	
AD19159-009 Sample	0.0092	0.0082	0.0010	-0.007682065	0.68	2.5	1	100	-0.452	1.176		9/15/20 13:27	
AD19159-010 Sample	0.0080	0.0066	0.0014	-0.007057074	0.87	2.5	1	100	-0.324	0.920		9/15/20 13:27	
AD19160-001 Sample	0.0220	0.0196	0.0024	-0.005494599	0.65	2.5	1	100	-0.338	1.231		9/15/20 13:28	
AD19160-002 Sample	0.0013	0.0036	-0.0023	-0.012838238	0.78	2.5	1	100	-0.658	1.026		9/15/20 13:28	
AD19178-001 Sample	0.0361	0.0413	-0.0052	-0.017369418	0.9	2.5	1	100	-0.772	0.889		9/15/20 13:28	
AD19178-002 Sample	0.0243	0.0231	0.0012	-0.00736957	0.91	2.5	1	100	-0.324	0.879		9/15/20 13:29	
AD19178-003 Sample	0.0554	0.0701	-0.0147	-0.032212951	0.79	2.5	1	100	-1.631	1.013		9/15/20 13:29	

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AD19178-004.Sample	0.0127	0.0152	-0.0025	-0.013150734	0.86	2.5	1	100	-0.612	0.930		9/15/20 13:29	
AD19178-005.Sample	0.0611	0.0545	0.0066	0.001067803	0.93	2.5	1	100	0.046	0.860		9/15/20 13:29	
CCV-2.Control	0.3229		0.3229	0.495279123	1	1	1	1	0.495	0.020	99	9/15/20 13:30	PASS
CCB-2.Sample	0.0001		0.0001	-0.009088294	1	1	1	1	-0.009	0.020		9/15/20 13:30	
AD19178-006.Sample	0.0205	0.3167	-0.2962	-0.472050105	0.87	2.5	1	100	-21.703	0.920		9/15/20 13:30	
AD19178-007.Sample	0.0005	0.0000	0.0005	-0.008463304	0.81	2.5	1	100	-0.418	0.988		9/15/20 13:31	
AD19178-008.Sample	0.0016	0.0024	-0.0008	-0.010494523	0.82	2.5	1	100	-0.512	0.976		9/15/20 13:31	
AD19178-009.Sample	0.0098	0.0069	0.0029	-0.00471336	0.81	2.5	1	100	-0.233	0.988		9/15/20 13:32	
AD19178-010.Sample	0.0039	0.0049	-0.0010	-0.010807019	0.83	2.5	1	100	-0.521	0.964		9/15/20 13:32	
AD19180-001.Sample	0.0190	0.0029	0.0161	0.015911329	0.92	2.5	1	100	0.692	0.870		9/15/20 13:33	
AD19192-002.Sample	0.4208	0.0061	0.4147	0.638714473	0.92	2.5	1	100	27.770	0.870		9/15/20 13:33	
AD19192-004MS2.Sample	0.7877	0.0068	0.7809	1.21089337	0.92	2.5	1	100	52.648	0.870		9/15/20 13:34	
AD19192-004MS2 2X.Sample	0.4092	0.0068	0.4024	0.61949603	0.92	2.5	2	100	53.869	1.739		9/15/20 13:34	
AD19192-005MSD2.Sample	4.3662	0.0062	4.3600	6.80315305	0.92	2.5	1	100	295.789	0.870		9/15/20 13:35	
CCV-3.Control	0.3214		0.3214	0.492935392	1	1	1	1	0.493	0.020	99	9/15/20 13:35	PASS
CCB-3.Sample	0.0038		0.0038	-0.003307131	1	1	1	1	-0.003	0.020		9/15/20 13:36	
AD19192-005 50XMSD2.Sample	0.1579	-0.0007	0.1586	0.238564243	0.92	2.5	50	100	518.618	43.478		9/15/20 13:36	
AD19159-004 T.Sample	0.0073		0.0073	0.002161537	0.88	2.5	1	100	0.098	0.909		9/15/20 13:36	
AD19159-005 T.Sample	0.0058		0.0058	-0.000182178	0.88	2.5	1	100	-0.008	0.909		9/15/20 13:37	
AD19159-006 T.Sample	0.0081		0.0081	0.003411518	0.88	2.5	1	100	0.155	0.909		9/15/20 13:37	
AD19159-006 50X T.Sample	0.0034		0.0034	-0.003932122	0.88	2.5	1	100	-0.179	0.909		9/15/20 13:37	
AD19159-008 T.Sample	0.0068		0.0068	0.001380299	0.65	2.5	1	100	0.085	1.231		9/15/20 13:38	
AD19159-009 T.Sample	0.0082		0.0082	0.003567766	0.68	2.5	1	100	0.210	1.176		9/15/20 13:38	
AD19159-010 T.Sample	0.0066		0.0066	0.001067803	0.87	2.5	1	100	0.049	0.920		9/15/20 13:38	
AD19160-001 T.Sample	0.0196		0.0196	0.021379998	0.65	2.5	1	100	1.316	1.231		9/15/20 13:38	
AD19160-002 T.Sample	0.0036		0.0036	-0.003619627	0.78	2.5	1	100	-0.186	1.026		9/15/20 13:52	
CCV-4.Control	0.3165		0.3165	0.48527929	1	1	1	1	0.485	0.020	97	9/15/20 13:53	PASS
CCB-4.Sample	0.0038		0.0038	-0.003307131	1	1	1	1	-0.003	0.020		9/15/20 13:53	
AD19178-001 T.Sample	0.0413		0.0413	0.055285736	0.9	2.5	1	100	2.457	0.889		9/15/20 13:53	
AD19178-002 T.Sample	0.0231		0.0231	0.026848666	0.91	2.5	1	100	1.180	0.879		9/15/20 13:55	
AD19178-003 T.Sample	0.0701		0.0701	0.100285065	0.79	2.5	1	100	5.078	1.013		9/15/20 13:55	
AD19178-004 T.Sample	0.0152		0.0152	0.014505102	0.86	2.5	1	100	0.675	0.930		9/15/20 13:56	
AD19178-005 T.Sample	0.0545		0.0545	0.075910426	0.93	2.5	1	100	3.265	0.860		9/15/20 13:56	
AD19178-006 T.Sample	0.3167		0.3167	0.485591791	0.87	2.5	1	100	22.326	0.920		9/15/20 13:56	
AD19178-007 T.Sample.Cycle1	0.0000		0.0000	-0.009244542	0.81	2.5	1	100	-0.457	0.988		9/15/20 13:57	
AD19178-008 T.Sample	0.0024		0.0024	-0.005494598	0.82	2.5	1	100	-0.268	0.976		9/15/20 13:58	
AD19178-009 T.Sample	0.0069		0.0069	0.001536546	0.81	2.5	1	100	0.076	0.988		9/15/20 13:58	
AD19178-010 T.Sample	0.0049		0.0049	-0.001588407	0.83	2.5	1	100	-0.077	0.964		9/15/20 13:58	
CCV-5.Control	0.3157		0.3157	0.484029288	1	1	1	1	0.484	0.020	97	9/15/20 13:59	PASS
CCB-5.Sample	-0.0009		-0.0009	-0.010650771	1	1	1	1	-0.011	0.020		9/15/20 13:59	
AD19180-001 T.Sample	0.0029		0.0029	-0.00471336	0.92	2.5	1	100	-0.205	0.870		9/15/20 13:59	
AD19192-002 T.Sample	0.0061		0.0061	0.000286565	0.92	2.5	1	100	0.012	0.870		9/15/20 13:59	
AD19192-004 T.Sample	0.0068		0.0068	0.001380299	0.92	2.5	1	100	0.060	0.870		9/15/20 14:00	
AD19192-005 T.Sample	0.0062		0.0062	0.000442813	0.92	2.5	1	100	0.019	0.870		9/15/20 14:00	
AD19192-005 50X T.Sample	-0.0007		-0.0007	-0.010338275	0.92	2.5	1	100	-0.449	0.870		9/15/20 14:00	
CCV-6.Control	0.3141		0.3141	0.48152933	1	1	1	1	0.482	0.020	96	9/15/20 14:01	PASS
CCB-6.Control	-0.0006		-0.0006	-0.010182028	1	1	1	1	-0.010	0.020		9/15/20 14:01	

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	Hex-Cr Soil		Q.C. DATA									
Batch#	784		QC Sample	AD19122-001 NS.Sample								
Date	9/10/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	19.72	19.72	99%	80-120%	NA	NA	PASS	
			MS(Sol)	21.98	19.48	16.06	73%	75-125%	NA	NA	FAIL	
			MS(Insol)	1060.22	516.22	512.81	48%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	3.42	NA	NA	NA	NA	NA		
			Sample Dup	NA	3.09	NA	NA	NA	10	20%		PASS
			PVS	21.98	23.79	20.37	93%	85-115%	NA	NA	PASS	
			MS(Sol)	21.74	21.14	21.14	97%	75-125%	NA	NA	PASS	
			MS(Insol)	873.91	434.63	431.85	49%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	2.77	NA	NA	NA	NA	NA		
Lead Chromate Added:	0.015	0.0125	G									
Upper Calibration Abbsorbance:	0.6516											

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3360	0.0000	0.3360	0.50347261	1	1	1	1	0.503	0.500	101	9/11/20 12:37	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0002	0.0000	0.0002	-0.011326406	1	1	1	1	-0.011	0.020		9/11/20 12:37	
MB.Sample	-0.0003	0.0000	-0.0003	-0.012092932	1	2.5	1	100	-0.484	0.800		9/11/20 12:37	
LCS.Sample	0.3291	0.0000	0.3291	0.492894574	1	2.5	1	100	19.716	0.800		9/11/20 12:37	
AD19122-001 NS.Sample	0.0638	0.0055	0.0583	0.077743943	0.91	2.5	1	100	3.417	0.879		9/11/20 12:38	
AD19122-001 DUP.Sample	0.0590	0.0055	0.0535	0.070385292	0.91	2.5	1	100	3.094	0.879		9/11/20 12:39	
AD19122-002 MS.Sample	0.3033	0.0067	0.2966	0.443070339	0.91	2.5	1	100	19.476	0.879		9/11/20 12:40	
AD19122-003 50X MSD.Sample	0.1606	-0.0002	0.1608	0.234881832	0.91	2.5	50	100	516.224	43.956		9/11/20 12:41	
AD19122-001 PVS.Sample	0.3661	0.0055	0.3606	0.541185728	0.91	2.5	1	100	23.788	0.879		9/11/20 12:42	
AD19140-002.Sample	0.0504	0.0012	0.0492	0.063793166	0.92	2.5	1	100	2.774	0.870		9/11/20 12:56	
AD19140-005 MS2.Sample	0.3260	0.0013	0.3247	0.486149131	0.92	2.5	1	100	21.137	0.870		9/11/20 13:00	
AD19140-006 MSD2.Sample	4.0131	0.0025	4.0106	6.136827483	0.92	2.5	1	100	266.819	0.870		9/11/20 13:00	
AD19140-00650XMSD2.Sample	0.1381	0.0001	0.1380	0.199928223	0.92	2.5	50	100	434.627	43.478		9/11/20 13:01	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3360		0.3360	0.50347261	1	1	1	1	0.503	0.020	101	9/11/20 12:37	PASS
ICB.Sample	0.0002		0.0002	-0.011326406	1	1	1	1	-0.011	0.020		9/11/20 12:37	
MB.Sample	-0.0003		-0.0003	-0.012092932	1	2.5	1	100	-0.484	0.800		9/11/20 12:37	
LCS.Sample	0.3291		0.3291	0.492894574	1	2.5	1	100	19.716	0.800		9/11/20 12:37	
AD19122-001 NS.Sample	0.0638	0.0055	0.0583	0.077743943	0.91	2.5	1	100	3.417	0.879		9/11/20 12:38	
AD19122-001 DUP.Sample	0.0590	0.0055	0.0535	0.070385292	0.91	2.5	1	100	3.094	0.879		9/11/20 12:39	
AD19122-002 MS.Sample	0.3033	0.0067	0.2966	0.443070339	0.91	2.5	1	100	19.476	0.879		9/11/20 12:40	
AD19122-003 XXX.Sample	4.1222	0.0062	4.1160	6.298411007	0.91	2.5	1	100	276.853	0.879		9/11/20 12:40	
AD19122-003 50X MSD.Sample	0.1606	-0.0002	0.1608	0.234881832	0.91	2.5	50	100	516.224	43.956		9/11/20 12:41	
AD19122-001 PVS.Sample	0.3661	0.0055	0.3606	0.541185728	0.91	2.5	1	100	23.788	0.879		9/11/20 12:42	
CCV-1.Control	0.3369		0.3369	0.504852358	1	1	1	1	0.505	0.020	101	9/11/20 12:43	PASS
CCB-1.Sample	-0.0006		-0.0006	-0.012552848	1	1	1	1	-0.013	0.020		9/11/20 12:43	
AD19107-001.Sample	0.0019	-0.0003	0.0022	-0.008260301	0.91	2.5	1	100	-0.363	0.879		9/11/20 12:43	
AD19107-002.Sample	0.0022	-0.0016	0.0038	-0.005807417	0.88	2.5	1	100	-0.264	0.909		9/11/20 12:43	
AD19120-001.Sample	0.0719	0.0949	-0.0230	-0.046893215	0.79	2.5	1	100	-2.374	1.013		9/11/20 12:44	
AD19120-002.Sample	0.0494	0.0506	-0.0012	-0.013472676	0.81	2.5	1	100	-0.665	0.988		9/11/20 12:45	
AD19120-003.Sample	0.0976	0.0893	0.0083	0.001091318	0.74	2.5	1	100	0.059	1.081		9/11/20 12:45	
AD19135-002.Sample	0.0021	0.0011	0.0010	-0.010099964	0.91	2.5	1	100	-0.444	0.879		9/11/20 12:46	
AD19135-004.Sample	0.0036	0.0014	0.0022	-0.008260301	0.91	2.5	1	100	-0.363	0.879		9/11/20 12:46	
AD19135-006.Sample	0.0015	-0.0005	0.0020	-0.008566911	0.9	2.5	1	100	-0.381	0.889		9/11/20 12:46	

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AD19140-001.Sample	0.3950	0.0069	0.3881	0.583344667	0.92	2.5	1	100	25.363	0.870		9/11/20 12:56	
AD19140-002.Sample	0.0504	0.0012	0.0492	0.063793166	0.92	2.5	1	100	2.774	0.870		9/11/20 12:56	
CCV-2.Control	0.3471		0.3471	0.520489483	1	1	1	1	0.520	0.020	104	9/11/20 12:57	PASS
CCB-2.Sample	0.0002		0.0002	-0.011326406	1	1	1	1	-0.011	0.020		9/11/20 12:57	
AD19140-003.Sample	0.3230	0.0066	0.3164	0.473424809	0.89	2.5	1	100	21.278	0.899		9/11/20 12:57	
AD19140-004.Sample	0.0231	0.0010	0.0221	0.022247443	0.86	2.5	1	100	1.035	0.930		9/11/20 12:59	
AD19140-005 MS2.Sample	0.3260	0.0013	0.3247	0.486149131	0.92	2.5	1	100	21.137	0.870		9/11/20 13:00	
AD19140-006 MSD2.Sample	4.0131	0.0025	4.0106	6.136827483	0.92	2.5	1	100	266.819	0.870		9/11/20 13:00	
AD19140-00650XMSD2.Sample	0.1381	0.0001	0.1380	0.199928223	0.92	2.5	50	100	434.627	43.478		9/11/20 13:01	
AD19143-001.Sample	0.0810	0.0850	-0.0040	-0.017765227	0.67	2.5	1	100	-1.061	1.194		9/11/20 13:01	
AD19159-001.Sample	0.0052	0.0067	-0.0015	-0.013932595	0.78	2.5	1	100	-0.714	1.026		9/11/20 13:02	
AD19159-002.Sample	0.0300	0.0068	0.0232	0.0239338	0.87	2.5	1	100	1.100	0.920		9/11/20 13:03	
AD19159-003.Sample	0.0156	0.0117	0.0039	-0.005654112	0.94	2.5	1	100	-0.241	0.851		9/11/20 13:03	
AD19159-007.Sample	0.0510	0.0553	-0.0043	-0.018225145	0.81	2.5	1	100	-0.900	0.988		9/11/20 13:04	
CCV-3.Control	0.3466		0.3466	0.519722967	1	1	1	1	0.520	0.020	104	9/11/20 13:04	PASS
CCB-3.Sample	0.0004		0.0004	-0.011019795	1	1	1	1	-0.011	0.020		9/11/20 13:04	
AD19122-001 T.Sample	0.0055		0.0055	-0.003201228	0.91	2.5	1	100	-0.141	0.879		9/11/20 13:04	
AD19122-002 T.Sample	0.0067		0.0067	-0.001361565	0.91	2.5	1	100	-0.060	0.879		9/11/20 13:05	
AD19122-003 T.Sample	0.0062		0.0062	-0.002128091	0.91	2.5	1	100	-0.094	0.879		9/11/20 13:05	
AD19122-003 50X T.Sample	-0.0002		-0.0002	-0.011939627	0.91	2.5	1	100	-0.525	0.879		9/11/20 13:05	
AD19107-001 T.Sample	-0.0003		-0.0003	-0.012092932	0.91	2.5	1	100	-0.532	0.879		9/11/20 13:05	
AD19107-002 T.Sample	-0.0016		-0.0016	-0.0140859	0.88	2.5	1	100	-0.640	0.909		9/11/20 13:06	
AD19120-001 T.Sample	0.0949		0.0949	0.13385366	0.79	2.5	1	100	6.777	1.013		9/11/20 13:07	
AD19120-002 T.Sample	0.0506		0.0506	0.065939439	0.81	2.5	1	100	3.256	0.988		9/11/20 13:07	
AD19120-003 T.Sample	0.0893		0.0893	0.125268569	0.74	2.5	1	100	6.771	1.081		9/11/20 13:07	
AD19135-002 T.Sample	0.0011		0.0011	-0.009946659	0.91	2.5	1	100	-0.437	0.879		9/11/20 13:08	
CCV-4.Control	0.3260		0.3260	0.4881421	1	1	1	1	0.488	0.020	98	9/11/20 13:08	PASS
CCB-4.Sample	-0.0015		-0.0015	-0.013932595	1	1	1	1	-0.014	0.020		9/11/20 13:08	
AD19135-004 T.Sample	0.0014		0.0014	-0.009486743	0.91	2.5	1	100	-0.417	0.879		9/11/20 13:09	
AD19135-006 T.Sample	-0.0005		-0.0005	-0.012399543	0.9	2.5	1	100	-0.551	0.889		9/11/20 13:09	
AD19140-001 T.Sample	0.0069		0.0069	-0.001054954	0.92	2.5	1	100	-0.046	0.870		9/11/20 13:09	
AD19140-002 T.Sample	0.0012		0.0012	-0.009793353	0.92	2.5	1	100	-0.426	0.870		9/11/20 13:09	
AD19140-003 T.Sample	0.0066		0.0066	-0.00151487	0.89	2.5	1	100	-0.068	0.899		9/11/20 13:11	
AD19140-004 T.Sample	0.0010		0.0010	-0.010099964	0.86	2.5	1	100	-0.470	0.930		9/11/20 13:12	
AD19140-005 T.Sample	0.0013		0.0013	-0.009640048	0.92	2.5	1	100	-0.419	0.870		9/11/20 13:12	
AD19140-006 T.Sample	0.0025		0.0025	-0.007800385	0.92	2.5	1	100	-0.339	0.870		9/11/20 13:12	
AD19140-006 50X T.Sample	0.0001		0.0001	-0.011479711	0.92	2.5	1	100	-0.499	0.870		9/11/20 13:13	
AD19143-001 T.Sample	0.0850		0.0850	0.118676446	0.67	2.5	1	100	7.085	1.194		9/11/20 13:13	
CCV-5.Control	0.3336		0.3336	0.499793313	1	1	1	1	0.500	0.020	100	9/11/20 13:13	PASS
CCB-5.Sample	-0.0012		-0.0012	-0.013472679	1	1	1	1	-0.013	0.020		9/11/20 13:14	
AD19159-001 T.Sample	0.0067		0.0067	-0.001361565	0.78	2.5	1	100	-0.070	1.026		9/11/20 13:14	
AD19159-002 T.Sample	0.0068		0.0068	-0.001208259	0.87	2.5	1	100	-0.056	0.920		9/11/20 13:14	
AD19159-003 T.Sample	0.0117		0.0117	0.006303697	0.94	2.5	1	100	0.268	0.851		9/11/20 13:15	
AD19159-007 T.Sample	0.0553		0.0553	0.073144787	0.81	2.5	1	100	3.612	0.988		9/11/20 13:15	
CCV-6.Control	0.3446		0.3446	0.516656856	1	1	1	1	0.517	0.020	103	9/11/20 13:15	PASS
CCB-6.Sample	-0.0015		-0.0015	-0.013932595	1	1	1	1	-0.014	0.020		9/11/20 13:16	

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	Hex-Cr Soil		Q.C. DATA									
Batch#	784 A		QC Sample	AD19122-001 NS.Sample								
Date	9/10/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	20.71	20.71	104%	80-120%	NA	NA	PASS	
			MS(Sol)	21.98	20.43	17.49	80%	75-125%	NA	NA	PASS	
			MS(Insol)	1060.22	533.74	530.80	50%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	2.95	NA	NA	NA	NA	NA		
			Sample Dup	NA	2.80	NA	NA	NA	5	20%		PASS
			PVS	21.98	21.23	18.28	83%	85-115%	NA	NA	FAIL	
			MS(Sol)	21.74	20.28	17.38	80%	75-125%	NA	NA	PASS	
			MS(Insol)	873.91	430.63	427.72	49%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	2.91	NA	NA	NA	NA	NA		
Lead Chromate Added :	0.015	0.0125	G									
Upper Calibration Abbsorbance:	0.6516											

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3247	0.0000	0.3247	0.48614912	1	1	1	1	0.486	0.500	97	9/11/20 13:22	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0020	0.0000	0.0020	-0.008566911	1	1	1	1	-0.009	0.020		9/11/20 13:22	
MB.Sample	-0.0014	0.0000	-0.0014	-0.01377929	1	2.5	1	100	-0.551	0.800		9/11/20 13:22	
LCS.Sample	0.3453	0.0000	0.3453	0.517729988	1	2.5	1	100	20.709	0.800		9/11/20 13:22	
AD19122-001 NS.Sample	0.0572	0.0059	0.0513	0.067012575	0.91	2.5	1	100	2.946	0.879		9/11/20 13:23	
AD19122-001 DUP.Sample	0.0551	0.0059	0.0492	0.063793167	0.91	2.5	1	100	2.804	0.879		9/11/20 13:24	
AD19122-002 MS.Sample	0.3143	0.0035	0.3108	0.464839695	0.91	2.5	1	100	20.433	0.879		9/11/20 13:24	
AD19122-003 50X MSD.Sample	0.1645	-0.0015	0.1660	0.242853692	0.91	2.5	50	100	533.744	43.956		9/11/20 13:25	
AD19122-001 PVS.Sample	0.3285	0.0059	0.3226	0.482929717	0.91	2.5	1	100	21.228	0.879		9/11/20 13:25	
AD19140-002.Sample	0.0553	0.0041	0.0512	0.066859272	0.92	2.5	1	100	2.907	0.870		9/11/20 13:29	
AD19140-005 MS2.Sample	0.3186	0.0067	0.3119	0.466526051	0.92	2.5	1	100	20.284	0.870		9/11/20 13:31	
AD19140-006 MSD2.Sample	4.1221	0.0041	4.1180	6.301476904	0.92	2.5	1	100	273.977	0.870		9/11/20 13:32	
AD19140-00650XMSD2.Sample	0.1355	-0.0013	0.1368	0.198088561	0.92	2.5	50	100	430.627	43.478		9/11/20 13:33	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3247		0.3247	0.48614912	1	1	1	1	0.486	0.020	97	9/11/20 13:22	PASS
ICB.Sample	0.0020		0.0020	-0.008566911	1	1	1	1	-0.009	0.020		9/11/20 13:22	
MB.Sample	-0.0014		-0.0014	-0.01377929	1	2.5	1	100	-0.551	0.800		9/11/20 13:22	
LCS.Sample	0.3453		0.3453	0.517729988	1	2.5	1	100	20.709	0.800		9/11/20 13:22	
AD19122-001 NS.Sample	0.0572	0.0059	0.0513	0.067012575	0.91	2.5	1	100	2.946	0.879		9/11/20 13:23	
AD19122-001 DUP.Sample	0.0551	0.0059	0.0492	0.063793167	0.91	2.5	1	100	2.804	0.879		9/11/20 13:24	
AD19122-002 MS.Sample	0.3143	0.0035	0.3108	0.464839695	0.91	2.5	1	100	20.433	0.879		9/11/20 13:24	
AD19122-003 XXX.Sample	3.9672	0.0038	3.9634	6.064467242	0.91	2.5	1	100	266.570	0.879		9/11/20 13:25	
AD19122-003 50X MSD.Sample	0.1645	0.0038	0.1607	0.234728514	0.91	2.5	50	100	515.887	43.956		9/11/20 13:25	
AD19122-001 PVS.Sample	0.3285	0.0059	0.3226	0.482929717	0.91	2.5	1	100	21.228	0.879		9/11/20 13:25	
CCV-1.Control	0.3458		0.3458	0.51849655	1	1	1	1	0.518	0.020	104	9/11/20 13:26	PASS
CCB-1.Sample	-0.0012		-0.0012	-0.013472679	1	1	1	1	-0.013	0.020		9/11/20 13:26	
AD19107-001.Sample	0.0125	0.0120	0.0005	-0.01086649	0.91	2.5	1	100	-0.478	0.879		9/11/20 13:26	
AD19107-002.Sample	0.0036	0.0043	-0.0007	-0.012706153	0.88	2.5	1	100	-0.578	0.909		9/11/20 13:26	
AD19120-001.Sample	0.0513	0.0513	0.0000	-0.011633016	0.79	2.5	1	100	-0.589	1.013		9/11/20 13:27	
AD19120-002.Sample	0.0861	0.0762	0.0099	0.003544197	0.81	2.5	1	100	0.175	0.988		9/11/20 13:27	
AD19120-003.Sample	0.0726	0.0726	0.0000	-0.011633016	0.74	2.5	1	100	-0.629	1.081		9/11/20 13:27	
AD19135-002.Sample	0.0003	-0.0014	0.0017	-0.009026827	0.91	2.5	1	100	-0.397	0.879		9/11/20 13:27	
AD19135-004.Sample	0.0073	0.0037	0.0036	-0.006114027	0.91	2.5	1	100	-0.269	0.879		9/11/20 13:28	

Hex-Cr Soil SW-846 3060A / 7196A

AD19135-006.Sample	0.0100	0.0138	-0.0038	-0.017458616	0.9	2.5	1	100	-0.776	0.889		9/11/20 13:28	
AD19140-001.Sample	0.3608	0.0144	0.3464	0.51941636	0.92	2.5	1	100	22.583	0.870		9/11/20 13:29	
AD19140-002.Sample	0.0553	0.0041	0.0512	0.066859272	0.92	2.5	1	100	2.907	0.870		9/11/20 13:29	
CCV-2.Control	0.3279		0.3279	0.49105488	1	1	1	1	0.491	0.020	98	9/11/20 13:29	PASS
CCB-2.Sample	0.0020		0.0020	-0.008566911	1	1	1	1	-0.009	0.020		9/11/20 13:30	
AD19140-003.Sample	0.3239	0.0036	0.3203	0.479403715	0.89	2.5	1	100	21.546	0.899		9/11/20 13:30	
AD19140-004.Sample	0.0271	0.0060	0.0211	0.020714392	0.86	2.5	1	100	0.963	0.930		9/11/20 13:31	
AD19140-005 MS2.Sample	0.3186	0.0067	0.3119	0.466526051	0.92	2.5	1	100	20.284	0.870		9/11/20 13:31	
AD19140-006 MSD2.Sample	4.1221	0.0041	4.1180	6.301476904	0.92	2.5	1	100	273.977	0.870		9/11/20 13:32	
AD19140-00650XMSD2.Sample	0.1355	-0.0013	0.1368	0.198088561	0.92	2.5	50	100	430.627	43.478		9/11/20 13:33	
AD19143-001.Sample	0.0513	0.0742	-0.0229	-0.046739913	0.67	2.5	1	100	-2.790	1.194		9/11/20 13:33	
AD19159-001.Sample	0.0141	0.0042	0.0099	0.003544204	0.78	2.5	1	100	0.182	1.026		9/11/20 13:33	
AD19159-002.Sample	0.0289	0.0038	0.0251	0.0268466	0.87	2.5	1	100	1.234	0.920		9/11/20 13:34	
AD19159-003.Sample	0.0505	0.0462	0.0043	-0.005040888	0.94	2.5	1	100	-0.215	0.851		9/11/20 13:34	
AD19159-007.Sample	0.0729	0.0726	0.0003	-0.011173104	0.81	2.5	1	100	-0.552	0.988		9/11/20 13:34	
CCV-3.Control	0.3253		0.3253	0.487068968	1	1	1	1	0.487	0.020	97	9/11/20 13:35	PASS
CCB-3.Sample	0.0020		0.0020	-0.008566911	1	1	1	1	-0.009	0.020		9/11/20 13:35	
AD19122-001 T.Sample	0.0059		0.0059	-0.002588006	0.91	2.5	1	100	-0.114	0.879		9/11/20 13:35	
AD19122-002 T.Sample	0.0035		0.0035	-0.006267332	0.91	2.5	1	100	-0.275	0.879		9/11/20 13:36	
AD19122-003 T.Sample	0.0038		0.0038	-0.005807417	0.91	2.5	1	100	-0.255	0.879		9/11/20 13:36	
AD19122-003 50X T.Sample	-0.0015		-0.0015	-0.013932595	0.91	2.5	1	100	-0.612	0.879		9/11/20 13:37	
AD19107-001 T.Sample	0.0120		0.0120	0.006763614	0.91	2.5	1	100	0.297	0.879		9/11/20 13:37	
AD19107-002 T.Sample	0.0043		0.0043	-0.00504089	0.88	2.5	1	100	-0.229	0.909		9/11/20 13:37	
AD19120-001 T.Sample	0.0513		0.0513	0.067012577	0.79	2.5	1	100	3.393	1.013		9/11/20 13:38	
AD19120-002 T.Sample	0.0762		0.0762	0.105185584	0.81	2.5	1	100	5.194	0.988		9/11/20 13:38	
AD19120-003 T.Sample	0.0726		0.0726	0.099666593	0.74	2.5	1	100	5.387	1.081		9/11/20 13:38	
AD19135-002 T.Sample	-0.0014		-0.0014	-0.01377929	0.91	2.5	1	100	-0.606	0.879		9/11/20 13:39	
CCV-4.Control	0.3246		0.3246	0.485995835	1	1	1	1	0.486	0.020	97	9/11/20 13:39	PASS
CCB-4.Sample	0.0025		0.0025	-0.007800385	1	1	1	1	-0.008	0.020		9/11/20 13:39	
AD19135-004 T.Sample	0.0037		0.0037	-0.005960722	0.91	2.5	1	100	-0.262	0.879		9/11/20 13:39	
AD19135-006 T.Sample	0.0138		0.0138	0.009523108	0.9	2.5	1	100	0.423	0.889		9/11/20 13:40	
AD19140-001 T.Sample	0.0144		0.0144	0.010442939	0.92	2.5	1	100	0.454	0.870		9/11/20 13:42	
AD19140-002 T.Sample	0.0041		0.0041	-0.005347501	0.92	2.5	1	100	-0.233	0.870		9/11/20 13:43	
AD19140-003 T.Sample	0.0036		0.0036	-0.006114027	0.89	2.5	1	100	-0.275	0.899		9/11/20 13:43	
AD19140-004 T.Sample	0.0060		0.0060	-0.002434701	0.86	2.5	1	100	-0.113	0.930		9/11/20 13:43	
AD19140-005 T.Sample	0.0067		0.0067	-0.001361565	0.92	2.5	1	100	-0.059	0.870		9/11/20 13:43	
AD19140-006 T.Sample	0.0041		0.0041	-0.005347501	0.92	2.5	1	100	-0.233	0.870		9/11/20 13:44	
AD19140-006 50X T.Sample	-0.0013		-0.0013	-0.013625985	0.92	2.5	1	100	-0.592	0.870		9/11/20 13:44	
AD19143-001 T.Sample.Cycle1	0.0742		0.0742	0.102119473	0.67	2.5	1	100	6.097	1.194		9/11/20 13:46	
CCV-5.Control	0.3234		0.3234	0.484156141	1	1	1	1	0.484	0.020	97	9/11/20 13:45	PASS
CCB-5.Sample	0.0021		0.0021	-0.008413606	1	1	1	1	-0.008	0.020		9/11/20 13:45	
AD19159-001 T.Sample	0.0042		0.0042	-0.005194196	0.78	2.5	1	100	-0.266	1.026		9/11/20 13:47	
AD19159-002 T.Sample	0.0038		0.0038	-0.005807417	0.87	2.5	1	100	-0.267	0.920		9/11/20 13:47	
AD19159-003 T.Sample	0.0462		0.0462	0.059194008	0.94	2.5	1	100	2.519	0.851		9/11/20 13:47	
AD19159-007 T.Sample	0.0726		0.0726	0.099666593	0.81	2.5	1	100	4.922	0.988		9/11/20 13:47	
CCV-6.Control	0.3230		0.3230	0.483542956	1	1	1	1	0.484	0.020	97	9/11/20 13:48	PASS
CCB-6.Sample	-0.0011		-0.0011	-0.013319374	1	1	1	1	-0.013	0.020		9/11/20 13:48	

Analysis Type: HEX-CR-W

Batch Number: HEX-CR-W-896

Units: mg/l

Calibration Curve Information

Cal Curve Date: 09/16/20

Concentration:	Abs/Area
0	0
0.02	0.024
0.05	0.06
0.25	0.309
0.5	0.541
0.75	0.847
1	1.135

Slope: 1.124739
Intercept: 0.003631676
Rsquared: 0.9994624
Date Performed: 09/16/20

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-09/16/20	0.02	50-150	NA	0.0181094	91	NA	
CCV	CCV-2	0.5	90-110	NA	0.509779	102	NA	
CCV	CCV-1	0.5	90-110	NA	0.5080008	102	NA	
DUP	AD19182-001	0	NA	20	-0.0032289	NA	NA	Nc
ICV	ICV-09/16/20	0.5	95-105	NA	0.5044444	101	NA	
LCS	LCS	0.5	75-125	NA	0.5062226	101	NA	
MS	AD19182-001	0.5	75-125	NA	0.4422078	88	NA	
MSD	AD19182-001	0.5	75-125	20	0.443986	89	0.4	

Analytical Method(s)

SM3500-CrB11

Sam #	Type	MB	Result	RL	Per Sol	Full Result	ABS	Turb Abs	DF	Sam Vol	Fin Vol	Prep Date	Prep By	Anal Date	Anal By
CAL-01-09/16/20	CAL-01		0.018		100	0.018109	0.024	0	1	1	1			09/16/20	JMP
MB-1-09/16/20	MB	MB-1-09/16/20	ND	0.02	100	-0.0032289	0	0	1	10	10	09/16/20	JMP	09/16/20	JMP
LCS	LCS	MB-1-09/16/20	0.51	0.02	100	0.50622	0.573	0	1	10	10	09/16/20	JMP	09/16/20	JMP
AD19182-001	Sample	MB-1-09/16/20	ND	0.02	100	-0.004118	0	0.001	1	10	10	09/16/20	JMP	09/16/20	JMP
AD19182-001	DUP	MB-1-09/16/20	ND	0.02	100	-0.0032289	0.001	0.001	1	10	10	09/16/20	JMP	09/16/20	JMP
AD19182-001	MS	MB-1-09/16/20	0.44	0.02	100	0.44221	0.502	0.001	1	10	10	09/16/20	JMP	09/16/20	JMP
AD19182-001	MSD	MB-1-09/16/20	0.44	0.02	100	0.44399	0.504	0.001	1	10	10	09/16/20	JMP	09/16/20	JMP
CCV-1	CCV	MB-1-09/16/20	0.51		100	0.508	0.575	0	1	1	1	09/16/20	JMP	09/16/20	JMP
CCB-1	CCB	MB-1-09/16/20	ND	0.02	100	-0.0032289	0	0	1	1	1	09/16/20	JMP	09/16/20	JMP
AD19159-011	Sample	MB-1-09/16/20	ND	0.02	100	-0.0032289	0	0	1	10	10	09/16/20	JMP	09/16/20	JMP
AD19236-012	Sample	MB-1-09/16/20	ND	0.02	100	-0.0032289	0	0	1	10	10	09/16/20	JMP	09/16/20	JMP
CCV-2	CCV	MB-1-09/16/20	0.51		100	0.50978	0.577	0	1	1	1	09/16/20	JMP	09/16/20	JMP
CCB-2	CCB	MB-1-09/16/20	ND	0.02	100	-0.0032289	0	0	1	1	1	09/16/20	JMP	09/16/20	JMP
ICV-09/16/20	ICV		0.50	0.02	100	0.50444	0.571	0	1	1	1		JMP	09/16/20	JMP

9/16/20

9/16/20

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

MS/MSD/DUP Recovery

0091006 0496

Prep Batch: S-2420 Sample ID: AD19159-004
Method: EPA 9012B Matrix: Soil

Qc Type: DUP

Analyte	Limits Rpd	Dil	DUP Conc	Sample Conc	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	35	1	0	0	NA		20200914141	15	09/14/20 14:50	20200914141	14	09/14/20 14:48

Qc Type: MS

Analyte	Amt	Limits Recov	Dil	MS Conc	Sample Conc	% Rec	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.0455	0	11	Ms	20200914141	16	09/14/20 14:52	20200914141	14	09/14/20 14:48

Qc Type: MSD

Analyte	Amt	Limits Recov	Rpd	Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.1638	0	41	113	MsMr	20200914141	17	09/14/20 14:55	20200914141	14	09/14/20 14:48

LCS Recoveries

	BatchRunID/RunID:====>	202009141417-12							
	QcBatchID:====>	LCSS-2420							
	Date/Time:====>	09/14/20 14:43							
	Analytical Method:====>	EPA 9012B							
	Matrix:====>	Soil	Soil		Soil		Soil		Soil	
Analyte	EPA 9012B Amt Limits	Amt Limits	% Rec Flags		% Rec Flags		% Rec Flags		% Rec Flags	
Cyanide	0.4 80-120		96							

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200914141	9	ICV	110	0.4	85-115
Cyanide	20200914141	21	CCV	109	0.4	85-115
Cyanide	20200914141	33	CCV	112	0.4	85-115
Cyanide	20200914141	41	CCV	113	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 9/14/20

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200914141	9/14/20 14:41	MBS-2420	11	Cyanide	ND	0.020

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200914141	9/14/20 14:38	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200914141	9/14/20 15:06	CCB	22	Cyanide	ND	0.020
20200914141	9/14/20 15:34	CCB	34	Cyanide	ND	0.020
20200914141	9/14/20 15:49	CCB	42	Cyanide	ND	0.020

MS/MSD/DUP Recovery

Prep Batch: W-1505 Sample ID: AD19136-001
Method: EPA 9012B Matrix: Aqueous

Qc Type: DUP

Analyte	Limits Rpd	Dil	DUP Conc	Sample Conc	Rpd	Flag	MS/MSD/DUP Batch	MS/MSD/DUP RunID	MS/MSD/DUP Analysis Date	Non Spike Batch	Non Spike RunID	Non Spike Analysis Date
Cyanide	35	1	0	0	NA		20200911114	15	09/11/20 12:14	20200911114	14	09/11/20 12:12

Qc Type: MS

Analyte	Amt	Limits Recov	Dil	MS Conc	Sample Conc	% Rec	Flag	MS/MSD/DUP Batch	MS/MSD/DUP RunID	MS/MSD/DUP Analysis Date	Non Spike Batch	Non Spike RunID	Non Spike Analysis Date
Cyanide	0.4	75-125	1	0.3683	0	92		20200911114	16	09/11/20 12:16	20200911114	14	09/11/20 12:12

Qc Type: MSD

Analyte	Amt	Limits Recov	Rpd	Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	MS/MSD/DUP Batch	MS/MSD/DUP RunID	MS/MSD/DUP Analysis Date	Non Spike Batch	Non Spike RunID	Non Spike Analysis Date
Cyanide	0.4	75-125	20	1	0.3777	0	94	2.5		20200911114	17	09/11/20 12:19	20200911114	14	09/11/20 12:12

LCS Recoveries

	BatchRunID/RunID:====>	202009111142-12				
	QcBatchID:====>	LCSW-1505				
	Date/Time:====>	09/11/20 12:07				
	Analytical Method:====>	EPA 9012B				
	Matrix:====>	Aqueous	Soil	Soil	Soil	Soil
Analyte	EPA 9012B Amt Limits Amt Limits	% Rec Flags	% Rec Flags	% Rec Flags	% Rec Flags	% Rec Flags
Cyanide	0.4 80-120	96				

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200911114	9	ICV	92	0.4	85-115
Cyanide	20200911114	21	CCV	93	0.4	85-115
Cyanide	20200911114	28	CCV	95	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 9/11/20

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200911114	9/11/20 12:05	MBW-1505	11	Cyanide	ND	0.020

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200911114	9/11/20 12:03	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200911114	9/11/20 12:30	CCB	22	Cyanide	ND	0.020
20200911114	9/11/20 12:43	CCB	29	Cyanide	ND	0.020

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-10966

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD19122-002	91	90.76923	Percent	1.38	16.33	14.96	09/10/20	BEENA	0.22	5
Sample	AD19122-002	91	90.97117	Percent	1.36	14.54	13.35	09/10/20	BEENA		
Sample	AD19122-003	91	90.65836	Percent	1.36	12.60	11.55	09/10/20	BEENA		
Sample	AD19159-001	78	77.90941	Percent	1.37	15.72	12.55	09/10/20	BEENA		
Sample	AD19159-002	87	86.90784	Percent	1.36	12.97	11.46	09/10/20	BEENA		
Sample	AD19159-003	94	94.27637	Percent	1.39	13.62	12.92	09/10/20	BEENA		
Sample	AD19159-004	88	88.00813	Percent	1.40	11.24	10.06	09/10/20	BEENA		
Sample	AD19159-005	88	88.21138	Percent	1.39	11.23	10.07	09/10/20	BEENA		
Sample	AD19159-006	88	88.19939	Percent	1.40	11.23	10.07	09/10/20	BEENA		
Sample	AD19159-007	81	81.46893	Percent	1.39	10.24	8.60	09/10/20	BEENA		
Sample	AD19159-008	65	64.65598	Percent	1.35	11.96	8.21	09/10/20	BEENA		
Sample	AD19159-009	68	68.31589	Percent	1.35	11.86	8.53	09/10/20	BEENA		
Sample	AD19159-010	87	86.96655	Percent	1.36	10.03	8.90	09/10/20	BEENA		

* - Indicates Failed Rpd Criteria

Wet Chemistry Data
Raw Data

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-325340

Prepared By: Patel, Jessica
Description: 100 ppm cr6 CCV
Prep Date: 4/7/2020
Expiration Date: 10/6/2020
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 04/07/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12101	1000 ppm Cr6 Std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-331888

Prepared By: Trivedi, Beena
Description: Phosphate Buffer
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9811	Potassium Phosphate Monobasic	68.04 g	neat neat	
12908	potassium phosphate dibasic anhydrous	87.09 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-331889

Prepared By: Trivedi, Beena
Description: 100 ppm cr6 std
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12831	1000 ppm cr6 std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-334593

Prepared By: Trivedi, Beena
Description: Cr6 digestion solution
Prep Date: 9/10/2020
Expiration Date: 10/9/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 6000 ml
ApprovedBy: jessica
ApproveDate: 09/10/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12852	Sodium Carbonate, Anhydrous	180 g	neat neat	
12834	sodium hydroxide	120 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334640

Prepared By: Patel, Jessica
Description: 10 % H2SO4
Prep Date: 9/11/2020
Expiration Date: 2/25/2021
Department: WetChem
BatchNumber:
Concentration: 10 %
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13343	sulfuric acid	200 ml	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334641

Prepared By: Patel, Jessica
Description: 5 M HNO3
Prep Date: 9/11/2020
Expiration Date: 2/25/2021
Department: WetChem
BatchNumber:
Concentration: 5 m
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13331	Nitric acid	640 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334790

Prepared By: Trivedi, Beena
Description: 0.02 PPM
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Wet Lab
BatchNumber: B-29678
Concentration: 0.02 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.02 ml	100 mg/l	
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334791

Prepared By: Trivedi, Beena
Description: 0.25 PPM
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: WetChem
BatchNumber: B-29678
Concentration: 0.25 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.25 ml	100 mg/l	

Veritech Lot Number: V-334792

Prepared By: Trivedi, Beena
Description: 0.5 PPM
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Wet Lab
BatchNumber: B-29678
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	

Veritech Lot Number: V-334793

Prepared By: Trivedi, Beena
Description: 1.0 PPM
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Wet Lab
BatchNumber: B-29678
Concentration: 1 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	1 ml	100 mg/l	
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334794

Prepared By: Trivedi, Beena | Department: Wet Lab | ApprovedBy: jessica
Description: ICV | BatchNumber: B-29678 | ApproveDate: 09/15/20
Prep Date: 9/14/2020 | Concentration: 0.5 ppm | Checked: Yes
Expiration Date: 9/14/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334795

Prepared By: Trivedi, Beena | Department: Wet Lab | ApprovedBy: jessica
Description: CCV | BatchNumber: B-29678 | ApproveDate: 09/15/20
Prep Date: 9/14/2020 | Concentration: 0.5 ppm | Checked: Yes
Expiration Date: 9/14/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334796

Prepared By: Trivedi, Beena | Department: Wet Lab | ApprovedBy: jessica
Description: LCS | BatchNumber: B-29678 | ApproveDate: 09/15/20
Prep Date: 9/14/2020 | Concentration: 0.5 ppm | Checked: Yes
Expiration Date: 9/14/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	

Veritech Lot Number: V-334845

Prepared By: Trivedi, Beena | Department: WetChem | ApprovedBy: [illegible]
Description: Cr6 Color Reagent | BatchNumber: | ApproveDate: 9/15/20
Prep Date: 9/15/2020 | Concentration: Reagent reag | Checked: No
Expiration Date: 12/3/2020 | Final Volume: 250 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11768	1,5-Diphenylcarbazide	1.25 g	neat neat	
12943	acetone	250 ml	neat neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9811

Description: Potassium Phosphate Monobasic

ApprovedBy: janee
ApproveDate: 11/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	P285-500	151912	11/17/15	11/16/25	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 11768

Description: 1,5-Diphenylcarbazide

ApprovedBy: janee
ApproveDate: 09/08/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	LC136558	H134-17	06/12/18	05/15/23	Wonge, Janee	1	25 g	neat	neat

Veritech Control/Receipt Number: 12101

Description: 1000 ppm Cr6 Std

ApprovedBy: janee
ApproveDate: 11/29/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	19036-100mL	BCBV2169	11/05/18	04/30/21	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12831

Description: 1000 ppm cr6 std

ApprovedBy: janee
ApproveDate: 12/26/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Hach	1466442	A9240	10/14/19	08/31/24	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12834

Description: sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12852

Description: Sodium Carbonate, Anhydrous

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Lab Chem	LC229651	J192-03	10/21/19	10/20/29	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12908

Description: potassium phosphate dibasic anhydrous

ApprovedBy: janee
ApproveDate: 12/04/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
fisher	p288-500	188106	12/04/19	12/03/29	Wonge, Janee	1	500 g	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12943

Description: acetone

ApprovedBy: akmal
ApproveDate: 12/18/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9254-03	236884	12/17/19	05/13/22	Lopez, Jose	32	4L	neat	neat

Veritech Control/Receipt Number: 13084

Description: DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13331

Description: Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13343

Description: sulfuric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6413

Description
Lead Chromate

ApprovedBy: aurora
ApproveDate: 11/05/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Pfaltz & Bauer inc	L01745	A056-5	10/27/11	10/26/21	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 12689

Description
Magnesium Chloride Anhydrous

ApprovedBy: janee
ApproveDate: 08/01/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Laboratory Sales	LC-2758812	190726-A	07/31/19	07/30/24	Wonge, Janee	1	2.5 kg	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332644

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: jessica
Description: KHP LCS	BatchNumber:	ApproveDate: 08/05/20
Prep Date: 8/5/2020	Concentration: 300 ppm	Checked: Yes
Expiration Date: 2/4/2021	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE	600 mg	NEAT	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10292

Description
Potassium Chloride, 4M

ApprovedBy: janee
ApproveDate: 12/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	SP135-500	156731	07/01/16	12/31/20	Wonge, Janee	1	500 m	4	M

Veritech Control/Receipt Number: 13162

Description
zobell"s solution

ApprovedBy: jessica
ApproveDate: 04/06/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LABCHEM	LC273101	K050-17	04/06/20	02/20/21	Patel, Jessica	1	500M	NEAT	NEAT

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-325340

Prepared By: Patel, Jessica
Description: 100 ppm cr6 CCV
Prep Date: 4/7/2020
Expiration Date: 10/6/2020
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 04/07/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12101	1000 ppm Cr6 Std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-331888

Prepared By: Trivedi, Beena
Description: Phosphate Buffer
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9811	Potassium Phosphate Monobasic	68.04 g	neat neat	
12908	potassium phosphate dibasic anhydrous	87.09 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-331889

Prepared By: Trivedi, Beena
Description: 100 ppm cr6 std
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12831	1000 ppm cr6 std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-334316

Prepared By: Wonge, Janee
Description: Cr6 Color Reagent
Prep Date: 9/4/2020
Expiration Date: 12/3/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 09/04/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11768	1,5-Diphenylcarbazide	1.25 g	neat neat	
12943	acetone	250 ml	neat neat	

Veritech Lot Number: V-334429

Prepared By: Trivedi, Beena
Description: Cr6 digestion solution
Prep Date: 9/8/2020
Expiration Date: 10/7/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 6000 ml
ApprovedBy: jessica
ApproveDate: 09/10/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12852	Sodium Carbonate, Anhydrous	180 g	neat neat	
12834	sodium hydroxide	120 g	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334605

Prepared By: Trivedi, Beena
Description: 0.02 PPM
Prep Date: 9/10/2020
Expiration Date: 9/10/2020
Department: Wet Lab
BatchNumber: B-29663
Concentration: 0.02 ppm
Final Volume: 100 ml
ApprovedBy: [signature]
ApproveDate: 9/11/20
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.02 ml	100 mg/l	
13084	DI H20			
V-334429	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334606

Prepared By: Trivedi, Beena
Description: 0.25 PPM
Prep Date: 9/10/2020
Expiration Date: 9/10/2020
Department: WetChem
BatchNumber: B-29663
Concentration: 0.25 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334429	Cr6 digestion solution	50 ml	Reagent reag	
13084	DI H20			
V-331889	100 ppm cr6 std	.25 ml	100 mg/l	

Veritech Lot Number: V-334607

Prepared By: Trivedi, Beena
Description: 0.5 PPM
Prep Date: 9/10/2020
Expiration Date: 9/10/2020
Department: Wet Lab
BatchNumber: B-29663
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334429	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	

Veritech Lot Number: V-334608

Prepared By: Trivedi, Beena
Description: 1.0 PPM
Prep Date: 9/10/2020
Expiration Date: 9/10/2020
Department: Wet Lab
BatchNumber: B-29663
Concentration: 1 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	1 ml	100 mg/l	
13084	DI H20			
V-334429	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334609

Prepared By: Trivedi, Beena
Description: ICV
Prep Date: 9/10/2020
Expiration Date: 9/10/2020
Department: Wet Lab
BatchNumber: B-29663
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334429	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334610

Prepared By:	Trivedi, Beena	Department: Wet Lab	ApprovedBy: [illegible]
Description:	CCV	BatchNumber: B-29663	ApproveDate: 9/11/20
Prep Date:	9/10/2020	Concentration: 0.5 ppm	Checked: No
Expiration Date:	9/10/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334429	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334611

Prepared By:	Trivedi, Beena	Department: Wet Lab	ApprovedBy:
Description:	LCS	BatchNumber: B-29663	ApproveDate:
Prep Date:	9/10/2020	Concentration: 0.5 ppm	Checked: No
Expiration Date:	9/10/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	
V-334429	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334640

Prepared By:	Patel, Jessica	Department: WetChem	ApprovedBy:
Description:	10 % H2SO4	BatchNumber:	ApproveDate:
Prep Date:	9/11/2020	Concentration: 10 %	Checked: No
Expiration Date:	2/25/2021	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13343	sulfuric acid	200 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334641

Prepared By:	Patel, Jessica	Department: WetChem	ApprovedBy:
Description:	5 M HNO3	BatchNumber:	ApproveDate:
Prep Date:	9/11/2020	Concentration: 5 m	Checked: No
Expiration Date:	2/25/2021	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13331	Nitric acid	640 ml	neat neat	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9811

Description
Potassium Phosphate Monobasic

ApprovedBy: janee
ApproveDate: 11/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	P285-500	151912	11/17/15	11/16/25	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 11768

Description
1,5-Diphenylcarbazide

ApprovedBy: janee
ApproveDate: 09/08/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LabChem	LC136558	H134-17	06/12/18	05/15/23	Wonge, Janee	1	25 g	neat	neat

Veritech Control/Receipt Number: 12101

Description
1000 ppm Cr6 Std

ApprovedBy: janee
ApproveDate: 11/29/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Sigma-Aldrich	19036-100mL	BCBV2169	11/05/18	04/30/21	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12831

Description
1000 ppm cr6 std

ApprovedBy: janee
ApproveDate: 12/26/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Hach	1466442	A9240	10/14/19	08/31/24	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12852

Description
Sodium Carbonate, Anhydrous

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Lab Chem	LC229651	J192-03	10/21/19	10/20/29	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12908

Description
potassium phosphate dibasic anhydrous

ApprovedBy: janee
ApproveDate: 12/04/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
fisher	p288-500	188106	12/04/19	12/03/29	Wonge, Janee	1	500 g	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12943

Description
acetone

ApprovedBy: akmal
ApproveDate: 12/18/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9254-03	236884	12/17/19	05/13/22	Lopez, Jose	32	4L	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13331

Description
Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6413

Description
Lead Chromate

ApprovedBy: aurora
ApproveDate: 11/05/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Pfaltz & Bauer inc	L01745	A056-5	10/27/11	10/26/21	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 12689

Description
Magnesium Chloride Anhydrous

ApprovedBy: janee
ApproveDate: 08/01/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Laboratory Sales	LC-2758812	190726-A	07/31/19	07/30/24	Wonge, Janee	1	2.5 kg	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332257

Prepared By: Trivedi, Beena
Description: 1 N NAOH
Prep Date: 7/28/2020
Expiration Date: 1/27/2021
Department: Metals
BatchNumber:
Concentration: 1 n
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 07/28/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12987	sodium hydroxide	80 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-333445

Prepared By: Patel, Jessica
Description: Sodium Phosphate
Prep Date: 8/19/2020
Expiration Date: 9/18/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 08/19/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13261	sodium phosphate monobasic	34.5 g	NEAT neat	
13084	DI H20			

Veritech Lot Number: V-334102

Prepared By: louis lombardi
Description: 0.25 N NaOH
Prep Date: 9/1/2020
Expiration Date: 2/25/2021
Department: WetChem
BatchNumber:
Concentration: 0.25 n
Final Volume: 6000 ml
ApprovedBy: jessica
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12834	sodium hydroxide	60 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334659

Prepared By: Wonge, Janee
Description: Pyridine/Barbaturic acid
Prep Date: 9/11/2020
Expiration Date: 9/18/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13135	Barbituric Acid	3.75 g	neat neat	
12769	Pyridine	18.75 ml	neat neat	
13096	hydrochloric acid	3.75 ml	neat neat	

Veritech Lot Number: V-334717

Prepared By: Wonge, Janee
Description: 20 ppm CN standard
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: WetChem
BatchNumber:
Concentration: 20 ppm
Final Volume: 100 ml
ApprovedBy: JJW
ApproveDate: 9/14/20
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13179	1000 ppm cn std	2 ml	1000 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334718

Prepared By: Wonge, Janee
Description: 20 ppm CN control
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: WetChem
BatchNumber:
Concentration: 20 ppm
Final Volume: 100 ml
ApprovedBy: JMP
ApproveDate: 9/14/20
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13213	1000 PPM CN STD	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334719

Prepared By: Wonge, Janee
Description: ICV/CCV
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: WetChem
BatchNumber:
Concentration: 0.40 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334718	20 ppm CN control	2 ml	20 ppm	
V-334102	0.25 N NaOH	98 ml	0.25 n	

Veritech Lot Number: V-334720

Prepared By: Wonge, Janee
Description: Chloramine -T (AQ2)
Prep Date: 9/14/2020
Expiration Date: 9/15/2020
Department: WetChem
BatchNumber:
Concentration: reagent reage
Final Volume: 50 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10778	Chloramine T trihydrate	.5 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334722

Prepared By: Wonge, Janee
Description: 0.80 ppm Cyanide
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: WetChem
BatchNumber:
Concentration: 0.80 ppm
Final Volume: 6 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334717	20 ppm CN standard	.24 ml	20 ppm	
V-332257	1 N NAOH	1.5 ml	1 n	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10778

Description
Chloramine T trihydrate

ApprovedBy: janee
ApproveDate: 03/02/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Emd Millipore	1.02426.0250	K48314926 637	03/02/17	03/01/27	Wonge, Janee	1	250 g	neat	neat

Veritech Control/Receipt Number: 12769

Description
Pyridine

ApprovedBy: janee
ApproveDate: 09/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	P368-1	190224	09/20/19	09/19/24	Wonge, Janee	1	1 L	neat	neat

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12987

Description
sodium hydroxide

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069931	01/07/20	01/06/25	Lopez, Jose	4	12kg	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13096

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9530-33	251602	03/10/20	01/15/25	Burwell, John	6	2.5	neat	neat

Veritech Control/Receipt Number: 13135

Description
Barbituric Acid

ApprovedBy: jessica
ApproveDate: 03/25/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
GFS chemicals	LS-1580004	17501828	03/25/20	03/24/30	Patel, Jessica	1	100 g	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13179

Description
1000 ppm cn std

ApprovedBy: jessica
ApproveDate: 04/08/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
labchem	LC135451	K070-001	04/08/20	09/20/20	Patel, Jessica	1	500M	1000	PPM

Veritech Control/Receipt Number: 13213

Description
1000 PPM CN STD

ApprovedBy: jessica
ApproveDate: 04/21/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RICCA	2543-16	4003H35	04/21/20	09/30/20	Patel, Jessica	1	500 M	1000	PPM

Veritech Control/Receipt Number: 13261

Description
sodium phosphate monobasic

ApprovedBy: jessica
ApproveDate: 05/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
lab chem	LC247751	K086-13	05/26/20	05/25/30	Patel, Jessica	3	500 G	NEAT	NEAT

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-330629

Prepared By: Patel, Jessica
Description: 0.4N Sulfamic Acid
Prep Date: 7/1/2020
Expiration Date: 12/31/2020
Department: WetChem
BatchNumber:
Concentration: 0.4 n
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 07/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10606	Sulfamic Acid, ACS	10 g	neat neat	.4 n
13084	DI H20			

Veritech Lot Number: V-330630

Prepared By: Patel, Jessica
Description: CN Release Solution
Prep Date: 7/1/2020
Expiration Date: 12/31/2020
Department: WetChem
BatchNumber:
Concentration: various neat
Final Volume: 930.6 g
ApprovedBy: jessica
ApproveDate: 07/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12312	Magnesium Chloride Hexahydrate	96.6 g	neat neat	
13084	DI H20	332.4 g		
13280	sulfuric acid	417 g	neat neat	
V-330629	0.4N Sulfamic Acid	84.6 g	0.4 n	

Veritech Lot Number: V-332257

Prepared By: Trivedi, Beena
Description: 1 N NAOH
Prep Date: 7/28/2020
Expiration Date: 1/27/2021
Department: Metals
BatchNumber:
Concentration: 1 n
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 07/28/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12987	sodium hydroxide	80 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-333445

Prepared By: Patel, Jessica
Description: Sodium Phosphate
Prep Date: 8/19/2020
Expiration Date: 9/18/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 08/19/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13261	sodium phosphate monobasic	34.5 g	NEAT neat	
13084	DI H20			

Veritech Lot Number: V-334102

Prepared By: louis lombardi
Description: 0.25 N NaOH
Prep Date: 9/1/2020
Expiration Date: 2/25/2021
Department: WetChem
BatchNumber:
Concentration: 0.25 n
Final Volume: 6000 ml
ApprovedBy: jessica
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12834	sodium hydroxide	60 g	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334652

Prepared By: Wonge, Janee
Description: 20 ppm CN standard
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: WetChem
BatchNumber:
Concentration: 20 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13179	1000 ppm cn std	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334653

Prepared By: Wonge, Janee
Description: 20 ppm CN control
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: WetChem
BatchNumber:
Concentration: 20 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13213	1000 PPM CN STD	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334654

Prepared By: Wonge, Janee
Description: ICV/CCV
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: WetChem
BatchNumber:
Concentration: 0.40 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334653	20 ppm CN control	2 ml	20 ppm	
V-334102	0.25 N NaOH	98 ml	0.25 n	

Veritech Lot Number: V-334656

Prepared By: Wonge, Janee
Description: Chloramine -T (AQ2)
Prep Date: 9/11/2020
Expiration Date: 9/12/2020
Department: WetChem
BatchNumber:
Concentration: reagent reage
Final Volume: 50 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10778	Chloramine T trihydrate	.5 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334657

Prepared By: Wonge, Janee
Description: 0.80 ppm Cyanide
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: WetChem
BatchNumber:
Concentration: 0.80 ppm
Final Volume: 6 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334652	20 ppm CN standard	.24 ml	20 ppm	
V-332257	1 N NAOH	1.5 ml	1 n	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334659

Prepared By:	Wonge, Janee	Department:	WetChem	ApprovedBy:	jessica
Description:	Pyridine/Barbaturic acid	BatchNumber:		ApproveDate:	09/11/20
Prep Date:	9/11/2020	Concentration:	Reagent reag	Checked:	Yes
Expiration Date:	9/18/2020	Final Volume:	250 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13135	Barbituric Acid	3.75 g	neat neat	
12769	Pyridine	18.75 ml	neat neat	
13096	hydrochloric acid	3.75 ml	neat neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10606

Description
Sulfamic Acid, ACS

ApprovedBy: janee
ApproveDate: 12/21/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Lab chem	LC254201	F308-21	12/19/16	12/18/26	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 10778

Description
Chloramine T trihydrate

ApprovedBy: janee
ApproveDate: 03/02/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Emd Millipore	1.02426.0250	K48314926 637	03/02/17	03/01/27	Wonge, Janee	1	250 g	neat	neat

Veritech Control/Receipt Number: 12312

Description
Magnesium Chloride Hexahydrate

ApprovedBy: janee
ApproveDate: 02/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	M35-500	182951	02/20/19	08/31/21	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12769

Description
Pyridine

ApprovedBy: janee
ApproveDate: 09/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	P368-1	190224	09/20/19	09/19/24	Wonge, Janee	1	1 L	neat	neat

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12987

Description
sodium hydroxide

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069931	01/07/20	01/06/25	Lopez, Jose	4	12kg	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13096

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9530-33	251602	03/10/20	01/15/25	Burwell, John	6	2.5	neat	neat

Veritech Control/Receipt Number: 13135

Description
Barbituric Acid

ApprovedBy: jessica
ApproveDate: 03/25/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
GFS chemicals	LS-1580004	17501828	03/25/20	03/24/30	Patel, Jessica	1	100 g	neat	neat

Veritech Control/Receipt Number: 13179

Description
1000 ppm cn std

ApprovedBy: jessica
ApproveDate: 04/08/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
labchem	LC135451	K070-001	04/08/20	09/20/20	Patel, Jessica	1	500M	1000	PPM

Veritech Control/Receipt Number: 13213

Description
1000 PPM CN STD

ApprovedBy: jessica
ApproveDate: 04/21/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RICCA	2543-16	4003H35	04/21/20	09/30/20	Patel, Jessica	1	500 M	1000	PPM

Veritech Control/Receipt Number: 13261

Description
sodium phosphate monobasic

ApprovedBy: jessica
ApproveDate: 05/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
lab chem	LC247751	K086-13	05/26/20	05/25/30	Patel, Jessica	3	500 G	NEAT	NEAT

Veritech Control/Receipt Number: 13280

Description
sulfuric acid

ApprovedBy: jessica
ApproveDate: 06/22/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/04/20	08/30/22	Lopez, Jose	2	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-331889

Prepared By: Trivedi, Beena
Description: 100 ppm cr6 std
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12831	1000 ppm cr6 std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-331890

Prepared By: Trivedi, Beena
Description: 100 ppm cr6 CCV
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12101	1000 ppm Cr6 Std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-334640

Prepared By: Patel, Jessica
Description: 10 % H2SO4
Prep Date: 9/11/2020
Expiration Date: 2/25/2021
Department: WetChem
BatchNumber:
Concentration: 10 %
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13343	sulfuric acid	200 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334845

Prepared By: Trivedi, Beena
Description: Cr6 Color Reagent
Prep Date: 9/15/2020
Expiration Date: 12/3/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11768	1,5-Diphenylcarbazide	1.25 g	neat neat	
12943	acetone	250 ml	neat neat	

Veritech Lot Number: V-334918

Prepared By: Patel, Jessica
Description: 0.02 ppm
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Wet Lab
BatchNumber: B-29687
Concentration: 0.02 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.02 ml	100 mg/l	
13084	DI H20			

Veritech Lot Number: V-334919

Prepared By: Patel, Jessica
Description: 0.05 ppm
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Wet Lab
BatchNumber: B-29687
Concentration: 0.05 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.05 ml	100 mg/l	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334920

Prepared By: Patel, Jessica
Description: 0.25 ppm
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Wet Lab
BatchNumber: B-29687
Concentration: 0.25 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.25 ml	100 mg/l	
13084	DI H20			

Veritech Lot Number: V-334921

Prepared By: Patel, Jessica
Description: 0.5 ppm
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Wet Lab
BatchNumber: B-29687
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	
13084	DI H20			

Veritech Lot Number: V-334922

Prepared By: Patel, Jessica
Description: 0.75 ppm
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Wet Lab
BatchNumber: B-29687
Concentration: 0.75 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.75 ml	100 mg/l	
13084	DI H20			

Veritech Lot Number: V-334923

Prepared By: Patel, Jessica
Description: 1 ppm
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Wet Lab
BatchNumber: B-29687
Concentration: 1 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	1 ml	100 mg/l	
13084	DI H20			

Veritech Lot Number: V-334924

Prepared By: Patel, Jessica
Description: 0.5 ppm ICV/CCV
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Wet Lab
BatchNumber: B-29687
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331890	100 ppm cr6 CCV	.5	100 mg/l	
13084	DI H20			

Veritech Lot Number: V-334925

Prepared By: Patel, Jessica
Description: 0.5 ppm LCS
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Wet Lab
BatchNumber: B-29687
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-331889	100 ppm cr6 std	.5	100 mg/l	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11768

Description: 1,5-Diphenylcarbazide

ApprovedBy: janee
ApproveDate: 09/08/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LabChem	LC136558	H134-17	06/12/18	05/15/23	Wonge, Janee	1	25 g	neat	neat

Veritech Control/Receipt Number: 12101

Description: 1000 ppm Cr6 Std

ApprovedBy: janee
ApproveDate: 11/29/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Sigma-Aldrich	19036-100mL	BCBV2169	11/05/18	04/30/21	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12831

Description: 1000 ppm cr6 std

ApprovedBy: janee
ApproveDate: 12/26/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Hach	1466442	A9240	10/14/19	08/31/24	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12943

Description: acetone

ApprovedBy: akmal
ApproveDate: 12/18/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9254-03	236884	12/17/19	05/13/22	Lopez, Jose	32	4L	neat	neat

Veritech Control/Receipt Number: 13084

Description: DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13343

Description: sulfuric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 785 Analyst PM Date 9/14/20

Digestion Start: 1530 Finish: 1642 30 Hot Plate Temp 1: 90c Hot Plate Temp 2: 90c

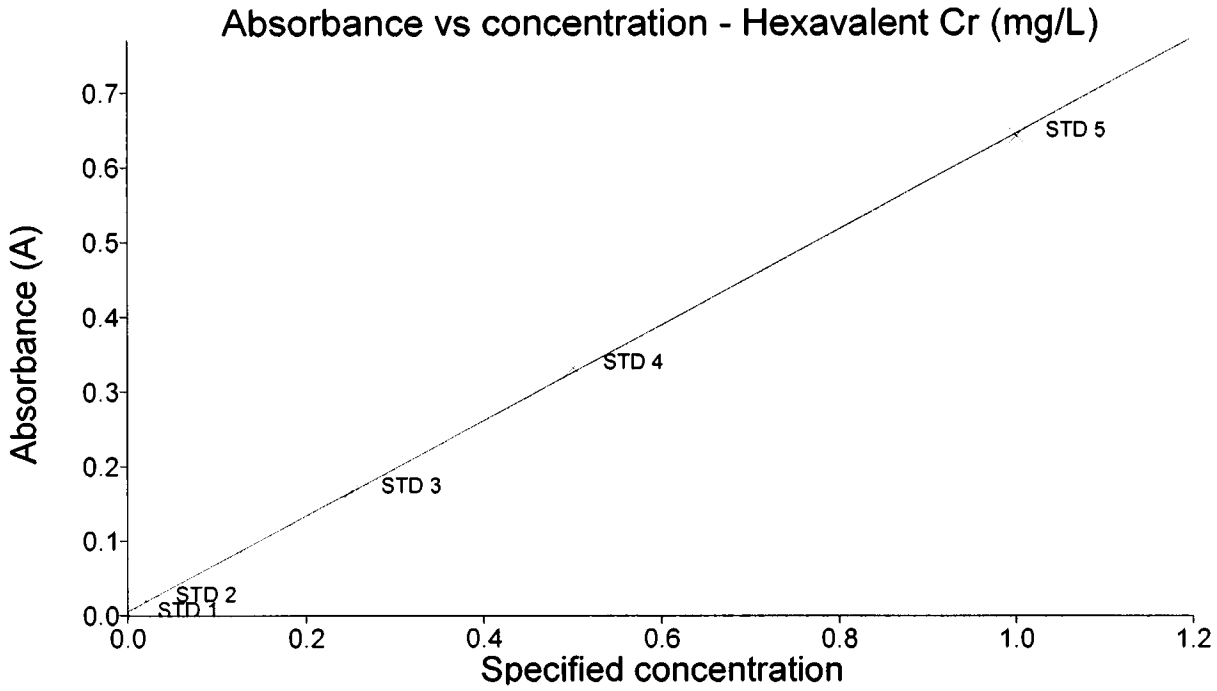
Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 (from 100 ppm)	0.0ml	7.19	100	1.95	
Cal Curve 0.02	0.02	7.64		1.77	
Cal Curve 0.25	0.25	7.33		1.70	Balance used: 031
Cal Curve 0.5	0.5	7.48		1.65	Pipettes used: 11, 19
Cal Curve 1.0	1.0	7.11		2.03	
MB	2.5ml	7.52		2.08	
LCS		7.39		1.94	
~~Sample~~ AD19154004					
PDS		7.10		1.96	
DUP		7.08		1.77	
(Sol) MS 005		7.18		1.70	
(Insol) MSD 006		7.26		1.69	
AD19159004		7.55		1.58	
2. 008		7.78		1.73	
3. 009		7.93		1.78	
4. 010		7.48		1.95	
5. AD19192.002		7.14		2.00	
6. MS 004		7.91		2.11	
7. MSD 005		7.71		2.14	
8. AD19160.001		7.06		1.94	
9. 002		7.55		1.98	
10. AD19180.001		7.87		2.07	
11. AD19178 001		7.90		1.90	
12. 002		7.14		1.88	
13. 003		7.28		1.73	
14. 004		7.15		1.96	
15. 005		7.57		2.05	
16. 006		7.71		2.00	
17. 007		7.70		1.98	
18. 008		7.54		1.73	
19. 009		7.83		1.70	
20. 010		7.80		1.84	

Reagent	Lot #:		$MgCl_2$	# 12689
Digestion Solution - pH must be > 11.5. If not, discard	V- 334593	pH 13.21	Lead Chromate ($PbCrO_4$)	# 6413
Phosphate Buffer	V- 331888		Weight of $PbCrO_4$ (10-20mg)	MSD-1 0.0150 MSD-2 0.0140 g
			Volume PVS 0.5 ml	10% H_2SO_4 V: 334640
			PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3 V: 334641
			Spike Volume 0.5ml V- 331890	Col Rea. V: 334645

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9999

Calibrated on: 09/15/20 12:09:16

User name: wet chem

Method name: Hexavalent Cr

9/15/20

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	-0.0093	0 0093	-0.0001
STD 2.Sample	0.0200	0.0232	-0.0032	0.0208
STD 3.Sample	0.2500	0.2518	-0.0018	0.1671
STD 4.Sample	0.5000	0.5097	-0.0097	0.3321
STD 5.Sample	1.0000	0.9947	0.0053	0.6425

Report Generated On:09/15/2020 13:08

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		09/15/20 12:33:13	0.5000	0.0150	0.3163	0.4850
ICB.Sample		09/15/20 12:33:26			-0.0002	-0.0096 : Exceeded calibration limits.
MB.Sample		09/15/20 12:33:39			-0.0028	-0.0136 : Exceeded calibration limits.
LCS.Sample		09/15/20 12:33:58			0.3253	0.4991
AD19159-004 NS.Sample		09/15/20 12:34:19			0.0415	0.0555
AD19159-004 DUP.Sample		09/15/20 12:34:37			0.0473	0.0646
AD19159-005 MS.Sample		09/15/20 12:35:38			0.1872	0.2833
AD19159-006 XXX.Sample		09/15/20 12:35:57			3.7897	5.9126 : Exceeded calibration limits.
AD19159-006 50X MSD.Sample	50	09/15/20 12:36:48			0.1651	0.2488
AD19159-004 PVS.Sample		09/15/20 12:37:09			0.2339	0.3563
CCV-1.Control		09/15/20 12:37:27	0.5000	0.0036	0.3236	0.4964
CCB-1.Sample		09/15/20 12:37:46			0.0011	-0.0075 : Exceeded calibration limits.
AD19159-008.Sample		09/15/20 12:38:20			0.0017	-0.0065 : Exceeded calibration limits.
AD19159-009.Sample		09/15/20 12:38:36			0.0044	-0.0024 : Exceeded calibration limits.
AD19159-010.Sample		09/15/20 12:38:54			-0.0012	-0.0112 : Exceeded calibration limits.
AD19160-001.Sample		09/15/20 12:39:11			0.0065	0.0010
AD19160-002.Sample		09/15/20 12:39:29			-0.0033	-0.0145 : Exceeded calibration limits.
AD19178-001.Sample		09/15/20 12:40:42			0.0571	0.0800
AD19178-002.Sample		09/15/20 12:40:59			0.0166	0.0167
AD19178-003.Sample		09/15/20 12:41:57			0.0702	0.1004
AD19178-004.Sample		09/15/20 12:42:13			0.0153	0.0146
AD19178-005.Sample		09/15/20 12:42:49			0.0599	0.0844

Report Generated On:09/15/2020 13:08

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCV-2.Control		09/15/20 12:43:02	0.5000	0.0053	0.3225	0.4947
CCB-2.Sample		09/15/20 12:43:17			-0.0024	-0.0130 : Exceeded calibration limits
AD19178-006.Sample		09/15/20 12:43:49			0.0176	0.0182
AD19178-007.Sample		09/15/20 12:44:01			0.0157	0.0153
AD19178-008.Sample		09/15/20 12:44:16			0.0294	0.0367
AD19178-009.Sample		09/15/20 12:44:39			0.0238	0.0279
AD19178-010.Sample		09/15/20 12:44:55			0.0114	0.0086
AD19180-001.Sample		09/15/20 12:46:16			0.0142	0.0129
AD19192-002.Sample		09/15/20 12:46:52			0.4456	0.6870
AD19192-004MS2.Sample		09/15/20 12:47:42			0.8015	1.2431 : Exceeded calibration limits
AD19192-004MS2 2X.Sample	2	09/15/20 12:48:27			0.4259	0.6563
AD19192-005MSD2.Sample		09/15/20 12:48:50			3.9658	6.1877 : Exceeded calibration limits
CCV-3.Control.Cycle1		09/15/20 12:50:22	0.5000	0.0081	0.3207	0.4919
CCB-3.Sample		09/15/20 12:50:35			0.0013	-0.0073 : Exceeded calibration limits
AD19192-005 50XMSD2.Sample	50	09/15/20 12:51:05			0.1672	0.2519
AD19159-004 T.Sample		09/15/20 12:54:11			0.0041	-0.0028 : Exceeded calibration limits
AD19159-005 T.Sample		09/15/20 12:54:31			0.0070	0.0017
AD19159-006 T.Sample		09/15/20 12:54:52			0.0068	0.0014
AD19159-006 50X T.Sample		09/15/20 12:55:15			0.0007	-0.0082 : Exceeded calibration limits
AD19159-008 T.Sample		09/15/20 12:55:29			0.0022	-0.0058 : Exceeded calibration limits
AD19159-009 T.Sample		09/15/20 12:55:47			0.0030	-0.0045 : Exceeded calibration limits

Report Generated On:09/15/2020 13:08

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD19159-010 T.Sample		09/15/20 12:56:04			-0.0008	-0.0105 : Exceeded calibration limits
AD19160-001 T.Sample		09/15/20 12:56:22			0.0031	-0.0043 : Exceeded calibration limits
AD19160-002 T.Sample		09/15/20 12:56:39			0.0023	-0.0057 : Exceeded calibration limits
CCV-4.Control		09/15/20 12:56:56	0.5000	0.0104	0.3193	0.4896
CCB-4.Sample		09/15/20 12:57:12			0.0007	-0.0082 : Exceeded calibration limits
AD19178-001 T.Sample		09/15/20 12:57:41			0.0616	0.0871
AD19178-002 T.Sample		09/15/20 12:58:03			0.0124	0.0101
AD19178-003 T.Sample.Cycle1		09/15/20 12:59:40			0.0639	0.0906
AD19178-004 T.Sample		09/15/20 13:00:28			0.0127	0.0105
AD19178-005 T.Sample		09/15/20 13:00:45			0.0660	0.0938
AD19178-006 T.Sample		09/15/20 13:01:03			0.0175	0.0181
AD19178-007 T.Sample		09/15/20 13:01:25			0.0130	0.0111
AD19178-008 T.Sample		09/15/20 13:02:29			0.0350	0.0454
AD19178-009 T.Sample		09/15/20 13:03:08			0.0302	0.0379
AD19178-010 T.Sample		09/15/20 13:03:24			0.0141	0.0127
CCV-5.Control		09/15/20 13:03:40	0.5000	0.0133	0.3174	0.4867
CCB-5.Sample		09/15/20 13:03:57			0.0001	-0.0091 : Exceeded calibration limits
AD19180-001 T.Sample		09/15/20 13:04:26			0.0000	-0.0092 : Exceeded calibration limits
AD19192-002 T.Sample		09/15/20 13:05:09			0.0102	0 0067
AD19192-004 T.Sample		09/15/20 13:05:30			0.0079	0.0031
AD19192-005 T.Sample		09/15/20 13:05:50			0.0076	0.0026
AD19192-005 50X T.Sample		09/15/20 13:06:42			0.0010	-0.0076 : Exceeded calibration limits

Report Generated On:09/15/2020 13:08

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCV-6.Control		09/15/20 13:06:56	0.5000	0.0146	0.3166	0.4854
CCB-6.Sample		09/15/20 13:07:10			0.0001	-0.0091 : Exceeded calibration limits

Report Generated On:09/15/2020 13:08

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 785A Analyst MH Date 9/14/20

Digestion Start: 1630 Finish: 1730 Hot Plate Temp 1: 90°C Hot Plate Temp 2: 90°C

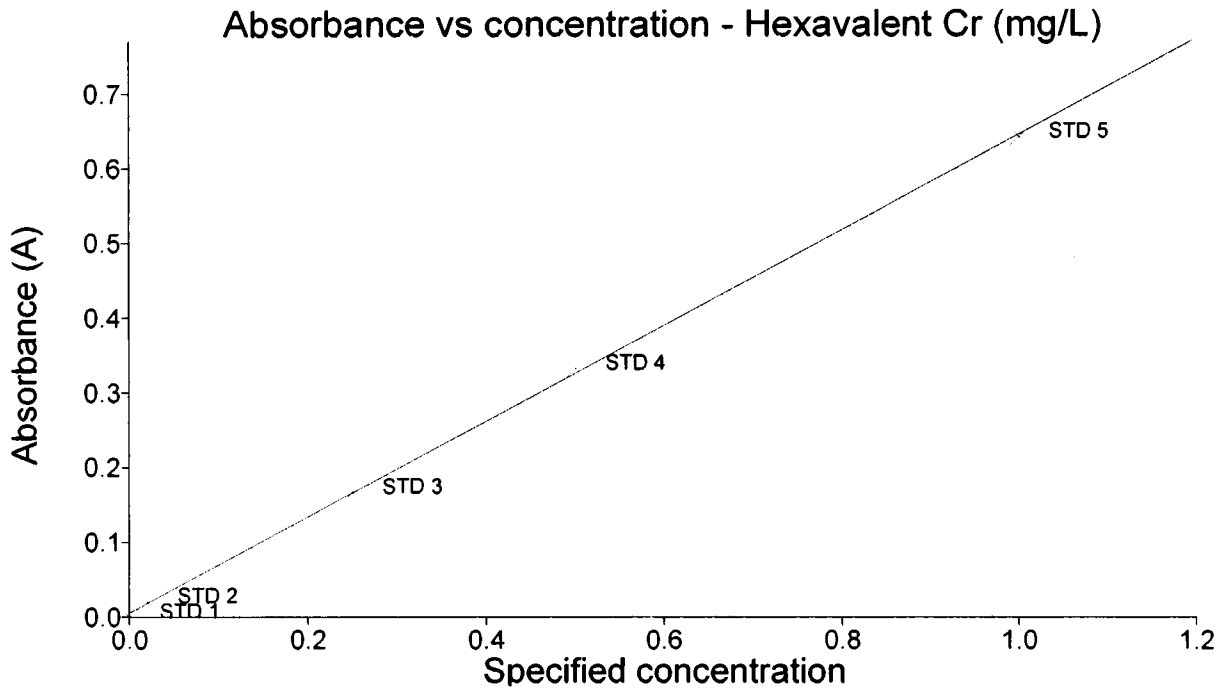
Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 From	0 mm	7.19	100	1.95	
Cal Curve 0.025 100	0.025	7.64		1.77	
Cal Curve 0.25 ppm	0.25	7.33		1.70	Balance used: 031
Cal Curve 0.5	0.5	7.46		1.65	Pipettes used: 11, 19
Cal Curve 1.0	1.0	7.52		2.03	
MB	2.5gm	7.88		1.99	
LCS		7.95		1.90	
~~Sample~~ 159-004					
PDS		7.04		2.03	
DUP		7.68		2.07	
(Sol) MS 005		7.13		1.91	
(Insol) MSD 006		7.25		1.98	
AD19159.004		7.19		1.64	
2. 008		7.87		1.78	
3. 009		7.61		1.84	
4. 010		7.10		2.05	
AD19192.002		7.14		2.08	
6. MB 004		7.13		1.97	
7. MSD 005		7.91		1.87	
AD19160.001		7.78		1.65	
9. 002		7.60		1.73	
10 AD19180.001		7.54		2.08	
11 AD19178.001		7.50		2.00	
12. 002		7.87		1.95	
13. 003		7.11		1.90	
14. 004		7.44		1.83	
15. 005		7.30		1.75	
16. 006		7.65		1.70	
17. 007		7.89		2.06	
18. 008		7.90		2.05	
19. 009		7.10		1.95	
20. 010		7.15		1.90	

Reagent	Lot #:		$MgCl_2$	# 12689
Digestion Solution - pH must be > 11.5. If not, discard	V- 334593	pH 13.21	Lead Chromate ($PbCrO_4$)	# 6413
Phosphate Buffer	V- 331886		Weight of $PbCrO_4$ (10-20mg)	MSD-1 0.0150 MSD-2 0.0140g
			PVS Volume 0.5 ml	10% H_2SO_4 V: 334640
			PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3 V: 334641
			Spike Volume 0.5ml V- 331890	Col Rea. V: 334845

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9999

Calibrated on: 09/15/20 12:09:16

User name: wet chem

Method name: Hexavalent Cr

9/15/20

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	-0.0093	0.0093	-0.0001
STD 2.Sample	0.0200	0.0232	-0.0032	0.0208
STD 3.Sample	0.2500	0.2518	-0.0018	0.1671
STD 4.Sample	0.5000	0.5097	-0.0097	0.3321
STD 5.Sample	1.0000	0.9947	0.0053	0.6425

Report Generated On:09/15/2020 14:02

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		09/15/20 13:22:13	0.5000	-0.0045	0.3288	0.5045
ICB.Sample		09/15/20 13:22:27			-0.0007	-0.0104 : Exceeded calibration limits.
MB.Sample		09/15/20 13:22:40			0.0036	-0.0036 : Exceeded calibration limits.
LCS.Sample		09/15/20 13:22:54			0.3147	0.4825
AD19159-004 NS.Sample		09/15/20 13:23:28			0.0336	0.0433
AD19159-004 DUP.Sample		09/15/20 13:23:46			0.0356	0.0463
AD19159-005 MS.Sample		09/15/20 13:24:20			0.2090	0.3173
AD19159-006 XXX.Sample		09/15/20 13:24:54			3.9269	6.1269 : Exceeded calibration limits.
AD19159-006 50X MSD.Sample	50	09/15/20 13:25:44			0.1534	0.2304
AD19159-004 PVS.Sample		09/15/20 13:26:01			0.2767	0.4231
CCV-1.Control		09/15/20 13:26:47	0.5000	-0.0014	0.3268	0.5014
CCB-1.Sample		09/15/20 13:27:01			-0.0005	-0.0100 : Exceeded calibration limits.
AD19159-008.Sample		09/15/20 13:27:13			0.0099	0.0063
AD19159-009.Sample		09/15/20 13:27:31			0.0092	0.0051
AD19159-010.Sample		09/15/20 13:27:48			0.0080	0.0032
AD19160-001.Sample		09/15/20 13:28:05			0.0220	0.0251
AD19160-002.Sample		09/15/20 13:28:20			0.0013	-0.0073 : Exceeded calibration limits.
AD19178-001.Sample		09/15/20 13:28:36			0.0361	0.0472
AD19178-002.Sample		09/15/20 13:29:00			0.0243	0.0287
AD19178-003.Sample		09/15/20 13:29:17			0.0554	0.0774
AD19178-004.Sample		09/15/20 13:29:34			0.0127	0.0105
AD19178-005.Sample		09/15/20 13:29:52			0.0611	0.0863
CCV-2.Control		09/15/20 13:30:17	0.5000	0.0047	0.3229	0.4953

Report Generated On:09/15/2020 14:02

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCB-2.Sample		09/15/20 13:30:30			0.0001	-0.0092 : Exceeded calibration limits
AD19178-006.Sample		09/15/20 13:30:44			0.0205	0.0228
AD19178-007.Sample		09/15/20 13:31:02			0.0005	-0.0085 : Exceeded calibration limits
AD19178-008.Sample		09/15/20 13:31:18			0.0016	-0.0067 : Exceeded calibration limits
AD19178-009.Sample		09/15/20 13:32:27			0.0098	0.0060
AD19178-010.Sample		09/15/20 13:32:46			0.0039	-0.0032 : Exceeded calibration limits
AD19180-001.Sample		09/15/20 13:33:19			0.0190	0.0205
AD19192-002.Sample		09/15/20 13:33:46			0.4208	0.6483
AD19192-004MS2.Sample		09/15/20 13:34:15			0.7877	1.2216 : Exceeded calibration limits
AD19192-004MS2 2X.Sample	2	09/15/20 13:34:56			0.4092	0.6302
AD19192-005MSD2.Sample		09/15/20 13:35:23			4.3662	6.8134 : Exceeded calibration limits
CCV-3.Control		09/15/20 13:35:48	0.5000	0.0070	0.3214	0.4930
CCB-3.Sample		09/15/20 13:36:03			0.0038	-0.0034 : Exceeded calibration limits
AD19192-005 50XMSD2.Sample	50	09/15/20 13:36:21			0.1579	0.2375
AD19159-004 T.Sample		09/15/20 13:36:43			0.0073	0.0022
AD19159-005 T.Sample		09/15/20 13:37:27			0.0058	-0.0002 : Exceeded calibration limits
AD19159-006 T.Sample		09/15/20 13:37:39			0.0081	0.0034
AD19159-006 50X T.Sample		09/15/20 13:37:53			0.0034	-0.0039 : Exceeded calibration limits
AD19159-008 T.Sample		09/15/20 13:38:10			0.0068	0.0014
AD19159-009 T.Sample		09/15/20 13:38:26			0.0082	0.0035
AD19159-010 T.Sample		09/15/20 13:38:40			0.0066	0.0010

Report Generated On:09/15/2020 14:02

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD19160-001 T.Sample		09/15/20 13:38:57			0.0196	0.0214
AD19160-002 T.Sample		09/15/20 13:52:46			0.0036	-0.0036 : Exceeded calibration limits
CCV-4.Control		09/15/20 13:53:03	0.5000	0.0147	0.3165	0.4853
CCB-4.Sample		09/15/20 13:53:21			0.0038	-0.0033 : Exceeded calibration limits
AD19178-001 T.Sample		09/15/20 13:53:52			0.0413	0.0553
AD19178-002 T.Sample		09/15/20 13:55:19			0.0231	0.0269
AD19178-003 T.Sample		09/15/20 13:55:41			0.0701	0.1002
AD19178-004 T.Sample		09/15/20 13:56:02			0.0152	0.0145
AD19178-005 T.Sample		09/15/20 13:56:21			0.0545	0.0759
AD19178-006 T.Sample		09/15/20 13:56:41			0.3167	0.4857
AD19178-007 T.Sample.Cycle1		09/15/20 13:57:40			-0.0000	-0.0093 : Exceeded calibration limits
AD19178-008 T.Sample		09/15/20 13:58:19			0.0024	-0.0055 : Exceeded calibration limits
AD19178-009 T.Sample		09/15/20 13:58:34			0.0069	0.0016
AD19178-010 T.Sample		09/15/20 13:58:50			0.0049	-0.0015 : Exceeded calibration limits
CCV-5.Control		09/15/20 13:59:05	0.5000	0.0159	0.3157	0.4841
CCB-5.Sample		09/15/20 13:59:20			-0.0009	-0.0106 : Exceeded calibration limits
AD19180-001 T.Sample		09/15/20 13:59:35			0.0029	-0.0047 : Exceeded calibration limits
AD19192-002 T.Sample		09/15/20 13:59:52			0.0061	0.0003
AD19192-004 T.Sample		09/15/20 14:00:11			0.0068	0.0014
AD19192-005 T.Sample		09/15/20 14:00:29			0.0062	0.0004
AD19192-005 50X T.Sample		09/15/20 14:00:45			-0.0007	-0.0103 : Exceeded calibration limits
CCV-6.Control		09/15/20 14:01:00	0.5000	0.0185	0.3141	0.4815

Report Generated On:09/15/2020 14:02

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCB-6 Control		09/15/20 14:01:15			-0.0006	-0.0101 : Exceeded calibration limits

Report Generated On:09/15/2020 14:02

0091006 0545

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1115 Meter #: 765486

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.3	23.5	235.3	23.5	LCS: 233 4.41	25	25	9/10/20 1330	BH
159.001 DUP	346.0	23.1	348.3	23.1	DUP: 8.00				
1. 001	140.2	23.0	137.8	23.0	11.39				
2. 002	357.1	23.2	355.2	23.2	8.23				
3. 003	335.7	23.3	336.2	23.3	8.11				
4. 004	347.8	23.0	350.2	23.0	8.08				
5. 005	344.6	23.1	345.7	23.1	8.11				
6. 006	358.9	23.0	354.0	23.0	8.18				
7. 007	446.7	22.8	444.2	22.8	7.74				
8. 008	296.6	22.7	297.4	22.7	8.41				
9. 009	282.8	22.4	290.0	22.4	8.04				
10. 010	434.8	23.0	440.9	23.0	7.90				
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
ZoBell's Solution (228 ± 10 mV)	233.3	23.6	231.8	23.6					

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: DMP

Date Reviewed: 9/11/20

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V- 832444

0002

0091006 0546

Hampton-Clarke

pH CALIBRATION RECORD

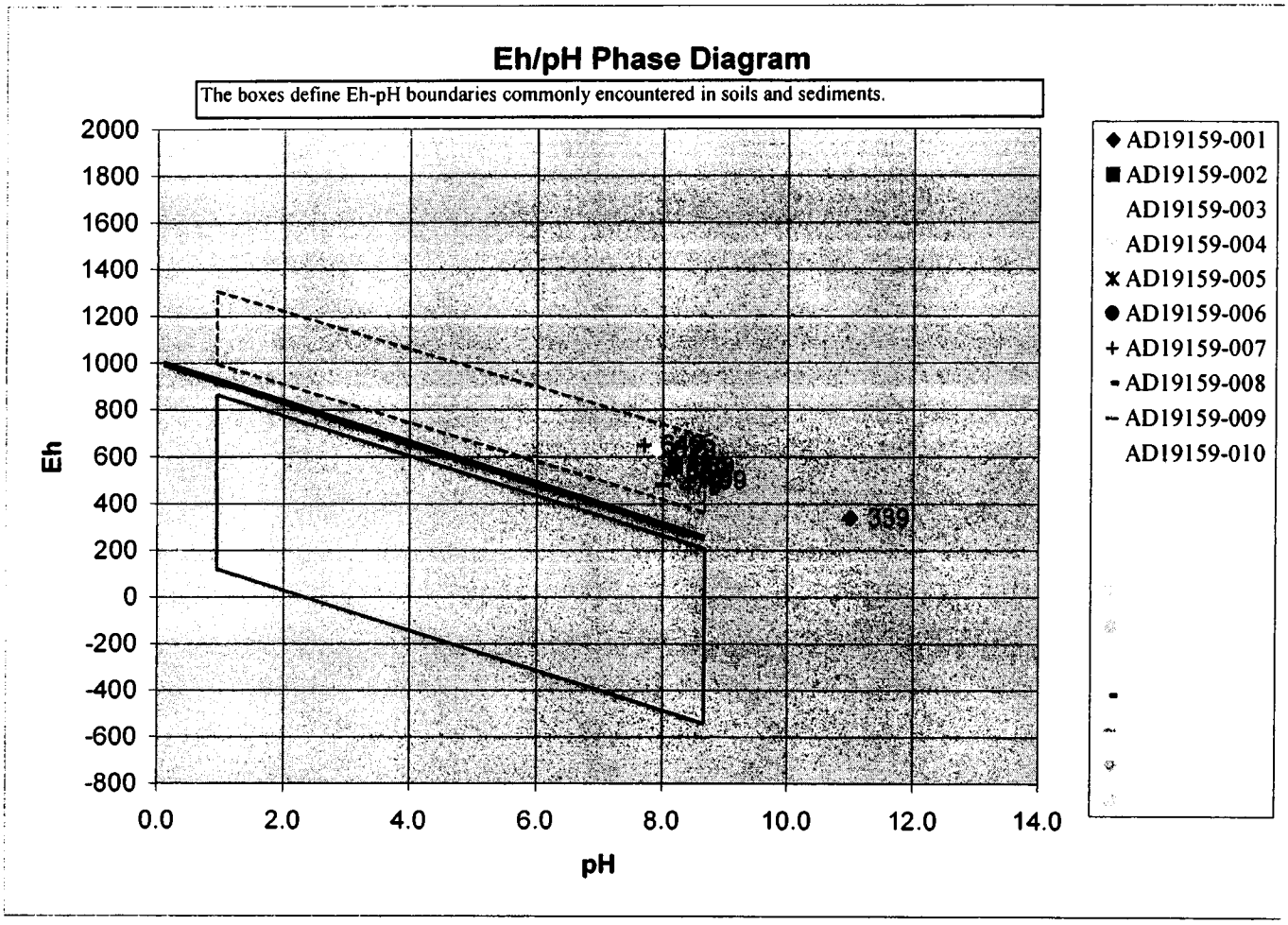
pH Meter: Orion Star A211

Serial # X55486

Date	Calibration						Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate: Buffer 1	Calibrate: Buffer 2	Calibrate: Buffer 3	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Buffer 1	Buffer 2 / Mid pt	Buffer 3
9/10/20	BM 11:30	23.3	7.00	10.00	11.99	9.98							13384	13026	12555
9/10/20	BM 14:40	23.6	4.00	7.00	10.00	7.02							13022	13384	13016

Calibrate using pH 4.0, pH 7.0, and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0, 0.4 and 7.0, check with 4.0. For basic samples calibrate with 7.0, 10.0, and 12.0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-



Sample	ORP	pH
AD19159-001	140	11.0
AD19159-002	360	8.2
AD19159-003	340	8.1
AD19159-004	350	8.1
AD19159-005	340	8.1
AD19159-006	360	8.2
AD19159-007	450	7.7
AD19159-008	300	8.4
AD19159-009	280	8.0
AD19159-010	430	7.9

Reducing

Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

9/11/20

9/11/20

0091006 0548

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1116 Meter #: 16004 X55486

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.5	23.0	233.9	23.0	LCS: 23.4° 4.43	25	25	9/14/20 12:25	BG/LL
AD19160.001 DUP	5.1	23.1	6.3	23.1	DUP: 7.26				
1. 001	4.9	22.7	5.8	22.7	7.41				
2. 002	252.4	22.7	250.7	22.7	8.48				
AD19178.001	281.3	22.7	280.7	22.7	7.97				
4. 002	327.2	22.6	326.8	22.6	8.07				
5. 003	323.0	22.3	322.6	22.3	7.91				
6. 004	345.8	22.5	346.3	22.5	8.37				
7. 005	327.1	22.5	329.2	22.5	8.03				
8. 006	333.9	22.5	331.5	22.5	7.99				
9. 007	221.5	22.5	219.6	22.5	9.37				
10. 008	326.0	22.6	326.7	22.6	7.87				
11. 009	280.5	22.5	281.3	22.5	8.80				
12. 010	313.7	22.4	314.8	22.4	8.26				
13. 011	273.3	22.1	271.1	22.1	8.69				
14. 012	310.8	22.1	311.2	22.1	8.18				
15. 013	257.3	21.9	259.9	21.9	8.02				
16 AD19180.001	42.5	22.6	40.5	22.6	12.46	10			
17 AD19192.001	469.7	22.0	470.3	22.0	5.38	25			
18. 002	500.3	21.9	502.3	21.9	4.76				
19. 003	484.3	22.0	486.3	22.0	4.93				
20.									
ZoBell's Solution (228 ± 10 mV)	233.6	23.2	231.5	23.2					

* Reading 1 and Reading 2 must agree within ± 10 mV

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V-332644

Reviewed by: mmp

Date Reviewed: 9/15/20

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0003

0091005 0549

Hampton-Clarke

pH CALIBRATION RECORD

pH Meter: Orion 3 Star

Serial # 16004

Date	Calibration					Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate Buffer 1	Calibrate Buffer 2	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Buffer 1	Buffer 2	Mid point Buffer
9/11/20	BM 9:00	23.3	4.00	10.00	7.06							13022	13016	13384
9/14/20	BM 9:30	23.6	4.00	10.00	7.07	BM 11:00	23.4	7.08	BM 16:00	23.0	7.07	/	/	/

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0 and 7.0, check with 4.0. For basic samples calibrate with 7.0 and 12. 0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-

0025

pH CALIBRATION RECORD

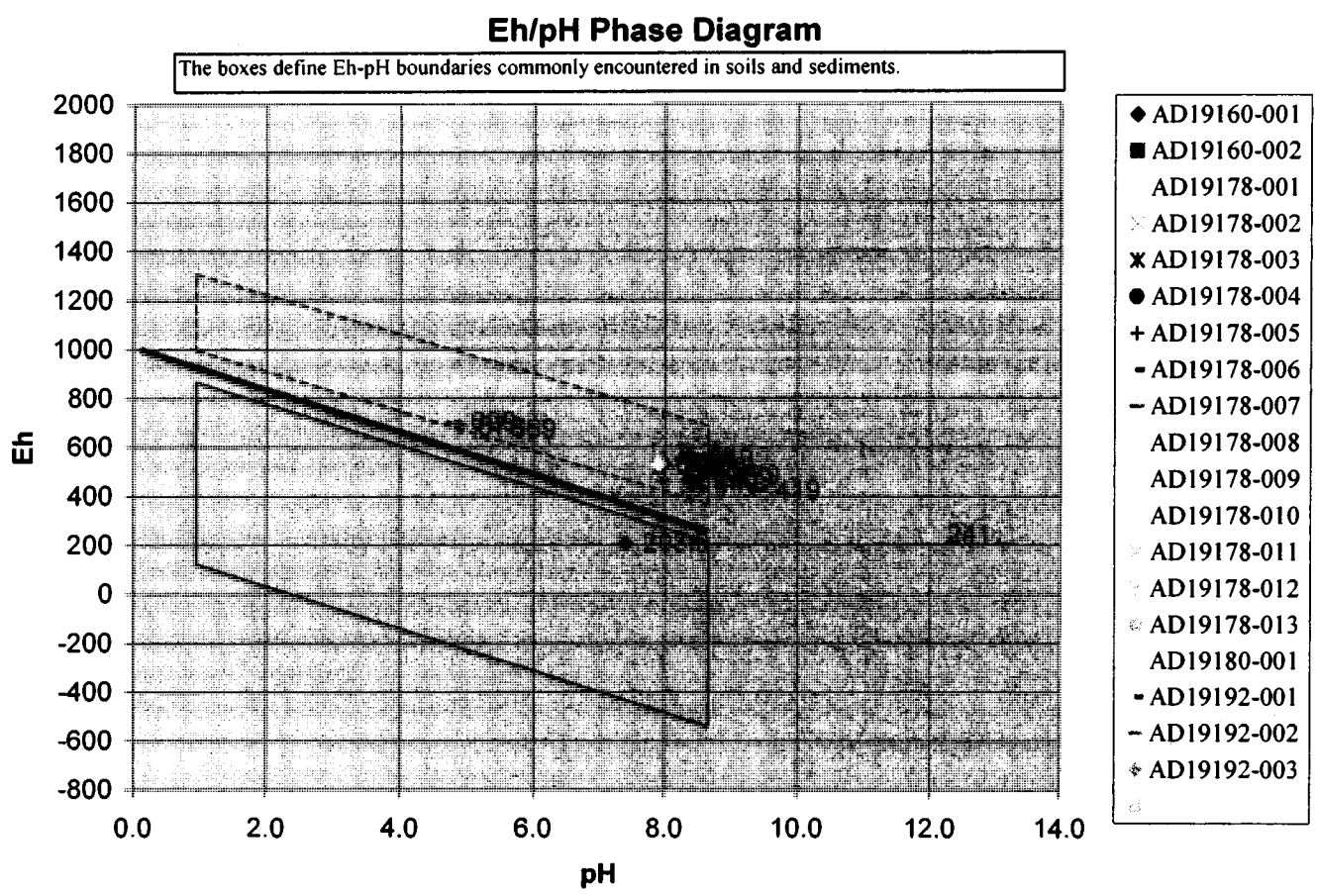
pH Meter: Orion Star A211

Serial # X55486

Date	Calibration						Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate: Buffer 1	Calibrate: Buffer 2	Calibrate: Buffer 3	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Buffer 1	Buffer 2 / Mid pt	Buffer 3
9/10/20	BG 11:30	23.3	7.00	10.00	11.99	9.98							13384	13016	12555
9/11/20	BG 14:40	23.6	4.00	7.00	10.00	7.02							13022	13384	13016
9/11/20	BG 9:00	24.0	4.00	7.00	10.00	6.99									
9/14/20	BG 9:30	23.7	4.00	7.00	10.00	7.03									
9/14/20	BG 12:00	23.8	7.00	10.00	11.99	9.99							13384	13016	12555

Calibrate using pH 4.0, pH 7.0, and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0, 0.4 and 7.0, check with 4.0. For basic samples calibrate with 7.0, 10.0, and 12.0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-



Sample	ORP	pH
AD19160-001	4.9	7.4
AD19160-002	250	8.5
AD19178-001	280	8.0
AD19178-002	330	8.1
AD19178-003	320	7.9
AD19178-004	350	8.4
AD19178-005	330	8.0
AD19178-006	330	8.0
AD19178-007	220	9.4
AD19178-008	330	7.9
AD19178-009	280	8.8
AD19178-010	310	8.3
AD19178-011	270	8.7
AD19178-012	310	8.2
AD19178-013	260	8.0
AD19180-001	42	12.0
AD19192-001	470	5.4
AD19192-002	500	4.8
AD19192-003	480	4.9

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

9/14/20

9/15/20

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Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1117 Meter #: 16004

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.5	23.0	233.9	23.0	LCS: 23.7 4.38	25	25	9/14/20 16:10	BH
DUP 9192-004	486.1	24.1	484.9	24.1	DUP: 4.87	"	"	"	"
1. 004	489.3	23.8	490.1	23.8	4.86	"	"	"	"
2. 005	492.0	23.6	491.8	23.6	4.78	"	"		"
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
ZoBell's Solution (228 ± 10 mV)	232.7	23.2	233.1	23.2					

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: MMP

Date Reviewed: 9/15/20

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V-332644

0004

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Hampton-Clarke

pH CALIBRATION RECORD

pH Meter: Orion 3 Star

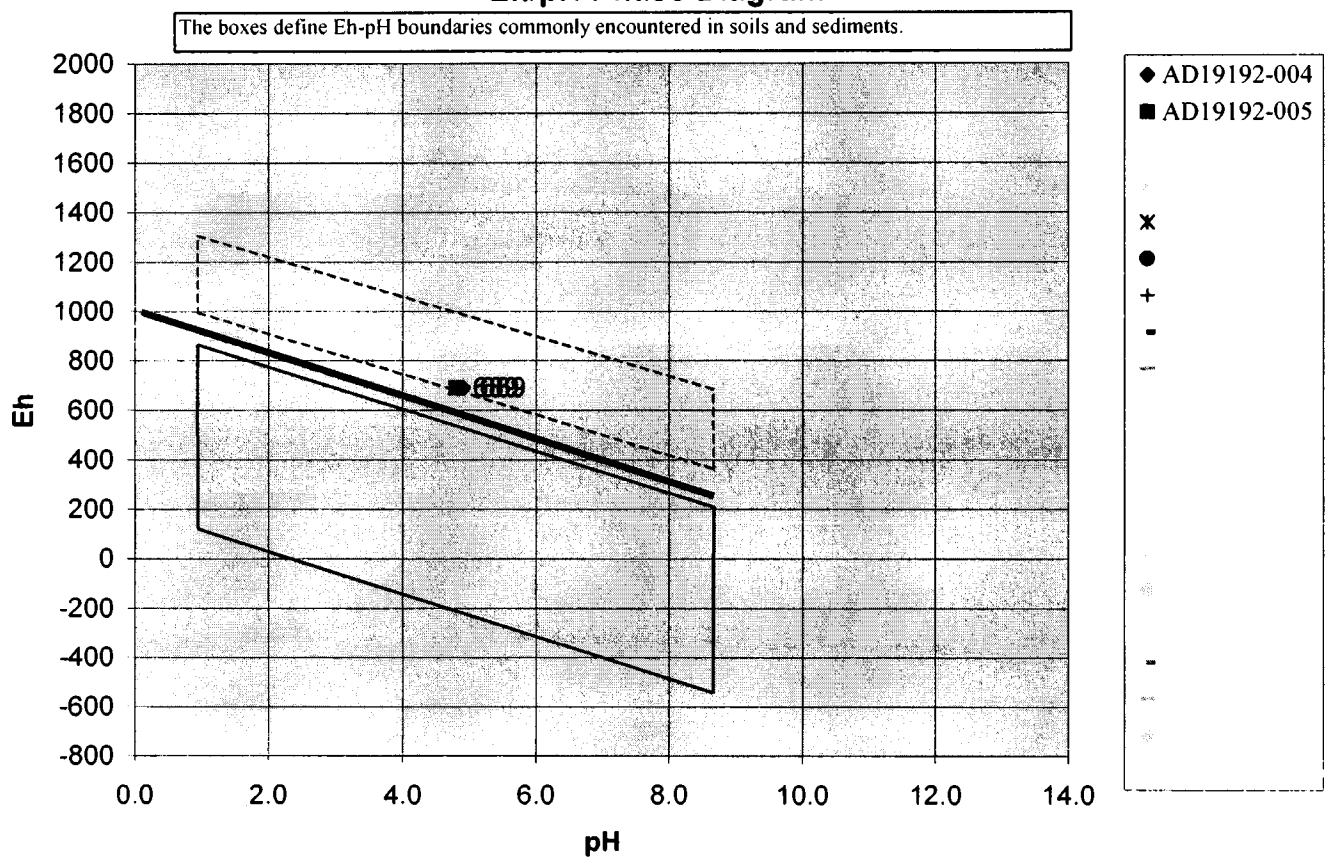
Serial # 16004

Date	Calibration					Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate Buffer 1	Calibrate Buffer 2	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Buffer 1	Buffer 2	Mid point Buffer
9/11/20	MJ 9:00	23.3	4.00	10.00	7.06							13022	13016	13384
9/14/20	MJ 9:30	23.6	4.00	10.00	7.07	MJ 11:00	23.4	7.08	MJ 16:00	23.0	7.07	1	1	1

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0 and 7.0, check with 4.0. For basic samples calibrate with 7.0 and 12. 0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-

Eh/pH Phase Diagram



Sample	ORP	pH
AD19192-004	490	4.9
AD19192-005	490	4.8

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

9/15/20

0091006 0555

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1115 Meter #: 465486

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.3	23.5	235.3	23.5	LCS: 4.41	25	25	9/10 1330	BH
DUP 159.004	346.0	23.1	348.3	23.1	DUP: 8.00				
1. 001	140.2	23.0	137.8	23.0	11.39				
2. 002	357.1	23.2	355.2	23.2	8.23				
3. 003	335.7	23.3	336.2	23.3	8.11				
4. 004	347.8	23.0	350.2	23.0	8.08				
5. 005	344.6	23.1	345.7	23.1	8.11				
6. 006	358.9	23.0	359.0	23.0	8.18				
7. 007	446.7	22.8	444.2	22.8	7.74				
8. 008	296.6	22.7	297.4	22.7	8.41				
9. 009	282.8	22.4	290.0	22.4	8.04				
10. 010	434.8	23.0	440.9	23.0	7.90				
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
ZoBell's Solution (228 ± 10 mV)	233.3	23.6	231.8	23.6					

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: [illegible]

Date Reviewed: 9/11/20

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V- 832544

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Hampton-Clarke

pH CALIBRATION RECORD

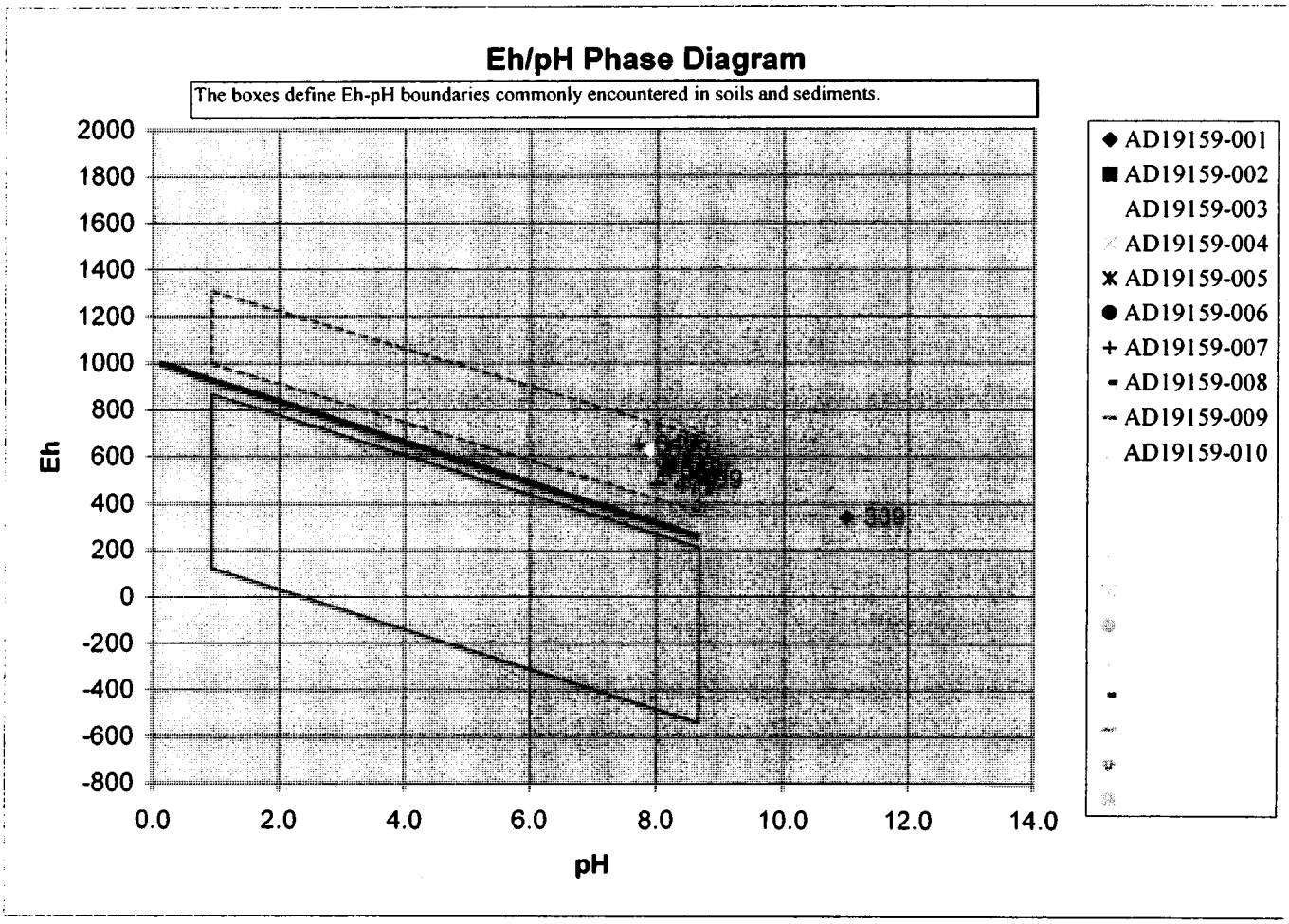
pH Meter: Orion Star A211

Serial # X55486

Date	Calibration						Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate: Buffer 1	Calibrate: Buffer 2	Calibrate: Buffer 3	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Buffer 1	Buffer 2 / Mid pt	Buffer 3
9/1/20	BM 11:30	23.3	7.00	10.00	11.99	9.98							13384	13026	12555
9/10/20	BM 14:40	23.6	4.00	7.00	10.00	7.02							13022	13384	13016

Calibrate using pH 4.0, pH 7.0, and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0, 0.4 and 7.0, check with 4.0. For basic samples calibrate with 7.0, 10.0, and 12.0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-



Sample	ORP	pH
AD19159-001	140	11.0
AD19159-002	360	8.2
AD19159-003	340	8.1
AD19159-004	350	8.1
AD19159-005	340	8.1
AD19159-006	360	8.2
AD19159-007	450	7.7
AD19159-008	300	8.4
AD19159-009	280	8.0
AD19159-010	430	7.9

Reducing

Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

9/11/20

9/11/20

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Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 11134 Meter #: 16004

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.3	23.5	235.3	23.5	LCS: 4.45 23.0	25	25	9/10/20 11:00	SOC/BB
DUP AD19107-001	487.8	23.5	485.3	23.5	DUP: 5.49				
1. ↓ -001	486.7	23.5	487.0	23.5	5.51				
2. ↓ -002	482.0	23.4	481.1	23.4	5.76				
3 AD19120-001	467.3	23.4	468.0	23.4	5.73				
4. ↓ -002	443.1	23.5	442.8	23.5	6.33				
5. ↓ -003	416.3	23.2	417.2	23.2	6.53				
6. AD19122-001	443.2	23.2	441.4	23.2	6.47				
7. ↓ -002	440.4	23.1	436.3	23.1	6.52				
8. ↓ -003	441.2	23.1	441.4	23.1	6.37	24		SOC 9/10/20	
9. AD19195-002	447.1	23.1	447.3	23.1	6.32				
10. ↓ -004	448.0	22.9	444.7	22.9	6.38				
11. ↓ -006	463.6	22.8	461.7	22.8	6.00				
12 AD19140-001	370.2	23.1	370.0	23.1	7.97				
13. ↓ -002	372.3	23.0	372.6	23.0	7.98				
14. ↓ -003	374.7	23.1	372.8	23.1	7.79				
15. ↓ -004	375.5	23.0	376.6	23.0	7.18				
16. AD19143-001	346.1	22.9	346.0	22.9	6.48				
17. AD19140-005	374.7	23.2	373.3	23.2	8.00			16:00	DDP
18. ↓ -006	369.5	23.3	370.9	23.3	7.99			↓	↓
19.									
20.									
ZoBell's Solution (228 ± 10 mV)	230.8	23.0	231.2	23.0					

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: DDP

Date Reviewed: 9/11/20

Solution	Manufacturer's Lot #
ZoBell's Solution	13163
4 M KCl Filling Solution	10292
LCS	V- 332644

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Hampton-Clarke

pH CALIBRATION RECORD

pH Meter: Orion 3 Star

Serial # 16004

Date	Calibration					Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate Buffer 1	Calibrate Buffer 2	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Buffer 1	Buffer 2	Mid point Buffer
9/1/20	JW 900	24.0	4.00	10.00	7.06							13022	13016	13394
9/2/20	JW 630	23.3	4.00	10.00	7.07	BM 10:20	23.1	7.04				↓	↓	↓
9/3/20	JW 840	24.6	4.00	10.00	7.06							↓	↓	↓
9/3/20	SDC 11:00	23.1	7.00	11.99	9.99							13384	13016	12555
9/4/20	BG 9:40	23.3	4.00	10.00	7.04							13022	13016	13384
9/8/20	DMP 800	23.8	4.00	10.00	7.03							↓	↓	↓
9/9/20	BG 9:40	24.1	4.00	10.00	7.06							↓	↓	↓
9/10/20	BG 9:40	23.3	4.00	10.00	7.06	DMP 15:55	23.4	7.04				↓	↓	↓

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0 and 7.0, check with 4.0. For basic samples calibrate with 7.0 and 12. 0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-

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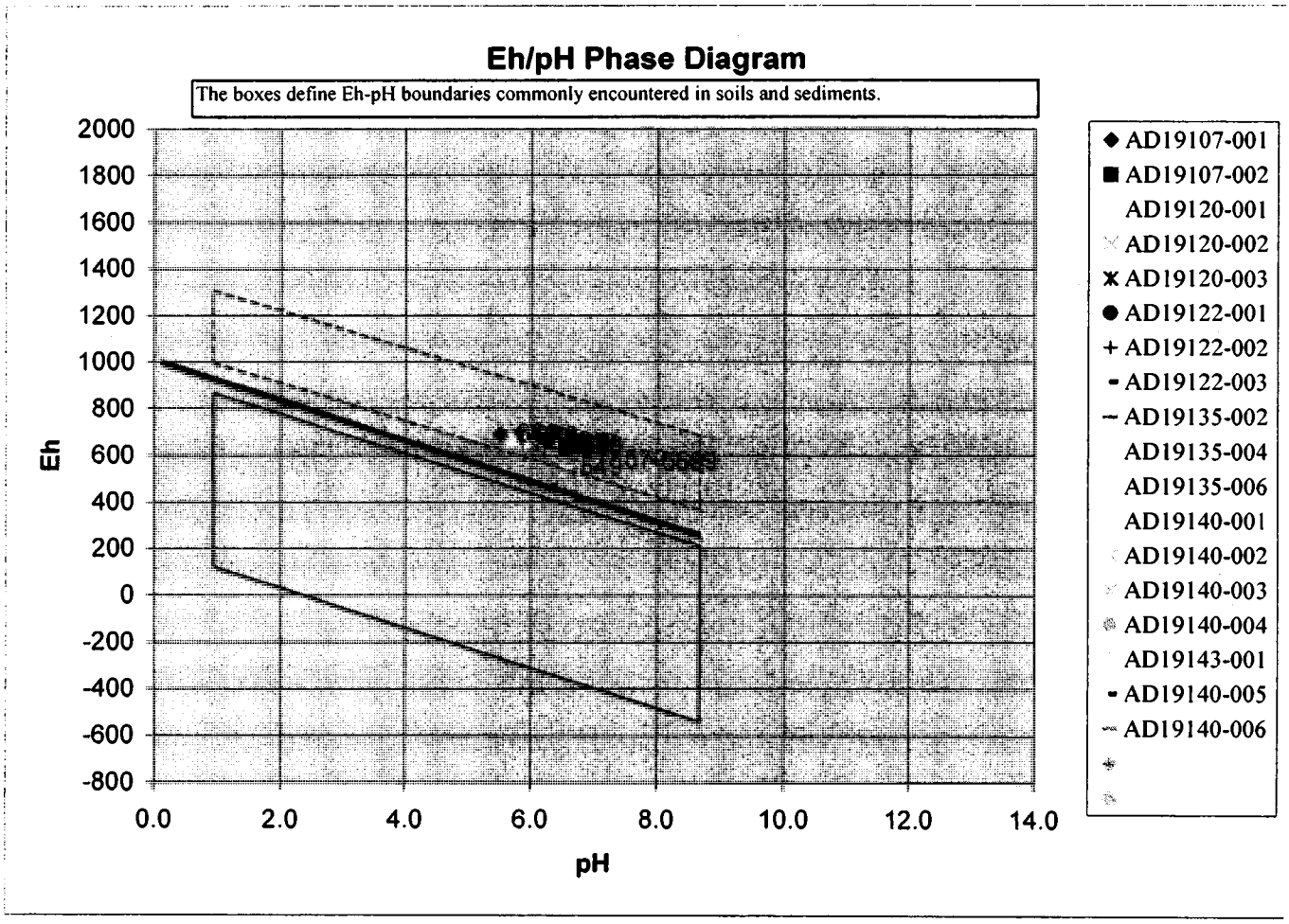


Sample	ORP	pH
AD19107-001	490	5.5
AD19107-002	480	5.8
AD19120-001	470	5.7
AD19120-002	440	6.3
AD19120-003	420	6.5
AD19122-001	440	6.5
AD19122-002	440	6.5
AD19122-003	440	6.2
AD19135-002	450	6.3
AD19135-004	450	6.4
AD19135-006	460	6.0
AD19140-001	370	8.0
AD19140-002	370	8.0
AD19140-003	370	7.8
AD19140-004	380	7.2
AD19143-001	350	6.5
AD19140-005	370	8.0
AD19140-006	370	8.0

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

BD 9/11/20

9/11/20

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 784 Analyst AH Date 9/10/20

Digestion Start: 1230 Finish: 1230 Hot Plate Temp 1: 90°C Hot Plate Temp 2: 90°C

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 (from 1ppm)	0.0 ml	7.19	100	1.95	
Cal Curve 0.02 (100 ppm)	0.02	7.64		1.96	
Cal Curve 0.25 (ppm)	0.25	7.33		2.08	Balance used: 031
Cal Curve 0.5	0.5	7.28		2.16	Pipettes used: 11,19
Cal Curve 1.0	1.0	7.10		1.94	
MB	2.5ml	7.45		1.97	
LCS		7.11		1.90	
~~LCSD~~ ADI9122.001					
PDS		7.87		2.14	
DUP		7.94		2.13	
(Sol) MS 002		7.15		1.90	
(Insol) MSD 003		7.33		1.83	
ADI9122.001		7.30		1.77	
ADI9100.001 9/10/20		7.43		1.70	
ADI9107.002		7.10		1.65	
ADI9120.001		7.46		1.73	
5. 002		7.20		1.95	
6. 003		7.28		1.98	
7. ADI9135.002		7.20		1.66	
8. 004		7.66		1.73	
9. 006		7.37		2.05	
10. ADI9143.001		7.91		2.07	
ADI9159.001		7.84		1.99	
12. 002		7.37		1.76	
13. 003		7.57		1.59	
14. 007		7.58		1.78	
ADI9140.001		7.59		1.73	
16. 002		7.17		1.94	
17. 003		7.25		2.02	
18. 004		7.80		2.05	
19. MS 005		7.37		1.61	
20. MSD 006		7.52		1.53	

Reagent	Lot #:		$MgCl_2$	# 12689
Digestion Solution - pH must be > 11.5. If not, discard	V- 331429	pH 13.26	Lead Chromate ($PbCrO_4$)	# 6413
Phosphate Buffer	V- 3318886		Weight of $PbCrO_4$ (10-20mg)	MSD-1 0.0150 g MSD-2 0.0125 g
			PVS Volume 0.5 ml	10% H_2SO_4 V: 331401
			PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3 V: 331401
			Spike Volume 0.5ml V- 331890	Col Rea. V: 331316

Hex-Cr Soil SW-846 3060A / 7196A

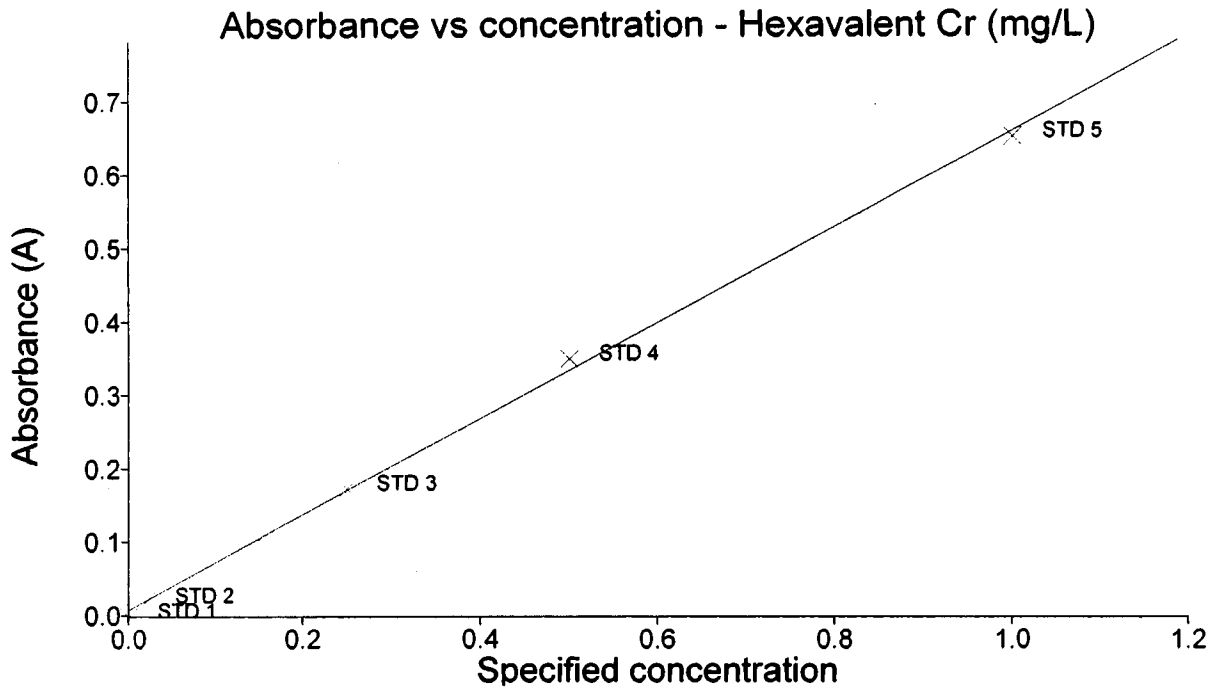
Cr6 soil curve		Date	9/11/2020			Batch #	784			TestGroupID	CR6-SOIL
										TestID:	CR-HEX
STD ppm			ABS								
0			-0.0013		Intercept	Constant	0.00758814				
0.02			0.0201								
0.25			0.1729		Slope	X Coefficients	0.652293391				
0.5			0.3492								
1			0.6516								
STD mg/L			ABS		PPM	DIFF					
0			-0.0013		-0.013625985	0.013625985					
0.02			0.0201		0.019181339	0.000818661					
0.25			0.1729		0.253431757	-0.003431757					
0.5			0.3492		0.523708909	-0.023708909					
1			0.6516		0.987303979	0.012696021					

SUMMARY OUTPUT									
Regression Statistics									
Multiple R	0.999329402								
R Square	0.998659254								
Adjusted R Square	0.998212339								
Standard Error	0.011431684								
Observations	5								
ANOVA									
	df	*SS*	*MS*	*F*	*Significance F*				
Regression	1	0.29202001	0.29202001	2234.560837	2.08441E-05				
Residual	3	0.00039205	0.000130683						
Total	4	0.29241206							
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*	
Intercept	0.00758814	0.007070949	1.073143022	0.361849725	-0.014914797	0.030091076	-0.014914797	0.030091076	
X Variable 1	0.652293391	0.013798977	47.27114169	2.08441E-05	0.608378847	0.696207935	0.608378847	0.696207935	

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9994

Calibrated on: 09/11/20 12:19:09

User name: wet chem

Method name: Hexavalent Cr

9/11/20

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	-0.0135	0.0135	-0.0013
STD 2.Sample	0.0200	0.0191	0.0009	0.0201
STD 3.Sample	0.2500	0.2534	-0.0034	0.1729
STD 4.Sample	0.5000	0.5237	-0.0237	0.3492
STD 5.Sample	1.0000	0.9873	0.0127	0.6516

Report Generated On:09/11/2020 13:17

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		09/11/20 12:37:12	0.5000	-0.0034	0.3360	0.5034
ICB.Sample		09/11/20 12:37:26			0.0002	-0.0114 : Exceeded calibration limits.
MB.Sample		09/11/20 12:37:36			-0.0003	-0.0121 : Exceeded calibration limits.
LCS.Sample		09/11/20 12:37:58			0.3291	0.4929
AD19122-001 NS.Sample		09/11/20 12:38:43			0.0638	0.0862
AD19122-001 DUP.Sample		09/11/20 12:39:08			0.0590	0.0788
AD19122-002 MS.Sample		09/11/20 12:40:16			0.3033	0.4533
AD19122-003 XXX.Sample		09/11/20 12:40:37			4.1222	6.3078 : Exceeded calibration limits.
AD19122-003 50X MSD.Sample	50	09/11/20 12:41:25			0.1806	0.2346
AD19122-001 PVS.Sample		09/11/20 12:42:49			0.3661	0.5497
CCV-1.Control		09/11/20 12:43:03	0.5000	-0.0048	0.3369	0.5048
CCB-1.Sample		09/11/20 12:43:14			-0.0006	-0.0126 : Exceeded calibration limits.
AD19107-001.Sample		09/11/20 12:43:28			0.0019	-0.0086 : Exceeded calibration limits.
AD19107-002.Sample		09/11/20 12:43:43			0.0022	-0.0082 : Exceeded calibration limits.
AD19120-001.Sample		09/11/20 12:44:44			0.0719	0.0985
AD19120-002.Sample		09/11/20 12:45:04			0.0494	0.0641
AD19120-003.Sample		09/11/20 12:45:39			0.0976	0.1380
AD19135-002.Sample		09/11/20 12:46:01			0.0021	-0.0085 : Exceeded calibration limits.
AD19135-004.Sample		09/11/20 12:46:17			0.0036	-0.0061 : Exceeded calibration limits.
AD19135-006.Sample		09/11/20 12:46:34			0.0015	-0.0093 : Exceeded calibration limits.
AD19140-001.Sample		09/11/20 12:56:31			0.3950	0.5939

Report Generated On:09/11/2020 13:17

Perkin-Elmer UV-VIS Lambda 20 ***Instrument ID: UV1***

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD19140-002.Sample		09/11/20 12:56:49			0.0504	0.0657
CCV-2.Control		09/11/20 12:57:03	0.5000	-0.0205	0.3471	0.5205
CCB-2.Sample		09/11/20 12:57:18			0.0002	-0.0112 : Exceeded calibration limits
AD19140-003.Sample		09/11/20 12:57:40			0.3230	0.4836
AD19140-004.Sample		09/11/20 12:59:55			0.0231	0.0238
AD19140-005 MS2.Sample		09/11/20 13:00:13			0.3260	0.4881
AD19140-006 MSD2.Sample		09/11/20 13:00:30			4.0131	6.1405 : Exceeded calibration limits
AD19140-00650XMSD2.Sample		09/11/20 13:01:37			0.1381	0.2002
AD19143-001.Sample		09/11/20 13:01:57			0.0810	0.1126
AD19159-001.Sample		09/11/20 13:02:35			0.0052	-0.0037 : Exceeded calibration limits
AD19159-002.Sample		09/11/20 13:03:05			0.0300	0.0344
AD19159-003.Sample		09/11/20 13:03:25			0.0156	0.0122
AD19159-007.Sample		09/11/20 13:04:15			0.0510	0.0666
CCV-3.Control		09/11/20 13:04:30	0.5000	-0.0198	0.3466	0.5198
CCB-3.Sample		09/11/20 13:04:44			0.0004	-0.0111 : Exceeded calibration limits
AD19122-001 T.Sample		09/11/20 13:04:59			0.0055	-0.0032 : Exceeded calibration limits
AD19122-002 T.Sample		09/11/20 13:05:13			0.0067	-0.0013 : Exceeded calibration limits
AD19122-003 T.Sample		09/11/20 13:05:28			0.0062	-0.0021 : Exceeded calibration limits
AD19122-003 50X T.Sample		09/11/20 13:05:42			-0.0002	-0.0119 : Exceeded calibration limits
AD19107-001 T.Sample		09/11/20 13:05:57			-0.0003	-0.0121 : Exceeded calibration limits
AD19107-002 T.Sample		09/11/20 13:06:13			-0.0016	-0.0141 : Exceeded calibration

Report Generated On:09/11/2020 13:17

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD19120-001 T.Sample		09/11/20 13:07:03			0.0949	0.1338
AD19120-002 T.Sample		09/11/20 13:07:17			0.0506	0.0659
AD19120-003 T.Sample		09/11/20 13:07:43			0.0893	0.1253
AD19135-002 T.Sample		09/11/20 13:08:00			0.0011	-0.0100 : Exceeded calibration limits
CCV-4.Control		09/11/20 13:08:23	0.5000	0.0118	0.3260	0.4882
CCB-4.Sample		09/11/20 13:08:38			-0.0015	-0.0139 : Exceeded calibration limits
AD19135-004 T.Sample		09/11/20 13:09:00			0.0014	-0.0095 : Exceeded calibration limits
AD19135-006 T.Sample		09/11/20 13:09:18			-0.0005	-0.0125 : Exceeded calibration limits
AD19140-001 T.Sample		09/11/20 13:09:34			0.0069	-0.0010 : Exceeded calibration limits
AD19140-002 T.Sample		09/11/20 13:09:50			0.0012	-0.0098 : Exceeded calibration limits
AD19140-003 T.Sample		09/11/20 13:11:33			0.0066	-0.0015 : Exceeded calibration limits
AD19140-004 T.Sample		09/11/20 13:12:00			0.0010	-0.0101 : Exceeded calibration limits
AD19140-005 T.Sample		09/11/20 13:12:19			0.0013	-0.0096 : Exceeded calibration limits
AD19140-006 T.Sample		09/11/20 13:12:58			0.0025	-0.0078 : Exceeded calibration limits
AD19140-006 50X T.Sample		09/11/20 13:13:13			0.0001	-0.0115 : Exceeded calibration limits
AD19143-001 T.Sample		09/11/20 13:13:34			0.0850	0.1187
CCV-5.Control		09/11/20 13:13:52	0.5000	0.0003	0.3336	0.4997
CCB-5.Sample		09/11/20 13:14:06			-0.0012	-0.0134 : Exceeded calibration limits
AD19159-001 T.Sample		09/11/20 13:14:23			0.0067	-0.0014 : Exceeded calibration limits

Report Generated On:09/11/2020 13:17

Perkin-Elmer UV-VIS Lambda 20 ***Instrument ID: UV1***

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD19159-002 T.Sample		09/11/20 13:14:46			0.0068	-0.0013 : Exceeded calibration limits
AD19159-003 T.Sample		09/11/20 13:15:19			0.0117	0.0063
AD19159-007 T.Sample		09/11/20 13:15:36			0.0553	0.0732
CCV-6.Control		09/11/20 13:15:51	0.5000	-0.0167	0.3446	0.5167
CCB-6.Sample		09/11/20 13:16:05			-0.0015	-0.0139 : Exceeded calibration limits

Report Generated On:09/11/2020 13:17

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 78nA Analyst MN Date 9/10/20

Digestion Start: 1230 Finish: 1330 Hot Plate Temp 1: 90°C Hot Plate Temp 2: 90°C

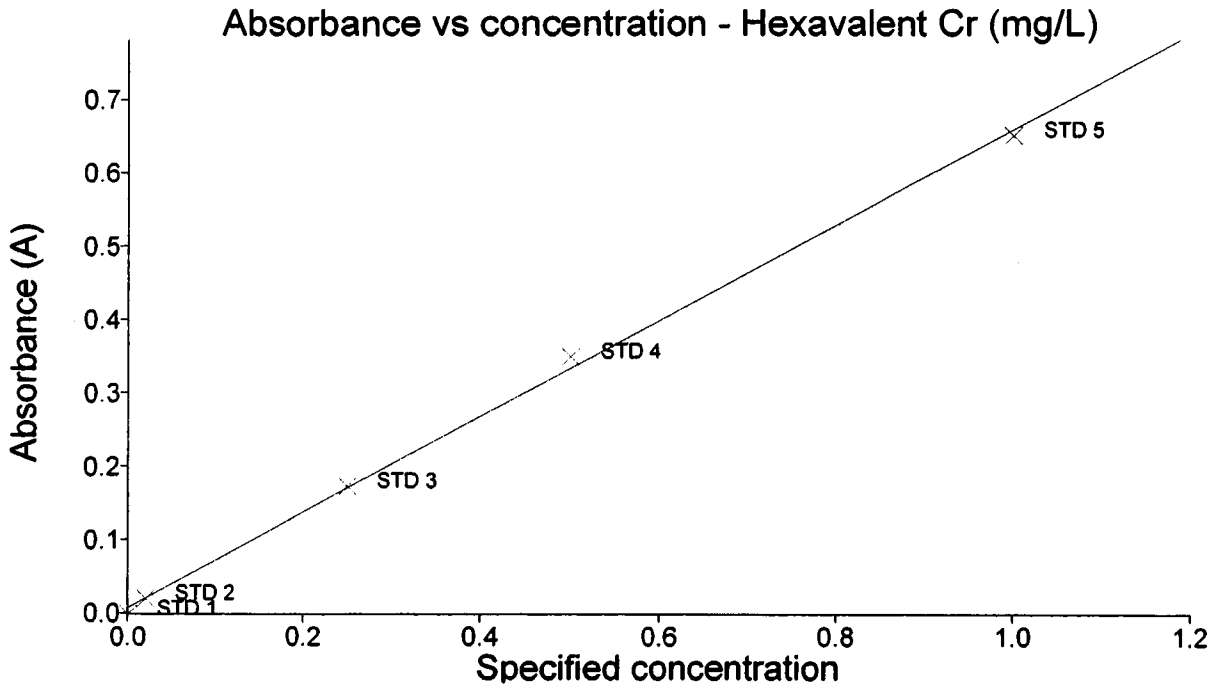
Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 (from 1M)	0.0m1	7.19	100	1.95	pH 9/11/20
Cal Curve 0.02 (1C)	0.02	7.64		1.90	
Cal Curve 0.25 (1M)	0.25	7.33		1.908	Balance used: 031
Cal Curve 0.5	0.5	7.28		1.916	Pipettes used: 11, 119
Cal Curve 1.0	1.0	7.10		1.98	
MB	2.0gm	7.88		2.11	
LCS		7.30		2.13	
~~AD19122-001~~					
PDS		7.54		1.90	
DUP		7.14		1.84	
(Sol) MS	002	7.36		1.71	
(Insol) MSD	003	7.58		1.73	
AD19122-001		7.98		1.69	
2. AD19107-001		7.90		1.70	
3. 002		7.83		1.87	
4. AD19120-001		7.84		1.91	
5. 002		7.65		2.03	
6. 003		7.67		2.05	
7. AD19135-002		9.44		2.19	
8. 004		7.43		1.94	
9. 006		7.81		1.98	
10. AD19143-001		7.67		1.73	
11. AD19154-001		7.39		1.69	
12. 002		7.30		1.68	
13. 003		7.35		2.08	
14. 007		7.87		2.14	
15. AD19140-001		7.94		2.13	
16. 002		7.90		1.95	
17. 003		7.61		1.98	
18. 004		7.63		1.93	
19. MS 005		7.70		1.79	
20. MSD 006		7.41		2.14	

Reagent	Lot #:	$MgCl_2$	# 12689
Digestion Solution - pH must be > 11.5. If not, discard	V- 331429 pH 13.26	Lead Chromate ($PbCrO_4$)	# 6415
Phosphate Buffer	V- 331880	Weight of $PbCrO_4$ (10-20mg)	MSD-1 0.0150 MSD-2 0.0125 g
		Volume PVS 0.5 ml	10% H_2SO_4 V: 334040
		PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3 V: 334041
		Spike Volume 0.5ml V- 331840	Col Rea. V: 334316

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9994

Calibrated on: 09/11/20 12:19:09

User name: wet chem

Method name: Hexavalent Cr

9/11/20

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	-0.0135	0.0135	-0.0013
STD 2.Sample	0.0200	0.0191	0.0009	0.0201
STD 3.Sample	0.2500	0.2534	-0.0034	0.1729
STD 4.Sample	0.5000	0.5237	-0.0237	0.3492
STD 5.Sample	1.0000	0.9873	0.0127	0.6516

Report Generated On:09/11/2020 13:49

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		09/11/20 13:22:09	0.5000	0.0139	0.3247	0.4861
ICB.Sample		09/11/20 13:22:25			0.0020	-0.0086 : Exceeded calibration limits.
MB.Sample		09/11/20 13:22:39			-0.0014	-0.0137 : Exceeded calibration limits.
LCS.Sample		09/11/20 13:22:53			0.3453	0.5177
AD19122-001 NS.Sample		09/11/20 13:23:18			0.0572	0.0760
AD19122-001 DUP.Sample		09/11/20 13:24:05			0.0551	0.0728
AD19122-002 MS.Sample		09/11/20 13:24:53			0.3143	0.4702
AD19122-003 XXX.Sample		09/11/20 13:25:14			3.9672	6.0702 : Exceeded calibration limits.
AD19122-003 50X MSD.Sample	50	09/11/20 13:25:36			0.1645	0.2405
AD19122-001 PVS.Sample		09/11/20 13:25:52			0.3285	0.4920
CCV-1.Control		09/11/20 13:26:07	0.5000	-0.0185	0.3458	0.5185
CCB-1.Sample		09/11/20 13:26:21			-0.0012	-0.0134 : Exceeded calibration limits.
AD19107-001.Sample		09/11/20 13:26:41			0.0125	0.0076
AD19107-002.Sample		09/11/20 13:26:57			0.0036	-0.0061 : Exceeded calibration limits.
AD19120-001.Sample		09/11/20 13:27:15			0.0513	0.0670
AD19120-002.Sample		09/11/20 13:27:29			0.0861	0.1203
AD19120-003.Sample		09/11/20 13:27:42			0.0726	0.0996
AD19135-002.Sample		09/11/20 13:27:59			0.0003	-0.0112 : Exceeded calibration limits.
AD19135-004.Sample		09/11/20 13:28:14			0.0073	-0.0004 : Exceeded calibration limits.
AD19135-006.Sample		09/11/20 13:28:29			0.0100	0.0037
AD19140-001.Sample		09/11/20 13:29:22			0.3608	0.5415
AD19140-002.Sample		09/11/20 13:29:43			0.0553	0.0731
CCV-2.Control		09/11/20 13:29:57	0.5000	0.0090	0.3279	0.4910

Report Generated On:09/11/2020 13:49

Perkin-Elmer UV-VIS Lambda 20 ***Instrument ID: UV1***

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCB-2.Sample		09/11/20 13:30:10			0.0020	-0.0086 : Exceeded calibration limits
AD19140-003.Sample		09/11/20 13:30:55			0.3239	0.4849
AD19140-004.Sample		09/11/20 13:31:26			0.0271	0.0299
AD19140-005 MS2.Sample		09/11/20 13:31:54			0.3186	0.4769
AD19140-006 MSD2.Sample		09/11/20 13:32:25			4.1221	6.3077 : Exceeded calibration limits
AD19140-00650XMSD2.Sample		09/11/20 13:33:12			0.1355	0.1961
AD19143-001.Sample		09/11/20 13:33:27			0.0513	0.0669
AD19159-001.Sample		09/11/20 13:33:47			0.0141	0.0099
AD19159-002.Sample		09/11/20 13:34:03			0.0289	0.0327
AD19159-003.Sample		09/11/20 13:34:40			0.0505	0.0657
AD19159-007.Sample		09/11/20 13:34:56			0.0729	0.1002
CCV-3.Control		09/11/20 13:35:25	0.5000	0.0129	0.3253	0.4871
CCB-3.Sample		09/11/20 13:35:39			0.0020	-0.0086 : Exceeded calibration limits
AD19122-001 T.Sample		09/11/20 13:35:55			0.0059	-0.0025 : Exceeded calibration limits
AD19122-002 T.Sample		09/11/20 13:36:15			0.0035	-0.0062 : Exceeded calibration limits
AD19122-003 T.Sample		09/11/20 13:36:54			0.0038	-0.0058 : Exceeded calibration limits
AD19122-003 50X T.Sample		09/11/20 13:37:10			-0.0015	-0.0140 : Exceeded calibration limits
AD19107-001 T.Sample		09/11/20 13:37:29			0.0120	0.0067
AD19107-002 T.Sample		09/11/20 13:37:48			0.0043	-0.0051 : Exceeded calibration limits
AD19120-001 T.Sample		09/11/20 13:38:07			0.0513	0.0670
AD19120-002 T.Sample		09/11/20 13:38:22			0.0762	0.1052
AD19120-003 T.Sample		09/11/20 13:38:37			0.0726	0.0997

Report Generated On:09/11/2020 13:49

Perkin-Elmer UV-VIS Lambda 20 ***Instrument ID: UV1***

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD19135-002 T.Sample		09/11/20 13:39:00			-0.0014	-0.0138 : Exceeded calibration limits
CCV-4.Control		09/11/20 13:39:16	0.5000	0.0140	0.3246	0.4860
CCB-4.Sample		09/11/20 13:39:30			0.0025	-0.0079 : Exceeded calibration limits
AD19135-004 T.Sample		09/11/20 13:39:46			0.0037	-0.0059 : Exceeded calibration limits
AD19135-006 T.Sample		09/11/20 13:40:04			0.0138	0.0096
AD19140-001 T.Sample		09/11/20 13:42:51			0.0144	0.0105
AD19140-002 T.Sample		09/11/20 13:43:05			0.0041	-0.0053 : Exceeded calibration limits
AD19140-003 T.Sample		09/11/20 13:43:21			0.0036	-0.0061 : Exceeded calibration limits
AD19140-004 T.Sample		09/11/20 13:43:36			0.0060	-0.0024 : Exceeded calibration limits
AD19140-005 T.Sample		09/11/20 13:43:50			0.0067	-0.0014 : Exceeded calibration limits
AD19140-006 T.Sample		09/11/20 13:44:06			0.0041	-0.0053 : Exceeded calibration limits
AD19140-006 50X T.Sample		09/11/20 13:44:22			-0.0013	-0.0136 : Exceeded calibration limits
AD19143-001 T.Sample.Cycle1		09/11/20 13:46:11			0.0742	0.1022
CCV-5.Control		09/11/20 13:45:06	0.5000	0.0158	0.3234	0.4842
CCB-5.Sample		09/11/20 13:45:21			0.0021	-0.0085 : Exceeded calibration limits
AD19159-001 T.Sample		09/11/20 13:47:02			0.0042	-0.0053 : Exceeded calibration limits
AD19159-002 T.Sample		09/11/20 13:47:22			0.0038	-0.0057 : Exceeded calibration limits
AD19159-003 T.Sample		09/11/20 13:47:40			0.0462	0.0592
AD19159-007 T.Sample		09/11/20 13:47:56			0.0726	0.0996

Report Generated On:09/11/2020 13:49

Perkin-Elmer UV-VIS Lambda 20 ***Instrument ID: UV1***

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCV-6.Control		09/11/20 13:48:11	0.5000	0.0164	0.3230	0.4836
CCB-6.Sample		09/11/20 13:48:26			-0.0011	-0.0133 : Exceeded calibration limits

Report Generated On:09/11/2020 13:49

RUN LOG

Instrument: DA1 BatchId: 202009141417 Analyzed By: jw

Run#	Qc Type	Sample ID	Flag summary:	Comments	An Date/Time:	Dil	Prep Batch	Method Blank
1	ICS	STANDARD 1		.g	09/14/20 14:17	1		
2	ICS	STANDARD 90		.g V-334722	09/14/20 14:20	1		
3	ICS	STANDARD 91		.g V-334722	09/14/20 14:22	1		
4	ICS	STANDARD 92		.g V-334722	09/14/20 14:24	1		
5	ICS	STANDARD 93		.g V-334722	09/14/20 14:27	1		
6	ICS	STANDARD 94		.g V-334722	09/14/20 14:29	1		
7	ICS	STANDARD 95		.g V-334722	09/14/20 14:31	1		
8	ICS	STANDARD 0		.g	09/14/20 14:34	1		
9	ICV	CCV		.g V-334719	09/14/20 14:36	1		
10	ICB	CCB		.g	09/14/20 14:38	1		
11	MB	MBS-2420		.g	09/14/20 14:41	1	S-2420	MBS-2420
12	LCS	LCSS-2420		.g V-334718	09/14/20 14:43	1	S-2420	MBS-2420
13	LCS	LCSS-2420 DUP		.g V-334718	09/14/20 14:45	1	S-2420	MBS-2420
14	SMP	AD19159-004		.g	09/14/20 14:48	1	S-2420	MBS-2420
15	DUP	AD19159-004 DUP		.g	09/14/20 14:50	1	S-2420	MBS-2420
16	MS	AD19159-005 MS	Ms	.g V-334718	09/14/20 14:52	1	S-2420	MBS-2420
17	MSD	AD19159-006 MSD	Ms	.g V-334718	09/14/20 14:55	1	S-2420	MBS-2420
18	SMP	AD19212-002		.g	09/14/20 14:57	1	S-2420	MBS-2420
19	SMP	AD19212-004		.g	09/14/20 14:59	1	S-2420	MBS-2420
20	SMP	AD19212-006		.g	09/14/20 15:02	1	S-2420	MBS-2420
21	CCV	CCV		.g V-334719	09/14/20 15:04	1		
22	CCB	CCB		.g	09/14/20 15:06	1		
23	SMP	AD19212-008		.g	09/14/20 15:09	1	S-2420	MBS-2420
24	SMP	AD19212-010		.g	09/14/20 15:11	1	S-2420	MBS-2420
25	SMP	AD19213-002		.g	09/14/20 15:13	1	S-2420	MBS-2420
26	SMP	AD19213-004		.g	09/14/20 15:15	1	S-2420	MBS-2420
27	SMP	AD19213-006		.g	09/14/20 15:18	1	S-2420	MBS-2420
28	SMP	AD19213-008		.g	09/14/20 15:20	1	S-2420	MBS-2420
29	SMP	AD19213-010		.g	09/14/20 15:23	1	S-2420	MBS-2420
30	SMP	AD19159-001		.g	09/14/20 15:25	1	S-2420	MBS-2420
31	SMP	AD19159-002		.g	09/14/20 15:27	1	S-2420	MBS-2420
32	SMP	AD19159-003		.g	09/14/20 15:30	1	S-2420	MBS-2420
33	CCV	CCV		.g V-334719	09/14/20 15:32	1		
34	CCB	CCB		.g	09/14/20 15:34	1		
35	SMP	AD19159-007		.g	09/14/20 15:37	1	S-2420	MBS-2420
36	SMP	AD19159-008		.g	09/14/20 15:39	1	S-2420	MBS-2420
37	SMP	AD19159-009		.g	09/14/20 15:41	1	S-2420	MBS-2420
38	SMP	AD19159-010		.g	09/14/20 15:43	1	S-2420	MBS-2420
39	SMP	AD19163-001		.g	09/14/20 15:44	1	S-2420	MBS-2420
40	SMP	AD19203-014		.g	09/14/20 15:46	1	S-2420	MBS-2420
41	CCV	CCV		.g V-334719	09/14/20 15:48	1		
42	CCB	CCB		.g	09/14/20 15:49	1		

Flag Code:	Flag Code Description	Flag Code:	Flag Code Description
Cs	CCV Out epa9056	Cw	CCV out 300.0 rev2.1
Ho	Hold Time Exceeded	I1	Init Cal x and y value problem
I2	Init Cal missing a data point	I3	Init Cal missing a Compound
I4	Init Cal Rsd < .995	Is	ICV out epa 9056
Iw	ICV Out 300.0 rev2.1	Ls	LCS Out EPA 9056
Lw	LCS Out 300.0 rev2.1	Ms	Spike Out EPA 9056
Mw	Spike Out EPA 300.0 REV2.1	Oc	Over Calibration/Linear Range

0091008 0575

Logo

AQ-2 Report

Serial Number: 090817
Report Requested By: Janee
Date & Time: Mon Sep 14 15:52:01 2020
Tray Number: 90
Tray Name: CNS 2420

Worklist

Cup	Type	ID	Details	Tests
2	U1	MBS-2420		tCN-m
3	U2	LCSS-2420		tCN-m
4	U3	LCSS-2420 DUP		tCN-m
5	U4	AD19159-004		tCN-m
6	U5	AD19159-004 DUP		tCN-m
7	U6	AD19159-005 MS		tCN-m
8	U7	AD19159-006 MSD		tCN-m
9	U8	AD19212-002		tCN-m
10	U9	AD19212-004		tCN-m
11	U10	AD19212-006		tCN-m
12	U11	AD19212-008		tCN-m
13	U12	AD19212-010		tCN-m
14	U13	AD19213-002		tCN-m
15	U14	AD19213-004		tCN-m
16	U15	AD19213-006		tCN-m
17	U16	AD19213-008		tCN-m
18	U17	AD19213-010		tCN-m
19	U18	AD19159-001		tCN-m
20	U19	AD19159-002		tCN-m
21	U20	AD19159-003		tCN-m
22	U21	AD19159-007		tCN-m
23	U22	AD19159-008		tCN-m
24	U23	AD19159-009		tCN-m
25	U24	AD19159-010		tCN-m
26	U25	AD19163-001		tCN-m
27	U26	AD19203-014		tCN-m

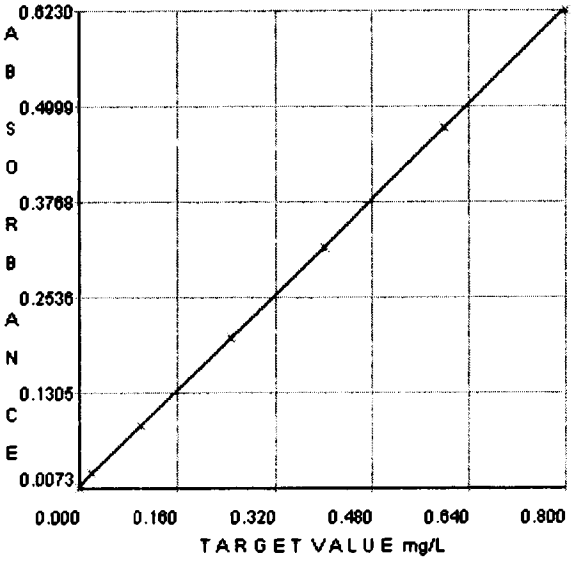
AQ2 tCN mod

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0073	-0.0027	0.0000	
S90	0.0252	0.0205	0.0200	2.62
S91	0.0875	0.1017	0.1000	1.71
S92	0.2005	0.2488	0.2480	0.33
S93	0.3165	0.3999	0.4000	-0.03
S94	0.4709	0.6009	0.6000	0.15
S95	0.6230	0.7989	0.8000	-0.13
S0	0.0077	-0.0023	0.0000	

Polynomial Order: 1
Correlation Coefficient: 1.0000
Carryover(%): 0.1
Calibration Equation: y = bx + a
y =: Concentration mg/L
x =: Measured Absorbance
a =: -1.226415E-002
b =: 1.301998E+000
Date & Time: Mon Sep 14 14:34:08 2020

Calibration Graph



9/14/20

Reagents

Name	Batch	Prepared By	Expiry Date
tCN Neutral	V-333445	JMP	Fri Sep 18 22:00:00 2020
tCN Chlor T	V-334720	JW	Tue Sep 15 22:00:00 2020
tCN Pyr Barb	V-334659	JW	Fri Sep 18 22:00:00 2020

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
	S1	STANDARD 1	0.0073		0.007329			jw	Mon Sep 14 14:17:48 2020
	S90	STANDARD 90	0.0252		0.025182			jw	Mon Sep 14 14:20:09 2020
	S91	STANDARD 91	0.0875		0.087539			jw	Mon Sep 14 14:22:31 2020
	S92	STANDARD 92	0.2005		0.200522			jw	Mon Sep 14 14:24:51 2020
	S93	STANDARD 93	0.3165		0.316535			jw	Mon Sep 14 14:27:11 2020
	S94	STANDARD 94	0.4709		0.470924			jw	Mon Sep 14 14:29:30 2020
	S95	STANDARD 95	0.6230		0.623038			jw	Mon Sep 14 14:31:49 2020
	S0	STANDARD 0	0.0077		0.007657			jw	Mon Sep 14 14:34:08 2020
	C11	C C V	0.4410	mg/L	0.348119			jw	Mon Sep 14 14:36:27 2020
	C12	C C B	-0.0025	mg/L	0.007463			jw	Mon Sep 14 14:38:47 2020
2	U1	MBS-2420	0.0001	mg/L	0.009485			jw	Mon Sep 14 14:41:06 2020
3	U2	LCSS-2420	0.3845	mg/L	0.304761			jw	Mon Sep 14 14:43:25 2020
4	U3	LCSS-2420 DUP	0.4018	mg/L	0.318048			jw	Mon Sep 14 14:45:44 2020
5	U4	AD19159-004	0.0059	mg/L	0.013922			jw	Mon Sep 14 14:48:03 2020
6	U5	AD19159-004 DUP	0.0158	mg/L	0.021534			jw	Mon Sep 14 14:50:24 2020
7	U6	AD19159-005 MS	0.0455	mg/L	0.044351			jw	Mon Sep 14 14:52:45 2020
8	U7	AD19159-006 MSD	0.1638	mg/L	0.135190			jw	Mon Sep 14 14:55:04 2020
9	U8	AD19212-002	0.0054	mg/L	0.013572			jw	Mon Sep 14 14:57:23 2020
10	U9	AD19212-004	0.0044	mg/L	0.012828			jw	Mon Sep 14 14:59:42 2020
11	U10	AD19212-006	0.0058	mg/L	0.013840			jw	Mon Sep 14 15:02:01 2020
	C11	C C V	0.4375	mg/L	0.345475			jw	Mon Sep 14 15:04:21 2020
	C12	C C B	-0.0026	mg/L	0.007430			jw	Mon Sep 14 15:06:40 2020
12	U11	AD19212-008	0.0040	mg/L	0.012515			jw	Mon Sep 14 15:09:00 2020
13	U12	AD19212-010	0.0043	mg/L	0.012760			jw	Mon Sep 14 15:11:20 2020
14	U13	AD19213-002	0.0129	mg/L	0.019366			jw	Mon Sep 14 15:13:39 2020
15	U14	AD19213-004	0.0084	mg/L	0.015904			jw	Mon Sep 14 15:15:59 2020
16	U15	AD19213-006	0.0080	mg/L	0.015529			jw	Mon Sep 14 15:18:20 2020
17	U16	AD19213-008	0.0087	mg/L	0.016077			jw	Mon Sep 14 15:20:41 2020
18	U17	AD19213-010	0.0093	mg/L	0.016547			jw	Mon Sep 14 15:23:01 2020
19	U18	AD19159-001	0.0038	mg/L	0.012325			jw	Mon Sep 14 15:25:21 2020
20	U19	AD19159-002	0.0027	mg/L	0.011524			jw	Mon Sep 14 15:27:41 2020
21	U20	AD19159-003	0.0165	mg/L	0.022102			jw	Mon Sep 14 15:30:01 2020
	C11	C C V	0.4476	mg/L	0.353179			jw	Mon Sep 14 15:32:21 2020
	C12	C C B	-0.0025	mg/L	0.007523			jw	Mon Sep 14 15:34:41 2020
22	U21	AD19159-007	0.0284	mg/L	0.031207			jw	Mon Sep 14 15:37:03 2020
23	U22	AD19159-008	0.0129	mg/L	0.019309			jw	Mon Sep 14 15:39:23 2020
24	U23	AD19159-009	0.0112	mg/L	0.018032			jw	Mon Sep 14 15:41:20 2020
25	U24	AD19159-010	0.0032	mg/L	0.011843			jw	Mon Sep 14 15:43:12 2020
26	U25	AD19163-001	-0.0001	mg/L	0.009340			jw	Mon Sep 14 15:44:53 2020
27	U26	AD19203-014	0.0050	mg/L	0.013256			jw	Mon Sep 14 15:46:35 2020
	C11	C C V	0.4537	mg/L	0.357910			jw	Mon Sep 14 15:48:17 2020
	C12	C C B	-0.0016	mg/L	0.008173			jw	Mon Sep 14 15:49:59 2020

RUN LOG

Instrument: DA1 BatchId: 202009111142 Analyzed By: jw

Run#	Qc Type	Sample ID	Flag summary:	Comments	An Date/Time:	Dil	Prep Batch	Method Blank
1	ICS	STANDARD 1		.g	09/11/20 11:42	1		
2	ICS	STANDARD 90		.g V-334657	09/11/20 11:44	1		
3	ICS	STANDARD 91		.g V-334657	09/11/20 11:46	1		
4	ICS	STANDARD 92		.g V-334657	09/11/20 11:49	1		
5	ICS	STANDARD 93		.g V-334657	09/11/20 11:51	1		
6	ICS	STANDARD 94		.g V-334657	09/11/20 11:53	1		
7	ICS	STANDARD 95		.g V-334657	09/11/20 11:56	1		
8	ICS	STANDARD 0		.g	09/11/20 11:58	1		
9	ICV	CCV		.g V-334654	09/11/20 12:00	1		
10	ICB	CCB		.g	09/11/20 12:03	1		
11	MB	MBW-1505		.g	09/11/20 12:05	1	W-1505	MBW-1505
12	LCS	LCSW-1505		.g V-334653	09/11/20 12:07	1	W-1505	MBW-1505
13	LCS	LCSW-1505 DUP		.g V-334653	09/11/20 12:09	1	W-1505	MBW-1505
14	SMP	AD19136-001		.g	09/11/20 12:12	1	W-1505	MBW-1505
15	DUP	AD19136-001 DUP		.g	09/11/20 12:14	1	W-1505	MBW-1505
16	MS	AD19136-001 MS		.g	09/11/20 12:16	1	W-1505	MBW-1505
17	MSD	AD19136-001 MSD		.g	09/11/20 12:19	1	W-1505	MBW-1505
18	SMP	AD19137-001		.g	09/11/20 12:21	1	W-1505	MBW-1505
19	SMP	AD19145-010		.g	09/11/20 12:23	1	W-1505	MBW-1505
20	SMP	AD19139-003		.g	09/11/20 12:26	1	W-1505	MBW-1505
21	CCV	CCV		.g V-334654	09/11/20 12:28	1		
22	CCB	CCB		.g	09/11/20 12:30	1		
23	SMP	AD19139-006		.g	09/11/20 12:33	1	W-1505	MBW-1505
24	SMP	AD19159-011		.g	09/11/20 12:35	1	W-1505	MBW-1505
25	SMP	AD19163-003		.g	09/11/20 12:37	1	W-1505	MBW-1505
26	SMP	AD19164-003		.g	09/11/20 12:38	1	W-1505	MBW-1505
27	SMP	AD19074-007		.g	09/11/20 12:40	1	W-1505	MBW-1505
28	CCV	CCV		.g V-334654	09/11/20 12:42	1		
29	CCB	CCB		.g	09/11/20 12:43	1		

Flag Code:	Flag Code Description	Flag Code:	Flag Code Description
Cs	CCV Out epa9056	Cw	CCV out 300.0 rev2.1
Ho	Hold Time Exceeded	I1	Init Cal x and y value problem
I2	Init Cal missing a data point	I3	Init Cal missing a Compound
I4	Init Cal Rsd < .995	Is	ICV out epa 9056
Iw	ICV Out 300.0 rev2.1	Ls	LCS Out EPA 9056
Lw	LCS Out 300.0 rev2.1	Ms	Spike Out EPA 9056
Mw	Spike Out EPA 300.0 REV2.1	Oc	Over Calibration/Linear Range

RUN LOG

Instrument: DA1 Batchld: 202009111142 Analyzed By: jw

Run#	Qc Type	Sample ID	Flag summary:	Comments	An Date/Time:	Dil	Prep Batch	Method Blank
1	ICS	STANDARD 1		.g	09/11/20 11:42	1		
2	ICS	STANDARD 90		.g V-334657	09/11/20 11:44	1		
3	ICS	STANDARD 91		.g V-334657	09/11/20 11:46	1		
4	ICS	STANDARD 92		.g V-334657	09/11/20 11:49	1		
5	ICS	STANDARD 93		.g V-334657	09/11/20 11:51	1		
6	ICS	STANDARD 94		.g V-334657	09/11/20 11:53	1		
7	ICS	STANDARD 95		.g V-334657	09/11/20 11:56	1		
8	ICS	STANDARD 0		.g	09/11/20 11:58	1		
9	ICV	CCV		.g V-334654	09/11/20 12:00	1		
10	ICB	CCB		.g	09/11/20 12:03	1		
11	MB	MBW-1505		.g	09/11/20 12:05	1	W-1505	MBW-1505
12	LCS	LCSW-1505		.g V-334653	09/11/20 12:07	1	W-1505	MBW-1505
13	LCS	LCSW-1505 DUP		.g V-334653	09/11/20 12:09	1	W-1505	MBW-1505
14	SMP	AD19136-001		.g	09/11/20 12:12	1	W-1505	MBW-1505
15	DUP	AD19136-001 DUP		.g	09/11/20 12:14	1	W-1505	MBW-1505
16	MS	AD19136-001 MS		.g	09/11/20 12:16	1	W-1505	MBW-1505
17	MSD	AD19136-001 MSD		.g	09/11/20 12:19	1	W-1505	MBW-1505
18	SMP	AD19137-001		.g	09/11/20 12:21	1	W-1505	MBW-1505
19	SMP	AD19145-010		.g	09/11/20 12:23	1	W-1505	MBW-1505
20	SMP	AD19139-003		.g	09/11/20 12:26	1	W-1505	MBW-1505
21	CCV	CCV		.g V-334654	09/11/20 12:28	1		
22	CCB	CCB		.g	09/11/20 12:30	1		
23	SMP	AD19139-006		.g	09/11/20 12:33	1	W-1505	MBW-1505
24	SMP	AD19159-011		.g	09/11/20 12:35	1	W-1505	MBW-1505
25	SMP	AD19163-003		.g	09/11/20 12:37	1	W-1505	MBW-1505
26	SMP	AD19164-003		.g	09/11/20 12:38	1	W-1505	MBW-1505
27	SMP	AD19074-007		.g	09/11/20 12:40	1	W-1505	MBW-1505
28	CCV	CCV		.g V-334654	09/11/20 12:42	1		
29	CCB	CCB		.g	09/11/20 12:43	1		

Flag Code:	Flag Code Description	Flag Code:	Flag Code Description
Cs	CCV Out epa9056	Cw	CCV out 300.0 rev2.1
Ho	Hold Time Exceeded	I1	Init Cal x and y value problem
I2	Init Cal missing a data point	I3	Init Cal missing a Compound
I4	Init Cal Rsd < .995	Is	ICV out epa 9056
Iw	ICV Out 300.0 rev2.1	Ls	LCS Out EPA 9056
Lw	LCS Out 300.0 rev2.1	Ms	Spike Out EPA 9056
Mw	Spike Out EPA 300.0 REV2.1	Oc	Over Calibration/Linear Range

Logo

AQ-2 Report

Serial Number:	090817
Report Requested By:	Janee
Date & Time:	Fri Sep 11 13:21:15 2020
Tray Number:	86
Tray Name:	CNW 1505

Worklist

Cup	Type	ID	Details	Tests
2	U1	MBW-1505		tCN-m
3	U2	LCSW-1505		tCN-m
4	U3	LCSW-1505 DUP		tCN-m
5	U4	AD19136-001		tCN-m
6	U5	AD19136-001 DUP		tCN-m
7	U6	AD19136-001 MS		tCN-m
8	U7	AD19136-001 MSD		tCN-m
9	U8	AD19137-001		tCN-m
10	U9	AD19145-010		tCN-m
11	U10	AD19139-003		tCN-m
12	U11	AD19139-006		tCN-m
13	U12	AD19159-011		tCN-m
14	U13	AD19163-003		tCN-m
15	U14	AD19164-003		tCN-m
16	U15	AD19074-007		tCN-m

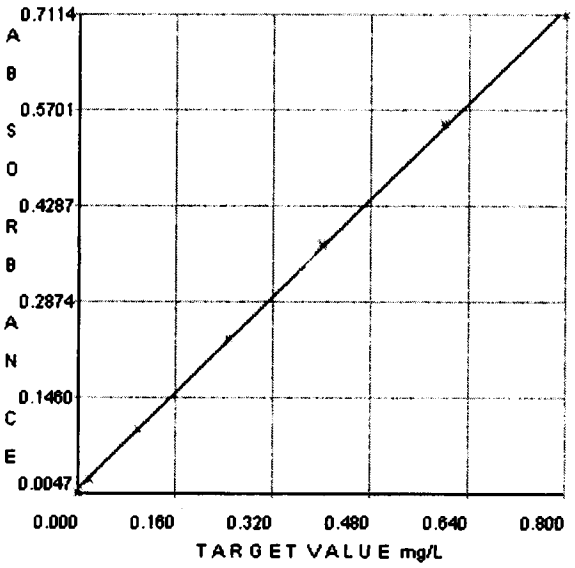
AQ2 tCN mod

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0047	-0.0048	0.0000	
S90	0.0252	0.0183	0.0200	-8.67
S91	0.0969	0.0989	0.1000	-1.10
S92	0.2319	0.2507	0.2480	1.07
S93	0.3711	0.4071	0.4000	1.77
S94	0.5501	0.6083	0.6000	1.38
S95	0.7114	0.7896	0.8000	-1.30
S0	0.0048	-0.0047	0.0000	

Polynomial Order:	1
Correlation Coefficient:	0.9998
Carryover(%):	0.0
Calibration Equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured Absorbance
a =:	-1.003384E-002
b =:	1.123992E+000
Date & Time:	Fri Sep 11 11:58:21 2020

Calibration Graph



9/11/20

Reagents

Name	Batch	Prepared By	Expiry Date
tCN Neutral	V-333445	JMP	Fri Sep 18 22:00:00 2020
tCN Chlor T	V-334656	JW	Sat Sep 12 22:00:00 2020
tCN Pyr Barb	V-334659	JW	Fri Sep 18 22:00:00 2020

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date

	S1	STANDARD 1	0.0047		0.004654	jw	Fri Sep 11 11:42:02 2020
	S90	STANDARD 90	0.0252		0.025178	jw	Fri Sep 11 11:44:23 2020
	S91	STANDARD 91	0.0969		0.096916	jw	Fri Sep 11 11:46:44 2020
	S92	STANDARD 92	0.2319		0.231938	jw	Fri Sep 11 11:49:05 2020
	S93	STANDARD 93	0.3711		0.371108	jw	Fri Sep 11 11:51:24 2020
	S94	STANDARD 94	0.5501		0.550123	jw	Fri Sep 11 11:53:43 2020
	S95	STANDARD 95	0.7114		0.711411	jw	Fri Sep 11 11:56:02 2020
	S0	STANDARD 0	0.0048		0.004764	jw	Fri Sep 11 11:58:21 2020
	C11	C C V	0.3663	mg/L	0.334777	jw	Fri Sep 11 12:00:40 2020
	C12	C C B	-0.0047	mg/L	0.004787	jw	Fri Sep 11 12:03:00 2020
2	U1	MBW-1505	-0.0026	mg/L	0.006607	jw	Fri Sep 11 12:05:18 2020
3	U2	LCSW-1505	0.3822	mg/L	0.348954	jw	Fri Sep 11 12:07:35 2020
4	U3	LCSW-1505 DUP	0.3855	mg/L	0.351911	jw	Fri Sep 11 12:09:53 2020
5	U4	AD19136-001	-0.0015	mg/L	0.007587	jw	Fri Sep 11 12:12:12 2020
6	U5	AD19136-001 DUP	-0.0012	mg/L	0.007881	jw	Fri Sep 11 12:14:34 2020
7	U6	AD19136-001 MS	0.3683	mg/L	0.336584	jw	Fri Sep 11 12:16:54 2020
8	U7	AD19136-001 MSD	0.3777	mg/L	0.344978	jw	Fri Sep 11 12:19:14 2020
9	U8	AD19137-001	0.3658	mg/L	0.334342	jw	Fri Sep 11 12:21:33 2020
10	U9	AD19145-010	-0.0017	mg/L	0.007408	jw	Fri Sep 11 12:23:53 2020
11	U10	AD19139-003	-0.0012	mg/L	0.007854	jw	Fri Sep 11 12:26:13 2020
	C11	C C V	0.3731	mg/L	0.340906	jw	Fri Sep 11 12:28:33 2020
	C12	C C B	-0.0047	mg/L	0.004719	jw	Fri Sep 11 12:30:55 2020
12	U11	AD19139-006	0.0038	mg/L	0.012320	jw	Fri Sep 11 12:33:16 2020
13	U12	AD19159-011	0.0014	mg/L	0.010201	jw	Fri Sep 11 12:35:12 2020
14	U13	AD19163-003	0.0037	mg/L	0.012201	jw	Fri Sep 11 12:37:04 2020
15	U14	AD19164-003	0.0047	mg/L	0.013115	jw	Fri Sep 11 12:38:45 2020
16	U15	AD19074-007	-0.0003	mg/L	0.008640	jw	Fri Sep 11 12:40:27 2020
	C11	C C V	0.3814	mg/L	0.348298	jw	Fri Sep 11 12:42:09 2020
	C12	C C B	0.0002	mg/L	0.009140	jw	Fri Sep 11 12:43:51 2020

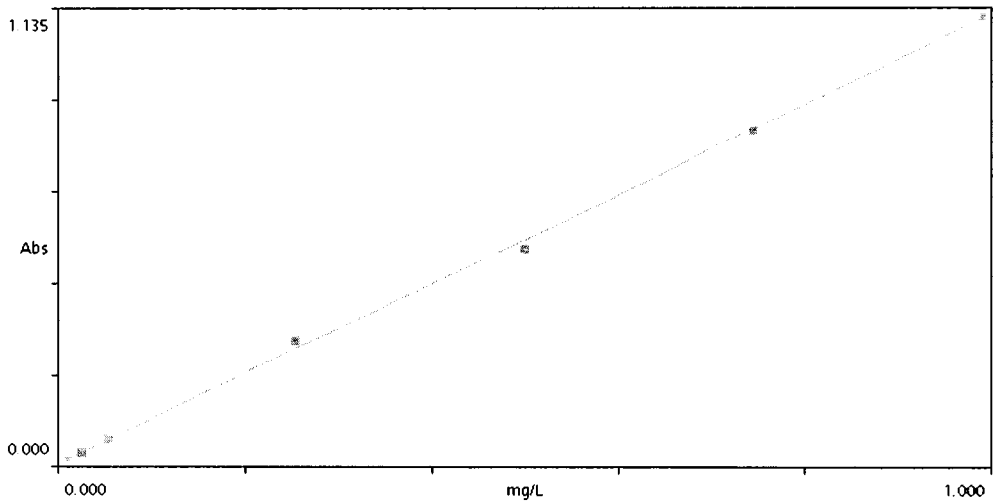
Parameter:	Date:	Operator ID:	Sample ID:	Comment:	Wavelength1	Value1	Unit1
CR6 W	9/16/2020 13:03	JMP	CR6 W 896	ICV	540	0.571	Abs
CR6 W	9/16/2020 13:03	JMP	CR6 W 896	ICB	540	0	Abs
CR6 W	9/16/2020 13:03	JMP	CR6 W 896	CAL-1	540	0.024	Abs
CR6 W	9/16/2020 13:03	JMP	CR6 W 896	MB	540	0	Abs
CR6 W	9/16/2020 13:04	JMP	CR6 W 896	LCS	540	0.573	Abs
CR6 W	9/16/2020 13:04	JMP	CR6 W 896	AD19182-001	540	0	Abs
CR6 W	9/16/2020 13:04	JMP	CR6 W 896	AD19182-001 DUP	540	0.001	Abs
CR6 W	9/16/2020 13:04	JMP	CR6 W 896	AD19182-001 MS	540	0.502	Abs
CR6 W	9/16/2020 13:05	JMP	CR6 W 896	AD19182-001 MSD	540	0.504	Abs
CR6 W	9/16/2020 13:05	JMP	CR6 W 896	AD19182-001 T	540	0.001	Abs
CR6 W	9/16/2020 13:05	JMP	CR6 W 896	CCV	540	0.575	Abs
CR6 W	9/16/2020 13:05	JMP	CR6 W 896	CCB	540	0	Abs
CR6 W	9/16/2020 13:05	JMP	CR6 W 896	AD19159-011	540	0	Abs
CR6 W	9/16/2020 13:05	JMP	CR6 W 896	AD19159-011 T	540	0	Abs
CR6 W	9/16/2020 13:06	JMP	CR6 W 896	AD19236-012	540	0	Abs
CR6 W	9/16/2020 13:06	JMP	CR6 W 896	AD19236-012T	540	0	Abs
CR6 W	9/16/2020 13:06	JMP	CR6 W 896	CCV	540	0.577	Abs
CR6 W	9/16/2020 13:06	JMP	CR6 W 896	CCB	540	0	Abs

DR3900 S/N 1484240

JMP
9/16/20

DR3900 S/N: 1484240 Instrument Version: 1.16 Page: 1 16-SEP-2020 13:02

Program:	9005			
Name:	CR6 W			
Units:	mg/L			
Wavelength:	540 nm			
Resolution:	0.001			
Chemical Form 1:	Cr6			
Calibration:	C = a + bA			
	a:	-0.003	b:	0.8884
Curve Fit r^2=	0.9989			



mg/L	Abs
0.0000	0.000
0.0200	0.024
0.0500	0.060
0.2500	0.309
0.5000	0.541
0.7500	0.847
1.0000	1.135

Upper Limit:	Off
Lower Limit:	Off
Timer 1:	Off
Timer 2:	Off
Timer 3:	Off
Timer 4:	Off
Chemical Form 2:	Off
Chemical Form 3:	Off
Chemical Form 4:	Off
Created:	16-SEP-2020 12:58

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(AQUEOUS SAMPLES ONLY)
Method SM3500-Cr B

Batch: 896 Analyst JMP Date 9/16/20

Laboratory Sample No.	Sample Vol (ml)	Date	Time	Comments
Cal Curve 0.0	10	9/16/20	13:03	V-
Cal Curve 0.02 / CAL-01				V-334918
Cal Curve 0.05				V-334919
Cal Curve 0.25				V-334920
Cal Curve 0.50				V-334921
Cal Curve 0.75				V-334922
Cal Curve 1.0				V-334923
ICV / CCV				V-334924
MB				
LCS				V-334925
1. QC Sample AD19182-001				
DUP -001				
MS -001				
MSD -001				
2 AD19159-011				
3 AD19236-012				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				

stock chromium soln (cal, LCS, MS, MSD)	2nd source chromium (ICV / CCV)
V- 331889	V- 331890

Diphenylcarbazide	10% H2SO4
V- 334845	V- 334640

Wet Chemistry Data
Preparation and Distillation Logbook Data

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B ✓ Total CN____ Amenable CN____ OIA 1677 Avail CN____ SM4500 WAD CN____

Batch No. 2420 STD Cont/ Batch: _____ Distilled by: JW Start Distill. Time: 1105 End Distill. Time 1150 Date: 9/14/20 Reviewed by: JMP Date: 9/14/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
MB	✓		0.5	5.5	6.0					
LCS / LCSD	↓	0.12	↓	↓	↓					Balance Used: 023
MS AD19159-005	↓	↓	↓	↓	↓					Pipettes Used: 11, 19
MSD 006	↓	↓	↓	↓	↓					
1. 004	↓		↓	↓	↓					Micro-dist used: 2, 3
Dup 1. 004	↓		↓	↓	↓					
2. 001	↓		↓	↓	↓					
3. 002	↓		↓	↓	↓					
4. 003	↓		↓	↓	↓					
5. 007	↓		↓	↓	↓					
6. 008	↓		↓	↓	↓					
7. 009	↓		↓	↓	↓					
8. 010	↓		↓	↓	↓					
9. AD19212-002	↓		↓	↓	↓					
10. 004	↓		↓	↓	↓					
Cal Curve Blank										
Std. ___ ppm										
Std. ___ ppm										
Std. ___ ppm										
Std. ___ ppm										
Std. ___ ppm										
Std. 0.8 ppm		0.24								V-334722 *

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:	V-332257	V-330630	V-334718			

* Samples analyzed on AQ2. Only 0.8 ppm std used.

T:\QC\FORMS\LOGBOOK FORMS\WET_CHEM\CN dist Soil 2016 DOD.DOC

0001600 0001600 0001600

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B ✓ Total CN⁻____ Amenable CN⁻____ OIA 1677 Avail CN⁻____ SM4500 WAD CN⁻____

Batch No. 2420 STD Cont/ Batch: ____ Distilled by: JW Start Distill. Time: 1105 End Distill. Time 1150 Date: 9/14/20 Reviewed by: DMP Date: 9/14/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
MB										
LCS										Balance Used:
MS										Pipettes Used:
MSD JW 9/14/20										
1.										Micro-dist used:
~~Dup~~ 1. AD19212-006	✓		0.5	5.5	6.0					
2. 008										
3. 010										
4. AD19213-002										
5. 004										
6. 006										
7. 008										
8. 010										
9. AD19163-001										
10. AD19203-014										
Cal Curve Blank										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:						

0091600 0082

0091006 0587

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (AQUEOUS SAMPLES ONLY)

Method: 335.4 ✓ SM4500 (Total)____ 9012B ✓ **Total CN⁻**____ **Amenable CN⁻**____ **OIA 1677 Avail CN⁻**_____ **SM4500 WAD CN⁻** ____

Batch No. 1505 Distilled by: JW Start Distill. Time: 1030 End Distill. Time: 1100 Date: 9/11/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Vol. (ml)	Scrub Vol. (ml)	Sulfide Check Y/N	$PbCO_3$ Added (gm)	Oxidizer Check Y/N	Sodium Thiosulfate Added (gm)	Comments
MB	✓		6	6					Balance used: NA
LCS/LCSD		0.12							Pipettes used: 11, 19
1. AD19136-001									
Dup 1.									Micro-dist used: 2
MS		0.12							
MSD		0.12							
JW 9/11/20 2. AD19137-001									
3. AD19074-007									
4. AD19145-010									
5. AD19139-003									
6. ↓ 006									
7. AD19164-003									
8. AD19163-003									
9. AD19159-011									
10.									
Cal Curve Blank									V-
Std. ____ ppm									V-
Std. ____ ppm									V-
Std. ____ ppm									V-
Std. ____ ppm									V-
Std. ____ ppm									V-
Std. 0.8 ppm		0.24							V- 334657 *

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:	V- 332257	V- 330630	V- 334653	V-	V-	V-

* Samples analyzed on AQ2. Only 0.8 ppm std used.

TCLP
Metal Data

TCLP
Metal Data
Sample Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-9	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A
7440-39-3	Barium	0.25	0.71	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A
7439-92-1	Lead	0.050	0.24	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	25	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	23	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	31	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	Duplicate	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A
7440-39-3	Barium	0.25	1.8	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	26	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	24	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	32	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A
7440-39-3	Barium	0.25	2.0	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	27	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	25	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	33	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A
7440-39-3	Barium	0.25	1.9	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	14	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	14	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	18	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B MS	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	0.51	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A
7440-39-3	Barium	0.25	2.6	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A
7440-43-9	Cadmium	0.050	0.51	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A
7440-47-3	Chromium	0.10	0.50	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A
7439-92-1	Lead	0.050	0.49	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A
7439-97-6	Mercury	0.00050	0.010	1	25	25	09/14/20	85267	H26209T	16	CV	HGCV3A
7440-02-0	Nickel	0.10	0.48	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A
7782-49-2	Selenium	0.40	0.70	4	50	50	09/14/20	85267	T26209B4	16	P	PEICP4A
7440-22-4	Silver	0.050	0.12	1	50	50	09/11/20	85267	T26209A4	20	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-5B MSD	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	0.52	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A
7440-39-3	Barium	0.25	2.5	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A
7440-43-9	Cadmium	0.050	0.51	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A
7440-47-3	Chromium	0.10	0.50	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A
7439-92-1	Lead	0.050	0.48	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A
7439-97-6	Mercury	0.00050	0.0098	1	25	25	09/14/20	85267	H26209T	17	CV	HGCV3A
7440-02-0	Nickel	0.10	0.48	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A
7782-49-2	Selenium	0.40	0.64	4	50	50	09/14/20	85267	T26209B4	17	P	PEICP4A
7440-22-4	Silver	0.050	0.12	1	50	50	09/11/20	85267	T26209A4	21	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-007	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-3A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7440-39-3	Barium	0.25	0.56	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	28	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	34	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-10A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7440-39-3	Barium	0.25	0.61	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	29	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	35	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-009	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-10B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A
7440-39-3	Barium	0.25	0.56	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	30	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	26	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	38	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-010	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-3B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A
7440-39-3	Barium	0.25	0.74	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	31	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	27	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	39	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19159-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	EB	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7440-39-3	Barium	0.25	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	32	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	40	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

TCLP
Metal Data
QC Data

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/11/20
Data File: T26209A4
Prep Batch: 85267
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333673-5	Rec	CCV V-333673-13	Rec	CCV V-333673-25	Rec	CCV V-333673-36	Rec	CCV V-333673-45	Rec		Rec		Rec		Rec
Arsenic	.5/.5	0.50039	100	0.53461	107	0.52021	104	0.48976	98	0.50374	101						
Barium	.5/.5	0.48866	98	0.49493	99	0.47118	94	0.47507	95	0.46645	93						
Beryllium	.5/.5	0.48700	97	0.49421	99	0.47099	94	0.47422	95	0.46721	93						
Cadmium	.5/.5	0.47497	95	0.48430	97	0.46575	93	0.45995	92	0.45009	90						
Chromium	.5/.5	0.50276	101	0.51185	102	0.48777	98	0.49268	99	0.48341	97						
Copper	.5/.5	0.49304	99	0.50290	101	0.47099	94	0.47392	95	0.47245	94						
Lead	.5/.5	0.48745	97	0.50421	101	0.48663	97	0.47953	96	0.46821	94						
Nickel	.5/.5	0.48910	98	0.49592	99	0.48113	96	0.47482	95	0.46335	93						
Selenium	.5/.5	0.48889	98	0.50332	101	0.47031	94	0.47862	96	0.48459	97						
Silver	0.1/0.1	0.09890	99	0.10094	101	0.09591	96	0.09675	97	0.09488	95						
Zinc	.5/.5	0.48275	97	0.48753	98	0.47450	95	0.47595	95	0.46419	93						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/11/20
Data File: T26209A4
Prep Batch: 85267
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333672	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-333660	Recovery	Low Limit	High Limit
Magnesium	5.0	4.77422	95	80	120		500	469.404	94	90	110
Silver	0.05	0.0481906	96	80	120		1	0.980899	98	90	110
Aluminum	1.0	1.03350	103	80	120		500	514.270	103	90	110
Arsenic	0.1	0.117118	117	80	120		10	9.81108	98	90	110
Boron	0.2	0.211651	106	80	120		5	4.86077	97	90	110
Barium	0.25	0.258644	103	80	120		10	10.3591	104	90	110
Beryllium	0.012	0.0111239	93	80	120		5	4.62516	93	90	110
Calcium	5.0	4.78911	96	80	120		500	452.203	90	90	110
Cadmium	0.05	0.0504155	101	80	120		5	4.95325	99	90	110
Cobalt	0.1	0.0933729	93	80	120		5	4.30869	86 a	90	110
Chromium	0.1	0.0924974	92	80	120		10	9.07795	91	90	110
Copper	0.1	0.101932	102	80	120		10	10.7620	108	90	110
Silicon	0.1	0.130219	130 a	80	120		25	25.7444	103	90	110
Iron	1.0	0.900588	90	80	120		200	192.017	96	90	110
Zinc	0.1	0.0956542	96	80	120		10	8.57275	86 a	90	110
Manganese	0.1	0.101739	102	80	120		10	9.43128	94	90	110
Molybdenum	0.1	0.0958488	96	80	120		10	9.18772	92	90	110
Sodium	NA	22.1784		80	120		1000	1246.76	125 a	90	110
Nickel	0.1	0.0953689	95	80	120		10	8.64968	86 a	90	110
Lead	0.05	0.0497266	99	80	120		10	9.37398	94	90	110
Antimony	0.07	0.0625745	89	80	120		5	5.26388	105	90	110
Selenium	0.1	0.0890183	89	80	120		5	5.04237	101	90	110
Tin	0.1	0.100972	101	80	120		10	9.67326	97	90	110
Titanium	0.1	0.0921051	92	80	120		10	9.80496	98	90	110
Thallium	0.1	0.0949242	95	80	120		5	4.46542	89 a	90	110
Vanadium	0.1	0.0955012	96	80	120		10	9.27524	93	90	110
Potassium	NA	-7.37949		80	120		200	-1825.12	-910 a	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/14/20
Data File: T26209B4
Prep Batch: 85267
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333673-5	Rec	CCV V-333673-12	Rec	CCV V-333673-20	Rec	CCV V-329036-29	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Selenium	.5/.5	0.50097	100	0.51270	103	0.51716	103	0.48912	98						

Notes:
a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/14/20
Data File: T26209B4
Prep Batch: 85267
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333672	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-333660	Recovery	Low Limit	High Limit
Manganese	0.1	0.104444	104	80	120		10	9.37519	94	90	110
Aluminum	1.0	1.03895	104	80	120		500	516.230	103	90	110
Arsenic	0.1	0.0915433	92	80	120		10	10.0144	100	90	110
Boron	0.2	0.218740	109	80	120		5	4.78262	96	90	110
Barium	0.25	0.248922	100	80	120		10	9.99294	100	90	110
Beryllium	0.012	0.0144897	121 a	80	120		5	4.67063	93	90	110
Calcium	5.0	5.19939	104	80	120		500	487.199	97	90	110
Cadmium	0.05	0.0549810	110	80	120		5	4.98959	100	90	110
Cobalt	0.1	0.103356	103	80	120		5	4.86037	97	90	110
Chromium	0.1	0.102190	102	80	120		10	8.83065	88 a	90	110
Copper	0.1	0.0925897	93	80	120		10	10.4107	104	90	110
Iron	1.0	0.896100	90	80	120		200	192.149	96	90	110
Silver	0.05	0.0568196	114	80	120		1	1.15316	115 a	90	110
Magnesium	5.0	5.74677	115	80	120		500	505.105	101	90	110
Zinc	0.1	0.107099	107	80	120		10	9.25865	93	90	110
Molybdenum	0.1	0.101763	102	80	120		10	9.17401	92	90	110
Sodium	NA	23.0849		80	120		1000	1288.51	129 a	90	110
Nickel	0.1	0.102311	102	80	120		10	8.73820	87 a	90	110
Lead	0.05	0.0543093	109	80	120		10	9.58889	96	90	110
Antimony	0.07	0.0788527	113	80	120		5	5.56026	111 a	90	110
Selenium	0.1	0.101324	101	80	120		5	5.32267	106	90	110
Silicon	0.1	0.144360	144 a	80	120		25	27.1781	109	90	110
Tin	0.1	0.105374	105	80	120		10	10.0466	100	90	110
Titanium	0.1	0.103977	104	80	120		10	9.47425	95	90	110
Thallium	0.1	0.103297	103	80	120		5	4.34938	87 a	90	110
Vanadium	0.1	0.0877360	88	80	120		10	9.06194	91	90	110
Potassium	NA	-6.03669		80	120		200	-1820.48	-910 a	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/14/20
Data File: H26209T
Prep Batch: 85267
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-21		CCV-33		CCV-39								
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec	
Mercury	20/10	20.01000	100	10.27000	103	10.25000	102	10.30000	103							

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/11/20
Data File: T26209A4
Prep Batch: 85267
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-14	CCB V-333667-26	CCB V-333667-37	CCB V-333667-46	MB 85267 (1)-15	EF V-334254 9/10-43	EF V-334254-9/11-44
Arsenic	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Barium	.125U	.25U	.25U	.25U	.25U	.13U	.25U	.25U
Beryllium	.006U	.012U	.012U	.012U	.012U	.006U	.012U	.012U
Cadmium	.025U	.05U	.05U	.05U	.05U	.025U	.05U	.05U
Chromium	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Copper	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Lead	.025U	.05U	.05U	.05U	.05U	.025U	.05U	.05U
Nickel	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Selenium	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Silver	.025U	.05U	.05U	.05U	.05U	.025U	.05U	.05U
Zinc	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/14/20
Data File: T26209B4
Prep Batch: 85267
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-21	CCB V-329027-30				
Selenium	.05 U	.1 U	.1 U	.1 U				

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/14/20
Data File: H26209T
Prep Batch: 85267
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-40	MB 85267 (1)-11	EF V-334254 A-37	EF V-334254 B-38
Mercury	.5 U	.5 U	.5 U	.5 U	.5 U	.5U	.5U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/11/20
Data File: T26209A4
Prep Batch: 85267
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-12	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	527.672	106							
Arsenic	0	U								
Barium	0	U								
Beryllium	0	U								
Cadmium	0	U								
Calcium	500	471.631	94							
Chromium	0	U								
Copper	0	U								
Iron	200	179.863	90							
Lead	0	U								
Magnesium	500	495.906	99							
Nickel	0	U								
Selenium	0	U								
Silver	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/14/20
Data File: T26209B4
Prep Batch: 85267
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091006

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	527.55	106							
Calcium	500	493.553	99							
Iron	200	174.553	87							
Magnesium	500	521.096	104							
Selenium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85267

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCSW MR 85267

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85267	1	T26209A4	17	0.4745	0.50	95		80	120
Barium	85267	1	T26209A4	17	0.5166	0.50	103		80	120
Cadmium	85267	1	T26209A4	17	0.4917	0.50	98		80	120
Chromium	85267	1	T26209A4	17	0.5089	0.50	102		80	120
Lead	85267	1	T26209A4	17	0.4986	0.50	100		80	120
Mercury	85267	1	H26209T	13	10.4100	10	104		80	120
Nickel	85267	1	T26209A4	17	0.5057	0.50	101		80	120
Selenium	85267	1	T26209A4	17	0.4985	0.50	100		80	120
Silver	85267	1	T26209A4	17	0.1016	0.100	102		80	120

TxtQcType: LCS Matrix: TCLP SampleID: LCSW 85267

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85267	1	T26209A4	16	0.4754	0.50	95		80	120
Barium	85267	1	T26209A4	16	0.5163	0.50	103		80	120
Cadmium	85267	1	T26209A4	16	0.5002	0.50	100		80	120
Chromium	85267	1	T26209A4	16	0.5242	0.50	105		80	120
Lead	85267	1	T26209A4	16	0.5078	0.50	102		80	120
Mercury	85267	1	H26209T	12	10.3000	10	103		80	120
Nickel	85267	1	T26209A4	16	0.5102	0.50	102		80	120
Selenium	85267	1	T26209A4	16	0.5182	0.50	104		80	120
Silver	85267	1	T26209A4	16	0.1029	0.100	103		80	120

TxtQcType: MSD Matrix: TCLP SampleID: AD19159-006

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85267	1	T26209A4	21	T26209A4	18	0.5207	0.1U	0.5	104		50	
Barium	85267	1	T26209A4	21	T26209A4	18	2.5045	1.8549	0.5	130		50	
Cadmium	85267	1	T26209A4	21	T26209A4	18	0.5149	0.05U	0.5	103		50	
Chromium	85267	1	T26209A4	21	T26209A4	18	0.5037	0.1U	0.5	101		50	
Lead	85267	1	T26209A4	21	T26209A4	18	0.4761	0.05U	0.5	95		50	
Mercury	85267	1	H26209T	17	H26209T	14	9.7550	0.50U	10	98		50	
Nickel	85267	1	T26209A4	21	T26209A4	18	0.4808	0.1U	0.5	96		50	
Selenium	85267	4	T26209B4	17	T26209B4	14	0.1607	0.1U	0.5	129		50	
Silver	85267	1	T26209A4	21	T26209A4	18	0.1212	0.05U	0.10	121		50	

TxtQcType: MS Matrix: TCLP SampleID: AD19159-005

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85267	1	T26209A4	20	T26209A4	18	0.5085	0.1U	0.50	102		50	
Barium	85267	1	T26209A4	20	T26209A4	18	2.5927	1.8549	0.50	148		50	
Cadmium	85267	1	T26209A4	20	T26209A4	18	0.5111	0.05U	0.50	102		50	
Chromium	85267	1	T26209A4	20	T26209A4	18	0.5048	0.1U	0.50	101		50	
Lead	85267	1	T26209A4	20	T26209A4	18	0.4860	0.05U	0.50	97		50	
Mercury	85267	1	H26209T	16	H26209T	14	10.0900	0.50U	10	101		50	
Nickel	85267	1	T26209A4	20	T26209A4	18	0.4785	0.1U	0.50	96		50	
Selenium	85267	4	T26209B4	16	T26209B4	14	0.1745	0.1U	0.50	140		50	
Silver	85267	1	T26209A4	20	T26209A4	18	0.1213	0.05U	0.100	121		50	

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85267

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS | Matrix: TCLP | SampleID: AD19159-004

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	T26209A4	22	T26209A4	18	0.5411	0.1U	0.5	108		75	125
Barium	1	T26209A4	22	T26209A4	18	2.3333	1.8549	0.5	96		75	125
Cadmium	1	T26209A4	22	T26209A4	18	0.5184	0.05U	0.5	104		75	125
Chromium	1	T26209A4	22	T26209A4	18	0.5244	0.1U	0.5	105		75	125
Lead	1	T26209A4	22	T26209A4	18	0.5066	0.05U	0.5	101		75	125
Nickel	1	T26209A4	22	T26209A4	18	0.4912	0.1U	0.5	98		75	125
Selenium	4	T26209B4	18	T26209B4	14	0.5731	0.1U	0.5	115		75	125
Silver	1	T26209A4	22	T26209A4	18	0.0866	0.05U	0.1	87		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85267

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR | Matrix: TCLP | SampleID: LCSW MR 85267

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85267	T26209A4	17	T26209A4	16	0.4745	0.4754	.18	20
Barium	85267	T26209A4	17	T26209A4	16	0.5166	0.5163	.048	20
Cadmium	85267	T26209A4	17	T26209A4	16	0.4917	0.5002	1.7	20
Chromium	85267	T26209A4	17	T26209A4	16	0.5089	0.5242	3	20
Lead	85267	T26209A4	17	T26209A4	16	0.4986	0.5078	1.8	20
Mercury	85267	H26209T	13	H26209T	12	10.4100	10.3000	1.1	20
Nickel	85267	T26209A4	17	T26209A4	16	0.5057	0.5102	.87	20
Selenium	85267	T26209A4	17	T26209A4	16	0.4985	0.5182	3.9	20
Silver	85267	T26209A4	17	T26209A4	16	0.1016	0.1029	1.3	20

TxtQcType: MR | Matrix: TCLP | SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85267	T26209A4	19	T26209A4	18	0.1U	0.1U	---	20
Barium	85267	T26209A4	19	T26209A4	18	1.8546	1.8549	0.015	20
Cadmium	85267	T26209A4	19	T26209A4	18	0.05U	0.05U	---	20
Chromium	85267	T26209A4	19	T26209A4	18	0.1U	0.1U	---	20
Lead	85267	T26209A4	19	T26209A4	18	0.05U	0.05U	---	20
Mercury	85267	H26209T	15	H26209T	14	0.50U	0.50U	---	20
Nickel	85267	T26209A4	19	T26209A4	18	0.1U	0.1U	---	20
Selenium	85267	T26209B4	15	T26209B4	14	0.1U	0.1U	---	20
Silver	85267	T26209A4	19	T26209A4	18	0.05U	0.05U	---	20

TxtQcType: MSD | Matrix: TCLP | SampleID: AD19159-006

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85267	T26209A4	21	T26209A4	20	0.5207	0.5085	2.4	20
Barium	85267	T26209A4	21	T26209A4	20	2.5045	2.5927	3.5	20
Cadmium	85267	T26209A4	21	T26209A4	20	0.5149	0.5111	.75	20
Chromium	85267	T26209A4	21	T26209A4	20	0.5037	0.5048	.22	20
Lead	85267	T26209A4	21	T26209A4	20	0.4761	0.4860	2.1	20
Mercury	85267	H26209T	17	H26209T	16	9.7550	10.0900	3.4	20
Nickel	85267	T26209A4	21	T26209A4	20	0.4808	0.4785	.49	20
Selenium	85267	T26209B4	17	T26209B4	16	0.1607	0.1745	8.2	20
Silver	85267	T26209A4	21	T26209A4	20	0.1212	0.1213	.1	20

TxtQcType: SD | Matrix: TCLP | SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85267	T26209A4	23	T26209A4	18	5	0.0069	-0.0043	---		10
Barium	85267	T26209A4	23	T26209A4	18	5	0.3796	1.8549	2.3		10
Cadmium	85267	T26209A4	23	T26209A4	18	5	0.0052	0.0123	111	c	10
Chromium	85267	T26209A4	23	T26209A4	18	5	0.0016	0.0244	68	c	10
Lead	85267	T26209A4	23	T26209A4	18	5	0.0057	0.0327	---		10
Nickel	85267	T26209A4	23	T26209A4	18	5	0.0026	0.0139	7.5		10
Selenium	85267	T26209B4	19	T26209B4	14	5	0.0007	0.0419	---		10
Silver	85267	T26209A4	23	T26209A4	18	5	0.0041	0.0149	38	c	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

TCLP
Metal Data
Verification of Instrument Parameters

INTERELEMENT CORRECTION SUMMARY PEICP4ax

Interfered Elements	Interfering Elements								
	Al	Ca	Fe	Mg	B	Ba	Cu	Mn	Mo
Al	N/A	0	0	0	0	0	0	0	25.4
Sb	0	0	0	0	0	0	0	0	-17.50
As	0.032	0	-0.07	0	0	0	0	0	24.8
Ba	0	0	0	0	0	N/A	0	0	0
Be	0	0	0	0	0	0	0	0	0
B	0	0	3.4	0	N/A	-3.91	0	-2.61	-5.9
Cd	0	0	0	0	0	0	0	0	0
Ca	0	N/A	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0	0
Cu	0	0	-0.1	0	0	0	N/A	0	0
Fe	0	0	N/A	0	0	0	0	0	0
Pb	-0.04	0	0.125	0	0	0	3.06	0	-3.66
Mg	0	0	0	N/A	0	0	0	0	0
Mn	0	0	0	0	0	0	0	N/A	0
Mo	0	0	0.0000	0	0	0	0	0	N/A
Ni	0	0	0	0	0	0	0	0	-2.79
Se	0	-0.08	-0.5	-0.034	0	0	0	0	0
Si	-0.288	-0.234	-2.39	-0.127	-22.10	-12.4	-14.50	-19.5	3.97
Ag	0	0	-0.065	0	0	0	0	0	0
Na	0	0	0	0	0	0	0	0	0
Tl	-0.028	0.06	0	0	0	2.32	0	-3.65	4.3
Sn	0	0	0	0	0	0	0	0	0
Ti	0	-0.076	0	0	0	0	0	0	0
V	0	0	0.035	-0.058	0	0	0	0	0
Zn	0	0	0	0	0	0	0	0	0
K	0	0	10771.7	0	0	0	0	0	0

IECs run 07/15/19. Sn mod 07/19/19; Cu mod 08/12/19; V mod 01/06/20; Sb mod 01/09/20; B, Ti mod 01/18/20; Ag, As, Mo, Pb, Se, Tl mod 03/11/20.

INTERELEMENT CORRECTION SUMMARY PEICP4ax

Interfering Elements

Interfered Elements	Na	Ni	Se	Si	Sn	Ti	V	Zn
Al	0	0	0	0	0	0	-53.2	0
Sb	0	0	0	0	-2.52	0	-3.51	0
As	0	0	0	0	5.11	0	18.3	0
Ba	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0	0	0
B	0.0096	-3.28	-7.4	-1.39	-3.26	-3.97	-4.33	-4.06
Cd	0	0	0	0	0	0	0	0
Ca	0	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	-4.63	0
Co	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	0	0
Fe	0	0	0	0	0	0	0.0	0
Pb	0	0	0	0	0	0	0	0
Mg	0	0	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0
Mo	0	0	0	0	0	0	0	0
Ni	0	N/A	0	0	0	0	0	0
Se	0	0	N/A	0	0	0	0	0
Si	-0.0333	-12.5	-19.90	N/A	-8.16	-10.1	-12.90	-11.9
Ag	0	0	0	0	0	0	-5.03	0
Na	N/A	0	0	0	0	0	0	0
Tl	0	0	0	0	0	-4.11	3.17	0
Sn	0	0	0	0	N/A	3.64	0	0
Ti	0	0	0	0	0	N/A	0	0
V	0	0	0	0	0	0	N/A	0
Zn	0	0	0	0	0	0	0	N/A
K	0	0	0	0	0	0	0	0

IECs run 07/15/19. Sn mod 07/19/19; Cu mod 08/12/19; V mod 01/06/20; Sb mod 01/09/20; B, Ti mod 01/18/20; Ag, As, Mo, Pb, Se, Tl mod 03/11/20.

MDL / RL SUMMARY
TCLP/SPLP
PE ICP 4 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/L)
AL	0.04124271	1
SB	0.03931955	0.07
AS	0.03438659	0.1
BA	0.00333959	0.25
BE	0.00524005	0.012
B	0.02711428	0.2
CD	0.00615363	0.05
CA	2.65167871	5
CR	0.00700712	0.1
CO	0.00382472	0.1
CU	0.02781758	0.1
FE	0.58649802	1
PB	0.0133322	0.05
MG	0.84264167	5
MN	0.00845022	0.1
MO	0.00271515	0.1
NI	0.00521027	0.1
SE	0.03922213	0.1
SI*	0.27653066	0.1
AG	0.01003449	0.05
NA	3.54005202	25
TL	0.04446035	0.1
SN	0.01672084	0.1
TI	0.00534095	0.1
V	0.01672283	0.1
ZN	0.02197619	0.1

COMPLETED: 12/2019

HGCV3 MDL/RL SUMMARY

Element: *Mercury*
Instrument: *PE FIMS 100*
Technique: *CV*

Instrument ID: *HgCV3*
Analyst *Carmela Aliano*

200 Series	METHOD	MDL (ppb)	Completed	RL (ppb)
H_2O	245.1	0.0794	12/31/2019	0.20
SW846				
H_2O	7470A	0.1740	12/31/2019	0.50
SOIL	7471 B	0.0757 (0.0126 mg/kg)	12/31/2019	0.50 (0.0833 mg/kg)

TCLP
Metal Data
Raw Data

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85267 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85267 (1) Units: MG/L Lab Code:
Matrix: TCLP
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.035	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-38-2	Arsenic	0.050	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-39-3	Barium	0.12	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-41-7	Beryllium	0.0060	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-43-9	Cadmium	0.025	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-47-3	Chromium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-50-8	Copper	0.050	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7439-92-1	Lead	0.025	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	11	CV	HGCV3A
7440-02-0	Nickel	0.050	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7782-49-2	Selenium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-22-4	Silver	0.025	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-66-6	Zinc	0.050	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-331024

Prepared By: Silva, Amanda
Description: 1:1 HCl WARNING
Prep Date: 7/7/2020
Expiration Date: 1/7/2021
Department: Metals
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13275	hydrochloric acid	500 ml	neat neat	

Veritech Lot Number: V-331982

Prepared By: Cousineau, Paul
Description: B, Si, Ce INTERMEDIATE
Prep Date: 7/23/2020
Expiration Date: 10/23/2020
Department: Metals
BatchNumber:
Concentration: 100 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 07/28/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	5 ml	neat neat	
13169	hydrochloric acid	5 ml	neat neat	
12976	BORON	10 ml	CONC conc	100 ppm
12977	SILICON	10 ml	CONC conc	100 ppm
13092	CERIUM	10 ml	CONC conc	100 ppm

Veritech Lot Number: V-333660

Prepared By: Aliano, Carmela
Description: LRS 1/2 Fe
Prep Date: 8/24/2020
Expiration Date: 10/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	335 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12915	LINEAR RANGE 1B	50 ml	neat neat	
12917	linear range 1C	50 ml	neat neat	
13092	CERIUM	12.5 ml	CONC conc	
12976	BORON	2.5 ml	CONC conc	
12977	SILICON	12.5 ml	CONC conc	

Veritech Lot Number: V-333665

Prepared By: Aliano, Carmela
Description: ICS4 High std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: various mg/l
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	434.5 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	1
12977	SILICON	5 ml	CONC conc	10

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333666

Prepared By: Aliano, Carmela
Description: ICS3 - Middle Std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	944.75 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	.5
12977	SILICON	5 ml	CONC conc	5
13092	CERIUM	5 ml	CONC conc	5

Veritech Lot Number: V-333667

Prepared By: Aliano, Carmela
Description: ICB/CCB
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: 0 mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	

Veritech Lot Number: V-333668

Prepared By: Aliano, Carmela
Description: ICSA
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: MULTI mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13176	ICSA	50 ml	NEAT neat	

Veritech Lot Number: V-333672

Prepared By: Aliano, Carmela
Description: LLICV/CCV leachate
Prep Date: 8/24/2020
Expiration Date: 10/30/2020
Department: WetChem
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
12918	LL-LEACH	10 ml	neat neat	
12976	BORON	.2 ml	CONC conc	0.2 ppm
12977	SILICON	.05 ml	CONC conc	0.05 ppm
13092	CERIUM	.05 ml	CONC conc	0.05 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333673

Prepared By: Aliano, Carmela	Department: Metals	ApprovedBy: carmela	
Description: CCV	BatchNumber:	ApproveDate: 08/24/20	
Prep Date: 8/24/2020	Concentration: MULTI multi	Checked: Yes	
Expiration Date: 2/20/2021	Final Volume: 1000 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13171	ICV 1	10 ml	NEAT neat	
13170	ICV 2	10 ml	CONC conc	
12981	BORON	.5 ml	CONC conc	
13091	CERIUM	5 ml	CONC conc	
12933	silicon	5 ml	CONC conc	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12915

Description
LINEAR RANGE 1B

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-40-500	7/271ab	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12917

Description
linear range 1C

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
spex	XHCV-44-500	8-002AB	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12918

Description
LL-LEACH

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
spex	XHCV-25-500	8-001AB	10/19/19	10/30/20	Aliano, Carmela	1	500ml	neat	neat

Veritech Control/Receipt Number: 12933

Description
silicon

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-145	S191206040	12/13/19	12/30/21	Aliano, Carmela	4	500m	CONC	CONC

Veritech Control/Receipt Number: 12976

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLB9-2X	24-110BX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12977

Description
SILICON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLSI9-2X	24-93SIX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12981

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-055	S190719015	01/06/20	07/30/21	Aliano, Carmela	3	500ml	CONC	CONC

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12983

Description: CALIBRATION 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	8/214AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 12984

Description: CALIBRATION 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	8/215AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 13084

Description: DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13091

Description: CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-051-585	S190710006	03/04/20	07/30/21	Aliano, Carmela	2	500ml	CONC	CONC

Veritech Control/Receipt Number: 13092

Description: CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLCE2-2X	24-15CEX	03/04/20	02/28/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13168

Description: nitric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	245675	04/07/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13169

Description: hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	04/07/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13170

Description
ICV 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S200306032	04/07/20	03/31/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13171

Description
ICV 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S200306031	04/07/20	03/31/21	Aliano, Carmela	2	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13176

Description
ICSA

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-30	9-265AB	04/07/20	03/31/21	Aliano, Carmela	4	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13275

Description
hydrochloric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	06/02/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy: jessica
ApproveDate: 09/21/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334615

Prepared By: Ransaw, Brianna | Department: Metals | ApprovedBy: shiamala
Description: Hg Intermediate Standard -WARNING | BatchNumber: B-29664 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: .25 ppm | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 500 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13311	MERCURY 1000 PPM	.125 ml	1000 ug/ml	
13421	nitric acid	12.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334616

Prepared By: Ransaw, Brianna | Department: Metals | ApprovedBy: shiamala
Description: Hg intermediate Control -WARNING | BatchNumber: B-29664 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 1.0 ppm | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334672

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ ICV 20 ppb | BatchNumber: B-29669 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 20 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334616	Hg intermediate Control -WARNING	.5 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334673

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ CCV 10 ppb | BatchNumber: B-29669 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 10 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334616	Hg intermediate Control -WARNING	.25 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334674

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard blk | BatchNumber: B-29669 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 0 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334675

Prepared By: Silva, Amanda
Description: Hg AQ standard .2 ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29669
Concentration: .2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.02 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334676

Prepared By: Silva, Amanda
Description: Hg AQ standard .5 ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29669
Concentration: .5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.05 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334677

Prepared By: Silva, Amanda
Description: Hg AQ standard 1 ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29669
Concentration: 1 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334678

Prepared By: Silva, Amanda
Description: Hg AQ standard 2 ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29669
Concentration: 2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.2 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334679

Prepared By: Silva, Amanda
Description: Hg AQ standard 5 ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29669
Concentration: 5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.5 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334680

Prepared By: Silva, Amanda
Description: Hg AQ standard 10 ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29669
Concentration: 10 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	1 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334681

Prepared By:	Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description:	Hg AQ standard 25 ppb	BatchNumber: B-29669	ApproveDate: 09/15/20
Prep Date:	9/11/2020	Concentration: 25 ppb	Checked: Yes
Expiration Date:	9/11/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	2.5 ml	.25 ppm	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13311

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP	140-051-801	S200130001	06/04/20	12/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-317822

Prepared By: Aliano, Carmela | Department: Metals | ApprovedBy: shiamala
Description: Hydroxylamine Hydrochloride WARNIN | BatchNumber: | ApproveDate: 12/16/19
Prep Date: 12/13/2019 | Concentration: reagent reage | Checked: Yes
Expiration Date: 1/8/2020 | Final Volume: 10 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12651	DI H2O			
12218	Sodium Chloride	1200 g	neat neat	
12619	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-327154

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: 5% Potassium Persulfate WARNING | BatchNumber: | ApproveDate: 05/07/20
Prep Date: 5/7/2020 | Concentration: reagent reage | Checked: Yes
Expiration Date: 11/6/2020 | Final Volume: 12620 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12620	POTASSIUM PERSULFATE	500 g	NEAT neat	

Veritech Lot Number: V-331286

Prepared By: Lucca, Daniela | Department: Metals | ApprovedBy: shiamala
Description: 5% Potassium Permanganate WARNIN | BatchNumber: | ApproveDate: 07/16/20
Prep Date: 7/13/2020 | Concentration: reagent reage | Checked: Yes
Expiration Date: 2/13/2021 | Final Volume: 20 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12621	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-334616

Prepared By: Ransaw, Brianna | Department: Metals | ApprovedBy: shiamala
Description: Hg intermediate Control -WARNING | BatchNumber: B-29664 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 1.0 ppm | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334627

Prepared By: Ransaw, Brianna | Department: WetChem | ApprovedBy: shiamala
Description: 3% HCL WARNING | BatchNumber: | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 3 % | Checked: Yes
Expiration Date: 9/20/2020 | Final Volume: 20 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13130	hydrochloric acid	600 ml	neat neat	3%
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334715

Prepared By:	Ransaw, Brianna	Department:	Metals	ApprovedBy:	shiamala
Description:	SnCl2 "WARNING:"	BatchNumber:		ApproveDate:	09/15/20
Prep Date:	9/14/2020	Concentration:	reagent I	Checked:	Yes
Expiration Date:	9/14/2020	Final Volume:	2 l		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334627	3% HCL WARNING	2000 ml	3 %	
13089	STANNOUS CHOLORIDE	26.4 g		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12218

Description
Sodium Chloride

ApprovedBy: akmal
ApproveDate: 12/31/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	SX0420-5	17F145203	12/27/18	12/26/23	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12619

Description
HYDROXYLAMINE HYDROCHLORIDE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LS-1580015	190318-4C	06/25/19	06/24/23	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12620

Description
POTASSIUM PERSULFATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-4445NG	170106-A	06/25/19	08/09/21	Balashanthan, Shi	1	2.5KG	NEAT	NEAT

Veritech Control/Receipt Number: 12621

Description
POTASSIUM PERMANGANATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-T10208	190318-3C	06/25/19	06/24/29	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12651

Description
DI H2O

ApprovedBy: janee
ApproveDate: 10/10/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	07/08/19	07/07/20	Cousineau, Paul	1			

Veritech Control/Receipt Number: 13084

Description
DI H2O

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13089

Description
STANNOUS CHOLORIDE

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB CHEM	LC-P33805	190620-3C	02/15/20	02/14/23	Aliano, Carmela	1	1Gal		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\T26209A4.txt

Analysis Date: 09/11/20 **Instrument:** PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	17:51	1							V-333667(ICB/CCB)
CALST2 V-333672	1	CAL	17:55	2							V-333672(LLICV/CCV leachate)
CALST3 V-333666	1	CAL	17:59	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	18:03	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	18:07	5							V-333673(CCV)
ICB V-333667	1	ICB	18:11	6							V-333667(ICB/CCB)
LRS V-333660	1	NA	18:15	7		TCLP	TCLP	SW846	85267		V-333660(LRS 1/2 Fe)
ICS3 V-333666	1	ICS	18:19	8							V-333666(ICS3 - Middle Std)
LRS V-333660	1	LRS	18:23	9		TCLP	TCLP	SW846	85267		V-333660(LRS 1/2 Fe)
RINSE	1	SMP	18:28	10		TCLP	TCLP	SW846	85267		0
LLICV V-333672	1	LLICV	18:32	11		TCLP	TCLP	SW846	85267		V-333672(LLICV/CCV leachate)
ICSA V-333668	1	ICSA	18:36	12							V-333668(ICSA)
CCV V-333673	1	CCV	18:40	13							V-333673(CCV)
CCB V-333667	1	CCB	18:44	14							V-333667(ICB/CCB)
MB 85267 (1)	1	MB	18:48	15		TCLP	TCLP	SW846	85267		0
LCSW 85267	1	LCS	18:52	16		TCLP	TCLP	SW846	85267		0
LCSW MR 85267	1	LCS	18:56	17		TCLP	TCLP	SW846	85267		0
AD19159-004	1	SMP	19:00	18		TCLP	TCLP	SW846	85267	Se/Zn NOT REPORTED>LR	0
AD19159-004	1	MR	19:05	19	METALS-TCLP	TCLP	TCLP	SW846	85267	Se/Zn NOT REPORTED>LR	0
AD19159-005	1	MS	19:09	20	METALS-TCLP	TCLP	TCLP	SW846	85267	Se/Zn NOT REPORTED>LR	0
AD19159-006	1	MSD	19:13	21	METALS-TCLP	TCLP	TCLP	SW846	85267	Se/Zn NOT REPORTED>LR	0
AD19159-004	1	PS	19:17	22	METALS-TCLP	TCLP	TCLP	SW846	85267	Se/Zn NOT REPORTED>LR	0
AD19159-004	5	SD	19:22	23	METALS-TCLP	TCLP	TCLP	SW846	85267	Se/Zn NOT REPORTED>LR	0
AD19143-001	1	SMP	19:26	24	METALS-TCLP	TCLP	TCLP	SW846	85267		0
CCV V-333673	1	CCV	19:30	25							V-333673(CCV)
CCB V-333667	1	CCB	19:34	26							V-333667(ICB/CCB)
AD19139-001	1	SMP	19:38	27	METALS-TCLP	TCLP	TCLP	SW846	85267		0
AD19139-004	1	SMP	19:42	28	METALS-TCLP	TCLP	TCLP	SW846	85267		0
AD19148-002	1	SMP	19:46	29	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	0
AD19084-001	1	SMP	19:50	30	METALS-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-001	1	SMP	19:54	31	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	0
AD19159-002	1	SMP	19:59	32	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	0
AD19159-003	1	SMP	20:03	33	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	0
AD19159-007	1	SMP	20:07	34	METALS-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-008	1	SMP	20:11	35	METALS-TCLP	TCLP	TCLP	SW846	85267		0
CCV V-333673	1	CCV	20:16	36							V-333673(CCV)
CCB V-333667	1	CCB	20:20	37							V-333667(ICB/CCB)
AD19159-009	1	SMP	20:24	38	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	0
AD19159-010	1	SMP	20:28	39	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	0
AD19159-011	1	SMP	20:32	40	METALS-TCLP	TCLP	TCLP	SW846	85267		0
AD19160-001	1	SMP	20:36	41	METALS-TCLP	TCLP	TCLP	SW846	85267		0
AD19160-002	1	SMP	20:40	42	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	0
EF V-334254 9/10	1	EF	20:45	43		TCLP	TCLP	SW846	85267		V-334254 9/10()
EF V-334254-9/11	1	EF	20:49	44		TCLP	TCLP	SW846	85267		V-334254-9/11()
CCV V-333673	1	CCV	20:53	45							V-333673(CCV)
CCB V-333667	1	CCB	20:57	46							V-333667(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.89 9/14/2020 8:43:35 AM

OK
ALL ELEMENTS REPORTED

9/16/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\T26209B4.txt

Analysis Date: 09/14/20 **Instrument:** PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	09:20	1							V-333667(ICB/CCB)
CALST2 V-333672	1	CAL	09:24	2							V-333672(LLICV/CCV leachate)
CALST3 V-333666	1	CAL	09:28	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	09:32	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	09:37	5							V-333673(CCV)
ICB V-333667	1	ICB	09:41	6							V-333667(ICB/CCB)
LRS V-333660	1	LRS	09:45	7	METALS-TCLP	TCLP	TCLP	SW846	85267		V-333660(LRS 1/2 Fe)
ICS3 V-333666	1	ICS	09:50	8							V-333666(ICS3 - Middle Std)
RINSE	1	SMP	09:54	9		TCLP	TCLP	SW846	85267		0
LLICV V-333672	1	LLICV	09:57	10	METALS-TCLP	TCLP	TCLP	SW846	85267		V-333672(LLICV/CCV leachate)
ICSA V-333668	1	ICSA	10:01	11							V-333668(ICSA)
CCV V-333673	1	CCV	10:06	12							V-333673(CCV)
CCB V-333667	1	CCB	10:10	13							V-333667(ICB/CCB)
AD19159-004	4	SMP	10:14	14	METALS-TCLP	TCLP	TCLP	SW846	85267	Se,Zn REPORTED	0
AD19159-004	4	MR	10:18	15	METALS-TCLP	TCLP	TCLP	SW846	85267	Se,Zn REPORTED	0
AD19159-005	4	MS	10:23	16	METALS-TCLP	TCLP	TCLP	SW846	85267	Se,Zn REPORTED	0
AD19159-006	4	MSD	10:27	17	METALS-TCLP	TCLP	TCLP	SW846	85267	Se,Zn REPORTED	0
AD19159-004	4	PS	10:31	18	METALS-TCLP	TCLP	TCLP	SW846	85267	Se,Zn REPORTED	0
AD19159-004	4	SD	10:35	19	METALS-TCLP	TCLP	TCLP	SW846	85267	Se,Zn REPORTED	0
CCV V-333673	1	CCV	10:39	20							V-333673(CCV)
CCB V-333667	1	CCB	10:43	21							V-333667(ICB/CCB)
AD19148-002	4	SMP	10:47	22	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	0
AD19159-001	4	SMP	10:52	23	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	0
AD19159-002	4	SMP	10:56	24	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	0
AD19159-003	4	SMP	11:00	25	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	0
AD19159-009	4	SMP	11:04	26	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	0
AD19159-010	4	SMP	11:08	27	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	0
AD19160-002	4	SMP	11:12	28	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	0
CCV V-329036	1	CCV	11:17	29							V-329036(CCV)
CCB V-329027	1	CCB	11:21	30							V-329027(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.89 9/14/2020 12:49:04 PM

OK

9/16/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26209T.txt

Analysis Date: 09/14/20

Instrument: HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	11:02	1							0
.2 PPB	1	CAL	11:03	2							0
.5 PPB	1	CAL	11:04	3							0
1 PPB	1	CAL	11:06	4							0
2 PPB	1	CAL	11:07	5							0
5 PPB	1	CAL	11:08	6							0
10 PPB	1	CAL	11:10	7							0
25 PPB	1	CAL	11:11	8							0
ICV (2)	1	ICV	11:13	9							0
ICB	1	ICB	11:15	10							0
MB 85267 (1)	1	MB	11:16	11	HG-TCLP	TCLP	TCLP	SW846	85267		0
LCS 85267	1	LCS	11:18	12	HG-TCLP	TCLP	TCLP	SW846	85267		0
LCS 85267 MR	1	LCS	11:19	13	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-004	1	SMP	11:21	14	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-004	1	MR	11:22	15	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-005	1	MS	11:24	16	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-006	1	MSD	11:25	17	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19139-001	1	SMP	11:27	18	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19139-004	1	SMP	11:29	19	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19143-001	1	SMP	11:30	20	HG-TCLP	TCLP	TCLP	SW846	85267		0
CCV	1	CCV	11:31	21							0
CCB	1	CCB	11:33	22							0
AD19148-002	1	SMP	11:34	23	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19084-001	1	SMP	11:36	24	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-001	1	SMP	11:37	25	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-002	1	SMP	11:38	26	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-003	1	SMP	11:40	27	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-007	1	SMP	11:41	28	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-008	1	SMP	11:42	29	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-009	1	SMP	11:44	30	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-010	1	SMP	11:45	31	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-011	1	SMP	11:46	32	HG-TCLP	TCLP	TCLP	SW846	85267		0
CCV	1	CCV	11:48	33							0
CCB	1	CCB	11:49	34							0
AD19160-001	1	SMP	11:51	35	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19160-002	1	SMP	11:52	36	HG-TCLP	TCLP	TCLP	SW846	85267		0
EF V-334254 A	1	EF	11:53	37	HG-TCLP	TCLP	TCLP	SW846	85267		V-334254 A(EF-I WARNING)
EF V-334254 B	1	EF	11:55	38	HG-TCLP	TCLP	TCLP	SW846	85267		V-334254 B(EF-I WARNING)
CCV	1	CCV	11:56	39							0
CCB	1	CCB	11:58	40							0

Comments/Reviewedby:

DLUCCA
192.168.1.87 9/14/2020 2:59:42 PM

OK

9/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334715

Method: PE 4 8300DV LEACH AX Page 1 Date: 9/11/2020 5:54:03 PM

T26209A4 26209/85267

Analysis Begun

leach CJN 9/14/20

Start Time: 9/11/2020 5:50:08 PM
Logged In Analyst: usermet
Spectrometer: Optima 8300 , S/N No Serial #
Plasma On Time: 9/11/2020 5:41:04 PM
Technique: ICP Continuous
Autosampler: S10

Sample Information File: C:\Users\Public\PerkinElmer\ICP\Data\Sample Information\09.10.20.sif
Batch ID: ICP4
Results Data Set: T26209A4
Results Library: C:\Users\Public\PerkinElmer\ICP\Data\Results\Results.mdb

9/16/20

Sequence No.: 1
Sample ID: CALBLK V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time:
Autosampler Location: 1
Date Collected: 9/11/2020 5:51:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-333667

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	52208.9	604.63	1.16%	100	%
Y 371.029	17298.5	164.64	0.95%	100	%
Ag 328.068†	-19.0	3.83	20.11%	[0.00]	mg/L
Al 308.215†	83.7	7.23	8.64%	[0.00]	mg/L
As 188.979†	-2.2	0.66	30.37%	[0.00]	mg/L
Ba 233.527†	-2.0	1.50	73.98%	[0.00]	mg/L
Be 313.107†	-415.0	16.86	4.06%	[0.00]	mg/L
Ca 315.887†	-152.3	27.37	17.98%	[0.00]	mg/L
Cd 228.802†	18.6	1.49	8.03%	[0.00]	mg/L
Co 228.616†	-2.4	0.75	30.74%	[0.00]	mg/L
Cr 267.716†	3.9	1.39	35.40%	[0.00]	mg/L
Cu 327.393†	-239.4	4.20	1.75%	[0.00]	mg/L
Fe 273.955†	0.3	1.61	484.57%	[0.00]	mg/L
K 404.721†	-37.2	3.08	8.28%	[0.00]	mg/L
Mg 279.077†	-5.6	1.72	30.56%	[0.00]	mg/L
Mn 257.610†	20.2	1.02	5.06%	[0.00]	mg/L
Mo 202.031†	3.6	1.47	40.94%	[0.00]	mg/L
Na 330.237†	16.7	5.54	33.17%	[0.00]	mg/L
Ni 231.604†	56.5	0.65	1.15%	[0.00]	mg/L
Pb 220.353†	-1.0	1.17	118.47%	[0.00]	mg/L
Sb 206.836†	3.0	0.45	14.91%	[0.00]	mg/L
Se 196.026†	5.2	1.07	20.34%	[0.00]	mg/L
Sn 189.927†	1.4	0.72	51.63%	[0.00]	mg/L
Ti 334.940†	21.9	1.13	5.16%	[0.00]	mg/L
Tl 190.801†	-1.1	1.60	144.40%	[0.00]	mg/L
V 290.880†	46.3	1.66	3.58%	[0.00]	mg/L
Zn 206.200†	4.1	1.32	32.35%	[0.00]	mg/L
B 249.772	78.2	1.38	1.76%	[0.00]	mg/L
Si 251.611	41.0	2.07	5.05%	[0.00]	mg/L

26209/85267

All reported

+QC
19159-004,-005,-006
Zn NOT Reported

19159-004 +QC
19148-002
19159-001,-002,-003,
-009,-010
19160-002
Se NOT Reported

Sequence No.: 2
Sample ID: CALST2 V-333672
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 9/11/2020 5:55:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST2 V-333672

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	51625.5	402.30	0.78%	98.9	%
Y 371.029	16453.4	101.56	0.62%	95.1	%
Ag 328.068†	530.0	11.20	2.11%	[0.05]	mg/L
Al 308.215†	1162.0	15.60	1.34%	[1]	mg/L
As 188.979†	8.3	0.91	10.87%	[0.1]	mg/L
Ba 233.527†	2041.9	20.28	0.99%	[0.25]	mg/L
Be 313.107†	2450.5	29.37	1.20%	[0.012]	mg/L
Ca 315.887†	13047.2	26.84	0.21%	[5]	mg/L
Cd 228.802†	98.3	1.51	1.53%	[0.05]	mg/L
Co 228.616†	183.6	1.46	0.80%	[0.1]	mg/L
Cr 267.716†	502.7	11.27	2.24%	[0.1]	mg/L
Cu 327.393†	762.7	14.54	1.91%	[0.1]	mg/L
Fe 273.955†	431.1	7.69	1.78%	[1]	mg/L
K 404.721†	19.2	1.24	6.46%	[5]	mg/L
Mg 279.077†	4107.2	19.66	0.48%	[5]	mg/L
Mn 257.610†	2345.1	23.50	1.00%	[0.1]	mg/L
Mo 202.031†	102.4	1.05	1.02%	[0.1]	mg/L
Na 330.237†	766.8	4.15	0.54%	[25]	mg/L
Ni 231.604†	235.3	1.72	0.73%	[0.1]	mg/L
Pb 220.353†	24.5	1.13	4.62%	[0.05]	mg/L
Sb 206.836†	9.7	0.50	5.20%	[0.07]	mg/L
Se 196.026†	17.9	1.74	9.71%	[0.1]	mg/L
Sn 189.927†	36.7	1.49	4.07%	[0.1]	mg/L
Ti 334.940†	2345.1	24.80	1.06%	[0.1]	mg/L
Tl 190.801†	14.1	0.76	5.37%	[0.1]	mg/L
V 290.880†	429.7	5.10	1.19%	[0.1]	mg/L
Zn 206.200†	277.8	5.80	2.09%	[0.1]	mg/L
B 249.772	881.3	6.57	0.75%	[0.2]	mg/L
Si 251.611	195.8	1.21	0.62%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-333666
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 3
Date Collected: 9/11/2020 5:59:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST3 V-333666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	47866.6	192.78	0.40%	91.7	%
Y 371.029	15328.4	188.52	1.23%	88.6	%
Ag 328.068†	1114.2	3.83	0.34%	[0.10]	mg/L
Al 308.215†	5339.6	5.10	0.10%	[5.0]	mg/L
As 188.979†	39.9	1.16	2.90%	[0.50]	mg/L
Ba 233.527†	3799.0	15.45	0.41%	[0.50]	mg/L
Be 313.107†	106374.7	104.61	0.10%	[0.50]	mg/L
Ca 315.887†	137930.4	494.89	0.36%	[50]	mg/L
Cd 228.802†	1016.9	3.83	0.38%	[0.50]	mg/L
Co 228.616†	967.5	1.24	0.13%	[0.50]	mg/L
Cr 267.716†	2678.7	15.63	0.58%	[0.50]	mg/L
Cu 327.393†	3636.5	9.53	0.26%	[0.50]	mg/L
Fe 273.955†	2253.6	6.69	0.30%	[5.0]	mg/L
K 404.721†	843.2	8.02	0.95%	[50]	mg/L
Mg 279.077†	42444.1	56.77	0.13%	[50]	mg/L
Mn 257.610†	10852.6	30.69	0.28%	[0.50]	mg/L
Mo 202.031†	537.9	1.52	0.28%	[0.50]	mg/L
Na 330.237†	1810.5	6.40	0.35%	[50]	mg/L
Ni 231.604†	1210.4	8.39	0.69%	[0.50]	mg/L
Pb 220.353†	240.1	1.92	0.80%	[0.50]	mg/L
Sb 206.836†	67.2	1.48	2.20%	[0.50]	mg/L
Se 196.026†	91.3	1.97	2.16%	[0.50]	mg/L
Sn 189.927†	190.6	2.13	1.12%	[0.50]	mg/L
Ti 334.940†	10498.8	88.88	0.85%	[0.50]	mg/L
Tl 190.801†	73.5	1.16	1.57%	[0.50]	mg/L
V 290.880†	2130.5	1.04	0.05%	[0.50]	mg/L
Zn 206.200†	1452.7	4.29	0.30%	[0.50]	mg/L
B 249.772	2221.2	6.93	0.31%	[0.50]	mg/L
Si 251.611	7295.8	33.86	0.46%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-333665
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 4
Date Collected: 9/11/2020 6:03:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST4 V-333665

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	47730.1	552.58	1.16%	91.4	%
Y 371.029	14939.4	273.80	1.83%	86.4	%
Ag 328.068†	2244.4	36.44	1.62%	[0.20]	mg/L
Al 308.215†	10556.5	22.27	0.21%	[10]	mg/L
As 188.979†	76.8	1.38	1.80%	[1.00]	mg/L
Ba 233.527†	7384.6	19.42	0.26%	[1.00]	mg/L
Be 313.107†	211095.2	550.88	0.26%	[1.00]	mg/L
Ca 315.887†	277506.4	857.64	0.31%	[100]	mg/L
Cd 228.802†	2092.3	19.63	0.94%	[1.00]	mg/L
Co 228.616†	1916.8	25.91	1.35%	[1.00]	mg/L
Cr 267.716†	5068.6	7.44	0.15%	[1.00]	mg/L
Cu 327.393†	7150.5	14.04	0.20%	[1.00]	mg/L
Fe 273.955†	3944.1	20.93	0.53%	[10.0]	mg/L
K 404.721†	1673.0	13.77	0.82%	[100]	mg/L
Mg 279.077†	84316.7	266.73	0.32%	[100]	mg/L
Mn 257.610†	21087.8	31.51	0.15%	[1.00]	mg/L
Mo 202.031†	1075.8	7.80	0.73%	[1.00]	mg/L
Na 330.237†	3360.0	2.69	0.08%	[100]	mg/L
Ni 231.604†	2401.0	31.94	1.33%	[1.00]	mg/L
Pb 220.353†	470.2	6.06	1.29%	[1.00]	mg/L
Sb 206.836†	129.7	2.57	1.98%	[1.00]	mg/L
Se 196.026†	183.0	2.99	1.63%	[1.00]	mg/L
Sn 189.927†	379.7	5.71	1.50%	[1.00]	mg/L
Ti 334.940†	20574.9	75.99	0.37%	[1.00]	mg/L
Tl 190.801†	142.9	4.06	2.84%	[1.00]	mg/L
V 290.880†	3990.2	18.79	0.47%	[1.00]	mg/L
Zn 206.200†	2881.4	35.64	1.24%	[1.00]	mg/L
B 249.772	4124.2	55.41	1.34%	[1.00]	mg/L
Si 251.611	14347.4	189.60	1.32%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-14.0	11270	0.00000	0.999893	
Al 308.215	3	Lin, Calc Int	58.6	1051	0.00000	0.999949	
As 188.979	3	Lin, Calc Int	0.6	76.77	0.00000	0.999788	
Ba 233.527	3	Lin, Calc Int	99.7	7330	0.00000	0.999572	
Be 313.107	3	Lin, Calc Int	113.1	211300	0.00000	0.999991	
Ca 315.887	3	Lin, Calc Int	-523.9	2778	0.00000	0.999994	
Cd 228.802	3	Lin, Calc Int	-8.2	2091	0.00000	0.999899	
Co 228.616	3	Lin, Calc Int	-1.9	1922	0.00000	0.999972	
Cr 267.716	3	Lin, Calc Int	24.9	5094	0.00000	0.999517	
Cu 327.393	3	Lin, Calc Int	32.5	7137	0.00000	0.999953	
Fe 273.955	3	Lin, Calc Int	68.5	397.2	0.00000	0.997209	
K 404.721	3	Lin, Calc Int	-27.8	17.07	0.00000	0.999321	
Mg 279.077	3	Lin, Calc Int	3.4	844.2	0.00000	0.999992	
Mn 257.610	3	Lin, Calc Int	162.1	21020	0.00000	0.999864	
Mo 202.031	3	Lin, Calc Int	-2.3	1078	0.00000	0.999989	
Na 330.237	3	Lin, Calc Int	-3.2	34.00	0.00000	0.998367	
Ni 231.604	3	Lin, Calc Int	-0.3	2405	0.00000	0.999985	
Pb 220.353	3	Lin, Calc Int	1.4	470.6	0.00000	0.999941	
Sb 206.836	3	Lin, Calc Int	0.7	129.8	0.00000	0.999821	
Se 196.026	3	Lin, Calc Int	-0.2	183.2	0.00000	0.999998	
Sn 189.927	3	Lin, Calc Int	-0.4	380.4	0.00000	0.999990	
Ti 334.940	3	Lin, Calc Int	166.8	20470	0.00000	0.999888	
Tl 190.801	3	Lin, Calc Int	0.3	143.4	0.00000	0.999878	
V 290.880	3	Lin, Calc Int	38.7	3997	0.00000	0.999377	
Zn 206.200	3	Lin, Calc Int	-2.4	2888	0.00000	0.999979	

B 249.772	3	Lin, Calc Int	54.5	4123	0.00000	0.999126
Si 251.611	3	Lin, Calc Int	45.9	1434	0.00000	0.999964

Sequence No.: 5
Sample ID: ICV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 85

Autosampler Location: 6
Date Collected: 9/11/2020 6:07:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	49023.7	93.9	%	0.27				0.28%
Y 371.029	15770.9	91.2	%	0.27				0.30%
Ag 328.068†	1068.1	0.0989037	mg/L	0.00068800	0.0989037	mg/L	0.00068800	0.70%
QC value within limits for Ag 328.068 Recovery = 98.90%								
Al 308.215†	5204.5	4.90850	mg/L	0.013242	4.90850	mg/L	0.013242	0.27%
QC value within limits for Al 308.215 Recovery = 98.17%								
As 188.979†	40.8	0.500387	mg/L	0.0132417	0.500387	mg/L	0.0132417	2.65%
QC value within limits for As 188.979 Recovery = 100.08%								
Ba 233.527†	3681.4	0.488658	mg/L	0.0010626	0.488658	mg/L	0.0010626	0.22%
QC value within limits for Ba 233.527 Recovery = 97.73%								
Be 313.107†	103010.2	0.486998	mg/L	0.0012727	0.486998	mg/L	0.0012727	0.26%
QC value within limits for Be 313.107 Recovery = 97.40%								
Ca 315.887†	133482.8	48.2397	mg/L	0.08048	48.2397	mg/L	0.08048	0.17%
QC value within limits for Ca 315.887 Recovery = 96.48%								
Cd 228.802†	984.8	0.474968	mg/L	0.0022869	0.474968	mg/L	0.0022869	0.48%
QC value within limits for Cd 228.802 Recovery = 94.99%								
Co 228.616†	931.7	0.485702	mg/L	0.0019629	0.485702	mg/L	0.0019629	0.40%
QC value within limits for Co 228.616 Recovery = 97.14%								
Cr 267.716†	2574.0	0.502756	mg/L	0.0004630	0.502756	mg/L	0.0004630	0.09%
QC value within limits for Cr 267.716 Recovery = 100.55%								
Cu 327.393†	3547.7	0.493044	mg/L	0.0008727	0.493044	mg/L	0.0008727	0.18%
QC value within limits for Cu 327.393 Recovery = 98.61%								
Fe 273.955†	2182.8	5.32347	mg/L	0.045132	5.32347	mg/L	0.045132	0.85%
QC value within limits for Fe 273.955 Recovery = 106.47%								
K 404.721†	816.8	-7.88081	mg/L	1.340710	-7.88081	mg/L	1.340710	17.01%
QC value less than the lower limit for K 404.721 Recovery = -15.76%								
Mg 279.077†	41095.5	48.6745	mg/L	0.09161	48.6745	mg/L	0.09161	0.19%
QC value within limits for Mg 279.077 Recovery = 97.35%								
Mn 257.610†	10527.5	0.493045	mg/L	0.0015302	0.493045	mg/L	0.0015302	0.31%
QC value within limits for Mn 257.610 Recovery = 98.61%								
Mo 202.031†	522.3	0.486475	mg/L	0.0051843	0.486475	mg/L	0.0051843	1.07%
QC value within limits for Mo 202.031 Recovery = 97.29%								
Na 330.237†	1754.3	51.6910	mg/L	0.18999	51.6910	mg/L	0.18999	0.37%
QC value within limits for Na 330.237 Recovery = 103.38%								
Ni 231.604†	1172.7	0.489100	mg/L	0.0032922	0.489100	mg/L	0.0032922	0.67%
QC value within limits for Ni 231.604 Recovery = 97.82%								
Pb 220.353†	230.3	0.487448	mg/L	0.0022472	0.487448	mg/L	0.0022472	0.46%
QC value within limits for Pb 220.353 Recovery = 97.49%								
Sb 206.836†	61.1	0.476739	mg/L	0.0170829	0.476739	mg/L	0.0170829	3.58%
QC value within limits for Sb 206.836 Recovery = 95.35%								
Se 196.026†	87.8	0.488893	mg/L	0.0260808	0.488893	mg/L	0.0260808	5.33%
QC value within limits for Se 196.026 Recovery = 97.78%								
Sn 189.927†	183.3	0.481155	mg/L	0.0043278	0.481155	mg/L	0.0043278	0.90%
QC value within limits for Sn 189.927 Recovery = 96.23%								
Ti 334.940†	10200.2	0.493822	mg/L	0.0011082	0.493822	mg/L	0.0011082	0.22%
QC value within limits for Ti 334.940 Recovery = 98.76%								
Tl 190.801†	71.7	0.494138	mg/L	0.0024830	0.494138	mg/L	0.0024830	0.50%
QC value within limits for Tl 190.801 Recovery = 98.83%								
V 290.880†	2059.1	0.508081	mg/L	0.0025441	0.508081	mg/L	0.0025441	0.50%
QC value within limits for V 290.880 Recovery = 101.62%								
Zn 206.200†	1392.0	0.482753	mg/L	0.0018550	0.482753	mg/L	0.0018550	0.38%
QC value within limits for Zn 206.200 Recovery = 96.55%								
B 249.772	2222.1	0.533036	mg/L	0.0026070	0.533036	mg/L	0.0026070	0.49%
QC value within limits for B 249.772 Recovery = 106.61%								
Si 251.611	7277.3	5.14502	mg/L	0.024619	5.14502	mg/L	0.024619	0.48%
QC value within limits for Si 251.611 Recovery = 102.90%								

QC Failed. Continue with analysis.

Sequence No.: 6
Sample ID: ICB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 1
Date Collected: 9/11/2020 6:11:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	52421.9	100	%	0.77				0.77%
Y 371.029	17205.0	99.5	%	0.94				0.94%
Ag 328.068†	0.9	0.0012684	mg/L	0.00063817	0.0012684	mg/L	0.00063817	50.31%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-1.5	-0.0575638	mg/L	0.00215963	-0.0575638	mg/L	0.00215963	3.75%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.2	0.0082519	mg/L	0.00297393	0.0082519	mg/L	0.00297393	36.04%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.3	-0.0136361	mg/L	0.00011077	-0.0136361	mg/L	0.00011077	0.81%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	32.0	-0.0003837	mg/L	0.00003725	-0.0003837	mg/L	0.00003725	9.71%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-33.1	0.176681	mg/L	0.0032465	0.176681	mg/L	0.0032465	1.84%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	1.2	0.0044972	mg/L	0.00023596	0.0044972	mg/L	0.00023596	5.25%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.2	0.0011008	mg/L	0.00038674	0.0011008	mg/L	0.00038674	35.13%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	2.7	-0.0044048	mg/L	0.00063160	-0.0044048	mg/L	0.00063160	14.34%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-7.6	-0.0056250	mg/L	0.00053900	-0.0056250	mg/L	0.00053900	9.58%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	1.2	-0.169332	mg/L	0.0035927	-0.169332	mg/L	0.0035927	2.12%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-6.3	3.08462	mg/L	0.341723	3.08462	mg/L	0.341723	11.08%
QC value greater than the upper limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	9.2	0.0068907	mg/L	0.00131206	0.0068907	mg/L	0.00131206	19.04%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	1.0	-0.0076649	mg/L	0.00009849	-0.0076649	mg/L	0.00009849	1.28%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.5	0.0016481	mg/L	0.00110663	0.0016481	mg/L	0.00110663	67.15%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-4.1	-0.0277249	mg/L	0.14543641	-0.0277249	mg/L	0.14543641	524.57%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	0.0	0.0001429	mg/L	0.00101605	0.0001429	mg/L	0.00101605	710.93%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.7	-0.0013619	mg/L	0.00308784	-0.0013619	mg/L	0.00308784	226.73%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.6	-0.0011785	mg/L	0.00197607	-0.0011785	mg/L	0.00197607	167.67%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.7	-0.0081236	mg/L	0.00923064	-0.0081236	mg/L	0.00923064	113.63%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.7	-0.0005866	mg/L	0.00318520	-0.0005866	mg/L	0.00318520	542.99%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	5.2	-0.0078816	mg/L	0.00003818	-0.0078816	mg/L	0.00003818	0.48%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.1	-0.0011037	mg/L	0.01235456	-0.0011037	mg/L	0.01235456	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	5.0	-0.0084305	mg/L	0.00135599	-0.0084305	mg/L	0.00135599	16.08%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-2.4	-0.0000295	mg/L	0.00052479	-0.0000295	mg/L	0.00052479	>999.9%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-3.9	-0.0138143	mg/L	0.00062769	-0.0138143	mg/L	0.00062769	4.54%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	1.1	-0.0327027	mg/L	0.00188689	-0.0327027	mg/L	0.00188689	5.77%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: LRS V-333660
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 13
Date Collected: 9/11/2020 6:15:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LRS V-333660

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	92146.6	176	%	0.65				0.37%
Saturated within auto integration window (code 4)								
Y 371.029	36972.7	214	%	3.75				1.76%
Ag 328.068†	11.9	0.0022031	mg/L	0.00012331	0.0022031	mg/L	0.00012331	5.60%
QC value less than the lower limit for Ag 328.068 Recovery = 0.22%								
Al 308.215†	-57.9	-0.111679	mg/L	0.0009553	-0.111679	mg/L	0.0009553	0.86%
QC value less than the lower limit for Al 308.215 Recovery = -0.02%								
As 188.979†	1.4	0.0116889	mg/L	0.00439207	0.0116889	mg/L	0.00439207	37.57%
QC value less than the lower limit for As 188.979 Recovery = 0.12%								
Ba 233.527†	1.0	-0.0134661	mg/L	0.00004023	-0.0134661	mg/L	0.00004023	0.30%
QC value less than the lower limit for Ba 233.527 Recovery = -0.13%								
Be 313.107†	258.8	0.0006899	mg/L	0.00003477	0.0006899	mg/L	0.00003477	5.04%
QC value less than the lower limit for Be 313.107 Recovery = 0.01%								
Ca 315.887†	76.4	0.216067	mg/L	0.0006828	0.216067	mg/L	0.0006828	0.32%
QC value less than the lower limit for Ca 315.887 Recovery = 0.04%								
Cd 228.802†	-6.6	0.0007703	mg/L	0.00033268	0.0007703	mg/L	0.00033268	43.19%
QC value less than the lower limit for Cd 228.802 Recovery = 0.02%								
Co 228.616†	1.3	0.0016945	mg/L	0.00007573	0.0016945	mg/L	0.00007573	4.47%
QC value less than the lower limit for Co 228.616 Recovery = 0.03%								
Cr 267.716†	-1.2	-0.0052026	mg/L	0.00054190	-0.0052026	mg/L	0.00054190	10.42%
QC value less than the lower limit for Cr 267.716 Recovery = -0.05%								
Cu 327.393†	-12.6	-0.0063296	mg/L	0.00103957	-0.0063296	mg/L	0.00103957	16.42%
QC value less than the lower limit for Cu 327.393 Recovery = -0.06%								
Fe 273.955†	-0.7	-0.174100	mg/L	0.0022749	-0.174100	mg/L	0.0022749	1.31%
QC value less than the lower limit for Fe 273.955 Recovery = -0.09%								
K 404.721†	-26.4	1.95779	mg/L	0.171766	1.95779	mg/L	0.171766	8.77%
QC value less than the lower limit for K 404.721 Recovery = 0.98%								
Mg 279.077†	2.9	-0.0006012	mg/L	0.00190965	-0.0006012	mg/L	0.00190965	317.65%
QC value less than the lower limit for Mg 279.077 Recovery = -0.00%								
Mn 257.610†	-10.2	-0.0081933	mg/L	0.00009078	-0.0081933	mg/L	0.00009078	1.11%
QC value less than the lower limit for Mn 257.610 Recovery = -0.08%								
Mo 202.031†	-2.5	-0.0001444	mg/L	0.00070805	-0.0001444	mg/L	0.00070805	490.44%
QC value less than the lower limit for Mo 202.031 Recovery = -0.00%								
Na 330.237†	-9.7	-0.192447	mg/L	0.0245574	-0.192447	mg/L	0.0245574	12.76%
QC value less than the lower limit for Na 330.237 Recovery = -0.02%								
Ni 231.604†	-24.9	-0.0102213	mg/L	0.00061054	-0.0102213	mg/L	0.00061054	5.97%
QC value less than the lower limit for Ni 231.604 Recovery = -0.10%								
Pb 220.353†	0.5	-0.0017709	mg/L	0.00148813	-0.0017709	mg/L	0.00148813	84.03%
QC value less than the lower limit for Pb 220.353 Recovery = -0.02%								
Sb 206.836†	-0.8	-0.0115598	mg/L	0.00045821	-0.0115598	mg/L	0.00045821	3.96%
QC value less than the lower limit for Sb 206.836 Recovery = -0.23%								
Se 196.026†	-2.5	-0.0127410	mg/L	0.00876079	-0.0127410	mg/L	0.00876079	68.76%
QC value less than the lower limit for Se 196.026 Recovery = -0.25%								
Sn 189.927†	-0.3	0.0003603	mg/L	0.00234144	0.0003603	mg/L	0.00234144	649.82%
QC value less than the lower limit for Sn 189.927 Recovery = 0.00%								
Ti 334.940†	-9.2	-0.0085803	mg/L	0.00002771	-0.0085803	mg/L	0.00002771	0.32%
QC value less than the lower limit for Ti 334.940 Recovery = -0.09%								
Tl 190.801†	0.2	-0.0003142	mg/L	0.00070793	-0.0003142	mg/L	0.00070793	225.30%
QC value less than the lower limit for Tl 190.801 Recovery = -0.01%								
V 290.880†	-28.0	-0.0166835	mg/L	0.00019997	-0.0166835	mg/L	0.00019997	1.20%
QC value less than the lower limit for V 290.880 Recovery = -0.17%								
Zn 206.200†	-3.9	-0.0005290	mg/L	0.00031178	-0.0005290	mg/L	0.00031178	58.94%
QC value less than the lower limit for Zn 206.200 Recovery = -0.01%								
B 249.772	-20.9	-0.0180600	mg/L	0.00064068	-0.0180600	mg/L	0.00064068	3.55%
QC value less than the lower limit for B 249.772 Recovery = -0.36%								
Si 251.611	-9.0	-0.0402351	mg/L	0.00147715	-0.0402351	mg/L	0.00147715	3.67%
QC value less than the lower limit for Si 251.611 Recovery = -0.16%								

QC Failed. Continue with analysis.

Sequence No.: 8 **Autosampler Location: 3**
Sample ID: ICS3 V-333666 **Date Collected: 9/11/2020 6:19:29 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	47782.6	91.5	%	0.25				0.27%
Y 371.029	15480.3	89.5	%	0.46				0.51%
Ag 328.068†	1099.7	0.101786	mg/L	0.0003747	0.101786	mg/L	0.0003747	0.37%
QC value within limits for Ag 328.068 Recovery = 101.79%								
Al 308.215†	5391.2	5.08638	mg/L	0.040698	5.08638	mg/L	0.040698	0.80%
QC value within limits for Al 308.215 Recovery = 101.73%								
As 188.979†	39.9	0.487556	mg/L	0.0189800	0.487556	mg/L	0.0189800	3.89%
QC value within limits for As 188.979 Recovery = 97.51%								
Ba 233.527†	3745.7	0.497431	mg/L	0.0008362	0.497431	mg/L	0.0008362	0.17%
QC value within limits for Ba 233.527 Recovery = 99.49%								
Be 313.107†	104378.3	0.493473	mg/L	0.0007430	0.493473	mg/L	0.0007430	0.15%
QC value within limits for Be 313.107 Recovery = 98.69%								
Ca 315.887†	135471.9	48.9557	mg/L	0.20064	48.9557	mg/L	0.20064	0.41%
QC value within limits for Ca 315.887 Recovery = 97.91%								
Cd 228.802†	1007.9	0.486019	mg/L	0.0003161	0.486019	mg/L	0.0003161	0.07%
QC value within limits for Cd 228.802 Recovery = 97.20%								
Co 228.616†	947.0	0.493641	mg/L	0.0018487	0.493641	mg/L	0.0018487	0.37%
QC value within limits for Co 228.616 Recovery = 98.73%								
Cr 267.716†	2639.4	0.515649	mg/L	0.0015773	0.515649	mg/L	0.0015773	0.31%
QC value within limits for Cr 267.716 Recovery = 103.13%								
Cu 327.393†	3619.1	0.503070	mg/L	0.0027242	0.503070	mg/L	0.0027242	0.54%
QC value within limits for Cu 327.393 Recovery = 100.61%								
Fe 273.955†	2261.9	5.52244	mg/L	0.021236	5.52244	mg/L	0.021236	0.38%
QC value greater than the upper limit for Fe 273.955 Recovery = 110.45%								
K 404.721†	828.1	-9.35710	mg/L	0.732766	-9.35710	mg/L	0.732766	7.83%
QC value less than the lower limit for K 404.721 Recovery = -18.71%								
Mg 279.077†	41472.3	49.1208	mg/L	0.12387	49.1208	mg/L	0.12387	0.25%
QC value within limits for Mg 279.077 Recovery = 98.24%								
Mn 257.610†	10716.8	0.502047	mg/L	0.0023132	0.502047	mg/L	0.0023132	0.46%
QC value within limits for Mn 257.610 Recovery = 100.41%								
Mo 202.031†	538.7	0.501758	mg/L	0.0039415	0.501758	mg/L	0.0039415	0.79%
QC value within limits for Mo 202.031 Recovery = 100.35%								
Na 330.237†	1819.0	53.5941	mg/L	0.33664	53.5941	mg/L	0.33664	0.63%
QC value within limits for Na 330.237 Recovery = 107.19%								
Ni 231.604†	1197.8	0.499588	mg/L	0.0013189	0.499588	mg/L	0.0013189	0.26%
QC value within limits for Ni 231.604 Recovery = 99.92%								
Pb 220.353†	234.9	0.497280	mg/L	0.0023689	0.497280	mg/L	0.0023689	0.48%
QC value within limits for Pb 220.353 Recovery = 99.46%								
Sb 206.836†	64.7	0.504996	mg/L	0.0105635	0.504996	mg/L	0.0105635	2.09%
QC value within limits for Sb 206.836 Recovery = 101.00%								
Se 196.026†	90.4	0.503644	mg/L	0.0007350	0.503644	mg/L	0.0007350	0.15%
QC value within limits for Se 196.026 Recovery = 100.73%								
Sn 189.927†	189.9	0.498590	mg/L	0.0015587	0.498590	mg/L	0.0015587	0.31%
QC value within limits for Sn 189.927 Recovery = 99.72%								
Ti 334.940†	10491.0	0.508082	mg/L	0.0018626	0.508082	mg/L	0.0018626	0.37%
QC value within limits for Ti 334.940 Recovery = 101.62%								
Tl 190.801†	71.3	0.491604	mg/L	0.0150438	0.491604	mg/L	0.0150438	3.06%
QC value within limits for Tl 190.801 Recovery = 98.32%								
V 290.880†	2114.8	0.522029	mg/L	0.0026468	0.522029	mg/L	0.0026468	0.51%
QC value within limits for V 290.880 Recovery = 104.41%								
Zn 206.200†	1417.1	0.491439	mg/L	0.0011332	0.491439	mg/L	0.0011332	0.23%
QC value within limits for Zn 206.200 Recovery = 98.29%								
B 249.772	2232.7	0.535330	mg/L	0.0026946	0.535330	mg/L	0.0026946	0.50%
QC value within limits for B 249.772 Recovery = 107.07%								
Si 251.611	7190.2	5.08655	mg/L	0.016668	5.08655	mg/L	0.016668	0.33%
QC value within limits for Si 251.611 Recovery = 101.73%								

QC Failed. Continue with analysis.

Sequence No.: 9 **Autosampler Location: 13**
Sample ID: LRS V-333660 **Date Collected: 9/11/2020 6:23:27 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: LRS V-333660

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44206.8	84.7	%	0.45				0.53%
Y 371.029	13149.6	76.0	%	0.83				1.09%
Ag 328.068†	10376.1	0.980899	mg/L	0.0030052	0.980899	mg/L	0.0030052	0.31%
Al 308.215†	540538.9	514.270	mg/L	4.7428	514.270	mg/L	4.7428	0.92%
As 188.979†	788.3	9.81108	mg/L	0.124233	9.81108	mg/L	0.124233	1.27%
Ba 233.527†	76028.9	10.3591	mg/L	0.00773	10.3591	mg/L	0.00773	0.07%
Be 313.107†	977355.9	4.62516	mg/L	0.042613	4.62516	mg/L	0.042613	0.92%
Ca 315.887†	1255664.4	452.203	mg/L	4.6198	452.203	mg/L	4.6198	1.02%
Cd 228.802†	10346.8	4.95325	mg/L	0.003926	4.95325	mg/L	0.003926	0.08%
Co 228.616†	8280.1	4.30869	mg/L	0.009974	4.30869	mg/L	0.009974	0.23%
Cr 267.716†	46048.9	9.07795	mg/L	0.020325	9.07795	mg/L	0.020325	0.22%
Cu 327.393†	76707.3	10.7620	mg/L	0.02081	10.7620	mg/L	0.02081	0.19%
Fe 273.955†	76333.4	192.017	mg/L	1.3591	192.017	mg/L	1.3591	0.71%
K 404.721†	4125.3	-1825.12	mg/L	14.272	-1825.12	mg/L	14.272	0.78%
Mg 279.077†	396285.0	469.404	mg/L	4.0294	469.404	mg/L	4.0294	0.86%
Mn 257.610†	198438.5	9.43128	mg/L	0.089965	9.43128	mg/L	0.089965	0.95%
Mo 202.031†	9904.6	9.18772	mg/L	0.014203	9.18772	mg/L	0.014203	0.15%
Na 330.237†	42386.9	1246.76	mg/L	6.837	1246.76	mg/L	6.837	0.55%
Ni 231.604†	20740.3	8.64968	mg/L	0.057552	8.64968	mg/L	0.057552	0.67%
Pb 220.353†	4384.4	9.37398	mg/L	0.090354	9.37398	mg/L	0.090354	0.96%
Sb 206.836†	655.7	5.26388	mg/L	0.055685	5.26388	mg/L	0.055685	1.06%
Se 196.026†	892.7	5.04237	mg/L	0.061496	5.04237	mg/L	0.061496	1.22%
Sn 189.927†	3693.1	9.67326	mg/L	0.116438	9.67326	mg/L	0.116438	1.20%
Ti 334.940†	200169.2	9.80496	mg/L	0.130391	9.80496	mg/L	0.130391	1.33%
Tl 190.801†	644.9	4.46542	mg/L	0.061181	4.46542	mg/L	0.061181	1.37%
V 290.880†	37032.1	9.27524	mg/L	0.009429	9.27524	mg/L	0.009429	0.10%
Zn 206.200†	24758.9	8.57275	mg/L	0.002214	8.57275	mg/L	0.002214	0.03%
B 249.772	21345.5	4.86077	mg/L	0.014684	4.86077	mg/L	0.014684	0.30%
Si 251.611	34148.5	25.7444	mg/L	0.17008	25.7444	mg/L	0.17008	0.66%

Sequence No.: 10
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 85

Autosampler Location: 14
Date Collected: 9/11/2020 6:28:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	52512.4	101	%	0.17				0.17%
Y 371.029	17278.5	99.9	%	0.29				0.29%
Ag 328.068†	7.4	0.0018501	mg/L	0.00025859	0.0018501	mg/L	0.00025859	13.98%
Al 308.215†	51.6	-0.0071081	mg/L	0.02218063	-0.0071081	mg/L	0.02218063	312.05%
As 188.979†	2.5	0.0258051	mg/L	0.01357805	0.0258051	mg/L	0.01357805	52.62%
Ba 233.527†	8.6	-0.0124277	mg/L	0.00042042	-0.0124277	mg/L	0.00042042	3.38%
Be 313.107†	109.4	-0.0000175	mg/L	0.00024592	-0.0000175	mg/L	0.00024592	>999.9%
Ca 315.887†	127.0	0.234289	mg/L	0.0222975	0.234289	mg/L	0.0222975	9.52%
Cd 228.802†	1.9	0.0048314	mg/L	0.00026074	0.0048314	mg/L	0.00026074	5.40%
Co 228.616†	3.0	0.0025319	mg/L	0.00060982	0.0025319	mg/L	0.00060982	24.09%
Cr 267.716†	4.7	-0.0040064	mg/L	0.00056090	-0.0040064	mg/L	0.00056090	14.00%
Cu 327.393†	-2.5	-0.0049175	mg/L	0.00095497	-0.0049175	mg/L	0.00095497	19.42%
Fe 273.955†	6.8	-0.155207	mg/L	0.0090075	-0.155207	mg/L	0.0090075	5.80%
K 404.721†	-8.2	2.82029	mg/L	0.450187	2.82029	mg/L	0.450187	15.96%
Mg 279.077†	37.7	0.0406275	mg/L	0.02130817	0.0406275	mg/L	0.02130817	52.45%
Mn 257.610†	19.0	-0.0068084	mg/L	0.00038946	-0.0068084	mg/L	0.00038946	5.72%
Mo 202.031†	2.1	0.0040324	mg/L	0.00174570	0.0040324	mg/L	0.00174570	43.29%
Na 330.237†	-4.6	-0.0402664	mg/L	0.07500491	-0.0402664	mg/L	0.07500491	186.27%
Ni 231.604†	1.2	0.0006168	mg/L	0.00123392	0.0006168	mg/L	0.00123392	200.04%
Pb 220.353†	0.7	-0.0013638	mg/L	0.00519786	-0.0013638	mg/L	0.00519786	381.13%
Sb 206.836†	1.2	0.0039162	mg/L	0.00173642	0.0039162	mg/L	0.00173642	44.34%
Se 196.026†	-0.3	-0.0007906	mg/L	0.01237123	-0.0007906	mg/L	0.01237123	>999.9%
Sn 189.927†	0.6	0.0027060	mg/L	0.00046564	0.0027060	mg/L	0.00046564	17.21%
Ti 334.940†	28.0	-0.0067637	mg/L	0.00070225	-0.0067637	mg/L	0.00070225	10.38%
Tl 190.801†	0.9	0.0045805	mg/L	0.01139622	0.0045805	mg/L	0.01139622	248.80%
V 290.880†	8.2	-0.0076194	mg/L	0.00101163	-0.0076194	mg/L	0.00101163	13.28%
Zn 206.200†	6.6	0.0031076	mg/L	0.00109386	0.0031076	mg/L	0.00109386	35.20%
B 249.772	70.7	0.0043252	mg/L	0.00321486	0.0043252	mg/L	0.00321486	74.33%
Si 251.611	3.7	-0.0301631	mg/L	0.00235051	-0.0301631	mg/L	0.00235051	7.79%

Sequence No.: 11
Sample ID: LLICV V-333672
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 9/11/2020 6:32:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LLICV V-333672

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	52378.9	100	%	0.44				0.44%
Y 371.029	16898.0	97.7	%	0.59				0.61%
Ag 328.068†	523.0	0.0481906	mg/L	0.00021777	0.0481906	mg/L	0.00021777	0.45%
QC value within limits for Ag 328.068 Recovery = 96.38%								
Al 308.215†	1142.5	1.03350	mg/L	0.008888	1.03350	mg/L	0.008888	0.86%
QC value within limits for Al 308.215 Recovery = 103.35%								
As 188.979†	9.9	0.117118	mg/L	0.0163176	0.117118	mg/L	0.0163176	13.93%
QC value within limits for As 188.979 Recovery = 117.12%								
Ba 233.527†	1995.4	0.258644	mg/L	0.0020571	0.258644	mg/L	0.0020571	0.80%
QC value within limits for Ba 233.527 Recovery = 103.46%								
Be 313.107†	2463.4	0.0111239	mg/L	0.00009594	0.0111239	mg/L	0.00009594	0.86%
QC value within limits for Be 313.107 Recovery = 92.70%								
Ca 315.887†	12780.0	4.78911	mg/L	0.014555	4.78911	mg/L	0.014555	0.30%
QC value within limits for Ca 315.887 Recovery = 95.78%								
Cd 228.802†	97.2	0.0504155	mg/L	0.00026790	0.0504155	mg/L	0.00026790	0.53%
QC value within limits for Cd 228.802 Recovery = 100.83%								
Co 228.616†	177.6	0.0933729	mg/L	0.00027627	0.0933729	mg/L	0.00027627	0.30%
QC value within limits for Co 228.616 Recovery = 93.37%								
Cr 267.716†	493.9	0.0924974	mg/L	0.00117452	0.0924974	mg/L	0.00117452	1.27%
QC value within limits for Cr 267.716 Recovery = 92.50%								
Cu 327.393†	759.4	0.101932	mg/L	0.0008174	0.101932	mg/L	0.0008174	0.80%
QC value within limits for Cu 327.393 Recovery = 101.93%								
Fe 273.955†	426.2	0.900588	mg/L	0.0093679	0.900588	mg/L	0.0093679	1.04%
QC value within limits for Fe 273.955 Recovery = 90.06%								
K 404.721†	11.8	-7.37949	mg/L	0.380538	-7.37949	mg/L	0.380538	5.16%
QC value less than the lower limit for K 404.721 Recovery = -147.59%								
Mg 279.077†	4033.9	4.77422	mg/L	0.015764	4.77422	mg/L	0.015764	0.33%
QC value within limits for Mg 279.077 Recovery = 95.48%								
Mn 257.610†	2301.0	0.101739	mg/L	0.0004940	0.101739	mg/L	0.0004940	0.49%
QC value within limits for Mn 257.610 Recovery = 101.74%								
Mo 202.031†	101.1	0.0958488	mg/L	0.00182650	0.0958488	mg/L	0.00182650	1.91%
QC value within limits for Mo 202.031 Recovery = 95.85%								
Na 330.237†	750.9	22.1784	mg/L	0.20593	22.1784	mg/L	0.20593	0.93%
QC value within limits for Na 330.237 Recovery = 88.71%								
Ni 231.604†	228.4	0.0953689	mg/L	0.00123931	0.0953689	mg/L	0.00123931	1.30%
QC value within limits for Ni 231.604 Recovery = 95.37%								
Pb 220.353†	24.7	0.0497266	mg/L	0.00270773	0.0497266	mg/L	0.00270773	5.45%
QC value within limits for Pb 220.353 Recovery = 99.45%								
Sb 206.836†	8.5	0.0625745	mg/L	0.00637844	0.0625745	mg/L	0.00637844	10.19%
QC value within limits for Sb 206.836 Recovery = 89.39%								
Se 196.026†	15.9	0.0890183	mg/L	0.00497250	0.0890183	mg/L	0.00497250	5.59%
QC value within limits for Se 196.026 Recovery = 89.02%								
Sn 189.927†	38.1	0.100972	mg/L	0.0025680	0.100972	mg/L	0.0025680	2.54%
QC value within limits for Sn 189.927 Recovery = 100.97%								
Ti 334.940†	2044.7	0.0921051	mg/L	0.00071529	0.0921051	mg/L	0.00071529	0.78%
QC value within limits for Ti 334.940 Recovery = 92.11%								
Tl 190.801†	14.0	0.0949242	mg/L	0.00415208	0.0949242	mg/L	0.00415208	4.37%
QC value within limits for Tl 190.801 Recovery = 94.92%								
V 290.880†	419.5	0.0955012	mg/L	0.00085435	0.0955012	mg/L	0.00085435	0.89%
QC value within limits for V 290.880 Recovery = 95.50%								
Zn 206.200†	273.9	0.0956542	mg/L	0.00024506	0.0956542	mg/L	0.00024506	0.26%
QC value within limits for Zn 206.200 Recovery = 95.65%								
B 249.772	922.3	0.211651	mg/L	0.0003964	0.211651	mg/L	0.0003964	0.19%
QC value within limits for B 249.772 Recovery = 105.83%								
Si 251.611	199.8	0.130219	mg/L	0.0011797	0.130219	mg/L	0.0011797	0.91%
QC value greater than the upper limit for Si 251.611 Recovery = 130.22%								

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: ICSA V-333668
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 7
Date Collected: 9/11/2020 6:36:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	45443.8	87.0	%	0.48				0.55%
Y 371.029	14673.0	84.8	%	0.18				0.22%
Ag 328.068†	-428.5	-0.0243406	mg/L	0.00113701	-0.0243406	mg/L	0.00113701	4.67%
Al 308.215†	554894.2	527.672	mg/L	1.9281	527.672	mg/L	1.9281	0.37%
QC value within limits for Al 308.215 Recovery = 105.53%								
As 188.979†	-0.2	-0.0172443	mg/L	0.01459476	-0.0172443	mg/L	0.01459476	84.64%
Ba 233.527†	43.1	-0.0077130	mg/L	0.00016796	-0.0077130	mg/L	0.00016796	2.18%
Be 313.107†	-34.4	-0.0006978	mg/L	0.00006040	-0.0006978	mg/L	0.00006040	8.66%
Ca 315.887†	1309635.9	471.631	mg/L	1.2941	471.631	mg/L	1.2941	0.27%
QC value within limits for Ca 315.887 Recovery = 94.33%								
Cd 228.802†	0.9	0.0043483	mg/L	0.00131863	0.0043483	mg/L	0.00131863	30.33%
Co 228.616†	1.3	0.0016520	mg/L	0.00096250	0.0016520	mg/L	0.00096250	58.26%
Cr 267.716†	-11.1	-0.0063926	mg/L	0.00081655	-0.0063926	mg/L	0.00081655	12.77%
Cu 327.393†	-124.1	-0.0039440	mg/L	0.00148033	-0.0039440	mg/L	0.00148033	37.53%
Fe 273.955†	71506.1	179.863	mg/L	1.4121	179.863	mg/L	1.4121	0.79%
QC value within limits for Fe 273.955 Recovery = 89.93%								
K 404.721†	-21.9	-1937.09	mg/L	14.617	-1937.09	mg/L	14.617	0.75%
Mg 279.077†	418658.7	495.906	mg/L	0.8841	495.906	mg/L	0.8841	0.18%
QC value within limits for Mg 279.077 Recovery = 99.18%								
Mn 257.610†	-199.2	-0.0171840	mg/L	0.00028197	-0.0171840	mg/L	0.00028197	1.64%
Mo 202.031†	-5.1	-0.0025909	mg/L	0.00139906	-0.0025909	mg/L	0.00139906	54.00%
Na 330.237†	-31.0	-0.818939	mg/L	0.1412356	-0.818939	mg/L	0.1412356	17.25%
Ni 231.604†	5.2	0.0022770	mg/L	0.00089594	0.0022770	mg/L	0.00089594	39.35%
Pb 220.353†	-19.2	0.0163923	mg/L	0.00665499	0.0163923	mg/L	0.00665499	40.60%
Sb 206.836†	2.0	0.0104798	mg/L	0.00413512	0.0104798	mg/L	0.00413512	39.46%
Se 196.026†	-32.7	-0.0142897	mg/L	0.01014065	-0.0142897	mg/L	0.01014065	70.96%
Sn 189.927†	-18.3	-0.0467508	mg/L	0.00590751	-0.0467508	mg/L	0.00590751	12.64%
Ti 334.940†	-178.6	0.0189692	mg/L	0.00049466	0.0189692	mg/L	0.00049466	2.61%
Tl 190.801†	-0.7	-0.0211186	mg/L	0.00400166	-0.0211186	mg/L	0.00400166	18.95%
V 290.880†	626.3	0.169465	mg/L	0.0030661	0.169465	mg/L	0.0030661	1.81%
Zn 206.200†	18.8	0.0073397	mg/L	0.00108169	0.0073397	mg/L	0.00108169	14.74%
B 249.772	3347.1	0.185524	mg/L	0.0121565	0.185524	mg/L	0.0121565	6.55%
Si 251.611	-17.3	0.726231	mg/L	0.0042895	0.726231	mg/L	0.0042895	0.59%

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 85

Autosampler Location: 6
Date Collected: 9/11/2020 6:40:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	48365.0	92.6	%	0.18				0.19%
Y 371.029	15708.6	90.8	%	0.74				0.81%
Ag 328.068†	1090.3	0.100936	mg/L	0.0004100	0.100936	mg/L	0.0004100	0.41%
QC value within limits for Ag 328.068 Recovery = 100.94%								
Al 308.215†	5327.8	5.02609	mg/L	0.008397	5.02609	mg/L	0.008397	0.17%
QC value within limits for Al 308.215 Recovery = 100.52%								
As 188.979†	43.5	0.534605	mg/L	0.0150804	0.534605	mg/L	0.0150804	2.82%
QC value within limits for As 188.979 Recovery = 106.92%								
Ba 233.527†	3727.3	0.494929	mg/L	0.0015206	0.494929	mg/L	0.0015206	0.31%
QC value within limits for Ba 233.527 Recovery = 98.99%								
Be 313.107†	104533.7	0.494209	mg/L	0.0010762	0.494209	mg/L	0.0010762	0.22%
QC value within limits for Be 313.107 Recovery = 98.84%								
Ca 315.887†	135617.7	49.0083	mg/L	0.10935	49.0083	mg/L	0.10935	0.22%
QC value within limits for Ca 315.887 Recovery = 98.02%								
Cd 228.802†	1004.3	0.484304	mg/L	0.0053148	0.484304	mg/L	0.0053148	1.10%
QC value within limits for Cd 228.802 Recovery = 96.86%								
Co 228.616†	948.5	0.494436	mg/L	0.0036872	0.494436	mg/L	0.0036872	0.75%
QC value within limits for Co 228.616 Recovery = 98.89%								
Cr 267.716†	2620.0	0.511847	mg/L	0.0032148	0.511847	mg/L	0.0032148	0.63%
QC value within limits for Cr 267.716 Recovery = 102.37%								
Cu 327.393†	3617.9	0.502895	mg/L	0.0014195	0.502895	mg/L	0.0014195	0.28%
QC value within limits for Cu 327.393 Recovery = 100.58%								
Fe 273.955†	2245.4	5.48087	mg/L	0.041253	5.48087	mg/L	0.041253	0.75%
QC value within limits for Fe 273.955 Recovery = 109.62%								
K 404.721†	834.6	-8.53297	mg/L	0.361815	-8.53297	mg/L	0.361815	4.24%
QC value less than the lower limit for K 404.721 Recovery = -17.07%								
Mg 279.077†	41619.1	49.2947	mg/L	0.21543	49.2947	mg/L	0.21543	0.44%
QC value within limits for Mg 279.077 Recovery = 98.59%								
Mn 257.610†	10702.4	0.501362	mg/L	0.0004472	0.501362	mg/L	0.0004472	0.09%
QC value within limits for Mn 257.610 Recovery = 100.27%								
Mo 202.031†	532.3	0.495812	mg/L	0.0018926	0.495812	mg/L	0.0018926	0.38%
QC value within limits for Mo 202.031 Recovery = 99.16%								
Na 330.237†	1800.8	53.0595	mg/L	0.31535	53.0595	mg/L	0.31535	0.59%
QC value within limits for Na 330.237 Recovery = 106.12%								
Ni 231.604†	1189.0	0.495916	mg/L	0.0045406	0.495916	mg/L	0.0045406	0.92%
QC value within limits for Ni 231.604 Recovery = 99.18%								
Pb 220.353†	238.2	0.504208	mg/L	0.0057055	0.504208	mg/L	0.0057055	1.13%
QC value within limits for Pb 220.353 Recovery = 100.84%								
Sb 206.836†	63.6	0.496225	mg/L	0.0069030	0.496225	mg/L	0.0069030	1.39%
QC value within limits for Sb 206.836 Recovery = 99.25%								
Se 196.026†	90.4	0.503321	mg/L	0.0237300	0.503321	mg/L	0.0237300	4.71%
QC value within limits for Se 196.026 Recovery = 100.66%								
Sn 189.927†	187.9	0.493233	mg/L	0.0066424	0.493233	mg/L	0.0066424	1.35%
QC value within limits for Sn 189.927 Recovery = 98.65%								
Ti 334.940†	10473.2	0.507217	mg/L	0.0007312	0.507217	mg/L	0.0007312	0.14%
QC value within limits for Ti 334.940 Recovery = 101.44%								
Tl 190.801†	70.9	0.488870	mg/L	0.0024375	0.488870	mg/L	0.0024375	0.50%
QC value within limits for Tl 190.801 Recovery = 97.77%								
V 290.880†	2104.5	0.519459	mg/L	0.0016099	0.519459	mg/L	0.0016099	0.31%
QC value within limits for V 290.880 Recovery = 103.89%								
Zn 206.200†	1405.8	0.487527	mg/L	0.0046857	0.487527	mg/L	0.0046857	0.96%
QC value within limits for Zn 206.200 Recovery = 97.51%								
B 249.772	2239.7	0.537193	mg/L	0.0013651	0.537193	mg/L	0.0013651	0.25%
QC value within limits for B 249.772 Recovery = 107.44%								
Si 251.611	7311.5	5.17085	mg/L	0.025133	5.17085	mg/L	0.025133	0.49%
QC value within limits for Si 251.611 Recovery = 103.42%								

QC Failed. Continue with analysis.

Sequence No.: 14 **Autosampler Location: 2**
Sample ID: CCB V-333667 **Date Collected: 9/11/2020 6:44:53 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	53169.6	102	%	1.19				1.17%
Y 371.029	17591.8	102	%	0.82				0.81%
Ag 328.068†	7.1	0.0018186	mg/L	0.00061818	0.0018186	mg/L	0.00061818	33.99%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-1.3	-0.0574252	mg/L	0.00355100	-0.0574252	mg/L	0.00355100	6.18%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.6	0.0004626	mg/L	0.00224962	0.0004626	mg/L	0.00224962	486.34%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.3	-0.0136356	mg/L	0.00022153	-0.0136356	mg/L	0.00022153	1.62%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	31.1	-0.0003882	mg/L	0.00004772	-0.0003882	mg/L	0.00004772	12.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-43.8	0.172809	mg/L	0.0032212	0.172809	mg/L	0.0032212	1.86%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	0.2	0.0040164	mg/L	0.00021930	0.0040164	mg/L	0.00021930	5.46%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.1	0.0010359	mg/L	0.00207497	0.0010359	mg/L	0.00207497	200.31%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.5	-0.0046478	mg/L	0.00055587	-0.0046478	mg/L	0.00055587	11.96%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-7.8	-0.0056584	mg/L	0.00047260	-0.0056584	mg/L	0.00047260	8.35%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	0.2	-0.171919	mg/L	0.0051383	-0.171919	mg/L	0.0051383	2.99%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-9.4	2.92737	mg/L	0.387159	2.92737	mg/L	0.387159	13.23%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	6.4	0.0035548	mg/L	0.00367762	0.0035548	mg/L	0.00367762	103.46%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-2.0	-0.0078077	mg/L	0.00014524	-0.0078077	mg/L	0.00014524	1.86%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-1.5	0.0007502	mg/L	0.00086650	0.0007502	mg/L	0.00086650	115.50%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-3.1	0.0027615	mg/L	0.05982269	0.0027615	mg/L	0.05982269	>999.9%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	1.3	0.0006531	mg/L	0.00023624	0.0006531	mg/L	0.00023624	36.17%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.8	0.0008973	mg/L	0.00331733	0.0008973	mg/L	0.00331733	369.70%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.5	-0.0014596	mg/L	0.00760563	-0.0014596	mg/L	0.00760563	521.07%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.7	-0.0030023	mg/L	0.00489581	-0.0030023	mg/L	0.00489581	163.07%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.9	0.0036772	mg/L	0.00237544	0.0036772	mg/L	0.00237544	64.60%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	4.9	-0.0078956	mg/L	0.00016480	-0.0078956	mg/L	0.00016480	2.09%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.2	-0.0102487	mg/L	0.00973226	-0.0102487	mg/L	0.00973226	94.96%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	1.3	-0.0093553	mg/L	0.00063740	-0.0093553	mg/L	0.00063740	6.81%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-2.2	0.0000655	mg/L	0.00036405	0.0000655	mg/L	0.00036405	556.16%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	9.7	-0.0104700	mg/L	0.00096587	-0.0104700	mg/L	0.00096587	9.23%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	0.3	-0.0330978	mg/L	0.00046977	-0.0330978	mg/L	0.00046977	1.42%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 15
Sample ID: MB 85267 (1)
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 86
Date Collected: 9/11/2020 6:48:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: MB 85267 (1)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	53667.9	103	%	0.32				0.31%
Y 371.029	17730.0	102	%	0.64				0.62%
Ag 328.068†	8.8	0.0019739	mg/L	0.00014829	0.0019739	mg/L	0.00014829	7.51%
Al 308.215†	4.0	-0.0524233	mg/L	0.00186737	-0.0524233	mg/L	0.00186737	3.56%
As 188.979†	1.2	0.0077755	mg/L	0.01066336	0.0077755	mg/L	0.01066336	137.14%
Ba 233.527†	1.2	-0.0134324	mg/L	0.00034135	-0.0134324	mg/L	0.00034135	2.54%
Be 313.107†	13.1	-0.0004734	mg/L	0.00005839	-0.0004734	mg/L	0.00005839	12.33%
Ca 315.887†	14.9	0.193929	mg/L	0.0013597	0.193929	mg/L	0.0013597	0.70%
Cd 228.802†	-0.1	0.0038689	mg/L	0.00029039	0.0038689	mg/L	0.00029039	7.51%
Co 228.616†	-0.5	0.0007312	mg/L	0.00030386	0.0007312	mg/L	0.00030386	41.55%
Cr 267.716†	1.8	-0.0045871	mg/L	0.00018100	-0.0045871	mg/L	0.00018100	3.95%
Cu 327.393†	-3.1	-0.0049860	mg/L	0.00020791	-0.0049860	mg/L	0.00020791	4.17%
Fe 273.955†	33.8	-0.0872709	mg/L	0.00528785	-0.0872709	mg/L	0.00528785	6.06%
K 404.721†	-9.1	2.03566	mg/L	0.810257	2.03566	mg/L	0.810257	39.80%
Mg 279.077†	6.6	0.0038612	mg/L	0.00330903	0.0038612	mg/L	0.00330903	85.70%
Mn 257.610†	12.1	-0.0071347	mg/L	0.00011157	-0.0071347	mg/L	0.00011157	1.56%
Mo 202.031†	-1.8	0.0004953	mg/L	0.00145871	0.0004953	mg/L	0.00145871	294.53%
Na 330.237†	-2.6	0.0177600	mg/L	0.11104139	0.0177600	mg/L	0.11104139	625.23%
Ni 231.604†	-0.1	0.0000953	mg/L	0.00108746	0.0000953	mg/L	0.00108746	>999.9%
Pb 220.353†	-0.1	-0.0031793	mg/L	0.00510123	-0.0031793	mg/L	0.00510123	160.45%
Sb 206.836†	1.0	0.0021291	mg/L	0.00628596	0.0021291	mg/L	0.00628596	295.24%
Se 196.026†	1.2	0.0077542	mg/L	0.00569451	0.0077542	mg/L	0.00569451	73.44%
Sn 189.927†	0.5	0.0024303	mg/L	0.00558426	0.0024303	mg/L	0.00558426	229.78%
Ti 334.940†	9.0	-0.0076908	mg/L	0.00019608	-0.0076908	mg/L	0.00019608	2.55%
Tl 190.801†	-0.8	-0.0072921	mg/L	0.00910893	-0.0072921	mg/L	0.00910893	124.91%
V 290.880†	0.9	-0.0094508	mg/L	0.00090974	-0.0094508	mg/L	0.00090974	9.63%
Zn 206.200†	11.0	0.0046341	mg/L	0.00065538	0.0046341	mg/L	0.00065538	14.14%
B 249.772	4.8	-0.0118179	mg/L	0.00020719	-0.0118179	mg/L	0.00020719	1.75%
Si 251.611	28.6	-0.0129164	mg/L	0.00241427	-0.0129164	mg/L	0.00241427	18.69%

Sequence No.: 16
Sample ID: LCSW 85267
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 87
Date Collected: 9/11/2020 6:52:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LCSW 85267

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	48360.8	92.6	%	1.11				1.20%
Y 371.029	16036.1	92.7	%	0.76				0.82%
Ag 328.068†	1112.5	0.102930	mg/L	0.0005974	0.102930	mg/L	0.0005974	0.58%
Al 308.215†	5355.6	5.05217	mg/L	0.011624	5.05217	mg/L	0.011624	0.23%
As 188.979†	38.9	0.475387	mg/L	0.0176548	0.475387	mg/L	0.0176548	3.71%
Ba 233.527†	3884.1	0.516317	mg/L	0.0010479	0.516317	mg/L	0.0010479	0.20%
Be 313.107†	105577.7	0.499150	mg/L	0.0010355	0.499150	mg/L	0.0010355	0.21%
Ca 315.887†	134788.0	48.7096	mg/L	0.10555	48.7096	mg/L	0.10555	0.22%
Cd 228.802†	1037.4	0.500162	mg/L	0.0029888	0.500162	mg/L	0.0029888	0.60%
Co 228.616†	968.4	0.504822	mg/L	0.0079885	0.504822	mg/L	0.0079885	1.58%
Cr 267.716†	2683.2	0.524248	mg/L	0.0048182	0.524248	mg/L	0.0048182	0.92%
Cu 327.393†	3612.4	0.502150	mg/L	0.0044505	0.502150	mg/L	0.0044505	0.89%
Fe 273.955†	2368.3	5.79042	mg/L	0.032812	5.79042	mg/L	0.032812	0.57%
K 404.721†	276.3	-44.5636	mg/L	0.55132	-44.5636	mg/L	0.55132	1.24%
Mg 279.077†	41422.3	49.0616	mg/L	0.06309	49.0616	mg/L	0.06309	0.13%
Mn 257.610†	10976.5	0.514404	mg/L	0.0007171	0.514404	mg/L	0.0007171	0.14%
Mo 202.031†	550.6	0.512789	mg/L	0.0048085	0.512789	mg/L	0.0048085	0.94%
Na 330.237†	1788.5	52.6955	mg/L	0.57384	52.6955	mg/L	0.57384	1.09%
Ni 231.604†	1223.2	0.510158	mg/L	0.0049454	0.510158	mg/L	0.0049454	0.97%
Pb 220.353†	239.9	0.507827	mg/L	0.0072631	0.507827	mg/L	0.0072631	1.43%
Sb 206.836†	65.5	0.511299	mg/L	0.0064887	0.511299	mg/L	0.0064887	1.27%
Se 196.026†	93.1	0.518179	mg/L	0.0026250	0.518179	mg/L	0.0026250	0.51%
Sn 189.927†	193.0	0.506578	mg/L	0.0111031	0.506578	mg/L	0.0111031	2.19%
Ti 334.940†	10645.5	0.515613	mg/L	0.0011886	0.515613	mg/L	0.0011886	0.23%
Tl 190.801†	74.4	0.513267	mg/L	0.0115216	0.513267	mg/L	0.0115216	2.24%
V 290.880†	2105.9	0.519790	mg/L	0.0057359	0.519790	mg/L	0.0057359	1.10%
Zn 206.200†	1428.3	0.495335	mg/L	0.0039585	0.495335	mg/L	0.0039585	0.80%
B 249.772	2271.1	0.537965	mg/L	0.0020092	0.537965	mg/L	0.0020092	0.37%
Si 251.611	834.6	0.656534	mg/L	0.0066194	0.656534	mg/L	0.0066194	1.01%

Sequence No.: 17
Sample ID: LCSW MR 85267
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 88
Date Collected: 9/11/2020 6:56:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LCSW MR 85267

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	48974.5	93.8	%	0.30				0.32%
Y 371.029	16516.0	95.5	%	0.59				0.62%
Ag 328.068†	1097.0	0.101587	mg/L	0.0007726	0.101587	mg/L	0.0007726	0.76%
Al 308.215†	5343.2	5.04102	mg/L	0.014065	5.04102	mg/L	0.014065	0.28%
As 188.979†	38.9	0.474520	mg/L	0.0092982	0.474520	mg/L	0.0092982	1.96%
Ba 233.527†	3885.9	0.516567	mg/L	0.0015420	0.516567	mg/L	0.0015420	0.30%
Be 313.107†	105830.3	0.500345	mg/L	0.0015437	0.500345	mg/L	0.0015437	0.31%
Ca 315.887†	135989.2	49.1420	mg/L	0.07499	49.1420	mg/L	0.07499	0.15%
Cd 228.802†	1019.8	0.491713	mg/L	0.0020675	0.491713	mg/L	0.0020675	0.42%
Co 228.616†	955.3	0.497971	mg/L	0.0021319	0.497971	mg/L	0.0021319	0.43%
Cr 267.716†	2605.0	0.508939	mg/L	0.0040485	0.508939	mg/L	0.0040485	0.80%
Cu 327.393†	3614.7	0.502473	mg/L	0.0031908	0.502473	mg/L	0.0031908	0.64%
Fe 273.955†	2324.6	5.68029	mg/L	0.003833	5.68029	mg/L	0.003833	0.07%
K 404.721†	279.5	-43.1884	mg/L	0.96522	-43.1884	mg/L	0.96522	2.23%
Mg 279.077†	41676.5	49.3627	mg/L	0.04442	49.3627	mg/L	0.04442	0.09%
Mn 257.610†	10903.7	0.510937	mg/L	0.0016025	0.510937	mg/L	0.0016025	0.31%
Mo 202.031†	540.4	0.503285	mg/L	0.0006048	0.503285	mg/L	0.0006048	0.12%
Na 330.237†	1774.9	52.2971	mg/L	0.31832	52.2971	mg/L	0.31832	0.61%
Ni 231.604†	1212.6	0.505724	mg/L	0.0006099	0.505724	mg/L	0.0006099	0.12%
Pb 220.353†	235.6	0.498600	mg/L	0.0036925	0.498600	mg/L	0.0036925	0.74%
Sb 206.836†	65.1	0.507665	mg/L	0.0094333	0.507665	mg/L	0.0094333	1.86%
Se 196.026†	89.5	0.498506	mg/L	0.0251636	0.498506	mg/L	0.0251636	5.05%
Sn 189.927†	192.7	0.505698	mg/L	0.0036324	0.505698	mg/L	0.0036324	0.72%
Ti 334.940†	10741.7	0.520343	mg/L	0.0018743	0.520343	mg/L	0.0018743	0.36%
Tl 190.801†	73.7	0.508402	mg/L	0.0047315	0.508402	mg/L	0.0047315	0.93%
V 290.880†	2140.5	0.528483	mg/L	0.0033892	0.528483	mg/L	0.0033892	0.64%
Zn 206.200†	1402.7	0.486450	mg/L	0.0015387	0.486450	mg/L	0.0015387	0.32%
B 249.772	2267.0	0.537157	mg/L	0.0021500	0.537157	mg/L	0.0021500	0.40%
Si 251.611	857.0	0.671587	mg/L	0.0034137	0.671587	mg/L	0.0034137	0.51%

Sequence No.: 18
Sample ID: AD19159-004
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 89
Date Collected: 9/11/2020 7:00:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	43926.0	84.1	%	0.61				0.72%
Y 371.029	14476.4	83.7	%	1.08				1.29%
Ag 328.068†	153.0	0.0148642	mg/L	0.00057687	0.0148642	mg/L	0.00057687	3.88%
Al 308.215†	78.9	0.0197273	mg/L	0.00554583	0.0197273	mg/L	0.00554583	28.11%
As 188.979†	0.3	-0.0043271	mg/L	0.02773202	-0.0043271	mg/L	0.02773202	640.89%
Ba 233.527†	13695.4	1.85489	mg/L	0.005262	1.85489	mg/L	0.005262	0.28%
Be 313.107†	-59.2	-0.0008154	mg/L	0.00002828	-0.0008154	mg/L	0.00002828	3.47%
Ca 315.887†	1905098.7	685.986	mg/L	2.9073	685.986	mg/L	2.9073	0.42%
Cd 228.802†	17.6	0.0123193	mg/L	0.00063159	0.0123193	mg/L	0.00063159	5.13%
Co 228.616†	3.5	0.0027947	mg/L	0.00145587	0.0027947	mg/L	0.00145587	52.09%
Cr 267.716†	149.2	0.0244471	mg/L	0.00050032	0.0244471	mg/L	0.00050032	2.05%
Cu 327.393†	17.7	-0.0020744	mg/L	0.00031021	-0.0020744	mg/L	0.00031021	14.95%
Fe 273.955†	25.9	-0.107210	mg/L	0.0062051	-0.107210	mg/L	0.0062051	5.79%
K 404.721†	23.1	4.13775	mg/L	1.151701	4.13775	mg/L	1.151701	27.83%
Mg 279.077†	4938.5	5.84581	mg/L	0.020785	5.84581	mg/L	0.020785	0.36%
Mn 257.610†	2845.2	0.127627	mg/L	0.0009971	0.127627	mg/L	0.0009971	0.78%
Mo 202.031†	6.1	0.0078042	mg/L	0.00118462	0.0078042	mg/L	0.00118462	15.18%
Na 330.237†	59146.4	1739.68	mg/L	2.122	1739.68	mg/L	2.122	0.12%
Ni 231.604†	33.1	0.0139306	mg/L	0.00099479	0.0139306	mg/L	0.00099479	7.14%
Pb 220.353†	16.7	0.0327235	mg/L	0.00200638	0.0327235	mg/L	0.00200638	6.13%
Sb 206.836†	1.5	0.0062696	mg/L	0.00616551	0.0062696	mg/L	0.00616551	98.34%
Se 196.026†	0.1	0.0568512	mg/L	0.01402122	0.0568512	mg/L	0.01402122	24.66%
Sn 189.927†	-1.4	-0.0023163	mg/L	0.00362568	-0.0023163	mg/L	0.00362568	156.53%
Ti 334.940†	-248.8	0.0318337	mg/L	0.00142241	0.0318337	mg/L	0.00142241	4.47%
Tl 190.801†	-1.2	-0.0554704	mg/L	0.01052383	-0.0554704	mg/L	0.01052383	18.97%
V 290.880†	82.2	0.0112256	mg/L	0.00052308	0.0112256	mg/L	0.00052308	4.66%
Zn 206.200†	1430.1	0.495948	mg/L	0.0012781	0.495948	mg/L	0.0012781	0.26%
B 249.772	286.0	0.0541303	mg/L	0.00097400	0.0541303	mg/L	0.00097400	1.80%
Si 251.611	4847.5	3.59958	mg/L	0.031819	3.59958	mg/L	0.031819	0.88%

Sequence No.: 19
Sample ID: AD19159-004 MR
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 90
Date Collected: 9/11/2020 7:05:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 MR

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44860.2	85.9	%	0.37				0.43%
Y 371.029	14853.7	85.9	%	0.70				0.81%
Ag 328.068†	156.4	0.0151754	mg/L	0.00007582	0.0151754	mg/L	0.00007582	0.50%
Al 308.215†	78.3	0.0192443	mg/L	0.00314734	0.0192443	mg/L	0.00314734	16.35%
As 188.979†	0.5	-0.0006362	mg/L	0.04817536	-0.0006362	mg/L	0.04817536	>999.9%
Ba 233.527†	13693.4	1.85462	mg/L	0.013226	1.85462	mg/L	0.013226	0.71%
Be 313.107†	-79.1	-0.0009094	mg/L	0.00004392	-0.0009094	mg/L	0.00004392	4.83%
Ca 315.887†	1910931.0	688.086	mg/L	8.4232	688.086	mg/L	8.4232	1.22%
Cd 228.802†	15.6	0.0113828	mg/L	0.00084526	0.0113828	mg/L	0.00084526	7.43%
Co 228.616†	-0.4	0.0007683	mg/L	0.00027523	0.0007683	mg/L	0.00027523	35.82%
Cr 267.716†	149.4	0.0244817	mg/L	0.00170992	0.0244817	mg/L	0.00170992	6.98%
Cu 327.393†	16.5	-0.0022459	mg/L	0.00040865	-0.0022459	mg/L	0.00040865	18.20%
Fe 273.955†	27.9	-0.102152	mg/L	0.0047031	-0.102152	mg/L	0.0047031	4.60%
K 404.721†	27.0	4.30720	mg/L	0.409412	4.30720	mg/L	0.409412	9.51%
Mg 279.077†	4983.9	5.89956	mg/L	0.021307	5.89956	mg/L	0.021307	0.36%
Mn 257.610†	2846.8	0.127701	mg/L	0.0012374	0.127701	mg/L	0.0012374	0.97%
Mo 202.031†	4.9	0.0066289	mg/L	0.00191244	0.0066289	mg/L	0.00191244	28.85%
Na 330.237†	58867.0	1731.47	mg/L	3.149	1731.47	mg/L	3.149	0.18%
Ni 231.604†	33.0	0.0138823	mg/L	0.00045670	0.0138823	mg/L	0.00045670	3.29%
Pb 220.353†	16.4	0.0320025	mg/L	0.00229269	0.0320025	mg/L	0.00229269	7.16%
Sb 206.836†	1.5	0.0058163	mg/L	0.00279952	0.0058163	mg/L	0.00279952	48.13%
Se 196.026†	0.2	0.0573048	mg/L	0.03821365	0.0573048	mg/L	0.03821365	66.68%
Sn 189.927†	-8.3	-0.0204655	mg/L	0.00221046	-0.0204655	mg/L	0.00221046	10.80%
Ti 334.940†	-274.2	0.0307523	mg/L	0.00045464	0.0307523	mg/L	0.00045464	1.48%
Tl 190.801†	0.1	-0.0467187	mg/L	0.01264770	-0.0467187	mg/L	0.01264770	27.07%
V 290.880†	83.4	0.0115361	mg/L	0.00057827	0.0115361	mg/L	0.00057827	5.01%
Zn 206.200†	1435.6	0.497855	mg/L	0.0027807	0.497855	mg/L	0.0027807	0.56%
B 249.772	280.5	0.0528391	mg/L	0.00025307	0.0528391	mg/L	0.00025307	0.48%
Si 251.611	4896.2	3.63363	mg/L	0.018800	3.63363	mg/L	0.018800	0.52%

Sequence No.: 20
Sample ID: AD19159-005 MS 1
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 91
Date Collected: 9/11/2020 7:09:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-005 MS 1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	43375.7	83.1	%	0.53				0.63%
Y 371.029	14329.8	82.8	%	0.40				0.48%
Ag 328.068†	1320.5	0.121337	mg/L	0.0003204	0.121337	mg/L	0.0003204	0.26%
Al 308.215†	5312.8	5.01188	mg/L	0.015214	5.01188	mg/L	0.015214	0.30%
As 188.979†	41.4	0.508457	mg/L	0.0173209	0.508457	mg/L	0.0173209	3.41%
Ba 233.527†	19103.5	2.59273	mg/L	0.009877	2.59273	mg/L	0.009877	0.38%
Be 313.107†	99650.2	0.471096	mg/L	0.0067070	0.471096	mg/L	0.0067070	1.42%
Ca 315.887†	2038595.5	734.042	mg/L	10.7870	734.042	mg/L	10.7870	1.47%
Cd 228.802†	1060.3	0.511115	mg/L	0.0028411	0.511115	mg/L	0.0028411	0.56%
Co 228.616†	880.9	0.459302	mg/L	0.0047918	0.459302	mg/L	0.0047918	1.04%
Cr 267.716†	2584.3	0.504825	mg/L	0.0033360	0.504825	mg/L	0.0033360	0.66%
Cu 327.393†	3655.2	0.508094	mg/L	0.0008235	0.508094	mg/L	0.0008235	0.16%
Fe 273.955†	2141.3	5.21882	mg/L	0.052239	5.21882	mg/L	0.052239	1.00%
K 404.721†	435.1	-29.1064	mg/L	0.82400	-29.1064	mg/L	0.82400	2.83%
Mg 279.077†	43387.6	51.3895	mg/L	0.10234	51.3895	mg/L	0.10234	0.20%
Mn 257.610†	12607.7	0.591993	mg/L	0.0017594	0.591993	mg/L	0.0017594	0.30%
Mo 202.031†	526.9	0.490796	mg/L	0.0011520	0.490796	mg/L	0.0011520	0.23%
Na 330.237†	60993.1	1794.00	mg/L	3.361	1794.00	mg/L	3.361	0.19%
Ni 231.604†	1147.1	0.478469	mg/L	0.0041828	0.478469	mg/L	0.0041828	0.87%
Pb 220.353†	229.7	0.486023	mg/L	0.0064535	0.486023	mg/L	0.0064535	1.33%
Sb 206.836†	66.5	0.518539	mg/L	0.0048143	0.518539	mg/L	0.0048143	0.93%
Se 196.026†	103.0	0.627030	mg/L	0.0018656	0.627030	mg/L	0.0018656	0.30%
Sn 189.927†	172.4	0.452589	mg/L	0.0099053	0.452589	mg/L	0.0099053	2.19%
Ti 334.940†	10019.4	0.537113	mg/L	0.0006689	0.537113	mg/L	0.0006689	0.12%
Tl 190.801†	63.6	0.392409	mg/L	0.0153928	0.392409	mg/L	0.0153928	3.92%
V 290.880†	2096.5	0.517594	mg/L	0.0046650	0.517594	mg/L	0.0046650	0.90%
Zn 206.200†	2710.5	0.939233	mg/L	0.0055594	0.939233	mg/L	0.0055594	0.59%
B 249.772	2274.5	0.537970	mg/L	0.0026119	0.537970	mg/L	0.0026119	0.49%
Si 251.611	4956.2	3.78034	mg/L	0.023986	3.78034	mg/L	0.023986	0.63%

Sequence No.: 21
Sample ID: AD19159-006 MS 2
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 92
Date Collected: 9/11/2020 7:13:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-006 MS 2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	44195.5	84.7	%	0.29				0.34%
Y 371.029	14493.5	83.8	%	0.33				0.39%
Ag 328.068†	1319.5	0.121215	mg/L	0.0005717	0.121215	mg/L	0.0005717	0.47%
Al 308.215†	5341.0	5.03838	mg/L	0.033339	5.03838	mg/L	0.033339	0.66%
As 188.979†	42.4	0.520739	mg/L	0.0037262	0.520739	mg/L	0.0037262	0.72%
Ba 233.527†	18457.1	2.50454	mg/L	0.005009	2.50454	mg/L	0.005009	0.20%
Be 313.107†	100282.5	0.474089	mg/L	0.0018109	0.474089	mg/L	0.0018109	0.38%
Ca 315.887†	2029108.5	730.627	mg/L	2.2981	730.627	mg/L	2.2981	0.31%
Cd 228.802†	1068.3	0.514942	mg/L	0.0029278	0.514942	mg/L	0.0029278	0.57%
Co 228.616†	881.5	0.459579	mg/L	0.0020495	0.459579	mg/L	0.0020495	0.45%
Cr 267.716†	2578.9	0.503725	mg/L	0.0019023	0.503725	mg/L	0.0019023	0.38%
Cu 327.393†	3678.1	0.511304	mg/L	0.0025403	0.511304	mg/L	0.0025403	0.50%
Fe 273.955†	2144.9	5.22783	mg/L	0.013412	5.22783	mg/L	0.013412	0.26%
K 404.721†	437.6	-29.0592	mg/L	0.24443	-29.0592	mg/L	0.24443	0.84%
Mg 279.077†	42953.5	50.8754	mg/L	0.05744	50.8754	mg/L	0.05744	0.11%
Mn 257.610†	13855.9	0.651362	mg/L	0.0018086	0.651362	mg/L	0.0018086	0.28%
Mo 202.031†	525.5	0.489508	mg/L	0.0026177	0.489508	mg/L	0.0026177	0.53%
Na 330.237†	60563.5	1781.36	mg/L	2.167	1781.36	mg/L	2.167	0.12%
Ni 231.604†	1152.8	0.480840	mg/L	0.0028364	0.480840	mg/L	0.0028364	0.59%
Pb 220.353†	225.0	0.476104	mg/L	0.0022060	0.476104	mg/L	0.0022060	0.46%
Sb 206.836†	67.3	0.524815	mg/L	0.0159320	0.524815	mg/L	0.0159320	3.04%
Se 196.026†	99.9	0.609890	mg/L	0.0201867	0.609890	mg/L	0.0201867	3.31%
Sn 189.927†	172.9	0.453985	mg/L	0.0054920	0.453985	mg/L	0.0054920	1.21%
Ti 334.940†	10069.9	0.539319	mg/L	0.0015562	0.539319	mg/L	0.0015562	0.29%
Tl 190.801†	66.4	0.412348	mg/L	0.0080630	0.412348	mg/L	0.0080630	1.96%
V 290.880†	2071.1	0.511224	mg/L	0.0063529	0.511224	mg/L	0.0063529	1.24%
Zn 206.200†	2813.9	0.975033	mg/L	0.0017054	0.975033	mg/L	0.0017054	0.17%
B 249.772	2293.6	0.542464	mg/L	0.0016879	0.542464	mg/L	0.0016879	0.31%
Si 251.611	4890.6	3.73363	mg/L	0.024150	3.73363	mg/L	0.024150	0.65%

Sequence No.: 22
Sample ID: AD19159-004 PS
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 93
Date Collected: 9/11/2020 7:17:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	43895.0	84.1	%	0.68				0.81%
Y 371.029	14434.5	83.4	%	0.53				0.64%
Ag 328.068†	929.1	0.0866253	mg/L	0.00060062	0.0866253	mg/L	0.00060062	0.69%
Al 308.215†	5376.1	5.07204	mg/L	0.034180	5.07204	mg/L	0.034180	0.67%
As 188.979†	43.9	0.541069	mg/L	0.0172330	0.541069	mg/L	0.0172330	3.18%
Ba 233.527†	17201.9	2.33328	mg/L	0.020490	2.33328	mg/L	0.020490	0.88%
Be 313.107†	101463.2	0.479677	mg/L	0.0028981	0.479677	mg/L	0.0028981	0.60%
Ca 315.887†	2027460.4	730.034	mg/L	3.6728	730.034	mg/L	3.6728	0.50%
Cd 228.802†	1075.6	0.518401	mg/L	0.0037798	0.518401	mg/L	0.0037798	0.73%
Co 228.616†	903.1	0.470837	mg/L	0.0047493	0.470837	mg/L	0.0047493	1.01%
Cr 267.716†	2684.2	0.524432	mg/L	0.0039464	0.524432	mg/L	0.0039464	0.75%
Cu 327.393†	3703.5	0.514869	mg/L	0.0022027	0.514869	mg/L	0.0022027	0.43%
Fe 273.955†	2177.3	5.30955	mg/L	0.041845	5.30955	mg/L	0.041845	0.79%
K 404.721†	398.0	-32.2554	mg/L	1.93146	-32.2554	mg/L	1.93146	5.99%
Mg 279.077†	42981.9	50.9090	mg/L	0.35826	50.9090	mg/L	0.35826	0.70%
Mn 257.610†	13029.5	0.612055	mg/L	0.0034042	0.612055	mg/L	0.0034042	0.56%
Mo 202.031†	529.3	0.492977	mg/L	0.0050785	0.492977	mg/L	0.0050785	1.03%
Na 330.237†	59995.5	1764.66	mg/L	19.062	1764.66	mg/L	19.062	1.08%
Ni 231.604†	1177.8	0.491222	mg/L	0.0018199	0.491222	mg/L	0.0018199	0.37%
Pb 220.353†	239.4	0.506614	mg/L	0.0073970	0.506614	mg/L	0.0073970	1.46%
Sb 206.836†	67.2	0.523819	mg/L	0.0048606	0.523819	mg/L	0.0048606	0.93%
Se 196.026†	103.4	0.629082	mg/L	0.0229415	0.629082	mg/L	0.0229415	3.65%
Sn 189.927†	182.4	0.478926	mg/L	0.0067944	0.478926	mg/L	0.0067944	1.42%
Ti 334.940†	10136.3	0.542518	mg/L	0.0053226	0.542518	mg/L	0.0053226	0.98%
Tl 190.801†	67.3	0.419167	mg/L	0.0352333	0.419167	mg/L	0.0352333	8.41%
V 290.880†	2102.4	0.519042	mg/L	0.0071338	0.519042	mg/L	0.0071338	1.37%
Zn 206.200†	2910.1	1.00835	mg/L	0.007797	1.00835	mg/L	0.007797	0.77%
B 249.772	2232.3	0.527875	mg/L	0.0044199	0.527875	mg/L	0.0044199	0.84%
Si 251.611	5635.6	4.25063	mg/L	0.014174	4.25063	mg/L	0.014174	0.33%

Sequence No.: 23
Sample ID: AD19159-004 SD
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 94
Date Collected: 9/11/2020 7:22:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 SD

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	51528.6	98.7	%	0.08				0.08%
Y 371.029	16798.8	97.1	%	0.32				0.33%
Ag 328.068†	32.7	0.0041091	mg/L	0.00031412	0.0041091	mg/L	0.00031412	7.64%
Al 308.215†	29.7	-0.0278521	mg/L	0.00308728	-0.0278521	mg/L	0.00308728	11.08%
As 188.979†	1.1	0.0068534	mg/L	0.00544530	0.0068534	mg/L	0.00544530	79.45%
Ba 233.527†	2882.0	0.379601	mg/L	0.0011299	0.379601	mg/L	0.0011299	0.30%
Be 313.107†	-10.5	-0.0005848	mg/L	0.00001410	-0.0005848	mg/L	0.00001410	2.41%
Ca 315.887†	385363.5	138.912	mg/L	0.5123	138.912	mg/L	0.5123	0.37%
Cd 228.802†	2.7	0.0051981	mg/L	0.00034329	0.0051981	mg/L	0.00034329	6.60%
Co 228.616†	-0.1	0.0009286	mg/L	0.00074739	0.0009286	mg/L	0.00074739	80.49%
Cr 267.716†	33.1	0.0015787	mg/L	0.00057045	0.0015787	mg/L	0.00057045	36.13%
Cu 327.393†	-5.4	-0.0053238	mg/L	0.00091494	-0.0053238	mg/L	0.00091494	17.19%
Fe 273.955†	7.6	-0.153404	mg/L	0.0036802	-0.153404	mg/L	0.0036802	2.40%
K 404.721†	-2.8	3.11730	mg/L	0.045121	3.11730	mg/L	0.045121	1.45%
Mg 279.077†	1059.5	1.25096	mg/L	0.004280	1.25096	mg/L	0.004280	0.34%
Mn 257.610†	513.0	0.0166891	mg/L	0.00002933	0.0166891	mg/L	0.00002933	0.18%
Mo 202.031†	1.0	0.0030368	mg/L	0.00046521	0.0030368	mg/L	0.00046521	15.32%
Na 330.237†	9379.6	275.962	mg/L	0.9475	275.962	mg/L	0.9475	0.34%
Ni 231.604†	5.9	0.0025778	mg/L	0.00071109	0.0025778	mg/L	0.00071109	27.58%
Pb 220.353†	4.0	0.0056696	mg/L	0.00172414	0.0056696	mg/L	0.00172414	30.41%
Sb 206.836†	1.6	0.0070475	mg/L	0.00472474	0.0070475	mg/L	0.00472474	67.04%
Se 196.026†	0.1	0.0125769	mg/L	0.00837030	0.0125769	mg/L	0.00837030	66.55%
Sn 189.927†	-4.0	-0.0093751	mg/L	0.00225569	-0.0093751	mg/L	0.00225569	24.06%
Ti 334.940†	-45.3	0.0001984	mg/L	0.00016864	0.0001984	mg/L	0.00016864	85.01%
Tl 190.801†	-0.2	-0.0125300	mg/L	0.00417872	-0.0125300	mg/L	0.00417872	33.35%
V 290.880†	16.9	-0.0053696	mg/L	0.00064991	-0.0053696	mg/L	0.00064991	12.10%
Zn 206.200†	303.6	0.105915	mg/L	0.0002726	0.105915	mg/L	0.0002726	0.26%
B 249.772	67.1	0.0038670	mg/L	0.00068493	0.0038670	mg/L	0.00068493	17.71%
Si 251.611	1108.1	0.788147	mg/L	0.0088819	0.788147	mg/L	0.0088819	1.13%

Sequence No.: 24
Sample ID: AD19143-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 97
Date Collected: 9/11/2020 7:26:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19143-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46764.6	89.6	%	1.70				1.90%
Y 371.029	15299.3	88.4	%	1.14				1.29%
Ag 328.068†	3.9	0.0016110	mg/L	0.00105122	0.0016110	mg/L	0.00105122	65.25%
Al 308.215†	98.2	0.0378876	mg/L	0.00250404	0.0378876	mg/L	0.00250404	6.61%
As 188.979†	0.7	-0.124203	mg/L	0.0061042	-0.124203	mg/L	0.0061042	4.91%
Ba 233.527†	3549.9	0.470717	mg/L	0.0026647	0.470717	mg/L	0.0026647	0.57%
Be 313.107†	27.2	-0.0004064	mg/L	0.00000963	-0.0004064	mg/L	0.00000963	2.37%
Ca 315.887†	64612.1	23.4476	mg/L	0.12206	23.4476	mg/L	0.12206	0.52%
Cd 228.802†	5.4	0.0065185	mg/L	0.00076010	0.0065185	mg/L	0.00076010	11.66%
Co 228.616†	19.5	0.0111427	mg/L	0.00010275	0.0111427	mg/L	0.00010275	0.92%
Cr 267.716†	8.2	-0.0032730	mg/L	0.00064685	-0.0032730	mg/L	0.00064685	19.76%
Cu 327.393†	25.4	-0.0009930	mg/L	0.00080604	-0.0009930	mg/L	0.00080604	81.17%
Fe 273.955†	34.9	-0.0845128	mg/L	0.00425966	-0.0845128	mg/L	0.00425966	5.04%
K 404.721†	4.7	2.81191	mg/L	1.250973	2.81191	mg/L	1.250973	44.49%
Mg 279.077†	4188.6	4.95749	mg/L	0.030177	4.95749	mg/L	0.030177	0.61%
Mn 257.610†	40704.2	1.92844	mg/L	0.013784	1.92844	mg/L	0.013784	0.71%
Mo 202.031†	0.3	0.0023912	mg/L	0.00125579	0.0023912	mg/L	0.00125579	52.52%
Na 330.237†	54924.8	1615.52	mg/L	15.998	1615.52	mg/L	15.998	0.99%
Ni 231.604†	28.8	0.0121157	mg/L	0.00099356	0.0121157	mg/L	0.00099356	8.20%
Pb 220.353†	4.0	0.0055286	mg/L	0.00180483	0.0055286	mg/L	0.00180483	32.65%
Sb 206.836†	-7.5	-0.0011408	mg/L	0.00564757	-0.0011408	mg/L	0.00564757	495.04%
Se 196.026†	3.7	0.0233122	mg/L	0.01722593	0.0233122	mg/L	0.01722593	73.89%
Sn 189.927†	9357.5	24.5986	mg/L	0.21207	24.5986	mg/L	0.21207	0.86%
Ti 334.940†	5.0	-0.0061203	mg/L	0.00019466	-0.0061203	mg/L	0.00019466	3.18%
Tl 190.801†	-1.9	-0.0109131	mg/L	0.01706366	-0.0109131	mg/L	0.01706366	156.36%
V 290.880†	57.0	0.0048622	mg/L	0.00097367	0.0048622	mg/L	0.00097367	20.03%
Zn 206.200†	905.0	0.314143	mg/L	0.0034342	0.314143	mg/L	0.0034342	1.09%
B 249.772	89.3	0.0834859	mg/L	0.00137578	0.0834859	mg/L	0.00137578	1.65%
Si 251.611	1857.7	1.57169	mg/L	0.016311	1.57169	mg/L	0.016311	1.04%

Sequence No.: 25
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/11/2020 7:30:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	51636.5	98.9	%	0.95				0.96%
Y 371.029	16886.2	97.6	%	1.22				1.24%
Ag 328.068†	1035.1	0.0959056	mg/L	0.00138766	0.0959056	mg/L	0.00138766	1.45%
QC value within limits for Ag 328.068 Recovery = 95.91%								
Al 308.215†	4989.6	4.70380	mg/L	0.009387	4.70380	mg/L	0.009387	0.20%
QC value within limits for Al 308.215 Recovery = 94.08%								
As 188.979†	42.3	0.520208	mg/L	0.0155108	0.520208	mg/L	0.0155108	2.98%
QC value within limits for As 188.979 Recovery = 104.04%								
Ba 233.527†	3553.3	0.471182	mg/L	0.0016456	0.471182	mg/L	0.0016456	0.35%
QC value within limits for Ba 233.527 Recovery = 94.24%								
Be 313.107†	99627.4	0.470988	mg/L	0.0004727	0.470988	mg/L	0.0004727	0.10%
QC value within limits for Be 313.107 Recovery = 94.20%								
Ca 315.887†	130632.7	47.2137	mg/L	0.01492	47.2137	mg/L	0.01492	0.03%
QC value within limits for Ca 315.887 Recovery = 94.43%								
Cd 228.802†	965.5	0.465747	mg/L	0.0021417	0.465747	mg/L	0.0021417	0.46%
QC value within limits for Cd 228.802 Recovery = 93.15%								
Co 228.616†	901.8	0.470169	mg/L	0.0016324	0.470169	mg/L	0.0016324	0.35%
QC value within limits for Co 228.616 Recovery = 94.03%								
Cr 267.716†	2498.0	0.487770	mg/L	0.0034464	0.487770	mg/L	0.0034464	0.71%
QC value within limits for Cr 267.716 Recovery = 97.55%								
Cu 327.393†	3390.3	0.470993	mg/L	0.0008662	0.470993	mg/L	0.0008662	0.18%
QC value within limits for Cu 327.393 Recovery = 94.20%								
Fe 273.955†	2181.4	5.31990	mg/L	0.036860	5.31990	mg/L	0.036860	0.69%
QC value within limits for Fe 273.955 Recovery = 106.40%								
K 404.721†	787.2	-9.57596	mg/L	0.373946	-9.57596	mg/L	0.373946	3.91%
QC value less than the lower limit for K 404.721 Recovery = -19.15%								
Mg 279.077†	40103.6	47.4996	mg/L	0.06104	47.4996	mg/L	0.06104	0.13%
QC value within limits for Mg 279.077 Recovery = 95.00%								
Mn 257.610†	10217.0	0.478273	mg/L	0.0012759	0.478273	mg/L	0.0012759	0.27%
QC value within limits for Mn 257.610 Recovery = 95.65%								
Mo 202.031†	505.2	0.470666	mg/L	0.0012234	0.470666	mg/L	0.0012234	0.26%
QC value within limits for Mo 202.031 Recovery = 94.13%								
Na 330.237†	1707.9	50.3268	mg/L	0.37324	50.3268	mg/L	0.37324	0.74%
QC value within limits for Na 330.237 Recovery = 100.65%								
Ni 231.604†	1153.6	0.481126	mg/L	0.0038796	0.481126	mg/L	0.0038796	0.81%
QC value within limits for Ni 231.604 Recovery = 96.23%								
Pb 220.353†	230.0	0.486627	mg/L	0.0119677	0.486627	mg/L	0.0119677	2.46%
QC value within limits for Pb 220.353 Recovery = 97.33%								
Sb 206.836†	62.1	0.484279	mg/L	0.0151927	0.484279	mg/L	0.0151927	3.14%
QC value within limits for Sb 206.836 Recovery = 96.86%								
Se 196.026†	84.4	0.470305	mg/L	0.0161389	0.470305	mg/L	0.0161389	3.43%
QC value within limits for Se 196.026 Recovery = 94.06%								
Sn 189.927†	187.9	0.493273	mg/L	0.0024085	0.493273	mg/L	0.0024085	0.49%
QC value within limits for Sn 189.927 Recovery = 98.65%								
Ti 334.940†	10004.7	0.484192	mg/L	0.0033545	0.484192	mg/L	0.0033545	0.69%
QC value within limits for Ti 334.940 Recovery = 96.84%								
Tl 190.801†	66.7	0.459417	mg/L	0.0120115	0.459417	mg/L	0.0120115	2.61%
QC value within limits for Tl 190.801 Recovery = 91.88%								
V 290.880†	2007.1	0.495006	mg/L	0.0026396	0.495006	mg/L	0.0026396	0.53%
QC value within limits for V 290.880 Recovery = 99.00%								
Zn 206.200†	1368.2	0.474501	mg/L	0.0039249	0.474501	mg/L	0.0039249	0.83%
QC value within limits for Zn 206.200 Recovery = 94.90%								
B 249.772	2262.1	0.542515	mg/L	0.0051617	0.542515	mg/L	0.0051617	0.95%
QC value within limits for B 249.772 Recovery = 108.50%								
Si 251.611	7478.4	5.28349	mg/L	0.050515	5.28349	mg/L	0.050515	0.96%
QC value within limits for Si 251.611 Recovery = 105.67%								

QC Failed. Continue with analysis.

Sequence No.: 26
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 9/11/2020 7:34:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	55080.8	106	%	1.86				1.76%
Y 371.029	18261.8	106	%	1.78				1.69%
Ag 328.068†	6.3	0.0017436	mg/L	0.00026963	0.0017436	mg/L	0.00026963	15.46%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-3.0	-0.0590211	mg/L	0.00383276	-0.0590211	mg/L	0.00383276	6.49%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.2	0.0089542	mg/L	0.00665220	0.0089542	mg/L	0.00665220	74.29%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.4	-0.0135484	mg/L	0.00016341	-0.0135484	mg/L	0.00016341	1.21%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	16.9	-0.0004552	mg/L	0.00001490	-0.0004552	mg/L	0.00001490	3.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-51.1	0.170177	mg/L	0.0022843	0.170177	mg/L	0.0022843	1.34%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.3	0.0037796	mg/L	0.00077303	0.0037796	mg/L	0.00077303	20.45%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-0.0	0.0009902	mg/L	0.00099841	0.0009902	mg/L	0.00099841	100.83%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.6	-0.0046211	mg/L	0.00048503	-0.0046211	mg/L	0.00048503	10.50%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-3.1	-0.0050000	mg/L	0.00113552	-0.0050000	mg/L	0.00113552	22.71%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-2.4	-0.178351	mg/L	0.0005727	-0.178351	mg/L	0.0005727	0.32%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-13.7	2.74985	mg/L	0.235468	2.74985	mg/L	0.235468	8.56%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	2.3	-0.0012479	mg/L	0.00188073	-0.0012479	mg/L	0.00188073	150.72%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-1.7	-0.0077891	mg/L	0.00011103	-0.0077891	mg/L	0.00011103	1.43%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-1.6	0.0006248	mg/L	0.00070818	0.0006248	mg/L	0.00070818	113.35%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.0	0.122551	mg/L	0.0557401	0.122551	mg/L	0.0557401	45.48%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-3.1	-0.0011544	mg/L	0.00044274	-0.0011544	mg/L	0.00044274	38.35%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.7	-0.0042968	mg/L	0.00047579	-0.0042968	mg/L	0.00047579	11.07%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.5	-0.0019293	mg/L	0.00747738	-0.0019293	mg/L	0.00747738	387.57%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.5	-0.0016093	mg/L	0.00567007	-0.0016093	mg/L	0.00567007	352.33%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.8	0.0060210	mg/L	0.00234091	0.0060210	mg/L	0.00234091	38.88%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	6.4	-0.0078212	mg/L	0.00015874	-0.0078212	mg/L	0.00015874	2.03%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-0.6	-0.0059335	mg/L	0.00756654	-0.0059335	mg/L	0.00756654	127.52%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	1.8	-0.0092381	mg/L	0.00018355	-0.0092381	mg/L	0.00018355	1.99%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-0.3	0.0007118	mg/L	0.00051177	0.0007118	mg/L	0.00051177	71.89%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-2.3	-0.0133420	mg/L	0.00059574	-0.0133420	mg/L	0.00059574	4.47%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-4.2	-0.0362211	mg/L	0.00074140	-0.0362211	mg/L	0.00074140	2.05%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 27
Sample ID: AD19139-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 95
Date Collected: 9/11/2020 7:38:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19139-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	47896.0	91.7	%	0.56				0.61%
Y 371.029	15454.4	89.3	%	0.28				0.31%
Ag 328.068†	3.9	0.0015812	mg/L	0.00021551	0.0015812	mg/L	0.00021551	13.63%
Al 308.215†	847.7	0.750146	mg/L	0.0111461	0.750146	mg/L	0.0111461	1.49%
As 188.979†	1.0	0.0052111	mg/L	0.01525269	0.0052111	mg/L	0.01525269	292.70%
Ba 233.527†	774.0	0.0920086	mg/L	0.00225351	0.0920086	mg/L	0.00225351	2.45%
Be 313.107†	-44.6	-0.0007464	mg/L	0.00004891	-0.0007464	mg/L	0.00004891	6.55%
Ca 315.887†	3552.1	1.46725	mg/L	0.008695	1.46725	mg/L	0.008695	0.59%
Cd 228.802†	1.5	0.0046240	mg/L	0.00073778	0.0046240	mg/L	0.00073778	15.96%
Co 228.616†	3.1	0.0025834	mg/L	0.00011880	0.0025834	mg/L	0.00011880	4.60%
Cr 267.716†	43.2	0.0035556	mg/L	0.00127023	0.0035556	mg/L	0.00127023	35.72%
Cu 327.393†	8.7	-0.0033009	mg/L	0.00080135	-0.0033009	mg/L	0.00080135	24.28%
Fe 273.955†	166.1	0.245778	mg/L	0.0161783	0.245778	mg/L	0.0161783	6.58%
K 404.721†	9.6	-0.458181	mg/L	0.6643794	-0.458181	mg/L	0.6643794	145.00%
Mg 279.077†	223.0	0.260207	mg/L	0.0052272	0.260207	mg/L	0.0052272	2.01%
Mn 257.610†	290.6	0.0061102	mg/L	0.00025387	0.0061102	mg/L	0.00025387	4.15%
Mo 202.031†	1.1	0.0031309	mg/L	0.00075302	0.0031309	mg/L	0.00075302	24.05%
Na 330.237†	57582.2	1693.68	mg/L	18.129	1693.68	mg/L	18.129	1.07%
Ni 231.604†	9.9	0.0042396	mg/L	0.00109358	0.0042396	mg/L	0.00109358	25.79%
Pb 220.353†	-0.8	-0.0045614	mg/L	0.00324774	-0.0045614	mg/L	0.00324774	71.20%
Sb 206.836†	0.4	-0.0022585	mg/L	0.00961277	-0.0022585	mg/L	0.00961277	425.62%
Se 196.026†	-1.5	-0.0067968	mg/L	0.01087967	-0.0067968	mg/L	0.01087967	160.07%
Sn 189.927†	2.0	0.0063865	mg/L	0.00391628	0.0063865	mg/L	0.00391628	61.32%
Ti 334.940†	18.8	-0.0071191	mg/L	0.00058311	-0.0071191	mg/L	0.00058311	8.19%
Tl 190.801†	1.5	0.0084293	mg/L	0.01145503	0.0084293	mg/L	0.01145503	135.89%
V 290.880†	16.0	-0.0056881	mg/L	0.00066742	-0.0056881	mg/L	0.00066742	11.73%
Zn 206.200†	94.6	0.0335542	mg/L	0.00021258	0.0335542	mg/L	0.00021258	0.63%
B 249.772	406.9	0.0695719	mg/L	0.00066325	0.0695719	mg/L	0.00066325	0.95%
Si 251.611	788.3	0.578604	mg/L	0.0080707	0.578604	mg/L	0.0080707	1.39%

Sequence No.: 28
Sample ID: AD19139-004
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 96
Date Collected: 9/11/2020 7:42:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19139-004

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	48635.7	93.2	%	0.57				0.61%
Y 371.029	15885.1	91.8	%	0.27				0.29%
Ag 328.068†	25.1	0.0035931	mg/L	0.00062797	0.0035931	mg/L	0.00062797	17.48%
Al 308.215†	1472.1	1.34507	mg/L	0.017831	1.34507	mg/L	0.017831	1.33%
As 188.979†	1.0	0.0054127	mg/L	0.02528229	0.0054127	mg/L	0.02528229	467.09%
Ba 233.527†	1294.6	0.163026	mg/L	0.0016436	0.163026	mg/L	0.0016436	1.01%
Be 313.107†	11.5	-0.0004809	mg/L	0.00005225	-0.0004809	mg/L	0.00005225	10.87%
Ca 315.887†	388348.3	139.986	mg/L	2.3162	139.986	mg/L	2.3162	1.65%
Cd 228.802†	0.5	0.0041738	mg/L	0.00094169	0.0041738	mg/L	0.00094169	22.56%
Co 228.616†	7.0	0.0046534	mg/L	0.00137551	0.0046534	mg/L	0.00137551	29.56%
Cr 267.716†	45.6	0.0041428	mg/L	0.00052594	0.0041428	mg/L	0.00052594	12.70%
Cu 327.393†	542.7	0.0715439	mg/L	0.00023414	0.0715439	mg/L	0.00023414	0.33%
Fe 273.955†	301.5	0.586816	mg/L	0.0153114	0.586816	mg/L	0.0153114	2.61%
K 404.721†	21.6	-3.42723	mg/L	0.980330	-3.42723	mg/L	0.980330	28.60%
Mg 279.077†	9249.7	10.9525	mg/L	0.03278	10.9525	mg/L	0.03278	0.30%
Mn 257.610†	5564.2	0.256956	mg/L	0.0006124	0.256956	mg/L	0.0006124	0.24%
Mo 202.031†	4.2	0.0060579	mg/L	0.00164282	0.0060579	mg/L	0.00164282	27.12%
Na 330.237†	54340.7	1598.34	mg/L	4.590	1598.34	mg/L	4.590	0.29%
Ni 231.604†	17.3	0.0073338	mg/L	0.00037353	0.0073338	mg/L	0.00037353	5.09%
Pb 220.353†	17.2	0.0336310	mg/L	0.00222932	0.0336310	mg/L	0.00222932	6.63%
Sb 206.836†	-0.3	-0.0075861	mg/L	0.00854093	-0.0075861	mg/L	0.00854093	112.59%
Se 196.026†	1.5	0.0212543	mg/L	0.00332773	0.0212543	mg/L	0.00332773	15.66%
Sn 189.927†	-4.0	-0.0092988	mg/L	0.00487667	-0.0092988	mg/L	0.00487667	52.44%
Ti 334.940†	209.4	0.0127225	mg/L	0.00065503	0.0127225	mg/L	0.00065503	5.15%
Tl 190.801†	1.6	0.0012680	mg/L	0.00976436	0.0012680	mg/L	0.00976436	770.08%
V 290.880†	107.4	0.0178020	mg/L	0.00092656	0.0178020	mg/L	0.00092656	5.20%
Zn 206.200†	236.4	0.0826594	mg/L	0.00264824	0.0826594	mg/L	0.00264824	3.20%
B 249.772	357.7	0.0750926	mg/L	0.00042230	0.0750926	mg/L	0.00042230	0.56%
Si 251.611	17651.9	12.3768	mg/L	0.09258	12.3768	mg/L	0.09258	0.75%

Sequence No.: 29
Sample ID: AD19148-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 98
Date Collected: 9/11/2020 7:46:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19148-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44769.9	85.8	%	0.59				0.69%
Y 371.029	15350.6	88.7	%	1.17				1.32%
Ag 328.068†	162.2	0.0157711	mg/L	0.00028905	0.0157711	mg/L	0.00028905	1.83%
Al 308.215†	154.6	0.0925704	mg/L	0.00423325	0.0925704	mg/L	0.00423325	4.57%
As 188.979†	2.9	0.0299865	mg/L	0.01698581	0.0299865	mg/L	0.01698581	56.64%
Ba 233.527†	2018.7	0.261822	mg/L	0.0018771	0.261822	mg/L	0.0018771	0.72%
Be 313.107†	-40.0	-0.0007244	mg/L	0.00004763	-0.0007244	mg/L	0.00004763	6.58%
Ca 315.887†	2018755.2	726.900	mg/L	2.5020	726.900	mg/L	2.5020	0.34%
Cd 228.802†	4.8	0.0062058	mg/L	0.00012857	0.0062058	mg/L	0.00012857	2.07%
Co 228.616†	31.3	0.0172836	mg/L	0.00237095	0.0172836	mg/L	0.00237095	13.72%
Cr 267.716†	14.9	-0.0018476	mg/L	0.00010922	-0.0018476	mg/L	0.00010922	5.91%
Cu 327.393†	78.6	0.0064691	mg/L	0.00021289	0.0064691	mg/L	0.00021289	3.29%
Fe 273.955†	94.9	0.0664116	mg/L	0.00715315	0.0664116	mg/L	0.00715315	10.77%
K 404.721†	33.5	2.87488	mg/L	0.765796	2.87488	mg/L	0.765796	26.64%
Mg 279.077†	12812.2	15.1724	mg/L	0.08407	15.1724	mg/L	0.08407	0.55%
Mn 257.610†	29869.7	1.41308	mg/L	0.002957	1.41308	mg/L	0.002957	0.21%
Mo 202.031†	5.1	0.0068431	mg/L	0.00067199	0.0068431	mg/L	0.00067199	9.82%
Na 330.237†	58076.0	1708.20	mg/L	4.954	1708.20	mg/L	4.954	0.29%
Ni 231.604†	51.0	0.0213464	mg/L	0.00182435	0.0213464	mg/L	0.00182435	8.55%
Pb 220.353†	20.1	0.0397249	mg/L	0.00910042	0.0397249	mg/L	0.00910042	22.91%
Sb 206.836†	2.1	0.0105771	mg/L	0.00553656	0.0105771	mg/L	0.00553656	52.34%
Se 196.026†	1.4	0.0675735	mg/L	0.01409952	0.0675735	mg/L	0.01409952	20.87%
Sn 189.927†	-10.9	-0.0273747	mg/L	0.00227394	-0.0273747	mg/L	0.00227394	8.31%
Ti 334.940†	-281.2	0.0333592	mg/L	0.00024306	0.0333592	mg/L	0.00024306	0.73%
Tl 190.801†	0.5	-0.0378256	mg/L	0.03046074	-0.0378256	mg/L	0.03046074	80.53%
V 290.880†	140.9	0.0264469	mg/L	0.00027015	0.0264469	mg/L	0.00027015	1.02%
Zn 206.200†	914.9	0.317577	mg/L	0.0024329	0.317577	mg/L	0.0024329	0.77%
B 249.772	755.0	0.165368	mg/L	0.0025774	0.165368	mg/L	0.0025774	1.56%
Si 251.611	6204.3	4.56185	mg/L	0.037205	4.56185	mg/L	0.037205	0.82%

Sequence No.: 30
Sample ID: AD19084-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 99
Date Collected: 9/11/2020 7:50:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19084-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46084.0	88.3	%	0.27				0.31%
Y 371.029	15347.6	88.7	%	0.58				0.66%
Ag 328.068†	22.8	0.0035212	mg/L	0.00064873	0.0035212	mg/L	0.00064873	18.42%
Al 308.215†	228.8	0.164258	mg/L	0.0026873	0.164258	mg/L	0.0026873	1.64%
As 188.979†	1.1	0.0062198	mg/L	0.00634763	0.0062198	mg/L	0.00634763	102.06%
Ba 233.527†	2007.9	0.260349	mg/L	0.0021132	0.260349	mg/L	0.0021132	0.81%
Be 313.107†	-19.7	-0.0006286	mg/L	0.00008385	-0.0006286	mg/L	0.00008385	13.34%
Ca 315.887†	316434.1	114.099	mg/L	0.5965	114.099	mg/L	0.5965	0.52%
Cd 228.802†	1.3	0.0045251	mg/L	0.00066266	0.0045251	mg/L	0.00066266	14.64%
Co 228.616†	24.2	0.0135845	mg/L	0.00096717	0.0135845	mg/L	0.00096717	7.12%
Cr 267.716†	13.1	-0.0021145	mg/L	0.00063242	-0.0021145	mg/L	0.00063242	29.91%
Cu 327.393†	0.6	-0.0044454	mg/L	0.00083818	-0.0044454	mg/L	0.00083818	18.86%
Fe 273.955†	175.1	0.268376	mg/L	0.0172159	0.268376	mg/L	0.0172159	6.41%
K 404.721†	15.5	-0.356136	mg/L	0.8739505	-0.356136	mg/L	0.8739505	245.40%
Mg 279.077†	25962.0	30.7485	mg/L	0.21404	30.7485	mg/L	0.21404	0.70%
Mn 257.610†	11046.1	0.517711	mg/L	0.0013774	0.517711	mg/L	0.0013774	0.27%
Mo 202.031†	2.0	0.0040047	mg/L	0.00072255	0.0040047	mg/L	0.00072255	18.04%
Na 330.237†	55035.3	1618.77	mg/L	5.348	1618.77	mg/L	5.348	0.33%
Ni 231.604†	108.0	0.0450587	mg/L	0.00205494	0.0450587	mg/L	0.00205494	4.56%
Pb 220.353†	6.7	0.0114528	mg/L	0.00795528	0.0114528	mg/L	0.00795528	69.46%
Sb 206.836†	0.2	-0.0038902	mg/L	0.01033696	-0.0038902	mg/L	0.01033696	265.72%
Se 196.026†	1.8	0.0215467	mg/L	0.00408565	0.0215467	mg/L	0.00408565	18.96%
Sn 189.927†	-5.0	-0.0120244	mg/L	0.00550946	-0.0120244	mg/L	0.00550946	45.82%
Ti 334.940†	10.0	0.0010129	mg/L	0.00005713	0.0010129	mg/L	0.00005713	5.64%
Tl 190.801†	0.4	-0.0049717	mg/L	0.01695273	-0.0049717	mg/L	0.01695273	340.99%
V 290.880†	223.6	0.0480292	mg/L	0.00249634	0.0480292	mg/L	0.00249634	5.20%
Zn 206.200†	176.2	0.0618291	mg/L	0.00069323	0.0618291	mg/L	0.00069323	1.12%
B 249.772	237.1	0.0354084	mg/L	0.00020561	0.0354084	mg/L	0.00020561	0.58%
Si 251.611	4754.5	3.38469	mg/L	0.017934	3.38469	mg/L	0.017934	0.53%

Sequence No.: 31
Sample ID: AD19159-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 100
Date Collected: 9/11/2020 7:54:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	45467.5	87.1	%	0.26				0.30%
Y 371.029	14890.9	86.1	%	0.09				0.11%
Ag 328.068†	147.7	0.0144104	mg/L	0.00068623	0.0144104	mg/L	0.00068623	4.76%
Al 308.215†	30.4	-0.0261825	mg/L	0.00346915	-0.0261825	mg/L	0.00346915	13.25%
As 188.979†	1.9	0.0173300	mg/L	0.02134027	0.0173300	mg/L	0.02134027	123.14%
Ba 233.527†	5306.0	0.710311	mg/L	0.0086250	0.710311	mg/L	0.0086250	1.21%
Be 313.107†	-92.5	-0.0009729	mg/L	0.00003537	-0.0009729	mg/L	0.00003537	3.64%
Ca 315.887†	1727841.4	622.177	mg/L	8.1699	622.177	mg/L	8.1699	1.31%
Cd 228.802†	5.0	0.0062996	mg/L	0.00076780	0.0062996	mg/L	0.00076780	12.19%
Co 228.616†	137.6	0.0725641	mg/L	0.00059975	0.0725641	mg/L	0.00059975	0.83%
Cr 267.716†	8.1	-0.0032374	mg/L	0.00050047	-0.0032374	mg/L	0.00050047	15.46%
Cu 327.393†	-20.5	-0.0074342	mg/L	0.00093652	-0.0074342	mg/L	0.00093652	12.60%
Fe 273.955†	11.0	-0.144618	mg/L	0.0025441	-0.144618	mg/L	0.0025441	1.76%
K 404.721†	37.6	5.38789	mg/L	0.364482	5.38789	mg/L	0.364482	6.76%
Mg 279.077†	7770.0	9.19969	mg/L	0.119652	9.19969	mg/L	0.119652	1.30%
Mn 257.610†	79225.0	3.76073	mg/L	0.061330	3.76073	mg/L	0.061330	1.63%
Mo 202.031†	4.5	0.0063037	mg/L	0.00045650	0.0063037	mg/L	0.00045650	7.24%
Na 330.237†	56673.9	1666.96	mg/L	20.955	1666.96	mg/L	20.955	1.26%
Ni 231.604†	62.9	0.0262979	mg/L	0.00011037	0.0262979	mg/L	0.00011037	0.42%
Pb 220.353†	114.8	0.241120	mg/L	0.0112175	0.241120	mg/L	0.0112175	4.65%
Sb 206.836†	3.0	0.0179593	mg/L	0.00718865	0.0179593	mg/L	0.00718865	40.03%
Se 196.026†	6.7	0.0874579	mg/L	0.02225712	0.0874579	mg/L	0.02225712	25.45%
Sn 189.927†	-7.9	-0.0194668	mg/L	0.00364108	-0.0194668	mg/L	0.00364108	18.70%
Ti 334.940†	-265.7	0.0261558	mg/L	0.00026979	0.0261558	mg/L	0.00026979	1.03%
Tl 190.801†	-1.8	-0.0397822	mg/L	0.01489529	-0.0397822	mg/L	0.01489529	37.44%
V 290.880†	94.4	0.0144715	mg/L	0.00215623	0.0144715	mg/L	0.00215623	14.90%
Zn 206.200†	152.9	0.0537618	mg/L	0.00060572	0.0537618	mg/L	0.00060572	1.13%
B 249.772	466.7	0.125317	mg/L	0.0015153	0.125317	mg/L	0.0015153	1.21%
Si 251.611	28648.7	20.2321	mg/L	0.25195	20.2321	mg/L	0.25195	1.25%

Sequence No.: 32
Sample ID: AD19159-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 101
Date Collected: 9/11/2020 7:59:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-002

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	45551.9	87.2	%	1.12				1.29%
Y 371.029	14747.7	85.3	%	1.18				1.38%
Ag 328.068†	153.0	0.0148548	mg/L	0.00049571	0.0148548	mg/L	0.00049571	3.34%
Al 308.215†	41.8	-0.0155724	mg/L	0.00223045	-0.0155724	mg/L	0.00223045	14.32%
As 188.979†	2.1	0.0199635	mg/L	0.01088839	0.0199635	mg/L	0.01088839	54.54%
Ba 233.527†	13654.6	1.84933	mg/L	0.006958	1.84933	mg/L	0.006958	0.38%
Be 313.107†	-78.3	-0.0009059	mg/L	0.00002860	-0.0009059	mg/L	0.00002860	3.16%
Ca 315.887†	1854163.8	667.651	mg/L	8.0569	667.651	mg/L	8.0569	1.21%
Cd 228.802†	16.2	0.0116495	mg/L	0.00050071	0.0116495	mg/L	0.00050071	4.30%
Co 228.616†	-0.6	0.0006858	mg/L	0.00065189	0.0006858	mg/L	0.00065189	95.05%
Cr 267.716†	201.4	0.0346744	mg/L	0.00024230	0.0346744	mg/L	0.00024230	0.70%
Cu 327.393†	38.4	0.0008245	mg/L	0.00025208	0.0008245	mg/L	0.00025208	30.57%
Fe 273.955†	22.6	-0.115510	mg/L	0.0042683	-0.115510	mg/L	0.0042683	3.70%
K 404.721†	28.3	4.52799	mg/L	0.357339	4.52799	mg/L	0.357339	7.89%
Mg 279.077†	4084.9	4.83464	mg/L	0.038830	4.83464	mg/L	0.038830	0.80%
Mn 257.610†	2462.8	0.109435	mg/L	0.0012560	0.109435	mg/L	0.0012560	1.15%
Mo 202.031†	2.9	0.0048624	mg/L	0.00215986	0.0048624	mg/L	0.00215986	44.42%
Na 330.237†	56626.6	1665.57	mg/L	4.106	1665.57	mg/L	4.106	0.25%
Ni 231.604†	33.2	0.0139412	mg/L	0.00293659	0.0139412	mg/L	0.00293659	21.06%
Pb 220.353†	23.1	0.0462697	mg/L	0.00722852	0.0462697	mg/L	0.00722852	15.62%
Sb 206.836†	1.1	0.0029904	mg/L	0.02485869	0.0029904	mg/L	0.02485869	831.28%
Se 196.026†	-0.4	0.0524217	mg/L	0.00845637	0.0524217	mg/L	0.00845637	16.13%
Sn 189.927†	-9.9	-0.0247490	mg/L	0.00424212	-0.0247490	mg/L	0.00424212	17.14%
Ti 334.940†	-279.4	0.0289425	mg/L	0.00067221	0.0289425	mg/L	0.00067221	2.32%
Tl 190.801†	-0.2	-0.0476644	mg/L	0.00664241	-0.0476644	mg/L	0.00664241	13.94%
V 290.880†	71.8	0.0085672	mg/L	0.00087941	0.0085672	mg/L	0.00087941	10.26%
Zn 206.200†	2067.7	0.716697	mg/L	0.0066939	0.716697	mg/L	0.0066939	0.93%
B 249.772	297.2	0.0585752	mg/L	0.00158075	0.0585752	mg/L	0.00158075	2.70%
Si 251.611	5141.2	3.79947	mg/L	0.049856	3.79947	mg/L	0.049856	1.31%

Sequence No.: 33
Sample ID: AD19159-003
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 102
Date Collected: 9/11/2020 8:03:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-003

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	45668.1	87.5	%	0.45				0.51%
Y 371.029	14789.1	85.5	%	0.57				0.67%
Ag 328.068†	148.7	0.0144845	mg/L	0.00056155	0.0144845	mg/L	0.00056155	3.88%
Al 308.215†	90.6	0.0308938	mg/L	0.00520745	0.0308938	mg/L	0.00520745	16.86%
As 188.979†	1.7	0.0139438	mg/L	0.01252162	0.0139438	mg/L	0.01252162	89.80%
Ba 233.527†	14756.9	1.99971	mg/L	0.004450	1.99971	mg/L	0.004450	0.22%
Be 313.107†	-85.3	-0.0009388	mg/L	0.00002290	-0.0009388	mg/L	0.00002290	2.44%
Ca 315.887†	1865850.5	671.858	mg/L	1.7882	671.858	mg/L	1.7882	0.27%
Cd 228.802†	6.9	0.0072022	mg/L	0.00062260	0.0072022	mg/L	0.00062260	8.64%
Co 228.616†	1.1	0.0015836	mg/L	0.00068362	0.0015836	mg/L	0.00068362	43.17%
Cr 267.716†	6.7	-0.0035338	mg/L	0.00056171	-0.0035338	mg/L	0.00056171	15.90%
Cu 327.393†	-41.0	-0.0103033	mg/L	0.00144779	-0.0103033	mg/L	0.00144779	14.05%
Fe 273.955†	49.3	-0.0483017	mg/L	0.00652995	-0.0483017	mg/L	0.00652995	13.52%
K 404.721†	26.8	3.71674	mg/L	0.387981	3.71674	mg/L	0.387981	10.44%
Mg 279.077†	5793.6	6.85862	mg/L	0.017406	6.85862	mg/L	0.017406	0.25%
Mn 257.610†	893.5	0.0347888	mg/L	0.00047176	0.0347888	mg/L	0.00047176	1.36%
Mo 202.031†	3.9	0.0057754	mg/L	0.00175376	0.0057754	mg/L	0.00175376	30.37%
Na 330.237†	57140.8	1680.70	mg/L	2.898	1680.70	mg/L	2.898	0.17%
Ni 231.604†	11.9	0.0050807	mg/L	0.00121163	0.0050807	mg/L	0.00121163	23.85%
Pb 220.353†	4.4	0.0064435	mg/L	0.00110866	0.0064435	mg/L	0.00110866	17.21%
Sb 206.836†	-1.0	-0.0134193	mg/L	0.00087793	-0.0134193	mg/L	0.00087793	6.54%
Se 196.026†	-1.2	0.0483479	mg/L	0.01058683	0.0483479	mg/L	0.01058683	21.90%
Sn 189.927†	-7.5	-0.0186040	mg/L	0.00709314	-0.0186040	mg/L	0.00709314	38.13%
Ti 334.940†	-251.7	0.0306176	mg/L	0.00082285	0.0306176	mg/L	0.00082285	2.69%
Tl 190.801†	-1.6	-0.0580343	mg/L	0.00638870	-0.0580343	mg/L	0.00638870	11.01%
V 290.880†	80.8	0.0109371	mg/L	0.00105357	0.0109371	mg/L	0.00105357	9.63%
Zn 206.200†	566.1	0.196803	mg/L	0.0007935	0.196803	mg/L	0.0007935	0.40%
B 249.772	318.3	0.0586125	mg/L	0.00203576	0.0586125	mg/L	0.00203576	3.47%
Si 251.611	2093.6	1.67045	mg/L	0.015508	1.67045	mg/L	0.015508	0.93%

Sequence No.: 34
Sample ID: AD19159-007
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 103
Date Collected: 9/11/2020 8:07:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-007

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46326.1	88.7	%	0.38				0.43%
Y 371.029	14739.7	85.2	%	0.43				0.50%
Ag 328.068†	103.2	0.0105694	mg/L	0.00053662	0.0105694	mg/L	0.00053662	5.08%
Al 308.215†	90.8	0.0323117	mg/L	0.00219201	0.0323117	mg/L	0.00219201	6.78%
As 188.979†	1.9	0.0165643	mg/L	0.00610200	0.0165643	mg/L	0.00610200	36.84%
Ba 233.527†	4227.8	0.563213	mg/L	0.0042865	0.563213	mg/L	0.0042865	0.76%
Be 313.107†	-82.4	-0.0009252	mg/L	0.00002866	-0.0009252	mg/L	0.00002866	3.10%
Ca 315.887†	1263661.1	455.081	mg/L	1.9702	455.081	mg/L	1.9702	0.43%
Cd 228.802†	5.9	0.0067279	mg/L	0.00015662	0.0067279	mg/L	0.00015662	2.33%
Co 228.616†	1.1	0.0015892	mg/L	0.00090217	0.0015892	mg/L	0.00090217	56.77%
Cr 267.716†	7.7	-0.0032272	mg/L	0.00137682	-0.0032272	mg/L	0.00137682	42.66%
Cu 327.393†	-30.1	-0.0087739	mg/L	0.00051688	-0.0087739	mg/L	0.00051688	5.89%
Fe 273.955†	39.6	-0.0726988	mg/L	0.00614639	-0.0726988	mg/L	0.00614639	8.45%
K 404.721†	48.2	5.23390	mg/L	0.572789	5.23390	mg/L	0.572789	10.94%
Mg 279.077†	17695.1	20.9562	mg/L	0.09779	20.9562	mg/L	0.09779	0.47%
Mn 257.610†	9523.8	0.445302	mg/L	0.0023609	0.445302	mg/L	0.0023609	0.53%
Mo 202.031†	2.8	0.0047311	mg/L	0.00269500	0.0047311	mg/L	0.00269500	56.96%
Na 330.237†	56871.9	1672.79	mg/L	3.569	1672.79	mg/L	3.569	0.21%
Ni 231.604†	16.3	0.0069005	mg/L	0.00166313	0.0069005	mg/L	0.00166313	24.10%
Pb 220.353†	4.2	0.0060897	mg/L	0.00540971	0.0060897	mg/L	0.00540971	88.83%
Sb 206.836†	0.5	-0.0018608	mg/L	0.00395617	-0.0018608	mg/L	0.00395617	212.61%
Se 196.026†	3.3	0.0561088	mg/L	0.00912212	0.0561088	mg/L	0.00912212	16.26%
Sn 189.927†	-10.4	-0.0260868	mg/L	0.00340150	-0.0260868	mg/L	0.00340150	13.04%
Ti 334.940†	-148.1	0.0192028	mg/L	0.00050892	0.0192028	mg/L	0.00050892	2.65%
Tl 190.801†	1.6	-0.0180269	mg/L	0.01793485	-0.0180269	mg/L	0.01793485	99.49%
V 290.880†	172.2	0.0346107	mg/L	0.00076063	0.0346107	mg/L	0.00076063	2.20%
Zn 206.200†	201.0	0.0704042	mg/L	0.00010041	0.0704042	mg/L	0.00010041	0.14%
B 249.772	540.1	0.109505	mg/L	0.0006194	0.109505	mg/L	0.0006194	0.57%
Si 251.611	3855.7	2.84063	mg/L	0.023922	2.84063	mg/L	0.023922	0.84%

Sequence No.: 35
Sample ID: AD19159-008
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 104
Date Collected: 9/11/2020 8:11:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-008

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46836.1	89.7	%	0.70				0.78%
Y 371.029	14860.7	85.9	%	0.43				0.50%
Ag 328.068†	73.7	0.0078876	mg/L	0.00064559	0.0078876	mg/L	0.00064559	8.18%
Al 308.215†	360.7	0.288249	mg/L	0.0051718	0.288249	mg/L	0.0051718	1.79%
As 188.979†	0.5	-0.0015983	mg/L	0.00984973	-0.0015983	mg/L	0.00984973	616.28%
Ba 233.527†	4534.5	0.605059	mg/L	0.0043976	0.605059	mg/L	0.0043976	0.73%
Be 313.107†	-32.0	-0.0006868	mg/L	0.00003597	-0.0006868	mg/L	0.00003597	5.24%
Ca 315.887†	920882.3	331.688	mg/L	1.3091	331.688	mg/L	1.3091	0.39%
Cd 228.802†	2.2	0.0049569	mg/L	0.00054643	0.0049569	mg/L	0.00054643	11.02%
Co 228.616†	150.5	0.0792955	mg/L	0.00108520	0.0792955	mg/L	0.00108520	1.37%
Cr 267.716†	12.1	-0.0024244	mg/L	0.00078819	-0.0024244	mg/L	0.00078819	32.51%
Cu 327.393†	20.2	-0.0017186	mg/L	0.00082587	-0.0017186	mg/L	0.00082587	48.06%
Fe 273.955†	63.3	-0.0129752	mg/L	0.00421924	-0.0129752	mg/L	0.00421924	32.52%
K 404.721†	26.7	3.33198	mg/L	0.673122	3.33198	mg/L	0.673122	20.20%
Mg 279.077†	11077.3	13.1173	mg/L	0.05003	13.1173	mg/L	0.05003	0.38%
Mn 257.610†	29647.2	1.40250	mg/L	0.003141	1.40250	mg/L	0.003141	0.22%
Mo 202.031†	5.4	0.0071420	mg/L	0.00139151	0.0071420	mg/L	0.00139151	19.48%
Na 330.237†	57781.5	1699.54	mg/L	5.687	1699.54	mg/L	5.687	0.33%
Ni 231.604†	60.8	0.0254395	mg/L	0.00125554	0.0254395	mg/L	0.00125554	4.94%
Pb 220.353†	14.0	0.0269813	mg/L	0.00258321	0.0269813	mg/L	0.00258321	9.57%
Sb 206.836†	1.8	0.0086896	mg/L	0.00975785	0.0086896	mg/L	0.00975785	112.29%
Se 196.026†	1.0	0.0335915	mg/L	0.00792385	0.0335915	mg/L	0.00792385	23.59%
Sn 189.927†	-8.9	-0.0222857	mg/L	0.00140198	-0.0222857	mg/L	0.00140198	6.29%
Ti 334.940†	-25.0	0.0158373	mg/L	0.00132361	0.0158373	mg/L	0.00132361	8.36%
Tl 190.801†	0.2	-0.0165883	mg/L	0.01288489	-0.0165883	mg/L	0.01288489	77.67%
V 290.880†	119.7	0.0210256	mg/L	0.00102367	0.0210256	mg/L	0.00102367	4.87%
Zn 206.200†	490.0	0.170467	mg/L	0.0013017	0.170467	mg/L	0.0013017	0.76%
B 249.772	395.4	0.0776166	mg/L	0.00156247	0.0776166	mg/L	0.00156247	2.01%
Si 251.611	4508.1	3.28646	mg/L	0.062607	3.28646	mg/L	0.062607	1.90%

Sequence No.: 36
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/11/2020 8:16:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	50648.4	97.0	%	0.87				0.90%
Y 371.029	16129.1	93.2	%	0.41				0.44%
Ag 328.068†	1044.6	0.0967495	mg/L	0.00153923	0.0967495	mg/L	0.00153923	1.59%
QC value within limits for Ag 328.068 Recovery = 96.75%								
Al 308.215†	5025.2	4.73764	mg/L	0.004509	4.73764	mg/L	0.004509	0.10%
QC value within limits for Al 308.215 Recovery = 94.75%								
As 188.979†	39.9	0.489758	mg/L	0.0077958	0.489758	mg/L	0.0077958	1.59%
QC value within limits for As 188.979 Recovery = 97.95%								
Ba 233.527†	3581.8	0.475073	mg/L	0.0031764	0.475073	mg/L	0.0031764	0.67%
QC value within limits for Ba 233.527 Recovery = 95.01%								
Be 313.107†	100309.8	0.474218	mg/L	0.0002833	0.474218	mg/L	0.0002833	0.06%
QC value within limits for Be 313.107 Recovery = 94.84%								
Ca 315.887†	130171.4	47.0477	mg/L	0.10721	47.0477	mg/L	0.10721	0.23%
QC value within limits for Ca 315.887 Recovery = 94.10%								
Cd 228.802†	953.4	0.459949	mg/L	0.0047857	0.459949	mg/L	0.0047857	1.04%
QC value within limits for Cd 228.802 Recovery = 91.99%								
Co 228.616†	907.9	0.473312	mg/L	0.0050776	0.473312	mg/L	0.0050776	1.07%
QC value within limits for Co 228.616 Recovery = 94.66%								
Cr 267.716†	2522.9	0.492679	mg/L	0.0041884	0.492679	mg/L	0.0041884	0.85%
QC value within limits for Cr 267.716 Recovery = 98.54%								
Cu 327.393†	3411.4	0.473924	mg/L	0.0004892	0.473924	mg/L	0.0004892	0.10%
QC value within limits for Cu 327.393 Recovery = 94.78%								
Fe 273.955†	2107.4	5.13350	mg/L	0.051765	5.13350	mg/L	0.051765	1.01%
QC value within limits for Fe 273.955 Recovery = 102.67%								
K 404.721†	784.1	-7.74571	mg/L	0.365347	-7.74571	mg/L	0.365347	4.72%
QC value less than the lower limit for K 404.721 Recovery = -15.49%								
Mg 279.077†	40180.5	47.5906	mg/L	0.09520	47.5906	mg/L	0.09520	0.20%
QC value within limits for Mg 279.077 Recovery = 95.18%								
Mn 257.610†	10202.6	0.477590	mg/L	0.0014338	0.477590	mg/L	0.0014338	0.30%
QC value within limits for Mn 257.610 Recovery = 95.52%								
Mo 202.031†	509.6	0.474723	mg/L	0.0049279	0.474723	mg/L	0.0049279	1.04%
QC value within limits for Mo 202.031 Recovery = 94.94%								
Na 330.237†	1693.7	49.9082	mg/L	0.64790	49.9082	mg/L	0.64790	1.30%
QC value within limits for Na 330.237 Recovery = 99.82%								
Ni 231.604†	1138.4	0.474822	mg/L	0.0042271	0.474822	mg/L	0.0042271	0.89%
QC value within limits for Ni 231.604 Recovery = 94.96%								
Pb 220.353†	226.6	0.479527	mg/L	0.0040611	0.479527	mg/L	0.0040611	0.85%
QC value within limits for Pb 220.353 Recovery = 95.91%								
Sb 206.836†	62.3	0.485389	mg/L	0.0173906	0.485389	mg/L	0.0173906	3.58%
QC value within limits for Sb 206.836 Recovery = 97.08%								
Se 196.026†	85.9	0.478623	mg/L	0.0317340	0.478623	mg/L	0.0317340	6.63%
QC value within limits for Se 196.026 Recovery = 95.72%								
Sn 189.927†	178.7	0.469079	mg/L	0.0045315	0.469079	mg/L	0.0045315	0.97%
QC value within limits for Sn 189.927 Recovery = 93.82%								
Ti 334.940†	9837.1	0.475996	mg/L	0.0022141	0.475996	mg/L	0.0022141	0.47%
QC value within limits for Ti 334.940 Recovery = 95.20%								
Tl 190.801†	69.2	0.477327	mg/L	0.0109786	0.477327	mg/L	0.0109786	2.30%
QC value within limits for Tl 190.801 Recovery = 95.47%								
V 290.880†	2015.9	0.497220	mg/L	0.0031540	0.497220	mg/L	0.0031540	0.63%
QC value within limits for V 290.880 Recovery = 99.44%								
Zn 206.200†	1372.3	0.475946	mg/L	0.0042957	0.475946	mg/L	0.0042957	0.90%
QC value within limits for Zn 206.200 Recovery = 95.19%								
B 249.772	2212.8	0.530962	mg/L	0.0021645	0.530962	mg/L	0.0021645	0.41%
QC value within limits for B 249.772 Recovery = 106.19%								
Si 251.611	7264.7	5.13362	mg/L	0.031693	5.13362	mg/L	0.031693	0.62%
QC value within limits for Si 251.611 Recovery = 102.67%								

QC Failed. Continue with analysis.

Sequence No.: 37
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 9/11/2020 8:20:11 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	55168.3	106	%	0.42				0.39%
Y 371.029	17965.8	104	%	0.48				0.46%
Ag 328.068†	5.7	0.0016955	mg/L	0.00020317	0.0016955	mg/L	0.00020317	11.98%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-9.7	-0.0654269	mg/L	0.00214164	-0.0654269	mg/L	0.00214164	3.27%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.1	-0.0061707	mg/L	0.01363347	-0.0061707	mg/L	0.01363347	220.94%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.4	-0.0135420	mg/L	0.00012172	-0.0135420	mg/L	0.00012172	0.90%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	12.7	-0.0004750	mg/L	0.00002855	-0.0004750	mg/L	0.00002855	6.01%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-43.7	0.172849	mg/L	0.0010780	0.172849	mg/L	0.0010780	0.62%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.4	0.0037398	mg/L	0.00056557	0.0037398	mg/L	0.00056557	15.12%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.1	0.0010193	mg/L	0.00108585	0.0010193	mg/L	0.00108585	106.53%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.4	-0.0046596	mg/L	0.00006549	-0.0046596	mg/L	0.00006549	1.41%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-11.1	-0.0061170	mg/L	0.00006673	-0.0061170	mg/L	0.00006673	1.09%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.1	-0.175261	mg/L	0.0025182	-0.175261	mg/L	0.0025182	1.44%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-9.1	2.98571	mg/L	0.245507	2.98571	mg/L	0.245507	8.22%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	3.4	-0.0000049	mg/L	0.00185445	-0.0000049	mg/L	0.00185445	>999.9%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-1.6	-0.0077843	mg/L	0.00003848	-0.0077843	mg/L	0.00003848	0.49%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.2	0.0019051	mg/L	0.00113638	0.0019051	mg/L	0.00113638	59.65%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-1.2	0.0598482	mg/L	0.05413812	0.0598482	mg/L	0.05413812	90.46%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-2.6	-0.0009303	mg/L	0.00096767	-0.0009303	mg/L	0.00096767	104.02%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.2	-0.0032802	mg/L	0.00273763	-0.0032802	mg/L	0.00273763	83.46%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.2	-0.0042341	mg/L	0.00820479	-0.0042341	mg/L	0.00820479	193.78%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.4	-0.0064142	mg/L	0.00507790	-0.0064142	mg/L	0.00507790	79.17%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.3	0.0020724	mg/L	0.00398157	0.0020724	mg/L	0.00398157	192.13%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	5.3	-0.0078775	mg/L	0.00026810	-0.0078775	mg/L	0.00026810	3.40%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.3	-0.0110276	mg/L	0.00596031	-0.0110276	mg/L	0.00596031	54.05%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	4.3	-0.0085948	mg/L	0.00043372	-0.0085948	mg/L	0.00043372	5.05%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-3.1	-0.0002410	mg/L	0.00021247	-0.0002410	mg/L	0.00021247	88.18%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	0.5	-0.0127172	mg/L	0.00063279	-0.0127172	mg/L	0.00063279	4.98%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-1.9	-0.0347585	mg/L	0.00177916	-0.0347585	mg/L	0.00177916	5.12%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 38
Sample ID: AD19159-009
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 105
Date Collected: 9/11/2020 8:24:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-009

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	45355.6	86.9	%	0.46				0.53%
Y 371.029	14426.9	83.4	%	1.03				1.24%
Ag 328.068†	123.1	0.0122729	mg/L	0.00018344	0.0122729	mg/L	0.00018344	1.49%
Al 308.215†	82.2	0.0235303	mg/L	0.00355823	0.0235303	mg/L	0.00355823	15.12%
As 188.979†	1.7	0.0141934	mg/L	0.02349105	0.0141934	mg/L	0.02349105	165.51%
Ba 233.527†	4171.8	0.555570	mg/L	0.0009186	0.555570	mg/L	0.0009186	0.17%
Be 313.107†	-81.2	-0.0009193	mg/L	0.00004318	-0.0009193	mg/L	0.00004318	4.70%
Ca 315.887†	1446446.6	520.880	mg/L	3.2541	520.880	mg/L	3.2541	0.62%
Cd 228.802†	2.8	0.0052482	mg/L	0.00174681	0.0052482	mg/L	0.00174681	33.28%
Co 228.616†	128.8	0.0680207	mg/L	0.00119253	0.0680207	mg/L	0.00119253	1.75%
Cr 267.716†	9.7	-0.0028853	mg/L	0.00079966	-0.0028853	mg/L	0.00079966	27.72%
Cu 327.393†	-49.8	-0.0115437	mg/L	0.00098950	-0.0115437	mg/L	0.00098950	8.57%
Fe 273.955†	16.4	-0.131090	mg/L	0.0045317	-0.131090	mg/L	0.0045317	3.46%
K 404.721†	19.6	4.18847	mg/L	1.236881	4.18847	mg/L	1.236881	29.53%
Mg 279.077†	12109.7	14.3402	mg/L	0.03089	14.3402	mg/L	0.03089	0.22%
Mn 257.610†	30159.4	1.42686	mg/L	0.002695	1.42686	mg/L	0.002695	0.19%
Mo 202.031†	6.2	0.0079031	mg/L	0.00087316	0.0079031	mg/L	0.00087316	11.05%
Na 330.237†	56672.3	1666.92	mg/L	5.574	1666.92	mg/L	5.574	0.33%
Ni 231.604†	46.4	0.0194607	mg/L	0.00090382	0.0194607	mg/L	0.00090382	4.64%
Pb 220.353†	-0.3	-0.0035554	mg/L	0.00446339	-0.0035554	mg/L	0.00446339	125.54%
Sb 206.836†	0.8	0.0009738	mg/L	0.01442361	0.0009738	mg/L	0.01442361	>999.9%
Se 196.026†	1.8	0.0528632	mg/L	0.00301947	0.0528632	mg/L	0.00301947	5.71%
Sn 189.927†	-9.9	-0.0248049	mg/L	0.00148735	-0.0248049	mg/L	0.00148735	6.00%
Ti 334.940†	-214.3	0.0209690	mg/L	0.00047146	0.0209690	mg/L	0.00047146	2.25%
Tl 190.801†	-0.8	-0.0347406	mg/L	0.02190813	-0.0347406	mg/L	0.02190813	63.06%
V 290.880†	132.5	0.0243028	mg/L	0.00087882	0.0243028	mg/L	0.00087882	3.62%
Zn 206.200†	285.3	0.0995908	mg/L	0.00086397	0.0995908	mg/L	0.00086397	0.87%
B 249.772	365.4	0.0699460	mg/L	0.00087384	0.0699460	mg/L	0.00087384	1.25%
Si 251.611	3810.5	2.84155	mg/L	0.019941	2.84155	mg/L	0.019941	0.70%

Sequence No.: 39
Sample ID: AD19159-010
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 106
Date Collected: 9/11/2020 8:28:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-010

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46174.0	88.4	%	0.69				0.78%
Y 371.029	14795.7	85.5	%	0.45				0.53%
Ag 328.068†	121.6	0.0122081	mg/L	0.00062950	0.0122081	mg/L	0.00062950	5.16%
Al 308.215†	63.6	0.0066260	mg/L	0.00380570	0.0066260	mg/L	0.00380570	57.44%
As 188.979†	0.8	0.0018649	mg/L	0.00599401	0.0018649	mg/L	0.00599401	321.41%
Ba 233.527†	5509.5	0.738068	mg/L	0.0012472	0.738068	mg/L	0.0012472	0.17%
Be 313.107†	-95.8	-0.0009886	mg/L	0.00003039	-0.0009886	mg/L	0.00003039	3.07%
Ca 315.887†	1483849.2	534.345	mg/L	6.1764	534.345	mg/L	6.1764	1.16%
Cd 228.802†	4.5	0.0060903	mg/L	0.00083952	0.0060903	mg/L	0.00083952	13.78%
Co 228.616†	-2.2	-0.0001581	mg/L	0.00080547	-0.0001581	mg/L	0.00080547	509.39%
Cr 267.716†	6.3	-0.0035007	mg/L	0.00097836	-0.0035007	mg/L	0.00097836	27.95%
Cu 327.393†	-14.6	-0.0065996	mg/L	0.00020963	-0.0065996	mg/L	0.00020963	3.18%
Fe 273.955†	27.6	-0.102874	mg/L	0.0020933	-0.102874	mg/L	0.0020933	2.03%
K 404.721†	31.8	4.59757	mg/L	0.441406	4.59757	mg/L	0.441406	9.60%
Mg 279.077†	19486.3	23.0779	mg/L	0.06549	23.0779	mg/L	0.06549	0.28%
Mn 257.610†	8943.6	0.417705	mg/L	0.0004030	0.417705	mg/L	0.0004030	0.10%
Mo 202.031†	0.6	0.0027196	mg/L	0.00048249	0.0027196	mg/L	0.00048249	17.74%
Na 330.237†	55814.9	1641.70	mg/L	3.756	1641.70	mg/L	3.756	0.23%
Ni 231.604†	40.6	0.0170239	mg/L	0.00108807	0.0170239	mg/L	0.00108807	6.39%
Pb 220.353†	5.9	0.0095756	mg/L	0.00124914	0.0095756	mg/L	0.00124914	13.05%
Sb 206.836†	0.5	-0.0018198	mg/L	0.00672867	-0.0018198	mg/L	0.00672867	369.76%
Se 196.026†	-0.3	0.0428157	mg/L	0.01353334	0.0428157	mg/L	0.01353334	31.61%
Sn 189.927†	-9.6	-0.0240562	mg/L	0.00332259	-0.0240562	mg/L	0.00332259	13.81%
Ti 334.940†	-205.0	0.0224489	mg/L	0.00075035	0.0224489	mg/L	0.00075035	3.34%
Tl 190.801†	0.5	-0.0309174	mg/L	0.00782976	-0.0309174	mg/L	0.00782976	25.32%
V 290.880†	180.4	0.0367885	mg/L	0.00089661	0.0367885	mg/L	0.00089661	2.44%
Zn 206.200†	306.0	0.106762	mg/L	0.0006001	0.106762	mg/L	0.0006001	0.56%
B 249.772	265.6	0.0427089	mg/L	0.00097247	0.0427089	mg/L	0.00097247	2.28%
Si 251.611	2572.8	1.96412	mg/L	0.026110	1.96412	mg/L	0.026110	1.33%

Sequence No.: 40
Sample ID: AD19159-011
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 107
Date Collected: 9/11/2020 8:32:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-011

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	57031.4	109	%	0.62				0.57%
Y 371.029	18219.7	105	%	0.82				0.78%
Ag 328.068†	2.7	0.0014264	mg/L	0.00040613	0.0014264	mg/L	0.00040613	28.47%
Al 308.215†	11.4	-0.0454389	mg/L	0.00314922	-0.0454389	mg/L	0.00314922	6.93%
As 188.979†	0.6	0.0007422	mg/L	0.01770665	0.0007422	mg/L	0.01770665	>999.9%
Ba 233.527†	70.2	-0.0040137	mg/L	0.00022110	-0.0040137	mg/L	0.00022110	5.51%
Be 313.107†	11.4	-0.0004813	mg/L	0.00004256	-0.0004813	mg/L	0.00004256	8.84%
Ca 315.887†	2115.1	0.949990	mg/L	0.0156909	0.949990	mg/L	0.0156909	1.65%
Cd 228.802†	-0.3	0.0037871	mg/L	0.00028899	0.0037871	mg/L	0.00028899	7.63%
Co 228.616†	1.6	0.0018098	mg/L	0.00095685	0.0018098	mg/L	0.00095685	52.87%
Cr 267.716†	5.0	-0.0039633	mg/L	0.00057648	-0.0039633	mg/L	0.00057648	14.55%
Cu 327.393†	-3.1	-0.0050002	mg/L	0.00114124	-0.0050002	mg/L	0.00114124	22.82%
Fe 273.955†	23.4	-0.113450	mg/L	0.0021689	-0.113450	mg/L	0.0021689	1.91%
K 404.721†	2.0	2.96535	mg/L	0.253945	2.96535	mg/L	0.253945	8.56%
Mg 279.077†	71.3	0.0804572	mg/L	0.00150620	0.0804572	mg/L	0.00150620	1.87%
Mn 257.610†	12.5	-0.0071146	mg/L	0.00003072	-0.0071146	mg/L	0.00003072	0.43%
Mo 202.031†	-1.1	0.0011185	mg/L	0.00067399	0.0011185	mg/L	0.00067399	60.26%
Na 330.237†	308.6	9.16892	mg/L	0.072855	9.16892	mg/L	0.072855	0.79%
Ni 231.604†	-5.2	-0.0020434	mg/L	0.00071204	-0.0020434	mg/L	0.00071204	34.85%
Pb 220.353†	-0.1	-0.0030719	mg/L	0.00173385	-0.0030719	mg/L	0.00173385	56.44%
Sb 206.836†	1.1	0.0027262	mg/L	0.00415671	0.0027262	mg/L	0.00415671	152.47%
Se 196.026†	-1.8	-0.0085596	mg/L	0.00808505	-0.0085596	mg/L	0.00808505	94.46%
Sn 189.927†	-0.3	0.0005381	mg/L	0.00240702	0.0005381	mg/L	0.00240702	447.30%
Ti 334.940†	7.6	-0.0077020	mg/L	0.00010368	-0.0077020	mg/L	0.00010368	1.35%
Tl 190.801†	0.4	0.0005284	mg/L	0.01328774	0.0005284	mg/L	0.01328774	>999.9%
V 290.880†	-1.9	-0.0101427	mg/L	0.00047525	-0.0101427	mg/L	0.00047525	4.69%
Zn 206.200†	21.0	0.0080894	mg/L	0.00086765	0.0080894	mg/L	0.00086765	10.73%
B 249.772	258.0	0.0506635	mg/L	0.00096382	0.0506635	mg/L	0.00096382	1.90%
Si 251.611	1225.3	0.823134	mg/L	0.0310960	0.823134	mg/L	0.0310960	3.78%

Sequence No.: 41
Sample ID: AD19160-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 108
Date Collected: 9/11/2020 8:36:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19160-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	47294.5	90.6	%	0.89				0.98%
Y 371.029	15157.7	87.6	%	1.40				1.59%
Ag 328.068†	101.7	0.0103469	mg/L	0.00006368	0.0103469	mg/L	0.00006368	0.62%
Al 308.215†	141.7	0.0795733	mg/L	0.00795238	0.0795733	mg/L	0.00795238	9.99%
As 188.979†	1.2	0.0080569	mg/L	0.00659101	0.0080569	mg/L	0.00659101	81.81%
Ba 233.527†	6771.8	0.910298	mg/L	0.0034792	0.910298	mg/L	0.0034792	0.38%
Be 313.107†	-29.3	-0.0006739	mg/L	0.00003249	-0.0006739	mg/L	0.00003249	4.82%
Ca 315.887†	1200929.2	432.499	mg/L	3.4230	432.499	mg/L	3.4230	0.79%
Cd 228.802†	3.1	0.0053959	mg/L	0.00027518	0.0053959	mg/L	0.00027518	5.10%
Co 228.616†	57.7	0.0309891	mg/L	0.00057964	0.0309891	mg/L	0.00057964	1.87%
Cr 267.716†	7.2	-0.0034313	mg/L	0.00130233	-0.0034313	mg/L	0.00130233	37.95%
Cu 327.393†	-20.6	-0.0074039	mg/L	0.00045060	-0.0074039	mg/L	0.00045060	6.09%
Fe 273.955†	216.3	0.372150	mg/L	0.0142786	0.372150	mg/L	0.0142786	3.84%
K 404.721†	17.2	-1.37387	mg/L	0.415531	-1.37387	mg/L	0.415531	30.25%
Mg 279.077†	6955.1	8.23448	mg/L	0.024822	8.23448	mg/L	0.024822	0.30%
Mn 257.610†	62489.2	2.96467	mg/L	0.025082	2.96467	mg/L	0.025082	0.85%
Mo 202.031†	2.9	0.0047754	mg/L	0.00227131	0.0047754	mg/L	0.00227131	47.56%
Na 330.237†	54882.1	1614.26	mg/L	7.771	1614.26	mg/L	7.771	0.48%
Ni 231.604†	172.9	0.0720490	mg/L	0.00138387	0.0720490	mg/L	0.00138387	1.92%
Pb 220.353†	2.1	0.0016457	mg/L	0.00203472	0.0016457	mg/L	0.00203472	123.64%
Sb 206.836†	0.1	-0.0042769	mg/L	0.00458239	-0.0042769	mg/L	0.00458239	107.14%
Se 196.026†	1.9	0.0466022	mg/L	0.01186628	0.0466022	mg/L	0.01186628	25.46%
Sn 189.927†	-8.0	-0.0197890	mg/L	0.00448203	-0.0197890	mg/L	0.00448203	22.65%
Ti 334.940†	-122.8	0.0187213	mg/L	0.00091306	0.0187213	mg/L	0.00091306	4.88%
Tl 190.801†	-1.2	-0.0274957	mg/L	0.02100839	-0.0274957	mg/L	0.02100839	76.41%
V 290.880†	82.1	0.0113271	mg/L	0.00092902	0.0113271	mg/L	0.00092902	8.20%
Zn 206.200†	383.3	0.133535	mg/L	0.0013997	0.133535	mg/L	0.0013997	1.05%
B 249.772	454.1	0.0939434	mg/L	0.00122813	0.0939434	mg/L	0.00122813	1.31%
Si 251.611	1755.9	1.42293	mg/L	0.010009	1.42293	mg/L	0.010009	0.70%

Sequence No.: 42
Sample ID: AD19160-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 109
Date Collected: 9/11/2020 8:40:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19160-002

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46520.4	89.1	%	1.01				1.13%
Y 371.029	15208.1	87.9	%	1.03				1.17%
Ag 328.068†	151.4	0.0147597	mg/L	0.00043025	0.0147597	mg/L	0.00043025	2.92%
Al 308.215†	260.2	0.192453	mg/L	0.0038620	0.192453	mg/L	0.0038620	2.01%
As 188.979†	1.2	0.0080474	mg/L	0.01725676	0.0080474	mg/L	0.01725676	214.44%
Ba 233.527†	4618.2	0.616472	mg/L	0.0026051	0.616472	mg/L	0.0026051	0.42%
Be 313.107†	-80.5	-0.0009160	mg/L	0.00003933	-0.0009160	mg/L	0.00003933	4.29%
Ca 315.887†	1810538.8	651.946	mg/L	3.7966	651.946	mg/L	3.7966	0.58%
Cd 228.802†	3.4	0.0055569	mg/L	0.00077348	0.0055569	mg/L	0.00077348	13.92%
Co 228.616†	17.8	0.0102393	mg/L	0.00128138	0.0102393	mg/L	0.00128138	12.51%
Cr 267.716†	6.3	-0.0035960	mg/L	0.00066355	-0.0035960	mg/L	0.00066355	18.45%
Cu 327.393†	-62.7	-0.0133304	mg/L	0.00091997	-0.0133304	mg/L	0.00091997	6.90%
Fe 273.955†	103.0	0.0869089	mg/L	0.00590334	0.0869089	mg/L	0.00590334	6.79%
K 404.721†	29.3	2.40523	mg/L	0.359715	2.40523	mg/L	0.359715	14.96%
Mg 279.077†	8309.8	9.83915	mg/L	0.042916	9.83915	mg/L	0.042916	0.44%
Mn 257.610†	88246.6	4.18986	mg/L	0.007581	4.18986	mg/L	0.007581	0.18%
Mo 202.031†	2.3	0.0042530	mg/L	0.00152596	0.0042530	mg/L	0.00152596	35.88%
Na 330.237†	55988.1	1646.79	mg/L	12.045	1646.79	mg/L	12.045	0.73%
Ni 231.604†	46.2	0.0193272	mg/L	0.00117829	0.0193272	mg/L	0.00117829	6.10%
Pb 220.353†	-0.2	-0.0031900	mg/L	0.00225555	-0.0031900	mg/L	0.00225555	70.71%
Sb 206.836†	-0.0	-0.0056367	mg/L	0.01255360	-0.0056367	mg/L	0.01255360	222.71%
Se 196.026†	2.3	0.0663473	mg/L	0.00311887	0.0663473	mg/L	0.00311887	4.70%
Sn 189.927†	-10.2	-0.0255761	mg/L	0.00038334	-0.0255761	mg/L	0.00038334	1.50%
Ti 334.940†	28.9	0.0428126	mg/L	0.00184177	0.0428126	mg/L	0.00184177	4.30%
Tl 190.801†	-3.1	-0.0487373	mg/L	0.00874173	-0.0487373	mg/L	0.00874173	17.94%
V 290.880†	99.0	0.0156593	mg/L	0.00172835	0.0156593	mg/L	0.00172835	11.04%
Zn 206.200†	73.5	0.0262772	mg/L	0.00113725	0.0262772	mg/L	0.00113725	4.33%
B 249.772	272.7	0.0552903	mg/L	0.00064674	0.0552903	mg/L	0.00064674	1.17%
Si 251.611	5069.1	3.80255	mg/L	0.005902	3.80255	mg/L	0.005902	0.16%

Sequence No.: 43
Sample ID: EF V-334254 9/10
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 110
Date Collected: 9/11/2020 8:45:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF V-334254 9/10

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	48220.6	92.4	%	0.65				0.70%
Y 371.029	15192.2	87.8	%	1.46				1.66%
Ag 328.068†	2.7	0.0014457	mg/L	0.00052537	0.0014457	mg/L	0.00052537	36.34%
Al 308.215†	13.0	-0.0437830	mg/L	0.00221017	-0.0437830	mg/L	0.00221017	5.05%
As 188.979†	1.1	0.0073725	mg/L	0.01444820	0.0073725	mg/L	0.01444820	195.97%
Ba 233.527†	64.6	-0.0047797	mg/L	0.00032629	-0.0047797	mg/L	0.00032629	6.83%
Be 313.107†	-67.6	-0.0008552	mg/L	0.00005241	-0.0008552	mg/L	0.00005241	6.13%
Ca 315.887†	157.2	0.245156	mg/L	0.0085282	0.245156	mg/L	0.0085282	3.48%
Cd 228.802†	0.6	0.0042063	mg/L	0.00055252	0.0042063	mg/L	0.00055252	13.14%
Co 228.616†	1.5	0.0017559	mg/L	0.00064010	0.0017559	mg/L	0.00064010	36.46%
Cr 267.716†	8.1	-0.0033244	mg/L	0.00066128	-0.0033244	mg/L	0.00066128	19.89%
Cu 327.393†	-15.9	-0.0067884	mg/L	0.00065705	-0.0067884	mg/L	0.00065705	9.68%
Fe 273.955†	5.4	-0.158862	mg/L	0.0033404	-0.158862	mg/L	0.0033404	2.10%
K 404.721†	8.8	3.85295	mg/L	0.352878	3.85295	mg/L	0.352878	9.16%
Mg 279.077†	38.7	0.0418978	mg/L	0.00269787	0.0418978	mg/L	0.00269787	6.44%
Mn 257.610†	21.7	-0.0066801	mg/L	0.00008528	-0.0066801	mg/L	0.00008528	1.28%
Mo 202.031†	3.2	0.0050873	mg/L	0.00291525	0.0050873	mg/L	0.00291525	57.30%
Na 330.237†	59340.6	1745.40	mg/L	4.724	1745.40	mg/L	4.724	0.27%
Ni 231.604†	5.1	0.0022737	mg/L	0.00124937	0.0022737	mg/L	0.00124937	54.95%
Pb 220.353†	1.5	0.0003191	mg/L	0.00539674	0.0003191	mg/L	0.00539674	>999.9%
Sb 206.836†	0.3	-0.0033624	mg/L	0.00893011	-0.0033624	mg/L	0.00893011	265.59%
Se 196.026†	0.8	0.0055952	mg/L	0.00632836	0.0055952	mg/L	0.00632836	113.10%
Sn 189.927†	1.2	0.0043830	mg/L	0.00261394	0.0043830	mg/L	0.00261394	59.64%
Ti 334.940†	9.2	-0.0076815	mg/L	0.00035559	-0.0076815	mg/L	0.00035559	4.63%
Tl 190.801†	-0.2	-0.0032412	mg/L	0.01210258	-0.0032412	mg/L	0.01210258	373.40%
V 290.880†	14.4	-0.0060680	mg/L	0.00033753	-0.0060680	mg/L	0.00033753	5.56%
Zn 206.200†	24.6	0.0093353	mg/L	0.00057683	0.0093353	mg/L	0.00057683	6.18%
B 249.772	36.5	-0.0205711	mg/L	0.00074169	-0.0205711	mg/L	0.00074169	3.61%
Si 251.611	23.4	0.0418670	mg/L	0.00035559	0.0418670	mg/L	0.00035559	0.85%

Sequence No.: 44
Sample ID: EF V-334254-9/11
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 111
Date Collected: 9/11/2020 8:49:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF V-334254-9/11

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	48646.1	93.2	%	1.17				1.25%
Y 371.029	15603.0	90.2	%	1.78				1.97%
Ag 328.068†	1.7	0.0013526	mg/L	0.00020218	0.0013526	mg/L	0.00020218	14.95%
Al 308.215†	11.3	-0.0454263	mg/L	0.00149086	-0.0454263	mg/L	0.00149086	3.28%
As 188.979†	1.3	0.0090804	mg/L	0.01008657	0.0090804	mg/L	0.01008657	111.08%
Ba 233.527†	69.0	-0.0041855	mg/L	0.00025673	-0.0041855	mg/L	0.00025673	6.13%
Be 313.107†	-67.2	-0.0008532	mg/L	0.00003916	-0.0008532	mg/L	0.00003916	4.59%
Ca 315.887†	132.1	0.236146	mg/L	0.0031679	0.236146	mg/L	0.0031679	1.34%
Cd 228.802†	-0.9	0.0034915	mg/L	0.00087808	0.0034915	mg/L	0.00087808	25.15%
Co 228.616†	0.6	0.0013278	mg/L	0.00078489	0.0013278	mg/L	0.00078489	59.11%
Cr 267.716†	10.9	-0.0027767	mg/L	0.00015476	-0.0027767	mg/L	0.00015476	5.57%
Cu 327.393†	-11.6	-0.0061843	mg/L	0.00146769	-0.0061843	mg/L	0.00146769	23.73%
Fe 273.955†	5.1	-0.159696	mg/L	0.0040644	-0.159696	mg/L	0.0040644	2.55%
K 404.721†	-1.1	3.28248	mg/L	0.394868	3.28248	mg/L	0.394868	12.03%
Mg 279.077†	35.0	0.0374106	mg/L	0.00045139	0.0374106	mg/L	0.00045139	1.21%
Mn 257.610†	12.0	-0.0071383	mg/L	0.00011868	-0.0071383	mg/L	0.00011868	1.66%
Mo 202.031†	4.8	0.0065737	mg/L	0.00034304	0.0065737	mg/L	0.00034304	5.22%
Na 330.237†	56909.8	1673.90	mg/L	15.692	1673.90	mg/L	15.692	0.94%
Ni 231.604†	6.9	0.0029931	mg/L	0.00158304	0.0029931	mg/L	0.00158304	52.89%
Pb 220.353†	1.4	0.0000181	mg/L	0.00631291	0.0000181	mg/L	0.00631291	>999.9%
Sb 206.836†	0.0	-0.0049887	mg/L	0.01152298	-0.0049887	mg/L	0.01152298	230.98%
Se 196.026†	2.0	0.0121847	mg/L	0.00883325	0.0121847	mg/L	0.00883325	72.49%
Sn 189.927†	0.5	0.0025950	mg/L	0.00213897	0.0025950	mg/L	0.00213897	82.43%
Ti 334.940†	8.6	-0.0077109	mg/L	0.00018765	-0.0077109	mg/L	0.00018765	2.43%
Tl 190.801†	1.0	0.0046145	mg/L	0.00447693	0.0046145	mg/L	0.00447693	97.02%
V 290.880†	11.7	-0.0067418	mg/L	0.00073444	-0.0067418	mg/L	0.00073444	10.89%
Zn 206.200†	23.9	0.0090914	mg/L	0.00044287	0.0090914	mg/L	0.00044287	4.87%
B 249.772	39.1	-0.0191849	mg/L	0.00023320	-0.0191849	mg/L	0.00023320	1.22%
Si 251.611	20.2	0.0373975	mg/L	0.00354934	0.0373975	mg/L	0.00354934	9.49%

Sequence No.: 45
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/11/2020 8:53:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	51397.3	98.4	%	0.50				0.50%
Y 371.029	16365.6	94.6	%	1.02				1.08%
Ag 328.068†	1024.3	0.0948843	mg/L	0.00059179	0.0948843	mg/L	0.00059179	0.62%
QC value within limits for Ag 328.068 Recovery = 94.88%								
Al 308.215†	4935.3	4.65182	mg/L	0.017143	4.65182	mg/L	0.017143	0.37%
QC value within limits for Al 308.215 Recovery = 93.04%								
As 188.979†	41.0	0.503743	mg/L	0.0096523	0.503743	mg/L	0.0096523	1.92%
QC value within limits for As 188.979 Recovery = 100.75%								
Ba 233.527†	3518.6	0.466448	mg/L	0.0029081	0.466448	mg/L	0.0029081	0.62%
QC value within limits for Ba 233.527 Recovery = 93.29%								
Be 313.107†	98829.2	0.467210	mg/L	0.0019470	0.467210	mg/L	0.0019470	0.42%
QC value within limits for Be 313.107 Recovery = 93.44%								
Ca 315.887†	127945.4	46.2464	mg/L	0.32303	46.2464	mg/L	0.32303	0.70%
QC value within limits for Ca 315.887 Recovery = 92.49%								
Cd 228.802†	932.8	0.450094	mg/L	0.0034682	0.450094	mg/L	0.0034682	0.77%
QC value within limits for Cd 228.802 Recovery = 90.02%								
Co 228.616†	891.6	0.464848	mg/L	0.0018774	0.464848	mg/L	0.0018774	0.40%
QC value within limits for Co 228.616 Recovery = 92.97%								
Cr 267.716†	2476.0	0.483406	mg/L	0.0043828	0.483406	mg/L	0.0043828	0.91%
QC value within limits for Cr 267.716 Recovery = 96.68%								
Cu 327.393†	3400.9	0.472448	mg/L	0.0029623	0.472448	mg/L	0.0029623	0.63%
QC value within limits for Cu 327.393 Recovery = 94.49%								
Fe 273.955†	2058.0	5.00913	mg/L	0.053257	5.00913	mg/L	0.053257	1.06%
QC value within limits for Fe 273.955 Recovery = 100.18%								
K 404.721†	764.4	-7.56229	mg/L	0.255192	-7.56229	mg/L	0.255192	3.37%
QC value less than the lower limit for K 404.721 Recovery = -15.12%								
Mg 279.077†	39509.6	46.7960	mg/L	0.28444	46.7960	mg/L	0.28444	0.61%
QC value within limits for Mg 279.077 Recovery = 93.59%								
Mn 257.610†	10062.0	0.470903	mg/L	0.0026362	0.470903	mg/L	0.0026362	0.56%
QC value within limits for Mn 257.610 Recovery = 94.18%								
Mo 202.031†	500.8	0.466595	mg/L	0.0015152	0.466595	mg/L	0.0015152	0.32%
QC value within limits for Mo 202.031 Recovery = 93.32%								
Na 330.237†	1663.6	49.0222	mg/L	0.51874	49.0222	mg/L	0.51874	1.06%
QC value within limits for Na 330.237 Recovery = 98.04%								
Ni 231.604†	1110.9	0.463352	mg/L	0.0046319	0.463352	mg/L	0.0046319	1.00%
QC value within limits for Ni 231.604 Recovery = 92.67%								
Pb 220.353†	221.3	0.468205	mg/L	0.0065161	0.468205	mg/L	0.0065161	1.39%
QC value within limits for Pb 220.353 Recovery = 93.64%								
Sb 206.836†	59.4	0.463398	mg/L	0.0061992	0.463398	mg/L	0.0061992	1.34%
QC value within limits for Sb 206.836 Recovery = 92.68%								
Se 196.026†	87.0	0.484593	mg/L	0.0051469	0.484593	mg/L	0.0051469	1.06%
QC value within limits for Se 196.026 Recovery = 96.92%								
Sn 189.927†	175.3	0.460248	mg/L	0.0106891	0.460248	mg/L	0.0106891	2.32%
QC value within limits for Sn 189.927 Recovery = 92.05%								
Ti 334.940†	9720.1	0.470218	mg/L	0.0029844	0.470218	mg/L	0.0029844	0.63%
QC value within limits for Ti 334.940 Recovery = 94.04%								
Tl 190.801†	67.1	0.462391	mg/L	0.0149586	0.462391	mg/L	0.0149586	3.24%
QC value within limits for Tl 190.801 Recovery = 92.48%								
V 290.880†	1971.3	0.486025	mg/L	0.0090319	0.486025	mg/L	0.0090319	1.86%
QC value within limits for V 290.880 Recovery = 97.20%								
Zn 206.200†	1338.4	0.464185	mg/L	0.0046231	0.464185	mg/L	0.0046231	1.00%
QC value within limits for Zn 206.200 Recovery = 92.84%								
B 249.772	2196.7	0.527249	mg/L	0.0029688	0.527249	mg/L	0.0029688	0.56%
QC value within limits for B 249.772 Recovery = 105.45%								
Si 251.611	7261.0	5.12969	mg/L	0.021763	5.12969	mg/L	0.021763	0.42%
QC value within limits for Si 251.611 Recovery = 102.59%								

QC Failed. Continue with analysis.

Sequence No.: 46 **Autosampler Location: 1**
Sample ID: CCB V-333667 **Date Collected: 9/11/2020 8:57:14 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	56044.1	107	%	0.70				0.66%
Y 371.029	18203.4	105	%	2.12				2.01%
Ag 328.068†	9.3	0.0020104	mg/L	0.00058386	0.0020104	mg/L	0.00058386	29.04%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-5.4	-0.0613302	mg/L	0.00372978	-0.0613302	mg/L	0.00372978	6.08%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.1	0.0075298	mg/L	0.01144376	0.0075298	mg/L	0.01144376	151.98%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.9	-0.0134787	mg/L	0.00007501	-0.0134787	mg/L	0.00007501	0.56%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	21.7	-0.0004326	mg/L	0.00006626	-0.0004326	mg/L	0.00006626	15.32%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-31.7	0.177161	mg/L	0.0041302	0.177161	mg/L	0.0041302	2.33%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.6	0.0036311	mg/L	0.00152409	0.0036311	mg/L	0.00152409	41.97%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.6	0.0018292	mg/L	0.00034112	0.0018292	mg/L	0.00034112	18.65%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	3.5	-0.0042445	mg/L	0.00016274	-0.0042445	mg/L	0.00016274	3.83%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-19.1	-0.0072363	mg/L	0.00094755	-0.0072363	mg/L	0.00094755	13.09%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	0.6	-0.170845	mg/L	0.0034346	-0.170845	mg/L	0.0034346	2.01%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-4.8	3.18550	mg/L	0.791350	3.18550	mg/L	0.791350	24.84%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	9.2	0.0068584	mg/L	0.00304406	0.0068584	mg/L	0.00304406	44.38%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-1.8	-0.0077948	mg/L	0.00008929	-0.0077948	mg/L	0.00008929	1.15%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.4	0.0017250	mg/L	0.00025208	0.0017250	mg/L	0.00025208	14.61%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.4	0.135614	mg/L	0.1791413	0.135614	mg/L	0.1791413	132.10%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-0.5	-0.0000785	mg/L	0.00154656	-0.0000785	mg/L	0.00154656	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.3	-0.0021711	mg/L	0.00245253	-0.0021711	mg/L	0.00245253	112.96%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.7	-0.0001595	mg/L	0.00727012	-0.0001595	mg/L	0.00727012	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.1	-0.0051828	mg/L	0.01036677	-0.0051828	mg/L	0.01036677	200.02%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.6	-0.0002670	mg/L	0.00113312	-0.0002670	mg/L	0.00113312	424.41%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	1.5	-0.0080627	mg/L	0.00006576	-0.0080627	mg/L	0.00006576	0.82%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.5	0.0016929	mg/L	0.00327360	0.0016929	mg/L	0.00327360	193.37%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	3.1	-0.0089067	mg/L	0.00055291	-0.0089067	mg/L	0.00055291	6.21%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-1.5	0.0003141	mg/L	0.00038816	0.0003141	mg/L	0.00038816	123.60%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-9.9	-0.0152643	mg/L	0.00050330	-0.0152643	mg/L	0.00050330	3.30%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	0.6	-0.0330432	mg/L	0.00132937	-0.0330432	mg/L	0.00132937	4.02%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Method: PE 4 8300DV LEACH AX Page 1 Date: 9/14/2020 9:23:50 AM

T26209B4 26209/85267

Analysis Begun

Start Time: 9/14/2020 9:19:50 AM
Logged In Analyst: usermet
Spectrometer: Optima 8300 , S/N No Serial #

Plasma On Time: 9/14/2020 8:57:41 AM
Technique: ICP Continuous
Autosampler: S10

TCP 9/14/2020

Sample Information File: C:\Users\Public\PerkinElmer\ICP\Data\Sample Information\09.14.20.sif
Batch ID: ICP4
Results Data Set: T26209B4
Results Library: C:\Users\Public\PerkinElmer\ICP\Data\Results\Results.mdb

9/16/20

Sequence No.: 1
Sample ID: CALBLK V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 9/14/2020 9:20:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-333667

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	47406.1	254.66	0.54%	100	%
Y 371.029	19328.8	125.13	0.65%	100	%
Ag 328.068†	-13.2	3.62	27.34%	[0.00]	mg/L
Al 308.215†	157.6	0.93	0.59%	[0.00]	mg/L
As 188.979†	-1.1	1.27	112.56%	[0.00]	mg/L
Ba 233.527†	-0.7	1.23	175.91%	[0.00]	mg/L
Be 313.107†	-321.4	7.72	2.40%	[0.00]	mg/L
Ca 315.887†	-217.1	2.34	1.08%	[0.00]	mg/L
Cd 228.802†	13.1	1.00	7.64%	[0.00]	mg/L
Co 228.616†	-3.1	0.61	19.87%	[0.00]	mg/L
Cr 267.716†	5.5	1.36	24.65%	[0.00]	mg/L
Cu 327.393†	-166.0	3.12	1.88%	[0.00]	mg/L
Fe 273.955†	3.9	0.62	16.00%	[0.00]	mg/L
K 404.721†	-57.8	1.72	2.98%	[0.00]	mg/L
Mg 279.077†	-1.7	2.07	123.30%	[0.00]	mg/L
Mn 257.610†	20.7	0.40	1.94%	[0.00]	mg/L
Mo 202.031†	1.7	0.12	7.08%	[0.00]	mg/L
Na 330.237†	15.4	3.19	20.72%	[0.00]	mg/L
Ni 231.604†	41.3	0.80	1.93%	[0.00]	mg/L
Pb 220.353†	0.3	1.23	478.54%	[0.00]	mg/L
Sb 206.836†	1.9	1.00	51.29%	[0.00]	mg/L
Se 196.026†	4.1	2.72	66.88%	[0.00]	mg/L
Sn 189.927†	0.8	1.00	118.56%	[0.00]	mg/L
Ti 334.940†	18.9	2.62	13.90%	[0.00]	mg/L
Tl 190.801†	-1.9	1.50	78.96%	[0.00]	mg/L
V 290.880†	56.2	2.14	3.80%	[0.00]	mg/L
Zn 206.200†	9.7	2.00	20.68%	[0.00]	mg/L
B 249.772	13.0	1.20	9.24%	[0.00]	mg/L
Si 251.611	76.7	2.29	2.99%	[0.00]	mg/L

26209/85267

19159-004 TQC (-005, -006)

19159-001, -002, -009, -010

19160-002

19148-002

(4D) Se Reported

19159-004 TQC (-005, -006)

(4D) Zn Reported

Sequence No.: 2
Sample ID: CALST2 V-333672
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 9/14/2020 9:24:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST2 V-333672

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	46237.5	640.86	1.39%	97.5	%
Y 371.029	18471.6	232.21	1.26%	95.6	%
Ag 328.068†	400.6	5.02	1.25%	[0.05]	mg/L
Al 308.215†	898.7	9.20	1.02%	[1]	mg/L
As 188.979†	6.1	0.44	7.29%	[0.1]	mg/L
Ba 233.527†	1359.6	19.48	1.43%	[0.25]	mg/L
Be 313.107†	1640.6	8.10	0.49%	[0.012]	mg/L
Ca 315.887†	8722.5	21.90	0.25%	[5]	mg/L
Cd 228.802†	75.5	1.27	1.68%	[0.05]	mg/L
Co 228.616†	118.1	1.94	1.64%	[0.1]	mg/L
Cr 267.716†	328.3	4.64	1.41%	[0.1]	mg/L
Cu 327.393†	631.9	14.96	2.37%	[0.1]	mg/L
Fe 273.955†	411.0	7.96	1.94%	[1]	mg/L
K 404.721†	23.3	6.93	29.66%	[5]	mg/L
Mg 279.077†	2812.6	27.01	0.96%	[5]	mg/L
Mn 257.610†	1716.4	23.74	1.38%	[0.1]	mg/L
Mo 202.031†	71.2	1.14	1.61%	[0.1]	mg/L
Na 330.237†	715.3	10.92	1.53%	[25]	mg/L
Ni 231.604†	169.5	4.22	2.49%	[0.1]	mg/L
Pb 220.353†	15.6	2.33	14.95%	[0.05]	mg/L
Sb 206.836†	7.0	0.84	11.95%	[0.07]	mg/L
Se 196.026†	10.8	1.76	16.38%	[0.1]	mg/L
Sn 189.927†	26.3	1.21	4.62%	[0.1]	mg/L
Ti 334.940†	2151.8	34.09	1.58%	[0.1]	mg/L
Tl 190.801†	10.9	1.50	13.85%	[0.1]	mg/L
V 290.880†	332.8	6.71	2.02%	[0.1]	mg/L
Zn 206.200†	139.5	0.52	0.37%	[0.1]	mg/L
B 249.772	679.5	2.04	0.30%	[0.2]	mg/L
Si 251.611	151.6	2.81	1.85%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-333666
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 3
Date Collected: 9/14/2020 9:28:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST3 V-333666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	45081.3	235.15	0.52%	95.1	%
Y 371.029	17844.4	91.26	0.51%	92.3	%
Ag 328.068†	518.7	5.00	0.96%	[0.10]	mg/L
Al 308.215†	4363.6	13.25	0.30%	[5.0]	mg/L
As 188.979†	30.3	0.44	1.45%	[0.50]	mg/L
Ba 233.527†	2904.7	9.86	0.34%	[0.50]	mg/L
Be 313.107†	72771.3	288.84	0.40%	[0.50]	mg/L
Ca 315.887†	95027.8	627.42	0.66%	[50]	mg/L
Cd 228.802†	804.4	3.86	0.48%	[0.50]	mg/L
Co 228.616†	617.1	3.28	0.53%	[0.50]	mg/L
Cr 267.716†	1726.5	3.20	0.19%	[0.50]	mg/L
Cu 327.393†	3284.4	19.41	0.59%	[0.50]	mg/L
Fe 273.955†	2190.6	7.41	0.34%	[5.0]	mg/L
K 404.721†	708.1	7.53	1.06%	[50]	mg/L
Mg 279.077†	26504.3	153.86	0.58%	[50]	mg/L
Mn 257.610†	8258.0	51.14	0.62%	[0.50]	mg/L
Mo 202.031†	387.0	2.30	0.60%	[0.50]	mg/L
Na 330.237†	1670.0	7.00	0.42%	[50]	mg/L
Ni 231.604†	895.4	4.40	0.49%	[0.50]	mg/L
Pb 220.353†	157.4	1.77	1.13%	[0.50]	mg/L
Sb 206.836†	44.4	0.71	1.59%	[0.50]	mg/L
Se 196.026†	58.0	2.12	3.66%	[0.50]	mg/L
Sn 189.927†	136.3	1.17	0.86%	[0.50]	mg/L
Ti 334.940†	9844.1	41.12	0.42%	[0.50]	mg/L
Tl 190.801†	53.0	1.27	2.39%	[0.50]	mg/L
V 290.880†	1862.1	14.00	0.75%	[0.50]	mg/L
Zn 206.200†	764.9	2.14	0.28%	[0.50]	mg/L
B 249.772	1778.7	10.22	0.57%	[0.50]	mg/L
Si 251.611	6042.3	40.60	0.67%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-333665
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 4
Date Collected: 9/14/2020 9:32:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST4 V-333665

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	43734.3	227.82	0.52%	92.3	%
Y 371.029	17026.5	120.09	0.71%	88.1	%
Ag 328.068†	1781.0	4.97	0.28%	[0.20]	mg/L
Al 308.215†	9028.6	46.21	0.51%	[10]	mg/L
As 188.979†	63.2	1.66	2.63%	[1.00]	mg/L
Ba 233.527†	5460.0	22.20	0.41%	[1.00]	mg/L
Be 313.107†	149653.6	121.77	0.08%	[1.00]	mg/L
Ca 315.887†	196581.0	438.40	0.22%	[100]	mg/L
Cd 228.802†	1743.0	7.96	0.46%	[1.00]	mg/L
Co 228.616†	1307.0	5.41	0.41%	[1.00]	mg/L
Cr 267.716†	3679.2	15.85	0.43%	[1.00]	mg/L
Cu 327.393†	6111.3	17.60	0.29%	[1.00]	mg/L
Fe 273.955†	4057.2	3.75	0.09%	[10.0]	mg/L
K 404.721†	1483.9	4.82	0.32%	[100]	mg/L
Mg 279.077†	55713.4	79.67	0.14%	[100]	mg/L
Mn 257.610†	16785.3	16.42	0.10%	[1.00]	mg/L
Mo 202.031†	800.9	2.09	0.26%	[1.00]	mg/L
Na 330.237†	3374.3	1.92	0.06%	[100]	mg/L
Ni 231.604†	1886.7	6.04	0.32%	[1.00]	mg/L
Pb 220.353†	321.8	2.63	0.82%	[1.00]	mg/L
Sb 206.836†	93.9	0.64	0.68%	[1.00]	mg/L
Se 196.026†	125.6	1.50	1.20%	[1.00]	mg/L
Sn 189.927†	287.1	0.86	0.30%	[1.00]	mg/L
Ti 334.940†	19799.4	26.88	0.14%	[1.00]	mg/L
Tl 190.801†	107.5	0.69	0.64%	[1.00]	mg/L
V 290.880†	3332.9	8.66	0.26%	[1.00]	mg/L
Zn 206.200†	1671.7	2.66	0.16%	[1.00]	mg/L
B 249.772	3515.1	26.80	0.76%	[1.00]	mg/L
Si 251.611	12185.3	84.03	0.69%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-92.2	8769	0.00000	0.972509	
Al 308.215	3	Lin, Calc Int	-29.8	900.6	0.00000	0.999837	
As 188.979	3	Lin, Calc Int	-0.3	63.09	0.00000	0.999765	
Ba 233.527	3	Lin, Calc Int	32.8	5482	0.00000	0.999298	
Be 313.107	3	Lin, Calc Int	-444.6	149400	0.00000	0.999902	
Ca 315.887	3	Lin, Calc Int	-1096.1	1966	0.00000	0.999859	
Cd 228.802	3	Lin, Calc Int	-17.5	1737	0.00000	0.999221	
Co 228.616	3	Lin, Calc Int	-12.3	1307	0.00000	0.999582	
Cr 267.716	3	Lin, Calc Int	-38.5	3680	0.00000	0.999492	
Cu 327.393	3	Lin, Calc Int	51.6	6138	0.00000	0.999214	
Fe 273.955	3	Lin, Calc Int	32.4	408.1	0.00000	0.999084	
K 404.721	3	Lin, Calc Int	-29.1	15.04	0.00000	0.999436	
Mg 279.077	3	Lin, Calc Int	-235.5	554.7	0.00000	0.999663	
Mn 257.610	3	Lin, Calc Int	-8.2	16750	0.00000	0.999953	
Mo 202.031	3	Lin, Calc Int	-6.4	803.0	0.00000	0.999836	
Na 330.237	3	Lin, Calc Int	-54.7	34.16	0.00000	0.999179	
Ni 231.604	3	Lin, Calc Int	-17.4	1888	0.00000	0.999652	
Pb 220.353	3	Lin, Calc Int	-0.9	321.5	0.00000	0.999939	
Sb 206.836	3	Lin, Calc Int	-0.3	93.21	0.00000	0.999515	
Se 196.026	3	Lin, Calc Int	-1.7	125.7	0.00000	0.999229	
Sn 189.927	3	Lin, Calc Int	-2.4	287.2	0.00000	0.999659	
Ti 334.940	3	Lin, Calc Int	65.9	19710	0.00000	0.999950	
Tl 190.801	3	Lin, Calc Int	-0.1	107.3	0.00000	0.999966	
V 290.880	3	Lin, Calc Int	36.1	3365	0.00000	0.998002	
Zn 206.200	3	Lin, Calc Int	-25.4	1674	0.00000	0.999032	

B 249.772	3	Lin, Calc Int	-5.8	3527	0.00000	0.999935
Si 251.611	3	Lin, Calc Int	4.3	1216	0.00000	0.999986

Sequence No.: 5 **Autosampler Location: 6**
Sample ID: ICV V-333673 **Date Collected: 9/14/2020 9:37:21 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 85 **Auto Dilution Factor: 1**

Mean Data: ICV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	46327.2	97.7	%	0.26				0.26%
Y 371.029	18188.1	94.1	%	0.11				0.12%
Ag 328.068†	854.2	0.111033	mg/L	0.0001153	0.111033	mg/L	0.0001153	0.10%
QC value greater than the upper limit for Ag 328.068 Recovery = 111.03%								
Al 308.215†	4316.5	4.84268	mg/L	0.009679	4.84268	mg/L	0.009679	0.20%
QC value within limits for Al 308.215 Recovery = 96.85%								
As 188.979†	29.2	0.443808	mg/L	0.0061439	0.443808	mg/L	0.0061439	1.38%
QC value less than the lower limit for As 188.979 Recovery = 88.76%								
Ba 233.527†	2935.7	0.529558	mg/L	0.0012305	0.529558	mg/L	0.0012305	0.23%
QC value within limits for Ba 233.527 Recovery = 105.91%								
Be 313.107†	73010.9	0.491776	mg/L	0.0003189	0.491776	mg/L	0.0003189	0.06%
QC value within limits for Be 313.107 Recovery = 98.36%								
Ca 315.887†	100114.4	51.4828	mg/L	0.06311	51.4828	mg/L	0.06311	0.12%
QC value within limits for Ca 315.887 Recovery = 102.97%								
Cd 228.802†	814.1	0.478693	mg/L	0.0018043	0.478693	mg/L	0.0018043	0.38%
QC value within limits for Cd 228.802 Recovery = 95.74%								
Co 228.616†	629.9	0.491315	mg/L	0.0034503	0.491315	mg/L	0.0034503	0.70%
QC value within limits for Co 228.616 Recovery = 98.26%								
Cr 267.716†	1771.8	0.494458	mg/L	0.0024462	0.494458	mg/L	0.0024462	0.49%
QC value within limits for Cr 267.716 Recovery = 98.89%								
Cu 327.393†	3270.0	0.524862	mg/L	0.0025398	0.524862	mg/L	0.0025398	0.48%
QC value within limits for Cu 327.393 Recovery = 104.97%								
Fe 273.955†	2219.1	5.35846	mg/L	0.005164	5.35846	mg/L	0.005164	0.10%
QC value within limits for Fe 273.955 Recovery = 107.17%								
K 404.721†	711.4	-8.49461	mg/L	0.408933	-8.49461	mg/L	0.408933	4.81%
QC value less than the lower limit for K 404.721 Recovery = -16.99%								
Mg 279.077†	27779.7	50.5087	mg/L	0.08093	50.5087	mg/L	0.08093	0.16%
QC value within limits for Mg 279.077 Recovery = 101.02%								
Mn 257.610†	8223.7	0.491596	mg/L	0.0002888	0.491596	mg/L	0.0002888	0.06%
QC value within limits for Mn 257.610 Recovery = 98.32%								
Mo 202.031†	386.1	0.488806	mg/L	0.0053434	0.488806	mg/L	0.0053434	1.09%
QC value within limits for Mo 202.031 Recovery = 97.76%								
Na 330.237†	1763.7	53.2282	mg/L	0.11582	53.2282	mg/L	0.11582	0.22%
QC value within limits for Na 330.237 Recovery = 106.46%								
Ni 231.604†	918.2	0.496880	mg/L	0.0006282	0.496880	mg/L	0.0006282	0.13%
QC value within limits for Ni 231.604 Recovery = 99.38%								
Pb 220.353†	160.0	0.501047	mg/L	0.0003954	0.501047	mg/L	0.0003954	0.08%
QC value within limits for Pb 220.353 Recovery = 100.21%								
Sb 206.836†	46.4	0.512786	mg/L	0.0079129	0.512786	mg/L	0.0079129	1.54%
QC value within limits for Sb 206.836 Recovery = 102.56%								
Se 196.026†	60.2	0.500967	mg/L	0.0066150	0.500967	mg/L	0.0066150	1.32%
QC value within limits for Se 196.026 Recovery = 100.19%								
Sn 189.927†	140.2	0.494794	mg/L	0.0052037	0.494794	mg/L	0.0052037	1.05%
QC value within limits for Sn 189.927 Recovery = 98.96%								
Ti 334.940†	9690.8	0.492304	mg/L	0.0014959	0.492304	mg/L	0.0014959	0.30%
QC value within limits for Ti 334.940 Recovery = 98.46%								
Tl 190.801†	49.9	0.461707	mg/L	0.0260427	0.461707	mg/L	0.0260427	5.64%
QC value within limits for Tl 190.801 Recovery = 92.34%								
V 290.880†	1885.5	0.552394	mg/L	0.0023088	0.552394	mg/L	0.0023088	0.42%
QC value greater than the upper limit for V 290.880 Recovery = 110.48%								
Zn 206.200†	814.7	0.501984	mg/L	0.0014008	0.501984	mg/L	0.0014008	0.28%
QC value within limits for Zn 206.200 Recovery = 100.40%								
B 249.772	1901.7	0.548785	mg/L	0.0034563	0.548785	mg/L	0.0034563	0.63%
QC value within limits for B 249.772 Recovery = 109.76%								
Si 251.611	6384.7	5.35320	mg/L	0.031016	5.35320	mg/L	0.031016	0.58%
QC value within limits for Si 251.611 Recovery = 107.06%								

QC Failed. Continue with analysis.

Sequence No.: 6 **Autosampler Location: 1**
Sample ID: ICB V-333667 **Date Collected: 9/14/2020 9:41:19 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	49256.4	104	%	0.47				0.46%
Y 371.029	20003.1	103	%	0.68				0.66%
Ag 328.068†	-1.9	0.0102446	mg/L	0.00052009	0.0102446	mg/L	0.00052009	5.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	21.6	0.0562873	mg/L	0.00526398	0.0562873	mg/L	0.00526398	9.35%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.6	0.0152948	mg/L	0.00482482	0.0152948	mg/L	0.00482482	31.55%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.1	-0.0059566	mg/L	0.00034702	-0.0059566	mg/L	0.00034702	5.83%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	24.5	0.0031406	mg/L	0.00004222	0.0031406	mg/L	0.00004222	1.34%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	165.1	0.641552	mg/L	0.0011453	0.641552	mg/L	0.0011453	0.18%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.4	0.0098637	mg/L	0.00032759	0.0098637	mg/L	0.00032759	3.32%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.5	0.0106230	mg/L	0.00080900	0.0106230	mg/L	0.00080900	7.62%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.4	0.0107950	mg/L	0.00086420	0.0107950	mg/L	0.00086420	8.01%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-4.2	-0.0090969	mg/L	0.00114605	-0.0090969	mg/L	0.00114605	12.60%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-0.6	-0.0807434	mg/L	0.00334826	-0.0807434	mg/L	0.00334826	4.15%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	0.2	2.82074	mg/L	0.320926	2.82074	mg/L	0.320926	11.38%
QC value greater than the upper limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	4.3	0.432510	mg/L	0.0032696	0.432510	mg/L	0.0032696	0.76%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	0.0	0.0004895	mg/L	0.00011268	0.0004895	mg/L	0.00011268	23.02%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.8	0.0070545	mg/L	0.00092832	0.0070545	mg/L	0.00092832	13.16%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.5	1.64537	mg/L	0.046421	1.64537	mg/L	0.046421	2.82%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-1.8	0.0082830	mg/L	0.00038123	0.0082830	mg/L	0.00038123	4.60%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.1	0.0024873	mg/L	0.00476412	0.0024873	mg/L	0.00476412	191.54%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.7	0.0109501	mg/L	0.00862418	0.0109501	mg/L	0.00862418	78.76%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.6	0.0010485	mg/L	0.01474420	0.0010485	mg/L	0.01474420	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.2	0.0078323	mg/L	0.00279640	0.0078323	mg/L	0.00279640	35.70%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-0.5	-0.0033222	mg/L	0.00032221	-0.0033222	mg/L	0.00032221	9.70%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.0	0.0106087	mg/L	0.00392983	0.0106087	mg/L	0.00392983	37.04%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	1.1	-0.0103776	mg/L	0.00080720	-0.0103776	mg/L	0.00080720	7.78%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	5.3	0.0183580	mg/L	0.00015029	0.0183580	mg/L	0.00015029	0.82%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	26.8	0.0095568	mg/L	0.00033863	0.0095568	mg/L	0.00033863	3.54%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-10.4	-0.0118203	mg/L	0.00099497	-0.0118203	mg/L	0.00099497	8.42%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: LRS V-333660
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 13
Date Collected: 9/14/2020 9:45:15 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LRS V-333660

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	41642.7	87.8	%	0.10				0.11%
Y 371.029	15130.8	78.3	%	0.25				0.32%
Ag 328.068†	9512.1	1.15316	mg/L	0.008672	1.15316	mg/L	0.008672	0.75%
QC value greater than the upper limit for Ag 328.068 Recovery = 115.32%								
Al 308.215†	464678.2	516.230	mg/L	2.6469	516.230	mg/L	2.6469	0.51%
QC value within limits for Al 308.215 Recovery = 103.25%								
As 188.979†	659.7	10.0144	mg/L	0.10053	10.0144	mg/L	0.10053	1.00%
QC value within limits for As 188.979 Recovery = 100.14%								
Ba 233.527†	54812.3	9.99294	mg/L	0.054242	9.99294	mg/L	0.054242	0.54%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	697197.0	4.67063	mg/L	0.026316	4.67063	mg/L	0.026316	0.56%
QC value within limits for Be 313.107 Recovery = 93.41%								
Ca 315.887†	956692.3	487.199	mg/L	2.4757	487.199	mg/L	2.4757	0.51%
QC value within limits for Ca 315.887 Recovery = 97.44%								
Cd 228.802†	8651.4	4.98959	mg/L	0.032789	4.98959	mg/L	0.032789	0.66%
QC value within limits for Cd 228.802 Recovery = 99.79%								
Co 228.616†	6341.4	4.86037	mg/L	0.034187	4.86037	mg/L	0.034187	0.70%
QC value within limits for Co 228.616 Recovery = 97.21%								
Cr 267.716†	32305.3	8.83065	mg/L	0.056668	8.83065	mg/L	0.056668	0.64%
QC value less than the lower limit for Cr 267.716 Recovery = 88.31%								
Cu 327.393†	63836.3	10.4107	mg/L	0.06653	10.4107	mg/L	0.06653	0.64%
QC value within limits for Cu 327.393 Recovery = 104.11%								
Fe 273.955†	78444.9	192.149	mg/L	0.8502	192.149	mg/L	0.8502	0.44%
QC value within limits for Fe 273.955 Recovery = 96.07%								
K 404.721†	3721.1	-1820.48	mg/L	8.659	-1820.48	mg/L	8.659	0.48%
QC value less than the lower limit for K 404.721 Recovery = -910.24%								
Mg 279.077†	279926.1	505.105	mg/L	2.2337	505.105	mg/L	2.2337	0.44%
QC value within limits for Mg 279.077 Recovery = 101.02%								
Mn 257.610†	156981.9	9.37519	mg/L	0.051848	9.37519	mg/L	0.051848	0.55%
QC value within limits for Mn 257.610 Recovery = 93.75%								
Mo 202.031†	7360.4	9.17401	mg/L	0.039981	9.17401	mg/L	0.039981	0.44%
QC value within limits for Mo 202.031 Recovery = 91.74%								
Na 330.237†	43965.5	1288.51	mg/L	6.216	1288.51	mg/L	6.216	0.48%
QC value greater than the upper limit for Na 330.237 Recovery = 128.85%								
Ni 231.604†	16433.9	8.73820	mg/L	0.038989	8.73820	mg/L	0.038989	0.45%
QC value less than the lower limit for Ni 231.604 Recovery = 87.38%								
Pb 220.353†	3062.2	9.58889	mg/L	0.063404	9.58889	mg/L	0.063404	0.66%
QC value within limits for Pb 220.353 Recovery = 95.89%								
Sb 206.836†	497.7	5.56026	mg/L	0.044945	5.56026	mg/L	0.044945	0.81%
QC value greater than the upper limit for Sb 206.836 Recovery = 111.21%								
Se 196.026†	645.8	5.32267	mg/L	0.025583	5.32267	mg/L	0.025583	0.48%
QC value within limits for Se 196.026 Recovery = 106.45%								
Sn 189.927†	2892.4	10.0466	mg/L	0.07614	10.0466	mg/L	0.07614	0.76%
QC value within limits for Sn 189.927 Recovery = 100.47%								
Ti 334.940†	186047.9	9.47425	mg/L	0.056741	9.47425	mg/L	0.056741	0.60%
QC value within limits for Ti 334.940 Recovery = 94.74%								
Tl 190.801†	470.2	4.34938	mg/L	0.015900	4.34938	mg/L	0.015900	0.37%
QC value less than the lower limit for Tl 190.801 Recovery = 86.99%								
V 290.880†	30450.8	9.06194	mg/L	0.048989	9.06194	mg/L	0.048989	0.54%
QC value within limits for V 290.880 Recovery = 90.62%								
Zn 206.200†	15470.5	9.25865	mg/L	0.027239	9.25865	mg/L	0.027239	0.29%
QC value within limits for Zn 206.200 Recovery = 92.59%								
B 249.772	17921.5	4.78262	mg/L	0.026277	4.78262	mg/L	0.026277	0.55%
QC value within limits for B 249.772 Recovery = 95.65%								
Si 251.611	30646.9	27.1781	mg/L	0.14828	27.1781	mg/L	0.14828	0.55%
QC value within limits for Si 251.611 Recovery = 108.71%								

QC Failed. Continue with analysis.

Sequence No.: 8 **Autosampler Location: 3**
Sample ID: ICS3 V-333666 **Date Collected: 9/14/2020 9:50:02 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 85 **Auto Dilution Factor: 1**

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	46896.2	98.9	%	0.78				0.79%
Y 371.029	18245.6	94.4	%	0.59				0.62%
Ag 328.068†	528.2	0.0739065	mg/L	0.00054928	0.0739065	mg/L	0.00054928	0.74%
QC value less than the lower limit for Ag 328.068 Recovery = 73.91%								
Al 308.215†	4518.3	5.06687	mg/L	0.008274	5.06687	mg/L	0.008274	0.16%
QC value within limits for Al 308.215 Recovery = 101.34%								
As 188.979†	31.9	0.486202	mg/L	0.0151162	0.486202	mg/L	0.0151162	3.11%
QC value within limits for As 188.979 Recovery = 97.24%								
Ba 233.527†	3056.9	0.551664	mg/L	0.0054373	0.551664	mg/L	0.0054373	0.99%
QC value greater than the upper limit for Ba 233.527 Recovery = 110.33%								
Be 313.107†	76125.3	0.512627	mg/L	0.0008048	0.512627	mg/L	0.0008048	0.16%
QC value within limits for Be 313.107 Recovery = 102.53%								
Ca 315.887†	101962.8	52.4231	mg/L	0.07009	52.4231	mg/L	0.07009	0.13%
QC value within limits for Ca 315.887 Recovery = 104.85%								
Cd 228.802†	835.4	0.490899	mg/L	0.0051976	0.490899	mg/L	0.0051976	1.06%
QC value within limits for Cd 228.802 Recovery = 98.18%								
Co 228.616†	656.6	0.511757	mg/L	0.0042365	0.511757	mg/L	0.0042365	0.83%
QC value within limits for Co 228.616 Recovery = 102.35%								
Cr 267.716†	1818.7	0.507260	mg/L	0.0035655	0.507260	mg/L	0.0035655	0.70%
QC value within limits for Cr 267.716 Recovery = 101.45%								
Cu 327.393†	3307.9	0.531033	mg/L	0.0047559	0.531033	mg/L	0.0047559	0.90%
QC value within limits for Cu 327.393 Recovery = 106.21%								
Fe 273.955†	2237.9	5.40463	mg/L	0.054668	5.40463	mg/L	0.054668	1.01%
QC value within limits for Fe 273.955 Recovery = 108.09%								
K 404.721†	731.2	-7.67543	mg/L	0.679579	-7.67543	mg/L	0.679579	8.85%
QC value less than the lower limit for K 404.721 Recovery = -15.35%								
Mg 279.077†	28462.2	51.7392	mg/L	0.06188	51.7392	mg/L	0.06188	0.12%
QC value within limits for Mg 279.077 Recovery = 103.48%								
Mn 257.610†	8544.1	0.510730	mg/L	0.0017312	0.510730	mg/L	0.0017312	0.34%
QC value within limits for Mn 257.610 Recovery = 102.15%								
Mo 202.031†	398.9	0.504728	mg/L	0.0047830	0.504728	mg/L	0.0047830	0.95%
QC value within limits for Mo 202.031 Recovery = 100.95%								
Na 330.237†	1770.9	53.4392	mg/L	0.63270	53.4392	mg/L	0.63270	1.18%
QC value within limits for Na 330.237 Recovery = 106.88%								
Ni 231.604†	946.2	0.511720	mg/L	0.0051851	0.511720	mg/L	0.0051851	1.01%
QC value within limits for Ni 231.604 Recovery = 102.34%								
Pb 220.353†	165.1	0.516971	mg/L	0.0042823	0.516971	mg/L	0.0042823	0.83%
QC value within limits for Pb 220.353 Recovery = 103.39%								
Sb 206.836†	47.3	0.522694	mg/L	0.0071846	0.522694	mg/L	0.0071846	1.37%
QC value within limits for Sb 206.836 Recovery = 104.54%								
Se 196.026†	63.4	0.527265	mg/L	0.0070463	0.527265	mg/L	0.0070463	1.34%
QC value within limits for Se 196.026 Recovery = 105.45%								
Sn 189.927†	148.1	0.522193	mg/L	0.0071722	0.522193	mg/L	0.0071722	1.37%
QC value within limits for Sn 189.927 Recovery = 104.44%								
Ti 334.940†	9905.8	0.503287	mg/L	0.0006939	0.503287	mg/L	0.0006939	0.14%
QC value within limits for Ti 334.940 Recovery = 100.66%								
Tl 190.801†	55.7	0.515993	mg/L	0.0041853	0.515993	mg/L	0.0041853	0.81%
QC value within limits for Tl 190.801 Recovery = 103.20%								
V 290.880†	1917.5	0.561989	mg/L	0.0083463	0.561989	mg/L	0.0083463	1.49%
QC value greater than the upper limit for V 290.880 Recovery = 112.40%								
Zn 206.200†	851.1	0.523754	mg/L	0.0056286	0.523754	mg/L	0.0056286	1.07%
QC value within limits for Zn 206.200 Recovery = 104.75%								
B 249.772	1979.2	0.571423	mg/L	0.0016477	0.571423	mg/L	0.0016477	0.29%
QC value greater than the upper limit for B 249.772 Recovery = 114.28%								
Si 251.611	6464.0	5.42152	mg/L	0.047582	5.42152	mg/L	0.047582	0.88%
QC value within limits for Si 251.611 Recovery = 108.43%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 14
Date Collected: 9/14/2020 9:54:00 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	50889.9	107	%	0.77				0.72%
Y 371.029	20241.2	105	%	0.53				0.51%
Ag 328.068†	-2.8	0.0101350	mg/L	0.00020796	0.0101350	mg/L	0.00020796	2.05%
Al 308.215†	0.3	0.0325422	mg/L	0.00098289	0.0325422	mg/L	0.00098289	3.02%
As 188.979†	0.5	0.0129882	mg/L	0.00912867	0.0129882	mg/L	0.00912867	70.28%
Ba 233.527†	0.5	-0.0058944	mg/L	0.00020881	-0.0058944	mg/L	0.00020881	3.54%
Be 313.107†	65.4	0.0034147	mg/L	0.00003719	0.0034147	mg/L	0.00003719	1.09%
Ca 315.887†	171.9	0.644993	mg/L	0.0045767	0.644993	mg/L	0.0045767	0.71%
Cd 228.802†	0.6	0.0104281	mg/L	0.00081408	0.0104281	mg/L	0.00081408	7.81%
Co 228.616†	1.8	0.0108059	mg/L	0.00045009	0.0108059	mg/L	0.00045009	4.17%
Cr 267.716†	0.6	0.0105743	mg/L	0.00004650	0.0105743	mg/L	0.00004650	0.44%
Cu 327.393†	-7.5	-0.0096500	mg/L	0.00075541	-0.0096500	mg/L	0.00075541	7.83%
Fe 273.955†	-1.8	-0.0838153	mg/L	0.00394254	-0.0838153	mg/L	0.00394254	4.70%
K 404.721†	-8.4	2.27661	mg/L	0.450485	2.27661	mg/L	0.450485	19.79%
Mg 279.077†	4.9	0.433573	mg/L	0.0065559	0.433573	mg/L	0.0065559	1.51%
Mn 257.610†	0.1	0.0004922	mg/L	0.00004468	0.0004922	mg/L	0.00004468	9.08%
Mo 202.031†	0.2	0.0082391	mg/L	0.00044618	0.0082391	mg/L	0.00044618	5.42%
Na 330.237†	0.3	1.60974	mg/L	0.018960	1.60974	mg/L	0.018960	1.18%
Ni 231.604†	-0.1	0.0092064	mg/L	0.00067923	0.0092064	mg/L	0.00067923	7.38%
Pb 220.353†	0.6	0.0046022	mg/L	0.00291715	0.0046022	mg/L	0.00291715	63.39%
Sb 206.836†	0.3	0.0064716	mg/L	0.00151836	0.0064716	mg/L	0.00151836	23.46%
Se 196.026†	-1.5	0.0017151	mg/L	0.00552705	0.0017151	mg/L	0.00552705	322.26%
Sn 189.927†	1.2	0.0127044	mg/L	0.00049142	0.0127044	mg/L	0.00049142	3.87%
Ti 334.940†	2.2	-0.0031833	mg/L	0.00009922	-0.0031833	mg/L	0.00009922	3.12%
Tl 190.801†	0.1	0.0016046	mg/L	0.00456604	0.0016046	mg/L	0.00456604	284.55%
V 290.880†	-3.6	-0.0117816	mg/L	0.00052703	-0.0117816	mg/L	0.00052703	4.47%
Zn 206.200†	1.2	0.0159210	mg/L	0.00051628	0.0159210	mg/L	0.00051628	3.24%
B 249.772	36.5	0.0123408	mg/L	0.00115041	0.0123408	mg/L	0.00115041	9.32%
Si 251.611	-17.0	-0.0172227	mg/L	0.00226866	-0.0172227	mg/L	0.00226866	13.17%

Sequence No.: 10 **Autosampler Location: 5**
Sample ID: LLICV V-333672 **Date Collected: 9/14/2020 9:57:57 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: LLICV V-333672

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	49491.7	104	%	0.39				0.38%
Y 371.029	19244.0	99.6	%	0.91				0.92%
Ag 328.068†	401.7	0.0568196	mg/L	0.00100075	0.0568196	mg/L	0.00100075	1.76%
QC value within limits for Ag 328.068 Recovery = 113.64%								
Al 308.215†	904.0	1.03895	mg/L	0.006924	1.03895	mg/L	0.006924	0.67%
QC value within limits for Al 308.215 Recovery = 103.89%								
As 188.979†	5.7	0.0915433	mg/L	0.00228561	0.0915433	mg/L	0.00228561	2.50%
QC value within limits for As 188.979 Recovery = 91.54%								
Ba 233.527†	1397.3	0.248922	mg/L	0.0009298	0.248922	mg/L	0.0009298	0.37%
QC value within limits for Ba 233.527 Recovery = 99.57%								
Be 313.107†	1719.7	0.0144897	mg/L	0.00004177	0.0144897	mg/L	0.00004177	0.29%
QC value greater than the upper limit for Be 313.107 Recovery = 120.75%								
Ca 315.887†	9125.4	5.19939	mg/L	0.014084	5.19939	mg/L	0.014084	0.27%
QC value within limits for Ca 315.887 Recovery = 103.99%								
Cd 228.802†	78.0	0.0549810	mg/L	0.00067214	0.0549810	mg/L	0.00067214	1.22%
QC value within limits for Cd 228.802 Recovery = 109.96%								
Co 228.616†	122.8	0.103356	mg/L	0.0006485	0.103356	mg/L	0.0006485	0.63%
QC value within limits for Co 228.616 Recovery = 103.36%								
Cr 267.716†	336.0	0.102190	mg/L	0.0011576	0.102190	mg/L	0.0011576	1.13%
QC value within limits for Cr 267.716 Recovery = 102.19%								
Cu 327.393†	619.4	0.0925897	mg/L	0.00060966	0.0925897	mg/L	0.00060966	0.66%
QC value within limits for Cu 327.393 Recovery = 92.59%								
Fe 273.955†	398.1	0.896100	mg/L	0.0027099	0.896100	mg/L	0.0027099	0.30%
QC value within limits for Fe 273.955 Recovery = 89.61%								
K 404.721†	25.3	-6.03669	mg/L	0.028519	-6.03669	mg/L	0.028519	0.47%
QC value less than the lower limit for K 404.721 Recovery = -120.73%								
Mg 279.077†	2952.0	5.74677	mg/L	0.031938	5.74677	mg/L	0.031938	0.56%
QC value within limits for Mg 279.077 Recovery = 114.94%								
Mn 257.610†	1740.8	0.104444	mg/L	0.0003506	0.104444	mg/L	0.0003506	0.34%
QC value within limits for Mn 257.610 Recovery = 104.44%								
Mo 202.031†	75.3	0.101763	mg/L	0.0007626	0.101763	mg/L	0.0007626	0.75%
QC value within limits for Mo 202.031 Recovery = 101.76%								
Na 330.237†	733.9	23.0849	mg/L	0.19382	23.0849	mg/L	0.19382	0.84%
QC value within limits for Na 330.237 Recovery = 92.34%								
Ni 231.604†	175.3	0.102311	mg/L	0.0009659	0.102311	mg/L	0.0009659	0.94%
QC value within limits for Ni 231.604 Recovery = 102.31%								
Pb 220.353†	16.5	0.0543093	mg/L	0.00305502	0.0543093	mg/L	0.00305502	5.63%
QC value within limits for Pb 220.353 Recovery = 108.62%								
Sb 206.836†	6.8	0.0788527	mg/L	0.00580663	0.0788527	mg/L	0.00580663	7.36%
QC value within limits for Sb 206.836 Recovery = 112.65%								
Se 196.026†	10.9	0.101324	mg/L	0.0032305	0.101324	mg/L	0.0032305	3.19%
QC value within limits for Se 196.026 Recovery = 101.32%								
Sn 189.927†	27.9	0.105374	mg/L	0.0022379	0.105374	mg/L	0.0022379	2.12%
QC value within limits for Sn 189.927 Recovery = 105.37%								
Ti 334.940†	2107.2	0.103977	mg/L	0.0004497	0.103977	mg/L	0.0004497	0.43%
QC value within limits for Ti 334.940 Recovery = 103.98%								
Tl 190.801†	11.1	0.103297	mg/L	0.0105352	0.103297	mg/L	0.0105352	10.20%
QC value within limits for Tl 190.801 Recovery = 103.30%								
V 290.880†	330.3	0.0877360	mg/L	0.00224600	0.0877360	mg/L	0.00224600	2.56%
QC value within limits for V 290.880 Recovery = 87.74%								
Zn 206.200†	153.8	0.107099	mg/L	0.0001963	0.107099	mg/L	0.0001963	0.18%
QC value within limits for Zn 206.200 Recovery = 107.10%								
B 249.772	760.9	0.218740	mg/L	0.0009322	0.218740	mg/L	0.0009322	0.43%
QC value within limits for B 249.772 Recovery = 109.37%								
Si 251.611	151.2	0.144360	mg/L	0.0012047	0.144360	mg/L	0.0012047	0.83%
QC value greater than the upper limit for Si 251.611 Recovery = 144.36%								

QC Failed. Continue with analysis.

Sequence No.: 11
Sample ID: ICSA V-333668
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 7
Date Collected: 9/14/2020 10:01:57 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	43359.9	91.5	%	0.78				0.86%
Y 371.029	16819.6	87.0	%	0.93				1.07%
Ag 328.068†	-345.7	-0.0169280	mg/L	0.00035249	-0.0169280	mg/L	0.00035249	2.08%
Al 308.215†	475091.5	527.550	mg/L	6.0275	527.550	mg/L	6.0275	1.14%
QC value within limits for Al 308.215 Recovery = 105.51%								
As 188.979†	-1.6	-0.0268345	mg/L	0.02357810	-0.0268345	mg/L	0.02357810	87.86%
Ba 233.527†	28.1	-0.0008502	mg/L	0.00039252	-0.0008502	mg/L	0.00039252	46.17%
Be 313.107†	-11.1	0.0029024	mg/L	0.00011516	0.0029024	mg/L	0.00011516	3.97%
Ca 315.887†	969183.6	493.553	mg/L	5.3646	493.553	mg/L	5.3646	1.09%
QC value within limits for Ca 315.887 Recovery = 98.71%								
Cd 228.802†	1.9	0.0111806	mg/L	0.00056701	0.0111806	mg/L	0.00056701	5.07%
Co 228.616†	2.0	0.0109550	mg/L	0.00207509	0.0109550	mg/L	0.00207509	18.94%
Cr 267.716†	-6.7	0.0092347	mg/L	0.00075417	0.0092347	mg/L	0.00075417	8.17%
Cu 327.393†	-103.5	-0.0078117	mg/L	0.00042644	-0.0078117	mg/L	0.00042644	5.46%
Fe 273.955†	71264.2	174.553	mg/L	1.0499	174.553	mg/L	1.0499	0.60%
QC value within limits for Fe 273.955 Recovery = 87.28%								
K 404.721†	6.7	-1877.85	mg/L	11.308	-1877.85	mg/L	11.308	0.60%
Mg 279.077†	288795.6	521.096	mg/L	5.6647	521.096	mg/L	5.6647	1.09%
QC value within limits for Mg 279.077 Recovery = 104.22%								
Mn 257.610†	-212.2	-0.0121832	mg/L	0.00014408	-0.0121832	mg/L	0.00014408	1.18%
Mo 202.031†	-3.0	0.0042465	mg/L	0.00238214	0.0042465	mg/L	0.00238214	56.10%
Na 330.237†	-16.7	1.11398	mg/L	0.072445	1.11398	mg/L	0.072445	6.50%
Ni 231.604†	1.5	0.0100225	mg/L	0.00180808	0.0100225	mg/L	0.00180808	18.04%
Pb 220.353†	-11.3	0.0278509	mg/L	0.01114682	0.0278509	mg/L	0.01114682	40.02%
Sb 206.836†	0.9	0.0135228	mg/L	0.02694291	0.0135228	mg/L	0.02694291	199.24%
Se 196.026†	-18.1	0.0320364	mg/L	0.04362293	0.0320364	mg/L	0.04362293	136.17%
Sn 189.927†	-13.0	-0.0367217	mg/L	0.00771301	-0.0367217	mg/L	0.00771301	21.00%
Ti 334.940†	-120.0	0.0280772	mg/L	0.00073179	0.0280772	mg/L	0.00073179	2.61%
Tl 190.801†	-1.1	-0.0243606	mg/L	0.00953110	-0.0243606	mg/L	0.00953110	39.13%
V 290.880†	460.6	0.150266	mg/L	0.0003381	0.150266	mg/L	0.0003381	0.23%
Zn 206.200†	10.0	0.0211944	mg/L	0.00296007	0.0211944	mg/L	0.00296007	13.97%
B 249.772	2356.9	0.0752873	mg/L	0.00447196	0.0752873	mg/L	0.00447196	5.94%
Si 251.611	-29.8	0.736216	mg/L	0.0073432	0.736216	mg/L	0.0073432	1.00%

All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 6**
Sample ID: CCV V-333673 **Date Collected: 9/14/2020 10:06:40 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 85 **Auto Dilution Factor: 1**

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	48469.1	102	%	0.56				0.55%
Y 371.029	18626.6	96.4	%	1.31				1.36%
Ag 328.068†	860.1	0.111653	mg/L	0.0004396	0.111653	mg/L	0.0004396	0.39%
QC value greater than the upper limit for Ag 328.068 Recovery = 111.65%								
Al 308.215†	4399.9	4.93489	mg/L	0.053014	4.93489	mg/L	0.053014	1.07%
QC value within limits for Al 308.215 Recovery = 98.70%								
As 188.979†	29.6	0.450806	mg/L	0.0200403	0.450806	mg/L	0.0200403	4.45%
QC value within limits for As 188.979 Recovery = 90.16%								
Ba 233.527†	2949.9	0.532150	mg/L	0.0047292	0.532150	mg/L	0.0047292	0.89%
QC value within limits for Ba 233.527 Recovery = 106.43%								
Be 313.107†	73406.1	0.494422	mg/L	0.0040428	0.494422	mg/L	0.0040428	0.82%
QC value within limits for Be 313.107 Recovery = 98.88%								
Ca 315.887†	100855.6	51.8598	mg/L	0.38689	51.8598	mg/L	0.38689	0.75%
QC value within limits for Ca 315.887 Recovery = 103.72%								
Cd 228.802†	807.2	0.474678	mg/L	0.0031147	0.474678	mg/L	0.0031147	0.66%
QC value within limits for Cd 228.802 Recovery = 94.94%								
Co 228.616†	634.8	0.495037	mg/L	0.0043263	0.495037	mg/L	0.0043263	0.87%
QC value within limits for Co 228.616 Recovery = 99.01%								
Cr 267.716†	1781.8	0.497153	mg/L	0.0040335	0.497153	mg/L	0.0040335	0.81%
QC value within limits for Cr 267.716 Recovery = 99.43%								
Cu 327.393†	3279.2	0.526333	mg/L	0.0024294	0.526333	mg/L	0.0024294	0.46%
QC value within limits for Cu 327.393 Recovery = 105.27%								
Fe 273.955†	2101.6	5.07057	mg/L	0.038922	5.07057	mg/L	0.038922	0.77%
QC value within limits for Fe 273.955 Recovery = 101.41%								
K 404.721†	713.7	-5.24197	mg/L	0.257239	-5.24197	mg/L	0.257239	4.91%
QC value less than the lower limit for K 404.721 Recovery = -10.48%								
Mg 279.077†	28221.5	51.3054	mg/L	0.42698	51.3054	mg/L	0.42698	0.83%
QC value within limits for Mg 279.077 Recovery = 102.61%								
Mn 257.610†	8190.2	0.489590	mg/L	0.0033700	0.489590	mg/L	0.0033700	0.69%
QC value within limits for Mn 257.610 Recovery = 97.92%								
Mo 202.031†	385.4	0.487949	mg/L	0.0031763	0.487949	mg/L	0.0031763	0.65%
QC value within limits for Mo 202.031 Recovery = 97.59%								
Na 330.237†	1790.6	54.0134	mg/L	0.42350	54.0134	mg/L	0.42350	0.78%
QC value within limits for Na 330.237 Recovery = 108.03%								
Ni 231.604†	902.5	0.488548	mg/L	0.0024496	0.488548	mg/L	0.0024496	0.50%
QC value within limits for Ni 231.604 Recovery = 97.71%								
Pb 220.353†	159.3	0.498974	mg/L	0.0081767	0.498974	mg/L	0.0081767	1.64%
QC value within limits for Pb 220.353 Recovery = 99.79%								
Sb 206.836†	47.3	0.521975	mg/L	0.0077526	0.521975	mg/L	0.0077526	1.49%
QC value within limits for Sb 206.836 Recovery = 104.40%								
Se 196.026†	61.6	0.512698	mg/L	0.0285851	0.512698	mg/L	0.0285851	5.58%
QC value within limits for Se 196.026 Recovery = 102.54%								
Sn 189.927†	140.9	0.497368	mg/L	0.0087530	0.497368	mg/L	0.0087530	1.76%
QC value within limits for Sn 189.927 Recovery = 99.47%								
Ti 334.940†	9539.7	0.484669	mg/L	0.0023997	0.484669	mg/L	0.0023997	0.50%
QC value within limits for Ti 334.940 Recovery = 96.93%								
Tl 190.801†	53.1	0.491304	mg/L	0.0102319	0.491304	mg/L	0.0102319	2.08%
QC value within limits for Tl 190.801 Recovery = 98.26%								
V 290.880†	1861.1	0.545202	mg/L	0.0053874	0.545202	mg/L	0.0053874	0.99%
QC value within limits for V 290.880 Recovery = 109.04%								
Zn 206.200†	813.4	0.501203	mg/L	0.0033419	0.501203	mg/L	0.0033419	0.67%
QC value within limits for Zn 206.200 Recovery = 100.24%								
B 249.772	1961.3	0.566978	mg/L	0.0029770	0.566978	mg/L	0.0029770	0.53%
QC value greater than the upper limit for B 249.772 Recovery = 113.40%								
Si 251.611	6644.6	5.56684	mg/L	0.041235	5.56684	mg/L	0.041235	0.74%
QC value greater than the upper limit for Si 251.611 Recovery = 111.34%								

QC Failed. Continue with analysis.

Sequence No.: 13 **Autosampler Location: 2**
Sample ID: CCB V-333667 **Date Collected: 9/14/2020 10:10:37 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	48111.3	101	%	5.33				5.25%
Y 371.029	18861.2	97.6	%	5.83				5.97%
Ag 328.068†	0.9	0.0105622	mg/L	0.00013654	0.0105622	mg/L	0.00013654	1.29%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	21.5	0.0562227	mg/L	0.00691129	0.0562227	mg/L	0.00691129	12.29%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.6	0.0156153	mg/L	0.01293036	0.0156153	mg/L	0.01293036	82.81%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-1.0	-0.0061535	mg/L	0.00024802	-0.0061535	mg/L	0.00024802	4.03%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	11.7	0.0030554	mg/L	0.00010590	0.0030554	mg/L	0.00010590	3.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	72.1	0.594255	mg/L	0.0060184	0.594255	mg/L	0.0060184	1.01%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	1.7	0.0110700	mg/L	0.00058206	0.0110700	mg/L	0.00058206	5.26%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.9	0.0101550	mg/L	0.00165365	0.0101550	mg/L	0.00165365	16.28%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.1	0.0104419	mg/L	0.00049768	0.0104419	mg/L	0.00049768	4.77%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-25.8	-0.0126179	mg/L	0.00156192	-0.0126179	mg/L	0.00156192	12.38%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.7	-0.0836704	mg/L	0.00069457	-0.0836704	mg/L	0.00069457	0.83%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	5.5	3.20433	mg/L	0.484716	3.20433	mg/L	0.484716	15.13%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	5.9	0.435330	mg/L	0.0046834	0.435330	mg/L	0.0046834	1.08%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-1.5	0.0003957	mg/L	0.00013934	0.0003957	mg/L	0.00013934	35.21%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-1.0	0.0067265	mg/L	0.00049125	0.0067265	mg/L	0.00049125	7.30%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.7	1.65227	mg/L	0.148605	1.65227	mg/L	0.148605	8.99%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	2.5	0.0105676	mg/L	0.00176257	0.0105676	mg/L	0.00176257	16.68%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.9	-0.0000102	mg/L	0.00393516	-0.0000102	mg/L	0.00393516	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.4	0.0073683	mg/L	0.01109867	0.0073683	mg/L	0.01109867	150.63%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.1	0.0219626	mg/L	0.02303346	0.0219626	mg/L	0.02303346	104.88%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.5	0.0103193	mg/L	0.00345141	0.0103193	mg/L	0.00345141	33.45%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	2.8	-0.0031563	mg/L	0.00008876	-0.0031563	mg/L	0.00008876	2.81%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.4	0.0049155	mg/L	0.00387314	0.0049155	mg/L	0.00387314	78.79%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	0.2	-0.0106389	mg/L	0.00159570	-0.0106389	mg/L	0.00159570	15.00%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	26.4	0.0309655	mg/L	0.00071671	0.0309655	mg/L	0.00071671	2.31%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	15.5	0.0065706	mg/L	0.00034946	0.0065706	mg/L	0.00034946	5.32%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-23.6	-0.0221864	mg/L	0.00120188	-0.0221864	mg/L	0.00120188	5.42%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: AD19159-004 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 112
Date Collected: 9/14/2020 10:14:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 4D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	45153.8	95.2	%	0.17				0.18%
Y 371.029	17211.3	89.0	%	0.76				0.86%
Ag 328.068†	22.6	0.0130581	mg/L	0.00027477	0.0130581	mg/L	0.00027477	2.10%
Al 308.215†	-5.8	0.0261963	mg/L	0.00601825	0.0261963	mg/L	0.00601825	22.97%
As 188.979†	-0.3	0.0001406	mg/L	0.01048684	0.0001406	mg/L	0.01048684	>999.9%
Ba 233.527†	2883.1	0.519961	mg/L	0.0009708	0.519961	mg/L	0.0009708	0.19%
Be 313.107†	-17.6	0.0028589	mg/L	0.00002587	0.0028589	mg/L	0.00002587	0.90%
Ca 315.887†	388181.8	198.014	mg/L	0.8895	198.014	mg/L	0.8895	0.45%
Cd 228.802†	4.9	0.0129391	mg/L	0.00117044	0.0129391	mg/L	0.00117044	9.05%
Co 228.616†	0.3	0.0096785	mg/L	0.00129384	0.0096785	mg/L	0.00129384	13.37%
Cr 267.716†	30.6	0.0187642	mg/L	0.00071749	0.0187642	mg/L	0.00071749	3.82%
Cu 327.393†	-16.8	-0.0111596	mg/L	0.00033772	-0.0111596	mg/L	0.00033772	3.03%
Fe 273.955†	6.8	-0.0627707	mg/L	0.00509551	-0.0627707	mg/L	0.00509551	8.12%
K 404.721†	14.9	3.59998	mg/L	0.284210	3.59998	mg/L	0.284210	7.89%
Mg 279.077†	998.8	2.22534	mg/L	0.008546	2.22534	mg/L	0.008546	0.38%
Mn 257.610†	568.3	0.0344248	mg/L	0.00011409	0.0344248	mg/L	0.00011409	0.33%
Mo 202.031†	0.9	0.0091373	mg/L	0.00005576	0.0091373	mg/L	0.00005576	0.61%
Na 330.237†	13193.0	387.773	mg/L	1.0160	387.773	mg/L	1.0160	0.26%
Ni 231.604†	7.7	0.0133189	mg/L	0.00112867	0.0133189	mg/L	0.00112867	8.47%
Pb 220.353†	5.0	0.0183034	mg/L	0.00151806	0.0183034	mg/L	0.00151806	8.29%
Sb 206.836†	1.1	0.0148692	mg/L	0.00852417	0.0148692	mg/L	0.00852417	57.33%
Se 196.026†	1.6	0.0419375	mg/L	0.00666715	0.0419375	mg/L	0.00666715	15.90%
Sn 189.927†	-3.5	-0.0038984	mg/L	0.00537917	-0.0038984	mg/L	0.00537917	137.98%
Ti 334.940†	-50.0	0.0091666	mg/L	0.00036308	0.0091666	mg/L	0.00036308	3.96%
Tl 190.801†	0.4	-0.0084845	mg/L	0.00321582	-0.0084845	mg/L	0.00321582	37.90%
V 290.880†	18.6	-0.0050619	mg/L	0.00098930	-0.0050619	mg/L	0.00098930	19.54%
Zn 206.200†	233.5	0.154722	mg/L	0.0016869	0.154722	mg/L	0.0016869	1.09%
B 249.772	103.1	0.0316181	mg/L	0.00087606	0.0316181	mg/L	0.00087606	2.77%
Si 251.611	1132.8	0.997333	mg/L	0.0023269	0.997333	mg/L	0.0023269	0.23%

Sequence No.: 15
Sample ID: AD19159-004 MR 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 113
Date Collected: 9/14/2020 10:18:50 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 MR 4D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	45445.5	95.9	%	0.73				0.76%
Y 371.029	17192.9	88.9	%	0.13				0.15%
Ag 328.068†	22.0	0.0129810	mg/L	0.00063604	0.0129810	mg/L	0.00063604	4.90%
Al 308.215†	-26.6	0.0028806	mg/L	0.00265950	0.0028806	mg/L	0.00265950	92.32%
As 188.979†	0.4	0.0111510	mg/L	0.01156502	0.0111510	mg/L	0.01156502	103.71%
Ba 233.527†	2824.7	0.509312	mg/L	0.0032145	0.509312	mg/L	0.0032145	0.63%
Be 313.107†	-15.3	0.0028744	mg/L	0.00001775	0.0028744	mg/L	0.00001775	0.62%
Ca 315.887†	378685.9	193.184	mg/L	3.1196	193.184	mg/L	3.1196	1.61%
Cd 228.802†	3.4	0.0120397	mg/L	0.00010758	0.0120397	mg/L	0.00010758	0.89%
Co 228.616†	1.3	0.0104304	mg/L	0.00052745	0.0104304	mg/L	0.00052745	5.06%
Cr 267.716†	28.6	0.0182052	mg/L	0.00066344	0.0182052	mg/L	0.00066344	3.64%
Cu 327.393†	-26.1	-0.0126661	mg/L	0.00039217	-0.0126661	mg/L	0.00039217	3.10%
Fe 273.955†	1.4	-0.0760582	mg/L	0.00308958	-0.0760582	mg/L	0.00308958	4.06%
K 404.721†	8.7	3.33413	mg/L	0.479898	3.33413	mg/L	0.479898	14.39%
Mg 279.077†	965.8	2.16589	mg/L	0.012793	2.16589	mg/L	0.012793	0.59%
Mn 257.610†	530.1	0.0321458	mg/L	0.00045684	0.0321458	mg/L	0.00045684	1.42%
Mo 202.031†	2.4	0.0109785	mg/L	0.00212303	0.0109785	mg/L	0.00212303	19.34%
Na 330.237†	13017.1	382.626	mg/L	2.5030	382.626	mg/L	2.5030	0.65%
Ni 231.604†	7.1	0.0130101	mg/L	0.00182399	0.0130101	mg/L	0.00182399	14.02%
Pb 220.353†	2.5	0.0104594	mg/L	0.00480542	0.0104594	mg/L	0.00480542	45.94%
Sb 206.836†	1.6	0.0206585	mg/L	0.00528664	0.0206585	mg/L	0.00528664	25.59%
Se 196.026†	0.2	0.0308227	mg/L	0.00245217	0.0308227	mg/L	0.00245217	7.96%
Sn 189.927†	-3.6	-0.0041184	mg/L	0.00471631	-0.0041184	mg/L	0.00471631	114.52%
Ti 334.940†	-53.0	0.0086465	mg/L	0.00035168	0.0086465	mg/L	0.00035168	4.07%
Tl 190.801†	0.0	-0.0115434	mg/L	0.00828403	-0.0115434	mg/L	0.00828403	71.76%
V 290.880†	12.6	-0.0068664	mg/L	0.00052069	-0.0068664	mg/L	0.00052069	7.58%
Zn 206.200†	217.7	0.145258	mg/L	0.0021849	0.145258	mg/L	0.0021849	1.50%
B 249.772	113.0	0.0343413	mg/L	0.00066854	0.0343413	mg/L	0.00066854	1.95%
Si 251.611	1112.3	0.978573	mg/L	0.0031093	0.978573	mg/L	0.0031093	0.32%

Sequence No.: 16
Sample ID: AD19159-005 MS 1 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 114
Date Collected: 9/14/2020 10:23:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-005 MS 1 4D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44711.0	94.3	%	0.50				0.53%
Y 371.029	16788.0	86.9	%	0.36				0.42%
Ag 328.068†	233.8	0.0378790	mg/L	0.00062740	0.0378790	mg/L	0.00062740	1.66%
Al 308.215†	1127.3	1.28831	mg/L	0.004060	1.28831	mg/L	0.004060	0.32%
As 188.979†	7.5	0.118510	mg/L	0.0290011	0.118510	mg/L	0.0290011	24.47%
Ba 233.527†	3467.0	0.626471	mg/L	0.0021998	0.626471	mg/L	0.0021998	0.35%
Be 313.107†	17795.0	0.122112	mg/L	0.0005061	0.122112	mg/L	0.0005061	0.41%
Ca 315.887†	386220.0	197.016	mg/L	0.9916	197.016	mg/L	0.9916	0.50%
Cd 228.802†	197.1	0.123560	mg/L	0.0012194	0.123560	mg/L	0.0012194	0.99%
Co 228.616†	153.7	0.127017	mg/L	0.0006801	0.127017	mg/L	0.0006801	0.54%
Cr 267.716†	444.7	0.131908	mg/L	0.0008649	0.131908	mg/L	0.0008649	0.66%
Cu 327.393†	758.7	0.115301	mg/L	0.0008567	0.115301	mg/L	0.0008567	0.74%
Fe 273.955†	464.8	1.05952	mg/L	0.010531	1.05952	mg/L	0.010531	0.99%
K 404.721†	87.0	-3.69191	mg/L	0.372174	-3.69191	mg/L	0.372174	10.08%
Mg 279.077†	7378.2	13.7269	mg/L	0.04768	13.7269	mg/L	0.04768	0.35%
Mn 257.610†	2688.4	0.161035	mg/L	0.0005139	0.161035	mg/L	0.0005139	0.32%
Mo 202.031†	94.6	0.125852	mg/L	0.0013266	0.125852	mg/L	0.0013266	1.05%
Na 330.237†	12971.2	381.281	mg/L	1.5201	381.281	mg/L	1.5201	0.40%
Ni 231.604†	218.7	0.125382	mg/L	0.0005815	0.125382	mg/L	0.0005815	0.46%
Pb 220.353†	38.3	0.122194	mg/L	0.0096048	0.122194	mg/L	0.0096048	7.86%
Sb 206.836†	12.9	0.144094	mg/L	0.0090675	0.144094	mg/L	0.0090675	6.29%
Se 196.026†	18.1	0.174453	mg/L	0.0219146	0.174453	mg/L	0.0219146	12.56%
Sn 189.927†	29.2	0.109748	mg/L	0.0013154	0.109748	mg/L	0.0013154	1.20%
Ti 334.940†	2213.2	0.123933	mg/L	0.0011180	0.123933	mg/L	0.0011180	0.90%
Tl 190.801†	12.3	0.102714	mg/L	0.0140793	0.102714	mg/L	0.0140793	13.71%
V 290.880†	459.9	0.126709	mg/L	0.0005548	0.126709	mg/L	0.0005548	0.44%
Zn 206.200†	392.9	0.249941	mg/L	0.0009697	0.249941	mg/L	0.0009697	0.39%
B 249.772	544.7	0.157612	mg/L	0.0015192	0.157612	mg/L	0.0015192	0.96%
Si 251.611	1123.1	1.01028	mg/L	0.006222	1.01028	mg/L	0.006222	0.62%

Sequence No.: 17
Sample ID: AD19159-006 MS 2 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 115
Date Collected: 9/14/2020 10:27:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-006 MS 2 4D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44731.2	94.4	%	0.49				0.52%
Y 371.029	16642.6	86.1	%	0.92				1.07%
Ag 328.068†	234.9	0.0380036	mg/L	0.00071767	0.0380036	mg/L	0.00071767	1.89%
Al 308.215†	1132.1	1.29358	mg/L	0.012242	1.29358	mg/L	0.012242	0.95%
As 188.979†	7.4	0.116361	mg/L	0.0223612	0.116361	mg/L	0.0223612	19.22%
Ba 233.527†	3332.5	0.601940	mg/L	0.0013539	0.601940	mg/L	0.0013539	0.22%
Be 313.107†	17916.0	0.122922	mg/L	0.0004898	0.122922	mg/L	0.0004898	0.40%
Ca 315.887†	384494.3	196.139	mg/L	1.8090	196.139	mg/L	1.8090	0.92%
Cd 228.802†	198.8	0.124534	mg/L	0.0004117	0.124534	mg/L	0.0004117	0.33%
Co 228.616†	152.2	0.125900	mg/L	0.0018507	0.125900	mg/L	0.0018507	1.47%
Cr 267.716†	439.0	0.130360	mg/L	0.0010871	0.130360	mg/L	0.0010871	0.83%
Cu 327.393†	764.0	0.116158	mg/L	0.0010305	0.116158	mg/L	0.0010305	0.89%
Fe 273.955†	462.3	1.05348	mg/L	0.015904	1.05348	mg/L	0.015904	1.51%
K 404.721†	88.2	-3.55111	mg/L	0.250105	-3.55111	mg/L	0.250105	7.04%
Mg 279.077†	7248.4	13.4928	mg/L	0.07294	13.4928	mg/L	0.07294	0.54%
Mn 257.610†	2646.8	0.158549	mg/L	0.0011910	0.158549	mg/L	0.0011910	0.75%
Mo 202.031†	96.1	0.127718	mg/L	0.0022458	0.127718	mg/L	0.0022458	1.76%
Na 330.237†	12967.9	381.184	mg/L	1.8198	381.184	mg/L	1.8198	0.48%
Ni 231.604†	222.2	0.127257	mg/L	0.0010627	0.127257	mg/L	0.0010627	0.84%
Pb 220.353†	39.6	0.126293	mg/L	0.0082318	0.126293	mg/L	0.0082318	6.52%
Sb 206.836†	12.6	0.140762	mg/L	0.0011730	0.140762	mg/L	0.0011730	0.83%
Se 196.026†	16.4	0.160661	mg/L	0.0234198	0.160661	mg/L	0.0234198	14.58%
Sn 189.927†	28.5	0.107226	mg/L	0.0044104	0.107226	mg/L	0.0044104	4.11%
Ti 334.940†	2225.1	0.124472	mg/L	0.0009634	0.124472	mg/L	0.0009634	0.77%
Tl 190.801†	13.7	0.115234	mg/L	0.0057452	0.115234	mg/L	0.0057452	4.99%
V 290.880†	460.3	0.126829	mg/L	0.0019190	0.126829	mg/L	0.0019190	1.51%
Zn 206.200†	400.2	0.254305	mg/L	0.0021180	0.254305	mg/L	0.0021180	0.83%
B 249.772	539.7	0.156007	mg/L	0.0003511	0.156007	mg/L	0.0003511	0.23%
Si 251.611	1091.5	0.983431	mg/L	0.0071380	0.983431	mg/L	0.0071380	0.73%

Sequence No.: 18
Sample ID: AD19159-004 PS 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 116
Date Collected: 9/14/2020 10:31:38 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 PS 4D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44335.0	93.5	%	0.68				0.73%
Y 371.029	16374.5	84.7	%	1.03				1.22%
Ag 328.068†	610.9	0.0832896	mg/L	0.00052316	0.0832896	mg/L	0.00052316	0.63%
Al 308.215†	4558.2	5.11064	mg/L	0.007806	5.11064	mg/L	0.007806	0.15%
As 188.979†	32.0	0.487585	mg/L	0.0088969	0.487585	mg/L	0.0088969	1.82%
Ba 233.527†	5320.1	0.964514	mg/L	0.0040018	0.964514	mg/L	0.0040018	0.41%
Be 313.107†	75251.3	0.506776	mg/L	0.0041938	0.506776	mg/L	0.0041938	0.83%
Ca 315.887†	470701.9	239.990	mg/L	1.7037	239.990	mg/L	1.7037	0.71%
Cd 228.802†	844.7	0.496279	mg/L	0.0033568	0.496279	mg/L	0.0033568	0.68%
Co 228.616†	653.7	0.509490	mg/L	0.0064301	0.509490	mg/L	0.0064301	1.26%
Cr 267.716†	1863.6	0.519439	mg/L	0.0060408	0.519439	mg/L	0.0060408	1.16%
Cu 327.393†	3438.7	0.552286	mg/L	0.0034627	0.552286	mg/L	0.0034627	0.63%
Fe 273.955†	2027.8	4.88967	mg/L	0.043604	4.88967	mg/L	0.043604	0.89%
K 404.721†	332.3	-28.6436	mg/L	0.25925	-28.6436	mg/L	0.25925	0.91%
Mg 279.077†	28391.8	51.6123	mg/L	0.11006	51.6123	mg/L	0.11006	0.21%
Mn 257.610†	8986.3	0.537134	mg/L	0.0010761	0.537134	mg/L	0.0010761	0.20%
Mo 202.031†	407.0	0.514883	mg/L	0.0072517	0.514883	mg/L	0.0072517	1.41%
Na 330.237†	15088.2	443.247	mg/L	2.1213	443.247	mg/L	2.1213	0.48%
Ni 231.604†	918.5	0.497085	mg/L	0.0038304	0.497085	mg/L	0.0038304	0.77%
Pb 220.353†	163.3	0.511516	mg/L	0.0038326	0.511516	mg/L	0.0038326	0.75%
Sb 206.836†	50.2	0.553482	mg/L	0.0259642	0.553482	mg/L	0.0259642	4.69%
Se 196.026†	67.4	0.573139	mg/L	0.0067087	0.573139	mg/L	0.0067087	1.17%
Sn 189.927†	139.6	0.492686	mg/L	0.0036457	0.492686	mg/L	0.0036457	0.74%
Ti 334.940†	9659.9	0.505066	mg/L	0.0011003	0.505066	mg/L	0.0011003	0.22%
Tl 190.801†	51.1	0.460688	mg/L	0.0191979	0.460688	mg/L	0.0191979	4.17%
V 290.880†	1902.3	0.557479	mg/L	0.0026352	0.557479	mg/L	0.0026352	0.47%
Zn 206.200†	1069.3	0.654105	mg/L	0.0050771	0.654105	mg/L	0.0050771	0.78%
B 249.772	1842.9	0.527747	mg/L	0.0012771	0.527747	mg/L	0.0012771	0.24%
Si 251.611	1796.9	1.64571	mg/L	0.003205	1.64571	mg/L	0.003205	0.19%

Sequence No.: 19
Sample ID: AD19159-004 SD
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 117
Date Collected: 9/14/2020 10:35:54 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 SD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	46959.6	99.1	%	0.60				0.61%
Y 371.029	17536.6	90.7	%	0.33				0.36%
Ag 328.068†	2.5	0.0107382	mg/L	0.00070193	0.0107382	mg/L	0.00070193	6.54%
Al 308.215†	-47.4	-0.0203279	mg/L	0.00123569	-0.0203279	mg/L	0.00123569	6.08%
As 188.979†	-0.2	0.0017032	mg/L	0.01390768	0.0017032	mg/L	0.01390768	816.54%
Ba 233.527†	556.7	0.0955850	mg/L	0.00080206	0.0955850	mg/L	0.00080206	0.84%
Be 313.107†	-1.3	0.0029682	mg/L	0.00000563	0.0029682	mg/L	0.00000563	0.19%
Ca 315.887†	77862.0	40.1637	mg/L	0.02735	40.1637	mg/L	0.02735	0.07%
Cd 228.802†	1.7	0.0110983	mg/L	0.00031255	0.0110983	mg/L	0.00031255	2.82%
Co 228.616†	0.2	0.0096203	mg/L	0.00046717	0.0096203	mg/L	0.00046717	4.86%
Cr 267.716†	7.7	0.0125266	mg/L	0.00092989	0.0125266	mg/L	0.00092989	7.42%
Cu 327.393†	-32.3	-0.0136752	mg/L	0.00082283	-0.0136752	mg/L	0.00082283	6.02%
Fe 273.955†	-3.0	-0.0866857	mg/L	0.00296991	-0.0866857	mg/L	0.00296991	3.43%
K 404.721†	16.1	3.94096	mg/L	0.346305	3.94096	mg/L	0.346305	8.79%
Mg 279.077†	199.4	0.784109	mg/L	0.0067127	0.784109	mg/L	0.0067127	0.86%
Mn 257.610†	112.0	0.0071767	mg/L	0.00007816	0.0071767	mg/L	0.00007816	1.09%
Mo 202.031†	1.4	0.0097528	mg/L	0.00090426	0.0097528	mg/L	0.00090426	9.27%
Na 330.237†	2453.8	73.4278	mg/L	0.31739	73.4278	mg/L	0.31739	0.43%
Ni 231.604†	4.2	0.0114702	mg/L	0.00081204	0.0114702	mg/L	0.00081204	7.08%
Pb 220.353†	0.1	0.0032046	mg/L	0.00428937	0.0032046	mg/L	0.00428937	133.85%
Sb 206.836†	1.0	0.0137954	mg/L	0.00778157	0.0137954	mg/L	0.00778157	56.41%
Se 196.026†	-2.0	0.0007204	mg/L	0.01242359	0.0007204	mg/L	0.01242359	>999.9%
Sn 189.927†	-2.1	0.0012548	mg/L	0.00062388	0.0012548	mg/L	0.00062388	49.72%
Ti 334.940†	-11.7	-0.0008860	mg/L	0.00017502	-0.0008860	mg/L	0.00017502	19.75%
Tl 190.801†	0.1	-0.0006065	mg/L	0.01867606	-0.0006065	mg/L	0.01867606	>999.9%
V 290.880†	0.8	-0.0104281	mg/L	0.00079884	-0.0104281	mg/L	0.00079884	7.66%
Zn 206.200†	39.0	0.0385051	mg/L	0.00056704	0.0385051	mg/L	0.00056704	1.47%
B 249.772	71.1	0.0221817	mg/L	0.00089763	0.0221817	mg/L	0.00089763	4.05%
Si 251.611	202.1	0.176315	mg/L	0.0034081	0.176315	mg/L	0.0034081	1.93%

Sequence No.: 20
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/14/2020 10:39:56 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46575.6	98.2	%	0.50				0.51%
Y 371.029	17029.3	88.1	%	0.75				0.86%
Ag 328.068†	857.9	0.111342	mg/L	0.0007949	0.111342	mg/L	0.0007949	0.71%
QC value greater than the upper limit for Ag 328.068 Recovery = 111.34%								
Al 308.215†	4274.9	4.79571	mg/L	0.003762	4.79571	mg/L	0.003762	0.08%
QC value within limits for Al 308.215 Recovery = 95.91%								
As 188.979†	29.7	0.451537	mg/L	0.0207415	0.451537	mg/L	0.0207415	4.59%
QC value within limits for As 188.979 Recovery = 90.31%								
Ba 233.527†	2957.9	0.533600	mg/L	0.0005529	0.533600	mg/L	0.0005529	0.10%
QC value within limits for Ba 233.527 Recovery = 106.72%								
Be 313.107†	73696.7	0.496368	mg/L	0.0010534	0.496368	mg/L	0.0010534	0.21%
QC value within limits for Be 313.107 Recovery = 99.27%								
Ca 315.887†	99021.1	50.9267	mg/L	0.07554	50.9267	mg/L	0.07554	0.15%
QC value within limits for Ca 315.887 Recovery = 101.85%								
Cd 228.802†	792.9	0.466454	mg/L	0.0011295	0.466454	mg/L	0.0011295	0.24%
QC value within limits for Cd 228.802 Recovery = 93.29%								
Co 228.616†	639.7	0.498762	mg/L	0.0025641	0.498762	mg/L	0.0025641	0.51%
QC value within limits for Co 228.616 Recovery = 99.75%								
Cr 267.716†	1801.5	0.502467	mg/L	0.0017044	0.502467	mg/L	0.0017044	0.34%
QC value within limits for Cr 267.716 Recovery = 100.49%								
Cu 327.393†	3252.4	0.521920	mg/L	0.0017661	0.521920	mg/L	0.0017661	0.34%
QC value within limits for Cu 327.393 Recovery = 104.38%								
Fe 273.955†	1966.2	4.73888	mg/L	0.015415	4.73888	mg/L	0.015415	0.33%
QC value within limits for Fe 273.955 Recovery = 94.78%								
K 404.721†	706.3	-2.16207	mg/L	0.562175	-2.16207	mg/L	0.562175	26.00%
QC value less than the lower limit for K 404.721 Recovery = -4.32%								
Mg 279.077†	28053.3	51.0020	mg/L	0.17427	51.0020	mg/L	0.17427	0.34%
QC value within limits for Mg 279.077 Recovery = 102.00%								
Mn 257.610†	8120.8	0.485450	mg/L	0.0006526	0.485450	mg/L	0.0006526	0.13%
QC value within limits for Mn 257.610 Recovery = 97.09%								
Mo 202.031†	384.1	0.486336	mg/L	0.0003405	0.486336	mg/L	0.0003405	0.07%
QC value within limits for Mo 202.031 Recovery = 97.27%								
Na 330.237†	1700.9	51.3902	mg/L	0.20342	51.3902	mg/L	0.20342	0.40%
QC value within limits for Na 330.237 Recovery = 102.78%								
Ni 231.604†	893.1	0.483534	mg/L	0.0032448	0.483534	mg/L	0.0032448	0.67%
QC value within limits for Ni 231.604 Recovery = 96.71%								
Pb 220.353†	159.7	0.500278	mg/L	0.0030425	0.500278	mg/L	0.0030425	0.61%
QC value within limits for Pb 220.353 Recovery = 100.06%								
Sb 206.836†	47.3	0.521971	mg/L	0.0108510	0.521971	mg/L	0.0108510	2.08%
QC value within limits for Sb 206.836 Recovery = 104.39%								
Se 196.026†	62.2	0.517159	mg/L	0.0067064	0.517159	mg/L	0.0067064	1.30%
QC value within limits for Se 196.026 Recovery = 103.43%								
Sn 189.927†	136.2	0.481188	mg/L	0.0042336	0.481188	mg/L	0.0042336	0.88%
QC value within limits for Sn 189.927 Recovery = 96.24%								
Ti 334.940†	9181.4	0.466414	mg/L	0.0019312	0.466414	mg/L	0.0019312	0.41%
QC value within limits for Ti 334.940 Recovery = 93.28%								
Tl 190.801†	52.5	0.485669	mg/L	0.0117202	0.485669	mg/L	0.0117202	2.41%
QC value within limits for Tl 190.801 Recovery = 97.13%								
V 290.880†	1832.3	0.536642	mg/L	0.0007757	0.536642	mg/L	0.0007757	0.14%
QC value within limits for V 290.880 Recovery = 107.33%								
Zn 206.200†	817.5	0.503678	mg/L	0.0028127	0.503678	mg/L	0.0028127	0.56%
QC value within limits for Zn 206.200 Recovery = 100.74%								
B 249.772	1905.4	0.551656	mg/L	0.0015115	0.551656	mg/L	0.0015115	0.27%
QC value greater than the upper limit for B 249.772 Recovery = 110.33%								
Si 251.611	6237.0	5.22966	mg/L	0.025817	5.22966	mg/L	0.025817	0.49%
QC value within limits for Si 251.611 Recovery = 104.59%								

QC Failed. Continue with analysis.

Sequence No.: 21 **Autosampler Location: 2**
Sample ID: CCB V-333667 **Date Collected: 9/14/2020 10:43:53 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	49869.8	105	%	1.23				1.17%
Y 371.029	18653.2	96.5	%	1.32				1.37%
Ag 328.068†	2.9	0.0107694	mg/L	0.00030369	0.0107694	mg/L	0.00030369	2.82%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-19.7	0.0103214	mg/L	0.00449577	0.0103214	mg/L	0.00449577	43.56%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.0	0.0047377	mg/L	0.00820367	0.0047377	mg/L	0.00820367	173.16%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.3	-0.0059135	mg/L	0.00016034	-0.0059135	mg/L	0.00016034	2.71%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	24.5	0.0031411	mg/L	0.00007758	0.0031411	mg/L	0.00007758	2.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	108.8	0.612888	mg/L	0.0120579	0.612888	mg/L	0.0120579	1.97%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	1.3	0.0108604	mg/L	0.00090347	0.0108604	mg/L	0.00090347	8.32%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	2.2	0.0111051	mg/L	0.00080527	0.0111051	mg/L	0.00080527	7.25%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.2	0.0107276	mg/L	0.00058932	0.0107276	mg/L	0.00058932	5.49%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-29.9	-0.0132963	mg/L	0.00122486	-0.0132963	mg/L	0.00122486	9.21%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-2.3	-0.0850282	mg/L	0.00517083	-0.0850282	mg/L	0.00517083	6.08%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	1.4	2.94359	mg/L	0.294280	2.94359	mg/L	0.294280	10.00%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	3.8	0.431522	mg/L	0.0063268	0.431522	mg/L	0.0063268	1.47%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-3.5	0.0002799	mg/L	0.00010945	0.0002799	mg/L	0.00010945	39.11%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.6	0.0087118	mg/L	0.00098714	0.0087118	mg/L	0.00098714	11.33%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-1.3	1.56499	mg/L	0.053604	1.56499	mg/L	0.053604	3.43%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	0.4	0.0094653	mg/L	0.00069439	0.0094653	mg/L	0.00069439	7.34%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.5	0.0044044	mg/L	0.00201886	0.0044044	mg/L	0.00201886	45.84%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.1	0.0046679	mg/L	0.00851019	0.0046679	mg/L	0.00851019	182.31%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.9	0.0202392	mg/L	0.00706083	0.0202392	mg/L	0.00706083	34.89%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.4	0.0098380	mg/L	0.00187255	0.0098380	mg/L	0.00187255	19.03%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	0.5	-0.0032746	mg/L	0.00007721	-0.0032746	mg/L	0.00007721	2.36%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.2	0.0029312	mg/L	0.00265895	0.0029312	mg/L	0.00265895	90.71%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-8.5	-0.0132248	mg/L	0.00045119	-0.0132248	mg/L	0.00045119	3.41%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	18.6	0.0263345	mg/L	0.00034277	0.0263345	mg/L	0.00034277	1.30%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	44.0	0.0146236	mg/L	0.00079692	0.0146236	mg/L	0.00079692	5.45%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-26.7	-0.0247696	mg/L	0.00089090	-0.0247696	mg/L	0.00089090	3.60%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 22
Sample ID: AD19148-002 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 118
Date Collected: 9/14/2020 10:47:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19148-002 4D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	45006.8	94.9	%	0.28				0.30%
Y 371.029	16418.2	84.9	%	0.13				0.15%
Ag 328.068†	25.9	0.0134421	mg/L	0.00036454	0.0134421	mg/L	0.00036454	2.71%
Al 308.215†	-24.6	0.0053341	mg/L	0.00468001	0.0053341	mg/L	0.00468001	87.74%
As 188.979†	-0.2	0.0015960	mg/L	0.02657283	0.0015960	mg/L	0.02657283	>999.9%
Ba 233.527†	348.9	0.0576627	mg/L	0.00034435	0.0576627	mg/L	0.00034435	0.60%
Be 313.107†	-6.0	0.0029367	mg/L	0.00002245	0.0029367	mg/L	0.00002245	0.76%
Ca 315.887†	376116.1	191.877	mg/L	0.5173	191.877	mg/L	0.5173	0.27%
Cd 228.802†	2.5	0.0115379	mg/L	0.00033497	0.0115379	mg/L	0.00033497	2.90%
Co 228.616†	8.4	0.0158474	mg/L	0.00120057	0.0158474	mg/L	0.00120057	7.58%
Cr 267.716†	2.4	0.0111038	mg/L	0.00049378	0.0111038	mg/L	0.00049378	4.45%
Cu 327.393†	-29.9	-0.0132952	mg/L	0.00039436	-0.0132952	mg/L	0.00039436	2.97%
Fe 273.955†	10.3	-0.0540899	mg/L	0.00644561	-0.0540899	mg/L	0.00644561	11.92%
K 404.721†	10.1	3.18919	mg/L	0.336152	3.18919	mg/L	0.336152	10.54%
Mg 279.077†	2405.9	4.76230	mg/L	0.006999	4.76230	mg/L	0.006999	0.15%
Mn 257.610†	5622.4	0.336247	mg/L	0.0019321	0.336247	mg/L	0.0019321	0.57%
Mo 202.031†	1.7	0.0100658	mg/L	0.00244015	0.0100658	mg/L	0.00244015	24.24%
Na 330.237†	12441.1	365.765	mg/L	1.1282	365.765	mg/L	1.1282	0.31%
Ni 231.604†	11.7	0.0154486	mg/L	0.00086538	0.0154486	mg/L	0.00086538	5.60%
Pb 220.353†	4.0	0.0151136	mg/L	0.00584598	0.0151136	mg/L	0.00584598	38.68%
Sb 206.836†	1.3	0.0171360	mg/L	0.00937097	0.0171360	mg/L	0.00937097	54.69%
Se 196.026†	2.2	0.0467441	mg/L	0.01269241	0.0467441	mg/L	0.01269241	27.15%
Sn 189.927†	-5.0	-0.0091002	mg/L	0.00042098	-0.0091002	mg/L	0.00042098	4.63%
Ti 334.940†	-49.5	0.0087264	mg/L	0.00013246	0.0087264	mg/L	0.00013246	1.52%
Tl 190.801†	0.7	-0.0033535	mg/L	0.01837586	-0.0033535	mg/L	0.01837586	547.96%
V 290.880†	23.6	-0.0034263	mg/L	0.00121254	-0.0034263	mg/L	0.00121254	35.39%
Zn 206.200†	125.7	0.0902814	mg/L	0.00226872	0.0902814	mg/L	0.00226872	2.51%
B 249.772	189.3	0.0553007	mg/L	0.00113165	0.0553007	mg/L	0.00113165	2.05%
Si 251.611	1395.8	1.21175	mg/L	0.005676	1.21175	mg/L	0.005676	0.47%

Sequence No.: 23
Sample ID: AD19159-001 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 119
Date Collected: 9/14/2020 10:52:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-001 4D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	44947.2	94.8	%	0.32				0.34%
Y 371.029	16248.6	84.1	%	0.36				0.43%
Ag 328.068†	21.0	0.0128693	mg/L	0.00012922	0.0128693	mg/L	0.00012922	1.00%
Al 308.215†	-43.9	-0.0163000	mg/L	0.00090459	-0.0163000	mg/L	0.00090459	5.55%
As 188.979†	-0.1	0.0035839	mg/L	0.01136485	0.0035839	mg/L	0.01136485	317.10%
Ba 233.527†	1021.6	0.180387	mg/L	0.0012341	0.180387	mg/L	0.0012341	0.68%
Be 313.107†	-21.1	0.0028352	mg/L	0.00002942	0.0028352	mg/L	0.00002942	1.04%
Ca 315.887†	320767.3	163.722	mg/L	0.1941	163.722	mg/L	0.1941	0.12%
Cd 228.802†	3.2	0.0119552	mg/L	0.00121810	0.0119552	mg/L	0.00121810	10.19%
Co 228.616†	25.6	0.0289928	mg/L	0.00206764	0.0289928	mg/L	0.00206764	7.13%
Cr 267.716†	4.1	0.0115696	mg/L	0.00041499	0.0115696	mg/L	0.00041499	3.59%
Cu 327.393†	-50.5	-0.0166444	mg/L	0.00032867	-0.0166444	mg/L	0.00032867	1.97%
Fe 273.955†	-1.7	-0.0836576	mg/L	0.00221652	-0.0836576	mg/L	0.00221652	2.65%
K 404.721†	15.4	3.85836	mg/L	0.150178	3.85836	mg/L	0.150178	3.89%
Mg 279.077†	1453.8	3.04579	mg/L	0.015934	3.04579	mg/L	0.015934	0.52%
Mn 257.610†	14775.9	0.882881	mg/L	0.0009831	0.882881	mg/L	0.0009831	0.11%
Mo 202.031†	1.8	0.0101900	mg/L	0.00089056	0.0101900	mg/L	0.00089056	8.74%
Na 330.237†	12167.6	357.760	mg/L	1.4510	357.760	mg/L	1.4510	0.41%
Ni 231.604†	15.1	0.0172494	mg/L	0.00047667	0.0172494	mg/L	0.00047667	2.76%
Pb 220.353†	20.6	0.0669774	mg/L	0.00643718	0.0669774	mg/L	0.00643718	9.61%
Sb 206.836†	1.7	0.0215691	mg/L	0.01328347	0.0215691	mg/L	0.01328347	61.59%
Se 196.026†	-0.4	0.0234594	mg/L	0.02377638	0.0234594	mg/L	0.02377638	101.35%
Sn 189.927†	-4.6	-0.0075686	mg/L	0.00192018	-0.0075686	mg/L	0.00192018	25.37%
Ti 334.940†	-46.1	0.0067592	mg/L	0.00017034	0.0067592	mg/L	0.00017034	2.52%
Tl 190.801†	0.2	-0.0038874	mg/L	0.01009692	-0.0038874	mg/L	0.01009692	259.74%
V 290.880†	13.8	-0.0064600	mg/L	0.00095110	-0.0064600	mg/L	0.00095110	14.72%
Zn 206.200†	15.8	0.0246457	mg/L	0.00041268	0.0246457	mg/L	0.00041268	1.67%
B 249.772	118.5	0.0421316	mg/L	0.00043954	0.0421316	mg/L	0.00043954	1.04%
Si 251.611	5982.9	4.98737	mg/L	0.014604	4.98737	mg/L	0.014604	0.29%

Sequence No.: 24
Sample ID: AD19159-002 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 120
Date Collected: 9/14/2020 10:56:21 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-002 4D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	45297.1	95.6	%	0.20				0.21%
Y 371.029	16143.6	83.5	%	0.44				0.53%
Ag 328.068†	22.5	0.0130405	mg/L	0.00038758	0.0130405	mg/L	0.00038758	2.97%
Al 308.215†	-47.6	-0.0204043	mg/L	0.00119363	-0.0204043	mg/L	0.00119363	5.85%
As 188.979†	0.5	0.0135335	mg/L	0.00953649	0.0135335	mg/L	0.00953649	70.47%
Ba 233.527†	2730.8	0.492184	mg/L	0.0040442	0.492184	mg/L	0.0040442	0.82%
Be 313.107†	-26.1	0.0028017	mg/L	0.00002078	0.0028017	mg/L	0.00002078	0.74%
Ca 315.887†	346019.1	176.567	mg/L	1.1533	176.567	mg/L	1.1533	0.65%
Cd 228.802†	5.0	0.0130019	mg/L	0.00050771	0.0130019	mg/L	0.00050771	3.90%
Co 228.616†	1.8	0.0108392	mg/L	0.00047123	0.0108392	mg/L	0.00047123	4.35%
Cr 267.716†	34.9	0.0199094	mg/L	0.00012136	0.0199094	mg/L	0.00012136	0.61%
Cu 327.393†	-40.5	-0.0150155	mg/L	0.00086117	-0.0150155	mg/L	0.00086117	5.74%
Fe 273.955†	0.1	-0.0791373	mg/L	0.00349104	-0.0791373	mg/L	0.00349104	4.41%
K 404.721†	15.0	3.78760	mg/L	0.254474	3.78760	mg/L	0.254474	6.72%
Mg 279.077†	752.1	1.78062	mg/L	0.010304	1.78062	mg/L	0.010304	0.58%
Mn 257.610†	445.2	0.0270721	mg/L	0.00007204	0.0270721	mg/L	0.00007204	0.27%
Mo 202.031†	1.0	0.0092375	mg/L	0.00060757	0.0092375	mg/L	0.00060757	6.58%
Na 330.237†	12200.1	358.711	mg/L	0.2201	358.711	mg/L	0.2201	0.06%
Ni 231.604†	6.7	0.0127876	mg/L	0.00127116	0.0127876	mg/L	0.00127116	9.94%
Pb 220.353†	4.0	0.0152816	mg/L	0.00302785	0.0152816	mg/L	0.00302785	19.81%
Sb 206.836†	-0.1	0.0019148	mg/L	0.00517642	0.0019148	mg/L	0.00517642	270.34%
Se 196.026†	-0.1	0.0266943	mg/L	0.00748808	0.0266943	mg/L	0.00748808	28.05%
Sn 189.927†	-4.0	-0.0054479	mg/L	0.00212730	-0.0054479	mg/L	0.00212730	39.05%
Ti 334.940†	-49.3	0.0075714	mg/L	0.00009884	0.0075714	mg/L	0.00009884	1.31%
Tl 190.801†	0.6	-0.0052823	mg/L	0.00871196	-0.0052823	mg/L	0.00871196	164.93%
V 290.880†	9.8	-0.0077071	mg/L	0.00088114	-0.0077071	mg/L	0.00088114	11.43%
Zn 206.200†	287.8	0.187156	mg/L	0.0013640	0.187156	mg/L	0.0013640	0.73%
B 249.772	72.2	0.0230982	mg/L	0.00049018	0.0230982	mg/L	0.00049018	2.12%
Si 251.611	1135.7	0.992930	mg/L	0.0044391	0.992930	mg/L	0.0044391	0.45%

Sequence No.: 25
Sample ID: AD19159-003 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 121
Date Collected: 9/14/2020 11:00:37 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-003 4D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	45251.4	95.5	%	0.33				0.35%
Y 371.029	16243.7	84.0	%	0.37				0.44%
Ag 328.068†	20.1	0.0127605	mg/L	0.00020920	0.0127605	mg/L	0.00020920	1.64%
Al 308.215†	-44.3	-0.0168221	mg/L	0.00310663	-0.0168221	mg/L	0.00310663	18.47%
As 188.979†	-0.2	0.0023482	mg/L	0.01051215	0.0023482	mg/L	0.01051215	447.66%
Ba 233.527†	2983.7	0.538321	mg/L	0.0010113	0.538321	mg/L	0.0010113	0.19%
Be 313.107†	-37.7	0.0027246	mg/L	0.00001642	0.0027246	mg/L	0.00001642	0.60%
Ca 315.887†	350664.2	178.930	mg/L	1.8231	178.930	mg/L	1.8231	1.02%
Cd 228.802†	2.0	0.0112481	mg/L	0.00062377	0.0112481	mg/L	0.00062377	5.55%
Co 228.616†	2.9	0.0116260	mg/L	0.00187315	0.0116260	mg/L	0.00187315	16.11%
Cr 267.716†	-0.3	0.0103516	mg/L	0.00008962	0.0103516	mg/L	0.00008962	0.87%
Cu 327.393†	-54.4	-0.0172874	mg/L	0.00037291	-0.0172874	mg/L	0.00037291	2.16%
Fe 273.955†	3.0	-0.0720244	mg/L	0.00395643	-0.0720244	mg/L	0.00395643	5.49%
K 404.721†	14.2	3.65481	mg/L	0.283195	3.65481	mg/L	0.283195	7.75%
Mg 279.077†	1089.7	2.38922	mg/L	0.004562	2.38922	mg/L	0.004562	0.19%
Mn 257.610†	163.6	0.0102559	mg/L	0.00011837	0.0102559	mg/L	0.00011837	1.15%
Mo 202.031†	2.8	0.0114221	mg/L	0.00006706	0.0114221	mg/L	0.00006706	0.59%
Na 330.237†	12548.9	368.921	mg/L	1.1609	368.921	mg/L	1.1609	0.31%
Ni 231.604†	5.0	0.0118988	mg/L	0.00050434	0.0118988	mg/L	0.00050434	4.24%
Pb 220.353†	0.1	0.0029919	mg/L	0.00280194	0.0029919	mg/L	0.00280194	93.65%
Sb 206.836†	-0.4	-0.0011334	mg/L	0.00703367	-0.0011334	mg/L	0.00703367	620.58%
Se 196.026†	-1.0	0.0200949	mg/L	0.00737300	0.0200949	mg/L	0.00737300	36.69%
Sn 189.927†	-4.9	-0.0087528	mg/L	0.00145854	-0.0087528	mg/L	0.00145854	16.66%
Ti 334.940†	-48.0	0.0078191	mg/L	0.00010338	0.0078191	mg/L	0.00010338	1.32%
Tl 190.801†	0.8	-0.0038601	mg/L	0.00716521	-0.0038601	mg/L	0.00716521	185.62%
V 290.880†	9.7	-0.0077037	mg/L	0.00158962	-0.0077037	mg/L	0.00158962	20.63%
Zn 206.200†	75.9	0.0605477	mg/L	0.00057032	0.0605477	mg/L	0.00057032	0.94%
B 249.772	72.7	0.0217772	mg/L	0.00097460	0.0217772	mg/L	0.00097460	4.48%
Si 251.611	355.9	0.351175	mg/L	0.0018676	0.351175	mg/L	0.0018676	0.53%

Sequence No.: 26
Sample ID: AD19159-009 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 122
Date Collected: 9/14/2020 11:04:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-009 4D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	42494.9	89.6	%	0.38				0.42%
Y 371.029	15503.0	80.2	%	0.59				0.74%
Ag 328.068†	16.7	0.0123967	mg/L	0.00048133	0.0123967	mg/L	0.00048133	3.88%
Al 308.215†	-31.4	-0.0021878	mg/L	0.00350847	-0.0021878	mg/L	0.00350847	160.37%
As 188.979†	0.5	0.0130468	mg/L	0.02829382	0.0130468	mg/L	0.02829382	216.86%
Ba 233.527†	859.7	0.150850	mg/L	0.0013826	0.150850	mg/L	0.0013826	0.92%
Be 313.107†	-48.3	0.0026535	mg/L	0.00003889	0.0026535	mg/L	0.00003889	1.47%
Ca 315.887†	300141.7	153.231	mg/L	0.0653	153.231	mg/L	0.0653	0.04%
Cd 228.802†	3.5	0.0120968	mg/L	0.00084564	0.0120968	mg/L	0.00084564	6.99%
Co 228.616†	25.0	0.0285863	mg/L	0.00118489	0.0285863	mg/L	0.00118489	4.14%
Cr 267.716†	2.4	0.0111155	mg/L	0.00040665	0.0111155	mg/L	0.00040665	3.66%
Cu 327.393†	-60.3	-0.0182496	mg/L	0.00027485	-0.0182496	mg/L	0.00027485	1.51%
Fe 273.955†	-1.4	-0.0828473	mg/L	0.00243182	-0.0828473	mg/L	0.00243182	2.94%
K 404.721†	14.9	3.81849	mg/L	0.480480	3.81849	mg/L	0.480480	12.58%
Mg 279.077†	2433.3	4.81176	mg/L	0.041844	4.81176	mg/L	0.041844	0.87%
Mn 257.610†	6071.2	0.363050	mg/L	0.0010308	0.363050	mg/L	0.0010308	0.28%
Mo 202.031†	0.9	0.0091679	mg/L	0.00066458	0.0091679	mg/L	0.00066458	7.25%
Na 330.237†	12952.4	380.732	mg/L	0.3365	380.732	mg/L	0.3365	0.09%
Ni 231.604†	14.2	0.0167650	mg/L	0.00010611	0.0167650	mg/L	0.00010611	0.63%
Pb 220.353†	-0.0	0.0027141	mg/L	0.00207989	0.0027141	mg/L	0.00207989	76.63%
Sb 206.836†	0.4	0.0077603	mg/L	0.00716088	0.0077603	mg/L	0.00716088	92.28%
Se 196.026†	1.0	0.0334464	mg/L	0.01166311	0.0334464	mg/L	0.01166311	34.87%
Sn 189.927†	-4.8	-0.0083546	mg/L	0.00503562	-0.0083546	mg/L	0.00503562	60.27%
Ti 334.940†	-38.1	0.0063655	mg/L	0.00022198	0.0063655	mg/L	0.00022198	3.49%
Tl 190.801†	0.7	-0.0009695	mg/L	0.00516632	-0.0009695	mg/L	0.00516632	532.88%
V 290.880†	22.4	-0.0038001	mg/L	0.00073093	-0.0038001	mg/L	0.00073093	19.23%
Zn 206.200†	38.7	0.0383117	mg/L	0.00021247	0.0383117	mg/L	0.00021247	0.55%
B 249.772	80.7	0.0239813	mg/L	0.00045126	0.0239813	mg/L	0.00045126	1.88%
Si 251.611	833.4	0.740818	mg/L	0.0018323	0.740818	mg/L	0.0018323	0.25%

Sequence No.: 27
Sample ID: AD19159-010 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 123
Date Collected: 9/14/2020 11:08:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-010 4D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	42827.3	90.3	%	0.31				0.34%
Y 371.029	15670.0	81.1	%	0.77				0.95%
Ag 328.068†	15.1	0.0122253	mg/L	0.00036279	0.0122253	mg/L	0.00036279	2.97%
Al 308.215†	-39.3	-0.0108735	mg/L	0.00248010	-0.0108735	mg/L	0.00248010	22.81%
As 188.979†	-0.3	0.0009005	mg/L	0.01068352	0.0009005	mg/L	0.01068352	>999.9%
Ba 233.527†	1079.5	0.190939	mg/L	0.0010357	0.190939	mg/L	0.0010357	0.54%
Be 313.107†	-53.5	0.0026184	mg/L	0.00004059	0.0026184	mg/L	0.00004059	1.55%
Ca 315.887†	289907.5	148.025	mg/L	0.0653	148.025	mg/L	0.0653	0.04%
Cd 228.802†	1.7	0.0110946	mg/L	0.00116948	0.0110946	mg/L	0.00116948	10.54%
Co 228.616†	1.9	0.0109224	mg/L	0.00141569	0.0109224	mg/L	0.00141569	12.96%
Cr 267.716†	1.9	0.0109845	mg/L	0.00073279	0.0109845	mg/L	0.00073279	6.67%
Cu 327.393†	-63.1	-0.0186941	mg/L	0.00042575	-0.0186941	mg/L	0.00042575	2.28%
Fe 273.955†	1.2	-0.0765371	mg/L	0.00461865	-0.0765371	mg/L	0.00461865	6.03%
K 404.721†	15.9	3.81600	mg/L	0.766386	3.81600	mg/L	0.766386	20.08%
Mg 279.077†	3372.8	6.50556	mg/L	0.010176	6.50556	mg/L	0.010176	0.16%
Mn 257.610†	1896.6	0.113752	mg/L	0.0009229	0.113752	mg/L	0.0009229	0.81%
Mo 202.031†	1.9	0.0103415	mg/L	0.00151903	0.0103415	mg/L	0.00151903	14.69%
Na 330.237†	12152.1	357.307	mg/L	0.4700	357.307	mg/L	0.4700	0.13%
Ni 231.604†	12.7	0.0159649	mg/L	0.00072815	0.0159649	mg/L	0.00072815	4.56%
Pb 220.353†	1.4	0.0071893	mg/L	0.00575837	0.0071893	mg/L	0.00575837	80.10%
Sb 206.836†	0.9	0.0133224	mg/L	0.00566521	0.0133224	mg/L	0.00566521	42.52%
Se 196.026†	0.5	0.0293906	mg/L	0.01562505	0.0293906	mg/L	0.01562505	53.16%
Sn 189.927†	-4.5	-0.0070966	mg/L	0.00691867	-0.0070966	mg/L	0.00691867	97.49%
Ti 334.940†	-41.4	0.0058046	mg/L	0.00018541	0.0058046	mg/L	0.00018541	3.19%
Tl 190.801†	1.3	0.0037961	mg/L	0.00214822	0.0037961	mg/L	0.00214822	56.59%
V 290.880†	33.0	-0.0005355	mg/L	0.00055045	-0.0005355	mg/L	0.00055045	102.80%
Zn 206.200†	37.1	0.0373571	mg/L	0.00164404	0.0373571	mg/L	0.00164404	4.40%
B 249.772	56.9	0.0165318	mg/L	0.00012177	0.0165318	mg/L	0.00012177	0.74%
Si 251.611	492.8	0.454329	mg/L	0.0018772	0.454329	mg/L	0.0018772	0.41%

Sequence No.: 28
Sample ID: AD19160-002 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 124
Date Collected: 9/14/2020 11:12:56 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19160-002 4D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44826.2	94.6	%	0.15				0.16%
Y 371.029	15700.7	81.2	%	0.28				0.35%
Ag 328.068†	22.1	0.0130000	mg/L	0.00033455	0.0130000	mg/L	0.00033455	2.57%
Al 308.215†	-19.7	0.0105618	mg/L	0.00343795	0.0105618	mg/L	0.00343795	32.55%
As 188.979†	-0.4	-0.0014190	mg/L	0.01190939	-0.0014190	mg/L	0.01190939	839.26%
Ba 233.527†	909.6	0.159959	mg/L	0.0004393	0.159959	mg/L	0.0004393	0.27%
Be 313.107†	-34.6	0.0027451	mg/L	0.00004886	0.0027451	mg/L	0.00004886	1.78%
Ca 315.887†	347272.8	177.205	mg/L	1.9610	177.205	mg/L	1.9610	1.11%
Cd 228.802†	1.7	0.0110668	mg/L	0.00048011	0.0110668	mg/L	0.00048011	4.34%
Co 228.616†	4.3	0.0127335	mg/L	0.00092980	0.0127335	mg/L	0.00092980	7.30%
Cr 267.716†	0.0	0.0104441	mg/L	0.00016791	0.0104441	mg/L	0.00016791	1.61%
Cu 327.393†	-67.8	-0.0194623	mg/L	0.00036323	-0.0194623	mg/L	0.00036323	1.87%
Fe 273.955†	17.5	-0.0366125	mg/L	0.00567519	-0.0366125	mg/L	0.00567519	15.50%
K 404.721†	16.0	3.39472	mg/L	1.108695	3.39472	mg/L	1.108695	32.66%
Mg 279.077†	1579.9	3.27308	mg/L	0.006826	3.27308	mg/L	0.006826	0.21%
Mn 257.610†	16776.8	1.00237	mg/L	0.001256	1.00237	mg/L	0.001256	0.13%
Mo 202.031†	1.7	0.0101688	mg/L	0.00079683	0.0101688	mg/L	0.00079683	7.84%
Na 330.237†	12549.0	368.924	mg/L	1.4689	368.924	mg/L	1.4689	0.40%
Ni 231.604†	12.5	0.0158868	mg/L	0.00049902	0.0158868	mg/L	0.00049902	3.14%
Pb 220.353†	-0.6	0.0009961	mg/L	0.00241650	0.0009961	mg/L	0.00241650	242.60%
Sb 206.836†	1.0	0.0138120	mg/L	0.01569728	0.0138120	mg/L	0.01569728	113.65%
Se 196.026†	-0.1	0.0266705	mg/L	0.01670971	0.0266705	mg/L	0.01670971	62.65%
Sn 189.927†	-4.0	-0.0055817	mg/L	0.00221736	-0.0055817	mg/L	0.00221736	39.73%
Ti 334.940†	-22.5	0.0089812	mg/L	0.00010312	0.0089812	mg/L	0.00010312	1.15%
Tl 190.801†	1.0	0.0027284	mg/L	0.01816887	0.0027284	mg/L	0.01816887	665.91%
V 290.880†	13.0	-0.0066668	mg/L	0.00088692	-0.0066668	mg/L	0.00088692	13.30%
Zn 206.200†	-1.3	0.0144465	mg/L	0.00053687	0.0144465	mg/L	0.00053687	3.72%
B 249.772	59.5	0.0197299	mg/L	0.00045579	0.0197299	mg/L	0.00045579	2.31%
Si 251.611	1056.1	0.941063	mg/L	0.0462480	0.941063	mg/L	0.0462480	4.91%

Sequence No.: 29
Sample ID: CCV V-329036
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/14/2020 11:17:12 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	47035.7	99.2	%	0.28				0.28%
Y 371.029	16399.7	84.8	%	0.49				0.58%
Ag 328.068†	848.4	0.110133	mg/L	0.0003387	0.110133	mg/L	0.0003387	0.31%
Al 308.215†	4263.6	4.78238	mg/L	0.033027	4.78238	mg/L	0.033027	0.69%
As 188.979†	27.4	0.416754	mg/L	0.0104389	0.416754	mg/L	0.0104389	2.50%
Ba 233.527†	2908.0	0.524499	mg/L	0.0006716	0.524499	mg/L	0.0006716	0.13%
Be 313.107†	72265.7	0.486787	mg/L	0.0026444	0.486787	mg/L	0.0026444	0.54%
Ca 315.887†	95343.7	49.0561	mg/L	0.27817	49.0561	mg/L	0.27817	0.57%
Cd 228.802†	760.9	0.448068	mg/L	0.0006393	0.448068	mg/L	0.0006393	0.14%
Co 228.616†	634.4	0.494741	mg/L	0.0021074	0.494741	mg/L	0.0021074	0.43%
Cr 267.716†	1780.3	0.496623	mg/L	0.0012625	0.496623	mg/L	0.0012625	0.25%
Cu 327.393†	3232.4	0.518630	mg/L	0.0014855	0.518630	mg/L	0.0014855	0.29%
Fe 273.955†	1786.4	4.29814	mg/L	0.011632	4.29814	mg/L	0.011632	0.27%
K 404.721†	691.7	1.61267	mg/L	0.413739	1.61267	mg/L	0.413739	25.66%
Mg 279.077†	27372.7	49.7750	mg/L	0.25611	49.7750	mg/L	0.25611	0.51%
Mn 257.610†	7847.4	0.469122	mg/L	0.0017582	0.469122	mg/L	0.0017582	0.37%
Mo 202.031†	378.1	0.478875	mg/L	0.0001109	0.478875	mg/L	0.0001109	0.02%
Na 330.237†	1658.2	50.1396	mg/L	0.07355	50.1396	mg/L	0.07355	0.15%
Ni 231.604†	855.1	0.463394	mg/L	0.0013720	0.463394	mg/L	0.0013720	0.30%
Pb 220.353†	154.6	0.484383	mg/L	0.0022588	0.484383	mg/L	0.0022588	0.47%
Sb 206.836†	46.8	0.516328	mg/L	0.0123685	0.516328	mg/L	0.0123685	2.40%
Se 196.026†	58.8	0.489123	mg/L	0.0137954	0.489123	mg/L	0.0137954	2.82%
Sn 189.927†	128.4	0.453806	mg/L	0.0024293	0.453806	mg/L	0.0024293	0.54%
Ti 334.940†	8754.5	0.444609	mg/L	0.0024032	0.444609	mg/L	0.0024032	0.54%
Tl 190.801†	51.1	0.472811	mg/L	0.0119972	0.472811	mg/L	0.0119972	2.54%
V 290.880†	1772.6	0.518820	mg/L	0.0013445	0.518820	mg/L	0.0013445	0.26%
Zn 206.200†	791.6	0.488156	mg/L	0.0031266	0.488156	mg/L	0.0031266	0.64%
B 249.772	1842.8	0.534540	mg/L	0.0009940	0.534540	mg/L	0.0009940	0.19%
Si 251.611	6082.0	5.09798	mg/L	0.047570	5.09798	mg/L	0.047570	0.93%

Sequence No.: 30
Sample ID: CCB V-329027
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 9/14/2020 11:21:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	50759.0	107	%	0.67				0.62%
Y 371.029	18254.0	94.4	%	1.20				1.27%
Ag 328.068†	1.1	0.0105708	mg/L	0.00051834	0.0105708	mg/L	0.00051834	4.90%
Al 308.215†	-34.1	-0.0056834	mg/L	0.00192985	-0.0056834	mg/L	0.00192985	33.96%
As 188.979†	0.2	0.0088163	mg/L	0.00763882	0.0088163	mg/L	0.00763882	86.64%
Ba 233.527†	-1.2	-0.0061985	mg/L	0.00018943	-0.0061985	mg/L	0.00018943	3.06%
Be 313.107†	18.6	0.0031011	mg/L	0.00005904	0.0031011	mg/L	0.00005904	1.90%
Ca 315.887†	134.3	0.625877	mg/L	0.0024396	0.625877	mg/L	0.0024396	0.39%
Cd 228.802†	0.8	0.0105487	mg/L	0.00047449	0.0105487	mg/L	0.00047449	4.50%
Co 228.616†	2.2	0.0111163	mg/L	0.00067165	0.0111163	mg/L	0.00067165	6.04%
Cr 267.716†	0.6	0.0105792	mg/L	0.00071095	0.0105792	mg/L	0.00071095	6.72%
Cu 327.393†	-47.1	-0.0160908	mg/L	0.00014478	-0.0160908	mg/L	0.00014478	0.90%
Fe 273.955†	-2.3	-0.0849102	mg/L	0.00297363	-0.0849102	mg/L	0.00297363	3.50%
K 404.721†	4.6	3.15340	mg/L	0.659282	3.15340	mg/L	0.659282	20.91%
Mg 279.077†	3.8	0.431487	mg/L	0.0049527	0.431487	mg/L	0.0049527	1.15%
Mn 257.610†	-2.0	0.0003677	mg/L	0.00011363	0.0003677	mg/L	0.00011363	30.91%
Mo 202.031†	0.2	0.0082363	mg/L	0.00039163	0.0082363	mg/L	0.00039163	4.75%
Na 330.237†	0.2	1.60952	mg/L	0.032209	1.60952	mg/L	0.032209	2.00%
Ni 231.604†	0.0	0.0092485	mg/L	0.00074972	0.0092485	mg/L	0.00074972	8.11%
Pb 220.353†	-0.7	0.0006022	mg/L	0.00507525	0.0006022	mg/L	0.00507525	842.73%
Sb 206.836†	-0.5	-0.0022460	mg/L	0.00789673	-0.0022460	mg/L	0.00789673	351.59%
Se 196.026†	-1.4	0.0024663	mg/L	0.00671313	0.0024663	mg/L	0.00671313	272.19%
Sn 189.927†	0.2	0.0090268	mg/L	0.00119587	0.0090268	mg/L	0.00119587	13.25%
Ti 334.940†	-0.3	-0.0033095	mg/L	0.00009823	-0.0033095	mg/L	0.00009823	2.97%
Tl 190.801†	0.6	0.0068826	mg/L	0.01051447	0.0068826	mg/L	0.01051447	152.77%
V 290.880†	-11.0	-0.0139826	mg/L	0.00069252	-0.0139826	mg/L	0.00069252	4.95%
Zn 206.200†	19.3	0.0267180	mg/L	0.00098289	0.0267180	mg/L	0.00098289	3.68%
B 249.772	0.8	0.0022401	mg/L	0.00088506	0.0022401	mg/L	0.00088506	39.51%
Si 251.611	-26.1	-0.0249759	mg/L	0.00038593	-0.0249759	mg/L	0.00038593	1.55%

Method: HGCV3 TCLP (7470A) Page 1 Date: 9/14/2020 11:06:58 AM

H26209T
$SnCl_2$ v-38471S
9/14/20
DL
9/15/20

Analysis Begun

Logged In Analyst: usermet Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550 Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26209T.sif
Batch ID: H26209T
Results Data Set: H26209T
Results Library: C:\data-AA\johns\Results\Results.mdb

Method Loaded
Method Name: HGCV3 TCLP (7470A) Method Last Saved: 3/2/2020 12:35:25 PM
Method Description: HgCV3 TCLP (7470A)

Sequence No.: 1 Autosampler Location: 1
Sample ID: Calibration Blank Date Collected: 9/14/2020 11:02:11 AM
Analyst: Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0004	0.0021	0.0004	11:02:58	Yes
2		[0.00]	0.0004	0.0018	0.0004	11:03:31	Yes
Mean:		[0.00]	0.0004				
SD:		0.00	0.0000				
%RSD:		0.00	4.49				

Auto-zero performed.

Sequence No.: 2 Autosampler Location: 2
Sample ID: .2 PPB Date Collected: 9/14/2020 11:03:32 AM
Analyst: Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0012	0.0070	0.0016	11:04:17	Yes
2		[0.2]	0.0012	0.0069	0.0016	11:04:50	Yes
Mean:		[0.2]	0.0012				
SD:		0.0	0.0000				
%RSD:		0.0	0.39				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00614 Intercept: 0.00000

Sequence No.: 3 Autosampler Location: 3
Sample ID: .5 PPB Date Collected: 9/14/2020 11:04:51 AM
Analyst: Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0028	0.0134	0.0031	11:05:37	Yes
2		[0.5]	0.0027	0.0128	0.0030	11:06:09	Yes
Mean:		[0.5]	0.0027				
SD:		0.0	0.0001				
%RSD:		0.0	2.81				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.998214 Slope: 0.00539 Intercept: 0.00006

Sequence No.: 4 Autosampler Location: 4
Sample ID: 1 PPB Date Collected: 9/14/2020 11:06:11 AM
Analyst: Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[1]	0.0055	0.0239	0.0058	11:06:56	Yes
2	[1]	0.0055	0.0244	0.0059	11:07:29	Yes
Mean:	[1]	0.0055				
SD:	0	0.0000				
%RSD:	0	0.83				

Standard number 3 applied. [1]
Correlation Coef.: 0.999597 Slope: 0.00544 Intercept: 0.00005

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: 2 PPB **Date Collected: 9/14/2020 11:07:30 AM**
Analyst: **Data Type: Original**

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0116	0.0488	0.0119	11:08:16	Yes
2		[2]	0.0115	0.0495	0.0119	11:08:48	Yes
Mean:		[2]	0.0115				
SD:		0	0.0000				
%RSD:		0	0.14				

Standard number 4 applied. [2]
Correlation Coef.: 0.999522 Slope: 0.00574 Intercept: -0.00005

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: 5 PPB **Date Collected: 9/14/2020 11:08:49 AM**
Analyst: **Data Type: Original**

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0302	0.1271	0.0306	11:09:35	Yes
2		[5]	0.0299	0.1256	0.0303	11:10:08	Yes
Mean:		[5]	0.0301				
SD:		0	0.0002				
%RSD:		0	0.63				

Standard number 5 applied. [5]
Correlation Coef.: 0.999748 Slope: 0.00603 Intercept: -0.00023

Sequence No.: 7 **Autosampler Location: 7**
Sample ID: 10 PPB **Date Collected: 9/14/2020 11:10:09 AM**
Analyst: **Data Type: Original**

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0593	0.2486	0.0596	11:10:55	Yes
2		[10]	0.0598	0.2501	0.0602	11:11:27	Yes
Mean:		[10]	0.0596				
SD:		0	0.0004				
%RSD:		0	0.66				

Standard number 6 applied. [10]
Correlation Coef.: 0.999936 Slope: 0.00598 Intercept: -0.00018

Sequence No.: 8 **Autosampler Location: 8**
Sample ID: 25 PPB **Date Collected: 9/14/2020 11:11:53 AM**
Analyst: **Data Type: Original**

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[25]	0.1458	0.6123	0.1461	11:12:43	Yes
2		[25]	0.1444	0.6053	0.1448	11:13:15	Yes
Mean:		[25]	0.1451				
SD:		0	0.0010				
%RSD:		0	0.66				

Standard number 7 applied. [25]
Correlation Coef.: 0.999918 Slope: 0.00582 Intercept: 0.00017

Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.029	0.00	4.5
.2 PPB	0.0012	0.2	0.182	0.00	0.4
.5 PPB	0.0027	0.5	0.438	0.00	2.8
1 PPB	0.0055	1.0	0.915	0.00	0.8
2 PPB	0.0115	2.0	1.954	0.00	0.1
5 PPB	0.0301	5.0	5.139	0.00	0.6
10 PPB	0.0596	10.0	10.202	0.00	0.7
25 PPB	0.1451	25.0	24.900	0.00	0.7

Correlation Coef.: 0.999918 Slope: 0.00582 Intercept: 0.00017

Sequence No.: 9 Autosampler Location: 10
Sample ID: ICV (2) Date Collected: 9/14/2020 11:13:42 AM
Analyst: Data Type: Original

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.03	20.03	0.1168	0.4906	0.1171	11:14:28	Yes
2	19.99	19.99	0.1165	0.4847	0.1169	11:15:01	Yes
Mean:	20.01	20.01	0.1166				
SD:	0.029	0.029	0.0002				
%RSD:	0.145	0.145	0.15				

QC value within limits for Hg 253.7 Recovery = 100.05%
All analyte(s) passed QC.

Sequence No.: 10 Autosampler Location: 1
Sample ID: ICB Date Collected: 9/14/2020 11:15:24 AM
Analyst: Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.050	-0.050	-0.0001	0.0002	0.0002	11:16:10	Yes
2	-0.042	-0.042	-0.0001	0.0009	0.0003	11:16:43	Yes
Mean:	-0.046	-0.046	-0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	11.67	11.67	31.28				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 11
Sample ID: MB 85267 (1) Date Collected: 9/14/2020 11:16:44 AM
Analyst: Data Type: Original

Replicate Data: MB 85267 (1)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0004	0.0000	11:17:30	Yes
2	-0.092	-0.092	-0.0004	-0.0002	0.0000	11:18:03	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	0.709	0.709	1.03				

Sequence No.: 12 Autosampler Location: 12
Sample ID: LCS 85267 Date Collected: 9/14/2020 11:18:04 AM
Analyst: Data Type: Original

Replicate Data: LCS 85267

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.25	10.25	0.0598	0.2542	0.0602	11:18:50	Yes
2	10.35	10.35	0.0604	0.2546	0.0608	11:19:22	Yes
Mean:	10.30	10.30	0.0601				

SD:	0.075	0.075	0.0004
%RSD:	0.730	0.730	0.73

Sequence No.: 13 Autosampler Location: 13
Sample ID: LCS 85267 MR Date Collected: 9/14/2020 11:19:46 AM
Analyst: Data Type: Original

Replicate Data: LCS 85267 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.34	10.34	0.0603	0.2535	0.0607	11:20:34	Yes
2	10.49	10.49	0.0612	0.2569	0.0616	11:21:07	Yes
Mean:	10.41	10.41	0.0608				
SD:	0.106	0.106	0.0006				
%RSD:	1.016	1.016	1.01				

Sequence No.: 14 Autosampler Location: 14
Sample ID: AD19159-004 Date Collected: 9/14/2020 11:21:30 AM
Analyst: Data Type: Original

Replicate Data: AD19159-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0005	-0.0000	11:22:19	Yes
2	-0.088	-0.088	-0.0003	-0.0001	0.0000	11:22:51	Yes
Mean:	-0.090	-0.090	-0.0004				
SD:	0.004	0.004	0.0000				
%RSD:	4.104	4.104	6.04				

Sequence No.: 15 Autosampler Location: 15
Sample ID: AD19159-004 MR Date Collected: 9/14/2020 11:22:53 AM
Analyst: Data Type: Original

Replicate Data: AD19159-004 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.090	-0.090	-0.0004	-0.0003	0.0000	11:23:38	Yes
2	-0.093	-0.093	-0.0004	-0.0005	-0.0000	11:24:11	Yes
Mean:	-0.091	-0.091	-0.0004				
SD:	0.003	0.003	0.0000				
%RSD:	2.814	2.814	4.12				

Sequence No.: 16 Autosampler Location: 16
Sample ID: AD19159-005 MS 1 Date Collected: 9/14/2020 11:24:12 AM
Analyst: Data Type: Original

Replicate Data: AD19159-005 MS 1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.911	9.911	0.0579	0.2460	0.0582	11:24:57	Yes
2	10.26	10.26	0.0599	0.2520	0.0603	11:25:30	Yes
Mean:	10.09	10.09	0.0589				
SD:	0.246	0.246	0.0014				
%RSD:	2.438	2.438	2.43				

Sequence No.: 17 Autosampler Location: 17
Sample ID: AD19159-006 MS 2 Date Collected: 9/14/2020 11:25:55 AM
Analyst: Data Type: Original

Replicate Data: AD19159-006 MS 2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.831	9.831	0.0574	0.2440	0.0578	11:26:45	Yes
2	9.679	9.679	0.0565	0.2378	0.0569	11:27:17	Yes
Mean:	9.755	9.755	0.0569				
SD:	0.107	0.107	0.0006				

%RSD: 1.102 1.102 1.10

Sequence No.: 18 Autosampler Location: 18
Sample ID: AD19139-001 Date Collected: 9/14/2020 11:27:43 AM
Analyst: Data Type: Original

Replicate Data: AD19139-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0004	-0.0006	-0.0000	11:28:33	Yes
2	-0.094	-0.094	-0.0004	-0.0005	-0.0000	11:29:05	Yes
Mean:	-0.094	-0.094	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.098	0.098	0.14				

Sequence No.: 19 Autosampler Location: 19
Sample ID: AD19139-004 Date Collected: 9/14/2020 11:29:06 AM
Analyst: Data Type: Original

Replicate Data: AD19139-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0004	-0.0000	11:29:55	Yes
2	-0.091	-0.091	-0.0004	-0.0004	0.0000	11:30:28	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	1.452	1.452	2.12				

Sequence No.: 20 Autosampler Location: 20
Sample ID: AD19143-001 Date Collected: 9/14/2020 11:30:29 AM
Analyst: Data Type: Original

Replicate Data: AD19143-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0003	-0.0000	11:31:15	Yes
2	-0.096	-0.096	-0.0004	-0.0006	-0.0000	11:31:47	Yes
Mean:	-0.095	-0.095	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	1.638	1.638	2.36				

Sequence No.: 21 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/14/2020 11:31:49 AM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.26	10.26	0.0599	0.2535	0.0602	11:32:35	Yes
2	10.28	10.28	0.0600	0.2528	0.0604	11:33:07	Yes
Mean:	10.27	10.27	0.0599				
SD:	0.018	0.018	0.0001				
%RSD:	0.176	0.176	0.18				

QC value within limits for Hg 253.7 Recovery = 102.68%
All analyte(s) passed QC.

Sequence No.: 22 Autosampler Location: 1
Sample ID: CCB Date Collected: 9/14/2020 11:33:30 AM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.058	-0.058	-0.0002	0.0003	0.0002	11:34:17	Yes
2	-0.053	-0.053	-0.0001	0.0005	0.0002	11:34:49	Yes
Mean:	-0.055	-0.055	-0.0002				

SD: 0.004 0.004 0.0000
%RSD: 6.592 6.592 13.85
QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 23 Autosampler Location: 21
Sample ID: AD19148-002 Date Collected: 9/14/2020 11:34:50 AM
Analyst: Data Type: Original

Replicate Data: AD19148-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0003	-0.0000	11:35:37	Yes
2	-0.093	-0.093	-0.0004	-0.0005	-0.0000	11:36:10	Yes
Mean:	-0.093	-0.093	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.444	0.444	0.64				

Sequence No.: 24 Autosampler Location: 22
Sample ID: AD19084-001 Date Collected: 9/14/2020 11:36:11 AM
Analyst: Data Type: Original

Replicate Data: AD19084-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0004	-0.0004	-0.0000	11:36:56	Yes
2	-0.091	-0.091	-0.0004	-0.0002	0.0000	11:37:29	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	1.988	1.988	2.90				

Sequence No.: 25 Autosampler Location: 23
Sample ID: AD19159-001 Date Collected: 9/14/2020 11:37:30 AM
Analyst: Data Type: Original

Replicate Data: AD19159-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0004	-0.0008	-0.0000	11:38:16	Yes
2	-0.094	-0.094	-0.0004	-0.0006	-0.0000	11:38:48	Yes
Mean:	-0.095	-0.095	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	0.638	0.638	0.92				

Sequence No.: 26 Autosampler Location: 24
Sample ID: AD19159-002 Date Collected: 9/14/2020 11:38:49 AM
Analyst: Data Type: Original

Replicate Data: AD19159-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0004	-0.0004	0.0000	11:39:34	Yes
2	-0.092	-0.092	-0.0004	-0.0002	0.0000	11:40:07	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.454	0.454	0.66				

Sequence No.: 27 Autosampler Location: 25
Sample ID: AD19159-003 Date Collected: 9/14/2020 11:40:08 AM
Analyst: Data Type: Original

Replicate Data: AD19159-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0003	-0.0003	0.0000	11:40:54	Yes
2	-0.091	-0.091	-0.0004	-0.0003	0.0000	11:41:26	Yes

Mean:	-0.090	-0.090	-0.0004
SD:	0.001	0.001	0.0000
%RSD:	1.657	1.657	2.44

Sequence No.: 28 **Autosampler Location: 26**
Sample ID: AD19159-007 **Date Collected: 9/14/2020 11:41:28 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-007

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0003	-0.0002	0.0000	11:42:13	Yes
2	-0.088	-0.088	-0.0003	-0.0001	0.0000	11:42:46	Yes
Mean:	-0.089	-0.089	-0.0003				
SD:	0.001	0.001	0.0000				
%RSD:	0.618	0.618	0.92				

Sequence No.: 29 **Autosampler Location: 27**
Sample ID: AD19159-008 **Date Collected: 9/14/2020 11:42:47 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-008

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0004	-0.0003	0.0000	11:43:33	Yes
2	-0.092	-0.092	-0.0004	-0.0005	0.0000	11:44:05	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.208	0.208	0.30				

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: AD19159-009 **Date Collected: 9/14/2020 11:44:07 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-009

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0006	-0.0000	11:44:55	Yes
2	-0.090	-0.090	-0.0004	-0.0003	0.0000	11:45:28	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	2.243	2.243	3.28				

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: AD19159-010 **Date Collected: 9/14/2020 11:45:29 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-010

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0004	-0.0004	0.0000	11:46:15	Yes
2	-0.092	-0.092	-0.0004	-0.0006	0.0000	11:46:47	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.033	0.033	0.05				

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: AD19159-011 **Date Collected: 9/14/2020 11:46:49 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-011

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0005	-0.0000	11:47:34	Yes
2	-0.092	-0.092	-0.0004	-0.0004	0.0000	11:48:07	Yes
Mean:	-0.093	-0.093	-0.0004				

SD:	0.001	0.001	0.0000
%RSD:	0.645	0.645	0.94

Sequence No.: 33 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/14/2020 11:48:08 AM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.27	10.27	0.0599	0.2528	0.0603	11:48:56	Yes
2	10.24	10.24	0.0598	0.2509	0.0601	11:49:28	Yes
Mean:	10.25	10.25	0.0598				
SD:	0.019	0.019	0.0001				
%RSD:	0.188	0.188	0.19				

QC value within limits for Hg 253.7 Recovery = 102.52%
All analyte(s) passed QC.

Sequence No.: 34 Autosampler Location: 1
Sample ID: CCB Date Collected: 9/14/2020 11:49:50 AM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.047	-0.047	-0.0001	0.0004	0.0003	11:50:37	Yes
2	-0.043	-0.043	-0.0001	0.0007	0.0003	11:51:10	Yes
Mean:	-0.045	-0.045	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	6.476	6.476	18.27				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 35 Autosampler Location: 31
Sample ID: AD19160-001 Date Collected: 9/14/2020 11:51:11 AM
Analyst: Data Type: Original

Replicate Data: AD19160-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0004	-0.0005	-0.0000	11:51:59	Yes
2	-0.092	-0.092	-0.0004	-0.0006	0.0000	11:52:32	Yes
Mean:	-0.093	-0.093	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	1.915	1.915	2.78				

Sequence No.: 36 Autosampler Location: 32
Sample ID: AD19160-002 Date Collected: 9/14/2020 11:52:33 AM
Analyst: Data Type: Original

Replicate Data: AD19160-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0004	-0.0005	-0.0000	11:53:19	Yes
2	-0.095	-0.095	-0.0004	-0.0004	-0.0000	11:53:51	Yes
Mean:	-0.095	-0.095	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.308	0.308	0.44				

Sequence No.: 37 Autosampler Location: 33
Sample ID: EF V-334254 A Date Collected: 9/14/2020 11:53:52 AM
Analyst: Data Type: Original

Replicate Data: EF V-334254 A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	-0.092	-0.092	-0.0004	-0.0003	0.0000	11:54:38	Yes
2	-0.094	-0.094	-0.0004	-0.0003	-0.0000	11:55:11	Yes
Mean:	-0.093	-0.093	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	0.970	0.970	1.41				

Sequence No.: 38 **Autosampler Location: 34**
Sample ID: EF V-334254 B **Date Collected: 9/14/2020 11:55:12 AM**
Analyst: **Data Type: Original**

Replicate Data: EF V-334254 B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0004	-0.0004	-0.0000	11:55:57	Yes
2	-0.093	-0.093	-0.0004	-0.0005	0.0000	11:56:30	Yes
Mean:	-0.093	-0.093	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	1.417	1.417	2.05				

Sequence No.: 39 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 9/14/2020 11:56:31 AM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.32	10.32	0.0602	0.2531	0.0606	11:57:20	Yes
2	10.28	10.28	0.0600	0.2520	0.0604	11:57:52	Yes
Mean:	10.30	10.30	0.0601				
SD:	0.027	0.027	0.0002				
%RSD:	0.260	0.260	0.26				

QC value within limits for Hg 253.7 Recovery = 102.97%
All analyte(s) passed QC.

Sequence No.: 40 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/14/2020 11:58:14 AM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0004	-0.0008	-0.0000	11:59:01	Yes
2	-0.094	-0.094	-0.0004	-0.0006	-0.0000	11:59:33	Yes
Mean:	-0.095	-0.095	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	0.998	0.998	1.44				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

TCLP
Metal Data
Digestion Logbook Data

Hampton-Clarke

ICP-SAMPLE PREPARATION LOG

ANALYTICAL METHOD: (3010A) 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 26209 Analyst: NS

QC Number: 85267 Prep Date: 9/14/20

Matrix: TCLP Reviewed By: CJR

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS						--	
LCSD						--	
1. AD 19154-004					9/11 334254		Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -004							
MS -005							Balance used: N/A
MSD -006							Pipettes used: 149
2. 19139-001					9/10 334254		
3. -004							Hot Block used: 9
4. 19143-001							
5. 19148-002							
6. 19084-001					9/11 334254		
7. 19159-001							
8. -002							
9. -003							
10. -007							
11. -008							
12. -009							
13. -010							
14. -011							
15. 19160-001							
16. -002							
17. CF. V-334254 9/10							
18. CF. V-334254 9/11							
19.							
20.							

Hot Plate Temperature: 93.7 C (90-95° C) Start Time: 12:00pm End Time: 2:30pm

	Volume mL	Lot #
LCS, LCSD	0.25ml	V-13177, 13178,
LLLCS, LLLCSD		V- 331982
MS, MSD	0.255ml	V-13177, 13178,
LLMS, LLMSD		V- 331982

Acid	Vol mL	Lot#
HNO_3	3.0	V-13440
HCl		V-
H_2O_2		V-

Acid	Vol mL	Lot#
1:1 HNO_3		V-
1:1 HCl	5.0	V-331024

Relinquished By NS Date 9/14/20

Received By CJR Date 9/14/2020

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2018 DOD.DOC

HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 (7470A) 7471B OTHER_____

Batch No.:* 26209

QC Number: 85267

Matrix: TCLP

Analyst: ANS

Prep Date: 9/11/20

Review By: DL

LAB ID#	MERCURY		COMMENTS	STANDARDS
	INITIAL	FINAL		
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V-334674
LCS				
LCSD				STD 0.2 ppb V- 334675
1 AQ 19159-004				STD 0.5 ppb V- 334676
MR -004				STD 1.0 ppb V- 334677
MS -006				STD 2.0 ppb V- 334678
MSD -006				STD 5.0 ppb V- 334679
2 AQ 19139-001				STD 10.0 ppb V- 334680
3 -004				STD 25.0 ppb V- 334681
4 AQ 19143-001				ICV 10.0 ppb V- 334672
5 19148-002				CCV 20.0 ppb V- 334673
6 19084-001				
7 19159-001				
8 -002				Balance used: N/A
9 -003				Pipettes used: 159, 143
10 -007				
11 -008				Hot Block used: 7
12 -009				
13 -010				
14 -011				
15 AQ 19160-001				
16 -002				
17 CF1 334254 9/10				
18 CF1 334254 9/11				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KMnO_4$: V- 331286	3.75	HNO3	0.625	V- 13421
$K_2S_2O_8$: V- 327159	2.0	HCl		V-
NH_2OH: V- 317822	1.5	H2SO4	1.5	V- 13343
		Aqua Regia		V-

**Block Temp.: °C 93.7

Time In Block: 12:00pm

Time Out of Block: 2:00pm

Spike Volume & Lot #

☐ LCS V- 334616 0.15x (0.25) ml

☐ MS V- 334616 0.250 ml

☐ Standards/Control Batch B- 29669

Start time: 12:00pm End Time: 2:30pm

**Temperature
245.1 / 7470A: 90-95C
7471B : 92-98C

Relinquished By: ANS

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

HG PREP 2016

0091006 0731

Hampton-Clarke, Inc.

LEACHATE PREPARATION LOG
(TCLP, SPLP)

Start Date: 9/10/20 TIME: 14:02 Finish Date: 9/11/20

**TCLP Ext. Fluid #1 pH: 4.94 (criteria: 4.93 ± 0.05)
**TCLP Ext. Fluid #2 pH: _____ (criteria: 2.88 ± 0.05)
**SPLP Ext. Fluid #3 pH: _____ (criteria: 4.20 ± 0.05)

Sample #	pH (units)	pH in HCL (units)	Final pH (units)	Ext. Fluid (number)	Wt./Vol of Sample (g or mL)	Start Time	Finish Time	Filter Time	Analyst (s)	Ext. Type*	Comments
19084 - 001	9.21	1.79	5.00	334254	150g/3L	17:15	10:10	10:15	EF	T	Balance ID: 037 MET+ORG
19148 - 002	8.52	1.85	5.52		100g/2L			10:45			pH Meter ID: B-38168 MET
19159 - 001	10.57	1.99	6.38					11:00			Pipette ID: 155
- 002	9.38	1.94	6.39					11:10			
- 003	8.46	1.85	6.37					11:15			
- 004	9.51	1.90	6.42					11:20			
- 005	9.41	1.94	6.39					11:34			
- 006	9.44	1.99	6.37					11:40			
- 007	8.41	1.86	5.64					11:45			
- 008	9.31	1.91	5.34					11:50			
- 009	8.94	1.88	5.85					11:55			
- 010	8.97	1.94	5.95					12:00			
19160 - 001	7.59	1.95	5.60					12:05			
- 002	9.72	2.32	6.40					12:10			
EF1 334254	4.94	—	4.80					10:10			
19159 - 011	—	—	10.53	—	0.25L	11:10	—	12:15			

*Ext. Type: TCLP = T (Method 1311) LAMP=L (Methods 1311 / ANSI/NEMA C78.LL 1256-2003)
SPLP = P (Method 1312) MEP=M (Method 1320)
ZHE = Z (Method 1311/1312)

** The pH of the extraction fluid must be checked prior to use and must be within limits specified above

0031

Hampton-Clarke
Analytical & Field Services

Last Page of Report

Hampton-Clarke
Analytical & Field Services

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2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
FAX: 973-244-9787
WWW.HCVLAB.COM

Project: Duofold- 7 Spruce St.

Client PO: HER1500.P2

Report To: HRP Associates. Inc.
1 Fairchild Square
Suite 110
Clifton Park, NY 12065
Attn: Stefan Truex

Received Date: 9/10/2020

Report Date: 9/30/2020

Deliverables: NYDOH-CatB

Lab ID: AD19160

Lab Project No: 0091007

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

Sean Berls - Quality Assurance Officer OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

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SDG Narrative

HC Case Narrative

Client: HRP Associates, Inc.
Project: Duofold-7 Spruce St.

HC Project: 0091007

Hampton-Clarke (HC) received the following samples on 9/10/2020:

Client ID	HC Sample ID	Matrix	Analysis
HRPB-5	AD19160-001	Soil	Metals (6010D/6020B/7471B), Cr3 (Calc), Cyanide (9012B), Hexavalent Chromium (7196A), % Solids (SM2540G), TCLP Metals (6010D/7470A)
HRPB-6	AD19160-002	Soil	Metals (6010D/6020B/7471B), Cr3 (Calc), Cyanide (9012B), Hexavalent Chromium (7196A), % Solids (SM2540G), TCLP Metals (6010D/7470A)

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Metals Analysis:

The Matrix Spike and/or Matrix Spike Duplicate for batches 85269, 85270 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The RPD between the QC sample and the Method Replicate had recoveries outside QC limits in batch 85269. Please refer to the applicable Form 6/9 for the recoveries.

Wet Chemistry Analysis:

The PVS, MS Insoluble and MS Soluble for Hexavalent Chromium, batch 785 , recovered outside the QC limits. The batch was reset and recoveries confirmed. The results from first analysis are reported.

The Matrix Spike Duplicate and MS/MSD RPD for Cyanide , batch 2418 , had recoveries outside QC limits. Please refer to the QC section for the recoveries.

TCLP Metals Analysis:

Sample AD19160-002 was reported at a dilution for Se due to Ca over linear range.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Sean Berls
Quality Assurance Officer

Or

Jean Revolus
Laboratory Director

9/30/20
Date

Reporting Limit Definitions

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

LCS = Laboratory Control Spike

MBS = Method Blank Spike

MS = Matrix Spike

MSD = Matrix Spike Duplicate

MDL = Method Detection Limit

NA = Not Applicable

ND = Not Detected

PS = Post Digestion Spike

RL* = Reporting Limit

RT = Retention Time

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Data Package Summary Forms

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0091007

Sample ID: HRPB-5
Lab#: AD19160-001
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		65

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.2	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	7.7	18

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.37	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.13	0.14

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		4.9

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		7.4
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	15	84
Chromium	1	mg/kg	7.7	18
Copper	1	mg/kg	7.7	43
Lead	1	mg/kg	7.7	25
Manganese	1	mg/kg	15	520
Nickel	1	mg/kg	7.7	36
Zinc	1	mg/kg	15	100

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.31	11
Beryllium	1	mg/kg	0.31	0.66
Selenium	1	mg/kg	3.1	ND
Silver	1	mg/kg	0.31	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result

Sample ID: HRPB-5 **Collection Date: 9/9/2020**
Lab#: AD19160-001 **Receipt Date: 9/10/2020**
Matrix: Soil

Arsenic	1	mg/l	0.10	ND
Barium	**1**	**mg/l**	**0.25**	**0.91**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

Sample ID: HRPB-6
Lab#: AD19160-002
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		78

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.0	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.4	12

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.31	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		250

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.5
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	13	67
Chromium	1	mg/kg	6.4	12
Copper	1	mg/kg	6.4	21
Lead	1	mg/kg	6.4	6.7
Manganese	1	mg/kg	13	390
Nickel	1	mg/kg	6.4	25
Zinc	1	mg/kg	13	58

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.26	8.2
Beryllium	1	mg/kg	0.26	0.39
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.62
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	4	mg/l	0.40	ND

Sample ID: HRPB-6 **Collection Date:** 9/9/2020
Lab#: AD19160-002 **Receipt Date:** 9/10/2020
Matrix: Soil

Silver		1	mg/l	0.050	ND

Cr-SOIL

Sample	Total Cr (mg/kg)	RL	Hexavalent Cr (mg/kg)	RL	Trivalent Cr (mg/kg)	RL
AD19160-001	17.8	7.69	ND	1.231	17.8	7.69
AD19160-002	12.1	6.41	ND	1.026	12.1	6.41

Calculated using 3 significant figures. Reported using 2 significant figures.

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19160-001	% Solid:	65	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-5	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	15	84	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A
7440-47-3	Chromium	7.7	18	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A
7440-50-8	Copper	7.7	43	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A
7439-92-1	Lead	7.7	25	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A
7439-96-5	Manganese	15	520	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A
7439-97-6	Mercury	0.13	0.14	1	0.15	25	09/11/20	85269	H26211S	29	CV	HGCV3A
7440-02-0	Nickel	7.7	36	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A
7440-66-6	Zinc	15	100	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19160-001	% Solid:	65	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-5	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.31	11	1	0.5	100	09/11/20	852701	120ANEW	37	MS	MS3_7700SWA
7440-41-7	Beryllium	0.31	0.66	1	0.5	100	09/11/20	852701	120ANEW	37	MS	MS3_7700SWA
7782-49-2	Selenium	3.1	ND	1	0.5	100	09/11/20	852701	120ANEW	37	MS	MS3_7700SWA
7440-22-4	Silver	0.31	ND	1	0.5	100	09/11/20	852701	120ANEW	37	MS	MS3_7700SWA

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19160-002	% Solid:	78	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-6	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	67	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A
7440-47-3	Chromium	6.4	12	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A
7440-50-8	Copper	6.4	21	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A
7439-92-1	Lead	6.4	6.7	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A
7439-96-5	Manganese	13	390	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	09/11/20	85269	H26211S	30	CV	HGCV3A
7440-02-0	Nickel	6.4	25	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A
7440-66-6	Zinc	13	58	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19160-002	% Solid:	78	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-6	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.26	8.2	1	0.5	100	09/11/20	852701	120ANEW	38	MS	MS3_7700SWA
7440-41-7	Beryllium	0.26	0.39	1	0.5	100	09/11/20	852701	120ANEW	38	MS	MS3_7700SWA
7782-49-2	Selenium	2.6	ND	1	0.5	100	09/11/20	852701	120ANEW	38	MS	MS3_7700SWA
7440-22-4	Silver	0.26	ND	1	0.5	100	09/11/20	852701	120ANEW	38	MS	MS3_7700SWA

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19160-001
Matrix: Soil
Client SampleID: HRPB-5

Project Number: 0091007
Received Date: 9/10/2020
Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.37	09/11/20	09/11/20
Oxidation Reduction Potenial	CR6-ORP	1	4.9	MV		09/14/20	09/14/20
Temperature	CR6-PH	1	23	C		09/14/20	09/14/20
pH	CR6-PH	1	7.4	PH		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.2	09/14/20	09/15/20

Lab#: AD19160-002
Matrix: Soil
Client SampleID: HRPB-6

Project Number: 0091007
Received Date: 9/10/2020
Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.31	09/11/20	09/11/20
Oxidation Reduction Potenial	CR6-ORP	1	250	MV		09/14/20	09/14/20
Temperature	CR6-PH	1	23	C		09/14/20	09/14/20
pH	CR6-PH	1	8.5	PH		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.0	09/14/20	09/15/20

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 0091007**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD19160-001	HRPB-5	Soil	1	65	Percent			09/11/20	09/10/20	09/09/20
AD19160-002	HRPB-6	Soil	1	78	Percent			09/11/20	09/10/20	09/09/20

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19160-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-5	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7440-39-3	Barium	0.25	0.91	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	35	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19160-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-6	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A
7440-39-3	Barium	0.25	0.62	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	36	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	28	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Chain of Custody Forms

0091007 00020

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 0091007

Page 1 of 1

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: HRP Associates
Address: 1 Fairchild Sq. Suite 110
Clifton Park, NY 12065
1b) Email/Cell/Fax/Ph: stefan.truex@hrpassociates.com
1c) Send Invoice to: Same
1d) Send Report to: Same

Project Information

2a) Project: Duofold - 7 Spruce St.
Ilion, NY
2b) Project Mgr: Stefan Truex
2c) Project Location (City/State): Ilion, NY
2d) Quote/PO # (If Applicable): HER1500.P2

FOR LAB USE ONLY

Batch # 459160

===> Check If Contingent ===>

Matrix Codes

DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	7) Analysis: Full 375 Metals + Hex Cr + CN	7) Analysis: TCLP RCRA Metals	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001	HRPB-5	Soil	9/9/20	12:30		X	X	X	2								
002	HRPB-6	Soil	9/9/20	14:50		X	X	X	2								

<=== Check If Contingent <===

10) Relinquished by:	Accepted by:	Date	Time
James Charter	FED EX	9/9/20	18:00
FED EX		9/10/20	11:21

11) Sampler (print name): James Charter Date: 9/9/20

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 3.1

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

CONDITION UPON RECEIPT

Batch Number AD19160 Entered By: Ricardo

Date Entered 9/10/2020 11:45:00 AM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	No	Are the COC seals intact?
4	T-461	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 3.1
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify (TB date, sample matrix, any missing info, etc.)
14	NA	Corrective actions (Specify item number and corrective action taken).
15	No	Were any samples for ortho-phosphate or dissolved ferrous iron field filtered?

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD19160-001	09/10/20 11:21	RICAR	0	M	Received
AD19160-001	09/10/20 11:45	RICAR	0	M	Login
AD19160-001	09/10/20 11:57	R12	1	A	NONE
AD19160-001	09/10/20 18:02	R12	1	A	NONE
AD19160-001	09/10/20 11:57	R12	2	A	NONE
AD19160-001	09/10/20 15:17	EF	2	A	R12
AD19160-001	09/10/20 15:17	EF	2	A	TCLP
AD19160-001	09/10/20 18:02	R12	2	A	NONE
AD19160-001	09/11/20 07:53	ANS	2	A	TDSI/Hg
AD19160-001	09/11/20 08:55	BCT	2	A	SOLIDS
AD19160-001	09/11/20 10:33	JW	2	A	CN
AD19160-001	09/11/20 15:32	R12	2	A	NONE
AD19160-001	09/14/20 10:45	BCT	2	A	EH-PH
AD19160-001	09/14/20 11:21	R12	2	A	NONE
AD19160-001	09/14/20 15:24	BCT	2	A	CR6-SEHPH
AD19160-001	09/14/20 15:25	R12	2	A	NONE
AD19160-002	09/10/20 11:21	RICAR	0	M	Received
AD19160-002	09/10/20 11:45	RICAR	0	M	Login
AD19160-002	09/10/20 11:57	R12	1	A	NONE
AD19160-002	09/10/20 18:02	R12	1	A	NONE
AD19160-002	09/10/20 11:57	R12	2	A	NONE
AD19160-002	09/10/20 15:17	EF	2	A	R12
AD19160-002	09/10/20 15:17	EF	2	A	TCLP
AD19160-002	09/10/20 18:02	R12	2	A	NONE
AD19160-002	09/11/20 07:53	ANS	2	A	TDSI/Hg
AD19160-002	09/11/20 08:55	BCT	2	A	SOLIDS
AD19160-002	09/11/20 10:33	JW	2	A	CN
AD19160-002	09/11/20 15:32	R12	2	A	NONE
AD19160-002	09/14/20 10:45	BCT	2	A	EH-PH
AD19160-002	09/14/20 11:21	R12	2	A	NONE
AD19160-002	09/14/20 15:24	BCT	2	A	CR6-SEHPH
AD19160-002	09/14/20 15:25	R12	2	A	NONE

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Metal Data

Metal Data
Sample Data

Cr-SOIL

Sample	Total Cr (mg/kg)	RL	Hexavalent Cr (mg/kg)	RL	Trivalent Cr (mg/kg)	RL
AD19160-001	17.8	7.69	ND	1.231	17.8	7.69
AD19160-002	12.1	6.41	ND	1.026	12.1	6.41

Calculated using 3 significant figures. Reported using 2 significant figures.

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19160-001	% Solid:	65	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-5	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	15	84	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A
7440-47-3	Chromium	7.7	18	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A
7440-50-8	Copper	7.7	43	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A
7439-92-1	Lead	7.7	25	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A
7439-96-5	Manganese	15	520	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A
7439-97-6	Mercury	0.13	0.14	1	0.15	25	09/11/20	85269	H26211S	29	CV	HGCV3A
7440-02-0	Nickel	7.7	36	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A
7440-66-6	Zinc	15	100	1	0.5	50	09/14/20	85269	S26211A3	34	P	PEICP3A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19160-001	% Solid:	65	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-5	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.31	11	1	0.5	100	09/11/20	852701	120ANEW	37	MS	MS3_7700SWA
7440-41-7	Beryllium	0.31	0.66	1	0.5	100	09/11/20	852701	120ANEW	37	MS	MS3_7700SWA
7782-49-2	Selenium	3.1	ND	1	0.5	100	09/11/20	852701	120ANEW	37	MS	MS3_7700SWA
7440-22-4	Silver	0.31	ND	1	0.5	100	09/11/20	852701	120ANEW	37	MS	MS3_7700SWA

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19160-002	% Solid:	78	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-6	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	67	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A
7440-47-3	Chromium	6.4	12	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A
7440-50-8	Copper	6.4	21	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A
7439-92-1	Lead	6.4	6.7	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A
7439-96-5	Manganese	13	390	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	09/11/20	85269	H26211S	30	CV	HGCV3A
7440-02-0	Nickel	6.4	25	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A
7440-66-6	Zinc	13	58	1	0.5	50	09/14/20	85269	S26211A3	35	P	PEICP3A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19160-002	% Solid:	78	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-6	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.26	8.2	1	0.5	100	09/11/20	852701	120ANEW	38	MS	MS3_7700SWA
7440-41-7	Beryllium	0.26	0.39	1	0.5	100	09/11/20	852701	120ANEW	38	MS	MS3_7700SWA
7782-49-2	Selenium	2.6	ND	1	0.5	100	09/11/20	852701	120ANEW	38	MS	MS3_7700SWA
7440-22-4	Silver	0.26	ND	1	0.5	100	09/11/20	852701	120ANEW	38	MS	MS3_7700SWA

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Metal Data
QC Data

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/14/20
Data File: S26211A3
Prep Batch: 85269
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333673-5	Rec	CCV V-333673-12	Rec	CCV V-333673-23	Rec	CCV V-333673-31	Rec	CCV V-333673-39	Rec	CCV V-333673-50	Rec	CCV V-333673-54	Rec	CCV V-325355-63	Rec
Aluminum	5/5	4.94987	99	4.92942	99	4.82652	97	4.85104	97	4.81360	96	4.77976	96	4.81379	96	4.57943	92
Barium	.5/.5	0.49448	99	0.49187	98	0.48267	97	0.48485	97	0.48078	96	0.47725	95	0.47946	96	0.45932	92
Calcium	50/50	51.97500	104	50.78780	102	49.66140	99	50.09990	100	49.02680	98	49.42000	99	49.13520	98	47.72880	95
Chromium	.5/.5	0.50147	100	0.49806	100	0.48963	98	0.49142	98	0.48664	97	0.48486	97	0.48585	97	0.46588	93
Cobalt	.5/.5	0.51396	103	0.48385	97	0.47579	95	0.47812	96	0.47299	95	0.47025	94	0.47256	95	0.47353	95
Copper	.5/.5	0.49929	100	0.49545	99	0.48649	97	0.48964	98	0.48417	97	0.48038	96	0.48417	97	0.46281	93
Iron	5/5	5.01413	100	4.98263	100	4.92575	99	4.97713	100	4.92811	99	4.89872	98	4.93631	99	4.71764	94
Lead	.5/.5	0.50576	101	0.50543	101	0.49149	98	0.48652	97	0.48958	98	0.48577	97	0.48594	97	0.46407	93
Magnesium	50/50	51.59370	103	51.16680	102	49.90180	100	49.63550	99	49.17830	98	49.76220	100	49.32590	99	47.24050	94
Manganese	.5/.5	0.49661	99	0.49299	99	0.48530	97	0.48783	98	0.48325	97	0.47996	96	0.48219	96	0.46160	92
Nickel	.5/.5	0.48736	97	0.48361	97	0.47494	95	0.47744	95	0.50178	100	0.47029	94	0.47260	95	0.47652	95
Vanadium	.5/.5	0.50181	100	0.49794	100	0.48944	98	0.49374	99	0.48966	98	0.48880	98	0.48614	97	0.46426	93
Zinc	.5/.5	0.50210	100	0.49754	100	0.49097	98	0.49417	99	0.48958	98	0.48905	98	0.48911	98	0.46774	94

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/14/20
Data File: S26211A3
Prep Batch: 85269
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333671	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-333662	Recovery	Low Limit	High Limit
Magnesium	5.0	5.29120	106	80	120	500	497.929	100	90	110
Silver	0.015	0.0172212	115	80	120	1	1.25555	126 a	90	110
Aluminum	2.0	2.03278	102	80	120	500	509.802	102	90	110
Arsenic	0.04	0.0460796	115	80	120	10	10.7532	108	90	110
Boron	0.2	0.204458	102	80	120	5	3.90222	78 a	90	110
Barium	0.1	0.104991	105	80	120	10	10.2486	102	90	110
Beryllium	0.012	0.0138513	115	80	120	5	5.09126	102	90	110
Calcium	10	10.5034	105	80	120	500	470.778	94	90	110
Cadmium	0.012	0.0171544	143 a	80	120	5	5.24868	105	90	110
Cobalt	0.025	0.0282737	113	80	120	5	4.80315	96	90	110
Chromium	0.05	0.0532240	106	80	120	10	10.1490	101	90	110
Copper	0.05	0.0509749	102	80	120	10	10.6394	106	90	110
Silicon	0.1	0.137124	137 a	80	120	25	0.154752	.62 a	90	110
Potassium	NA	-16.6772		80	120	200	-2448.15	- a	90	110
Zinc	0.1	0.102604	103	80	120	10	9.81568	1200 98	90	110
Manganese	0.1	0.101044	101	80	120	10	10.0681	101	90	110
Molybdenum	0.025	0.0258763	104	80	120	10	9.99740	100	90	110
Sodium	NA	2.86332		80	120	1000	1191.52	119 a	90	110
Nickel	0.05	0.0541742	108	80	120	10	9.52728	95	90	110
Lead	0.05	0.0503340	101	80	120	10	9.94191	99	90	110
Antimony	0.04	0.0405926	101	80	120	5	5.65342	113 a	90	110
Selenium	0.05	0.0555636	111	80	120	5	5.25887	105	90	110
Tin	0.2	0.205515	103	80	120	10	10.1499	101	90	110
Titanium	0.1	0.100060	100	80	120	10	10.3993	104	90	110
Thallium	0.05	0.0590761	118	80	120	5	5.19707	104	90	110
Vanadium	0.1	0.103608	104	80	120	10	10.6104	106	90	110
Iron	2.0	2.05050	103	80	120	400	383.320	96	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/11/20
Data File: S091120ANEW
Prep Batch: 85270
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-334461-8	Rec	CCV V-334465-16	Rec	CCV V-334465-28	Rec	CCV V-334465-40	Rec	CCV V-334465-46	Rec		Rec		Rec		Rec
Antimony	50/50	47.13800	94	47.89100	96	48.09900	96	48.21900	96	48.97600	98						
Arsenic	50/50	50.07300	100	50.12500	100	49.53800	99	49.24500	98	48.97700	98						
Beryllium	50/50	51.53900	103	51.65100	103	50.85100	102	49.88400	100	48.28700	97						
Cadmium	50/50	49.85000	100	49.67000	99	49.46800	99	49.74300	99	50.36400	101						
Selenium	50/250	48.98300	98	255.25600	102	252.56600	101	246.57400	99	246.56800	99						
Silver	10/50	9.76000	98	53.56300	107	51.28200	103	51.53900	103	51.84300	104						
Thallium	50/50	49.05100	98	51.16300	102	51.42500	103	51.65700	103	50.29000	101						
Vanadium	50/50	49.61300	99	49.93600	100	49.26900	99	49.63600	99	48.82300	98						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/11/20
Data File: S091120ANEW
Prep Batch: 85270
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-334466	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-334464	Recovery	Low Limit	High Limit
Magnesium	500	485.757	97	80	120		50000	51109.053	102	90	110
Aluminum	500	496.990	99	80	120		15000	15514.650	103	90	110
Chromium	2	2.027	101	80	120		500	522.702	105	90	110
Copper	10	10.044	100	80	120		500	514.739	103	90	110
Iron	500	511.403	102	80	120		50000	51119.767	102	90	110
Arsenic	1	0.992	99	80	120		500	510.281	102	90	110
Barium	5	3.699	74 a	80	120		500	528.188	106	90	110
Beryllium	1	0.989	99	80	120		500	488.021	98	90	110
Calcium	500	500.903	100	80	120		50000	53586.886	107	90	110
Cadmium	2	1.910	96	80	120		500	522.028	104	90	110
Silver	1	0.924	92	80	120		500	1545.019	309 a	90	110
Potassium	500	488.491	98	80	120		50000	51834.310	104	90	110
Zinc	20	19.764	99	80	120		500	485.196	97	90	110
Manganese	6	5.936	99	80	120		500	532.178	106	90	110
Molybdenum	1	1.054	105	80	120		500	530.631	106	90	110
Sodium	500	468.022	94	80	120		50000	51835.041	104	90	110
Nickel	3	2.832	94	80	120		500	500.679	100	90	110
Lead	2	1.841	92	80	120		500	468.004	94	90	110
Antimony	4	3.674	92	80	120		500	496.388	99	90	110
Selenium	10	10.006	100	80	120		2500	2497.117	100	90	110
Thallium	2	1.816	91	80	120		500	480.314	96	90	110
Vanadium	1	0.968	97	80	120		500	534.746	107	90	110
Cobalt	2	1.934	97	80	120		500	514.163	103	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/11/20
Data File: H26211S
Prep Batch: 85269
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-21		CCV-33		CCV-36							
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec	Rec	Rec	Rec	Rec	Rec	Rec
Mercury	20/10	20.19000	101	10.08000	101	10.14000	101	9.98000	100						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/14/20
Data File: S26211A3
Prep Batch: 85269
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-24	CCB V-333667-32	CCB V-333667-40	CCB V-333667-51	CCB V-333667-55	CCB V-325347-64
Aluminum	1U	2U	2U	2U	2U	2U	2U	2U
Barium	.05U	.1U	.1U	.1U	.1U	.1U	.1U	.1U
Calcium	5U	10U	10U	10U	10U	10U	10U	10U
Chromium	.025U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
Cobalt	.0125U	.025U	.025U	.025U	.025U	.025U	.025U	.025U
Copper	.025U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
Iron	1U	2U	2U	2U	2U	2U	2U	2U
Lead	.025U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
Magnesium	2.5U	5U	5U	5U	5U	5U	5U	5U
Manganese	.05U	.1U	.1U	.1U	.1U	.1U	.1U	.1U
Nickel	.025U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
Vanadium	.05U	.1U	.1U	.1U	.1U	.1U	.1U	.1U
Zinc	.05U	.1U	.1U	.1U	.1U	.1U	.1U	.1U

Analyte	MB 85269 (100)-14
Aluminum	100U
Barium	5U
Calcium	500U
Chromium	2.5U
Cobalt	1.3U
Copper	2.5U
Iron	100U
Lead	2.5U
Magnesium	250U
Manganese	5U
Nickel	2.5U
Vanadium	5U
Zinc	5U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/11/20
Data File: S091120ANEW
Prep Batch: 85270
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-334462-10	CCB V-334462-17	CCB V-334462-29	CCB V-334462-41	CCB V-334462-47	MB 85270-18		
Antimony	2U	4U	4U	4U	4U	400U		
Arsenic	.5U	1U	1U	1U	1U	100U		
Beryllium	.5U	1U	1U	1U	1U	100U		
Cadmium	1U	2U	2U	2U	2U	200U		
Selenium	5U	10U	10U	10U	10U	1000U		
Silver	.5U	1U	1U	1U	1U	100U		
Thallium	1U	2U	2U	2U	2U	200U		
Vanadium	.5U	1U	1U	1U	1U	100U		

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/11/20
Data File: H26211S
Prep Batch: 85269
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-37	MB 85269 (167)-11			
Mercury	.5 U	.5 U	.5 U	.5 U	83 U			

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/14/20
Data File: S26211A3
Prep Batch: 85269
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	499.408	100							
Barium	0	U								
Calcium	500	473.756	95							
Chromium	0	U								
Cobalt	0	U								
Copper	0	U								
Iron	200	190.217	95							
Lead	0	U								
Magnesium	500	502.636	101							
Manganese	0	U								
Nickel	0	U								
Vanadium	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/11/20
Data File: S091120ANEW
Prep Batch: 85270
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-334463-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	51588.44	103							
Antimony	0	U								
Arsenic	0	U								
Beryllium	0	U								
Cadmium	0	U								
Calcium	150000	163961	109							
Iron	125000	128419	103							
Magnesium	50000	50909.44	102							
Selenium	0	U								
Silver	0	U								
Thallium	0	U								
Vanadium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85269

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85269

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	16	7.3004	8.92	82		65	110
Chromium	85269	1	S26211A3	16	1.9160	2.27	84		61	114
Copper	85269	1	S26211A3	16	1.8090	2.09	87		66	110
Lead	85269	1	S26211A3	16	1.3742	1.63	84		62	110
Manganese	85269	1	S26211A3	16	5.1743	6.03	86		68	110
Mercury	85269	4	H26211S	15	6.0430	41.64	58		39	110
Nickel	85269	1	S26211A3	16	0.4827	.553	87		61	114
Zinc	85269	1	S26211A3	16	5.9111	7.13	83		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85269

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	15	7.2814	8.92	82		65	110
Chromium	85269	1	S26211A3	15	1.9287	2.27	85		61	114
Copper	85269	1	S26211A3	15	1.8105	2.09	87		66	110
Lead	85269	1	S26211A3	15	1.3562	1.63	83		62	110
Manganese	85269	1	S26211A3	15	5.0323	6.03	83		68	110
Mercury	85269	4	H26211S	14	6.2230	41.64	60		39	110
Nickel	85269	1	S26211A3	15	0.4808	.553	87		61	114
Zinc	85269	1	S26211A3	15	5.9825	7.13	84		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	20	S26211A3	17	4.6864	2.7883	0.5	380	b	75	125
Chromium	85269	1	S26211A3	20	S26211A3	17	0.8849	0.5254	0.5	72	a	75	125
Copper	85269	1	S26211A3	20	S26211A3	17	1.2183	0.7403	0.5	96		75	125
Lead	85269	1	S26211A3	20	S26211A3	17	3.0829	3.3560	0.5	-55	b	75	125
Manganese	85269	1	S26211A3	20	S26211A3	17	3.5537	2.9865	0.5	113		75	125
Mercury	85269	1	H26211S	19	H26211S	16	10.7300	0.7820	10	99		75	125
Nickel	85269	1	S26211A3	20	S26211A3	17	0.7393	0.3054	0.5	87		75	125
Zinc	85269	1	S26211A3	20	S26211A3	17	4.4203	3.5562	0.5	173	b	75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19159-005

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	19	S26211A3	17	5.4637	2.7883	0.5	535	b	75	125
Chromium	85269	1	S26211A3	19	S26211A3	17	0.9442	0.5254	0.5	84		75	125
Copper	85269	1	S26211A3	19	S26211A3	17	1.2461	0.7403	0.5	101		75	125
Lead	85269	1	S26211A3	19	S26211A3	17	3.0330	3.3560	0.5	-65	b	75	125
Manganese	85269	1	S26211A3	19	S26211A3	17	3.4821	2.9865	0.5	99		75	125
Mercury	85269	1	H26211S	18	H26211S	16	11.1900	0.7820	10	104		75	125
Nickel	85269	1	S26211A3	19	S26211A3	17	0.7984	0.3054	0.5	99		75	125
Zinc	85269	1	S26211A3	19	S26211A3	17	4.0159	3.5562	0.5	92		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 85269

Instrument Type: ICP/HG
Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: SOIL SampleID: AD19159-004

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	1	S26211A3	21	S26211A3	17	3.2328	2.7883	0.50	89		75	125
Chromium	1	S26211A3	21	S26211A3	17	1.0359	0.5254	0.50	102		75	125
Copper	1	S26211A3	21	S26211A3	17	1.2606	0.7403	0.50	104		75	125
Lead	1	S26211A3	21	S26211A3	17	3.8920	3.3560	0.50	107		75	125
Manganese	1	S26211A3	21	S26211A3	17	3.4143	2.9865	0.50	86		75	125
Nickel	1	S26211A3	21	S26211A3	17	0.8013	0.3054	0.50	99		75	125
Zinc	1	S26211A3	21	S26211A3	17	4.0097	3.5562	0.50	91		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85270

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85270

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	20	41.1700	49.4	83		61	113
Beryllium	85270	1	S091120A	20	147.3900	187	79		66	110
Selenium	85270	1	S091120A	20	300.0830	364	82		60	112
Silver	85270	1	S091120A	20	82.9270	94.0	88		61	111

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85270

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	19	42.0340	49.4	85		61	113
Beryllium	85270	1	S091120A	19	151.0130	187	81		66	110
Selenium	85270	1	S091120A	19	304.5110	364	84		60	112
Silver	85270	1	S091120A	19	83.1280	94.0	88		61	111

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	25	S091120A	21	249.8150	40.5900	250	84		75	125
Beryllium	85270	1	S091120A	25	S091120A	21	196.1200	1.4870	250	78		75	125
Selenium	85270	1	S091120A	25	S091120A	21	205.5270	10U	250	82		75	125
Silver	85270	1	S091120A	25	S091120A	21	47.7160	9.2420	50	77		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19159-005

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	24	S091120A	21	250.5490	40.5900	250	84		75	125
Beryllium	85270	1	S091120A	24	S091120A	21	188.3710	1.4870	250	75		75	125
Selenium	85270	1	S091120A	24	S091120A	21	204.6510	10U	250	82		75	125
Silver	85270	1	S091120A	24	S091120A	21	46.1160	9.2420	50	74	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85270

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS | Matrix: SOIL | SampleID: AD19159-004

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	S091120A	26	S091120A	21	89.2740	40.5900	50	97		75	125
Beryllium	1	S091120A	26	S091120A	21	43.1430	1.4870	50	83		75	125
Selenium	1	S091120A	26	S091120A	21	239.3490	10U	250	96		75	125
Silver	1	S091120A	26	S091120A	21	48.1730	9.2420	50	78		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85269

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85269

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85269	S26211A3	16	S26211A3	15	7.3004	7.2814	.26		20
Chromium	85269	S26211A3	16	S26211A3	15	1.9160	1.9287	.66		20
Copper	85269	S26211A3	16	S26211A3	15	1.8090	1.8105	.081		20
Lead	85269	S26211A3	16	S26211A3	15	1.3742	1.3562	1.3		20
Manganese	85269	S26211A3	16	S26211A3	15	5.1743	5.0323	2.8		20
Mercury	85269	H26211S	15	H26211S	14	6.0430	6.2230	2.9		20
Nickel	85269	S26211A3	16	S26211A3	15	0.4827	0.4808	.38		20
Zinc	85269	S26211A3	16	S26211A3	15	5.9111	5.9825	1.2		20

TxtQcType: MR Matrix: SOIL SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85269	S26211A3	18	S26211A3	17	6.2188	2.7883	76	a	20
Chromium	85269	S26211A3	18	S26211A3	17	0.5940	0.5254	12		20
Copper	85269	S26211A3	18	S26211A3	17	0.6411	0.7403	14		20
Lead	85269	S26211A3	18	S26211A3	17	2.3311	3.3560	36	a	20
Manganese	85269	S26211A3	18	S26211A3	17	2.6522	2.9865	12		20
Mercury	85269	H26211S	17	H26211S	16	0.8260	0.7820	5.5		20
Nickel	85269	S26211A3	18	S26211A3	17	0.2482	0.3054	21	b	20
Zinc	85269	S26211A3	18	S26211A3	17	4.5735	3.5562	25	a	20

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Barium	85269	S26211A3	20	S26211A3	19	4.6864	5.4637	15	20
Chromium	85269	S26211A3	20	S26211A3	19	0.8849	0.9442	6.5	20
Copper	85269	S26211A3	20	S26211A3	19	1.2183	1.2461	2.3	20
Lead	85269	S26211A3	20	S26211A3	19	3.0829	3.0330	1.6	20
Manganese	85269	S26211A3	20	S26211A3	19	3.5537	3.4821	2	20
Mercury	85269	H26211S	19	H26211S	18	10.7300	11.1900	4.2	20
Nickel	85269	S26211A3	20	S26211A3	19	0.7393	0.7984	7.7	20
Zinc	85269	S26211A3	20	S26211A3	19	4.4203	4.0159	9.6	20

TxtQcType: SD Matrix: SOIL SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Barium	85269	S26211A3	22	S26211A3	17	5	0.5708	2.7883	2.3	10
Chromium	85269	S26211A3	22	S26211A3	17	5	0.1142	0.5254	8.7	10
Copper	85269	S26211A3	22	S26211A3	17	5	0.1491	0.7403	0.68	10
Lead	85269	S26211A3	22	S26211A3	17	5	0.7284	3.3560	8.5	10
Manganese	85269	S26211A3	22	S26211A3	17	5	0.6181	2.9865	3.5	10
Nickel	85269	S26211A3	22	S26211A3	17	5	0.0655	0.3054	7.2	10
Zinc	85269	S26211A3	22	S26211A3	17	5	0.7448	3.5562	4.7	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85270

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85270

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85270	S091120A	20	S091120A	19	41.1700	42.0340	2.1	20
Beryllium	85270	S091120A	20	S091120A	19	147.3900	151.0130	2.4	20
Selenium	85270	S091120A	20	S091120A	19	300.0830	304.5110	1.5	20
Silver	85270	S091120A	20	S091120A	19	82.9270	83.1280	.24	20

TxtQcType: MR Matrix: SOIL SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85270	S091120A	22	S091120A	21	45.3310	40.5900	11	20
Beryllium	85270	S091120A	22	S091120A	21	1.6950	1.4870	13	20
Selenium	85270	S091120A	22	S091120A	21	10U	10U	---	20
Silver	85270	S091120A	22	S091120A	21	10.5390	9.2420	13	20

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85270	S091120A	25	S091120A	24	249.8150	250.5490	.29	20
Beryllium	85270	S091120A	25	S091120A	24	196.1200	188.3710	4	20
Selenium	85270	S091120A	25	S091120A	24	205.5270	204.6510	.43	20
Silver	85270	S091120A	25	S091120A	24	47.7160	46.1160	3.4	20

TxtQcType: SD Matrix: SOIL SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85270	S091120A	23	S091120A	21	5	8.2590	40.5900	1.7		20
Beryllium	85270	S091120A	23	S091120A	21	5	0.3370	1.4870	13		20
Selenium	85270	S091120A	23	S091120A	21	5	0.5970	5.1080	42	c	20
Silver	85270	S091120A	23	S091120A	21	5	1.9280	9.2420	4.3		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Metal Data
Verification of Instrument Parameters

INTERELEMENT CORRECTION SUMMARY PEICP3ax

Interfered Elements	Interfering Elements								
	Al	Ca	Fe	Mg	B	Ba	Cu	Mn	Mo
Al	N/A	0	0	0	0	0	0	0	23.5
Sb	0	0	0	0	0	0	0	0	-12.9
As	0	0	-0.116	0	0	0	0	0	5.29
Ba	0	0	0	0	0	N/A	0	0	0
Be	0	0	0	0	0	0	0	0	0
B	0	0	4.15	0	N/A	0	0	0	-2.34
Cd	0	0	0	0	0	0	0	0	0
Ca	0	N/A	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	N/A	0	0
Fe	0	0	N/A	0	0	0	0	0	0
Pb	-0.0911	0	0	0	0	0	0	0	0
Mg	0	0	0	N/A	0	0	0	0	0
Mn	0	0	0	0	0	0	0	N/A	0
Mo	0	0	0	0	0	0	0	0	N/A
Ni	0	0	0	0	0	0	0	0	0
K	0	0	4207.75	0	0	0	0	0	0
Se	0	0.0541	-0.495	0	0	0	0	0	0
Si	-0.0936	-0.0964	-0.285	-0.0459	-10.34	-5.45	-5.89	-4.28	11.1
Ag	0	0	0	0	0	0	0	0	0
Na	0	0	0	0	0	0	0	0	0
Tl	0	0	0	0	0	0	0	2.59	0.00
Sn	0	0	0	0	0	0	0	0	0
Ti	0	0	0	0	0	0	0	0	0
V	0	0	0.0684	0	0	0	0	0	-13.1
Zn	0	0	0	0	0	0	0	0	0

IECs run 07/15/2019. As, B Mod 12302019

INTERELEMENT CORRECTION SUMMARY PEICP3ax

Interfered Elements	Interfering Elements							
	Na	Ni	Se	Si	Sn	Ti	V	Zn
Al	0	0	0	0	0	0	0	0
Sb	0	0	0	0	0	0	0	0
As	0	0	0	0	0	0	0	0
Ba	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0.00	0	0
B	0	0	0	0	0	0	0	0
Cd	0	0	0	0	0	0	0	0
Ca	0	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	0	0
Fe	0	0	0	0	0	0	0	0
Pb	0	0	0	0	0	0	0	0
Mg	0	0	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0
Mo	0	0	0	0	0	0	0	0
Ni	0	N/A	0	0	0	0	0	0
K	0	0	0	0	0	0	0	0
Se	0	0	N/A	0	0.000	0	0	0
Si	0.0185	-5.1	0	N/A	-5.27	-2.58	-5.57	-4.92
Ag	0	0	0	0	0	0	0	0
Na	N/A	0	0	0	0	0.0	0	0
Tl	0	0	0	0	0	-11.1	-13.5	0
Sn	0	0	0	0	N/A	5.67	0	0
Ti	0	0	0	0	0	N/A	0	0
V	0	0	0	0	0	0	N/A	0
Zn	0	0	0	0	0	0	0	N/A

IECs run 07/15/2019. As, B Mod 12302019

MDL / RL SUMMARY
SOIL
PE ICP 3 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/Kg)
Ag	0.24396749	1.5
Al	16.7078017	200
As	1.37117317	4
Ba	0.67596126	10
Be	0.71383086	1.2
Ca	100.98567	1000
Cd	0.52283194	1.2
Co	0.71289903	2.5
Cr	0.67036785	5
Cu	0.61619583	5
Fe	13.1992644	200
Mg	19.5137102	500
Mn	0.64172541	10
Mo	0.27417636	2.5
Na	111.789255	250
Ni	1.10372174	5
Pb	0.61639339	5
Sb	1.03795619	4
Se	1.72784998	5
Sn	1.86972983	20
Ti	0.63640908	10
Tl	16.577423	5
V	0.95770226	10
Zn	1.50868728	10
B	5.92873987	20

COMPLETED: 12/31/2019

HGCV3 MDL/RL SUMMARY

Element: *Mercury*
Instrument: *PE FIMS 100*
Technique: *CV*

Instrument ID: *HgCV3*
Analyst *Carmela Aliano*

200 Series	METHOD	MDL (ppb)	Completed	RL (ppb)
H_2O	245.1	0.0794	12/31/2019	0.20
SW846				
H_2O	7470A	0.1740	12/31/2019	0.50
SOIL	7471 B	0.0757 (0.0126 mg/kg)	12/31/2019	0.50 (0.0833 mg/kg)

MDL/RL
Method 6020/6020A
MS3_7700
SOIL

ELEMENT	MDL (MG/KG)	Reporting Limits (MG/KG)
Al	1.5871	100
Sb	0.0225	0.8
AS	0.0175	0.2
BA	0.0568	1
BE	0.0157	0.2
CA	19.0038	100
CD	0.0141	0.4
CR	0.0859	0.4
CO	0.0109	0.4
CU	0.1937	2
FE	4.2445	100
PB	0.0374	0.4
MG	2.3285	100
MN	0.2413	1.2
MO	0.0534	0.2
NA	17.8116	100
Ni	0.0522	0.6
K	5.8233	100
Se	0.0635	2
Ag	0.0261	0.2
TL	0.0176	0.4
V	0.0108	0.2
Zn	1.4649	4

MDL analyzed 5/21/2019, 7/12/2019, 9/5/2019, 10/29/2019.
Blanks 1/24/2019-1/24/2020

Metal Data
Raw Data

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85270 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85270 Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-36-0	Antimony	0.40	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-38-2	Arsenic	0.10	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-39-3	Barium	0.50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-41-7	Beryllium	0.10	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-43-9	Cadmium	0.20	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-70-2	Calcium	50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-47-3	Chromium	0.20	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-48-4	Cobalt	0.20	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-50-8	Copper	1.0	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7439-89-6	Iron	50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7439-92-1	Lead	0.20	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7439-95-4	Magnesium	50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7439-96-5	Manganese	0.60	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7439-98-7	Molybdenum	0.20	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-02-0	Nickel	0.30	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-09-7	Potassium	50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7782-49-2	Selenium	1.0	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-22-4	Silver	0.10	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-23-5	Sodium	50	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-28-0	Thallium	0.20	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-62-2	Vanadium	0.10	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA
7440-66-6	Zinc	2.0	ND	1	0.5	100	09/11/20	85270	1120ANEW	18	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85269 (100) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85269 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-39-3	Barium	5.0	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-70-2	Calcium	500	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-47-3	Chromium	2.5	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-48-4	Cobalt	1.2	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-50-8	Copper	2.5	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7439-89-6	Iron	100	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7439-92-1	Lead	2.5	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7439-95-4	Magnesium	250	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7439-96-5	Manganese	5.0	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-02-0	Nickel	2.5	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-09-7	Potassium	250	ND	1	0.5	50	09/11/20	85269	S26206A4	32	P	PEICPRAD4A
7440-23-5	Sodium	120	ND	1	0.5	50	09/11/20	85269	S26206A4	32	P	PEICPRAD4A
7440-31-5	Tin	10	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-62-2	Vanadium	5.0	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A
7440-66-6	Zinc	5.0	ND	1	0.5	50	09/14/20	85269	S26211A3	14	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85269 (167) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85269 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	09/11/20	85269	H26211S	11	CV	HGCV3A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333665

Prepared By: Aliano, Carmela
Description: ICS4 High std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: various mg/l
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	434.5 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	1
12977	SILICON	5 ml	CONC conc	10

Veritech Lot Number: V-333666

Prepared By: Aliano, Carmela
Description: ICS3 - Middle Std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	944.75 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	.5
12977	SILICON	5 ml	CONC conc	5
13092	CERIUM	5 ml	CONC conc	5

Veritech Lot Number: V-333667

Prepared By: Aliano, Carmela
Description: ICB/CCB
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: 0 mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	

Veritech Lot Number: V-333671

Prepared By: Aliano, Carmela
Description: LLICV/LLCCV soil
Prep Date: 8/24/2020
Expiration Date: 12/31/2020
Department: WetChem
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
12982	LL-SOIL	10 ml		
12976	BORON	.2 ml	CONC conc	
12977	SILICON	.1 ml	CONC conc	
13092	CERIUM	.1 ml	CONC conc	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333673

Prepared By: Aliano, Carmela
Department: Metals
ApprovedBy: carmela
Description: CCV
BatchNumber:
ApproveDate: 08/24/20
Prep Date: 8/24/2020
Concentration: MULTI multi
Checked: Yes
Expiration Date: 2/20/2021
Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13171	ICV 1	10 ml	NEAT neat	
13170	ICV 2	10 ml	CONC conc	
12981	BORON	.5 ml	CONC conc	
12933	silicon	5 ml	CONC conc	
13091	CERIUM	5 ml	CONC conc	

Veritech Lot Number: V-334144

Prepared By: Silva, Amanda
Department: Metals
ApprovedBy: shiamala
Description: 1:1 HNO3 WARNING
BatchNumber:
ApproveDate: 09/15/20
Prep Date: 9/2/2020
Concentration: Reagent reag
Checked: Yes
Expiration Date: 3/1/2021
Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13421	nitric acid	500 ml	neat neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12933

Description
silicon

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-145	S191206040	12/13/19	12/30/21	Aliano, Carmela	4	500m	CONC	CONC

Veritech Control/Receipt Number: 12976

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLB9-2X	24-110BX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12977

Description
SILICON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLSI9-2X	24-93SIX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12981

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-055	S190719015	01/06/20	07/30/21	Aliano, Carmela	3	500ml	CONC	CONC

Veritech Control/Receipt Number: 12982

Description
LL-SOIL

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-31-500	8/209AB	01/06/20	12/31/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 12983

Description
CALIBRATION 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	8/214AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 12984

Description
CALIBRATION 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	8/215AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description: DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13091

Description: CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-051-585	S190710006	03/04/20	07/30/21	Aliano, Carmela	2	500ml	CONC	CONC

Veritech Control/Receipt Number: 13092

Description: CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLCE2-2X	24-15CEX	03/04/20	02/28/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13168

Description: nitric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	245675	04/07/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13169

Description: hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	04/07/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13170

Description: ICV 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S200306032	04/07/20	03/31/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13171

Description: ICV 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S200306031	04/07/20	03/31/21	Aliano, Carmela	2	500ml	NEAT	NEAT

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description: LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Control/Receipt Number: 13067

Description: hydrogen peroxide`

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	H325-4	197718	02/19/20	01/31/25	Lopez, Jose	4	4L	neat	neat

Veritech Control/Receipt Number: 13130

Description: hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13177

Description: CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description: CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13440

Description: nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334615

Prepared By: Ransaw, Brianna
Description: Hg Intermediate Standard -WARNING
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29664
Concentration: .25 ppm
Final Volume: 500 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13311	MERCURY 1000 PPM	.125 ml	1000 ug/ml	
13421	nitric acid	12.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334616

Prepared By: Ransaw, Brianna
Description: Hg intermediate Control -WARNING
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29664
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334661

Prepared By: Silva, Amanda
Description: Aquaregia
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29668
Concentration: 0 neat
Final Volume: 80 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13440	nitric acid	20 ml	neat neat	
13130	hydrochloric acid	60 ml	neat neat	

Veritech Lot Number: V-334662

Prepared By: Silva, Amanda
Description: Hg Soil ICV Soil
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29668
Concentration: 20 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334616	Hg intermediate Control -WARNING	.5 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334663

Prepared By: Silva, Amanda
Description: Hg soil CCV 10ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29668
Concentration: 10 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334616	Hg intermediate Control -WARNING	.25 ml	1.0 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334664

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg soil standard blk | BatchNumber: B-29668 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 0 ppm | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			

Veritech Lot Number: V-334665

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg soil standard .2 ppb | BatchNumber: B-29668 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: .2 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.02 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334666

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg soil standard .5 ppb | BatchNumber: B-29668 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: .5 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.05 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334667

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg soil standard 1 ppb | BatchNumber: B-29668 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 1 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334668

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg soil standard 2 ppb | BatchNumber: B-29668 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 2 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.2 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334669

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg soil standard 5 ppb | BatchNumber: B-29668 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 5 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.5 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334670

Prepared By:	Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description:	Hg soil standard 10 ppb	BatchNumber: B-29668	ApproveDate: 09/15/20
Prep Date:	9/11/2020	Concentration: 10 ppb	Checked: Yes
Expiration Date:	9/11/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334671

Prepared By:	Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description:	Hg soil standard 25 ppb	BatchNumber: B-29668	ApproveDate: 09/15/20
Prep Date:	9/11/2020	Concentration: 25 ppb	Checked: Yes
Expiration Date:	9/11/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	2.5 ml	.25 ppm	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13311

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP	140-051-801	S200130001	06/04/20	12/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-317822

Prepared By: Aliano, Carmela
Description: Hydroxylamine Hydrochloride WARNIN
Prep Date: 12/13/2019
Expiration Date: 1/8/2020
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 10 l
ApprovedBy: shiamala
ApproveDate: 12/16/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12651	DI H2O			
12218	Sodium Chloride	1200 g	neat neat	
12619	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-331286

Prepared By: Lucca, Daniela
Description: 5% Potassium Permanganate WARNIN
Prep Date: 7/13/2020
Expiration Date: 2/13/2021
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12621	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-334616

Prepared By: Ransaw, Brianna
Description: Hg intermediate Control -WARNING
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29664
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334627

Prepared By: Ransaw, Brianna
Description: 3% HCL WARNING
Prep Date: 9/11/2020
Expiration Date: 9/20/2020
Department: WetChem
BatchNumber:
Concentration: 3 %
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13130	hydrochloric acid	600 ml	neat neat	3%
13084	DI H20			

Veritech Lot Number: V-334628

Prepared By: Ransaw, Brianna
Description: SnCl2 "WARNING:"
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber:
Concentration: reagent I
Final Volume: 2 l
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334627	3% HCL WARNING	2000 ml	3 %	
13089	STANNOUS CHOLORIDE	26.4 g		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12218

Description
Sodium Chloride

ApprovedBy: akmal
ApproveDate: 12/31/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	SX0420-5	17F145203	12/27/18	12/26/23	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12619

Description
HYDROXYLAMINE HYDROCHLORIDE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LS-1580015	190318-4C	06/25/19	06/24/23	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12621

Description
POTASSIUM PERMANGANATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-T10208	190318-3C	06/25/19	06/24/29	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12651

Description
DI H2O

ApprovedBy: janee
ApproveDate: 10/10/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	07/08/19	07/07/20	Cousineau, Paul	1			

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13089

Description
STANNOUS CHOLORIDE

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB CHEM	LC-P33805	190620-3C	02/15/20	02/14/23	Aliano, Carmela	1	1Gal		

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-329062

Prepared By: Cousineau, Paul
Description: Antimony Intermediate 1PPM
Prep Date: 6/5/2020
Expiration Date: 2/25/2021
Department: Metals
BatchNumber:
Concentration: 1000 ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 06/12/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13251	nitric acid	2.5 ml	neat neat	
13296	ANTIMONY 1000 PPM	.1 ml	1000 ug/ml	

Veritech Lot Number: V-333325

Prepared By: Cousineau, Paul
Description: 6020 CALIBRATION STOCK
Prep Date: 8/16/2020
Expiration Date: 11/15/2020
Department: Metals
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 100 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13331	Nitric acid	2 ml	neat neat	
13304	ALUMINUM 10000 PPM	.725 ml	10000 ug/ml	72.5
13305	CALCIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13308	IRON 10000 PPM	2.5 ml	10000 ug/ml	250
13306	MAGNESIUM 10000PPM	2.5 ml	10000 ug/ml	250
13309	POTASSIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13307	SODIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13297	SELENIUM 1000 PPM	1 ml	1000 ug/ml	10
13323	CAL STD	12.5 ml	20 ug/ml	2.5

Veritech Lot Number: V-334144

Prepared By: Silva, Amanda
Description: 1:1 HNO3 WARNING
Prep Date: 9/2/2020
Expiration Date: 3/1/2021
Department: Metals
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13421	nitric acid	500 ml	neat neat	

Veritech Lot Number: V-334455

Prepared By: Cousineau, Paul
Description: Cal Blk WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: 0 ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-334456

Prepared By: Cousineau, Paul
Description: Cal Std-1 WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.02 ml	VARIOUS pp	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334457

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-2 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.2 ml	VARIOUS pp	

Veritech Lot Number: V-334458

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-3 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.4 ml	VARIOUS pp	

Veritech Lot Number: V-334459

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-4 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-334460

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-5 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	4 ml	VARIOUS pp	

Veritech Lot Number: V-334461

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: ICV WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
13315	6020 ICV	.1 ml	MULTI ug/ml	
13314	6020 ICV (Ag only)	.1 ml	10 ug/ml	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334462

Prepared By: Cousineau, Paul
Description: ICB/CCB WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: 0 ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-334463

Prepared By: Cousineau, Paul
Description: ICSA WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	
12856	Interferents A	2.5 ml	NEAT mg/l	

Veritech Lot Number: V-334464

Prepared By: Cousineau, Paul
Description: LRS WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	2.5 %
V-333325	6020 CALIBRATION STOCK	10 ml	VARIOUS pp	

Veritech Lot Number: V-334465

Prepared By: Cousineau, Paul
Description: CCV WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-334466

Prepared By: Cousineau, Paul
Description: LL-ICV/CCV SOIL WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
12979	LLICV/CCV SOIL	1 ml	NEAT neat	
V-329062	Antimony Intermediate 1PPM	.3 ml	1000 ppb	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12856

Description
Interferents A

ApprovedBy: carmela
ApproveDate: 12/09/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-A1	CL51-020CRY	10/31/19	10/30/20	Cousineau, Paul	1		NEAT	mg/l

Veritech Control/Receipt Number: 12979

Description
LLICV/CCV SOIL

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	ZHCV-13-100	53-093CR	01/06/20	12/30/20	Aliano, Carmela	1	125ml	NEAT	NEAT

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13251

Description
nitric acid

ApprovedBy: jean
ApproveDate: 05/27/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	245675	05/19/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13296

Description
ANTIMONY 1000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSB7-2Y	24-153SBY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13297

Description
SELENIUM 1000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSE2-2Y	25-14SEY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13304

Description
ALUMINUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLAL2-3X	AP18-72ALX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13305

Description
CALCIUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLCA2-3X	AZ18-49CAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13306

Description
MAGNESIUM 10000PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLMG2-3X	AP18-57MGX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13307

Description
SODIUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLNA2-3X	AT18-84NAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13308

Description
IRON 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLFE2-3X	AR18-89FEX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13309

Description
POTASSIUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLK2-3X	AX18-77KX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13314

Description
6020 ICV (Ag only)

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-113	S200519030	06/04/20	05/31/21	Cousineau, Paul	1	125 M	10	UG/ML

Veritech Control/Receipt Number: 13315

Description
6020 ICV

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-112	S200519029	06/04/20	05/31/21	Cousineau, Paul	1	125 M	MULTI	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13323

Description
CAL STD

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-CAL-1	CL51-013CRY	06/15/20	06/30/21	Cousineau, Paul	1	125M	20	UG/ML

Veritech Control/Receipt Number: 13331

Description
Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13391

Description
nitric acid

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	07/14/20	02/03/25	Lopez, Jose	4	2.5	neat	neat

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Control/Receipt Number: 13067

Description
hrydrogen peroxide`

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	H325-4	197718	02/19/20	01/31/25	Lopez, Jose	4	4L	neat	neat

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: S091120AN Sample ID: CalBlk V-334455 Sample Date 09/11/20 Sample Time: 10:35

IS ID:	Area	Area Limit		
Ho-1	2269892.73	1588924.911	-	2950860.549
In-1	1541461.12	1079022.784	-	2003899.456
Sc-1	943267.99	660287.593	-	1226248.387
Tb-1	2290443.33	1603310.331	-	2977576.329

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area		Area	Area	Area	Area
ISBLK	CalBlk V-334455	2	2269892.	1541461.	943267.9	2290443.					
SMP	RINSE	1	2228347.	1508709.	926682.7	2276311.					
CAL	CalStd1 V-33445	3	2290067.	1559120.	958370.8	2315697.					
CAL	CalStd2 V-33445	4	2317409.	1557419.	983537.3	2362716.					
CAL	CalStd3 V-33445	5	2281937.	1537625.	960102.6	2328559.					
CAL	CalStd4 V-33445	6	2309096.	1537039.	974320.1	2343874.					
CAL	CalStd5 V-33446	7	2315366.	1527887.	965799.1	2318148.					
ICV	ICV V-334461	8	2305545.	1569150.	985147.2	2351890.					
LLICV	LLICV V-334466	9	2322583.	1565181.	983761.7	2372178.					
ICB	ICB V-334462	10	2278721.	1539503.	965346.7	2316812.					
ICSA	ICSA V-334463	11	2454295.	1586743.	1042704.	2481062.					
SMP	RINSE	12	2493493.	1716243.	1051370.	2527037.					
LRS	LRS V-334464	13	2402584.	1578439.	1021426.	2450021.					
SMP	RINSE	14	2451830.	1668883.	1048116.	2499513.					
SMP	RINSE	15	2368689.	1605909.	992706.0	2394194.					
CCV	CCV V-334465	16	2348283.	1583182.	990178.7	2382194.					
CCB	CCB V-334462	17	2324964.	1559697.	967437.6	2356237.					
MB	MB 85270	18	2374817.	1602535.	978001.0	2414486.					
LCS	LCS 85270	19	2430451.	1590173.	1024933.	2451498.					
MR	LCS MR 85270	20	2419646.	1565816.	1010282.	2473193.					
SMP	AD19159-004	21	2468303.	1515636.	1246401.	* 2471112.					
MR	AD19159-004	22	2498897.	1528652.	1233141.	* 2516033.					
SD	AD19159-004	23	2399104.	1556448.	984079.7	2432037.					
MS	AD19159-005	24	2435132.	1521683.	1245904.	* 2468725.					
MSD	AD19159-006	25	2395423.	1471312.	1234982.	* 2413946.					
PS	AD19159-004	26	2404431.	1470559.	1201005.	2439179.					
SMP	RINSE	27	2292412.	1523140.	921325.2	2324077.					
CCV	CCV V-334465	28	2237611.	1492870.	920756.3	2260611.					
CCB	CCB V-334462	29	2178584.	1475028.	915145.4	2215051.					
SMP	AD19159-001	30	2405673.	1429974.	1265205.	* 2427716.					
SMP	AD19159-002	31	2453686.	1500636.	1155261.	2464088.					
SMP	AD19159-003	32	2417906.	1486405.	1101953.	2439783.					
SMP	AD19159-007	33	2470570.	1505702.	1278912.	* 2484354.					
SMP	AD19159-008	34	2405251.	1514227.	1045651.	2433565.					
SMP	AD19159-009	35	2429525.	1517769.	1039984.	2457214.					
SMP	AD19159-010	36	2493778.	1517846.	1297520.	* 2523242.					
SMP	AD19160-001	37	2518313.	1494785.	1509789.	* 2564768.					
SMP	AD19160-002	38	2451187.	1408047.	1311769.	* 2461661.					
SMP	RINSE	39	2254756.	1509761.	910052.1	2317717.					
CCV	CCV V-334465	40	2186500.	1457394.	900000.0	2227617.					
CCB	CCB V-334462	41	2186562.	1462742.	895292.0	2217536.					
SMP	AD19067-003	42	2257644.	1455766.	1013408.	2299851.					
SMP	AD19163-001	43	2314374.	1513091.	959024.1	2351615.					
SMP	AD19164-001	44	2237771.	1418621.	985814.9	2241230.					
SMP	RINSE	45	2120011.	1324002.	863477.2	2142706.					
CCV	CCV V-334465	46	2178006.	1400045.	881903.1	2199770.					
CCB	CCB V-334462	47	2208674.	1466800.	898491.3	2206464.					

* Indicates Internal Standard Area outside of limits

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S26211A3.txt

Analysis Date: 09/14/20 **Instrument:** PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	10:04	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	10:08	2							V-333671(LLICV/LLCCV soil)
CALST3 V-333666	1	CAL	10:12	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	10:16	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	10:20	5							V-333673(CCV)
ICB V-333667	1	ICB	10:24	6							V-333667(ICB/CCB)
LRS V-333662	1	LRS	10:28	7	MET-TAL6010S	SOIL	SOIL	SW846	85269		V-333662(LRS)
ICS3 V-333666	1	ICS	10:32	8							V-333666(ICS3 - Middle Std)
RINSE	1	NA	10:36	9		SOIL	SOIL	SW846	85269		()
LLICV V-333671	1	LLICV	10:40	10	MET-TAL6010S	SOIL	SOIL	SW846	85269		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	10:44	11							V-333668(ICSA)
CCV V-333673	1	CCV	10:49	12							V-333673(CCV)
CCB V-333667	1	CCB	10:53	13							V-333667(ICB/CCB)
MB 85269 (100)	1	MB	10:57	14	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
LCS 85269	1	LCS	11:00	15	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
LCS MR 85269	1	LCS	11:06	16	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19159-004	1	SMP	11:10	17	MET-TAL6010S	SOIL	SOIL	SW846	85269	Ca NOT REPORTED	()
AD19159-004	1	MR	11:15	18	MET-TAL6010S	SOIL	SOIL	SW846	85269	Ca NOT REPORTED>LR	()
AD19159-005	1	MS	11:20	19	MET-TAL6010S	SOIL	SOIL	SW846	85269	Ca NOT REPORTED	()
AD19159-006	1	MSD	11:25	20	MET-TAL6010S	SOIL	SOIL	SW846	85269	Ca NOT REPORTED>LR	()
AD19159-004	1	PS	11:29	21	MET-TAL6010S	SOIL	SOIL	SW846	85269	Ca NOT REPORTED	()
AD19159-004	5	SD	11:34	22	MET-TAL6010S	SOIL	SOIL	SW846	85269	Ca NOT REPORTED	()
CCV V-333673	1	CCV	11:38	23							V-333673(CCV)
CCB V-333667	1	CCB	11:42	24							V-333667(ICB/CCB)
AD19159-001	1	SMP	11:46	25	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19159-002	1	SMP	11:51	26	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19159-003	1	SMP	11:56	27	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19159-007	1	SMP	12:00	28	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19159-008	1	SMP	12:04	29	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19159-009	1	SMP	12:08	30	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
CCV V-333673	1	CCV	12:13	31							V-333673(CCV)
CCB V-333667	1	CCB	12:17	32							V-333667(ICB/CCB)
AD19159-010	1	SMP	12:21	33	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19160-001	1	SMP	12:26	34	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19160-002	1	SMP	12:31	35	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19067-003	1	SMP	12:36	36	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19163-001	1	SMP	12:40	37	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
AD19164-001	1	SMP	12:44	38	MET-TAL6010S	SOIL	SOIL	SW846	85269		()
CCV V-333673	1	CCV	12:47	39							V-333673(CCV)
CCB V-333667	1	CCB	12:51	40							V-333667(ICB/CCB)
MB 85275 (100)	1	MB	12:55	41	PB-SOIL	SOIL	SOIL	SW846	85275		()
LCS 85275	1	LCS	12:59	42	PB-SOIL	SOIL	SOIL	SW846	85275		()
LCS MR 85275	1	LCS	13:04	43	PB-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-001	1	SMP	13:09	44	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-001	1	MR	13:13	45	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-001	1	MS	13:16	46	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-001	1	MSD	13:20	47	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-001	1	PS	13:24	48	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-001	5	SD	13:28	49	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
CCV V-333673	1	CCV	13:32	50							V-333673(CCV)
CCB V-333667	1	CCB	13:36	51							V-333667(ICB/CCB)
AD19192-002	1	SMP	13:40	52	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
AD19192-003	1	SMP	13:44	53	MET-1-SOIL	SOIL	SOIL	SW846	85275		()
CCV V-333673	1	CCV	13:48	54							V-333673(CCV)
CCB V-333667	1	CCB	13:52	55							V-333667(ICB/CCB)
AD19155-004	1	SMP	13:56	56	PB-SOIL	SOIL	SOIL	SW846	85275		()
AD19155-005	1	SMP	14:00	57	PB-SOIL	SOIL	SOIL	SW846	85275		()
AD19155-006	1	SMP	14:04	58	PB-SOIL	SOIL	SOIL	SW846	85275		()
AD19155-007	1	SMP	14:08	59	PB-SOIL	SOIL	SOIL	SW846	85275		()
AD19173-001	1	SMP	14:12	60	PB-SOIL	SOIL	SOIL	SW846	85275		()

Comments/Reviewedby:

olufemi
192.168.1.105 9/15/2020 1:11:37 PM

RUN IS OK
All elements reported, except Na, K

9/15/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S262I1A3.txt

Analysis Date: 09/14/20

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
AD19173-002	1	SMP	14:16	61	PB-SOIL	SOIL	SOIL	SW846	85275		()
AD19173-003	1	SMP	14:20	62	PB-SOIL	SOIL	SOIL	SW846	85275		()
CCV V-325355	1	CCV	14:24	63							V-325355(CCV)
CCB V-325347	1	CCB	14:28	64							V-325347(ICB/CCB)

Comments/Reviewedby:

olufemi
192.168.1.105 9/15/2020 1:11:37 PM

RUN IS OK
All elements reported, except Na, K

9/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26211S.txt

Analysis Date: 09/11/20 **Instrument:** HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	11:04	1							0
.2 PPB	1	CAL	11:05	2							0
.5 PPB	1	CAL	11:07	3							0
1 PPB	1	CAL	11:08	4							0
2 PPB	1	CAL	11:09	5							0
5 PPB	1	CAL	11:11	6							0
10 PPB	1	CAL	11:12	7							0
25 PPB	1	CAL	11:14	8							0
ICV (2)	1	ICV	11:16	9							0
ICB	1	ICB	11:17	10							0
MB 85269 (167)	1	MB	11:19	11	HG-SOIL	SOIL	SOIL	SW846	85269		0
LCS 85269	1	NA	11:20	12	HG-SOIL	SOIL	SOIL	SW846	85269	Conc. Is greater than calibration limits.	0
LCS MR 85269	1	NA	11:22	13	HG-SOIL	SOIL	SOIL	SW846	85269	Conc. Is greater than calibration limits	0
LCS 4D	4	LCS	11:23	14	HG-SOIL	SOIL	SOIL	SW846	85269		0
LCS 4D MR	4	LCS	11:25	15	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19159-004	1	SMP	11:26	16	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19159-004	1	MR	11:27	17	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19159-005	1	MS	11:29	18	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19159-006	1	MSD	11:31	19	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19159-001	1	SMP	11:32	20	HG-SOIL	SOIL	SOIL	SW846	85269		0
CCV	1	CCV	11:34	21							0
CCB	1	CCB	11:35	22							0
AD19159-002	1	SMP	11:37	23	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19159-003	1	SMP	11:38	24	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19159-007	1	SMP	11:39	25	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19159-008	1	SMP	11:41	26	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19159-009	1	SMP	11:42	27	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19159-010	1	SMP	11:43	28	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19160-001	1	SMP	11:45	29	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19160-002	1	SMP	11:46	30	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19067-003	1	SMP	11:47	31	HG-SOIL	SOIL	SOIL	SW846	85269		0
AD19163-001	1	SMP	11:49	32	HG-SOIL	SOIL	SOIL	SW846	85269		0
CCV	1	CCV	11:50	33							0
CCB	1	CCB	11:52	34							0
AD19164-001	1	SMP	11:53	35	HG-SOIL	SOIL	SOIL	SW846	85269		0
CCV	1	CCV	11:54	36							0
CCB	1	CCB	11:56	37							0

Comments/Reviewedby:

bransaw
192.168.1.120 9/11/2020 12:17:49 PM

OK

9/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334628

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS3_7700SWA\S091120ANEW.txt

Analysis Date: 09/11/20

Instrument: MS3_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	10:31	1		SOIL	SOIL	SW846	85270		()
CalBlk V-334455	1	ISBLK	10:35	2		SOIL	SOIL				V-334455(Cal Blk WARNING)
CalStd1 V-334456	1	CAL	10:40	3							V-334456(Cal Std-1 WARNING)
CalStd2 V-334457	1	CAL	10:44	4							V-334457(Cal Std-2 WARNING)
CalStd3 V-334458	1	CAL	10:49	5							V-334458(Cal Std-3 WARNING)
CalStd4 V-334459	1	CAL	10:53	6							V-334459(Cal Std-4 WARNING)
CalStd5 V-334460	1	CAL	10:58	7							V-334460(Cal Std-5 WARNING)
ICV V-334461	1	ICV	11:02	8							V-334461(ICV WARNING)
LLICV V-334466	1	LLICV	11:07	9		SOIL	SOIL	SW846	85270		V-334466(LL-ICV/CCV SOIL WARNING)
ICB V-334462	1	ICB	11:11	10							V-334462(ICB/CCB WARNING)
ICSA V-334463	1	ICSA	11:16	11							V-334463(ICSA WARNING)
RINSE	1	NA	11:20	12		SOIL	SOIL	SW846	85270		()
LRS V-334464	1	LRS	11:25	13		SOIL	SOIL	SW846	85270	Ag fail	V-334464(LRS WARNING)
RINSE	1	NA	11:29	14		SOIL	SOIL	SW846	85270		()
RINSE	1	NA	11:33	15		SOIL	SOIL	SW846	85270		()
CCV V-334465	1	CCV	11:38	16							V-334465(CCV WARNING)
CCB V-334462	1	CCB	11:42	17							V-334462(ICB/CCB WARNING)
MB 85270	1	MB	11:47	18		SOIL	SOIL	SW846	85270		()
LCS 85270	1	LCS	11:51	19		SOIL	SOIL	SW846	85270		()
LCS MR 85270	1	LCS	11:56	20		SOIL	SOIL	SW846	85270		()
AD19159-004	1	SMP	12:00	21	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19159-004	1	MR	12:04	22	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19159-004	5	SD	12:09	23	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19159-005	1	MS	12:13	24	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19159-006	1	MSD	12:18	25	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19159-004	1	PS	12:22	26	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
RINSE	1	NA	12:26	27		SOIL	SOIL	SW846	85270		()
CCV V-334465	1	CCV	12:31	28							V-334465(CCV WARNING)
CCB V-334462	1	CCB	12:35	29							V-334462(ICB/CCB WARNING)
AD19159-001	1	SMP	12:40	30	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19159-002	1	SMP	12:44	31	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19159-003	1	SMP	12:48	32	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19159-007	1	SMP	12:53	33	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19159-008	1	SMP	12:57	34	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19159-009	1	SMP	13:02	35	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19159-010	1	SMP	13:06	36	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19160-001	1	SMP	13:10	37	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19160-002	1	SMP	13:15	38	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
RINSE	1	NA	13:19	39		SOIL	SOIL	SW846	85270		()
CCV V-334465	1	CCV	13:24	40							V-334465(CCV WARNING)
CCB V-334462	1	CCB	13:28	41							V-334462(ICB/CCB WARNING)
AD19067-003	1	SMP	13:33	42	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19163-001	1	SMP	13:37	43	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
AD19164-001	1	SMP	13:42	44	MET-TAL6020S	SOIL	SOIL	SW846	85270		()
RINSE	1	NA	13:46	45		SOIL	SOIL	SW846	85270		()
CCV V-334465	1	CCV	13:51	46							V-334465(CCV WARNING)
CCB V-334462	1	CCB	13:55	47							V-334462(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.87 9/14/2020 8:19:24 AM

Run ok. Report Ag, As, Be, Cd, Sb, Se, Tl, V. LRS fail for Ag. Ag LR = 100ppb. PC.

9/14/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 1e 9/14/20

Standard/Batch/SnCl2 Lot #:

ICPMS Internal Standard Summary Report

TuneID: 2

Batch/FileID: S091120AN Sample ID: CalBlk V-334455 Sample Date 09/11/20 Sample Time: 10:35

IS ID:	Area	Area Limit		
Ho-2	995473.27	696831.289	-	1294115.251
In-2	302667.71	211867.397	-	393468.023
Sc-2	47160.90	33012.63	-	61309.17
Tb-2	989980.19	692986.133	-	1286974.247

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-334455	2	995473.2	302667.7	47160.90	989980.1				
SMP	RINSE	1	980316.7	302431.6	46462.45	976029.5				
CAL	CalStd1 V-33445	3	1009276.	307843.6	47894.66	1008473.				
CAL	CalStd2 V-33445	4	1029425.	313065.9	49121.43	1030170.				
CAL	CalStd3 V-33445	5	1023053.	312573.7	49198.26	1027216.				
CAL	CalStd4 V-33445	6	1048254.	317005.1	49798.61	1048391.				
CAL	CalStd5 V-33446	7	1035066.	310129.2	49424.35	1030270.				
ICV	ICV V-334461	8	1042027.	316406.5	49170.25	1035812.				
LLICV	LLICV V-334466	9	1043657.	319596.4	49887.73	1036113.				
ICB	ICB V-334462	10	1021894.	315377.4	49377.47	1022136.				
ICSA	ICSA V-334463	11	1091923.	318055.0	54039.25	1086714.				
SMP	RINSE	12	1097199.	336652.8	52590.63	1090629.				
LRS	LRS V-334464	13	1072039.	320382.8	52786.71	1068393.				
SMP	RINSE	14	1082126.	336676.4	52614.04	1086492.				
SMP	RINSE	15	1042450.	323103.0	49754.16	1044124.				
CCV	CCV V-334465	16	1046820.	317933.6	50034.81	1048375.				
CCB	CCB V-334462	17	1034072.	316743.8	49055.61	1033160.				
MB	MB 85270	18	1037756.	309541.7	48606.69	1033188.				
LCS	LCS 85270	19	1045018.	303406.3	49268.34	1042615.				
MR	LCS MR 85270	20	1044758.	301317.6	48709.21	1039093.				
SMP	AD19159-004	21	1043915.	286533.6	57366.35	1036909.				
MR	AD19159-004	22	1060162.	288638.8	56935.30	1055872.				
SD	AD19159-004	23	1033998.	299129.6	48815.98	1027236.				
MS	AD19159-005	24	1049388.	288083.6	56914.30	1044429.				
MSD	AD19159-006	25	1013881.	281550.8	56189.70	1012438.				
PS	AD19159-004	26	1024165.	276180.7	55326.23	1018754.				
SMP	RINSE	27	1004030.	300352.2	45602.53	1000336.				
CCV	CCV V-334465	28	995818.6	297231.4	46117.33	990234.4				
CCB	CCB V-334462	29	997357.5	303860.4	47039.33	991048.7				
SMP	AD19159-001	30	1016861.	274023.3	57551.93	1008167.				
SMP	AD19159-002	31	1043463.	284299.0	54204.08	1027304.				
SMP	AD19159-003	32	1018045.	280029.8	52157.21	1009341.				
SMP	AD19159-007	33	1048449.	280565.0	58663.81	1035783.				
SMP	AD19159-008	34	1020270.	280702.8	49207.01	1010297.				
SMP	AD19159-009	35	1024495.	284877.2	50797.94	1021735.				
SMP	AD19159-010	36	1049938.	281866.1	59826.76	1041179.				
SMP	AD19160-001	37	1057522.	276723.1	68957.07 *	1060873.				
SMP	AD19160-002	38	1036148.	265321.2	59438.70	1020296.				
SMP	RINSE	39	980672.3	291984.7	44673.76	974554.4				
CCV	CCV V-334465	40	972036.1	289219.5	44858.42	965313.5				
CCB	CCB V-334462	41	967331.1	293146.9	45141.41	959267.4				
SMP	AD19067-003	42	985198.2	280901.7	50068.30	978922.3				
SMP	AD19163-001	43	983199.4	282380.8	45399.93	990082.1				
SMP	AD19164-001	44	980960.6	284353.3	47816.75	970041.7				
SMP	RINSE	45	959131.4	290027.9	44002.10	956598.0				
CCV	CCV V-334465	46	976642.8	290952.2	44519.99	969425.5				
CCB	CCB V-334462	47	984440.5	299959.6	46108.52	979516.9				

* Indicates Internal Standard Area outside of limits

S26211A3 26211/85269 SOIL

Analysis Begun

Start Time: 9/14/2020 10:04:34 AM
Logged In Analyst: usermet
Spectrometer Model: Optima 7300 DV, S/N No Serial #
Plasma On Time: 9/14/2020 8:58:44 AM
Technique: ICP Continuous
Autosampler Model: S10

Sample Information File: C:\pe\Administrator\Sample Information\09.14.20.sif
Batch ID:
Results Data Set: S26211A3
Results Library: C:\pe\Administrator\Results\Results.mdb

Method Loaded
Method Name: PE3 7300DV SOIL AX
IEC File: IEC072420A.iec
Method Description: 6010D (SOIL)
Method Last Saved: 9/10/2020 5:13:24 PM
MSF File:

Sequence No.: 1
Sample ID: CALBLK V-333667
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 9/14/2020 10:04:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-333667

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	382422.9	6064.86	1.59%	100	%
Y 371.029	173455.2	2430.95	1.40%	100	%
Ag 328.068†	-295.2	68.11	23.08%	[0.00]	mg/L
Al 308.215†	2328.4	33.07	1.42%	[0.00]	mg/L
As 188.979†	2.2	0.36	15.83%	[0.00]	mg/L
Ba 233.527†	-19.2	6.93	36.03%	[0.00]	mg/L
Be 313.107†	-1084.5	53.36	4.92%	[0.00]	mg/L
Ca 317.933†	2306.6	43.02	1.87%	[0.00]	mg/L
Cd 228.802†	132.3	7.55	5.71%	[0.00]	mg/L
Co 228.616†	-41.1	10.26	24.97%	[0.00]	mg/L
Cr 267.716†	25.7	17.62	68.67%	[0.00]	mg/L
Cu 327.393†	-314.6	19.23	6.11%	[0.00]	mg/L
Fe 273.955†	-876.0	12.21	1.39%	[0.00]	mg/L
K 404.721†	55271.0	1124.13	2.03%	[0.00]	mg/L
Mg 279.077†	-609.5	17.68	2.90%	[0.00]	mg/L
Mn 257.610†	4.7	14.20	303.26%	[0.00]	mg/L
Mo 202.031†	149.3	6.48	4.34%	[0.00]	mg/L
Na 330.237†	457.4	35.41	7.74%	[0.00]	mg/L
Ni 231.604†	8.2	6.00	72.92%	[0.00]	mg/L
Pb 220.353†	48.3	2.72	5.63%	[0.00]	mg/L
Sb 206.836†	42.2	3.38	7.99%	[0.00]	mg/L
Se 196.026†	42.2	11.12	26.36%	[0.00]	mg/L
Sn 189.927†	-7.6	3.40	44.44%	[0.00]	mg/L
Ti 334.940†	191.8	34.00	17.73%	[0.00]	mg/L
Tl 190.801†	-49.5	6.58	13.28%	[0.00]	mg/L
V 290.880†	1255.2	7.10	0.57%	[0.00]	mg/L
Zn 206.200†	-102.1	5.69	5.57%	[0.00]	mg/L
B 249.772†	160.8	4.57	2.84%	[0.00]	mg/L
Si 251.611†	269.4	12.90	4.79%	[0.00]	mg/L
Ce 413.764†	-1874.4	99.45	5.31%	[0.00]	mg/L

26211/85269

All elements reported, except Na, K.

QC — 19159.004
.004 MR
MS1 19159.005 MS1
MS2 19159.006 MS2
} Ca NOT reported

Sequence No.: 2
Sample ID: CALST2 V-333671
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 9/14/2020 10:08:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST2 V-333671

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	374363.6	2556.72	0.68%	97.9	%
Y 371.029	169074.2	940.48	0.56%	97.5	%
Ag 328.068†	1351.8	40.16	2.97%	[0.015]	mg/L
Al 308.215†	16329.3	143.42	0.88%	[2]	mg/L
As 188.979†	63.2	2.21	3.50%	[0.04]	mg/L
Ba 233.527†	8144.9	17.18	0.21%	[0.1]	mg/L
Be 313.107†	12790.7	106.36	0.83%	[0.012]	mg/L
Ca 317.933†	829495.9	5396.04	0.65%	[10]	mg/L
Cd 228.802†	332.9	12.22	3.67%	[0.012]	mg/L
Co 228.616†	598.3	1.51	0.25%	[0.025]	mg/L
Cr 267.716†	3092.5	32.14	1.04%	[0.05]	mg/L
Cu 327.393†	3157.6	63.82	2.02%	[0.05]	mg/L
Fe 273.955†	15824.8	101.79	0.64%	[2]	mg/L
K 404.721†	713.6	329.41	46.16%	[5]	mg/L
Mg 279.077†	46946.6	349.13	0.74%	[5]	mg/L
Mn 257.610†	25533.9	116.25	0.46%	[0.1]	mg/L
Mo 202.031†	246.3	6.87	2.79%	[0.025]	mg/L
Na 330.237†	704.2	32.50	4.62%	[2.5]	mg/L
Ni 231.604†	1258.0	7.31	0.58%	[0.05]	mg/L
Pb 220.353†	281.5	6.77	2.41%	[0.05]	mg/L
Sb 206.836†	78.1	9.67	12.38%	[0.04]	mg/L
Se 196.026†	90.1	2.18	2.42%	[0.05]	mg/L
Sn 189.927†	1058.6	18.50	1.75%	[0.2]	mg/L
Ti 334.940†	24716.8	157.35	0.64%	[0.1]	mg/L
Tl 190.801†	102.9	9.46	9.19%	[0.05]	mg/L
V 290.880†	4338.3	64.78	1.49%	[0.1]	mg/L
Zn 206.200†	4132.2	10.49	0.25%	[0.1]	mg/L
B 249.772†	11714.3	188.51	1.61%	[0.2]	mg/L
Si 251.611†	2962.4	6.42	0.22%	[0.1]	mg/L
Ce 413.764†	764.1	47.19	6.18%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-333666
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 3
Date Collected: 9/14/2020 10:12:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST3 V-333666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	381707.0	3340.10	0.88%	99.8	%
Y 371.029	144025.9	1123.53	0.78%	83.0	%
Ag 328.068†	7530.9	42.38	0.56%	[0.1]	mg/L
Al 308.215†	39320.5	55.31	0.14%	[5]	mg/L
As 188.979†	837.9	4.62	0.55%	[0.5]	mg/L
Ba 233.527†	37789.6	40.63	0.11%	[0.5]	mg/L
Be 313.107†	532487.3	7664.58	1.44%	[0.5]	mg/L
Ca 317.933†	3875256.3	52219.52	1.35%	[50]	mg/L
Cd 228.802†	12919.2	21.39	0.17%	[0.5]	mg/L
Co 228.616†	11458.2	30.48	0.27%	[0.5]	mg/L
Cr 267.716†	28374.0	67.39	0.24%	[0.5]	mg/L
Cu 327.393†	30862.9	115.28	0.37%	[0.5]	mg/L
Fe 273.955†	38227.5	28.80	0.08%	[5]	mg/L
K 404.721†	1539.5	488.61	31.74%	[50]	mg/L
Mg 279.077†	430820.0	5033.29	1.17%	[50]	mg/L
Mn 257.610†	124425.0	77.59	0.06%	[0.5]	mg/L
Mo 202.031†	4786.1	44.58	0.93%	[0.5]	mg/L
Na 330.237†	17327.9	22.41	0.13%	[50]	mg/L
Ni 231.604†	11688.7	27.03	0.23%	[0.5]	mg/L
Pb 220.353†	2761.4	30.31	1.10%	[0.5]	mg/L
Sb 206.836†	910.0	15.34	1.69%	[0.5]	mg/L
Se 196.026†	807.4	9.60	1.19%	[0.5]	mg/L
Sn 189.927†	2578.7	15.43	0.60%	[0.5]	mg/L
Ti 334.940†	123577.1	309.94	0.25%	[0.5]	mg/L
Tl 190.801†	917.1	13.65	1.49%	[0.5]	mg/L
V 290.880†	21253.1	92.95	0.44%	[0.5]	mg/L
Zn 206.200†	19878.4	47.76	0.24%	[0.5]	mg/L
B 249.772†	30720.5	101.32	0.33%	[0.5]	mg/L
Si 251.611†	99025.5	9.15	0.01%	[5]	mg/L
Ce 413.764†	30960.9	527.81	1.70%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-333665
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 9/14/2020 10:16:15 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST4 V-333665

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	366232.3	3415.94	0.93%	95.8	%
Y 371.029	113705.5	832.24	0.73%	65.6	%
Ag 328.068†	15293.8	19.74	0.13%	[0.2]	mg/L
Al 308.215†	79335.8	181.71	0.23%	[10]	mg/L
As 188.979†	1676.2	7.97	0.48%	[1]	mg/L
Ba 233.527†	76125.5	161.48	0.21%	[1]	mg/L
Be 313.107†	1089050.9	11582.76	1.06%	[1]	mg/L
Ca 317.933†	7916892.0	82280.63	1.04%	[100]	mg/L
Cd 228.802†	27212.3	88.84	0.33%	[1]	mg/L
Co 228.616†	23586.6	77.25	0.33%	[1]	mg/L
Cr 267.716†	57078.3	99.11	0.17%	[1]	mg/L
Cu 327.393†	62421.8	86.43	0.14%	[1]	mg/L
Fe 273.955†	76374.2	164.01	0.21%	[10]	mg/L
K 404.721†	5347.5	603.85	11.29%	[100]	mg/L
Mg 279.077†	866544.1	10161.79	1.17%	[100]	mg/L
Mn 257.610†	249677.8	262.84	0.11%	[1]	mg/L
Mo 202.031†	9617.9	42.68	0.44%	[1]	mg/L
Na 330.237†	37009.9	180.27	0.49%	[100]	mg/L
Ni 231.604†	24193.2	106.38	0.44%	[1]	mg/L
Pb 220.353†	5437.5	18.39	0.34%	[1]	mg/L
Sb 206.836†	1824.0	8.05	0.44%	[1]	mg/L
Se 196.026†	1624.4	4.34	0.27%	[1]	mg/L
Sn 189.927†	5158.7	25.82	0.50%	[1]	mg/L
Ti 334.940†	249761.8	186.59	0.07%	[1]	mg/L
Tl 190.801†	1801.8	9.32	0.52%	[1]	mg/L
V 290.880†	43713.1	206.35	0.47%	[1]	mg/L
Zn 206.200†	39830.6	24.79	0.06%	[1]	mg/L
B 249.772†	63365.9	204.70	0.32%	[1]	mg/L
Si 251.611†	200546.8	315.38	0.16%	[10]	mg/L
Ce 413.764†	62533.4	2136.98	3.42%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	70.3	75860	0.00000	0.999850	
Al 308.215	3	Lin, Calc Int	126.1	7911	0.00000	0.999958	
As 188.979	3	Lin, Calc Int	-1.8	1678	0.00000	0.999998	
Ba 233.527	3	Lin, Calc Int	185.4	75820	0.00000	0.999960	
Be 313.107	3	Lin, Calc Int	-2317.6	1087000	0.00000	0.999935	
Ca 317.933	3	Lin, Calc Int	1338.8	78850	0.00000	0.999906	
Cd 228.802	3	Lin, Calc Int	-122.2	27090	0.00000	0.999654	
Co 228.616	3	Lin, Calc Int	-57.2	23520	0.00000	0.999888	
Cr 267.716	3	Lin, Calc Int	77.3	56930	0.00000	0.999984	
Cu 327.393	3	Lin, Calc Int	-47.3	62340	0.00000	0.999981	
Fe 273.955	3	Lin, Calc Int	238.0	7616	0.00000	0.999971	
K 404.721	3	Lin, Calc Int	-6.6	49.21	0.00000	0.962650	
Mg 279.077	3	Lin, Calc Int	1182.0	8642	0.00000	0.999984	
Mn 257.610	3	Lin, Calc Int	174.3	249300	0.00000	0.999995	
Mo 202.031	3	Lin, Calc Int	-1.5	9611	0.00000	0.999996	
Na 330.237	3	Lin, Calc Int	-314.8	369.2	0.00000	0.999485	
Ni 231.604	3	Lin, Calc Int	-52.9	24100	0.00000	0.999828	
Pb 220.353	3	Lin, Calc Int	12.1	5440	0.00000	0.999968	
Sb 206.836	3	Lin, Calc Int	2.0	1821	0.00000	0.999995	
Se 196.026	3	Lin, Calc Int	3.1	1619	0.00000	0.999977	
Sn 189.927	3	Lin, Calc Int	11.1	5148	0.00000	0.999984	
Ti 334.940	3	Lin, Calc Int	-356.9	249700	0.00000	0.999985	
Tl 190.801	3	Lin, Calc Int	8.7	1798	0.00000	0.999951	
V 290.880	3	Lin, Calc Int	-126.6	43630	0.00000	0.999890	
Zn 206.200	3	Lin, Calc Int	59.3	39750	0.00000	0.999991	
B 249.772	3	Lin, Calc Int	-587.9	63620	0.00000	0.999807	
Si 251.611	3	Lin, Calc Int	207.3	19980	0.00000	0.999962	

Ce 413.764	3	Lin, Calc Int	7.3	6240	0.00000	0.999982

Sequence No.: 5 Autosampler Location: 6
Sample ID: ICV V-333673 Date Collected: 9/14/2020 10:20:22 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICV V-333673

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	376617.7	98.5	%	1.70				1.73%
Y 371.029	142011.4	81.9	%	1.51				1.84%
Ag 328.068†	7675.0	0.100248	mg/L	0.0007104	0.100248	mg/L	0.0007104	0.71%
QC value within limits for Ag 328.068 Recovery = 100.25%								
Al 308.215†	39162.8	4.94987	mg/L	0.017662	4.94987	mg/L	0.017662	0.36%
QC value within limits for Al 308.215 Recovery = 99.00%								
As 188.979†	838.1	0.501334	mg/L	0.0089476	0.501334	mg/L	0.0089476	1.78%
QC value within limits for As 188.979 Recovery = 100.27%								
Ba 233.527†	37679.1	0.494484	mg/L	0.0006486	0.494484	mg/L	0.0006486	0.13%
QC value within limits for Ba 233.527 Recovery = 98.90%								
Be 313.107†	541365.6	0.500152	mg/L	0.0098044	0.500152	mg/L	0.0098044	1.96%
QC value within limits for Be 313.107 Recovery = 100.03%								
Ca 317.933†	4099660.4	51.9750	mg/L	1.00460	51.9750	mg/L	1.00460	1.93%
QC value within limits for Ca 317.933 Recovery = 103.95%								
Cd 228.802†	12915.9	0.481370	mg/L	0.0017392	0.481370	mg/L	0.0017392	0.36%
QC value within limits for Cd 228.802 Recovery = 96.27%								
Co 228.616†	12032.4	0.513958	mg/L	0.0081479	0.513958	mg/L	0.0081479	1.59%
QC value within limits for Co 228.616 Recovery = 102.79%								
Cr 267.716†	28624.3	0.501473	mg/L	0.0006544	0.501473	mg/L	0.0006544	0.13%
QC value within limits for Cr 267.716 Recovery = 100.29%								
Cu 327.393†	31079.6	0.499285	mg/L	0.0019372	0.499285	mg/L	0.0019372	0.39%
QC value within limits for Cu 327.393 Recovery = 99.86%								
Fe 273.955†	38426.4	5.01413	mg/L	0.021356	5.01413	mg/L	0.021356	0.43%
QC value within limits for Fe 273.955 Recovery = 100.28%								
K 404.721†	2491.5	0.811989	mg/L	21.9040516	0.811989	mg/L	21.9040516	>999.9%
QC value less than the lower limit for K 404.721 Recovery = 1.62%								
Mg 279.077†	447079.4	51.5937	mg/L	1.06794	51.5937	mg/L	1.06794	2.07%
QC value within limits for Mg 279.077 Recovery = 103.19%								
Mn 257.610†	123997.5	0.496609	mg/L	0.0012461	0.496609	mg/L	0.0012461	0.25%
QC value within limits for Mn 257.610 Recovery = 99.32%								
Mo 202.031†	4812.2	0.500867	mg/L	0.0074710	0.500867	mg/L	0.0074710	1.49%
QC value within limits for Mo 202.031 Recovery = 100.17%								
Na 330.237†	17924.7	49.4043	mg/L	0.30093	49.4043	mg/L	0.30093	0.61%
QC value within limits for Na 330.237 Recovery = 98.81%								
Ni 231.604†	11691.3	0.487358	mg/L	0.0004567	0.487358	mg/L	0.0004567	0.09%
QC value within limits for Ni 231.604 Recovery = 97.47%								
Pb 220.353†	2777.1	0.505756	mg/L	0.0092555	0.505756	mg/L	0.0092555	1.83%
QC value within limits for Pb 220.353 Recovery = 101.15%								
Sb 206.836†	921.9	0.523010	mg/L	0.0121005	0.523010	mg/L	0.0121005	2.31%
QC value within limits for Sb 206.836 Recovery = 104.60%								
Se 196.026†	811.0	0.500340	mg/L	0.0065614	0.500340	mg/L	0.0065614	1.31%
QC value within limits for Se 196.026 Recovery = 100.07%								
Sn 189.927†	2619.4	0.506653	mg/L	0.0075143	0.506653	mg/L	0.0075143	1.48%
QC value within limits for Sn 189.927 Recovery = 101.33%								
Ti 334.940†	124066.6	0.498338	mg/L	0.0012681	0.498338	mg/L	0.0012681	0.25%
QC value within limits for Ti 334.940 Recovery = 99.67%								
Tl 190.801†	897.5	0.533195	mg/L	0.0116029	0.533195	mg/L	0.0116029	2.18%
QC value within limits for Tl 190.801 Recovery = 106.64%								
V 290.880†	21436.1	0.501814	mg/L	0.0033847	0.501814	mg/L	0.0033847	0.67%
QC value within limits for V 290.880 Recovery = 100.36%								
Zn 206.200†	20019.2	0.502104	mg/L	0.0001589	0.502104	mg/L	0.0001589	0.03%
QC value within limits for Zn 206.200 Recovery = 100.42%								
B 249.772†	31242.2	0.529726	mg/L	0.0019391	0.529726	mg/L	0.0019391	0.37%
QC value within limits for B 249.772 Recovery = 105.95%								
Si 251.611†	101659.5	5.06967	mg/L	0.013042	5.06967	mg/L	0.013042	0.26%
QC value within limits for Si 251.611 Recovery = 101.39%								
Ce 413.764†	32815.3	5.261	mg/L	0.1777	5.261	mg/L	0.1777	3.38%
QC value within limits for Ce 413.764 Recovery = 105.23%								

QC Failed. Continue with analysis.

Sequence No.: 6 Autosampler Location: 1
Sample ID: ICB V-333667 Date Collected: 9/14/2020 10:24:25 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	382396.5	100.0	%	0.26				0.26%
Y 371.029	173859.4	100	%	0.1				0.15%
Ag 328.068†	15.6	-0.0007201	mg/L	0.00054248	-0.0007201	mg/L	0.00054248	75.34%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-19.8	-0.0185682	mg/L	0.00465489	-0.0185682	mg/L	0.00465489	25.07%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	5.8	0.0045302	mg/L	0.00392097	0.0045302	mg/L	0.00392097	86.55%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	14.8	-0.0022505	mg/L	0.00003842	-0.0022505	mg/L	0.00003842	1.71%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-38.9	0.0020962	mg/L	0.00005807	0.0020962	mg/L	0.00005807	2.77%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	96.5	-0.0157543	mg/L	0.00071544	-0.0157543	mg/L	0.00071544	4.54%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	-0.7	0.0044851	mg/L	0.00024139	0.0044851	mg/L	0.00024139	5.38%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.9	0.0024669	mg/L	0.00007056	0.0024669	mg/L	0.00007056	2.86%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	18.7	-0.0010283	mg/L	0.00014275	-0.0010283	mg/L	0.00014275	13.88%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-45.7	0.0000257	mg/L	0.00093451	0.0000257	mg/L	0.00093451	>999.9%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	18.6	-0.0288059	mg/L	0.00067245	-0.0288059	mg/L	0.00067245	2.33%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-158.2	-2.79428	mg/L	7.661652	-2.79428	mg/L	7.661652	274.19%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	18.5	-0.134622	mg/L	0.0005446	-0.134622	mg/L	0.0005446	0.40%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	0.6	-0.0006969	mg/L	0.00001742	-0.0006969	mg/L	0.00001742	2.50%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.6	0.0010541	mg/L	0.00059943	0.0010541	mg/L	0.00059943	56.86%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-3.8	0.842265	mg/L	0.0691338	0.842265	mg/L	0.0691338	8.21%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-6.6	0.0019224	mg/L	0.00053815	0.0019224	mg/L	0.00053815	27.99%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-5.4	-0.0032066	mg/L	0.00165664	-0.0032066	mg/L	0.00165664	51.66%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.0	0.0000209	mg/L	0.00142698	0.0000209	mg/L	0.00142698	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-2.3	-0.0033882	mg/L	0.00404842	-0.0033882	mg/L	0.00404842	119.49%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.5	-0.0018772	mg/L	0.00081072	-0.0018772	mg/L	0.00081072	43.19%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	10.1	0.0014698	mg/L	0.00003133	0.0014698	mg/L	0.00003133	2.13%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	5.9	-0.0016182	mg/L	0.00268839	-0.0016182	mg/L	0.00268839	166.14%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-3.2	0.0028471	mg/L	0.00049996	0.0028471	mg/L	0.00049996	17.56%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-8.6	-0.0017082	mg/L	0.00004321	-0.0017082	mg/L	0.00004321	2.53%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	243.2	0.0128936	mg/L	0.00078692	0.0128936	mg/L	0.00078692	6.10%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	23.8	-0.0092029	mg/L	0.00070283	-0.0092029	mg/L	0.00070283	7.64%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	-58.2	-0.011	mg/L	0.0087	-0.011	mg/L	0.0087	83.09%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: LRS V-333662
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 9/14/2020 10:28:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LRS V-333662

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	322765.9	84.4	%	0.29				0.34%
Y 371.029	144403.0	83.3	%	0.23				0.27%
Ag 328.068†	95314.5	1.25555	mg/L	0.002387	1.25555	mg/L	0.002387	0.19%
QC value greater than the upper limit for Ag 328.068 Recovery = 125.56%								
Al 308.215†	4035801.0	509.802	mg/L	1.3124	509.802	mg/L	1.3124	0.26%
QC value within limits for Al 308.215 Recovery = 101.96%								
As 188.979†	17933.8	10.7532	mg/L	0.13468	10.7532	mg/L	0.13468	1.25%
QC value within limits for As 188.979 Recovery = 107.53%								
Ba 233.527†	777275.2	10.2486	mg/L	0.03023	10.2486	mg/L	0.03023	0.30%
QC value within limits for Ba 233.527 Recovery = 102.49%								
Be 313.107†	5532067.1	5.09126	mg/L	0.056993	5.09126	mg/L	0.056993	1.12%
QC value within limits for Be 313.107 Recovery = 101.83%								
Ca 317.933†	37123001.1	470.778	mg/L	4.8258	470.778	mg/L	4.8258	1.03%
QC value within limits for Ca 317.933 Recovery = 94.16%								
Cd 228.802†	142040.4	5.24868	mg/L	0.019097	5.24868	mg/L	0.019097	0.36%
QC value within limits for Cd 228.802 Recovery = 104.97%								
Co 228.616†	112924.9	4.80315	mg/L	0.018890	4.80315	mg/L	0.018890	0.39%
QC value within limits for Co 228.616 Recovery = 96.06%								
Cr 267.716†	577825.3	10.1490	mg/L	0.02624	10.1490	mg/L	0.02624	0.26%
QC value within limits for Cr 267.716 Recovery = 101.49%								
Cu 327.393†	663244.8	10.6394	mg/L	0.00483	10.6394	mg/L	0.00483	0.05%
QC value within limits for Cu 327.393 Recovery = 106.39%								
Fe 273.955†	2919661.6	383.320	mg/L	1.2267	383.320	mg/L	1.2267	0.32%
QC value within limits for Fe 273.955 Recovery = 95.83%								
K 404.721†	67449.9	-2448.15	mg/L	11.910	-2448.15	mg/L	11.910	0.49%
QC value less than the lower limit for K 404.721 Recovery = -1224.08%								
Mg 279.077†	4304514.6	497.929	mg/L	1.6974	497.929	mg/L	1.6974	0.34%
QC value within limits for Mg 279.077 Recovery = 99.59%								
Mn 257.610†	2510532.9	10.0681	mg/L	0.02630	10.0681	mg/L	0.02630	0.26%
QC value within limits for Mn 257.610 Recovery = 100.68%								
Mo 202.031†	96081.3	9.99740	mg/L	0.035168	9.99740	mg/L	0.035168	0.35%
QC value within limits for Mo 202.031 Recovery = 99.97%								
Na 330.237†	439579.6	1191.52	mg/L	3.114	1191.52	mg/L	3.114	0.26%
QC value greater than the upper limit for Na 330.237 Recovery = 119.15%								
Ni 231.604†	229533.4	9.52728	mg/L	0.045278	9.52728	mg/L	0.045278	0.48%
QC value within limits for Ni 231.604 Recovery = 95.27%								
Pb 220.353†	53649.4	9.94191	mg/L	0.102228	9.94191	mg/L	0.102228	1.03%
QC value within limits for Pb 220.353 Recovery = 99.42%								
Sb 206.836†	9973.8	5.65342	mg/L	0.048581	5.65342	mg/L	0.048581	0.86%
QC value greater than the upper limit for Sb 206.836 Recovery = 113.07%								
Se 196.026†	8349.4	5.25887	mg/L	0.051683	5.25887	mg/L	0.051683	0.98%
QC value within limits for Se 196.026 Recovery = 105.18%								
Sn 189.927†	52262.9	10.1499	mg/L	0.10168	10.1499	mg/L	0.10168	1.00%
QC value within limits for Sn 189.927 Recovery = 101.50%								
Ti 334.940†	2596105.1	10.3993	mg/L	0.01899	10.3993	mg/L	0.01899	0.18%
QC value within limits for Ti 334.940 Recovery = 103.99%								
Tl 190.801†	9228.2	5.19707	mg/L	0.021674	5.19707	mg/L	0.021674	0.42%
QC value within limits for Tl 190.801 Recovery = 103.94%								
V 290.880†	457103.8	10.6104	mg/L	0.02194	10.6104	mg/L	0.02194	0.21%
QC value within limits for V 290.880 Recovery = 106.10%								
Zn 206.200†	390256.6	9.81568	mg/L	0.060008	9.81568	mg/L	0.060008	0.61%
QC value within limits for Zn 206.200 Recovery = 98.16%								
B 249.772†	104668.3	3.90222	mg/L	0.021580	3.90222	mg/L	0.021580	0.55%
QC value less than the lower limit for B 249.772 Recovery = 78.04%								
Si 251.611†	6448.1	0.154752	mg/L	0.0047362	0.154752	mg/L	0.0047362	3.06%
QC value less than the lower limit for Si 251.611 Recovery = 0.62%								
Ce 413.764†	904.7	0.455	mg/L	0.0116	0.455	mg/L	0.0116	2.55%
QC value less than the lower limit for Ce 413.764 Recovery = 1.82%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-333666
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 9/14/2020 10:32:28 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	380162.1	99.4	%	0.48				0.49%
Y 371.029	143666.9	82.8	%	0.44				0.53%
Ag 328.068†	7487.6	0.0977781	mg/L	0.00053612	0.0977781	mg/L	0.00053612	0.55%
QC value within limits for Ag 328.068 Recovery = 97.78%								
Al 308.215†	39184.7	4.95268	mg/L	0.004249	4.95268	mg/L	0.004249	0.09%
QC value within limits for Al 308.215 Recovery = 99.05%								
As 188.979†	841.1	0.503102	mg/L	0.0026948	0.503102	mg/L	0.0026948	0.54%
QC value within limits for As 188.979 Recovery = 100.62%								
Ba 233.527†	37793.5	0.495992	mg/L	0.0015853	0.495992	mg/L	0.0015853	0.32%
QC value within limits for Ba 233.527 Recovery = 99.20%								
Be 313.107†	539639.7	0.498564	mg/L	0.0054179	0.498564	mg/L	0.0054179	1.09%
QC value within limits for Be 313.107 Recovery = 99.71%								
Ca 317.933†	3936248.5	49.9026	mg/L	0.50151	49.9026	mg/L	0.50151	1.00%
QC value within limits for Ca 317.933 Recovery = 99.81%								
Cd 228.802†	12880.9	0.480077	mg/L	0.0010576	0.480077	mg/L	0.0010576	0.22%
QC value within limits for Cd 228.802 Recovery = 96.02%								
Co 228.616†	11397.8	0.486981	mg/L	0.0025607	0.486981	mg/L	0.0025607	0.53%
QC value within limits for Co 228.616 Recovery = 97.40%								
Cr 267.716†	28312.9	0.496003	mg/L	0.0004136	0.496003	mg/L	0.0004136	0.08%
QC value within limits for Cr 267.716 Recovery = 99.20%								
Cu 327.393†	30775.3	0.494404	mg/L	0.0007137	0.494404	mg/L	0.0007137	0.14%
QC value within limits for Cu 327.393 Recovery = 98.88%								
Fe 273.955†	38260.0	4.99229	mg/L	0.008001	4.99229	mg/L	0.008001	0.16%
QC value within limits for Fe 273.955 Recovery = 99.85%								
K 404.721†	1855.7	-11.8912	mg/L	9.66138	-11.8912	mg/L	9.66138	81.25%
QC value less than the lower limit for K 404.721 Recovery = -23.78%								
Mg 279.077†	437496.3	50.4849	mg/L	0.56887	50.4849	mg/L	0.56887	1.13%
QC value within limits for Mg 279.077 Recovery = 100.97%								
Mn 257.610†	124178.3	0.497334	mg/L	0.0003501	0.497334	mg/L	0.0003501	0.07%
QC value within limits for Mn 257.610 Recovery = 99.47%								
Mo 202.031†	4846.2	0.504404	mg/L	0.0004984	0.504404	mg/L	0.0004984	0.10%
QC value within limits for Mo 202.031 Recovery = 100.88%								
Na 330.237†	17343.2	47.8292	mg/L	0.14261	47.8292	mg/L	0.14261	0.30%
QC value within limits for Na 330.237 Recovery = 95.66%								
Ni 231.604†	11645.0	0.485435	mg/L	0.0015826	0.485435	mg/L	0.0015826	0.33%
QC value within limits for Ni 231.604 Recovery = 97.09%								
Pb 220.353†	2758.3	0.502297	mg/L	0.0025357	0.502297	mg/L	0.0025357	0.50%
QC value within limits for Pb 220.353 Recovery = 100.46%								
Sb 206.836†	910.2	0.516613	mg/L	0.0041730	0.516613	mg/L	0.0041730	0.81%
QC value within limits for Sb 206.836 Recovery = 103.32%								
Se 196.026†	815.9	0.503404	mg/L	0.0044722	0.503404	mg/L	0.0044722	0.89%
QC value within limits for Se 196.026 Recovery = 100.68%								
Sn 189.927†	2607.0	0.504246	mg/L	0.0021092	0.504246	mg/L	0.0021092	0.42%
QC value within limits for Sn 189.927 Recovery = 100.85%								
Ti 334.940†	123469.4	0.495946	mg/L	0.0000901	0.495946	mg/L	0.0000901	0.02%
QC value within limits for Ti 334.940 Recovery = 99.19%								
Tl 190.801†	928.3	0.550327	mg/L	0.0032379	0.550327	mg/L	0.0032379	0.59%
QC value greater than the upper limit for Tl 190.801 Recovery = 110.07%								
V 290.880†	21190.2	0.496238	mg/L	0.0023799	0.496238	mg/L	0.0023799	0.48%
QC value within limits for V 290.880 Recovery = 99.25%								
Zn 206.200†	19756.6	0.495500	mg/L	0.0012316	0.495500	mg/L	0.0012316	0.25%
QC value within limits for Zn 206.200 Recovery = 99.10%								
B 249.772†	30428.6	0.516810	mg/L	0.0033969	0.516810	mg/L	0.0033969	0.66%
QC value within limits for B 249.772 Recovery = 103.36%								
Si 251.611†	98644.5	4.91871	mg/L	0.008787	4.91871	mg/L	0.008787	0.18%
QC value within limits for Si 251.611 Recovery = 98.37%								
Ce 413.764†	32841.6	5.266	mg/L	0.1333	5.266	mg/L	0.1333	2.53%
QC value within limits for Ce 413.764 Recovery = 105.31%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 14
Date Collected: 9/14/2020 10:36:33 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	387988.3	101	%	1.4				1.33%
Y 371.029	176590.0	102	%	1.4				1.35%
Ag 328.068†	9.8	-0.0007968	mg/L	0.00082833	-0.0007968	mg/L	0.00082833	103.96%
Al 308.215†	54.4	-0.0091566	mg/L	0.00217093	-0.0091566	mg/L	0.00217093	23.71%
As 188.979†	9.2	0.0065232	mg/L	0.00012517	0.0065232	mg/L	0.00012517	1.92%
Ba 233.527†	9.4	-0.0023221	mg/L	0.00018178	-0.0023221	mg/L	0.00018178	7.83%
Be 313.107†	-14.4	0.0021188	mg/L	0.00005627	0.0021188	mg/L	0.00005627	2.66%
Ca 317.933†	1060.5	-0.0035285	mg/L	0.00085127	-0.0035285	mg/L	0.00085127	24.13%
Cd 228.802†	3.1	0.0046257	mg/L	0.00038148	0.0046257	mg/L	0.00038148	8.25%
Co 228.616†	-6.6	0.0021515	mg/L	0.00077531	0.0021515	mg/L	0.00077531	36.04%
Cr 267.716†	16.2	-0.0010737	mg/L	0.00020856	-0.0010737	mg/L	0.00020856	19.43%
Cu 327.393†	-33.5	0.0002206	mg/L	0.00080759	0.0002206	mg/L	0.00080759	366.13%
Fe 273.955†	79.6	-0.0207938	mg/L	0.00200754	-0.0207938	mg/L	0.00200754	9.65%
K 404.721†	-1268.3	-25.4338	mg/L	14.29219	-25.4338	mg/L	14.29219	56.19%
Mg 279.077†	42.4	-0.131862	mg/L	0.0024669	-0.131862	mg/L	0.0024669	1.87%
Mn 257.610†	30.5	-0.0005770	mg/L	0.00001038	-0.0005770	mg/L	0.00001038	1.80%
Mo 202.031†	15.1	0.0017265	mg/L	0.00034187	0.0017265	mg/L	0.00034187	19.80%
Na 330.237†	33.4	0.942985	mg/L	0.0475761	0.942985	mg/L	0.0475761	5.05%
Ni 231.604†	-14.7	0.0015859	mg/L	0.00052796	0.0015859	mg/L	0.00052796	33.29%
Pb 220.353†	-1.2	-0.0024454	mg/L	0.00060352	-0.0024454	mg/L	0.00060352	24.68%
Sb 206.836†	0.4	-0.0008108	mg/L	0.00401023	-0.0008108	mg/L	0.00401023	494.57%
Se 196.026†	1.7	-0.0009169	mg/L	0.00798216	-0.0009169	mg/L	0.00798216	870.55%
Sn 189.927†	23.7	0.0024436	mg/L	0.00096310	0.0024436	mg/L	0.00096310	39.41%
Ti 334.940†	35.1	0.0015700	mg/L	0.00005817	0.0015700	mg/L	0.00005817	3.71%
Tl 190.801†	-1.3	-0.0056172	mg/L	0.00277989	-0.0056172	mg/L	0.00277989	49.49%
V 290.880†	2.8	0.0029939	mg/L	0.00055230	0.0029939	mg/L	0.00055230	18.45%
Zn 206.200†	30.3	-0.0007308	mg/L	0.00044728	-0.0007308	mg/L	0.00044728	61.20%
B 249.772†	208.1	0.0123887	mg/L	0.00059322	0.0123887	mg/L	0.00059322	4.79%
Si 251.611†	61.3	-0.0073325	mg/L	0.00166201	-0.0073325	mg/L	0.00166201	22.67%
Ce 413.764†	-13.0	-0.003	mg/L	0.0015	-0.003	mg/L	0.0015	44.22%

Sequence No.: 10 Autosampler Location: 5
Sample ID: LLICV V-333671 Date Collected: 9/14/2020 10:40:18 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: LLICV V-333671

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	379597.4	99.3	%	0.27				0.27%
Y 371.029	171761.0	99.0	%	0.29				0.29%
Ag 328.068†	1376.6	0.0172212	mg/L	0.00059703	0.0172212	mg/L	0.00059703	3.47%
QC value within limits for Ag 328.068 Recovery = 114.81%								
Al 308.215†	16215.5	2.03278	mg/L	0.007683	2.03278	mg/L	0.007683	0.38%
QC value within limits for Al 308.215 Recovery = 101.64%								
As 188.979†	75.0	0.0460796	mg/L	0.00340951	0.0460796	mg/L	0.00340951	7.40%
QC value within limits for As 188.979 Recovery = 115.20%								
Ba 233.527†	8146.2	0.104991	mg/L	0.0001496	0.104991	mg/L	0.0001496	0.14%
QC value within limits for Ba 233.527 Recovery = 104.99%								
Be 313.107†	12739.3	0.0138513	mg/L	0.00006820	0.0138513	mg/L	0.00006820	0.49%
QC value within limits for Be 313.107 Recovery = 115.43%								
Ca 317.933†	829548.4	10.5034	mg/L	0.01980	10.5034	mg/L	0.01980	0.19%
QC value within limits for Ca 317.933 Recovery = 105.03%								
Cd 228.802†	342.5	0.0171544	mg/L	0.00023664	0.0171544	mg/L	0.00023664	1.38%
QC value greater than the upper limit for Cd 228.802 Recovery = 142.95%								
Co 228.616†	607.9	0.0282737	mg/L	0.00071830	0.0282737	mg/L	0.00071830	2.54%
QC value within limits for Co 228.616 Recovery = 113.09%								
Cr 267.716†	3107.1	0.0532240	mg/L	0.00031104	0.0532240	mg/L	0.00031104	0.58%
QC value within limits for Cr 267.716 Recovery = 106.45%								
Cu 327.393†	3130.7	0.0509749	mg/L	0.00063939	0.0509749	mg/L	0.00063939	1.25%
QC value within limits for Cu 327.393 Recovery = 101.95%								
Fe 273.955†	15854.9	2.05050	mg/L	0.006396	2.05050	mg/L	0.006396	0.31%
QC value within limits for Fe 273.955 Recovery = 102.52%								
K 404.721†	178.0	-16.6772	mg/L	4.01627	-16.6772	mg/L	4.01627	24.08%
QC value less than the lower limit for K 404.721 Recovery = -333.54%								
Mg 279.077†	46911.0	5.29120	mg/L	0.012861	5.29120	mg/L	0.012861	0.24%
QC value within limits for Mg 279.077 Recovery = 105.82%								
Mn 257.610†	25368.4	0.101044	mg/L	0.0001821	0.101044	mg/L	0.0001821	0.18%
QC value within limits for Mn 257.610 Recovery = 101.04%								
Mo 202.031†	247.2	0.0258763	mg/L	0.00043007	0.0258763	mg/L	0.00043007	1.66%
QC value within limits for Mo 202.031 Recovery = 103.51%								
Na 330.237†	742.3	2.86332	mg/L	0.099922	2.86332	mg/L	0.099922	3.49%
QC value within limits for Na 330.237 Recovery = 114.53%								
Ni 231.604†	1252.6	0.0541742	mg/L	0.00049491	0.0541742	mg/L	0.00049491	0.91%
QC value within limits for Ni 231.604 Recovery = 108.35%								
Pb 220.353†	285.0	0.0503340	mg/L	0.00174024	0.0503340	mg/L	0.00174024	3.46%
QC value within limits for Pb 220.353 Recovery = 100.67%								
Sb 206.836†	73.5	0.0405926	mg/L	0.00296900	0.0405926	mg/L	0.00296900	7.31%
QC value within limits for Sb 206.836 Recovery = 101.48%								
Se 196.026†	92.2	0.0555636	mg/L	0.00392497	0.0555636	mg/L	0.00392497	7.06%
QC value within limits for Se 196.026 Recovery = 111.13%								
Sn 189.927†	1069.1	0.205515	mg/L	0.0013141	0.205515	mg/L	0.0013141	0.64%
QC value within limits for Sn 189.927 Recovery = 102.76%								
Ti 334.940†	24625.7	0.100060	mg/L	0.0000987	0.100060	mg/L	0.0000987	0.10%
QC value within limits for Ti 334.940 Recovery = 100.06%								
Tl 190.801†	112.0	0.0590761	mg/L	0.00237284	0.0590761	mg/L	0.00237284	4.02%
QC value within limits for Tl 190.801 Recovery = 118.15%								
V 290.880†	4382.6	0.103608	mg/L	0.0009257	0.103608	mg/L	0.0009257	0.89%
QC value within limits for V 290.880 Recovery = 103.61%								
Zn 206.200†	4138.1	0.102604	mg/L	0.0003751	0.102604	mg/L	0.0003751	0.37%
QC value within limits for Zn 206.200 Recovery = 102.60%								
B 249.772†	11654.6	0.204458	mg/L	0.0013908	0.204458	mg/L	0.0013908	0.68%
QC value within limits for B 249.772 Recovery = 102.23%								
Si 251.611†	2955.3	0.137124	mg/L	0.0003555	0.137124	mg/L	0.0003555	0.26%
QC value greater than the upper limit for Si 251.611 Recovery = 137.12%								
Ce 413.764†	894.2	0.144	mg/L	0.0115	0.144	mg/L	0.0115	7.97%
QC value greater than the upper limit for Ce 413.764 Recovery = 143.78%								

QC Failed. Continue with analysis.

Sequence No.: 11
Sample ID: ICSA V-333668
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 9/14/2020 10:44:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	345265.7	90.3	%	0.62				0.68%
Y 371.029	154051.2	88.8	%	0.55				0.62%
Ag 328.068†	-483.2	-0.0072955	mg/L	0.00020293	-0.0072955	mg/L	0.00020293	2.78%
Al 308.215†	3950780.1	499.408	mg/L	4.1638	499.408	mg/L	4.1638	0.83%
QC value within limits for Al 308.215 Recovery = 99.88%								
As 188.979†	-44.7	0.0068912	mg/L	0.00464562	0.0068912	mg/L	0.00464562	67.41%
Ba 233.527†	359.3	0.0022925	mg/L	0.00010474	0.0022925	mg/L	0.00010474	4.57%
Be 313.107†	-189.5	0.0019577	mg/L	0.00004222	0.0019577	mg/L	0.00004222	2.16%
Ca 317.933†	37357881.3	473.756	mg/L	1.7913	473.756	mg/L	1.7913	0.38%
QC value within limits for Ca 317.933 Recovery = 94.75%								
Cd 228.802†	-50.1	0.0026625	mg/L	0.00016226	0.0026625	mg/L	0.00016226	6.09%
Co 228.616†	40.0	0.0041299	mg/L	0.00049300	0.0041299	mg/L	0.00049300	11.94%
Cr 267.716†	-328.1	-0.0071213	mg/L	0.00021492	-0.0071213	mg/L	0.00021492	3.02%
Cu 327.393†	-2066.2	-0.0323841	mg/L	0.00031375	-0.0323841	mg/L	0.00031375	0.97%
Fe 273.955†	1448961.6	190.217	mg/L	2.0342	190.217	mg/L	2.0342	1.07%
QC value within limits for Fe 273.955 Recovery = 95.11%								
K 404.721†	32467.4	-1235.19	mg/L	38.315	-1235.19	mg/L	38.315	3.10%
Mg 279.077†	4345199.8	502.636	mg/L	5.7221	502.636	mg/L	5.7221	1.14%
QC value within limits for Mg 279.077 Recovery = 100.53%								
Mn 257.610†	-4438.3	-0.0184997	mg/L	0.00006791	-0.0184997	mg/L	0.00006791	0.37%
Mo 202.031†	62.2	0.0066265	mg/L	0.00039158	0.0066265	mg/L	0.00039158	5.91%
Na 330.237†	49.7	0.987279	mg/L	0.0738935	0.987279	mg/L	0.0738935	7.48%
Ni 231.604†	200.3	0.0105075	mg/L	0.00069710	0.0105075	mg/L	0.00069710	6.63%
Pb 220.353†	-270.3	0.0004104	mg/L	0.00092497	0.0004104	mg/L	0.00092497	225.38%
Sb 206.836†	-3.0	-0.0090326	mg/L	0.00776801	-0.0090326	mg/L	0.00776801	86.00%
Se 196.026†	-127.4	-0.0292187	mg/L	0.01450755	-0.0292187	mg/L	0.01450755	49.65%
Sn 189.927†	-79.2	-0.0175510	mg/L	0.00095997	-0.0175510	mg/L	0.00095997	5.47%
Ti 334.940†	-1688.0	-0.0053314	mg/L	0.00027358	-0.0053314	mg/L	0.00027358	5.13%
Tl 190.801†	-15.6	-0.0137105	mg/L	0.00185275	-0.0137105	mg/L	0.00185275	13.51%
V 290.880†	1229.7	0.0170999	mg/L	0.00055910	0.0170999	mg/L	0.00055910	3.27%
Zn 206.200†	-3.3	-0.0015737	mg/L	0.00019936	-0.0015737	mg/L	0.00019936	12.67%
B 249.772†	52373.2	1.94789	mg/L	0.011010	1.94789	mg/L	0.011010	0.57%
Si 251.611†	271.7	0.0031164	mg/L	0.00647432	0.0031164	mg/L	0.00647432	207.75%
Ce 413.764†	-127.8	0.133	mg/L	0.0128	0.133	mg/L	0.0128	9.62%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 10:49:15 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	380261.3	99.4	%	1.39				1.40%
Y 371.029	143934.6	83.0	%	1.06				1.28%
Ag 328.068†	7552.7	0.0986373	mg/L	0.00070700	0.0986373	mg/L	0.00070700	0.72%
QC value within limits for Ag 328.068 Recovery = 98.64%								
Al 308.215†	38992.2	4.92942	mg/L	0.009374	4.92942	mg/L	0.009374	0.19%
QC value within limits for Al 308.215 Recovery = 98.59%								
As 188.979†	837.5	0.500964	mg/L	0.0075119	0.500964	mg/L	0.0075119	1.50%
QC value within limits for As 188.979 Recovery = 100.19%								
Ba 233.527†	37480.7	0.491867	mg/L	0.0008952	0.491867	mg/L	0.0008952	0.18%
QC value within limits for Ba 233.527 Recovery = 98.37%								
Be 313.107†	533768.1	0.493163	mg/L	0.0086066	0.493163	mg/L	0.0086066	1.75%
QC value within limits for Be 313.107 Recovery = 98.63%								
Ca 317.933†	4006048.1	50.7878	mg/L	0.86456	50.7878	mg/L	0.86456	1.70%
QC value within limits for Ca 317.933 Recovery = 101.58%								
Cd 228.802†	12792.9	0.476829	mg/L	0.0010190	0.476829	mg/L	0.0010190	0.21%
QC value within limits for Cd 228.802 Recovery = 95.37%								
Co 228.616†	11324.1	0.483847	mg/L	0.0009615	0.483847	mg/L	0.0009615	0.20%
QC value within limits for Co 228.616 Recovery = 96.77%								
Cr 267.716†	28430.1	0.498061	mg/L	0.0006991	0.498061	mg/L	0.0006991	0.14%
QC value within limits for Cr 267.716 Recovery = 99.61%								
Cu 327.393†	30840.7	0.495454	mg/L	0.0004789	0.495454	mg/L	0.0004789	0.10%
QC value within limits for Cu 327.393 Recovery = 99.09%								
Fe 273.955†	38186.5	4.98263	mg/L	0.004914	4.98263	mg/L	0.004914	0.10%
QC value within limits for Fe 273.955 Recovery = 99.65%								
K 404.721†	1815.7	-12.6088	mg/L	20.07999	-12.6088	mg/L	20.07999	159.25%
QC value less than the lower limit for K 404.721 Recovery = -25.22%								
Mg 279.077†	443389.8	51.1668	mg/L	0.91081	51.1668	mg/L	0.91081	1.78%
QC value within limits for Mg 279.077 Recovery = 102.33%								
Mn 257.610†	123094.3	0.492987	mg/L	0.0003633	0.492987	mg/L	0.0003633	0.07%
QC value within limits for Mn 257.610 Recovery = 98.60%								
Mo 202.031†	4779.8	0.497493	mg/L	0.0086451	0.497493	mg/L	0.0086451	1.74%
QC value within limits for Mo 202.031 Recovery = 99.50%								
Na 330.237†	17747.3	48.9239	mg/L	0.33945	48.9239	mg/L	0.33945	0.69%
QC value within limits for Na 330.237 Recovery = 97.85%								
Ni 231.604†	11601.0	0.483609	mg/L	0.0012314	0.483609	mg/L	0.0012314	0.25%
QC value within limits for Ni 231.604 Recovery = 96.72%								
Pb 220.353†	2776.1	0.505429	mg/L	0.0071386	0.505429	mg/L	0.0071386	1.41%
QC value within limits for Pb 220.353 Recovery = 101.09%								
Sb 206.836†	921.4	0.522924	mg/L	0.0067218	0.522924	mg/L	0.0067218	1.29%
QC value within limits for Sb 206.836 Recovery = 104.58%								
Se 196.026†	802.7	0.495198	mg/L	0.0195474	0.495198	mg/L	0.0195474	3.95%
QC value within limits for Se 196.026 Recovery = 99.04%								
Sn 189.927†	2619.0	0.506589	mg/L	0.0105259	0.506589	mg/L	0.0105259	2.08%
QC value within limits for Sn 189.927 Recovery = 101.32%								
Ti 334.940†	123256.7	0.495094	mg/L	0.0002936	0.495094	mg/L	0.0002936	0.06%
QC value within limits for Ti 334.940 Recovery = 99.02%								
Tl 190.801†	883.7	0.526572	mg/L	0.0089636	0.526572	mg/L	0.0089636	1.70%
QC value within limits for Tl 190.801 Recovery = 105.31%								
V 290.880†	21269.3	0.497940	mg/L	0.0018199	0.497940	mg/L	0.0018199	0.37%
QC value within limits for V 290.880 Recovery = 99.59%								
Zn 206.200†	19837.6	0.497536	mg/L	0.0005730	0.497536	mg/L	0.0005730	0.12%
QC value within limits for Zn 206.200 Recovery = 99.51%								
B 249.772†	30582.7	0.519175	mg/L	0.0026205	0.519175	mg/L	0.0026205	0.50%
QC value within limits for B 249.772 Recovery = 103.84%								
Si 251.611†	100543.8	5.01388	mg/L	0.005479	5.01388	mg/L	0.005479	0.11%
QC value within limits for Si 251.611 Recovery = 100.28%								
Ce 413.764†	33815.6	5.422	mg/L	0.0398	5.422	mg/L	0.0398	0.73%
QC value within limits for Ce 413.764 Recovery = 108.43%								

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 2
Date Collected: 9/14/2020 10:53:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	390440.6	102	%	1.0				0.99%
Y 371.029	177645.7	102	%	0.9				0.87%
Ag 328.068†	44.1	-0.0003444	mg/L	0.00025538	-0.0003444	mg/L	0.00025538	74.16%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	42.4	-0.0106139	mg/L	0.00481621	-0.0106139	mg/L	0.00481621	45.38%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.7	0.0006390	mg/L	0.00060049	0.0006390	mg/L	0.00060049	93.97%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	5.6	-0.0023718	mg/L	0.00012406	-0.0023718	mg/L	0.00012406	5.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-34.4	0.0021003	mg/L	0.00004316	0.0021003	mg/L	0.00004316	2.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	1062.3	-0.0035065	mg/L	0.00012452	-0.0035065	mg/L	0.00012452	3.55%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	-2.7	0.0044127	mg/L	0.00029856	0.0044127	mg/L	0.00029856	6.77%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-10.5	0.0019823	mg/L	0.00032117	0.0019823	mg/L	0.00032117	16.20%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-1.6	-0.0013864	mg/L	0.00013391	-0.0013864	mg/L	0.00013391	9.66%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-32.7	0.0002334	mg/L	0.00126974	0.0002334	mg/L	0.00126974	543.91%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	113.1	-0.0164006	mg/L	0.00409245	-0.0164006	mg/L	0.00409245	24.95%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-1746.7	-35.1993	mg/L	12.96147	-35.1993	mg/L	12.96147	36.82%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	68.6	-0.128829	mg/L	0.0029685	-0.128829	mg/L	0.0029685	2.30%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	24.8	-0.0005997	mg/L	0.00001374	-0.0005997	mg/L	0.00001374	2.29%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	5.2	0.0006972	mg/L	0.00036138	0.0006972	mg/L	0.00036138	51.83%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-7.9	0.831260	mg/L	0.0478878	0.831260	mg/L	0.0478878	5.76%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-5.4	0.0019718	mg/L	0.00051080	0.0019718	mg/L	0.00051080	25.90%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-2.6	-0.0027133	mg/L	0.00385706	-0.0027133	mg/L	0.00385706	142.15%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-6.5	-0.0046001	mg/L	0.00141533	-0.0046001	mg/L	0.00141533	30.77%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.9	-0.0013751	mg/L	0.00876551	-0.0013751	mg/L	0.00876551	637.47%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	7.8	-0.0006421	mg/L	0.00050155	-0.0006421	mg/L	0.00050155	78.11%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	21.0	0.0015137	mg/L	0.00007710	0.0015137	mg/L	0.00007710	5.09%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	4.0	-0.0025770	mg/L	0.00095609	-0.0025770	mg/L	0.00095609	37.10%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	12.1	0.0031907	mg/L	0.00074232	0.0031907	mg/L	0.00074232	23.27%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	49.7	-0.0002409	mg/L	0.00026085	-0.0002409	mg/L	0.00026085	108.29%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	221.4	0.0126244	mg/L	0.00076841	0.0126244	mg/L	0.00076841	6.09%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	112.9	-0.0047367	mg/L	0.00028103	-0.0047367	mg/L	0.00028103	5.93%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	35.0	0.004	mg/L	0.0105	0.004	mg/L	0.0105	238.14%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 14
Sample ID: MB 85269 (100)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 9/14/2020 10:57:05 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85269 (100)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	391102.0	102	%	0.4				0.36%
Y 371.029	175669.6	101	%	0.3				0.33%
Ag 328.068†	65.9	-0.0000572	mg/L	0.00050069	-0.0000572	mg/L	0.00050069	875.07%
Al 308.215†	19.0	-0.0135318	mg/L	0.00093765	-0.0135318	mg/L	0.00093765	6.93%
As 188.979†	1.8	0.0022235	mg/L	0.00337407	0.0022235	mg/L	0.00337407	151.75%
Ba 233.527†	78.0	-0.0014167	mg/L	0.00017192	-0.0014167	mg/L	0.00017192	12.14%
Be 313.107†	-7.7	0.0021249	mg/L	0.00003645	0.0021249	mg/L	0.00003645	1.72%
Ca 317.933†	3617.3	0.0288960	mg/L	0.00057568	0.0288960	mg/L	0.00057568	1.99%
Cd 228.802†	6.4	0.0047484	mg/L	0.00005991	0.0047484	mg/L	0.00005991	1.26%
Co 228.616†	1.2	0.0024801	mg/L	0.00039377	0.0024801	mg/L	0.00039377	15.88%
Cr 267.716†	27.7	-0.0008714	mg/L	0.00026687	-0.0008714	mg/L	0.00026687	30.63%
Cu 327.393†	11.8	0.0009474	mg/L	0.00158467	0.0009474	mg/L	0.00158467	167.27%
Fe 273.955†	4536.9	0.564451	mg/L	0.0040206	0.564451	mg/L	0.0040206	0.71%
K 404.721†	-2080.2	-47.7638	mg/L	13.40987	-47.7638	mg/L	13.40987	28.08%
Mg 279.077†	120.4	-0.122837	mg/L	0.0020885	-0.122837	mg/L	0.0020885	1.70%
Mn 257.610†	635.6	0.0018499	mg/L	0.00001303	0.0018499	mg/L	0.00001303	0.70%
Mo 202.031†	3.3	0.0005036	mg/L	0.00016564	0.0005036	mg/L	0.00016564	32.89%
Na 330.237†	42.7	0.968360	mg/L	0.0673987	0.968360	mg/L	0.0673987	6.96%
Ni 231.604†	1.0	0.0022354	mg/L	0.00029969	0.0022354	mg/L	0.00029969	13.41%
Pb 220.353†	-13.0	-0.0046223	mg/L	0.00174976	-0.0046223	mg/L	0.00174976	37.85%
Sb 206.836†	6.2	0.0023696	mg/L	0.00417625	0.0023696	mg/L	0.00417625	176.24%
Se 196.026†	0.6	-0.0014217	mg/L	0.00095148	-0.0014217	mg/L	0.00095148	66.93%
Sn 189.927†	66.1	0.0106758	mg/L	0.00021653	0.0106758	mg/L	0.00021653	2.03%
Ti 334.940†	87.4	0.0017794	mg/L	0.00008354	0.0017794	mg/L	0.00008354	4.69%
Tl 190.801†	1.7	-0.0038336	mg/L	0.00524517	-0.0038336	mg/L	0.00524517	136.82%
V 290.880†	-27.7	0.0022317	mg/L	0.00036918	0.0022317	mg/L	0.00036918	16.54%
Zn 206.200†	133.7	0.0018719	mg/L	0.00008750	0.0018719	mg/L	0.00008750	4.67%
B 249.772†	264.4	0.0167054	mg/L	0.00001585	0.0167054	mg/L	0.00001585	0.09%
Si 251.611†	245.8	0.0019172	mg/L	0.00082411	0.0019172	mg/L	0.00082411	42.99%
Ce 413.764†	52.9	0.008	mg/L	0.0093	0.008	mg/L	0.0093	119.98%

Sequence No.: 15
Sample ID: LCS 85269
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 9/14/2020 11:00:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 85269

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	379217.5	99.2	%	0.81				0.82%
Y 371.029	197567.3	114	%	1.1				0.95%
Ag 328.068†	69073.9	0.909637	mg/L	0.0017478	0.909637	mg/L	0.0017478	0.19%
Al 308.215†	682425.7	86.1827	mg/L	0.60784	86.1827	mg/L	0.60784	0.71%
As 188.979†	655.9	0.415478	mg/L	0.0051063	0.415478	mg/L	0.0051063	1.23%
Ba 233.527†	552290.1	7.28141	mg/L	0.007082	7.28141	mg/L	0.007082	0.10%
Be 313.107†	1741656.4	1.60434	mg/L	0.013822	1.60434	mg/L	0.013822	0.86%
Ca 317.933†	14200536.3	180.074	mg/L	2.3464	180.074	mg/L	2.3464	1.30%
Cd 228.802†	42807.9	1.58499	mg/L	0.002105	1.58499	mg/L	0.002105	0.13%
Co 228.616†	55236.5	2.35067	mg/L	0.005088	2.35067	mg/L	0.005088	0.22%
Cr 267.716†	109873.1	1.92874	mg/L	0.001998	1.92874	mg/L	0.001998	0.10%
Cu 327.393†	112821.8	1.81046	mg/L	0.000505	1.81046	mg/L	0.000505	0.03%
Fe 273.955†	1051234.9	137.996	mg/L	1.4854	137.996	mg/L	1.4854	1.08%
K 404.721†	19147.0	-985.608	mg/L	19.6758	-985.608	mg/L	19.6758	2.00%
Mg 279.077†	570521.4	65.8769	mg/L	0.21801	65.8769	mg/L	0.21801	0.33%
Mn 257.610†	1254909.5	5.03228	mg/L	0.044854	5.03228	mg/L	0.044854	0.89%
Mo 202.031†	16155.9	1.68118	mg/L	0.017503	1.68118	mg/L	0.017503	1.04%
Na 330.237†	2730.8	8.24928	mg/L	0.078025	8.24928	mg/L	0.078025	0.95%
Ni 231.604†	11533.5	0.480810	mg/L	0.0039023	0.480810	mg/L	0.0039023	0.81%
Pb 220.353†	7316.1	1.35620	mg/L	0.016649	1.35620	mg/L	0.016649	1.23%
Sb 206.836†	691.8	0.410941	mg/L	0.0043947	0.410941	mg/L	0.0043947	1.07%
Se 196.026†	4893.3	3.05787	mg/L	0.034782	3.05787	mg/L	0.034782	1.14%
Sn 189.927†	6778.6	1.31459	mg/L	0.015448	1.31459	mg/L	0.015448	1.18%
Ti 334.940†	1008299.4	4.03984	mg/L	0.031060	4.03984	mg/L	0.031060	0.77%
Tl 190.801†	3640.0	2.04869	mg/L	0.021678	2.04869	mg/L	0.021678	1.06%
V 290.880†	109241.0	2.52320	mg/L	0.009738	2.52320	mg/L	0.009738	0.39%
Zn 206.200†	237879.6	5.98253	mg/L	0.018550	5.98253	mg/L	0.018550	0.31%
B 249.772†	189894.5	3.80331	mg/L	0.020148	3.80331	mg/L	0.020148	0.53%
Si 251.611†	78384.5	3.88617	mg/L	0.011337	3.88617	mg/L	0.011337	0.29%
Ce 413.764†	2273.0	0.475	mg/L	0.0107	0.475	mg/L	0.0107	2.25%

Sequence No.: 16
Sample ID: LCS MR 85269
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 9/14/2020 11:06:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS MR 85269

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	372970.5	97.5	%	0.72				0.74%
Y 371.029	195215.8	113	%	0.7				0.59%
Ag 328.068†	69239.0	0.911813	mg/L	0.0009779	0.911813	mg/L	0.0009779	0.11%
Al 308.215†	693179.9	87.5422	mg/L	0.05328	87.5422	mg/L	0.05328	0.06%
As 188.979†	665.8	0.421933	mg/L	0.0038074	0.421933	mg/L	0.0038074	0.90%
Ba 233.527†	553733.1	7.30044	mg/L	0.010519	7.30044	mg/L	0.010519	0.14%
Be 313.107†	1773298.0	1.63345	mg/L	0.001685	1.63345	mg/L	0.001685	0.10%
Ca 317.933†	14410037.4	182.731	mg/L	2.7108	182.731	mg/L	2.7108	1.48%
Cd 228.802†	42783.6	1.58409	mg/L	0.005768	1.58409	mg/L	0.005768	0.36%
Co 228.616†	55241.6	2.35089	mg/L	0.008025	2.35089	mg/L	0.008025	0.34%
Cr 267.716†	109146.7	1.91598	mg/L	0.002606	1.91598	mg/L	0.002606	0.14%
Cu 327.393†	112730.7	1.80900	mg/L	0.001642	1.80900	mg/L	0.001642	0.09%
Fe 273.955†	1077420.3	141.434	mg/L	0.1445	141.434	mg/L	0.1445	0.10%
K 404.721†	19397.5	-1014.77	mg/L	29.207	-1014.77	mg/L	29.207	2.88%
Mg 279.077†	556876.0	64.2981	mg/L	0.09827	64.2981	mg/L	0.09827	0.15%
Mn 257.610†	1290319.4	5.17430	mg/L	0.002657	5.17430	mg/L	0.002657	0.05%
Mo 202.031†	16436.5	1.71037	mg/L	0.012649	1.71037	mg/L	0.012649	0.74%
Na 330.237†	2660.2	8.05814	mg/L	0.104922	8.05814	mg/L	0.104922	1.30%
Ni 231.604†	11577.9	0.482653	mg/L	0.0023893	0.482653	mg/L	0.0023893	0.50%
Pb 220.353†	7413.3	1.37422	mg/L	0.010744	1.37422	mg/L	0.010744	0.78%
Sb 206.836†	665.2	0.396817	mg/L	0.0050084	0.396817	mg/L	0.0050084	1.26%
Se 196.026†	5083.1	3.17602	mg/L	0.021903	3.17602	mg/L	0.021903	0.69%
Sn 189.927†	6862.3	1.33085	mg/L	0.008270	1.33085	mg/L	0.008270	0.62%
Ti 334.940†	1012767.2	4.05774	mg/L	0.000616	4.05774	mg/L	0.000616	0.02%
Tl 190.801†	3707.8	2.08711	mg/L	0.014317	2.08711	mg/L	0.014317	0.69%
V 290.880†	109078.6	2.51969	mg/L	0.001065	2.51969	mg/L	0.001065	0.04%
Zn 206.200†	235038.7	5.91107	mg/L	0.016655	5.91107	mg/L	0.016655	0.28%
B 249.772†	189788.6	3.82180	mg/L	0.007883	3.82180	mg/L	0.007883	0.21%
Si 251.611†	71538.7	3.54309	mg/L	0.007291	3.54309	mg/L	0.007291	0.21%
Ce 413.764†	2873.3	0.574	mg/L	0.0161	0.574	mg/L	0.0161	2.80%

Sequence No.: 17
Sample ID: AD19159-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 9/14/2020 11:10:58 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-004

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	374155.2	97.8	%	0.33				0.34%
Y 371.029	203561.3	117	%	0.4				0.34%
Ag 328.068†	1422.9	0.0178313	mg/L	0.00024551	0.0178313	mg/L	0.00024551	1.38%
Al 308.215†	336149.2	42.4725	mg/L	0.07542	42.4725	mg/L	0.07542	0.18%
As 188.979†	89.5	0.0825279	mg/L	0.00235895	0.0825279	mg/L	0.00235895	2.86%
Ba 233.527†	211603.6	2.78828	mg/L	0.007898	2.78828	mg/L	0.007898	0.28%
Be 313.107†	2181.6	0.0041390	mg/L	0.00002269	0.0041390	mg/L	0.00002269	0.55%
Ca 317.933†	35006561.3	443.937	mg/L	2.5312	443.937	mg/L	2.5312	0.57%
Cd 228.802†	360.2	0.0178112	mg/L	0.00022327	0.0178112	mg/L	0.00022327	1.25%
Co 228.616†	1386.9	0.0613921	mg/L	0.00025503	0.0613921	mg/L	0.00025503	0.42%
Cr 267.716†	29984.1	0.525361	mg/L	0.0005965	0.525361	mg/L	0.0005965	0.11%
Cu 327.393†	46107.9	0.740344	mg/L	0.0019941	0.740344	mg/L	0.0019941	0.27%
Fe 273.955†	1257502.6	165.079	mg/L	0.5177	165.079	mg/L	0.5177	0.31%
K 404.721†	20865.5	-1220.51	mg/L	2.384	-1220.51	mg/L	2.384	0.20%
Mg 279.077†	457335.6	52.7805	mg/L	0.05939	52.7805	mg/L	0.05939	0.11%
Mn 257.610†	744825.1	2.98652	mg/L	0.006227	2.98652	mg/L	0.006227	0.21%
Mo 202.031†	108.5	0.0114472	mg/L	0.00001681	0.0114472	mg/L	0.00001681	0.15%
Na 330.237†	249.9	1.52948	mg/L	0.177828	1.52948	mg/L	0.177828	11.63%
Ni 231.604†	7305.5	0.305357	mg/L	0.0004094	0.305357	mg/L	0.0004094	0.13%
Pb 220.353†	18245.1	3.35601	mg/L	0.011274	3.35601	mg/L	0.011274	0.34%
Sb 206.836†	42.4	0.0196332	mg/L	0.00188207	0.0196332	mg/L	0.00188207	9.59%
Se 196.026†	-91.6	-0.0138854	mg/L	0.00184201	-0.0138854	mg/L	0.00184201	13.27%
Sn 189.927†	737.8	0.141155	mg/L	0.0023005	0.141155	mg/L	0.0023005	1.63%
Ti 334.940†	213344.4	0.855911	mg/L	0.0017138	0.855911	mg/L	0.0017138	0.20%
Tl 190.801†	-22.7	-0.0104887	mg/L	0.00289443	-0.0104887	mg/L	0.00289443	27.60%
V 290.880†	17586.0	0.393912	mg/L	0.0005832	0.393912	mg/L	0.0005832	0.15%
Zn 206.200†	141426.8	3.55620	mg/L	0.019484	3.55620	mg/L	0.019484	0.55%
B 249.772†	47383.3	1.72204	mg/L	0.007106	1.72204	mg/L	0.007106	0.41%
Si 251.611†	74612.5	3.72371	mg/L	0.005727	3.72371	mg/L	0.005727	0.15%
Ce 413.764†	1285.6	0.339	mg/L	0.0037	0.339	mg/L	0.0037	1.10%

Sequence No.: 18
Sample ID: AD19159-004 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 9/14/2020 11:15:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-004 MR

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	372520.1	97.4	%	1.24				1.27%
Y 371.029	195134.8	112	%	1.2				1.11%
Ag 328.068†	2014.6	0.0256317	mg/L	0.00034519	0.0256317	mg/L	0.00034519	1.35%
Al 308.215†	263598.4	33.3005	mg/L	0.06929	33.3005	mg/L	0.06929	0.21%
As 188.979†	71.3	0.0712442	mg/L	0.00220077	0.0712442	mg/L	0.00220077	3.09%
Ba 233.527†	471720.2	6.21882	mg/L	0.010267	6.21882	mg/L	0.010267	0.17%
Be 313.107†	2106.3	0.0040697	mg/L	0.00007569	0.0040697	mg/L	0.00007569	1.86%
Ca 317.933†	41981950.4	532.399	mg/L	12.0689	532.399	mg/L	12.0689	2.27%
Cd 228.802†	310.9	0.0159887	mg/L	0.00048053	0.0159887	mg/L	0.00048053	3.01%
Co 228.616†	1025.6	0.0460319	mg/L	0.00039463	0.0460319	mg/L	0.00039463	0.86%
Cr 267.716†	33890.6	0.593985	mg/L	0.0010486	0.593985	mg/L	0.0010486	0.18%
Cu 327.393†	39919.2	0.641075	mg/L	0.0013970	0.641075	mg/L	0.0013970	0.22%
Fe 273.955†	1236298.3	162.295	mg/L	0.1897	162.295	mg/L	0.1897	0.12%
K 404.721†	19496.0	-1220.61	mg/L	38.898	-1220.61	mg/L	38.898	3.19%
Mg 279.077†	439321.6	50.6961	mg/L	0.12537	50.6961	mg/L	0.12537	0.25%
Mn 257.610†	661462.2	2.65218	mg/L	0.001927	2.65218	mg/L	0.001927	0.07%
Mo 202.031†	376.0	0.0392832	mg/L	0.00086374	0.0392832	mg/L	0.00086374	2.20%
Na 330.237†	298.0	1.65981	mg/L	0.033777	1.65981	mg/L	0.033777	2.03%
Ni 231.604†	5927.1	0.248154	mg/L	0.0016688	0.248154	mg/L	0.0016688	0.67%
Pb 220.353†	12674.4	2.33110	mg/L	0.006020	2.33110	mg/L	0.006020	0.26%
Sb 206.836†	38.8	0.0174813	mg/L	0.00200427	0.0174813	mg/L	0.00200427	11.47%
Se 196.026†	-98.4	-0.0188402	mg/L	0.00885360	-0.0188402	mg/L	0.00885360	46.99%
Sn 189.927†	318.7	0.0597463	mg/L	0.00146983	0.0597463	mg/L	0.00146983	2.46%
Ti 334.940†	153860.2	0.617666	mg/L	0.0011298	0.617666	mg/L	0.0011298	0.18%
Tl 190.801†	-14.5	-0.0076165	mg/L	0.00132518	-0.0076165	mg/L	0.00132518	17.40%
V 290.880†	17848.8	0.400585	mg/L	0.0015020	0.400585	mg/L	0.0015020	0.37%
Zn 206.200†	181867.2	4.57350	mg/L	0.004424	4.57350	mg/L	0.004424	0.10%
B 249.772†	45535.9	1.67668	mg/L	0.002413	1.67668	mg/L	0.002413	0.14%
Si 251.611†	59480.2	2.96592	mg/L	0.008031	2.96592	mg/L	0.008031	0.27%
Ce 413.764†	1141.4	0.313	mg/L	0.0074	0.313	mg/L	0.0074	2.37%

Sequence No.: 19
Sample ID: AD19159-005 MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 9/14/2020 11:20:05 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-005 MS1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	370025.5	96.8	%	0.44				0.46%
Y 371.029	203049.9	117	%	0.7				0.56%
Ag 328.068†	9933.3	0.130019	mg/L	0.0003758	0.130019	mg/L	0.0003758	0.29%
Al 308.215†	396265.9	50.0596	mg/L	0.08183	50.0596	mg/L	0.08183	0.16%
As 188.979†	887.3	0.559763	mg/L	0.0034497	0.559763	mg/L	0.0034497	0.62%
Ba 233.527†	414463.3	5.46369	mg/L	0.007323	5.46369	mg/L	0.007323	0.13%
Be 313.107†	529810.6	0.489522	mg/L	0.0001947	0.489522	mg/L	0.0001947	0.04%
Ca 317.933†	34973878.7	443.522	mg/L	1.9383	443.522	mg/L	1.9383	0.44%
Cd 228.802†	13229.3	0.492941	mg/L	0.0014656	0.492941	mg/L	0.0014656	0.30%
Co 228.616†	12497.8	0.533742	mg/L	0.0015562	0.533742	mg/L	0.0015562	0.29%
Cr 267.716†	53828.1	0.944218	mg/L	0.0007123	0.944218	mg/L	0.0007123	0.08%
Cu 327.393†	77635.7	1.24606	mg/L	0.003601	1.24606	mg/L	0.003601	0.29%
Fe 273.955†	1338148.3	175.668	mg/L	0.6802	175.668	mg/L	0.6802	0.39%
K 404.721†	22831.0	-1286.06	mg/L	32.562	-1286.06	mg/L	32.562	2.53%
Mg 279.077†	898818.0	103.863	mg/L	0.2484	103.863	mg/L	0.2484	0.24%
Mn 257.610†	868386.8	3.48208	mg/L	0.007733	3.48208	mg/L	0.007733	0.22%
Mo 202.031†	4567.5	0.475404	mg/L	0.0013531	0.475404	mg/L	0.0013531	0.28%
Na 330.237†	19443.7	53.5187	mg/L	0.12999	53.5187	mg/L	0.12999	0.24%
Ni 231.604†	19186.4	0.798386	mg/L	0.0012168	0.798386	mg/L	0.0012168	0.15%
Pb 220.353†	16479.0	3.03295	mg/L	0.008026	3.03295	mg/L	0.008026	0.26%
Sb 206.836†	520.2	0.291148	mg/L	0.0006753	0.291148	mg/L	0.0006753	0.23%
Se 196.026†	665.5	0.456606	mg/L	0.0028676	0.456606	mg/L	0.0028676	0.63%
Sn 189.927†	2703.4	0.522972	mg/L	0.0024083	0.522972	mg/L	0.0024083	0.46%
Ti 334.940†	316145.1	1.26765	mg/L	0.002021	1.26765	mg/L	0.002021	0.16%
Tl 190.801†	875.8	0.496270	mg/L	0.0022943	0.496270	mg/L	0.0022943	0.46%
V 290.880†	38480.1	0.879401	mg/L	0.0033516	0.879401	mg/L	0.0033516	0.38%
Zn 206.200†	159702.4	4.01593	mg/L	0.011714	4.01593	mg/L	0.011714	0.29%
B 249.772†	77772.7	2.26181	mg/L	0.004707	2.26181	mg/L	0.004707	0.21%
Si 251.611†	79421.4	3.95708	mg/L	0.009157	3.95708	mg/L	0.009157	0.23%
Ce 413.764†	5247.3	0.982	mg/L	0.0136	0.982	mg/L	0.0136	1.38%

Sequence No.: 20
Sample ID: AD19159-006 MS2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 9/14/2020 11:25:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-006 MS2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	367973.4	96.2	%	1.00				1.04%
Y 371.029	194438.2	112	%	1.2				1.07%
Ag 328.068†	10410.2	0.136306	mg/L	0.0018362	0.136306	mg/L	0.0018362	1.35%
Al 308.215†	355336.4	44.8848	mg/L	0.07254	44.8848	mg/L	0.07254	0.16%
As 188.979†	875.9	0.550225	mg/L	0.0057445	0.550225	mg/L	0.0057445	1.04%
Ba 233.527†	355529.0	4.68643	mg/L	0.010211	4.68643	mg/L	0.010211	0.22%
Be 313.107†	530918.1	0.490541	mg/L	0.0014275	0.490541	mg/L	0.0014275	0.29%
Ca 317.933†	42113644.6	534.069	mg/L	3.9680	534.069	mg/L	3.9680	0.74%
Cd 228.802†	13194.7	0.491662	mg/L	0.0062465	0.491662	mg/L	0.0062465	1.27%
Co 228.616†	12132.2	0.518201	mg/L	0.0072339	0.518201	mg/L	0.0072339	1.40%
Cr 267.716†	50451.3	0.884899	mg/L	0.0022622	0.884899	mg/L	0.0022622	0.26%
Cu 327.393†	75904.7	1.21830	mg/L	0.001529	1.21830	mg/L	0.001529	0.13%
Fe 273.955†	1214637.8	159.451	mg/L	0.2680	159.451	mg/L	0.2680	0.17%
K 404.721†	19984.9	-1182.34	mg/L	28.903	-1182.34	mg/L	28.903	2.44%
Mg 279.077†	923704.3	106.743	mg/L	0.5265	106.743	mg/L	0.5265	0.49%
Mn 257.610†	886253.6	3.55374	mg/L	0.007777	3.55374	mg/L	0.007777	0.22%
Mo 202.031†	4524.2	0.470901	mg/L	0.0062880	0.470901	mg/L	0.0062880	1.34%
Na 330.237†	19459.6	53.5617	mg/L	0.65747	53.5617	mg/L	0.65747	1.23%
Ni 231.604†	17761.7	0.739266	mg/L	0.0094251	0.739266	mg/L	0.0094251	1.27%
Pb 220.353†	16753.2	3.08285	mg/L	0.037038	3.08285	mg/L	0.037038	1.20%
Sb 206.836†	531.5	0.298080	mg/L	0.0032626	0.298080	mg/L	0.0032626	1.09%
Se 196.026†	663.9	0.451237	mg/L	0.0021285	0.451237	mg/L	0.0021285	0.47%
Sn 189.927†	3009.2	0.582384	mg/L	0.0087743	0.582384	mg/L	0.0087743	1.51%
Ti 334.940†	332826.7	1.33446	mg/L	0.001807	1.33446	mg/L	0.001807	0.14%
Tl 190.801†	863.1	0.489233	mg/L	0.0023350	0.489233	mg/L	0.0023350	0.48%
V 290.880†	40207.1	0.920112	mg/L	0.0041734	0.920112	mg/L	0.0041734	0.45%
Zn 206.200†	175777.5	4.42031	mg/L	0.017215	4.42031	mg/L	0.017215	0.39%
B 249.772†	72067.3	2.07704	mg/L	0.009434	2.07704	mg/L	0.009434	0.45%
Si 251.611†	78807.1	3.92640	mg/L	0.031527	3.92640	mg/L	0.031527	0.80%
Ce 413.764†	4864.9	0.908	mg/L	0.0177	0.908	mg/L	0.0177	1.95%

Sequence No.: 21
Sample ID: AD19159-004 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 9/14/2020 11:29:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-004 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	371279.0	97.1	%	0.44				0.45%
Y 371.029	199141.0	115	%	0.6				0.48%
Ag 328.068†	8052.3	0.105223	mg/L	0.0004508	0.105223	mg/L	0.0004508	0.43%
Al 308.215†	371151.9	46.8834	mg/L	0.07584	46.8834	mg/L	0.07584	0.16%
As 188.979†	946.4	0.593098	mg/L	0.0048568	0.593098	mg/L	0.0048568	0.82%
Ba 233.527†	245308.9	3.23280	mg/L	0.003034	3.23280	mg/L	0.003034	0.09%
Be 313.107†	580605.9	0.536250	mg/L	0.0003014	0.536250	mg/L	0.0003014	0.06%
Ca 317.933†	38127016.1	483.511	mg/L	4.2059	483.511	mg/L	4.2059	0.87%
Cd 228.802†	14246.1	0.530479	mg/L	0.0010120	0.530479	mg/L	0.0010120	0.19%
Co 228.616†	13276.3	0.566837	mg/L	0.0012659	0.566837	mg/L	0.0012659	0.22%
Cr 267.716†	59047.3	1.03590	mg/L	0.000913	1.03590	mg/L	0.000913	0.09%
Cu 327.393†	78540.8	1.26058	mg/L	0.002450	1.26058	mg/L	0.002450	0.19%
Fe 273.955†	1254385.6	164.669	mg/L	0.1479	164.669	mg/L	0.1479	0.09%
K 404.721†	19242.2	-1249.42	mg/L	21.959	-1249.42	mg/L	21.959	1.76%
Mg 279.077†	878136.7	101.470	mg/L	0.1915	101.470	mg/L	0.1915	0.19%
Mn 257.610†	851478.9	3.41427	mg/L	0.002004	3.41427	mg/L	0.002004	0.06%
Mo 202.031†	5014.5	0.521917	mg/L	0.0025444	0.521917	mg/L	0.0025444	0.49%
Na 330.237†	19109.0	52.6121	mg/L	0.13569	52.6121	mg/L	0.13569	0.26%
Ni 231.604†	19257.3	0.801326	mg/L	0.0013338	0.801326	mg/L	0.0013338	0.17%
Pb 220.353†	21153.3	3.89199	mg/L	0.011134	3.89199	mg/L	0.011134	0.29%
Sb 206.836†	993.6	0.552647	mg/L	0.0049703	0.552647	mg/L	0.0049703	0.90%
Se 196.026†	754.7	0.508748	mg/L	0.0083344	0.508748	mg/L	0.0083344	1.64%
Sn 189.927†	3336.7	0.645987	mg/L	0.0009074	0.645987	mg/L	0.0009074	0.14%
Ti 334.940†	338374.9	1.35668	mg/L	0.001950	1.35668	mg/L	0.001950	0.14%
Tl 190.801†	968.8	0.548674	mg/L	0.0004950	0.548674	mg/L	0.0004950	0.09%
V 290.880†	40405.2	0.925079	mg/L	0.0007084	0.925079	mg/L	0.0007084	0.08%
Zn 206.200†	159452.6	4.00965	mg/L	0.006978	4.00965	mg/L	0.006978	0.17%
B 249.772†	76409.7	2.17590	mg/L	0.002881	2.17590	mg/L	0.002881	0.13%
Si 251.611†	89562.4	4.46389	mg/L	0.003641	4.46389	mg/L	0.003641	0.08%
Ce 413.764†	5356.7	0.991	mg/L	0.0286	0.991	mg/L	0.0286	2.89%

Sequence No.: 22
Sample ID: AD19159-004 SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 9/14/2020 11:34:47 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-004 SD

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	393752.7	103	%	1.2				1.15%
Y 371.029	183973.0	106	%	1.2				1.12%
Ag 328.068†	369.1	0.0039389	mg/L	0.00025414	0.0039389	mg/L	0.00025414	6.45%
Al 308.215†	68667.2	8.66353	mg/L	0.033500	8.66353	mg/L	0.033500	0.39%
As 188.979†	20.6	0.0192572	mg/L	0.00147285	0.0192572	mg/L	0.00147285	7.65%
Ba 233.527†	43462.2	0.570753	mg/L	0.0010466	0.570753	mg/L	0.0010466	0.18%
Be 313.107†	449.7	0.0025457	mg/L	0.00001569	0.0025457	mg/L	0.00001569	0.62%
Ca 317.933†	7630382.6	96.7517	mg/L	1.49325	96.7517	mg/L	1.49325	1.54%
Cd 228.802†	68.9	0.0070541	mg/L	0.00010978	0.0070541	mg/L	0.00010978	1.56%
Co 228.616†	281.4	0.0143930	mg/L	0.00010142	0.0143930	mg/L	0.00010142	0.70%
Cr 267.716†	6577.7	0.114191	mg/L	0.0016344	0.114191	mg/L	0.0016344	1.43%
Cu 327.393†	9246.2	0.149070	mg/L	0.0012289	0.149070	mg/L	0.0012289	0.82%
Fe 273.955†	265160.0	34.7842	mg/L	0.12041	34.7842	mg/L	0.12041	0.35%
K 404.721†	1455.3	-316.847	mg/L	12.6974	-316.847	mg/L	12.6974	4.01%
Mg 279.077†	97647.3	11.1618	mg/L	0.04836	11.1618	mg/L	0.04836	0.43%
Mn 257.610†	154285.3	0.618083	mg/L	0.0016281	0.618083	mg/L	0.0016281	0.26%
Mo 202.031†	12.0	0.0014128	mg/L	0.00039320	0.0014128	mg/L	0.00039320	27.83%
Na 330.237†	62.3	1.02124	mg/L	0.384172	1.02124	mg/L	0.384172	37.62%
Ni 231.604†	1525.4	0.0654944	mg/L	0.00118509	0.0654944	mg/L	0.00118509	1.81%
Pb 220.353†	3970.1	0.728444	mg/L	0.0089396	0.728444	mg/L	0.0089396	1.23%
Sb 206.836†	8.6	0.0030413	mg/L	0.00219115	0.0030413	mg/L	0.00219115	72.05%
Se 196.026†	-8.1	0.0024756	mg/L	0.00604468	0.0024756	mg/L	0.00604468	244.17%
Sn 189.927†	127.9	0.0226860	mg/L	0.00181733	0.0226860	mg/L	0.00181733	8.01%
Ti 334.940†	43086.6	0.173999	mg/L	0.0001373	0.173999	mg/L	0.0001373	0.08%
Tl 190.801†	1.9	-0.0023692	mg/L	0.00253408	-0.0023692	mg/L	0.00253408	106.96%
V 290.880†	3331.2	0.0766950	mg/L	0.00102811	0.0766950	mg/L	0.00102811	1.34%
Zn 206.200†	29666.2	0.744781	mg/L	0.0038181	0.744781	mg/L	0.0038181	0.51%
B 249.772†	9983.9	0.370143	mg/L	0.0013209	0.370143	mg/L	0.0013209	0.36%
Si 251.611†	14687.7	0.724704	mg/L	0.0045813	0.724704	mg/L	0.0045813	0.63%
Ce 413.764†	282.3	0.072	mg/L	0.0050	0.072	mg/L	0.0050	6.96%

Sequence No.: 23
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 11:38:50 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	389802.3	102	%	1.3				1.26%
Y 371.029	148103.2	85.4	%	1.15				1.35%
Ag 328.068†	7474.3	0.0976027	mg/L	0.00036494	0.0976027	mg/L	0.00036494	0.37%
QC value within limits for Ag 328.068 Recovery = 97.60%								
Al 308.215†	38159.5	4.82652	mg/L	0.014438	4.82652	mg/L	0.014438	0.30%
QC value within limits for Al 308.215 Recovery = 96.53%								
As 188.979†	817.4	0.488995	mg/L	0.0029712	0.488995	mg/L	0.0029712	0.61%
QC value within limits for As 188.979 Recovery = 97.80%								
Ba 233.527†	36783.7	0.482674	mg/L	0.0009676	0.482674	mg/L	0.0009676	0.20%
QC value within limits for Ba 233.527 Recovery = 96.53%								
Be 313.107†	520287.6	0.480761	mg/L	0.0057032	0.480761	mg/L	0.0057032	1.19%
QC value within limits for Be 313.107 Recovery = 96.15%								
Ca 317.933†	3917232.1	49.6614	mg/L	0.66016	49.6614	mg/L	0.66016	1.33%
QC value within limits for Ca 317.933 Recovery = 99.32%								
Cd 228.802†	12568.8	0.468555	mg/L	0.0012499	0.468555	mg/L	0.0012499	0.27%
QC value within limits for Cd 228.802 Recovery = 93.71%								
Co 228.616†	11134.6	0.475790	mg/L	0.0009292	0.475790	mg/L	0.0009292	0.20%
QC value within limits for Co 228.616 Recovery = 95.16%								
Cr 267.716†	27950.0	0.489628	mg/L	0.0010340	0.489628	mg/L	0.0010340	0.21%
QC value within limits for Cr 267.716 Recovery = 97.93%								
Cu 327.393†	30281.8	0.486489	mg/L	0.0014473	0.486489	mg/L	0.0014473	0.30%
QC value within limits for Cu 327.393 Recovery = 97.30%								
Fe 273.955†	37753.2	4.92575	mg/L	0.003095	4.92575	mg/L	0.003095	0.06%
QC value within limits for Fe 273.955 Recovery = 98.51%								
K 404.721†	599.7	-36.7543	mg/L	21.51784	-36.7543	mg/L	21.51784	58.55%
QC value less than the lower limit for K 404.721 Recovery = -73.51%								
Mg 279.077†	432456.8	49.9018	mg/L	0.71958	49.9018	mg/L	0.71958	1.44%
QC value within limits for Mg 279.077 Recovery = 99.80%								
Mn 257.610†	121176.3	0.485295	mg/L	0.0007448	0.485295	mg/L	0.0007448	0.15%
QC value within limits for Mn 257.610 Recovery = 97.06%								
Mo 202.031†	4692.8	0.488446	mg/L	0.0052719	0.488446	mg/L	0.0052719	1.08%
QC value within limits for Mo 202.031 Recovery = 97.69%								
Na 330.237†	17408.2	48.0053	mg/L	0.36334	48.0053	mg/L	0.36334	0.76%
QC value within limits for Na 330.237 Recovery = 96.01%								
Ni 231.604†	11392.2	0.474944	mg/L	0.0015076	0.474944	mg/L	0.0015076	0.32%
QC value within limits for Ni 231.604 Recovery = 94.99%								
Pb 220.353†	2702.0	0.491488	mg/L	0.0041026	0.491488	mg/L	0.0041026	0.83%
QC value within limits for Pb 220.353 Recovery = 98.30%								
Sb 206.836†	896.6	0.509668	mg/L	0.0048020	0.509668	mg/L	0.0048020	0.94%
QC value within limits for Sb 206.836 Recovery = 101.93%								
Se 196.026†	787.2	0.485629	mg/L	0.0047582	0.485629	mg/L	0.0047582	0.98%
QC value within limits for Se 196.026 Recovery = 97.13%								
Sn 189.927†	2555.4	0.494229	mg/L	0.0061000	0.494229	mg/L	0.0061000	1.23%
QC value within limits for Sn 189.927 Recovery = 98.85%								
Ti 334.940†	121114.0	0.486512	mg/L	0.0001096	0.486512	mg/L	0.0001096	0.02%
QC value within limits for Ti 334.940 Recovery = 97.30%								
Tl 190.801†	876.1	0.524498	mg/L	0.0075613	0.524498	mg/L	0.0075613	1.44%
QC value within limits for Tl 190.801 Recovery = 104.90%								
V 290.880†	20904.6	0.489443	mg/L	0.0014752	0.489443	mg/L	0.0014752	0.30%
QC value within limits for V 290.880 Recovery = 97.89%								
Zn 206.200†	19576.5	0.490967	mg/L	0.0006983	0.490967	mg/L	0.0006983	0.14%
QC value within limits for Zn 206.200 Recovery = 98.19%								
B 249.772†	30127.7	0.511689	mg/L	0.0023041	0.511689	mg/L	0.0023041	0.45%
QC value within limits for B 249.772 Recovery = 102.34%								
Si 251.611†	98848.9	4.92919	mg/L	0.002982	4.92919	mg/L	0.002982	0.06%
QC value within limits for Si 251.611 Recovery = 98.58%								
Ce 413.764†	35886.3	5.754	mg/L	0.1136	5.754	mg/L	0.1136	1.98%
QC value greater than the upper limit for Ce 413.764 Recovery = 115.07%								

QC Failed. Continue with analysis.

Sequence No.: 24
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/14/2020 11:42:54 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	394083.8	103	%	0.6				0.54%
Y 371.029	179977.4	104	%	0.7				0.70%
Ag 328.068†	30.3	-0.0005274	mg/L	0.00051615	-0.0005274	mg/L	0.00051615	97.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	24.2	-0.0128335	mg/L	0.00172193	-0.0128335	mg/L	0.00172193	13.42%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.0	0.0016481	mg/L	0.00211849	0.0016481	mg/L	0.00211849	128.54%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	13.6	-0.0022661	mg/L	0.00008187	-0.0022661	mg/L	0.00008187	3.61%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	4.7	0.0021364	mg/L	0.00002653	0.0021364	mg/L	0.00002653	1.24%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	1099.8	-0.0030307	mg/L	0.00051306	-0.0030307	mg/L	0.00051306	16.93%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	-0.6	0.0044873	mg/L	0.00033437	0.0044873	mg/L	0.00033437	7.45%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	5.9	0.0026809	mg/L	0.00041148	0.0026809	mg/L	0.00041148	15.35%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	7.5	-0.0012249	mg/L	0.00058133	-0.0012249	mg/L	0.00058133	47.46%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	6.8	0.0008672	mg/L	0.00077097	0.0008672	mg/L	0.00077097	88.91%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	120.0	-0.0154946	mg/L	0.00093140	-0.0154946	mg/L	0.00093140	6.01%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-2329.4	-47.0489	mg/L	4.45312	-47.0489	mg/L	4.45312	9.46%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	39.1	-0.132236	mg/L	0.0018914	-0.132236	mg/L	0.0018914	1.43%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	38.2	-0.0005459	mg/L	0.00002384	-0.0005459	mg/L	0.00002384	4.37%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	4.1	0.0005829	mg/L	0.00021960	0.0005829	mg/L	0.00021960	37.68%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	7.5	0.872780	mg/L	0.1049192	0.872780	mg/L	0.1049192	12.02%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-7.8	0.0018723	mg/L	0.00073333	0.0018723	mg/L	0.00073333	39.17%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.3	-0.0019986	mg/L	0.00184567	-0.0019986	mg/L	0.00184567	92.35%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-3.6	-0.0030106	mg/L	0.00461474	-0.0030106	mg/L	0.00461474	153.28%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	3.7	0.0003336	mg/L	0.00576058	0.0003336	mg/L	0.00576058	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	12.8	0.0003244	mg/L	0.00153435	0.0003244	mg/L	0.00153435	473.04%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	36.4	0.0015753	mg/L	0.00014768	0.0015753	mg/L	0.00014768	9.37%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	6.6	-0.0010881	mg/L	0.00359112	-0.0010881	mg/L	0.00359112	330.04%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-9.2	0.0026997	mg/L	0.00026610	0.0026997	mg/L	0.00026610	9.86%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	43.2	-0.0004065	mg/L	0.00028736	-0.0004065	mg/L	0.00028736	70.70%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	260.6	0.0132463	mg/L	0.00036276	0.0132463	mg/L	0.00036276	2.74%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	132.5	-0.0037511	mg/L	0.00008844	-0.0037511	mg/L	0.00008844	2.36%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	107.2	0.016	mg/L	0.0236	0.016	mg/L	0.0236	147.46%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 25
Sample ID: AD19159-001
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 29
Date Collected: 9/14/2020 11:46:40 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	394650.9	103	%	1.2				1.18%
Y 371.029	213561.1	123	%	1.3				1.09%
Ag 328.068†	-187.1	-0.0033927	mg/L	0.00087934	-0.0033927	mg/L	0.00087934	25.92%
Al 308.215†	419385.1	52.9987	mg/L	0.93255	52.9987	mg/L	0.93255	1.76%
As 188.979†	125.1	0.102418	mg/L	0.0033627	0.102418	mg/L	0.0033627	3.28%
Ba 233.527†	42249.9	0.554765	mg/L	0.0010205	0.554765	mg/L	0.0010205	0.18%
Be 313.107†	1799.1	0.0037871	mg/L	0.00001055	0.0037871	mg/L	0.00001055	0.28%
Ca 317.933†	15501205.3	196.570	mg/L	3.3052	196.570	mg/L	3.3052	1.68%
Cd 228.802†	28.0	0.0055457	mg/L	0.00045378	0.0055457	mg/L	0.00045378	8.18%
Co 228.616†	2514.3	0.109320	mg/L	0.0009785	0.109320	mg/L	0.0009785	0.90%
Cr 267.716†	5508.2	0.0954019	mg/L	0.00089784	0.0954019	mg/L	0.00089784	0.94%
Cu 327.393†	19748.8	0.317536	mg/L	0.0013112	0.317536	mg/L	0.0013112	0.41%
Fe 273.955†	1197306.8	157.175	mg/L	2.8339	157.175	mg/L	2.8339	1.80%
K 404.721†	16050.8	-1239.61	mg/L	6.670	-1239.61	mg/L	6.670	0.54%
Mg 279.077†	388162.1	44.7766	mg/L	0.79503	44.7766	mg/L	0.79503	1.78%
Mn 257.610†	909204.6	3.64579	mg/L	0.066556	3.64579	mg/L	0.066556	1.83%
Mo 202.031†	12.3	0.0014431	mg/L	0.00045523	0.0014431	mg/L	0.00045523	31.55%
Na 330.237†	131.5	1.20889	mg/L	0.101553	1.20889	mg/L	0.101553	8.40%
Ni 231.604†	3110.2	0.131263	mg/L	0.0020113	0.131263	mg/L	0.0020113	1.53%
Pb 220.353†	43638.1	8.02499	mg/L	0.016766	8.02499	mg/L	0.016766	0.21%
Sb 206.836†	188.0	0.0989214	mg/L	0.00390986	0.0989214	mg/L	0.00390986	3.95%
Se 196.026†	-96.7	-0.0191735	mg/L	0.00339133	-0.0191735	mg/L	0.00339133	17.69%
Sn 189.927†	123.3	0.0217942	mg/L	0.00099053	0.0217942	mg/L	0.00099053	4.54%
Ti 334.940†	201789.4	0.809631	mg/L	0.0024733	0.809631	mg/L	0.0024733	0.31%
Tl 190.801†	-11.9	-0.0047732	mg/L	0.00658820	-0.0047732	mg/L	0.00658820	138.02%
V 290.880†	5052.4	0.107079	mg/L	0.0032009	0.107079	mg/L	0.0032009	2.99%
Zn 206.200†	42016.9	1.05547	mg/L	0.001317	1.05547	mg/L	0.001317	0.12%
B 249.772†	45574.7	1.64727	mg/L	0.014997	1.64727	mg/L	0.014997	0.91%
Si 251.611†	129407.8	6.46631	mg/L	0.018200	6.46631	mg/L	0.018200	0.28%
Ce 413.764†	1261.8	0.328	mg/L	0.0034	0.328	mg/L	0.0034	1.05%

Sequence No.: 26
Sample ID: AD19159-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 9/14/2020 11:51:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	386781.8	101	%	0.4				0.43%
Y 371.029	205550.9	119	%	0.5				0.40%
Ag 328.068†	1706.4	0.0215683	mg/L	0.00101331	0.0215683	mg/L	0.00101331	4.70%
Al 308.215†	304305.0	38.4469	mg/L	0.08917	38.4469	mg/L	0.08917	0.23%
As 188.979†	104.9	0.0937144	mg/L	0.00319772	0.0937144	mg/L	0.00319772	3.41%
Ba 233.527†	252196.4	3.32364	mg/L	0.004952	3.32364	mg/L	0.004952	0.15%
Be 313.107†	2231.3	0.0041847	mg/L	0.00000716	0.0041847	mg/L	0.00000716	0.17%
Ca 317.933†	39072027.0	495.495	mg/L	2.9157	495.495	mg/L	2.9157	0.59%
Cd 228.802†	341.8	0.0171304	mg/L	0.00026170	0.0171304	mg/L	0.00026170	1.53%
Co 228.616†	1521.3	0.0671036	mg/L	0.00021066	0.0671036	mg/L	0.00021066	0.31%
Cr 267.716†	36088.7	0.632598	mg/L	0.0019938	0.632598	mg/L	0.0019938	0.32%
Cu 327.393†	55252.4	0.887026	mg/L	0.0008090	0.887026	mg/L	0.0008090	0.09%
Fe 273.955†	1346247.0	176.731	mg/L	0.4321	176.731	mg/L	0.4321	0.24%
K 404.721†	18126.1	-1392.27	mg/L	13.825	-1392.27	mg/L	13.825	0.99%
Mg 279.077†	476909.4	55.0453	mg/L	0.12608	55.0453	mg/L	0.12608	0.23%
Mn 257.610†	727836.9	2.91839	mg/L	0.007697	2.91839	mg/L	0.007697	0.26%
Mo 202.031†	80.2	0.0085088	mg/L	0.00045456	0.0085088	mg/L	0.00045456	5.34%
Na 330.237†	262.7	1.56417	mg/L	0.247849	1.56417	mg/L	0.247849	15.85%
Ni 231.604†	7005.2	0.292895	mg/L	0.0007733	0.292895	mg/L	0.0007733	0.26%
Pb 220.353†	12995.6	2.39058	mg/L	0.008411	2.39058	mg/L	0.008411	0.35%
Sb 206.836†	29.6	0.0120155	mg/L	0.00132272	0.0120155	mg/L	0.00132272	11.01%
Se 196.026†	-112.5	-0.0236903	mg/L	0.00223888	-0.0236903	mg/L	0.00223888	9.45%
Sn 189.927†	300.3	0.0561736	mg/L	0.00143653	0.0561736	mg/L	0.00143653	2.56%
Ti 334.940†	217464.9	0.872414	mg/L	0.0011720	0.872414	mg/L	0.0011720	0.13%
Tl 190.801†	-14.2	-0.0056940	mg/L	0.00106366	-0.0056940	mg/L	0.00106366	18.68%
V 290.880†	18304.1	0.409460	mg/L	0.0024549	0.409460	mg/L	0.0024549	0.60%
Zn 206.200†	147951.8	3.72034	mg/L	0.014124	3.72034	mg/L	0.014124	0.38%
B 249.772†	51747.2	1.85896	mg/L	0.009434	1.85896	mg/L	0.009434	0.51%
Si 251.611†	65687.4	3.27707	mg/L	0.004789	3.27707	mg/L	0.004789	0.15%
Ce 413.764†	1247.4	0.342	mg/L	0.0104	0.342	mg/L	0.0104	3.06%

Sequence No.: 27
Sample ID: AD19159-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 9/14/2020 11:56:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-003

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	372273.9	97.3	%	0.84				0.87%
Y 371.029	196601.2	113	%	0.9				0.78%
Ag 328.068†	-188.3	-0.0034081	mg/L	0.00040546	-0.0034081	mg/L	0.00040546	11.90%
Al 308.215†	194536.6	24.5758	mg/L	0.02614	24.5758	mg/L	0.02614	0.11%
As 188.979†	23.5	0.0286114	mg/L	0.00372544	0.0286114	mg/L	0.00372544	13.02%
Ba 233.527†	131845.0	1.73639	mg/L	0.001703	1.73639	mg/L	0.001703	0.10%
Be 313.107†	1423.5	0.0034415	mg/L	0.00002240	0.0034415	mg/L	0.00002240	0.65%
Ca 317.933†	51146311.6	648.621	mg/L	1.8491	648.621	mg/L	1.8491	0.29%
Cd 228.802†	84.3	0.0076240	mg/L	0.00001467	0.0076240	mg/L	0.00001467	0.19%
Co 228.616†	573.3	0.0268024	mg/L	0.00116320	0.0268024	mg/L	0.00116320	4.34%
Cr 267.716†	4465.7	0.0770888	mg/L	0.00058131	0.0770888	mg/L	0.00058131	0.75%
Cu 327.393†	10063.7	0.162183	mg/L	0.0005635	0.162183	mg/L	0.0005635	0.35%
Fe 273.955†	606437.1	79.5939	mg/L	0.15920	79.5939	mg/L	0.15920	0.20%
K 404.721†	6909.0	-652.453	mg/L	11.1611	-652.453	mg/L	11.1611	1.71%
Mg 279.077†	279323.7	32.1831	mg/L	0.07188	32.1831	mg/L	0.07188	0.22%
Mn 257.610†	500182.4	2.00535	mg/L	0.001164	2.00535	mg/L	0.001164	0.06%
Mo 202.031†	17.5	0.0019820	mg/L	0.00052778	0.0019820	mg/L	0.00052778	26.63%
Na 330.237†	255.4	1.54437	mg/L	0.179992	1.54437	mg/L	0.179992	11.65%
Ni 231.604†	2117.6	0.0900706	mg/L	0.00126935	0.0900706	mg/L	0.00126935	1.41%
Pb 220.353†	4677.5	0.860012	mg/L	0.0021399	0.860012	mg/L	0.0021399	0.25%
Sb 206.836†	8.2	0.0022300	mg/L	0.00540389	0.0022300	mg/L	0.00540389	242.32%
Se 196.026†	-38.4	-0.0041371	mg/L	0.01102864	-0.0041371	mg/L	0.01102864	266.58%
Sn 189.927†	11.7	0.0001082	mg/L	0.00118248	0.0001082	mg/L	0.00118248	>999.9%
Ti 334.940†	131220.2	0.526989	mg/L	0.0004353	0.526989	mg/L	0.0004353	0.08%
Tl 190.801†	-8.0	-0.0043812	mg/L	0.00123984	-0.0043812	mg/L	0.00123984	28.30%
V 290.880†	3756.3	0.0831274	mg/L	0.00156233	0.0831274	mg/L	0.00156233	1.88%
Zn 206.200†	64999.0	1.63360	mg/L	0.003544	1.63360	mg/L	0.003544	0.22%
B 249.772†	23296.1	0.842151	mg/L	0.0016846	0.842151	mg/L	0.0016846	0.20%
Si 251.611†	45984.7	2.29108	mg/L	0.005135	2.29108	mg/L	0.005135	0.22%
Ce 413.764†	1364.7	0.282	mg/L	0.0022	0.282	mg/L	0.0022	0.79%

Sequence No.: 28
Sample ID: AD19159-007
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 32
Date Collected: 9/14/2020 12:00:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-007

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	405928.3	106	%	2.3				2.19%
Y 371.029	224002.8	129	%	2.6				2.05%
Ag 328.068†	175.9	0.0013925	mg/L	0.00062062	0.0013925	mg/L	0.00062062	44.57%
Al 308.215†	382455.2	48.3299	mg/L	0.56421	48.3299	mg/L	0.56421	1.17%
As 188.979†	44.0	0.0557753	mg/L	0.00125606	0.0557753	mg/L	0.00125606	2.25%
Ba 233.527†	35877.9	0.470729	mg/L	0.0005175	0.470729	mg/L	0.0005175	0.11%
Be 313.107†	2061.9	0.0040288	mg/L	0.00005659	0.0040288	mg/L	0.00005659	1.40%
Ca 317.933†	11903218.6	150.940	mg/L	3.5735	150.940	mg/L	3.5735	2.37%
Cd 228.802†	78.2	0.0073973	mg/L	0.00039734	0.0073973	mg/L	0.00039734	5.37%
Co 228.616†	1372.7	0.0607868	mg/L	0.00107932	0.0607868	mg/L	0.00107932	1.78%
Cr 267.716†	6151.3	0.106700	mg/L	0.0013947	0.106700	mg/L	0.0013947	1.31%
Cu 327.393†	22683.2	0.364604	mg/L	0.0024523	0.364604	mg/L	0.0024523	0.67%
Fe 273.955†	1273288.0	167.151	mg/L	2.0373	167.151	mg/L	2.0373	1.22%
K 404.721†	15436.7	-1351.49	mg/L	14.507	-1351.49	mg/L	14.507	1.07%
Mg 279.077†	412568.3	47.6005	mg/L	0.49224	47.6005	mg/L	0.49224	1.03%
Mn 257.610†	873548.5	3.50278	mg/L	0.039011	3.50278	mg/L	0.039011	1.11%
Mo 202.031†	34.6	0.0037606	mg/L	0.00072906	0.0037606	mg/L	0.00072906	19.39%
Na 330.237†	11.4	0.883582	mg/L	0.1728737	0.883582	mg/L	0.1728737	19.57%
Ni 231.604†	5941.7	0.248763	mg/L	0.0031848	0.248763	mg/L	0.0031848	1.28%
Pb 220.353†	3040.9	0.561665	mg/L	0.0077863	0.561665	mg/L	0.0077863	1.39%
Sb 206.836†	5.0	-0.0019110	mg/L	0.00444045	-0.0019110	mg/L	0.00444045	232.36%
Se 196.026†	-100.9	-0.0190854	mg/L	0.00369834	-0.0190854	mg/L	0.00369834	19.38%
Sn 189.927†	46.7	0.0069183	mg/L	0.00108587	0.0069183	mg/L	0.00108587	15.70%
Ti 334.940†	188612.0	0.756853	mg/L	0.0010828	0.756853	mg/L	0.0010828	0.14%
Tl 190.801†	-10.4	-0.0042473	mg/L	0.00449350	-0.0042473	mg/L	0.00449350	105.80%
V 290.880†	6573.4	0.141236	mg/L	0.0027964	0.141236	mg/L	0.0027964	1.98%
Zn 206.200†	30758.0	0.772246	mg/L	0.0057565	0.772246	mg/L	0.0057565	0.75%
B 249.772†	48902.0	1.75807	mg/L	0.016869	1.75807	mg/L	0.016869	0.96%
Si 251.611†	50626.1	2.52334	mg/L	0.009663	2.52334	mg/L	0.009663	0.38%
Ce 413.764†	1324.8	0.347	mg/L	0.0158	0.347	mg/L	0.0158	4.55%

Sequence No.: 29
Sample ID: AD19159-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 9/14/2020 12:04:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-008

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	397558.5	104	%	0.6				0.55%
Y 371.029	192174.7	111	%	0.4				0.40%
Ag 328.068†	-67.0	-0.0018088	mg/L	0.00024135	-0.0018088	mg/L	0.00024135	13.34%
Al 308.215†	350262.2	44.2608	mg/L	0.15674	44.2608	mg/L	0.15674	0.35%
As 188.979†	42.0	0.0420620	mg/L	0.00242398	0.0420620	mg/L	0.00242398	5.76%
Ba 233.527†	40258.1	0.528496	mg/L	0.0006091	0.528496	mg/L	0.0006091	0.12%
Be 313.107†	87.2	0.0022122	mg/L	0.00002354	0.0022122	mg/L	0.00002354	1.06%
Ca 317.933†	6452094.5	81.8086	mg/L	0.25025	81.8086	mg/L	0.25025	0.31%
Cd 228.802†	26.3	0.0054801	mg/L	0.00015266	0.0054801	mg/L	0.00015266	2.79%
Co 228.616†	1137.1	0.0507708	mg/L	0.00046792	0.0507708	mg/L	0.00046792	0.92%
Cr 267.716†	2434.5	0.0414089	mg/L	0.00023599	0.0414089	mg/L	0.00023599	0.57%
Cu 327.393†	8248.1	0.133061	mg/L	0.0002768	0.133061	mg/L	0.0002768	0.21%
Fe 273.955†	713627.6	93.6680	mg/L	0.42917	93.6680	mg/L	0.42917	0.46%
K 404.721†	7748.4	-775.615	mg/L	16.2378	-775.615	mg/L	16.2378	2.09%
Mg 279.077†	144233.7	16.5522	mg/L	0.03376	16.5522	mg/L	0.03376	0.20%
Mn 257.610†	199181.6	0.798145	mg/L	0.0014705	0.798145	mg/L	0.0014705	0.18%
Mo 202.031†	24.9	0.0027531	mg/L	0.00073269	0.0027531	mg/L	0.00073269	26.61%
Na 330.237†	1115.9	3.87519	mg/L	0.158596	3.87519	mg/L	0.158596	4.09%
Ni 231.604†	2678.4	0.113341	mg/L	0.0005433	0.113341	mg/L	0.0005433	0.48%
Pb 220.353†	1383.0	0.256534	mg/L	0.0019075	0.256534	mg/L	0.0019075	0.74%
Sb 206.836†	10.7	0.0038780	mg/L	0.00482779	0.0038780	mg/L	0.00482779	124.49%
Se 196.026†	-55.8	-0.0110800	mg/L	0.00573746	-0.0110800	mg/L	0.00573746	51.78%
Sn 189.927†	40.5	0.0057145	mg/L	0.00138825	0.0057145	mg/L	0.00138825	24.29%
Ti 334.940†	258890.5	1.03833	mg/L	0.001298	1.03833	mg/L	0.001298	0.12%
Tl 190.801†	-9.6	-0.0025796	mg/L	0.00885256	-0.0025796	mg/L	0.00885256	343.18%
V 290.880†	3448.1	0.0750353	mg/L	0.00194205	0.0750353	mg/L	0.00194205	2.59%
Zn 206.200†	20582.5	0.516275	mg/L	0.0016119	0.516275	mg/L	0.0016119	0.31%
B 249.772†	29606.9	1.02388	mg/L	0.002325	1.02388	mg/L	0.002325	0.23%
Si 251.611†	51487.9	2.56649	mg/L	0.005366	2.56649	mg/L	0.005366	0.21%
Ce 413.764†	751.2	0.195	mg/L	0.0093	0.195	mg/L	0.0093	4.77%

Sequence No.: 30
Sample ID: AD19159-009
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 9/14/2020 12:08:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-009

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	382871.9	100	%	0.9				0.90%
Y 371.029	190657.7	110	%	0.9				0.86%
Ag 328.068†	-170.5	-0.0031743	mg/L	0.00006319	-0.0031743	mg/L	0.00006319	1.99%
Al 308.215†	420113.4	53.0907	mg/L	0.22637	53.0907	mg/L	0.22637	0.43%
As 188.979†	43.0	0.0462769	mg/L	0.00317085	0.0462769	mg/L	0.00317085	6.85%
Ba 233.527†	41266.8	0.541800	mg/L	0.0008018	0.541800	mg/L	0.0008018	0.15%
Be 313.107†	-65.5	0.0020718	mg/L	0.00002186	0.0020718	mg/L	0.00002186	1.05%
Ca 317.933†	9632012.1	122.136	mg/L	1.0123	122.136	mg/L	1.0123	0.83%
Cd 228.802†	18.8	0.0052045	mg/L	0.00032345	0.0052045	mg/L	0.00032345	6.21%
Co 228.616†	1186.4	0.0528688	mg/L	0.00051093	0.0528688	mg/L	0.00051093	0.97%
Cr 267.716†	3765.4	0.0647871	mg/L	0.00101174	0.0647871	mg/L	0.00101174	1.56%
Cu 327.393†	9417.7	0.151822	mg/L	0.0002449	0.151822	mg/L	0.0002449	0.16%
Fe 273.955†	874645.2	114.810	mg/L	0.3762	114.810	mg/L	0.3762	0.33%
K 404.721†	12011.1	-899.621	mg/L	8.0167	-899.621	mg/L	8.0167	0.89%
Mg 279.077†	164623.0	18.9114	mg/L	0.02573	18.9114	mg/L	0.02573	0.14%
Mn 257.610†	264500.2	1.06011	mg/L	0.002850	1.06011	mg/L	0.002850	0.27%
Mo 202.031†	38.2	0.0041373	mg/L	0.00036872	0.0041373	mg/L	0.00036872	8.91%
Na 330.237†	886.0	3.25252	mg/L	0.071844	3.25252	mg/L	0.071844	2.21%
Ni 231.604†	3303.1	0.139265	mg/L	0.0009430	0.139265	mg/L	0.0009430	0.68%
Pb 220.353†	1028.4	0.192253	mg/L	0.0022171	0.192253	mg/L	0.0022171	1.15%
Sb 206.836†	8.7	0.0027241	mg/L	0.00509718	0.0027241	mg/L	0.00509718	187.12%
Se 196.026†	-74.6	-0.0169994	mg/L	0.00611753	-0.0169994	mg/L	0.00611753	35.99%
Sn 189.927†	27.3	0.0031409	mg/L	0.00159009	0.0031409	mg/L	0.00159009	50.63%
Ti 334.940†	334485.9	1.34110	mg/L	0.002903	1.34110	mg/L	0.002903	0.22%
Tl 190.801†	-25.3	-0.0089963	mg/L	0.00478577	-0.0089963	mg/L	0.00478577	53.20%
V 290.880†	4493.4	0.0974487	mg/L	0.00067082	0.0974487	mg/L	0.00067082	0.69%
Zn 206.200†	17032.9	0.426982	mg/L	0.0021064	0.426982	mg/L	0.0021064	0.49%
B 249.772†	35445.2	1.23962	mg/L	0.007519	1.23962	mg/L	0.007519	0.61%
Si 251.611†	60345.8	3.00979	mg/L	0.016511	3.00979	mg/L	0.016511	0.55%
Ce 413.764†	1022.5	0.256	mg/L	0.0127	0.256	mg/L	0.0127	4.95%

Sequence No.: 31
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 12:13:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	395495.1	103	%	0.3				0.33%
Y 371.029	150169.9	86.6	%	0.35				0.40%
Ag 328.068†	7468.7	0.0975299	mg/L	0.00057327	0.0975299	mg/L	0.00057327	0.59%
QC value within limits for Ag 328.068 Recovery = 97.53%								
Al 308.215†	38334.3	4.85104	mg/L	0.003399	4.85104	mg/L	0.003399	0.07%
QC value within limits for Al 308.215 Recovery = 97.02%								
As 188.979†	808.7	0.483814	mg/L	0.0033325	0.483814	mg/L	0.0033325	0.69%
QC value within limits for As 188.979 Recovery = 96.76%								
Ba 233.527†	36949.0	0.484854	mg/L	0.0004981	0.484854	mg/L	0.0004981	0.10%
QC value within limits for Ba 233.527 Recovery = 96.97%								
Be 313.107†	517586.4	0.478276	mg/L	0.0029009	0.478276	mg/L	0.0029009	0.61%
QC value within limits for Be 313.107 Recovery = 95.66%								
Ca 317.933†	3951808.2	50.0999	mg/L	0.30013	50.0999	mg/L	0.30013	0.60%
QC value within limits for Ca 317.933 Recovery = 100.20%								
Cd 228.802†	12619.7	0.470434	mg/L	0.0007034	0.470434	mg/L	0.0007034	0.15%
QC value within limits for Cd 228.802 Recovery = 94.09%								
Co 228.616†	11189.5	0.478123	mg/L	0.0012639	0.478123	mg/L	0.0012639	0.26%
QC value within limits for Co 228.616 Recovery = 95.62%								
Cr 267.716†	28052.0	0.491419	mg/L	0.0011941	0.491419	mg/L	0.0011941	0.24%
QC value within limits for Cr 267.716 Recovery = 98.28%								
Cu 327.393†	30477.9	0.489635	mg/L	0.0014468	0.489635	mg/L	0.0014468	0.30%
QC value within limits for Cu 327.393 Recovery = 97.93%								
Fe 273.955†	38144.6	4.97713	mg/L	0.010395	4.97713	mg/L	0.010395	0.21%
QC value within limits for Fe 273.955 Recovery = 99.54%								
K 404.721†	-556.9	-60.7708	mg/L	5.36761	-60.7708	mg/L	5.36761	8.83%
QC value less than the lower limit for K 404.721 Recovery = -121.54%								
Mg 279.077†	430155.2	49.6355	mg/L	0.31082	49.6355	mg/L	0.31082	0.63%
QC value within limits for Mg 279.077 Recovery = 99.27%								
Mn 257.610†	121808.8	0.487831	mg/L	0.0006332	0.487831	mg/L	0.0006332	0.13%
QC value within limits for Mn 257.610 Recovery = 97.57%								
Mo 202.031†	4636.7	0.482610	mg/L	0.0009947	0.482610	mg/L	0.0009947	0.21%
QC value within limits for Mo 202.031 Recovery = 96.52%								
Na 330.237†	17402.1	47.9887	mg/L	0.17271	47.9887	mg/L	0.17271	0.36%
QC value within limits for Na 330.237 Recovery = 95.98%								
Ni 231.604†	11452.3	0.477437	mg/L	0.0011186	0.477437	mg/L	0.0011186	0.23%
QC value within limits for Ni 231.604 Recovery = 95.49%								
Pb 220.353†	2676.9	0.486518	mg/L	0.0032566	0.486518	mg/L	0.0032566	0.67%
QC value within limits for Pb 220.353 Recovery = 97.30%								
Sb 206.836†	889.3	0.506226	mg/L	0.0039363	0.506226	mg/L	0.0039363	0.78%
QC value within limits for Sb 206.836 Recovery = 101.25%								
Se 196.026†	785.5	0.484604	mg/L	0.0083634	0.484604	mg/L	0.0083634	1.73%
QC value within limits for Se 196.026 Recovery = 96.92%								
Sn 189.927†	2535.9	0.490446	mg/L	0.0017469	0.490446	mg/L	0.0017469	0.36%
QC value within limits for Sn 189.927 Recovery = 98.09%								
Ti 334.940†	121927.9	0.489772	mg/L	0.0004491	0.489772	mg/L	0.0004491	0.09%
QC value within limits for Ti 334.940 Recovery = 97.95%								
Tl 190.801†	863.7	0.520218	mg/L	0.0036197	0.520218	mg/L	0.0036197	0.70%
QC value within limits for Tl 190.801 Recovery = 104.04%								
V 290.880†	21096.3	0.493737	mg/L	0.0011062	0.493737	mg/L	0.0011062	0.22%
QC value within limits for V 290.880 Recovery = 98.75%								
Zn 206.200†	19703.8	0.494170	mg/L	0.0001835	0.494170	mg/L	0.0001835	0.04%
QC value within limits for Zn 206.200 Recovery = 98.83%								
B 249.772†	30141.9	0.512213	mg/L	0.0033394	0.512213	mg/L	0.0033394	0.65%
QC value within limits for B 249.772 Recovery = 102.44%								
Si 251.611†	99456.4	4.95969	mg/L	0.005415	4.95969	mg/L	0.005415	0.11%
QC value within limits for Si 251.611 Recovery = 99.19%								
Ce 413.764†	38262.5	6.134	mg/L	0.0237	6.134	mg/L	0.0237	0.39%
QC value greater than the upper limit for Ce 413.764 Recovery = 122.69%								

QC Failed. Continue with analysis.

Sequence No.: 32 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 9/14/2020 12:17:44 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	396260.8	104	%	1.4				1.31%
Y 371.029	181002.8	104	%	1.3				1.22%
Ag 328.068†	35.7	-0.0004556	mg/L	0.00021628	-0.0004556	mg/L	0.00021628	47.47%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-30.0	-0.0197232	mg/L	0.01147236	-0.0197232	mg/L	0.01147236	58.17%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	2.2	0.0023751	mg/L	0.00199145	0.0023751	mg/L	0.00199145	83.85%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	27.8	-0.0020792	mg/L	0.00005881	-0.0020792	mg/L	0.00005881	2.83%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	6.5	0.0021380	mg/L	0.00005025	0.0021380	mg/L	0.00005025	2.35%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	1103.6	-0.0029823	mg/L	0.00031554	-0.0029823	mg/L	0.00031554	10.58%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	-7.4	0.0042374	mg/L	0.00029929	0.0042374	mg/L	0.00029929	7.06%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-0.1	0.0024271	mg/L	0.00020083	0.0024271	mg/L	0.00020083	8.27%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	3.5	-0.0012954	mg/L	0.00024506	-0.0012954	mg/L	0.00024506	18.92%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1.0	0.0007419	mg/L	0.00012412	0.0007419	mg/L	0.00012412	16.73%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	136.1	-0.0133813	mg/L	0.00197004	-0.0133813	mg/L	0.00197004	14.72%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-2819.7	-57.0349	mg/L	13.44914	-57.0349	mg/L	13.44914	23.58%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	52.5	-0.130689	mg/L	0.0017355	-0.130689	mg/L	0.0017355	1.33%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	34.8	-0.0005598	mg/L	0.00004185	-0.0005598	mg/L	0.00004185	7.48%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	3.2	0.0004973	mg/L	0.00076121	0.0004973	mg/L	0.00076121	153.07%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-61.4	0.686326	mg/L	0.1438071	0.686326	mg/L	0.1438071	20.95%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-4.3	0.0020193	mg/L	0.00014808	0.0020193	mg/L	0.00014808	7.33%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	5.0	-0.0013260	mg/L	0.00104717	-0.0013260	mg/L	0.00104717	78.97%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-3.2	-0.0027871	mg/L	0.00462932	-0.0027871	mg/L	0.00462932	166.10%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.5	-0.0022755	mg/L	0.00159760	-0.0022755	mg/L	0.00159760	70.21%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	9.6	-0.0002925	mg/L	0.00025083	-0.0002925	mg/L	0.00025083	85.75%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	42.0	0.0015978	mg/L	0.00010489	0.0015978	mg/L	0.00010489	6.56%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	3.9	-0.0026235	mg/L	0.00267688	-0.0026235	mg/L	0.00267688	102.03%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-24.4	0.0023502	mg/L	0.00039280	0.0023502	mg/L	0.00039280	16.71%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	46.1	-0.0003316	mg/L	0.00003306	-0.0003316	mg/L	0.00003306	9.97%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	212.6	0.0125041	mg/L	0.00026185	0.0125041	mg/L	0.00026185	2.09%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	170.4	-0.0018541	mg/L	0.00013292	-0.0018541	mg/L	0.00013292	7.17%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	54.4	0.008	mg/L	0.0071	0.008	mg/L	0.0071	94.52%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 33
Sample ID: AD19159-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 9/14/2020 12:21:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19159-010

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	402010.3	105	%	0.3				0.29%
Y 371.029	221398.3	128	%	0.4				0.28%
Ag 328.068†	-179.3	-0.0032902	mg/L	0.00109594	-0.0032902	mg/L	0.00109594	33.31%
Al 308.215†	415875.5	52.5548	mg/L	0.15076	52.5548	mg/L	0.15076	0.29%
As 188.979†	128.8	0.108748	mg/L	0.0041128	0.108748	mg/L	0.0041128	3.78%
Ba 233.527†	49197.1	0.646388	mg/L	0.0016115	0.646388	mg/L	0.0016115	0.25%
Be 313.107†	3094.6	0.0049789	mg/L	0.00003607	0.0049789	mg/L	0.00003607	0.72%
Ca 317.933†	11119351.0	140.999	mg/L	1.2695	140.999	mg/L	1.2695	0.90%
Cd 228.802†	59.6	0.0067100	mg/L	0.00027055	0.0067100	mg/L	0.00027055	4.03%
Co 228.616†	1552.6	0.0684340	mg/L	0.00100522	0.0684340	mg/L	0.00100522	1.47%
Cr 267.716†	5447.6	0.0943388	mg/L	0.00041030	0.0943388	mg/L	0.00041030	0.43%
Cu 327.393†	42772.0	0.686835	mg/L	0.0015531	0.686835	mg/L	0.0015531	0.23%
Fe 273.955†	1382728.4	181.521	mg/L	0.5624	181.521	mg/L	0.5624	0.31%
K 404.721†	16871.2	-1465.50	mg/L	22.284	-1465.50	mg/L	22.284	1.52%
Mg 279.077†	413502.0	47.7086	mg/L	0.14269	47.7086	mg/L	0.14269	0.30%
Mn 257.610†	1007916.3	4.04168	mg/L	0.008753	4.04168	mg/L	0.008753	0.22%
Mo 202.031†	26.6	0.0029314	mg/L	0.00026331	0.0029314	mg/L	0.00026331	8.98%
Na 330.237†	148.1	1.25375	mg/L	0.045096	1.25375	mg/L	0.045096	3.60%
Ni 231.604†	5380.0	0.225454	mg/L	0.0006357	0.225454	mg/L	0.0006357	0.28%
Pb 220.353†	6552.3	1.20759	mg/L	0.003724	1.20759	mg/L	0.003724	0.31%
Sb 206.836†	12.3	0.0016169	mg/L	0.00140114	0.0016169	mg/L	0.00140114	86.66%
Se 196.026†	-105.7	-0.0181963	mg/L	0.00158673	-0.0181963	mg/L	0.00158673	8.72%
Sn 189.927†	64.9	0.0104504	mg/L	0.00128720	0.0104504	mg/L	0.00128720	12.32%
Ti 334.940†	193621.7	0.776918	mg/L	0.0013981	0.776918	mg/L	0.0013981	0.18%
Tl 190.801†	-13.4	-0.0058180	mg/L	0.00071673	-0.0058180	mg/L	0.00071673	12.32%
V 290.880†	6016.4	0.127392	mg/L	0.0019777	0.127392	mg/L	0.0019777	1.55%
Zn 206.200†	34250.1	0.860092	mg/L	0.0040214	0.860092	mg/L	0.0040214	0.47%
B 249.772†	54461.6	1.92972	mg/L	0.002677	1.92972	mg/L	0.002677	0.14%
Si 251.611†	61267.6	3.05595	mg/L	0.009940	3.05595	mg/L	0.009940	0.33%
Ce 413.764†	1290.3	0.353	mg/L	0.0138	0.353	mg/L	0.0138	3.91%

Sequence No.: 34
Sample ID: AD19160-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 9/14/2020 12:26:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19160-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	406715.6	106	%	1.7				1.62%
Y 371.029	239972.3	138	%	2.3				1.69%
Ag 328.068†	-243.5	-0.0041355	mg/L	0.00072042	-0.0041355	mg/L	0.00072042	17.42%
Al 308.215†	553210.3	69.9154	mg/L	1.47384	69.9154	mg/L	1.47384	2.11%
As 188.979†	49.7	0.0659015	mg/L	0.00329092	0.0659015	mg/L	0.00329092	4.99%
Ba 233.527†	41412.3	0.543719	mg/L	0.0017321	0.543719	mg/L	0.0017321	0.32%
Be 313.107†	4528.1	0.0062976	mg/L	0.00004184	0.0062976	mg/L	0.00004184	0.66%
Ca 317.933†	11331329.3	143.687	mg/L	3.5907	143.687	mg/L	3.5907	2.50%
Cd 228.802†	20.4	0.0052632	mg/L	0.00019924	0.0052632	mg/L	0.00019924	3.79%
Co 228.616†	2145.7	0.0936506	mg/L	0.00056708	0.0936506	mg/L	0.00056708	0.61%
Cr 267.716†	6664.4	0.115713	mg/L	0.0009553	0.115713	mg/L	0.0009553	0.83%
Cu 327.393†	17269.1	0.277760	mg/L	0.0002136	0.277760	mg/L	0.0002136	0.08%
Fe 273.955†	1572735.4	206.469	mg/L	4.6455	206.469	mg/L	4.6455	2.25%
K 404.721†	20023.5	-1649.99	mg/L	26.926	-1649.99	mg/L	26.926	1.63%
Mg 279.077†	368647.0	42.5185	mg/L	0.85180	42.5185	mg/L	0.85180	2.00%
Mn 257.610†	844249.1	3.38527	mg/L	0.074853	3.38527	mg/L	0.074853	2.21%
Mo 202.031†	2.3	0.0003986	mg/L	0.00129589	0.0003986	mg/L	0.00129589	325.12%
Na 330.237†	54.6	1.00037	mg/L	0.152052	1.00037	mg/L	0.152052	15.20%
Ni 231.604†	5631.2	0.235875	mg/L	0.0016064	0.235875	mg/L	0.0016064	0.68%
Pb 220.353†	868.9	0.164626	mg/L	0.0015655	0.164626	mg/L	0.0015655	0.95%
Sb 206.836†	1.0	-0.0061053	mg/L	0.00387783	-0.0061053	mg/L	0.00387783	63.52%
Se 196.026†	-149.3	-0.0383391	mg/L	0.00368905	-0.0383391	mg/L	0.00368905	9.62%
Sn 189.927†	11.5	0.0000701	mg/L	0.00148993	0.0000701	mg/L	0.00148993	>999.9%
Ti 334.940†	99025.8	0.398045	mg/L	0.0005283	0.398045	mg/L	0.0005283	0.13%
Tl 190.801†	-6.4	-0.0043493	mg/L	0.00484534	-0.0043493	mg/L	0.00484534	111.41%
V 290.880†	6648.9	0.140001	mg/L	0.0007920	0.140001	mg/L	0.0007920	0.57%
Zn 206.200†	25913.6	0.650382	mg/L	0.0052242	0.650382	mg/L	0.0052242	0.80%
B 249.772†	59396.6	2.15358	mg/L	0.031870	2.15358	mg/L	0.031870	1.48%
Si 251.611†	47861.7	2.38504	mg/L	0.036602	2.38504	mg/L	0.036602	1.53%
Ce 413.764†	1363.2	0.385	mg/L	0.0069	0.385	mg/L	0.0069	1.80%

Sequence No.: 35
Sample ID: AD19160-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 9/14/2020 12:31:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19160-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	380684.3	99.5	%	0.53				0.54%
Y 371.029	229768.5	132	%	0.7				0.56%
Ag 328.068†	-502.3	-0.0075477	mg/L	0.00053122	-0.0075477	mg/L	0.00053122	7.04%
Al 308.215†	569499.5	71.9753	mg/L	0.03692	71.9753	mg/L	0.03692	0.05%
As 188.979†	61.7	0.0758933	mg/L	0.00236027	0.0758933	mg/L	0.00236027	3.11%
Ba 233.527†	39785.6	0.522264	mg/L	0.0005299	0.522264	mg/L	0.0005299	0.10%
Be 313.107†	1760.7	0.0037517	mg/L	0.00003059	0.0037517	mg/L	0.00003059	0.82%
Ca 317.933†	25416751.6	322.319	mg/L	2.7885	322.319	mg/L	2.7885	0.87%
Cd 228.802†	-9.3	0.0041659	mg/L	0.00033773	0.0041659	mg/L	0.00033773	8.11%
Co 228.616†	1708.7	0.0750694	mg/L	0.00022054	0.0750694	mg/L	0.00022054	0.29%
Cr 267.716†	5437.9	0.0941674	mg/L	0.00049902	0.0941674	mg/L	0.00049902	0.53%
Cu 327.393†	10092.9	0.162651	mg/L	0.0007810	0.162651	mg/L	0.0007810	0.48%
Fe 273.955†	1699123.8	223.064	mg/L	0.5109	223.064	mg/L	0.5109	0.23%
K 404.721†	24975.6	-1714.69	mg/L	54.705	-1714.69	mg/L	54.705	3.19%
Mg 279.077†	672261.5	77.6490	mg/L	0.16701	77.6490	mg/L	0.16701	0.22%
Mn 257.610†	751482.6	3.01322	mg/L	0.001985	3.01322	mg/L	0.001985	0.07%
Mo 202.031†	-12.8	-0.0011718	mg/L	0.00015283	-0.0011718	mg/L	0.00015283	13.04%
Na 330.237†	177.6	1.33364	mg/L	0.016878	1.33364	mg/L	0.016878	1.27%
Ni 231.604†	4594.8	0.192871	mg/L	0.0005214	0.192871	mg/L	0.0005214	0.27%
Pb 220.353†	256.3	0.0521163	mg/L	0.00077701	0.0521163	mg/L	0.00077701	1.49%
Sb 206.836†	9.4	-0.0002284	mg/L	0.00533215	-0.0002284	mg/L	0.00533215	>999.9%
Se 196.026†	-145.3	-0.0313705	mg/L	0.00532026	-0.0313705	mg/L	0.00532026	16.96%
Sn 189.927†	-14.8	-0.0050423	mg/L	0.00168702	-0.0050423	mg/L	0.00168702	33.46%
Ti 334.940†	324231.5	1.30003	mg/L	0.000247	1.30003	mg/L	0.000247	0.02%
Tl 190.801†	-26.3	-0.0085074	mg/L	0.00516852	-0.0085074	mg/L	0.00516852	60.75%
V 290.880†	7259.0	0.152728	mg/L	0.0007180	0.152728	mg/L	0.0007180	0.47%
Zn 206.200†	17974.8	0.450677	mg/L	0.0018084	0.450677	mg/L	0.0018084	0.40%
B 249.772†	63072.8	2.30868	mg/L	0.004948	2.30868	mg/L	0.004948	0.21%
Si 251.611†	52950.8	2.63977	mg/L	0.007292	2.63977	mg/L	0.007292	0.28%
Ce 413.764†	2249.7	0.540	mg/L	0.0167	0.540	mg/L	0.0167	3.10%

Sequence No.: 36
Sample ID: AD19067-003
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 38
Date Collected: 9/14/2020 12:36:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19067-003

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	392967.8	103	%	1.5				1.42%
Y 371.029	180205.3	104	%	1.5				1.43%
Ag 328.068†	-21.0	-0.0012034	mg/L	0.00124938	-0.0012034	mg/L	0.00124938	103.82%
Al 308.215†	229092.2	28.9428	mg/L	0.08962	28.9428	mg/L	0.08962	0.31%
As 188.979†	46.9	0.0497197	mg/L	0.00006556	0.0497197	mg/L	0.00006556	0.13%
Ba 233.527†	7357.6	0.0945903	mg/L	0.00157045	0.0945903	mg/L	0.00157045	1.66%
Be 313.107†	3278.8	0.0051483	mg/L	0.00002082	0.0051483	mg/L	0.00002082	0.40%
Ca 317.933†	513511.1	6.49538	mg/L	0.016079	6.49538	mg/L	0.016079	0.25%
Cd 228.802†	-1.2	0.0044669	mg/L	0.00012691	0.0044669	mg/L	0.00012691	2.84%
Co 228.616†	264.5	0.0136749	mg/L	0.00048116	0.0136749	mg/L	0.00048116	3.52%
Cr 267.716†	15164.8	0.265036	mg/L	0.0010512	0.265036	mg/L	0.0010512	0.40%
Cu 327.393†	785.7	0.0133604	mg/L	0.00046257	0.0133604	mg/L	0.00046257	3.46%
Fe 273.955†	924817.2	121.397	mg/L	0.3910	121.397	mg/L	0.3910	0.32%
K 404.721†	11798.0	-969.585	mg/L	22.9416	-969.585	mg/L	22.9416	2.37%
Mg 279.077†	67519.4	7.67575	mg/L	0.021740	7.67575	mg/L	0.021740	0.28%
Mn 257.610†	50473.5	0.201732	mg/L	0.0005980	0.201732	mg/L	0.0005980	0.30%
Mo 202.031†	3.1	0.0004873	mg/L	0.00061327	0.0004873	mg/L	0.00061327	125.85%
Na 330.237†	-72.0	0.657589	mg/L	0.0265540	0.657589	mg/L	0.0265540	4.04%
Ni 231.604†	513.3	0.0234982	mg/L	0.00091494	0.0234982	mg/L	0.00091494	3.89%
Pb 220.353†	136.7	0.0258224	mg/L	0.00239705	0.0258224	mg/L	0.00239705	9.28%
Sb 206.836†	10.2	0.0017217	mg/L	0.00338866	0.0017217	mg/L	0.00338866	196.82%
Se 196.026†	-91.7	-0.0257923	mg/L	0.00210845	-0.0257923	mg/L	0.00210845	8.17%
Sn 189.927†	57.8	0.0090713	mg/L	0.00177383	0.0090713	mg/L	0.00177383	19.55%
Ti 334.940†	117619.7	0.472517	mg/L	0.0007685	0.472517	mg/L	0.0007685	0.16%
Tl 190.801†	-3.0	-0.0025534	mg/L	0.00275078	-0.0025534	mg/L	0.00275078	107.73%
V 290.880†	5960.9	0.130535	mg/L	0.0019013	0.130535	mg/L	0.0019013	1.46%
Zn 206.200†	5599.2	0.139359	mg/L	0.0025826	0.139359	mg/L	0.0025826	1.85%
B 249.772†	38104.5	1.32005	mg/L	0.004157	1.32005	mg/L	0.004157	0.31%
Si 251.611†	70501.4	3.51813	mg/L	0.019202	3.51813	mg/L	0.019202	0.55%
Ce 413.764†	791.1	0.224	mg/L	0.0117	0.224	mg/L	0.0117	5.22%

Sequence No.: 37
Sample ID: AD19163-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 9/14/2020 12:40:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19163-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	403274.3	105	%	0.7				0.66%
Y 371.029	183811.0	106	%	0.6				0.57%
Ag 328.068†	33.2	-0.0004881	mg/L	0.00040639	-0.0004881	mg/L	0.00040639	83.26%
Al 308.215†	124967.4	15.7813	mg/L	0.07755	15.7813	mg/L	0.07755	0.49%
As 188.979†	13.5	0.0127637	mg/L	0.00420997	0.0127637	mg/L	0.00420997	32.98%
Ba 233.527†	9627.8	0.124530	mg/L	0.0007542	0.124530	mg/L	0.0007542	0.61%
Be 313.107†	-535.1	0.0016397	mg/L	0.00004463	0.0016397	mg/L	0.00004463	2.72%
Ca 317.933†	190927.4	2.40437	mg/L	0.009431	2.40437	mg/L	0.009431	0.39%
Cd 228.802†	8.2	0.0048119	mg/L	0.00030962	0.0048119	mg/L	0.00030962	6.43%
Co 228.616†	77.4	0.0057189	mg/L	0.00032296	0.0057189	mg/L	0.00032296	5.65%
Cr 267.716†	1980.8	0.0334377	mg/L	0.00065232	0.0334377	mg/L	0.00065232	1.95%
Cu 327.393†	865.1	0.0146343	mg/L	0.00080673	0.0146343	mg/L	0.00080673	5.51%
Fe 273.955†	163605.2	21.4501	mg/L	0.12068	21.4501	mg/L	0.12068	0.56%
K 404.721†	-1569.8	-245.475	mg/L	6.8181	-245.475	mg/L	6.8181	2.78%
Mg 279.077†	10403.5	1.06700	mg/L	0.005723	1.06700	mg/L	0.005723	0.54%
Mn 257.610†	82366.2	0.329642	mg/L	0.0014495	0.329642	mg/L	0.0014495	0.44%
Mo 202.031†	36.6	0.0039664	mg/L	0.00073238	0.0039664	mg/L	0.00073238	18.46%
Na 330.237†	102.2	1.12946	mg/L	0.168257	1.12946	mg/L	0.168257	14.90%
Ni 231.604†	169.6	0.0092324	mg/L	0.00021893	0.0092324	mg/L	0.00021893	2.37%
Pb 220.353†	144.8	0.0259783	mg/L	0.00137459	0.0259783	mg/L	0.00137459	5.29%
Sb 206.836†	-1.5	-0.0016016	mg/L	0.00246993	-0.0016016	mg/L	0.00246993	154.21%
Se 196.026†	-17.9	-0.0072039	mg/L	0.00364370	-0.0072039	mg/L	0.00364370	50.58%
Sn 189.927†	65.1	0.0104765	mg/L	0.00120593	0.0104765	mg/L	0.00120593	11.51%
Ti 334.940†	111008.0	0.446036	mg/L	0.0255108	0.446036	mg/L	0.0255108	5.72%
Tl 190.801†	-2.2	-0.0026356	mg/L	0.00223281	-0.0026356	mg/L	0.00223281	84.72%
V 290.880†	1512.8	0.0360485	mg/L	0.00022398	0.0360485	mg/L	0.00022398	0.62%
Zn 206.200†	3675.8	0.0909765	mg/L	0.00077027	0.0909765	mg/L	0.00077027	0.85%
B 249.772†	6026.0	0.229741	mg/L	0.0019962	0.229741	mg/L	0.0019962	0.87%
Si 251.611†	127539.9	6.37278	mg/L	0.224589	6.37278	mg/L	0.224589	3.52%
Ce 413.764†	484.6	0.094	mg/L	0.0094	0.094	mg/L	0.0094	10.04%

Sequence No.: 38
Sample ID: AD19164-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 9/14/2020 12:44:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19164-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	409019.9	107	%	1.7				1.58%
Y 371.029	202609.4	117	%	1.8				1.52%
Ag 328.068†	-1.4	-0.0009445	mg/L	0.00088005	-0.0009445	mg/L	0.00088005	93.17%
Al 308.215†	162710.0	20.5518	mg/L	0.12969	20.5518	mg/L	0.12969	0.63%
As 188.979†	54.3	0.0388135	mg/L	0.00071461	0.0388135	mg/L	0.00071461	1.84%
Ba 233.527†	3612.6	0.0451990	mg/L	0.00073806	0.0451990	mg/L	0.00073806	1.63%
Be 313.107†	-605.7	0.0015748	mg/L	0.00002800	0.0015748	mg/L	0.00002800	1.78%
Ca 317.933†	15164.1	0.175333	mg/L	0.0005443	0.175333	mg/L	0.0005443	0.31%
Cd 228.802†	8.9	0.0048391	mg/L	0.00005404	0.0048391	mg/L	0.00005404	1.12%
Co 228.616†	72.0	0.0054905	mg/L	0.00062479	0.0054905	mg/L	0.00062479	11.38%
Cr 267.716†	3556.2	0.0611120	mg/L	0.00066980	0.0611120	mg/L	0.00066980	1.10%
Cu 327.393†	1060.5	0.0177686	mg/L	0.00037311	0.0177686	mg/L	0.00037311	2.10%
Fe 273.955†	240297.2	31.5198	mg/L	0.12154	31.5198	mg/L	0.12154	0.39%
K 404.721†	-1179.4	-337.866	mg/L	21.1607	-337.866	mg/L	21.1607	6.26%
Mg 279.077†	6163.7	0.576425	mg/L	0.0102681	0.576425	mg/L	0.0102681	1.78%
Mn 257.610†	7712.4	0.0302324	mg/L	0.00048915	0.0302324	mg/L	0.00048915	1.62%
Mo 202.031†	35.7	0.0038701	mg/L	0.00061225	0.0038701	mg/L	0.00061225	15.82%
Na 330.237†	-47.9	0.722909	mg/L	0.0146076	0.722909	mg/L	0.0146076	2.02%
Ni 231.604†	319.4	0.0154493	mg/L	0.00112256	0.0154493	mg/L	0.00112256	7.27%
Pb 220.353†	156.2	0.0285439	mg/L	0.00152375	0.0285439	mg/L	0.00152375	5.34%
Sb 206.836†	7.2	0.0030271	mg/L	0.00345653	0.0030271	mg/L	0.00345653	114.18%
Se 196.026†	-24.3	-0.0084528	mg/L	0.00247100	-0.0084528	mg/L	0.00247100	29.23%
Sn 189.927†	71.4	0.0117152	mg/L	0.00201538	0.0117152	mg/L	0.00201538	17.20%
Ti 334.940†	114807.6	0.461254	mg/L	0.0159726	0.461254	mg/L	0.0159726	3.46%
Tl 190.801†	3.8	0.0010605	mg/L	0.00221372	0.0010605	mg/L	0.00221372	208.74%
V 290.880†	3790.4	0.0875006	mg/L	0.00160724	0.0875006	mg/L	0.00160724	1.84%
Zn 206.200†	1219.6	0.0291883	mg/L	0.00046864	0.0291883	mg/L	0.00046864	1.61%
B 249.772†	8627.8	0.329685	mg/L	0.0017991	0.329685	mg/L	0.0017991	0.55%
Si 251.611†	184234.5	9.21028	mg/L	0.183734	9.21028	mg/L	0.183734	1.99%
Ce 413.764†	713.1	0.139	mg/L	0.0109	0.139	mg/L	0.0109	7.90%

Sequence No.: 39
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 12:47:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	393352.3	103	%	1.3				1.24%
Y 371.029	150025.1	86.5	%	1.09				1.26%
Ag 328.068†	7374.7	0.0962897	mg/L	0.00032804	0.0962897	mg/L	0.00032804	0.34%
Al 308.215†	38038.8	4.81360	mg/L	0.012310	4.81360	mg/L	0.012310	0.26%
As 188.979†	808.9	0.483907	mg/L	0.0093592	0.483907	mg/L	0.0093592	1.93%
Ba 233.527†	36640.3	0.480784	mg/L	0.0011971	0.480784	mg/L	0.0011971	0.25%
Be 313.107†	513896.7	0.474882	mg/L	0.0076499	0.474882	mg/L	0.0076499	1.61%
Ca 317.933†	3867191.9	49.0268	mg/L	0.79366	49.0268	mg/L	0.79366	1.62%
Cd 228.802†	12524.3	0.466910	mg/L	0.0015570	0.466910	mg/L	0.0015570	0.33%
Co 228.616†	11068.8	0.472994	mg/L	0.0012822	0.472994	mg/L	0.0012822	0.27%
Cr 267.716†	27779.6	0.486635	mg/L	0.0011101	0.486635	mg/L	0.0011101	0.23%
Cu 327.393†	30137.4	0.484172	mg/L	0.0013331	0.484172	mg/L	0.0013331	0.28%
Fe 273.955†	37771.2	4.92811	mg/L	0.010562	4.92811	mg/L	0.010562	0.21%
K 404.721†	-492.3	-58.9692	mg/L	20.40050	-58.9692	mg/L	20.40050	34.60%
Mg 279.077†	426203.8	49.1783	mg/L	0.88301	49.1783	mg/L	0.88301	1.80%
Mn 257.610†	120667.1	0.483252	mg/L	0.0001607	0.483252	mg/L	0.0001607	0.03%
Mo 202.031†	4648.1	0.483790	mg/L	0.0090016	0.483790	mg/L	0.0090016	1.86%
Na 330.237†	17236.5	47.5402	mg/L	0.43184	47.5402	mg/L	0.43184	0.91%
Ni 231.604†	12038.9	0.501781	mg/L	0.0084769	0.501781	mg/L	0.0084769	1.69%
Pb 220.353†	2693.5	0.489584	mg/L	0.0091195	0.489584	mg/L	0.0091195	1.86%
Sb 206.836†	889.4	0.506231	mg/L	0.0029397	0.506231	mg/L	0.0029397	0.58%
Se 196.026†	789.0	0.486766	mg/L	0.0095315	0.486766	mg/L	0.0095315	1.96%
Sn 189.927†	2545.0	0.492211	mg/L	0.0087505	0.492211	mg/L	0.0087505	1.78%
Ti 334.940†	120827.3	0.485364	mg/L	0.0005752	0.485364	mg/L	0.0005752	0.12%
Tl 190.801†	877.7	0.527861	mg/L	0.0115176	0.527861	mg/L	0.0115176	2.18%
V 290.880†	20917.5	0.489662	mg/L	0.0022587	0.489662	mg/L	0.0022587	0.46%
Zn 206.200†	19521.5	0.489584	mg/L	0.0010249	0.489584	mg/L	0.0010249	0.21%
B 249.772†	29892.8	0.508011	mg/L	0.0030580	0.508011	mg/L	0.0030580	0.60%
Si 251.611†	98429.3	4.90827	mg/L	0.008633	4.90827	mg/L	0.008633	0.18%
Ce 413.764†	38157.4	6.117	mg/L	0.0609	6.117	mg/L	0.0609	1.00%

Sequence No.: 40
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/14/2020 12:51:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	398250.4	104	%	0.8				0.80%
Y 371.029	181813.9	105	%	0.9				0.82%
Ag 328.068†	36.7	-0.0004417	mg/L	0.00063846	-0.0004417	mg/L	0.00063846	144.53%
Al 308.215†	-14.6	-0.0177083	mg/L	0.00751211	-0.0177083	mg/L	0.00751211	42.42%
As 188.979†	-0.3	0.0008996	mg/L	0.00223856	0.0008996	mg/L	0.00223856	248.83%
Ba 233.527†	21.8	-0.0021580	mg/L	0.00017228	-0.0021580	mg/L	0.00017228	7.98%
Be 313.107†	16.1	0.0021468	mg/L	0.00002001	0.0021468	mg/L	0.00002001	0.93%
Ca 317.933†	1058.6	-0.0035528	mg/L	0.00056289	-0.0035528	mg/L	0.00056289	15.84%
Cd 228.802†	5.6	0.0047193	mg/L	0.00039079	0.0047193	mg/L	0.00039079	8.28%
Co 228.616†	-1.7	0.0023563	mg/L	0.00029699	0.0023563	mg/L	0.00029699	12.60%
Cr 267.716†	0.2	-0.0013540	mg/L	0.00016292	-0.0013540	mg/L	0.00016292	12.03%
Cu 327.393†	-16.7	0.0004909	mg/L	0.00038433	0.0004909	mg/L	0.00038433	78.30%
Fe 273.955†	136.9	-0.0132692	mg/L	0.00162698	-0.0132692	mg/L	0.00162698	12.26%
K 404.721†	-3143.7	-63.6210	mg/L	7.44663	-63.6210	mg/L	7.44663	11.70%
Mg 279.077†	59.3	-0.129902	mg/L	0.0016881	-0.129902	mg/L	0.0016881	1.30%
Mn 257.610†	22.9	-0.0006073	mg/L	0.00005258	-0.0006073	mg/L	0.00005258	8.66%
Mo 202.031†	-2.0	-0.0000512	mg/L	0.00037051	-0.0000512	mg/L	0.00037051	723.59%
Na 330.237†	-31.3	0.767805	mg/L	0.1083796	0.767805	mg/L	0.1083796	14.12%
Ni 231.604†	-12.7	0.0016670	mg/L	0.00017716	0.0016670	mg/L	0.00017716	10.63%
Pb 220.353†	-6.1	-0.0033774	mg/L	0.00209677	-0.0033774	mg/L	0.00209677	62.08%
Sb 206.836†	2.4	0.0002875	mg/L	0.00329161	0.0002875	mg/L	0.00329161	>999.9%
Se 196.026†	-4.1	-0.0044569	mg/L	0.00157775	-0.0044569	mg/L	0.00157775	35.40%
Sn 189.927†	13.2	0.0004010	mg/L	0.00036529	0.0004010	mg/L	0.00036529	91.09%
Ti 334.940†	31.3	0.0015546	mg/L	0.00010266	0.0015546	mg/L	0.00010266	6.60%
Tl 190.801†	10.9	0.0013001	mg/L	0.00365901	0.0013001	mg/L	0.00365901	281.44%
V 290.880†	-22.1	0.0023948	mg/L	0.00026348	0.0023948	mg/L	0.00026348	11.00%
Zn 206.200†	42.3	-0.0004273	mg/L	0.00019393	-0.0004273	mg/L	0.00019393	45.39%
B 249.772†	190.9	0.0121631	mg/L	0.00069727	0.0121631	mg/L	0.00069727	5.73%
Si 251.611†	215.2	0.0003964	mg/L	0.00643409	0.0003964	mg/L	0.00643409	>999.9%
Ce 413.764†	115.1	0.017	mg/L	0.0116	0.017	mg/L	0.0116	67.31%

Sequence No.: 41
Sample ID: MB 85275 (100)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 9/14/2020 12:55:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85275 (100)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	409182.6	107	%	0.7				0.69%
Y 371.029	184640.0	106	%	0.8				0.72%
Ag 328.068†	49.0	-0.0002797	mg/L	0.00080213	-0.0002797	mg/L	0.00080213	286.81%
Al 308.215†	-77.1	-0.0255629	mg/L	0.00678838	-0.0255629	mg/L	0.00678838	26.56%
As 188.979†	-1.2	0.0003177	mg/L	0.00390606	0.0003177	mg/L	0.00390606	>999.9%
Ba 233.527†	22.1	-0.0021538	mg/L	0.00013278	-0.0021538	mg/L	0.00013278	6.16%
Be 313.107†	45.3	0.0021737	mg/L	0.00002723	0.0021737	mg/L	0.00002723	1.25%
Ca 317.933†	2597.7	0.0159660	mg/L	0.00031313	0.0159660	mg/L	0.00031313	1.96%
Cd 228.802†	-9.2	0.0041709	mg/L	0.00017959	0.0041709	mg/L	0.00017959	4.31%
Co 228.616†	0.8	0.0024649	mg/L	0.00028062	0.0024649	mg/L	0.00028062	11.38%
Cr 267.716†	17.4	-0.0010526	mg/L	0.00003590	-0.0010526	mg/L	0.00003590	3.41%
Cu 327.393†	10.8	0.0009320	mg/L	0.00137092	0.0009320	mg/L	0.00137092	147.10%
Fe 273.955†	327.1	0.0116990	mg/L	0.00325078	0.0116990	mg/L	0.00325078	27.79%
K 404.721†	-4461.5	-90.6502	mg/L	12.83671	-90.6502	mg/L	12.83671	14.16%
Mg 279.077†	151.4	-0.119246	mg/L	0.0033092	-0.119246	mg/L	0.0033092	2.78%
Mn 257.610†	353.4	0.0007183	mg/L	0.00006063	0.0007183	mg/L	0.00006063	8.44%
Mo 202.031†	-4.4	-0.0003002	mg/L	0.00050777	-0.0003002	mg/L	0.00050777	169.16%
Na 330.237†	-6.3	0.835564	mg/L	0.1766741	0.835564	mg/L	0.1766741	21.14%
Ni 231.604†	6.9	0.0024836	mg/L	0.00054592	0.0024836	mg/L	0.00054592	21.98%
Pb 220.353†	-4.4	-0.0030638	mg/L	0.00151550	-0.0030638	mg/L	0.00151550	49.46%
Sb 206.836†	-3.0	-0.0026628	mg/L	0.00128382	-0.0026628	mg/L	0.00128382	48.21%
Se 196.026†	-6.6	-0.0060268	mg/L	0.00239419	-0.0060268	mg/L	0.00239419	39.73%
Sn 189.927†	55.6	0.0086433	mg/L	0.00190687	0.0086433	mg/L	0.00190687	22.06%
Ti 334.940†	106.6	0.0018562	mg/L	0.00022755	0.0018562	mg/L	0.00022755	12.26%
Tl 190.801†	13.1	0.0026045	mg/L	0.00266902	0.0026045	mg/L	0.00266902	102.48%
V 290.880†	-64.2	0.0014235	mg/L	0.00052949	0.0014235	mg/L	0.00052949	37.20%
Zn 206.200†	202.1	0.0035912	mg/L	0.00021920	0.0035912	mg/L	0.00021920	6.10%
B 249.772†	101.6	0.0109056	mg/L	0.00011777	0.0109056	mg/L	0.00011777	1.08%
Si 251.611†	258.5	0.0025690	mg/L	0.00339757	0.0025690	mg/L	0.00339757	132.25%
Ce 413.764†	143.2	0.022	mg/L	0.0092	0.022	mg/L	0.0092	42.21%

Sequence No.: 42
Sample ID: LCS 85275
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 9/14/2020 12:59:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 85275

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	382187.4	99.9	%	0.71				0.71%
Y 371.029	199594.6	115	%	0.9				0.82%
Ag 328.068†	66164.9	0.871289	mg/L	0.0014432	0.871289	mg/L	0.0014432	0.17%
Al 308.215†	693153.9	87.5423	mg/L	0.07577	87.5423	mg/L	0.07577	0.09%
As 188.979†	644.3	0.408714	mg/L	0.0024810	0.408714	mg/L	0.0024810	0.61%
Ba 233.527†	539054.8	7.10685	mg/L	0.015270	7.10685	mg/L	0.015270	0.21%
Be 313.107†	1708803.2	1.57412	mg/L	0.004302	1.57412	mg/L	0.004302	0.27%
Ca 317.933†	14268325.7	180.934	mg/L	1.4362	180.934	mg/L	1.4362	0.79%
Cd 228.802†	41322.7	1.53015	mg/L	0.003133	1.53015	mg/L	0.003133	0.20%
Co 228.616†	53503.5	2.27700	mg/L	0.006860	2.27700	mg/L	0.006860	0.30%
Cr 267.716†	105672.8	1.85495	mg/L	0.003161	1.85495	mg/L	0.003161	0.17%
Cu 327.393†	108675.0	1.74394	mg/L	0.003800	1.74394	mg/L	0.003800	0.22%
Fe 273.955†	1058512.2	138.951	mg/L	0.5891	138.951	mg/L	0.5891	0.42%
K 404.721†	14732.5	-1084.84	mg/L	11.406	-1084.84	mg/L	11.406	1.05%
Mg 279.077†	544795.7	62.9003	mg/L	0.19143	62.9003	mg/L	0.19143	0.30%
Mn 257.610†	1239077.5	4.96879	mg/L	0.010312	4.96879	mg/L	0.010312	0.21%
Mo 202.031†	15657.2	1.62929	mg/L	0.009966	1.62929	mg/L	0.009966	0.61%
Na 330.237†	2564.3	7.79847	mg/L	0.103104	7.79847	mg/L	0.103104	1.32%
Ni 231.604†	11183.4	0.466279	mg/L	0.0019922	0.466279	mg/L	0.0019922	0.43%
Pb 220.353†	7271.9	1.34795	mg/L	0.007841	1.34795	mg/L	0.007841	0.58%
Sb 206.836†	649.0	0.386759	mg/L	0.0014605	0.386759	mg/L	0.0014605	0.38%
Se 196.026†	4801.4	3.00133	mg/L	0.015582	3.00133	mg/L	0.015582	0.52%
Sn 189.927†	6610.1	1.28185	mg/L	0.006515	1.28185	mg/L	0.006515	0.51%
Ti 334.940†	1011651.3	4.05327	mg/L	0.005970	4.05327	mg/L	0.005970	0.15%
Tl 190.801†	3594.2	2.02433	mg/L	0.007667	2.02433	mg/L	0.007667	0.38%
V 290.880†	104855.5	2.42179	mg/L	0.000941	2.42179	mg/L	0.000941	0.04%
Zn 206.200†	229683.5	5.77635	mg/L	0.021210	5.77635	mg/L	0.021210	0.37%
B 249.772†	181999.3	3.68481	mg/L	0.014807	3.68481	mg/L	0.014807	0.40%
Si 251.611†	123698.2	6.15489	mg/L	0.066059	6.15489	mg/L	0.066059	1.07%
Ce 413.764†	3245.9	0.632	mg/L	0.0104	0.632	mg/L	0.0104	1.65%

Sequence No.: 43
Sample ID: LCS MR 85275
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 9/14/2020 1:04:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS MR 85275

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	385679.4	101	%	0.5				0.45%
Y 371.029	201371.7	116	%	0.5				0.40%
Ag 328.068†	65804.9	0.866543	mg/L	0.0014355	0.866543	mg/L	0.0014355	0.17%
Al 308.215†	681312.9	86.0460	mg/L	0.22500	86.0460	mg/L	0.22500	0.26%
As 188.979†	633.2	0.401598	mg/L	0.0018761	0.401598	mg/L	0.0018761	0.47%
Ba 233.527†	528719.6	6.97055	mg/L	0.016451	6.97055	mg/L	0.016451	0.24%
Be 313.107†	1698063.2	1.56424	mg/L	0.001988	1.56424	mg/L	0.001988	0.13%
Ca 317.933†	14348757.6	181.954	mg/L	3.0488	181.954	mg/L	3.0488	1.68%
Cd 228.802†	40962.8	1.51687	mg/L	0.002297	1.51687	mg/L	0.002297	0.15%
Co 228.616†	52968.6	2.25426	mg/L	0.002647	2.25426	mg/L	0.002647	0.12%
Cr 267.716†	104608.1	1.83625	mg/L	0.004012	1.83625	mg/L	0.004012	0.22%
Cu 327.393†	107865.2	1.73095	mg/L	0.003942	1.73095	mg/L	0.003942	0.23%
Fe 273.955†	1036673.6	136.084	mg/L	0.2448	136.084	mg/L	0.2448	0.18%
K 404.721†	13497.4	-1081.37	mg/L	14.548	-1081.37	mg/L	14.548	1.35%
Mg 279.077†	539721.5	62.3132	mg/L	0.11930	62.3132	mg/L	0.11930	0.19%
Mn 257.610†	1231339.4	4.93775	mg/L	0.011746	4.93775	mg/L	0.011746	0.24%
Mo 202.031†	15430.0	1.60564	mg/L	0.010485	1.60564	mg/L	0.010485	0.65%
Na 330.237†	2513.8	7.66160	mg/L	0.020369	7.66160	mg/L	0.020369	0.27%
Ni 231.604†	10980.4	0.457856	mg/L	0.0021846	0.457856	mg/L	0.0021846	0.48%
Pb 220.353†	7145.7	1.32454	mg/L	0.009707	1.32454	mg/L	0.009707	0.73%
Sb 206.836†	615.6	0.367856	mg/L	0.0029685	0.367856	mg/L	0.0029685	0.81%
Se 196.026†	4799.3	2.99924	mg/L	0.026864	2.99924	mg/L	0.026864	0.90%
Sn 189.927†	6515.9	1.26356	mg/L	0.005730	1.26356	mg/L	0.005730	0.45%
Ti 334.940†	977403.6	3.91610	mg/L	0.012051	3.91610	mg/L	0.012051	0.31%
Tl 190.801†	3545.8	1.99636	mg/L	0.005493	1.99636	mg/L	0.005493	0.28%
V 290.880†	104471.3	2.41282	mg/L	0.009556	2.41282	mg/L	0.009556	0.40%
Zn 206.200†	228148.5	5.73774	mg/L	0.006598	5.73774	mg/L	0.006598	0.11%
B 249.772†	181890.9	3.66629	mg/L	0.016806	3.66629	mg/L	0.016806	0.46%
Si 251.611†	110533.2	5.49637	mg/L	0.090168	5.49637	mg/L	0.090168	1.64%
Ce 413.764†	3083.7	0.603	mg/L	0.0046	0.603	mg/L	0.0046	0.76%

Sequence No.: 44
Sample ID: AD19192-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 9/14/2020 1:09:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	421415.5	110	%	0.9				0.83%
Y 371.029	190199.1	110	%	0.9				0.85%
Ag 328.068†	87.6	0.0002287	mg/L	0.00032692	0.0002287	mg/L	0.00032692	142.92%
Al 308.215†	111472.7	14.0758	mg/L	0.07991	14.0758	mg/L	0.07991	0.57%
As 188.979†	0.7	0.0029504	mg/L	0.00605438	0.0029504	mg/L	0.00605438	205.21%
Ba 233.527†	1992.2	0.0238280	mg/L	0.00015695	0.0238280	mg/L	0.00015695	0.66%
Be 313.107†	-823.4	0.0013746	mg/L	0.00004326	0.0013746	mg/L	0.00004326	3.15%
Ca 317.933†	11019.4	0.122770	mg/L	0.0016618	0.122770	mg/L	0.0016618	1.35%
Cd 228.802†	-5.2	0.0043184	mg/L	0.00050165	0.0043184	mg/L	0.00050165	11.62%
Co 228.616†	45.7	0.0043731	mg/L	0.00046462	0.0043731	mg/L	0.00046462	10.62%
Cr 267.716†	7416.9	0.128933	mg/L	0.0016182	0.128933	mg/L	0.0016182	1.26%
Cu 327.393†	249.7	0.0047640	mg/L	0.00100301	0.0047640	mg/L	0.00100301	21.05%
Fe 273.955†	67682.4	8.85545	mg/L	0.019739	8.85545	mg/L	0.019739	0.22%
K 404.721†	-4891.8	-187.505	mg/L	11.0025	-187.505	mg/L	11.0025	5.87%
Mg 279.077†	1457.4	0.0318632	mg/L	0.00153270	0.0318632	mg/L	0.00153270	4.81%
Mn 257.610†	3296.1	0.0125203	mg/L	0.00014204	0.0125203	mg/L	0.00014204	1.13%
Mo 202.031†	1.9	0.0003590	mg/L	0.00050730	0.0003590	mg/L	0.00050730	141.30%
Na 330.237†	-81.2	0.632514	mg/L	0.0707847	0.632514	mg/L	0.0707847	11.19%
Ni 231.604†	98.1	0.0062680	mg/L	0.00052856	0.0062680	mg/L	0.00052856	8.43%
Pb 220.353†	102.3	0.0179377	mg/L	0.00110395	0.0179377	mg/L	0.00110395	6.15%
Sb 206.836†	8.0	0.0041247	mg/L	0.00407819	0.0041247	mg/L	0.00407819	98.87%
Se 196.026†	-19.6	-0.0116293	mg/L	0.00477493	-0.0116293	mg/L	0.00477493	41.06%
Sn 189.927†	72.5	0.0119318	mg/L	0.00130600	0.0119318	mg/L	0.00130600	10.95%
Ti 334.940†	114638.4	0.460576	mg/L	0.0166493	0.460576	mg/L	0.0166493	3.61%
Tl 190.801†	1.1	-0.0003441	mg/L	0.00328174	-0.0003441	mg/L	0.00328174	953.71%
V 290.880†	1230.2	0.0304457	mg/L	0.00093246	0.0304457	mg/L	0.00093246	3.06%
Zn 206.200†	424.7	0.0091918	mg/L	0.00015489	0.0091918	mg/L	0.00015489	1.69%
B 249.772†	3382.4	0.114334	mg/L	0.0018655	0.114334	mg/L	0.0018655	1.63%
Si 251.611†	183520.7	9.17461	mg/L	0.178858	9.17461	mg/L	0.178858	1.95%
Ce 413.764†	804.1	0.135	mg/L	0.0020	0.135	mg/L	0.0020	1.50%

Sequence No.: 45
Sample ID: AD19192-001 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 9/14/2020 1:13:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-001 MR

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	412828.2	108	%	0.5				0.49%
Y 371.029	186829.2	108	%	0.7				0.66%
Ag 328.068†	64.5	-0.0000754	mg/L	0.00027726	-0.0000754	mg/L	0.00027726	367.58%
Al 308.215†	117464.1	14.8331	mg/L	0.05623	14.8331	mg/L	0.05623	0.38%
As 188.979†	4.5	0.0055685	mg/L	0.00184067	0.0055685	mg/L	0.00184067	33.06%
Ba 233.527†	3891.8	0.0488807	mg/L	0.00071377	0.0488807	mg/L	0.00071377	1.46%
Be 313.107†	-762.7	0.0014304	mg/L	0.00006274	0.0014304	mg/L	0.00006274	4.39%
Ca 317.933†	12309.9	0.139137	mg/L	0.0008421	0.139137	mg/L	0.0008421	0.61%
Cd 228.802†	4.5	0.0046783	mg/L	0.00015975	0.0046783	mg/L	0.00015975	3.41%
Co 228.616†	59.9	0.0049747	mg/L	0.00035912	0.0049747	mg/L	0.00035912	7.22%
Cr 267.716†	9243.2	0.161014	mg/L	0.0013631	0.161014	mg/L	0.0013631	0.85%
Cu 327.393†	367.5	0.0066524	mg/L	0.00035362	0.0066524	mg/L	0.00035362	5.32%
Fe 273.955†	81907.9	10.7233	mg/L	0.01099	10.7233	mg/L	0.01099	0.10%
K 404.721†	-3766.0	-183.235	mg/L	5.9031	-183.235	mg/L	5.9031	3.22%
Mg 279.077†	1543.4	0.0418195	mg/L	0.00125488	0.0418195	mg/L	0.00125488	3.00%
Mn 257.610†	3800.0	0.0145412	mg/L	0.00023626	0.0145412	mg/L	0.00023626	1.62%
Mo 202.031†	-1.4	0.0000113	mg/L	0.00031427	0.0000113	mg/L	0.00031427	>999.9%
Na 330.237†	-36.0	0.755187	mg/L	0.0489374	0.755187	mg/L	0.0489374	6.48%
Ni 231.604†	109.9	0.0067581	mg/L	0.00001394	0.0067581	mg/L	0.00001394	0.21%
Pb 220.353†	149.2	0.0266533	mg/L	0.00099835	0.0266533	mg/L	0.00099835	3.75%
Sb 206.836†	3.5	0.0015589	mg/L	0.00302924	0.0015589	mg/L	0.00302924	194.31%
Se 196.026†	-10.7	-0.0056222	mg/L	0.00729361	-0.0056222	mg/L	0.00729361	129.73%
Sn 189.927†	83.1	0.0139730	mg/L	0.00175716	0.0139730	mg/L	0.00175716	12.58%
Ti 334.940†	108489.1	0.435947	mg/L	0.0050791	0.435947	mg/L	0.0050791	1.17%
Tl 190.801†	-2.1	-0.0023170	mg/L	0.00239232	-0.0023170	mg/L	0.00239232	103.25%
V 290.880†	1480.9	0.0360476	mg/L	0.00030097	0.0360476	mg/L	0.00030097	0.83%
Zn 206.200†	546.2	0.0122474	mg/L	0.00038365	0.0122474	mg/L	0.00038365	3.13%
B 249.772†	3548.6	0.127900	mg/L	0.0002341	0.127900	mg/L	0.0002341	0.18%
Si 251.611†	172386.4	8.61736	mg/L	0.242687	8.61736	mg/L	0.242687	2.82%
Ce 413.764†	779.0	0.132	mg/L	0.0035	0.132	mg/L	0.0035	2.64%

Sequence No.: 46
Sample ID: AD19192-001 MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 9/14/2020 1:16:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-001 MS1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	392140.8	103	%	0.5				0.50%
Y 371.029	173747.3	100	%	0.4				0.42%
Ag 328.068†	7711.8	0.100734	mg/L	0.0006762	0.100734	mg/L	0.0006762	0.67%
Al 308.215†	277152.4	35.0076	mg/L	0.08238	35.0076	mg/L	0.08238	0.24%
As 188.979†	726.9	0.436778	mg/L	0.0068413	0.436778	mg/L	0.0068413	1.57%
Ba 233.527†	37245.7	0.488767	mg/L	0.0029777	0.488767	mg/L	0.0029777	0.61%
Be 313.107†	489049.2	0.452024	mg/L	0.0061030	0.452024	mg/L	0.0061030	1.35%
Ca 317.933†	3620342.0	45.8963	mg/L	0.60469	45.8963	mg/L	0.60469	1.32%
Cd 228.802†	11581.6	0.432106	mg/L	0.0039719	0.432106	mg/L	0.0039719	0.92%
Co 228.616†	10888.2	0.465315	mg/L	0.0046795	0.465315	mg/L	0.0046795	1.01%
Cr 267.716†	33619.9	0.589228	mg/L	0.0011209	0.589228	mg/L	0.0011209	0.19%
Cu 327.393†	29282.2	0.470454	mg/L	0.0005780	0.470454	mg/L	0.0005780	0.12%
Fe 273.955†	114062.7	14.9452	mg/L	0.05420	14.9452	mg/L	0.05420	0.36%
K 404.721†	-920.9	-167.479	mg/L	2.8920	-167.479	mg/L	2.8920	1.73%
Mg 279.077†	403639.9	46.5675	mg/L	0.54580	46.5675	mg/L	0.54580	1.17%
Mn 257.610†	115708.8	0.463366	mg/L	0.0018604	0.463366	mg/L	0.0018604	0.40%
Mo 202.031†	4330.8	0.450780	mg/L	0.0051038	0.450780	mg/L	0.0051038	1.13%
Na 330.237†	15881.3	43.8694	mg/L	0.24480	43.8694	mg/L	0.24480	0.56%
Ni 231.604†	11292.3	0.470797	mg/L	0.0038998	0.470797	mg/L	0.0038998	0.83%
Pb 220.353†	2605.5	0.481097	mg/L	0.0048160	0.481097	mg/L	0.0048160	1.00%
Sb 206.836†	632.8	0.356334	mg/L	0.0021823	0.356334	mg/L	0.0021823	0.61%
Se 196.026†	709.3	0.440254	mg/L	0.0101087	0.440254	mg/L	0.0101087	2.30%
Sn 189.927†	2410.9	0.466168	mg/L	0.0058876	0.466168	mg/L	0.0058876	1.26%
Ti 334.940†	213386.4	0.856079	mg/L	0.0198894	0.856079	mg/L	0.0198894	2.32%
Tl 190.801†	902.7	0.507592	mg/L	0.0032356	0.507592	mg/L	0.0032356	0.64%
V 290.880†	20764.8	0.484895	mg/L	0.0054657	0.484895	mg/L	0.0054657	1.13%
Zn 206.200†	18516.9	0.464314	mg/L	0.0035889	0.464314	mg/L	0.0035889	0.77%
B 249.772†	29312.2	0.557624	mg/L	0.0003615	0.557624	mg/L	0.0003615	0.06%
Si 251.611†	206537.1	10.3195	mg/L	0.18509	10.3195	mg/L	0.18509	1.79%
Ce 413.764†	4399.1	0.716	mg/L	0.0085	0.716	mg/L	0.0085	1.18%

Sequence No.: 47
Sample ID: AD19192-001 MS2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 9/14/2020 1:20:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-001 MS2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	382868.1	100	%	0.5				0.45%
Y 371.029	171885.8	99.1	%	0.44				0.45%
Ag 328.068†	8536.4	0.111605	mg/L	0.0008298	0.111605	mg/L	0.0008298	0.74%
Al 308.215†	299532.6	37.8369	mg/L	0.06513	37.8369	mg/L	0.06513	0.17%
As 188.979†	763.1	0.458491	mg/L	0.0084432	0.458491	mg/L	0.0084432	1.84%
Ba 233.527†	38861.7	0.510080	mg/L	0.0010058	0.510080	mg/L	0.0010058	0.20%
Be 313.107†	508839.2	0.470230	mg/L	0.0016560	0.470230	mg/L	0.0016560	0.35%
Ca 317.933†	3818589.7	48.4104	mg/L	0.16169	48.4104	mg/L	0.16169	0.33%
Cd 228.802†	12576.8	0.468851	mg/L	0.0018507	0.468851	mg/L	0.0018507	0.39%
Co 228.616†	11147.0	0.476318	mg/L	0.0022188	0.476318	mg/L	0.0022188	0.47%
Cr 267.716†	38251.7	0.670594	mg/L	0.0024900	0.670594	mg/L	0.0024900	0.37%
Cu 327.393†	29660.7	0.476526	mg/L	0.0009993	0.476526	mg/L	0.0009993	0.21%
Fe 273.955†	120503.1	15.7908	mg/L	0.06064	15.7908	mg/L	0.06064	0.38%
K 404.721†	487.4	-147.284	mg/L	6.8821	-147.284	mg/L	6.8821	4.67%
Mg 279.077†	419989.3	48.4592	mg/L	0.30649	48.4592	mg/L	0.30649	0.63%
Mn 257.610†	120323.4	0.481874	mg/L	0.0014496	0.481874	mg/L	0.0014496	0.30%
Mo 202.031†	4452.1	0.463394	mg/L	0.0018169	0.463394	mg/L	0.0018169	0.39%
Na 330.237†	18051.9	49.7488	mg/L	0.17838	49.7488	mg/L	0.17838	0.36%
Ni 231.604†	11543.2	0.481211	mg/L	0.0015633	0.481211	mg/L	0.0015633	0.32%
Pb 220.353†	2695.0	0.497763	mg/L	0.0021906	0.497763	mg/L	0.0021906	0.44%
Sb 206.836†	606.6	0.342358	mg/L	0.0044913	0.342358	mg/L	0.0044913	1.31%
Se 196.026†	746.1	0.463157	mg/L	0.0103936	0.463157	mg/L	0.0103936	2.24%
Sn 189.927†	2509.3	0.485282	mg/L	0.0012643	0.485282	mg/L	0.0012643	0.26%
Ti 334.940†	205601.3	0.824898	mg/L	0.0018918	0.824898	mg/L	0.0018918	0.23%
Tl 190.801†	934.7	0.526034	mg/L	0.0025507	0.526034	mg/L	0.0025507	0.48%
V 290.880†	21963.5	0.512507	mg/L	0.0053684	0.512507	mg/L	0.0053684	1.05%
Zn 206.200†	20360.4	0.510687	mg/L	0.0027232	0.510687	mg/L	0.0027232	0.53%
B 249.772†	32887.9	0.618787	mg/L	0.0016488	0.618787	mg/L	0.0016488	0.27%
Si 251.611†	189552.0	9.46917	mg/L	0.156038	9.46917	mg/L	0.156038	1.65%
Ce 413.764†	5194.5	0.844	mg/L	0.0351	0.844	mg/L	0.0351	4.16%

Sequence No.: 48
Sample ID: AD19192-001 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 9/14/2020 1:24:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-001 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	396187.6	104	%	0.6				0.58%
Y 371.029	175366.1	101	%	0.6				0.57%
Ag 328.068†	5025.1	0.0653172	mg/L	0.00097108	0.0653172	mg/L	0.00097108	1.49%
Al 308.215†	147780.9	18.6527	mg/L	0.07946	18.6527	mg/L	0.07946	0.43%
As 188.979†	790.7	0.474486	mg/L	0.0019673	0.474486	mg/L	0.0019673	0.41%
Ba 233.527†	37608.8	0.493556	mg/L	0.0004867	0.493556	mg/L	0.0004867	0.10%
Be 313.107†	506970.5	0.468511	mg/L	0.0058823	0.468511	mg/L	0.0058823	1.26%
Ca 317.933†	3699696.8	46.9026	mg/L	0.55150	46.9026	mg/L	0.55150	1.18%
Cd 228.802†	12112.9	0.451723	mg/L	0.0015126	0.451723	mg/L	0.0015126	0.33%
Co 228.616†	10813.5	0.462140	mg/L	0.0027458	0.462140	mg/L	0.0027458	0.59%
Cr 267.716†	33912.8	0.594373	mg/L	0.0012410	0.594373	mg/L	0.0012410	0.21%
Cu 327.393†	29578.1	0.475201	mg/L	0.0016227	0.475201	mg/L	0.0016227	0.34%
Fe 273.955†	102141.9	13.3800	mg/L	0.02456	13.3800	mg/L	0.02456	0.18%
K 404.721†	-1618.5	-166.062	mg/L	5.5085	-166.062	mg/L	5.5085	3.32%
Mg 279.077†	410153.1	47.3211	mg/L	0.57825	47.3211	mg/L	0.57825	1.22%
Mn 257.610†	120978.2	0.484500	mg/L	0.0002745	0.484500	mg/L	0.0002745	0.06%
Mo 202.031†	4630.0	0.481910	mg/L	0.0046349	0.481910	mg/L	0.0046349	0.96%
Na 330.237†	16319.1	45.0554	mg/L	0.14658	45.0554	mg/L	0.14658	0.33%
Ni 231.604†	11135.9	0.464310	mg/L	0.0011148	0.464310	mg/L	0.0011148	0.24%
Pb 220.353†	2717.1	0.499986	mg/L	0.0017768	0.499986	mg/L	0.0017768	0.36%
Sb 206.836†	883.3	0.494632	mg/L	0.0021061	0.494632	mg/L	0.0021061	0.43%
Se 196.026†	779.8	0.483351	mg/L	0.0055283	0.483351	mg/L	0.0055283	1.14%
Sn 189.927†	2530.9	0.489468	mg/L	0.0030842	0.489468	mg/L	0.0030842	0.63%
Ti 334.940†	234627.0	0.941151	mg/L	0.0138587	0.941151	mg/L	0.0138587	1.47%
Tl 190.801†	953.1	0.536226	mg/L	0.0043367	0.536226	mg/L	0.0043367	0.81%
V 290.880†	21385.5	0.499733	mg/L	0.0039490	0.499733	mg/L	0.0039490	0.79%
Zn 206.200†	19144.7	0.480105	mg/L	0.0019132	0.480105	mg/L	0.0019132	0.40%
B 249.772†	29937.1	0.558269	mg/L	0.0029196	0.558269	mg/L	0.0029196	0.52%
Si 251.611†	193592.4	9.67110	mg/L	0.249197	9.67110	mg/L	0.249197	2.58%
Ce 413.764†	4410.8	0.716	mg/L	0.0268	0.716	mg/L	0.0268	3.74%

Sequence No.: 49
Sample ID: AD19192-001 SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 9/14/2020 1:28:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-001 SD

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	408980.8	107	%	0.6				0.60%
Y 371.029	184770.0	107	%	0.7				0.64%
Ag 328.068†	31.6	-0.0005094	mg/L	0.00060463	-0.0005094	mg/L	0.00060463	118.69%
Al 308.215†	22544.0	2.83412	mg/L	0.015499	2.83412	mg/L	0.015499	0.55%
As 188.979†	4.2	0.0038819	mg/L	0.00206169	0.0038819	mg/L	0.00206169	53.11%
Ba 233.527†	431.2	0.0032412	mg/L	0.00016736	0.0032412	mg/L	0.00016736	5.16%
Be 313.107†	-120.4	0.0020213	mg/L	0.00002595	0.0020213	mg/L	0.00002595	1.28%
Ca 317.933†	3493.9	0.0273318	mg/L	0.00027878	0.0273318	mg/L	0.00027878	1.02%
Cd 228.802†	-0.8	0.0044812	mg/L	0.00030619	0.0044812	mg/L	0.00030619	6.83%
Co 228.616†	12.8	0.0029762	mg/L	0.00056091	0.0029762	mg/L	0.00056091	18.85%
Cr 267.716†	1540.0	0.0256951	mg/L	0.00008895	0.0256951	mg/L	0.00008895	0.35%
Cu 327.393†	67.0	0.0018327	mg/L	0.00062286	0.0018327	mg/L	0.00062286	33.99%
Fe 273.955†	13829.3	1.78453	mg/L	0.007554	1.78453	mg/L	0.007554	0.42%
K 404.721†	-4305.0	-105.132	mg/L	7.6816	-105.132	mg/L	7.6816	7.31%
Mg 279.077†	347.2	-0.0965888	mg/L	0.00196230	-0.0965888	mg/L	0.00196230	2.03%
Mn 257.610†	722.1	0.0021967	mg/L	0.00003555	0.0021967	mg/L	0.00003555	1.62%
Mo 202.031†	-10.8	-0.0009594	mg/L	0.00059910	-0.0009594	mg/L	0.00059910	62.44%
Na 330.237†	-40.6	0.742727	mg/L	0.1401755	0.742727	mg/L	0.1401755	18.87%
Ni 231.604†	1.8	0.0022686	mg/L	0.00083140	0.0022686	mg/L	0.00083140	36.65%
Pb 220.353†	17.5	0.0012434	mg/L	0.00050272	0.0012434	mg/L	0.00050272	40.43%
Sb 206.836†	2.8	0.0006297	mg/L	0.00445791	0.0006297	mg/L	0.00445791	707.91%
Se 196.026†	-7.2	-0.0058989	mg/L	0.00334000	-0.0058989	mg/L	0.00334000	56.62%
Sn 189.927†	23.2	0.0023515	mg/L	0.00147945	0.0023515	mg/L	0.00147945	62.91%
Ti 334.940†	23437.2	0.0952994	mg/L	0.01107779	0.0952994	mg/L	0.01107779	11.62%
Tl 190.801†	3.5	-0.0019636	mg/L	0.00284617	-0.0019636	mg/L	0.00284617	144.95%
V 290.880†	197.4	0.0072769	mg/L	0.00037551	0.0072769	mg/L	0.00037551	5.16%
Zn 206.200†	169.7	0.0027779	mg/L	0.00010641	0.0027779	mg/L	0.00010641	3.83%
B 249.772†	815.2	0.0325186	mg/L	0.00045819	0.0325186	mg/L	0.00045819	1.41%
Si 251.611†	37059.8	1.84444	mg/L	0.076546	1.84444	mg/L	0.076546	4.15%
Ce 413.764†	325.9	0.052	mg/L	0.0062	0.052	mg/L	0.0062	11.74%

Sequence No.: 50
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 1:32:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	392114.4	103	%	2.1				2.06%
Y 371.029	150155.7	86.6	%	1.82				2.11%
Ag 328.068†	7361.7	0.0961194	mg/L	0.00221999	0.0961194	mg/L	0.00221999	2.31%
Al 308.215†	37769.6	4.77976	mg/L	0.115232	4.77976	mg/L	0.115232	2.41%
As 188.979†	814.5	0.487267	mg/L	0.0093581	0.487267	mg/L	0.0093581	1.92%
Ba 233.527†	36372.6	0.477253	mg/L	0.0090084	0.477253	mg/L	0.0090084	1.89%
Be 313.107†	518220.8	0.478860	mg/L	0.0138817	0.478860	mg/L	0.0138817	2.90%
Ca 317.933†	3898196.4	49.4200	mg/L	1.43265	49.4200	mg/L	1.43265	2.90%
Cd 228.802†	12437.0	0.463688	mg/L	0.0096508	0.463688	mg/L	0.0096508	2.08%
Co 228.616†	11004.3	0.470249	mg/L	0.0085459	0.470249	mg/L	0.0085459	1.82%
Cr 267.716†	27678.3	0.484855	mg/L	0.0093918	0.484855	mg/L	0.0093918	1.94%
Cu 327.393†	29900.7	0.480376	mg/L	0.0096416	0.480376	mg/L	0.0096416	2.01%
Fe 273.955†	37547.3	4.89872	mg/L	0.100886	4.89872	mg/L	0.100886	2.06%
K 404.721†	100.7	-46.6258	mg/L	22.17237	-46.6258	mg/L	22.17237	47.55%
Mg 279.077†	431250.0	49.7622	mg/L	1.45753	49.7622	mg/L	1.45753	2.93%
Mn 257.610†	119847.0	0.479963	mg/L	0.0091659	0.479963	mg/L	0.0091659	1.91%
Mo 202.031†	4645.9	0.483559	mg/L	0.0122565	0.483559	mg/L	0.0122565	2.53%
Na 330.237†	17237.2	47.5421	mg/L	0.95777	47.5421	mg/L	0.95777	2.01%
Ni 231.604†	11280.0	0.470290	mg/L	0.0081413	0.470290	mg/L	0.0081413	1.73%
Pb 220.353†	2672.9	0.485770	mg/L	0.0138812	0.485770	mg/L	0.0138812	2.86%
Sb 206.836†	880.6	0.501463	mg/L	0.0170990	0.501463	mg/L	0.0170990	3.41%
Se 196.026†	780.7	0.481608	mg/L	0.0158223	0.481608	mg/L	0.0158223	3.29%
Sn 189.927†	2538.9	0.491017	mg/L	0.0138537	0.491017	mg/L	0.0138537	2.82%
Ti 334.940†	119669.6	0.480727	mg/L	0.0100434	0.480727	mg/L	0.0100434	2.09%
Tl 190.801†	874.4	0.526183	mg/L	0.0091846	0.526183	mg/L	0.0091846	1.75%
V 290.880†	20879.9	0.488801	mg/L	0.0078097	0.488801	mg/L	0.0078097	1.60%
Zn 206.200†	19500.1	0.489047	mg/L	0.0097183	0.489047	mg/L	0.0097183	1.99%
B 249.772†	29892.5	0.507833	mg/L	0.0077490	0.507833	mg/L	0.0077490	1.53%
Si 251.611†	97901.6	4.88186	mg/L	0.096818	4.88186	mg/L	0.096818	1.98%
Ce 413.764†	38334.3	6.146	mg/L	0.0758	6.146	mg/L	0.0758	1.23%

Sequence No.: 51
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/14/2020 1:36:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	406890.3	106	%	1.5				1.40%
Y 371.029	185773.0	107	%	1.4				1.31%
Ag 328.068†	75.0	0.0000625	mg/L	0.00053771	0.0000625	mg/L	0.00053771	859.91%
Al 308.215†	-86.8	-0.0268311	mg/L	0.00409015	-0.0268311	mg/L	0.00409015	15.24%
As 188.979†	1.9	0.0021524	mg/L	0.00440592	0.0021524	mg/L	0.00440592	204.70%
Ba 233.527†	21.9	-0.0021572	mg/L	0.00012143	-0.0021572	mg/L	0.00012143	5.63%
Be 313.107†	8.6	0.0021400	mg/L	0.00001639	0.0021400	mg/L	0.00001639	0.77%
Ca 317.933†	1076.4	-0.0033267	mg/L	0.00015723	-0.0033267	mg/L	0.00015723	4.73%
Cd 228.802†	3.7	0.0046472	mg/L	0.00037584	0.0046472	mg/L	0.00037584	8.09%
Co 228.616†	0.9	0.0024687	mg/L	0.00033862	0.0024687	mg/L	0.00033862	13.72%
Cr 267.716†	-10.7	-0.0015451	mg/L	0.00019584	-0.0015451	mg/L	0.00019584	12.68%
Cu 327.393†	34.7	0.0013156	mg/L	0.00030283	0.0013156	mg/L	0.00030283	23.02%
Fe 273.955†	164.3	-0.0096770	mg/L	0.00199138	-0.0096770	mg/L	0.00199138	20.58%
K 404.721†	-4460.6	-90.4189	mg/L	14.38100	-90.4189	mg/L	14.38100	15.90%
Mg 279.077†	52.6	-0.130680	mg/L	0.0038495	-0.130680	mg/L	0.0038495	2.95%
Mn 257.610†	30.8	-0.0005758	mg/L	0.00007133	-0.0005758	mg/L	0.00007133	12.39%
Mo 202.031†	-0.5	0.0001070	mg/L	0.00066148	0.0001070	mg/L	0.00066148	617.93%
Na 330.237†	-56.1	0.700616	mg/L	0.0430038	0.700616	mg/L	0.0430038	6.14%
Ni 231.604†	-9.6	0.0017992	mg/L	0.00029883	0.0017992	mg/L	0.00029883	16.61%
Pb 220.353†	-1.9	-0.0025904	mg/L	0.00135326	-0.0025904	mg/L	0.00135326	52.24%
Sb 206.836†	-1.7	-0.0020080	mg/L	0.00247131	-0.0020080	mg/L	0.00247131	123.07%
Se 196.026†	4.7	0.0009718	mg/L	0.00249971	0.0009718	mg/L	0.00249971	257.23%
Sn 189.927†	8.5	-0.0005136	mg/L	0.00158195	-0.0005136	mg/L	0.00158195	308.01%
Ti 334.940†	32.8	0.0015607	mg/L	0.00011496	0.0015607	mg/L	0.00011496	7.37%
Tl 190.801†	12.2	0.0020086	mg/L	0.00217570	0.0020086	mg/L	0.00217570	108.32%
V 290.880†	-69.7	0.0013056	mg/L	0.00077899	0.0013056	mg/L	0.00077899	59.67%
Zn 206.200†	50.6	-0.0002192	mg/L	0.00009321	-0.0002192	mg/L	0.00009321	42.53%
B 249.772†	253.0	0.0131603	mg/L	0.00078922	0.0131603	mg/L	0.00078922	6.00%
Si 251.611†	147.1	-0.0030129	mg/L	0.00050896	-0.0030129	mg/L	0.00050896	16.89%
Ce 413.764†	102.0	0.015	mg/L	0.0050	0.015	mg/L	0.0050	32.65%

Sequence No.: 52
Sample ID: AD19192-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 9/14/2020 1:40:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-002

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	411127.3	108	%	0.5				0.42%
Y 371.029	188217.4	109	%	0.6				0.52%
Ag 328.068†	48.1	-0.0002922	mg/L	0.00023690	-0.0002922	mg/L	0.00023690	81.07%
Al 308.215†	325398.1	41.1181	mg/L	0.05757	41.1181	mg/L	0.05757	0.14%
As 188.979†	13.5	0.0143867	mg/L	0.00166883	0.0143867	mg/L	0.00166883	11.60%
Ba 233.527†	2115.6	0.0254556	mg/L	0.00039965	0.0254556	mg/L	0.00039965	1.57%
Be 313.107†	-633.6	0.0015492	mg/L	0.00005564	0.0015492	mg/L	0.00005564	3.59%
Ca 317.933†	16444.3	0.191569	mg/L	0.0014250	0.191569	mg/L	0.0014250	0.74%
Cd 228.802†	0.7	0.0045383	mg/L	0.00023773	0.0045383	mg/L	0.00023773	5.24%
Co 228.616†	74.3	0.0055911	mg/L	0.00030189	0.0055911	mg/L	0.00030189	5.40%
Cr 267.716†	24029.0	0.420749	mg/L	0.0010288	0.420749	mg/L	0.0010288	0.24%
Cu 327.393†	916.4	0.0154579	mg/L	0.00069096	0.0154579	mg/L	0.00069096	4.47%
Fe 273.955†	237469.6	31.1485	mg/L	0.03301	31.1485	mg/L	0.03301	0.11%
K 404.721†	-1259.9	-335.803	mg/L	7.5793	-335.803	mg/L	7.5793	2.26%
Mg 279.077†	2973.6	0.207300	mg/L	0.0032562	0.207300	mg/L	0.0032562	1.57%
Mn 257.610†	5606.6	0.0217870	mg/L	0.00002264	0.0217870	mg/L	0.00002264	0.10%
Mo 202.031†	10.5	0.0012533	mg/L	0.00011896	0.0012533	mg/L	0.00011896	9.49%
Na 330.237†	-80.2	0.635249	mg/L	0.1641929	0.635249	mg/L	0.1641929	25.85%
Ni 231.604†	293.8	0.0143871	mg/L	0.00027231	0.0143871	mg/L	0.00027231	1.89%
Pb 220.353†	124.7	0.0248319	mg/L	0.00187657	0.0248319	mg/L	0.00187657	7.56%
Sb 206.836†	14.2	0.0069222	mg/L	0.00309545	0.0069222	mg/L	0.00309545	44.72%
Se 196.026†	-29.1	-0.0114727	mg/L	0.00205383	-0.0114727	mg/L	0.00205383	17.90%
Sn 189.927†	83.9	0.0141347	mg/L	0.00078543	0.0141347	mg/L	0.00078543	5.56%
Ti 334.940†	102775.6	0.413064	mg/L	0.0016724	0.413064	mg/L	0.0016724	0.40%
Tl 190.801†	-2.7	-0.0023372	mg/L	0.00258743	-0.0023372	mg/L	0.00258743	110.71%
V 290.880†	3728.9	0.0860761	mg/L	0.00024177	0.0860761	mg/L	0.00024177	0.28%
Zn 206.200†	1594.6	0.0386205	mg/L	0.00007723	0.0386205	mg/L	0.00007723	0.20%
B 249.772†	8705.1	0.328723	mg/L	0.0014505	0.328723	mg/L	0.0014505	0.44%
Si 251.611†	87731.1	4.38044	mg/L	0.055105	4.38044	mg/L	0.055105	1.26%
Ce 413.764†	1204.4	0.217	mg/L	0.0155	0.217	mg/L	0.0155	7.14%

Sequence No.: 53
Sample ID: AD19192-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 9/14/2020 1:44:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19192-003

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	414499.0	108	%	0.7				0.68%
Y 371.029	187699.8	108	%	0.8				0.72%
Ag 328.068†	56.0	-0.0001879	mg/L	0.00077447	-0.0001879	mg/L	0.00077447	412.07%
Al 308.215†	75379.1	9.51327	mg/L	0.057731	9.51327	mg/L	0.057731	0.61%
As 188.979†	5.0	0.0051945	mg/L	0.00227930	0.0051945	mg/L	0.00227930	43.88%
Ba 233.527†	1499.7	0.0173326	mg/L	0.00068095	0.0173326	mg/L	0.00068095	3.93%
Be 313.107†	-423.1	0.0017428	mg/L	0.00004780	0.0017428	mg/L	0.00004780	2.74%
Ca 317.933†	9769.2	0.106915	mg/L	0.0004355	0.106915	mg/L	0.0004355	0.41%
Cd 228.802†	-3.9	0.0043664	mg/L	0.00047491	0.0043664	mg/L	0.00047491	10.88%
Co 228.616†	17.3	0.0031670	mg/L	0.00018147	0.0031670	mg/L	0.00018147	5.73%
Cr 267.716†	4422.3	0.0763263	mg/L	0.00061383	0.0763263	mg/L	0.00061383	0.80%
Cu 327.393†	264.3	0.0049973	mg/L	0.00128771	0.0049973	mg/L	0.00128771	25.77%
Fe 273.955†	52513.7	6.86380	mg/L	0.014800	6.86380	mg/L	0.014800	0.22%
K 404.721†	-4230.8	-154.229	mg/L	6.6862	-154.229	mg/L	6.6862	4.34%
Mg 279.077†	1092.3	-0.0103782	mg/L	0.00108069	-0.0103782	mg/L	0.00108069	10.41%
Mn 257.610†	1612.3	0.0057671	mg/L	0.00003586	0.0057671	mg/L	0.00003586	0.62%
Mo 202.031†	-1.9	-0.0000362	mg/L	0.00105763	-0.0000362	mg/L	0.00105763	>999.9%
Na 330.237†	-50.4	0.716004	mg/L	0.0491857	0.716004	mg/L	0.0491857	6.87%
Ni 231.604†	65.6	0.0049193	mg/L	0.00011344	0.0049193	mg/L	0.00011344	2.31%
Pb 220.353†	61.1	0.0098981	mg/L	0.00226630	0.0098981	mg/L	0.00226630	22.90%
Sb 206.836†	-1.4	-0.0013591	mg/L	0.00369055	-0.0013591	mg/L	0.00369055	271.54%
Se 196.026†	-14.7	-0.0091320	mg/L	0.00471259	-0.0091320	mg/L	0.00471259	51.61%
Sn 189.927†	72.0	0.0118292	mg/L	0.00033034	0.0118292	mg/L	0.00033034	2.79%
Ti 334.940†	63650.7	0.256362	mg/L	0.0075325	0.256362	mg/L	0.0075325	2.94%
Tl 190.801†	5.9	0.0009162	mg/L	0.00307128	0.0009162	mg/L	0.00307128	335.23%
V 290.880†	887.1	0.0227241	mg/L	0.00038957	0.0227241	mg/L	0.00038957	1.71%
Zn 206.200†	381.4	0.0081023	mg/L	0.00042826	0.0081023	mg/L	0.00042826	5.29%
B 249.772†	2177.3	0.0837127	mg/L	0.00024441	0.0837127	mg/L	0.00024441	0.29%
Si 251.611†	135814.8	6.78700	mg/L	0.226677	6.78700	mg/L	0.226677	3.34%
Ce 413.764†	752.9	0.125	mg/L	0.0043	0.125	mg/L	0.0043	3.44%

Sequence No.: 54
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/14/2020 1:48:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	390393.1	102	%	3.0				2.95%
Y 371.029	149352.2	86.1	%	2.95				3.43%
Ag 328.068†	7373.0	0.0962679	mg/L	0.00445812	0.0962679	mg/L	0.00445812	4.63%
Al 308.215†	38031.6	4.81379	mg/L	0.233191	4.81379	mg/L	0.233191	4.84%
As 188.979†	803.4	0.480661	mg/L	0.0101097	0.480661	mg/L	0.0101097	2.10%
Ba 233.527†	36539.6	0.479455	mg/L	0.0226370	0.479455	mg/L	0.0226370	4.72%
Be 313.107†	515493.4	0.476351	mg/L	0.0160615	0.476351	mg/L	0.0160615	3.37%
Ca 317.933†	3875742.0	49.1352	mg/L	1.64352	49.1352	mg/L	1.64352	3.34%
Cd 228.802†	12525.2	0.466944	mg/L	0.0226067	0.466944	mg/L	0.0226067	4.84%
Co 228.616†	11058.6	0.472560	mg/L	0.0227463	0.472560	mg/L	0.0227463	4.81%
Cr 267.716†	27734.7	0.485846	mg/L	0.0233480	0.485846	mg/L	0.0233480	4.81%
Cu 327.393†	30137.4	0.484172	mg/L	0.0223698	0.484172	mg/L	0.0223698	4.62%
Fe 273.955†	37833.7	4.93631	mg/L	0.225161	4.93631	mg/L	0.225161	4.56%
K 404.721†	50.2	-48.0259	mg/L	33.54620	-48.0259	mg/L	33.54620	69.85%
Mg 279.077†	427479.5	49.3259	mg/L	1.58090	49.3259	mg/L	1.58090	3.21%
Mn 257.610†	120400.9	0.482185	mg/L	0.0226555	0.482185	mg/L	0.0226555	4.70%
Mo 202.031†	4620.8	0.480955	mg/L	0.0120952	0.480955	mg/L	0.0120952	2.51%
Na 330.237†	17291.3	47.6887	mg/L	2.21025	47.6887	mg/L	2.21025	4.63%
Ni 231.604†	11335.7	0.472601	mg/L	0.0237674	0.472601	mg/L	0.0237674	5.03%
Pb 220.353†	2674.4	0.485935	mg/L	0.0118481	0.485935	mg/L	0.0118481	2.44%
Sb 206.836†	883.7	0.503310	mg/L	0.0099938	0.503310	mg/L	0.0099938	1.99%
Se 196.026†	783.0	0.483050	mg/L	0.0116624	0.483050	mg/L	0.0116624	2.41%
Sn 189.927†	2513.7	0.486125	mg/L	0.0103966	0.486125	mg/L	0.0103966	2.14%
Ti 334.940†	120494.1	0.484029	mg/L	0.0226968	0.484029	mg/L	0.0226968	4.69%
Tl 190.801†	880.6	0.530518	mg/L	0.0154974	0.530518	mg/L	0.0154974	2.92%
V 290.880†	20765.9	0.486142	mg/L	0.0230254	0.486142	mg/L	0.0230254	4.74%
Zn 206.200†	19502.7	0.489113	mg/L	0.0242491	0.489113	mg/L	0.0242491	4.96%
B 249.772†	29861.1	0.507561	mg/L	0.0241191	0.507561	mg/L	0.0241191	4.75%
Si 251.611†	98486.7	4.91119	mg/L	0.232094	4.91119	mg/L	0.232094	4.73%
Ce 413.764†	39148.8	6.276	mg/L	0.2432	6.276	mg/L	0.2432	3.88%

Sequence No.: 55
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/14/2020 1:52:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	406809.7	106	%	1.3				1.24%
Y 371.029	185818.5	107	%	1.1				1.06%
Ag 328.068†	91.7	0.0002822	mg/L	0.00040206	0.0002822	mg/L	0.00040206	142.48%
Al 308.215†	-90.5	-0.0272652	mg/L	0.00519300	-0.0272652	mg/L	0.00519300	19.05%
As 188.979†	1.3	0.0017980	mg/L	0.00229379	0.0017980	mg/L	0.00229379	127.57%
Ba 233.527†	19.2	-0.0021927	mg/L	0.00015075	-0.0021927	mg/L	0.00015075	6.88%
Be 313.107†	34.1	0.0021634	mg/L	0.00002757	0.0021634	mg/L	0.00002757	1.27%
Ca 317.933†	1089.5	-0.0031612	mg/L	0.00041940	-0.0031612	mg/L	0.00041940	13.27%
Cd 228.802†	-0.2	0.0045025	mg/L	0.00034772	0.0045025	mg/L	0.00034772	7.72%
Co 228.616†	-4.1	0.0022547	mg/L	0.00030560	0.0022547	mg/L	0.00030560	13.55%
Cr 267.716†	-12.8	-0.0015816	mg/L	0.00017172	-0.0015816	mg/L	0.00017172	10.86%
Cu 327.393†	49.2	0.0015475	mg/L	0.00077993	0.0015475	mg/L	0.00077993	50.40%
Fe 273.955†	168.4	-0.0091382	mg/L	0.00127081	-0.0091382	mg/L	0.00127081	13.91%
K 404.721†	-4423.0	-89.6609	mg/L	12.45239	-89.6609	mg/L	12.45239	13.89%
Mg 279.077†	70.3	-0.128635	mg/L	0.0002756	-0.128635	mg/L	0.0002756	0.21%
Mn 257.610†	31.9	-0.0005711	mg/L	0.00002719	-0.0005711	mg/L	0.00002719	4.76%
Mo 202.031†	-1.6	-0.0000094	mg/L	0.00110059	-0.0000094	mg/L	0.00110059	>999.9%
Na 330.237†	-84.3	0.624154	mg/L	0.0484026	0.624154	mg/L	0.0484026	7.75%
Ni 231.604†	-3.5	0.0020515	mg/L	0.00071513	0.0020515	mg/L	0.00071513	34.86%
Pb 220.353†	-16.3	-0.0052521	mg/L	0.00107766	-0.0052521	mg/L	0.00107766	20.52%
Sb 206.836†	-5.9	-0.0042644	mg/L	0.00193430	-0.0042644	mg/L	0.00193430	45.36%
Se 196.026†	-9.4	-0.0077404	mg/L	0.00442476	-0.0077404	mg/L	0.00442476	57.16%
Sn 189.927†	12.4	0.0002529	mg/L	0.00141233	0.0002529	mg/L	0.00141233	558.44%
Ti 334.940†	37.3	0.0015787	mg/L	0.00021965	0.0015787	mg/L	0.00021965	13.91%
Tl 190.801†	8.0	-0.0002577	mg/L	0.00436931	-0.0002577	mg/L	0.00436931	>999.9%
V 290.880†	-66.7	0.0013717	mg/L	0.00050966	0.0013717	mg/L	0.00050966	37.15%
Zn 206.200†	48.8	-0.0002648	mg/L	0.00015235	-0.0002648	mg/L	0.00015235	57.53%
B 249.772†	208.3	0.0124611	mg/L	0.00063318	0.0124611	mg/L	0.00063318	5.08%
Si 251.611†	183.8	-0.0011764	mg/L	0.00441717	-0.0011764	mg/L	0.00441717	375.48%
Ce 413.764†	138.6	0.021	mg/L	0.0064	0.021	mg/L	0.0064	30.21%

Sequence No.: 56
Sample ID: AD19155-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 9/14/2020 1:56:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19155-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	409617.4	107	%	1.3				1.19%
Y 371.029	192714.9	111	%	1.4				1.23%
Ag 328.068†	-69.9	-0.0018470	mg/L	0.00012851	-0.0018470	mg/L	0.00012851	6.96%
Al 308.215†	526260.7	66.5071	mg/L	0.14078	66.5071	mg/L	0.14078	0.21%
As 188.979†	73.6	0.0719234	mg/L	0.00443936	0.0719234	mg/L	0.00443936	6.17%
Ba 233.527†	15799.5	0.205925	mg/L	0.0003243	0.205925	mg/L	0.0003243	0.16%
Be 313.107†	691.5	0.0027681	mg/L	0.00007578	0.0027681	mg/L	0.00007578	2.74%
Ca 317.933†	833776.2	10.5570	mg/L	0.02653	10.5570	mg/L	0.02653	0.25%
Cd 228.802†	20.7	0.0052741	mg/L	0.00029947	0.0052741	mg/L	0.00029947	5.68%
Co 228.616†	411.5	0.0199250	mg/L	0.00004562	0.0199250	mg/L	0.00004562	0.23%
Cr 267.716†	12452.1	0.217383	mg/L	0.0001045	0.217383	mg/L	0.0001045	0.05%
Cu 327.393†	1567.0	0.0258939	mg/L	0.00074833	0.0258939	mg/L	0.00074833	2.89%
Fe 273.955†	1206433.3	158.373	mg/L	0.2266	158.373	mg/L	0.2266	0.14%
K 404.721†	14527.7	-1282.51	mg/L	12.489	-1282.51	mg/L	12.489	0.97%
Mg 279.077†	73307.1	8.34543	mg/L	0.013631	8.34543	mg/L	0.013631	0.16%
Mn 257.610†	50886.9	0.203389	mg/L	0.0002725	0.203389	mg/L	0.0002725	0.13%
Mo 202.031†	49.9	0.0053471	mg/L	0.00094743	0.0053471	mg/L	0.00094743	17.72%
Na 330.237†	-66.8	0.671769	mg/L	0.0729040	0.671769	mg/L	0.0729040	10.85%
Ni 231.604†	773.8	0.0343080	mg/L	0.00045159	0.0343080	mg/L	0.00045159	1.32%
Pb 220.353†	584.3	0.112031	mg/L	0.0017618	0.112031	mg/L	0.0017618	1.57%
Sb 206.836†	10.3	0.0022187	mg/L	0.00764273	0.0022187	mg/L	0.00764273	344.47%
Se 196.026†	-123.9	-0.0356674	mg/L	0.00807011	-0.0356674	mg/L	0.00807011	22.63%
Sn 189.927†	67.5	0.0109442	mg/L	0.00033898	0.0109442	mg/L	0.00033898	3.10%
Ti 334.940†	318059.7	1.27531	mg/L	0.002501	1.27531	mg/L	0.002501	0.20%
Tl 190.801†	-18.7	-0.0058358	mg/L	0.00214223	-0.0058358	mg/L	0.00214223	36.71%
V 290.880†	9890.4	0.217934	mg/L	0.0011271	0.217934	mg/L	0.0011271	0.52%
Zn 206.200†	19977.5	0.501056	mg/L	0.0014418	0.501056	mg/L	0.0014418	0.29%
B 249.772†	47466.7	1.68403	mg/L	0.002658	1.68403	mg/L	0.002658	0.16%
Si 251.611†	70207.1	3.50332	mg/L	0.017334	3.50332	mg/L	0.017334	0.49%
Ce 413.764†	945.1	0.279	mg/L	0.0113	0.279	mg/L	0.0113	4.05%

Sequence No.: 57
Sample ID: AD19155-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 9/14/2020 2:00:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19155-005

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	400942.2	105	%	1.1				1.03%
Y 371.029	197081.5	114	%	1.1				0.98%
Ag 328.068†	14.0	-0.0007418	mg/L	0.00031362	-0.0007418	mg/L	0.00031362	42.28%
Al 308.215†	142039.7	17.9378	mg/L	0.03389	17.9378	mg/L	0.03389	0.19%
As 188.979†	158.5	0.103693	mg/L	0.0017109	0.103693	mg/L	0.0017109	1.65%
Ba 233.527†	3081.8	0.0381981	mg/L	0.00025156	0.0381981	mg/L	0.00025156	0.66%
Be 313.107†	1133.0	0.0031743	mg/L	0.00007522	0.0031743	mg/L	0.00007522	2.37%
Ca 317.933†	254236.8	3.20726	mg/L	0.002338	3.20726	mg/L	0.002338	0.07%
Cd 228.802†	47.3	0.0062589	mg/L	0.00009779	0.0062589	mg/L	0.00009779	1.56%
Co 228.616†	177.1	0.0099583	mg/L	0.00051940	0.0099583	mg/L	0.00051940	5.22%
Cr 267.716†	5974.2	0.103589	mg/L	0.0010880	0.103589	mg/L	0.0010880	1.05%
Cu 327.393†	420.1	0.0074962	mg/L	0.00103121	0.0074962	mg/L	0.00103121	13.76%
Fe 273.955†	366355.3	48.0712	mg/L	0.08513	48.0712	mg/L	0.08513	0.18%
K 404.721†	1990.1	-438.356	mg/L	13.6450	-438.356	mg/L	13.6450	3.11%
Mg 279.077†	23190.8	2.54659	mg/L	0.005381	2.54659	mg/L	0.005381	0.21%
Mn 257.610†	12442.8	0.0492043	mg/L	0.00010425	0.0492043	mg/L	0.00010425	0.21%
Mo 202.031†	23.4	0.0025965	mg/L	0.00109303	0.0025965	mg/L	0.00109303	42.10%
Na 330.237†	-113.9	0.543975	mg/L	0.0808851	0.543975	mg/L	0.0808851	14.87%
Ni 231.604†	247.7	0.0124744	mg/L	0.00034394	0.0124744	mg/L	0.00034394	2.76%
Pb 220.353†	78.9	0.0140724	mg/L	0.00080072	0.0140724	mg/L	0.00080072	5.69%
Sb 206.836†	4.2	0.0008516	mg/L	0.00918953	0.0008516	mg/L	0.00918953	>999.9%
Se 196.026†	-28.5	-0.0065620	mg/L	0.00887234	-0.0065620	mg/L	0.00887234	135.21%
Sn 189.927†	71.6	0.0117544	mg/L	0.00133743	0.0117544	mg/L	0.00133743	11.38%
Ti 334.940†	102945.1	0.413742	mg/L	0.0009480	0.413742	mg/L	0.0009480	0.23%
Tl 190.801†	1.2	-0.0007238	mg/L	0.00492790	-0.0007238	mg/L	0.00492790	680.81%
V 290.880†	7100.5	0.162120	mg/L	0.0007741	0.162120	mg/L	0.0007741	0.48%
Zn 206.200†	4251.3	0.105453	mg/L	0.0005196	0.105453	mg/L	0.0005196	0.49%
B 249.772†	15059.4	0.527837	mg/L	0.0015164	0.527837	mg/L	0.0015164	0.29%
Si 251.611†	64988.7	3.24219	mg/L	0.013083	3.24219	mg/L	0.013083	0.40%
Ce 413.764†	709.8	0.152	mg/L	0.0157	0.152	mg/L	0.0157	10.35%

Sequence No.: 58
Sample ID: AD19155-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 9/14/2020 2:04:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19155-006

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	405340.3	106	%	1.3				1.22%
Y 371.029	191639.4	110	%	1.4				1.23%
Ag 328.068†	21.4	-0.0006446	mg/L	0.00034402	-0.0006446	mg/L	0.00034402	53.37%
Al 308.215†	121737.8	15.3721	mg/L	0.03120	15.3721	mg/L	0.03120	0.20%
As 188.979†	27.0	0.0259529	mg/L	0.00189676	0.0259529	mg/L	0.00189676	7.31%
Ba 233.527†	3242.3	0.0403156	mg/L	0.00086722	0.0403156	mg/L	0.00086722	2.15%
Be 313.107†	911.2	0.0029703	mg/L	0.00003728	0.0029703	mg/L	0.00003728	1.25%
Ca 317.933†	254797.8	3.21437	mg/L	0.005823	3.21437	mg/L	0.005823	0.18%
Cd 228.802†	1.6	0.0045691	mg/L	0.00022107	0.0045691	mg/L	0.00022107	4.84%
Co 228.616†	128.2	0.0078786	mg/L	0.00050460	0.0078786	mg/L	0.00050460	6.40%
Cr 267.716†	5655.2	0.0979853	mg/L	0.00137320	0.0979853	mg/L	0.00137320	1.40%
Cu 327.393†	564.3	0.0098101	mg/L	0.00096378	0.0098101	mg/L	0.00096378	9.82%
Fe 273.955†	393622.7	51.6514	mg/L	0.07016	51.6514	mg/L	0.07016	0.14%
K 404.721†	1373.6	-486.553	mg/L	16.5626	-486.553	mg/L	16.5626	3.40%
Mg 279.077†	18682.3	2.02492	mg/L	0.004232	2.02492	mg/L	0.004232	0.21%
Mn 257.610†	11149.3	0.0440167	mg/L	0.00013092	0.0440167	mg/L	0.00013092	0.30%
Mo 202.031†	5.6	0.0007473	mg/L	0.00015653	0.0007473	mg/L	0.00015653	20.95%
Na 330.237†	-52.4	0.710561	mg/L	0.0257921	0.710561	mg/L	0.0257921	3.63%
Ni 231.604†	226.6	0.0115985	mg/L	0.00081741	0.0115985	mg/L	0.00081741	7.05%
Pb 220.353†	179.3	0.0322847	mg/L	0.00320465	0.0322847	mg/L	0.00320465	9.93%
Sb 206.836†	2.3	-0.0006923	mg/L	0.00497806	-0.0006923	mg/L	0.00497806	719.09%
Se 196.026†	-35.6	-0.0099803	mg/L	0.00406182	-0.0099803	mg/L	0.00406182	40.70%
Sn 189.927†	61.3	0.0097459	mg/L	0.00191920	0.0097459	mg/L	0.00191920	19.69%
Ti 334.940†	78420.0	0.315515	mg/L	0.0014050	0.315515	mg/L	0.0014050	0.45%
Tl 190.801†	-2.2	-0.0035437	mg/L	0.00107563	-0.0035437	mg/L	0.00107563	30.35%
V 290.880†	4435.8	0.100751	mg/L	0.0023546	0.100751	mg/L	0.0023546	2.34%
Zn 206.200†	2414.3	0.0592412	mg/L	0.00100984	0.0592412	mg/L	0.00100984	1.70%
B 249.772†	16044.2	0.564311	mg/L	0.0015238	0.564311	mg/L	0.0015238	0.27%
Si 251.611†	79281.8	3.95757	mg/L	0.017377	3.95757	mg/L	0.017377	0.44%
Ce 413.764†	431.3	0.110	mg/L	0.0032	0.110	mg/L	0.0032	2.89%

Sequence No.: 59
Sample ID: AD19155-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 9/14/2020 2:08:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19155-007

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	407262.4	106	%	0.9				0.87%
Y 371.029	191819.5	111	%	0.8				0.74%
Ag 328.068†	7.8	-0.0008239	mg/L	0.00026227	-0.0008239	mg/L	0.00026227	31.84%
Al 308.215†	242876.8	30.6855	mg/L	0.01898	30.6855	mg/L	0.01898	0.06%
As 188.979†	25.3	0.0284224	mg/L	0.00114940	0.0284224	mg/L	0.00114940	4.04%
Ba 233.527†	6550.0	0.0839388	mg/L	0.00046036	0.0839388	mg/L	0.00046036	0.55%
Be 313.107†	-23.7	0.0021102	mg/L	0.00001210	0.0021102	mg/L	0.00001210	0.57%
Ca 317.933†	363429.0	4.59204	mg/L	0.001273	4.59204	mg/L	0.001273	0.03%
Cd 228.802†	8.8	0.0048352	mg/L	0.00013580	0.0048352	mg/L	0.00013580	2.81%
Co 228.616†	176.5	0.0099347	mg/L	0.00020143	0.0099347	mg/L	0.00020143	2.03%
Cr 267.716†	7212.8	0.125347	mg/L	0.0004436	0.125347	mg/L	0.0004436	0.35%
Cu 327.393†	1383.5	0.0229502	mg/L	0.00042875	0.0229502	mg/L	0.00042875	1.87%
Fe 273.955†	548165.0	71.9428	mg/L	0.10852	71.9428	mg/L	0.10852	0.15%
K 404.721†	3700.1	-641.438	mg/L	12.4924	-641.438	mg/L	12.4924	1.95%
Mg 279.077†	17552.1	1.89415	mg/L	0.006940	1.89415	mg/L	0.006940	0.37%
Mn 257.610†	31278.2	0.124746	mg/L	0.0001925	0.124746	mg/L	0.0001925	0.15%
Mo 202.031†	23.0	0.0025570	mg/L	0.00030528	0.0025570	mg/L	0.00030528	11.94%
Na 330.237†	-36.0	0.755142	mg/L	0.0561693	0.755142	mg/L	0.0561693	7.44%
Ni 231.604†	369.0	0.0175083	mg/L	0.00018825	0.0175083	mg/L	0.00018825	1.08%
Pb 220.353†	565.4	0.104795	mg/L	0.0017389	0.104795	mg/L	0.0017389	1.66%
Sb 206.836†	4.7	0.0007472	mg/L	0.00157082	0.0007472	mg/L	0.00157082	210.23%
Se 196.026†	-45.4	-0.0105305	mg/L	0.00308610	-0.0105305	mg/L	0.00308610	29.31%
Sn 189.927†	72.2	0.0118716	mg/L	0.00094585	0.0118716	mg/L	0.00094585	7.97%
Ti 334.940†	155081.7	0.622559	mg/L	0.0028309	0.622559	mg/L	0.0028309	0.45%
Tl 190.801†	1.8	0.0013056	mg/L	0.00122593	0.0013056	mg/L	0.00122593	93.90%
V 290.880†	5994.3	0.134996	mg/L	0.0008934	0.134996	mg/L	0.0008934	0.66%
Zn 206.200†	9309.5	0.232696	mg/L	0.0000917	0.232696	mg/L	0.0000917	0.04%
B 249.772†	21042.5	0.761863	mg/L	0.0008182	0.761863	mg/L	0.0008182	0.11%
Si 251.611†	84481.8	4.21780	mg/L	0.024049	4.21780	mg/L	0.024049	0.57%
Ce 413.764†	1011.0	0.219	mg/L	0.0127	0.219	mg/L	0.0127	5.81%

Sequence No.: 60
Sample ID: AD19173-001
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 54
Date Collected: 9/14/2020 2:12:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19173-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	393606.6	103	%	1.0				0.93%
Y 371.029	181175.5	104	%	0.9				0.87%
Ag 328.068†	-62.7	-0.0017525	mg/L	0.00073309	-0.0017525	mg/L	0.00073309	41.83%
Al 308.215†	186643.8	23.5778	mg/L	0.04679	23.5778	mg/L	0.04679	0.20%
As 188.979†	56.8	0.0397410	mg/L	0.00264420	0.0397410	mg/L	0.00264420	6.65%
Ba 233.527†	10633.6	0.137795	mg/L	0.0007228	0.137795	mg/L	0.0007228	0.52%
Be 313.107†	-2435.2	-0.0001082	mg/L	0.00005772	-0.0001082	mg/L	0.00005772	53.33%
Ca 317.933†	28169422.5	357.228	mg/L	3.2244	357.228	mg/L	3.2244	0.90%
Cd 228.802†	17.4	0.0051517	mg/L	0.00024981	0.0051517	mg/L	0.00024981	4.85%
Co 228.616†	252.1	0.0131493	mg/L	0.00021584	0.0131493	mg/L	0.00021584	1.64%
Cr 267.716†	3742.4	0.0643843	mg/L	0.00060467	0.0643843	mg/L	0.00060467	0.94%
Cu 327.393†	1305.2	0.0216942	mg/L	0.00090366	0.0216942	mg/L	0.00090366	4.17%
Fe 273.955†	216213.3	28.3575	mg/L	0.08444	28.3575	mg/L	0.08444	0.30%
K 404.721†	-1422.8	-311.307	mg/L	12.9674	-311.307	mg/L	12.9674	4.17%
Mg 279.077†	172296.6	19.7993	mg/L	0.06880	19.7993	mg/L	0.06880	0.35%
Mn 257.610†	101954.0	0.408201	mg/L	0.0006592	0.408201	mg/L	0.0006592	0.16%
Mo 202.031†	50.9	0.0054608	mg/L	0.00171834	0.0054608	mg/L	0.00171834	31.47%
Na 330.237†	410.6	1.96469	mg/L	0.135449	1.96469	mg/L	0.135449	6.89%
Ni 231.604†	976.6	0.0427216	mg/L	0.00051221	0.0427216	mg/L	0.00051221	1.20%
Pb 220.353†	228.1	0.0421173	mg/L	0.00260244	0.0421173	mg/L	0.00260244	6.18%
Sb 206.836†	-3.2	-0.0010797	mg/L	0.00270517	-0.0010797	mg/L	0.00270517	250.55%
Se 196.026†	-0.1	0.0056830	mg/L	0.00248433	0.0056830	mg/L	0.00248433	43.72%
Sn 189.927†	-8.9	-0.0038888	mg/L	0.00101330	-0.0038888	mg/L	0.00101330	26.06%
Ti 334.940†	350450.2	1.40504	mg/L	0.002784	1.40504	mg/L	0.002784	0.20%
Tl 190.801†	-15.2	-0.0035897	mg/L	0.00078193	-0.0035897	mg/L	0.00078193	21.78%
V 290.880†	1515.7	0.0356262	mg/L	0.00123617	0.0356262	mg/L	0.00123617	3.47%
Zn 206.200†	42965.0	1.07932	mg/L	0.002390	1.07932	mg/L	0.002390	0.22%
B 249.772†	11158.9	0.350929	mg/L	0.0011278	0.350929	mg/L	0.0011278	0.32%
Si 251.611†	243982.8	12.2006	mg/L	0.09618	12.2006	mg/L	0.09618	0.79%
Ce 413.764†	437.1	0.092	mg/L	0.0100	0.092	mg/L	0.0100	10.86%

Sequence No.: 61
Sample ID: AD19173-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 9/14/2020 2:16:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19173-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	388530.3	102	%	0.9				0.85%
Y 371.029	181733.8	105	%	0.8				0.74%
Ag 328.068†	-168.6	-0.0031484	mg/L	0.00045515	-0.0031484	mg/L	0.00045515	14.46%
Al 308.215†	321794.5	40.6614	mg/L	0.04361	40.6614	mg/L	0.04361	0.11%
As 188.979†	17.5	0.0172693	mg/L	0.00477818	0.0172693	mg/L	0.00477818	27.67%
Ba 233.527†	21319.6	0.278727	mg/L	0.0006756	0.278727	mg/L	0.0006756	0.24%
Be 313.107†	-2602.4	-0.0002621	mg/L	0.00004623	-0.0002621	mg/L	0.00004623	17.64%
Ca 317.933†	41747334.6	529.423	mg/L	7.7240	529.423	mg/L	7.7240	1.46%
Cd 228.802†	6.2	0.0047410	mg/L	0.00035930	0.0047410	mg/L	0.00035930	7.58%
Co 228.616†	428.7	0.0206535	mg/L	0.00033470	0.0206535	mg/L	0.00033470	1.62%
Cr 267.716†	3878.2	0.0667693	mg/L	0.00053598	0.0667693	mg/L	0.00053598	0.80%
Cu 327.393†	2122.4	0.0348016	mg/L	0.00032144	0.0348016	mg/L	0.00032144	0.92%
Fe 273.955†	259205.4	34.0024	mg/L	0.07026	34.0024	mg/L	0.07026	0.21%
K 404.721†	-1297.4	-364.998	mg/L	11.6836	-364.998	mg/L	11.6836	3.20%
Mg 279.077†	343159.9	39.5695	mg/L	0.10679	39.5695	mg/L	0.10679	0.27%
Mn 257.610†	267873.9	1.07365	mg/L	0.001937	1.07365	mg/L	0.001937	0.18%
Mo 202.031†	449.5	0.0469263	mg/L	0.00052993	0.0469263	mg/L	0.00052993	1.13%
Na 330.237†	794.0	3.00315	mg/L	0.023788	3.00315	mg/L	0.023788	0.79%
Ni 231.604†	795.0	0.0351876	mg/L	0.00044087	0.0351876	mg/L	0.00044087	1.25%
Pb 220.353†	186.3	0.0363111	mg/L	0.00166115	0.0363111	mg/L	0.00166115	4.57%
Sb 206.836†	12.0	0.0088174	mg/L	0.00331639	0.0088174	mg/L	0.00331639	37.61%
Se 196.026†	11.0	0.0140722	mg/L	0.00184058	0.0140722	mg/L	0.00184058	13.08%
Sn 189.927†	4.1	-0.0013619	mg/L	0.00144675	-0.0013619	mg/L	0.00144675	106.23%
Ti 334.940†	497925.0	1.99571	mg/L	0.007049	1.99571	mg/L	0.007049	0.35%
Tl 190.801†	-25.1	-0.0049089	mg/L	0.00460636	-0.0049089	mg/L	0.00460636	93.84%
V 290.880†	2905.9	0.0677323	mg/L	0.00031264	0.0677323	mg/L	0.00031264	0.46%
Zn 206.200†	61775.9	1.55252	mg/L	0.003773	1.55252	mg/L	0.003773	0.24%
B 249.772†	16398.9	0.466394	mg/L	0.0007729	0.466394	mg/L	0.0007729	0.17%
Si 251.611†	274253.1	13.7149	mg/L	0.17761	13.7149	mg/L	0.17761	1.29%
Ce 413.764†	726.0	0.143	mg/L	0.0099	0.143	mg/L	0.0099	6.93%

Sequence No.: 62
Sample ID: AD19173-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 9/14/2020 2:20:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19173-003

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	391071.3	102	%	0.4				0.39%
Y 371.029	184504.2	106	%	0.5				0.43%
Ag 328.068†	-133.0	-0.0026791	mg/L	0.00079881	-0.0026791	mg/L	0.00079881	29.82%
Al 308.215†	335926.4	42.4485	mg/L	0.06950	42.4485	mg/L	0.06950	0.16%
As 188.979†	25.5	0.0208835	mg/L	0.00053968	0.0208835	mg/L	0.00053968	2.58%
Ba 233.527†	27476.1	0.359921	mg/L	0.0000485	0.359921	mg/L	0.0000485	0.01%
Be 313.107†	-1957.7	0.0003311	mg/L	0.00004115	0.0003311	mg/L	0.00004115	12.43%
Ca 317.933†	37518767.3	475.797	mg/L	3.5118	475.797	mg/L	3.5118	0.74%
Cd 228.802†	2.0	0.0045856	mg/L	0.00030927	0.0045856	mg/L	0.00030927	6.74%
Co 228.616†	371.9	0.0182392	mg/L	0.00046442	0.0182392	mg/L	0.00046442	2.55%
Cr 267.716†	3514.6	0.0603824	mg/L	0.00043110	0.0603824	mg/L	0.00043110	0.71%
Cu 327.393†	3573.0	0.0580704	mg/L	0.00042182	0.0580704	mg/L	0.00042182	0.73%
Fe 273.955†	206096.5	27.0292	mg/L	0.03043	27.0292	mg/L	0.03043	0.11%
K 404.721†	-2424.1	-318.422	mg/L	5.2254	-318.422	mg/L	5.2254	1.64%
Mg 279.077†	455034.4	52.5142	mg/L	0.10302	52.5142	mg/L	0.10302	0.20%
Mn 257.610†	241772.7	0.968963	mg/L	0.0003295	0.968963	mg/L	0.0003295	0.03%
Mo 202.031†	340.7	0.0356074	mg/L	0.00060619	0.0356074	mg/L	0.00060619	1.70%
Na 330.237†	627.5	2.55235	mg/L	0.216892	2.55235	mg/L	0.216892	8.50%
Ni 231.604†	641.6	0.0288210	mg/L	0.00018932	0.0288210	mg/L	0.00018932	0.66%
Pb 220.353†	153.5	0.0304366	mg/L	0.00065902	0.0304366	mg/L	0.00065902	2.17%
Sb 206.836†	8.1	0.0067880	mg/L	0.00357071	0.0067880	mg/L	0.00357071	52.60%
Se 196.026†	11.7	0.0125933	mg/L	0.00376748	0.0125933	mg/L	0.00376748	29.92%
Sn 189.927†	-11.2	-0.0043352	mg/L	0.00101516	-0.0043352	mg/L	0.00101516	23.42%
Ti 334.940†	511949.8	2.05188	mg/L	0.009213	2.05188	mg/L	0.009213	0.45%
Tl 190.801†	-29.4	-0.0069080	mg/L	0.00274237	-0.0069080	mg/L	0.00274237	39.70%
V 290.880†	1741.6	0.0413837	mg/L	0.00360582	0.0413837	mg/L	0.00360582	8.71%
Zn 206.200†	24729.3	0.620590	mg/L	0.0016965	0.620590	mg/L	0.0016965	0.27%
B 249.772†	12835.6	0.369493	mg/L	0.0007492	0.369493	mg/L	0.0007492	0.20%
Si 251.611†	373438.6	18.6792	mg/L	0.03397	18.6792	mg/L	0.03397	0.18%
Ce 413.764†	756.5	0.142	mg/L	0.0063	0.142	mg/L	0.0063	4.45%

Sequence No.: 63
Sample ID: CCV V-325355
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 6
Date Collected: 9/14/2020 2:24:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-325355

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	408240.8	107	%	1.7				1.55%
Y 371.029	156815.2	90.4	%	1.41				1.57%
Ag 328.068†	7066.1	0.0922228	mg/L	0.00076392	0.0922228	mg/L	0.00076392	0.83%
Al 308.215†	36193.2	4.57943	mg/L	0.010781	4.57943	mg/L	0.010781	0.24%
As 188.979†	774.2	0.463221	mg/L	0.0051213	0.463221	mg/L	0.0051213	1.11%
Ba 233.527†	35012.8	0.459319	mg/L	0.0009727	0.459319	mg/L	0.0009727	0.21%
Be 313.107†	493574.2	0.456187	mg/L	0.0038787	0.456187	mg/L	0.0038787	0.85%
Ca 317.933†	3764838.6	47.7288	mg/L	0.46166	47.7288	mg/L	0.46166	0.97%
Cd 228.802†	11998.4	0.447494	mg/L	0.0006505	0.447494	mg/L	0.0006505	0.15%
Co 228.616†	11081.3	0.473525	mg/L	0.0077028	0.473525	mg/L	0.0077028	1.63%
Cr 267.716†	26598.3	0.465883	mg/L	0.0004028	0.465883	mg/L	0.0004028	0.09%
Cu 327.393†	28805.9	0.462814	mg/L	0.0015812	0.462814	mg/L	0.0015812	0.34%
Fe 273.955†	36168.3	4.71764	mg/L	0.006734	4.71764	mg/L	0.006734	0.14%
K 404.721†	-2715.3	-102.048	mg/L	15.2040	-102.048	mg/L	15.2040	14.90%
Mg 279.077†	409456.9	47.2405	mg/L	0.52001	47.2405	mg/L	0.52001	1.10%
Mn 257.610†	115268.7	0.461602	mg/L	0.0005577	0.461602	mg/L	0.0005577	0.12%
Mo 202.031†	4428.7	0.460965	mg/L	0.0067664	0.460965	mg/L	0.0067664	1.47%
Na 330.237†	16368.2	45.1884	mg/L	0.24469	45.1884	mg/L	0.24469	0.54%
Ni 231.604†	11430.2	0.476523	mg/L	0.0081440	0.476523	mg/L	0.0081440	1.71%
Pb 220.353†	2553.9	0.464074	mg/L	0.0095440	0.464074	mg/L	0.0095440	2.06%
Sb 206.836†	842.6	0.479690	mg/L	0.0090064	0.479690	mg/L	0.0090064	1.88%
Se 196.026†	749.4	0.462243	mg/L	0.0030547	0.462243	mg/L	0.0030547	0.66%
Sn 189.927†	2416.4	0.467224	mg/L	0.0073961	0.467224	mg/L	0.0073961	1.58%
Ti 334.940†	115833.1	0.465361	mg/L	0.0012892	0.465361	mg/L	0.0012892	0.28%
Tl 190.801†	835.5	0.502402	mg/L	0.0058911	0.502402	mg/L	0.0058911	1.17%
V 290.880†	19824.2	0.464256	mg/L	0.0031945	0.464256	mg/L	0.0031945	0.69%
Zn 206.200†	18653.0	0.467738	mg/L	0.0018919	0.467738	mg/L	0.0018919	0.40%
B 249.772†	28592.0	0.486330	mg/L	0.0032828	0.486330	mg/L	0.0032828	0.68%
Si 251.611†	95189.9	4.74650	mg/L	0.017834	4.74650	mg/L	0.017834	0.38%
Ce 413.764†	36446.8	5.843	mg/L	0.0257	5.843	mg/L	0.0257	0.44%

Sequence No.: 64
Sample ID: CCB V-325347
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/14/2020 2:28:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-325347

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	416613.8	109	%	1.1				1.03%
Y 371.029	190062.3	110	%	1.1				0.99%
Ag 328.068†	63.0	-0.0000954	mg/L	0.00064715	-0.0000954	mg/L	0.00064715	678.39%
Al 308.215†	-129.2	-0.0320901	mg/L	0.00114656	-0.0320901	mg/L	0.00114656	3.57%
As 188.979†	-1.3	0.0002714	mg/L	0.00168915	0.0002714	mg/L	0.00168915	622.46%
Ba 233.527†	13.9	-0.0022621	mg/L	0.00011745	-0.0022621	mg/L	0.00011745	5.19%
Be 313.107†	28.2	0.0021580	mg/L	0.00002837	0.0021580	mg/L	0.00002837	1.31%
Ca 317.933†	1095.0	-0.0030913	mg/L	0.00056027	-0.0030913	mg/L	0.00056027	18.12%
Cd 228.802†	-6.5	0.0042727	mg/L	0.00015788	0.0042727	mg/L	0.00015788	3.70%
Co 228.616†	6.6	0.0027095	mg/L	0.00014453	0.0027095	mg/L	0.00014453	5.33%
Cr 267.716†	-8.9	-0.0015147	mg/L	0.00030331	-0.0015147	mg/L	0.00030331	20.02%
Cu 327.393†	29.3	0.0012275	mg/L	0.00051574	0.0012275	mg/L	0.00051574	42.01%
Fe 273.955†	194.1	-0.0057635	mg/L	0.00153691	-0.0057635	mg/L	0.00153691	26.67%
K 404.721†	-5991.8	-121.575	mg/L	9.9824	-121.575	mg/L	9.9824	8.21%
Mg 279.077†	71.6	-0.128476	mg/L	0.0006080	-0.128476	mg/L	0.0006080	0.47%
Mn 257.610†	33.1	-0.0005663	mg/L	0.00004433	-0.0005663	mg/L	0.00004433	7.83%
Mo 202.031†	-9.3	-0.0008040	mg/L	0.00071884	-0.0008040	mg/L	0.00071884	89.40%
Na 330.237†	-37.5	0.751131	mg/L	0.0569763	0.751131	mg/L	0.0569763	7.59%
Ni 231.604†	2.6	0.0023018	mg/L	0.00068604	0.0023018	mg/L	0.00068604	29.81%
Pb 220.353†	5.1	-0.0013266	mg/L	0.00327372	-0.0013266	mg/L	0.00327372	246.78%
Sb 206.836†	-4.2	-0.0033623	mg/L	0.00153305	-0.0033623	mg/L	0.00153305	45.60%
Se 196.026†	-2.0	-0.0031966	mg/L	0.00440879	-0.0031966	mg/L	0.00440879	137.92%
Sn 189.927†	9.0	-0.0004034	mg/L	0.00070462	-0.0004034	mg/L	0.00070462	174.69%
Ti 334.940†	66.3	0.0016949	mg/L	0.00013985	0.0016949	mg/L	0.00013985	8.25%
Tl 190.801†	12.8	0.0024748	mg/L	0.00373257	0.0024748	mg/L	0.00373257	150.82%
V 290.880†	-96.1	0.0006855	mg/L	0.00037576	0.0006855	mg/L	0.00037576	54.81%
Zn 206.200†	57.8	-0.0000371	mg/L	0.00033053	-0.0000371	mg/L	0.00033053	892.02%
B 249.772†	204.0	0.0124128	mg/L	0.00033151	0.0124128	mg/L	0.00033151	2.67%
Si 251.611†	646.4	0.0219883	mg/L	0.01166991	0.0219883	mg/L	0.01166991	53.07%
Ce 413.764†	177.8	0.027	mg/L	0.0053	0.027	mg/L	0.0053	19.55%

Method: HGCV3 Soil (7471B) Page 1 Date: 9/11/2020 11:09:23 AM

==========

Analysis Begun

Logged In Analyst: usermet Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550 Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26211S.sif
Batch ID: H26211S
Results Data Set: ~~H26196T~~ H26211S BR 9/11/20
Results Library: C:\data-AA\johns\Results\Results.mdb

H26211S
SnCl2 v-334628
9/11/20
BR

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Method Loaded
Method Name: HGCV3 Soil (7471B) Method Last Saved: 9/10/2020 1:02:51 PM
Method Description: HgCV3 Soil (7471B)

9/18/20

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Sequence No.: 1 Autosampler Location: 1
Sample ID: Calibration Blank Date Collected: 9/11/2020 11:04:37 AM
Analyst: Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0003	0.0021	0.0003	11:05:23	Yes
2		[0.00]	0.0002	0.0014	0.0002	11:05:56	Yes
Mean:		[0.00]	0.0003				
SD:		0.00	0.0000				
%RSD:		0.00	16.80				

Auto-zero performed.

==========

Sequence No.: 2 Autosampler Location: 2
Sample ID: .2 PPB Date Collected: 9/11/2020 11:05:57 AM
Analyst: Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0013	0.0074	0.0016	11:06:43	Yes
2		[0.2]	0.0014	0.0076	0.0016	11:07:16	Yes
Mean:		[0.2]	0.0014				
SD:		0.0	0.0000				
%RSD:		0.0	0.90				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00678 Intercept: 0.00000

==========

Sequence No.: 3 Autosampler Location: 3
Sample ID: .5 PPB Date Collected: 9/11/2020 11:07:17 AM
Analyst: Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0032	0.0159	0.0034	11:08:03	Yes
2		[0.5]	0.0032	0.0161	0.0034	11:08:35	Yes
Mean:		[0.5]	0.0032				
SD:		0.0	0.0000				
%RSD:		0.0	0.27				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999462 Slope: 0.00630 Intercept: 0.00004

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Sequence No.: 4 Autosampler Location: 4
Sample ID: 1 PPB Date Collected: 9/11/2020 11:08:37 AM
Analyst: Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[1]	0.0057	0.0277	0.0060	11:09:22	Yes
2	[1]	0.0058	0.0272	0.0060	11:09:55	Yes
Mean:	[1]	0.0057				
SD:	0	0.0000				
%RSD:	0	0.69				

Standard number 3 applied. [1]
Correlation Coef.: 0.998253 Slope: 0.00570 Intercept: 0.00014

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: 2 PPB **Date Collected: 9/11/2020 11:09:56 AM**
Analyst: **Data Type: Original**

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0117	0.0547	0.0119	11:10:42	Yes
2		[2]	0.0115	0.0522	0.0118	11:11:14	Yes
Mean:		[2]	0.0116				
SD:		0	0.0001				
%RSD:		0	0.67				

Standard number 4 applied. [2]
Correlation Coef.: 0.999611 Slope: 0.00573 Intercept: 0.00013

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: 5 PPB **Date Collected: 9/11/2020 11:11:16 AM**
Analyst: **Data Type: Original**

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0289	0.1334	0.0292	11:12:01	Yes
2		[5]	0.0302	0.1412	0.0304	11:12:34	Yes
Mean:		[5]	0.0295				
SD:		0	0.0009				
%RSD:		0	3.04				

Standard number 5 applied. [5]
Correlation Coef.: 0.999888 Slope: 0.00588 Intercept: 0.00004

Sequence No.: 7 **Autosampler Location: 7**
Sample ID: 10 PPB **Date Collected: 9/11/2020 11:12:35 AM**
Analyst: **Data Type: Original**

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0550	0.2428	0.0553	11:13:21	Yes
2		[10]	0.0556	0.2408	0.0559	11:13:53	Yes
Mean:		[10]	0.0553				
SD:		0	0.0005				
%RSD:		0	0.84				

Standard number 6 applied. [10]
Correlation Coef.: 0.999493 Slope: 0.00556 Intercept: 0.00040

Sequence No.: 8 **Autosampler Location: 8**
Sample ID: 25 PPB **Date Collected: 9/11/2020 11:14:19 AM**
Analyst: **Data Type: Original**

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[25]	0.1372	0.6371	0.1375	11:15:09	Yes
2		[25]	0.1370	0.6309	0.1372	11:15:41	Yes
Mean:		[25]	0.1371				
SD:		0	0.0002				
%RSD:		0	0.12				

Standard number 7 applied. [25]
Correlation Coef.: 0.999895 Slope: 0.00547 Intercept: 0.00058

Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.107	0.00	16.8
.2 PPB	0.0014	0.2	0.141	0.00	0.9
.5 PPB	0.0032	0.5	0.471	0.00	0.3
1 PPB	0.0057	1.0	0.943	0.00	0.7
2 PPB	0.0116	2.0	2.013	0.00	0.7
5 PPB	0.0295	5.0	5.293	0.00	3.0
10 PPB	0.0553	10.0	10.002	0.00	0.8
25 PPB	0.1371	25.0	24.943	0.00	0.1

Correlation Coef.: 0.999895 Slope: 0.00547 Intercept: 0.00058

Sequence No.: 9 Autosampler Location: 10
Sample ID: ICV (2) Date Collected: 9/11/2020 11:16:08 AM
Analyst: Data Type: Original

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.23	20.23	0.1113	0.5160	0.1115	11:16:55	Yes
2	20.15	20.15	0.1108	0.5077	0.1111	11:17:27	Yes
Mean:	20.19	20.19	0.1111				
SD:	0.053	0.053	0.0003				
%RSD:	0.262	0.262	0.26				

QC value within limits for Hg 253.7 Recovery = 100.94%
All analyte(s) passed QC.

Sequence No.: 10 Autosampler Location: 1
Sample ID: ICB Date Collected: 9/11/2020 11:17:50 AM
Analyst: Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.114	-0.114	-0.0000	0.0005	0.0002	11:18:36	Yes
2	-0.113	-0.113	-0.0000	0.0007	0.0002	11:19:09	Yes
Mean:	-0.114	-0.114	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	0.580	0.580	9.15				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 11
Sample ID: MB 85269 (167) Date Collected: 9/11/2020 11:19:10 AM
Analyst: Data Type: Original

Replicate Data: MB 85269 (167)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.152	-0.152	-0.0003	-0.0000	0.0000	11:19:57	Yes
2	-0.153	-0.153	-0.0003	-0.0001	0.0000	11:20:29	Yes
Mean:	-0.153	-0.153	-0.0003				
SD:	0.000	0.000	0.0000				
%RSD:	0.307	0.307	1.02				

Sequence No.: 12 Autosampler Location: 12
Sample ID: LCS 85269 Date Collected: 9/11/2020 11:20:31 AM
Analyst: Data Type: Original

Replicate Data: LCS 85269

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	24.87	24.87	0.1367	0.6317	0.1369	11:21:16	Yes
2	24.83	24.83	0.1365	0.6328	0.1367	11:21:49	Yes
Mean:	24.85	24.85	0.1366				

SD:	0.025	0.025	0.0001
%RSD:	0.101	0.101	0.10

Sequence No.: 13 Autosampler Location: 13
Sample ID: LCS MR 85269 Date Collected: 9/11/2020 11:22:12 AM
Analyst: Data Type: Original

Replicate Data: LCS MR 85269

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	24.60	24.60	0.1352	0.6284	0.1355	11:23:00	Yes
2	24.34	24.34	0.1338	0.6178	0.1340	11:23:32	Yes
Mean:	24.47	24.47	0.1345				
SD:	0.189	0.189	0.0010				
%RSD:	0.773	0.773	0.77				

Sequence No.: 14 Autosampler Location: 14
Sample ID: LCS 4D Date Collected: 9/11/2020 11:23:56 AM
Analyst: Data Type: Original

Replicate Data: LCS 4D

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	6.001	6.001	0.0334	0.1450	0.0337	11:24:45	Yes
2	6.446	6.446	0.0359	0.1641	0.0361	11:25:17	Yes
Mean:	6.223	6.223	0.0346				
SD:	0.315	0.315	0.0017				
%RSD:	5.065	5.065	4.98				

Sequence No.: 15 Autosampler Location: 15
Sample ID: LCS 4D MR Date Collected: 9/11/2020 11:25:19 AM
Analyst: Data Type: Original

Replicate Data: LCS 4D MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	6.306	6.306	0.0351	0.1658	0.0354	11:26:04	Yes
2	5.780	5.780	0.0322	0.1371	0.0325	11:26:37	Yes
Mean:	6.043	6.043	0.0337				
SD:	0.372	0.372	0.0020				
%RSD:	6.157	6.157	6.05				

Sequence No.: 16 Autosampler Location: 16
Sample ID: AD19159-004 Date Collected: 9/11/2020 11:26:38 AM
Analyst: Data Type: Original

Replicate Data: AD19159-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.767	0.767	0.0048	0.0231	0.0050	11:27:24	Yes
2	0.797	0.797	0.0049	0.0241	0.0052	11:27:56	Yes
Mean:	0.782	0.782	0.0049				
SD:	0.021	0.021	0.0001				
%RSD:	2.734	2.734	2.41				

Sequence No.: 17 Autosampler Location: 17
Sample ID: AD19159-004 MR Date Collected: 9/11/2020 11:27:57 AM
Analyst: Data Type: Original

Replicate Data: AD19159-004 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.840	0.840	0.0052	0.0251	0.0054	11:28:43	Yes
2	0.812	0.812	0.0050	0.0223	0.0053	11:29:15	Yes
Mean:	0.826	0.826	0.0051				
SD:	0.019	0.019	0.0001				

%RSD: 2.336 2.336 2.07

Sequence No.: 18 Autosampler Location: 18
Sample ID: AD19159-005 MS 1 Date Collected: 9/11/2020 11:29:17 AM
Analyst: Data Type: Original

Replicate Data: AD19159-005 MS 1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	11.24	11.24	0.0621	0.2897	0.0624	11:30:02	Yes
2	11.14	11.14	0.0615	0.2847	0.0618	11:30:35	Yes
Mean:	11.19	11.19	0.0618				
SD:	0.074	0.074	0.0004				
%RSD:	0.661	0.661	0.65				

Sequence No.: 19 Autosampler Location: 19
Sample ID: AD19159-006 MS 2 Date Collected: 9/11/2020 11:31:01 AM
Analyst: Data Type: Original

Replicate Data: AD19159-006 MS 2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.74	10.74	0.0594	0.2766	0.0596	11:31:47	Yes
2	10.71	10.71	0.0592	0.2745	0.0595	11:32:19	Yes
Mean:	10.73	10.73	0.0593				
SD:	0.023	0.023	0.0001				
%RSD:	0.214	0.214	0.21				

Sequence No.: 20 Autosampler Location: 20
Sample ID: AD19159-001 Date Collected: 9/11/2020 11:32:41 AM
Analyst: Data Type: Original

Replicate Data: AD19159-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.543	0.543	0.0036	0.0167	0.0038	11:33:28	Yes
2	0.552	0.552	0.0036	0.0166	0.0039	11:34:00	Yes
Mean:	0.547	0.547	0.0036				
SD:	0.006	0.006	0.0000				
%RSD:	1.110	1.110	0.93				

Sequence No.: 21 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/11/2020 11:34:02 AM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.10	10.10	0.0558	0.2599	0.0561	11:34:48	Yes
2	10.07	10.07	0.0557	0.2484	0.0560	11:35:20	Yes
Mean:	10.08	10.08	0.0558				
SD:	0.019	0.019	0.0001				
%RSD:	0.191	0.191	0.19				

QC value within limits for Hg 253.7 Recovery = 100.85%
All analyte(s) passed QC.

Sequence No.: 22 Autosampler Location: 1
Sample ID: CCB Date Collected: 9/11/2020 11:35:43 AM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.110	-0.110	-0.0000	0.0008	0.0002	11:36:29	Yes
2	-0.118	-0.118	-0.0001	0.0003	0.0002	11:37:02	Yes
Mean:	-0.114	-0.114	-0.0000				

SD:	0.006	0.006	0.0000
%RSD:	5.069	5.069	79.42

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 21**
Sample ID: AD19159-002 **Date Collected: 9/11/2020 11:37:03 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.379	1.379	0.0081	0.0386	0.0084	11:37:51	Yes
2	1.365	1.365	0.0081	0.0381	0.0083	11:38:23	Yes
Mean:	1.372	1.372	0.0081				
SD:	0.010	0.010	0.0001				
%RSD:	0.727	0.727	0.67				

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: AD19159-003 **Date Collected: 9/11/2020 11:38:25 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.223	0.223	0.0018	0.0093	0.0021	11:39:10	Yes
2	0.233	0.233	0.0019	0.0094	0.0021	11:39:43	Yes
Mean:	0.228	0.228	0.0018				
SD:	0.006	0.006	0.0000				
%RSD:	2.822	2.822	1.92				

Sequence No.: 25 **Autosampler Location: 23**
Sample ID: AD19159-007 **Date Collected: 9/11/2020 11:39:44 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-007

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.135	0.135	0.0013	0.0069	0.0016	11:40:29	Yes
2	0.146	0.146	0.0014	0.0072	0.0017	11:41:02	Yes
Mean:	0.141	0.141	0.0014				
SD:	0.008	0.008	0.0000				
%RSD:	5.912	5.912	3.36				

Sequence No.: 26 **Autosampler Location: 24**
Sample ID: AD19159-008 **Date Collected: 9/11/2020 11:41:03 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-008

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0006	0.0036	0.0009	11:41:48	Yes
2	0.005	0.005	0.0006	0.0035	0.0009	11:42:21	Yes
Mean:	0.004	0.004	0.0006				
SD:	0.000	0.000	0.0000				
%RSD:	8.429	8.429	0.33				

Sequence No.: 27 **Autosampler Location: 25**
Sample ID: AD19159-009 **Date Collected: 9/11/2020 11:42:22 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-009

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	0.0005	0.0033	0.0008	11:43:07	Yes
2	-0.014	-0.014	0.0005	0.0032	0.0008	11:43:40	Yes

Mean:	-0.014	-0.014	0.0005
SD:	0.000	0.000	0.0000
%RSD:	3.312	3.312	0.50

Sequence No.: 28 **Autosampler Location: 26**
Sample ID: AD19159-010 **Date Collected: 9/11/2020 11:43:41 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-010

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.157	0.157	0.0014	0.0074	0.0017	11:44:27	Yes
2	0.152	0.152	0.0014	0.0073	0.0017	11:45:00	Yes
Mean:	0.154	0.154	0.0014				
SD:	0.003	0.003	0.0000				
%RSD:	2.106	2.106	1.25				

Sequence No.: 29 **Autosampler Location: 27**
Sample ID: AD19160-001 **Date Collected: 9/11/2020 11:45:01 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19160-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.539	0.539	0.0035	0.0174	0.0038	11:45:46	Yes
2	0.533	0.533	0.0035	0.0169	0.0038	11:46:19	Yes
Mean:	0.536	0.536	0.0035				
SD:	0.004	0.004	0.0000				
%RSD:	0.820	0.820	0.68				

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: AD19160-002 **Date Collected: 9/11/2020 11:46:20 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19160-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.069	0.069	0.0010	0.0055	0.0012	11:47:09	Yes
2	0.068	0.068	0.0010	0.0053	0.0012	11:47:41	Yes
Mean:	0.068	0.068	0.0010				
SD:	0.001	0.001	0.0000				
%RSD:	1.571	1.571	0.61				

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: AD19067-003 **Date Collected: 9/11/2020 11:47:43 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19067-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.062	-0.062	0.0002	0.0020	0.0005	11:48:28	Yes
2	-0.057	-0.057	0.0003	0.0022	0.0005	11:49:00	Yes
Mean:	-0.060	-0.060	0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	5.618	5.618	7.18				

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: AD19163-001 **Date Collected: 9/11/2020 11:49:02 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19163-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.052	-0.052	0.0003	0.0023	0.0006	11:49:47	Yes
2	-0.058	-0.058	0.0003	0.0021	0.0005	11:50:20	Yes
Mean:	-0.055	-0.055	0.0003				

SD:	0.005	0.005	0.0000
%RSD:	8.573	8.573	9.09

Sequence No.: 33 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 9/11/2020 11:50:21 AM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.08	10.08	0.0558	0.2595	0.0560	11:51:08	Yes
2	10.20	10.20	0.0564	0.2613	0.0567	11:51:41	Yes
Mean:	10.14	10.14	0.0561				
SD:	0.085	0.085	0.0005				
%RSD:	0.837	0.837	0.83				

QC value within limits for Hg 253.7 Recovery = 101.42%
All analyte(s) passed QC.

Sequence No.: 34 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/11/2020 11:52:03 AM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.118	-0.118	-0.0001	0.0003	0.0002	11:52:50	Yes
2	-0.120	-0.120	-0.0001	0.0004	0.0002	11:53:23	Yes
Mean:	-0.119	-0.119	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.121	1.121	10.66				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 31**
Sample ID: AD19164-001 **Date Collected: 9/11/2020 11:53:24 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19164-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.038	-0.038	0.0004	0.0025	0.0006	11:54:12	Yes
2	-0.040	-0.040	0.0004	0.0022	0.0006	11:54:45	Yes
Mean:	-0.039	-0.039	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	3.662	3.662	2.12				

Sequence No.: 36 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 9/11/2020 11:54:46 AM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.980	9.980	0.0552	0.2581	0.0555	11:55:34	Yes
2	9.980	9.980	0.0552	0.2497	0.0555	11:56:06	Yes
Mean:	9.980	9.980	0.0552				
SD:	0.000	0.000	0.0000				
%RSD:	0.003	0.003	0.00				

QC value within limits for Hg 253.7 Recovery = 99.80%
All analyte(s) passed QC.

Sequence No.: 37 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/11/2020 11:56:29 AM**
Analyst: **Data Type: Original**

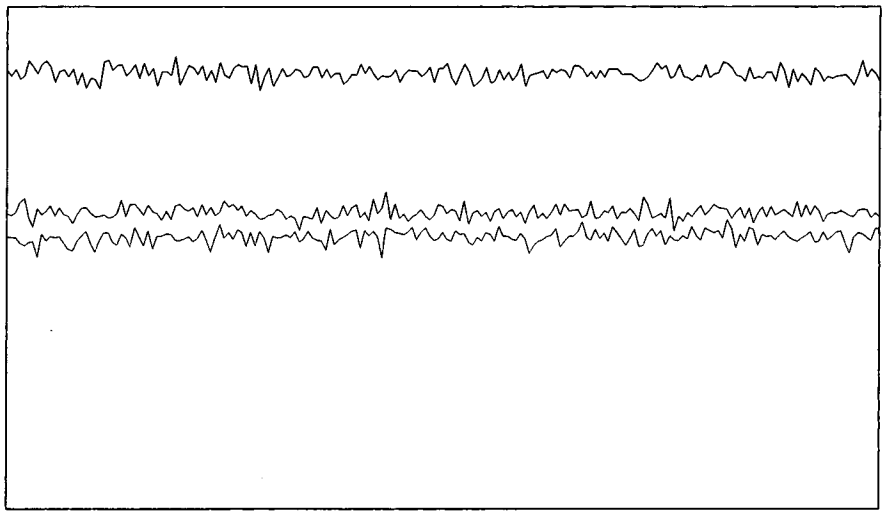
Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.123	-0.123	-0.0001	0.0001	0.0002	11:57:15	Yes
2	-0.124	-0.124	-0.0001	0.0002	0.0002	11:57:48	Yes
Mean:	-0.123	-0.123	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.253	0.253	1.86				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

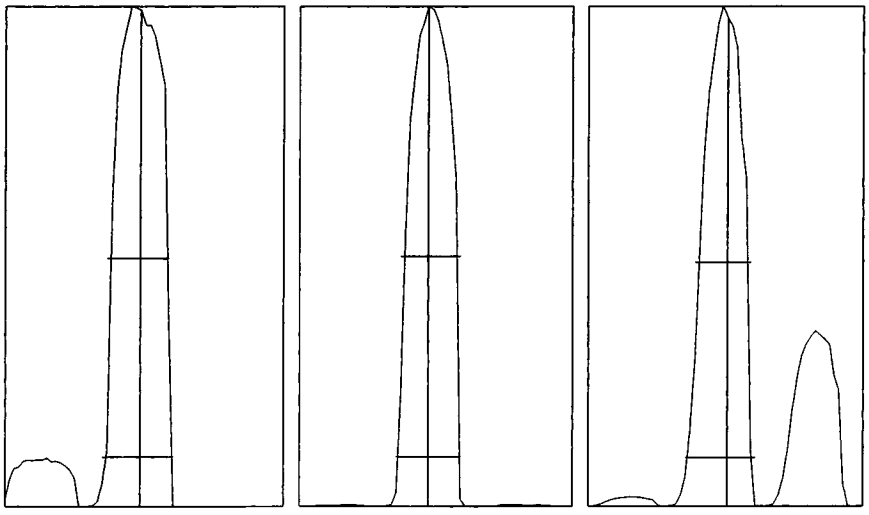
Tune Report

Tune File : ATUNE.U
Comment : TN091120



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	1.25
Doubly Charged:	70/140	0.86

m/z	Range	Count	Mean	RSD%	Background
7	50,000	42478.0	43304.7	1.52	0.50
89	100,000	58159.0	58950.9	2.07	0.90
205	100,000	55765.0	54034.1	2.38	3.70
156/140	2	1.290%	1.264%	5.02	
70/140	2	0.893%	0.858%	6.03	



m/z:	7	89	
Height:	43,604	59,339	5
Axis:	7.00	88.95	2
W-50%:	0.65	0.65	
W-10%:	0.7500	0.700	0

Integration Time:	0.1000 sec
Acquisition Time:	22.7600 sec

Y axis : Linear

Generated : Sep 11, 2020 09:16:58
Printed : Sep 11, 2020 09:17:01

Tune Report

Tune File : ATUNE.U
Comment : TN091120

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1500 W	Extract 1	:	0 V	AMU Gain	:	127
RF Matching	:	2.5 V	Extract 2	:	-120 V	AMU Offset	:	127
Smpl Depth	:	9.5 mm	Omega Bias	:	-65 V	Axis Gain	:	0.9998
Torch-H	:	-1.3 mm	Omega Lens	:	6.5 V	Axis Offset	:	0.02
Torch-V	:	0.6 mm	Cell Entrance	:	-40 V	QP Bias	:	-3 V
Carrier Gas	:	0.6 L/min	Cell Exit	:	-60 V			
Dilution Mode	:	ON	Deflect	:	13 V	===Detector Parameters===		
Dilution Gas	:	0.45 L/min	Plate Bias	:	-40 V	Discriminator	:	4.7 mV
Optional Gas	:	--- %	===Octopole Parameters===			Analog HV	:	1721 V
Nebulizer Pump	:	0.1 rps	OctP RF	:	190 V	Pulse HV	:	1656 V
Sample Pump	:	--- rps	OctP Bias	:	-8 V			
S/C Temp	:	2 degC						

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	--- mL/min	He Gas	:	4.3 mL/min	Optional Gas	:	--- %

Generated : Sep 11, 2020 09:16:58
Printed : Sep 11, 2020 09:17:04

C:\ICPMH\1\7500\QCTUNE.D

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 11 Sep 2020 09:36:28 am
Operator: PC
Misc Info:
Vial Number: 4
Current Method: C:\ICPMH\1\METHODS\TN6020.m

Minimum Response(CPS)

Element	Actual	Required	Flag
7 Li	4396510.00	0.00	
59 Co	3361220.00	0.00	
115 In	5735420.00	0.00	
205 Tl	5209340.00	0.00	

RSD (%)

Element	Actual	Required	Flag
7 Li	0.93	5.00	
59 Co	0.82	5.00	
115 In	0.40	5.00	
205 Tl	0.65	5.00	

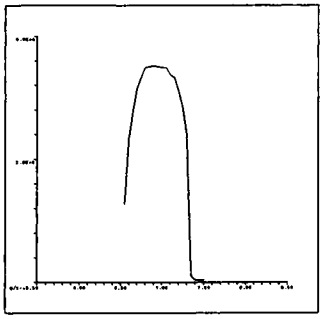
Ion Ratio

Element	Actual	Required	Flag
7 Li			
59 Co			
115 In			
205 Tl			

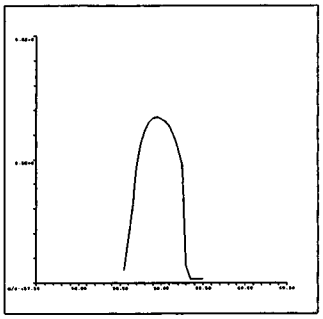
Maximum Bkg. Count(CPS)

Element	Actual	Required	Flag

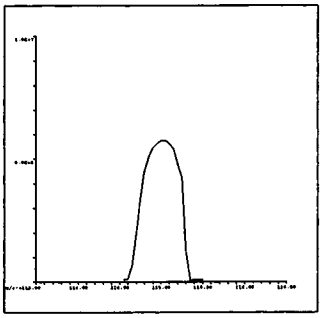
C:\ICPMH\1\7500\QCTUNE.D



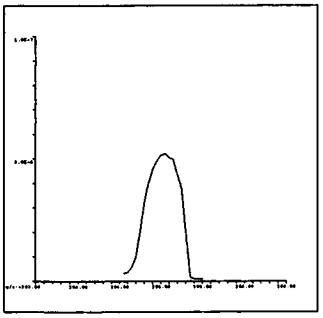
7 Li
Mass Calib.
Actual: 6.90
Required: 6.90-7.10
Flag:
Peak Width
Actual: 0.75
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.05
Required: 204.90-205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

QC Tune Result:Pass

Calibration Blank Report

File S091120A
B- 26212
QC 85270

Rmk.

Sample Name	**RINSE**
Data File Name	**001CALB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:31:16-04:00**
Type	**CalBlk**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

Report Ag, As, Be, Cd, Sb, Se, Tl, V
LRS fmd for Ag.
Ag LR = 100 PPB

9/14/20

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	256	3.98
Na	23	115	2	24990	1.01
Mg	24	115	2	1457	7.96
Al	27	115	2	462	15.20
K	39	115	2	25779	1.25
Ca	44	115	2	287	3.08
V	51	115	2	41	9.35
Cr	52	115	2	1087	6.60
Mn	55	115	2	1647	1.07
Fe	56	115	2	37753	0.87
Co	59	115	2	714	2.57
Ni	60	115	2	729	8.97
Cu	65	115	2	1683	3.48
Zn	66	115	2	4404	4.10
As	75	115	2	17	13.35
Se	78	115	2	11	43.03
Kr	83	115	1	123	2.70
Mo	95	115	1	174	17.34
Ag	107	115	1	386	5.56
Cd	111	115	1	42	22.49
Sb	121	115	1	910	8.03
Ba	137	159	1	659	7.41
Tl	205	165	1	1609	4.88
(Pb)	206	165	1	883	12.78
(Pb)	207	165	1	698	7.19
Pb	208	165	1	1794	3.93

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	926683	0.13
Sc	45	2	46462	1.73
In	115	1	1508709	2.78
In	115	2	302432	0.90
Tb	159	1	2276312	1.75
Tb	159	2	976030	0.92
Ho	165	1	2228348	1.81
Ho	165	2	980317	0.68

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Blank Report

Sample Name	**CalBlk V-334455**
Data File Name	**002CALB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:35:48-04:00**
Type	**CalBlk**
VialNumber	**2101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	261	7.03
Na	23	115	2	14483	1.38
Mg	24	115	2	2654	1.40
Al	27	115	2	526	5.09
K	39	115	2	24518	0.85
Ca	44	115	2	149	9.32
V	51	115	2	31	6.18
Cr	52	115	2	1433	6.56
Mn	55	115	2	1139	5.26
Fe	56	115	2	31679	2.26
Co	59	115	2	638	8.27
Ni	60	115	2	602	5.54
Cu	65	115	2	614	10.27
Zn	66	115	2	731	6.92
As	75	115	2	11	36.02
Se	78	115	2	18	14.12
Kr	83	115	1	124	27.10
Mo	95	115	1	81	26.42
Ag	107	115	1	142	18.95
Cd	111	115	1	26	30.99
Sb	121	115	1	1092	3.26
Ba	137	159	1	7706	3.05
Tl	205	165	1	1510	3.61
(Pb)	206	165	1	1032	4.06
(Pb)	207	165	1	905	6.61
Pb	208	165	1	2327	1.86

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	943268	0.62
Sc	45	2	47161	0.69
In	115	1	1541461	1.23
In	115	2	302668	0.40
Tb	159	1	2290443	1.82
Tb	159	2	989980	0.47
Ho	165	1	2269893	1.55
Ho	165	2	995473	0.65

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd1 V-334456**
Data File Name	**003CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:40:20-04:00**
Type	**CalStd**
VialNumber	**2102**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	4427	1.44
Na	23	115	2	72983	0.45
Mg	24	115	2	30591	1.88
Al	27	115	2	3847	6.93
K	39	115	2	44324	0.76
Ca	44	115	2	1142	9.72
V	51	115	2	2270	2.22
Cr	52	115	2	4265	3.03
Mn	55	115	2	3584	2.75
Fe	56	115	2	297584	1.24
Co	59	115	2	5380	2.60
Ni	60	115	2	1805	6.03
Cu	65	115	2	2374	3.37
Zn	66	115	2	5073	2.80
As	75	115	2	293	6.28
Se	78	115	2	134	2.09
Kr	83	115	1	123	29.73
Mo	95	115	1	3706	8.11
Ag	107	115	1	9835	1.70
Cd	111	115	1	1988	1.86
Sb	121	115	1	8668	3.66
Ba	137	159	1	4065	3.90
Tl	205	165	1	23914	3.36
(Pb)	206	165	1	8318	2.67
(Pb)	207	165	1	6727	0.37
Pb	208	165	1	17072	1.80

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	958371	0.72	943268	101.6	70	130	
Sc	45	2	47895	1.50	47161	101.6	70	130	
In	115	1	1559121	1.15	1541461	101.1	70	130	
In	115	2	307844	0.96	302668	101.7	70	130	
Tb	159	1	2315697	0.78	2290443	101.1	70	130	
Tb	159	2	1008473	0.55	989980	101.9	70	130	
Ho	165	1	2290068	0.85	2269893	100.9	70	130	
Ho	165	2	1009277	0.15	995473	101.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd2 V-334457**
Data File Name	**004CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:44:53-04:00**
Type	**CalStd**
VialNumber	**2103**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	43112	3.06
Na	23	115	2	588725	1.08
Mg	24	115	2	282696	0.74
Al	27	115	2	31019	2.33
K	39	115	2	228298	1.10
Ca	44	115	2	10657	0.92
V	51	115	2	22816	2.61
Cr	52	115	2	30113	2.56
Mn	55	115	2	18411	2.38
Fe	56	115	2	2483481	1.49
Co	59	115	2	45494	1.90
Ni	60	115	2	13412	1.38
Cu	65	115	2	17332	2.70
Zn	66	115	2	6621	4.25
As	75	115	2	2867	2.32
Se	78	115	2	1186	1.27
Kr	83	115	1	138	33.99
Mo	95	115	1	35656	2.87
Ag	107	115	1	97014	1.85
Cd	111	115	1	19888	2.55
Sb	121	115	1	77695	2.80
Ba	137	159	1	31178	1.40
Tl	205	165	1	230335	3.54
(Pb)	206	165	1	75510	3.15
(Pb)	207	165	1	63203	3.30
Pb	208	165	1	156614	3.18

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	983537	0.71	943268	104.3	70	130	
Sc	45	2	49121	0.87	47161	104.2	70	130	
In	115	1	1557419	0.48	1541461	101.0	70	130	
In	115	2	313066	1.19	302668	103.4	70	130	
Tb	159	1	2362716	0.28	2290443	103.2	70	130	
Tb	159	2	1030170	1.04	989980	104.1	70	130	
Ho	165	1	2317409	0.12	2269893	102.1	70	130	
Ho	165	2	1029426	0.51	995473	103.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd3 V-334458**
Data File Name	**005CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:49:24-04:00**
Type	**CalStd**
VialNumber	**2104**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	83896	1.55
Na	23	115	2	1205623	0.99
Mg	24	115	2	560156	1.56
Al	27	115	2	61178	1.72
K	39	115	2	423690	1.01
Ca	44	115	2	20527	1.64
V	51	115	2	45308	0.72
Cr	52	115	2	57319	2.25
Mn	55	115	2	34184	0.72
Fe	56	115	2	4836234	1.00
Co	59	115	2	90962	0.91
Ni	60	115	2	24730	2.93
Cu	65	115	2	32168	2.65
Zn	66	115	2	10683	1.72
As	75	115	2	5780	2.62
Se	78	115	2	2391	3.95
Kr	83	115	1	132	22.88
Mo	95	115	1	70683	1.90
Ag	107	115	1	193333	2.50
Cd	111	115	1	38970	2.87
Sb	121	115	1	152045	2.80
Ba	137	159	1	61622	3.45
Tl	205	165	1	456993	2.65
(Pb)	206	165	1	147341	2.87
(Pb)	207	165	1	124110	3.30
Pb	208	165	1	308873	3.08

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	960103	0.56	943268	101.8	70	130	
Sc	45	2	49198	1.83	47161	104.3	70	130	
In	115	1	1537625	1.11	1541461	99.8	70	130	
In	115	2	312574	0.55	302668	103.3	70	130	
Tb	159	1	2328560	0.38	2290443	101.7	70	130	
Tb	159	2	1027217	1.23	989980	103.8	70	130	
Ho	165	1	2281937	0.12	2269893	100.5	70	130	
Ho	165	2	1023053	1.22	995473	102.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd4 V-334459**
Data File Name	**006CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:53:53-04:00**
Type	**CalStd**
VialNumber	**2105**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	430855	2.27
Na	23	115	2	5881104	1.73
Mg	24	115	2	2860974	1.74
Al	27	115	2	311047	1.51
K	39	115	2	2074968	1.25
Ca	44	115	2	103550	2.65
V	51	115	2	230584	3.17
Cr	52	115	2	287968	2.33
Mn	55	115	2	168550	2.13
Fe	56	115	2	24279546	2.16
Co	59	115	2	456776	2.17
Ni	60	115	2	120985	2.63
Cu	65	115	2	156140	2.44
Zn	66	115	2	49686	2.85
As	75	115	2	29373	3.00
Se	78	115	2	12122	2.67
Kr	83	115	1	133	6.61
Mo	95	115	1	363775	3.01
Ag	107	115	1	971924	2.33
Cd	111	115	1	199032	3.01
Sb	121	115	1	769311	2.40
Ba	137	159	1	311193	2.70
Tl	205	165	1	2522038	2.74
(Pb)	206	165	1	748639	3.41
(Pb)	207	165	1	632677	3.39
Pb	208	165	1	1697657	2.07

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	974320	0.74	943268	103.3	70	130	
Sc	45	2	49799	1.86	47161	105.6	70	130	
In	115	1	1537039	1.18	1541461	99.7	70	130	
In	115	2	317005	2.29	302668	104.7	70	130	
Tb	159	1	2343875	0.36	2290443	102.3	70	130	
Tb	159	2	1048392	0.72	989980	105.9	70	130	
Ho	165	1	2309096	0.55	2269893	101.7	70	130	
Ho	165	2	1048255	1.20	995473	105.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd5 V-334460**
Data File Name	**007CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T10:58:19-04:00**
Type	**CalStd**
VialNumber	**2106**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	849990	1.67
Na	23	115	2	11702859	1.27
Mg	24	115	2	5611922	1.17
Al	27	115	2	622576	1.87
K	39	115	2	4053067	1.59
Ca	44	115	2	204580	1.87
V	51	115	2	459806	1.52
Cr	52	115	2	566508	1.58
Mn	55	115	2	331436	1.53
Fe	56	115	2	47934527	0.96
Co	59	115	2	900519	0.84
Ni	60	115	2	238747	0.79
Cu	65	115	2	307686	1.94
Zn	66	115	2	97651	0.66
As	75	115	2	58675	0.69
Se	78	115	2	23685	1.78
Kr	83	115	1	147	7.87
Mo	95	115	1	724195	2.78
Ag	107	115	1	2048228	1.91
Cd	111	115	1	393142	2.44
Sb	121	115	1	1646398	2.18
Ba	137	159	1	621641	3.27
Tl	205	165	1	4931221	2.48
(Pb)	206	165	1	1659296	2.38
(Pb)	207	165	1	1262972	2.06
Pb	208	165	1	3374136	1.63

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	965799	0.89	943268	102.4	70	130	
Sc	45	2	49424	0.57	47161	104.8	70	130	
In	115	1	1527887	1.29	1541461	99.1	70	130	
In	115	2	310129	1.40	302668	102.5	70	130	
Tb	159	1	2318148	0.43	2290443	101.2	70	130	
Tb	159	2	1030271	1.14	989980	104.1	70	130	
Ho	165	1	2315367	1.14	2269893	102.0	70	130	
Ho	165	2	1035066	1.63	995473	104.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Verification (ICV) - US EPA Method 6020

Sample Name	**ICV V-334461**
Data File Name	**008_ICV.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:02:43-04:00**
Type	**6-ICV**
VialNumber	**2108**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	51.54	ppb	50	437682	2.77	103.08	90	110	
Na	23	115	2	5121.50	ppb	5000	6100713	1.19	102.43	90	110	
Mg	24	115	2	5106.89	ppb	5000	2923283	1.22	102.14	90	110	
Al	27	115	2	5077.90	ppb	5000	1069426	1.37	101.56	90	110	
K	39	115	2	5073.10	ppb	5000	2106219	1.32	101.46	90	110	
Ca	44	115	2	5086.10	ppb	5000	106004	0.81	101.72	90	110	
V	51	115	2	49.61	ppb	50	231828	1.38	99.23	90	110	
Cr	52	115	2	50.45	ppb	50	291797	1.43	100.89	90	110	
Mn	55	115	2	49.81	ppb	50	168755	0.55	99.63	90	110	
Fe	56	115	2	5063.02	ppb	5000	24730510	0.61	101.26	90	110	
Co	59	115	2	49.92	ppb	50	458215	0.65	99.84	90	110	
Ni	60	115	2	49.68	ppb	50	121079	1.21	99.35	90	110	
Cu	65	115	2	50.12	ppb	50	157395	1.42	100.23	90	110	
Zn	66	115	2	50.65	ppb	50	50749	1.01	101.29	90	110	
As	75	115	2	50.07	ppb	50	29852	0.97	100.15	90	110	
Se	78	115	2	48.98	ppb	50	2384	3.26	97.97	90	110	
Mo	95	115	1	48.63	ppb	50	361565	3.01	97.25	90	110	
Ag	107	115	1	9.76	ppb	10	203038	2.79	97.60	90	110	
Cd	111	115	1	49.85	ppb	50	201556	2.24	99.70	90	110	
Sb	121	115	1	47.14	ppb	50	785797	3.24	94.28	90	110	
Ba	137	159	1	49.62	ppb	50	315090	3.28	99.24	90	110	
Tl	205	165	1	49.05	ppb	50	2419796	2.52	98.10	90	110	
Pb	208	165	1	51.10	ppb	50	1719162	3.60	102.20	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	985147	0.96	943268	104.4	70	130	
Sc	45	2	49170	0.70	47161	104.3	70	130	
In	115	1	1569151	0.22	1541461	101.8	70	130	
In	115	2	316407	0.35	302668	104.5	70	130	
Tb	159	1	2351890	0.53	2290443	102.7	70	130	
Tb	159	2	1035813	0.25	989980	104.6	70	130	
Ho	165	1	2305546	1.90	2269893	101.6	70	130	
Ho	165	2	1042027	0.30	995473	104.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Low Level Initial/Continuing Calibration Verification (ICV/CCV) - US EPA Method 6020

Sample Name	**LLICV V-334466**
Data File Name	**009_LCS.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:07:10-04:00**
Type	**6-LCS**
VialNumber	**2110**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	ExpectedValue	%Recovery	%QC Low	%QC High	QC Flag
Be	9	165	1	0.99	ppb	1	98.9	80	120	
Na	23	115	2	468.02	ppb	500	93.6	80	120	
Mg	24	115	2	485.76	ppb	500	97.2	80	120	
Al	27	115	2	496.99	ppb	500	99.4	80	120	
K	39	115	2	488.49	ppb	500	97.7	80	120	
Ca	44	115	2	500.90	ppb	500	100.2	80	120	
V	51	115	2	0.97	ppb	1	96.8	80	120	
Cr	52	115	2	2.03	ppb	2	101.4	80	120	
Mn	55	115	2	5.94	ppb	6	98.9	80	120	
Fe	56	115	2	511.40	ppb	500	102.3	80	120	
Co	59	115	2	1.93	ppb	2	96.7	80	120	
Ni	60	115	2	2.83	ppb	3	94.4	80	120	
Cu	65	115	2	10.04	ppb	10	100.4	80	120	
Zn	66	115	2	19.76	ppb	20	98.8	80	120	
As	75	115	2	0.99	ppb	1	99.2	80	120	
Se	78	115	2	10.01	ppb	10	100.1	80	120	
Mo	95	115	1	1.05	ppb	1	105.4	80	120	
Ag	107	115	1	0.92	ppb	1	92.4	80	120	
Cd	111	115	1	1.91	ppb	2	95.5	80	120	
Sb	121	115	1	3.67	ppb	4	91.9	80	120	
Ba	137	159	1	3.70	ppb	5	74.0	80	120	>+-10%
Tl	205	165	1	1.82	ppb	2	90.8	80	120	
Pb	208	165	1	1.84	ppb	2	92.1	80	120	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	983762	0.23	943268	104.3	70	130	
Sc	45	2	49888	1.65	47161	105.8	70	130	
In	115	1	1565182	0.73	1541461	101.5	70	130	
In	115	2	319596	1.52	302668	105.6	70	130	
Tb	159	1	2372178	1.28	2290443	103.6	70	130	
Tb	159	2	1036113	0.91	989980	104.7	70	130	
Ho	165	1	2322583	1.04	2269893	102.3	70	130	
Ho	165	2	1043657	0.57	995473	104.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Blank (ICB) - US EPA Method 6020

Sample Name	**ICB V-334462**
Data File Name	**010_ICB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:11:42-04:00**
Type	**6-ICB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	0.5	
Na	23	115	2	6.86	ppb	250	
Mg	24	115	2	0.32	ppb	250	
Al	27	115	2	1.06	ppb	250	
K	39	115	2	3.42	ppb	250	
Ca	44	115	2	3.44	ppb	250	
V	51	115	2	0.00	ppb	0.5	
Cr	52	115	2	0.01	ppb	1	
Mn	55	115	2	0.02	ppb	3	
Fe	56	115	2	2.37	ppb	250	
Co	59	115	2	-0.01	ppb	1	
Ni	60	115	2	0.08	ppb	1.5	
Cu	65	115	2	0.96	ppb	5	
Zn	66	115	2	0.50	ppb	10	
As	75	115	2	0.00	ppb	0.5	
Se	78	115	2	-0.05	ppb	5	
Mo	95	115	1	0.03	ppb	0.5	
Ag	107	115	1	0.00	ppb	0.5	
Cd	111	115	1	0.00	ppb	1	
Sb	121	115	1	-0.01	ppb	2	
Ba	137	159	1	-1.13	ppb	2.5	
Tl	205	165	1	0.00	ppb	1	
Pb	208	165	1	-0.01	ppb	1	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	965347	0.66	943268	102.3	70	130	
Sc	45	2	49377	1.83	47161	104.7	70	130	
In	115	1	1539503	1.57	1541461	99.9	70	130	
In	115	2	315377	1.21	302668	104.2	70	130	
Tb	159	1	2316813	0.87	2290443	101.2	70	130	
Tb	159	2	1022136	0.97	989980	103.2	70	130	
Ho	165	1	2278721	1.59	2269893	100.4	70	130	
Ho	165	2	1021894	1.28	995473	102.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Interference Check Sample A (ICS-A) - US EPA Method 6020

Sample Name	**ICSA V-334463**
Data File Name	**011ICSA.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:16:14-04:00**
Type	**6-ICSA**
VialNumber	**2107**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	131709.36	ppb	162500	
Mg	24	115	2	50909.44	ppb	65000	
Al	27	115	2	51588.44	ppb	65000	
K	39	115	2	53196.29	ppb	65000	
Ca	44	115	2	163961.03	ppb	195000	
V	51	115	2	0.09	ppb	1	
Cr	52	115	2	0.51	ppb	2	
Mn	55	115	2	1.45	ppb	6	
Fe	56	115	2	128419.00	ppb	162500	
Co	59	115	2	0.20	ppb	2	
Ni	60	115	2	0.62	ppb	3	
Cu	65	115	2	0.64	ppb	10	
Zn	66	115	2	1.04	ppb	20	
As	75	115	2	0.24	ppb	1	
Se	78	115	2	0.06	ppb	10	
Mo	95	115	1	1015.70	ppb	1300	
Ag	107	115	1	0.12	ppb	1	
Cd	111	115	1	1.29	ppb	2	
Sb	121	115	1	0.31	ppb	1	
Ba	137	159	1	-0.28	ppb	5	
Tl	205	165	1	-0.01	ppb	2	
Pb	208	165	1	0.01	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1042705	0.99	943268	110.5	70	130	
Sc	45	2	54039	0.55	47161	114.6	70	130	
In	115	1	1586744	0.65	1541461	102.9	70	130	
In	115	2	318055	1.50	302668	105.1	70	130	
Tb	159	1	2481062	0.56	2290443	108.3	70	130	
Tb	159	2	1086714	1.44	989980	109.8	70	130	
Ho	165	1	2454295	0.66	2269893	108.1	70	130	
Ho	165	2	1091923	0.93	995473	109.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**012SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:20:38-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.00	0.00	ppb	301	4.99	550	
Na	23	115	2	18.28	18.28	ppb	39221	2.65	55000	
Mg	24	115	2	-2.09	-2.09	ppb	1682	1.16	55000	
Al	27	115	2	-0.26	-0.26	ppb	527	5.02	16500	
K	39	115	2	4.30	4.30	ppb	29152	1.69	55000	
Ca	44	115	2	8.53	8.53	ppb	354	2.87	55000	
V	51	115	2	0.01	0.01	ppb	63	10.52	550	
Cr	52	115	2	-0.07	-0.07	ppb	1141	2.98	550	
Mn	55	115	2	0.06	0.06	ppb	1488	4.02	550	
Fe	56	115	2	3.83	3.83	ppb	55094	0.84	55000	
Co	59	115	2	-0.03	-0.03	ppb	457	5.51	550	
Ni	60	115	2	-0.01	-0.01	ppb	651	13.35	550	
Cu	65	115	2	0.51	0.51	ppb	2395	4.62	550	
Zn	66	115	2	4.04	4.04	ppb	5061	3.86	550	
As	75	115	2	0.00	0.00	ppb	13	49.99	550	
Se	78	115	2	-0.05	-0.05	ppb	18	22.54	2750	
Mo	95	115	1	0.48	0.48	ppb	3978	3.87	550	
Ag	107	115	1	0.02	0.02	ppb	502	19.34	550	
Cd	111	115	1	0.00	0.00	ppb	49	35.12	550	
Sb	121	115	1	-0.03	-0.03	ppb	736	16.84	550	
Ba	137	159	1	-1.18	-1.18	ppb	636	7.96	550	
Tl	205	165	1	-0.01	-0.01	ppb	1392	14.80	550	
Pb	208	165	1	-0.02	-0.02	ppb	1982	4.88	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1051370	0.61	943268	111.5	70	130	
Sc	45	2	52591	1.11	47161	111.5	70	130	
In	115	1	1716244	0.47	1541461	111.3	70	130	
In	115	2	336653	0.34	302668	111.2	70	130	
Tb	159	1	2527037	1.43	2290443	110.3	70	130	
Tb	159	2	1090629	0.70	989980	110.2	70	130	
Ho	165	1	2493494	0.94	2269893	109.9	70	130	
Ho	165	2	1097199	0.73	995473	110.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LRS V-334464**
Data File Name	**013SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:25:11-04:00**
Type	**Sample**
VialNumber	**2109**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	488.02	488.02	ppb	4317806	2.36	550	
Na	23	115	2	51835.04	51835.04	ppb	62386362	1.65	55000	
Mg	24	115	2	51109.05	51109.05	ppb	29600344	2.06	55000	
Al	27	115	2	15514.65	15514.65	ppb	3307383	1.01	16500	
K	39	115	2	51834.31	51834.31	ppb	21573031	1.30	55000	
Ca	44	115	2	53586.89	53586.89	ppb	1129528	3.11	55000	
V	51	115	2	534.75	534.75	ppb	2529972	2.10	550	
Cr	52	115	2	522.70	522.70	ppb	3047568	2.37	550	
Mn	55	115	2	532.18	532.18	ppb	1813945	1.66	550	
Fe	56	115	2	51119.77	51119.77	ppb	252540038	1.66	55000	
Co	59	115	2	514.16	514.16	ppb	4772705	1.46	550	
Ni	60	115	2	500.68	500.68	ppb	1230228	5.48	550	
Cu	65	115	2	514.74	514.74	ppb	1630891	1.42	550	
Zn	66	115	2	485.20	485.20	ppb	485688	1.88	550	
As	75	115	2	510.28	510.28	ppb	307935	1.66	550	
Se	78	115	2	2497.12	2497.12	ppb	122125	1.56	2750	
Mo	95	115	1	530.63	530.63	ppb	3967928	2.94	550	
Ag	107	115	1	1545.02	1545.02	ppb	32301710	1.46	550	>LDR
Cd	111	115	1	522.03	522.03	ppb	2122545	2.74	550	
Sb	121	115	1	496.39	496.39	ppb	8312032	2.37	550	
Ba	137	159	1	528.19	528.19	ppb	3414664	2.95	550	
Tl	205	165	1	480.31	480.31	ppb	24679662	1.63	550	
Pb	208	165	1	468.00	468.00	ppb	16390401	1.37	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1021426	0.47	943268	108.3	70	130	
Sc	45	2	52787	2.07	47161	111.9	70	130	
In	115	1	1578440	2.08	1541461	102.4	70	130	
In	115	2	320383	0.90	302668	105.9	70	130	
Tb	159	1	2450022	1.62	2290443	107.0	70	130	
Tb	159	2	1068394	1.21	989980	107.9	70	130	
Ho	165	1	2402584	2.19	2269893	105.8	70	130	
Ho	165	2	1072040	1.59	995473	107.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**014SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:29:22-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.08	0.08	ppb	1019	7.18	550	
Na	23	115	2	18.17	18.17	ppb	39083	0.47	55000	
Mg	24	115	2	-1.75	-1.75	ppb	1885	3.01	55000	
Al	27	115	2	0.13	0.13	ppb	614	13.62	16500	
K	39	115	2	7.42	7.42	ppb	30511	0.23	55000	
Ca	44	115	2	6.55	6.55	ppb	311	17.02	55000	
V	51	115	2	0.00	0.00	ppb	47	53.93	550	
Cr	52	115	2	-0.08	-0.08	ppb	1128	2.81	550	
Mn	55	115	2	0.05	0.05	ppb	1433	2.33	550	
Fe	56	115	2	3.48	3.48	ppb	53281	0.90	55000	
Co	59	115	2	-0.01	-0.01	ppb	613	2.49	550	
Ni	60	115	2	0.03	0.03	ppb	740	3.58	550	
Cu	65	115	2	0.45	0.45	ppb	2186	1.68	550	
Zn	66	115	2	4.01	4.01	ppb	5020	5.38	550	
As	75	115	2	0.06	0.06	ppb	48	13.96	550	
Se	78	115	2	0.23	0.23	ppb	32	17.21	2750	
Mo	95	115	1	0.33	0.33	ppb	2737	5.91	550	
Ag	107	115	1	103.22	103.22	ppb	2281515	3.20	550	
Cd	111	115	1	0.01	0.01	ppb	63	17.55	550	
Sb	121	115	1	0.24	0.24	ppb	5397	6.00	550	
Ba	137	159	1	-1.17	-1.17	ppb	736	14.01	550	
Tl	205	165	1	0.05	0.05	ppb	4286	5.55	550	
Pb	208	165	1	0.00	0.00	ppb	2489	5.47	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1048117	0.26	943268	111.1	70	130	
Sc	45	2	52614	0.44	47161	111.6	70	130	
In	115	1	1668884	1.35	1541461	108.3	70	130	
In	115	2	336676	1.39	302668	111.2	70	130	
Tb	159	1	2499513	0.56	2290443	109.1	70	130	
Tb	159	2	1086492	0.49	989980	109.7	70	130	
Ho	165	1	2451830	0.24	2269893	108.0	70	130	
Ho	165	2	1082127	1.56	995473	108.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**015SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:33:53-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.04	0.04	ppb	658	9.01	550	
Na	23	115	2	16.95	16.95	ppb	36021	1.20	55000	
Mg	24	115	2	-0.54	-0.54	ppb	2520	3.80	55000	
Al	27	115	2	0.47	0.47	ppb	662	12.79	16500	
K	39	115	2	6.10	6.10	ppb	28728	0.66	55000	
Ca	44	115	2	9.56	9.56	ppb	362	5.23	55000	
V	51	115	2	0.01	0.01	ppb	90	14.82	550	
Cr	52	115	2	-0.07	-0.07	ppb	1127	10.80	550	
Mn	55	115	2	0.07	0.07	ppb	1445	4.26	550	
Fe	56	115	2	3.47	3.47	ppb	51085	1.37	55000	
Co	59	115	2	-0.01	-0.01	ppb	582	14.31	550	
Ni	60	115	2	0.02	0.02	ppb	698	11.10	550	
Cu	65	115	2	0.48	0.48	ppb	2196	3.26	550	
Zn	66	115	2	4.03	4.03	ppb	4843	6.86	550	
As	75	115	2	0.01	0.01	ppb	17	17.64	550	
Se	78	115	2	-0.05	-0.05	ppb	17	50.67	2750	
Mo	95	115	1	0.11	0.11	ppb	908	8.00	550	
Ag	107	115	1	0.26	0.26	ppb	5678	10.69	550	
Cd	111	115	1	0.01	0.01	ppb	71	5.04	550	
Sb	121	115	1	0.03	0.03	ppb	1611	4.56	550	
Ba	137	159	1	-1.17	-1.17	ppb	674	2.72	550	
Tl	205	165	1	0.02	0.02	ppb	2500	0.58	550	
Pb	208	165	1	0.00	0.00	ppb	2282	1.83	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	992706	0.59	943268	105.2	70	130	
Sc	45	2	49754	0.83	47161	105.5	70	130	
In	115	1	1605909	0.92	1541461	104.2	70	130	
In	115	2	323103	1.10	302668	106.8	70	130	
Tb	159	1	2394195	0.76	2290443	104.5	70	130	
Tb	159	2	1044125	0.31	989980	105.5	70	130	
Ho	165	1	2368690	0.39	2269893	104.4	70	130	
Ho	165	2	1042451	1.12	995473	104.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0166CCV.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:38:24-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	51.65	ppb	50	446930	3.27	103.30	90	110	
Na	23	115	2	5039.59	ppb	5000	6031800	0.32	100.79	90	110	
Mg	24	115	2	5114.87	ppb	5000	2941643	0.38	102.30	90	110	
Al	27	115	2	1505.36	ppb	1500	318937	1.27	100.36	90	110	
K	39	115	2	5101.27	ppb	5000	2129937	0.85	102.03	90	110	
Ca	44	115	2	5064.78	ppb	5000	106056	1.46	101.30	90	110	
V	51	115	2	49.94	ppb	50	234446	0.74	99.87	90	110	
Cr	52	115	2	50.09	ppb	50	291101	1.04	100.17	90	110	
Mn	55	115	2	50.47	ppb	50	171779	1.09	100.94	90	110	
Fe	56	115	2	5036.26	ppb	5000	24716574	0.98	100.73	90	110	
Co	59	115	2	50.01	ppb	50	461224	0.90	100.02	90	110	
Ni	60	115	2	50.27	ppb	50	123106	0.94	100.55	90	110	
Cu	65	115	2	50.52	ppb	50	159401	0.50	101.03	90	110	
Zn	66	115	2	50.46	ppb	50	50791	1.67	100.91	90	110	
As	75	115	2	50.13	ppb	50	30024	0.76	100.25	90	110	
Se	78	115	2	255.26	ppb	250	12404	0.46	102.10	90	110	
Mo	95	115	1	49.54	ppb	50	371556	3.83	99.07	90	110	
Ag	107	115	1	53.56	ppb	50	1123430	3.38	107.13	90	110	
Cd	111	115	1	49.67	ppb	50	202595	3.38	99.34	90	110	
Sb	121	115	1	47.89	ppb	50	805333	3.88	95.78	90	110	
Ba	137	159	1	50.17	ppb	50	322564	3.92	100.34	90	110	
Tl	205	165	1	51.16	ppb	50	2571242	2.77	102.33	90	110	
Pb	208	165	1	50.38	ppb	50	1726829	2.31	100.75	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	990179	0.84	943268	105.0	70	130	
Sc	45	2	50035	0.51	47161	106.1	70	130	
In	115	1	1583182	0.75	1541461	102.7	70	130	
In	115	2	317934	1.45	302668	105.0	70	130	
Tb	159	1	2382194	0.54	2290443	104.0	70	130	
Tb	159	2	1048375	0.32	989980	105.9	70	130	
Ho	165	1	2348284	0.67	2269893	103.5	70	130	
Ho	165	2	1046821	0.59	995473	105.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0176CCB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:42:50-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.02	ppb	1	
Na	23	115	2	9.53	ppb	500	
Mg	24	115	2	0.71	ppb	500	
Al	27	115	2	0.85	ppb	500	
K	39	115	2	3.54	ppb	500	
Ca	44	115	2	1.53	ppb	500	
V	51	115	2	0.00	ppb	1	
Cr	52	115	2	0.02	ppb	2	
Mn	55	115	2	-0.03	ppb	6	
Fe	56	115	2	2.51	ppb	500	
Co	59	115	2	-0.02	ppb	2	
Ni	60	115	2	0.12	ppb	3	
Cu	65	115	2	1.01	ppb	10	
Zn	66	115	2	0.53	ppb	20	
As	75	115	2	0.00	ppb	1	
Se	78	115	2	0.10	ppb	10	
Mo	95	115	1	0.08	ppb	1	
Ag	107	115	1	0.08	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.01	ppb	4	
Ba	137	159	1	-1.13	ppb	5	
Tl	205	165	1	0.01	ppb	2	
Pb	208	165	1	-0.01	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	967438	0.88	943268	102.6	70	130	
Sc	45	2	49056	2.50	47161	104.0	70	130	
In	115	1	1559697	0.58	1541461	101.2	70	130	
In	115	2	316744	0.27	302668	104.7	70	130	
Tb	159	1	2356238	0.42	2290443	102.9	70	130	
Tb	159	2	1033160	0.86	989980	104.4	70	130	
Ho	165	1	2324964	0.97	2269893	102.4	70	130	
Ho	165	2	1034072	0.33	995473	103.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**MB 85270**
Data File Name	**018SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:47:21-04:00**
Type	**Sample**
VialNumber	**2201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.01	0.01	ppb	398	1.74	550	
Na	23	115	2	12.20	12.20	ppb	28993	1.05	55000	
Mg	24	115	2	-0.32	-0.32	ppb	2536	6.36	55000	
Al	27	115	2	0.61	0.61	ppb	662	12.86	16500	
K	39	115	2	1.65	1.65	ppb	25737	0.56	55000	
Ca	44	115	2	2.69	2.69	ppb	207	26.94	55000	
V	51	115	2	0.08	0.08	ppb	397	11.37	550	
Cr	52	115	2	0.14	0.14	ppb	2269	3.82	550	
Mn	55	115	2	0.04	0.04	ppb	1292	4.79	550	
Fe	56	115	2	5.94	5.94	ppb	60764	0.64	55000	
Co	59	115	2	-0.03	-0.03	ppb	380	8.77	550	
Ni	60	115	2	-0.01	-0.01	ppb	591	8.99	550	
Cu	65	115	2	0.52	0.52	ppb	2214	2.86	550	
Zn	66	115	2	2.05	2.05	ppb	2726	7.74	550	
As	75	115	2	0.01	0.01	ppb	20	22.20	550	
Se	78	115	2	-0.06	-0.06	ppb	16	32.23	2750	
Mo	95	115	1	0.04	0.04	ppb	421	7.09	550	
Ag	107	115	1	0.10	0.10	ppb	2299	19.43	550	
Cd	111	115	1	0.00	0.00	ppb	44	32.79	550	
Sb	121	115	1	0.02	0.02	ppb	1409	5.32	550	
Ba	137	159	1	-0.40	-0.40	ppb	5610	5.44	550	
Tl	205	165	1	0.00	0.00	ppb	1516	9.06	550	
Pb	208	165	1	0.23	0.23	ppb	10495	1.70	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	978001	1.90	943268	103.7	70	130	
Sc	45	2	48607	0.79	47161	103.1	70	130	
In	115	1	1602535	0.83	1541461	104.0	70	130	
In	115	2	309542	0.91	302668	102.3	70	130	
Tb	159	1	2414486	1.58	2290443	105.4	70	130	
Tb	159	2	1033189	0.48	989980	104.4	70	130	
Ho	165	1	2374818	1.36	2269893	104.6	70	130	
Ho	165	2	1037756	0.70	995473	104.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LCS 85270**
Data File Name	**019SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:51:53-04:00**
Type	**Sample**
VialNumber	**2202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	151.01	151.01	ppb	1351794	1.71	550	
Na	23	115	2	879.26	879.26	ppb	1016537	5.26	55000	
Mg	24	115	2	6451.13	6451.13	ppb	3540159	0.85	55000	
Al	27	115	2	8734.21	8734.21	ppb	1763465	0.64	16500	
K	39	115	2	1870.28	1870.28	ppb	760833	1.04	55000	
Ca	44	115	2	19543.70	19543.70	ppb	390184	1.73	55000	
V	51	115	2	247.17	247.17	ppb	1107409	1.02	550	
Cr	52	115	2	196.49	196.49	ppb	1085736	1.68	550	
Mn	55	115	2	538.16	538.16	ppb	1737247	2.56	550	
Fe	56	115	2	13234.15	13234.15	ppb	61937620	1.66	55000	
Co	59	115	2	259.78	259.78	ppb	2283876	1.39	550	
Ni	60	115	2	48.25	48.25	ppb	112798	0.71	550	
Cu	65	115	2	185.97	185.97	ppb	558418	1.69	550	
Zn	66	115	2	599.98	599.98	ppb	568559	0.90	550	>LDR
As	75	115	2	42.03	42.03	ppb	24032	1.54	550	
Se	78	115	2	304.51	304.51	ppb	14119	1.21	2750	
Mo	95	115	1	178.91	178.91	ppb	1347822	2.25	550	
Ag	107	115	1	83.13	83.13	ppb	1751258	1.97	550	
Cd	111	115	1	170.64	170.64	ppb	699129	2.58	550	
Sb	121	115	1	40.65	40.65	ppb	686862	1.88	550	
Ba	137	159	1	842.08	842.08	ppb	5441476	1.30	550	>LDR
Tl	205	165	1	187.40	187.40	ppb	9743823	3.04	550	
Pb	208	165	1	143.86	143.86	ppb	5099663	2.63	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1024933	0.77	943268	108.7	70	130	
Sc	45	2	49268	0.75	47161	104.5	70	130	
In	115	1	1590173	1.76	1541461	103.2	70	130	
In	115	2	303406	0.91	302668	100.2	70	130	
Tb	159	1	2451499	1.32	2290443	107.0	70	130	
Tb	159	2	1042616	0.74	989980	105.3	70	130	
Ho	165	1	2430452	1.41	2269893	107.1	70	130	
Ho	165	2	1045018	0.96	995473	105.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LCS MR 85270**
Data File Name	**020SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T11:56:15-04:00**
Type	**Sample**
VialNumber	**2203**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	147.39	147.39	ppb	1313334	1.39	550	
Na	23	115	2	826.52	826.52	ppb	949751	1.75	55000	
Mg	24	115	2	6372.80	6372.80	ppb	3473364	1.33	55000	
Al	27	115	2	8633.40	8633.40	ppb	1731162	1.22	16500	
K	39	115	2	1844.49	1844.49	ppb	745486	0.78	55000	
Ca	44	115	2	19350.12	19350.12	ppb	383675	2.06	55000	
V	51	115	2	242.32	242.32	ppb	1078185	1.31	550	
Cr	52	115	2	193.76	193.76	ppb	1063288	1.61	550	
Mn	55	115	2	530.19	530.19	ppb	1699684	2.03	550	
Fe	56	115	2	13017.82	13017.82	ppb	60507341	1.83	55000	
Co	59	115	2	254.15	254.15	ppb	2218994	1.22	550	
Ni	60	115	2	48.74	48.74	ppb	113136	0.87	550	
Cu	65	115	2	184.71	184.71	ppb	550808	0.98	550	
Zn	66	115	2	598.38	598.38	ppb	563115	0.62	550	>LDR
As	75	115	2	41.17	41.17	ppb	23375	1.40	550	
Se	78	115	2	300.08	300.08	ppb	13817	0.31	2750	
Mo	95	115	1	176.37	176.37	ppb	1308250	3.86	550	
Ag	107	115	1	82.93	82.93	ppb	1720401	2.05	550	
Cd	111	115	1	171.51	171.51	ppb	691938	2.98	550	
Sb	121	115	1	41.41	41.41	ppb	688956	2.80	550	
Ba	137	159	1	795.60	795.60	ppb	5186949	2.56	550	>LDR
Tl	205	165	1	186.34	186.34	ppb	9644040	2.45	550	
Pb	208	165	1	144.20	144.20	ppb	5088400	2.21	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1010283	0.82	943268	107.1	70	130	
Sc	45	2	48709	1.53	47161	103.3	70	130	
In	115	1	1565816	0.67	1541461	101.6	70	130	
In	115	2	301318	1.15	302668	99.6	70	130	
Tb	159	1	2473194	1.32	2290443	108.0	70	130	
Tb	159	2	1039093	1.05	989980	105.0	70	130	
Ho	165	1	2419647	1.50	2269893	106.6	70	130	
Ho	165	2	1044758	1.08	995473	105.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-004**
Data File Name	**021SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:00:35-04:00**
Type	**Sample**
VialNumber	**2204**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.49	1.49	ppb	13798	1.98	550	
Na	23	115	2	374.26	374.26	ppb	416439	0.90	55000	
Mg	24	115	2	24699.62	24699.62	ppb	12793821	0.88	55000	
Al	27	115	2	18252.80	18252.80	ppb	3479738	0.60	16500	>LDR
K	39	115	2	2392.90	2392.90	ppb	912806	1.16	55000	
Ca	44	115	2	220637.19	220637.19	ppb	4158643	1.95	55000	>LDR
V	51	115	2	195.19	195.19	ppb	825890	1.98	550	
Cr	52	115	2	209.52	209.52	ppb	1093225	1.69	550	
Mn	55	115	2	1511.93	1511.93	ppb	4606620	0.85	550	>LDR
Fe	56	115	2	73721.07	73721.07	ppb	325666411	0.24	55000	>LDR
Co	59	115	2	27.18	27.18	ppb	226192	0.85	550	
Ni	60	115	2	124.91	124.91	ppb	274844	0.66	550	
Cu	65	115	2	329.81	329.81	ppb	934786	1.29	550	
Zn	66	115	2	1508.09	1508.09	ppb	1348597	1.35	550	>LDR
As	75	115	2	40.59	40.59	ppb	21914	0.89	550	
Se	78	115	2	5.11	5.11	ppb	241	11.33	2750	
Mo	95	115	1	6.64	6.64	ppb	47785	3.44	550	
Ag	107	115	1	9.24	9.24	ppb	185716	2.28	550	
Cd	111	115	1	6.12	6.12	ppb	23911	3.41	550	
Sb	121	115	1	2.06	2.06	ppb	34163	4.93	550	
Ba	137	159	1	1130.03	1130.03	ppb	7358508	3.27	550	>LDR
Tl	205	165	1	0.77	0.77	ppb	42491	5.25	550	
Pb	208	165	1	950.59	950.59	ppb	34205687	2.43	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1246402	1.74	943268	132.1	70	130	IS Fail
Sc	45	2	57366	1.89	47161	121.6	70	130	
In	115	1	1515636	0.61	1541461	98.3	70	130	
In	115	2	286534	1.17	302668	94.7	70	130	
Tb	159	1	2471113	0.64	2290443	107.9	70	130	
Tb	159	2	1036910	1.38	989980	104.7	70	130	
Ho	165	1	2468304	0.67	2269893	108.7	70	130	
Ho	165	2	1043916	1.42	995473	104.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-004 MR**
Data File Name	**022SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:04:58-04:00**
Type	**Sample**
VialNumber	**2205**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.69	1.69	ppb	15884	1.80	550	
Na	23	115	2	319.03	319.03	ppb	359574	1.22	55000	
Mg	24	115	2	22643.81	22643.81	ppb	11814987	0.41	55000	
Al	27	115	2	18192.93	18192.93	ppb	3493702	0.44	16500	>LDR
K	39	115	2	2516.44	2516.44	ppb	965776	1.19	55000	
Ca	44	115	2	151923.04	151923.04	ppb	2884316	0.90	55000	>LDR
V	51	115	2	198.74	198.74	ppb	847088	1.29	550	
Cr	52	115	2	261.46	261.46	ppb	1374044	2.41	550	
Mn	55	115	2	1424.07	1424.07	ppb	4371178	1.41	550	>LDR
Fe	56	115	2	90552.43	90552.43	ppb	402968332	0.70	55000	>LDR
Co	59	115	2	28.84	28.84	ppb	241772	1.98	550	
Ni	60	115	2	153.02	153.02	ppb	339042	0.92	550	
Cu	65	115	2	404.34	404.34	ppb	1154285	0.79	550	
Zn	66	115	2	1619.27	1619.27	ppb	1458504	0.37	550	>LDR
As	75	115	2	45.33	45.33	ppb	24655	1.87	550	
Se	78	115	2	5.80	5.80	ppb	273	1.24	2750	
Mo	95	115	1	8.35	8.35	ppb	60592	2.84	550	
Ag	107	115	1	10.54	10.54	ppb	213611	2.89	550	
Cd	111	115	1	6.41	6.41	ppb	25281	2.52	550	
Sb	121	115	1	2.01	2.01	ppb	33627	0.66	550	
Ba	137	159	1	1252.68	1252.68	ppb	8304729	3.12	550	>LDR
Tl	205	165	1	0.50	0.50	ppb	28452	3.02	550	
Pb	208	165	1	1310.50	1310.50	ppb	47739892	2.51	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1233142	1.18	943268	130.7	70	130	IS Fail
Sc	45	2	56935	0.93	47161	120.7	70	130	
In	115	1	1528652	1.19	1541461	99.2	70	130	
In	115	2	288639	1.12	302668	95.4	70	130	
Tb	159	1	2516034	0.90	2290443	109.8	70	130	
Tb	159	2	1055872	1.21	989980	106.7	70	130	
Ho	165	1	2498898	0.40	2269893	110.1	70	130	
Ho	165	2	1060163	1.19	995473	106.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-004 SD**
Data File Name	**023SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:09:21-04:00**
Type	**Sample**
VialNumber	**2209**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.34	0.34	ppb	3253	4.87	550	
Na	23	115	2	91.94	91.94	ppb	117581	0.53	55000	
Mg	24	115	2	5065.64	5065.64	ppb	2741121	0.62	55000	
Al	27	115	2	3797.45	3797.45	ppb	756194	1.15	16500	
K	39	115	2	488.90	488.90	ppb	213971	1.20	55000	
Ca	44	115	2	44688.12	44688.12	ppb	879344	0.96	55000	
V	51	115	2	39.00	39.00	ppb	172297	1.50	550	
Cr	52	115	2	42.12	42.12	ppb	230529	0.91	550	
Mn	55	115	2	305.52	305.52	ppb	972735	1.58	550	
Fe	56	115	2	14923.60	14923.60	ppb	68847749	0.74	55000	
Co	59	115	2	5.49	5.49	ppb	48165	1.67	550	
Ni	60	115	2	25.95	25.95	ppb	60080	1.14	550	
Cu	65	115	2	69.74	69.74	ppb	206830	1.35	550	
Zn	66	115	2	318.38	318.38	ppb	297787	1.14	550	
As	75	115	2	8.26	8.26	ppb	4664	1.18	550	
Se	78	115	2	0.60	0.60	ppb	45	15.81	2750	
Mo	95	115	1	1.32	1.32	ppb	9806	2.43	550	
Ag	107	115	1	1.93	1.93	ppb	39894	3.33	550	
Cd	111	115	1	1.28	1.28	ppb	5147	3.38	550	
Sb	121	115	1	0.41	0.41	ppb	7816	4.34	550	
Ba	137	159	1	243.66	243.66	ppb	1567884	3.39	550	
Tl	205	165	1	0.12	0.12	ppb	7507	4.17	550	
Pb	208	165	1	207.15	207.15	ppb	7244547	3.15	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	984080	0.57	943268	104.3	70	130	
Sc	45	2	48816	0.93	47161	103.5	70	130	
In	115	1	1556449	0.57	1541461	101.0	70	130	
In	115	2	299130	1.49	302668	98.8	70	130	
Tb	159	1	2432038	0.67	2290443	106.2	70	130	
Tb	159	2	1027236	0.85	989980	103.8	70	130	
Ho	165	1	2399105	1.06	2269893	105.7	70	130	
Ho	165	2	1033998	1.80	995473	103.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 12:11 PM on:9/11/2020

Sample Report

Sample Name	**AD19159-005 MS 1**
Data File Name	**024SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:13:47-04:00**
Type	**Sample**
VialNumber	**2206**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	188.37	188.37	ppb	1689459	2.48	550	
Na	23	115	2	22333.23	22333.23	ppb	24176121	0.93	55000	
Mg	24	115	2	43946.26	43946.26	ppb	22884597	1.49	55000	
Al	27	115	2	24292.52	24292.52	ppb	4656236	1.62	16500	>LDR
K	39	115	2	23488.61	23488.61	ppb	8802796	0.95	55000	
Ca	44	115	2	164041.16	164041.16	ppb	3108469	1.30	55000	>LDR
V	51	115	2	466.18	466.18	ppb	1983093	1.64	550	
Cr	52	115	2	408.37	408.37	ppb	2141013	1.16	550	
Mn	55	115	2	1794.27	1794.27	ppb	5496469	1.69	550	>LDR
Fe	56	115	2	79204.75	79204.75	ppb	351804026	1.25	55000	>LDR
Co	59	115	2	254.84	254.84	ppb	2127280	1.99	550	
Ni	60	115	2	344.31	344.31	ppb	760690	1.27	550	
Cu	65	115	2	591.57	591.57	ppb	1685287	1.17	550	>LDR
Zn	66	115	2	1922.33	1922.33	ppb	1728130	0.90	550	>LDR
As	75	115	2	250.55	250.55	ppb	135953	0.72	550	
Se	78	115	2	204.65	204.65	ppb	9015	1.46	2750	
Mo	95	115	1	225.14	225.14	ppb	1623143	3.61	550	
Ag	107	115	1	46.12	46.12	ppb	929849	3.19	550	
Cd	111	115	1	216.56	216.56	ppb	849055	2.73	550	
Sb	121	115	1	90.47	90.47	ppb	1461544	2.38	550	
Ba	137	159	1	1253.08	1253.08	ppb	8150489	2.29	550	>LDR
Tl	205	165	1	193.77	193.77	ppb	10093943	2.69	550	
Pb	208	165	1	1082.23	1082.23	ppb	38419539	2.32	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1245905	1.13	943268	132.1	70	130	IS Fail
Sc	45	2	56914	1.22	47161	120.7	70	130	
In	115	1	1521684	0.08	1541461	98.7	70	130	
In	115	2	288084	0.09	302668	95.2	70	130	
Tb	159	1	2468725	0.47	2290443	107.8	70	130	
Tb	159	2	1044430	0.64	989980	105.5	70	130	
Ho	165	1	2435133	1.47	2269893	107.3	70	130	
Ho	165	2	1049388	0.93	995473	105.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-006 MS 2**
Data File Name	**025SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:18:00-04:00**
Type	**Sample**
VialNumber	**2207**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	196.12	196.12	ppb	1730077	2.48	550	
Na	23	115	2	22860.39	22860.39	ppb	24185147	0.39	55000	
Mg	24	115	2	65689.86	65689.86	ppb	33430558	0.41	55000	>LDR
Al	27	115	2	18634.27	18634.27	ppb	3490724	1.26	16500	>LDR
K	39	115	2	23811.84	23811.84	ppb	8721177	0.43	55000	
Ca	44	115	2	319347.66	319347.66	ppb	5913891	1.37	55000	>LDR
V	51	115	2	414.32	414.32	ppb	1722489	1.32	550	
Cr	52	115	2	407.95	407.95	ppb	2090312	1.53	550	
Mn	55	115	2	1534.10	1534.10	ppb	4592944	1.41	550	>LDR
Fe	56	115	2	67083.30	67083.30	ppb	291210958	0.87	55000	>LDR
Co	59	115	2	250.32	250.32	ppb	2042124	1.58	550	
Ni	60	115	2	323.33	323.33	ppb	698169	1.42	550	
Cu	65	115	2	539.96	539.96	ppb	1503432	0.45	550	
Zn	66	115	2	1797.49	1797.49	ppb	1579274	0.59	550	>LDR
As	75	115	2	249.82	249.82	ppb	132480	1.32	550	
Se	78	115	2	205.53	205.53	ppb	8849	0.54	2750	
Mo	95	115	1	239.54	239.54	ppb	1669980	3.25	550	
Ag	107	115	1	47.72	47.72	ppb	930345	2.45	550	
Cd	111	115	1	222.44	222.44	ppb	843277	2.26	550	
Sb	121	115	1	100.57	100.57	ppb	1570874	2.18	550	
Ba	137	159	1	1813.00	1813.00	ppb	11526848	2.03	550	>LDR
Tl	205	165	1	197.52	197.52	ppb	10121026	2.83	550	
Pb	208	165	1	1172.67	1172.67	ppb	40947228	1.34	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1234982	1.22	943268	130.9	70	130	IS Fail
Sc	45	2	56190	1.08	47161	119.1	70	130	
In	115	1	1471313	1.03	1541461	95.4	70	130	
In	115	2	281551	0.36	302668	93.0	70	130	
Tb	159	1	2413947	1.06	2290443	105.4	70	130	
Tb	159	2	1012439	0.15	989980	102.3	70	130	
Ho	165	1	2395424	1.02	2269893	105.5	70	130	
Ho	165	2	1013681	0.88	995473	101.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-004 PS**
Data File Name	**026SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:22:12-04:00**
Type	**Sample**
VialNumber	**2208**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	43.14	43.14	ppb	382234	2.60	550	
Na	23	115	2	5489.42	5489.42	ppb	5706856	0.83	55000	
Mg	24	115	2	28727.92	28727.92	ppb	14342907	1.09	55000	
Al	27	115	2	19348.80	19348.80	ppb	3555622	1.19	16500	>LDR
K	39	115	2	7373.70	7373.70	ppb	2664589	0.54	55000	
Ca	44	115	2	220104.68	220104.68	ppb	3998537	1.12	55000	>LDR
V	51	115	2	240.64	240.64	ppb	981398	0.74	550	
Cr	52	115	2	261.62	261.62	ppb	1315529	2.31	550	
Mn	55	115	2	1539.39	1539.39	ppb	4521267	1.78	550	>LDR
Fe	56	115	2	76338.36	76338.36	ppb	325076882	1.40	55000	>LDR
Co	59	115	2	75.59	75.59	ppb	605365	1.42	550	
Ni	60	115	2	169.49	169.49	ppb	359261	1.08	550	
Cu	65	115	2	365.02	365.02	ppb	997182	1.75	550	
Zn	66	115	2	1465.36	1465.36	ppb	1262928	1.31	550	>LDR
As	75	115	2	89.27	89.27	ppb	46447	0.85	550	
Se	78	115	2	239.35	239.35	ppb	10106	2.01	2750	
Mo	95	115	1	57.95	57.95	ppb	403775	3.12	550	
Ag	107	115	1	48.17	48.17	ppb	938638	2.34	550	
Cd	111	115	1	54.64	54.64	ppb	207027	3.19	550	
Sb	121	115	1	50.31	50.31	ppb	785836	2.60	550	
Ba	137	159	1	1141.03	1141.03	ppb	7333290	2.26	550	>LDR
Tl	205	165	1	48.93	48.93	ppb	2517887	2.39	550	
Pb	208	165	1	969.74	969.74	ppb	33992764	2.75	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1201005	1.35	943268	127.3	70	130	
Sc	45	2	55326	0.63	47161	117.3	70	130	
In	115	1	1470559	0.69	1541461	95.4	70	130	
In	115	2	276181	0.72	302668	91.2	70	130	
Tb	159	1	2439179	0.46	2290443	106.5	70	130	
Tb	159	2	1018755	0.35	989980	102.9	70	130	
Ho	165	1	2404432	1.33	2269893	105.9	70	130	
Ho	165	2	1024166	0.20	995473	102.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**027SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:26:31-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.06	0.06	ppb	771	8.50	550	
Na	23	115	2	14.63	14.63	ppb	30871	0.70	55000	
Mg	24	115	2	-0.82	-0.82	ppb	2186	19.35	55000	
Al	27	115	2	0.83	0.83	ppb	686	34.47	16500	
K	39	115	2	2.80	2.80	ppb	25423	1.69	55000	
Ca	44	115	2	9.23	9.23	ppb	330	7.63	55000	
V	51	115	2	0.01	0.01	ppb	87	25.22	550	
Cr	52	115	2	-0.06	-0.06	ppb	1097	2.70	550	
Mn	55	115	2	0.08	0.08	ppb	1398	3.96	550	
Fe	56	115	2	3.74	3.74	ppb	48734	1.62	55000	
Co	59	115	2	-0.03	-0.03	ppb	364	6.49	550	
Ni	60	115	2	0.03	0.03	ppb	659	7.16	550	
Cu	65	115	2	0.50	0.50	ppb	2088	6.00	550	
Zn	66	115	2	3.86	3.86	ppb	4338	3.44	550	
As	75	115	2	0.01	0.01	ppb	17	9.95	550	
Se	78	115	2	-0.09	-0.09	ppb	14	39.74	2750	
Mo	95	115	1	0.09	0.09	ppb	724	21.34	550	
Ag	107	115	1	0.29	0.29	ppb	6029	4.35	550	
Cd	111	115	1	0.01	0.01	ppb	80	6.45	550	
Sb	121	115	1	0.10	0.10	ppb	2635	4.38	550	
Ba	137	159	1	-1.12	-1.12	ppb	990	1.68	550	
Tl	205	165	1	0.10	0.10	ppb	6584	5.22	550	
Pb	208	165	1	0.08	0.08	ppb	5177	7.28	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	921325	0.32	943268	97.7	70	130	
Sc	45	2	45603	1.01	47161	96.7	70	130	
In	115	1	1523141	1.03	1541461	98.8	70	130	
In	115	2	300352	0.53	302668	99.2	70	130	
Tb	159	1	2324078	0.29	2290443	101.5	70	130	
Tb	159	2	1000336	0.50	989980	101.0	70	130	
Ho	165	1	2292413	0.19	2269893	101.0	70	130	
Ho	165	2	1004031	0.33	995473	100.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0286CCV.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:31:02-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	50.85	ppb	50	419280	3.60	101.70	90	110	
Na	23	115	2	4969.68	ppb	5000	5561432	0.35	99.39	90	110	
Mg	24	115	2	5037.54	ppb	5000	2708879	0.92	100.75	90	110	
Al	27	115	2	1476.47	ppb	1500	292468	0.97	98.43	90	110	
K	39	115	2	5053.27	ppb	5000	1972685	0.46	101.07	90	110	
Ca	44	115	2	5025.21	ppb	5000	98388	1.07	100.50	90	110	
V	51	115	2	49.27	ppb	50	216260	1.01	98.54	90	110	
Cr	52	115	2	49.73	ppb	50	270213	1.65	99.45	90	110	
Mn	55	115	2	49.74	ppb	50	158313	1.45	99.49	90	110	
Fe	56	115	2	5015.47	ppb	5000	23013631	1.71	100.31	90	110	
Co	59	115	2	50.02	ppb	50	431342	1.28	100.05	90	110	
Ni	60	115	2	49.80	ppb	50	114016	0.92	99.59	90	110	
Cu	65	115	2	49.93	ppb	50	147295	0.52	99.86	90	110	
Zn	66	115	2	49.93	ppb	50	47003	0.43	99.85	90	110	
As	75	115	2	49.54	ppb	50	27743	1.22	99.08	90	110	
Se	78	115	2	252.57	ppb	250	11475	2.05	101.03	90	110	
Mo	95	115	1	48.84	ppb	50	345433	2.94	97.68	90	110	
Ag	107	115	1	51.28	ppb	50	1014152	3.14	102.56	90	110	
Cd	111	115	1	49.47	ppb	50	190253	3.10	98.94	90	110	
Sb	121	115	1	48.10	ppb	50	762651	3.50	96.20	90	110	
Ba	137	159	1	48.97	ppb	50	298860	4.12	97.93	90	110	
Tl	205	165	1	51.43	ppb	50	2462647	2.46	102.85	90	110	
Pb	208	165	1	50.78	ppb	50	1658654	3.77	101.56	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	920756	0.43	943268	97.6	70	130	
Sc	45	2	46117	0.41	47161	97.8	70	130	
In	115	1	1492870	1.88	1541461	96.8	70	130	
In	115	2	297231	0.94	302668	98.2	70	130	
Tb	159	1	2260611	1.58	2290443	98.7	70	130	
Tb	159	2	990234	0.89	989980	100.0	70	130	
Ho	165	1	2237612	0.94	2269893	98.6	70	130	
Ho	165	2	995819	1.27	995473	100.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0296CCB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:35:27-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.03	ppb	1	
Na	23	115	2	9.78	ppb	500	
Mg	24	115	2	0.58	ppb	500	
Al	27	115	2	0.93	ppb	500	
K	39	115	2	3.36	ppb	500	
Ca	44	115	2	2.47	ppb	500	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	0.01	ppb	2	
Mn	55	115	2	-0.01	ppb	6	
Fe	56	115	2	1.87	ppb	500	
Co	59	115	2	-0.03	ppb	2	
Ni	60	115	2	0.11	ppb	3	
Cu	65	115	2	0.97	ppb	10	
Zn	66	115	2	0.70	ppb	20	
As	75	115	2	0.00	ppb	1	
Se	78	115	2	-0.04	ppb	10	
Mo	95	115	1	0.07	ppb	1	
Ag	107	115	1	0.05	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.04	ppb	4	
Ba	137	159	1	-1.12	ppb	5	
Tl	205	165	1	0.03	ppb	2	
Pb	208	165	1	0.05	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	915145	1.10	943268	97.0	70	130	
Sc	45	2	47039	1.69	47161	99.7	70	130	
In	115	1	1475029	1.98	1541461	95.7	70	130	
In	115	2	303860	0.56	302668	100.4	70	130	
Tb	159	1	2215052	2.09	2290443	96.7	70	130	
Tb	159	2	991049	1.37	989980	100.1	70	130	
Ho	165	1	2178584	3.01	2269893	96.0	70	130	
Ho	165	2	997358	1.20	995473	100.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-001**
Data File Name	**030SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:40:00-04:00**
Type	**Sample**
VialNumber	**2210**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.49	1.49	ppb	13517	2.08	550	
Na	23	115	2	360.54	360.54	ppb	384067	1.08	55000	
Mg	24	115	2	25837.42	25837.42	ppb	12796696	0.76	55000	
Al	27	115	2	26571.20	26571.20	ppb	4843785	1.07	16500	>LDR
K	39	115	2	3559.18	3559.18	ppb	1287361	0.63	55000	
Ca	44	115	2	125730.14	125730.14	ppb	2266147	1.88	55000	>LDR
V	51	115	2	53.23	53.23	ppb	215367	0.88	550	
Cr	52	115	2	46.93	46.93	ppb	235170	1.44	550	
Mn	55	115	2	1753.62	1753.62	ppb	5109003	0.86	550	>LDR
Fe	56	115	2	69492.52	69492.52	ppb	293554285	0.74	55000	>LDR
Co	59	115	2	48.14	48.14	ppb	382682	1.54	550	
Ni	60	115	2	58.03	58.03	ppb	122386	1.44	550	
Cu	65	115	2	137.01	137.01	ppb	371721	2.22	550	
Zn	66	115	2	496.19	496.19	ppb	424787	2.09	550	
As	75	115	2	38.60	38.60	ppb	19925	0.67	550	
Se	78	115	2	4.45	4.45	ppb	203	10.70	2750	
Mo	95	115	1	2.58	2.58	ppb	17518	1.93	550	
Ag	107	115	1	0.35	0.35	ppb	6684	4.37	550	
Cd	111	115	1	0.72	0.72	ppb	2688	3.13	550	
Sb	121	115	1	9.80	9.80	ppb	149507	2.84	550	
Ba	137	159	1	270.48	270.48	ppb	1736550	3.70	550	
Tl	205	165	1	0.35	0.35	ppb	19801	4.59	550	
Pb	208	165	1	1990.79	1990.79	ppb	69807506	3.03	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1265205	2.13	943268	134.1	70	130	IS Fail
Sc	45	2	57552	0.91	47161	122.0	70	130	
In	115	1	1429975	6.15	1541461	92.8	70	130	
In	115	2	274023	2.02	302668	90.5	70	130	
Tb	159	1	2427716	2.73	2290443	106.0	70	130	
Tb	159	2	1008167	0.89	989980	101.8	70	130	
Ho	165	1	2405673	2.49	2269893	106.0	70	130	
Ho	165	2	1016861	1.16	995473	102.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 12:41 PM on:9/11/2020

Sample Report

Sample Name	**AD19159-002**
Data File Name	**031SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:44:23-04:00**
Type	**Sample**
VialNumber	**2211**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.48	1.48	ppb	13651	2.18	550	
Na	23	115	2	535.29	535.29	ppb	584990	0.72	55000	
Mg	24	115	2	18247.23	18247.23	ppb	9377397	1.22	55000	
Al	27	115	2	20441.90	20441.90	ppb	3866039	0.91	16500	>LDR
K	39	115	2	1982.16	1982.16	ppb	754078	1.31	55000	
Ca	44	115	2	133674.97	133674.97	ppb	2499505	1.53	55000	>LDR
V	51	115	2	140.47	140.47	ppb	589639	1.27	550	
Cr	52	115	2	222.06	222.06	ppb	1149387	1.16	550	
Mn	55	115	2	1160.26	1160.26	ppb	3506749	0.30	550	>LDR
Fe	56	115	2	65942.48	65942.48	ppb	288987496	0.62	55000	>LDR
Co	59	115	2	28.84	28.84	ppb	238023	0.84	550	
Ni	60	115	2	96.23	96.23	ppb	210182	1.80	550	
Cu	65	115	2	318.43	318.43	ppb	895434	1.69	550	
Zn	66	115	2	1221.91	1221.91	ppb	1084180	1.53	550	>LDR
As	75	115	2	46.46	46.46	ppb	24885	1.16	550	
Se	78	115	2	4.24	4.24	ppb	201	11.82	2750	
Mo	95	115	1	6.32	6.32	ppb	45032	1.98	550	
Ag	107	115	1	7.75	7.75	ppb	154233	2.17	550	
Cd	111	115	1	5.00	5.00	ppb	19338	2.50	550	
Sb	121	115	1	1.74	1.74	ppb	28783	2.49	550	
Ba	137	159	1	890.42	890.42	ppb	5782747	2.35	550	>LDR
Tl	205	165	1	0.33	0.33	ppb	19009	2.36	550	
Pb	208	165	1	927.63	927.63	ppb	33174790	2.59	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1155261	3.47	943268	122.5	70	130	
Sc	45	2	54204	2.11	47161	114.9	70	130	
In	115	1	1500637	0.75	1541461	97.4	70	130	
In	115	2	284299	2.21	302668	93.9	70	130	
Tb	159	1	2464089	0.33	2290443	107.6	70	130	
Tb	159	2	1027305	1.19	989980	103.8	70	130	
Ho	165	1	2453687	0.80	2269893	108.1	70	130	
Ho	165	2	1043464	1.38	995473	104.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-003**
Data File Name	**032SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:48:49-04:00**
Type	**Sample**
VialNumber	**2212**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.79	0.79	ppb	7281	0.62	550	
Na	23	115	2	247.68	247.68	ppb	273874	0.65	55000	
Mg	24	115	2	12563.46	12563.46	ppb	6360874	0.84	55000	
Al	27	115	2	10694.09	10694.09	ppb	1992676	0.48	16500	
K	39	115	2	1610.79	1610.79	ppb	607931	0.85	55000	
Ca	44	115	2	234625.04	234625.04	ppb	4321657	1.20	55000	>LDR
V	51	115	2	36.35	36.35	ppb	150351	1.44	550	
Cr	52	115	2	31.83	31.83	ppb	163438	0.64	550	
Mn	55	115	2	921.93	921.93	ppb	2745750	0.68	550	>LDR
Fe	56	115	2	32737.44	32737.44	ppb	141360889	0.57	55000	
Co	59	115	2	11.26	11.26	ppb	91944	0.52	550	
Ni	60	115	2	33.11	33.11	ppb	71599	2.14	550	
Cu	65	115	2	66.27	66.27	ppb	184029	0.87	550	
Zn	66	115	2	574.87	574.87	ppb	502816	1.52	550	>LDR
As	75	115	2	11.12	11.12	ppb	5876	3.25	550	
Se	78	115	2	2.97	2.97	ppb	144	11.73	2750	
Mo	95	115	1	1.60	1.60	ppb	11342	3.37	550	
Ag	107	115	1	1.47	1.47	ppb	29022	2.92	550	
Cd	111	115	1	1.44	1.44	ppb	5548	1.69	550	
Sb	121	115	1	0.90	0.90	ppb	15234	2.96	550	
Ba	137	159	1	577.87	577.87	ppb	3718499	1.59	550	>LDR
Tl	205	165	1	0.16	0.16	ppb	10089	1.48	550	
Pb	208	165	1	338.87	338.87	ppb	11945780	1.02	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1101953	3.46	943268	116.8	70	130	
Sc	45	2	52157	1.04	47161	110.6	70	130	
In	115	1	1486405	1.06	1541461	96.4	70	130	
In	115	2	280030	0.65	302668	92.5	70	130	
Tb	159	1	2439784	0.87	2290443	106.5	70	130	
Tb	159	2	1009341	0.81	989980	102.0	70	130	
Ho	165	1	2417906	1.03	2269893	106.5	70	130	
Ho	165	2	1018045	0.63	995473	102.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-007**
Data File Name	**033SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:53:15-04:00**
Type	**Sample**
VialNumber	**2301**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.36	1.36	ppb	12686	2.68	550	
Na	23	115	2	300.61	300.61	ppb	330153	3.61	55000	
Mg	24	115	2	23766.96	23766.96	ppb	12054517	1.14	55000	
Al	27	115	2	21762.18	21762.18	ppb	4062374	1.09	16500	>LDR
K	39	115	2	4212.95	4212.95	ppb	1556231	0.88	55000	
Ca	44	115	2	84074.03	84074.03	ppb	1551681	1.59	55000	>LDR
V	51	115	2	60.65	60.65	ppb	251294	1.19	550	
Cr	52	115	2	37.27	37.27	ppb	191499	1.05	550	
Mn	55	115	2	1684.91	1684.91	ppb	5026724	1.01	550	>LDR
Fe	56	115	2	64343.79	64343.79	ppb	278333323	0.77	55000	>LDR
Co	59	115	2	26.83	26.83	ppb	218700	2.13	550	
Ni	60	115	2	96.35	96.35	ppb	207708	1.25	550	
Cu	65	115	2	118.66	118.66	ppb	329679	1.04	550	
Zn	66	115	2	351.21	351.21	ppb	308051	1.47	550	
As	75	115	2	26.60	26.60	ppb	14070	1.96	550	
Se	78	115	2	5.39	5.39	ppb	248	9.42	2750	
Mo	95	115	1	2.86	2.86	ppb	20458	2.62	550	
Ag	107	115	1	2.27	2.27	ppb	45393	1.96	550	
Cd	111	115	1	1.72	1.72	ppb	6694	5.03	550	
Sb	121	115	1	0.47	0.47	ppb	8511	2.98	550	
Ba	137	159	1	219.20	219.20	ppb	1441401	7.17	550	
Tl	205	165	1	0.42	0.42	ppb	24028	3.58	550	
Pb	208	165	1	243.77	243.77	ppb	8780482	2.56	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1278912	1.87	943268	135.6	70	130	IS Fail
Sc	45	2	58664	0.47	47161	124.4	70	130	
In	115	1	1505702	0.55	1541461	97.7	70	130	
In	115	2	280565	1.22	302668	92.7	70	130	
Tb	159	1	2484355	0.64	2290443	108.5	70	130	
Tb	159	2	1035784	1.19	989980	104.6	70	130	
Ho	165	1	2470570	0.33	2269893	108.8	70	130	
Ho	165	2	1048449	1.23	995473	105.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-008**
Data File Name	**034SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T12:57:38-04:00**
Type	**Sample**
VialNumber	**2302**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.27	1.27	ppb	11539	4.45	550	
Na	23	115	2	2506.18	2506.18	ppb	2655152	1.04	55000	
Mg	24	115	2	9403.05	9403.05	ppb	4773025	1.13	55000	
Al	27	115	2	26724.10	26724.10	ppb	4991033	0.79	16500	>LDR
K	39	115	2	2070.26	2070.26	ppb	776714	1.28	55000	
Ca	44	115	2	70109.42	70109.42	ppb	1294608	1.75	55000	>LDR
V	51	115	2	41.58	41.58	ppb	172359	0.58	550	
Cr	52	115	2	19.99	19.99	ppb	103392	1.10	550	
Mn	55	115	2	397.20	397.20	ppb	1186425	1.10	550	
Fe	56	115	2	29220.88	29220.88	ppb	126483151	0.77	55000	
Co	59	115	2	24.19	24.19	ppb	197255	1.23	550	
Ni	60	115	2	36.11	36.11	ppb	78231	1.18	550	
Cu	65	115	2	54.37	54.37	ppb	151450	0.73	550	
Zn	66	115	2	119.36	119.36	ppb	105197	2.11	550	
As	75	115	2	18.49	18.49	ppb	9788	3.07	550	
Se	78	115	2	3.05	3.05	ppb	147	7.55	2750	
Mo	95	115	1	2.10	2.10	ppb	15164	3.26	550	
Ag	107	115	1	0.14	0.14	ppb	2895	3.50	550	
Cd	111	115	1	0.43	0.43	ppb	1718	6.48	550	
Sb	121	115	1	0.33	0.33	ppb	6353	1.61	550	
Ba	137	159	1	276.88	276.88	ppb	1781741	2.46	550	
Tl	205	165	1	0.14	0.14	ppb	8564	6.08	550	
Pb	208	165	1	62.57	62.57	ppb	2195997	2.11	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1045652	0.34	943268	110.9	70	130	
Sc	45	2	49207	0.78	47161	104.3	70	130	
In	115	1	1514228	0.40	1541461	98.2	70	130	
In	115	2	280703	0.86	302668	92.7	70	130	
Tb	159	1	2433566	0.85	2290443	106.2	70	130	
Tb	159	2	1010297	1.24	989980	102.1	70	130	
Ho	165	1	2405251	0.78	2269893	106.0	70	130	
Ho	165	2	1020270	0.74	995473	102.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-009**
Data File Name	**035SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:02:05-04:00**
Type	**Sample**
VialNumber	**2303**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.15	1.15	ppb	10565	3.28	550	
Na	23	115	2	1706.07	1706.07	ppb	1838572	1.11	55000	
Mg	24	115	2	7265.20	7265.20	ppb	3742717	0.62	55000	
Al	27	115	2	20262.56	20262.56	ppb	3840463	1.06	16500	>LDR
K	39	115	2	2160.52	2160.52	ppb	821597	1.33	55000	
Ca	44	115	2	70206.75	70206.75	ppb	1315689	2.65	55000	>LDR
V	51	115	2	43.30	43.30	ppb	182162	0.90	550	
Cr	52	115	2	23.99	23.99	ppb	125622	1.69	550	
Mn	55	115	2	426.34	426.34	ppb	1292280	1.29	550	
Fe	56	115	2	36709.73	36709.73	ppb	161240053	1.84	55000	
Co	59	115	2	25.58	25.58	ppb	211713	2.37	550	
Ni	60	115	2	50.39	50.39	ppb	110573	1.55	550	
Cu	65	115	2	63.92	63.92	ppb	180581	0.96	550	
Zn	66	115	2	157.17	157.17	ppb	140342	1.24	550	
As	75	115	2	21.63	21.63	ppb	11615	1.85	550	
Se	78	115	2	2.96	2.96	ppb	146	10.11	2750	
Mo	95	115	1	3.44	3.44	ppb	24787	3.10	550	
Ag	107	115	1	0.14	0.14	ppb	2980	1.34	550	
Cd	111	115	1	0.56	0.56	ppb	2213	4.62	550	
Sb	121	115	1	0.56	0.56	ppb	10045	4.18	550	
Ba	137	159	1	278.17	278.17	ppb	1807094	2.21	550	
Tl	205	165	1	0.18	0.18	ppb	11162	3.00	550	
Pb	208	165	1	107.08	107.08	ppb	3794804	2.71	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1039984	0.68	943268	110.3	70	130	
Sc	45	2	50798	1.00	47161	107.7	70	130	
In	115	1	1517769	0.53	1541461	98.5	70	130	
In	115	2	284877	1.35	302668	94.1	70	130	
Tb	159	1	2457215	0.49	2290443	107.3	70	130	
Tb	159	2	1021736	1.56	989980	103.2	70	130	
Ho	165	1	2429526	0.17	2269893	107.0	70	130	
Ho	165	2	1024495	1.42	995473	102.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19159-010**
Data File Name	**036SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:06:29-04:00**
Type	**Sample**
VialNumber	**2304**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.57	1.57	ppb	14710	1.91	550	
Na	23	115	2	302.70	302.70	ppb	333917	1.20	55000	
Mg	24	115	2	20645.53	20645.53	ppb	10520482	0.96	55000	
Al	27	115	2	21691.86	21691.86	ppb	4068163	0.97	16500	>LDR
K	39	115	2	2652.95	2652.95	ppb	993045	0.73	55000	
Ca	44	115	2	68950.92	68950.92	ppb	1278459	1.22	55000	>LDR
V	51	115	2	59.17	59.17	ppb	246317	2.18	550	
Cr	52	115	2	39.75	39.75	ppb	205136	1.86	550	
Mn	55	115	2	2014.51	2014.51	ppb	6037904	0.67	550	>LDR
Fe	56	115	2	85606.24	85606.24	ppb	372034923	0.88	55000	>LDR
Co	59	115	2	27.97	27.97	ppb	228964	1.11	550	
Ni	60	115	2	87.60	87.60	ppb	189791	1.26	550	
Cu	65	115	2	314.11	314.11	ppb	875815	0.83	550	
Zn	66	115	2	343.15	343.15	ppb	302390	1.10	550	
As	75	115	2	54.31	54.31	ppb	28843	1.28	550	
Se	78	115	2	6.35	6.35	ppb	290	9.32	2750	
Mo	95	115	1	3.85	3.85	ppb	27735	2.28	550	
Ag	107	115	1	0.55	0.55	ppb	11188	0.48	550	
Cd	111	115	1	0.96	0.96	ppb	3771	2.45	550	
Sb	121	115	1	0.81	0.81	ppb	14153	3.81	550	
Ba	137	159	1	276.36	276.36	ppb	1843624	2.06	550	
Tl	205	165	1	0.52	0.52	ppb	29606	2.50	550	
Pb	208	165	1	544.15	544.15	ppb	19779824	2.81	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1297521	0.49	943268	137.6	70	130	IS Fail
Sc	45	2	59827	1.87	47161	126.9	70	130	
In	115	1	1517847	0.78	1541461	98.5	70	130	
In	115	2	281866	0.61	302668	93.1	70	130	
Tb	159	1	2523243	1.18	2290443	110.2	70	130	
Tb	159	2	1041179	1.11	989980	105.2	70	130	
Ho	165	1	2493779	1.41	2269893	109.9	70	130	
Ho	165	2	1049938	0.73	995473	105.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19160-001**
Data File Name	**037SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:10:54-04:00**
Type	**Sample**
VialNumber	**2305**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	2.13	2.13	ppb	20061	2.86	550	
Na	23	115	2	222.26	222.26	ppb	244203	1.24	55000	
Mg	24	115	2	23469.95	23469.95	ppb	11740274	0.97	55000	
Al	27	115	2	36446.01	36446.01	ppb	6709668	1.03	16500	>LDR
K	39	115	2	3811.25	3811.25	ppb	1390545	3.86	55000	
Ca	44	115	2	58506.83	58506.83	ppb	1065012	1.37	55000	>LDR
V	51	115	2	75.01	75.01	ppb	306554	1.87	550	
Cr	52	115	2	62.61	62.61	ppb	316410	1.29	550	
Mn	55	115	2	1693.49	1693.49	ppb	4983335	1.76	550	>LDR
Fe	56	115	2	106086.74	106086.74	ppb	452606678	1.38	55000	>LDR
Co	59	115	2	45.08	45.08	ppb	361908	1.23	550	
Ni	60	115	2	110.08	110.08	ppb	233988	1.87	550	
Cu	65	115	2	153.57	153.57	ppb	420666	1.55	550	
Zn	66	115	2	329.26	329.26	ppb	284886	1.75	550	
As	75	115	2	36.04	36.04	ppb	18793	1.67	550	
Se	78	115	2	8.06	8.06	ppb	357	2.19	2750	
Mo	95	115	1	4.25	4.25	ppb	30151	3.65	550	
Ag	107	115	1	0.49	0.49	ppb	9899	3.40	550	
Cd	111	115	1	1.18	1.18	ppb	4580	2.69	550	
Sb	121	115	1	0.19	0.19	ppb	4103	4.07	550	
Ba	137	159	1	309.35	309.35	ppb	2096828	2.63	550	
Tl	205	165	1	0.57	0.57	ppb	32571	3.43	550	
Pb	208	165	1	82.03	82.03	ppb	3013478	3.13	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1509789	0.52	943268	160.1	70	130	IS Fail
Sc	45	2	68957	0.73	47161	146.2	70	130	IS Fail
In	115	1	1494786	0.79	1541461	97.0	70	130	
In	115	2	276723	1.58	302668	91.4	70	130	
Tb	159	1	2564769	0.39	2290443	112.0	70	130	
Tb	159	2	1060874	1.58	989980	107.2	70	130	
Ho	165	1	2518313	0.55	2269893	110.9	70	130	
Ho	165	2	1057523	0.72	995473	106.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19160-002**
Data File Name	**038SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:15:18-04:00**
Type	**Sample**
VialNumber	**2306**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.51	1.51	ppb	13871	5.31	550	
Na	23	115	2	347.77	347.77	ppb	359214	1.67	55000	
Mg	24	115	2	35168.23	35168.23	ppb	16867275	0.78	55000	
Al	27	115	2	27601.83	27601.83	ppb	4872583	1.92	16500	>LDR
K	39	115	2	4604.65	4604.65	ppb	1606655	2.99	55000	
Ca	44	115	2	216125.58	216125.58	ppb	3771816	1.47	55000	>LDR
V	51	115	2	60.54	60.54	ppb	237227	1.12	550	
Cr	52	115	2	41.56	41.56	ppb	201786	1.34	550	
Mn	55	115	2	1679.87	1679.87	ppb	4739589	1.28	550	>LDR
Fe	56	115	2	81270.52	81270.52	ppb	332464988	1.46	55000	>LDR
Co	59	115	2	33.19	33.19	ppb	255656	1.42	550	
Ni	60	115	2	74.85	74.85	ppb	152710	1.36	550	
Cu	65	115	2	92.10	92.10	ppb	242109	1.30	550	
Zn	66	115	2	199.36	199.36	ppb	165629	1.23	550	
As	75	115	2	31.88	31.88	ppb	15940	1.98	550	
Se	78	115	2	5.77	5.77	ppb	250	5.93	2750	
Mo	95	115	1	2.31	2.31	ppb	15414	4.98	550	
Ag	107	115	1	0.26	0.26	ppb	4911	0.18	550	
Cd	111	115	1	0.62	0.62	ppb	2255	5.53	550	
Sb	121	115	1	0.15	0.15	ppb	3272	0.66	550	
Ba	137	159	1	175.09	175.09	ppb	1142862	3.60	550	
Tl	205	165	1	0.43	0.43	ppb	24039	4.39	550	
Pb	208	165	1	27.25	27.25	ppb	976237	3.47	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1311769	2.45	943268	139.1	70	130	IS Fail
Sc	45	2	59439	0.61	47161	126.0	70	130	
In	115	1	1408047	4.06	1541461	91.3	70	130	
In	115	2	265321	0.23	302668	87.7	70	130	
Tb	159	1	2461662	1.41	2290443	107.5	70	130	
Tb	159	2	1020296	0.48	989980	103.1	70	130	
Ho	165	1	2451188	1.11	2269893	108.0	70	130	
Ho	165	2	1036149	0.37	995473	104.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**039SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:19:43-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.01	0.01	ppb	328	10.87	550	
Na	23	115	2	12.98	12.98	ppb	28205	0.78	55000	
Mg	24	115	2	-0.88	-0.88	ppb	2096	5.02	55000	
Al	27	115	2	0.55	0.55	ppb	614	5.13	16500	
K	39	115	2	3.85	3.85	ppb	25112	1.61	55000	
Ca	44	115	2	12.71	12.71	ppb	388	9.47	55000	
V	51	115	2	0.02	0.02	ppb	101	3.81	550	
Cr	52	115	2	-0.07	-0.07	ppb	1022	2.64	550	
Mn	55	115	2	0.09	0.09	ppb	1366	5.08	550	
Fe	56	115	2	4.37	4.37	ppb	50242	0.94	55000	
Co	59	115	2	-0.04	-0.04	ppb	239	30.39	550	
Ni	60	115	2	-0.03	-0.03	ppb	504	13.88	550	
Cu	65	115	2	0.49	0.49	ppb	2006	6.29	550	
Zn	66	115	2	4.02	4.02	ppb	4371	4.15	550	
As	75	115	2	0.01	0.01	ppb	17	36.28	550	
Se	78	115	2	-0.09	-0.09	ppb	14	16.89	2750	
Mo	95	115	1	0.04	0.04	ppb	389	16.29	550	
Ag	107	115	1	0.31	0.31	ppb	6397	2.13	550	
Cd	111	115	1	0.01	0.01	ppb	59	5.79	550	
Sb	121	115	1	-0.04	-0.04	ppb	497	8.38	550	
Ba	137	159	1	-1.17	-1.17	ppb	667	14.81	550	
Tl	205	165	1	0.00	0.00	ppb	1647	0.81	550	
Pb	208	165	1	0.07	0.07	ppb	4565	3.55	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	910052	0.47	943268	96.5	70	130	
Sc	45	2	44674	0.91	47161	94.7	70	130	
In	115	1	1509761	0.70	1541461	97.9	70	130	
In	115	2	291985	1.17	302668	96.5	70	130	
Tb	159	1	2317718	0.67	2290443	101.2	70	130	
Tb	159	2	974554	0.17	989980	98.4	70	130	
Ho	165	1	2254756	1.41	2269893	99.3	70	130	
Ho	165	2	980672	0.85	995473	98.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0406CCV.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:24:15-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	49.88	ppb	50	401910	3.65	99.77	90	110	
Na	23	115	2	4913.99	ppb	5000	5350858	0.57	98.28	90	110	
Mg	24	115	2	4983.54	ppb	5000	2607651	1.21	99.67	90	110	
Al	27	115	2	1459.09	ppb	1500	281259	1.96	97.27	90	110	
K	39	115	2	4991.79	ppb	5000	1896607	1.30	99.84	90	110	
Ca	44	115	2	4964.42	ppb	5000	94574	0.22	99.29	90	110	
V	51	115	2	49.64	ppb	50	211990	0.54	99.27	90	110	
Cr	52	115	2	49.80	ppb	50	263304	1.43	99.60	90	110	
Mn	55	115	2	49.18	ppb	50	152290	0.52	98.35	90	110	
Fe	56	115	2	4980.76	ppb	5000	22237711	0.71	99.62	90	110	
Co	59	115	2	49.59	ppb	50	416040	0.86	99.17	90	110	
Ni	60	115	2	49.96	ppb	50	111300	1.27	99.91	90	110	
Cu	65	115	2	50.36	ppb	50	144562	1.95	100.71	90	110	
Zn	66	115	2	49.04	ppb	50	44945	1.52	98.09	90	110	
As	75	115	2	49.25	ppb	50	26836	1.49	98.49	90	110	
Se	78	115	2	246.57	ppb	250	10901	0.74	98.63	90	110	
Mo	95	115	1	49.54	ppb	50	342074	2.81	99.08	90	110	
Ag	107	115	1	51.54	ppb	50	995087	2.80	103.08	90	110	
Cd	111	115	1	49.74	ppb	50	186761	3.19	99.49	90	110	
Sb	121	115	1	48.22	ppb	50	746417	2.70	96.44	90	110	
Ba	137	159	1	49.16	ppb	50	295713	2.79	98.31	90	110	
Tl	205	165	1	51.66	ppb	50	2417281	3.67	103.31	90	110	
Pb	208	165	1	50.56	ppb	50	1613881	1.99	101.13	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	900000	0.37	943268	95.4	70	130	
Sc	45	2	44858	1.18	47161	95.1	70	130	
In	115	1	1457394	0.79	1541461	94.5	70	130	
In	115	2	289220	1.06	302668	95.6	70	130	
Tb	159	1	2227617	0.38	2290443	97.3	70	130	
Tb	159	2	965314	1.04	989980	97.5	70	130	
Ho	165	1	2186501	0.46	2269893	96.3	70	130	
Ho	165	2	972036	1.66	995473	97.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0416CCB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:28:42-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	8.60	ppb	500	
Mg	24	115	2	0.93	ppb	500	
Al	27	115	2	1.30	ppb	500	
K	39	115	2	4.41	ppb	500	
Ca	44	115	2	4.91	ppb	500	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	0.02	ppb	2	
Mn	55	115	2	-0.01	ppb	6	
Fe	56	115	2	2.02	ppb	500	
Co	59	115	2	-0.05	ppb	2	
Ni	60	115	2	0.07	ppb	3	
Cu	65	115	2	0.99	ppb	10	
Zn	66	115	2	0.63	ppb	20	
As	75	115	2	0.01	ppb	1	
Se	78	115	2	0.15	ppb	10	
Mo	95	115	1	0.06	ppb	1	
Ag	107	115	1	0.06	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.00	ppb	4	
Ba	137	159	1	-1.14	ppb	5	
Tl	205	165	1	0.01	ppb	2	
Pb	208	165	1	0.05	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	895292	0.68	943268	94.9	70	130	
Sc	45	2	45141	0.56	47161	95.7	70	130	
In	115	1	1462743	0.90	1541461	94.9	70	130	
In	115	2	293147	0.40	302668	96.9	70	130	
Tb	159	1	2217536	0.75	2290443	96.8	70	130	
Tb	159	2	959267	0.33	989980	96.9	70	130	
Ho	165	1	2186563	0.66	2269893	96.3	70	130	
Ho	165	2	967331	0.40	995473	97.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19067-003**
Data File Name	**042SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:33:14-04:00**
Type	**Sample**
VialNumber	**2307**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.35	1.35	ppb	11474	2.78	550	
Na	23	115	2	104.88	104.88	ppb	123952	0.47	55000	
Mg	24	115	2	2576.16	2576.16	ppb	1309083	1.76	55000	
Al	27	115	2	10793.51	10793.51	ppb	2015941	1.33	16500	
K	39	115	2	5245.93	5245.93	ppb	1932532	0.32	55000	
Ca	44	115	2	2887.56	2887.56	ppb	53455	1.92	55000	
V	51	115	2	46.19	46.19	ppb	191445	1.43	550	
Cr	52	115	2	106.36	106.36	ppb	544243	1.07	550	
Mn	55	115	2	94.48	94.48	ppb	282933	0.62	550	
Fe	56	115	2	43808.27	43808.27	ppb	189551251	0.31	55000	
Co	59	115	2	3.81	3.81	ppb	31575	1.98	550	
Ni	60	115	2	5.86	5.86	ppb	13165	1.57	550	
Cu	65	115	2	10.45	10.45	ppb	29579	2.16	550	
Zn	66	115	2	57.08	57.08	ppb	50641	1.79	550	
As	75	115	2	21.40	21.40	ppb	11322	0.81	550	
Se	78	115	2	1.27	1.27	ppb	71	29.69	2750	
Mo	95	115	1	1.35	1.35	ppb	9384	6.28	550	
Ag	107	115	1	0.18	0.18	ppb	3564	5.05	550	
Cd	111	115	1	0.13	0.13	ppb	499	14.99	550	
Sb	121	115	1	0.32	0.32	ppb	5943	3.07	550	
Ba	137	159	1	36.18	36.18	ppb	226769	2.53	550	
Tl	205	165	1	0.06	0.06	ppb	4483	3.78	550	
Pb	208	165	1	11.72	11.72	ppb	387788	3.86	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1013408	0.50	943268	107.4	70	130	
Sc	45	2	50068	3.95	47161	106.2	70	130	
In	115	1	1455766	0.91	1541461	94.4	70	130	
In	115	2	280902	4.07	302668	92.8	70	130	
Tb	159	1	2299852	1.88	2290443	100.4	70	130	
Tb	159	2	978922	3.90	989980	98.9	70	130	
Ho	165	1	2257645	0.70	2269893	99.5	70	130	
Ho	165	2	985198	4.00	995473	99.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19163-001**
Data File Name	**043SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:37:41-04:00**
Type	**Sample**
VialNumber	**2308**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.19	0.19	ppb	1912	1.86	550	
Na	23	115	2	328.77	328.77	ppb	362158	0.35	55000	
Mg	24	115	2	452.52	452.52	ppb	233428	0.82	55000	
Al	27	115	2	6916.03	6916.03	ppb	1299688	0.52	16500	
K	39	115	2	447.78	447.78	ppb	186929	1.10	55000	
Ca	44	115	2	1161.64	1161.64	ppb	21713	0.80	55000	
V	51	115	2	14.99	14.99	ppb	62511	0.94	550	
Cr	52	115	2	17.74	17.74	ppb	92444	1.52	550	
Mn	55	115	2	140.52	140.52	ppb	422910	1.13	550	
Fe	56	115	2	10914.85	10914.85	ppb	47546482	1.19	55000	
Co	59	115	2	0.98	0.98	ppb	8625	3.75	550	
Ni	60	115	2	2.93	2.93	ppb	6899	2.71	550	
Cu	65	115	2	8.05	8.05	ppb	23033	1.66	550	
Zn	66	115	2	40.31	40.31	ppb	36187	2.49	550	
As	75	115	2	4.86	4.86	ppb	2596	2.99	550	
Se	78	115	2	0.96	0.96	ppb	58	20.60	2750	
Mo	95	115	1	2.58	2.58	ppb	18562	3.09	550	
Ag	107	115	1	0.15	0.15	ppb	3117	2.42	550	
Cd	111	115	1	0.17	0.17	ppb	685	3.00	550	
Sb	121	115	1	0.05	0.05	ppb	1926	4.98	550	
Ba	137	159	1	51.05	51.05	ppb	323817	2.86	550	
Tl	205	165	1	0.09	0.09	ppb	5987	3.34	550	
Pb	208	165	1	10.38	10.38	ppb	352599	2.97	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	959024	0.35	943268	101.7	70	130	
Sc	45	2	45400	0.65	47161	96.3	70	130	
In	115	1	1513091	1.23	1541461	98.2	70	130	
In	115	2	282381	0.73	302668	93.3	70	130	
Tb	159	1	2351615	1.38	2290443	102.7	70	130	
Tb	159	2	990082	0.85	989980	100.0	70	130	
Ho	165	1	2314374	1.03	2269893	102.0	70	130	
Ho	165	2	983199	1.02	995473	98.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19164-001**
Data File Name	**044SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:42:13-04:00**
Type	**Sample**
VialNumber	**2309**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.13	0.13	ppb	1297	12.25	550	
Na	23	115	2	63.92	63.92	ppb	81862	0.34	55000	
Mg	24	115	2	217.65	217.65	ppb	114362	2.40	55000	
Al	27	115	2	7253.23	7253.23	ppb	1372513	0.30	16500	
K	39	115	2	290.52	290.52	ppb	130198	1.92	55000	
Ca	44	115	2	68.49	68.49	ppb	1420	7.73	55000	
V	51	115	2	18.38	18.38	ppb	77186	2.38	550	
Cr	52	115	2	17.69	17.69	ppb	92826	0.35	550	
Mn	55	115	2	11.97	11.97	ppb	37248	2.23	550	
Fe	56	115	2	6659.86	6659.86	ppb	29229060	3.41	55000	
Co	59	115	2	0.58	0.58	ppb	5338	2.99	550	
Ni	60	115	2	5.14	5.14	ppb	11766	0.36	550	
Cu	65	115	2	5.54	5.54	ppb	16159	1.37	550	
Zn	66	115	2	10.50	10.50	ppb	9998	0.72	550	
As	75	115	2	5.32	5.32	ppb	2860	5.80	550	
Se	78	115	2	1.30	1.30	ppb	73	7.58	2750	
Mo	95	115	1	0.99	0.99	ppb	6714	1.14	550	
Ag	107	115	1	0.08	0.08	ppb	1609	3.30	550	
Cd	111	115	1	0.03	0.03	ppb	147	21.56	550	
Sb	121	115	1	-0.01	-0.01	ppb	825	9.10	550	
Ba	137	159	1	12.77	12.77	ppb	82847	3.02	550	
Tl	205	165	1	0.04	0.04	ppb	3591	2.99	550	
Pb	208	165	1	10.15	10.15	ppb	333201	2.73	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	985815	0.66	943268	104.5	70	130	
Sc	45	2	47817	1.05	47161	101.4	70	130	
In	115	1	1418622	4.48	1541461	92.0	70	130	
In	115	2	284353	0.95	302668	93.9	70	130	
Tb	159	1	2241230	0.44	2290443	97.9	70	130	
Tb	159	2	970042	0.53	989980	98.0	70	130	
Ho	165	1	2237771	1.66	2269893	98.6	70	130	
Ho	165	2	980961	0.91	995473	98.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**045SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:46:44-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.01	0.01	ppb	296	5.09	550	
Na	23	115	2	11.84	11.84	ppb	26774	2.40	55000	
Mg	24	115	2	-0.40	-0.40	ppb	2329	5.69	55000	
Al	27	115	2	5.66	5.66	ppb	1589	85.99	16500	
K	39	115	2	1.88	1.88	ppb	24201	2.61	55000	
Ca	44	115	2	14.73	14.73	ppb	422	18.08	55000	
V	51	115	2	0.01	0.01	ppb	82	11.70	550	
Cr	52	115	2	-0.06	-0.06	ppb	1070	10.20	550	
Mn	55	115	2	0.10	0.10	ppb	1391	3.76	550	
Fe	56	115	2	4.35	4.35	ppb	49822	3.90	55000	
Co	59	115	2	-0.04	-0.04	ppb	288	21.68	550	
Ni	60	115	2	0.00	0.00	ppb	572	8.29	550	
Cu	65	115	2	0.41	0.41	ppb	1762	6.01	550	
Zn	66	115	2	3.96	3.96	ppb	4282	1.44	550	
As	75	115	2	0.02	0.02	ppb	20	31.95	550	
Se	78	115	2	-0.08	-0.08	ppb	14	32.87	2750	
Mo	95	115	1	0.04	0.04	ppb	307	12.82	550	
Ag	107	115	1	0.32	0.32	ppb	5785	4.03	550	
Cd	111	115	1	0.01	0.01	ppb	56	27.91	550	
Sb	121	115	1	-0.03	-0.03	ppb	479	16.36	550	
Ba	137	159	1	-1.19	-1.19	ppb	521	12.51	550	
Tl	205	165	1	0.00	0.00	ppb	1371	3.95	550	
Pb	208	165	1	0.05	0.05	ppb	3613	4.82	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	863477	0.07	943268	91.5	70	130	
Sc	45	2	44002	1.23	47161	93.3	70	130	
In	115	1	1324003	0.43	1541461	85.9	70	130	
In	115	2	290028	2.62	302668	95.8	70	130	
Tb	159	1	2142706	1.58	2290443	93.5	70	130	
Tb	159	2	956598	1.62	989980	96.6	70	130	
Ho	165	1	2120012	2.37	2269893	93.4	70	130	
Ho	165	2	959131	1.36	995473	96.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 1:48 PM on:9/11/2020

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0466CCV.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:51:16-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	48.29	ppb	50	387531	3.12	96.57	90	110	
Na	23	115	2	4834.98	ppb	5000	5296612	1.03	96.70	90	110	
Mg	24	115	2	4912.22	ppb	5000	2585686	2.40	98.24	90	110	
Al	27	115	2	1434.31	ppb	1500	278128	1.82	95.62	90	110	
K	39	115	2	4980.05	ppb	5000	1903360	0.95	99.60	90	110	
Ca	44	115	2	4887.13	ppb	5000	93674	2.23	97.74	90	110	
V	51	115	2	48.82	ppb	50	209774	1.26	97.65	90	110	
Cr	52	115	2	48.72	ppb	50	259203	1.60	97.45	90	110	
Mn	55	115	2	49.02	ppb	50	152725	0.70	98.05	90	110	
Fe	56	115	2	4910.59	ppb	5000	22058745	2.36	98.21	90	110	
Co	59	115	2	49.11	ppb	50	414473	0.92	98.21	90	110	
Ni	60	115	2	49.31	ppb	50	110515	2.11	98.62	90	110	
Cu	65	115	2	49.21	ppb	50	142128	2.21	98.41	90	110	
Zn	66	115	2	48.35	ppb	50	44587	1.93	96.71	90	110	
As	75	115	2	48.98	ppb	50	26846	0.60	97.95	90	110	
Se	78	115	2	246.57	ppb	250	10965	0.14	98.63	90	110	
Mo	95	115	1	49.95	ppb	50	331156	2.79	99.90	90	110	
Ag	107	115	1	51.84	ppb	50	961043	3.08	103.69	90	110	
Cd	111	115	1	50.36	ppb	50	181540	3.12	100.73	90	110	
Sb	121	115	1	48.98	ppb	50	727756	3.04	97.95	90	110	
Ba	137	159	1	48.44	ppb	50	287864	2.48	96.88	90	110	
Tl	205	165	1	50.29	ppb	50	2344128	2.62	100.58	90	110	
Pb	208	165	1	48.14	ppb	50	1530717	7.32	96.27	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	881903	0.50	943268	93.5	70	130	
Sc	45	2	44520	1.63	47161	94.4	70	130	
In	115	1	1400045	3.49	1541461	90.8	70	130	
In	115	2	290952	1.48	302668	96.1	70	130	
Tb	159	1	2199770	0.44	2290443	96.0	70	130	
Tb	159	2	969425	0.94	989980	97.9	70	130	
Ho	165	1	2178007	0.42	2269893	96.0	70	130	
Ho	165	2	976643	0.53	995473	98.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0476CCB.D**
DataPath	**C:\ICPMH\1\DATA\S091120A.b**
Acq Date Time	**2020-09-11T13:55:42-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

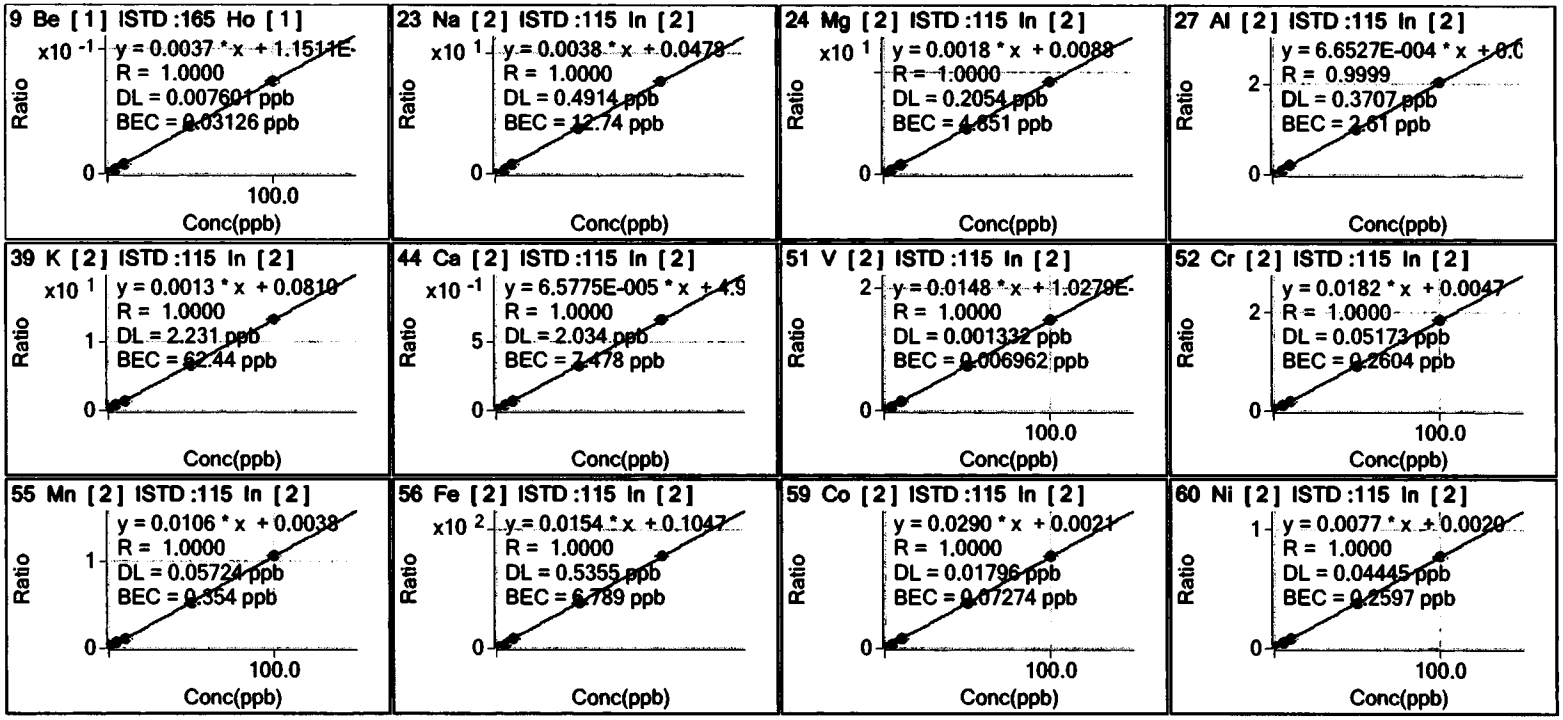
QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.00	ppb	1	
Na	23	115	2	7.44	ppb	500	
Mg	24	115	2	0.80	ppb	500	
Al	27	115	2	2.33	ppb	500	
K	39	115	2	2.41	ppb	500	
Ca	44	115	2	1.72	ppb	500	
V	51	115	2	0.00	ppb	1	
Cr	52	115	2	0.01	ppb	2	
Mn	55	115	2	0.02	ppb	6	
Fe	56	115	2	2.11	ppb	500	
Co	59	115	2	-0.04	ppb	2	
Ni	60	115	2	0.06	ppb	3	
Cu	65	115	2	0.95	ppb	10	
Zn	66	115	2	0.62	ppb	20	
As	75	115	2	0.01	ppb	1	
Se	78	115	2	0.04	ppb	10	
Mo	95	115	1	0.06	ppb	1	
Ag	107	115	1	0.07	ppb	1	
Cd	111	115	1	0.00	ppb	2	
Sb	121	115	1	0.00	ppb	4	
Ba	137	159	1	-1.13	ppb	5	
Tl	205	165	1	0.01	ppb	2	
Pb	208	165	1	0.04	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	898491	0.16	943268	95.3	70	130	
Sc	45	2	46109	3.12	47161	97.8	70	130	
In	115	1	1466800	1.04	1541461	95.2	70	130	
In	115	2	299960	1.84	302668	99.1	70	130	
Tb	159	1	2206465	0.82	2290443	96.3	70	130	
Tb	159	2	979517	1.93	969980	98.9	70	130	
Ho	165	1	2208674	0.71	2269893	97.3	70	130	
Ho	165	2	984441	2.60	995473	98.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u



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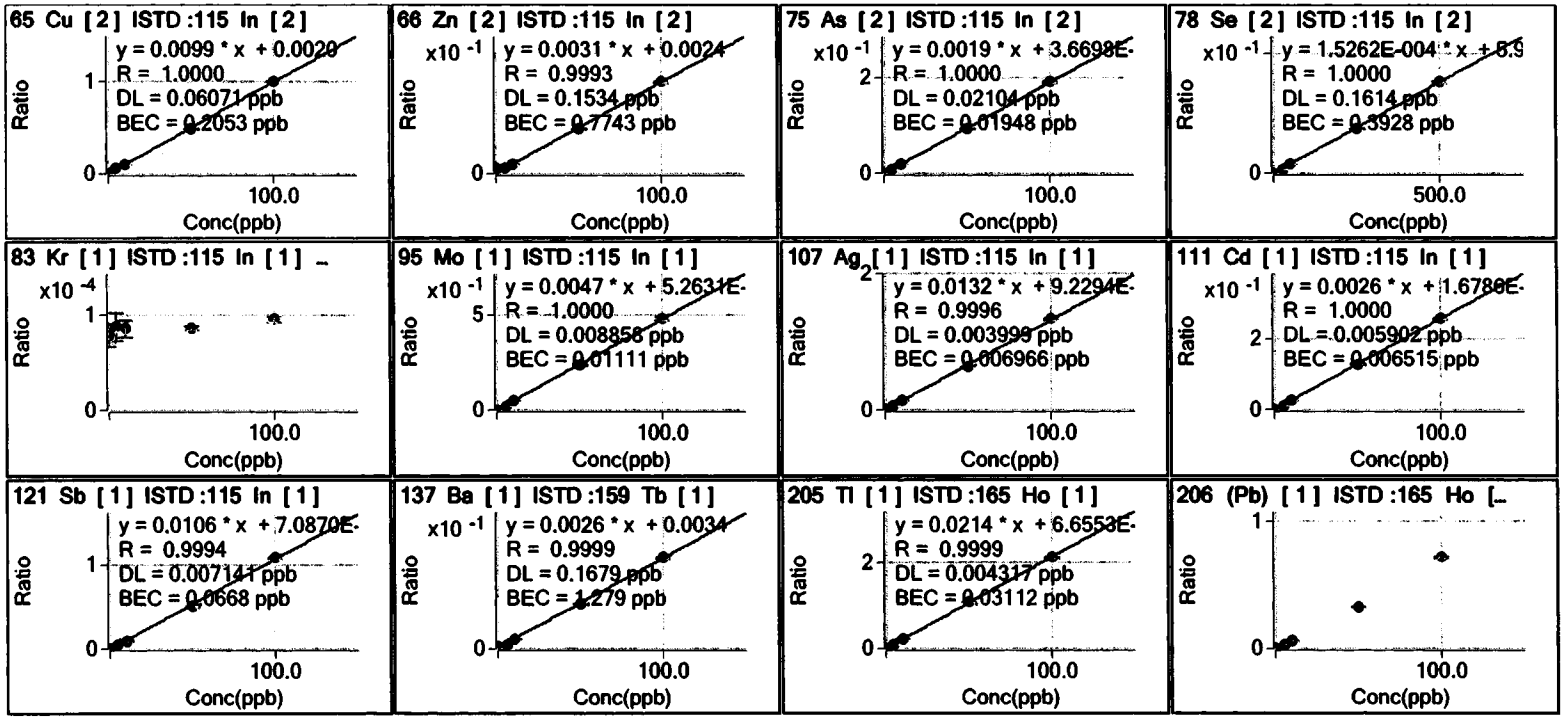
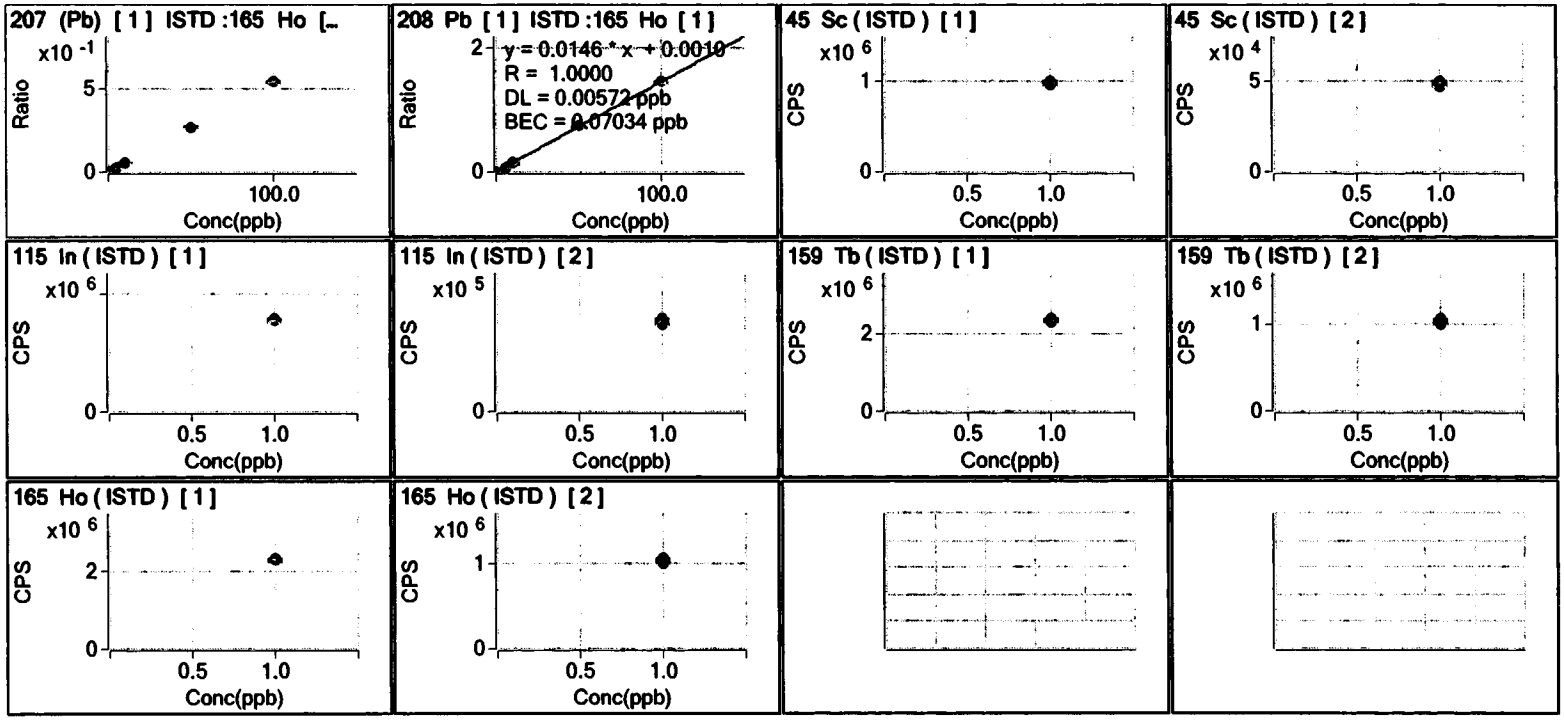


0091007 0210



0091007 0211

Metal Data
Digestion Logbook Data

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A (3050B) 200.7/200.8 OTHER_____

Batch No.: 26211 Analyst: ANS

QC Number: 85269 Prep Date: 9/11/20

Matrix: SOIL 6010 Reviewed By:

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS	0.5g					--	
LCSD	0.5g					--	
1. A019159-004	0.5g						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -004							
MS -005							Balance used: 032
MSD -006							Pipettes used: 155,149
2. A019159-001							
3. -002							Hot Block used: 5
4. -003							
5. -007							
6. -008							
7. -009							
8. -010							
9. 19160-001							
10. -002							
11. 19067-003							
12. 1963-001							
13. 19164-001							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 93.9 C (90-95° C) Start Time: 8:00am End Time: 10:30am

	Volume mL	Lot #
LCS, LCSD	0.5g	V- 13005
LLLCS, LLLCSD		V-
MS, MSD	0.25ml	V- 13177, 13178,
LLMS, LLMSD		V- 33982

Acid	Vol mL	Lot#
HNO_3	2.5	V-13440
HCl	5.0	V-13130
H_2O_2	1.5	V-13067

Acid	Vol mL	Lot#
1:1 HNO_3	5.0	V-334144
1:1 HCl		V-

Relinquished By ANS Date 9/11/20

Received By Date 9/11/2020

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HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 7470A (7471B) OTHER_____

Batch No.:* 26211

QC Number: 85269

Matrix: Soil

Analyst: ANS

Prep Date: 9/11/20

Review By: DL

LAB ID#	MERCURY INITIAL	MERCURY FINAL	COMMENTS	STANDARDS
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 334664
LCS	0.15g			
LCSD				STD 0.2 ppb V- 334665
1 AD 19159-004				STD 0.5 ppb V- 334666
MR -004				STD 1.0 ppb V- 334667
MS -005				STD 2.0 ppb V- 334668
MSD -006				STD 5.0 ppb V- 334669
2 AD 19159-001				STD 10.0 ppb V- 334670
3 -002				STD 25.0 ppb V- 334671
4 -003				ICV 10.0 ppb V- 334662
5 -007				CCV 20.0 ppb V- 334663
6 -008				
7 -009				
8 -010				Balance used: 032
9 AD 19160-001				Pipettes used: 159, 143, 155
10 -002				
11 AD 19067-003				Hot Block used: 7
12 AD 19163-001				
13 AD 19164-001				
14				
15				
16				
17				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 331286	3.75	HNO3		V-
$K_2S_2O_8$: V-		HCl		V-
NH_2OH: V- 317822	1.5	H2SO4		V-
		Aqua Regia	1.25	V- 334661

**Block Temp. : °C 92.8

Time In Block: 8:00am

Time Out of Block: 8:30am

Spike Volume & Lot #

☐ LCS V- 13005 (0.13g/0.25 ml)

☐ MS V- 334616 0.250 ml

☐ Standards/Control Batch B- 29668

Start time: ~~9:28~~ 8:00am End Time: 9:00am

**Temperature
245.1 / 7470A: 90-95C
7471B : 92-98C

Relinquished By: ANS

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

HG PREP 2016

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A (3050B) 200.7/200.8 OTHER_____

Batch No.: 26212 Analyst: ANS

QC Number: 85270 Prep Date: 9/11/20

Matrix: Soil 6020 Reviewed By: [illegible]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml	25ml	50ml		--	
LCS	0.1g					--	
LCSD	0.1g					--	
1. AO 19159-004	0.5g						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -004							
MS -005							Balance used: 032
MSD -006							Pipettes used: 155, 149
2. 19159-001							
3. -002							Hot Block used: 4
4. -003							
5. -007							
6. -008							
7. -009							
8. -010							
9. 19160-001							
10. -002							
11. 19067-003							
12. 19163-001							
13. 19164-001							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 92.8 C (90-95° C) Start Time: 8:00am End Time: 10:00am

	Volume mL	Lot #
LCS, LCSD	0.1g	V- 13005
LLLCS, LLLCSD		V-
MS, MSD	0.25ml	V- 13177, 13178
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2.5	V- 13440
HCl		V-
H_2O_2	1.5	V- 13067

Acid	Vol mL	Lot#
1:1 HNO_3	5.0	V- 334144
1:1 HCl		V-

Relinquished By ANS Date 9/11/20

Received By [illegible] Date 9/14/20

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Wet Chemistry Data

Wet Chemistry Data
Sample Data

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19160-001
Matrix Soil
Client SampleID: HRPB-5

Project Number: 0091007
Received Date: 9/10/2020
Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.37	09/11/20	09/11/20
Oxidation Reduction Potenial	CR6-ORP	**1**	**4.9**	**MV**		09/14/20	09/14/20
Temperature	CR6-PH	**1**	**23**	**C**		09/14/20	09/14/20
pH	CR6-PH	**1**	**7.4**	**PH**		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.2	09/14/20	09/15/20

Lab#: AD19160-002
Matrix Soil
Client SampleID: HRPB-6

Project Number: 0091007
Received Date: 9/10/2020
Collect Date: 9/9/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.31	09/11/20	09/11/20
Oxidation Reduction Potenial	CR6-ORP	**1**	**250**	**MV**		09/14/20	09/14/20
Temperature	CR6-PH	**1**	**23**	**C**		09/14/20	09/14/20
pH	CR6-PH	**1**	**8.5**	**PH**		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.0	09/14/20	09/15/20

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 0091007**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD19160-001	HRPB-5	Soil	1	65	Percent			09/11/20	09/10/20	09/09/20
AD19160-002	HRPB-6	Soil	1	78	Percent			09/11/20	09/10/20	09/09/20

Wet Chemistry Data
QC Data

Hex-Cr Soil SW-846 3060A / 7196A

Cr6 soil curve		Date	9/15/2020			Batch #	785			TestGroupID	CR6-SOIL	
										TestID:	CR-HEX	
STD ppm			ABS									
0			-0.0001		Intercept	Constant	0.005916596					
0.02			0.0208									
0.25			0.1671		Slope	X Coefficients	0.640009617					
0.5			0.3321									
1			0.6425									

STD mg/L		ABS		PPM	DIFF						
0		-0.0001		-0.00940079	0.00940079						
0.02		0.0208		0.02325497	-0.00325497						
0.25		0.1671		0.251845285	-0.001845285						
0.5		0.3321		0.509653911	-0.009653911						
1		0.6425		0.994646624	0.005353376						

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.999836682
R Square	0.999673391
Adjusted R Square	0.999564522
Standard Error	0.005533171
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.28112512	0.28112512	9182.300572	2.50538E-06
Residual	3	9.18479E-05	3.0616E-05		
Total	4	0.281216968			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.005916596	0.003422485	1.728742578	0.182299251	-0.00497529	0.016808481	-0.00497529	0.016808481
X Variable 1	0.640009617	0.006678989	95.8243214	2.50538E-06	0.618754072	0.661265161	0.618754072	0.661265161

	Hex-Cr Soil		Q.C. DATA									
Batch#	785		QC Sample	AD19159-004 NS.Sample								
Date	9/14/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	19.96	19.96	100%	80-120%	NA	NA	PASS	
			MS(Sol)	22.73	12.38	10.14	45%	75-125%	NA	NA	[illegible]	
			MS(Insol)	1096.36	562.79	560.55	51%	75-125%	NA	20%	[illegible]	PASS
			Sample	NA	2.24	NA	NA	NA	NA	NA		
			Sample Dup	NA	2.65	NA	NA	NA	17	20%		PASS
			PVS	22.73	15.90	13.67	60%	85-115%	NA	NA	[illegible]	
			MS(Sol)	43.48	55.99	26.81	62%	75-125%	NA	NA	[illegible]	
			MS(Insol)	978.78	544.43	515.26	53%	75-125%	NA	20%	[illegible]	PASS
			Sample	NA	29.18	NA	NA	NA	NA	NA		
Lead Chromate Added :	0.015	0.014	g									
Upper Calibration Abbsorbance:	0.6425											

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate

Hex-Cr Soil SW-846 3060A / 7196A

ICV.Control	0.3163	0.0000	0.3163	0.484966789	1	1	1	1	0.485	0.500	97	9/15/20 12:33	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	-0.0002	0.0000	-0.0002	-0.009557037	1	1	1	1	-0.010	0.020		9/15/20 12:33	
MB.Sample	-0.0028	0.0000	-0.0028	-0.013619476	1	2.5	1	100	-0.545	0.800		9/15/20 12:33	
LCS.Sample	0.3253	0.0000	0.3253	0.499029083	1	2.5	1	100	19.961	0.800		9/15/20 12:33	
AD19159-004 NS.Sample	0.0415	0.0041	0.0374	0.049192077	0.88	2.5	1	100	2.236	0.909		9/15/20 12:34	
AD19159-004 DUP.Sample	0.0473	0.0041	0.0432	0.058254443	0.88	2.5	1	100	2.648	0.909		9/15/20 12:34	
AD19159-005 MS.Sample	0.1872	0.0070	0.1802	0.272313719	0.88	2.5	1	100	12.378	0.909		9/15/20 12:35	
AD19159-006 50X MSD.Sample	0.1651	0.0007	0.1644	0.247626588	0.88	2.5	50	100	562.788	45.455		9/15/20 12:36	
AD19159-004 PVS.Sample	0.2339	0.0041	0.2298	0.349812556	0.88	2.5	1	100	15.901	0.909		9/15/20 12:37	
AD19192-002.Sample	0.4456	0.0102	0.4354	0.67105774	0.92	2.5	1	100	29.176	0.870		9/15/20 12:46	
AD19192-004MS2.Sample	0.8015	0.0079	0.7936	1.230736862	0.92	2.5	1	100	53.510	0.870		9/15/20 12:47	
AD19192-004MS2 2X.Sample	0.4259	0.0079	0.4180	0.643870664	0.92	2.5	2	100	55.989	1.739		9/15/20 12:48	
AD19192-005MSD2.Sample	3.9658	0.0076	3.9582	6.175350103	0.92	2.5	1	100	268.493	0.870		9/15/20 12:48	
AD19192-005 50XMSD2.Sample	0.1672	0.0010	0.1662	0.250439055	0.92	2.5	50	100	544.433	43.478		9/15/20 12:51	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3163		0.3163	0.484966789	1	1	1	1	0.485	0.020	97	9/15/20 12:33	PASS
ICB.Sample	-0.0002		-0.0002	-0.009557037	1	1	1	1	-0.010	0.020		9/15/20 12:33	
MB.Sample	-0.0028		-0.0028	-0.013619476	1	2.5	1	100	-0.545	0.800		9/15/20 12:33	
LCS.Sample	0.3253		0.3253	0.499029083	1	2.5	1	100	19.961	0.800		9/15/20 12:33	
AD19159-004 NS.Sample	0.0415	0.0041	0.0374	0.049192077	0.88	2.5	1	100	2.236	0.909		9/15/20 12:34	
AD19159-004 DUP.Sample	0.0473	0.0041	0.0432	0.058254443	0.88	2.5	1	100	2.648	0.909		9/15/20 12:34	
AD19159-005 MS.Sample	0.1872	0.0070	0.1802	0.272313719	0.88	2.5	1	100	12.378	0.909		9/15/20 12:35	
AD19159-006 XXX.Sample	3.7897	0.0068	3.7829	5.901447944	0.88	2.5	1	100	268.248	0.909		9/15/20 12:35	
AD19159-006 50X MSD.Sample	0.1651	0.0007	0.1644	0.247626588	0.88	2.5	50	100	562.788	45.455		9/15/20 12:36	
AD19159-004 PVS.Sample	0.2339	0.0041	0.2298	0.349812556	0.88	2.5	1	100	15.901	0.909		9/15/20 12:37	
CCV-1.Control	0.3236		0.3236	0.496372852	1	1	1	1	0.496	0.020	99	9/15/20 12:37	PASS
CCB-1.Sample	0.0011		0.0011	-0.007525818	1	1	1	1	-0.008	0.020		9/15/20 12:37	
AD19159-008.Sample	0.0017	0.0022	-0.0005	-0.01002578	0.65	2.5	1	100	-0.617	1.231		9/15/20 12:38	
AD19159-009.Sample	0.0044	0.0030	0.0014	-0.007057075	0.68	2.5	1	100	-0.415	1.176		9/15/20 12:38	
AD19159-010.Sample	-0.0012	-0.0008	-0.0004	-0.009869533	0.87	2.5	1	100	-0.454	0.920		9/15/20 12:38	
AD19160-001.Sample	0.0065	0.0031	0.0034	-0.003932122	0.65	2.5	1	100	-0.242	1.231		9/15/20 12:39	
AD19160-002.Sample	-0.0033	0.0023	-0.0056	-0.017994411	0.78	2.5	1	100	-0.923	1.026		9/15/20 12:39	
AD19178-001.Sample	0.0571	0.0616	-0.0045	-0.016275683	0.9	2.5	1	100	-0.723	0.889		9/15/20 12:40	
AD19178-002.Sample	0.0166	0.0124	0.0042	-0.002682142	0.91	2.5	1	100	-0.118	0.879		9/15/20 12:40	
AD19178-003.Sample	0.0702	0.0639	0.0063	0.000599064	0.79	2.5	1	100	0.030	1.013		9/15/20 12:41	
AD19178-004.Sample	0.0153	0.0127	0.0026	-0.005182103	0.86	2.5	1	100	-0.241	0.930		9/15/20 12:42	
AD19178-005.Sample	0.0599	0.0660	-0.0061	-0.018775647	0.93	2.5	1	100	-0.808	0.860		9/15/20 12:42	
CCV-2.Control	0.3225		0.3225	0.494654122	1	1	1	1	0.495	0.020	99	9/15/20 12:43	PASS
CCB-2.Sample	-0.0024		-0.0024	-0.012994486	1	1	1	1	-0.013	0.020		9/15/20 12:43	
AD19178-006.Sample	0.0176	0.0175	0.0001	-0.009088295	0.87	2.5	1	100	-0.418	0.920		9/15/20 12:43	
AD19178-007.Sample	0.0157	0.0130	0.0027	-0.005025857	0.81	2.5	1	100	-0.248	0.988		9/15/20 12:44	
AD19178-008.Sample	0.0294	0.0350	-0.0056	-0.01799441	0.82	2.5	1	100	-0.878	0.976		9/15/20 12:44	
AD19178-009.Sample	0.0238	0.0302	-0.0064	-0.019244392	0.81	2.5	1	100	-0.950	0.988		9/15/20 12:44	
AD19178-010.Sample	0.0114	0.0141	-0.0027	-0.013463229	0.83	2.5	1	100	-0.649	0.964		9/15/20 12:44	
AD19180-001.Sample	0.0142	0.0000	0.0142	0.012942625	0.92	2.5	1	100	0.563	0.870		9/15/20 12:46	
AD19192-002.Sample	0.4456	0.0102	0.4354	0.67105774	0.92	2.5	1	100	29.176	0.870		9/15/20 12:46	
AD19192-004MS2.Sample	0.8015	0.0079	0.7936	1.230736862	0.92	2.5	1	100	53.510	0.870		9/15/20 12:47	
AD19192-004MS2 2X.Sample	0.4259	0.0079	0.4180	0.643870664	0.92	2.5	2	100	55.989	1.739		9/15/20 12:48	
AD19192-005MSD2.Sample	3.9658	0.0076	3.9582	6.175350103	0.92	2.5	1	100	268.493	0.870		9/15/20 12:48	
CCV-3.Control.Cycle1	0.3207		0.3207	0.491841663	1	1	1	1	0.492	0.020	98	9/15/20 12:50	PASS
CCB-3.Sample	0.0013		0.0013	-0.007213322	1	1	1	1	-0.007	0.020		9/15/20 12:50	
AD19192-005 50XMSD2.Sample	0.1672	0.0010	0.1662	0.250439055	0.92	2.5	50	100	544.433	43.478		9/15/20 12:51	
AD19159-004 T.Sample	0.0041		0.0041	-0.002838388	0.88	2.5	1	100	-0.129	0.909		9/15/20 12:54	
AD19159-005 T.Sample	0.0070		0.0070	0.001692794	0.88	2.5	1	100	0.077	0.909		9/15/20 12:54	
AD19159-006 T.Sample	0.0068		0.0068	0.001380299	0.88	2.5	1	100	0.063	0.909		9/15/20 12:54	
AD19159-006 50X T.Sample	0.0007		0.0007	-0.008150808	0.88	2.5	1	100	-0.370	0.909		9/15/20 12:55	

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AD19159-008 T.Sample	0.0022		0.0022	-0.005807094	0.65	2.5	1	100	-0.357	1.231		9/15/20 12:55	
AD19159-009 T.Sample	0.0030		0.0030	-0.004557112	0.68	2.5	1	100	-0.268	1.176		9/15/20 12:55	
AD19159-010 T.Sample	-0.0008		-0.0008	-0.010494523	0.87	2.5	1	100	-0.483	0.920		9/15/20 12:56	
AD19160-001 T.Sample	0.0031		0.0031	-0.004400865	0.65	2.5	1	100	-0.271	1.231		9/15/20 12:56	
AD19160-002 T.Sample	0.0023		0.0023	-0.005650846	0.78	2.5	1	100	-0.290	1.026		9/15/20 12:56	
CCV-4.Control	0.3193		0.3193	0.489654205	1	1	1	1	0.490	0.020	98	9/15/20 12:56	PASS
CCB-4.Sample	0.0007		0.0007	-0.008150808	1	1	1	1	-0.008	0.020		9/15/20 12:57	
AD19178-001 T.Sample	0.0616		0.0616	0.087004011	0.9	2.5	1	100	3.867	0.889		9/15/20 12:57	
AD19178-002 T.Sample	0.0124		0.0124	0.010130167	0.91	2.5	1	100	0.445	0.879		9/15/20 12:58	
AD19178-003 T.Sample.Cycle1	0.0639		0.0639	0.09059771	0.79	2.5	1	100	4.587	1.013		9/15/20 12:59	
AD19178-004 T.Sample	0.0127		0.0127	0.01059891	0.86	2.5	1	100	0.493	0.930		9/15/20 13:00	
AD19178-005 T.Sample	0.0660		0.0660	0.093878908	0.93	2.5	1	100	4.038	0.860		9/15/20 13:00	
AD19178-006 T.Sample	0.0175		0.0175	0.018098797	0.87	2.5	1	100	0.832	0.920		9/15/20 13:01	
AD19178-007 T.Sample	0.0130		0.0130	0.011067653	0.81	2.5	1	100	0.547	0.988		9/15/20 13:01	
AD19178-008 T.Sample	0.0350		0.0350	0.045442137	0.82	2.5	1	100	2.217	0.976		9/15/20 13:02	
AD19178-009 T.Sample	0.0302		0.0302	0.03794225	0.81	2.5	1	100	1.674	0.988		9/15/20 13:03	
AD19178-010 T.Sample	0.0141		0.0141	0.012786377	0.83	2.5	1	100	0.616	0.964		9/15/20 13:03	
CCV-5.Control	0.3174		0.3174	0.486685519	1	1	1	1	0.487	0.020	97	9/15/20 13:03	PASS
CCB-5.Sample	0.0001		0.0001	-0.009088294	1	1	1	1	-0.009	0.020		9/15/20 13:03	
AD19180-001 T.Sample	0.0000		0.0000	-0.009244542	0.92	2.5	1	100	-0.402	0.870		9/15/20 13:04	
AD19192-002 T.Sample	0.0102		0.0102	0.006692719	0.92	2.5	1	100	0.291	0.870		9/15/20 13:05	
AD19192-004 T.Sample	0.0079		0.0079	0.003099022	0.92	2.5	1	100	0.135	0.870		9/15/20 13:05	
AD19192-005 T.Sample	0.0076		0.0076	0.00263028	0.92	2.5	1	100	0.114	0.870		9/15/20 13:05	
AD19192-005 50X T.Sample	0.0010		0.0010	-0.007682065	0.92	2.5	1	100	-0.334	0.870		9/15/20 13:06	
CCV-6.Control	0.3166		0.3166	0.485435517	1	1	1	1	0.485	0.020	97	9/15/20 13:06	PASS
CCB-6.Sample	0.0001		0.0001	-0.009088294	1	1	1	1	-0.009	0.020		9/15/20 13:07	

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Cr6 soil curve		Date	9/15/2020			Batch #	785 A			TestGroupID	CR6-SOIL
										TestID	CR-HEX
STD ppm			ABS								
0			-0.0001		Intercept	Constant	0.005916596				
0.02			0.0208								
0.25			0.1671		Slope	X Coefficients	0.640009617				
0.5			0.3321								
1			0.6425								

STD mg/L		ABS	PPM	DIFF
0		-0.0001	-0.00940079	0.00940079
0.02		0.0208	0.02325497	-0.00325497
0.25		0.1671	0.251845285	-0.001845285
0.5		0.3321	0.509653911	-0.009653911
1		0.6425	0.994646624	0.005353376

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.999836682
R Square	0.999673391
Adjusted R Square	0.999564522
Standard Error	0.005533171
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.28112512	0.28112512	9182.300572	2.50538E-06
Residual	3	9.18479E-05	3.0616E-05		
Total	4	0.281216968			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.005916596	0.003422485	1.728742578	0.182299251	-0.00497529	0.016808481	-0.00497529	0.016808481
X Variable 1	0.640009617	0.006678989	95.8243214	2.50538E-06	0.618754072	0.661265161	0.618754072	0.661265161

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	Hex-Cr Soil		Q.C. DATA									
Batch#	785 A		QC Sample	AD19159-004 NS.Sample								
Date	9/14/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	19.30	19.30	96%	80-120%	NA	NA	PASS	
			MS(Sol)	22.73	14.01	12.56	55%	75-125%	NA	NA	FAIL	
			MS(Insol)	1096.36	511.65	510.20	47%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	1.45	NA	NA	NA	NA	NA		
			Sample Dup	NA	1.59	NA	NA	NA	9	20%		PASS
			PVS	22.73	18.71	17.27	76%	85-115%	NA	NA	FAIL	
			MS(Sol)	43.48	53.87	26.10	60%	75-125%	NA	NA	FAIL	
			MS(Insol)	978.78	518.62	490.85	50%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	27.77	NA	NA	NA	NA	NA		
Lead Chromate Added :	0.015	0.014	G									
Upper Calibration Abbsorbance:	0.6425											

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3288	0.0000	0.3288	0.504497727	1	1	1	1	0.504	0.500	101	9/15/20 13:22	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	-0.0007	0.0000	-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB.Sample	0.0036	0.0000	0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS.Sample	0.3147	0.0000	0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS.Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP.Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS.Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 50X MSD.Sample	0.1534	0.0034	0.1500	0.225126943	0.88	2.5	50	100	511.652	45.455		9/15/20 13:25	
AD19159-004 PVS.Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
AD19192-002.Sample	0.4208	0.0061	0.4147	0.638714473	0.92	2.5	1	100	27.770	0.870		9/15/20 13:33	
AD19192-004MS2.Sample	0.7877	0.0068	0.7809	1.21089337	0.92	2.5	1	100	52.648	0.870		9/15/20 13:34	
AD19192-004MS2 2X.Sample	0.4092	0.0068	0.4024	0.61949603	0.92	2.5	2	100	53.869	1.739		9/15/20 13:34	
AD19192-005MSD2.Sample	4.3662	0.0062	4.3600	6.80315305	0.92	2.5	1	100	295.789	0.870		9/15/20 13:35	
AD19192-005 50XMSD2.Sample	0.1579	-0.0007	0.1586	0.238564243	0.92	2.5	50	100	518.618	43.478		9/15/20 13:36	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3288		0.3288	0.504497727	1	1	1	1	0.504	0.020	101	9/15/20 13:22	PASS
ICB.Sample	-0.0007		-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB.Sample	0.0036		0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS.Sample	0.3147		0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS.Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP.Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS.Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 XXX.Sample	3.9269	0.0081	3.9188	6.113788314	0.88	2.5	1	100	277.899	0.909		9/15/20 13:24	
AD19159-006 50X MSD.Sample	0.1534	0.0081	0.1453	0.217783303	0.88	2.5	50	100	494.962	45.455		9/15/20 13:25	
AD19159-004 PVS.Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
CCV-1.Control	0.3268		0.3268	0.501372768	1	1	1	1	0.501	0.020	100	9/15/20 13:26	PASS
CCB-1.Sample	-0.0005		-0.0005	-0.01002578	1	1	1	1	-0.010	0.020		9/15/20 13:27	
AD19159-008.Sample	0.0099	0.0068	0.0031	-0.004400865	0.65	2.5	1	100	-0.271	1.231		9/15/20 13:27	
AD19159-009.Sample	0.0092	0.0082	0.0010	-0.007682065	0.68	2.5	1	100	-0.452	1.176		9/15/20 13:27	
AD19159-010.Sample	0.0080	0.0066	0.0014	-0.007057074	0.87	2.5	1	100	-0.324	0.920		9/15/20 13:27	
AD19160-001.Sample	0.0220	0.0196	0.0024	-0.005494599	0.65	2.5	1	100	-0.338	1.231		9/15/20 13:28	
AD19160-002.Sample	0.0013	0.0036	-0.0023	-0.012838238	0.78	2.5	1	100	-0.658	1.026		9/15/20 13:28	
AD19178-001.Sample	0.0361	0.0413	-0.0052	-0.017369418	0.9	2.5	1	100	-0.772	0.889		9/15/20 13:28	
AD19178-002.Sample	0.0243	0.0231	0.0012	-0.00736957	0.91	2.5	1	100	-0.324	0.879		9/15/20 13:29	
AD19178-003.Sample	0.0554	0.0701	-0.0147	-0.032212951	0.79	2.5	1	100	-1.631	1.013		9/15/20 13:29	

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AD19178-004.Sample	0.0127	0.0152	-0.0025	-0.013150734	0.86	2.5	1	100	-0.612	0.930		9/15/20 13:29	
AD19178-005.Sample	0.0611	0.0545	0.0066	0.001067803	0.93	2.5	1	100	0.046	0.860		9/15/20 13:29	
CCV-2.Control	0.3229		0.3229	0.495279123	1	1	1	1	0.495	0.020	99	9/15/20 13:30	PASS
CCB-2.Sample	0.0001		0.0001	-0.009088294	1	1	1	1	-0.009	0.020		9/15/20 13:30	
AD19178-006.Sample	0.0205	0.3167	-0.2962	-0.472050105	0.87	2.5	1	100	-21.703	0.920		9/15/20 13:30	
AD19178-007.Sample	0.0005	0.0000	0.0005	-0.008463304	0.81	2.5	1	100	-0.418	0.988		9/15/20 13:31	
AD19178-008.Sample	0.0016	0.0024	-0.0008	-0.010494523	0.82	2.5	1	100	-0.512	0.976		9/15/20 13:31	
AD19178-009.Sample	0.0098	0.0069	0.0029	-0.00471336	0.81	2.5	1	100	-0.233	0.988		9/15/20 13:32	
AD19178-010.Sample	0.0039	0.0049	-0.0010	-0.010807019	0.83	2.5	1	100	-0.521	0.964		9/15/20 13:32	
AD19180-001.Sample	0.0190	0.0029	0.0161	0.015911329	0.92	2.5	1	100	0.692	0.870		9/15/20 13:33	
AD19192-002.Sample	0.4208	0.0061	0.4147	0.638714473	0.92	2.5	1	100	27.770	0.870		9/15/20 13:33	
AD19192-004MS2.Sample	0.7877	0.0068	0.7809	1.21089337	0.92	2.5	1	100	52.648	0.870		9/15/20 13:34	
AD19192-004MS2 2X.Sample	0.4092	0.0068	0.4024	0.61949603	0.92	2.5	2	100	53.869	1.739		9/15/20 13:34	
AD19192-005MSD2.Sample	4.3662	0.0062	4.3600	6.80315305	0.92	2.5	1	100	295.789	0.870		9/15/20 13:35	
CCV-3.Control	0.3214		0.3214	0.492935392	1	1	1	1	0.493	0.020	99	9/15/20 13:35	PASS
CCB-3.Sample	0.0038		0.0038	-0.003307131	1	1	1	1	-0.003	0.020		9/15/20 13:36	
AD19192-005 50XMSD2.Sample	0.1579	-0.0007	0.1586	0.238564243	0.92	2.5	50	100	518.618	43.478		9/15/20 13:36	
AD19159-004 T.Sample	0.0073		0.0073	0.002161537	0.88	2.5	1	100	0.098	0.909		9/15/20 13:36	
AD19159-005 T.Sample	0.0058		0.0058	-0.000182178	0.88	2.5	1	100	-0.008	0.909		9/15/20 13:37	
AD19159-006 T.Sample	0.0081		0.0081	0.003411518	0.88	2.5	1	100	0.155	0.909		9/15/20 13:37	
AD19159-006 50X T.Sample	0.0034		0.0034	-0.003932122	0.88	2.5	1	100	-0.179	0.909		9/15/20 13:37	
AD19159-008 T.Sample	0.0068		0.0068	0.001380299	0.65	2.5	1	100	0.085	1.231		9/15/20 13:38	
AD19159-009 T.Sample	0.0082		0.0082	0.003567766	0.68	2.5	1	100	0.210	1.176		9/15/20 13:38	
AD19159-010 T.Sample	0.0066		0.0066	0.001067803	0.87	2.5	1	100	0.049	0.920		9/15/20 13:38	
AD19160-001 T.Sample	0.0196		0.0196	0.021379998	0.65	2.5	1	100	1.316	1.231		9/15/20 13:38	
AD19160-002 T.Sample	0.0036		0.0036	-0.003619627	0.78	2.5	1	100	-0.186	1.026		9/15/20 13:52	
CCV-4.Control	0.3165		0.3165	0.48527929	1	1	1	1	0.485	0.020	97	9/15/20 13:53	PASS
CCB-4.Sample	0.0038		0.0038	-0.003307131	1	1	1	1	-0.003	0.020		9/15/20 13:53	
AD19178-001 T.Sample	0.0413		0.0413	0.055285736	0.9	2.5	1	100	2.457	0.889		9/15/20 13:53	
AD19178-002 T.Sample	0.0231		0.0231	0.026848666	0.91	2.5	1	100	1.180	0.879		9/15/20 13:55	
AD19178-003 T.Sample	0.0701		0.0701	0.100285065	0.79	2.5	1	100	5.078	1.013		9/15/20 13:55	
AD19178-004 T.Sample	0.0152		0.0152	0.014505102	0.86	2.5	1	100	0.675	0.930		9/15/20 13:56	
AD19178-005 T.Sample	0.0545		0.0545	0.075910426	0.93	2.5	1	100	3.265	0.860		9/15/20 13:56	
AD19178-006 T.Sample	0.3167		0.3167	0.485591791	0.87	2.5	1	100	22.326	0.920		9/15/20 13:56	
AD19178-007 T.Sample.Cycle1	0.0000		0.0000	-0.009244542	0.81	2.5	1	100	-0.457	0.988		9/15/20 13:57	
AD19178-008 T.Sample	0.0024		0.0024	-0.005494598	0.82	2.5	1	100	-0.268	0.976		9/15/20 13:58	
AD19178-009 T.Sample	0.0069		0.0069	0.001536546	0.81	2.5	1	100	0.076	0.988		9/15/20 13:58	
AD19178-010 T.Sample	0.0049		0.0049	-0.001588407	0.83	2.5	1	100	-0.077	0.964		9/15/20 13:58	
CCV-5.Control	0.3157		0.3157	0.484029288	1	1	1	1	0.484	0.020	97	9/15/20 13:59	PASS
CCB-5.Sample	-0.0009		-0.0009	-0.010650771	1	1	1	1	-0.011	0.020		9/15/20 13:59	
AD19180-001 T.Sample	0.0029		0.0029	-0.00471336	0.92	2.5	1	100	-0.205	0.870		9/15/20 13:59	
AD19192-002 T.Sample	0.0061		0.0061	0.000286565	0.92	2.5	1	100	0.012	0.870		9/15/20 13:59	
AD19192-004 T.Sample	0.0068		0.0068	0.001380299	0.92	2.5	1	100	0.060	0.870		9/15/20 14:00	
AD19192-005 T.Sample	0.0062		0.0062	0.000442813	0.92	2.5	1	100	0.019	0.870		9/15/20 14:00	
AD19192-005 50X T.Sample	-0.0007		-0.0007	-0.010338275	0.92	2.5	1	100	-0.449	0.870		9/15/20 14:00	
CCV-6.Control	0.3141		0.3141	0.48152933	1	1	1	1	0.482	0.020	96	9/15/20 14:01	PASS
CCB-6.Control	-0.0006		-0.0006	-0.010182028	1	1	1	1	-0.010	0.020		9/15/20 14:01	

MS/MSD/DUP Recovery

0091007 0227

Prep Batch: S-2418 Sample ID: AD19145-001
Method: EPA 9012B Matrix: Soil

Qc Type: DUP

Analyte	Limits Rpd	Dil	DUP Conc	Sample Conc	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	35	1	0	0	NA		20200911133	15	09/11/20 14:03	20200911133	14	09/11/20 14:01

Qc Type: MS

Analyte	Amt	Limits Recov	Dil	MS Conc	Sample Conc	% Rec	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.3174	0	79		20200911133	16	09/11/20 14:05	20200911133	14	09/11/20 14:01

Qc Type: MSD

Analyte	Amt	Limits Recov	Rpd	Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.2499	0	62	23.8	Ms	20200911133	17	09/11/20 14:08	20200911133	14	09/11/20 14:01

LCS Recoveries

	BatchRunID/RunID:====>	202009111331-12							
	QcBatchID:====>	LCSS-2418							
	Date/Time:====>	09/11/20 13:56							
	Analytical Method:====>	EPA 9012B							
	Matrix:====>	Soil	Soil		Soil		Soil		Soil	
	EPA 9012B									
Analyte	**Amt Limits**	**Amt Limits**	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide	0.4 80-120		88							

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200911133	9	ICV	100	0.4	85-115
Cyanide	20200911133	21	CCV	102	0.4	85-115
Cyanide	20200911133	33	CCV	101	0.4	85-115
Cyanide	20200911133	41	CCV	102	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 9/11/20

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200911133	9/11/20 13:54	MBS-2418	11	Cyanide	ND	0.020

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200911133	9/11/20 13:51	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200911133	9/11/20 14:19	CCB	22	Cyanide	ND	0.020
20200911133	9/11/20 14:47	CCB	34	Cyanide	ND	0.020
20200911133	9/11/20 15:02	CCB	42	Cyanide	ND	0.020

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-10968

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD19164-001	89	89.14591	Percent	1.35	12.59	11.37	09/11/20	BEENA	2.4	5
Sample	AD19142-002	83	83.41346	Percent	1.36	9.68	8.31	09/11/20	BEENA		
Sample	AD19145-013	89	88.56607	Percent	1.35	12.02	10.80	09/11/20	BEENA		
Sample	AD19155-002	85	85.20900	Percent	1.37	10.70	9.32	09/11/20	BEENA		
Sample	AD19155-003	86	85.90551	Percent	1.34	14.04	12.26	09/11/20	BEENA		
Sample	AD19155-004	84	84.22175	Percent	1.37	10.75	9.27	09/11/20	BEENA		
Sample	AD19155-005	85	84.85830	Percent	1.36	13.71	11.84	09/11/20	BEENA		
Sample	AD19155-006	87	87.05263	Percent	1.36	10.86	9.63	09/11/20	BEENA		
Sample	AD19155-007	87	87.19453	Percent	1.39	11.62	10.31	09/11/20	BEENA		
Sample	AD19157-001	93	93.05374	Percent	1.39	9.02	8.49	09/11/20	BEENA		
Sample	AD19157-002	93	92.98893	Percent	1.38	12.22	11.46	09/11/20	BEENA		
Sample	AD19160-001	65	64.50777	Percent	1.37	12.95	8.84	09/11/20	BEENA		
Sample	AD19160-002	78	78.04622	Percent	1.38	10.90	8.81	09/11/20	BEENA		
Sample	AD19161-001	94	94.13613	Percent	1.36	10.91	10.35	09/11/20	BEENA		
Sample	AD19162-001	87	87.05561	Percent	1.37	12.34	10.92	09/11/20	BEENA		
Sample	AD19163-001	86	85.82621	Percent	1.36	15.40	13.41	09/11/20	BEENA		
Sample	AD19163-002	86	86.04651	Percent	1.36	13.40	11.72	09/11/20	BEENA		
Sample	AD19164-001	87	87.04319	Percent	1.36	13.40	11.84	09/11/20	BEENA		
Sample	AD19164-002	95	94.63519	Percent	1.36	10.68	10.18	09/11/20	BEENA		
Sample	AD19170-001	86	86.38996	Percent	1.37	11.73	10.32	09/11/20	BEENA		
Sample	AD19170-002	89	89.24855	Percent	1.37	10.02	9.09	09/11/20	BEENA		

* - Indicates Failed Rpd Criteria

Wet Chemistry Data
Raw Data

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-325340

Prepared By: Patel, Jessica
Description: 100 ppm cr6 CCV
Prep Date: 4/7/2020
Expiration Date: 10/6/2020
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 04/07/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12101	1000 ppm Cr6 Std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-331888

Prepared By: Trivedi, Beena
Description: Phosphate Buffer
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9811	Potassium Phosphate Monobasic	68.04 g	neat neat	
12908	potassium phosphate dibasic anhydrous	87.09 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-331889

Prepared By: Trivedi, Beena
Description: 100 ppm cr6 std
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12831	1000 ppm cr6 std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-334593

Prepared By: Trivedi, Beena
Description: Cr6 digestion solution
Prep Date: 9/10/2020
Expiration Date: 10/9/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 6000 ml
ApprovedBy: jessica
ApproveDate: 09/10/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12852	Sodium Carbonate, Anhydrous	180 g	neat neat	
12834	sodium hydroxide	120 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334640

Prepared By: Patel, Jessica
Description: 10 % H2SO4
Prep Date: 9/11/2020
Expiration Date: 2/25/2021
Department: WetChem
BatchNumber:
Concentration: 10 %
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13343	sulfuric acid	200 ml	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334641

Prepared By: Patel, Jessica
Description: 5 M HNO3
Prep Date: 9/11/2020
Expiration Date: 2/25/2021
Department: WetChem
BatchNumber:
Concentration: 5 m
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13331	Nitric acid	640 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334790

Prepared By: Trivedi, Beena
Description: 0.02 PPM
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Wet Lab
BatchNumber: B-29678
Concentration: 0.02 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.02 ml	100 mg/l	
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334791

Prepared By: Trivedi, Beena
Description: 0.25 PPM
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: WetChem
BatchNumber: B-29678
Concentration: 0.25 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.25 ml	100 mg/l	

Veritech Lot Number: V-334792

Prepared By: Trivedi, Beena
Description: 0.5 PPM
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Wet Lab
BatchNumber: B-29678
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	

Veritech Lot Number: V-334793

Prepared By: Trivedi, Beena
Description: 1.0 PPM
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Wet Lab
BatchNumber: B-29678
Concentration: 1 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	1 ml	100 mg/l	
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334794

Prepared By: Trivedi, Beena
Description: ICV
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Wet Lab
BatchNumber: B-29678
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334795

Prepared By: Trivedi, Beena
Description: CCV
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Wet Lab
BatchNumber: B-29678
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334796

Prepared By: Trivedi, Beena
Description: LCS
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Wet Lab
BatchNumber: B-29678
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	

Veritech Lot Number: V-334845

Prepared By: Trivedi, Beena
Description: Cr6 Color Reagent
Prep Date: 9/15/2020
Expiration Date: 12/3/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: [signature]
ApproveDate: 9/15/20
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11768	1,5-Diphenylcarbazide	1.25 g	neat neat	
12943	acetone	250 ml	neat neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9811

Description
Potassium Phosphate Monobasic

ApprovedBy: janee
ApproveDate: 11/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	P285-500	151912	11/17/15	11/16/25	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 11768

Description
1,5-Diphenylcarbazide

ApprovedBy: janee
ApproveDate: 09/08/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	LC136558	H134-17	06/12/18	05/15/23	Wonge, Janee	1	25 g	neat	neat

Veritech Control/Receipt Number: 12101

Description
1000 ppm Cr6 Std

ApprovedBy: janee
ApproveDate: 11/29/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	19036-100mL	BCBV2169	11/05/18	04/30/21	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12831

Description
1000 ppm cr6 std

ApprovedBy: janee
ApproveDate: 12/26/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Hach	1466442	A9240	10/14/19	08/31/24	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12852

Description
Sodium Carbonate, Anhydrous

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Lab Chem	LC229651	J192-03	10/21/19	10/20/29	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12908

Description
potassium phosphate dibasic anhydrous

ApprovedBy: janee
ApproveDate: 12/04/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
fisher	p288-500	188106	12/04/19	12/03/29	Wonge, Janee	1	500 g	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12943

Description
acetone

ApprovedBy: akmal
ApproveDate: 12/18/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9254-03	236884	12/17/19	05/13/22	Lopez, Jose	32	4L	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13331

Description
Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6413

Description
Lead Chromate

ApprovedBy: aurora
ApproveDate: 11/05/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Pfaltz & Bauer inc	L01745	A056-5	10/27/11	10/26/21	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 12689

Description
Magnesium Chloride Anhydrous

ApprovedBy: janee
ApproveDate: 08/01/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Laboratory Sales	LC-2758812	190726-A	07/31/19	07/30/24	Wonge, Janee	1	2.5 kg	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-330629

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: 0.4N Sulfamic Acid
BatchNumber:
ApproveDate: 07/01/20
Prep Date: 7/1/2020
Concentration: 0.4 n
Checked: Yes
Expiration Date: 12/31/2020
Final Volume: 250 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10606	Sulfamic Acid, ACS	10 g	neat neat	.4 n
13084	DI H20			

Veritech Lot Number: V-330630

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: CN Release Solution
BatchNumber:
ApproveDate: 07/01/20
Prep Date: 7/1/2020
Concentration: various neat
Checked: Yes
Expiration Date: 12/31/2020
Final Volume: 930.6 g

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12312	Magnesium Chloride Hexahydrate	96.6 g	neat neat	
13084	DI H20	332.4 g		
13280	sulfuric acid	417 g	neat neat	
V-330629	0.4N Sulfamic Acid	84.6 g	0.4 n	

Veritech Lot Number: V-332257

Prepared By: Trivedi, Beena
Department: Metals
ApprovedBy: jessica
Description: 1 N NAOH
BatchNumber:
ApproveDate: 07/28/20
Prep Date: 7/28/2020
Concentration: 1 n
Checked: Yes
Expiration Date: 1/27/2021
Final Volume: 2000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12987	sodium hydroxide	80 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-333445

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: Sodium Phosphate
BatchNumber:
ApproveDate: 08/19/20
Prep Date: 8/19/2020
Concentration: Reagent reag
Checked: Yes
Expiration Date: 9/18/2020
Final Volume: 250 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13261	sodium phosphate monobasic	34.5 g	NEAT neat	
13084	DI H20			

Veritech Lot Number: V-334102

Prepared By: louis lombardi
Department: WetChem
ApprovedBy: jessica
Description: 0.25 N NaOH
BatchNumber:
ApproveDate: 09/02/20
Prep Date: 9/1/2020
Concentration: 0.25 n
Checked: Yes
Expiration Date: 2/25/2021
Final Volume: 6000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12834	sodium hydroxide	60 g	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334652

Prepared By: Wonge, Janee
Description: 20 ppm CN standard
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: WetChem
BatchNumber:
Concentration: 20 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13179	1000 ppm cn std	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334653

Prepared By: Wonge, Janee
Description: 20 ppm CN control
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: WetChem
BatchNumber:
Concentration: 20 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13213	1000 PPM CN STD	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334654

Prepared By: Wonge, Janee
Description: ICV/CCV
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: WetChem
BatchNumber:
Concentration: 0.40 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334653	20 ppm CN control	2 ml	20 ppm	
V-334102	0.25 N NaOH	98 ml	0.25 n	

Veritech Lot Number: V-334656

Prepared By: Wonge, Janee
Description: Chloramine -T (AQ2)
Prep Date: 9/11/2020
Expiration Date: 9/12/2020
Department: WetChem
BatchNumber:
Concentration: reagent reage
Final Volume: 50 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10778	Chloramine T trihydrate	.5 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334658

Prepared By: Wonge, Janee
Description: 0.80 ppm Cyanide
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: WetChem
BatchNumber:
Concentration: 0.80 ppm
Final Volume: 6 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334652	20 ppm CN standard	.24 ml	20 ppm	
V-332257	1 N NAOH	1.5 ml	1 n	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334659

Prepared By: Wonge, Janee
Description: Pyridine/Barbaturic acid
Prep Date: 9/11/2020
Expiration Date: 9/18/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13135	Barbituric Acid	3.75 g	neat neat	
12769	Pyridine	18.75 ml	neat neat	
13096	hydrochloric acid	3.75 ml	neat neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10606

Description: Sulfamic Acid, ACS

ApprovedBy: janee
ApproveDate: 12/21/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Lab chem	LC254201	F308-21	12/19/16	12/18/26	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 10778

Description: Chloramine T trihydrate

ApprovedBy: janee
ApproveDate: 03/02/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Emd Millipore	1.02426.0250	K48314926 637	03/02/17	03/01/27	Wonge, Janee	1	250 g	neat	neat

Veritech Control/Receipt Number: 12312

Description: Magnesium Chloride Hexahydrate

ApprovedBy: janee
ApproveDate: 02/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	M35-500	182951	02/20/19	08/31/21	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12769

Description: Pyridine

ApprovedBy: janee
ApproveDate: 09/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	P368-1	190224	09/20/19	09/19/24	Wonge, Janee	1	1 L	neat	neat

Veritech Control/Receipt Number: 12834

Description: sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12987

Description: sodium hydroxide

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069931	01/07/20	01/06/25	Lopez, Jose	4	12kg	neat	neat

Veritech Control/Receipt Number: 13084

Description: DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13096

Description: hydrochloric acid

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9530-33	251602	03/10/20	01/15/25	Burwell, John	6	2.5	neat	neat

Veritech Control/Receipt Number: 13135

Description: Barbituric Acid

ApprovedBy: jessica
ApproveDate: 03/25/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
GFS chemicals	LS-1580004	17501828	03/25/20	03/24/30	Patel, Jessica	1	100 g	neat	neat

Veritech Control/Receipt Number: 13179

Description: 1000 ppm cn std

ApprovedBy: jessica
ApproveDate: 04/08/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
labchem	LC135451	K070-001	04/08/20	09/20/20	Patel, Jessica	1	500M	1000	PPM

Veritech Control/Receipt Number: 13213

Description: 1000 PPM CN STD

ApprovedBy: jessica
ApproveDate: 04/21/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RICCA	2543-16	4003H35	04/21/20	09/30/20	Patel, Jessica	1	500 M	1000	PPM

Veritech Control/Receipt Number: 13261

Description: sodium phosphate monobasic

ApprovedBy: jessica
ApproveDate: 05/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
lab chem	LC247751	K086-13	05/26/20	05/25/30	Patel, Jessica	3	500 G	NEAT	NEAT

Veritech Control/Receipt Number: 13280

Description: sulfuric acid

ApprovedBy: jessica
ApproveDate: 06/22/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/04/20	08/30/22	Lopez, Jose	2	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332644

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: jessica
Description: KHP LCS	BatchNumber:	ApproveDate: 08/05/20
Prep Date: 8/5/2020	Concentration: 300 ppm	Checked: Yes
Expiration Date: 2/4/2021	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE	600 mg	NEAT	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10292

Description
Potassium Chloride, 4M

ApprovedBy: janee
ApproveDate: 12/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	SP135-500	156731	07/01/16	12/31/20	Wonge, Janee	1	500 m	4	M

Veritech Control/Receipt Number: 13162

Description
zobell"s solution

ApprovedBy: jessica
ApproveDate: 04/06/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LABCHEM	LC273101	K050-17	04/06/20	02/20/21	Patel, Jessica	1	500M	NEAT	NEAT

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 785 Analyst BM Date 9/14/20

Digestion Start: 1530 Finish: 1630 Hot Plate Temp 1: 90c Hot Plate Temp 2: 90c

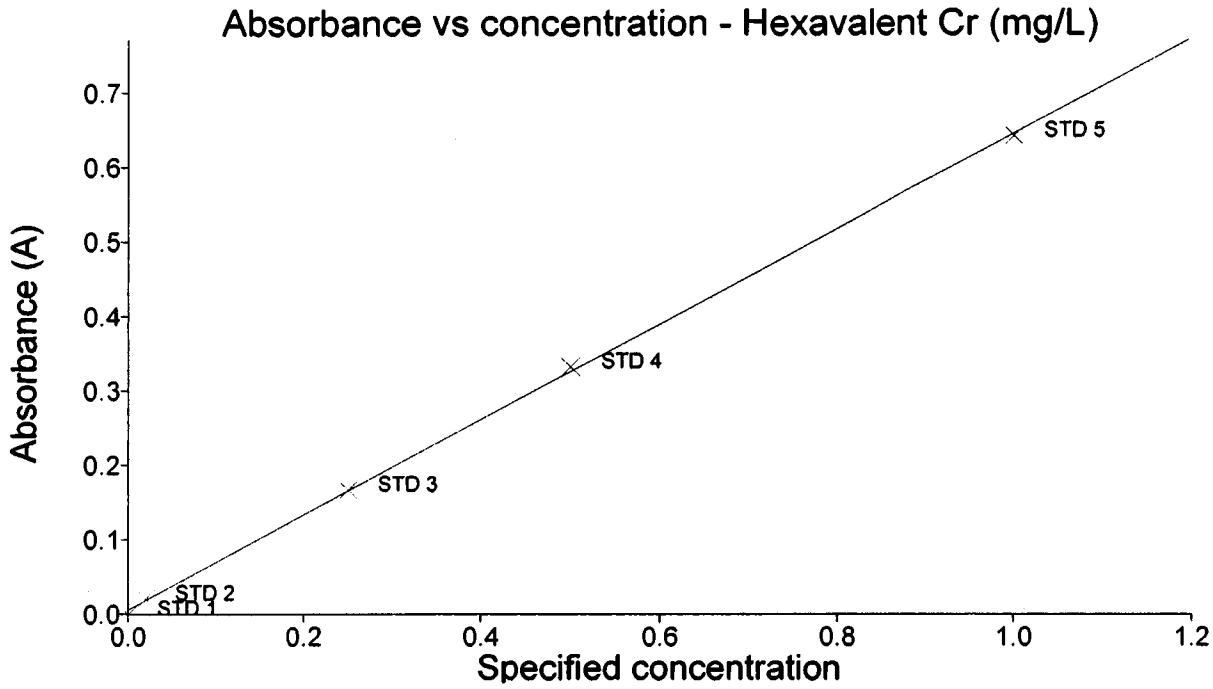
Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 (500 ml)	0.0 ml	7.19	100	1.95	
Cal Curve 0.02 (100 ppm)	0.02	7.64		1.77	
Cal Curve 0.25	0.25	7.33		1.70	Balance used: 031
Cal Curve 0.5	0.5	7.48		1.65	Pipettes used: 11, 19
Cal Curve 1.0	1.0	7.11		2.03	
MB	2.5 ml	7.56		2.08	
LCS		7.39		1.94	
~~AD19154004~~					
PDS		7.10		1.96	
DUP		7.08		1.77	
(Sol) MS	009	7.18		1.70	
(Insol) MSD	006	7.26		1.69	
AD19154004		7.55		1.58	
2.	008	7.78		1.73	
3.	009	7.93		1.78	
4.	010	7.48		1.95	
5. AD19192.002		7.14		2.00	
6.	MS 004	7.91		2.11	
7.	MSD 005	7.71		2.14	
8. AD19160.001		7.06		1.94	
9.	002	7.55		1.98	
10. AD19180.001		7.87		2.07	
11. AD19178.001		7.90		1.90	
12.	002	7.14		1.88	
13.	003	7.28		1.73	
14.	004	7.15		1.96	
15.	005	7.56		2.05	
16.	006	7.71		2.00	
17.	007	7.70		1.98	
18.	008	7.54		1.73	
19.	009	7.83		1.70	
20.	010	7.80		1.84	

Reagent	Lot #:		$MgCl_2$	# 12689
Digestion Solution - pH must be > 11.5. If not, discard	V- 334593	pH 13.21	Lead Chromate ($PbCrO_4$)	# 6413
Phosphate Buffer	V- 331888		Weight of $PbCrO_4$ (10-20mg)	MSD.1 0.0150 g MS.2 0.0140 g
			Volume PVS 0.5 ml	10% H_2SO_4 V: 334640
			PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3 V: 334641
			Spike Volume 0.5ml V- ~~331890~~	Col Rea. V: 334645

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9999

Calibrated on: 09/15/20 12:09:16

User name: wet chem

Method name: Hexavalent Cr

CCDDP 9/15/20

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	-0.0093	0.0093	-0.0001
STD 2.Sample	0.0200	0.0232	-0.0032	0.0208
STD 3.Sample	0.2500	0.2518	-0.0018	0.1671
STD 4.Sample	0.5000	0.5097	-0.0097	0.3321
STD 5.Sample	1.0000	0.9947	0.0053	0.6425

Report Generated On:09/15/2020 13:08

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		09/15/20 12:33:13	0.5000	0.0150	0.3163	0.4650
ICB.Sample		09/15/20 12:33:26			-0.0002	-0.0096 : Exceeded calibration limits.
MB.Sample		09/15/20 12:33:39			-0.0028	-0.0136 : Exceeded calibration limits.
LCS.Sample		09/15/20 12:33:58			0.3253	0.4991
AD19159-004 NS.Sample		09/15/20 12:34:19			0.0415	0.0555
AD19159-004 DUP.Sample		09/15/20 12:34:37			0.0473	0.0646
AD19159-005 MS.Sample		09/15/20 12:35:38			0.1872	0.2833
AD19159-006 XXX.Sample		09/15/20 12:35:57			3.7897	5.9126 : Exceeded calibration limits.
AD19159-006 50X MSD.Sample	50	09/15/20 12:36:48			0.1651	0.2488
AD19159-004 PVS.Sample		09/15/20 12:37:09			0.2339	0.3563
CCV-1.Control		09/15/20 12:37:27	0.5000	0.0036	0.3236	0.4964
CCB-1.Sample		09/15/20 12:37:46			0.0011	-0.0075 : Exceeded calibration limits.
AD19159-008.Sample		09/15/20 12:38:20			0.0017	-0.0065 : Exceeded calibration limits.
AD19159-009.Sample		09/15/20 12:38:36			0.0044	-0.0024 : Exceeded calibration limits.
AD19159-010.Sample		09/15/20 12:38:54			-0.0012	-0.0112 : Exceeded calibration limits.
AD19160-001.Sample		09/15/20 12:39:11			0.0065	0.0010
AD19160-002.Sample		09/15/20 12:39:29			-0.0033	-0.0145 : Exceeded calibration limits.
AD19178-001.Sample		09/15/20 12:40:42			0.0571	0.0800
AD19178-002.Sample		09/15/20 12:40:59			0.0166	0.0167
AD19178-003.Sample		09/15/20 12:41:57			0.0702	0.1004
AD19178-004.Sample		09/15/20 12:42:13			0.0153	0.0146
AD19178-005.Sample		09/15/20 12:42:49			0.0599	0.0844

Report Generated On:09/15/2020 13:08

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCV-2.Control		09/15/20 12:43:02	0.5000	0.0053	0.3225	0.4947
CCB-2.Sample		09/15/20 12:43:17			-0.0024	-0.0130 : Exceeded calibration limits
AD19178-006.Sample		09/15/20 12:43:49			0.0176	0.0182
AD19178-007.Sample		09/15/20 12:44:01			0.0157	0.0153
AD19178-008.Sample		09/15/20 12:44:16			0.0294	0.0367
AD19178-009.Sample		09/15/20 12:44:39			0.0238	0.0279
AD19178-010.Sample		09/15/20 12:44:55			0.0114	0.0086
AD19180-001.Sample		09/15/20 12:46:16			0.0142	0.0129
AD19192-002.Sample		09/15/20 12:46:52			0.4456	0.6870
AD19192-004MS2.Sample		09/15/20 12:47:42			0.8015	1.2431 : Exceeded calibration limits
AD19192-004MS2 2X.Sample	2	09/15/20 12:48:27			0.4259	0.6563
AD19192-005MSD2.Sample		09/15/20 12:48:50			3.9658	6.1877 : Exceeded calibration limits
CCV-3.Control.Cycle1		09/15/20 12:50:22	0.5000	0.0081	0.3207	0.4919
CCB-3.Sample		09/15/20 12:50:35			0.0013	-0.0073 : Exceeded calibration limits
AD19192-005 50XMSD2.Sample	50	09/15/20 12:51:05			0.1672	0.2519
AD19159-004 T.Sample		09/15/20 12:54:11			0.0041	-0.0028 : Exceeded calibration limits
AD19159-005 T.Sample		09/15/20 12:54:31			0.0070	0.0017
AD19159-006 T.Sample		09/15/20 12:54:52			0.0068	0.0014
AD19159-006 50X T.Sample		09/15/20 12:55:15			0.0007	-0.0082 : Exceeded calibration limits
AD19159-008 T.Sample		09/15/20 12:55:29			0.0022	-0.0058 : Exceeded calibration limits
AD19159-009 T.Sample		09/15/20 12:55:47			0.0030	-0.0045 : Exceeded calibration limits

Report Generated On:09/15/2020 13:08

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD19159-010 T.Sample		09/15/20 12:56:04			-0.0008	-0.0105 : Exceeded calibration limits
AD19160-001 T.Sample		09/15/20 12:56:22			0.0031	-0.0043 : Exceeded calibration limits
AD19160-002 T.Sample		09/15/20 12:56:39			0.0023	-0.0057 : Exceeded calibration limits
CCV-4.Control		09/15/20 12:56:56	0.5000	0.0104	0.3193	0.4896
CCB-4.Sample		09/15/20 12:57:12			0.0007	-0.0082 : Exceeded calibration limits
AD19178-001 T.Sample		09/15/20 12:57:41			0.0616	0.0871
AD19178-002 T.Sample		09/15/20 12:58:03			0.0124	0.0101
AD19178-003 T.Sample.Cycle1		09/15/20 12:59:40			0.0639	0.0906
AD19178-004 T.Sample		09/15/20 13:00:28			0.0127	0.0105
AD19178-005 T.Sample		09/15/20 13:00:45			0.0660	0.0938
AD19178-006 T.Sample		09/15/20 13:01:03			0.0175	0.0181
AD19178-007 T.Sample		09/15/20 13:01:25			0.0130	0.0111
AD19178-008 T.Sample		09/15/20 13:02:29			0.0350	0.0454
AD19178-009 T.Sample		09/15/20 13:03:08			0.0302	0.0379
AD19178-010 T.Sample		09/15/20 13:03:24			0.0141	0.0127
CCV-5.Control		09/15/20 13:03:40	0.5000	0.0133	0.3174	0.4867
CCB-5.Sample		09/15/20 13:03:57			0.0001	-0.0091 : Exceeded calibration limits
AD19180-001 T.Sample		09/15/20 13:04:26			0.0000	-0.0092 : Exceeded calibration limits
AD19192-002 T.Sample		09/15/20 13:05:09			0.0102	0.0067
AD19192-004 T.Sample		09/15/20 13:05:30			0.0079	0.0031
AD19192-005 T.Sample		09/15/20 13:05:50			0.0076	0.0026
AD19192-005 50X T.Sample		09/15/20 13:06:42			0.0010	-0.0076 : Exceeded calibration limits

Report Generated On:09/15/2020 13:08

Perkin-Elmer UV-VIS Lambda 20 ***Instrument ID: UV1***

Results Table

Units: **mg/L**

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCV-6.Control		09/15/20 13:06:56	0.5000	0.0146	0.3166	0.4854
CCB-6.Sample		09/15/20 13:07:10			0.0001	-0.0091 : Exceeded calibration limits

Report Generated On:09/15/2020 13:08

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 785A Analyst MH Date 9/14/20

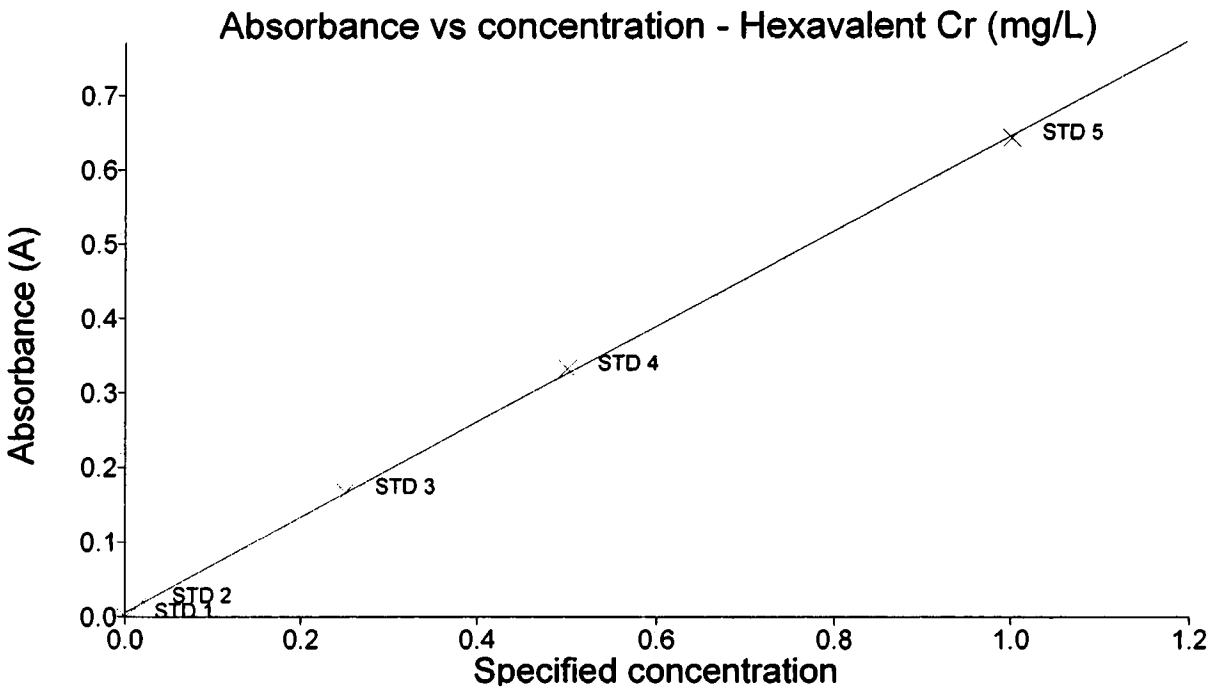
Digestion Start: 1630 Finish: 1730 Hot Plate Temp 1: 90°C Hot Plate Temp 2: 90°C

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0	0 mm	7.19	100	1.95	
Cal Curve 0.025 ppm	0.025	7.64		1.77	
Cal Curve 0.25 ppm	0.25	7.33		1.70	Balance used: 031
Cal Curve 0.5	0.5	7.48		1.65	Pipettes used: 11, 19
Cal Curve 1.0	1.0	7.32		2.03	
MB	2.5gm	7.88		1.99	
LCS		7.95		1.90	
AD19159-004					
PDS		7.04		2.03	
DUP		7.68		2.07	
(Sol) MS 005		7.13		1.91	
(Insol) MSD 006		7.25		1.98	
AD19159-004		7.19		1.64	
2. 008		7.87		1.78	
3. 009		7.61		1.84	
4. 010		7.10		2.05	
5. AD19192-002		7.14		2.08	
6. MS 004		7.13		1.97	
7. MSD 005		7.91		1.87	
AD19160-001		7.78		1.65	
9. 002		7.60		1.73	
10. AD19180-001		7.54		2.08	
11. AD19178-001		7.50		2.00	
12. 002		7.87		1.95	
13. 003		7.11		1.90	
14. 004		7.44		1.83	
15. 005		7.30		1.75	
16. 006		7.65		1.70	
17. 007		7.89		2.06	
18. 008		7.90		2.05	
19. 009		7.10		1.95	
20. 010		7.15		1.90	

Reagent	Lot #:	$MgCl_2$	# 12689
Digestion Solution - pH must be > 11.5. If not, discard	V- 334592 pH 13.21	Lead Chromate ($PbCrO_4$)	# 6413
Phosphate Buffer	V- 331886	Weight of $PbCrO_4$ (10-20mg)	MSD-1 0.0150 MSD-2 0.0140 g
		PVS Volume 0.5 ml	10% H_2SO_4 V: 334640
		PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3, V: 334641
		Spike Volume 0.5ml V- 331890	Col Rea. V: 334845

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9999

Calibrated on: 09/15/20 12:09:16

User name: wet chem

Method name: Hexavalent Cr

9/15/20

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	-0.0093	0.0093	-0.0001
STD 2.Sample	0.0200	0.0232	-0.0032	0.0208
STD 3.Sample	0.2500	0.2518	-0.0018	0.1671
STD 4.Sample	0.5000	0.5097	-0.0097	0.3321
STD 5.Sample	1.0000	0.9947	0.0053	0.6425

Report Generated On:09/15/2020 14:02

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		09/15/20 13:22:13	0.5000	-0.0045	0.3288	0.5045
ICB.Sample		09/15/20 13:22:27			-0.0007	-0.0104 : Exceeded calibration limits.
MB.Sample		09/15/20 13:22:40			0.0036	-0.0036 : Exceeded calibration limits.
LCS.Sample		09/15/20 13:22:54			0.3147	0.4825
AD19159-004 NS.Sample		09/15/20 13:23:28			0.0336	0.0433
AD19159-004 DUP.Sample		09/15/20 13:23:46			0.0356	0.0463
AD19159-005 MS.Sample		09/15/20 13:24:20			0.2090	0.3173
AD19159-006 XXX.Sample		09/15/20 13:24:54			3.9269	6.1269 : Exceeded calibration limits.
AD19159-006 50X MSD.Sample	50	09/15/20 13:25:44			0.1534	0.2304
AD19159-004 PVS.Sample		09/15/20 13:26:01			0.2767	0.4231
CCV-1.Control		09/15/20 13:26:47	0.5000	-0.0014	0.3268	0.5014
CCB-1.Sample		09/15/20 13:27:01			-0.0005	-0.0100 : Exceeded calibration limits.
AD19159-008.Sample		09/15/20 13:27:13			0.0099	0.0063
AD19159-009.Sample		09/15/20 13:27:31			0.0092	0.0051
AD19159-010.Sample		09/15/20 13:27:48			0.0080	0.0032
AD19160-001.Sample		09/15/20 13:28:05			0.0220	0.0251
AD19160-002.Sample		09/15/20 13:28:20			0.0013	-0.0073 : Exceeded calibration limits.
AD19178-001.Sample		09/15/20 13:28:36			0.0361	0.0472
AD19178-002.Sample		09/15/20 13:29:00			0.0243	0.0287
AD19178-003.Sample		09/15/20 13:29:17			0.0554	0.0774
AD19178-004.Sample		09/15/20 13:29:34			0.0127	0.0105
AD19178-005.Sample		09/15/20 13:29:52			0.0611	0.0863
CCV-2.Control		09/15/20 13:30:17	0.5000	0.0047	0.3229	0.4953

Report Generated On:09/15/2020 14:02

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCB-2.Sample		09/15/20 13:30:30			0.0001	-0.0092 : Exceeded calibration limits
AD19178-006.Sample		09/15/20 13:30:44			0.0205	0.0228
AD19178-007.Sample		09/15/20 13:31:02			0.0005	-0.0085 : Exceeded calibration limits
AD19178-008.Sample		09/15/20 13:31:18			0.0016	-0.0067 : Exceeded calibration limits
AD19178-009.Sample		09/15/20 13:32:27			0.0098	0.0060
AD19178-010.Sample		09/15/20 13:32:46			0.0039	-0.0032 : Exceeded calibration limits
AD19180-001.Sample		09/15/20 13:33:19			0.0190	0.0205
AD19192-002.Sample		09/15/20 13:33:46			0.4208	0.6483
AD19192-004MS2.Sample		09/15/20 13:34:15			0.7877	1.2216 : Exceeded calibration limits
AD19192-004MS2 2X.Sample	2	09/15/20 13:34:56			0.4092	0.6302
AD19192-005MSD2.Sample		09/15/20 13:35:23			4.3662	6.8134 : Exceeded calibration limits
CCV-3.Control		09/15/20 13:35:48	0.5000	0.0070	0.3214	0.4930
CCB-3.Sample		09/15/20 13:36:03			0.0038	-0.0034 : Exceeded calibration limits
AD19192-005 50XMSD2.Sample	50	09/15/20 13:36:21			0.1579	0.2375
AD19159-004 T.Sample		09/15/20 13:36:43			0.0073	0.0022
AD19159-005 T.Sample		09/15/20 13:37:27			0.0058	-0.0002 : Exceeded calibration limits
AD19159-006 T.Sample		09/15/20 13:37:39			0.0081	0.0034
AD19159-006 50X T.Sample		09/15/20 13:37:53			0.0034	-0.0039 : Exceeded calibration limits
AD19159-008 T.Sample		09/15/20 13:38:10			0.0068	0.0014
AD19159-009 T.Sample		09/15/20 13:38:26			0.0082	0.0035
AD19159-010 T.Sample		09/15/20 13:38:40			0.0066	0.0010

Report Generated On:09/15/2020 14:02

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD19160-001 T.Sample		09/15/20 13:38:57			0.0196	0.0214
AD19160-002 T.Sample		09/15/20 13:52:46			0.0036	-0.0036 : Exceeded calibration limits
CCV-4.Control		09/15/20 13:53:03	0.5000	0.0147	0.3165	0.4853
CCB-4.Sample		09/15/20 13:53:21			0.0038	-0.0033 : Exceeded calibration limits
AD19178-001 T.Sample		09/15/20 13:53:52			0.0413	0.0553
AD19178-002 T.Sample		09/15/20 13:55:19			0.0231	0.0269
AD19178-003 T.Sample		09/15/20 13:55:41			0.0701	0.1002
AD19178-004 T.Sample		09/15/20 13:56:02			0.0152	0.0145
AD19178-005 T.Sample		09/15/20 13:56:21			0.0545	0.0759
AD19178-006 T.Sample		09/15/20 13:56:41			0.3167	0.4857
AD19178-007 T.Sample.Cycle1		09/15/20 13:57:40			-0.0000	-0.0093 : Exceeded calibration limits
AD19178-008 T.Sample		09/15/20 13:58:19			0.0024	-0.0055 : Exceeded calibration limits
AD19178-009 T.Sample		09/15/20 13:58:34			0.0069	0.0016
AD19178-010 T.Sample		09/15/20 13:58:50			0.0049	-0.0015 : Exceeded calibration limits
CCV-5.Control		09/15/20 13:59:05	0.5000	0.0159	0.3157	0.4841
CCB-5.Sample		09/15/20 13:59:20			-0.0009	-0.0106 : Exceeded calibration limits
AD19180-001 T.Sample		09/15/20 13:59:35			0.0029	-0.0047 : Exceeded calibration limits
AD19192-002 T.Sample		09/15/20 13:59:52			0.0061	0.0003
AD19192-004 T.Sample		09/15/20 14:00:11			0.0068	0.0014
AD19192-005 T.Sample		09/15/20 14:00:29			0.0062	0.0004
AD19192-005 50X T.Sample		09/15/20 14:00:45			-0.0007	-0.0103 : Exceeded calibration limits
CCV-6.Control		09/15/20 14:01:00	0.5000	0.0185	0.3141	0.4815

Report Generated On:09/15/2020 14:02

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCB-6.Control		09/15/20 14:01:15			-0.0006	-0.0101 : Exceeded calibration limits

Report Generated On:09/15/2020 14:02

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1115

Meter #: 465486

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.3	23.5	235.3	23.5	LCS: 23.3 4.41	25	25	9/10/20 1330	BH
DUP 159.004	346.0	23.1	348.3	23.1	DUP: 8.00				
1. 001	140.2	23.0	137.8	23.0	11.39				
2. 002	357.1	23.2	355.2	23.2	8.23				
3. 003	335.7	23.3	336.2	23.3	8.11				
4. 004	347.8	23.0	350.2	23.0	8.08				
5. 005	344.6	23.1	345.7	23.1	8.11				
6. 006	358.9	23.0	354.0	23.0	8.18				
7. 007	446.7	22.8	444.2	22.8	7.74				
8. 008	296.6	22.7	297.4	22.7	8.41				
9. 009	282.8	22.4	290.0	22.4	8.04				
10. 010	434.8	23.0	440.9	23.0	7.90				
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
ZoBell's Solution (228 ± 10 mV)	233.3	23.6	231.8	23.6					

* Reading 1 and Reading 2 must agree within ± 10 mV

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V-832544

Reviewed by: DMP

Date Reviewed: 9/11/20

0091007 0260

Hampton-Clarke

pH CALIBRATION RECORD

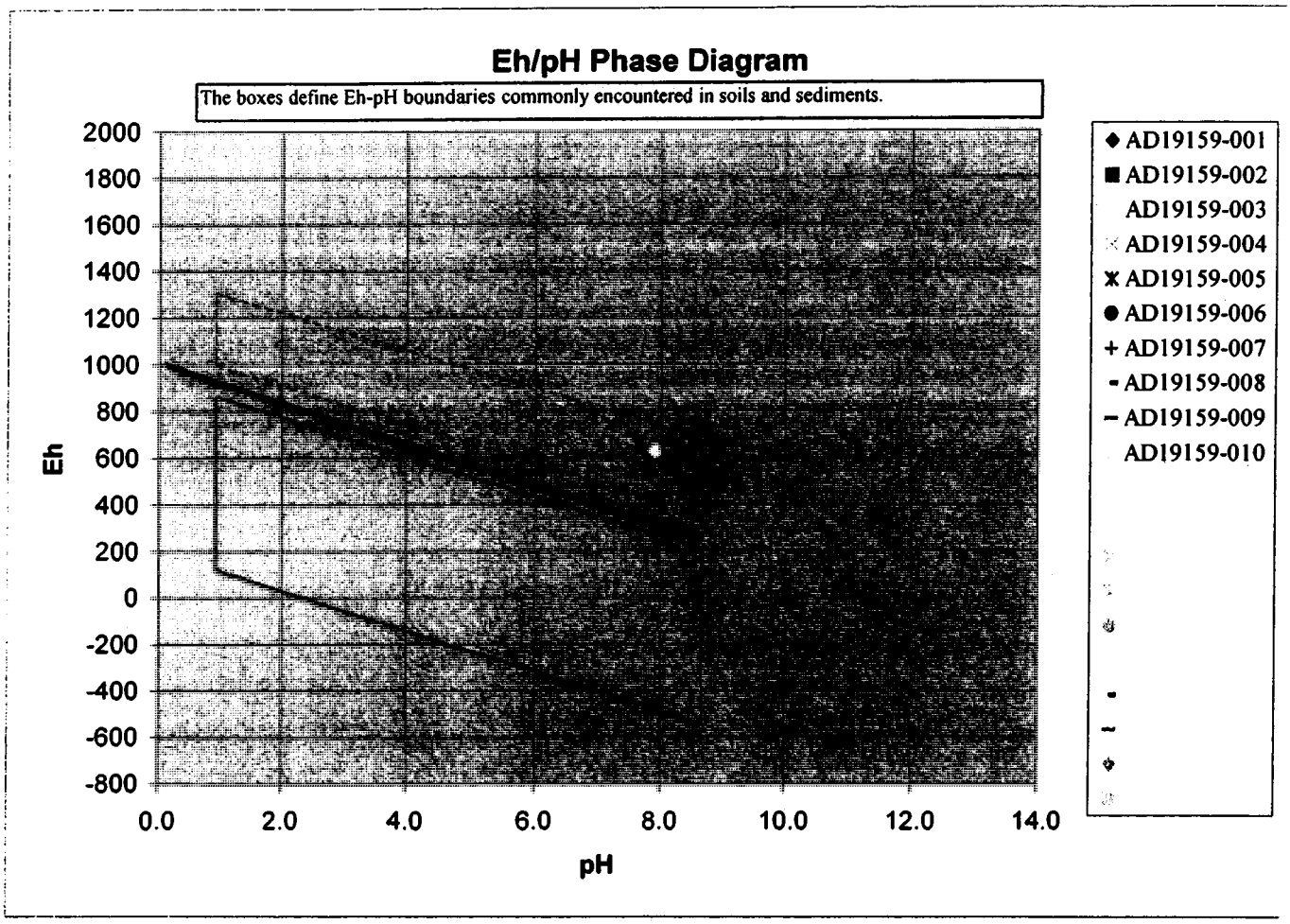
pH Meter: Orion Star A211

Serial # X55486

Date	Calibration						Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate: Buffer 1	Calibrate: Buffer 2	Calibrate: Buffer 3	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Buffer 1	Buffer 2 / Mid pt	Buffer 3
9/10/20	BM 11:30	23.3	7.00	10.00	11.99	9.98							13384	13026	12555
9/11/20	BM 14:40	23.6	4.00	7.00	10.00	7.02							13022	13384	13016

Calibrate using pH 4.0, pH 7.0, and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0, 0.4 and 7.0, check with 4.0. For basic samples calibrate with 7.0, 10.0, and 12.0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-



Sample	ORP	pH
AD19159-001	140	11.0
AD19159-002	360	8.2
AD19159-003	340	8.1
AD19159-004	350	8.1
AD19159-005	340	8.1
AD19159-006	360	8.2
AD19159-007	450	7.7
AD19159-008	300	8.4
AD19159-009	280	8.0
AD19159-010	430	7.9

Reducing

Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

9/11/20

9/11/20

0091007 0262

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1116 Meter #: 16004 / 55486

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.5	23.0	233.9	23.0	LCS: 23.4° 4.43	25	25	9/14/20 12:25	BG/LL
AD19160.001 DUP	5.1	23.1	6.3	23.1	DUP: 7.26				
1. 001	4.9	22.7	5.8	22.7	7.41				
2. 002	252.4	22.7	250.7	22.7	8.48				
AD19178.001	281.3	22.7	280.7	22.7	7.97				
4. 003	327.2	22.6	326.8	22.6	8.07				
5. 003	323.0	22.3	322.6	22.3	7.91				
6. 004	345.8	22.5	346.3	22.5	8.37				
7. 005	327.1	22.5	329.2	22.5	8.03				
8. 006	333.9	22.5	331.5	22.5	7.99				
9. 007	221.5	22.5	219.6	22.5	9.37				
10. 008	326.0	22.6	326.7	22.6	7.87				
11. 009	280.5	22.5	281.3	22.5	8.80				
12. 010	313.7	22.4	314.8	22.4	8.26				
13. 011	273.3	22.1	271.1	22.1	8.69				
14. 012	310.8	22.1	311.2	22.1	8.18				
15. 013	257.3	21.9	259.9	21.9	8.02				
AD19180.001	42.5	22.6	40.5	22.6	12.46	10			
AD19192.001	469.7	22.0	470.3	22.0	5.38	25			
18. 002	500.3	21.9	502.3	21.9	4.76				
19. 003	484.3	22.0	486.3	22.0	4.93				
20.									
ZoBell's Solution (228 ± 10 mV)	233.6	23.2	231.5	23.2					

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: mmp

Date Reviewed: 9/15/20

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V-332644

0003

0091007 0263

Hampton-Clarke

pH CALIBRATION RECORD

pH Meter: Orion 3 Star

Serial # 16004

Date	Calibration					Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate Buffer 1	Calibrate Buffer 2	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Buffer 1	Buffer 2	Mid point Buffer
BM 9/11/20	BM 9:40	23.3	4.00	10.00	7.06							13022	13016	13384
BM 9/14/20	BM 9:30	23.6	4.00	10.00	7.07	BM 11:40	23.4	7.08	BM 16:40	23.0	7.07	1	1	1

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0 and 7.0, check with 4.0. For basic samples calibrate with 7.0 and 12. 0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-

0091007 0264

pH CALIBRATION RECORD

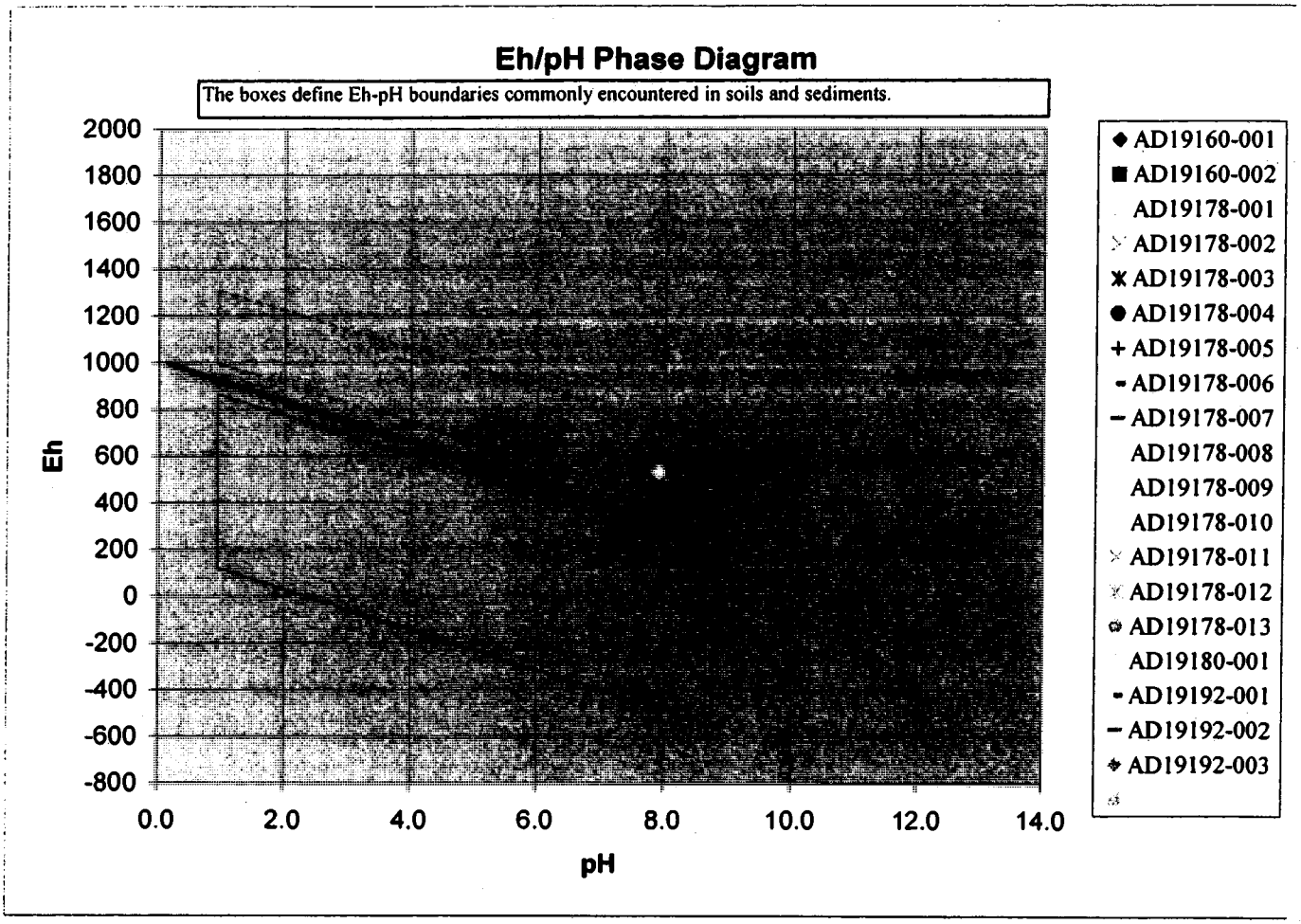
pH Meter: Orion Star A211

Serial # X55486

Date	Calibration						Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate: Buffer 1	Calibrate: Buffer 2	Calibrate: Buffer 3	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Buffer 1	Buffer 2 / Mid pt	Buffer 3
9/10/20	BG 11:30	23.3	7.00	10.00	11.99	9.98							13384	13016	12555
9/10/20	BG 14:40	23.6	4.00	7.00	10.00	7.02							13022	13384	13016
9/11/20	BG 9:00	24.0	4.00	7.00	10.00	6.99									
9/14/20	BG 9:30	23.7	4.00	7.00	10.00	7.03									
9/14/20	BG 12:00	23.8	7.00	10.00	11.99	9.99							13384	13016	12555

Calibrate using pH 4.0, pH 7.0, and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0, 0.4 and 7.0, check with 4.0. For basic samples calibrate with 7.0, 10.0, and 12.0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-



Sample	ORP	pH
AD19160-001	4.9	7.4
AD19160-002	250	8.5
AD19178-001	280	8.0
AD19178-002	330	8.1
AD19178-003	320	7.9
AD19178-004	350	8.4
AD19178-005	330	8.0
AD19178-006	330	8.0
AD19178-007	220	9.4
AD19178-008	330	7.9
AD19178-009	280	8.8
AD19178-010	310	8.3
AD19178-011	270	8.7
AD19178-012	310	8.2
AD19178-013	260	8.0
AD19180-001	42	12.0
AD19192-001	470	5.4
AD19192-002	500	4.8
AD19192-003	480	4.9

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

PB 9/14/20

9/15/20

0091007 0266

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1117 Meter #: 16004

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.5	23.0	233.9	23.0	LCS: 2.37 4.38	25	25	9/14/20 16:10	BY
DUP 9192-004	486.1	24.1	484.9	24.1	DUP: 4.81	1	1	1	1
1. 004	489.3	23.8	490.1	23.8	4.86	1	1	1	1
2. 005	492.0	23.6	491.8	23.6	4.78	1	1		"
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
ZoBell's Solution (228 ± 10 mV)	232.7	23.2	233.1	23.2					

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: MMP

Date Reviewed: 9/15/20

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V-332644

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0004

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Hampton-Clarke

pH CALIBRATION RECORD

pH Meter: Orion 3 Star

Serial # 16004

Date	Calibration					Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate: Buffer 1	Calibrate: Buffer 2	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Buffer 1	Buffer 2	Mid point Buffer
9/11/20	BM 9:00	23.3	4.00	10.00	7.06							13022	13016	13384
9/14/20	BM 9:30	23.6	4.00	10.00	7.07	BM 11:00	23.4	7.08	BM 16:00	23.0	7.07	/	/	/

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0 and 7.0, check with 4.0. For basic samples calibrate with 7.0 and 12. 0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-

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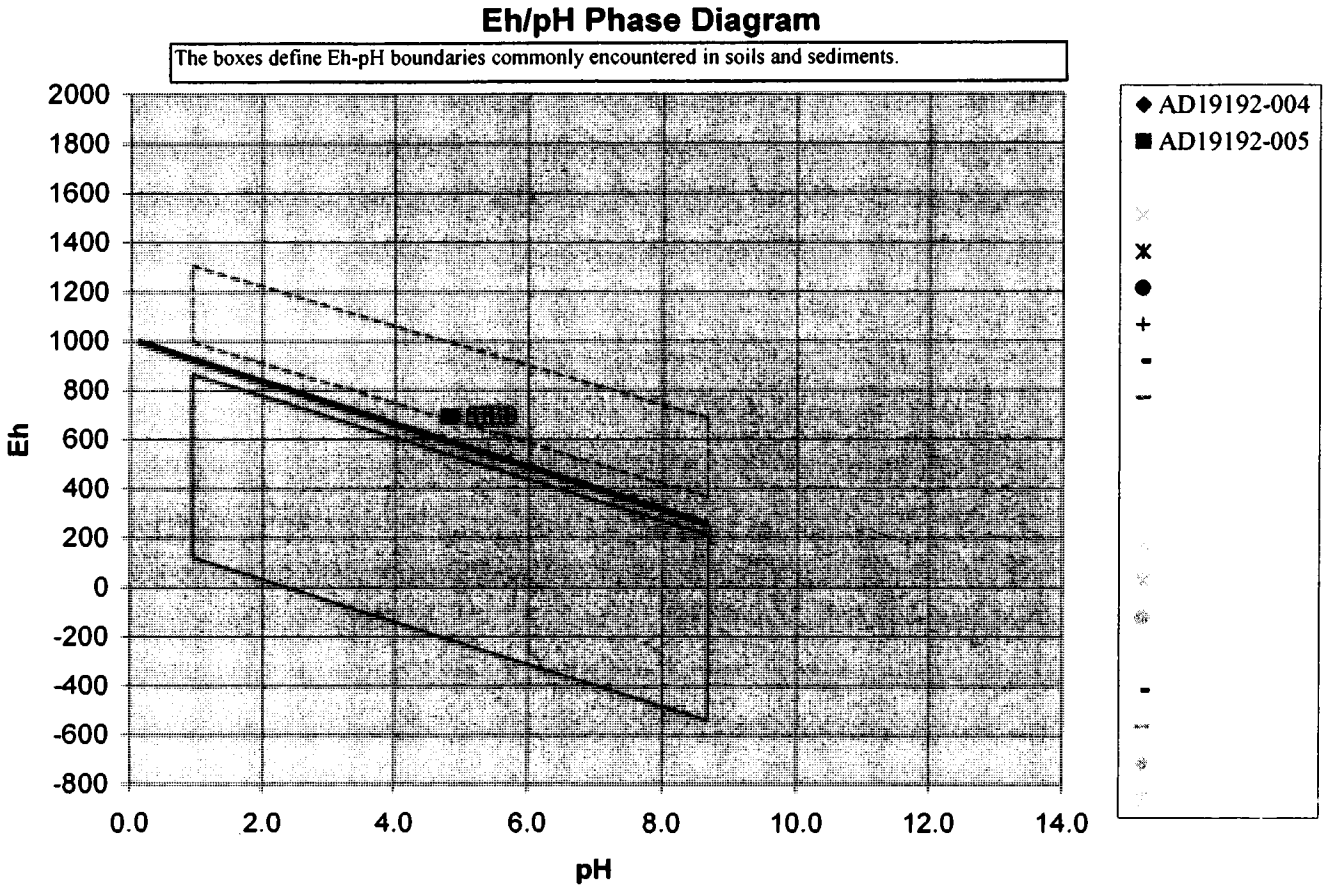


Sample	ORP	pH
AD19192-004	490	4.9
AD19192-005	490	4.8

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

9/15/20

RUN LOG

Instrument: DA1 BatchId: 202009111331 Analyzed By: jw

Run#	Qc Type	Sample ID	Flag summary:	Comments	An Date/Time:	Dil	Prep Batch	Method Blank
1	ICS	STANDARD 1		.g	09/11/20 13:31	1		
2	ICS	STANDARD 90		.g V-334658	09/11/20 13:33	1		
3	ICS	STANDARD 91		.g V-334658	09/11/20 13:35	1		
4	ICS	STANDARD 92		.g V-334658	09/11/20 13:38	1		
5	ICS	STANDARD 93		.g V-334658	09/11/20 13:40	1		
6	ICS	STANDARD 94		.g V-334658	09/11/20 13:42	1		
7	ICS	STANDARD 95		.g V-334658	09/11/20 13:45	1		
8	ICS	STANDARD 0		.g	09/11/20 13:47	1		
9	ICV	CCV		.g V-334654	09/11/20 13:49	1		
10	ICB	CCB		.g	09/11/20 13:51	1		
11	MB	MBS-2418		.g	09/11/20 13:54	1	S-2418	MBS-2418
12	LCS	LCSS-2418		.g V-334653	09/11/20 13:56	1	S-2418	MBS-2418
13	LCS	LCSS-2418 DUP		.g V-334653	09/11/20 13:58	1	S-2418	MBS-2418
14	SMP	AD19145-001		.g	09/11/20 14:01	1	S-2418	MBS-2418
15	DUP	AD19145-001 DUP		.g	09/11/20 14:03	1	S-2418	MBS-2418
16	MS	AD19145-001 MS		.g	09/11/20 14:05	1	S-2418	MBS-2418
17	MSD	AD19145-001 MSD	Ms	.g	09/11/20 14:08	1	S-2418	MBS-2418
18	SMP	AD19145-002		.g	09/11/20 14:10	1	S-2418	MBS-2418
19	SMP	AD19145-003		.g	09/11/20 14:12	1	S-2418	MBS-2418
20	SMP	AD19145-004		.g	09/11/20 14:14	1	S-2418	MBS-2418
21	CCV	CCV		.g V-334654	09/11/20 14:17	1		
22	CCB	CCB		.g	09/11/20 14:19	1		
23	SMP	AD19145-005		.g	09/11/20 14:21	1	S-2418	MBS-2418
24	SMP	AD19145-006		.g	09/11/20 14:24	1	S-2418	MBS-2418
25	SMP	AD19145-007		.g	09/11/20 14:26	1	S-2418	MBS-2418
26	SMP	AD19145-008		.g	09/11/20 14:28	1	S-2418	MBS-2418
27	SMP	AD19145-009		.g	09/11/20 14:31	1	S-2418	MBS-2418
28	SMP	AD19145-011		.g	09/11/20 14:33	1	S-2418	MBS-2418
29	SMP	AD19145-012		.g	09/11/20 14:35	1	S-2418	MBS-2418
30	SMP	AD19145-013		.g	09/11/20 14:37	1	S-2418	MBS-2418
31	SMP	AD19160-001		.g	09/11/20 14:40	1	S-2418	MBS-2418
32	SMP	AD19160-002		.g	09/11/20 14:42	1	S-2418	MBS-2418
33	CCV	CCV		.g V-334654	09/11/20 14:44	1		
34	CCB	CCB		.g	09/11/20 14:47	1		
35	SMP	AD19142-001		.g	09/11/20 14:49	1	S-2418	MBS-2418
36	SMP	AD19142-003		.g	09/11/20 14:51	1	S-2418	MBS-2418
37	SMP	AD19142-007		.g	09/11/20 14:53	1	S-2418	MBS-2418
38	SMP	AD19142-009		.g	09/11/20 14:55	1	S-2418	MBS-2418
39	SMP	AD19139-001		.g	09/11/20 14:57	1	S-2418	MBS-2418
40	SMP	AD19139-004		.g	09/11/20 14:59	1	S-2418	MBS-2418
41	CCV	CCV		.g V-334654	09/11/20 15:00	1		
42	CCB	CCB		.g	09/11/20 15:02	1		

Flag Code:	Flag Code Description
Cs	CCV Out epa9056
Ho	Hold Time Exceeded
I2	Init Cal missing a data point
I4	Init Cal Rsd < .995
Iw	ICV Out 300.0 rev2.1
Lw	LCS Out 300.0 rev2.1
Mw	Spike Out EPA 300.0 REV2.1

Flag Code:	Flag Code Description
Cw	CCV out 300.0 rev2.1
I1	Init Cal x and y value problem
I3	Init Cal missing a Compound
Is	ICV out epa 9056
Ls	LCS Out EPA 9056
Ms	Spike Out EPA 9056
Oc	Over Calibration/Linear Range

Logo

AQ-2 Report

Serial Number:	090817
Report Requested By:	Janee
Date & Time:	Fri Sep 11 15:04:29 2020
Tray Number:	87
Tray Name:	CNS 2418

Worklist

Cup	Type	ID	Details	Tests
2	U1	MBS-2418		tCN-m
3	U2	LCSS-2418		tCN-m
4	U3	LCSS-2418 DUP		tCN-m
5	U4	AD19145-001		tCN-m
6	U5	AD19145-001 DUP		tCN-m
7	U6	AD19145-001 MS		tCN-m
8	U7	AD19145-001 MSD		tCN-m
9	U8	AD19145-002		tCN-m
10	U9	AD19145-003		tCN-m
11	U10	AD19145-004		tCN-m
12	U11	AD19145-005		tCN-m
13	U12	AD19145-006		tCN-m
14	U13	AD19145-007		tCN-m
15	U14	AD19145-008		tCN-m
16	U15	AD19145-009		tCN-m
17	U16	AD19145-011		tCN-m
18	U17	AD19145-012		tCN-m
19	U18	AD19145-013		tCN-m
20	U19	AD19160-001		tCN-m
21	U20	AD19160-002		tCN-m
22	U21	AD19142-001		tCN-m
23	U22	AD19142-003		tCN-m
24	U23	AD19142-007		tCN-m
25	U24	AD19142-009		tCN-m
26	U25	AD19139-001		tCN-m
27	U26	AD19139-004		tCN-m

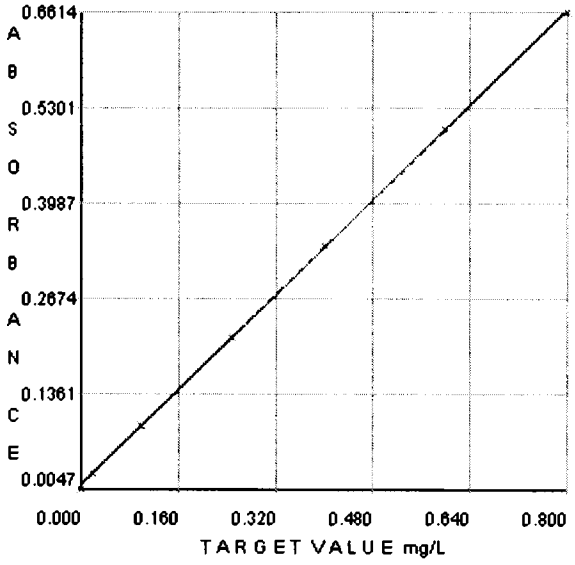
AQ2 tCN mod

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0047	-0.0042	0.0000	
S90	0.0239	0.0192	0.0200	-4.11
S91	0.0914	0.1014	0.1000	1.42
S92	0.2136	0.2505	0.2480	1.00
S93	0.3391	0.4035	0.4000	0.88
S94	0.5013	0.6012	0.6000	0.20
S95	0.6614	0.7964	0.8000	-0.45
S0	0.0050	-0.0039	0.0000	

Polynomial Order:	1
Correlation Coefficient:	1.0000
Carryover(%):	0.0
Calibration Equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured Absorbance
a =:	-9.966672E-003
b =:	1.219235E+000
Date & Time:	Fri Sep 11 13:47:22 2020

Calibration Graph



9/11/20

Reagents

Name	Batch	Prepared By	Expiry Date
tCN Neutral	V-333445	JMP	Fri Sep 18 22:00:00 2020
tCN Chlor T	V-334656	JW	Sat Sep 12 22:00:00 2020
tCN Pyr Barb	V-334659	JW	Fri Sep 18 22:00:00 2020

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
	S1	STANDARD 1	0.0047		0.004723			jw	Fri Sep 11 13:31:03 2020
	S90	STANDARD 90	0.0239		0.023904			jw	Fri Sep 11 13:33:23 2020
	S91	STANDARD 91	0.0914		0.091360			jw	Fri Sep 11 13:35:45 2020
	S92	STANDARD 92	0.2136		0.213606			jw	Fri Sep 11 13:38:05 2020
	S93	STANDARD 93	0.3391		0.339147			jw	Fri Sep 11 13:40:24 2020
	S94	STANDARD 94	0.5013		0.501252			jw	Fri Sep 11 13:42:44 2020
	S95	STANDARD 95	0.6614		0.661393			jw	Fri Sep 11 13:45:03 2020
	S0	STANDARD 0	0.0050		0.004965			jw	Fri Sep 11 13:47:22 2020
	C11	C C V	0.4012	mg/L	0.337263			jw	Fri Sep 11 13:49:40 2020
	C12	C C B	-0.0040	mg/L	0.004934			jw	Fri Sep 11 13:51:57 2020
2	U1	MBS-2418	0.0008	mg/L	0.008802			jw	Fri Sep 11 13:54:14 2020
3	U2	LCSS-2418	0.3538	mg/L	0.298328			jw	Fri Sep 11 13:56:31 2020
4	U3	LCSS-2418 DUP	0.3823	mg/L	0.321734			jw	Fri Sep 11 13:58:49 2020
5	U4	AD19145-001	0.0085	mg/L	0.015137			jw	Fri Sep 11 14:01:06 2020
6	U5	AD19145-001 DUP	0.0065	mg/L	0.013530			jw	Fri Sep 11 14:03:26 2020
7	U6	AD19145-001 MS	0.3174	mg/L	0.268538			jw	Fri Sep 11 14:05:44 2020
8	U7	AD19145-001 MSD	0.2499	mg/L	0.213136			jw	Fri Sep 11 14:08:02 2020
9	U8	AD19145-002	0.0149	mg/L	0.020367			jw	Fri Sep 11 14:10:19 2020
10	U9	AD19145-003	0.0181	mg/L	0.023003			jw	Fri Sep 11 14:12:37 2020
11	U10	AD19145-004	0.0168	mg/L	0.021957			jw	Fri Sep 11 14:14:54 2020
	C11	C C V	0.4087	mg/L	0.343361			jw	Fri Sep 11 14:17:12 2020
	C12	C C B	-0.0038	mg/L	0.005044			jw	Fri Sep 11 14:19:30 2020
12	U11	AD19145-005	0.0158	mg/L	0.021165			jw	Fri Sep 11 14:21:48 2020
13	U12	AD19145-006	-0.0001	mg/L	0.008092			jw	Fri Sep 11 14:24:06 2020
14	U13	AD19145-007	0.0027	mg/L	0.010367			jw	Fri Sep 11 14:26:24 2020
15	U14	AD19145-008	0.0075	mg/L	0.014298			jw	Fri Sep 11 14:28:42 2020
16	U15	AD19145-009	0.0421	mg/L	0.042717			jw	Fri Sep 11 14:31:02 2020
17	U16	AD19145-011	0.0032	mg/L	0.010774			jw	Fri Sep 11 14:33:21 2020
18	U17	AD19145-012	0.0191	mg/L	0.023824			jw	Fri Sep 11 14:35:39 2020
19	U18	AD19145-013	0.0191	mg/L	0.023870			jw	Fri Sep 11 14:37:58 2020
20	U19	AD19160-001	0.0009	mg/L	0.008932			jw	Fri Sep 11 14:40:17 2020
21	U20	AD19160-002	-0.0019	mg/L	0.006593			jw	Fri Sep 11 14:42:37 2020
	C11	C C V	0.4034	mg/L	0.339011			jw	Fri Sep 11 14:44:56 2020
	C12	C C B	0.0024	mg/L	0.010137			jw	Fri Sep 11 14:47:16 2020
22	U21	AD19142-001	0.0044	mg/L	0.011760			jw	Fri Sep 11 14:49:38 2020
23	U22	AD19142-003	0.0047	mg/L	0.012020			jw	Fri Sep 11 14:51:59 2020
24	U23	AD19142-007	0.2736	mg/L	0.232553			jw	Fri Sep 11 14:53:55 2020
25	U24	AD19142-009	0.0002	mg/L	0.008353			jw	Fri Sep 11 14:55:47 2020
26	U25	AD19139-001	-0.0006	mg/L	0.007706			jw	Fri Sep 11 14:57:28 2020
27	U26	AD19139-004	0.0006	mg/L	0.008649			jw	Fri Sep 11 14:59:10 2020
	C11	C C V	0.4081	mg/L	0.342878			jw	Fri Sep 11 15:00:52 2020
	C12	C C B	-0.0028	mg/L	0.005895			jw	Fri Sep 11 15:02:34 2020

Wet Chemistry Data
Preparation and Distillation Logbook Data

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Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B ✓ Total CN____ Amenable CN____ OIA 1677 Avail CN____ SM4500 WAD CN____

Batch No. 24118 STD Cont/ Batch: ____ Distilled by: JW Start Distill. Time: 1130 End Distill. Time 1215 Date: 9/11/20 Reviewed by: [redacted] Date: 9/11/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
MB	✓		0.5	5.5	6.0					
LCS / LCSD		0.12								Balance Used: 023
MS AD19145-001										Pipettes Used: 11,19
MSD										
1.										Micro-dist used: 2,3
Dup 1.										
2. 002										
3. 003										
4. 004										
5. 005										
6. 006										
7. 007										
8. 008										
9. 009										
10. 011										
Cal Curve Blank										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. 0.8 ppm		0.24								V-334658 ☆

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:	V-332257	V-330630	V-334653			

☆ Samples analyzed on AQ2 only 0.8 ppm std used.

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Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B ✓ **Total CN⁻**____ **Amenable CN⁻**____ **OIA 1677 Avail CN⁻**____ **SM4500 WAD CN⁻**____

Batch No. 2418 STD Cont/ Batch: ____ Distilled by: JW Start Distill. Time: 1130 End Distill. Time 1215 Date: 9/11/20 Reviewed by: [illegible] Date: 9/11/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
MB										
LCS										Balance Used:
MS										Pipettes Used:
MSD JW 9/11/20										
1.										Micro-dist used:
~~Dup 1~~ AD19145-012	✓		0.5	5.5	6.0					
2. ↓ 013	↓		↓	↓	↓					
3. AD19160-001										
4. ↓ 002										
5. AD19142-001										
6. ↓ 003										
7. 007										
8. ↓ 009										
9. AD19139-001										
10. ↓ 004	↓		↓	↓	↓					
Cal Curve Blank										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:						

TCLP
Metal Data

TCLP
Metal Data
Sample Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19160-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-5	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7440-39-3	Barium	0.25	0.91	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	35	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	41	P	PEICP4A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19160-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-6	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/10/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A
7440-39-3	Barium	0.25	0.62	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	36	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A
7782-49-2	Selenium	0.40	ND	4	50	50	09/14/20	85267	T26209B4	28	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/11/20	85267	T26209A4	42	P	PEICP4A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

TCLP
Metal Data
QC Data

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/11/20
Data File: T26209A4
Prep Batch: 85267
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333673-5	Rec	CCV V-333673-13	Rec	CCV V-333673-25	Rec	CCV V-333673-36	Rec	CCV V-333673-45	Rec		Rec		Rec		Rec
Arsenic	.5/.5	0.50039	100	0.53461	107	0.52021	104	0.48976	98	0.50374	101						
Barium	.5/.5	0.48866	98	0.49493	99	0.47118	94	0.47507	95	0.46645	93						
Beryllium	.5/.5	0.48700	97	0.49421	99	0.47099	94	0.47422	95	0.46721	93						
Cadmium	.5/.5	0.47497	95	0.48430	97	0.46575	93	0.45995	92	0.45009	90						
Chromium	.5/.5	0.50276	101	0.51185	102	0.48777	98	0.49268	99	0.48341	97						
Copper	.5/.5	0.49304	99	0.50290	101	0.47099	94	0.47392	95	0.47245	94						
Lead	.5/.5	0.48745	97	0.50421	101	0.48663	97	0.47953	96	0.46821	94						
Nickel	.5/.5	0.48910	98	0.49592	99	0.48113	96	0.47482	95	0.46335	93						
Selenium	.5/.5	0.48889	98	0.50332	101	0.47031	94	0.47862	96	0.48459	97						
Silver	0.1/0.1	0.09890	99	0.10094	101	0.09591	96	0.09675	97	0.09488	95						
Zinc	.5/.5	0.48275	97	0.48753	98	0.47450	95	0.47595	95	0.46419	93						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/11/20
Data File: T26209A4
Prep Batch: 85267
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333672	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-333660	Recovery	Low Limit	High Limit
Magnesium	5.0	4.77422	95	80	120		500	469.404	94	90	110
Silver	0.05	0.0481906	96	80	120		1	0.980899	98	90	110
Aluminum	1.0	1.03350	103	80	120		500	514.270	103	90	110
Arsenic	0.1	0.117118	117	80	120		10	9.81108	98	90	110
Boron	0.2	0.211651	106	80	120		5	4.86077	97	90	110
Barium	0.25	0.258644	103	80	120		10	10.3591	104	90	110
Beryllium	0.012	0.0111239	93	80	120		5	4.62516	93	90	110
Calcium	5.0	4.78911	96	80	120		500	452.203	90	90	110
Cadmium	0.05	0.0504155	101	80	120		5	4.95325	99	90	110
Cobalt	0.1	0.0933729	93	80	120		5	4.30869	86 a	90	110
Chromium	0.1	0.0924974	92	80	120		10	9.07795	91	90	110
Copper	0.1	0.101932	102	80	120		10	10.7620	108	90	110
Silicon	0.1	0.130219	130 a	80	120		25	25.7444	103	90	110
Iron	1.0	0.900588	90	80	120		200	192.017	96	90	110
Zinc	0.1	0.0956542	96	80	120		10	8.57275	86 a	90	110
Manganese	0.1	0.101739	102	80	120		10	9.43128	94	90	110
Molybdenum	0.1	0.0958488	96	80	120		10	9.18772	92	90	110
Sodium	NA	22.1784		80	120		1000	1246.76	125 a	90	110
Nickel	0.1	0.0953689	95	80	120		10	8.64968	86 a	90	110
Lead	0.05	0.0497266	99	80	120		10	9.37398	94	90	110
Antimony	0.07	0.0625745	89	80	120		5	5.26388	105	90	110
Selenium	0.1	0.0890183	89	80	120		5	5.04237	101	90	110
Tin	0.1	0.100972	101	80	120		10	9.67326	97	90	110
Titanium	0.1	0.0921051	92	80	120		10	9.80496	98	90	110
Thallium	0.1	0.0949242	95	80	120		5	4.46542	89 a	90	110
Vanadium	0.1	0.0955012	96	80	120		10	9.27524	93	90	110
Potassium	NA	-7.37949		80	120		200	-1825.12	-910 a	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/14/20
Data File: T26209B4
Prep Batch: 85267
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333673-5	Rec	CCV V-333673-12	Rec	CCV V-333673-20	Rec	CCV V-329036-29	Rec	Rec	Rec	Rec	Rec	Rec
Selenium	.5/.5	0.50097	100	0.51270	103	0.51716	103	0.48912	98					

Notes:
a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/14/20
Data File: T26209B4
Prep Batch: 85267
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333672	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-333660	Recovery	Low Limit	High Limit	
Manganese	0.1	0.104444	104	80	120		10	9.37519	94	90	110	
Aluminum	1.0	1.03895	104	80	120		500	516.230	103	90	110	
Arsenic	0.1	0.0915433	92	80	120		10	10.0144	100	90	110	
Boron	0.2	0.218740	109	80	120		5	4.78262	96	90	110	
Barium	0.25	0.248922	100	80	120		10	9.99294	100	90	110	
Beryllium	0.012	0.0144897	121 a	80	120		5	4.67063	93	90	110	
Calcium	5.0	5.19939	104	80	120		500	487.199	97	90	110	
Cadmium	0.05	0.0549810	110	80	120		5	4.98959	100	90	110	
Cobalt	0.1	0.103356	103	80	120		5	4.86037	97	90	110	
Chromium	0.1	0.102190	102	80	120		10	8.83065	88 a	90	110	
Copper	0.1	0.0925897	93	80	120		10	10.4107	104	90	110	
Iron	1.0	0.896100	90	80	120		200	192.149	96	90	110	
Silver	0.05	0.0568196	114	80	120		1	1.15316	115 a	90	110	
Magnesium	5.0	5.74677	115	80	120		500	505.105	101	90	110	
Zinc	0.1	0.107099	107	80	120		10	9.25865	93	90	110	
Molybdenum	0.1	0.101763	102	80	120		10	9.17401	92	90	110	
Sodium	NA	23.0849		80	120		1000	1288.51	129 a	90	110	
Nickel	0.1	0.102311	102	80	120		10	8.73820	87 a	90	110	
Lead	0.05	0.0543093	109	80	120		10	9.58889	96	90	110	
Antimony	0.07	0.0788527	113	80	120		5	5.56026	111 a	90	110	
Selenium	0.1	0.101324	101	80	120		5	5.32267	106	90	110	
Silicon	0.1	0.144360	144 a	80	120		25	27.1781	109	90	110	
Tin	0.1	0.105374	105	80	120		10	10.0466	100	90	110	
Titanium	0.1	0.103977	104	80	120		10	9.47425	95	90	110	
Thallium	0.1	0.103297	103	80	120		5	4.34938	87 a	90	110	
Vanadium	0.1	0.0877360	88	80	120		10	9.06194	91	90	110	
Potassium	NA	-6.03669		80	120		200	-1820.48	-910 a	90	110	

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/14/20
Data File: H26209T
Prep Batch: 85267
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-21		CCV-33		CCV-39								
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec	
Mercury	20/10	20.01000	100	10.27000	103	10.25000	102	10.30000	103							

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/11/20
Data File: T26209A4
Prep Batch: 85267
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-14	CCB V-333667-26	CCB V-333667-37	CCB V-333667-46	MB 85267 (1)-15	EF V-334254 9/10-43	EF V-334254-9/11-44
Arsenic	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Barium	.125U	.25U	.25U	.25U	.25U	.13U	.25U	.25U
Beryllium	.006U	.012U	.012U	.012U	.012U	.006U	.012U	.012U
Cadmium	.025U	.05U	.05U	.05U	.05U	.025U	.05U	.05U
Chromium	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Copper	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Lead	.025U	.05U	.05U	.05U	.05U	.025U	.05U	.05U
Nickel	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Selenium	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U
Silver	.025U	.05U	.05U	.05U	.05U	.025U	.05U	.05U
Zinc	.05U	.1U	.1U	.1U	.1U	.05U	.1U	.1U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/14/20
Data File: T26209B4
Prep Batch: 85267
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-21	CCB V-329027-30				
Selenium	.05 U	.1 U	.1 U	.1 U				

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/14/20
Data File: H26209T
Prep Batch: 85267
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-40	MB 85267 (1)-11	EF V-334254 A-37	EF V-334254 B-38
Mercury	.5 U	.5 U	.5 U	.5 U	.5 U	.5U	.5U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/11/20
Data File: T26209A4
Prep Batch: 85267
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-12	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	527.672	106							
Arsenic	0	U								
Barium	0	U								
Beryllium	0	U								
Cadmium	0	U								
Calcium	500	471.631	94							
Chromium	0	U								
Copper	0	U								
Iron	200	179.863	90							
Lead	0	U								
Magnesium	500	495.906	99							
Nickel	0	U								
Selenium	0	U								
Silver	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/14/20
Data File: T26209B4
Prep Batch: 85267
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091007

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	527.55	106							
Calcium	500	493.553	99							
Iron	200	174.553	87							
Magnesium	500	521.096	104							
Selenium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85267

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCSW MR 85267

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85267	1	T26209A4	17	0.4745	0.50	95		80	120
Barium	85267	1	T26209A4	17	0.5166	0.50	103		80	120
Cadmium	85267	1	T26209A4	17	0.4917	0.50	98		80	120
Chromium	85267	1	T26209A4	17	0.5089	0.50	102		80	120
Lead	85267	1	T26209A4	17	0.4986	0.50	100		80	120
Mercury	85267	1	H26209T	13	10.4100	10	104		80	120
Nickel	85267	1	T26209A4	17	0.5057	0.50	101		80	120
Selenium	85267	1	T26209A4	17	0.4985	0.50	100		80	120
Silver	85267	1	T26209A4	17	0.1016	0.100	102		80	120

TxtQcType: LCS Matrix: TCLP SampleID: LCSW 85267

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85267	1	T26209A4	16	0.4754	0.50	95		80	120
Barium	85267	1	T26209A4	16	0.5163	0.50	103		80	120
Cadmium	85267	1	T26209A4	16	0.5002	0.50	100		80	120
Chromium	85267	1	T26209A4	16	0.5242	0.50	105		80	120
Lead	85267	1	T26209A4	16	0.5078	0.50	102		80	120
Mercury	85267	1	H26209T	12	10.3000	10	103		80	120
Nickel	85267	1	T26209A4	16	0.5102	0.50	102		80	120
Selenium	85267	1	T26209A4	16	0.5182	0.50	104		80	120
Silver	85267	1	T26209A4	16	0.1029	0.100	103		80	120

TxtQcType: MSD Matrix: TCLP SampleID: AD19159-006

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85267	1	T26209A4	21	T26209A4	18	0.5207	0.1U	0.5	104		50	
Barium	85267	1	T26209A4	21	T26209A4	18	2.5045	1.8549	0.5	130		50	
Cadmium	85267	1	T26209A4	21	T26209A4	18	0.5149	0.05U	0.5	103		50	
Chromium	85267	1	T26209A4	21	T26209A4	18	0.5037	0.1U	0.5	101		50	
Lead	85267	1	T26209A4	21	T26209A4	18	0.4761	0.05U	0.5	95		50	
Mercury	85267	1	H26209T	17	H26209T	14	9.7550	0.50U	10	98		50	
Nickel	85267	1	T26209A4	21	T26209A4	18	0.4808	0.1U	0.5	96		50	
Selenium	85267	4	T26209B4	17	T26209B4	14	0.1607	0.1U	0.5	129		50	
Silver	85267	1	T26209A4	21	T26209A4	18	0.1212	0.05U	0.10	121		50	

TxtQcType: MS Matrix: TCLP SampleID: AD19159-005

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85267	1	T26209A4	20	T26209A4	18	0.5085	0.1U	0.50	102		50	
Barium	85267	1	T26209A4	20	T26209A4	18	2.5927	1.8549	0.50	148		50	
Cadmium	85267	1	T26209A4	20	T26209A4	18	0.5111	0.05U	0.50	102		50	
Chromium	85267	1	T26209A4	20	T26209A4	18	0.5048	0.1U	0.50	101		50	
Lead	85267	1	T26209A4	20	T26209A4	18	0.4860	0.05U	0.50	97		50	
Mercury	85267	1	H26209T	16	H26209T	14	10.0900	0.50U	10	101		50	
Nickel	85267	1	T26209A4	20	T26209A4	18	0.4785	0.1U	0.50	96		50	
Selenium	85267	4	T26209B4	16	T26209B4	14	0.1745	0.1U	0.50	140		50	
Silver	85267	1	T26209A4	20	T26209A4	18	0.1213	0.05U	0.100	121		50	

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85267

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS | Matrix: TCLP | SampleID: AD19159-004

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	T26209A4	22	T26209A4	18	0.5411	0.1U	0.5	108		75	125
Barium	1	T26209A4	22	T26209A4	18	2.3333	1.8549	0.5	96		75	125
Cadmium	1	T26209A4	22	T26209A4	18	0.5184	0.05U	0.5	104		75	125
Chromium	1	T26209A4	22	T26209A4	18	0.5244	0.1U	0.5	105		75	125
Lead	1	T26209A4	22	T26209A4	18	0.5066	0.05U	0.5	101		75	125
Nickel	1	T26209A4	22	T26209A4	18	0.4912	0.1U	0.5	98		75	125
Selenium	4	T26209B4	18	T26209B4	14	0.5731	0.1U	0.5	115		75	125
Silver	1	T26209A4	22	T26209A4	18	0.0866	0.05U	0.1	87		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85267

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCSW MR 85267

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85267	T26209A4	17	T26209A4	16	0.4745	0.4754	.18	20
Barium	85267	T26209A4	17	T26209A4	16	0.5166	0.5163	.048	20
Cadmium	85267	T26209A4	17	T26209A4	16	0.4917	0.5002	1.7	20
Chromium	85267	T26209A4	17	T26209A4	16	0.5089	0.5242	3	20
Lead	85267	T26209A4	17	T26209A4	16	0.4986	0.5078	1.8	20
Mercury	85267	H26209T	13	H26209T	12	10.4100	10.3000	1.1	20
Nickel	85267	T26209A4	17	T26209A4	16	0.5057	0.5102	.87	20
Selenium	85267	T26209A4	17	T26209A4	16	0.4985	0.5182	3.9	20
Silver	85267	T26209A4	17	T26209A4	16	0.1016	0.1029	1.3	20

TxtQcType: MR Matrix: TCLP SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85267	T26209A4	19	T26209A4	18	0.1U	0.1U	---	20
Barium	85267	T26209A4	19	T26209A4	18	1.8546	1.8549	0.015	20
Cadmium	85267	T26209A4	19	T26209A4	18	0.05U	0.05U	---	20
Chromium	85267	T26209A4	19	T26209A4	18	0.1U	0.1U	---	20
Lead	85267	T26209A4	19	T26209A4	18	0.05U	0.05U	---	20
Mercury	85267	H26209T	15	H26209T	14	0.50U	0.50U	---	20
Nickel	85267	T26209A4	19	T26209A4	18	0.1U	0.1U	---	20
Selenium	85267	T26209B4	15	T26209B4	14	0.1U	0.1U	---	20
Silver	85267	T26209A4	19	T26209A4	18	0.05U	0.05U	---	20

TxtQcType: MSD Matrix: TCLP SampleID: AD19159-006

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85267	T26209A4	21	T26209A4	20	0.5207	0.5085	2.4	20
Barium	85267	T26209A4	21	T26209A4	20	2.5045	2.5927	3.5	20
Cadmium	85267	T26209A4	21	T26209A4	20	0.5149	0.5111	.75	20
Chromium	85267	T26209A4	21	T26209A4	20	0.5037	0.5048	.22	20
Lead	85267	T26209A4	21	T26209A4	20	0.4761	0.4860	2.1	20
Mercury	85267	H26209T	17	H26209T	16	9.7550	10.0900	3.4	20
Nickel	85267	T26209A4	21	T26209A4	20	0.4808	0.4785	.49	20
Selenium	85267	T26209B4	17	T26209B4	16	0.1607	0.1745	8.2	20
Silver	85267	T26209A4	21	T26209A4	20	0.1212	0.1213	.1	20

TxtQcType: SD Matrix: TCLP SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85267	T26209A4	23	T26209A4	18	5	0.0069	-0.0043	---		10
Barium	85267	T26209A4	23	T26209A4	18	5	0.3796	1.8549	2.3		10
Cadmium	85267	T26209A4	23	T26209A4	18	5	0.0052	0.0123	111	c	10
Chromium	85267	T26209A4	23	T26209A4	18	5	0.0016	0.0244	68	c	10
Lead	85267	T26209A4	23	T26209A4	18	5	0.0057	0.0327	---		10
Nickel	85267	T26209A4	23	T26209A4	18	5	0.0026	0.0139	7.5		10
Selenium	85267	T26209B4	19	T26209B4	14	5	0.0007	0.0419	---		10
Silver	85267	T26209A4	23	T26209A4	18	5	0.0041	0.0149	38	c	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

TCLP
Metal Data
Verification of Instrument Parameters

INTERELEMENT CORRECTION SUMMARY PEICP4ax

Interfered Elements	Interfering Elements								
	Al	Ca	Fe	Mg	B	Ba	Cu	Mn	Mo
Al	N/A	0	0	0	0	0	0	0	25.4
Sb	0	0	0	0	0	0	0	0	-17.50
As	0.032	0	-0.07	0	0	0	0	0	24.8
Ba	0	0	0	0	0	N/A	0	0	0
Be	0	0	0	0	0	0	0	0	0
B	0	0	3.4	0	N/A	-3.91	0	-2.61	-5.9
Cd	0	0	0	0	0	0	0	0	0
Ca	0	N/A	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0	0
Cu	0	0	-0.1	0	0	0	N/A	0	0
Fe	0	0	N/A	0	0	0	0	0	0
Pb	-0.04	0	0.125	0	0	0	3.06	0	-3.66
Mg	0	0	0	N/A	0	0	0	0	0
Mn	0	0	0	0	0	0	0	N/A	0
Mo	0	0	0.0000	0	0	0	0	0	N/A
Ni	0	0	0	0	0	0	0	0	-2.79
Se	0	-0.08	-0.5	-0.034	0	0	0	0	0
Si	-0.288	-0.234	-2.39	-0.127	-22.10	-12.4	-14.50	-19.5	3.97
Ag	0	0	-0.065	0	0	0	0	0	0
Na	0	0	0	0	0	0	0	0	0
Tl	-0.028	0.06	0	0	0	2.32	0	-3.65	4.3
Sn	0	0	0	0	0	0	0	0	0
Ti	0	-0.076	0	0	0	0	0	0	0
V	0	0	0.035	-0.058	0	0	0	0	0
Zn	0	0	0	0	0	0	0	0	0
K	0	0	10771.7	0	0	0	0	0	0

IECs run 07/15/19. Sn mod 07/19/19; Cu mod 08/12/19; V mod 01/06/20; Sb mod 01/09/20; B, Ti mod 01/18/20; Ag, As, Mo, Pb, Se, Tl mod 03/11/20.

INTERELEMENT CORRECTION SUMMARY PEICP4ax

	Interfering Elements							
Interfered Elements	Na	Ni	Se	Si	Sn	Ti	V	Zn
Al	0	0	0	0	0	0	-53.2	0
Sb	0	0	0	0	-2.52	0	-3.51	0
As	0	0	0	0	5.11	0	18.3	0
Ba	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0	0	0
B	0.0096	-3.28	-7.4	-1.39	-3.26	-3.97	-4.33	-4.06
Cd	0	0	0	0	0	0	0	0
Ca	0	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	-4.63	0
Co	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	0	0
Fe	0	0	0	0	0	0	0.0	0
Pb	0	0	0	0	0	0	0	0
Mg	0	0	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0
Mo	0	0	0	0	0	0	0	0
Ni	0	N/A	0	0	0	0	0	0
Se	0	0	N/A	0	0	0	0	0
Si	-0.0333	-12.5	-19.90	N/A	-8.16	-10.1	-12.90	-11.9
Ag	0	0	0	0	0	0	-5.03	0
Na	N/A	0	0	0	0	0	0	0
Tl	0	0	0	0	0	-4.11	3.17	0
Sn	0	0	0	0	N/A	3.64	0	0
Ti	0	0	0	0	0	N/A	0	0
V	0	0	0	0	0	0	N/A	0
Zn	0	0	0	0	0	0	0	N/A
K	0	0	0	0	0	0	0	0

IECs run 07/15/19. Sn mod 07/19/19; Cu mod 08/12/19; V mod 01/06/20; Sb mod 01/09/20; B, Ti mod 01/18/20; Ag, As, Mo, Pb, Se, Tl mod 03/11/20.

MDL / RL SUMMARY
TCLP/SPLP
PE ICP 4 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/L)
AL	0.04124271	1
SB	0.03931955	0.07
AS	0.03438659	0.1
BA	0.00333959	0.25
BE	0.00524005	0.012
B	0.02711428	0.2
CD	0.00615363	0.05
CA	2.65167871	5
CR	0.00700712	0.1
CO	0.00382472	0.1
CU	0.02781758	0.1
FE	0.58649802	1
PB	0.0133322	0.05
MG	0.84264167	5
MN	0.00845022	0.1
MO	0.00271515	0.1
NI	0.00521027	0.1
SE	0.03922213	0.1
SI*	0.27653066	0.1
AG	0.01003449	0.05
NA	3.54005202	25
TL	0.04446035	0.1
SN	0.01672084	0.1
TI	0.00534095	0.1
V	0.01672283	0.1
ZN	0.02197619	0.1

COMPLETED: 12/2019

HGCV3 MDL/RL SUMMARY

Element: *Mercury*
Instrument: *PE FIMS 100*
Technique: *CV*

Instrument ID: *HgCV3*
Analyst *Carmela Aliano*

200 Series	METHOD	MDL (ppb)	Completed	RL (ppb)
H_2O	245.1	0.0794	12/31/2019	0.20
SW846				
H_2O	7470A	0.1740	12/31/2019	0.50
SOIL	7471 B	0.0757 (0.0126 mg/kg)	12/31/2019	0.50 (0.0833 mg/kg)

TCLP
Metal Data
Raw Data

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85267 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85267 (1) Units: MG/L Lab Code:
Matrix: TCLP
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.035	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-38-2	Arsenic	0.050	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-39-3	Barium	0.12	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-41-7	Beryllium	0.0060	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-43-9	Cadmium	0.025	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-47-3	Chromium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-50-8	Copper	0.050	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7439-92-1	Lead	0.025	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/14/20	85267	H26209T	11	CV	HGCV3A
7440-02-0	Nickel	0.050	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7782-49-2	Selenium	0.050	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-22-4	Silver	0.025	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A
7440-66-6	Zinc	0.050	ND	1	50	50	09/11/20	85267	T26209A4	15	P	PEICP4A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-331024

Prepared By: Silva, Amanda
Description: 1:1 HCl WARNING
Prep Date: 7/7/2020
Expiration Date: 1/7/2021
Department: Metals
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13275	hydrochloric acid	500 ml	neat neat	

Veritech Lot Number: V-331982

Prepared By: Cousineau, Paul
Description: B, Si, Ce INTERMEDIATE
Prep Date: 7/23/2020
Expiration Date: 10/23/2020
Department: Metals
BatchNumber:
Concentration: 100 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 07/28/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	5 ml	neat neat	
13169	hydrochloric acid	5 ml	neat neat	
12976	BORON	10 ml	CONC conc	100 ppm
12977	SILICON	10 ml	CONC conc	100 ppm
13092	CERIUM	10 ml	CONC conc	100 ppm

Veritech Lot Number: V-333660

Prepared By: Aliano, Carmela
Description: LRS 1/2 Fe
Prep Date: 8/24/2020
Expiration Date: 10/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	335 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12915	LINEAR RANGE 1B	50 ml	neat neat	
12917	linear range 1C	50 ml	neat neat	
13092	CERIUM	12.5 ml	CONC conc	
12976	BORON	2.5 ml	CONC conc	
12977	SILICON	12.5 ml	CONC conc	

Veritech Lot Number: V-333665

Prepared By: Aliano, Carmela
Description: ICS4 High std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: various mg/l
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	434.5 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	1
12977	SILICON	5 ml	CONC conc	10

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333666

Prepared By: Aliano, Carmela
Description: ICS3 - Middle Std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	944.75 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	.5
12977	SILICON	5 ml	CONC conc	5
13092	CERIUM	5 ml	CONC conc	5

Veritech Lot Number: V-333667

Prepared By: Aliano, Carmela
Description: ICB/CCB
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: 0 mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	

Veritech Lot Number: V-333668

Prepared By: Aliano, Carmela
Description: ICSA
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: MULTI mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13176	ICSA	50 ml	NEAT neat	

Veritech Lot Number: V-333672

Prepared By: Aliano, Carmela
Description: LLICV/CCV leachate
Prep Date: 8/24/2020
Expiration Date: 10/30/2020
Department: WetChem
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
12918	LL-LEACH	10 ml	neat neat	
12976	BORON	.2 ml	CONC conc	0.2 ppm
12977	SILICON	.05 ml	CONC conc	0.05 ppm
13092	CERIUM	.05 ml	CONC conc	0.05 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333673

Prepared By: Aliano, Carmela	Department: Metals	ApprovedBy: carmela
Description: CCV	BatchNumber:	ApproveDate: 08/24/20
Prep Date: 8/24/2020	Concentration: MULTI multi	Checked: Yes
Expiration Date: 2/20/2021	Final Volume: 1000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13171	ICV 1	10 ml	NEAT neat	
13170	ICV 2	10 ml	CONC conc	
12981	BORON	.5 ml	CONC conc	
13091	CERIUM	5 ml	CONC conc	
12933	silicon	5 ml	CONC conc	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12915

Description
LINEAR RANGE 1B

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-40-500	7/271ab	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12917

Description
linear range 1C

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
spex	XHCV-44-500	8-002AB	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12918

Description
LL-LEACH

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
spex	XHCV-25-500	8-001AB	10/19/19	10/30/20	Aliano, Carmela	1	500ml	neat	neat

Veritech Control/Receipt Number: 12933

Description
silicon

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-145	S191206040	12/13/19	12/30/21	Aliano, Carmela	4	500m	CONC	CONC

Veritech Control/Receipt Number: 12976

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLB9-2X	24-110BX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12977

Description
SILICON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLSI9-2X	24-93SIX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12981

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-050-055	S190719015	01/06/20	07/30/21	Aliano, Carmela	3	500ml	CONC	CONC

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12983

Description
CALIBRATION 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	8/214AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 12984

Description
CALIBRATION 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	8/215AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13091

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	140-051-585	S190710006	03/04/20	07/30/21	Aliano, Carmela	2	500ml	CONC	CONC

Veritech Control/Receipt Number: 13092

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLCE2-2X	24-15CEX	03/04/20	02/28/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13168

Description
nitric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	245675	04/07/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13169

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	04/07/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13170

Description
ICV 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S200306032	04/07/20	03/31/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13171

Description
ICV 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S200306031	04/07/20	03/31/21	Aliano, Carmela	2	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13176

Description
ICSA

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-30	9-265AB	04/07/20	03/31/21	Aliano, Carmela	4	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13275

Description
hydrochloric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	06/02/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334615

Prepared By: Ransaw, Brianna
Description: Hg Intermediate Standard -WARNING
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29664
Concentration: .25 ppm
Final Volume: 500 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13311	MERCURY 1000 PPM	.125 ml	1000 ug/ml	
13421	nitric acid	12.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334616

Prepared By: Ransaw, Brianna
Description: Hg intermediate Control -WARNING
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29664
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334672

Prepared By: Silva, Amanda
Description: Hg AQ ICV 20 ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29669
Concentration: 20 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334616	Hg intermediate Control -WARNING	.5 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334673

Prepared By: Silva, Amanda
Description: Hg AQ CCV 10 ppb
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29669
Concentration: 10 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334616	Hg intermediate Control -WARNING	.25 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334674

Prepared By: Silva, Amanda
Description: Hg AQ standard blk
Prep Date: 9/11/2020
Expiration Date: 9/11/2020
Department: Metals
BatchNumber: B-29669
Concentration: 0 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334675

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard .2 ppb | BatchNumber: B-29669 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: .2 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.02 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334676

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard .5 ppb | BatchNumber: B-29669 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: .5 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.05 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334677

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard 1 ppb | BatchNumber: B-29669 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 1 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334678

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard 2 ppb | BatchNumber: B-29669 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 2 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.2 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334679

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard 5 ppb | BatchNumber: B-29669 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 5 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	.5 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334680

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard 10 ppb | BatchNumber: B-29669 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 10 ppb | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	1 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334681

Prepared By:	Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description:	Hg AQ standard 25 ppb	BatchNumber: B-29669	ApproveDate: 09/15/20
Prep Date:	9/11/2020	Concentration: 25 ppb	Checked: Yes
Expiration Date:	9/11/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334615	Hg Intermediate Standard -WARNING	2.5 ml	.25 ppm	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13311

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SCP	140-051-801	S200130001	06/04/20	12/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-317822

Prepared By: Aliano, Carmela | Department: Metals | ApprovedBy: shiamala
Description: Hydroxylamine Hydrochloride WARNIN | BatchNumber: | ApproveDate: 12/16/19
Prep Date: 12/13/2019 | Concentration: reagent reage | Checked: Yes
Expiration Date: 1/8/2020 | Final Volume: 10 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12651	DI H2O			
12218	Sodium Chloride	1200 g	neat neat	
12619	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-327154

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: 5% Potassium Persulfate WARNING | BatchNumber: | ApproveDate: 05/07/20
Prep Date: 5/7/2020 | Concentration: reagent reage | Checked: Yes
Expiration Date: 11/6/2020 | Final Volume: 12620 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12620	POTASSIUM PERSULFATE	500 g	NEAT neat	

Veritech Lot Number: V-331286

Prepared By: Lucca, Daniela | Department: Metals | ApprovedBy: shiamala
Description: 5% Potassium Permanganate WARNIN | BatchNumber: | ApproveDate: 07/16/20
Prep Date: 7/13/2020 | Concentration: reagent reage | Checked: Yes
Expiration Date: 2/13/2021 | Final Volume: 20 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12621	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-334616

Prepared By: Ransaw, Brianna | Department: Metals | ApprovedBy: shiamala
Description: Hg intermediate Control -WARNING | BatchNumber: B-29664 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 1.0 ppm | Checked: Yes
Expiration Date: 9/11/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334627

Prepared By: Ransaw, Brianna | Department: WetChem | ApprovedBy: shiamala
Description: 3% HCL WARNING | BatchNumber: | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: 3 % | Checked: Yes
Expiration Date: 9/20/2020 | Final Volume: 20 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13130	hydrochloric acid	600 ml	neat neat	3%
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334715

Prepared By:	Ransaw, Brianna	Department:	Metals	ApprovedBy:	shiamala
Description:	SnCl2 "WARNING:"	BatchNumber:		ApproveDate:	09/15/20
Prep Date:	9/14/2020	Concentration:	reagent I	Checked:	Yes
Expiration Date:	9/14/2020	Final Volume:	2 l		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334627	3% HCL WARNING	2000 ml	3 %	
13089	STANNOUS CHOLORIDE	26.4 g		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12218

Description
Sodium Chloride

ApprovedBy: akmal
ApproveDate: 12/31/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	SX0420-5	17F145203	12/27/18	12/26/23	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12619

Description
HYDROXYLAMINE HYDROCHLORIDE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LS-1580015	190318-4C	06/25/19	06/24/23	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12620

Description
POTASSIUM PERSULFATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-4445NG	170106-A	06/25/19	08/09/21	Balashanthan, Shi	1	2.5KG	NEAT	NEAT

Veritech Control/Receipt Number: 12621

Description
POTASSIUM PERMANGANATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB SALES	LC-T10208	190318-3C	06/25/19	06/24/29	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12651

Description
DI H2O

ApprovedBy: janee
ApproveDate: 10/10/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	07/08/19	07/07/20	Cousineau, Paul	1			

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13089

Description
STANNOUS CHOLORIDE

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LAB CHEM	LC-P33805	190620-3C	02/15/20	02/14/23	Aliano, Carmela	1	1Gal		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy: jessica
ApproveDate: 09/21/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\T26209A4.txt

Analysis Date: 09/11/20 **Instrument:** PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	17:51	1							V-333667(ICB/CCB)
CALST2 V-333672	1	CAL	17:55	2							V-333672(LLICV/CCV leachate)
CALST3 V-333666	1	CAL	17:59	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	18:03	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	18:07	5							V-333673(CCV)
ICB V-333667	1	ICB	18:11	6							V-333667(ICB/CCB)
LRS V-333660	1	NA	18:15	7		TCLP	TCLP	SW846	85267		V-333660(LRS 1/2 Fe)
ICS3 V-333666	1	ICS	18:19	8							V-333666(ICS3 - Middle Std)
LRS V-333660	1	LRS	18:23	9		TCLP	TCLP	SW846	85267		V-333660(LRS 1/2 Fe)
RINSE	1	SMP	18:28	10		TCLP	TCLP	SW846	85267		()
LLICV V-333672	1	LLICV	18:32	11		TCLP	TCLP	SW846	85267		V-333672(LLICV/CCV leachate)
ICSA V-333668	1	ICSA	18:36	12							V-333668(ICSA)
CCV V-333673	1	CCV	18:40	13							V-333673(CCV)
CCB V-333667	1	CCB	18:44	14							V-333667(ICB/CCB)
MB 85267 (1)	1	MB	18:48	15		TCLP	TCLP	SW846	85267		()
LCSW 85267	1	LCS	18:52	16		TCLP	TCLP	SW846	85267		()
LCSW MR 85267	1	LCS	18:56	17		TCLP	TCLP	SW846	85267		()
AD19159-004	1	SMP	19:00	18		TCLP	TCLP	SW846	85267	Se/Zn NOT REPORTED>LR	()
AD19159-004	1	MR	19:05	19	METALS-TCLP	TCLP	TCLP	SW846	85267	Se/Zn NOT REPORTED>LR	()
AD19159-005	1	MS	19:09	20	METALS-TCLP	TCLP	TCLP	SW846	85267	Se/Zn NOT REPORTED>LR	()
AD19159-006	1	MSD	19:13	21	METALS-TCLP	TCLP	TCLP	SW846	85267	Se/Zn NOT REPORTED>LR	()
AD19159-004	1	PS	19:17	22	METALS-TCLP	TCLP	TCLP	SW846	85267	Se/Zn NOT REPORTED>LR	()
AD19159-004	5	SD	19:22	23	METALS-TCLP	TCLP	TCLP	SW846	85267	Se/Zn NOT REPORTED>LR	()
AD19143-001	1	SMP	19:26	24	METALS-TCLP	TCLP	TCLP	SW846	85267		()
CCV V-333673	1	CCV	19:30	25							V-333673(CCV)
CCB V-333667	1	CCB	19:34	26							V-333667(ICB/CCB)
AD19139-001	1	SMP	19:38	27	METALS-TCLP	TCLP	TCLP	SW846	85267		()
AD19139-004	1	SMP	19:42	28	METALS-TCLP	TCLP	TCLP	SW846	85267		()
AD19148-002	1	SMP	19:46	29	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	()
AD19084-001	1	SMP	19:50	30	METALS-TCLP	TCLP	TCLP	SW846	85267		()
AD19159-001	1	SMP	19:54	31	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	()
AD19159-002	1	SMP	19:59	32	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	()
AD19159-003	1	SMP	20:03	33	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	()
AD19159-007	1	SMP	20:07	34	METALS-TCLP	TCLP	TCLP	SW846	85267		()
AD19159-008	1	SMP	20:11	35	METALS-TCLP	TCLP	TCLP	SW846	85267		()
CCV V-333673	1	CCV	20:16	36							V-333673(CCV)
CCB V-333667	1	CCB	20:20	37							V-333667(ICB/CCB)
AD19159-009	1	SMP	20:24	38	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	()
AD19159-010	1	SMP	20:28	39	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	()
AD19159-011	1	SMP	20:32	40	METALS-TCLP	TCLP	TCLP	SW846	85267		()
AD19160-001	1	SMP	20:36	41	METALS-TCLP	TCLP	TCLP	SW846	85267		()
AD19160-002	1	SMP	20:40	42	METALS-TCLP	TCLP	TCLP	SW846	85267	Se NOT REPORTED Ca>LR	()
EF V-334254 9/10	1	EF	20:45	43		TCLP	TCLP	SW846	85267		V-334254 9/10()
EF V-334254-9/11	1	EF	20:49	44		TCLP	TCLP	SW846	85267		V-334254-9/11()
CCV V-333673	1	CCV	20:53	45							V-333673(CCV)
CCB V-333667	1	CCB	20:57	46							V-333667(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.89 9/14/2020 8:43:35 AM

OK
ALL ELEMENTS REPORTED

9/16/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\T26209B4.txt

Analysis Date: 09/14/20 **Instrument:** PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	09:20	1							V-333667(ICB/CCB)
CALST2 V-333672	1	CAL	09:24	2							V-333672(LLICV/CCV leachate)
CALST3 V-333666	1	CAL	09:28	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	09:32	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	09:37	5							V-333673(CCV)
ICB V-333667	1	ICB	09:41	6							V-333667(ICB/CCB)
LRS V-333660	1	LRS	09:45	7	METALS-TCLP	TCLP	TCLP	SW846	85267		V-333660(LRS 1/2 Fe)
ICS3 V-333666	1	ICS	09:50	8							V-333666(ICS3 - Middle Std)
RINSE	1	SMP	09:54	9		TCLP	TCLP	SW846	85267		()
LLICV V-333672	1	LLICV	09:57	10	METALS-TCLP	TCLP	TCLP	SW846	85267		V-333672(LLICV/CCV leachate)
ICSA V-333668	1	ICSA	10:01	11							V-333668(ICSA)
CCV V-333673	1	CCV	10:06	12							V-333673(CCV)
CCB V-333667	1	CCB	10:10	13							V-333667(ICB/CCB)
AD19159-004	4	SMP	10:14	14	METALS-TCLP	TCLP	TCLP	SW846	85267	Se,Zn REPORTED	()
AD19159-004	4	MR	10:18	15	METALS-TCLP	TCLP	TCLP	SW846	85267	Se,Zn REPORTED	()
AD19159-005	4	MS	10:23	16	METALS-TCLP	TCLP	TCLP	SW846	85267	Se,Zn REPORTED	()
AD19159-006	4	MSD	10:27	17	METALS-TCLP	TCLP	TCLP	SW846	85267	Se,Zn REPORTED	()
AD19159-004	4	PS	10:31	18	METALS-TCLP	TCLP	TCLP	SW846	85267	Se,Zn REPORTED	()
AD19159-004	4	SD	10:35	19	METALS-TCLP	TCLP	TCLP	SW846	85267	Se,Zn REPORTED	()
CCV V-333673	1	CCV	10:39	20							V-333673(CCV)
CCB V-333667	1	CCB	10:43	21							V-333667(ICB/CCB)
AD19148-002	4	SMP	10:47	22	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	()
AD19159-001	4	SMP	10:52	23	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	()
AD19159-002	4	SMP	10:56	24	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	()
AD19159-003	4	SMP	11:00	25	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	()
AD19159-009	4	SMP	11:04	26	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	()
AD19159-010	4	SMP	11:08	27	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	()
AD19160-002	4	SMP	11:12	28	METALS-TCLP	TCLP	TCLP	SW846	85267	Se REPORTED	()
CCV V-329036	1	CCV	11:17	29							V-329036(CCV)
CCB V-329027	1	CCB	11:21	30							V-329027(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.89 9/14/2020 12:49:04 PM

OK

9/15/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26209T.txt

Analysis Date: 09/14/20

Instrument: HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	11:02	1							0
.2 PPB	1	CAL	11:03	2							0
.5 PPB	1	CAL	11:04	3							0
1 PPB	1	CAL	11:06	4							0
2 PPB	1	CAL	11:07	5							0
5 PPB	1	CAL	11:08	6							0
10 PPB	1	CAL	11:10	7							0
25 PPB	1	CAL	11:11	8							0
ICV (2)	1	ICV	11:13	9							0
ICB	1	ICB	11:15	10							0
MB 85267 (1)	1	MB	11:16	11	HG-TCLP	TCLP	TCLP	SW846	85267		0
LCS 85267	1	LCS	11:18	12	HG-TCLP	TCLP	TCLP	SW846	85267		0
LCS 85267 MR	1	LCS	11:19	13	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-004	1	SMP	11:21	14	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-004	1	MR	11:22	15	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-005	1	MS	11:24	16	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-006	1	MSD	11:25	17	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19139-001	1	SMP	11:27	18	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19139-004	1	SMP	11:29	19	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19143-001	1	SMP	11:30	20	HG-TCLP	TCLP	TCLP	SW846	85267		0
CCV	1	CCV	11:31	21							0
CCB	1	CCB	11:33	22							0
AD19148-002	1	SMP	11:34	23	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19084-001	1	SMP	11:36	24	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-001	1	SMP	11:37	25	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-002	1	SMP	11:38	26	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-003	1	SMP	11:40	27	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-007	1	SMP	11:41	28	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-008	1	SMP	11:42	29	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-009	1	SMP	11:44	30	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-010	1	SMP	11:45	31	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19159-011	1	SMP	11:46	32	HG-TCLP	TCLP	TCLP	SW846	85267		0
CCV	1	CCV	11:48	33							0
CCB	1	CCB	11:49	34							0
AD19160-001	1	SMP	11:51	35	HG-TCLP	TCLP	TCLP	SW846	85267		0
AD19160-002	1	SMP	11:52	36	HG-TCLP	TCLP	TCLP	SW846	85267		0
EF V-334254 A	1	EF	11:53	37	HG-TCLP	TCLP	TCLP	SW846	85267		V-334254 A(EF-1 WARNING)
EF V-334254 B	1	EF	11:55	38	HG-TCLP	TCLP	TCLP	SW846	85267		V-334254 B(EF-1 WARNING)
CCV	1	CCV	11:56	39							0
CCB	1	CCB	11:58	40							0

Comments/Reviewedby:

DLUCCA
192.168.1.87 9/14/2020 2:59:42 PM

OK

9/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334715

Method: PE 4 8300DV LEACH AX Page 1 Date: 9/11/2020 5:54:03 PM

T26209A4 26209/85267

Analysis Begun

leach CJM 9/14/20

Start Time: 9/11/2020 5:50:08 PM
Logged In Analyst: usermet
Spectrometer: Optima 8300 , S/N No Serial #
Plasma On Time: 9/11/2020 5:41:04 PM
Technique: ICP Continuous
Autosampler: S10

Sample Information File: C:\Users\Public\PerkinElmer\ICP\Data\Sample Information\09.10.20.sif
Batch ID: ICP4
Results Data Set: T26209A4
Results Library: C:\Users\Public\PerkinElmer\ICP\Data\Results\Results.mdb

9/16/20

Sequence No.: 1
Sample ID: CALBLK V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time:
Autosampler Location: 1
Date Collected: 9/11/2020 5:51:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-333667

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	52208.9	604.63	1.16%	100	%
Y 371.029	17298.5	164.64	0.95%	100	%
Ag 328.068†	-19.0	3.83	20.11%	[0.00]	mg/L
Al 308.215†	83.7	7.23	8.64%	[0.00]	mg/L
As 188.979†	-2.2	0.66	30.37%	[0.00]	mg/L
Ba 233.527†	-2.0	1.50	73.98%	[0.00]	mg/L
Be 313.107†	-415.0	16.86	4.06%	[0.00]	mg/L
Ca 315.887†	-152.3	27.37	17.98%	[0.00]	mg/L
Cd 228.802†	18.6	1.49	8.03%	[0.00]	mg/L
Co 228.616†	-2.4	0.75	30.74%	[0.00]	mg/L
Cr 267.716†	3.9	1.39	35.40%	[0.00]	mg/L
Cu 327.393†	-239.4	4.20	1.75%	[0.00]	mg/L
Fe 273.955†	0.3	1.61	484.57%	[0.00]	mg/L
K 404.721†	-37.2	3.08	8.28%	[0.00]	mg/L
Mg 279.077†	-5.6	1.72	30.56%	[0.00]	mg/L
Mn 257.610†	20.2	1.02	5.06%	[0.00]	mg/L
Mo 202.031†	3.6	1.47	40.94%	[0.00]	mg/L
Na 330.237†	16.7	5.54	33.17%	[0.00]	mg/L
Ni 231.604†	56.5	0.65	1.15%	[0.00]	mg/L
Pb 220.353†	-1.0	1.17	118.47%	[0.00]	mg/L
Sb 206.836†	3.0	0.45	14.91%	[0.00]	mg/L
Se 196.026†	5.2	1.07	20.34%	[0.00]	mg/L
Sn 189.927†	1.4	0.72	51.63%	[0.00]	mg/L
Ti 334.940†	21.9	1.13	5.16%	[0.00]	mg/L
Tl 190.801†	-1.1	1.60	144.40%	[0.00]	mg/L
V 290.880†	46.3	1.66	3.58%	[0.00]	mg/L
Zn 206.200†	4.1	1.32	32.35%	[0.00]	mg/L
B 249.772	78.2	1.38	1.76%	[0.00]	mg/L
Si 251.611	41.0	2.07	5.05%	[0.00]	mg/L

26209/85267

All reported

+QC
19159-004, -005, -006
Zn NOT Reported

19159-004 +QC
19148-002
19159-001, -002, -003, -009, -010
19160-002
Se NOT reported

Sequence No.: 2
Sample ID: CALST2 V-333672
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 9/11/2020 5:55:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST2 V-333672

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	51625.5	402.30	0.78%	98.9	%
Y 371.029	16453.4	101.56	0.62%	95.1	%
Ag 328.068†	530.0	11.20	2.11%	[0.05]	mg/L
Al 308.215†	1162.0	15.60	1.34%	[1]	mg/L
As 188.979†	8.3	0.91	10.87%	[0.1]	mg/L
Ba 233.527†	2041.9	20.28	0.99%	[0.25]	mg/L
Be 313.107†	2450.5	29.37	1.20%	[0.012]	mg/L
Ca 315.887†	13047.2	26.84	0.21%	[5]	mg/L
Cd 228.802†	98.3	1.51	1.53%	[0.05]	mg/L
Co 228.616†	183.6	1.46	0.80%	[0.1]	mg/L
Cr 267.716†	502.7	11.27	2.24%	[0.1]	mg/L
Cu 327.393†	762.7	14.54	1.91%	[0.1]	mg/L
Fe 273.955†	431.1	7.69	1.78%	[1]	mg/L
K 404.721†	19.2	1.24	6.46%	[5]	mg/L
Mg 279.077†	4107.2	19.66	0.48%	[5]	mg/L
Mn 257.610†	2345.1	23.50	1.00%	[0.1]	mg/L
Mo 202.031†	102.4	1.05	1.02%	[0.1]	mg/L
Na 330.237†	766.8	4.15	0.54%	[25]	mg/L
Ni 231.604†	235.3	1.72	0.73%	[0.1]	mg/L
Pb 220.353†	24.5	1.13	4.62%	[0.05]	mg/L
Sb 206.836†	9.7	0.50	5.20%	[0.07]	mg/L
Se 196.026†	17.9	1.74	9.71%	[0.1]	mg/L
Sn 189.927†	36.7	1.49	4.07%	[0.1]	mg/L
Ti 334.940†	2345.1	24.80	1.06%	[0.1]	mg/L
Tl 190.801†	14.1	0.76	5.37%	[0.1]	mg/L
V 290.880†	429.7	5.10	1.19%	[0.1]	mg/L
Zn 206.200†	277.8	5.80	2.09%	[0.1]	mg/L
B 249.772	881.3	6.57	0.75%	[0.2]	mg/L
Si 251.611	195.8	1.21	0.62%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-333666
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 3
Date Collected: 9/11/2020 5:59:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST3 V-333666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	47866.6	192.78	0.40%	91.7	%
Y 371.029	15328.4	188.52	1.23%	88.6	%
Ag 328.068†	1114.2	3.83	0.34%	[0.10]	mg/L
Al 308.215†	5339.6	5.10	0.10%	[5.0]	mg/L
As 188.979†	39.9	1.16	2.90%	[0.50]	mg/L
Ba 233.527†	3799.0	15.45	0.41%	[0.50]	mg/L
Be 313.107†	106374.7	104.61	0.10%	[0.50]	mg/L
Ca 315.887†	137930.4	494.89	0.36%	[50]	mg/L
Cd 228.802†	1016.9	3.83	0.38%	[0.50]	mg/L
Co 228.616†	967.5	1.24	0.13%	[0.50]	mg/L
Cr 267.716†	2678.7	15.63	0.58%	[0.50]	mg/L
Cu 327.393†	3636.5	9.53	0.26%	[0.50]	mg/L
Fe 273.955†	2253.6	6.69	0.30%	[5.0]	mg/L
K 404.721†	843.2	8.02	0.95%	[50]	mg/L
Mg 279.077†	42444.1	56.77	0.13%	[50]	mg/L
Mn 257.610†	10852.6	30.69	0.28%	[0.50]	mg/L
Mo 202.031†	537.9	1.52	0.28%	[0.50]	mg/L
Na 330.237†	1810.5	6.40	0.35%	[50]	mg/L
Ni 231.604†	1210.4	8.39	0.69%	[0.50]	mg/L
Pb 220.353†	240.1	1.92	0.80%	[0.50]	mg/L
Sb 206.836†	67.2	1.48	2.20%	[0.50]	mg/L
Se 196.026†	91.3	1.97	2.16%	[0.50]	mg/L
Sn 189.927†	190.6	2.13	1.12%	[0.50]	mg/L
Ti 334.940†	10498.8	88.88	0.85%	[0.50]	mg/L
Tl 190.801†	73.5	1.16	1.57%	[0.50]	mg/L
V 290.880†	2130.5	1.04	0.05%	[0.50]	mg/L
Zn 206.200†	1452.7	4.29	0.30%	[0.50]	mg/L
B 249.772	2221.2	6.93	0.31%	[0.50]	mg/L
Si 251.611	7295.8	33.86	0.46%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-333665
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 4
Date Collected: 9/11/2020 6:03:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST4 V-333665

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	47730.1	552.58	1.16%	91.4	%
Y 371.029	14939.4	273.80	1.83%	86.4	%
Ag 328.068†	2244.4	36.44	1.62%	[0.20]	mg/L
Al 308.215†	10556.5	22.27	0.21%	[10]	mg/L
As 188.979†	76.8	1.38	1.80%	[1.00]	mg/L
Ba 233.527†	7384.6	19.42	0.26%	[1.00]	mg/L
Be 313.107†	211095.2	550.88	0.26%	[1.00]	mg/L
Ca 315.887†	277506.4	857.64	0.31%	[100]	mg/L
Cd 228.802†	2092.3	19.63	0.94%	[1.00]	mg/L
Co 228.616†	1916.8	25.91	1.35%	[1.00]	mg/L
Cr 267.716†	5068.6	7.44	0.15%	[1.00]	mg/L
Cu 327.393†	7150.5	14.04	0.20%	[1.00]	mg/L
Fe 273.955†	3944.1	20.93	0.53%	[10.0]	mg/L
K 404.721†	1673.0	13.77	0.82%	[100]	mg/L
Mg 279.077†	84316.7	266.73	0.32%	[100]	mg/L
Mn 257.610†	21087.8	31.51	0.15%	[1.00]	mg/L
Mo 202.031†	1075.8	7.80	0.73%	[1.00]	mg/L
Na 330.237†	3360.0	2.69	0.08%	[100]	mg/L
Ni 231.604†	2401.0	31.94	1.33%	[1.00]	mg/L
Pb 220.353†	470.2	6.06	1.29%	[1.00]	mg/L
Sb 206.836†	129.7	2.57	1.98%	[1.00]	mg/L
Se 196.026†	183.0	2.99	1.63%	[1.00]	mg/L
Sn 189.927†	379.7	5.71	1.50%	[1.00]	mg/L
Ti 334.940†	20574.9	75.99	0.37%	[1.00]	mg/L
Tl 190.801†	142.9	4.06	2.84%	[1.00]	mg/L
V 290.880†	3990.2	18.79	0.47%	[1.00]	mg/L
Zn 206.200†	2881.4	35.64	1.24%	[1.00]	mg/L
B 249.772	4124.2	55.41	1.34%	[1.00]	mg/L
Si 251.611	14347.4	189.60	1.32%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-14.0	11270	0.00000	0.999893	
Al 308.215	3	Lin, Calc Int	58.6	1051	0.00000	0.999949	
As 188.979	3	Lin, Calc Int	0.6	76.77	0.00000	0.999788	
Ba 233.527	3	Lin, Calc Int	99.7	7330	0.00000	0.999572	
Be 313.107	3	Lin, Calc Int	113.1	211300	0.00000	0.999991	
Ca 315.887	3	Lin, Calc Int	-523.9	2778	0.00000	0.999994	
Cd 228.802	3	Lin, Calc Int	-8.2	2091	0.00000	0.999899	
Co 228.616	3	Lin, Calc Int	-1.9	1922	0.00000	0.999972	
Cr 267.716	3	Lin, Calc Int	24.9	5094	0.00000	0.999517	
Cu 327.393	3	Lin, Calc Int	32.5	7137	0.00000	0.999953	
Fe 273.955	3	Lin, Calc Int	68.5	397.2	0.00000	0.997209	
K 404.721	3	Lin, Calc Int	-27.8	17.07	0.00000	0.999321	
Mg 279.077	3	Lin, Calc Int	3.4	844.2	0.00000	0.999992	
Mn 257.610	3	Lin, Calc Int	162.1	21020	0.00000	0.999864	
Mo 202.031	3	Lin, Calc Int	-2.3	1078	0.00000	0.999989	
Na 330.237	3	Lin, Calc Int	-3.2	34.00	0.00000	0.998367	
Ni 231.604	3	Lin, Calc Int	-0.3	2405	0.00000	0.999985	
Pb 220.353	3	Lin, Calc Int	1.4	470.6	0.00000	0.999941	
Sb 206.836	3	Lin, Calc Int	0.7	129.8	0.00000	0.999821	
Se 196.026	3	Lin, Calc Int	-0.2	183.2	0.00000	0.999998	
Sn 189.927	3	Lin, Calc Int	-0.4	380.4	0.00000	0.999990	
Ti 334.940	3	Lin, Calc Int	166.8	20470	0.00000	0.999888	
Tl 190.801	3	Lin, Calc Int	0.3	143.4	0.00000	0.999878	
V 290.880	3	Lin, Calc Int	38.7	3997	0.00000	0.999377	
Zn 206.200	3	Lin, Calc Int	-2.4	2888	0.00000	0.999979	

B 249.772	3	Lin, Calc Int	54.5	4123	0.00000	0.999126
Si 251.611	3	Lin, Calc Int	45.9	1434	0.00000	0.999964

Sequence No.: 5
Sample ID: ICV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 85

Autosampler Location: 6
Date Collected: 9/11/2020 6:07:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	49023.7	93.9	%	0.27				0.28%
Y 371.029	15770.9	91.2	%	0.27				0.30%
Ag 328.068†	1068.1	0.0989037	mg/L	0.00068800	0.0989037	mg/L	0.00068800	0.70%
QC value within limits for Ag 328.068 Recovery = 98.90%								
Al 308.215†	5204.5	4.90850	mg/L	0.013242	4.90850	mg/L	0.013242	0.27%
QC value within limits for Al 308.215 Recovery = 98.17%								
As 188.979†	40.8	0.500387	mg/L	0.0132417	0.500387	mg/L	0.0132417	2.65%
QC value within limits for As 188.979 Recovery = 100.08%								
Ba 233.527†	3681.4	0.488658	mg/L	0.0010626	0.488658	mg/L	0.0010626	0.22%
QC value within limits for Ba 233.527 Recovery = 97.73%								
Be 313.107†	103010.2	0.486998	mg/L	0.0012727	0.486998	mg/L	0.0012727	0.26%
QC value within limits for Be 313.107 Recovery = 97.40%								
Ca 315.887†	133482.8	48.2397	mg/L	0.08048	48.2397	mg/L	0.08048	0.17%
QC value within limits for Ca 315.887 Recovery = 96.48%								
Cd 228.802†	984.8	0.474968	mg/L	0.0022869	0.474968	mg/L	0.0022869	0.48%
QC value within limits for Cd 228.802 Recovery = 94.99%								
Co 228.616†	931.7	0.485702	mg/L	0.0019629	0.485702	mg/L	0.0019629	0.40%
QC value within limits for Co 228.616 Recovery = 97.14%								
Cr 267.716†	2574.0	0.502756	mg/L	0.0004630	0.502756	mg/L	0.0004630	0.09%
QC value within limits for Cr 267.716 Recovery = 100.55%								
Cu 327.393†	3547.7	0.493044	mg/L	0.0008727	0.493044	mg/L	0.0008727	0.18%
QC value within limits for Cu 327.393 Recovery = 98.61%								
Fe 273.955†	2182.8	5.32347	mg/L	0.045132	5.32347	mg/L	0.045132	0.85%
QC value within limits for Fe 273.955 Recovery = 106.47%								
K 404.721†	816.8	-7.88081	mg/L	1.340710	-7.88081	mg/L	1.340710	17.01%
QC value less than the lower limit for K 404.721 Recovery = -15.76%								
Mg 279.077†	41095.5	48.6745	mg/L	0.09161	48.6745	mg/L	0.09161	0.19%
QC value within limits for Mg 279.077 Recovery = 97.35%								
Mn 257.610†	10527.5	0.493045	mg/L	0.0015302	0.493045	mg/L	0.0015302	0.31%
QC value within limits for Mn 257.610 Recovery = 98.61%								
Mo 202.031†	522.3	0.486475	mg/L	0.0051843	0.486475	mg/L	0.0051843	1.07%
QC value within limits for Mo 202.031 Recovery = 97.29%								
Na 330.237†	1754.3	51.6910	mg/L	0.18999	51.6910	mg/L	0.18999	0.37%
QC value within limits for Na 330.237 Recovery = 103.38%								
Ni 231.604†	1172.7	0.489100	mg/L	0.0032922	0.489100	mg/L	0.0032922	0.67%
QC value within limits for Ni 231.604 Recovery = 97.82%								
Pb 220.353†	230.3	0.487448	mg/L	0.0022472	0.487448	mg/L	0.0022472	0.46%
QC value within limits for Pb 220.353 Recovery = 97.49%								
Sb 206.836†	61.1	0.476739	mg/L	0.0170829	0.476739	mg/L	0.0170829	3.58%
QC value within limits for Sb 206.836 Recovery = 95.35%								
Se 196.026†	87.8	0.488893	mg/L	0.0260808	0.488893	mg/L	0.0260808	5.33%
QC value within limits for Se 196.026 Recovery = 97.78%								
Sn 189.927†	183.3	0.481155	mg/L	0.0043278	0.481155	mg/L	0.0043278	0.90%
QC value within limits for Sn 189.927 Recovery = 96.23%								
Ti 334.940†	10200.2	0.493822	mg/L	0.0011082	0.493822	mg/L	0.0011082	0.22%
QC value within limits for Ti 334.940 Recovery = 98.76%								
Tl 190.801†	71.7	0.494138	mg/L	0.0024830	0.494138	mg/L	0.0024830	0.50%
QC value within limits for Tl 190.801 Recovery = 98.83%								
V 290.880†	2059.1	0.508081	mg/L	0.0025441	0.508081	mg/L	0.0025441	0.50%
QC value within limits for V 290.880 Recovery = 101.62%								
Zn 206.200†	1392.0	0.482753	mg/L	0.0018550	0.482753	mg/L	0.0018550	0.38%
QC value within limits for Zn 206.200 Recovery = 96.55%								
B 249.772	2222.1	0.533036	mg/L	0.0026070	0.533036	mg/L	0.0026070	0.49%
QC value within limits for B 249.772 Recovery = 106.61%								
Si 251.611	7277.3	5.14502	mg/L	0.024619	5.14502	mg/L	0.024619	0.48%
QC value within limits for Si 251.611 Recovery = 102.90%								

QC Failed. Continue with analysis.

Sequence No.: 6
Sample ID: ICB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 1
Date Collected: 9/11/2020 6:11:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	52421.9	100	%	0.77				0.77%
Y 371.029	17205.0	99.5	%	0.94				0.94%
Ag 328.068†	0.9	0.0012684	mg/L	0.00063817	0.0012684	mg/L	0.00063817	50.31%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-1.5	-0.0575638	mg/L	0.00215963	-0.0575638	mg/L	0.00215963	3.75%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.2	0.0082519	mg/L	0.00297393	0.0082519	mg/L	0.00297393	36.04%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.3	-0.0136361	mg/L	0.00011077	-0.0136361	mg/L	0.00011077	0.81%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	32.0	-0.0003837	mg/L	0.00003725	-0.0003837	mg/L	0.00003725	9.71%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-33.1	0.176681	mg/L	0.0032465	0.176681	mg/L	0.0032465	1.84%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	1.2	0.0044972	mg/L	0.00023596	0.0044972	mg/L	0.00023596	5.25%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.2	0.0011008	mg/L	0.00038674	0.0011008	mg/L	0.00038674	35.13%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	2.7	-0.0044048	mg/L	0.00063160	-0.0044048	mg/L	0.00063160	14.34%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-7.6	-0.0056250	mg/L	0.00053900	-0.0056250	mg/L	0.00053900	9.58%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	1.2	-0.169332	mg/L	0.0035927	-0.169332	mg/L	0.0035927	2.12%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-6.3	3.08462	mg/L	0.341723	3.08462	mg/L	0.341723	11.08%
QC value greater than the upper limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	9.2	0.0068907	mg/L	0.00131206	0.0068907	mg/L	0.00131206	19.04%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	1.0	-0.0076649	mg/L	0.00009849	-0.0076649	mg/L	0.00009849	1.28%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.5	0.0016481	mg/L	0.00110663	0.0016481	mg/L	0.00110663	67.15%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-4.1	-0.0277249	mg/L	0.14543641	-0.0277249	mg/L	0.14543641	524.57%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	0.0	0.0001429	mg/L	0.00101605	0.0001429	mg/L	0.00101605	710.93%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.7	-0.0013619	mg/L	0.00308784	-0.0013619	mg/L	0.00308784	226.73%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.6	-0.0011785	mg/L	0.00197607	-0.0011785	mg/L	0.00197607	167.67%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.7	-0.0081236	mg/L	0.00923064	-0.0081236	mg/L	0.00923064	113.63%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.7	-0.0005866	mg/L	0.00318520	-0.0005866	mg/L	0.00318520	542.99%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	5.2	-0.0078816	mg/L	0.00003818	-0.0078816	mg/L	0.00003818	0.48%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.1	-0.0011037	mg/L	0.01235456	-0.0011037	mg/L	0.01235456	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	5.0	-0.0084305	mg/L	0.00135599	-0.0084305	mg/L	0.00135599	16.08%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-2.4	-0.0000295	mg/L	0.00052479	-0.0000295	mg/L	0.00052479	>999.9%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-3.9	-0.0138143	mg/L	0.00062769	-0.0138143	mg/L	0.00062769	4.54%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	1.1	-0.0327027	mg/L	0.00188689	-0.0327027	mg/L	0.00188689	5.77%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: LRS V-333660
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 13
Date Collected: 9/11/2020 6:15:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LRS V-333660

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	92146.6	176	%	0.65				0.37%
Saturated within auto integration window (code 4)								
Y 371.029	36972.7	214	%	3.75				1.76%
Ag 328.068†	11.9	0.0022031	mg/L	0.00012331	0.0022031	mg/L	0.00012331	5.60%
QC value less than the lower limit for Ag 328.068 Recovery = 0.22%								
Al 308.215†	-57.9	-0.111679	mg/L	0.0009553	-0.111679	mg/L	0.0009553	0.86%
QC value less than the lower limit for Al 308.215 Recovery = -0.02%								
As 188.979†	1.4	0.0116889	mg/L	0.00439207	0.0116889	mg/L	0.00439207	37.57%
QC value less than the lower limit for As 188.979 Recovery = 0.12%								
Ba 233.527†	1.0	-0.0134661	mg/L	0.00004023	-0.0134661	mg/L	0.00004023	0.30%
QC value less than the lower limit for Ba 233.527 Recovery = -0.13%								
Be 313.107†	258.8	0.0006899	mg/L	0.00003477	0.0006899	mg/L	0.00003477	5.04%
QC value less than the lower limit for Be 313.107 Recovery = 0.01%								
Ca 315.887†	76.4	0.216067	mg/L	0.0006828	0.216067	mg/L	0.0006828	0.32%
QC value less than the lower limit for Ca 315.887 Recovery = 0.04%								
Cd 228.802†	-6.6	0.0007703	mg/L	0.00033268	0.0007703	mg/L	0.00033268	43.19%
QC value less than the lower limit for Cd 228.802 Recovery = 0.02%								
Co 228.616†	1.3	0.0016945	mg/L	0.00007573	0.0016945	mg/L	0.00007573	4.47%
QC value less than the lower limit for Co 228.616 Recovery = 0.03%								
Cr 267.716†	-1.2	-0.0052026	mg/L	0.00054190	-0.0052026	mg/L	0.00054190	10.42%
QC value less than the lower limit for Cr 267.716 Recovery = -0.05%								
Cu 327.393†	-12.6	-0.0063296	mg/L	0.00103957	-0.0063296	mg/L	0.00103957	16.42%
QC value less than the lower limit for Cu 327.393 Recovery = -0.06%								
Fe 273.955†	-0.7	-0.174100	mg/L	0.0022749	-0.174100	mg/L	0.0022749	1.31%
QC value less than the lower limit for Fe 273.955 Recovery = -0.09%								
K 404.721†	-26.4	1.95779	mg/L	0.171766	1.95779	mg/L	0.171766	8.77%
QC value less than the lower limit for K 404.721 Recovery = 0.98%								
Mg 279.077†	2.9	-0.0006012	mg/L	0.00190965	-0.0006012	mg/L	0.00190965	317.65%
QC value less than the lower limit for Mg 279.077 Recovery = -0.00%								
Mn 257.610†	-10.2	-0.0081933	mg/L	0.00009078	-0.0081933	mg/L	0.00009078	1.11%
QC value less than the lower limit for Mn 257.610 Recovery = -0.08%								
Mo 202.031†	-2.5	-0.0001444	mg/L	0.00070805	-0.0001444	mg/L	0.00070805	490.44%
QC value less than the lower limit for Mo 202.031 Recovery = -0.00%								
Na 330.237†	-9.7	-0.192447	mg/L	0.0245574	-0.192447	mg/L	0.0245574	12.76%
QC value less than the lower limit for Na 330.237 Recovery = -0.02%								
Ni 231.604†	-24.9	-0.0102213	mg/L	0.00061054	-0.0102213	mg/L	0.00061054	5.97%
QC value less than the lower limit for Ni 231.604 Recovery = -0.10%								
Pb 220.353†	0.5	-0.0017709	mg/L	0.00148813	-0.0017709	mg/L	0.00148813	84.03%
QC value less than the lower limit for Pb 220.353 Recovery = -0.02%								
Sb 206.836†	-0.8	-0.0115598	mg/L	0.00045821	-0.0115598	mg/L	0.00045821	3.96%
QC value less than the lower limit for Sb 206.836 Recovery = -0.23%								
Se 196.026†	-2.5	-0.0127410	mg/L	0.00876079	-0.0127410	mg/L	0.00876079	68.76%
QC value less than the lower limit for Se 196.026 Recovery = -0.25%								
Sn 189.927†	-0.3	0.0003603	mg/L	0.00234144	0.0003603	mg/L	0.00234144	649.82%
QC value less than the lower limit for Sn 189.927 Recovery = 0.00%								
Ti 334.940†	-9.2	-0.0085803	mg/L	0.00002771	-0.0085803	mg/L	0.00002771	0.32%
QC value less than the lower limit for Ti 334.940 Recovery = -0.09%								
Tl 190.801†	0.2	-0.0003142	mg/L	0.00070793	-0.0003142	mg/L	0.00070793	225.30%
QC value less than the lower limit for Tl 190.801 Recovery = -0.01%								
V 290.880†	-28.0	-0.0166835	mg/L	0.00019997	-0.0166835	mg/L	0.00019997	1.20%
QC value less than the lower limit for V 290.880 Recovery = -0.17%								
Zn 206.200†	-3.9	-0.0005290	mg/L	0.00031178	-0.0005290	mg/L	0.00031178	58.94%
QC value less than the lower limit for Zn 206.200 Recovery = -0.01%								
B 249.772	-20.9	-0.0180600	mg/L	0.00064068	-0.0180600	mg/L	0.00064068	3.55%
QC value less than the lower limit for B 249.772 Recovery = -0.36%								
Si 251.611	-9.0	-0.0402351	mg/L	0.00147715	-0.0402351	mg/L	0.00147715	3.67%
QC value less than the lower limit for Si 251.611 Recovery = -0.16%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-333666
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 3
Date Collected: 9/11/2020 6:19:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	47782.6	91.5	%	0.25				0.27%
Y 371.029	15480.3	89.5	%	0.46				0.51%
Ag 328.068†	1099.7	0.101786	mg/L	0.0003747	0.101786	mg/L	0.0003747	0.37%
QC value within limits for Ag 328.068 Recovery = 101.79%								
Al 308.215†	5391.2	5.08638	mg/L	0.040698	5.08638	mg/L	0.040698	0.80%
QC value within limits for Al 308.215 Recovery = 101.73%								
As 188.979†	39.9	0.487556	mg/L	0.0189800	0.487556	mg/L	0.0189800	3.89%
QC value within limits for As 188.979 Recovery = 97.51%								
Ba 233.527†	3745.7	0.497431	mg/L	0.0008362	0.497431	mg/L	0.0008362	0.17%
QC value within limits for Ba 233.527 Recovery = 99.49%								
Be 313.107†	104378.3	0.493473	mg/L	0.0007430	0.493473	mg/L	0.0007430	0.15%
QC value within limits for Be 313.107 Recovery = 98.69%								
Ca 315.887†	135471.9	48.9557	mg/L	0.20064	48.9557	mg/L	0.20064	0.41%
QC value within limits for Ca 315.887 Recovery = 97.91%								
Cd 228.802†	1007.9	0.486019	mg/L	0.0003161	0.486019	mg/L	0.0003161	0.07%
QC value within limits for Cd 228.802 Recovery = 97.20%								
Co 228.616†	947.0	0.493641	mg/L	0.0018487	0.493641	mg/L	0.0018487	0.37%
QC value within limits for Co 228.616 Recovery = 98.73%								
Cr 267.716†	2639.4	0.515649	mg/L	0.0015773	0.515649	mg/L	0.0015773	0.31%
QC value within limits for Cr 267.716 Recovery = 103.13%								
Cu 327.393†	3619.1	0.503070	mg/L	0.0027242	0.503070	mg/L	0.0027242	0.54%
QC value within limits for Cu 327.393 Recovery = 100.61%								
Fe 273.955†	2261.9	5.52244	mg/L	0.021236	5.52244	mg/L	0.021236	0.38%
QC value greater than the upper limit for Fe 273.955 Recovery = 110.45%								
K 404.721†	828.1	-9.35710	mg/L	0.732766	-9.35710	mg/L	0.732766	7.83%
QC value less than the lower limit for K 404.721 Recovery = -18.71%								
Mg 279.077†	41472.3	49.1208	mg/L	0.12387	49.1208	mg/L	0.12387	0.25%
QC value within limits for Mg 279.077 Recovery = 98.24%								
Mn 257.610†	10716.8	0.502047	mg/L	0.0023132	0.502047	mg/L	0.0023132	0.46%
QC value within limits for Mn 257.610 Recovery = 100.41%								
Mo 202.031†	538.7	0.501758	mg/L	0.0039415	0.501758	mg/L	0.0039415	0.79%
QC value within limits for Mo 202.031 Recovery = 100.35%								
Na 330.237†	1819.0	53.5941	mg/L	0.33664	53.5941	mg/L	0.33664	0.63%
QC value within limits for Na 330.237 Recovery = 107.19%								
Ni 231.604†	1197.8	0.499588	mg/L	0.0013189	0.499588	mg/L	0.0013189	0.26%
QC value within limits for Ni 231.604 Recovery = 99.92%								
Pb 220.353†	234.9	0.497280	mg/L	0.0023689	0.497280	mg/L	0.0023689	0.48%
QC value within limits for Pb 220.353 Recovery = 99.46%								
Sb 206.836†	64.7	0.504996	mg/L	0.0105635	0.504996	mg/L	0.0105635	2.09%
QC value within limits for Sb 206.836 Recovery = 101.00%								
Se 196.026†	90.4	0.503644	mg/L	0.0007350	0.503644	mg/L	0.0007350	0.15%
QC value within limits for Se 196.026 Recovery = 100.73%								
Sn 189.927†	189.9	0.498590	mg/L	0.0015587	0.498590	mg/L	0.0015587	0.31%
QC value within limits for Sn 189.927 Recovery = 99.72%								
Ti 334.940†	10491.0	0.508082	mg/L	0.0018626	0.508082	mg/L	0.0018626	0.37%
QC value within limits for Ti 334.940 Recovery = 101.62%								
Tl 190.801†	71.3	0.491604	mg/L	0.0150438	0.491604	mg/L	0.0150438	3.06%
QC value within limits for Tl 190.801 Recovery = 98.32%								
V 290.880†	2114.8	0.522029	mg/L	0.0026468	0.522029	mg/L	0.0026468	0.51%
QC value within limits for V 290.880 Recovery = 104.41%								
Zn 206.200†	1417.1	0.491439	mg/L	0.0011332	0.491439	mg/L	0.0011332	0.23%
QC value within limits for Zn 206.200 Recovery = 98.29%								
B 249.772	2232.7	0.535330	mg/L	0.0026946	0.535330	mg/L	0.0026946	0.50%
QC value within limits for B 249.772 Recovery = 107.07%								
Si 251.611	7190.2	5.08655	mg/L	0.016668	5.08655	mg/L	0.016668	0.33%
QC value within limits for Si 251.611 Recovery = 101.73%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: LRS V-333660
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 13
Date Collected: 9/11/2020 6:23:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LRS V-333660

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44206.8	84.7	%	0.45				0.53%
Y 371.029	13149.6	76.0	%	0.83				1.09%
Ag 328.068†	10376.1	0.980899	mg/L	0.0030052	0.980899	mg/L	0.0030052	0.31%
Al 308.215†	540538.9	514.270	mg/L	4.7428	514.270	mg/L	4.7428	0.92%
As 188.979†	788.3	9.81108	mg/L	0.124233	9.81108	mg/L	0.124233	1.27%
Ba 233.527†	76028.9	10.3591	mg/L	0.00773	10.3591	mg/L	0.00773	0.07%
Be 313.107†	977355.9	4.62516	mg/L	0.042613	4.62516	mg/L	0.042613	0.92%
Ca 315.887†	1255664.4	452.203	mg/L	4.6198	452.203	mg/L	4.6198	1.02%
Cd 228.802†	10346.8	4.95325	mg/L	0.003926	4.95325	mg/L	0.003926	0.08%
Co 228.616†	8280.1	4.30869	mg/L	0.009974	4.30869	mg/L	0.009974	0.23%
Cr 267.716†	46048.9	9.07795	mg/L	0.020325	9.07795	mg/L	0.020325	0.22%
Cu 327.393†	76707.3	10.7620	mg/L	0.02081	10.7620	mg/L	0.02081	0.19%
Fe 273.955†	76333.4	192.017	mg/L	1.3591	192.017	mg/L	1.3591	0.71%
K 404.721†	4125.3	-1825.12	mg/L	14.272	-1825.12	mg/L	14.272	0.78%
Mg 279.077†	396285.0	469.404	mg/L	4.0294	469.404	mg/L	4.0294	0.86%
Mn 257.610†	198438.5	9.43128	mg/L	0.089965	9.43128	mg/L	0.089965	0.95%
Mo 202.031†	9904.6	9.18772	mg/L	0.014203	9.18772	mg/L	0.014203	0.15%
Na 330.237†	42386.9	1246.76	mg/L	6.837	1246.76	mg/L	6.837	0.55%
Ni 231.604†	20740.3	8.64968	mg/L	0.057552	8.64968	mg/L	0.057552	0.67%
Pb 220.353†	4384.4	9.37398	mg/L	0.090354	9.37398	mg/L	0.090354	0.96%
Sb 206.836†	655.7	5.26388	mg/L	0.055685	5.26388	mg/L	0.055685	1.06%
Se 196.026†	892.7	5.04237	mg/L	0.061496	5.04237	mg/L	0.061496	1.22%
Sn 189.927†	3693.1	9.67326	mg/L	0.116438	9.67326	mg/L	0.116438	1.20%
Ti 334.940†	200169.2	9.80496	mg/L	0.130391	9.80496	mg/L	0.130391	1.33%
Tl 190.801†	644.9	4.46542	mg/L	0.061181	4.46542	mg/L	0.061181	1.37%
V 290.880†	37032.1	9.27524	mg/L	0.009429	9.27524	mg/L	0.009429	0.10%
Zn 206.200†	24758.9	8.57275	mg/L	0.002214	8.57275	mg/L	0.002214	0.03%
B 249.772	21345.5	4.86077	mg/L	0.014684	4.86077	mg/L	0.014684	0.30%
Si 251.611	34148.5	25.7444	mg/L	0.17008	25.7444	mg/L	0.17008	0.66%

Sequence No.: 10
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 85

Autosampler Location: 14
Date Collected: 9/11/2020 6:28:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	52512.4	101	%	0.17				0.17%
Y 371.029	17278.5	99.9	%	0.29				0.29%
Ag 328.068†	7.4	0.0018501	mg/L	0.00025859	0.0018501	mg/L	0.00025859	13.98%
Al 308.215†	51.6	-0.0071081	mg/L	0.02218063	-0.0071081	mg/L	0.02218063	312.05%
As 188.979†	2.5	0.0258051	mg/L	0.01357805	0.0258051	mg/L	0.01357805	52.62%
Ba 233.527†	8.6	-0.0124277	mg/L	0.00042042	-0.0124277	mg/L	0.00042042	3.38%
Be 313.107†	109.4	-0.0000175	mg/L	0.00024592	-0.0000175	mg/L	0.00024592	>999.9%
Ca 315.887†	127.0	0.234289	mg/L	0.0222975	0.234289	mg/L	0.0222975	9.52%
Cd 228.802†	1.9	0.0048314	mg/L	0.00026074	0.0048314	mg/L	0.00026074	5.40%
Co 228.616†	3.0	0.0025319	mg/L	0.00060982	0.0025319	mg/L	0.00060982	24.09%
Cr 267.716†	4.7	-0.0040064	mg/L	0.00056090	-0.0040064	mg/L	0.00056090	14.00%
Cu 327.393†	-2.5	-0.0049175	mg/L	0.00095497	-0.0049175	mg/L	0.00095497	19.42%
Fe 273.955†	6.8	-0.155207	mg/L	0.0090075	-0.155207	mg/L	0.0090075	5.80%
K 404.721†	-8.2	2.82029	mg/L	0.450187	2.82029	mg/L	0.450187	15.96%
Mg 279.077†	37.7	0.0406275	mg/L	0.02130817	0.0406275	mg/L	0.02130817	52.45%
Mn 257.610†	19.0	-0.0068084	mg/L	0.00038946	-0.0068084	mg/L	0.00038946	5.72%
Mo 202.031†	2.1	0.0040324	mg/L	0.00174570	0.0040324	mg/L	0.00174570	43.29%
Na 330.237†	-4.6	-0.0402664	mg/L	0.07500491	-0.0402664	mg/L	0.07500491	186.27%
Ni 231.604†	1.2	0.0006168	mg/L	0.00123392	0.0006168	mg/L	0.00123392	200.04%
Pb 220.353†	0.7	-0.0013638	mg/L	0.00519786	-0.0013638	mg/L	0.00519786	381.13%
Sb 206.836†	1.2	0.0039162	mg/L	0.00173642	0.0039162	mg/L	0.00173642	44.34%
Se 196.026†	-0.3	-0.0007906	mg/L	0.01237123	-0.0007906	mg/L	0.01237123	>999.9%
Sn 189.927†	0.6	0.0027060	mg/L	0.00046564	0.0027060	mg/L	0.00046564	17.21%
Ti 334.940†	28.0	-0.0067637	mg/L	0.00070225	-0.0067637	mg/L	0.00070225	10.38%
Tl 190.801†	0.9	0.0045805	mg/L	0.01139622	0.0045805	mg/L	0.01139622	248.80%
V 290.880†	8.2	-0.0076194	mg/L	0.00101163	-0.0076194	mg/L	0.00101163	13.28%
Zn 206.200†	6.6	0.0031076	mg/L	0.00109386	0.0031076	mg/L	0.00109386	35.20%
B 249.772	70.7	0.0043252	mg/L	0.00321486	0.0043252	mg/L	0.00321486	74.33%
Si 251.611	3.7	-0.0301631	mg/L	0.00235051	-0.0301631	mg/L	0.00235051	7.79%

Sequence No.: 11 **Autosampler Location: 5**
Sample ID: LLICV V-333672 **Date Collected: 9/11/2020 6:32:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: LLICV V-333672

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	52378.9	100	%	0.44				0.44%
Y 371.029	16898.0	97.7	%	0.59				0.61%
Ag 328.068†	523.0	0.0481906	mg/L	0.00021777	0.0481906	mg/L	0.00021777	0.45%
QC value within limits for Ag 328.068 Recovery = 96.38%								
Al 308.215†	1142.5	1.03350	mg/L	0.008888	1.03350	mg/L	0.008888	0.86%
QC value within limits for Al 308.215 Recovery = 103.35%								
As 188.979†	9.9	0.117118	mg/L	0.0163176	0.117118	mg/L	0.0163176	13.93%
QC value within limits for As 188.979 Recovery = 117.12%								
Ba 233.527†	1995.4	0.258644	mg/L	0.0020571	0.258644	mg/L	0.0020571	0.80%
QC value within limits for Ba 233.527 Recovery = 103.46%								
Be 313.107†	2463.4	0.0111239	mg/L	0.00009594	0.0111239	mg/L	0.00009594	0.86%
QC value within limits for Be 313.107 Recovery = 92.70%								
Ca 315.887†	12780.0	4.78911	mg/L	0.014555	4.78911	mg/L	0.014555	0.30%
QC value within limits for Ca 315.887 Recovery = 95.78%								
Cd 228.802†	97.2	0.0504155	mg/L	0.00026790	0.0504155	mg/L	0.00026790	0.53%
QC value within limits for Cd 228.802 Recovery = 100.83%								
Co 228.616†	177.6	0.0933729	mg/L	0.00027627	0.0933729	mg/L	0.00027627	0.30%
QC value within limits for Co 228.616 Recovery = 93.37%								
Cr 267.716†	493.9	0.0924974	mg/L	0.00117452	0.0924974	mg/L	0.00117452	1.27%
QC value within limits for Cr 267.716 Recovery = 92.50%								
Cu 327.393†	759.4	0.101932	mg/L	0.0008174	0.101932	mg/L	0.0008174	0.80%
QC value within limits for Cu 327.393 Recovery = 101.93%								
Fe 273.955†	426.2	0.900588	mg/L	0.0093679	0.900588	mg/L	0.0093679	1.04%
QC value within limits for Fe 273.955 Recovery = 90.06%								
K 404.721†	11.8	-7.37949	mg/L	0.380538	-7.37949	mg/L	0.380538	5.16%
QC value less than the lower limit for K 404.721 Recovery = -147.59%								
Mg 279.077†	4033.9	4.77422	mg/L	0.015764	4.77422	mg/L	0.015764	0.33%
QC value within limits for Mg 279.077 Recovery = 95.48%								
Mn 257.610†	2301.0	0.101739	mg/L	0.0004940	0.101739	mg/L	0.0004940	0.49%
QC value within limits for Mn 257.610 Recovery = 101.74%								
Mo 202.031†	101.1	0.0958488	mg/L	0.00182650	0.0958488	mg/L	0.00182650	1.91%
QC value within limits for Mo 202.031 Recovery = 95.85%								
Na 330.237†	750.9	22.1784	mg/L	0.20593	22.1784	mg/L	0.20593	0.93%
QC value within limits for Na 330.237 Recovery = 88.71%								
Ni 231.604†	228.4	0.0953689	mg/L	0.00123931	0.0953689	mg/L	0.00123931	1.30%
QC value within limits for Ni 231.604 Recovery = 95.37%								
Pb 220.353†	24.7	0.0497266	mg/L	0.00270773	0.0497266	mg/L	0.00270773	5.45%
QC value within limits for Pb 220.353 Recovery = 99.45%								
Sb 206.836†	8.5	0.0625745	mg/L	0.00637844	0.0625745	mg/L	0.00637844	10.19%
QC value within limits for Sb 206.836 Recovery = 89.39%								
Se 196.026†	15.9	0.0890183	mg/L	0.00497250	0.0890183	mg/L	0.00497250	5.59%
QC value within limits for Se 196.026 Recovery = 89.02%								
Sn 189.927†	38.1	0.100972	mg/L	0.0025680	0.100972	mg/L	0.0025680	2.54%
QC value within limits for Sn 189.927 Recovery = 100.97%								
Ti 334.940†	2044.7	0.0921051	mg/L	0.00071529	0.0921051	mg/L	0.00071529	0.78%
QC value within limits for Ti 334.940 Recovery = 92.11%								
Tl 190.801†	14.0	0.0949242	mg/L	0.00415208	0.0949242	mg/L	0.00415208	4.37%
QC value within limits for Tl 190.801 Recovery = 94.92%								
V 290.880†	419.5	0.0955012	mg/L	0.00085435	0.0955012	mg/L	0.00085435	0.89%
QC value within limits for V 290.880 Recovery = 95.50%								
Zn 206.200†	273.9	0.0956542	mg/L	0.00024506	0.0956542	mg/L	0.00024506	0.26%
QC value within limits for Zn 206.200 Recovery = 95.65%								
B 249.772	922.3	0.211651	mg/L	0.0003964	0.211651	mg/L	0.0003964	0.19%
QC value within limits for B 249.772 Recovery = 105.83%								
Si 251.611	199.8	0.130219	mg/L	0.0011797	0.130219	mg/L	0.0011797	0.91%
QC value greater than the upper limit for Si 251.611 Recovery = 130.22%								

QC Failed. Continue with analysis.

Sequence No.: 12 **Autosampler Location: 7**
Sample ID: ICSA V-333668 **Date Collected: 9/11/2020 6:36:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	45443.8	87.0	%	0.48				0.55%
Y 371.029	14673.0	84.8	%	0.18				0.22%
Ag 328.068†	-428.5	-0.0243406	mg/L	0.00113701	-0.0243406	mg/L	0.00113701	4.67%
Al 308.215†	554894.2	527.672	mg/L	1.9281	527.672	mg/L	1.9281	0.37%
QC value within limits for Al 308.215 Recovery = 105.53%								
As 188.979†	-0.2	-0.0172443	mg/L	0.01459476	-0.0172443	mg/L	0.01459476	84.64%
Ba 233.527†	43.1	-0.0077130	mg/L	0.00016796	-0.0077130	mg/L	0.00016796	2.18%
Be 313.107†	-34.4	-0.0006978	mg/L	0.00006040	-0.0006978	mg/L	0.00006040	8.66%
Ca 315.887†	1309635.9	471.631	mg/L	1.2941	471.631	mg/L	1.2941	0.27%
QC value within limits for Ca 315.887 Recovery = 94.33%								
Cd 228.802†	0.9	0.0043483	mg/L	0.00131863	0.0043483	mg/L	0.00131863	30.33%
Co 228.616†	1.3	0.0016520	mg/L	0.00096250	0.0016520	mg/L	0.00096250	58.26%
Cr 267.716†	-11.1	-0.0063926	mg/L	0.00081655	-0.0063926	mg/L	0.00081655	12.77%
Cu 327.393†	-124.1	-0.0039440	mg/L	0.00148033	-0.0039440	mg/L	0.00148033	37.53%
Fe 273.955†	71506.1	179.863	mg/L	1.4121	179.863	mg/L	1.4121	0.79%
QC value within limits for Fe 273.955 Recovery = 89.93%								
K 404.721†	-21.9	-1937.09	mg/L	14.617	-1937.09	mg/L	14.617	0.75%
Mg 279.077†	418658.7	495.906	mg/L	0.8841	495.906	mg/L	0.8841	0.18%
QC value within limits for Mg 279.077 Recovery = 99.18%								
Mn 257.610†	-199.2	-0.0171840	mg/L	0.00028197	-0.0171840	mg/L	0.00028197	1.64%
Mo 202.031†	-5.1	-0.0025909	mg/L	0.00139906	-0.0025909	mg/L	0.00139906	54.00%
Na 330.237†	-31.0	-0.818939	mg/L	0.1412356	-0.818939	mg/L	0.1412356	17.25%
Ni 231.604†	5.2	0.0022770	mg/L	0.00089594	0.0022770	mg/L	0.00089594	39.35%
Pb 220.353†	-19.2	0.0163923	mg/L	0.00665499	0.0163923	mg/L	0.00665499	40.60%
Sb 206.836†	2.0	0.0104798	mg/L	0.00413512	0.0104798	mg/L	0.00413512	39.46%
Se 196.026†	-32.7	-0.0142897	mg/L	0.01014065	-0.0142897	mg/L	0.01014065	70.96%
Sn 189.927†	-18.3	-0.0467508	mg/L	0.00590751	-0.0467508	mg/L	0.00590751	12.64%
Ti 334.940†	-178.6	0.0189692	mg/L	0.00049466	0.0189692	mg/L	0.00049466	2.61%
Tl 190.801†	-0.7	-0.0211186	mg/L	0.00400166	-0.0211186	mg/L	0.00400166	18.95%
V 290.880†	626.3	0.169465	mg/L	0.0030661	0.169465	mg/L	0.0030661	1.81%
Zn 206.200†	18.8	0.0073397	mg/L	0.00108169	0.0073397	mg/L	0.00108169	14.74%
B 249.772	3347.1	0.185524	mg/L	0.0121565	0.185524	mg/L	0.0121565	6.55%
Si 251.611	-17.3	0.726231	mg/L	0.0042895	0.726231	mg/L	0.0042895	0.59%

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 85

Autosampler Location: 6
Date Collected: 9/11/2020 6:40:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	48365.0	92.6	%	0.18				0.19%
Y 371.029	15708.6	90.8	%	0.74				0.81%
Ag 328.068†	1090.3	0.100936	mg/L	0.0004100	0.100936	mg/L	0.0004100	0.41%
QC value within limits for Ag 328.068 Recovery = 100.94%								
Al 308.215†	5327.8	5.02609	mg/L	0.008397	5.02609	mg/L	0.008397	0.17%
QC value within limits for Al 308.215 Recovery = 100.52%								
As 188.979†	43.5	0.534605	mg/L	0.0150804	0.534605	mg/L	0.0150804	2.82%
QC value within limits for As 188.979 Recovery = 106.92%								
Ba 233.527†	3727.3	0.494929	mg/L	0.0015206	0.494929	mg/L	0.0015206	0.31%
QC value within limits for Ba 233.527 Recovery = 98.99%								
Be 313.107†	104533.7	0.494209	mg/L	0.0010762	0.494209	mg/L	0.0010762	0.22%
QC value within limits for Be 313.107 Recovery = 98.84%								
Ca 315.887†	135617.7	49.0083	mg/L	0.10935	49.0083	mg/L	0.10935	0.22%
QC value within limits for Ca 315.887 Recovery = 98.02%								
Cd 228.802†	1004.3	0.484304	mg/L	0.0053148	0.484304	mg/L	0.0053148	1.10%
QC value within limits for Cd 228.802 Recovery = 96.86%								
Co 228.616†	948.5	0.494436	mg/L	0.0036872	0.494436	mg/L	0.0036872	0.75%
QC value within limits for Co 228.616 Recovery = 98.89%								
Cr 267.716†	2620.0	0.511847	mg/L	0.0032148	0.511847	mg/L	0.0032148	0.63%
QC value within limits for Cr 267.716 Recovery = 102.37%								
Cu 327.393†	3617.9	0.502895	mg/L	0.0014195	0.502895	mg/L	0.0014195	0.28%
QC value within limits for Cu 327.393 Recovery = 100.58%								
Fe 273.955†	2245.4	5.48087	mg/L	0.041253	5.48087	mg/L	0.041253	0.75%
QC value within limits for Fe 273.955 Recovery = 109.62%								
K 404.721†	834.6	-8.53297	mg/L	0.361815	-8.53297	mg/L	0.361815	4.24%
QC value less than the lower limit for K 404.721 Recovery = -17.07%								
Mg 279.077†	41619.1	49.2947	mg/L	0.21543	49.2947	mg/L	0.21543	0.44%
QC value within limits for Mg 279.077 Recovery = 98.59%								
Mn 257.610†	10702.4	0.501362	mg/L	0.0004472	0.501362	mg/L	0.0004472	0.09%
QC value within limits for Mn 257.610 Recovery = 100.27%								
Mo 202.031†	532.3	0.495812	mg/L	0.0018926	0.495812	mg/L	0.0018926	0.38%
QC value within limits for Mo 202.031 Recovery = 99.16%								
Na 330.237†	1800.8	53.0595	mg/L	0.31535	53.0595	mg/L	0.31535	0.59%
QC value within limits for Na 330.237 Recovery = 106.12%								
Ni 231.604†	1189.0	0.495916	mg/L	0.0045406	0.495916	mg/L	0.0045406	0.92%
QC value within limits for Ni 231.604 Recovery = 99.18%								
Pb 220.353†	238.2	0.504208	mg/L	0.0057055	0.504208	mg/L	0.0057055	1.13%
QC value within limits for Pb 220.353 Recovery = 100.84%								
Sb 206.836†	63.6	0.496225	mg/L	0.0069030	0.496225	mg/L	0.0069030	1.39%
QC value within limits for Sb 206.836 Recovery = 99.25%								
Se 196.026†	90.4	0.503321	mg/L	0.0237300	0.503321	mg/L	0.0237300	4.71%
QC value within limits for Se 196.026 Recovery = 100.66%								
Sn 189.927†	187.9	0.493233	mg/L	0.0066424	0.493233	mg/L	0.0066424	1.35%
QC value within limits for Sn 189.927 Recovery = 98.65%								
Ti 334.940†	10473.2	0.507217	mg/L	0.0007312	0.507217	mg/L	0.0007312	0.14%
QC value within limits for Ti 334.940 Recovery = 101.44%								
Tl 190.801†	70.9	0.488870	mg/L	0.0024375	0.488870	mg/L	0.0024375	0.50%
QC value within limits for Tl 190.801 Recovery = 97.77%								
V 290.880†	2104.5	0.519459	mg/L	0.0016099	0.519459	mg/L	0.0016099	0.31%
QC value within limits for V 290.880 Recovery = 103.89%								
Zn 206.200†	1405.8	0.487527	mg/L	0.0046857	0.487527	mg/L	0.0046857	0.96%
QC value within limits for Zn 206.200 Recovery = 97.51%								
B 249.772	2239.7	0.537193	mg/L	0.0013651	0.537193	mg/L	0.0013651	0.25%
QC value within limits for B 249.772 Recovery = 107.44%								
Si 251.611	7311.5	5.17085	mg/L	0.025133	5.17085	mg/L	0.025133	0.49%
QC value within limits for Si 251.611 Recovery = 103.42%								

QC Failed. Continue with analysis.

Sequence No.: 14 **Autosampler Location: 2**
Sample ID: CCB V-333667 **Date Collected: 9/11/2020 6:44:53 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	53169.6	102	%	1.19				1.17%
Y 371.029	17591.8	102	%	0.82				0.81%
Ag 328.068†	7.1	0.0018186	mg/L	0.00061818	0.0018186	mg/L	0.00061818	33.99%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-1.3	-0.0574252	mg/L	0.00355100	-0.0574252	mg/L	0.00355100	6.18%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.6	0.0004626	mg/L	0.00224962	0.0004626	mg/L	0.00224962	486.34%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.3	-0.0136356	mg/L	0.00022153	-0.0136356	mg/L	0.00022153	1.62%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	31.1	-0.0003882	mg/L	0.00004772	-0.0003882	mg/L	0.00004772	12.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-43.8	0.172809	mg/L	0.0032212	0.172809	mg/L	0.0032212	1.86%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	0.2	0.0040164	mg/L	0.00021930	0.0040164	mg/L	0.00021930	5.46%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.1	0.0010359	mg/L	0.00207497	0.0010359	mg/L	0.00207497	200.31%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.5	-0.0046478	mg/L	0.00055587	-0.0046478	mg/L	0.00055587	11.96%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-7.8	-0.0056584	mg/L	0.00047260	-0.0056584	mg/L	0.00047260	8.35%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	0.2	-0.171919	mg/L	0.0051383	-0.171919	mg/L	0.0051383	2.99%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-9.4	2.92737	mg/L	0.387159	2.92737	mg/L	0.387159	13.23%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	6.4	0.0035548	mg/L	0.00367762	0.0035548	mg/L	0.00367762	103.46%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-2.0	-0.0078077	mg/L	0.00014524	-0.0078077	mg/L	0.00014524	1.86%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-1.5	0.0007502	mg/L	0.00086650	0.0007502	mg/L	0.00086650	115.50%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-3.1	0.0027615	mg/L	0.05982269	0.0027615	mg/L	0.05982269	>999.9%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	1.3	0.0006531	mg/L	0.00023624	0.0006531	mg/L	0.00023624	36.17%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.8	0.0008973	mg/L	0.00331733	0.0008973	mg/L	0.00331733	369.70%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.5	-0.0014596	mg/L	0.00760563	-0.0014596	mg/L	0.00760563	521.07%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.7	-0.0030023	mg/L	0.00489581	-0.0030023	mg/L	0.00489581	163.07%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.9	0.0036772	mg/L	0.00237544	0.0036772	mg/L	0.00237544	64.60%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	4.9	-0.0078956	mg/L	0.00016480	-0.0078956	mg/L	0.00016480	2.09%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.2	-0.0102487	mg/L	0.00973226	-0.0102487	mg/L	0.00973226	94.96%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	1.3	-0.0093553	mg/L	0.00063740	-0.0093553	mg/L	0.00063740	6.81%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-2.2	0.0000655	mg/L	0.00036405	0.0000655	mg/L	0.00036405	556.16%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	9.7	-0.0104700	mg/L	0.00096587	-0.0104700	mg/L	0.00096587	9.23%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	0.3	-0.0330978	mg/L	0.00046977	-0.0330978	mg/L	0.00046977	1.42%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 15
Sample ID: MB 85267 (1)
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 86
Date Collected: 9/11/2020 6:48:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: MB 85267 (1)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	53667.9	103	%	0.32				0.31%
Y 371.029	17730.0	102	%	0.64				0.62%
Ag 328.068†	8.8	0.0019739	mg/L	0.00014829	0.0019739	mg/L	0.00014829	7.51%
Al 308.215†	4.0	-0.0524233	mg/L	0.00186737	-0.0524233	mg/L	0.00186737	3.56%
As 188.979†	1.2	0.0077755	mg/L	0.01066336	0.0077755	mg/L	0.01066336	137.14%
Ba 233.527†	1.2	-0.0134324	mg/L	0.00034135	-0.0134324	mg/L	0.00034135	2.54%
Be 313.107†	13.1	-0.0004734	mg/L	0.00005839	-0.0004734	mg/L	0.00005839	12.33%
Ca 315.887†	14.9	0.193929	mg/L	0.0013597	0.193929	mg/L	0.0013597	0.70%
Cd 228.802†	-0.1	0.0038689	mg/L	0.00029039	0.0038689	mg/L	0.00029039	7.51%
Co 228.616†	-0.5	0.0007312	mg/L	0.00030386	0.0007312	mg/L	0.00030386	41.55%
Cr 267.716†	1.8	-0.0045871	mg/L	0.00018100	-0.0045871	mg/L	0.00018100	3.95%
Cu 327.393†	-3.1	-0.0049860	mg/L	0.00020791	-0.0049860	mg/L	0.00020791	4.17%
Fe 273.955†	33.8	-0.0872709	mg/L	0.00528785	-0.0872709	mg/L	0.00528785	6.06%
K 404.721†	-9.1	2.03566	mg/L	0.810257	2.03566	mg/L	0.810257	39.80%
Mg 279.077†	6.6	0.0038612	mg/L	0.00330903	0.0038612	mg/L	0.00330903	85.70%
Mn 257.610†	12.1	-0.0071347	mg/L	0.00011157	-0.0071347	mg/L	0.00011157	1.56%
Mo 202.031†	-1.8	0.0004953	mg/L	0.00145871	0.0004953	mg/L	0.00145871	294.53%
Na 330.237†	-2.6	0.0177600	mg/L	0.11104139	0.0177600	mg/L	0.11104139	625.23%
Ni 231.604†	-0.1	0.0000953	mg/L	0.00108746	0.0000953	mg/L	0.00108746	>999.9%
Pb 220.353†	-0.1	-0.0031793	mg/L	0.00510123	-0.0031793	mg/L	0.00510123	160.45%
Sb 206.836†	1.0	0.0021291	mg/L	0.00628596	0.0021291	mg/L	0.00628596	295.24%
Se 196.026†	1.2	0.0077542	mg/L	0.00569451	0.0077542	mg/L	0.00569451	73.44%
Sn 189.927†	0.5	0.0024303	mg/L	0.00558426	0.0024303	mg/L	0.00558426	229.78%
Ti 334.940†	9.0	-0.0076908	mg/L	0.00019608	-0.0076908	mg/L	0.00019608	2.55%
Tl 190.801†	-0.8	-0.0072921	mg/L	0.00910893	-0.0072921	mg/L	0.00910893	124.91%
V 290.880†	0.9	-0.0094508	mg/L	0.00090974	-0.0094508	mg/L	0.00090974	9.63%
Zn 206.200†	11.0	0.0046341	mg/L	0.00065538	0.0046341	mg/L	0.00065538	14.14%
B 249.772	4.8	-0.0118179	mg/L	0.00020719	-0.0118179	mg/L	0.00020719	1.75%
Si 251.611	28.6	-0.0129164	mg/L	0.00241427	-0.0129164	mg/L	0.00241427	18.69%

Sequence No.: 16
Sample ID: LCSW 85267
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 87
Date Collected: 9/11/2020 6:52:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LCSW 85267

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	48360.8	92.6	%	1.11				1.20%
Y 371.029	16036.1	92.7	%	0.76				0.82%
Ag 328.068†	1112.5	0.102930	mg/L	0.0005974	0.102930	mg/L	0.0005974	0.58%
Al 308.215†	5355.6	5.05217	mg/L	0.011624	5.05217	mg/L	0.011624	0.23%
As 188.979†	38.9	0.475387	mg/L	0.0176548	0.475387	mg/L	0.0176548	3.71%
Ba 233.527†	3884.1	0.516317	mg/L	0.0010479	0.516317	mg/L	0.0010479	0.20%
Be 313.107†	105577.7	0.499150	mg/L	0.0010355	0.499150	mg/L	0.0010355	0.21%
Ca 315.887†	134788.0	48.7096	mg/L	0.10555	48.7096	mg/L	0.10555	0.22%
Cd 228.802†	1037.4	0.500162	mg/L	0.0029888	0.500162	mg/L	0.0029888	0.60%
Co 228.616†	968.4	0.504822	mg/L	0.0079885	0.504822	mg/L	0.0079885	1.58%
Cr 267.716†	2683.2	0.524248	mg/L	0.0048182	0.524248	mg/L	0.0048182	0.92%
Cu 327.393†	3612.4	0.502150	mg/L	0.0044505	0.502150	mg/L	0.0044505	0.89%
Fe 273.955†	2368.3	5.79042	mg/L	0.032812	5.79042	mg/L	0.032812	0.57%
K 404.721†	276.3	-44.5636	mg/L	0.55132	-44.5636	mg/L	0.55132	1.24%
Mg 279.077†	41422.3	49.0616	mg/L	0.06309	49.0616	mg/L	0.06309	0.13%
Mn 257.610†	10976.5	0.514404	mg/L	0.0007171	0.514404	mg/L	0.0007171	0.14%
Mo 202.031†	550.6	0.512789	mg/L	0.0048085	0.512789	mg/L	0.0048085	0.94%
Na 330.237†	1788.5	52.6955	mg/L	0.57384	52.6955	mg/L	0.57384	1.09%
Ni 231.604†	1223.2	0.510158	mg/L	0.0049454	0.510158	mg/L	0.0049454	0.97%
Pb 220.353†	239.9	0.507827	mg/L	0.0072631	0.507827	mg/L	0.0072631	1.43%
Sb 206.836†	65.5	0.511299	mg/L	0.0064887	0.511299	mg/L	0.0064887	1.27%
Se 196.026†	93.1	0.518179	mg/L	0.0026250	0.518179	mg/L	0.0026250	0.51%
Sn 189.927†	193.0	0.506578	mg/L	0.0111031	0.506578	mg/L	0.0111031	2.19%
Ti 334.940†	10645.5	0.515613	mg/L	0.0011886	0.515613	mg/L	0.0011886	0.23%
Tl 190.801†	74.4	0.513267	mg/L	0.0115216	0.513267	mg/L	0.0115216	2.24%
V 290.880†	2105.9	0.519790	mg/L	0.0057359	0.519790	mg/L	0.0057359	1.10%
Zn 206.200†	1428.3	0.495335	mg/L	0.0039585	0.495335	mg/L	0.0039585	0.80%
B 249.772	2271.1	0.537965	mg/L	0.0020092	0.537965	mg/L	0.0020092	0.37%
Si 251.611	834.6	0.656534	mg/L	0.0066194	0.656534	mg/L	0.0066194	1.01%

Sequence No.: 17
Sample ID: LCSW MR 85267
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 88
Date Collected: 9/11/2020 6:56:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LCSW MR 85267

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	48974.5	93.8	%	0.30				0.32%
Y 371.029	16516.0	95.5	%	0.59				0.62%
Ag 328.068†	1097.0	0.101587	mg/L	0.0007726	0.101587	mg/L	0.0007726	0.76%
Al 308.215†	5343.2	5.04102	mg/L	0.014065	5.04102	mg/L	0.014065	0.28%
As 188.979†	38.9	0.474520	mg/L	0.0092982	0.474520	mg/L	0.0092982	1.96%
Ba 233.527†	3885.9	0.516567	mg/L	0.0015420	0.516567	mg/L	0.0015420	0.30%
Be 313.107†	105830.3	0.500345	mg/L	0.0015437	0.500345	mg/L	0.0015437	0.31%
Ca 315.887†	135989.2	49.1420	mg/L	0.07499	49.1420	mg/L	0.07499	0.15%
Cd 228.802†	1019.8	0.491713	mg/L	0.0020675	0.491713	mg/L	0.0020675	0.42%
Co 228.616†	955.3	0.497971	mg/L	0.0021319	0.497971	mg/L	0.0021319	0.43%
Cr 267.716†	2605.0	0.508939	mg/L	0.0040485	0.508939	mg/L	0.0040485	0.80%
Cu 327.393†	3614.7	0.502473	mg/L	0.0031908	0.502473	mg/L	0.0031908	0.64%
Fe 273.955†	2324.6	5.68029	mg/L	0.003833	5.68029	mg/L	0.003833	0.07%
K 404.721†	279.5	-43.1884	mg/L	0.96522	-43.1884	mg/L	0.96522	2.23%
Mg 279.077†	41676.5	49.3627	mg/L	0.04442	49.3627	mg/L	0.04442	0.09%
Mn 257.610†	10903.7	0.510937	mg/L	0.0016025	0.510937	mg/L	0.0016025	0.31%
Mo 202.031†	540.4	0.503285	mg/L	0.0006048	0.503285	mg/L	0.0006048	0.12%
Na 330.237†	1774.9	52.2971	mg/L	0.31832	52.2971	mg/L	0.31832	0.61%
Ni 231.604†	1212.6	0.505724	mg/L	0.0006099	0.505724	mg/L	0.0006099	0.12%
Pb 220.353†	235.6	0.498600	mg/L	0.0036925	0.498600	mg/L	0.0036925	0.74%
Sb 206.836†	65.1	0.507665	mg/L	0.0094333	0.507665	mg/L	0.0094333	1.86%
Se 196.026†	89.5	0.498506	mg/L	0.0251636	0.498506	mg/L	0.0251636	5.05%
Sn 189.927†	192.7	0.505698	mg/L	0.0036324	0.505698	mg/L	0.0036324	0.72%
Ti 334.940†	10741.7	0.520343	mg/L	0.0018743	0.520343	mg/L	0.0018743	0.36%
Tl 190.801†	73.7	0.508402	mg/L	0.0047315	0.508402	mg/L	0.0047315	0.93%
V 290.880†	2140.5	0.528483	mg/L	0.0033892	0.528483	mg/L	0.0033892	0.64%
Zn 206.200†	1402.7	0.486450	mg/L	0.0015387	0.486450	mg/L	0.0015387	0.32%
B 249.772	2267.0	0.537157	mg/L	0.0021500	0.537157	mg/L	0.0021500	0.40%
Si 251.611	857.0	0.671587	mg/L	0.0034137	0.671587	mg/L	0.0034137	0.51%

Sequence No.: 18
Sample ID: AD19159-004
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 89
Date Collected: 9/11/2020 7:00:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	43926.0	84.1	%	0.61				0.72%
Y 371.029	14476.4	83.7	%	1.08				1.29%
Ag 328.068†	153.0	0.0148642	mg/L	0.00057687	0.0148642	mg/L	0.00057687	3.88%
Al 308.215†	78.9	0.0197273	mg/L	0.00554583	0.0197273	mg/L	0.00554583	28.11%
As 188.979†	0.3	-0.0043271	mg/L	0.02773202	-0.0043271	mg/L	0.02773202	640.89%
Ba 233.527†	13695.4	1.85489	mg/L	0.005262	1.85489	mg/L	0.005262	0.28%
Be 313.107†	-59.2	-0.0008154	mg/L	0.00002828	-0.0008154	mg/L	0.00002828	3.47%
Ca 315.887†	1905098.7	685.986	mg/L	2.9073	685.986	mg/L	2.9073	0.42%
Cd 228.802†	17.6	0.0123193	mg/L	0.00063159	0.0123193	mg/L	0.00063159	5.13%
Co 228.616†	3.5	0.0027947	mg/L	0.00145587	0.0027947	mg/L	0.00145587	52.09%
Cr 267.716†	149.2	0.0244471	mg/L	0.00050032	0.0244471	mg/L	0.00050032	2.05%
Cu 327.393†	17.7	-0.0020744	mg/L	0.00031021	-0.0020744	mg/L	0.00031021	14.95%
Fe 273.955†	25.9	-0.107210	mg/L	0.0062051	-0.107210	mg/L	0.0062051	5.79%
K 404.721†	23.1	4.13775	mg/L	1.151701	4.13775	mg/L	1.151701	27.83%
Mg 279.077†	4938.5	5.84581	mg/L	0.020785	5.84581	mg/L	0.020785	0.36%
Mn 257.610†	2845.2	0.127627	mg/L	0.0009971	0.127627	mg/L	0.0009971	0.78%
Mo 202.031†	6.1	0.0078042	mg/L	0.00118462	0.0078042	mg/L	0.00118462	15.18%
Na 330.237†	59146.4	1739.68	mg/L	2.122	1739.68	mg/L	2.122	0.12%
Ni 231.604†	33.1	0.0139306	mg/L	0.00099479	0.0139306	mg/L	0.00099479	7.14%
Pb 220.353†	16.7	0.0327235	mg/L	0.00200638	0.0327235	mg/L	0.00200638	6.13%
Sb 206.836†	1.5	0.0062696	mg/L	0.00616551	0.0062696	mg/L	0.00616551	98.34%
Se 196.026†	0.1	0.0568512	mg/L	0.01402122	0.0568512	mg/L	0.01402122	24.66%
Sn 189.927†	-1.4	-0.0023163	mg/L	0.00362568	-0.0023163	mg/L	0.00362568	156.53%
Ti 334.940†	-248.8	0.0318337	mg/L	0.00142241	0.0318337	mg/L	0.00142241	4.47%
Tl 190.801†	-1.2	-0.0554704	mg/L	0.01052383	-0.0554704	mg/L	0.01052383	18.97%
V 290.880†	82.2	0.0112256	mg/L	0.00052308	0.0112256	mg/L	0.00052308	4.66%
Zn 206.200†	1430.1	0.495948	mg/L	0.0012781	0.495948	mg/L	0.0012781	0.26%
B 249.772	286.0	0.0541303	mg/L	0.00097400	0.0541303	mg/L	0.00097400	1.80%
Si 251.611	4847.5	3.59958	mg/L	0.031819	3.59958	mg/L	0.031819	0.88%

Sequence No.: 19
Sample ID: AD19159-004 MR
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 90
Date Collected: 9/11/2020 7:05:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 MR

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44860.2	85.9	%	0.37				0.43%
Y 371.029	14853.7	85.9	%	0.70				0.81%
Ag 328.068†	156.4	0.0151754	mg/L	0.00007582	0.0151754	mg/L	0.00007582	0.50%
Al 308.215†	78.3	0.0192443	mg/L	0.00314734	0.0192443	mg/L	0.00314734	16.35%
As 188.979†	0.5	-0.0006362	mg/L	0.04817536	-0.0006362	mg/L	0.04817536	>999.9%
Ba 233.527†	13693.4	1.85462	mg/L	0.013226	1.85462	mg/L	0.013226	0.71%
Be 313.107†	-79.1	-0.0009094	mg/L	0.00004392	-0.0009094	mg/L	0.00004392	4.83%
Ca 315.887†	1910931.0	688.086	mg/L	8.4232	688.086	mg/L	8.4232	1.22%
Cd 228.802†	15.6	0.0113828	mg/L	0.00084526	0.0113828	mg/L	0.00084526	7.43%
Co 228.616†	-0.4	0.0007683	mg/L	0.00027523	0.0007683	mg/L	0.00027523	35.82%
Cr 267.716†	149.4	0.0244817	mg/L	0.00170992	0.0244817	mg/L	0.00170992	6.98%
Cu 327.393†	16.5	-0.0022459	mg/L	0.00040865	-0.0022459	mg/L	0.00040865	18.20%
Fe 273.955†	27.9	-0.102152	mg/L	0.0047031	-0.102152	mg/L	0.0047031	4.60%
K 404.721†	27.0	4.30720	mg/L	0.409412	4.30720	mg/L	0.409412	9.51%
Mg 279.077†	4983.9	5.89956	mg/L	0.021307	5.89956	mg/L	0.021307	0.36%
Mn 257.610†	2846.8	0.127701	mg/L	0.0012374	0.127701	mg/L	0.0012374	0.97%
Mo 202.031†	4.9	0.0066289	mg/L	0.00191244	0.0066289	mg/L	0.00191244	28.85%
Na 330.237†	58867.0	1731.47	mg/L	3.149	1731.47	mg/L	3.149	0.18%
Ni 231.604†	33.0	0.0138823	mg/L	0.00045670	0.0138823	mg/L	0.00045670	3.29%
Pb 220.353†	16.4	0.0320025	mg/L	0.00229269	0.0320025	mg/L	0.00229269	7.16%
Sb 206.836†	1.5	0.0058163	mg/L	0.00279952	0.0058163	mg/L	0.00279952	48.13%
Se 196.026†	0.2	0.0573048	mg/L	0.03821365	0.0573048	mg/L	0.03821365	66.68%
Sn 189.927†	-8.3	-0.0204655	mg/L	0.00221046	-0.0204655	mg/L	0.00221046	10.80%
Ti 334.940†	-274.2	0.0307523	mg/L	0.00045464	0.0307523	mg/L	0.00045464	1.48%
Tl 190.801†	0.1	-0.0467187	mg/L	0.01264770	-0.0467187	mg/L	0.01264770	27.07%
V 290.880†	83.4	0.0115361	mg/L	0.00057827	0.0115361	mg/L	0.00057827	5.01%
Zn 206.200†	1435.6	0.497855	mg/L	0.0027807	0.497855	mg/L	0.0027807	0.56%
B 249.772	280.5	0.0528391	mg/L	0.00025307	0.0528391	mg/L	0.00025307	0.48%
Si 251.611	4896.2	3.63363	mg/L	0.018800	3.63363	mg/L	0.018800	0.52%

Sequence No.: 20
Sample ID: AD19159-005 MS 1
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 91
Date Collected: 9/11/2020 7:09:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-005 MS 1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	43375.7	83.1	%	0.53				0.63%
Y 371.029	14329.8	82.8	%	0.40				0.48%
Ag 328.068†	1320.5	0.121337	mg/L	0.0003204	0.121337	mg/L	0.0003204	0.26%
Al 308.215†	5312.8	5.01188	mg/L	0.015214	5.01188	mg/L	0.015214	0.30%
As 188.979†	41.4	0.508457	mg/L	0.0173209	0.508457	mg/L	0.0173209	3.41%
Ba 233.527†	19103.5	2.59273	mg/L	0.009877	2.59273	mg/L	0.009877	0.38%
Be 313.107†	99650.2	0.471096	mg/L	0.0067070	0.471096	mg/L	0.0067070	1.42%
Ca 315.887†	2038595.5	734.042	mg/L	10.7870	734.042	mg/L	10.7870	1.47%
Cd 228.802†	1060.3	0.511115	mg/L	0.0028411	0.511115	mg/L	0.0028411	0.56%
Co 228.616†	880.9	0.459302	mg/L	0.0047918	0.459302	mg/L	0.0047918	1.04%
Cr 267.716†	2584.3	0.504825	mg/L	0.0033360	0.504825	mg/L	0.0033360	0.66%
Cu 327.393†	3655.2	0.508094	mg/L	0.0008235	0.508094	mg/L	0.0008235	0.16%
Fe 273.955†	2141.3	5.21882	mg/L	0.052239	5.21882	mg/L	0.052239	1.00%
K 404.721†	435.1	-29.1064	mg/L	0.82400	-29.1064	mg/L	0.82400	2.83%
Mg 279.077†	43387.6	51.3895	mg/L	0.10234	51.3895	mg/L	0.10234	0.20%
Mn 257.610†	12607.7	0.591993	mg/L	0.0017594	0.591993	mg/L	0.0017594	0.30%
Mo 202.031†	526.9	0.490796	mg/L	0.0011520	0.490796	mg/L	0.0011520	0.23%
Na 330.237†	60993.1	1794.00	mg/L	3.361	1794.00	mg/L	3.361	0.19%
Ni 231.604†	1147.1	0.478469	mg/L	0.0041828	0.478469	mg/L	0.0041828	0.87%
Pb 220.353†	229.7	0.486023	mg/L	0.0064535	0.486023	mg/L	0.0064535	1.33%
Sb 206.836†	66.5	0.518539	mg/L	0.0048143	0.518539	mg/L	0.0048143	0.93%
Se 196.026†	103.0	0.627030	mg/L	0.0018656	0.627030	mg/L	0.0018656	0.30%
Sn 189.927†	172.4	0.452589	mg/L	0.0099053	0.452589	mg/L	0.0099053	2.19%
Ti 334.940†	10019.4	0.537113	mg/L	0.0006689	0.537113	mg/L	0.0006689	0.12%
Tl 190.801†	63.6	0.392409	mg/L	0.0153928	0.392409	mg/L	0.0153928	3.92%
V 290.880†	2096.5	0.517594	mg/L	0.0046650	0.517594	mg/L	0.0046650	0.90%
Zn 206.200†	2710.5	0.939233	mg/L	0.0055594	0.939233	mg/L	0.0055594	0.59%
B 249.772	2274.5	0.537970	mg/L	0.0026119	0.537970	mg/L	0.0026119	0.49%
Si 251.611	4956.2	3.78034	mg/L	0.023986	3.78034	mg/L	0.023986	0.63%

Sequence No.: 21
Sample ID: AD19159-006 MS 2
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 92
Date Collected: 9/11/2020 7:13:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-006 MS 2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44195.5	84.7	%	0.29				0.34%
Y 371.029	14493.5	83.8	%	0.33				0.39%
Ag 328.068†	1319.5	0.121215	mg/L	0.0005717	0.121215	mg/L	0.0005717	0.47%
Al 308.215†	5341.0	5.03838	mg/L	0.033339	5.03838	mg/L	0.033339	0.66%
As 188.979†	42.4	0.520739	mg/L	0.0037262	0.520739	mg/L	0.0037262	0.72%
Ba 233.527†	18457.1	2.50454	mg/L	0.005009	2.50454	mg/L	0.005009	0.20%
Be 313.107†	100282.5	0.474089	mg/L	0.0018109	0.474089	mg/L	0.0018109	0.38%
Ca 315.887†	2029108.5	730.627	mg/L	2.2981	730.627	mg/L	2.2981	0.31%
Cd 228.802†	1068.3	0.514942	mg/L	0.0029278	0.514942	mg/L	0.0029278	0.57%
Co 228.616†	881.5	0.459579	mg/L	0.0020495	0.459579	mg/L	0.0020495	0.45%
Cr 267.716†	2578.9	0.503725	mg/L	0.0019023	0.503725	mg/L	0.0019023	0.38%
Cu 327.393†	3678.1	0.511304	mg/L	0.0025403	0.511304	mg/L	0.0025403	0.50%
Fe 273.955†	2144.9	5.22783	mg/L	0.013412	5.22783	mg/L	0.013412	0.26%
K 404.721†	437.6	-29.0592	mg/L	0.24443	-29.0592	mg/L	0.24443	0.84%
Mg 279.077†	42953.5	50.8754	mg/L	0.05744	50.8754	mg/L	0.05744	0.11%
Mn 257.610†	13855.9	0.651362	mg/L	0.0018086	0.651362	mg/L	0.0018086	0.28%
Mo 202.031†	525.5	0.489508	mg/L	0.0026177	0.489508	mg/L	0.0026177	0.53%
Na 330.237†	60563.5	1781.36	mg/L	2.167	1781.36	mg/L	2.167	0.12%
Ni 231.604†	1152.8	0.480840	mg/L	0.0028364	0.480840	mg/L	0.0028364	0.59%
Pb 220.353†	225.0	0.476104	mg/L	0.0022060	0.476104	mg/L	0.0022060	0.46%
Sb 206.836†	67.3	0.524815	mg/L	0.0159320	0.524815	mg/L	0.0159320	3.04%
Se 196.026†	99.9	0.609890	mg/L	0.0201867	0.609890	mg/L	0.0201867	3.31%
Sn 189.927†	172.9	0.453985	mg/L	0.0054920	0.453985	mg/L	0.0054920	1.21%
Ti 334.940†	10069.9	0.539319	mg/L	0.0015562	0.539319	mg/L	0.0015562	0.29%
Tl 190.801†	66.4	0.412348	mg/L	0.0080630	0.412348	mg/L	0.0080630	1.96%
V 290.880†	2071.1	0.511224	mg/L	0.0063529	0.511224	mg/L	0.0063529	1.24%
Zn 206.200†	2813.9	0.975033	mg/L	0.0017054	0.975033	mg/L	0.0017054	0.17%
B 249.772	2293.6	0.542464	mg/L	0.0016879	0.542464	mg/L	0.0016879	0.31%
Si 251.611	4890.6	3.73363	mg/L	0.024150	3.73363	mg/L	0.024150	0.65%

Sequence No.: 22
Sample ID: AD19159-004 PS
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 93
Date Collected: 9/11/2020 7:17:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 PS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	43895.0	84.1	%	0.68				0.81%
Y 371.029	14434.5	83.4	%	0.53				0.64%
Ag 328.068†	929.1	0.0866253	mg/L	0.00060062	0.0866253	mg/L	0.00060062	0.69%
Al 308.215†	5376.1	5.07204	mg/L	0.034180	5.07204	mg/L	0.034180	0.67%
As 188.979†	43.9	0.541069	mg/L	0.0172330	0.541069	mg/L	0.0172330	3.18%
Ba 233.527†	17201.9	2.33328	mg/L	0.020490	2.33328	mg/L	0.020490	0.88%
Be 313.107†	101463.2	0.479677	mg/L	0.0028981	0.479677	mg/L	0.0028981	0.60%
Ca 315.887†	2027460.4	730.034	mg/L	3.6728	730.034	mg/L	3.6728	0.50%
Cd 228.802†	1075.6	0.518401	mg/L	0.0037798	0.518401	mg/L	0.0037798	0.73%
Co 228.616†	903.1	0.470837	mg/L	0.0047493	0.470837	mg/L	0.0047493	1.01%
Cr 267.716†	2684.2	0.524432	mg/L	0.0039464	0.524432	mg/L	0.0039464	0.75%
Cu 327.393†	3703.5	0.514869	mg/L	0.0022027	0.514869	mg/L	0.0022027	0.43%
Fe 273.955†	2177.3	5.30955	mg/L	0.041845	5.30955	mg/L	0.041845	0.79%
K 404.721†	398.0	-32.2554	mg/L	1.93146	-32.2554	mg/L	1.93146	5.99%
Mg 279.077†	42981.9	50.9090	mg/L	0.35826	50.9090	mg/L	0.35826	0.70%
Mn 257.610†	13029.5	0.612055	mg/L	0.0034042	0.612055	mg/L	0.0034042	0.56%
Mo 202.031†	529.3	0.492977	mg/L	0.0050785	0.492977	mg/L	0.0050785	1.03%
Na 330.237†	59995.5	1764.66	mg/L	19.062	1764.66	mg/L	19.062	1.08%
Ni 231.604†	1177.8	0.491222	mg/L	0.0018199	0.491222	mg/L	0.0018199	0.37%
Pb 220.353†	239.4	0.506614	mg/L	0.0073970	0.506614	mg/L	0.0073970	1.46%
Sb 206.836†	67.2	0.523819	mg/L	0.0048606	0.523819	mg/L	0.0048606	0.93%
Se 196.026†	103.4	0.629082	mg/L	0.0229415	0.629082	mg/L	0.0229415	3.65%
Sn 189.927†	182.4	0.478926	mg/L	0.0067944	0.478926	mg/L	0.0067944	1.42%
Ti 334.940†	10136.3	0.542518	mg/L	0.0053226	0.542518	mg/L	0.0053226	0.98%
Tl 190.801†	67.3	0.419167	mg/L	0.0352333	0.419167	mg/L	0.0352333	8.41%
V 290.880†	2102.4	0.519042	mg/L	0.0071338	0.519042	mg/L	0.0071338	1.37%
Zn 206.200†	2910.1	1.00835	mg/L	0.007797	1.00835	mg/L	0.007797	0.77%
B 249.772	2232.3	0.527875	mg/L	0.0044199	0.527875	mg/L	0.0044199	0.84%
Si 251.611	5635.6	4.25063	mg/L	0.014174	4.25063	mg/L	0.014174	0.33%

Sequence No.: 23
Sample ID: AD19159-004 SD
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 94
Date Collected: 9/11/2020 7:22:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 SD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	51528.6	98.7	%	0.08				0.08%
Y 371.029	16798.8	97.1	%	0.32				0.33%
Ag 328.068†	32.7	0.0041091	mg/L	0.00031412	0.0041091	mg/L	0.00031412	7.64%
Al 308.215†	29.7	-0.0278521	mg/L	0.00308728	-0.0278521	mg/L	0.00308728	11.08%
As 188.979†	1.1	0.0068534	mg/L	0.00544530	0.0068534	mg/L	0.00544530	79.45%
Ba 233.527†	2882.0	0.379601	mg/L	0.0011299	0.379601	mg/L	0.0011299	0.30%
Be 313.107†	-10.5	-0.0005848	mg/L	0.00001410	-0.0005848	mg/L	0.00001410	2.41%
Ca 315.887†	385363.5	138.912	mg/L	0.5123	138.912	mg/L	0.5123	0.37%
Cd 228.802†	2.7	0.0051981	mg/L	0.00034329	0.0051981	mg/L	0.00034329	6.60%
Co 228.616†	-0.1	0.0009286	mg/L	0.00074739	0.0009286	mg/L	0.00074739	80.49%
Cr 267.716†	33.1	0.0015787	mg/L	0.00057045	0.0015787	mg/L	0.00057045	36.13%
Cu 327.393†	-5.4	-0.0053238	mg/L	0.00091494	-0.0053238	mg/L	0.00091494	17.19%
Fe 273.955†	7.6	-0.153404	mg/L	0.0036802	-0.153404	mg/L	0.0036802	2.40%
K 404.721†	-2.8	3.11730	mg/L	0.045121	3.11730	mg/L	0.045121	1.45%
Mg 279.077†	1059.5	1.25096	mg/L	0.004280	1.25096	mg/L	0.004280	0.34%
Mn 257.610†	513.0	0.0166891	mg/L	0.00002933	0.0166891	mg/L	0.00002933	0.18%
Mo 202.031†	1.0	0.0030368	mg/L	0.00046521	0.0030368	mg/L	0.00046521	15.32%
Na 330.237†	9379.6	275.962	mg/L	0.9475	275.962	mg/L	0.9475	0.34%
Ni 231.604†	5.9	0.0025778	mg/L	0.00071109	0.0025778	mg/L	0.00071109	27.58%
Pb 220.353†	4.0	0.0056696	mg/L	0.00172414	0.0056696	mg/L	0.00172414	30.41%
Sb 206.836†	1.6	0.0070475	mg/L	0.00472474	0.0070475	mg/L	0.00472474	67.04%
Se 196.026†	0.1	0.0125769	mg/L	0.00837030	0.0125769	mg/L	0.00837030	66.55%
Sn 189.927†	-4.0	-0.0093751	mg/L	0.00225569	-0.0093751	mg/L	0.00225569	24.06%
Ti 334.940†	-45.3	0.0001984	mg/L	0.00016864	0.0001984	mg/L	0.00016864	85.01%
Tl 190.801†	-0.2	-0.0125300	mg/L	0.00417872	-0.0125300	mg/L	0.00417872	33.35%
V 290.880†	16.9	-0.0053696	mg/L	0.00064991	-0.0053696	mg/L	0.00064991	12.10%
Zn 206.200†	303.6	0.105915	mg/L	0.0002726	0.105915	mg/L	0.0002726	0.26%
B 249.772	67.1	0.0038670	mg/L	0.00068493	0.0038670	mg/L	0.00068493	17.71%
Si 251.611	1108.1	0.788147	mg/L	0.0088819	0.788147	mg/L	0.0088819	1.13%

Sequence No.: 24
Sample ID: AD19143-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 97
Date Collected: 9/11/2020 7:26:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19143-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46764.6	89.6	%	1.70				1.90%
Y 371.029	15299.3	88.4	%	1.14				1.29%
Ag 328.068†	3.9	0.0016110	mg/L	0.00105122	0.0016110	mg/L	0.00105122	65.25%
Al 308.215†	98.2	0.0378876	mg/L	0.00250404	0.0378876	mg/L	0.00250404	6.61%
As 188.979†	0.7	-0.124203	mg/L	0.0061042	-0.124203	mg/L	0.0061042	4.91%
Ba 233.527†	3549.9	0.470717	mg/L	0.0026647	0.470717	mg/L	0.0026647	0.57%
Be 313.107†	27.2	-0.0004064	mg/L	0.00000963	-0.0004064	mg/L	0.00000963	2.37%
Ca 315.887†	64612.1	23.4476	mg/L	0.12206	23.4476	mg/L	0.12206	0.52%
Cd 228.802†	5.4	0.0065185	mg/L	0.00076010	0.0065185	mg/L	0.00076010	11.66%
Co 228.616†	19.5	0.0111427	mg/L	0.00010275	0.0111427	mg/L	0.00010275	0.92%
Cr 267.716†	8.2	-0.0032730	mg/L	0.00064685	-0.0032730	mg/L	0.00064685	19.76%
Cu 327.393†	25.4	-0.0009930	mg/L	0.00080604	-0.0009930	mg/L	0.00080604	81.17%
Fe 273.955†	34.9	-0.0845128	mg/L	0.00425966	-0.0845128	mg/L	0.00425966	5.04%
K 404.721†	4.7	2.81191	mg/L	1.250973	2.81191	mg/L	1.250973	44.49%
Mg 279.077†	4188.6	4.95749	mg/L	0.030177	4.95749	mg/L	0.030177	0.61%
Mn 257.610†	40704.2	1.92844	mg/L	0.013784	1.92844	mg/L	0.013784	0.71%
Mo 202.031†	0.3	0.0023912	mg/L	0.00125579	0.0023912	mg/L	0.00125579	52.52%
Na 330.237†	54924.8	1615.52	mg/L	15.998	1615.52	mg/L	15.998	0.99%
Ni 231.604†	28.8	0.0121157	mg/L	0.00099356	0.0121157	mg/L	0.00099356	8.20%
Pb 220.353†	4.0	0.0055286	mg/L	0.00180483	0.0055286	mg/L	0.00180483	32.65%
Sb 206.836†	-7.5	-0.0011408	mg/L	0.00564757	-0.0011408	mg/L	0.00564757	495.04%
Se 196.026†	3.7	0.0233122	mg/L	0.01722593	0.0233122	mg/L	0.01722593	73.89%
Sn 189.927†	9357.5	24.5986	mg/L	0.21207	24.5986	mg/L	0.21207	0.86%
Ti 334.940†	5.0	-0.0061203	mg/L	0.00019466	-0.0061203	mg/L	0.00019466	3.18%
Tl 190.801†	-1.9	-0.0109131	mg/L	0.01706366	-0.0109131	mg/L	0.01706366	156.36%
V 290.880†	57.0	0.0048622	mg/L	0.00097367	0.0048622	mg/L	0.00097367	20.03%
Zn 206.200†	905.0	0.314143	mg/L	0.0034342	0.314143	mg/L	0.0034342	1.09%
B 249.772	89.3	0.0834859	mg/L	0.00137578	0.0834859	mg/L	0.00137578	1.65%
Si 251.611	1857.7	1.57169	mg/L	0.016311	1.57169	mg/L	0.016311	1.04%

Sequence No.: 25
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/11/2020 7:30:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	51636.5	98.9	%	0.95				0.96%
Y 371.029	16886.2	97.6	%	1.22				1.24%
Ag 328.068†	1035.1	0.0959056	mg/L	0.00138766	0.0959056	mg/L	0.00138766	1.45%
QC value within limits for Ag 328.068 Recovery = 95.91%								
Al 308.215†	4989.6	4.70380	mg/L	0.009387	4.70380	mg/L	0.009387	0.20%
QC value within limits for Al 308.215 Recovery = 94.08%								
As 188.979†	42.3	0.520208	mg/L	0.0155108	0.520208	mg/L	0.0155108	2.98%
QC value within limits for As 188.979 Recovery = 104.04%								
Ba 233.527†	3553.3	0.471182	mg/L	0.0016456	0.471182	mg/L	0.0016456	0.35%
QC value within limits for Ba 233.527 Recovery = 94.24%								
Be 313.107†	99627.4	0.470988	mg/L	0.0004727	0.470988	mg/L	0.0004727	0.10%
QC value within limits for Be 313.107 Recovery = 94.20%								
Ca 315.887†	130632.7	47.2137	mg/L	0.01492	47.2137	mg/L	0.01492	0.03%
QC value within limits for Ca 315.887 Recovery = 94.43%								
Cd 228.802†	965.5	0.465747	mg/L	0.0021417	0.465747	mg/L	0.0021417	0.46%
QC value within limits for Cd 228.802 Recovery = 93.15%								
Co 228.616†	901.8	0.470169	mg/L	0.0016324	0.470169	mg/L	0.0016324	0.35%
QC value within limits for Co 228.616 Recovery = 94.03%								
Cr 267.716†	2498.0	0.487770	mg/L	0.0034464	0.487770	mg/L	0.0034464	0.71%
QC value within limits for Cr 267.716 Recovery = 97.55%								
Cu 327.393†	3390.3	0.470993	mg/L	0.0008662	0.470993	mg/L	0.0008662	0.18%
QC value within limits for Cu 327.393 Recovery = 94.20%								
Fe 273.955†	2181.4	5.31990	mg/L	0.036860	5.31990	mg/L	0.036860	0.69%
QC value within limits for Fe 273.955 Recovery = 106.40%								
K 404.721†	787.2	-9.57596	mg/L	0.373946	-9.57596	mg/L	0.373946	3.91%
QC value less than the lower limit for K 404.721 Recovery = -19.15%								
Mg 279.077†	40103.6	47.4996	mg/L	0.06104	47.4996	mg/L	0.06104	0.13%
QC value within limits for Mg 279.077 Recovery = 95.00%								
Mn 257.610†	10217.0	0.478273	mg/L	0.0012759	0.478273	mg/L	0.0012759	0.27%
QC value within limits for Mn 257.610 Recovery = 95.65%								
Mo 202.031†	505.2	0.470666	mg/L	0.0012234	0.470666	mg/L	0.0012234	0.26%
QC value within limits for Mo 202.031 Recovery = 94.13%								
Na 330.237†	1707.9	50.3268	mg/L	0.37324	50.3268	mg/L	0.37324	0.74%
QC value within limits for Na 330.237 Recovery = 100.65%								
Ni 231.604†	1153.6	0.481126	mg/L	0.0038796	0.481126	mg/L	0.0038796	0.81%
QC value within limits for Ni 231.604 Recovery = 96.23%								
Pb 220.353†	230.0	0.486627	mg/L	0.0119677	0.486627	mg/L	0.0119677	2.46%
QC value within limits for Pb 220.353 Recovery = 97.33%								
Sb 206.836†	62.1	0.484279	mg/L	0.0151927	0.484279	mg/L	0.0151927	3.14%
QC value within limits for Sb 206.836 Recovery = 96.86%								
Se 196.026†	84.4	0.470305	mg/L	0.0161389	0.470305	mg/L	0.0161389	3.43%
QC value within limits for Se 196.026 Recovery = 94.06%								
Sn 189.927†	187.9	0.493273	mg/L	0.0024085	0.493273	mg/L	0.0024085	0.49%
QC value within limits for Sn 189.927 Recovery = 98.65%								
Ti 334.940†	10004.7	0.484192	mg/L	0.0033545	0.484192	mg/L	0.0033545	0.69%
QC value within limits for Ti 334.940 Recovery = 96.84%								
Tl 190.801†	66.7	0.459417	mg/L	0.0120115	0.459417	mg/L	0.0120115	2.61%
QC value within limits for Tl 190.801 Recovery = 91.88%								
V 290.880†	2007.1	0.495006	mg/L	0.0026396	0.495006	mg/L	0.0026396	0.53%
QC value within limits for V 290.880 Recovery = 99.00%								
Zn 206.200†	1368.2	0.474501	mg/L	0.0039249	0.474501	mg/L	0.0039249	0.83%
QC value within limits for Zn 206.200 Recovery = 94.90%								
B 249.772	2262.1	0.542515	mg/L	0.0051617	0.542515	mg/L	0.0051617	0.95%
QC value within limits for B 249.772 Recovery = 108.50%								
Si 251.611	7478.4	5.28349	mg/L	0.050515	5.28349	mg/L	0.050515	0.96%
QC value within limits for Si 251.611 Recovery = 105.67%								

QC Failed. Continue with analysis.

Sequence No.: 26
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 9/11/2020 7:34:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	55080.8	106	%	1.86				1.76%
Y 371.029	18261.8	106	%	1.78				1.69%
Ag 328.068†	6.3	0.0017436	mg/L	0.00026963	0.0017436	mg/L	0.00026963	15.46%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-3.0	-0.0590211	mg/L	0.00383276	-0.0590211	mg/L	0.00383276	6.49%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.2	0.0089542	mg/L	0.00665220	0.0089542	mg/L	0.00665220	74.29%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.4	-0.0135484	mg/L	0.00016341	-0.0135484	mg/L	0.00016341	1.21%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	16.9	-0.0004552	mg/L	0.00001490	-0.0004552	mg/L	0.00001490	3.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-51.1	0.170177	mg/L	0.0022843	0.170177	mg/L	0.0022843	1.34%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.3	0.0037796	mg/L	0.00077303	0.0037796	mg/L	0.00077303	20.45%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-0.0	0.0009902	mg/L	0.00099841	0.0009902	mg/L	0.00099841	100.83%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.6	-0.0046211	mg/L	0.00048503	-0.0046211	mg/L	0.00048503	10.50%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-3.1	-0.0050000	mg/L	0.00113552	-0.0050000	mg/L	0.00113552	22.71%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-2.4	-0.178351	mg/L	0.0005727	-0.178351	mg/L	0.0005727	0.32%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-13.7	2.74985	mg/L	0.235468	2.74985	mg/L	0.235468	8.56%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	2.3	-0.0012479	mg/L	0.00188073	-0.0012479	mg/L	0.00188073	150.72%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-1.7	-0.0077891	mg/L	0.00011103	-0.0077891	mg/L	0.00011103	1.43%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-1.6	0.0006248	mg/L	0.00070818	0.0006248	mg/L	0.00070818	113.35%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.0	0.122551	mg/L	0.0557401	0.122551	mg/L	0.0557401	45.48%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-3.1	-0.0011544	mg/L	0.00044274	-0.0011544	mg/L	0.00044274	38.35%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.7	-0.0042968	mg/L	0.00047579	-0.0042968	mg/L	0.00047579	11.07%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.5	-0.0019293	mg/L	0.00747738	-0.0019293	mg/L	0.00747738	387.57%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.5	-0.0016093	mg/L	0.00567007	-0.0016093	mg/L	0.00567007	352.33%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.8	0.0060210	mg/L	0.00234091	0.0060210	mg/L	0.00234091	38.88%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	6.4	-0.0078212	mg/L	0.00015874	-0.0078212	mg/L	0.00015874	2.03%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-0.6	-0.0059335	mg/L	0.00756654	-0.0059335	mg/L	0.00756654	127.52%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	1.8	-0.0092381	mg/L	0.00018355	-0.0092381	mg/L	0.00018355	1.99%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-0.3	0.0007118	mg/L	0.00051177	0.0007118	mg/L	0.00051177	71.89%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-2.3	-0.0133420	mg/L	0.00059574	-0.0133420	mg/L	0.00059574	4.47%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-4.2	-0.0362211	mg/L	0.00074140	-0.0362211	mg/L	0.00074140	2.05%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 27
Sample ID: AD19139-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 95
Date Collected: 9/11/2020 7:38:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19139-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	47896.0	91.7	%	0.56				0.61%
Y 371.029	15454.4	89.3	%	0.28				0.31%
Ag 328.068†	3.9	0.0015812	mg/L	0.00021551	0.0015812	mg/L	0.00021551	13.63%
Al 308.215†	847.7	0.750146	mg/L	0.0111461	0.750146	mg/L	0.0111461	1.49%
As 188.979†	1.0	0.0052111	mg/L	0.01525269	0.0052111	mg/L	0.01525269	292.70%
Ba 233.527†	774.0	0.0920086	mg/L	0.00225351	0.0920086	mg/L	0.00225351	2.45%
Be 313.107†	-44.6	-0.0007464	mg/L	0.00004891	-0.0007464	mg/L	0.00004891	6.55%
Ca 315.887†	3552.1	1.46725	mg/L	0.008695	1.46725	mg/L	0.008695	0.59%
Cd 228.802†	1.5	0.0046240	mg/L	0.00073778	0.0046240	mg/L	0.00073778	15.96%
Co 228.616†	3.1	0.0025834	mg/L	0.00011880	0.0025834	mg/L	0.00011880	4.60%
Cr 267.716†	43.2	0.0035556	mg/L	0.00127023	0.0035556	mg/L	0.00127023	35.72%
Cu 327.393†	8.7	-0.0033009	mg/L	0.00080135	-0.0033009	mg/L	0.00080135	24.28%
Fe 273.955†	166.1	0.245778	mg/L	0.0161783	0.245778	mg/L	0.0161783	6.58%
K 404.721†	9.6	-0.458181	mg/L	0.6643794	-0.458181	mg/L	0.6643794	145.00%
Mg 279.077†	223.0	0.260207	mg/L	0.0052272	0.260207	mg/L	0.0052272	2.01%
Mn 257.610†	290.6	0.0061102	mg/L	0.00025387	0.0061102	mg/L	0.00025387	4.15%
Mo 202.031†	1.1	0.0031309	mg/L	0.00075302	0.0031309	mg/L	0.00075302	24.05%
Na 330.237†	57582.2	1693.68	mg/L	18.129	1693.68	mg/L	18.129	1.07%
Ni 231.604†	9.9	0.0042396	mg/L	0.00109358	0.0042396	mg/L	0.00109358	25.79%
Pb 220.353†	-0.8	-0.0045614	mg/L	0.00324774	-0.0045614	mg/L	0.00324774	71.20%
Sb 206.836†	0.4	-0.0022585	mg/L	0.00961277	-0.0022585	mg/L	0.00961277	425.62%
Se 196.026†	-1.5	-0.0067968	mg/L	0.01087967	-0.0067968	mg/L	0.01087967	160.07%
Sn 189.927†	2.0	0.0063865	mg/L	0.00391628	0.0063865	mg/L	0.00391628	61.32%
Ti 334.940†	18.8	-0.0071191	mg/L	0.00058311	-0.0071191	mg/L	0.00058311	8.19%
Tl 190.801†	1.5	0.0084293	mg/L	0.01145503	0.0084293	mg/L	0.01145503	135.89%
V 290.880†	16.0	-0.0056881	mg/L	0.00066742	-0.0056881	mg/L	0.00066742	11.73%
Zn 206.200†	94.6	0.0335542	mg/L	0.00021258	0.0335542	mg/L	0.00021258	0.63%
B 249.772	406.9	0.0695719	mg/L	0.00066325	0.0695719	mg/L	0.00066325	0.95%
Si 251.611	788.3	0.578604	mg/L	0.0080707	0.578604	mg/L	0.0080707	1.39%

Sequence No.: 28
Sample ID: AD19139-004
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 96
Date Collected: 9/11/2020 7:42:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19139-004

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	48635.7	93.2	%	0.57				0.61%
Y 371.029	15885.1	91.8	%	0.27				0.29%
Ag 328.068†	25.1	0.0035931	mg/L	0.00062797	0.0035931	mg/L	0.00062797	17.48%
Al 308.215†	1472.1	1.34507	mg/L	0.017831	1.34507	mg/L	0.017831	1.33%
As 188.979†	1.0	0.0054127	mg/L	0.02528229	0.0054127	mg/L	0.02528229	467.09%
Ba 233.527†	1294.6	0.163026	mg/L	0.0016436	0.163026	mg/L	0.0016436	1.01%
Be 313.107†	11.5	-0.0004809	mg/L	0.00005225	-0.0004809	mg/L	0.00005225	10.87%
Ca 315.887†	388348.3	139.986	mg/L	2.3162	139.986	mg/L	2.3162	1.65%
Cd 228.802†	0.5	0.0041738	mg/L	0.00094169	0.0041738	mg/L	0.00094169	22.56%
Co 228.616†	7.0	0.0046534	mg/L	0.00137551	0.0046534	mg/L	0.00137551	29.56%
Cr 267.716†	45.6	0.0041428	mg/L	0.00052594	0.0041428	mg/L	0.00052594	12.70%
Cu 327.393†	542.7	0.0715439	mg/L	0.00023414	0.0715439	mg/L	0.00023414	0.33%
Fe 273.955†	301.5	0.586816	mg/L	0.0153114	0.586816	mg/L	0.0153114	2.61%
K 404.721†	21.6	-3.42723	mg/L	0.980330	-3.42723	mg/L	0.980330	28.60%
Mg 279.077†	9249.7	10.9525	mg/L	0.03278	10.9525	mg/L	0.03278	0.30%
Mn 257.610†	5564.2	0.256956	mg/L	0.0006124	0.256956	mg/L	0.0006124	0.24%
Mo 202.031†	4.2	0.0060579	mg/L	0.00164282	0.0060579	mg/L	0.00164282	27.12%
Na 330.237†	54340.7	1598.34	mg/L	4.590	1598.34	mg/L	4.590	0.29%
Ni 231.604†	17.3	0.0073338	mg/L	0.00037353	0.0073338	mg/L	0.00037353	5.09%
Pb 220.353†	17.2	0.0336310	mg/L	0.00222932	0.0336310	mg/L	0.00222932	6.63%
Sb 206.836†	-0.3	-0.0075861	mg/L	0.00854093	-0.0075861	mg/L	0.00854093	112.59%
Se 196.026†	1.5	0.0212543	mg/L	0.00332773	0.0212543	mg/L	0.00332773	15.66%
Sn 189.927†	-4.0	-0.0092988	mg/L	0.00487667	-0.0092988	mg/L	0.00487667	52.44%
Ti 334.940†	209.4	0.0127225	mg/L	0.00065503	0.0127225	mg/L	0.00065503	5.15%
Tl 190.801†	1.6	0.0012680	mg/L	0.00976436	0.0012680	mg/L	0.00976436	770.08%
V 290.880†	107.4	0.0178020	mg/L	0.00092656	0.0178020	mg/L	0.00092656	5.20%
Zn 206.200†	236.4	0.0826594	mg/L	0.00264824	0.0826594	mg/L	0.00264824	3.20%
B 249.772	357.7	0.0750926	mg/L	0.00042230	0.0750926	mg/L	0.00042230	0.56%
Si 251.611	17651.9	12.3768	mg/L	0.09258	12.3768	mg/L	0.09258	0.75%

Sequence No.: 29
Sample ID: AD19148-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 98
Date Collected: 9/11/2020 7:46:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19148-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44769.9	85.8	%	0.59				0.69%
Y 371.029	15350.6	88.7	%	1.17				1.32%
Ag 328.068†	162.2	0.0157711	mg/L	0.00028905	0.0157711	mg/L	0.00028905	1.83%
Al 308.215†	154.6	0.0925704	mg/L	0.00423325	0.0925704	mg/L	0.00423325	4.57%
As 188.979†	2.9	0.0299865	mg/L	0.01698581	0.0299865	mg/L	0.01698581	56.64%
Ba 233.527†	2018.7	0.261822	mg/L	0.0018771	0.261822	mg/L	0.0018771	0.72%
Be 313.107†	-40.0	-0.0007244	mg/L	0.00004763	-0.0007244	mg/L	0.00004763	6.58%
Ca 315.887†	2018755.2	726.900	mg/L	2.5020	726.900	mg/L	2.5020	0.34%
Cd 228.802†	4.8	0.0062058	mg/L	0.00012857	0.0062058	mg/L	0.00012857	2.07%
Co 228.616†	31.3	0.0172836	mg/L	0.00237095	0.0172836	mg/L	0.00237095	13.72%
Cr 267.716†	14.9	-0.0018476	mg/L	0.00010922	-0.0018476	mg/L	0.00010922	5.91%
Cu 327.393†	78.6	0.0064691	mg/L	0.00021289	0.0064691	mg/L	0.00021289	3.29%
Fe 273.955†	94.9	0.0664116	mg/L	0.00715315	0.0664116	mg/L	0.00715315	10.77%
K 404.721†	33.5	2.87488	mg/L	0.765796	2.87488	mg/L	0.765796	26.64%
Mg 279.077†	12812.2	15.1724	mg/L	0.08407	15.1724	mg/L	0.08407	0.55%
Mn 257.610†	29869.7	1.41308	mg/L	0.002957	1.41308	mg/L	0.002957	0.21%
Mo 202.031†	5.1	0.0068431	mg/L	0.00067199	0.0068431	mg/L	0.00067199	9.82%
Na 330.237†	58076.0	1708.20	mg/L	4.954	1708.20	mg/L	4.954	0.29%
Ni 231.604†	51.0	0.0213464	mg/L	0.00182435	0.0213464	mg/L	0.00182435	8.55%
Pb 220.353†	20.1	0.0397249	mg/L	0.00910042	0.0397249	mg/L	0.00910042	22.91%
Sb 206.836†	2.1	0.0105771	mg/L	0.00553656	0.0105771	mg/L	0.00553656	52.34%
Se 196.026†	1.4	0.0675735	mg/L	0.01409952	0.0675735	mg/L	0.01409952	20.87%
Sn 189.927†	-10.9	-0.0273747	mg/L	0.00227394	-0.0273747	mg/L	0.00227394	8.31%
Ti 334.940†	-281.2	0.0333592	mg/L	0.00024306	0.0333592	mg/L	0.00024306	0.73%
Tl 190.801†	0.5	-0.0378256	mg/L	0.03046074	-0.0378256	mg/L	0.03046074	80.53%
V 290.880†	140.9	0.0264469	mg/L	0.00027015	0.0264469	mg/L	0.00027015	1.02%
Zn 206.200†	914.9	0.317577	mg/L	0.0024329	0.317577	mg/L	0.0024329	0.77%
B 249.772	755.0	0.165368	mg/L	0.0025774	0.165368	mg/L	0.0025774	1.56%
Si 251.611	6204.3	4.56185	mg/L	0.037205	4.56185	mg/L	0.037205	0.82%

Sequence No.: 30
Sample ID: AD19084-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 99
Date Collected: 9/11/2020 7:50:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19084-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	46084.0	88.3	%	0.27				0.31%
Y 371.029	15347.6	88.7	%	0.58				0.66%
Ag 328.068†	22.8	0.0035212	mg/L	0.00064873	0.0035212	mg/L	0.00064873	18.42%
Al 308.215†	228.8	0.164258	mg/L	0.0026873	0.164258	mg/L	0.0026873	1.64%
As 188.979†	1.1	0.0062198	mg/L	0.00634763	0.0062198	mg/L	0.00634763	102.06%
Ba 233.527†	2007.9	0.260349	mg/L	0.0021132	0.260349	mg/L	0.0021132	0.81%
Be 313.107†	-19.7	-0.0006286	mg/L	0.00008385	-0.0006286	mg/L	0.00008385	13.34%
Ca 315.887†	316434.1	114.099	mg/L	0.5965	114.099	mg/L	0.5965	0.52%
Cd 228.802†	1.3	0.0045251	mg/L	0.00066266	0.0045251	mg/L	0.00066266	14.64%
Co 228.616†	24.2	0.0135845	mg/L	0.00096717	0.0135845	mg/L	0.00096717	7.12%
Cr 267.716†	13.1	-0.0021145	mg/L	0.00063242	-0.0021145	mg/L	0.00063242	29.91%
Cu 327.393†	0.6	-0.0044454	mg/L	0.00083818	-0.0044454	mg/L	0.00083818	18.86%
Fe 273.955†	175.1	0.268376	mg/L	0.0172159	0.268376	mg/L	0.0172159	6.41%
K 404.721†	15.5	-0.356136	mg/L	0.8739505	-0.356136	mg/L	0.8739505	245.40%
Mg 279.077†	25962.0	30.7485	mg/L	0.21404	30.7485	mg/L	0.21404	0.70%
Mn 257.610†	11046.1	0.517711	mg/L	0.0013774	0.517711	mg/L	0.0013774	0.27%
Mo 202.031†	2.0	0.0040047	mg/L	0.00072255	0.0040047	mg/L	0.00072255	18.04%
Na 330.237†	55035.3	1618.77	mg/L	5.348	1618.77	mg/L	5.348	0.33%
Ni 231.604†	108.0	0.0450587	mg/L	0.00205494	0.0450587	mg/L	0.00205494	4.56%
Pb 220.353†	6.7	0.0114528	mg/L	0.00795528	0.0114528	mg/L	0.00795528	69.46%
Sb 206.836†	0.2	-0.0038902	mg/L	0.01033696	-0.0038902	mg/L	0.01033696	265.72%
Se 196.026†	1.8	0.0215467	mg/L	0.00408565	0.0215467	mg/L	0.00408565	18.96%
Sn 189.927†	-5.0	-0.0120244	mg/L	0.00550946	-0.0120244	mg/L	0.00550946	45.82%
Ti 334.940†	10.0	0.0010129	mg/L	0.00005713	0.0010129	mg/L	0.00005713	5.64%
Tl 190.801†	0.4	-0.0049717	mg/L	0.01695273	-0.0049717	mg/L	0.01695273	340.99%
V 290.880†	223.6	0.0480292	mg/L	0.00249634	0.0480292	mg/L	0.00249634	5.20%
Zn 206.200†	176.2	0.0618291	mg/L	0.00069323	0.0618291	mg/L	0.00069323	1.12%
B 249.772	237.1	0.0354084	mg/L	0.00020561	0.0354084	mg/L	0.00020561	0.58%
Si 251.611	4754.5	3.38469	mg/L	0.017934	3.38469	mg/L	0.017934	0.53%

Sequence No.: 31
Sample ID: AD19159-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 100
Date Collected: 9/11/2020 7:54:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	45467.5	87.1	%	0.26				0.30%
Y 371.029	14890.9	86.1	%	0.09				0.11%
Ag 328.068†	147.7	0.0144104	mg/L	0.00068623	0.0144104	mg/L	0.00068623	4.76%
Al 308.215†	30.4	-0.0261825	mg/L	0.00346915	-0.0261825	mg/L	0.00346915	13.25%
As 188.979†	1.9	0.0173300	mg/L	0.02134027	0.0173300	mg/L	0.02134027	123.14%
Ba 233.527†	5306.0	0.710311	mg/L	0.0086250	0.710311	mg/L	0.0086250	1.21%
Be 313.107†	-92.5	-0.0009729	mg/L	0.00003537	-0.0009729	mg/L	0.00003537	3.64%
Ca 315.887†	1727841.4	622.177	mg/L	8.1699	622.177	mg/L	8.1699	1.31%
Cd 228.802†	5.0	0.0062996	mg/L	0.00076780	0.0062996	mg/L	0.00076780	12.19%
Co 228.616†	137.6	0.0725641	mg/L	0.00059975	0.0725641	mg/L	0.00059975	0.83%
Cr 267.716†	8.1	-0.0032374	mg/L	0.00050047	-0.0032374	mg/L	0.00050047	15.46%
Cu 327.393†	-20.5	-0.0074342	mg/L	0.00093652	-0.0074342	mg/L	0.00093652	12.60%
Fe 273.955†	11.0	-0.144618	mg/L	0.0025441	-0.144618	mg/L	0.0025441	1.76%
K 404.721†	37.6	5.38789	mg/L	0.364482	5.38789	mg/L	0.364482	6.76%
Mg 279.077†	7770.0	9.19969	mg/L	0.119652	9.19969	mg/L	0.119652	1.30%
Mn 257.610†	79225.0	3.76073	mg/L	0.061330	3.76073	mg/L	0.061330	1.63%
Mo 202.031†	4.5	0.0063037	mg/L	0.00045650	0.0063037	mg/L	0.00045650	7.24%
Na 330.237†	56673.9	1666.96	mg/L	20.955	1666.96	mg/L	20.955	1.26%
Ni 231.604†	62.9	0.0262979	mg/L	0.00011037	0.0262979	mg/L	0.00011037	0.42%
Pb 220.353†	114.8	0.241120	mg/L	0.0112175	0.241120	mg/L	0.0112175	4.65%
Sb 206.836†	3.0	0.0179593	mg/L	0.00718865	0.0179593	mg/L	0.00718865	40.03%
Se 196.026†	6.7	0.0874579	mg/L	0.02225712	0.0874579	mg/L	0.02225712	25.45%
Sn 189.927†	-7.9	-0.0194668	mg/L	0.00364108	-0.0194668	mg/L	0.00364108	18.70%
Ti 334.940†	-265.7	0.0261558	mg/L	0.00026979	0.0261558	mg/L	0.00026979	1.03%
Tl 190.801†	-1.8	-0.0397822	mg/L	0.01489529	-0.0397822	mg/L	0.01489529	37.44%
V 290.880†	94.4	0.0144715	mg/L	0.00215623	0.0144715	mg/L	0.00215623	14.90%
Zn 206.200†	152.9	0.0537618	mg/L	0.00060572	0.0537618	mg/L	0.00060572	1.13%
B 249.772	466.7	0.125317	mg/L	0.0015153	0.125317	mg/L	0.0015153	1.21%
Si 251.611	28648.7	20.2321	mg/L	0.25195	20.2321	mg/L	0.25195	1.25%

Sequence No.: 32
Sample ID: AD19159-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 101
Date Collected: 9/11/2020 7:59:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	45551.9	87.2	%	1.12				1.29%
Y 371.029	14747.7	85.3	%	1.18				1.38%
Ag 328.068†	153.0	0.0148548	mg/L	0.00049571	0.0148548	mg/L	0.00049571	3.34%
Al 308.215†	41.8	-0.0155724	mg/L	0.00223045	-0.0155724	mg/L	0.00223045	14.32%
As 188.979†	2.1	0.0199635	mg/L	0.01088839	0.0199635	mg/L	0.01088839	54.54%
Ba 233.527†	13654.6	1.84933	mg/L	0.006958	1.84933	mg/L	0.006958	0.38%
Be 313.107†	-78.3	-0.0009059	mg/L	0.00002860	-0.0009059	mg/L	0.00002860	3.16%
Ca 315.887†	1854163.8	667.651	mg/L	8.0569	667.651	mg/L	8.0569	1.21%
Cd 228.802†	16.2	0.0116495	mg/L	0.00050071	0.0116495	mg/L	0.00050071	4.30%
Co 228.616†	-0.6	0.0006858	mg/L	0.00065189	0.0006858	mg/L	0.00065189	95.05%
Cr 267.716†	201.4	0.0346744	mg/L	0.00024230	0.0346744	mg/L	0.00024230	0.70%
Cu 327.393†	38.4	0.0008245	mg/L	0.00025208	0.0008245	mg/L	0.00025208	30.57%
Fe 273.955†	22.6	-0.115510	mg/L	0.0042683	-0.115510	mg/L	0.0042683	3.70%
K 404.721†	28.3	4.52799	mg/L	0.357339	4.52799	mg/L	0.357339	7.89%
Mg 279.077†	4084.9	4.83464	mg/L	0.038830	4.83464	mg/L	0.038830	0.80%
Mn 257.610†	2462.8	0.109435	mg/L	0.0012560	0.109435	mg/L	0.0012560	1.15%
Mo 202.031†	2.9	0.0048624	mg/L	0.00215986	0.0048624	mg/L	0.00215986	44.42%
Na 330.237†	56626.6	1665.57	mg/L	4.106	1665.57	mg/L	4.106	0.25%
Ni 231.604†	33.2	0.0139412	mg/L	0.00293659	0.0139412	mg/L	0.00293659	21.06%
Pb 220.353†	23.1	0.0462697	mg/L	0.00722852	0.0462697	mg/L	0.00722852	15.62%
Sb 206.836†	1.1	0.0029904	mg/L	0.02485869	0.0029904	mg/L	0.02485869	831.28%
Se 196.026†	-0.4	0.0524217	mg/L	0.00845637	0.0524217	mg/L	0.00845637	16.13%
Sn 189.927†	-9.9	-0.0247490	mg/L	0.00424212	-0.0247490	mg/L	0.00424212	17.14%
Ti 334.940†	-279.4	0.0289425	mg/L	0.00067221	0.0289425	mg/L	0.00067221	2.32%
Tl 190.801†	-0.2	-0.0476644	mg/L	0.00664241	-0.0476644	mg/L	0.00664241	13.94%
V 290.880†	71.8	0.0085672	mg/L	0.00087941	0.0085672	mg/L	0.00087941	10.26%
Zn 206.200†	2067.7	0.716697	mg/L	0.0066939	0.716697	mg/L	0.0066939	0.93%
B 249.772	297.2	0.0585752	mg/L	0.00158075	0.0585752	mg/L	0.00158075	2.70%
Si 251.611	5141.2	3.79947	mg/L	0.049856	3.79947	mg/L	0.049856	1.31%

Sequence No.: 33
Sample ID: AD19159-003
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 102
Date Collected: 9/11/2020 8:03:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-003

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	45668.1	87.5	%	0.45				0.51%
Y 371.029	14789.1	85.5	%	0.57				0.67%
Ag 328.068†	148.7	0.0144845	mg/L	0.00056155	0.0144845	mg/L	0.00056155	3.88%
Al 308.215†	90.6	0.0308938	mg/L	0.00520745	0.0308938	mg/L	0.00520745	16.86%
As 188.979†	1.7	0.0139438	mg/L	0.01252162	0.0139438	mg/L	0.01252162	89.80%
Ba 233.527†	14756.9	1.99971	mg/L	0.004450	1.99971	mg/L	0.004450	0.22%
Be 313.107†	-85.3	-0.0009388	mg/L	0.00002290	-0.0009388	mg/L	0.00002290	2.44%
Ca 315.887†	1865850.5	671.858	mg/L	1.7882	671.858	mg/L	1.7882	0.27%
Cd 228.802†	6.9	0.0072022	mg/L	0.00062260	0.0072022	mg/L	0.00062260	8.64%
Co 228.616†	1.1	0.0015836	mg/L	0.00068362	0.0015836	mg/L	0.00068362	43.17%
Cr 267.716†	6.7	-0.0035338	mg/L	0.00056171	-0.0035338	mg/L	0.00056171	15.90%
Cu 327.393†	-41.0	-0.0103033	mg/L	0.00144779	-0.0103033	mg/L	0.00144779	14.05%
Fe 273.955†	49.3	-0.0483017	mg/L	0.00652995	-0.0483017	mg/L	0.00652995	13.52%
K 404.721†	26.8	3.71674	mg/L	0.387981	3.71674	mg/L	0.387981	10.44%
Mg 279.077†	5793.6	6.85862	mg/L	0.017406	6.85862	mg/L	0.017406	0.25%
Mn 257.610†	893.5	0.0347888	mg/L	0.00047176	0.0347888	mg/L	0.00047176	1.36%
Mo 202.031†	3.9	0.0057754	mg/L	0.00175376	0.0057754	mg/L	0.00175376	30.37%
Na 330.237†	57140.8	1680.70	mg/L	2.898	1680.70	mg/L	2.898	0.17%
Ni 231.604†	11.9	0.0050807	mg/L	0.00121163	0.0050807	mg/L	0.00121163	23.85%
Pb 220.353†	4.4	0.0064435	mg/L	0.00110866	0.0064435	mg/L	0.00110866	17.21%
Sb 206.836†	-1.0	-0.0134193	mg/L	0.00087793	-0.0134193	mg/L	0.00087793	6.54%
Se 196.026†	-1.2	0.0483479	mg/L	0.01058683	0.0483479	mg/L	0.01058683	21.90%
Sn 189.927†	-7.5	-0.0186040	mg/L	0.00709314	-0.0186040	mg/L	0.00709314	38.13%
Ti 334.940†	-251.7	0.0306176	mg/L	0.00082285	0.0306176	mg/L	0.00082285	2.69%
Tl 190.801†	-1.6	-0.0580343	mg/L	0.00638870	-0.0580343	mg/L	0.00638870	11.01%
V 290.880†	80.8	0.0109371	mg/L	0.00105357	0.0109371	mg/L	0.00105357	9.63%
Zn 206.200†	566.1	0.196803	mg/L	0.0007935	0.196803	mg/L	0.0007935	0.40%
B 249.772	318.3	0.0586125	mg/L	0.00203576	0.0586125	mg/L	0.00203576	3.47%
Si 251.611	2093.6	1.67045	mg/L	0.015508	1.67045	mg/L	0.015508	0.93%

Sequence No.: 34
Sample ID: AD19159-007
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 103
Date Collected: 9/11/2020 8:07:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-007

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46326.1	88.7	%	0.38				0.43%
Y 371.029	14739.7	85.2	%	0.43				0.50%
Ag 328.068†	103.2	0.0105694	mg/L	0.00053662	0.0105694	mg/L	0.00053662	5.08%
Al 308.215†	90.8	0.0323117	mg/L	0.00219201	0.0323117	mg/L	0.00219201	6.78%
As 188.979†	1.9	0.0165643	mg/L	0.00610200	0.0165643	mg/L	0.00610200	36.84%
Ba 233.527†	4227.8	0.563213	mg/L	0.0042865	0.563213	mg/L	0.0042865	0.76%
Be 313.107†	-82.4	-0.0009252	mg/L	0.00002866	-0.0009252	mg/L	0.00002866	3.10%
Ca 315.887†	1263661.1	455.081	mg/L	1.9702	455.081	mg/L	1.9702	0.43%
Cd 228.802†	5.9	0.0067279	mg/L	0.00015662	0.0067279	mg/L	0.00015662	2.33%
Co 228.616†	1.1	0.0015892	mg/L	0.00090217	0.0015892	mg/L	0.00090217	56.77%
Cr 267.716†	7.7	-0.0032272	mg/L	0.00137682	-0.0032272	mg/L	0.00137682	42.66%
Cu 327.393†	-30.1	-0.0087739	mg/L	0.00051688	-0.0087739	mg/L	0.00051688	5.89%
Fe 273.955†	39.6	-0.0726988	mg/L	0.00614639	-0.0726988	mg/L	0.00614639	8.45%
K 404.721†	48.2	5.23390	mg/L	0.572789	5.23390	mg/L	0.572789	10.94%
Mg 279.077†	17695.1	20.9562	mg/L	0.09779	20.9562	mg/L	0.09779	0.47%
Mn 257.610†	9523.8	0.445302	mg/L	0.0023609	0.445302	mg/L	0.0023609	0.53%
Mo 202.031†	2.8	0.0047311	mg/L	0.00269500	0.0047311	mg/L	0.00269500	56.96%
Na 330.237†	56871.9	1672.79	mg/L	3.569	1672.79	mg/L	3.569	0.21%
Ni 231.604†	16.3	0.0069005	mg/L	0.00166313	0.0069005	mg/L	0.00166313	24.10%
Pb 220.353†	4.2	0.0060897	mg/L	0.00540971	0.0060897	mg/L	0.00540971	88.83%
Sb 206.836†	0.5	-0.0018608	mg/L	0.00395617	-0.0018608	mg/L	0.00395617	212.61%
Se 196.026†	3.3	0.0561088	mg/L	0.00912212	0.0561088	mg/L	0.00912212	16.26%
Sn 189.927†	-10.4	-0.0260868	mg/L	0.00340150	-0.0260868	mg/L	0.00340150	13.04%
Ti 334.940†	-148.1	0.0192028	mg/L	0.00050892	0.0192028	mg/L	0.00050892	2.65%
Tl 190.801†	1.6	-0.0180269	mg/L	0.01793485	-0.0180269	mg/L	0.01793485	99.49%
V 290.880†	172.2	0.0346107	mg/L	0.00076063	0.0346107	mg/L	0.00076063	2.20%
Zn 206.200†	201.0	0.0704042	mg/L	0.00010041	0.0704042	mg/L	0.00010041	0.14%
B 249.772	540.1	0.109505	mg/L	0.0006194	0.109505	mg/L	0.0006194	0.57%
Si 251.611	3855.7	2.84063	mg/L	0.023922	2.84063	mg/L	0.023922	0.84%

Sequence No.: 35
Sample ID: AD19159-008
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 104
Date Collected: 9/11/2020 8:11:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-008

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	46836.1	89.7	%	0.70				0.78%
Y 371.029	14860.7	85.9	%	0.43				0.50%
Ag 328.068†	73.7	0.0078876	mg/L	0.00064559	0.0078876	mg/L	0.00064559	8.18%
Al 308.215†	360.7	0.288249	mg/L	0.0051718	0.288249	mg/L	0.0051718	1.79%
As 188.979†	0.5	-0.0015983	mg/L	0.00984973	-0.0015983	mg/L	0.00984973	616.28%
Ba 233.527†	4534.5	0.605059	mg/L	0.0043976	0.605059	mg/L	0.0043976	0.73%
Be 313.107†	-32.0	-0.0006868	mg/L	0.00003597	-0.0006868	mg/L	0.00003597	5.24%
Ca 315.887†	920882.3	331.688	mg/L	1.3091	331.688	mg/L	1.3091	0.39%
Cd 228.802†	2.2	0.0049569	mg/L	0.00054643	0.0049569	mg/L	0.00054643	11.02%
Co 228.616†	150.5	0.0792955	mg/L	0.00108520	0.0792955	mg/L	0.00108520	1.37%
Cr 267.716†	12.1	-0.0024244	mg/L	0.00078819	-0.0024244	mg/L	0.00078819	32.51%
Cu 327.393†	20.2	-0.0017186	mg/L	0.00082587	-0.0017186	mg/L	0.00082587	48.06%
Fe 273.955†	63.3	-0.0129752	mg/L	0.00421924	-0.0129752	mg/L	0.00421924	32.52%
K 404.721†	26.7	3.33198	mg/L	0.673122	3.33198	mg/L	0.673122	20.20%
Mg 279.077†	11077.3	13.1173	mg/L	0.05003	13.1173	mg/L	0.05003	0.38%
Mn 257.610†	29647.2	1.40250	mg/L	0.003141	1.40250	mg/L	0.003141	0.22%
Mo 202.031†	5.4	0.0071420	mg/L	0.00139151	0.0071420	mg/L	0.00139151	19.48%
Na 330.237†	57781.5	1699.54	mg/L	5.687	1699.54	mg/L	5.687	0.33%
Ni 231.604†	60.8	0.0254395	mg/L	0.00125554	0.0254395	mg/L	0.00125554	4.94%
Pb 220.353†	14.0	0.0269813	mg/L	0.00258321	0.0269813	mg/L	0.00258321	9.57%
Sb 206.836†	1.8	0.0086896	mg/L	0.00975785	0.0086896	mg/L	0.00975785	112.29%
Se 196.026†	1.0	0.0335915	mg/L	0.00792385	0.0335915	mg/L	0.00792385	23.59%
Sn 189.927†	-8.9	-0.0222857	mg/L	0.00140198	-0.0222857	mg/L	0.00140198	6.29%
Ti 334.940†	-25.0	0.0158373	mg/L	0.00132361	0.0158373	mg/L	0.00132361	8.36%
Tl 190.801†	0.2	-0.0165883	mg/L	0.01288489	-0.0165883	mg/L	0.01288489	77.67%
V 290.880†	119.7	0.0210256	mg/L	0.00102367	0.0210256	mg/L	0.00102367	4.87%
Zn 206.200†	490.0	0.170467	mg/L	0.0013017	0.170467	mg/L	0.0013017	0.76%
B 249.772	395.4	0.0776166	mg/L	0.00156247	0.0776166	mg/L	0.00156247	2.01%
Si 251.611	4508.1	3.28646	mg/L	0.062607	3.28646	mg/L	0.062607	1.90%

Sequence No.: 36 **Autosampler Location: 6**
Sample ID: CCV V-333673 **Date Collected: 9/11/2020 8:16:14 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	50648.4	97.0	%	0.87				0.90%
Y 371.029	16129.1	93.2	%	0.41				0.44%
Ag 328.068†	1044.6	0.0967495	mg/L	0.00153923	0.0967495	mg/L	0.00153923	1.59%
QC value within limits for Ag 328.068 Recovery = 96.75%								
Al 308.215†	5025.2	4.73764	mg/L	0.004509	4.73764	mg/L	0.004509	0.10%
QC value within limits for Al 308.215 Recovery = 94.75%								
As 188.979†	39.9	0.489758	mg/L	0.0077958	0.489758	mg/L	0.0077958	1.59%
QC value within limits for As 188.979 Recovery = 97.95%								
Ba 233.527†	3581.8	0.475073	mg/L	0.0031764	0.475073	mg/L	0.0031764	0.67%
QC value within limits for Ba 233.527 Recovery = 95.01%								
Be 313.107†	100309.8	0.474218	mg/L	0.0002833	0.474218	mg/L	0.0002833	0.06%
QC value within limits for Be 313.107 Recovery = 94.84%								
Ca 315.887†	130171.4	47.0477	mg/L	0.10721	47.0477	mg/L	0.10721	0.23%
QC value within limits for Ca 315.887 Recovery = 94.10%								
Cd 228.802†	953.4	0.459949	mg/L	0.0047857	0.459949	mg/L	0.0047857	1.04%
QC value within limits for Cd 228.802 Recovery = 91.99%								
Co 228.616†	907.9	0.473312	mg/L	0.0050776	0.473312	mg/L	0.0050776	1.07%
QC value within limits for Co 228.616 Recovery = 94.66%								
Cr 267.716†	2522.9	0.492679	mg/L	0.0041884	0.492679	mg/L	0.0041884	0.85%
QC value within limits for Cr 267.716 Recovery = 98.54%								
Cu 327.393†	3411.4	0.473924	mg/L	0.0004892	0.473924	mg/L	0.0004892	0.10%
QC value within limits for Cu 327.393 Recovery = 94.78%								
Fe 273.955†	2107.4	5.13350	mg/L	0.051765	5.13350	mg/L	0.051765	1.01%
QC value within limits for Fe 273.955 Recovery = 102.67%								
K 404.721†	784.1	-7.74571	mg/L	0.365347	-7.74571	mg/L	0.365347	4.72%
QC value less than the lower limit for K 404.721 Recovery = -15.49%								
Mg 279.077†	40180.5	47.5906	mg/L	0.09520	47.5906	mg/L	0.09520	0.20%
QC value within limits for Mg 279.077 Recovery = 95.18%								
Mn 257.610†	10202.6	0.477590	mg/L	0.0014338	0.477590	mg/L	0.0014338	0.30%
QC value within limits for Mn 257.610 Recovery = 95.52%								
Mo 202.031†	509.6	0.474723	mg/L	0.0049279	0.474723	mg/L	0.0049279	1.04%
QC value within limits for Mo 202.031 Recovery = 94.94%								
Na 330.237†	1693.7	49.9082	mg/L	0.64790	49.9082	mg/L	0.64790	1.30%
QC value within limits for Na 330.237 Recovery = 99.82%								
Ni 231.604†	1138.4	0.474822	mg/L	0.0042271	0.474822	mg/L	0.0042271	0.89%
QC value within limits for Ni 231.604 Recovery = 94.96%								
Pb 220.353†	226.6	0.479527	mg/L	0.0040611	0.479527	mg/L	0.0040611	0.85%
QC value within limits for Pb 220.353 Recovery = 95.91%								
Sb 206.836†	62.3	0.485389	mg/L	0.0173906	0.485389	mg/L	0.0173906	3.58%
QC value within limits for Sb 206.836 Recovery = 97.08%								
Se 196.026†	85.9	0.478623	mg/L	0.0317340	0.478623	mg/L	0.0317340	6.63%
QC value within limits for Se 196.026 Recovery = 95.72%								
Sn 189.927†	178.7	0.469079	mg/L	0.0045315	0.469079	mg/L	0.0045315	0.97%
QC value within limits for Sn 189.927 Recovery = 93.82%								
Ti 334.940†	9837.1	0.475996	mg/L	0.0022141	0.475996	mg/L	0.0022141	0.47%
QC value within limits for Ti 334.940 Recovery = 95.20%								
Tl 190.801†	69.2	0.477327	mg/L	0.0109786	0.477327	mg/L	0.0109786	2.30%
QC value within limits for Tl 190.801 Recovery = 95.47%								
V 290.880†	2015.9	0.497220	mg/L	0.0031540	0.497220	mg/L	0.0031540	0.63%
QC value within limits for V 290.880 Recovery = 99.44%								
Zn 206.200†	1372.3	0.475946	mg/L	0.0042957	0.475946	mg/L	0.0042957	0.90%
QC value within limits for Zn 206.200 Recovery = 95.19%								
B 249.772	2212.8	0.530962	mg/L	0.0021645	0.530962	mg/L	0.0021645	0.41%
QC value within limits for B 249.772 Recovery = 106.19%								
Si 251.611	7264.7	5.13362	mg/L	0.031693	5.13362	mg/L	0.031693	0.62%
QC value within limits for Si 251.611 Recovery = 102.67%								

QC Failed. Continue with analysis.

Sequence No.: 37
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 9/11/2020 8:20:11 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	55168.3	106	%	0.42				0.39%
Y 371.029	17965.8	104	%	0.48				0.46%
Ag 328.068†	5.7	0.0016955	mg/L	0.00020317	0.0016955	mg/L	0.00020317	11.98%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-9.7	-0.0654269	mg/L	0.00214164	-0.0654269	mg/L	0.00214164	3.27%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.1	-0.0061707	mg/L	0.01363347	-0.0061707	mg/L	0.01363347	220.94%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.4	-0.0135420	mg/L	0.00012172	-0.0135420	mg/L	0.00012172	0.90%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	12.7	-0.0004750	mg/L	0.00002855	-0.0004750	mg/L	0.00002855	6.01%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-43.7	0.172849	mg/L	0.0010780	0.172849	mg/L	0.0010780	0.62%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.4	0.0037398	mg/L	0.00056557	0.0037398	mg/L	0.00056557	15.12%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.1	0.0010193	mg/L	0.00108585	0.0010193	mg/L	0.00108585	106.53%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.4	-0.0046596	mg/L	0.00006549	-0.0046596	mg/L	0.00006549	1.41%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-11.1	-0.0061170	mg/L	0.00006673	-0.0061170	mg/L	0.00006673	1.09%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.1	-0.175261	mg/L	0.0025182	-0.175261	mg/L	0.0025182	1.44%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-9.1	2.98571	mg/L	0.245507	2.98571	mg/L	0.245507	8.22%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	3.4	-0.0000049	mg/L	0.00185445	-0.0000049	mg/L	0.00185445	>999.9%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-1.6	-0.0077843	mg/L	0.00003848	-0.0077843	mg/L	0.00003848	0.49%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.2	0.0019051	mg/L	0.00113638	0.0019051	mg/L	0.00113638	59.65%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-1.2	0.0598482	mg/L	0.05413812	0.0598482	mg/L	0.05413812	90.46%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-2.6	-0.0009303	mg/L	0.00096767	-0.0009303	mg/L	0.00096767	104.02%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.2	-0.0032802	mg/L	0.00273763	-0.0032802	mg/L	0.00273763	83.46%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.2	-0.0042341	mg/L	0.00820479	-0.0042341	mg/L	0.00820479	193.78%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.4	-0.0064142	mg/L	0.00507790	-0.0064142	mg/L	0.00507790	79.17%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.3	0.0020724	mg/L	0.00398157	0.0020724	mg/L	0.00398157	192.13%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	5.3	-0.0078775	mg/L	0.00026810	-0.0078775	mg/L	0.00026810	3.40%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.3	-0.0110276	mg/L	0.00596031	-0.0110276	mg/L	0.00596031	54.05%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	4.3	-0.0085948	mg/L	0.00043372	-0.0085948	mg/L	0.00043372	5.05%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-3.1	-0.0002410	mg/L	0.00021247	-0.0002410	mg/L	0.00021247	88.18%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	0.5	-0.0127172	mg/L	0.00063279	-0.0127172	mg/L	0.00063279	4.98%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-1.9	-0.0347585	mg/L	0.00177916	-0.0347585	mg/L	0.00177916	5.12%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 38
Sample ID: AD19159-009
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 105
Date Collected: 9/11/2020 8:24:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-009

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	45355.6	86.9	%	0.46				0.53%
Y 371.029	14426.9	83.4	%	1.03				1.24%
Ag 328.068†	123.1	0.0122729	mg/L	0.00018344	0.0122729	mg/L	0.00018344	1.49%
Al 308.215†	82.2	0.0235303	mg/L	0.00355823	0.0235303	mg/L	0.00355823	15.12%
As 188.979†	1.7	0.0141934	mg/L	0.02349105	0.0141934	mg/L	0.02349105	165.51%
Ba 233.527†	4171.8	0.555570	mg/L	0.0009186	0.555570	mg/L	0.0009186	0.17%
Be 313.107†	-81.2	-0.0009193	mg/L	0.00004318	-0.0009193	mg/L	0.00004318	4.70%
Ca 315.887†	1446446.6	520.880	mg/L	3.2541	520.880	mg/L	3.2541	0.62%
Cd 228.802†	2.8	0.0052482	mg/L	0.00174681	0.0052482	mg/L	0.00174681	33.28%
Co 228.616†	128.8	0.0680207	mg/L	0.00119253	0.0680207	mg/L	0.00119253	1.75%
Cr 267.716†	9.7	-0.0028853	mg/L	0.00079966	-0.0028853	mg/L	0.00079966	27.72%
Cu 327.393†	-49.8	-0.0115437	mg/L	0.00098950	-0.0115437	mg/L	0.00098950	8.57%
Fe 273.955†	16.4	-0.131090	mg/L	0.0045317	-0.131090	mg/L	0.0045317	3.46%
K 404.721†	19.6	4.18847	mg/L	1.236881	4.18847	mg/L	1.236881	29.53%
Mg 279.077†	12109.7	14.3402	mg/L	0.03089	14.3402	mg/L	0.03089	0.22%
Mn 257.610†	30159.4	1.42686	mg/L	0.002695	1.42686	mg/L	0.002695	0.19%
Mo 202.031†	6.2	0.0079031	mg/L	0.00087316	0.0079031	mg/L	0.00087316	11.05%
Na 330.237†	56672.3	1666.92	mg/L	5.574	1666.92	mg/L	5.574	0.33%
Ni 231.604†	46.4	0.0194607	mg/L	0.00090382	0.0194607	mg/L	0.00090382	4.64%
Pb 220.353†	-0.3	-0.0035554	mg/L	0.00446339	-0.0035554	mg/L	0.00446339	125.54%
Sb 206.836†	0.8	0.0009738	mg/L	0.01442361	0.0009738	mg/L	0.01442361	>999.9%
Se 196.026†	1.8	0.0528632	mg/L	0.00301947	0.0528632	mg/L	0.00301947	5.71%
Sn 189.927†	-9.9	-0.0248049	mg/L	0.00148735	-0.0248049	mg/L	0.00148735	6.00%
Ti 334.940†	-214.3	0.0209690	mg/L	0.00047146	0.0209690	mg/L	0.00047146	2.25%
Tl 190.801†	-0.8	-0.0347406	mg/L	0.02190813	-0.0347406	mg/L	0.02190813	63.06%
V 290.880†	132.5	0.0243028	mg/L	0.00087882	0.0243028	mg/L	0.00087882	3.62%
Zn 206.200†	285.3	0.0995908	mg/L	0.00086397	0.0995908	mg/L	0.00086397	0.87%
B 249.772	365.4	0.0699460	mg/L	0.00087384	0.0699460	mg/L	0.00087384	1.25%
Si 251.611	3810.5	2.84155	mg/L	0.019941	2.84155	mg/L	0.019941	0.70%

Sequence No.: 39
Sample ID: AD19159-010
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 106
Date Collected: 9/11/2020 8:28:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-010

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46174.0	88.4	%	0.69				0.78%
Y 371.029	14795.7	85.5	%	0.45				0.53%
Ag 328.068†	121.6	0.0122081	mg/L	0.00062950	0.0122081	mg/L	0.00062950	5.16%
Al 308.215†	63.6	0.0066260	mg/L	0.00380570	0.0066260	mg/L	0.00380570	57.44%
As 188.979†	0.8	0.0018649	mg/L	0.00599401	0.0018649	mg/L	0.00599401	321.41%
Ba 233.527†	5509.5	0.738068	mg/L	0.0012472	0.738068	mg/L	0.0012472	0.17%
Be 313.107†	-95.8	-0.0009886	mg/L	0.00003039	-0.0009886	mg/L	0.00003039	3.07%
Ca 315.887†	1483849.2	534.345	mg/L	6.1764	534.345	mg/L	6.1764	1.16%
Cd 228.802†	4.5	0.0060903	mg/L	0.00083952	0.0060903	mg/L	0.00083952	13.78%
Co 228.616†	-2.2	-0.0001581	mg/L	0.00080547	-0.0001581	mg/L	0.00080547	509.39%
Cr 267.716†	6.3	-0.0035007	mg/L	0.00097836	-0.0035007	mg/L	0.00097836	27.95%
Cu 327.393†	-14.6	-0.0065996	mg/L	0.00020963	-0.0065996	mg/L	0.00020963	3.18%
Fe 273.955†	27.6	-0.102874	mg/L	0.0020933	-0.102874	mg/L	0.0020933	2.03%
K 404.721†	31.8	4.59757	mg/L	0.441406	4.59757	mg/L	0.441406	9.60%
Mg 279.077†	19486.3	23.0779	mg/L	0.06549	23.0779	mg/L	0.06549	0.28%
Mn 257.610†	8943.6	0.417705	mg/L	0.0004030	0.417705	mg/L	0.0004030	0.10%
Mo 202.031†	0.6	0.0027196	mg/L	0.00048249	0.0027196	mg/L	0.00048249	17.74%
Na 330.237†	55814.9	1641.70	mg/L	3.756	1641.70	mg/L	3.756	0.23%
Ni 231.604†	40.6	0.0170239	mg/L	0.00108807	0.0170239	mg/L	0.00108807	6.39%
Pb 220.353†	5.9	0.0095756	mg/L	0.00124914	0.0095756	mg/L	0.00124914	13.05%
Sb 206.836†	0.5	-0.0018198	mg/L	0.00672867	-0.0018198	mg/L	0.00672867	369.76%
Se 196.026†	-0.3	0.0428157	mg/L	0.01353334	0.0428157	mg/L	0.01353334	31.61%
Sn 189.927†	-9.6	-0.0240562	mg/L	0.00332259	-0.0240562	mg/L	0.00332259	13.81%
Ti 334.940†	-205.0	0.0224489	mg/L	0.00075035	0.0224489	mg/L	0.00075035	3.34%
Tl 190.801†	0.5	-0.0309174	mg/L	0.00782976	-0.0309174	mg/L	0.00782976	25.32%
V 290.880†	180.4	0.0367885	mg/L	0.00089661	0.0367885	mg/L	0.00089661	2.44%
Zn 206.200†	306.0	0.106762	mg/L	0.0006001	0.106762	mg/L	0.0006001	0.56%
B 249.772	265.6	0.0427089	mg/L	0.00097247	0.0427089	mg/L	0.00097247	2.28%
Si 251.611	2572.8	1.96412	mg/L	0.026110	1.96412	mg/L	0.026110	1.33%

Sequence No.: 40
Sample ID: AD19159-011
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 107
Date Collected: 9/11/2020 8:32:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-011

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	57031.4	109	%	0.62				0.57%
Y 371.029	18219.7	105	%	0.82				0.78%
Ag 328.068†	2.7	0.0014264	mg/L	0.00040613	0.0014264	mg/L	0.00040613	28.47%
Al 308.215†	11.4	-0.0454389	mg/L	0.00314922	-0.0454389	mg/L	0.00314922	6.93%
As 188.979†	0.6	0.0007422	mg/L	0.01770665	0.0007422	mg/L	0.01770665	>999.9%
Ba 233.527†	70.2	-0.0040137	mg/L	0.00022110	-0.0040137	mg/L	0.00022110	5.51%
Be 313.107†	11.4	-0.0004813	mg/L	0.00004256	-0.0004813	mg/L	0.00004256	8.84%
Ca 315.887†	2115.1	0.949990	mg/L	0.0156909	0.949990	mg/L	0.0156909	1.65%
Cd 228.802†	-0.3	0.0037871	mg/L	0.00028899	0.0037871	mg/L	0.00028899	7.63%
Co 228.616†	1.6	0.0018098	mg/L	0.00095685	0.0018098	mg/L	0.00095685	52.87%
Cr 267.716†	5.0	-0.0039633	mg/L	0.00057648	-0.0039633	mg/L	0.00057648	14.55%
Cu 327.393†	-3.1	-0.0050002	mg/L	0.00114124	-0.0050002	mg/L	0.00114124	22.82%
Fe 273.955†	23.4	-0.113450	mg/L	0.0021689	-0.113450	mg/L	0.0021689	1.91%
K 404.721†	2.0	2.96535	mg/L	0.253945	2.96535	mg/L	0.253945	8.56%
Mg 279.077†	71.3	0.0804572	mg/L	0.00150620	0.0804572	mg/L	0.00150620	1.87%
Mn 257.610†	12.5	-0.0071146	mg/L	0.00003072	-0.0071146	mg/L	0.00003072	0.43%
Mo 202.031†	-1.1	0.0011185	mg/L	0.00067399	0.0011185	mg/L	0.00067399	60.26%
Na 330.237†	308.6	9.16892	mg/L	0.072855	9.16892	mg/L	0.072855	0.79%
Ni 231.604†	-5.2	-0.0020434	mg/L	0.00071204	-0.0020434	mg/L	0.00071204	34.85%
Pb 220.353†	-0.1	-0.0030719	mg/L	0.00173385	-0.0030719	mg/L	0.00173385	56.44%
Sb 206.836†	1.1	0.0027262	mg/L	0.00415671	0.0027262	mg/L	0.00415671	152.47%
Se 196.026†	-1.8	-0.0085596	mg/L	0.00808505	-0.0085596	mg/L	0.00808505	94.46%
Sn 189.927†	-0.3	0.0005381	mg/L	0.00240702	0.0005381	mg/L	0.00240702	447.30%
Ti 334.940†	7.6	-0.0077020	mg/L	0.00010368	-0.0077020	mg/L	0.00010368	1.35%
Tl 190.801†	0.4	0.0005284	mg/L	0.01328774	0.0005284	mg/L	0.01328774	>999.9%
V 290.880†	-1.9	-0.0101427	mg/L	0.00047525	-0.0101427	mg/L	0.00047525	4.69%
Zn 206.200†	21.0	0.0080894	mg/L	0.00086765	0.0080894	mg/L	0.00086765	10.73%
B 249.772	258.0	0.0506635	mg/L	0.00096382	0.0506635	mg/L	0.00096382	1.90%
Si 251.611	1225.3	0.823134	mg/L	0.0310960	0.823134	mg/L	0.0310960	3.78%

Sequence No.: 41
Sample ID: AD19160-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 108
Date Collected: 9/11/2020 8:36:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19160-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	47294.5	90.6	%	0.89				0.98%
Y 371.029	15157.7	87.6	%	1.40				1.59%
Ag 328.068†	101.7	0.0103469	mg/L	0.00006368	0.0103469	mg/L	0.00006368	0.62%
Al 308.215†	141.7	0.0795733	mg/L	0.00795238	0.0795733	mg/L	0.00795238	9.99%
As 188.979†	1.2	0.0080569	mg/L	0.00659101	0.0080569	mg/L	0.00659101	81.81%
Ba 233.527†	6771.8	0.910298	mg/L	0.0034792	0.910298	mg/L	0.0034792	0.38%
Be 313.107†	-29.3	-0.0006739	mg/L	0.00003249	-0.0006739	mg/L	0.00003249	4.82%
Ca 315.887†	1200929.2	432.499	mg/L	3.4230	432.499	mg/L	3.4230	0.79%
Cd 228.802†	3.1	0.0053959	mg/L	0.00027518	0.0053959	mg/L	0.00027518	5.10%
Co 228.616†	57.7	0.0309891	mg/L	0.00057964	0.0309891	mg/L	0.00057964	1.87%
Cr 267.716†	7.2	-0.0034313	mg/L	0.00130233	-0.0034313	mg/L	0.00130233	37.95%
Cu 327.393†	-20.6	-0.0074039	mg/L	0.00045060	-0.0074039	mg/L	0.00045060	6.09%
Fe 273.955†	216.3	0.372150	mg/L	0.0142786	0.372150	mg/L	0.0142786	3.84%
K 404.721†	17.2	-1.37387	mg/L	0.415531	-1.37387	mg/L	0.415531	30.25%
Mg 279.077†	6955.1	8.23448	mg/L	0.024822	8.23448	mg/L	0.024822	0.30%
Mn 257.610†	62489.2	2.96467	mg/L	0.025082	2.96467	mg/L	0.025082	0.85%
Mo 202.031†	2.9	0.0047754	mg/L	0.00227131	0.0047754	mg/L	0.00227131	47.56%
Na 330.237†	54882.1	1614.26	mg/L	7.771	1614.26	mg/L	7.771	0.48%
Ni 231.604†	172.9	0.0720490	mg/L	0.00138387	0.0720490	mg/L	0.00138387	1.92%
Pb 220.353†	2.1	0.0016457	mg/L	0.00203472	0.0016457	mg/L	0.00203472	123.64%
Sb 206.836†	0.1	-0.0042769	mg/L	0.00458239	-0.0042769	mg/L	0.00458239	107.14%
Se 196.026†	1.9	0.0466022	mg/L	0.01186628	0.0466022	mg/L	0.01186628	25.46%
Sn 189.927†	-8.0	-0.0197890	mg/L	0.00448203	-0.0197890	mg/L	0.00448203	22.65%
Ti 334.940†	-122.8	0.0187213	mg/L	0.00091306	0.0187213	mg/L	0.00091306	4.88%
Tl 190.801†	-1.2	-0.0274957	mg/L	0.02100839	-0.0274957	mg/L	0.02100839	76.41%
V 290.880†	82.1	0.0113271	mg/L	0.00092902	0.0113271	mg/L	0.00092902	8.20%
Zn 206.200†	383.3	0.133535	mg/L	0.0013997	0.133535	mg/L	0.0013997	1.05%
B 249.772	454.1	0.0939434	mg/L	0.00122813	0.0939434	mg/L	0.00122813	1.31%
Si 251.611	1755.9	1.42293	mg/L	0.010009	1.42293	mg/L	0.010009	0.70%

Sequence No.: 42
Sample ID: AD19160-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 109
Date Collected: 9/11/2020 8:40:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19160-002

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	46520.4	89.1	%	1.01				1.13%
Y 371.029	15208.1	87.9	%	1.03				1.17%
Ag 328.068†	151.4	0.0147597	mg/L	0.00043025	0.0147597	mg/L	0.00043025	2.92%
Al 308.215†	260.2	0.192453	mg/L	0.0038620	0.192453	mg/L	0.0038620	2.01%
As 188.979†	1.2	0.0080474	mg/L	0.01725676	0.0080474	mg/L	0.01725676	214.44%
Ba 233.527†	4618.2	0.616472	mg/L	0.0026051	0.616472	mg/L	0.0026051	0.42%
Be 313.107†	-80.5	-0.0009160	mg/L	0.00003933	-0.0009160	mg/L	0.00003933	4.29%
Ca 315.887†	1810538.8	651.946	mg/L	3.7966	651.946	mg/L	3.7966	0.58%
Cd 228.802†	3.4	0.0055569	mg/L	0.00077348	0.0055569	mg/L	0.00077348	13.92%
Co 228.616†	17.8	0.0102393	mg/L	0.00128138	0.0102393	mg/L	0.00128138	12.51%
Cr 267.716†	6.3	-0.0035960	mg/L	0.00066355	-0.0035960	mg/L	0.00066355	18.45%
Cu 327.393†	-62.7	-0.0133304	mg/L	0.00091997	-0.0133304	mg/L	0.00091997	6.90%
Fe 273.955†	103.0	0.0869089	mg/L	0.00590334	0.0869089	mg/L	0.00590334	6.79%
K 404.721†	29.3	2.40523	mg/L	0.359715	2.40523	mg/L	0.359715	14.96%
Mg 279.077†	8309.8	9.83915	mg/L	0.042916	9.83915	mg/L	0.042916	0.44%
Mn 257.610†	88246.6	4.18986	mg/L	0.007581	4.18986	mg/L	0.007581	0.18%
Mo 202.031†	2.3	0.0042530	mg/L	0.00152596	0.0042530	mg/L	0.00152596	35.88%
Na 330.237†	55988.1	1646.79	mg/L	12.045	1646.79	mg/L	12.045	0.73%
Ni 231.604†	46.2	0.0193272	mg/L	0.00117829	0.0193272	mg/L	0.00117829	6.10%
Pb 220.353†	-0.2	-0.0031900	mg/L	0.00225555	-0.0031900	mg/L	0.00225555	70.71%
Sb 206.836†	-0.0	-0.0056367	mg/L	0.01255360	-0.0056367	mg/L	0.01255360	222.71%
Se 196.026†	2.3	0.0663473	mg/L	0.00311887	0.0663473	mg/L	0.00311887	4.70%
Sn 189.927†	-10.2	-0.0255761	mg/L	0.00038334	-0.0255761	mg/L	0.00038334	1.50%
Ti 334.940†	28.9	0.0428126	mg/L	0.00184177	0.0428126	mg/L	0.00184177	4.30%
Tl 190.801†	-3.1	-0.0487373	mg/L	0.00874173	-0.0487373	mg/L	0.00874173	17.94%
V 290.880†	99.0	0.0156593	mg/L	0.00172835	0.0156593	mg/L	0.00172835	11.04%
Zn 206.200†	73.5	0.0262772	mg/L	0.00113725	0.0262772	mg/L	0.00113725	4.33%
B 249.772	272.7	0.0552903	mg/L	0.00064674	0.0552903	mg/L	0.00064674	1.17%
Si 251.611	5069.1	3.80255	mg/L	0.005902	3.80255	mg/L	0.005902	0.16%

Sequence No.: 43
Sample ID: EF V-334254 9/10
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 110
Date Collected: 9/11/2020 8:45:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF V-334254 9/10

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	48220.6	92.4	%	0.65				0.70%
Y 371.029	15192.2	87.8	%	1.46				1.66%
Ag 328.068†	2.7	0.0014457	mg/L	0.00052537	0.0014457	mg/L	0.00052537	36.34%
Al 308.215†	13.0	-0.0437830	mg/L	0.00221017	-0.0437830	mg/L	0.00221017	5.05%
As 188.979†	1.1	0.0073725	mg/L	0.01444820	0.0073725	mg/L	0.01444820	195.97%
Ba 233.527†	64.6	-0.0047797	mg/L	0.00032629	-0.0047797	mg/L	0.00032629	6.83%
Be 313.107†	-67.6	-0.0008552	mg/L	0.00005241	-0.0008552	mg/L	0.00005241	6.13%
Ca 315.887†	157.2	0.245156	mg/L	0.0085282	0.245156	mg/L	0.0085282	3.48%
Cd 228.802†	0.6	0.0042063	mg/L	0.00055252	0.0042063	mg/L	0.00055252	13.14%
Co 228.616†	1.5	0.0017559	mg/L	0.00064010	0.0017559	mg/L	0.00064010	36.46%
Cr 267.716†	8.1	-0.0033244	mg/L	0.00066128	-0.0033244	mg/L	0.00066128	19.89%
Cu 327.393†	-15.9	-0.0067884	mg/L	0.00065705	-0.0067884	mg/L	0.00065705	9.68%
Fe 273.955†	5.4	-0.158862	mg/L	0.0033404	-0.158862	mg/L	0.0033404	2.10%
K 404.721†	8.8	3.85295	mg/L	0.352878	3.85295	mg/L	0.352878	9.16%
Mg 279.077†	38.7	0.0418978	mg/L	0.00269787	0.0418978	mg/L	0.00269787	6.44%
Mn 257.610†	21.7	-0.0066801	mg/L	0.00008528	-0.0066801	mg/L	0.00008528	1.28%
Mo 202.031†	3.2	0.0050873	mg/L	0.00291525	0.0050873	mg/L	0.00291525	57.30%
Na 330.237†	59340.6	1745.40	mg/L	4.724	1745.40	mg/L	4.724	0.27%
Ni 231.604†	5.1	0.0022737	mg/L	0.00124937	0.0022737	mg/L	0.00124937	54.95%
Pb 220.353†	1.5	0.0003191	mg/L	0.00539674	0.0003191	mg/L	0.00539674	>999.9%
Sb 206.836†	0.3	-0.0033624	mg/L	0.00893011	-0.0033624	mg/L	0.00893011	265.59%
Se 196.026†	0.8	0.0055952	mg/L	0.00632836	0.0055952	mg/L	0.00632836	113.10%
Sn 189.927†	1.2	0.0043830	mg/L	0.00261394	0.0043830	mg/L	0.00261394	59.64%
Ti 334.940†	9.2	-0.0076815	mg/L	0.00035559	-0.0076815	mg/L	0.00035559	4.63%
Tl 190.801†	-0.2	-0.0032412	mg/L	0.01210258	-0.0032412	mg/L	0.01210258	373.40%
V 290.880†	14.4	-0.0060680	mg/L	0.00033753	-0.0060680	mg/L	0.00033753	5.56%
Zn 206.200†	24.6	0.0093353	mg/L	0.00057683	0.0093353	mg/L	0.00057683	6.18%
B 249.772	36.5	-0.0205711	mg/L	0.00074169	-0.0205711	mg/L	0.00074169	3.61%
Si 251.611	23.4	0.0418670	mg/L	0.00035559	0.0418670	mg/L	0.00035559	0.85%

Sequence No.: 44
Sample ID: EF V-334254-9/11
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 111
Date Collected: 9/11/2020 8:49:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF V-334254-9/11

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	48646.1	93.2	%	1.17				1.25%
Y 371.029	15603.0	90.2	%	1.78				1.97%
Ag 328.068†	1.7	0.0013526	mg/L	0.00020218	0.0013526	mg/L	0.00020218	14.95%
Al 308.215†	11.3	-0.0454263	mg/L	0.00149086	-0.0454263	mg/L	0.00149086	3.28%
As 188.979†	1.3	0.0090804	mg/L	0.01008657	0.0090804	mg/L	0.01008657	111.08%
Ba 233.527†	69.0	-0.0041855	mg/L	0.00025673	-0.0041855	mg/L	0.00025673	6.13%
Be 313.107†	-67.2	-0.0008532	mg/L	0.00003916	-0.0008532	mg/L	0.00003916	4.59%
Ca 315.887†	132.1	0.236146	mg/L	0.0031679	0.236146	mg/L	0.0031679	1.34%
Cd 228.802†	-0.9	0.0034915	mg/L	0.00087808	0.0034915	mg/L	0.00087808	25.15%
Co 228.616†	0.6	0.0013278	mg/L	0.00078489	0.0013278	mg/L	0.00078489	59.11%
Cr 267.716†	10.9	-0.0027767	mg/L	0.00015476	-0.0027767	mg/L	0.00015476	5.57%
Cu 327.393†	-11.6	-0.0061843	mg/L	0.00146769	-0.0061843	mg/L	0.00146769	23.73%
Fe 273.955†	5.1	-0.159696	mg/L	0.0040644	-0.159696	mg/L	0.0040644	2.55%
K 404.721†	-1.1	3.28248	mg/L	0.394868	3.28248	mg/L	0.394868	12.03%
Mg 279.077†	35.0	0.0374106	mg/L	0.00045139	0.0374106	mg/L	0.00045139	1.21%
Mn 257.610†	12.0	-0.0071383	mg/L	0.00011868	-0.0071383	mg/L	0.00011868	1.66%
Mo 202.031†	4.8	0.0065737	mg/L	0.00034304	0.0065737	mg/L	0.00034304	5.22%
Na 330.237†	56909.8	1673.90	mg/L	15.692	1673.90	mg/L	15.692	0.94%
Ni 231.604†	6.9	0.0029931	mg/L	0.00158304	0.0029931	mg/L	0.00158304	52.89%
Pb 220.353†	1.4	0.0000181	mg/L	0.00631291	0.0000181	mg/L	0.00631291	>999.9%
Sb 206.836†	0.0	-0.0049887	mg/L	0.01152298	-0.0049887	mg/L	0.01152298	230.98%
Se 196.026†	2.0	0.0121847	mg/L	0.00883325	0.0121847	mg/L	0.00883325	72.49%
Sn 189.927†	0.5	0.0025950	mg/L	0.00213897	0.0025950	mg/L	0.00213897	82.43%
Ti 334.940†	8.6	-0.0077109	mg/L	0.00018765	-0.0077109	mg/L	0.00018765	2.43%
Tl 190.801†	1.0	0.0046145	mg/L	0.00447693	0.0046145	mg/L	0.00447693	97.02%
V 290.880†	11.7	-0.0067418	mg/L	0.00073444	-0.0067418	mg/L	0.00073444	10.89%
Zn 206.200†	23.9	0.0090914	mg/L	0.00044287	0.0090914	mg/L	0.00044287	4.87%
B 249.772	39.1	-0.0191849	mg/L	0.00023320	-0.0191849	mg/L	0.00023320	1.22%
Si 251.611	20.2	0.0373975	mg/L	0.00354934	0.0373975	mg/L	0.00354934	9.49%

Sequence No.: 45
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/11/2020 8:53:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	51397.3	98.4	%	0.50				0.50%
Y 371.029	16365.6	94.6	%	1.02				1.08%
Ag 328.068†	1024.3	0.0948843	mg/L	0.00059179	0.0948843	mg/L	0.00059179	0.62%
QC value within limits for Ag 328.068 Recovery = 94.88%								
Al 308.215†	4935.3	4.65182	mg/L	0.017143	4.65182	mg/L	0.017143	0.37%
QC value within limits for Al 308.215 Recovery = 93.04%								
As 188.979†	41.0	0.503743	mg/L	0.0096523	0.503743	mg/L	0.0096523	1.92%
QC value within limits for As 188.979 Recovery = 100.75%								
Ba 233.527†	3518.6	0.466448	mg/L	0.0029081	0.466448	mg/L	0.0029081	0.62%
QC value within limits for Ba 233.527 Recovery = 93.29%								
Be 313.107†	98829.2	0.467210	mg/L	0.0019470	0.467210	mg/L	0.0019470	0.42%
QC value within limits for Be 313.107 Recovery = 93.44%								
Ca 315.887†	127945.4	46.2464	mg/L	0.32303	46.2464	mg/L	0.32303	0.70%
QC value within limits for Ca 315.887 Recovery = 92.49%								
Cd 228.802†	932.8	0.450094	mg/L	0.0034682	0.450094	mg/L	0.0034682	0.77%
QC value within limits for Cd 228.802 Recovery = 90.02%								
Co 228.616†	891.6	0.464848	mg/L	0.0018774	0.464848	mg/L	0.0018774	0.40%
QC value within limits for Co 228.616 Recovery = 92.97%								
Cr 267.716†	2476.0	0.483406	mg/L	0.0043828	0.483406	mg/L	0.0043828	0.91%
QC value within limits for Cr 267.716 Recovery = 96.68%								
Cu 327.393†	3400.9	0.472448	mg/L	0.0029623	0.472448	mg/L	0.0029623	0.63%
QC value within limits for Cu 327.393 Recovery = 94.49%								
Fe 273.955†	2058.0	5.00913	mg/L	0.053257	5.00913	mg/L	0.053257	1.06%
QC value within limits for Fe 273.955 Recovery = 100.18%								
K 404.721†	764.4	-7.56229	mg/L	0.255192	-7.56229	mg/L	0.255192	3.37%
QC value less than the lower limit for K 404.721 Recovery = -15.12%								
Mg 279.077†	39509.6	46.7960	mg/L	0.28444	46.7960	mg/L	0.28444	0.61%
QC value within limits for Mg 279.077 Recovery = 93.59%								
Mn 257.610†	10062.0	0.470903	mg/L	0.0026362	0.470903	mg/L	0.0026362	0.56%
QC value within limits for Mn 257.610 Recovery = 94.18%								
Mo 202.031†	500.8	0.466595	mg/L	0.0015152	0.466595	mg/L	0.0015152	0.32%
QC value within limits for Mo 202.031 Recovery = 93.32%								
Na 330.237†	1663.6	49.0222	mg/L	0.51874	49.0222	mg/L	0.51874	1.06%
QC value within limits for Na 330.237 Recovery = 98.04%								
Ni 231.604†	1110.9	0.463352	mg/L	0.0046319	0.463352	mg/L	0.0046319	1.00%
QC value within limits for Ni 231.604 Recovery = 92.67%								
Pb 220.353†	221.3	0.468205	mg/L	0.0065161	0.468205	mg/L	0.0065161	1.39%
QC value within limits for Pb 220.353 Recovery = 93.64%								
Sb 206.836†	59.4	0.463398	mg/L	0.0061992	0.463398	mg/L	0.0061992	1.34%
QC value within limits for Sb 206.836 Recovery = 92.68%								
Se 196.026†	87.0	0.484593	mg/L	0.0051469	0.484593	mg/L	0.0051469	1.06%
QC value within limits for Se 196.026 Recovery = 96.92%								
Sn 189.927†	175.3	0.460248	mg/L	0.0106891	0.460248	mg/L	0.0106891	2.32%
QC value within limits for Sn 189.927 Recovery = 92.05%								
Ti 334.940†	9720.1	0.470218	mg/L	0.0029844	0.470218	mg/L	0.0029844	0.63%
QC value within limits for Ti 334.940 Recovery = 94.04%								
Tl 190.801†	67.1	0.462391	mg/L	0.0149586	0.462391	mg/L	0.0149586	3.24%
QC value within limits for Tl 190.801 Recovery = 92.48%								
V 290.880†	1971.3	0.486025	mg/L	0.0090319	0.486025	mg/L	0.0090319	1.86%
QC value within limits for V 290.880 Recovery = 97.20%								
Zn 206.200†	1338.4	0.464185	mg/L	0.0046231	0.464185	mg/L	0.0046231	1.00%
QC value within limits for Zn 206.200 Recovery = 92.84%								
B 249.772	2196.7	0.527249	mg/L	0.0029688	0.527249	mg/L	0.0029688	0.56%
QC value within limits for B 249.772 Recovery = 105.45%								
Si 251.611	7261.0	5.12969	mg/L	0.021763	5.12969	mg/L	0.021763	0.42%
QC value within limits for Si 251.611 Recovery = 102.59%								

QC Failed. Continue with analysis.

Sequence No.: 46
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 1
Date Collected: 9/11/2020 8:57:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	56044.1	107	%	0.70				0.66%
Y 371.029	18203.4	105	%	2.12				2.01%
Ag 328.068†	9.3	0.0020104	mg/L	0.00058386	0.0020104	mg/L	0.00058386	29.04%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-5.4	-0.0613302	mg/L	0.00372978	-0.0613302	mg/L	0.00372978	6.08%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.1	0.0075298	mg/L	0.01144376	0.0075298	mg/L	0.01144376	151.98%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.9	-0.0134787	mg/L	0.00007501	-0.0134787	mg/L	0.00007501	0.56%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	21.7	-0.0004326	mg/L	0.00006626	-0.0004326	mg/L	0.00006626	15.32%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-31.7	0.177161	mg/L	0.0041302	0.177161	mg/L	0.0041302	2.33%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.6	0.0036311	mg/L	0.00152409	0.0036311	mg/L	0.00152409	41.97%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.6	0.0018292	mg/L	0.00034112	0.0018292	mg/L	0.00034112	18.65%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	3.5	-0.0042445	mg/L	0.00016274	-0.0042445	mg/L	0.00016274	3.83%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-19.1	-0.0072363	mg/L	0.00094755	-0.0072363	mg/L	0.00094755	13.09%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	0.6	-0.170845	mg/L	0.0034346	-0.170845	mg/L	0.0034346	2.01%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-4.8	3.18550	mg/L	0.791350	3.18550	mg/L	0.791350	24.84%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	9.2	0.0068584	mg/L	0.00304406	0.0068584	mg/L	0.00304406	44.38%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-1.8	-0.0077948	mg/L	0.00008929	-0.0077948	mg/L	0.00008929	1.15%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.4	0.0017250	mg/L	0.00025208	0.0017250	mg/L	0.00025208	14.61%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.4	0.135614	mg/L	0.1791413	0.135614	mg/L	0.1791413	132.10%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-0.5	-0.0000785	mg/L	0.00154656	-0.0000785	mg/L	0.00154656	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.3	-0.0021711	mg/L	0.00245253	-0.0021711	mg/L	0.00245253	112.96%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.7	-0.0001595	mg/L	0.00727012	-0.0001595	mg/L	0.00727012	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.1	-0.0051828	mg/L	0.01036677	-0.0051828	mg/L	0.01036677	200.02%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.6	-0.0002670	mg/L	0.00113312	-0.0002670	mg/L	0.00113312	424.41%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	1.5	-0.0080627	mg/L	0.00006576	-0.0080627	mg/L	0.00006576	0.82%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.5	0.0016929	mg/L	0.00327360	0.0016929	mg/L	0.00327360	193.37%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	3.1	-0.0089067	mg/L	0.00055291	-0.0089067	mg/L	0.00055291	6.21%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-1.5	0.0003141	mg/L	0.00038816	0.0003141	mg/L	0.00038816	123.60%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	-9.9	-0.0152643	mg/L	0.00050330	-0.0152643	mg/L	0.00050330	3.30%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	0.6	-0.0330432	mg/L	0.00132937	-0.0330432	mg/L	0.00132937	4.02%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Method: PE 4 8300DV LEACH AX Page 1 Date: 9/14/2020 9:23:50 AM

T26209B4 26209/85267

Analysis Begun

Start Time: 9/14/2020 9:19:50 AM
Logged In Analyst: usermet
Spectrometer: Optima 8300 , S/N No Serial #

Plasma On Time: 9/14/2020 8:57:41 AM
Technique: ICP Continuous
Autosampler: S10

TCP 9/14/2020

Sample Information File: C:\Users\Public\PerkinElmer\ICP\Data\Sample Information\09.14.20.sif
Batch ID: ICP4
Results Data Set: T26209B4
Results Library: C:\Users\Public\PerkinElmer\ICP\Data\Results\Results.mdb

9/16/20

Sequence No.: 1
Sample ID: CALBLK V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 9/14/2020 9:20:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-333667

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	47406.1	254.66	0.54%	100	%
Y 371.029	19328.8	125.13	0.65%	100	%
Ag 328.068†	-13.2	3.62	27.34%	[0.00]	mg/L
Al 308.215†	157.6	0.93	0.59%	[0.00]	mg/L
As 188.979†	-1.1	1.27	112.56%	[0.00]	mg/L
Ba 233.527†	-0.7	1.23	175.91%	[0.00]	mg/L
Be 313.107†	-321.4	7.72	2.40%	[0.00]	mg/L
Ca 315.887†	-217.1	2.34	1.08%	[0.00]	mg/L
Cd 228.802†	13.1	1.00	7.64%	[0.00]	mg/L
Co 228.616†	-3.1	0.61	19.87%	[0.00]	mg/L
Cr 267.716†	5.5	1.36	24.65%	[0.00]	mg/L
Cu 327.393†	-166.0	3.12	1.88%	[0.00]	mg/L
Fe 273.955†	3.9	0.62	16.00%	[0.00]	mg/L
K 404.721†	-57.8	1.72	2.98%	[0.00]	mg/L
Mg 279.077†	-1.7	2.07	123.30%	[0.00]	mg/L
Mn 257.610†	20.7	0.40	1.94%	[0.00]	mg/L
Mo 202.031†	1.7	0.12	7.08%	[0.00]	mg/L
Na 330.237†	15.4	3.19	20.72%	[0.00]	mg/L
Ni 231.604†	41.3	0.80	1.93%	[0.00]	mg/L
Pb 220.353†	0.3	1.23	478.54%	[0.00]	mg/L
Sb 206.836†	1.9	1.00	51.29%	[0.00]	mg/L
Se 196.026†	4.1	2.72	66.88%	[0.00]	mg/L
Sn 189.927†	0.8	1.00	118.56%	[0.00]	mg/L
Ti 334.940†	18.9	2.62	13.90%	[0.00]	mg/L
Tl 190.801†	-1.9	1.50	78.96%	[0.00]	mg/L
V 290.880†	56.2	2.14	3.80%	[0.00]	mg/L
Zn 206.200†	9.7	2.00	20.68%	[0.00]	mg/L
B 249.772	13.0	1.20	9.24%	[0.00]	mg/L
Si 251.611	76.7	2.29	2.99%	[0.00]	mg/L

26209/85267

19159-004 TQC (-005, -006)

19159-001, -002, -009, -010

19160-002

19148-002

(4D) Se Reported

19159-004 TQC (-005, -006)

(4D) Zn Reported

Sequence No.: 2
Sample ID: CALST2 V-333672
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 9/14/2020 9:24:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST2 V-333672

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	46237.5	640.86	1.39%	97.5	%
Y 371.029	18471.6	232.21	1.26%	95.6	%
Ag 328.068†	400.6	5.02	1.25%	[0.05]	mg/L
Al 308.215†	898.7	9.20	1.02%	[1]	mg/L
As 188.979†	6.1	0.44	7.29%	[0.1]	mg/L
Ba 233.527†	1359.6	19.48	1.43%	[0.25]	mg/L
Be 313.107†	1640.6	8.10	0.49%	[0.012]	mg/L
Ca 315.887†	8722.5	21.90	0.25%	[5]	mg/L
Cd 228.802†	75.5	1.27	1.68%	[0.05]	mg/L
Co 228.616†	118.1	1.94	1.64%	[0.1]	mg/L
Cr 267.716†	328.3	4.64	1.41%	[0.1]	mg/L
Cu 327.393†	631.9	14.96	2.37%	[0.1]	mg/L
Fe 273.955†	411.0	7.96	1.94%	[1]	mg/L
K 404.721†	23.3	6.93	29.66%	[5]	mg/L
Mg 279.077†	2812.6	27.01	0.96%	[5]	mg/L
Mn 257.610†	1716.4	23.74	1.38%	[0.1]	mg/L
Mo 202.031†	71.2	1.14	1.61%	[0.1]	mg/L
Na 330.237†	715.3	10.92	1.53%	[25]	mg/L
Ni 231.604†	169.5	4.22	2.49%	[0.1]	mg/L
Pb 220.353†	15.6	2.33	14.95%	[0.05]	mg/L
Sb 206.836†	7.0	0.84	11.95%	[0.07]	mg/L
Se 196.026†	10.8	1.76	16.38%	[0.1]	mg/L
Sn 189.927†	26.3	1.21	4.62%	[0.1]	mg/L
Ti 334.940†	2151.8	34.09	1.58%	[0.1]	mg/L
Tl 190.801†	10.9	1.50	13.85%	[0.1]	mg/L
V 290.880†	332.8	6.71	2.02%	[0.1]	mg/L
Zn 206.200†	139.5	0.52	0.37%	[0.1]	mg/L
B 249.772	679.5	2.04	0.30%	[0.2]	mg/L
Si 251.611	151.6	2.81	1.85%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-333666
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 3
Date Collected: 9/14/2020 9:28:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST3 V-333666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	45081.3	235.15	0.52%	95.1	%
Y 371.029	17844.4	91.26	0.51%	92.3	%
Ag 328.068†	518.7	5.00	0.96%	[0.10]	mg/L
Al 308.215†	4363.6	13.25	0.30%	[5.0]	mg/L
As 188.979†	30.3	0.44	1.45%	[0.50]	mg/L
Ba 233.527†	2904.7	9.86	0.34%	[0.50]	mg/L
Be 313.107†	72771.3	288.84	0.40%	[0.50]	mg/L
Ca 315.887†	95027.8	627.42	0.66%	[50]	mg/L
Cd 228.802†	804.4	3.86	0.48%	[0.50]	mg/L
Co 228.616†	617.1	3.28	0.53%	[0.50]	mg/L
Cr 267.716†	1726.5	3.20	0.19%	[0.50]	mg/L
Cu 327.393†	3284.4	19.41	0.59%	[0.50]	mg/L
Fe 273.955†	2190.6	7.41	0.34%	[5.0]	mg/L
K 404.721†	708.1	7.53	1.06%	[50]	mg/L
Mg 279.077†	26504.3	153.86	0.58%	[50]	mg/L
Mn 257.610†	8258.0	51.14	0.62%	[0.50]	mg/L
Mo 202.031†	387.0	2.30	0.60%	[0.50]	mg/L
Na 330.237†	1670.0	7.00	0.42%	[50]	mg/L
Ni 231.604†	895.4	4.40	0.49%	[0.50]	mg/L
Pb 220.353†	157.4	1.77	1.13%	[0.50]	mg/L
Sb 206.836†	44.4	0.71	1.59%	[0.50]	mg/L
Se 196.026†	58.0	2.12	3.66%	[0.50]	mg/L
Sn 189.927†	136.3	1.17	0.86%	[0.50]	mg/L
Ti 334.940†	9844.1	41.12	0.42%	[0.50]	mg/L
Tl 190.801†	53.0	1.27	2.39%	[0.50]	mg/L
V 290.880†	1862.1	14.00	0.75%	[0.50]	mg/L
Zn 206.200†	764.9	2.14	0.28%	[0.50]	mg/L
B 249.772	1778.7	10.22	0.57%	[0.50]	mg/L
Si 251.611	6042.3	40.60	0.67%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-333665
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 4
Date Collected: 9/14/2020 9:32:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST4 V-333665

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	43734.3	227.82	0.52%	92.3	%
Y 371.029	17026.5	120.09	0.71%	88.1	%
Ag 328.068†	1781.0	4.97	0.28%	[0.20]	mg/L
Al 308.215†	9028.6	46.21	0.51%	[10]	mg/L
As 188.979†	63.2	1.66	2.63%	[1.00]	mg/L
Ba 233.527†	5460.0	22.20	0.41%	[1.00]	mg/L
Be 313.107†	149653.6	121.77	0.08%	[1.00]	mg/L
Ca 315.887†	196581.0	438.40	0.22%	[100]	mg/L
Cd 228.802†	1743.0	7.96	0.46%	[1.00]	mg/L
Co 228.616†	1307.0	5.41	0.41%	[1.00]	mg/L
Cr 267.716†	3679.2	15.85	0.43%	[1.00]	mg/L
Cu 327.393†	6111.3	17.60	0.29%	[1.00]	mg/L
Fe 273.955†	4057.2	3.75	0.09%	[10.0]	mg/L
K 404.721†	1483.9	4.82	0.32%	[100]	mg/L
Mg 279.077†	55713.4	79.67	0.14%	[100]	mg/L
Mn 257.610†	16785.3	16.42	0.10%	[1.00]	mg/L
Mo 202.031†	800.9	2.09	0.26%	[1.00]	mg/L
Na 330.237†	3374.3	1.92	0.06%	[100]	mg/L
Ni 231.604†	1886.7	6.04	0.32%	[1.00]	mg/L
Pb 220.353†	321.8	2.63	0.82%	[1.00]	mg/L
Sb 206.836†	93.9	0.64	0.68%	[1.00]	mg/L
Se 196.026†	125.6	1.50	1.20%	[1.00]	mg/L
Sn 189.927†	287.1	0.86	0.30%	[1.00]	mg/L
Ti 334.940†	19799.4	26.88	0.14%	[1.00]	mg/L
Tl 190.801†	107.5	0.69	0.64%	[1.00]	mg/L
V 290.880†	3332.9	8.66	0.26%	[1.00]	mg/L
Zn 206.200†	1671.7	2.66	0.16%	[1.00]	mg/L
B 249.772	3515.1	26.80	0.76%	[1.00]	mg/L
Si 251.611	12185.3	84.03	0.69%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-92.2	8769	0.00000	0.972509	
Al 308.215	3	Lin, Calc Int	-29.8	900.6	0.00000	0.999837	
As 188.979	3	Lin, Calc Int	-0.3	63.09	0.00000	0.999765	
Ba 233.527	3	Lin, Calc Int	32.8	5482	0.00000	0.999298	
Be 313.107	3	Lin, Calc Int	-444.6	149400	0.00000	0.999902	
Ca 315.887	3	Lin, Calc Int	-1096.1	1966	0.00000	0.999859	
Cd 228.802	3	Lin, Calc Int	-17.5	1737	0.00000	0.999221	
Co 228.616	3	Lin, Calc Int	-12.3	1307	0.00000	0.999582	
Cr 267.716	3	Lin, Calc Int	-38.5	3680	0.00000	0.999492	
Cu 327.393	3	Lin, Calc Int	51.6	6138	0.00000	0.999214	
Fe 273.955	3	Lin, Calc Int	32.4	408.1	0.00000	0.999084	
K 404.721	3	Lin, Calc Int	-29.1	15.04	0.00000	0.999436	
Mg 279.077	3	Lin, Calc Int	-235.5	554.7	0.00000	0.999663	
Mn 257.610	3	Lin, Calc Int	-8.2	16750	0.00000	0.999953	
Mo 202.031	3	Lin, Calc Int	-6.4	803.0	0.00000	0.999836	
Na 330.237	3	Lin, Calc Int	-54.7	34.16	0.00000	0.999179	
Ni 231.604	3	Lin, Calc Int	-17.4	1888	0.00000	0.999652	
Pb 220.353	3	Lin, Calc Int	-0.9	321.5	0.00000	0.999939	
Sb 206.836	3	Lin, Calc Int	-0.3	93.21	0.00000	0.999515	
Se 196.026	3	Lin, Calc Int	-1.7	125.7	0.00000	0.999229	
Sn 189.927	3	Lin, Calc Int	-2.4	287.2	0.00000	0.999659	
Ti 334.940	3	Lin, Calc Int	65.9	19710	0.00000	0.999950	
Tl 190.801	3	Lin, Calc Int	-0.1	107.3	0.00000	0.999966	
V 290.880	3	Lin, Calc Int	36.1	3365	0.00000	0.998002	
Zn 206.200	3	Lin, Calc Int	-25.4	1674	0.00000	0.999032	

B 249.772	3	Lin, Calc Int	-5.8	3527	0.00000	0.999935
Si 251.611	3	Lin, Calc Int	4.3	1216	0.00000	0.999986

Sequence No.: 5
Sample ID: ICV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 85

Autosampler Location: 6
Date Collected: 9/14/2020 9:37:21 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	46327.2	97.7	%	0.26				0.26%
Y 371.029	18188.1	94.1	%	0.11				0.12%
Ag 328.068†	854.2	0.111033	mg/L	0.0001153	0.111033	mg/L	0.0001153	0.10%
QC value greater than the upper limit for Ag 328.068 Recovery = 111.03%								
Al 308.215†	4316.5	4.84268	mg/L	0.009679	4.84268	mg/L	0.009679	0.20%
QC value within limits for Al 308.215 Recovery = 96.85%								
As 188.979†	29.2	0.443808	mg/L	0.0061439	0.443808	mg/L	0.0061439	1.38%
QC value less than the lower limit for As 188.979 Recovery = 88.76%								
Ba 233.527†	2935.7	0.529558	mg/L	0.0012305	0.529558	mg/L	0.0012305	0.23%
QC value within limits for Ba 233.527 Recovery = 105.91%								
Be 313.107†	73010.9	0.491776	mg/L	0.0003189	0.491776	mg/L	0.0003189	0.06%
QC value within limits for Be 313.107 Recovery = 98.36%								
Ca 315.887†	100114.4	51.4828	mg/L	0.06311	51.4828	mg/L	0.06311	0.12%
QC value within limits for Ca 315.887 Recovery = 102.97%								
Cd 228.802†	814.1	0.478693	mg/L	0.0018043	0.478693	mg/L	0.0018043	0.38%
QC value within limits for Cd 228.802 Recovery = 95.74%								
Co 228.616†	629.9	0.491315	mg/L	0.0034503	0.491315	mg/L	0.0034503	0.70%
QC value within limits for Co 228.616 Recovery = 98.26%								
Cr 267.716†	1771.8	0.494458	mg/L	0.0024462	0.494458	mg/L	0.0024462	0.49%
QC value within limits for Cr 267.716 Recovery = 98.89%								
Cu 327.393†	3270.0	0.524862	mg/L	0.0025398	0.524862	mg/L	0.0025398	0.48%
QC value within limits for Cu 327.393 Recovery = 104.97%								
Fe 273.955†	2219.1	5.35846	mg/L	0.005164	5.35846	mg/L	0.005164	0.10%
QC value within limits for Fe 273.955 Recovery = 107.17%								
K 404.721†	711.4	-8.49461	mg/L	0.408933	-8.49461	mg/L	0.408933	4.81%
QC value less than the lower limit for K 404.721 Recovery = -16.99%								
Mg 279.077†	27779.7	50.5087	mg/L	0.08093	50.5087	mg/L	0.08093	0.16%
QC value within limits for Mg 279.077 Recovery = 101.02%								
Mn 257.610†	8223.7	0.491596	mg/L	0.0002888	0.491596	mg/L	0.0002888	0.06%
QC value within limits for Mn 257.610 Recovery = 98.32%								
Mo 202.031†	386.1	0.488806	mg/L	0.0053434	0.488806	mg/L	0.0053434	1.09%
QC value within limits for Mo 202.031 Recovery = 97.76%								
Na 330.237†	1763.7	53.2282	mg/L	0.11582	53.2282	mg/L	0.11582	0.22%
QC value within limits for Na 330.237 Recovery = 106.46%								
Ni 231.604†	918.2	0.496880	mg/L	0.0006282	0.496880	mg/L	0.0006282	0.13%
QC value within limits for Ni 231.604 Recovery = 99.38%								
Pb 220.353†	160.0	0.501047	mg/L	0.0003954	0.501047	mg/L	0.0003954	0.08%
QC value within limits for Pb 220.353 Recovery = 100.21%								
Sb 206.836†	46.4	0.512786	mg/L	0.0079129	0.512786	mg/L	0.0079129	1.54%
QC value within limits for Sb 206.836 Recovery = 102.56%								
Se 196.026†	60.2	0.500967	mg/L	0.0066150	0.500967	mg/L	0.0066150	1.32%
QC value within limits for Se 196.026 Recovery = 100.19%								
Sn 189.927†	140.2	0.494794	mg/L	0.0052037	0.494794	mg/L	0.0052037	1.05%
QC value within limits for Sn 189.927 Recovery = 98.96%								
Ti 334.940†	9690.8	0.492304	mg/L	0.0014959	0.492304	mg/L	0.0014959	0.30%
QC value within limits for Ti 334.940 Recovery = 98.46%								
Tl 190.801†	49.9	0.461707	mg/L	0.0260427	0.461707	mg/L	0.0260427	5.64%
QC value within limits for Tl 190.801 Recovery = 92.34%								
V 290.880†	1885.5	0.552394	mg/L	0.0023088	0.552394	mg/L	0.0023088	0.42%
QC value greater than the upper limit for V 290.880 Recovery = 110.48%								
Zn 206.200†	814.7	0.501984	mg/L	0.0014008	0.501984	mg/L	0.0014008	0.28%
QC value within limits for Zn 206.200 Recovery = 100.40%								
B 249.772	1901.7	0.548785	mg/L	0.0034563	0.548785	mg/L	0.0034563	0.63%
QC value within limits for B 249.772 Recovery = 109.76%								
Si 251.611	6384.7	5.35320	mg/L	0.031016	5.35320	mg/L	0.031016	0.58%
QC value within limits for Si 251.611 Recovery = 107.06%								

QC Failed. Continue with analysis.

Sequence No.: 6 **Autosampler Location: 1**
Sample ID: ICB V-333667 **Date Collected: 9/14/2020 9:41:19 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	49256.4	104	%	0.47				0.46%
Y 371.029	20003.1	103	%	0.68				0.66%
Ag 328.068†	-1.9	0.0102446	mg/L	0.00052009	0.0102446	mg/L	0.00052009	5.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	21.6	0.0562873	mg/L	0.00526398	0.0562873	mg/L	0.00526398	9.35%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.6	0.0152948	mg/L	0.00482482	0.0152948	mg/L	0.00482482	31.55%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.1	-0.0059566	mg/L	0.00034702	-0.0059566	mg/L	0.00034702	5.83%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	24.5	0.0031406	mg/L	0.00004222	0.0031406	mg/L	0.00004222	1.34%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	165.1	0.641552	mg/L	0.0011453	0.641552	mg/L	0.0011453	0.18%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.4	0.0098637	mg/L	0.00032759	0.0098637	mg/L	0.00032759	3.32%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.5	0.0106230	mg/L	0.00080900	0.0106230	mg/L	0.00080900	7.62%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.4	0.0107950	mg/L	0.00086420	0.0107950	mg/L	0.00086420	8.01%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-4.2	-0.0090969	mg/L	0.00114605	-0.0090969	mg/L	0.00114605	12.60%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-0.6	-0.0807434	mg/L	0.00334826	-0.0807434	mg/L	0.00334826	4.15%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	0.2	2.82074	mg/L	0.320926	2.82074	mg/L	0.320926	11.38%
QC value greater than the upper limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	4.3	0.432510	mg/L	0.0032696	0.432510	mg/L	0.0032696	0.76%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	0.0	0.0004895	mg/L	0.00011268	0.0004895	mg/L	0.00011268	23.02%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.8	0.0070545	mg/L	0.00092832	0.0070545	mg/L	0.00092832	13.16%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.5	1.64537	mg/L	0.046421	1.64537	mg/L	0.046421	2.82%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-1.8	0.0082830	mg/L	0.00038123	0.0082830	mg/L	0.00038123	4.60%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.1	0.0024873	mg/L	0.00476412	0.0024873	mg/L	0.00476412	191.54%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.7	0.0109501	mg/L	0.00862418	0.0109501	mg/L	0.00862418	78.76%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.6	0.0010485	mg/L	0.01474420	0.0010485	mg/L	0.01474420	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.2	0.0078323	mg/L	0.00279640	0.0078323	mg/L	0.00279640	35.70%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-0.5	-0.0033222	mg/L	0.00032221	-0.0033222	mg/L	0.00032221	9.70%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.0	0.0106087	mg/L	0.00392983	0.0106087	mg/L	0.00392983	37.04%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	1.1	-0.0103776	mg/L	0.00080720	-0.0103776	mg/L	0.00080720	7.78%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	5.3	0.0183580	mg/L	0.00015029	0.0183580	mg/L	0.00015029	0.82%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	26.8	0.0095568	mg/L	0.00033863	0.0095568	mg/L	0.00033863	3.54%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-10.4	-0.0118203	mg/L	0.00099497	-0.0118203	mg/L	0.00099497	8.42%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: LRS V-333660
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 13
Date Collected: 9/14/2020 9:45:15 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LRS V-333660

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	41642.7	87.8	%	0.10				0.11%
Y 371.029	15130.8	78.3	%	0.25				0.32%
Ag 328.068†	9512.1	1.15316	mg/L	0.008672	1.15316	mg/L	0.008672	0.75%
QC value greater than the upper limit for Ag 328.068 Recovery = 115.32%								
Al 308.215†	464678.2	516.230	mg/L	2.6469	516.230	mg/L	2.6469	0.51%
QC value within limits for Al 308.215 Recovery = 103.25%								
As 188.979†	659.7	10.0144	mg/L	0.10053	10.0144	mg/L	0.10053	1.00%
QC value within limits for As 188.979 Recovery = 100.14%								
Ba 233.527†	54812.3	9.99294	mg/L	0.054242	9.99294	mg/L	0.054242	0.54%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	697197.0	4.67063	mg/L	0.026316	4.67063	mg/L	0.026316	0.56%
QC value within limits for Be 313.107 Recovery = 93.41%								
Ca 315.887†	956692.3	487.199	mg/L	2.4757	487.199	mg/L	2.4757	0.51%
QC value within limits for Ca 315.887 Recovery = 97.44%								
Cd 228.802†	8651.4	4.98959	mg/L	0.032789	4.98959	mg/L	0.032789	0.66%
QC value within limits for Cd 228.802 Recovery = 99.79%								
Co 228.616†	6341.4	4.86037	mg/L	0.034187	4.86037	mg/L	0.034187	0.70%
QC value within limits for Co 228.616 Recovery = 97.21%								
Cr 267.716†	32305.3	8.83065	mg/L	0.056668	8.83065	mg/L	0.056668	0.64%
QC value less than the lower limit for Cr 267.716 Recovery = 88.31%								
Cu 327.393†	63836.3	10.4107	mg/L	0.06653	10.4107	mg/L	0.06653	0.64%
QC value within limits for Cu 327.393 Recovery = 104.11%								
Fe 273.955†	78444.9	192.149	mg/L	0.8502	192.149	mg/L	0.8502	0.44%
QC value within limits for Fe 273.955 Recovery = 96.07%								
K 404.721†	3721.1	-1820.48	mg/L	8.659	-1820.48	mg/L	8.659	0.48%
QC value less than the lower limit for K 404.721 Recovery = -910.24%								
Mg 279.077†	279926.1	505.105	mg/L	2.2337	505.105	mg/L	2.2337	0.44%
QC value within limits for Mg 279.077 Recovery = 101.02%								
Mn 257.610†	156981.9	9.37519	mg/L	0.051848	9.37519	mg/L	0.051848	0.55%
QC value within limits for Mn 257.610 Recovery = 93.75%								
Mo 202.031†	7360.4	9.17401	mg/L	0.039981	9.17401	mg/L	0.039981	0.44%
QC value within limits for Mo 202.031 Recovery = 91.74%								
Na 330.237†	43965.5	1288.51	mg/L	6.216	1288.51	mg/L	6.216	0.48%
QC value greater than the upper limit for Na 330.237 Recovery = 128.85%								
Ni 231.604†	16433.9	8.73820	mg/L	0.038989	8.73820	mg/L	0.038989	0.45%
QC value less than the lower limit for Ni 231.604 Recovery = 87.38%								
Pb 220.353†	3062.2	9.58889	mg/L	0.063404	9.58889	mg/L	0.063404	0.66%
QC value within limits for Pb 220.353 Recovery = 95.89%								
Sb 206.836†	497.7	5.56026	mg/L	0.044945	5.56026	mg/L	0.044945	0.81%
QC value greater than the upper limit for Sb 206.836 Recovery = 111.21%								
Se 196.026†	645.8	5.32267	mg/L	0.025583	5.32267	mg/L	0.025583	0.48%
QC value within limits for Se 196.026 Recovery = 106.45%								
Sn 189.927†	2892.4	10.0466	mg/L	0.07614	10.0466	mg/L	0.07614	0.76%
QC value within limits for Sn 189.927 Recovery = 100.47%								
Ti 334.940†	186047.9	9.47425	mg/L	0.056741	9.47425	mg/L	0.056741	0.60%
QC value within limits for Ti 334.940 Recovery = 94.74%								
Tl 190.801†	470.2	4.34938	mg/L	0.015900	4.34938	mg/L	0.015900	0.37%
QC value less than the lower limit for Tl 190.801 Recovery = 86.99%								
V 290.880†	30450.8	9.06194	mg/L	0.048989	9.06194	mg/L	0.048989	0.54%
QC value within limits for V 290.880 Recovery = 90.62%								
Zn 206.200†	15470.5	9.25865	mg/L	0.027239	9.25865	mg/L	0.027239	0.29%
QC value within limits for Zn 206.200 Recovery = 92.59%								
B 249.772	17921.5	4.78262	mg/L	0.026277	4.78262	mg/L	0.026277	0.55%
QC value within limits for B 249.772 Recovery = 95.65%								
Si 251.611	30646.9	27.1781	mg/L	0.14828	27.1781	mg/L	0.14828	0.55%
QC value within limits for Si 251.611 Recovery = 108.71%								

QC Failed. Continue with analysis.

Sequence No.: 8 **Autosampler Location: 3**
Sample ID: ICS3 V-333666 **Date Collected: 9/14/2020 9:50:02 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 85 **Auto Dilution Factor: 1**

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	46896.2	98.9	%	0.78				0.79%
Y 371.029	18245.6	94.4	%	0.59				0.62%
Ag 328.068†	528.2	0.0739065	mg/L	0.00054928	0.0739065	mg/L	0.00054928	0.74%
QC value less than the lower limit for Ag 328.068 Recovery = 73.91%								
Al 308.215†	4518.3	5.06687	mg/L	0.008274	5.06687	mg/L	0.008274	0.16%
QC value within limits for Al 308.215 Recovery = 101.34%								
As 188.979†	31.9	0.486202	mg/L	0.0151162	0.486202	mg/L	0.0151162	3.11%
QC value within limits for As 188.979 Recovery = 97.24%								
Ba 233.527†	3056.9	0.551664	mg/L	0.0054373	0.551664	mg/L	0.0054373	0.99%
QC value greater than the upper limit for Ba 233.527 Recovery = 110.33%								
Be 313.107†	76125.3	0.512627	mg/L	0.0008048	0.512627	mg/L	0.0008048	0.16%
QC value within limits for Be 313.107 Recovery = 102.53%								
Ca 315.887†	101962.8	52.4231	mg/L	0.07009	52.4231	mg/L	0.07009	0.13%
QC value within limits for Ca 315.887 Recovery = 104.85%								
Cd 228.802†	835.4	0.490899	mg/L	0.0051976	0.490899	mg/L	0.0051976	1.06%
QC value within limits for Cd 228.802 Recovery = 98.18%								
Co 228.616†	656.6	0.511757	mg/L	0.0042365	0.511757	mg/L	0.0042365	0.83%
QC value within limits for Co 228.616 Recovery = 102.35%								
Cr 267.716†	1818.7	0.507260	mg/L	0.0035655	0.507260	mg/L	0.0035655	0.70%
QC value within limits for Cr 267.716 Recovery = 101.45%								
Cu 327.393†	3307.9	0.531033	mg/L	0.0047559	0.531033	mg/L	0.0047559	0.90%
QC value within limits for Cu 327.393 Recovery = 106.21%								
Fe 273.955†	2237.9	5.40463	mg/L	0.054668	5.40463	mg/L	0.054668	1.01%
QC value within limits for Fe 273.955 Recovery = 108.09%								
K 404.721†	731.2	-7.67543	mg/L	0.679579	-7.67543	mg/L	0.679579	8.85%
QC value less than the lower limit for K 404.721 Recovery = -15.35%								
Mg 279.077†	28462.2	51.7392	mg/L	0.06188	51.7392	mg/L	0.06188	0.12%
QC value within limits for Mg 279.077 Recovery = 103.48%								
Mn 257.610†	8544.1	0.510730	mg/L	0.0017312	0.510730	mg/L	0.0017312	0.34%
QC value within limits for Mn 257.610 Recovery = 102.15%								
Mo 202.031†	398.9	0.504728	mg/L	0.0047830	0.504728	mg/L	0.0047830	0.95%
QC value within limits for Mo 202.031 Recovery = 100.95%								
Na 330.237†	1770.9	53.4392	mg/L	0.63270	53.4392	mg/L	0.63270	1.18%
QC value within limits for Na 330.237 Recovery = 106.88%								
Ni 231.604†	946.2	0.511720	mg/L	0.0051851	0.511720	mg/L	0.0051851	1.01%
QC value within limits for Ni 231.604 Recovery = 102.34%								
Pb 220.353†	165.1	0.516971	mg/L	0.0042823	0.516971	mg/L	0.0042823	0.83%
QC value within limits for Pb 220.353 Recovery = 103.39%								
Sb 206.836†	47.3	0.522694	mg/L	0.0071846	0.522694	mg/L	0.0071846	1.37%
QC value within limits for Sb 206.836 Recovery = 104.54%								
Se 196.026†	63.4	0.527265	mg/L	0.0070463	0.527265	mg/L	0.0070463	1.34%
QC value within limits for Se 196.026 Recovery = 105.45%								
Sn 189.927†	148.1	0.522193	mg/L	0.0071722	0.522193	mg/L	0.0071722	1.37%
QC value within limits for Sn 189.927 Recovery = 104.44%								
Ti 334.940†	9905.8	0.503287	mg/L	0.0006939	0.503287	mg/L	0.0006939	0.14%
QC value within limits for Ti 334.940 Recovery = 100.66%								
Tl 190.801†	55.7	0.515993	mg/L	0.0041853	0.515993	mg/L	0.0041853	0.81%
QC value within limits for Tl 190.801 Recovery = 103.20%								
V 290.880†	1917.5	0.561989	mg/L	0.0083463	0.561989	mg/L	0.0083463	1.49%
QC value greater than the upper limit for V 290.880 Recovery = 112.40%								
Zn 206.200†	851.1	0.523754	mg/L	0.0056286	0.523754	mg/L	0.0056286	1.07%
QC value within limits for Zn 206.200 Recovery = 104.75%								
B 249.772	1979.2	0.571423	mg/L	0.0016477	0.571423	mg/L	0.0016477	0.29%
QC value greater than the upper limit for B 249.772 Recovery = 114.28%								
Si 251.611	6464.0	5.42152	mg/L	0.047582	5.42152	mg/L	0.047582	0.88%
QC value within limits for Si 251.611 Recovery = 108.43%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 14
Date Collected: 9/14/2020 9:54:00 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	50889.9	107	%	0.77				0.72%
Y 371.029	20241.2	105	%	0.53				0.51%
Ag 328.068†	-2.8	0.0101350	mg/L	0.00020796	0.0101350	mg/L	0.00020796	2.05%
Al 308.215†	0.3	0.0325422	mg/L	0.00098289	0.0325422	mg/L	0.00098289	3.02%
As 188.979†	0.5	0.0129882	mg/L	0.00912867	0.0129882	mg/L	0.00912867	70.28%
Ba 233.527†	0.5	-0.0058944	mg/L	0.00020881	-0.0058944	mg/L	0.00020881	3.54%
Be 313.107†	65.4	0.0034147	mg/L	0.00003719	0.0034147	mg/L	0.00003719	1.09%
Ca 315.887†	171.9	0.644993	mg/L	0.0045767	0.644993	mg/L	0.0045767	0.71%
Cd 228.802†	0.6	0.0104281	mg/L	0.00081408	0.0104281	mg/L	0.00081408	7.81%
Co 228.616†	1.8	0.0108059	mg/L	0.00045009	0.0108059	mg/L	0.00045009	4.17%
Cr 267.716†	0.6	0.0105743	mg/L	0.00004650	0.0105743	mg/L	0.00004650	0.44%
Cu 327.393†	-7.5	-0.0096500	mg/L	0.00075541	-0.0096500	mg/L	0.00075541	7.83%
Fe 273.955†	-1.8	-0.0838153	mg/L	0.00394254	-0.0838153	mg/L	0.00394254	4.70%
K 404.721†	-8.4	2.27661	mg/L	0.450485	2.27661	mg/L	0.450485	19.79%
Mg 279.077†	4.9	0.433573	mg/L	0.0065559	0.433573	mg/L	0.0065559	1.51%
Mn 257.610†	0.1	0.0004922	mg/L	0.00004468	0.0004922	mg/L	0.00004468	9.08%
Mo 202.031†	0.2	0.0082391	mg/L	0.00044618	0.0082391	mg/L	0.00044618	5.42%
Na 330.237†	0.3	1.60974	mg/L	0.018960	1.60974	mg/L	0.018960	1.18%
Ni 231.604†	-0.1	0.0092064	mg/L	0.00067923	0.0092064	mg/L	0.00067923	7.38%
Pb 220.353†	0.6	0.0046022	mg/L	0.00291715	0.0046022	mg/L	0.00291715	63.39%
Sb 206.836†	0.3	0.0064716	mg/L	0.00151836	0.0064716	mg/L	0.00151836	23.46%
Se 196.026†	-1.5	0.0017151	mg/L	0.00552705	0.0017151	mg/L	0.00552705	322.26%
Sn 189.927†	1.2	0.0127044	mg/L	0.00049142	0.0127044	mg/L	0.00049142	3.87%
Ti 334.940†	2.2	-0.0031833	mg/L	0.00009922	-0.0031833	mg/L	0.00009922	3.12%
Tl 190.801†	0.1	0.0016046	mg/L	0.00456604	0.0016046	mg/L	0.00456604	284.55%
V 290.880†	-3.6	-0.0117816	mg/L	0.00052703	-0.0117816	mg/L	0.00052703	4.47%
Zn 206.200†	1.2	0.0159210	mg/L	0.00051628	0.0159210	mg/L	0.00051628	3.24%
B 249.772	36.5	0.0123408	mg/L	0.00115041	0.0123408	mg/L	0.00115041	9.32%
Si 251.611	-17.0	-0.0172227	mg/L	0.00226866	-0.0172227	mg/L	0.00226866	13.17%

Sequence No.: 10
Sample ID: LLICV V-333672
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 9/14/2020 9:57:57 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LLICV V-333672

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	49491.7	104	%	0.39				0.38%
Y 371.029	19244.0	99.6	%	0.91				0.92%
Ag 328.068†	401.7	0.0568196	mg/L	0.00100075	0.0568196	mg/L	0.00100075	1.76%
QC value within limits for Ag 328.068 Recovery = 113.64%								
Al 308.215†	904.0	1.03895	mg/L	0.006924	1.03895	mg/L	0.006924	0.67%
QC value within limits for Al 308.215 Recovery = 103.89%								
As 188.979†	5.7	0.0915433	mg/L	0.00228561	0.0915433	mg/L	0.00228561	2.50%
QC value within limits for As 188.979 Recovery = 91.54%								
Ba 233.527†	1397.3	0.248922	mg/L	0.0009298	0.248922	mg/L	0.0009298	0.37%
QC value within limits for Ba 233.527 Recovery = 99.57%								
Be 313.107†	1719.7	0.0144897	mg/L	0.00004177	0.0144897	mg/L	0.00004177	0.29%
QC value greater than the upper limit for Be 313.107 Recovery = 120.75%								
Ca 315.887†	9125.4	5.19939	mg/L	0.014084	5.19939	mg/L	0.014084	0.27%
QC value within limits for Ca 315.887 Recovery = 103.99%								
Cd 228.802†	78.0	0.0549810	mg/L	0.00067214	0.0549810	mg/L	0.00067214	1.22%
QC value within limits for Cd 228.802 Recovery = 109.96%								
Co 228.616†	122.8	0.103356	mg/L	0.0006485	0.103356	mg/L	0.0006485	0.63%
QC value within limits for Co 228.616 Recovery = 103.36%								
Cr 267.716†	336.0	0.102190	mg/L	0.0011576	0.102190	mg/L	0.0011576	1.13%
QC value within limits for Cr 267.716 Recovery = 102.19%								
Cu 327.393†	619.4	0.0925897	mg/L	0.00060966	0.0925897	mg/L	0.00060966	0.66%
QC value within limits for Cu 327.393 Recovery = 92.59%								
Fe 273.955†	398.1	0.896100	mg/L	0.0027099	0.896100	mg/L	0.0027099	0.30%
QC value within limits for Fe 273.955 Recovery = 89.61%								
K 404.721†	25.3	-6.03669	mg/L	0.028519	-6.03669	mg/L	0.028519	0.47%
QC value less than the lower limit for K 404.721 Recovery = -120.73%								
Mg 279.077†	2952.0	5.74677	mg/L	0.031938	5.74677	mg/L	0.031938	0.56%
QC value within limits for Mg 279.077 Recovery = 114.94%								
Mn 257.610†	1740.8	0.104444	mg/L	0.0003506	0.104444	mg/L	0.0003506	0.34%
QC value within limits for Mn 257.610 Recovery = 104.44%								
Mo 202.031†	75.3	0.101763	mg/L	0.0007626	0.101763	mg/L	0.0007626	0.75%
QC value within limits for Mo 202.031 Recovery = 101.76%								
Na 330.237†	733.9	23.0849	mg/L	0.19382	23.0849	mg/L	0.19382	0.84%
QC value within limits for Na 330.237 Recovery = 92.34%								
Ni 231.604†	175.3	0.102311	mg/L	0.0009659	0.102311	mg/L	0.0009659	0.94%
QC value within limits for Ni 231.604 Recovery = 102.31%								
Pb 220.353†	16.5	0.0543093	mg/L	0.00305502	0.0543093	mg/L	0.00305502	5.63%
QC value within limits for Pb 220.353 Recovery = 108.62%								
Sb 206.836†	6.8	0.0788527	mg/L	0.00580663	0.0788527	mg/L	0.00580663	7.36%
QC value within limits for Sb 206.836 Recovery = 112.65%								
Se 196.026†	10.9	0.101324	mg/L	0.0032305	0.101324	mg/L	0.0032305	3.19%
QC value within limits for Se 196.026 Recovery = 101.32%								
Sn 189.927†	27.9	0.105374	mg/L	0.0022379	0.105374	mg/L	0.0022379	2.12%
QC value within limits for Sn 189.927 Recovery = 105.37%								
Ti 334.940†	2107.2	0.103977	mg/L	0.0004497	0.103977	mg/L	0.0004497	0.43%
QC value within limits for Ti 334.940 Recovery = 103.98%								
Tl 190.801†	11.1	0.103297	mg/L	0.0105352	0.103297	mg/L	0.0105352	10.20%
QC value within limits for Tl 190.801 Recovery = 103.30%								
V 290.880†	330.3	0.0877360	mg/L	0.00224600	0.0877360	mg/L	0.00224600	2.56%
QC value within limits for V 290.880 Recovery = 87.74%								
Zn 206.200†	153.8	0.107099	mg/L	0.0001963	0.107099	mg/L	0.0001963	0.18%
QC value within limits for Zn 206.200 Recovery = 107.10%								
B 249.772	760.9	0.218740	mg/L	0.0009322	0.218740	mg/L	0.0009322	0.43%
QC value within limits for B 249.772 Recovery = 109.37%								
Si 251.611	151.2	0.144360	mg/L	0.0012047	0.144360	mg/L	0.0012047	0.83%
QC value greater than the upper limit for Si 251.611 Recovery = 144.36%								

QC Failed. Continue with analysis.

Sequence No.: 11
Sample ID: ICSA V-333668
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 7
Date Collected: 9/14/2020 10:01:57 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	43359.9	91.5	%	0.78				0.86%
Y 371.029	16819.6	87.0	%	0.93				1.07%
Ag 328.068†	-345.7	-0.0169280	mg/L	0.00035249	-0.0169280	mg/L	0.00035249	2.08%
Al 308.215†	475091.5	527.550	mg/L	6.0275	527.550	mg/L	6.0275	1.14%
QC value within limits for Al 308.215 Recovery = 105.51%								
As 188.979†	-1.6	-0.0268345	mg/L	0.02357810	-0.0268345	mg/L	0.02357810	87.86%
Ba 233.527†	28.1	-0.0008502	mg/L	0.00039252	-0.0008502	mg/L	0.00039252	46.17%
Be 313.107†	-11.1	0.0029024	mg/L	0.00011516	0.0029024	mg/L	0.00011516	3.97%
Ca 315.887†	969183.6	493.553	mg/L	5.3646	493.553	mg/L	5.3646	1.09%
QC value within limits for Ca 315.887 Recovery = 98.71%								
Cd 228.802†	1.9	0.0111806	mg/L	0.00056701	0.0111806	mg/L	0.00056701	5.07%
Co 228.616†	2.0	0.0109550	mg/L	0.00207509	0.0109550	mg/L	0.00207509	18.94%
Cr 267.716†	-6.7	0.0092347	mg/L	0.00075417	0.0092347	mg/L	0.00075417	8.17%
Cu 327.393†	-103.5	-0.0078117	mg/L	0.00042644	-0.0078117	mg/L	0.00042644	5.46%
Fe 273.955†	71264.2	174.553	mg/L	1.0499	174.553	mg/L	1.0499	0.60%
QC value within limits for Fe 273.955 Recovery = 87.28%								
K 404.721†	6.7	-1877.85	mg/L	11.308	-1877.85	mg/L	11.308	0.60%
Mg 279.077†	288795.6	521.096	mg/L	5.6647	521.096	mg/L	5.6647	1.09%
QC value within limits for Mg 279.077 Recovery = 104.22%								
Mn 257.610†	-212.2	-0.0121832	mg/L	0.00014408	-0.0121832	mg/L	0.00014408	1.18%
Mo 202.031†	-3.0	0.0042465	mg/L	0.00238214	0.0042465	mg/L	0.00238214	56.10%
Na 330.237†	-16.7	1.11398	mg/L	0.072445	1.11398	mg/L	0.072445	6.50%
Ni 231.604†	1.5	0.0100225	mg/L	0.00180808	0.0100225	mg/L	0.00180808	18.04%
Pb 220.353†	-11.3	0.0278509	mg/L	0.01114682	0.0278509	mg/L	0.01114682	40.02%
Sb 206.836†	0.9	0.0135228	mg/L	0.02694291	0.0135228	mg/L	0.02694291	199.24%
Se 196.026†	-18.1	0.0320364	mg/L	0.04362293	0.0320364	mg/L	0.04362293	136.17%
Sn 189.927†	-13.0	-0.0367217	mg/L	0.00771301	-0.0367217	mg/L	0.00771301	21.00%
Ti 334.940†	-120.0	0.0280772	mg/L	0.00073179	0.0280772	mg/L	0.00073179	2.61%
Tl 190.801†	-1.1	-0.0243606	mg/L	0.00953110	-0.0243606	mg/L	0.00953110	39.13%
V 290.880†	460.6	0.150266	mg/L	0.0003381	0.150266	mg/L	0.0003381	0.23%
Zn 206.200†	10.0	0.0211944	mg/L	0.00296007	0.0211944	mg/L	0.00296007	13.97%
B 249.772	2356.9	0.0752873	mg/L	0.00447196	0.0752873	mg/L	0.00447196	5.94%
Si 251.611	-29.8	0.736216	mg/L	0.0073432	0.736216	mg/L	0.0073432	1.00%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 85

Autosampler Location: 6
Date Collected: 9/14/2020 10:06:40 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	48469.1	102	%	0.56				0.55%
Y 371.029	18626.6	96.4	%	1.31				1.36%
Ag 328.068†	860.1	0.111653	mg/L	0.0004396	0.111653	mg/L	0.0004396	0.39%
QC value greater than the upper limit for Ag 328.068 Recovery = 111.65%								
Al 308.215†	4399.9	4.93489	mg/L	0.053014	4.93489	mg/L	0.053014	1.07%
QC value within limits for Al 308.215 Recovery = 98.70%								
As 188.979†	29.6	0.450806	mg/L	0.0200403	0.450806	mg/L	0.0200403	4.45%
QC value within limits for As 188.979 Recovery = 90.16%								
Ba 233.527†	2949.9	0.532150	mg/L	0.0047292	0.532150	mg/L	0.0047292	0.89%
QC value within limits for Ba 233.527 Recovery = 106.43%								
Be 313.107†	73406.1	0.494422	mg/L	0.0040428	0.494422	mg/L	0.0040428	0.82%
QC value within limits for Be 313.107 Recovery = 98.88%								
Ca 315.887†	100855.6	51.8598	mg/L	0.38689	51.8598	mg/L	0.38689	0.75%
QC value within limits for Ca 315.887 Recovery = 103.72%								
Cd 228.802†	807.2	0.474678	mg/L	0.0031147	0.474678	mg/L	0.0031147	0.66%
QC value within limits for Cd 228.802 Recovery = 94.94%								
Co 228.616†	634.8	0.495037	mg/L	0.0043263	0.495037	mg/L	0.0043263	0.87%
QC value within limits for Co 228.616 Recovery = 99.01%								
Cr 267.716†	1781.8	0.497153	mg/L	0.0040335	0.497153	mg/L	0.0040335	0.81%
QC value within limits for Cr 267.716 Recovery = 99.43%								
Cu 327.393†	3279.2	0.526333	mg/L	0.0024294	0.526333	mg/L	0.0024294	0.46%
QC value within limits for Cu 327.393 Recovery = 105.27%								
Fe 273.955†	2101.6	5.07057	mg/L	0.038922	5.07057	mg/L	0.038922	0.77%
QC value within limits for Fe 273.955 Recovery = 101.41%								
K 404.721†	713.7	-5.24197	mg/L	0.257239	-5.24197	mg/L	0.257239	4.91%
QC value less than the lower limit for K 404.721 Recovery = -10.48%								
Mg 279.077†	28221.5	51.3054	mg/L	0.42698	51.3054	mg/L	0.42698	0.83%
QC value within limits for Mg 279.077 Recovery = 102.61%								
Mn 257.610†	8190.2	0.489590	mg/L	0.0033700	0.489590	mg/L	0.0033700	0.69%
QC value within limits for Mn 257.610 Recovery = 97.92%								
Mo 202.031†	385.4	0.487949	mg/L	0.0031763	0.487949	mg/L	0.0031763	0.65%
QC value within limits for Mo 202.031 Recovery = 97.59%								
Na 330.237†	1790.6	54.0134	mg/L	0.42350	54.0134	mg/L	0.42350	0.78%
QC value within limits for Na 330.237 Recovery = 108.03%								
Ni 231.604†	902.5	0.488548	mg/L	0.0024496	0.488548	mg/L	0.0024496	0.50%
QC value within limits for Ni 231.604 Recovery = 97.71%								
Pb 220.353†	159.3	0.498974	mg/L	0.0081767	0.498974	mg/L	0.0081767	1.64%
QC value within limits for Pb 220.353 Recovery = 99.79%								
Sb 206.836†	47.3	0.521975	mg/L	0.0077526	0.521975	mg/L	0.0077526	1.49%
QC value within limits for Sb 206.836 Recovery = 104.40%								
Se 196.026†	61.6	0.512698	mg/L	0.0285851	0.512698	mg/L	0.0285851	5.58%
QC value within limits for Se 196.026 Recovery = 102.54%								
Sn 189.927†	140.9	0.497368	mg/L	0.0087530	0.497368	mg/L	0.0087530	1.76%
QC value within limits for Sn 189.927 Recovery = 99.47%								
Ti 334.940†	9539.7	0.484669	mg/L	0.0023997	0.484669	mg/L	0.0023997	0.50%
QC value within limits for Ti 334.940 Recovery = 96.93%								
Tl 190.801†	53.1	0.491304	mg/L	0.0102319	0.491304	mg/L	0.0102319	2.08%
QC value within limits for Tl 190.801 Recovery = 98.26%								
V 290.880†	1861.1	0.545202	mg/L	0.0053874	0.545202	mg/L	0.0053874	0.99%
QC value within limits for V 290.880 Recovery = 109.04%								
Zn 206.200†	813.4	0.501203	mg/L	0.0033419	0.501203	mg/L	0.0033419	0.67%
QC value within limits for Zn 206.200 Recovery = 100.24%								
B 249.772	1961.3	0.566978	mg/L	0.0029770	0.566978	mg/L	0.0029770	0.53%
QC value greater than the upper limit for B 249.772 Recovery = 113.40%								
Si 251.611	6644.6	5.56684	mg/L	0.041235	5.56684	mg/L	0.041235	0.74%
QC value greater than the upper limit for Si 251.611 Recovery = 111.34%								

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 9/14/2020 10:10:37 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	48111.3	101	%	5.33				5.25%
Y 371.029	18861.2	97.6	%	5.83				5.97%
Ag 328.068†	0.9	0.0105622	mg/L	0.00013654	0.0105622	mg/L	0.00013654	1.29%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	21.5	0.0562227	mg/L	0.00691129	0.0562227	mg/L	0.00691129	12.29%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.6	0.0156153	mg/L	0.01293036	0.0156153	mg/L	0.01293036	82.81%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-1.0	-0.0061535	mg/L	0.00024802	-0.0061535	mg/L	0.00024802	4.03%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	11.7	0.0030554	mg/L	0.00010590	0.0030554	mg/L	0.00010590	3.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	72.1	0.594255	mg/L	0.0060184	0.594255	mg/L	0.0060184	1.01%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	1.7	0.0110700	mg/L	0.00058206	0.0110700	mg/L	0.00058206	5.26%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.9	0.0101550	mg/L	0.00165365	0.0101550	mg/L	0.00165365	16.28%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.1	0.0104419	mg/L	0.00049768	0.0104419	mg/L	0.00049768	4.77%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-25.8	-0.0126179	mg/L	0.00156192	-0.0126179	mg/L	0.00156192	12.38%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.7	-0.0836704	mg/L	0.00069457	-0.0836704	mg/L	0.00069457	0.83%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	5.5	3.20433	mg/L	0.484716	3.20433	mg/L	0.484716	15.13%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	5.9	0.435330	mg/L	0.0046834	0.435330	mg/L	0.0046834	1.08%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-1.5	0.0003957	mg/L	0.00013934	0.0003957	mg/L	0.00013934	35.21%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-1.0	0.0067265	mg/L	0.00049125	0.0067265	mg/L	0.00049125	7.30%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	1.7	1.65227	mg/L	0.148605	1.65227	mg/L	0.148605	8.99%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	2.5	0.0105676	mg/L	0.00176257	0.0105676	mg/L	0.00176257	16.68%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.9	-0.0000102	mg/L	0.00393516	-0.0000102	mg/L	0.00393516	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.4	0.0073683	mg/L	0.01109867	0.0073683	mg/L	0.01109867	150.63%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.1	0.0219626	mg/L	0.02303346	0.0219626	mg/L	0.02303346	104.88%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.5	0.0103193	mg/L	0.00345141	0.0103193	mg/L	0.00345141	33.45%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	2.8	-0.0031563	mg/L	0.00008876	-0.0031563	mg/L	0.00008876	2.81%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.4	0.0049155	mg/L	0.00387314	0.0049155	mg/L	0.00387314	78.79%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	0.2	-0.0106389	mg/L	0.00159570	-0.0106389	mg/L	0.00159570	15.00%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	26.4	0.0309655	mg/L	0.00071671	0.0309655	mg/L	0.00071671	2.31%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	15.5	0.0065706	mg/L	0.00034946	0.0065706	mg/L	0.00034946	5.32%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-23.6	-0.0221864	mg/L	0.00120188	-0.0221864	mg/L	0.00120188	5.42%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: AD19159-004 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 112
Date Collected: 9/14/2020 10:14:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 4D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	45153.8	95.2	%	0.17				0.18%
Y 371.029	17211.3	89.0	%	0.76				0.86%
Ag 328.068†	22.6	0.0130581	mg/L	0.00027477	0.0130581	mg/L	0.00027477	2.10%
Al 308.215†	-5.8	0.0261963	mg/L	0.00601825	0.0261963	mg/L	0.00601825	22.97%
As 188.979†	-0.3	0.0001406	mg/L	0.01048684	0.0001406	mg/L	0.01048684	>999.9%
Ba 233.527†	2883.1	0.519961	mg/L	0.0009708	0.519961	mg/L	0.0009708	0.19%
Be 313.107†	-17.6	0.0028589	mg/L	0.00002587	0.0028589	mg/L	0.00002587	0.90%
Ca 315.887†	388181.8	198.014	mg/L	0.8895	198.014	mg/L	0.8895	0.45%
Cd 228.802†	4.9	0.0129391	mg/L	0.00117044	0.0129391	mg/L	0.00117044	9.05%
Co 228.616†	0.3	0.0096785	mg/L	0.00129384	0.0096785	mg/L	0.00129384	13.37%
Cr 267.716†	30.6	0.0187642	mg/L	0.00071749	0.0187642	mg/L	0.00071749	3.82%
Cu 327.393†	-16.8	-0.0111596	mg/L	0.00033772	-0.0111596	mg/L	0.00033772	3.03%
Fe 273.955†	6.8	-0.0627707	mg/L	0.00509551	-0.0627707	mg/L	0.00509551	8.12%
K 404.721†	14.9	3.59998	mg/L	0.284210	3.59998	mg/L	0.284210	7.89%
Mg 279.077†	998.8	2.22534	mg/L	0.008546	2.22534	mg/L	0.008546	0.38%
Mn 257.610†	568.3	0.0344248	mg/L	0.00011409	0.0344248	mg/L	0.00011409	0.33%
Mo 202.031†	0.9	0.0091373	mg/L	0.00005576	0.0091373	mg/L	0.00005576	0.61%
Na 330.237†	13193.0	387.773	mg/L	1.0160	387.773	mg/L	1.0160	0.26%
Ni 231.604†	7.7	0.0133189	mg/L	0.00112867	0.0133189	mg/L	0.00112867	8.47%
Pb 220.353†	5.0	0.0183034	mg/L	0.00151806	0.0183034	mg/L	0.00151806	8.29%
Sb 206.836†	1.1	0.0148692	mg/L	0.00852417	0.0148692	mg/L	0.00852417	57.33%
Se 196.026†	1.6	0.0419375	mg/L	0.00666715	0.0419375	mg/L	0.00666715	15.90%
Sn 189.927†	-3.5	-0.0038984	mg/L	0.00537917	-0.0038984	mg/L	0.00537917	137.98%
Ti 334.940†	-50.0	0.0091666	mg/L	0.00036308	0.0091666	mg/L	0.00036308	3.96%
Tl 190.801†	0.4	-0.0084845	mg/L	0.00321582	-0.0084845	mg/L	0.00321582	37.90%
V 290.880†	18.6	-0.0050619	mg/L	0.00098930	-0.0050619	mg/L	0.00098930	19.54%
Zn 206.200†	233.5	0.154722	mg/L	0.0016869	0.154722	mg/L	0.0016869	1.09%
B 249.772	103.1	0.0316181	mg/L	0.00087606	0.0316181	mg/L	0.00087606	2.77%
Si 251.611	1132.8	0.997333	mg/L	0.0023269	0.997333	mg/L	0.0023269	0.23%

Sequence No.: 15
Sample ID: AD19159-004 MR 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 113
Date Collected: 9/14/2020 10:18:50 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 MR 4D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	45445.5	95.9	%	0.73				0.76%
Y 371.029	17192.9	88.9	%	0.13				0.15%
Ag 328.068†	22.0	0.0129810	mg/L	0.00063604	0.0129810	mg/L	0.00063604	4.90%
Al 308.215†	-26.6	0.0028806	mg/L	0.00265950	0.0028806	mg/L	0.00265950	92.32%
As 188.979†	0.4	0.0111510	mg/L	0.01156502	0.0111510	mg/L	0.01156502	103.71%
Ba 233.527†	2824.7	0.509312	mg/L	0.0032145	0.509312	mg/L	0.0032145	0.63%
Be 313.107†	-15.3	0.0028744	mg/L	0.00001775	0.0028744	mg/L	0.00001775	0.62%
Ca 315.887†	378685.9	193.184	mg/L	3.1196	193.184	mg/L	3.1196	1.61%
Cd 228.802†	3.4	0.0120397	mg/L	0.00010758	0.0120397	mg/L	0.00010758	0.89%
Co 228.616†	1.3	0.0104304	mg/L	0.00052745	0.0104304	mg/L	0.00052745	5.06%
Cr 267.716†	28.6	0.0182052	mg/L	0.00066344	0.0182052	mg/L	0.00066344	3.64%
Cu 327.393†	-26.1	-0.0126661	mg/L	0.00039217	-0.0126661	mg/L	0.00039217	3.10%
Fe 273.955†	1.4	-0.0760582	mg/L	0.00308958	-0.0760582	mg/L	0.00308958	4.06%
K 404.721†	8.7	3.33413	mg/L	0.479898	3.33413	mg/L	0.479898	14.39%
Mg 279.077†	965.8	2.16589	mg/L	0.012793	2.16589	mg/L	0.012793	0.59%
Mn 257.610†	530.1	0.0321458	mg/L	0.00045684	0.0321458	mg/L	0.00045684	1.42%
Mo 202.031†	2.4	0.0109785	mg/L	0.00212303	0.0109785	mg/L	0.00212303	19.34%
Na 330.237†	13017.1	382.626	mg/L	2.5030	382.626	mg/L	2.5030	0.65%
Ni 231.604†	7.1	0.0130101	mg/L	0.00182399	0.0130101	mg/L	0.00182399	14.02%
Pb 220.353†	2.5	0.0104594	mg/L	0.00480542	0.0104594	mg/L	0.00480542	45.94%
Sb 206.836†	1.6	0.0206585	mg/L	0.00528664	0.0206585	mg/L	0.00528664	25.59%
Se 196.026†	0.2	0.0308227	mg/L	0.00245217	0.0308227	mg/L	0.00245217	7.96%
Sn 189.927†	-3.6	-0.0041184	mg/L	0.00471631	-0.0041184	mg/L	0.00471631	114.52%
Ti 334.940†	-53.0	0.0086465	mg/L	0.00035168	0.0086465	mg/L	0.00035168	4.07%
Tl 190.801†	0.0	-0.0115434	mg/L	0.00828403	-0.0115434	mg/L	0.00828403	71.76%
V 290.880†	12.6	-0.0068664	mg/L	0.00052069	-0.0068664	mg/L	0.00052069	7.58%
Zn 206.200†	217.7	0.145258	mg/L	0.0021849	0.145258	mg/L	0.0021849	1.50%
B 249.772	113.0	0.0343413	mg/L	0.00066854	0.0343413	mg/L	0.00066854	1.95%
Si 251.611	1112.3	0.978573	mg/L	0.0031093	0.978573	mg/L	0.0031093	0.32%

Sequence No.: 16
Sample ID: AD19159-005 MS 1 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 114
Date Collected: 9/14/2020 10:23:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-005 MS 1 4D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44711.0	94.3	%	0.50				0.53%
Y 371.029	16788.0	86.9	%	0.36				0.42%
Ag 328.068†	233.8	0.0378790	mg/L	0.00062740	0.0378790	mg/L	0.00062740	1.66%
Al 308.215†	1127.3	1.28831	mg/L	0.004060	1.28831	mg/L	0.004060	0.32%
As 188.979†	7.5	0.118510	mg/L	0.0290011	0.118510	mg/L	0.0290011	24.47%
Ba 233.527†	3467.0	0.626471	mg/L	0.0021998	0.626471	mg/L	0.0021998	0.35%
Be 313.107†	17795.0	0.122112	mg/L	0.0005061	0.122112	mg/L	0.0005061	0.41%
Ca 315.887†	386220.0	197.016	mg/L	0.9916	197.016	mg/L	0.9916	0.50%
Cd 228.802†	197.1	0.123560	mg/L	0.0012194	0.123560	mg/L	0.0012194	0.99%
Co 228.616†	153.7	0.127017	mg/L	0.0006801	0.127017	mg/L	0.0006801	0.54%
Cr 267.716†	444.7	0.131908	mg/L	0.0008649	0.131908	mg/L	0.0008649	0.66%
Cu 327.393†	758.7	0.115301	mg/L	0.0008567	0.115301	mg/L	0.0008567	0.74%
Fe 273.955†	464.8	1.05952	mg/L	0.010531	1.05952	mg/L	0.010531	0.99%
K 404.721†	87.0	-3.69191	mg/L	0.372174	-3.69191	mg/L	0.372174	10.08%
Mg 279.077†	7378.2	13.7269	mg/L	0.04768	13.7269	mg/L	0.04768	0.35%
Mn 257.610†	2688.4	0.161035	mg/L	0.0005139	0.161035	mg/L	0.0005139	0.32%
Mo 202.031†	94.6	0.125852	mg/L	0.0013266	0.125852	mg/L	0.0013266	1.05%
Na 330.237†	12971.2	381.281	mg/L	1.5201	381.281	mg/L	1.5201	0.40%
Ni 231.604†	218.7	0.125382	mg/L	0.0005815	0.125382	mg/L	0.0005815	0.46%
Pb 220.353†	38.3	0.122194	mg/L	0.0096048	0.122194	mg/L	0.0096048	7.86%
Sb 206.836†	12.9	0.144094	mg/L	0.0090675	0.144094	mg/L	0.0090675	6.29%
Se 196.026†	18.1	0.174453	mg/L	0.0219146	0.174453	mg/L	0.0219146	12.56%
Sn 189.927†	29.2	0.109748	mg/L	0.0013154	0.109748	mg/L	0.0013154	1.20%
Ti 334.940†	2213.2	0.123933	mg/L	0.0011180	0.123933	mg/L	0.0011180	0.90%
Tl 190.801†	12.3	0.102714	mg/L	0.0140793	0.102714	mg/L	0.0140793	13.71%
V 290.880†	459.9	0.126709	mg/L	0.0005548	0.126709	mg/L	0.0005548	0.44%
Zn 206.200†	392.9	0.249941	mg/L	0.0009697	0.249941	mg/L	0.0009697	0.39%
B 249.772	544.7	0.157612	mg/L	0.0015192	0.157612	mg/L	0.0015192	0.96%
Si 251.611	1123.1	1.01028	mg/L	0.006222	1.01028	mg/L	0.006222	0.62%

Sequence No.: 17
Sample ID: AD19159-006 MS 2 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 115
Date Collected: 9/14/2020 10:27:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-006 MS 2 4D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44731.2	94.4	%	0.49				0.52%
Y 371.029	16642.6	86.1	%	0.92				1.07%
Ag 328.068†	234.9	0.0380036	mg/L	0.00071767	0.0380036	mg/L	0.00071767	1.89%
Al 308.215†	1132.1	1.29358	mg/L	0.012242	1.29358	mg/L	0.012242	0.95%
As 188.979†	7.4	0.116361	mg/L	0.0223612	0.116361	mg/L	0.0223612	19.22%
Ba 233.527†	3332.5	0.601940	mg/L	0.0013539	0.601940	mg/L	0.0013539	0.22%
Be 313.107†	17916.0	0.122922	mg/L	0.0004898	0.122922	mg/L	0.0004898	0.40%
Ca 315.887†	384494.3	196.139	mg/L	1.8090	196.139	mg/L	1.8090	0.92%
Cd 228.802†	198.8	0.124534	mg/L	0.0004117	0.124534	mg/L	0.0004117	0.33%
Co 228.616†	152.2	0.125900	mg/L	0.0018507	0.125900	mg/L	0.0018507	1.47%
Cr 267.716†	439.0	0.130360	mg/L	0.0010871	0.130360	mg/L	0.0010871	0.83%
Cu 327.393†	764.0	0.116158	mg/L	0.0010305	0.116158	mg/L	0.0010305	0.89%
Fe 273.955†	462.3	1.05348	mg/L	0.015904	1.05348	mg/L	0.015904	1.51%
K 404.721†	88.2	-3.55111	mg/L	0.250105	-3.55111	mg/L	0.250105	7.04%
Mg 279.077†	7248.4	13.4928	mg/L	0.07294	13.4928	mg/L	0.07294	0.54%
Mn 257.610†	2646.8	0.158549	mg/L	0.0011910	0.158549	mg/L	0.0011910	0.75%
Mo 202.031†	96.1	0.127718	mg/L	0.0022458	0.127718	mg/L	0.0022458	1.76%
Na 330.237†	12967.9	381.184	mg/L	1.8198	381.184	mg/L	1.8198	0.48%
Ni 231.604†	222.2	0.127257	mg/L	0.0010627	0.127257	mg/L	0.0010627	0.84%
Pb 220.353†	39.6	0.126293	mg/L	0.0082318	0.126293	mg/L	0.0082318	6.52%
Sb 206.836†	12.6	0.140762	mg/L	0.0011730	0.140762	mg/L	0.0011730	0.83%
Se 196.026†	16.4	0.160661	mg/L	0.0234198	0.160661	mg/L	0.0234198	14.58%
Sn 189.927†	28.5	0.107226	mg/L	0.0044104	0.107226	mg/L	0.0044104	4.11%
Ti 334.940†	2225.1	0.124472	mg/L	0.0009634	0.124472	mg/L	0.0009634	0.77%
Tl 190.801†	13.7	0.115234	mg/L	0.0057452	0.115234	mg/L	0.0057452	4.99%
V 290.880†	460.3	0.126829	mg/L	0.0019190	0.126829	mg/L	0.0019190	1.51%
Zn 206.200†	400.2	0.254305	mg/L	0.0021180	0.254305	mg/L	0.0021180	0.83%
B 249.772	539.7	0.156007	mg/L	0.0003511	0.156007	mg/L	0.0003511	0.23%
Si 251.611	1091.5	0.983431	mg/L	0.0071380	0.983431	mg/L	0.0071380	0.73%

Sequence No.: 18
Sample ID: AD19159-004 PS 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 116
Date Collected: 9/14/2020 10:31:38 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 PS 4D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44335.0	93.5	%	0.68				0.73%
Y 371.029	16374.5	84.7	%	1.03				1.22%
Ag 328.068†	610.9	0.0832896	mg/L	0.00052316	0.0832896	mg/L	0.00052316	0.63%
Al 308.215†	4558.2	5.11064	mg/L	0.007806	5.11064	mg/L	0.007806	0.15%
As 188.979†	32.0	0.487585	mg/L	0.0088969	0.487585	mg/L	0.0088969	1.82%
Ba 233.527†	5320.1	0.964514	mg/L	0.0040018	0.964514	mg/L	0.0040018	0.41%
Be 313.107†	75251.3	0.506776	mg/L	0.0041938	0.506776	mg/L	0.0041938	0.83%
Ca 315.887†	470701.9	239.990	mg/L	1.7037	239.990	mg/L	1.7037	0.71%
Cd 228.802†	844.7	0.496279	mg/L	0.0033568	0.496279	mg/L	0.0033568	0.68%
Co 228.616†	653.7	0.509490	mg/L	0.0064301	0.509490	mg/L	0.0064301	1.26%
Cr 267.716†	1863.6	0.519439	mg/L	0.0060408	0.519439	mg/L	0.0060408	1.16%
Cu 327.393†	3438.7	0.552286	mg/L	0.0034627	0.552286	mg/L	0.0034627	0.63%
Fe 273.955†	2027.8	4.88967	mg/L	0.043604	4.88967	mg/L	0.043604	0.89%
K 404.721†	332.3	-28.6436	mg/L	0.25925	-28.6436	mg/L	0.25925	0.91%
Mg 279.077†	28391.8	51.6123	mg/L	0.11006	51.6123	mg/L	0.11006	0.21%
Mn 257.610†	8986.3	0.537134	mg/L	0.0010761	0.537134	mg/L	0.0010761	0.20%
Mo 202.031†	407.0	0.514883	mg/L	0.0072517	0.514883	mg/L	0.0072517	1.41%
Na 330.237†	15088.2	443.247	mg/L	2.1213	443.247	mg/L	2.1213	0.48%
Ni 231.604†	918.5	0.497085	mg/L	0.0038304	0.497085	mg/L	0.0038304	0.77%
Pb 220.353†	163.3	0.511516	mg/L	0.0038326	0.511516	mg/L	0.0038326	0.75%
Sb 206.836†	50.2	0.553482	mg/L	0.0259642	0.553482	mg/L	0.0259642	4.69%
Se 196.026†	67.4	0.573139	mg/L	0.0067087	0.573139	mg/L	0.0067087	1.17%
Sn 189.927†	139.6	0.492686	mg/L	0.0036457	0.492686	mg/L	0.0036457	0.74%
Ti 334.940†	9659.9	0.505066	mg/L	0.0011003	0.505066	mg/L	0.0011003	0.22%
Tl 190.801†	51.1	0.460688	mg/L	0.0191979	0.460688	mg/L	0.0191979	4.17%
V 290.880†	1902.3	0.557479	mg/L	0.0026352	0.557479	mg/L	0.0026352	0.47%
Zn 206.200†	1069.3	0.654105	mg/L	0.0050771	0.654105	mg/L	0.0050771	0.78%
B 249.772	1842.9	0.527747	mg/L	0.0012771	0.527747	mg/L	0.0012771	0.24%
Si 251.611	1796.9	1.64571	mg/L	0.003205	1.64571	mg/L	0.003205	0.19%

Sequence No.: 19
Sample ID: AD19159-004 SD
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 117
Date Collected: 9/14/2020 10:35:54 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-004 SD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	46959.6	99.1	%	0.60				0.61%
Y 371.029	17536.6	90.7	%	0.33				0.36%
Ag 328.068†	2.5	0.0107382	mg/L	0.00070193	0.0107382	mg/L	0.00070193	6.54%
Al 308.215†	-47.4	-0.0203279	mg/L	0.00123569	-0.0203279	mg/L	0.00123569	6.08%
As 188.979†	-0.2	0.0017032	mg/L	0.01390768	0.0017032	mg/L	0.01390768	816.54%
Ba 233.527†	556.7	0.0955850	mg/L	0.00080206	0.0955850	mg/L	0.00080206	0.84%
Be 313.107†	-1.3	0.0029682	mg/L	0.00000563	0.0029682	mg/L	0.00000563	0.19%
Ca 315.887†	77862.0	40.1637	mg/L	0.02735	40.1637	mg/L	0.02735	0.07%
Cd 228.802†	1.7	0.0110983	mg/L	0.00031255	0.0110983	mg/L	0.00031255	2.82%
Co 228.616†	0.2	0.0096203	mg/L	0.00046717	0.0096203	mg/L	0.00046717	4.86%
Cr 267.716†	7.7	0.0125266	mg/L	0.00092989	0.0125266	mg/L	0.00092989	7.42%
Cu 327.393†	-32.3	-0.0136752	mg/L	0.00082283	-0.0136752	mg/L	0.00082283	6.02%
Fe 273.955†	-3.0	-0.0866857	mg/L	0.00296991	-0.0866857	mg/L	0.00296991	3.43%
K 404.721†	16.1	3.94096	mg/L	0.346305	3.94096	mg/L	0.346305	8.79%
Mg 279.077†	199.4	0.784109	mg/L	0.0067127	0.784109	mg/L	0.0067127	0.86%
Mn 257.610†	112.0	0.0071767	mg/L	0.00007816	0.0071767	mg/L	0.00007816	1.09%
Mo 202.031†	1.4	0.0097528	mg/L	0.00090426	0.0097528	mg/L	0.00090426	9.27%
Na 330.237†	2453.8	73.4278	mg/L	0.31739	73.4278	mg/L	0.31739	0.43%
Ni 231.604†	4.2	0.0114702	mg/L	0.00081204	0.0114702	mg/L	0.00081204	7.08%
Pb 220.353†	0.1	0.0032046	mg/L	0.00428937	0.0032046	mg/L	0.00428937	133.85%
Sb 206.836†	1.0	0.0137954	mg/L	0.00778157	0.0137954	mg/L	0.00778157	56.41%
Se 196.026†	-2.0	0.0007204	mg/L	0.01242359	0.0007204	mg/L	0.01242359	>999.9%
Sn 189.927†	-2.1	0.0012548	mg/L	0.00062388	0.0012548	mg/L	0.00062388	49.72%
Ti 334.940†	-11.7	-0.0008860	mg/L	0.00017502	-0.0008860	mg/L	0.00017502	19.75%
Tl 190.801†	0.1	-0.0006065	mg/L	0.01867606	-0.0006065	mg/L	0.01867606	>999.9%
V 290.880†	0.8	-0.0104281	mg/L	0.00079884	-0.0104281	mg/L	0.00079884	7.66%
Zn 206.200†	39.0	0.0385051	mg/L	0.00056704	0.0385051	mg/L	0.00056704	1.47%
B 249.772	71.1	0.0221817	mg/L	0.00089763	0.0221817	mg/L	0.00089763	4.05%
Si 251.611	202.1	0.176315	mg/L	0.0034081	0.176315	mg/L	0.0034081	1.93%

Sequence No.: 20
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/14/2020 10:39:56 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	46575.6	98.2	%	0.50				0.51%
Y 371.029	17029.3	88.1	%	0.75				0.86%
Ag 328.068†	857.9	0.111342	mg/L	0.0007949	0.111342	mg/L	0.0007949	0.71%
QC value greater than the upper limit for Ag 328.068 Recovery = 111.34%								
Al 308.215†	4274.9	4.79571	mg/L	0.003762	4.79571	mg/L	0.003762	0.08%
QC value within limits for Al 308.215 Recovery = 95.91%								
As 188.979†	29.7	0.451537	mg/L	0.0207415	0.451537	mg/L	0.0207415	4.59%
QC value within limits for As 188.979 Recovery = 90.31%								
Ba 233.527†	2957.9	0.533600	mg/L	0.0005529	0.533600	mg/L	0.0005529	0.10%
QC value within limits for Ba 233.527 Recovery = 106.72%								
Be 313.107†	73696.7	0.496368	mg/L	0.0010534	0.496368	mg/L	0.0010534	0.21%
QC value within limits for Be 313.107 Recovery = 99.27%								
Ca 315.887†	99021.1	50.9267	mg/L	0.07554	50.9267	mg/L	0.07554	0.15%
QC value within limits for Ca 315.887 Recovery = 101.85%								
Cd 228.802†	792.9	0.466454	mg/L	0.0011295	0.466454	mg/L	0.0011295	0.24%
QC value within limits for Cd 228.802 Recovery = 93.29%								
Co 228.616†	639.7	0.498762	mg/L	0.0025641	0.498762	mg/L	0.0025641	0.51%
QC value within limits for Co 228.616 Recovery = 99.75%								
Cr 267.716†	1801.5	0.502467	mg/L	0.0017044	0.502467	mg/L	0.0017044	0.34%
QC value within limits for Cr 267.716 Recovery = 100.49%								
Cu 327.393†	3252.4	0.521920	mg/L	0.0017661	0.521920	mg/L	0.0017661	0.34%
QC value within limits for Cu 327.393 Recovery = 104.38%								
Fe 273.955†	1966.2	4.73888	mg/L	0.015415	4.73888	mg/L	0.015415	0.33%
QC value within limits for Fe 273.955 Recovery = 94.78%								
K 404.721†	706.3	-2.16207	mg/L	0.562175	-2.16207	mg/L	0.562175	26.00%
QC value less than the lower limit for K 404.721 Recovery = -4.32%								
Mg 279.077†	28053.3	51.0020	mg/L	0.17427	51.0020	mg/L	0.17427	0.34%
QC value within limits for Mg 279.077 Recovery = 102.00%								
Mn 257.610†	8120.8	0.485450	mg/L	0.0006526	0.485450	mg/L	0.0006526	0.13%
QC value within limits for Mn 257.610 Recovery = 97.09%								
Mo 202.031†	384.1	0.486336	mg/L	0.0003405	0.486336	mg/L	0.0003405	0.07%
QC value within limits for Mo 202.031 Recovery = 97.27%								
Na 330.237†	1700.9	51.3902	mg/L	0.20342	51.3902	mg/L	0.20342	0.40%
QC value within limits for Na 330.237 Recovery = 102.78%								
Ni 231.604†	893.1	0.483534	mg/L	0.0032448	0.483534	mg/L	0.0032448	0.67%
QC value within limits for Ni 231.604 Recovery = 96.71%								
Pb 220.353†	159.7	0.500278	mg/L	0.0030425	0.500278	mg/L	0.0030425	0.61%
QC value within limits for Pb 220.353 Recovery = 100.06%								
Sb 206.836†	47.3	0.521971	mg/L	0.0108510	0.521971	mg/L	0.0108510	2.08%
QC value within limits for Sb 206.836 Recovery = 104.39%								
Se 196.026†	62.2	0.517159	mg/L	0.0067064	0.517159	mg/L	0.0067064	1.30%
QC value within limits for Se 196.026 Recovery = 103.43%								
Sn 189.927†	136.2	0.481188	mg/L	0.0042336	0.481188	mg/L	0.0042336	0.88%
QC value within limits for Sn 189.927 Recovery = 96.24%								
Ti 334.940†	9181.4	0.466414	mg/L	0.0019312	0.466414	mg/L	0.0019312	0.41%
QC value within limits for Ti 334.940 Recovery = 93.28%								
Tl 190.801†	52.5	0.485669	mg/L	0.0117202	0.485669	mg/L	0.0117202	2.41%
QC value within limits for Tl 190.801 Recovery = 97.13%								
V 290.880†	1832.3	0.536642	mg/L	0.0007757	0.536642	mg/L	0.0007757	0.14%
QC value within limits for V 290.880 Recovery = 107.33%								
Zn 206.200†	817.5	0.503678	mg/L	0.0028127	0.503678	mg/L	0.0028127	0.56%
QC value within limits for Zn 206.200 Recovery = 100.74%								
B 249.772	1905.4	0.551656	mg/L	0.0015115	0.551656	mg/L	0.0015115	0.27%
QC value greater than the upper limit for B 249.772 Recovery = 110.33%								
Si 251.611	6237.0	5.22966	mg/L	0.025817	5.22966	mg/L	0.025817	0.49%
QC value within limits for Si 251.611 Recovery = 104.59%								

QC Failed. Continue with analysis.

Sequence No.: 21 **Autosampler Location: 2**
Sample ID: CCB V-333667 **Date Collected: 9/14/2020 10:43:53 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	49869.8	105	%	1.23				1.17%
Y 371.029	18653.2	96.5	%	1.32				1.37%
Ag 328.068†	2.9	0.0107694	mg/L	0.00030369	0.0107694	mg/L	0.00030369	2.82%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-19.7	0.0103214	mg/L	0.00449577	0.0103214	mg/L	0.00449577	43.56%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.0	0.0047377	mg/L	0.00820367	0.0047377	mg/L	0.00820367	173.16%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.3	-0.0059135	mg/L	0.00016034	-0.0059135	mg/L	0.00016034	2.71%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	24.5	0.0031411	mg/L	0.00007758	0.0031411	mg/L	0.00007758	2.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	108.8	0.612888	mg/L	0.0120579	0.612888	mg/L	0.0120579	1.97%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	1.3	0.0108604	mg/L	0.00090347	0.0108604	mg/L	0.00090347	8.32%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	2.2	0.0111051	mg/L	0.00080527	0.0111051	mg/L	0.00080527	7.25%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.2	0.0107276	mg/L	0.00058932	0.0107276	mg/L	0.00058932	5.49%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-29.9	-0.0132963	mg/L	0.00122486	-0.0132963	mg/L	0.00122486	9.21%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-2.3	-0.0850282	mg/L	0.00517083	-0.0850282	mg/L	0.00517083	6.08%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	1.4	2.94359	mg/L	0.294280	2.94359	mg/L	0.294280	10.00%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	3.8	0.431522	mg/L	0.0063268	0.431522	mg/L	0.0063268	1.47%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-3.5	0.0002799	mg/L	0.00010945	0.0002799	mg/L	0.00010945	39.11%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.6	0.0087118	mg/L	0.00098714	0.0087118	mg/L	0.00098714	11.33%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-1.3	1.56499	mg/L	0.053604	1.56499	mg/L	0.053604	3.43%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	0.4	0.0094653	mg/L	0.00069439	0.0094653	mg/L	0.00069439	7.34%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.5	0.0044044	mg/L	0.00201886	0.0044044	mg/L	0.00201886	45.84%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.1	0.0046679	mg/L	0.00851019	0.0046679	mg/L	0.00851019	182.31%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.9	0.0202392	mg/L	0.00706083	0.0202392	mg/L	0.00706083	34.89%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.4	0.0098380	mg/L	0.00187255	0.0098380	mg/L	0.00187255	19.03%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	0.5	-0.0032746	mg/L	0.00007721	-0.0032746	mg/L	0.00007721	2.36%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.2	0.0029312	mg/L	0.00265895	0.0029312	mg/L	0.00265895	90.71%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-8.5	-0.0132248	mg/L	0.00045119	-0.0132248	mg/L	0.00045119	3.41%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	18.6	0.0263345	mg/L	0.00034277	0.0263345	mg/L	0.00034277	1.30%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	44.0	0.0146236	mg/L	0.00079692	0.0146236	mg/L	0.00079692	5.45%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	-26.7	-0.0247696	mg/L	0.00089090	-0.0247696	mg/L	0.00089090	3.60%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 22
Sample ID: AD19148-002 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 118
Date Collected: 9/14/2020 10:47:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19148-002 4D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	45006.8	94.9	%	0.28				0.30%
Y 371.029	16418.2	84.9	%	0.13				0.15%
Ag 328.068†	25.9	0.0134421	mg/L	0.00036454	0.0134421	mg/L	0.00036454	2.71%
Al 308.215†	-24.6	0.0053341	mg/L	0.00468001	0.0053341	mg/L	0.00468001	87.74%
As 188.979†	-0.2	0.0015960	mg/L	0.02657283	0.0015960	mg/L	0.02657283	>999.9%
Ba 233.527†	348.9	0.0576627	mg/L	0.00034435	0.0576627	mg/L	0.00034435	0.60%
Be 313.107†	-6.0	0.0029367	mg/L	0.00002245	0.0029367	mg/L	0.00002245	0.76%
Ca 315.887†	376116.1	191.877	mg/L	0.5173	191.877	mg/L	0.5173	0.27%
Cd 228.802†	2.5	0.0115379	mg/L	0.00033497	0.0115379	mg/L	0.00033497	2.90%
Co 228.616†	8.4	0.0158474	mg/L	0.00120057	0.0158474	mg/L	0.00120057	7.58%
Cr 267.716†	2.4	0.0111038	mg/L	0.00049378	0.0111038	mg/L	0.00049378	4.45%
Cu 327.393†	-29.9	-0.0132952	mg/L	0.00039436	-0.0132952	mg/L	0.00039436	2.97%
Fe 273.955†	10.3	-0.0540899	mg/L	0.00644561	-0.0540899	mg/L	0.00644561	11.92%
K 404.721†	10.1	3.18919	mg/L	0.336152	3.18919	mg/L	0.336152	10.54%
Mg 279.077†	2405.9	4.76230	mg/L	0.006999	4.76230	mg/L	0.006999	0.15%
Mn 257.610†	5622.4	0.336247	mg/L	0.0019321	0.336247	mg/L	0.0019321	0.57%
Mo 202.031†	1.7	0.0100658	mg/L	0.00244015	0.0100658	mg/L	0.00244015	24.24%
Na 330.237†	12441.1	365.765	mg/L	1.1282	365.765	mg/L	1.1282	0.31%
Ni 231.604†	11.7	0.0154486	mg/L	0.00086538	0.0154486	mg/L	0.00086538	5.60%
Pb 220.353†	4.0	0.0151136	mg/L	0.00584598	0.0151136	mg/L	0.00584598	38.68%
Sb 206.836†	1.3	0.0171360	mg/L	0.00937097	0.0171360	mg/L	0.00937097	54.69%
Se 196.026†	2.2	0.0467441	mg/L	0.01269241	0.0467441	mg/L	0.01269241	27.15%
Sn 189.927†	-5.0	-0.0091002	mg/L	0.00042098	-0.0091002	mg/L	0.00042098	4.63%
Ti 334.940†	-49.5	0.0087264	mg/L	0.00013246	0.0087264	mg/L	0.00013246	1.52%
Tl 190.801†	0.7	-0.0033535	mg/L	0.01837586	-0.0033535	mg/L	0.01837586	547.96%
V 290.880†	23.6	-0.0034263	mg/L	0.00121254	-0.0034263	mg/L	0.00121254	35.39%
Zn 206.200†	125.7	0.0902814	mg/L	0.00226872	0.0902814	mg/L	0.00226872	2.51%
B 249.772	189.3	0.0553007	mg/L	0.00113165	0.0553007	mg/L	0.00113165	2.05%
Si 251.611	1395.8	1.21175	mg/L	0.005676	1.21175	mg/L	0.005676	0.47%

Sequence No.: 23
Sample ID: AD19159-001 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 119
Date Collected: 9/14/2020 10:52:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-001 4D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	44947.2	94.8	%	0.32				0.34%
Y 371.029	16248.6	84.1	%	0.36				0.43%
Ag 328.068†	21.0	0.0128693	mg/L	0.00012922	0.0128693	mg/L	0.00012922	1.00%
Al 308.215†	-43.9	-0.0163000	mg/L	0.00090459	-0.0163000	mg/L	0.00090459	5.55%
As 188.979†	-0.1	0.0035839	mg/L	0.01136485	0.0035839	mg/L	0.01136485	317.10%
Ba 233.527†	1021.6	0.180387	mg/L	0.0012341	0.180387	mg/L	0.0012341	0.68%
Be 313.107†	-21.1	0.0028352	mg/L	0.00002942	0.0028352	mg/L	0.00002942	1.04%
Ca 315.887†	320767.3	163.722	mg/L	0.1941	163.722	mg/L	0.1941	0.12%
Cd 228.802†	3.2	0.0119552	mg/L	0.00121810	0.0119552	mg/L	0.00121810	10.19%
Co 228.616†	25.6	0.0289928	mg/L	0.00206764	0.0289928	mg/L	0.00206764	7.13%
Cr 267.716†	4.1	0.0115696	mg/L	0.00041499	0.0115696	mg/L	0.00041499	3.59%
Cu 327.393†	-50.5	-0.0166444	mg/L	0.00032867	-0.0166444	mg/L	0.00032867	1.97%
Fe 273.955†	-1.7	-0.0836576	mg/L	0.00221652	-0.0836576	mg/L	0.00221652	2.65%
K 404.721†	15.4	3.85836	mg/L	0.150178	3.85836	mg/L	0.150178	3.89%
Mg 279.077†	1453.8	3.04579	mg/L	0.015934	3.04579	mg/L	0.015934	0.52%
Mn 257.610†	14775.9	0.882881	mg/L	0.0009831	0.882881	mg/L	0.0009831	0.11%
Mo 202.031†	1.8	0.0101900	mg/L	0.00089056	0.0101900	mg/L	0.00089056	8.74%
Na 330.237†	12167.6	357.760	mg/L	1.4510	357.760	mg/L	1.4510	0.41%
Ni 231.604†	15.1	0.0172494	mg/L	0.00047667	0.0172494	mg/L	0.00047667	2.76%
Pb 220.353†	20.6	0.0669774	mg/L	0.00643718	0.0669774	mg/L	0.00643718	9.61%
Sb 206.836†	1.7	0.0215691	mg/L	0.01328347	0.0215691	mg/L	0.01328347	61.59%
Se 196.026†	-0.4	0.0234594	mg/L	0.02377638	0.0234594	mg/L	0.02377638	101.35%
Sn 189.927†	-4.6	-0.0075686	mg/L	0.00192018	-0.0075686	mg/L	0.00192018	25.37%
Ti 334.940†	-46.1	0.0067592	mg/L	0.00017034	0.0067592	mg/L	0.00017034	2.52%
Tl 190.801†	0.2	-0.0038874	mg/L	0.01009692	-0.0038874	mg/L	0.01009692	259.74%
V 290.880†	13.8	-0.0064600	mg/L	0.00095110	-0.0064600	mg/L	0.00095110	14.72%
Zn 206.200†	15.8	0.0246457	mg/L	0.00041268	0.0246457	mg/L	0.00041268	1.67%
B 249.772	118.5	0.0421316	mg/L	0.00043954	0.0421316	mg/L	0.00043954	1.04%
Si 251.611	5982.9	4.98737	mg/L	0.014604	4.98737	mg/L	0.014604	0.29%

Sequence No.: 24
Sample ID: AD19159-002 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 120
Date Collected: 9/14/2020 10:56:21 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-002 4D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	45297.1	95.6	%	0.20				0.21%
Y 371.029	16143.6	83.5	%	0.44				0.53%
Ag 328.068†	22.5	0.0130405	mg/L	0.00038758	0.0130405	mg/L	0.00038758	2.97%
Al 308.215†	-47.6	-0.0204043	mg/L	0.00119363	-0.0204043	mg/L	0.00119363	5.85%
As 188.979†	0.5	0.0135335	mg/L	0.00953649	0.0135335	mg/L	0.00953649	70.47%
Ba 233.527†	2730.8	0.492184	mg/L	0.0040442	0.492184	mg/L	0.0040442	0.82%
Be 313.107†	-26.1	0.0028017	mg/L	0.00002078	0.0028017	mg/L	0.00002078	0.74%
Ca 315.887†	346019.1	176.567	mg/L	1.1533	176.567	mg/L	1.1533	0.65%
Cd 228.802†	5.0	0.0130019	mg/L	0.00050771	0.0130019	mg/L	0.00050771	3.90%
Co 228.616†	1.8	0.0108392	mg/L	0.00047123	0.0108392	mg/L	0.00047123	4.35%
Cr 267.716†	34.9	0.0199094	mg/L	0.00012136	0.0199094	mg/L	0.00012136	0.61%
Cu 327.393†	-40.5	-0.0150155	mg/L	0.00086117	-0.0150155	mg/L	0.00086117	5.74%
Fe 273.955†	0.1	-0.0791373	mg/L	0.00349104	-0.0791373	mg/L	0.00349104	4.41%
K 404.721†	15.0	3.78760	mg/L	0.254474	3.78760	mg/L	0.254474	6.72%
Mg 279.077†	752.1	1.78062	mg/L	0.010304	1.78062	mg/L	0.010304	0.58%
Mn 257.610†	445.2	0.0270721	mg/L	0.00007204	0.0270721	mg/L	0.00007204	0.27%
Mo 202.031†	1.0	0.0092375	mg/L	0.00060757	0.0092375	mg/L	0.00060757	6.58%
Na 330.237†	12200.1	358.711	mg/L	0.2201	358.711	mg/L	0.2201	0.06%
Ni 231.604†	6.7	0.0127876	mg/L	0.00127116	0.0127876	mg/L	0.00127116	9.94%
Pb 220.353†	4.0	0.0152816	mg/L	0.00302785	0.0152816	mg/L	0.00302785	19.81%
Sb 206.836†	-0.1	0.0019148	mg/L	0.00517642	0.0019148	mg/L	0.00517642	270.34%
Se 196.026†	-0.1	0.0266943	mg/L	0.00748808	0.0266943	mg/L	0.00748808	28.05%
Sn 189.927†	-4.0	-0.0054479	mg/L	0.00212730	-0.0054479	mg/L	0.00212730	39.05%
Ti 334.940†	-49.3	0.0075714	mg/L	0.00009884	0.0075714	mg/L	0.00009884	1.31%
Tl 190.801†	0.6	-0.0052823	mg/L	0.00871196	-0.0052823	mg/L	0.00871196	164.93%
V 290.880†	9.8	-0.0077071	mg/L	0.00088114	-0.0077071	mg/L	0.00088114	11.43%
Zn 206.200†	287.8	0.187156	mg/L	0.0013640	0.187156	mg/L	0.0013640	0.73%
B 249.772	72.2	0.0230982	mg/L	0.00049018	0.0230982	mg/L	0.00049018	2.12%
Si 251.611	1135.7	0.992930	mg/L	0.0044391	0.992930	mg/L	0.0044391	0.45%

Sequence No.: 25
Sample ID: AD19159-003 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 121
Date Collected: 9/14/2020 11:00:37 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-003 4D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	45251.4	95.5	%	0.33				0.35%
Y 371.029	16243.7	84.0	%	0.37				0.44%
Ag 328.068†	20.1	0.0127605	mg/L	0.00020920	0.0127605	mg/L	0.00020920	1.64%
Al 308.215†	-44.3	-0.0168221	mg/L	0.00310663	-0.0168221	mg/L	0.00310663	18.47%
As 188.979†	-0.2	0.0023482	mg/L	0.01051215	0.0023482	mg/L	0.01051215	447.66%
Ba 233.527†	2983.7	0.538321	mg/L	0.0010113	0.538321	mg/L	0.0010113	0.19%
Be 313.107†	-37.7	0.0027246	mg/L	0.00001642	0.0027246	mg/L	0.00001642	0.60%
Ca 315.887†	350664.2	178.930	mg/L	1.8231	178.930	mg/L	1.8231	1.02%
Cd 228.802†	2.0	0.0112481	mg/L	0.00062377	0.0112481	mg/L	0.00062377	5.55%
Co 228.616†	2.9	0.0116260	mg/L	0.00187315	0.0116260	mg/L	0.00187315	16.11%
Cr 267.716†	-0.3	0.0103516	mg/L	0.00008962	0.0103516	mg/L	0.00008962	0.87%
Cu 327.393†	-54.4	-0.0172874	mg/L	0.00037291	-0.0172874	mg/L	0.00037291	2.16%
Fe 273.955†	3.0	-0.0720244	mg/L	0.00395643	-0.0720244	mg/L	0.00395643	5.49%
K 404.721†	14.2	3.65481	mg/L	0.283195	3.65481	mg/L	0.283195	7.75%
Mg 279.077†	1089.7	2.38922	mg/L	0.004562	2.38922	mg/L	0.004562	0.19%
Mn 257.610†	163.6	0.0102559	mg/L	0.00011837	0.0102559	mg/L	0.00011837	1.15%
Mo 202.031†	2.8	0.0114221	mg/L	0.00006706	0.0114221	mg/L	0.00006706	0.59%
Na 330.237†	12548.9	368.921	mg/L	1.1609	368.921	mg/L	1.1609	0.31%
Ni 231.604†	5.0	0.0118988	mg/L	0.00050434	0.0118988	mg/L	0.00050434	4.24%
Pb 220.353†	0.1	0.0029919	mg/L	0.00280194	0.0029919	mg/L	0.00280194	93.65%
Sb 206.836†	-0.4	-0.0011334	mg/L	0.00703367	-0.0011334	mg/L	0.00703367	620.58%
Se 196.026†	-1.0	0.0200949	mg/L	0.00737300	0.0200949	mg/L	0.00737300	36.69%
Sn 189.927†	-4.9	-0.0087528	mg/L	0.00145854	-0.0087528	mg/L	0.00145854	16.66%
Ti 334.940†	-48.0	0.0078191	mg/L	0.00010338	0.0078191	mg/L	0.00010338	1.32%
Tl 190.801†	0.8	-0.0038601	mg/L	0.00716521	-0.0038601	mg/L	0.00716521	185.62%
V 290.880†	9.7	-0.0077037	mg/L	0.00158962	-0.0077037	mg/L	0.00158962	20.63%
Zn 206.200†	75.9	0.0605477	mg/L	0.00057032	0.0605477	mg/L	0.00057032	0.94%
B 249.772	72.7	0.0217772	mg/L	0.00097460	0.0217772	mg/L	0.00097460	4.48%
Si 251.611	355.9	0.351175	mg/L	0.0018676	0.351175	mg/L	0.0018676	0.53%

Sequence No.: 26
Sample ID: AD19159-009 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 122
Date Collected: 9/14/2020 11:04:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-009 4D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	42494.9	89.6	%	0.38				0.42%
Y 371.029	15503.0	80.2	%	0.59				0.74%
Ag 328.068†	16.7	0.0123967	mg/L	0.00048133	0.0123967	mg/L	0.00048133	3.88%
Al 308.215†	-31.4	-0.0021878	mg/L	0.00350847	-0.0021878	mg/L	0.00350847	160.37%
As 188.979†	0.5	0.0130468	mg/L	0.02829382	0.0130468	mg/L	0.02829382	216.86%
Ba 233.527†	859.7	0.150850	mg/L	0.0013826	0.150850	mg/L	0.0013826	0.92%
Be 313.107†	-48.3	0.0026535	mg/L	0.00003889	0.0026535	mg/L	0.00003889	1.47%
Ca 315.887†	300141.7	153.231	mg/L	0.0653	153.231	mg/L	0.0653	0.04%
Cd 228.802†	3.5	0.0120968	mg/L	0.00084564	0.0120968	mg/L	0.00084564	6.99%
Co 228.616†	25.0	0.0285863	mg/L	0.00118489	0.0285863	mg/L	0.00118489	4.14%
Cr 267.716†	2.4	0.0111155	mg/L	0.00040665	0.0111155	mg/L	0.00040665	3.66%
Cu 327.393†	-60.3	-0.0182496	mg/L	0.00027485	-0.0182496	mg/L	0.00027485	1.51%
Fe 273.955†	-1.4	-0.0828473	mg/L	0.00243182	-0.0828473	mg/L	0.00243182	2.94%
K 404.721†	14.9	3.81849	mg/L	0.480480	3.81849	mg/L	0.480480	12.58%
Mg 279.077†	2433.3	4.81176	mg/L	0.041844	4.81176	mg/L	0.041844	0.87%
Mn 257.610†	6071.2	0.363050	mg/L	0.0010308	0.363050	mg/L	0.0010308	0.28%
Mo 202.031†	0.9	0.0091679	mg/L	0.00066458	0.0091679	mg/L	0.00066458	7.25%
Na 330.237†	12952.4	380.732	mg/L	0.3365	380.732	mg/L	0.3365	0.09%
Ni 231.604†	14.2	0.0167650	mg/L	0.00010611	0.0167650	mg/L	0.00010611	0.63%
Pb 220.353†	-0.0	0.0027141	mg/L	0.00207989	0.0027141	mg/L	0.00207989	76.63%
Sb 206.836†	0.4	0.0077603	mg/L	0.00716088	0.0077603	mg/L	0.00716088	92.28%
Se 196.026†	1.0	0.0334464	mg/L	0.01166311	0.0334464	mg/L	0.01166311	34.87%
Sn 189.927†	-4.8	-0.0083546	mg/L	0.00503562	-0.0083546	mg/L	0.00503562	60.27%
Ti 334.940†	-38.1	0.0063655	mg/L	0.00022198	0.0063655	mg/L	0.00022198	3.49%
Tl 190.801†	0.7	-0.0009695	mg/L	0.00516632	-0.0009695	mg/L	0.00516632	532.88%
V 290.880†	22.4	-0.0038001	mg/L	0.00073093	-0.0038001	mg/L	0.00073093	19.23%
Zn 206.200†	38.7	0.0383117	mg/L	0.00021247	0.0383117	mg/L	0.00021247	0.55%
B 249.772	80.7	0.0239813	mg/L	0.00045126	0.0239813	mg/L	0.00045126	1.88%
Si 251.611	833.4	0.740818	mg/L	0.0018323	0.740818	mg/L	0.0018323	0.25%

Sequence No.: 27
Sample ID: AD19159-010 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 123
Date Collected: 9/14/2020 11:08:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19159-010 4D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	42827.3	90.3	%	0.31				0.34%
Y 371.029	15670.0	81.1	%	0.77				0.95%
Ag 328.068†	15.1	0.0122253	mg/L	0.00036279	0.0122253	mg/L	0.00036279	2.97%
Al 308.215†	-39.3	-0.0108735	mg/L	0.00248010	-0.0108735	mg/L	0.00248010	22.81%
As 188.979†	-0.3	0.0009005	mg/L	0.01068352	0.0009005	mg/L	0.01068352	>999.9%
Ba 233.527†	1079.5	0.190939	mg/L	0.0010357	0.190939	mg/L	0.0010357	0.54%
Be 313.107†	-53.5	0.0026184	mg/L	0.00004059	0.0026184	mg/L	0.00004059	1.55%
Ca 315.887†	289907.5	148.025	mg/L	0.0653	148.025	mg/L	0.0653	0.04%
Cd 228.802†	1.7	0.0110946	mg/L	0.00116948	0.0110946	mg/L	0.00116948	10.54%
Co 228.616†	1.9	0.0109224	mg/L	0.00141569	0.0109224	mg/L	0.00141569	12.96%
Cr 267.716†	1.9	0.0109845	mg/L	0.00073279	0.0109845	mg/L	0.00073279	6.67%
Cu 327.393†	-63.1	-0.0186941	mg/L	0.00042575	-0.0186941	mg/L	0.00042575	2.28%
Fe 273.955†	1.2	-0.0765371	mg/L	0.00461865	-0.0765371	mg/L	0.00461865	6.03%
K 404.721†	15.9	3.81600	mg/L	0.766386	3.81600	mg/L	0.766386	20.08%
Mg 279.077†	3372.8	6.50556	mg/L	0.010176	6.50556	mg/L	0.010176	0.16%
Mn 257.610†	1896.6	0.113752	mg/L	0.0009229	0.113752	mg/L	0.0009229	0.81%
Mo 202.031†	1.9	0.0103415	mg/L	0.00151903	0.0103415	mg/L	0.00151903	14.69%
Na 330.237†	12152.1	357.307	mg/L	0.4700	357.307	mg/L	0.4700	0.13%
Ni 231.604†	12.7	0.0159649	mg/L	0.00072815	0.0159649	mg/L	0.00072815	4.56%
Pb 220.353†	1.4	0.0071893	mg/L	0.00575837	0.0071893	mg/L	0.00575837	80.10%
Sb 206.836†	0.9	0.0133224	mg/L	0.00566521	0.0133224	mg/L	0.00566521	42.52%
Se 196.026†	0.5	0.0293906	mg/L	0.01562505	0.0293906	mg/L	0.01562505	53.16%
Sn 189.927†	-4.5	-0.0070966	mg/L	0.00691867	-0.0070966	mg/L	0.00691867	97.49%
Ti 334.940†	-41.4	0.0058046	mg/L	0.00018541	0.0058046	mg/L	0.00018541	3.19%
Tl 190.801†	1.3	0.0037961	mg/L	0.00214822	0.0037961	mg/L	0.00214822	56.59%
V 290.880†	33.0	-0.0005355	mg/L	0.00055045	-0.0005355	mg/L	0.00055045	102.80%
Zn 206.200†	37.1	0.0373571	mg/L	0.00164404	0.0373571	mg/L	0.00164404	4.40%
B 249.772	56.9	0.0165318	mg/L	0.00012177	0.0165318	mg/L	0.00012177	0.74%
Si 251.611	492.8	0.454329	mg/L	0.0018772	0.454329	mg/L	0.0018772	0.41%

Sequence No.: 28
Sample ID: AD19160-002 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 124
Date Collected: 9/14/2020 11:12:56 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19160-002 4D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	44826.2	94.6	%	0.15				0.16%
Y 371.029	15700.7	81.2	%	0.28				0.35%
Ag 328.068†	22.1	0.0130000	mg/L	0.00033455	0.0130000	mg/L	0.00033455	2.57%
Al 308.215†	-19.7	0.0105618	mg/L	0.00343795	0.0105618	mg/L	0.00343795	32.55%
As 188.979†	-0.4	-0.0014190	mg/L	0.01190939	-0.0014190	mg/L	0.01190939	839.26%
Ba 233.527†	909.6	0.159959	mg/L	0.0004393	0.159959	mg/L	0.0004393	0.27%
Be 313.107†	-34.6	0.0027451	mg/L	0.00004886	0.0027451	mg/L	0.00004886	1.78%
Ca 315.887†	347272.8	177.205	mg/L	1.9610	177.205	mg/L	1.9610	1.11%
Cd 228.802†	1.7	0.0110668	mg/L	0.00048011	0.0110668	mg/L	0.00048011	4.34%
Co 228.616†	4.3	0.0127335	mg/L	0.00092980	0.0127335	mg/L	0.00092980	7.30%
Cr 267.716†	0.0	0.0104441	mg/L	0.00016791	0.0104441	mg/L	0.00016791	1.61%
Cu 327.393†	-67.8	-0.0194623	mg/L	0.00036323	-0.0194623	mg/L	0.00036323	1.87%
Fe 273.955†	17.5	-0.0366125	mg/L	0.00567519	-0.0366125	mg/L	0.00567519	15.50%
K 404.721†	16.0	3.39472	mg/L	1.108695	3.39472	mg/L	1.108695	32.66%
Mg 279.077†	1579.9	3.27308	mg/L	0.006826	3.27308	mg/L	0.006826	0.21%
Mn 257.610†	16776.8	1.00237	mg/L	0.001256	1.00237	mg/L	0.001256	0.13%
Mo 202.031†	1.7	0.0101688	mg/L	0.00079683	0.0101688	mg/L	0.00079683	7.84%
Na 330.237†	12549.0	368.924	mg/L	1.4689	368.924	mg/L	1.4689	0.40%
Ni 231.604†	12.5	0.0158868	mg/L	0.00049902	0.0158868	mg/L	0.00049902	3.14%
Pb 220.353†	-0.6	0.0009961	mg/L	0.00241650	0.0009961	mg/L	0.00241650	242.60%
Sb 206.836†	1.0	0.0138120	mg/L	0.01569728	0.0138120	mg/L	0.01569728	113.65%
Se 196.026†	-0.1	0.0266705	mg/L	0.01670971	0.0266705	mg/L	0.01670971	62.65%
Sn 189.927†	-4.0	-0.0055817	mg/L	0.00221736	-0.0055817	mg/L	0.00221736	39.73%
Ti 334.940†	-22.5	0.0089812	mg/L	0.00010312	0.0089812	mg/L	0.00010312	1.15%
Tl 190.801†	1.0	0.0027284	mg/L	0.01816887	0.0027284	mg/L	0.01816887	665.91%
V 290.880†	13.0	-0.0066668	mg/L	0.00088692	-0.0066668	mg/L	0.00088692	13.30%
Zn 206.200†	-1.3	0.0144465	mg/L	0.00053687	0.0144465	mg/L	0.00053687	3.72%
B 249.772	59.5	0.0197299	mg/L	0.00045579	0.0197299	mg/L	0.00045579	2.31%
Si 251.611	1056.1	0.941063	mg/L	0.0462480	0.941063	mg/L	0.0462480	4.91%

Sequence No.: 29
Sample ID: CCV V-329036
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/14/2020 11:17:12 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-329036

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	47035.7	99.2	%	0.28				0.28%
Y 371.029	16399.7	84.8	%	0.49				0.58%
Ag 328.068†	848.4	0.110133	mg/L	0.0003387	0.110133	mg/L	0.0003387	0.31%
Al 308.215†	4263.6	4.78238	mg/L	0.033027	4.78238	mg/L	0.033027	0.69%
As 188.979†	27.4	0.416754	mg/L	0.0104389	0.416754	mg/L	0.0104389	2.50%
Ba 233.527†	2908.0	0.524499	mg/L	0.0006716	0.524499	mg/L	0.0006716	0.13%
Be 313.107†	72265.7	0.486787	mg/L	0.0026444	0.486787	mg/L	0.0026444	0.54%
Ca 315.887†	95343.7	49.0561	mg/L	0.27817	49.0561	mg/L	0.27817	0.57%
Cd 228.802†	760.9	0.448068	mg/L	0.0006393	0.448068	mg/L	0.0006393	0.14%
Co 228.616†	634.4	0.494741	mg/L	0.0021074	0.494741	mg/L	0.0021074	0.43%
Cr 267.716†	1780.3	0.496623	mg/L	0.0012625	0.496623	mg/L	0.0012625	0.25%
Cu 327.393†	3232.4	0.518630	mg/L	0.0014855	0.518630	mg/L	0.0014855	0.29%
Fe 273.955†	1786.4	4.29814	mg/L	0.011632	4.29814	mg/L	0.011632	0.27%
K 404.721†	691.7	1.61267	mg/L	0.413739	1.61267	mg/L	0.413739	25.66%
Mg 279.077†	27372.7	49.7750	mg/L	0.25611	49.7750	mg/L	0.25611	0.51%
Mn 257.610†	7847.4	0.469122	mg/L	0.0017582	0.469122	mg/L	0.0017582	0.37%
Mo 202.031†	378.1	0.478875	mg/L	0.0001109	0.478875	mg/L	0.0001109	0.02%
Na 330.237†	1658.2	50.1396	mg/L	0.07355	50.1396	mg/L	0.07355	0.15%
Ni 231.604†	855.1	0.463394	mg/L	0.0013720	0.463394	mg/L	0.0013720	0.30%
Pb 220.353†	154.6	0.484383	mg/L	0.0022588	0.484383	mg/L	0.0022588	0.47%
Sb 206.836†	46.8	0.516328	mg/L	0.0123685	0.516328	mg/L	0.0123685	2.40%
Se 196.026†	58.8	0.489123	mg/L	0.0137954	0.489123	mg/L	0.0137954	2.82%
Sn 189.927†	128.4	0.453806	mg/L	0.0024293	0.453806	mg/L	0.0024293	0.54%
Ti 334.940†	8754.5	0.444609	mg/L	0.0024032	0.444609	mg/L	0.0024032	0.54%
Tl 190.801†	51.1	0.472811	mg/L	0.0119972	0.472811	mg/L	0.0119972	2.54%
V 290.880†	1772.6	0.518820	mg/L	0.0013445	0.518820	mg/L	0.0013445	0.26%
Zn 206.200†	791.6	0.488156	mg/L	0.0031266	0.488156	mg/L	0.0031266	0.64%
B 249.772	1842.8	0.534540	mg/L	0.0009940	0.534540	mg/L	0.0009940	0.19%
Si 251.611	6082.0	5.09798	mg/L	0.047570	5.09798	mg/L	0.047570	0.93%

Sequence No.: 30
Sample ID: CCB V-329027
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 9/14/2020 11:21:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-329027

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	50759.0	107	%	0.67				0.62%
Y 371.029	18254.0	94.4	%	1.20				1.27%
Ag 328.068†	1.1	0.0105708	mg/L	0.00051834	0.0105708	mg/L	0.00051834	4.90%
Al 308.215†	-34.1	-0.0056834	mg/L	0.00192985	-0.0056834	mg/L	0.00192985	33.96%
As 188.979†	0.2	0.0088163	mg/L	0.00763882	0.0088163	mg/L	0.00763882	86.64%
Ba 233.527†	-1.2	-0.0061985	mg/L	0.00018943	-0.0061985	mg/L	0.00018943	3.06%
Be 313.107†	18.6	0.0031011	mg/L	0.00005904	0.0031011	mg/L	0.00005904	1.90%
Ca 315.887†	134.3	0.625877	mg/L	0.0024396	0.625877	mg/L	0.0024396	0.39%
Cd 228.802†	0.8	0.0105487	mg/L	0.00047449	0.0105487	mg/L	0.00047449	4.50%
Co 228.616†	2.2	0.0111163	mg/L	0.00067165	0.0111163	mg/L	0.00067165	6.04%
Cr 267.716†	0.6	0.0105792	mg/L	0.00071095	0.0105792	mg/L	0.00071095	6.72%
Cu 327.393†	-47.1	-0.0160908	mg/L	0.00014478	-0.0160908	mg/L	0.00014478	0.90%
Fe 273.955†	-2.3	-0.0849102	mg/L	0.00297363	-0.0849102	mg/L	0.00297363	3.50%
K 404.721†	4.6	3.15340	mg/L	0.659282	3.15340	mg/L	0.659282	20.91%
Mg 279.077†	3.8	0.431487	mg/L	0.0049527	0.431487	mg/L	0.0049527	1.15%
Mn 257.610†	-2.0	0.0003677	mg/L	0.00011363	0.0003677	mg/L	0.00011363	30.91%
Mo 202.031†	0.2	0.0082363	mg/L	0.00039163	0.0082363	mg/L	0.00039163	4.75%
Na 330.237†	0.2	1.60952	mg/L	0.032209	1.60952	mg/L	0.032209	2.00%
Ni 231.604†	0.0	0.0092485	mg/L	0.00074972	0.0092485	mg/L	0.00074972	8.11%
Pb 220.353†	-0.7	0.0006022	mg/L	0.00507525	0.0006022	mg/L	0.00507525	842.73%
Sb 206.836†	-0.5	-0.0022460	mg/L	0.00789673	-0.0022460	mg/L	0.00789673	351.59%
Se 196.026†	-1.4	0.0024663	mg/L	0.00671313	0.0024663	mg/L	0.00671313	272.19%
Sn 189.927†	0.2	0.0090268	mg/L	0.00119587	0.0090268	mg/L	0.00119587	13.25%
Ti 334.940†	-0.3	-0.0033095	mg/L	0.00009823	-0.0033095	mg/L	0.00009823	2.97%
Tl 190.801†	0.6	0.0068826	mg/L	0.01051447	0.0068826	mg/L	0.01051447	152.77%
V 290.880†	-11.0	-0.0139826	mg/L	0.00069252	-0.0139826	mg/L	0.00069252	4.95%
Zn 206.200†	19.3	0.0267180	mg/L	0.00098289	0.0267180	mg/L	0.00098289	3.68%
B 249.772	0.8	0.0022401	mg/L	0.00088506	0.0022401	mg/L	0.00088506	39.51%
Si 251.611	-26.1	-0.0249759	mg/L	0.00038593	-0.0249759	mg/L	0.00038593	1.55%

H26209T
$SnCl_2$ r-384715
9/14/20
DL
9/15/20

Analysis Begun

Logged In Analyst: usermet
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26209T.sif
Batch ID: H26209T
Results Data Set: H26209T
Results Library: C:\data-AA\johns\Results\Results.mdb

Method Loaded
Method Name: HGCV3 TCLP (7470A)
Method Last Saved: 3/2/2020 12:35:25 PM
Method Description: HgCV3 TCLP (7470A)

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calibration Blank
Date Collected: 9/14/2020 11:02:11 AM
Analyst:
Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0004	0.0021	0.0004	11:02:58	Yes
2		[0.00]	0.0004	0.0018	0.0004	11:03:31	Yes
Mean:		[0.00]	0.0004				
SD:		0.00	0.0000				
%RSD:		0.00	4.49				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 2
Sample ID: .2 PPB
Date Collected: 9/14/2020 11:03:32 AM
Analyst:
Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0012	0.0070	0.0016	11:04:17	Yes
2		[0.2]	0.0012	0.0069	0.0016	11:04:50	Yes
Mean:		[0.2]	0.0012				
SD:		0.0	0.0000				
%RSD:		0.0	0.39				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00614 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 3
Sample ID: .5 PPB
Date Collected: 9/14/2020 11:04:51 AM
Analyst:
Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0028	0.0134	0.0031	11:05:37	Yes
2		[0.5]	0.0027	0.0128	0.0030	11:06:09	Yes
Mean:		[0.5]	0.0027				
SD:		0.0	0.0001				
%RSD:		0.0	2.81				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.998214 Slope: 0.00539 Intercept: 0.00006

Sequence No.: 4
Autosampler Location: 4
Sample ID: 1 PPB
Date Collected: 9/14/2020 11:06:11 AM
Analyst:
Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[1]	0.0055	0.0239	0.0058	11:06:56	Yes
2	[1]	0.0055	0.0244	0.0059	11:07:29	Yes
Mean:	[1]	0.0055				
SD:	0	0.0000				
%RSD:	0	0.83				

Standard number 3 applied. [1]
Correlation Coef.: 0.999597 Slope: 0.00544 Intercept: 0.00005

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: 2 PPB **Date Collected: 9/14/2020 11:07:30 AM**
Analyst: **Data Type: Original**

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0116	0.0488	0.0119	11:08:16	Yes
2		[2]	0.0115	0.0495	0.0119	11:08:48	Yes
Mean:		[2]	0.0115				
SD:		0	0.0000				
%RSD:		0	0.14				

Standard number 4 applied. [2]
Correlation Coef.: 0.999522 Slope: 0.00574 Intercept: -0.00005

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: 5 PPB **Date Collected: 9/14/2020 11:08:49 AM**
Analyst: **Data Type: Original**

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0302	0.1271	0.0306	11:09:35	Yes
2		[5]	0.0299	0.1256	0.0303	11:10:08	Yes
Mean:		[5]	0.0301				
SD:		0	0.0002				
%RSD:		0	0.63				

Standard number 5 applied. [5]
Correlation Coef.: 0.999748 Slope: 0.00603 Intercept: -0.00023

Sequence No.: 7 **Autosampler Location: 7**
Sample ID: 10 PPB **Date Collected: 9/14/2020 11:10:09 AM**
Analyst: **Data Type: Original**

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0593	0.2486	0.0596	11:10:55	Yes
2		[10]	0.0598	0.2501	0.0602	11:11:27	Yes
Mean:		[10]	0.0596				
SD:		0	0.0004				
%RSD:		0	0.66				

Standard number 6 applied. [10]
Correlation Coef.: 0.999936 Slope: 0.00598 Intercept: -0.00018

Sequence No.: 8 **Autosampler Location: 8**
Sample ID: 25 PPB **Date Collected: 9/14/2020 11:11:53 AM**
Analyst: **Data Type: Original**

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[25]	0.1458	0.6123	0.1461	11:12:43	Yes
2		[25]	0.1444	0.6053	0.1448	11:13:15	Yes
Mean:		[25]	0.1451				
SD:		0	0.0010				
%RSD:		0	0.66				

Standard number 7 applied. [25]
Correlation Coef.: 0.999918 Slope: 0.00582 Intercept: 0.00017

Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.029	0.00	4.5
.2 PPB	0.0012	0.2	0.182	0.00	0.4
.5 PPB	0.0027	0.5	0.438	0.00	2.8
1 PPB	0.0055	1.0	0.915	0.00	0.8
2 PPB	0.0115	2.0	1.954	0.00	0.1
5 PPB	0.0301	5.0	5.139	0.00	0.6
10 PPB	0.0596	10.0	10.202	0.00	0.7
25 PPB	0.1451	25.0	24.900	0.00	0.7

Correlation Coef.: 0.999918 Slope: 0.00582 Intercept: 0.00017

Sequence No.: 9 Autosampler Location: 10
Sample ID: ICV (2) Date Collected: 9/14/2020 11:13:42 AM
Analyst: Data Type: Original

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.03	20.03	0.1168	0.4906	0.1171	11:14:28	Yes
2	19.99	19.99	0.1165	0.4847	0.1169	11:15:01	Yes
Mean:	20.01	20.01	0.1166				
SD:	0.029	0.029	0.0002				
%RSD:	0.145	0.145	0.15				

QC value within limits for Hg 253.7 Recovery = 100.05%
All analyte(s) passed QC.

Sequence No.: 10 Autosampler Location: 1
Sample ID: ICB Date Collected: 9/14/2020 11:15:24 AM
Analyst: Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.050	-0.050	-0.0001	0.0002	0.0002	11:16:10	Yes
2	-0.042	-0.042	-0.0001	0.0009	0.0003	11:16:43	Yes
Mean:	-0.046	-0.046	-0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	11.67	11.67	31.28				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 11
Sample ID: MB 85267 (1) Date Collected: 9/14/2020 11:16:44 AM
Analyst: Data Type: Original

Replicate Data: MB 85267 (1)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0004	0.0000	11:17:30	Yes
2	-0.092	-0.092	-0.0004	-0.0002	0.0000	11:18:03	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	0.709	0.709	1.03				

Sequence No.: 12 Autosampler Location: 12
Sample ID: LCS 85267 Date Collected: 9/14/2020 11:18:04 AM
Analyst: Data Type: Original

Replicate Data: LCS 85267

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.25	10.25	0.0598	0.2542	0.0602	11:18:50	Yes
2	10.35	10.35	0.0604	0.2546	0.0608	11:19:22	Yes
Mean:	10.30	10.30	0.0601				

SD:	0.075	0.075	0.0004
%RSD:	0.730	0.730	0.73

Sequence No.: 13 Autosampler Location: 13
Sample ID: LCS 85267 MR Date Collected: 9/14/2020 11:19:46 AM
Analyst: Data Type: Original

Replicate Data: LCS 85267 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.34	10.34	0.0603	0.2535	0.0607	11:20:34	Yes
2	10.49	10.49	0.0612	0.2569	0.0616	11:21:07	Yes
Mean:	10.41	10.41	0.0608				
SD:	0.106	0.106	0.0006				
%RSD:	1.016	1.016	1.01				

Sequence No.: 14 Autosampler Location: 14
Sample ID: AD19159-004 Date Collected: 9/14/2020 11:21:30 AM
Analyst: Data Type: Original

Replicate Data: AD19159-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0005	-0.0000	11:22:19	Yes
2	-0.088	-0.088	-0.0003	-0.0001	0.0000	11:22:51	Yes
Mean:	-0.090	-0.090	-0.0004				
SD:	0.004	0.004	0.0000				
%RSD:	4.104	4.104	6.04				

Sequence No.: 15 Autosampler Location: 15
Sample ID: AD19159-004 MR Date Collected: 9/14/2020 11:22:53 AM
Analyst: Data Type: Original

Replicate Data: AD19159-004 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.090	-0.090	-0.0004	-0.0003	0.0000	11:23:38	Yes
2	-0.093	-0.093	-0.0004	-0.0005	-0.0000	11:24:11	Yes
Mean:	-0.091	-0.091	-0.0004				
SD:	0.003	0.003	0.0000				
%RSD:	2.814	2.814	4.12				

Sequence No.: 16 Autosampler Location: 16
Sample ID: AD19159-005 MS 1 Date Collected: 9/14/2020 11:24:12 AM
Analyst: Data Type: Original

Replicate Data: AD19159-005 MS 1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.911	9.911	0.0579	0.2460	0.0582	11:24:57	Yes
2	10.26	10.26	0.0599	0.2520	0.0603	11:25:30	Yes
Mean:	10.09	10.09	0.0589				
SD:	0.246	0.246	0.0014				
%RSD:	2.438	2.438	2.43				

Sequence No.: 17 Autosampler Location: 17
Sample ID: AD19159-006 MS 2 Date Collected: 9/14/2020 11:25:55 AM
Analyst: Data Type: Original

Replicate Data: AD19159-006 MS 2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.831	9.831	0.0574	0.2440	0.0578	11:26:45	Yes
2	9.679	9.679	0.0565	0.2378	0.0569	11:27:17	Yes
Mean:	9.755	9.755	0.0569				
SD:	0.107	0.107	0.0006				

%RSD: 1.102 1.102 1.10

Sequence No.: 18 Autosampler Location: 18
Sample ID: AD19139-001 Date Collected: 9/14/2020 11:27:43 AM
Analyst: Data Type: Original

Replicate Data: AD19139-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0004	-0.0006	-0.0000	11:28:33	Yes
2	-0.094	-0.094	-0.0004	-0.0005	-0.0000	11:29:05	Yes
Mean:	-0.094	-0.094	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.098	0.098	0.14				

Sequence No.: 19 Autosampler Location: 19
Sample ID: AD19139-004 Date Collected: 9/14/2020 11:29:06 AM
Analyst: Data Type: Original

Replicate Data: AD19139-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0004	-0.0000	11:29:55	Yes
2	-0.091	-0.091	-0.0004	-0.0004	0.0000	11:30:28	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	1.452	1.452	2.12				

Sequence No.: 20 Autosampler Location: 20
Sample ID: AD19143-001 Date Collected: 9/14/2020 11:30:29 AM
Analyst: Data Type: Original

Replicate Data: AD19143-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0003	-0.0000	11:31:15	Yes
2	-0.096	-0.096	-0.0004	-0.0006	-0.0000	11:31:47	Yes
Mean:	-0.095	-0.095	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	1.638	1.638	2.36				

Sequence No.: 21 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/14/2020 11:31:49 AM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.26	10.26	0.0599	0.2535	0.0602	11:32:35	Yes
2	10.28	10.28	0.0600	0.2528	0.0604	11:33:07	Yes
Mean:	10.27	10.27	0.0599				
SD:	0.018	0.018	0.0001				
%RSD:	0.176	0.176	0.18				

QC value within limits for Hg 253.7 Recovery = 102.68%
All analyte(s) passed QC.

Sequence No.: 22 Autosampler Location: 1
Sample ID: CCB Date Collected: 9/14/2020 11:33:30 AM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.058	-0.058	-0.0002	0.0003	0.0002	11:34:17	Yes
2	-0.053	-0.053	-0.0001	0.0005	0.0002	11:34:49	Yes
Mean:	-0.055	-0.055	-0.0002				

SD: 0.004 0.004 0.0000
%RSD: 6.592 6.592 13.85
QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 21**
Sample ID: AD19148-002 **Date Collected: 9/14/2020 11:34:50 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19148-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0003	-0.0000	11:35:37	Yes
2	-0.093	-0.093	-0.0004	-0.0005	-0.0000	11:36:10	Yes
Mean:	-0.093	-0.093	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.444	0.444	0.64				

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: AD19084-001 **Date Collected: 9/14/2020 11:36:11 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19084-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0004	-0.0004	-0.0000	11:36:56	Yes
2	-0.091	-0.091	-0.0004	-0.0002	0.0000	11:37:29	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	1.988	1.988	2.90				

Sequence No.: 25 **Autosampler Location: 23**
Sample ID: AD19159-001 **Date Collected: 9/14/2020 11:37:30 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0004	-0.0008	-0.0000	11:38:16	Yes
2	-0.094	-0.094	-0.0004	-0.0006	-0.0000	11:38:48	Yes
Mean:	-0.095	-0.095	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	0.638	0.638	0.92				

Sequence No.: 26 **Autosampler Location: 24**
Sample ID: AD19159-002 **Date Collected: 9/14/2020 11:38:49 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0004	-0.0004	0.0000	11:39:34	Yes
2	-0.092	-0.092	-0.0004	-0.0002	0.0000	11:40:07	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.454	0.454	0.66				

Sequence No.: 27 **Autosampler Location: 25**
Sample ID: AD19159-003 **Date Collected: 9/14/2020 11:40:08 AM**
Analyst: **Data Type: Original**

Replicate Data: AD19159-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0003	-0.0003	0.0000	11:40:54	Yes
2	-0.091	-0.091	-0.0004	-0.0003	0.0000	11:41:26	Yes

Mean:	-0.090	-0.090	-0.0004
SD:	0.001	0.001	0.0000
%RSD:	1.657	1.657	2.44

Sequence No.: 28 Autosampler Location: 26
Sample ID: AD19159-007 Date Collected: 9/14/2020 11:41:28 AM
Analyst: Data Type: Original

Replicate Data: AD19159-007

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0003	-0.0002	0.0000	11:42:13	Yes
2	-0.088	-0.088	-0.0003	-0.0001	0.0000	11:42:46	Yes
Mean:	-0.089	-0.089	-0.0003				
SD:	0.001	0.001	0.0000				
%RSD:	0.618	0.618	0.92				

Sequence No.: 29 Autosampler Location: 27
Sample ID: AD19159-008 Date Collected: 9/14/2020 11:42:47 AM
Analyst: Data Type: Original

Replicate Data: AD19159-008

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0004	-0.0003	0.0000	11:43:33	Yes
2	-0.092	-0.092	-0.0004	-0.0005	0.0000	11:44:05	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.208	0.208	0.30				

Sequence No.: 30 Autosampler Location: 28
Sample ID: AD19159-009 Date Collected: 9/14/2020 11:44:07 AM
Analyst: Data Type: Original

Replicate Data: AD19159-009

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0006	-0.0000	11:44:55	Yes
2	-0.090	-0.090	-0.0004	-0.0003	0.0000	11:45:28	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	2.243	2.243	3.28				

Sequence No.: 31 Autosampler Location: 29
Sample ID: AD19159-010 Date Collected: 9/14/2020 11:45:29 AM
Analyst: Data Type: Original

Replicate Data: AD19159-010

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0004	-0.0004	0.0000	11:46:15	Yes
2	-0.092	-0.092	-0.0004	-0.0006	0.0000	11:46:47	Yes
Mean:	-0.092	-0.092	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.033	0.033	0.05				

Sequence No.: 32 Autosampler Location: 30
Sample ID: AD19159-011 Date Collected: 9/14/2020 11:46:49 AM
Analyst: Data Type: Original

Replicate Data: AD19159-011

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0004	-0.0005	-0.0000	11:47:34	Yes
2	-0.092	-0.092	-0.0004	-0.0004	0.0000	11:48:07	Yes
Mean:	-0.093	-0.093	-0.0004				

SD:	0.001	0.001	0.0000
%RSD:	0.645	0.645	0.94

Sequence No.: 33 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/14/2020 11:48:08 AM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.27	10.27	0.0599	0.2528	0.0603	11:48:56	Yes
2	10.24	10.24	0.0598	0.2509	0.0601	11:49:28	Yes
Mean:	10.25	10.25	0.0598				
SD:	0.019	0.019	0.0001				
%RSD:	0.188	0.188	0.19				

QC value within limits for Hg 253.7 Recovery = 102.52%
All analyte(s) passed QC.

Sequence No.: 34 Autosampler Location: 1
Sample ID: CCB Date Collected: 9/14/2020 11:49:50 AM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.047	-0.047	-0.0001	0.0004	0.0003	11:50:37	Yes
2	-0.043	-0.043	-0.0001	0.0007	0.0003	11:51:10	Yes
Mean:	-0.045	-0.045	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	6.476	6.476	18.27				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 35 Autosampler Location: 31
Sample ID: AD19160-001 Date Collected: 9/14/2020 11:51:11 AM
Analyst: Data Type: Original

Replicate Data: AD19160-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0004	-0.0005	-0.0000	11:51:59	Yes
2	-0.092	-0.092	-0.0004	-0.0006	0.0000	11:52:32	Yes
Mean:	-0.093	-0.093	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	1.915	1.915	2.78				

Sequence No.: 36 Autosampler Location: 32
Sample ID: AD19160-002 Date Collected: 9/14/2020 11:52:33 AM
Analyst: Data Type: Original

Replicate Data: AD19160-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0004	-0.0005	-0.0000	11:53:19	Yes
2	-0.095	-0.095	-0.0004	-0.0004	-0.0000	11:53:51	Yes
Mean:	-0.095	-0.095	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.308	0.308	0.44				

Sequence No.: 37 Autosampler Location: 33
Sample ID: EF V-334254 A Date Collected: 9/14/2020 11:53:52 AM
Analyst: Data Type: Original

Replicate Data: EF V-334254 A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	-0.092	-0.092	-0.0004	-0.0003	0.0000	11:54:38	Yes
2	-0.094	-0.094	-0.0004	-0.0003	-0.0000	11:55:11	Yes
Mean:	-0.093	-0.093	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	0.970	0.970	1.41				

Sequence No.: 38 **Autosampler Location: 34**
Sample ID: EF V-334254 B **Date Collected: 9/14/2020 11:55:12 AM**
Analyst: **Data Type: Original**

Replicate Data: EF V-334254 B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0004	-0.0004	-0.0000	11:55:57	Yes
2	-0.093	-0.093	-0.0004	-0.0005	0.0000	11:56:30	Yes
Mean:	-0.093	-0.093	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	1.417	1.417	2.05				

Sequence No.: 39 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 9/14/2020 11:56:31 AM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.32	10.32	0.0602	0.2531	0.0606	11:57:20	Yes
2	10.28	10.28	0.0600	0.2520	0.0604	11:57:52	Yes
Mean:	10.30	10.30	0.0601				
SD:	0.027	0.027	0.0002				
%RSD:	0.260	0.260	0.26				

QC value within limits for Hg 253.7 Recovery = 102.97%
All analyte(s) passed QC.

Sequence No.: 40 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/14/2020 11:58:14 AM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0004	-0.0008	-0.0000	11:59:01	Yes
2	-0.094	-0.094	-0.0004	-0.0006	-0.0000	11:59:33	Yes
Mean:	-0.095	-0.095	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	0.998	0.998	1.44				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

TCLP
Metal Data
Digestion Logbook Data

Hampton-Clarke

ICP-SAMPLE PREPARATION LOG

ANALYTICAL METHOD: (3010A) 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 26209 Analyst: NS

QC Number: 85267 Prep Date: 9/11/20

Matrix: TCLP Reviewed By: CJR

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS						--	
LCSD						--	
1. 19154-004					9/10 334254		Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -004							
MS -005							Balance used: N/A
MSD -006							Pipettes used: 149
2. 19139-001					9/10 334254		
3. -004							Hot Block used: 9
4. 19143-001							
5. 19148-002							
6. 19084-001					9/11 334254		
7. 19159-001							
8. -002							
9. -003							
10. -007							
11. -008							
12. -009							
13. -010							
14. -011							
15. 19160-001							
16. -002							
17. CF. V-334254 9/10							
18. CF. V-334254 9/11							
19.							
20.							

Hot Plate Temperature: 93.7 C (90-95° C) Start Time: 12:00pm End Time: 2:30pm

	Volume mL	Lot #
LCS, LCSD	0.25ml	V-13177,13178,
LLLCS, LLLCSD		V- 331982
MS, MSD	0.255ml	V-13177,13178,
LLMS, LLMSD		V- 331982

Acid	Vol mL	Lot#
HNO_3	3.0	V-13440
HCl		V-
H_2O_2		V-

Acid	Vol mL	Lot#
1:1 HNO_3		V-
1:1 HCl	5.0	V-331024

Relinquished By NS Date 9/11/20

Received By CJR Date 9/14/2020

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2018 DOD.DOC

HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 (7470A) 7471B OTHER_____

Batch No.:* 26209 1

QC Number: 85267

Matrix: TCLP

Analyst: ANS

Prep Date: 9/11/20

Review By: DL

LAB ID#	MERCURY		COMMENTS	STANDARDS
	INITIAL	FINAL		
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 334674
LCS				
LCSD				STD 0.2 ppb V- 334675
1 AQ 19159-004				STD 0.5 ppb V- 334676
MR -004				STD 1.0 ppb V- 334677
MS -006				STD 2.0 ppb V- 334678
MSD -006				STD 5.0 ppb V- 334679
2 AQ 19139-001				STD 10.0 ppb V- 334680
3 -004				STD 25.0 ppb V- 334681
4 AQ 19143-001				ICV 10.0 ppb V- 334672
5 19148-002				CCV 20.0 ppb V- 334673
6 19084-001				
7 19159-001				
8 -002				Balance used: N/A
9 -003				Pipettes used: 159, 143
10 -007				
11 -008				Hot Block used: 7
12 -009				
13 -010				
14 -011				
15 AQ 19160-001				
16 -002				
17 CF. 334254 9/10				
18 CF. 334254 9/11				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 331286	3.75	HNO3	0.625	V- 13421
$K_2S_2O_8$: V- 327159	2.0	HCl		V-
NH_2OH: V- 317822	1.5	H2SO4	1.5	V- 13343
		Aqua Regia		V-

**Block Temp.: °C 93.7

Time In Block: 12:00pm

Time Out of Block: 2:00pm

Spike Volume & Lot #

☐ LCS V- 334616 0.15ml (0.25ml)

☐ MS V- 334616 0.250 ml

☐ Standards/Control Batch B- 29669

Start time: 12:00pm End Time: 2:30pm

**Temperature
245.1 / 7470A: 90-95C
7471B : 92-98C

Relinquished By: ANS

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

HG PREP 2016

0001007 0409

Hampton-Clarke, Inc.

LEACHATE PREPARATION LOG
(TCLP, SPLP)

Start Date: 9/10/20 TIME: 14:02 Finish Date: 9/11/20

**TCLP Ext. Fluid #1 pH: 4.94 (criteria: 4.93 ± 0.05)
**TCLP Ext. Fluid #2 pH: _____ (criteria: 2.88 ± 0.05)
**SPLP Ext. Fluid #3 pH: _____ (criteria: 4.20 ± 0.05)

Sample #	pH (units)	pH in HCL (units)	Final pH (units)	Ext. Fluid (number)	Wt./Vol of Sample (g or mL)	Start Time	Finish Time	Filter Time	Analyst (s)	Ext. Type*	Comments
19084 - 001	9.21	1.79	5.00	334254	150g/3L	17:15	10:10	10:15	EF	T	Balance ID: 037 MET+ORG
19148 - 002	8.52	1.85	5.52		100g/2L			10:45			pH Meter ID: B-38168 MET
19159 - 001	10.57	1.99	6.38					11:00			Pipette ID: 155
- 002	9.38	1.94	6.39					11:10			
- 003	8.46	1.85	6.37					11:15			
- 004	9.51	1.90	6.42					11:20			
- 005	9.41	1.94	6.39					11:34			
- 006	9.44	1.99	6.37					11:40			
- 007	8.41	1.86	5.64					11:45			
- 008	9.31	1.91	5.34					11:50			
- 009	8.94	1.88	5.85					11:55			
- 010	8.97	1.94	5.95					12:00			
19160 - 001	7.59	1.95	5.60					12:05			
- 002	9.72	2.32	6.40					12:10			
EFI 334254	4.94	—	4.80					10:10			
19159 - 011	—	—	10.53	—	0.25L	11:10	—	12:15			

*Ext. Type: TCLP = T (Method 1311) LAMP=L (Methods 1311 / ANSI/NEMA C78.LL 1256-2003)
SPLP = P (Method 1312) MEP=M (Method 1320)
ZHE = Z (Method 1311/1312)

** The pH of the extraction fluid must be checked prior to use and must be within limits specified above

0031

Hampton-Clarke
Analytical & Field Services

Last Page of Report

Hampton-Clarke
Analytical & Field Services

175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004
2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
FAX: 973-244-9787
WWW.HCVLAB.COM

Project: Duofold- 7 Spruce St.

Client PO: HER1500.P2

Report To: HRP Associates. Inc.
1 Fairchild Square
Suite 110
Clifton Park, NY 12065
Attn: Stefan Truex

Received Date: 9/11/2020

Report Date: 9/30/2020

Deliverables: NYDOH-CatB

Lab ID: AD19178

Lab Project No: 0091101

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

Sean Beris - Quality Assurance Officer OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

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SDG Narrative

HC Case Narrative

Client: HRP Associates, Inc
Project: Duofold - 7 Spruce Street

HC Project: 0091101

Hampton-Clarke (HC) received the following samples on 9/11/2020:

Client ID	HC Sample ID	Matrix	Analysis
SS-4A	AD19178-001	Soil	% Solid(SM2540G), Cyanide(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D),Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals (6010D/6020B), TCLP Metals Extraction 1311
SS-4B	AD19178-002	Soil	% Solid(SM2540G), Cyanide(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D),Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals (6010D/6020B), TCLP Metals Extraction 1311
SS-2A	AD19178-003	Soil	% Solid(SM2540G), Cyanide(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D),Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals (6010D/6020B), TCLP Metals Extraction 1311
SS-2B	AD19178-004	Soil	% Solid(SM2540G), Cyanide(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D),Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals (6010D/6020B), TCLP Metals Extraction 1311
SS-1A	AD19178-005	Soil	% Solid(SM2540G), Cyanide(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D),Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals (6010D/6020B), TCLP Metals Extraction 1311
SS-1B	AD19178-006	Soil	% Solid(SM2540G), Cyanide(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D),Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals (6010D/6020B), TCLP Metals Extraction 1311
SS-6A	AD19178-007	Soil	% Solid(SM2540G), Cyanide(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D),Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals (6010D/6020B), TCLP Metals Extraction 1311
SS-6B	AD19178-008	Soil	% Solid(SM2540G), Cyanide(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D),Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals (6010D/6020B), TCLP Metals Extraction 1311
SS-7A	AD19178-009	Soil	% Solid(SM2540G), Cyanide(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D),Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals (6010D/6020B), TCLP Metals Extraction 1311
SS-7B	AD19178-010	Soil	% Solid(SM2540G), Cyanide(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D),Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals (6010D/6020B), TCLP Metals Extraction 1311
SS-8A	AD19178-011	Soil	% Solid(SM2540G), Cyanide(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D),Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals (6010D/6020B), TCLP Metals Extraction 1311
SS-8B	AD19178-012	Soil	% Solid(SM2540G), Cyanide(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D),Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals (6010D/6020B), TCLP Metals Extraction 1311
HRPB-1	AD19178-013	Soil/Terracore	% Solid(SM2540G), Cyanide(9012B), Cr3(CALC), ORP(SM2580B), pH(9040C/9045D),Cr(Hexavalent)(7196A), Mercury(7471B), Mercury(TCLP)(7470A), TCLP Metals(6010D), TAL Metals (6010D/6020B), TCLP Metals Extraction 1311, Volatile Organics(No Search)(8260C)
Trip blank	AD19178-014	Aqueous	Volatile Organics(No Search)(8260C)

* - Indicates analysis was performed by a subcontracted laboratory.

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Volatile Organic Analysis:

Methylene chloride was recovered in sample AD19178-013 due to possible laboratory contamination.

The Method Blank Spike for batch 89300 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 89300 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Sample AD19178-013 had one or more internal standard areas outside +100% / -50% window from most recent calibration verification standard. Please refer to the applicable Form 8 for the areas.

Metals Analysis:

The Matrix Spike and/or Matrix Spike Duplicate for batches 85279, 85280 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The RPD between the QC sample and the Method Replicate had recoveries outside QC limits in batch 85279. Please refer to the applicable Form 6/9 for the recoveries.

The MS/MSD RPD had recoveries outside QC limits in batch 85279. Please refer to the applicable Form 6/9 for the recoveries.

The serial dilution for batches 85279, 85280 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

Wet Chemistry Analysis:

The MS Insoluble and MS Soluble for Hexavalent Chromium, batches 785,786, recovered outside the QC limits. The batch was reset and recoveries confirmed. The results from first analysis are reported.

TCLP Metals Analysis:

Samples AD19178-002, -004, -005, -011, -012 were reported at a dilution for Se due to Ca over linear range.

The serial dilution for batch 85281 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Sean Berls Quality Assurance Officer	Or	Jean Revolus Laboratory Director	9/30/20 Date

Reporting Limit Definitions

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

LCS = Laboratory Control Spike

MBS = Method Blank Spike

MS = Matrix Spike

MSD = Matrix Spike Duplicate

MDL = Method Detection Limit

NA = Not Applicable

ND = Not Detected

PS = Post Digestion Spike

RL* = Reporting Limit

RT = Retention Time

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Data Package Summary Forms

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0091101

Sample ID: SS-4A
Lab#: AD19178-001
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		90

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.89	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	5.6	13

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.27	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.093	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		280

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.0
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	11	39
Chromium	1	mg/kg	5.6	13
Copper	1	mg/kg	5.6	30
Lead	1	mg/kg	5.6	77
Manganese	1	mg/kg	11	240
Nickel	1	mg/kg	5.6	28
Zinc	1	mg/kg	11	75

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.22	6.0
Beryllium	1	mg/kg	0.22	0.30
Selenium	1	mg/kg	2.2	ND
Silver	1	mg/kg	0.22	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result

Sample ID: SS-4A
Lab#: AD19178-001
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Arsenic	1	mg/l	0.10	ND
Barium	**1**	**mg/l**	**0.25**	**0.45**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

Sample ID: SS-4B
Lab#: AD19178-002
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		91

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.88	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	5.5	13

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.26	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.092	0.12

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		330

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.1
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	11	33
Chromium	1	mg/kg	5.5	13
Copper	1	mg/kg	5.5	54
Lead	1	mg/kg	5.5	120
Manganese	1	mg/kg	11	250
Nickel	1	mg/kg	5.5	53
Zinc	1	mg/kg	11	73

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.22	7.5
Beryllium	1	mg/kg	0.22	0.37
Selenium	1	mg/kg	2.2	ND
Silver	1	mg/kg	0.22	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.33
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	2	mg/l	0.20	ND

Sample ID: SS-4B
Lab#: AD19178-002
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-2A
Lab#: AD19178-003
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		79

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.0	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.3	13

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	0.51

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	0.14

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		320

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		7.9
Temperature	1	c		22

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	13	140
Chromium	1	mg/kg	6.3	13
Copper	1	mg/kg	6.3	140
Lead	1	mg/kg	6.3	180
Manganese	1	mg/kg	13	300
Nickel	1	mg/kg	6.3	33
Zinc	1	mg/kg	13	130

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.25	11
Beryllium	1	mg/kg	0.25	0.41
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	0.28

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.93
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND

Sample ID: SS-2A
Lab#: AD19178-003
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-2B
Lab#: AD19178-004
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		86

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.93	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	5.8	12

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.28	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.097	0.11

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		350

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.4
Temperature	1	c		22

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	12	230
Chromium	1	mg/kg	5.8	12
Copper	1	mg/kg	5.8	88
Lead	1	mg/kg	5.8	170
Manganese	1	mg/kg	12	380
Nickel	1	mg/kg	5.8	18
Zinc	1	mg/kg	12	100

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.23	8.7
Beryllium	1	mg/kg	0.23	0.37
Selenium	1	mg/kg	2.3	ND
Silver	1	mg/kg	0.23	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.99
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	2	mg/l	0.20	ND

Sample ID: SS-2B
Lab#: AD19178-004
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-1A
Lab#: AD19178-005
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		93

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.86	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	5.4	9.8

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.26	0.54

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.090	0.26

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		330

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		6.0
Temperature	1	c		22

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	11	100
Chromium	1	mg/kg	5.4	9.8
Copper	1	mg/kg	5.4	63
Lead	1	mg/kg	5.4	250
Manganese	1	mg/kg	11	250
Nickel	1	mg/kg	5.4	19
Zinc	1	mg/kg	11	110

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.22	12
Beryllium	1	mg/kg	0.22	0.30
Selenium	1	mg/kg	2.2	ND
Silver	1	mg/kg	0.22	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.71
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	2	mg/l	0.20	ND

Sample ID: SS-1A
Lab#: AD19178-005
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND	

Sample ID: SS-1B
Lab#: AD19178-006
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		87

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.92	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	5.7	13

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.28	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.096	0.17

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		330

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.0
Temperature	1	c		22

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	11	350
Chromium	1	mg/kg	5.7	13
Copper	1	mg/kg	5.7	200
Lead	1	mg/kg	5.7	730
Manganese	1	mg/kg	11	130
Nickel	1	mg/kg	5.7	18
Zinc	1	mg/kg	11	48

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.23	27
Beryllium	1	mg/kg	0.23	0.37
Selenium	1	mg/kg	2.3	ND
Silver	1	mg/kg	0.23	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	3.0
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	0.29
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND

Sample ID: SS-1B
Lab#: AD19178-006
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver		1	mg/l	0.050	ND

Sample ID: SS-6A
Lab#: AD19178-007
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		81

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.99	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.2	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	1.8

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	0.13

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		220

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		9.4
Temperature	1	c		22

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	12	140
Chromium	1	mg/kg	6.2	ND
Copper	1	mg/kg	6.2	300
Lead	1	mg/kg	6.2	350
Manganese	1	mg/kg	12	91
Nickel	1	mg/kg	6.2	99
Zinc	1	mg/kg	12	130

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.25	16
Beryllium	1	mg/kg	0.25	0.47
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	1.1
Cadmium	1	mg/l	0.050	0.082
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	0.52
Nickel	1	mg/l	0.10	0.17
Selenium	1	mg/l	0.10	ND

Sample ID: SS-6A
Lab#: AD19178-007
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-6B
Lab#: AD19178-008
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		82

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.98	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.1	14

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.29	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	0.30

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		330

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		7.9
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	12	450
Chromium	1	mg/kg	6.1	14
Copper	1	mg/kg	6.1	420
Lead	1	mg/kg	6.1	340
Manganese	1	mg/kg	12	120
Nickel	1	mg/kg	6.1	110
Zinc	1	mg/kg	12	110

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.24	18
Beryllium	1	mg/kg	0.24	0.45
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	1.1
Cadmium	1	mg/l	0.050	0.055
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	0.30
Nickel	1	mg/l	0.10	0.19
Selenium	1	mg/l	0.10	ND

Sample ID: SS-6B
Lab#: AD19178-008
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-7A
Lab#: AD19178-009
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		81

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.99	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.2	7.4

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	0.44

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		280

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.8
Temperature	1	c		22

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	12	72
Chromium	1	mg/kg	6.2	7.4
Copper	1	mg/kg	6.2	41
Lead	1	mg/kg	6.2	35
Manganese	1	mg/kg	12	47
Nickel	1	mg/kg	6.2	19
Zinc	1	mg/kg	12	25

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.25	6.3
Beryllium	1	mg/kg	0.25	0.26
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.61
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND

Sample ID: SS-7A
Lab#: AD19178-009
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-7B
Lab#: AD19178-010
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		83

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.96	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.0	10

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.29	0.36

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		310

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.3
Temperature	1	c		22

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	12	58
Chromium	1	mg/kg	6.0	10
Copper	1	mg/kg	6.0	57
Lead	1	mg/kg	6.0	41
Manganese	1	mg/kg	12	660
Nickel	1	mg/kg	6.0	22
Zinc	1	mg/kg	12	83

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.24	9.5
Beryllium	1	mg/kg	0.24	0.39
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.56
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND

Sample ID: SS-7B
Lab#: AD19178-010
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-8A
Lab#: AD19178-011
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		82

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.98	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.1	15

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.29	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		270

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.7
Temperature	1	c		22

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	12	64
Chromium	1	mg/kg	6.1	15
Copper	1	mg/kg	6.1	35
Lead	1	mg/kg	6.1	60
Manganese	1	mg/kg	12	390
Nickel	1	mg/kg	6.1	18
Zinc	1	mg/kg	12	87

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.24	10
Beryllium	1	mg/kg	0.24	0.31
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.70
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	2	mg/l	0.20	ND

Sample ID: SS-8A
Lab#: AD19178-011
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-8B
Lab#: AD19178-012
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		85

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.94	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	5.9	9.3

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.28	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.098	0.14

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		310

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.2
Temperature	1	c		22

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	12	88
Chromium	1	mg/kg	5.9	9.3
Copper	1	mg/kg	5.9	41
Lead	1	mg/kg	5.9	100
Manganese	1	mg/kg	12	310
Nickel	1	mg/kg	5.9	19
Zinc	1	mg/kg	12	62

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.24	13
Beryllium	1	mg/kg	0.24	0.36
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.88
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	2	mg/l	0.20	ND

Sample ID: SS-8B
Lab#: AD19178-012
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND	

Sample ID: HRPB-1 **Collection Date:** 9/10/2020
Lab#: AD19178-013 **Receipt Date:** 9/11/2020
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		66

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.2	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	7.6	13

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.36	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.13	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		260

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.0
Temperature	1	c		22

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	15	64
Chromium	1	mg/kg	7.8	13
Copper	1	mg/kg	7.6	25
Lead	1	mg/kg	7.8	14
Manganese	1	mg/kg	15	250
Nickel	1	mg/kg	7.6	25
Zinc	1	mg/kg	15	74

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.30	10
Beryllium	1	mg/kg	0.30	0.35
Selenium	1	mg/kg	3.0	ND
Silver	1	mg/kg	0.30	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.98
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND

Sample ID: HRPB-1 **Collection Date:** 9/10/2020
Lab#: AD19178-013 **Receipt Date:** 9/11/2020
Matrix: Soil/Terracore

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.852	mg/kg	0.0026	ND
1,1,2,2-Tetrachloroethane	0.852	mg/kg	0.0026	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.852	mg/kg	0.0026	ND
1,1,2-Trichloroethane	0.852	mg/kg	0.0026	ND
1,1-Dichloroethane	0.852	mg/kg	0.0026	ND
1,1-Dichloroethene	0.852	mg/kg	0.0026	ND
1,2,3-Trichloropropane	0.852	mg/kg	0.0026	ND
1,2,4-Trimethylbenzene	0.852	mg/kg	0.0013	ND
1,2-Dichlorobenzene	0.852	mg/kg	0.0026	ND
1,2-Dichloroethane	0.852	mg/kg	0.0026	ND
1,2-Dichloropropane	0.852	mg/kg	0.0026	ND
1,3,5-Trimethylbenzene	0.852	mg/kg	0.0013	ND
1,3-Dichlorobenzene	0.852	mg/kg	0.0026	ND
1,3-Dichloropropane	0.852	mg/kg	0.0026	ND
1,4-Dichlorobenzene	0.852	mg/kg	0.0026	ND
1,4-Dioxane	0.852	mg/kg	0.13	ND
2-Butanone	0.852	mg/kg	0.0026	ND
2-Chloroethylvinylether	0.852	mg/kg	0.0026	ND
2-Hexanone	0.852	mg/kg	0.0026	ND
4-Isopropyltoluene	0.852	mg/kg	0.0013	ND
4-Methyl-2-pentanone	0.852	mg/kg	0.0026	ND
Acetone	**0.852**	**mg/kg**	**0.013**	**0.040**
Acrolein	0.852	mg/kg	0.013	ND
Acrylonitrile	0.852	mg/kg	0.0026	ND
Benzene	0.852	mg/kg	0.0013	ND
Bromodichloromethane	0.852	mg/kg	0.0026	ND
Bromoform	0.852	mg/kg	0.0026	ND
Bromomethane	0.852	mg/kg	0.0026	ND
Carbon disulfide	0.852	mg/kg	0.0044	ND
Carbon tetrachloride	0.852	mg/kg	0.0026	ND
Chlorobenzene	0.852	mg/kg	0.0026	ND
Chloroethane	0.852	mg/kg	0.0026	ND
Chloroform	0.852	mg/kg	0.0026	ND
Chloromethane	0.852	mg/kg	0.0026	ND
cis-1,2-Dichloroethene	0.852	mg/kg	0.0026	ND
cis-1,3-Dichloropropene	0.852	mg/kg	0.0026	ND
Dibromochloromethane	0.852	mg/kg	0.0026	ND
Dichlorodifluoromethane	0.852	mg/kg	0.0026	ND
Ethylbenzene	0.852	mg/kg	0.0013	ND
Isopropylbenzene	0.852	mg/kg	0.0013	ND
m&p-Xylenes	0.852	mg/kg	0.0015	ND
Methylene chloride	**0.852**	**mg/kg**	**0.0026**	**0.0029**
Methyl-t-butyl ether	0.852	mg/kg	0.0013	ND
n-Butylbenzene	0.852	mg/kg	0.0013	ND
n-Propylbenzene	0.852	mg/kg	0.0013	ND
o-Xylene	0.852	mg/kg	0.0013	ND
sec-Butylbenzene	0.852	mg/kg	0.0013	ND
Styrene	0.852	mg/kg	0.0026	ND
t-Butyl Alcohol	0.852	mg/kg	0.013	ND
t-Butylbenzene	0.852	mg/kg	0.0013	ND
Tetrachloroethene	0.852	mg/kg	0.0026	ND
Toluene	0.852	mg/kg	0.0013	ND
trans-1,2-Dichloroethene	0.852	mg/kg	0.0026	ND

Sample ID: HRPB-1 **Collection Date:** 9/10/2020
Lab#: AD19178-013 **Receipt Date:** 9/11/2020
Matrix: Soil/Terracore

trans-1,3-Dichloropropene	0.852	mg/kg	0.0026	ND
Trichloroethene	0.852	mg/kg	0.0026	ND
Trichlorofluoromethane	0.852	mg/kg	0.0026	ND
Vinyl chloride	0.852	mg/kg	0.0026	ND
Xylenes (Total)	0.852	mg/kg	0.0013	ND

Sample ID: Trip blank
Lab#: AD19178-014
Matrix: Aqueous

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.64	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	2.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: Trip blank
Lab#: AD19178-014
Matrix: Aqueous
Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19178-013
Client Id: HRPB-1
Data File: 6M132564.D
Analysis Date: 09/17/20 21:36
Date Rec/Extracted: 09/11/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5.87g
Final Vol: NA
Dilution: 0.852
Solids: 66

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0026	U	56-23-5	Carbon Tetrachloride	0.0026	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0026	U	108-90-7	Chlorobenzene	0.0026	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0026	U	75-00-3	Chloroethane	0.0026	U
79-00-5	1,1,2-Trichloroethane	0.0026	U	67-66-3	Chloroform	0.0026	U
75-34-3	1,1-Dichloroethane	0.0026	U	74-87-3	Chloromethane	0.0026	U
75-35-4	1,1-Dichloroethene	0.0026	U	156-59-2	cis-1,2-Dichloroethene	0.0026	U
96-18-4	1,2,3-Trichloropropane	0.0026	U	10061-01-5	cis-1,3-Dichloropropene	0.0026	U
95-63-6	1,2,4-Trimethylbenzene	0.0013	U	124-48-1	Dibromochloromethane	0.0026	U
95-50-1	1,2-Dichlorobenzene	0.0026	U	75-71-8	Dichlorodifluoromethane	0.0026	U
107-06-2	1,2-Dichloroethane	0.0026	U	100-41-4	Ethylbenzene	0.0013	U
78-87-5	1,2-Dichloropropane	0.0026	U	98-82-8	Isopropylbenzene	0.0013	U
108-67-8	1,3,5-Trimethylbenzene	0.0013	U	79601-23-1	m&p-Xylenes	0.0015	U
541-73-1	1,3-Dichlorobenzene	0.0026	U	**75-09-2**	**Methylene Chloride**	**0.0026**	**0.0029**
142-28-9	1,3-Dichloropropane	0.0026	U	1634-04-4	Methyl-t-butyl ether	0.0013	U
106-46-7	1,4-Dichlorobenzene	0.0026	U	104-51-8	n-Butylbenzene	0.0013	U
123-91-1	1,4-Dioxane	0.13	U	103-65-1	n-Propylbenzene	0.0013	U
78-93-3	2-Butanone	0.0026	U	95-47-6	o-Xylene	0.0013	U
110-75-8	2-Chloroethylvinylether	0.0026	U	135-98-8	sec-Butylbenzene	0.0013	U
591-78-6	2-Hexanone	0.0026	U	100-42-5	Styrene	0.0026	U
99-87-6	4-Isopropyltoluene	0.0013	U	75-65-0	t-Butyl Alcohol	0.013	U
108-10-1	4-Methyl-2-Pentanone	0.0026	U	98-06-6	t-Butylbenzene	0.0013	U
67-64-1	**Acetone**	**0.013**	**0.040**	127-18-4	Tetrachloroethene	0.0026	U
107-02-8	Acrolein	0.013	U	108-88-3	Toluene	0.0013	U
107-13-1	Acrylonitrile	0.0026	U	156-60-5	trans-1,2-Dichloroethene	0.0026	U
71-43-2	Benzene	0.0013	U	10061-02-6	trans-1,3-Dichloropropene	0.0026	U
75-27-4	Bromodichloromethane	0.0026	U	79-01-6	Trichloroethene	0.0026	U
75-25-2	Bromoform	0.0026	U	75-69-4	Trichlorofluoromethane	0.0026	U
74-83-9	Bromomethane	0.0026	U	75-01-4	Vinyl Chloride	0.0026	U
75-15-0	Carbon Disulfide	0.0044	U	1330-20-7	Xylenes (Total)	0.0013	U

Worksheet #: 567344

Total Target Concentration 0.043

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19178-014
Client Id: Trip blank
Data File: 11M82724.D
Analysis Date: 09/14/20 22:13
Date Rec/Extracted: 09/11/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 567344

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-001	% Solid:	90	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-4A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.22	6.0	1	0.5	100	09/16/20	852801620BNEW		21	MS	MS3_7700SWA
7440-41-7	Beryllium	0.22	0.30	1	0.5	100	09/16/20	852801620BNEW		21	MS	MS3_7700SWA
7782-49-2	Selenium	2.2	ND	1	0.5	100	09/16/20	852801620BNEW		21	MS	MS3_7700SWA
7440-22-4	Silver	0.22	ND	1	0.5	100	09/16/20	852801620BNEW		21	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-001	% Solid:	90	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-4A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	39	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A
7440-47-3	Chromium	5.6	13	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A
7440-50-8	Copper	5.6	30	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A
7439-92-1	Lead	5.6	77	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A
7439-96-5	Manganese	11	240	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A
7439-97-6	Mercury	0.093	ND	1	0.15	25	09/16/20	85279	H26221S	16	CV	HGCV3A
7440-02-0	Nickel	5.6	28	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A
7440-66-6	Zinc	11	75	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-002	% Solid:	91	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-4B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.22	7.5	1	0.5	100	09/16/20	852801	620BNEW	30	MS	MS3_7700SWA
7440-41-7	Beryllium	0.22	0.37	1	0.5	100	09/16/20	852801	620BNEW	30	MS	MS3_7700SWA
7782-49-2	Selenium	2.2	ND	1	0.5	100	09/16/20	852801	620BNEW	30	MS	MS3_7700SWA
7440-22-4	Silver	0.22	ND	1	0.5	100	09/16/20	852801	620BNEW	30	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-002	% Solid:	91	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-4B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	33	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A
7440-47-3	Chromium	5.5	13	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A
7440-50-8	Copper	5.5	54	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A
7439-92-1	Lead	5.5	120	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A
7439-96-5	Manganese	11	250	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A
7439-97-6	Mercury	0.092	0.12	1	0.15	25	09/16/20	85279	H26221S	20	CV	HGCV3A
7440-02-0	Nickel	5.5	53	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A
7440-66-6	Zinc	11	73	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-003	% Solid:	79	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-2A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	11	1	0.5	100	09/16/20	852801	620BNEW	31	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	0.41	1	0.5	100	09/16/20	852801	620BNEW	31	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	09/16/20	852801	620BNEW	31	MS	MS3_7700SWA
7440-22-4	Silver	0.25	0.28	1	0.5	100	09/16/20	852801	620BNEW	31	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-003	% Solid:	79	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-2A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	140	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A
7440-47-3	Chromium	6.3	13	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A
7440-50-8	Copper	6.3	140	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A
7439-92-1	Lead	6.3	180	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A
7439-96-5	Manganese	13	300	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A
7439-97-6	Mercury	0.11	0.14	1	0.15	25	09/16/20	85279	H26221S	23	CV	HGCV3A
7440-02-0	Nickel	6.3	33	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A
7440-66-6	Zinc	13	130	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-004	% Solid:	86	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-2B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	8.7	1	0.5	100	09/16/20	852801	620BNEW	32	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	0.37	1	0.5	100	09/16/20	852801	620BNEW	32	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	ND	1	0.5	100	09/16/20	852801	620BNEW	32	MS	MS3_7700SWA
7440-22-4	Silver	0.23	ND	1	0.5	100	09/16/20	852801	620BNEW	32	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-004	% Solid:	86	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-2B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	230	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A
7440-47-3	Chromium	5.8	12	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A
7440-50-8	Copper	5.8	88	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A
7439-92-1	Lead	5.8	170	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A
7439-96-5	Manganese	12	380	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A
7439-97-6	Mercury	0.097	0.11	1	0.15	25	09/16/20	85279	H26221S	24	CV	HGCV3A
7440-02-0	Nickel	5.8	18	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A
7440-66-6	Zinc	12	100	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-005	% Solid:	93	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-1A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.22	12	1	0.5	100	09/16/20	852801	620BNEW	33	MS	MS3_7700SWA
7440-41-7	Beryllium	0.22	0.30	1	0.5	100	09/16/20	852801	620BNEW	33	MS	MS3_7700SWA
7782-49-2	Selenium	2.2	ND	1	0.5	100	09/16/20	852801	620BNEW	33	MS	MS3_7700SWA
7440-22-4	Silver	0.22	ND	1	0.5	100	09/16/20	852801	620BNEW	33	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-005	% Solid:	93	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-1A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	100	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A
7440-47-3	Chromium	5.4	9.8	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A
7440-50-8	Copper	5.4	83	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A
7439-92-1	Lead	5.4	250	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A
7439-96-5	Manganese	11	250	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A
7439-97-6	Mercury	0.090	0.26	1	0.15	25	09/16/20	85279	H26221S	25	CV	HGCV3A
7440-02-0	Nickel	5.4	19	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A
7440-66-6	Zinc	11	110	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-006	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-1B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	27	1	0.5	100	09/16/20	852801	620BNEW	34	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	0.37	1	0.5	100	09/16/20	852801	620BNEW	34	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	ND	1	0.5	100	09/16/20	852801	620BNEW	34	MS	MS3_7700SWA
7440-22-4	Silver	0.23	ND	1	0.5	100	09/16/20	852801	620BNEW	34	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-006	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-1B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	350	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A
7440-47-3	Chromium	5.7	13	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A
7440-50-8	Copper	5.7	200	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A
7439-92-1	Lead	5.7	730	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A
7439-96-5	Manganese	11	130	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A
7439-97-6	Mercury	0.096	0.17	1	0.15	25	09/16/20	85279	H26221S	26	CV	HGCV3A
7440-02-0	Nickel	5.7	18	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A
7440-66-6	Zinc	11	48	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-007	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-6A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	16	1	0.5	100	09/16/20	852801	620BNEW	35	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	0.47	1	0.5	100	09/16/20	852801	620BNEW	35	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	09/16/20	852801	620BNEW	35	MS	MS3_7700SWA
7440-22-4	Silver	0.25	ND	1	0.5	100	09/16/20	852801	620BNEW	35	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-007	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-6A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	140	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A
7440-47-3	Chromium	6.2	ND	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A
7440-50-8	Copper	6.2	300	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A
7439-92-1	Lead	6.2	350	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A
7439-96-5	Manganese	12	91	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A
7439-97-6	Mercury	0.10	0.13	1	0.15	25	09/16/20	85279	H26221S	27	CV	HGCV3A
7440-02-0	Nickel	6.2	99	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A
7440-66-6	Zinc	12	130	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-008	% Solid:	82	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-6B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	18	1	0.5	100	09/16/20	852801	620BNEW	36	MS	MS3_7700SWA
7440-41-7	Beryllium	0.24	0.45	1	0.5	100	09/16/20	852801	620BNEW	36	MS	MS3_7700SWA
7782-49-2	Selenium	2.4	ND	1	0.5	100	09/16/20	852801	620BNEW	36	MS	MS3_7700SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	09/16/20	852801	620BNEW	36	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-008	% Solid:	82	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-6B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	450	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A
7440-47-3	Chromium	6.1	14	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A
7440-50-8	Copper	6.1	420	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A
7439-92-1	Lead	6.1	340	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A
7439-96-5	Manganese	12	120	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A
7439-97-6	Mercury	0.10	0.30	1	0.15	25	09/16/20	85279	H26221S	28	CV	HGCV3A
7440-02-0	Nickel	6.1	110	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A
7440-66-6	Zinc	12	110	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-009	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-7A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	6.3	1	0.5	100	09/16/20	852801620BNEW		37	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	0.26	1	0.5	100	09/16/20	852801620BNEW		37	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	09/16/20	852801620BNEW		37	MS	MS3_7700SWA
7440-22-4	Silver	0.25	ND	1	0.5	100	09/16/20	852801620BNEW		37	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-009	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-7A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	72	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A
7440-47-3	Chromium	6.2	7.4	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A
7440-50-8	Copper	6.2	41	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A
7439-92-1	Lead	6.2	35	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A
7439-96-5	Manganese	12	47	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A
7439-97-6	Mercury	0.10	ND	1	0.15	25	09/16/20	85279	H26221S	29	CV	HGCV3A
7440-02-0	Nickel	6.2	19	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A
7440-66-6	Zinc	12	25	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-010	% Solid:	83	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-7B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	9.5	1	0.5	100	09/16/20	852801	620BNEW	38	MS	MS3_7700SWA
7440-41-7	Beryllium	0.24	0.39	1	0.5	100	09/16/20	852801	620BNEW	38	MS	MS3_7700SWA
7782-49-2	Selenium	2.4	ND	1	0.5	100	09/16/20	852801	620BNEW	38	MS	MS3_7700SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	09/16/20	852801	620BNEW	38	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-010	% Solid:	83	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-7B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	58	1	0.5	50	09/16/20	85279	S26226A3	64	P	PEICP3A
7440-47-3	Chromium	6.0	10	1	0.5	50	09/16/20	85279	S26226A3	64	P	PEICP3A
7440-50-8	Copper	6.0	57	1	0.5	50	09/16/20	85279	S26226A3	64	P	PEICP3A
7439-92-1	Lead	6.0	41	1	0.5	50	09/16/20	85279	S26226A3	64	P	PEICP3A
7439-96-5	Manganese	12	660	1	0.5	50	09/16/20	85279	S26226A3	64	P	PEICP3A
7439-97-6	Mercury	0.10	ND	1	0.15	25	09/16/20	85279	H26221S	30	CV	HGCV3A
7440-02-0	Nickel	6.0	22	1	0.5	50	09/16/20	85279	S26232B3	36	P	PEICP3A
7440-66-6	Zinc	12	83	1	0.5	50	09/16/20	85279	S26226A3	64	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-011	% Solid:	82	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-8A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	10	1	0.5	100	09/16/20	852801	620BNEW	42	MS	MS3_7700SWA
7440-41-7	Beryllium	0.24	0.31	1	0.5	100	09/16/20	852801	620BNEW	42	MS	MS3_7700SWA
7782-49-2	Selenium	2.4	ND	1	0.5	100	09/16/20	852801	620BNEW	42	MS	MS3_7700SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	09/16/20	852801	620BNEW	42	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-011	% Solid:	82	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-8A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	64	1	0.5	50	09/16/20	85279	S26226A3	65	P	PEICP3A
7440-47-3	Chromium	6.1	15	1	0.5	50	09/16/20	85279	S26226A3	65	P	PEICP3A
7440-50-8	Copper	6.1	35	1	0.5	50	09/16/20	85279	S26226A3	65	P	PEICP3A
7439-92-1	Lead	6.1	60	1	0.5	50	09/16/20	85279	S26226A3	65	P	PEICP3A
7439-96-5	Manganese	12	390	1	0.5	50	09/16/20	85279	S26226A3	65	P	PEICP3A
7439-97-6	Mercury	0.10	ND	1	0.15	25	09/16/20	85279	H26221S	31	CV	HGCV3A
7440-02-0	Nickel	6.1	18	1	0.5	50	09/16/20	85279	S26232B3	37	P	PEICP3A
7440-66-6	Zinc	12	87	1	0.5	50	09/16/20	85279	S26226A3	65	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-012	% Solid:	85	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-8B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	13	1	0.5	100	09/16/20	852801	620BNEW	43	MS	MS3_7700SWA
7440-41-7	Beryllium	0.24	0.36	1	0.5	100	09/16/20	852801	620BNEW	43	MS	MS3_7700SWA
7782-49-2	Selenium	2.4	ND	1	0.5	100	09/16/20	852801	620BNEW	43	MS	MS3_7700SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	09/16/20	852801	620BNEW	43	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-012	% Solid:	85	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-8B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	88	1	0.5	50	09/16/20	85279	S26226A3	66	P	PEICP3A
7440-47-3	Chromium	5.9	9.3	1	0.5	50	09/16/20	85279	S26226A3	66	P	PEICP3A
7440-50-8	Copper	5.9	41	1	0.5	50	09/16/20	85279	S26226A3	66	P	PEICP3A
7439-92-1	Lead	5.9	100	1	0.5	50	09/16/20	85279	S26226A3	66	P	PEICP3A
7439-96-5	Manganese	12	310	1	0.5	50	09/16/20	85279	S26226A3	66	P	PEICP3A
7439-97-6	Mercury	0.098	0.14	1	0.15	25	09/16/20	85279	H26221S	32	CV	HGCV3A
7440-02-0	Nickel	5.9	19	1	0.5	50	09/16/20	85279	S26232B3	38	P	PEICP3A
7440-66-6	Zinc	12	62	1	0.5	50	09/16/20	85279	S26226A3	66	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-013	% Solid:	66	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-1	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.30	10	1	0.5	100	09/16/20	852801	620BNEW	44	MS	MS3_7700SWA
7440-41-7	Beryllium	0.30	0.35	1	0.5	100	09/16/20	852801	620BNEW	44	MS	MS3_7700SWA
7782-49-2	Selenium	3.0	ND	1	0.5	100	09/16/20	852801	620BNEW	44	MS	MS3_7700SWA
7440-22-4	Silver	0.30	ND	1	0.5	100	09/16/20	852801	620BNEW	44	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-013	% Solid:	66	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-1	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	15	64	1	0.5	50	09/16/20	85279	S26226A3	67	P	PEICP3A
7440-47-3	Chromium	7.6	13	1	0.5	50	09/16/20	85279	S26226A3	67	P	PEICP3A
7440-50-8	Copper	7.6	25	1	0.5	50	09/16/20	85279	S26226A3	67	P	PEICP3A
7439-92-1	Lead	7.6	14	1	0.5	50	09/16/20	85279	S26226A3	67	P	PEICP3A
7439-96-5	Manganese	15	250	1	0.5	50	09/16/20	85279	S26226A3	67	P	PEICP3A
7439-97-6	Mercury	0.13	ND	1	0.15	25	09/16/20	85279	H26221S	35	CV	HGCV3A
7440-02-0	Nickel	7.6	25	1	0.5	50	09/16/20	85279	S26232B3	39	P	PEICP3A
7440-66-6	Zinc	15	74	1	0.5	50	09/16/20	85279	S26226A3	67	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19178-001 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-4A | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.27	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	280	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.0	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	23	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.89	09/14/20	09/15/20

Lab#: AD19178-002 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-4B | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.26	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	330	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.1	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	23	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.88	09/14/20	09/15/20

Lab#: AD19178-003 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-2A | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.51	mg/Kg	0.30	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	320	MV		09/14/20	09/14/20
pH	CR6-PH	1	7.9	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.0	09/14/20	09/15/20

Lab#: AD19178-004 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-2B | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.28	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	350	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.4	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.93	09/14/20	09/15/20

Lab#: AD19178-005 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-1A | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.54	mg/Kg	0.26	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	330	MV		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
pH	CR6-PH	1	8.0	PH		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.86	09/14/20	09/15/20

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19178-006 | Project Number: 0091101
Matrix Soil | Received Date: 9/11/2020
Client SampleID: SS-1B | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.28	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	330	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.0	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.92	09/14/20	09/15/20

Lab#: AD19178-007 | Project Number: 0091101
Matrix Soil | Received Date: 9/11/2020
Client SampleID: SS-6A | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	1.8	mg/Kg	0.30	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	220	MV		09/14/20	09/14/20
pH	CR6-PH	1	9.4	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.99	09/14/20	09/15/20

Lab#: AD19178-008 | Project Number: 0091101
Matrix Soil | Received Date: 9/11/2020
Client SampleID: SS-6B | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.29	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	330	MV		09/14/20	09/14/20
pH	CR6-PH	1	7.9	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	23	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.98	09/14/20	09/15/20

Lab#: AD19178-009 | Project Number: 0091101
Matrix Soil | Received Date: 9/11/2020
Client SampleID: SS-7A | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.44	mg/Kg	0.30	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	280	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.8	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.99	09/14/20	09/15/20

Lab#: AD19178-010 | Project Number: 0091101
Matrix Soil | Received Date: 9/11/2020
Client SampleID: SS-7B | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.36	mg/Kg	0.29	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	310	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.3	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.96	09/14/20	09/15/20

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19178-011 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-8A | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.29	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	270	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.7	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.98	09/18/20	09/18/20

Lab#: AD19178-012 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-8B | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.28	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	310	MV		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
pH	CR6-PH	1	8.2	PH		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.94	09/18/20	09/18/20

Lab#: AD19178-013 | Project Number: 0091101
Matrix: Soil/Terracore | Received Date: 9/11/2020
Client SampleID: HRPB-1 | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.36	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	260	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.0	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.2	09/18/20	09/18/20

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 0091101**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD19178-001	SS-4A	Soil	1	90	Percent			09/13/20	09/11/20	09/10/20
AD19178-002	SS-4B	Soil	1	91	Percent			09/13/20	09/11/20	09/10/20
AD19178-003	SS-2A	Soil	1	79	Percent			09/13/20	09/11/20	09/10/20
AD19178-004	SS-2B	Soil	1	86	Percent			09/13/20	09/11/20	09/10/20
AD19178-005	SS-1A	Soil	1	93	Percent			09/13/20	09/11/20	09/10/20
AD19178-006	SS-1B	Soil	1	87	Percent			09/13/20	09/11/20	09/10/20
AD19178-007	SS-6A	Soil	1	81	Percent			09/13/20	09/11/20	09/10/20
AD19178-008	SS-6B	Soil	1	82	Percent			09/13/20	09/11/20	09/10/20
AD19178-009	SS-7A	Soil	1	81	Percent			09/13/20	09/11/20	09/10/20
AD19178-010	SS-7B	Soil	1	83	Percent			09/13/20	09/11/20	09/10/20
AD19178-011	SS-8A	Soil	1	82	Percent			09/13/20	09/11/20	09/10/20
AD19178-012	SS-8B	Soil	1	85	Percent			09/13/20	09/11/20	09/10/20
AD19178-013	HRPB-1	Soil/Terracore	1	66	Percent			09/13/20	09/11/20	09/10/20

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-4A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7440-39-3	Barium	0.25	0.45	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223T	14	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-4B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A
7440-39-3	Barium	0.25	0.33	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223T	17	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/16/20	85281	T26213B4	62	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-2A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7440-39-3	Barium	0.25	0.93	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223T	18	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-2B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A
7440-39-3	Barium	0.25	0.99	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223T	19	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/16/20	85281	T26213B4	63	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-1A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A
7440-39-3	Barium	0.25	0.71	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223T	20	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/16/20	85281	T26213B4	64	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-1B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7440-39-3	Barium	0.25	3.0	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7439-92-1	Lead	0.050	0.29	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	11	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-007	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-6A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7440-39-3	Barium	0.25	1.1	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7440-43-9	Cadmium	0.050	0.082	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7439-92-1	Lead	0.050	0.52	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	12	CV	HGCV3A
7440-02-0	Nickel	0.10	0.17	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-6B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7440-39-3	Barium	0.25	1.1	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7440-43-9	Cadmium	0.050	0.055	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7439-92-1	Lead	0.050	0.30	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	13	CV	HGCV3A
7440-02-0	Nickel	0.10	0.19	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-009	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-7A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7440-39-3	Barium	0.25	0.61	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	14	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-010	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-7B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7440-39-3	Barium	0.25	0.56	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	15	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-8A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A
7440-39-3	Barium	0.25	0.70	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	16	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/16/20	85281	T26213B4	65	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-012	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-8B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A
7440-39-3	Barium	0.25	0.88	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	17	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/17/20	85281	T26234B4	19	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-013	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-1	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7440-39-3	Barium	0.25	0.98	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	18	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Chain of Custody Forms

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992
A Women-Owned, Disadvantaged, Small Business Enterprise

CHAIN OF CUSTODY RECORD

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Project # (Lab Use Only): 0091101

Page 1 of 2

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: HRP Associates
Address: 1 Fairchild Square, Suite 110
Clifton Park, NY 12065
1b) Email/Cell/Fax/Ph: stefan.truex@hrpassociates.com
1c) Send Invoice to: Same
1d) Send Report to: Same

Project Information

2a) Project: Duofoil - 7 Spruce Street
Ilion, NY
2b) Project Mgr: Stefan Truex
2c) Project Location (City/State): Ilion, NY
2d) Quote/PO # (If Applicable): HER1500.P2

FOR LAB USE ONLY

Batch # A019178

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	Part 375 Metals + Hex Cr + CN	TCLP RCRA Metals	EPA 8260 VOCs	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001	SS-4A	Soil	9/10/20	905		X	X	X		1								
002	SS-4B			910		X	X	X		1								
003	SS-2A			927		X	X	X		1								
004	SS-2B			930		X	X	X		1								
005	SS-1A			945		X	X	X		1								
006	SS-1B			950		X	X	X		1								
007	SS-6A			1030		X	X	X		1								
008	SS-6B			1035		X	X	X		1								
009	SS-7A			1055		X	X	X		1								
010	SS-7B	↓	↓	1100		X	X	X		1								

10) Relinquished by:	Accepted by:	Date	Time
James Charter		9/10/20	17:00
		9/11/20	11:48

11) Sampler (print name): James Charter Date: 9/10/20

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.7

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992
A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 0091101

0091101 0083

Customer Information

1a) Customer: HRP Associates
Address: 1 Fairchild Sq. Suite 110
Clifton Park, NY 12065
1b) Email/Cell/Fax/Ph: stefan.truex@hrpassociates.com
1c) Send Invoice to: same
1d) Send Report to: same

Project Information

2a) Project: Duofold - 7 Spruce Street
Ilion, NY
2b) Project Mgr: Stefan Truex
2c) Project Location (City/State): Ilion, NY
2d) Quote/PO # (If Applicable): HER1500.P2

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY

Batch # 409178

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water; S - Soil; A - Air; GW - Ground Water; SL - Sludge; WW - Waste Water; OL - Oil; OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	Part 375 Metals + Hex Cr + CN	TCLP RCRA metals	EPA 8260 VOCs	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
011	SS-8A	Soil	9/10/20	1105		X	X	X		1								
012	SS-8B	Soil	"	1110		X	X	X		1								
013	HRPB-1	Soil	"	1215		X	X	X	X	2				3				
014	Trip blank	Water	↓			X			X	2								

10) Relinquished by:	Accepted by:	Date	Time
James Charter		9/10/20	17:00
DAL 9/11/20		9/11/20	11:46

11) Sampler (print name): James Charter Date: 9/10/20

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.7

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

CONDITION UPON RECEIPT

Batch Number AD19178 Entered By: Ricardo
Date Entered 9/11/2020 12:06:00 PM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	No	Are the COC seals intact?
4	T-461	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.7
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify (TB date, sample matrix, any missing info, etc.)
14	NA	Corrective actions (Specify item number and corrective action taken).
15	No	Were any samples for ortho-phosphate or dissolved ferrous iron field filtered?

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD19178-001	09/11/20 11:48	RICAR	0	M	Received
AD19178-001	09/11/20 12:06	RICAR	0	M	Login
AD19178-001	09/11/20 13:04	R12	1	A	NONE
AD19178-001	09/11/20 23:48	PA	1	A	mix
AD19178-001	09/11/20 23:48	R12	1	A	NONE
AD19178-001	09/14/20 10:45	BCT	1	A	EH-PH
AD19178-001	09/14/20 11:21	R12	1	A	NONE
AD19178-001	09/14/20 12:14	JW	1	A	cn
AD19178-001	09/14/20 12:18	R12	1	A	NONE
AD19178-001	09/14/20 13:10	EF	1	A	TCLP
AD19178-001	09/14/20 13:14	EF	1	A	R12
AD19178-001	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19178-001	09/14/20 15:25	R12	1	A	NONE
AD19178-001	09/16/20 07:50	ANS	1	A	TDSI/Hg
AD19178-001	09/16/20 10:08	R12	1	A	NONE
AD19178-002	09/11/20 11:48	RICAR	0	M	Received
AD19178-002	09/11/20 12:06	RICAR	0	M	Login
AD19178-002	09/11/20 13:04	R12	1	A	NONE
AD19178-002	09/11/20 23:48	R12	1	A	NONE
AD19178-002	09/11/20 23:48	PA	1	A	mix
AD19178-002	09/14/20 10:45	BCT	1	A	EH-PH
AD19178-002	09/14/20 11:21	R12	1	A	NONE
AD19178-002	09/14/20 12:14	JW	1	A	cn
AD19178-002	09/14/20 12:18	R12	1	A	NONE
AD19178-002	09/14/20 13:10	EF	1	A	TCLP
AD19178-002	09/14/20 13:14	EF	1	A	R12
AD19178-002	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19178-002	09/14/20 15:25	R12	1	A	NONE
AD19178-002	09/16/20 07:50	ANS	1	A	TDSI/Hg
AD19178-002	09/16/20 10:08	R12	1	A	NONE
AD19178-003	09/11/20 11:48	RICAR	0	M	Received
AD19178-003	09/11/20 12:06	RICAR	0	M	Login
AD19178-003	09/11/20 13:04	R12	1	A	NONE
AD19178-003	09/11/20 23:48	R12	1	A	NONE
AD19178-003	09/11/20 23:48	PA	1	A	mix
AD19178-003	09/14/20 10:45	BCT	1	A	EH-PH
AD19178-003	09/14/20 11:21	R12	1	A	NONE
AD19178-003	09/14/20 13:10	EF	1	A	TCLP
AD19178-003	09/14/20 13:14	EF	1	A	R12
AD19178-003	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19178-003	09/14/20 15:25	R12	1	A	NONE
AD19178-003	09/15/20 11:23	JW	1	A	CN
AD19178-003	09/15/20 12:03	R12	1	A	NONE
AD19178-003	09/16/20 07:50	ANS	1	A	TDSI/Hg
AD19178-003	09/16/20 10:08	R12	1	A	NONE
AD19178-004	09/11/20 11:48	RICAR	0	M	Received
AD19178-004	09/11/20 12:06	RICAR	0	M	Login
AD19178-004	09/11/20 13:04	R12	1	A	NONE
AD19178-004	09/11/20 23:48	PA	1	A	mix
AD19178-004	09/11/20 23:48	R12	1	A	NONE
AD19178-004	09/14/20 10:45	BCT	1	A	EH-PH
AD19178-004	09/14/20 11:21	R12	1	A	NONE
AD19178-004	09/14/20 13:10	EF	1	A	TCLP
AD19178-004	09/14/20 13:14	EF	1	A	R12
AD19178-004	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19178-004	09/14/20 15:25	R12	1	A	NONE
AD19178-004	09/15/20 11:23	JW	1	A	CN
AD19178-004	09/15/20 12:03	R12	1	A	NONE
AD19178-004	09/16/20 07:50	ANS	1	A	TDSI/Hg
AD19178-004	09/16/20 10:08	R12	1	A	NONE
AD19178-005	09/11/20 11:48	RICAR	0	M	Received
AD19178-005	09/11/20 12:06	RICAR	0	M	Login
AD19178-005	09/11/20 13:04	R12	1	A	NONE
AD19178-005	09/11/20 23:48	PA	1	A	mix
AD19178-005	09/11/20 23:48	R12	1	A	NONE
AD19178-005	09/14/20 10:45	BCT	1	A	EH-PH
AD19178-005	09/14/20 11:21	R12	1	A	NONE
AD19178-005	09/14/20 13:10	EF	1	A	TCLP
AD19178-005	09/14/20 13:14	EF	1	A	R12
AD19178-005	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19178-005	09/14/20 15:25	R12	1	A	NONE
AD19178-005	09/15/20 11:23	JW	1	A	CN
AD19178-005	09/15/20 12:03	R12	1	A	NONE
AD19178-005	09/16/20 07:50	ANS	1	A	TDSI/Hg
AD19178-005	09/16/20 10:08	R12	1	A	NONE
AD19178-006	09/11/20 11:48	RICAR	0	M	Received
AD19178-006	09/11/20 12:06	RICAR	0	M	Login
AD19178-006	09/11/20 13:04	R12	1	A	NONE
AD19178-006	09/11/20 23:48	PA	1	A	mix
AD19178-006	09/11/20 23:48	R12	1	A	NONE
AD19178-006	09/14/20 10:45	BCT	1	A	EH-PH
AD19178-006	09/14/20 11:21	R12	1	A	NONE
AD19178-006	09/14/20 13:10	EF	1	A	TCLP
AD19178-006	09/14/20 13:14	EF	1	A	R12
AD19178-006	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19178-006	09/14/20 15:25	R12	1	A	NONE
AD19178-006	09/15/20 11:23	JW	1	A	CN
AD19178-006	09/15/20 12:03	R12	1	A	NONE
AD19178-006	09/16/20 07:50	ANS	1	A	TDSI/Hg
AD19178-006	09/16/20 10:08	R12	1	A	NONE
AD19178-007	09/11/20 11:48	RICAR	0	M	Received
AD19178-007	09/11/20 12:06	RICAR	0	M	Login
AD19178-007	09/11/20 13:04	R12	1	A	NONE
AD19178-007	09/11/20 23:48	PA	1	A	mix
AD19178-007	09/11/20 23:48	R12	1	A	NONE
AD19178-007	09/14/20 10:45	BCT	1	A	EH-PH
AD19178-007	09/14/20 11:21	R12	1	A	NONE
AD19178-007	09/14/20 13:10	EF	1	A	TCLP
AD19178-007	09/14/20 13:14	EF	1	A	R12
AD19178-007	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19178-007	09/14/20 15:25	R12	1	A	NONE
AD19178-007	09/15/20 11:23	JW	1	A	CN
AD19178-007	09/15/20 12:03	R12	1	A	NONE
AD19178-007	09/16/20 07:50	ANS	1	A	TDSI/Hg
AD19178-007	09/16/20 10:08	R12	1	A	NONE
AD19178-008	09/11/20 11:48	RICAR	0	M	Received
AD19178-008	09/11/20 12:06	RICAR	0	M	Login
AD19178-008	09/11/20 13:04	R12	1	A	NONE
AD19178-008	09/11/20 23:48	R12	1	A	NONE
AD19178-008	09/11/20 23:48	PA	1	A	mix
AD19178-008	09/14/20 10:45	BCT	1	A	EH-PH
AD19178-008	09/14/20 11:21	R12	1	A	NONE
AD19178-008	09/14/20 13:10	EF	1	A	TCLP
AD19178-008	09/14/20 13:14	EF	1	A	R12
AD19178-008	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19178-008	09/15/20 11:23	JW	1	A	CN
AD19178-008	09/15/20 12:03	R12	1	A	NONE
AD19178-008	09/16/20 07:50	ANS	1	A	TDSI/Hg
AD19178-008	09/16/20 10:08	R12	1	A	NONE
AD19178-009	09/11/20 11:48	RICAR	0	M	Received
AD19178-009	09/11/20 12:06	RICAR	0	M	Login
AD19178-009	09/11/20 13:04	R12	1	A	NONE
AD19178-009	09/11/20 23:48	PA	1	A	mix
AD19178-009	09/11/20 23:48	R12	1	A	NONE
AD19178-009	09/14/20 10:45	BCT	1	A	EH-PH
AD19178-009	09/14/20 11:21	R12	1	A	NONE
AD19178-009	09/14/20 13:10	EF	1	A	TCLP
AD19178-009	09/14/20 13:14	EF	1	A	R12
AD19178-009	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19178-009	09/14/20 15:25	R12	1	A	NONE
AD19178-009	09/15/20 11:23	JW	1	A	CN
AD19178-009	09/15/20 12:03	R12	1	A	NONE
AD19178-009	09/16/20 07:50	ANS	1	A	TDSI/Hg
AD19178-009	09/16/20 10:08	R12	1	A	NONE
AD19178-010	09/11/20 11:48	RICAR	0	M	Received
AD19178-010	09/11/20 12:06	RICAR	0	M	Login
AD19178-010	09/11/20 13:04	R12	1	A	NONE
AD19178-010	09/11/20 23:48	PA	1	A	mix
AD19178-010	09/11/20 23:48	R12	1	A	NONE
AD19178-010	09/14/20 10:45	BCT	1	A	EH-PH
AD19178-010	09/14/20 11:21	R12	1	A	NONE
AD19178-010	09/14/20 13:10	EF	1	A	TCLP
AD19178-010	09/14/20 13:14	EF	1	A	R12
AD19178-010	09/14/20 15:24	BCT	1	A	CR6-SEHPH
AD19178-010	09/14/20 15:25	R12	1	A	NONE
AD19178-010	09/15/20 11:23	JW	1	A	CN
AD19178-010	09/15/20 12:03	R12	1	A	NONE
AD19178-010	09/16/20 07:50	ANS	1	A	TDSI/Hg
AD19178-010	09/16/20 10:08	R12	1	A	NONE
AD19178-011	09/11/20 11:48	RICAR	0	M	Received

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD19178-011	09/11/20 12:06	RICAR	0	M	Login
AD19178-011	09/11/20 13:04	R12	1	A	NONE
AD19178-011	09/11/20 23:48	PA	1	A	mix
AD19178-011	09/11/20 23:48	R12	1	A	NONE
AD19178-011	09/14/20 10:45	BCT	1	A	EH-PH
AD19178-011	09/14/20 11:21	R12	1	A	NONE
AD19178-011	09/14/20 13:10	EF	1	A	TCLP
AD19178-011	09/14/20 13:14	EF	1	A	R12
AD19178-011	09/14/20 15:25	R12	1	A	NONE
AD19178-011	09/15/20 11:23	JW	1	A	CN
AD19178-011	09/15/20 12:03	R12	1	A	NONE
AD19178-011	09/16/20 07:50	ANS	1	A	TDSI/Hg
AD19178-011	09/16/20 10:08	R12	1	A	NONE
AD19178-011	09/18/20 09:29	BCT	1	A	CR6/EH-PH
AD19178-011	09/18/20 09:59	R12	1	A	NONE
AD19178-012	09/11/20 11:48	RICAR	0	M	Received
AD19178-012	09/11/20 12:06	RICAR	0	M	Login
AD19178-012	09/11/20 13:04	R12	1	A	NONE
AD19178-012	09/11/20 23:48	PA	1	A	mix
AD19178-012	09/11/20 23:48	R12	1	A	NONE
AD19178-012	09/14/20 10:45	BCT	1	A	EH-PH
AD19178-012	09/14/20 11:21	R12	1	A	NONE
AD19178-012	09/14/20 13:10	EF	1	A	TCLP
AD19178-012	09/14/20 13:14	EF	1	A	R12
AD19178-012	09/14/20 15:25	R12	1	A	NONE
AD19178-012	09/15/20 11:23	JW	1	A	CN
AD19178-012	09/15/20 12:03	R12	1	A	NONE
AD19178-012	09/16/20 07:50	ANS	1	A	TDSI/Hg
AD19178-012	09/16/20 10:08	R12	1	A	NONE
AD19178-012	09/18/20 09:29	BCT	1	A	CR6/EH-PH
AD19178-012	09/18/20 09:59	R12	1	A	NONE
AD19178-013	09/11/20 11:48	RICAR	0	M	Received
AD19178-013	09/11/20 12:06	RICAR	0	M	Login
AD19178-013	09/11/20 13:04	R12	1	A	NONE
AD19178-013	09/11/20 13:04	R12	2	A	NONE
AD19178-013	09/11/20 23:48	R12	2	A	NONE
AD19178-013	09/11/20 23:48	PA	2	A	mix
AD19178-013	09/14/20 10:45	BCT	2	A	EH-PH
AD19178-013	09/14/20 11:21	R12	2	A	NONE
AD19178-013	09/14/20 13:10	EF	2	A	TCLP
AD19178-013	09/14/20 13:14	EF	2	A	R12
AD19178-013	09/15/20 11:23	JW	2	A	CN
AD19178-013	09/15/20 12:03	R12	2	A	NONE
AD19178-013	09/16/20 07:50	ANS	2	A	TDSI/Hg
AD19178-013	09/16/20 10:08	R12	2	A	NONE
AD19178-013	09/18/20 09:29	BCT	2	A	CR6/EH-PH
AD19178-013	09/18/20 09:59	R12	2	A	NONE
AD19178-013	09/11/20 12:20	R31	3	A	NONE
AD19178-013	09/14/20 08:52	RL	3	A	VOA
AD19178-013	09/14/20 10:31	R31	3	A	NONE
AD19178-013	09/11/20 12:20	F18	4	A	NONE
AD19178-013	09/17/20 13:43	WP	4	A	VOA
AD19178-013	09/11/20 12:20	F18	5	A	NONE
AD19178-014	09/11/20 11:48	RICAR	0	M	Received
AD19178-014	09/11/20 12:06	RICAR	0	M	Login
AD19178-014	09/12/20 09:20	R31	1	A	NONE
AD19178-014	09/14/20 19:00	WP	1	A	VOA
AD19178-014	09/12/20 09:20	R31	2	A	NONE

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

GC/MS Volatile Data

GC/MS Volatile Data
QC Summary

FORM2

Surrogate Recovery

Method: EPA 8260C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
11M82707.D	DAILY BLANK	A	09/14/20 17:00	1		95	99	98	106		
6M132538.D	DAILY BLANK	S	09/17/20 12:37	1		110	97	83	95		
6M132564.D	AD19178-013	S	09/17/20 21:36	1		116	110	97	107		
11M82724.D	AD19178-014	A	09/14/20 22:13	1		94	106	102	103		
11M82710.D	MBS87835	A	09/14/20 17:55	1		101	102	98	104		
6M132540.D	AD19283-006	S	09/17/20 13:19	1		115	108	82	96		
6M132541.D	MBS89300	S	09/17/20 13:39	1		111	102	84	93		
6M132542.D	AD19283-006(MS)	S	09/17/20 14:00	1		105	98	87	94		
6M132543.D	AD19283-006(MSD)	S	09/17/20 14:21	1		108	100	85	98		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8260C

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	73-131
S2=1,2-Dichloroethane-d4	30	78-128
S3=Toluene-d8	30	79-111
S4=Bromofluorobenzene	30	82-112

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87835

Data File	Sample ID:	Analysis Date
Spike or Dup: 11M82710.D	MBS87835	9/14/2020 5:55:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.6013	0	20	93	50	150
Dichlorodifluoromethane	1	18.8341	0	20	94	50	150
Chloromethane	1	19.7241	0	20	99	50	150
Bromomethane	1	17.5644	0	20	88	50	150
Vinyl Chloride	1	20.0175	0	20	100	50	150
Chloroethane	1	19.3955	0	20	97	50	150
Trichlorofluoromethane	1	19.3249	0	20	97	50	150
Ethyl ether	1	19.308	0	20	97	50	150
Furan	1	18.5256	0	20	93	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	20.0597	0	20	100	50	150
Methylene Chloride	1	17.5627	0	20	88	70	130
Acrolein	1	95.7496	0	100	96	50	150
Acrylonitrile	1	19.2547	0	20	96	50	150
Iodomethane	1	14.0589	0	20	70	50	150
Acetone	1	93.0756	0	100	93	50	150
Carbon Disulfide	1	18.9184	0	20	95	50	150
t-Butyl Alcohol	1	105.1723	0	100	105	50	150
n-Hexane	1	21.1025	0	20	106	70	130
Di-isopropyl-ether	1	18.9389	0	20	95	70	130
1,1-Dichloroethene	1	20.3518	0	20	102	70	130
Methyl Acetate	1	19.4569	0	20	97	50	150
Methyl-t-butyl ether	1	18.7525	0	20	94	70	130
1,1-Dichloroethane	1	19.0947	0	20	95	70	130
trans-1,2-Dichloroethene	1	19.4048	0	20	97	70	130
Ethyl-t-butyl ether	1	18.6546	0	20	93	70	130
cis-1,2-Dichloroethene	1	18.6674	0	20	93	70	130
Bromochloromethane	1	18.9817	0	20	95	70	130
2,2-Dichloropropane	1	20.7198	0	20	104	70	130
Ethyl acetate	1	18.5437	0	20	93	50	150
1,4-Dioxane	1	1116.895	0	1000	112	50	150
1,1-Dichloropropene	1	18.8455	0	20	94	70	130
Chloroform	1	18.5783	0	20	93	70	130
Cyclohexane	1	20.3793	0	20	102	70	130
1,2-Dichloroethane	1	18.2621	0	20	91	70	130
2-Butanone	1	15.8966	0	20	79	50	150
1,1,1-Trichloroethane	1	18.9033	0	20	95	70	130
Carbon Tetrachloride	1	19.7396	0	20	99	50	150
Vinyl Acetate	1	19.149	0	20	96	50	150
Bromodichloromethane	1	18.2868	0	20	91	70	130
Methylcyclohexane	1	21.2188	0	20	106	70	130
Dibromomethane	1	17.1799	0	20	86	70	130
1,2-Dichloropropane	1	18.8873	0	20	94	70	130
Trichloroethene	1	18.3722	0	20	92	70	130
Benzene	1	18.8456	0	20	94	70	130
tert-Amyl methyl ether	1	17.663	0	20	88	70	130
Iso-propylacetate	1	17.562	0	20	88	70	130
Methyl methacrylate	1	16.2668	0	20	81	70	130
Dibromochloromethane	1	18.638	0	20	93	70	130
2-Chloroethylvinylether	1	17.2376	0	20	86	70	130
cis-1,3-Dichloropropene	1	18.5879	0	20	93	70	130
trans-1,3-Dichloropropene	1	18.3519	0	20	92	70	130
Ethyl methacrylate	1	18.6598	0	20	93	70	130
1,1,2-Trichloroethane	1	17.0435	0	20	85	70	130
1,2-Dibromoethane	1	18.1684	0	20	91	70	130
1,3-Dichloropropane	1	18.1359	0	20	91	70	130
4-Methyl-2-Pentanone	1	17.5181	0	20	88	50	150
2-Hexanone	1	17.7056	0	20	89	50	150
Tetrachloroethene	1	18.5054	0	20	93	50	150
Toluene	1	17.8129	0	20	89	70	130
1,1,1,2-Tetrachloroethane	1	18.1041	0	20	91	70	130
Chlorobenzene	1	17.9954	0	20	90	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87835

Method: 8260C		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	18.1833	0	20	91	70	130
n-Amyl acetate	1	19.367	0	20	97	70	130
Bromoform	**1**	**18.2921**	**0**	**20**	**91**	**70**	**130**
Ethylbenzene	**1**	**18.6687**	**0**	**20**	**93**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**18.0195**	**0**	**20**	**90**	**70**	**130**
Styrene	**1**	**18.8197**	**0**	**20**	**94**	**70**	**130**
m&p-Xylenes	**1**	**36.9085**	**0**	**40**	**92**	**70**	**130**
o-Xylene	**1**	**18.9857**	**0**	**20**	**95**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	20.3069	0	20	102	50	150
1,3-Dichlorobenzene	**1**	**18.0428**	**0**	**20**	**90**	**70**	**130**
1,4-Dichlorobenzene	**1**	**17.4919**	**0**	**20**	**87**	**70**	**130**
1,2-Dichlorobenzene	**1**	**17.7645**	**0**	**20**	**89**	**70**	**130**
Isopropylbenzene	**1**	**19.5336**	**0**	**20**	**98**	**70**	**130**
Cyclohexanone	1	123.5981	0	100	124	50	150
Camphene	1	21.091	0	20	105	70	130
1,2,3-Trichloropropane	**1**	**18.4059**	**0**	**20**	**92**	**70**	**130**
2-Chlorotoluene	1	18.7459	0	20	94	70	130
p-Ethyltoluene	1	19.5201	0	20	98	70	130
4-Chlorotoluene	1	17.9825	0	20	90	70	130
n-Propylbenzene	**1**	**19.5371**	**0**	**20**	**98**	**70**	**130**
Bromobenzene	1	18.4709	0	20	92	70	130
1,3,5-Trimethylbenzene	**1**	**18.7847**	**0**	**20**	**94**	**70**	**130**
Butyl methacrylate	1	18.7198	0	20	94	70	130
t-Butylbenzene	**1**	**18.7455**	**0**	**20**	**94**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**18.7101**	**0**	**20**	**94**	**70**	**130**
sec-Butylbenzene	**1**	**19.3518**	**0**	**20**	**97**	**70**	**130**
4-Isopropyltoluene	**1**	**19.0944**	**0**	**20**	**95**	**70**	**130**
n-Butylbenzene	**1**	**19.1884**	**0**	**20**	**96**	**70**	**130**
p-Diethylbenzene	1	19.2861	0	20	96	70	130
1,2,4,5-Tetramethylbenzene	1	18.7589	0	20	94	70	130
1,2-Dibromo-3-Chloropropane	1	18.5212	0	20	93	50	150
Camphor	1	159.6956	0	200	80	20	150
Hexachlorobutadiene	1	18.4413	0	20	92	50	150
1,2,4-Trichlorobenzene	1	16.6592	0	20	83	70	130
1,2,3-Trichlorobenzene	1	16.1064	0	20	81	70	130
Naphthalene	1	16.4646	0	20	82	50	150

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

Data File	Sample ID:	Analysis Date
Spike or Dup: 6M132541.D	MBS89300	9/17/2020 1:39:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	63.7839	0	50	128	20	130
Dichlorodifluoromethane	1	59.0268	0	50	118	20	130
Chloromethane	1	57.3341	0	50	115	20	130
Bromomethane	1	53.6719	0	50	107	20	130
Vinyl Chloride	1	56.3629	0	50	113	20	130
Chloroethane	1	56.8226	0	50	114	20	130
Trichlorofluoromethane	1	58.6156	0	50	117	20	130
Ethyl ether	1	56.8643	0	50	114	50	130
Furan	1	52.7423	0	50	105	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	65.3251	0	50	131*	50	130
Methylene Chloride	1	58.8633	0	50	118	50	130
Acrolein	1	311.2093	0	200	156*	20	130
Acrylonitrile	1	49.746	0	50	99	20	130
Iodomethane	1	74.4734	0	50	149*	50	130
Acetone	1	224.7024	0	200	112	20	130
Carbon Disulfide	1	58.0752	0	50	116	50	130
t-Butyl Alcohol	1	167.8476	0	200	84	20	130
n-Hexane	1	67.5732	0	50	135*	50	130
Di-isopropyl-ether	1	63.7641	0	50	128	50	130
1,1-Dichloroethene	1	62.0946	0	50	124	50	130
Methyl Acetate	1	65.8467	0	50	132*	50	130
Methyl-t-butyl ether	1	65.5948	0	50	131*	50	130
1,1-Dichloroethane	1	58.923	0	50	118	50	130
trans-1,2-Dichloroethene	1	60.9174	0	50	122	50	130
Ethyl-t-butyl ether	1	55.3283	0	50	111	50	130
cis-1,2-Dichloroethene	1	60.3252	0	50	121	50	130
Bromochloromethane	1	60.0202	0	50	120	50	130
2,2-Dichloropropane	1	66.8187	0	50	134*	50	130
Ethyl acetate	1	51.6395	0	50	103	50	130
1,4-Dioxane	1	1853.394	0	2500	74	50	130
1,1-Dichloropropene	1	62.2675	0	50	125	50	130
Chloroform	1	61.0647	0	50	122	50	130
Cyclohexane	1	62.0593	0	50	124	50	130
1,2-Dichloroethane	1	63.2818	0	50	127	50	130
2-Butanone	1	48.2845	0	50	97	20	130
1,1,1-Trichloroethane	1	61.3151	0	50	123	50	130
Carbon Tetrachloride	1	64.7686	0	50	130	50	130
Vinyl Acetate	1	47.1166	0	50	94	50	130
Bromodichloromethane	1	63.7391	0	50	127	50	130
Methylcyclohexane	1	60.8754	0	50	122	50	130
Dibromomethane	1	60.1007	0	50	120	50	130
1,2-Dichloropropane	1	58.2902	0	50	117	50	130
Trichloroethene	1	60.8362	0	50	122	50	130
Benzene	1	60.1494	0	50	120	50	130
tert-Amyl methyl ether	1	62.9327	0	50	126	50	130
Iso-propylacetate	1	44.1683	0	50	88	50	130
Methyl methacrylate	1	43.8225	0	50	88	50	130
Dibromochloromethane	1	49.8745	0	50	100	50	130
2-Chloroethylvinylether	1	103.7397	0	50	207*	50	130
cis-1,3-Dichloropropene	1	48.7084	0	50	97	50	130
trans-1,3-Dichloropropene	1	49.5952	0	50	99	50	130
Ethyl methacrylate	1	46.0418	0	50	92	50	130
1,1,2-Trichloroethane	1	48.6557	0	50	97	50	130
1,2-Dibromoethane	1	49.379	0	50	99	50	130
1,3-Dichloropropane	1	47.7109	0	50	95	50	130
4-Methyl-2-Pentanone	1	40.3707	0	50	81	20	130
2-Hexanone	1	36.9077	0	50	74	20	130
Tetrachloroethene	1	48.3149	0	50	97	50	130
Toluene	1	43.9943	0	50	88	50	130
1,1,1,2-Tetrachloroethane	1	47.6696	0	50	95	50	130
Chlorobenzene	1	44.9722	0	50	90	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

Method: 8260C	Matrix: Soil	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	41.804	0	50	84	50	130
n-Amyl acetate	1	42.0005	0	50	84	50	130
Bromoform	**1**	**67.9123**	**0**	**50**	**136***	**20**	**130**
Ethylbenzene	**1**	**42.5142**	**0**	**50**	**85**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**41.5211**	**0**	**50**	**83**	**50**	**130**
Styrene	**1**	**41.0562**	**0**	**50**	**82**	**50**	**130**
m&p-Xylenes	**1**	**82.9624**	**0**	**100**	**83**	**50**	**130**
o-Xylene	**1**	**40.6001**	**0**	**50**	**81**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	42.8888	0	50	86	20	130
1,3-Dichlorobenzene	**1**	**42.3687**	**0**	**50**	**85**	**50**	**130**
1,4-Dichlorobenzene	**1**	**40.2403**	**0**	**50**	**80**	**50**	**130**
1,2-Dichlorobenzene	**1**	**42.0393**	**0**	**50**	**84**	**50**	**130**
Isopropylbenzene	**1**	**41.5715**	**0**	**50**	**83**	**50**	**130**
Cyclohexanone	1	128.3428	0	250	51	50	130
Camphene	1	42.9626	0	50	86	50	130
1,2,3-Trichloropropane	**1**	**39.937**	**0**	**50**	**80**	**50**	**130**
2-Chlorotoluene	1	43.3241	0	50	87	50	130
p-Ethyltoluene	1	41.1058	0	50	82	50	130
4-Chlorotoluene	1	45.4822	0	50	91	50	130
n-Propylbenzene	**1**	**43.1704**	**0**	**50**	**86**	**50**	**130**
Bromobenzene	1	41.5058	0	50	83	50	130
1,3,5-Trimethylbenzene	**1**	**47.0482**	**0**	**50**	**94**	**50**	**130**
Butyl methacrylate	1	42.3338	0	50	85	50	130
t-Butylbenzene	**1**	**42.6301**	**0**	**50**	**85**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**42.996**	**0**	**50**	**86**	**50**	**130**
sec-Butylbenzene	**1**	**44.8208**	**0**	**50**	**90**	**50**	**130**
4-Isopropyltoluene	**1**	**44.7488**	**0**	**50**	**89**	**50**	**130**
n-Butylbenzene	**1**	**45.2423**	**0**	**50**	**90**	**50**	**130**
p-Diethylbenzene	1	44.2677	0	50	89	50	130
1,2,4,5-Tetramethylbenzene	1	44.2703	0	50	89	50	130
1,2-Dibromo-3-Chloropropane	1	36.8726	0	50	74	50	130
Camphor	1	474.0762	0	500	95	50	130
Hexachlorobutadiene	1	42.148	0	50	84	50	130
1,2,4-Trichlorobenzene	1	41.4291	0	50	83	50	130
1,2,3-Trichlorobenzene	1	40.7301	0	50	81	50	130
Naphthalene	1	37.1703	0	50	74	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M132542.D	AD19283-006(MS)	9/17/2020 2:00:00 PM
Non Spike(If applicable):	6M132540.D	AD19283-006	9/17/2020 1:19:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	64.7742	0	50	130	20	130
Dichlorodifluoromethane	1	45.1906	0	50	90	20	130
Chloromethane	1	44.7465	0	50	89	20	130
Bromomethane	1	44.0331	0	50	88	20	130
Vinyl Chloride	1	46.093	0	50	92	20	130
Chloroethane	1	45.0962	0	50	90	20	130
Trichlorofluoromethane	1	46.1301	0	50	92	20	130
Ethyl ether	1	46.398	0	50	93	50	130
Furan	1	42.7872	0	50	86	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	49.2	0	50	98	50	130
Methylene Chloride	1	44.51	0	50	89	50	130
Acrolein	1	143.4404	0	200	72	20	130
Acrylonitrile	1	35.8528	0	50	72	20	130
Iodomethane	1	58.7058	0	50	117	50	130
Acetone	1	174.1374	0	200	87	20	130
Carbon Disulfide	1	43.0984	0	50	86	50	130
t-Butyl Alcohol	1	129.6621	0	200	65	20	130
n-Hexane	1	47.0845	0	50	94	50	130
Di-isopropyl-ether	1	50.6189	0	50	101	50	130
1,1-Dichloroethene	1	48.3692	0	50	97	50	130
Methyl Acetate	1	60.7803	0	50	122	50	130
Methyl-t-butyl ether	1	54.096	0	50	108	50	130
1,1-Dichloroethane	1	47.5492	0	50	95	50	130
trans-1,2-Dichloroethene	1	46.0283	0	50	92	50	130
Ethyl-t-butyl ether	1	46.8355	0	50	94	50	130
cis-1,2-Dichloroethene	1	46.8461	0	50	94	50	130
Bromochloromethane	1	49.1152	0	50	98	50	130
2,2-Dichloropropane	1	52.6942	0	50	105	50	130
Ethyl acetate	1	29.6919	0	50	59	50	130
1,4-Dioxane	1	1393.228	0	2500	56	50	130
1,1-Dichloropropene	1	47.4642	0	50	95	50	130
Chloroform	1	49.2247	0	50	98	50	130
Cyclohexane	1	47.2544	0	50	95	50	130
1,2-Dichloroethane	1	50.5993	0	50	101	50	130
2-Butanone	1	35.0116	0	50	70	20	130
1,1,1-Trichloroethane	1	48.393	0	50	97	50	130
Carbon Tetrachloride	1	49.2225	0	50	98	50	130
Vinyl Acetate	1	26.7753	0	50	54	50	130
Bromodichloromethane	1	51.4302	0	50	103	50	130
Methylcyclohexane	1	43.6548	0	50	87	50	130
Dibromomethane	1	51.2331	0	50	102	50	130
1,2-Dichloropropane	1	46.4778	0	50	93	50	130
Trichloroethene	1	47.2894	0	50	95	50	130
Benzene	1	47.2684	0	50	95	50	130
tert-Amyl methyl ether	1	51.0368	0	50	102	50	130
Iso-propylacetate	1	32.0845	0	50	64	50	130
Methyl methacrylate	1	50.658	0	50	101	50	130
Dibromochloromethane	1	40.5709	0	50	81	50	130
2-Chloroethylvinylether	1	85.9316	0	50	172*	50	130
cis-1,3-Dichloropropene	1	39.136	0	50	78	50	130
trans-1,3-Dichloropropene	1	40.2661	0	50	81	50	130
Ethyl methacrylate	1	29.9644	0	50	60	50	130
1,1,2-Trichloroethane	1	39.9355	0	50	80	50	130
1,2-Dibromoethane	1	39.5143	0	50	79	50	130
1,3-Dichloropropane	1	39.0032	0	50	78	50	130
4-Methyl-2-Pentanone	1	32.2657	0	50	65	20	130
2-Hexanone	1	29.902	0	50	60	20	130
Tetrachloroethene	1	36.0758	0	50	72	50	130
Toluene	1	35.197	0	50	70	50	130
1,1,1,2-Tetrachloroethane	1	38.7295	0	50	77	50	130
Chlorobenzene	1	34.966	0	50	70	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

Method: 8260C	Matrix: Soil	QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	26.4058	0	50	53	50	130
n-Amyl acetate	1	20.8648	0	50	42*	50	130
Bromoform	**1**	**54.2103**	**0**	**50**	**108**	**20**	**130**
Ethylbenzene	**1**	**34.0166**	**0**	**50**	**68**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**33.8868**	**0**	**50**	**68**	**50**	**130**
Styrene	**1**	**31.3754**	**0**	**50**	**63**	**50**	**130**
m&p-Xylenes	**1**	**63.8587**	**0**	**100**	**64**	**50**	**130**
o-Xylene	**1**	**31.5526**	**0**	**50**	**63**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	30.8125	0	50	62	20	130
1,3-Dichlorobenzene	**1**	**30.1803**	**0**	**50**	**60**	**50**	**130**
1,4-Dichlorobenzene	**1**	**29.3631**	**0**	**50**	**59**	**50**	**130**
1,2-Dichlorobenzene	**1**	**30.2778**	**0**	**50**	**61**	**50**	**130**
Isopropylbenzene	**1**	**32.0661**	**0**	**50**	**64**	**50**	**130**
Cyclohexanone	1	103.4941	0	250	41*	50	130
Camphene	1	27.1146	0	50	54	50	130
1,2,3-Trichloropropane	**1**	**32.0142**	**0**	**50**	**64**	**50**	**130**
2-Chlorotoluene	1	33.4725	0	50	67	50	130
p-Ethyltoluene	1	30.7714	0	50	62	50	130
4-Chlorotoluene	1	32.9825	0	50	66	50	130
n-Propylbenzene	**1**	**32.1153**	**0**	**50**	**64**	**50**	**130**
Bromobenzene	1	30.791	0	50	62	50	130
1,3,5-Trimethylbenzene	**1**	**35.161**	**0**	**50**	**70**	**50**	**130**
Butyl methacrylate	1	27.5838	0	50	55	50	130
t-Butylbenzene	**1**	**31.0009**	**0**	**50**	**62**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**32.2028**	**0**	**50**	**64**	**50**	**130**
sec-Butylbenzene	**1**	**30.2751**	**0**	**50**	**61**	**50**	**130**
4-Isopropyltoluene	**1**	**30.6962**	**0**	**50**	**61**	**50**	**130**
n-Butylbenzene	**1**	**29.2736**	**0**	**50**	**59**	**50**	**130**
p-Diethylbenzene	1	29.6348	0	50	59	50	130
1,2,4,5-Tetramethylbenzene	1	29.6141	0	50	59	50	130
1,2-Dibromo-3-Chloropropane	1	27.8283	0	50	56	50	130
Camphor	1	401.4661	0	500	80	50	130
Hexachlorobutadiene	1	18.6257	0	50	37*	50	130
1,2,4-Trichlorobenzene	1	23.0528	0	50	46*	50	130
1,2,3-Trichlorobenzene	1	21.3084	0	50	43*	50	130
Naphthalene	1	23.178	0	50	46*	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M132543.D	AD19283-006(MSD)	9/17/2020 2:21:00 PM
Non Spike(If applicable):	6M132540.D	AD19283-006	9/17/2020 1:19:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	53.5868	0	50	107	20	130
Dichlorodifluoromethane	1	56.2445	0	50	112	20	130
Chloromethane	1	55.8238	0	50	112	20	130
Bromomethane	1	55.9258	0	50	112	20	130
Vinyl Chloride	1	57.2243	0	50	114	20	130
Chloroethane	1	56.6026	0	50	113	20	130
Trichlorofluoromethane	1	58.1494	0	50	116	20	130
Ethyl ether	1	56.4034	0	50	113	50	130
Furan	1	53.6025	0	50	107	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	61.9143	0	50	124	50	130
Methylene Chloride	1	57.1644	0	50	114	50	130
Acrolein	1	190.1136	0	200	95	20	130
Acrylonitrile	1	41.7692	0	50	84	20	130
Iodomethane	1	72.4683	0	50	145*	50	130
Acetone	1	198.5386	0	200	99	20	130
Carbon Disulfide	1	52.9301	0	50	106	50	130
t-Butyl Alcohol	1	144.6204	0	200	72	20	130
n-Hexane	1	61.2966	0	50	123	50	130
Di-isopropyl-ether	1	63.4106	0	50	127	50	130
1,1-Dichloroethene	1	59.8916	0	50	120	50	130
Methyl Acetate	1	73.572	0	50	147*	50	130
Methyl-t-butyl ether	1	67.5456	0	50	135*	50	130
1,1-Dichloroethane	1	60.1723	0	50	120	50	130
trans-1,2-Dichloroethene	1	57.0738	0	50	114	50	130
Ethyl-t-butyl ether	1	58.7923	0	50	118	50	130
cis-1,2-Dichloroethene	1	59.1104	0	50	118	50	130
Bromochloromethane	1	60.479	0	50	121	50	130
2,2-Dichloropropane	1	66.4509	0	50	133*	50	130
Ethyl acetate	1	38.0396	0	50	76	50	130
1,4-Dioxane	1	1665.665	0	2500	67	50	130
1,1-Dichloropropene	1	60.8343	0	50	122	50	130
Chloroform	1	60.5195	0	50	121	50	130
Cyclohexane	1	59.0496	0	50	118	50	130
1,2-Dichloroethane	1	63.7527	0	50	128	50	130
2-Butanone	1	41.6932	0	50	83	20	130
1,1,1-Trichloroethane	1	61.3767	0	50	123	50	130
Carbon Tetrachloride	1	63.3933	0	50	127	50	130
Vinyl Acetate	1	34.9941	0	50	70	50	130
Bromodichloromethane	1	63.756	0	50	128	50	130
Methylcyclohexane	1	54.9876	0	50	110	50	130
Dibromomethane	1	63.2225	0	50	126	50	130
1,2-Dichloropropane	1	59.2685	0	50	119	50	130
Trichloroethene	1	59.1943	0	50	118	50	130
Benzene	1	60.7508	0	50	122	50	130
tert-Amyl methyl ether	1	64.623	0	50	129	50	130
Iso-propylacetate	1	39.2526	0	50	79	50	130
Methyl methacrylate	1	60.0027	0	50	120	50	130
Dibromochloromethane	1	51.6125	0	50	103	50	130
2-Chloroethylvinylether	1	105.3625	0	50	211*	50	130
cis-1,3-Dichloropropene	1	48.2874	0	50	97	50	130
trans-1,3-Dichloropropene	1	49.1696	0	50	98	50	130
Ethyl methacrylate	1	38.9701	0	50	78	50	130
1,1,2-Trichloroethane	1	48.9709	0	50	98	50	130
1,2-Dibromoethane	1	47.4204	0	50	95	50	130
1,3-Dichloropropane	1	48.6332	0	50	97	50	130
4-Methyl-2-Pentanone	1	37.6965	0	50	75	20	130
2-Hexanone	1	32.6901	0	50	65	20	130
Tetrachloroethene	1	46.7026	0	50	93	50	130
Toluene	1	44.1482	0	50	88	50	130
1,1,1,2-Tetrachloroethane	1	48.5604	0	50	97	50	130
Chlorobenzene	1	44.2936	0	50	89	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

Method: 8260C	Matrix: Soil	QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	35.1896	0	50	70	50	130
n-Amyl acetate	1	28.5513	0	50	57	50	130
Bromoform	**1**	**69.1723**	**0**	**50**	**138***	**20**	**130**
Ethylbenzene	**1**	**44.5852**	**0**	**50**	**89**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**42.382**	**0**	**50**	**85**	**50**	**130**
Styrene	**1**	**41.5523**	**0**	**50**	**83**	**50**	**130**
m&p-Xylenes	**1**	**84.8346**	**0**	**100**	**85**	**50**	**130**
o-Xylene	**1**	**41.8252**	**0**	**50**	**84**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	39.0256	0	50	78	20	130
1,3-Dichlorobenzene	**1**	**39.5706**	**0**	**50**	**79**	**50**	**130**
1,4-Dichlorobenzene	**1**	**38.1803**	**0**	**50**	**76**	**50**	**130**
1,2-Dichlorobenzene	**1**	**40.0448**	**0**	**50**	**80**	**50**	**130**
Isopropylbenzene	**1**	**42.1391**	**0**	**50**	**84**	**50**	**130**
Cyclohexanone	1	115.1208	0	250	46*	50	130
Camphene	1	36.8254	0	50	74	50	130
1,2,3-Trichloropropane	**1**	**39.5663**	**0**	**50**	**79**	**50**	**130**
2-Chlorotoluene	1	43.119	0	50	86	50	130
p-Ethyltoluene	1	40.5838	0	50	81	50	130
4-Chlorotoluene	1	43.5239	0	50	87	50	130
n-Propylbenzene	**1**	**42.394**	**0**	**50**	**85**	**50**	**130**
Bromobenzene	1	40.6803	0	50	81	50	130
1,3,5-Trimethylbenzene	**1**	**45.5383**	**0**	**50**	**91**	**50**	**130**
Butyl methacrylate	1	38.912	0	50	78	50	130
t-Butylbenzene	**1**	**41.4871**	**0**	**50**	**83**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**42.6087**	**0**	**50**	**85**	**50**	**130**
sec-Butylbenzene	**1**	**41.3353**	**0**	**50**	**83**	**50**	**130**
4-Isopropyltoluene	**1**	**41.3754**	**0**	**50**	**83**	**50**	**130**
n-Butylbenzene	**1**	**39.7442**	**0**	**50**	**79**	**50**	**130**
p-Diethylbenzene	1	40.4447	0	50	81	50	130
1,2,4,5-Tetramethylbenzene	1	39.7031	0	50	79	50	130
1,2-Dibromo-3-Chloropropane	1	33.1673	0	50	66	50	130
Camphor	1	464.3459	0	500	93	50	130
Hexachlorobutadiene	1	23.9836	0	50	48*	50	130
1,2,4-Trichlorobenzene	1	30.2474	0	50	60	50	130
1,2,3-Trichlorobenzene	1	27.3776	0	50	55	50	130
Naphthalene	1	28.712	0	50	57	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89300

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M132543.D	AD19283-006(MSD)	9/17/2020 2:21:00 PM
Duplicate(If applicable):	6M132542.D	AD19283-006(MS)	9/17/2020 2:00:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	53.5868	64.7742	19	30
Dichlorodifluoromethane	**1**	**56.2445**	**45.1906**	**22**	**30**
Chloromethane	**1**	**55.8238**	**44.7465**	**22**	**30**
Bromomethane	**1**	**55.9258**	**44.0331**	**24**	**30**
Vinyl Chloride	**1**	**57.2243**	**46.093**	**22**	**40**
Chloroethane	**1**	**56.6026**	**45.0962**	**23**	**30**
Trichlorofluoromethane	**1**	**58.1494**	**46.1301**	**23**	**30**
Ethyl ether	1	56.4034	46.398	19	30
Furan	1	53.6025	42.7872	22	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**61.9143**	**49.2**	**23**	**30**
Methylene Chloride	**1**	**57.1644**	**44.51**	**25**	**30**
Acrolein	**1**	**190.1136**	**143.4404**	**28**	**30**
Acrylonitrile	**1**	**41.7692**	**35.8528**	**15**	**30**
Iodomethane	1	72.4683	58.7058	21	30
Acetone	**1**	**198.5386**	**174.1374**	**13**	**30**
Carbon Disulfide	**1**	**52.9301**	**43.0984**	**20**	**30**
t-Butyl Alcohol	**1**	**144.6204**	**129.6621**	**11**	**30**
n-Hexane	1	61.2966	47.0845	26	30
Di-isopropyl-ether	1	63.4106	50.6189	22	30
1,1-Dichloroethene	**1**	**59.8916**	**48.3692**	**21**	**40**
Methyl Acetate	1	73.572	60.7803	19	30
Methyl-t-butyl ether	**1**	**67.5456**	**54.096**	**22**	**30**
1,1-Dichloroethane	**1**	**60.1723**	**47.5492**	**23**	**40**
trans-1,2-Dichloroethene	**1**	**57.0738**	**46.0283**	**21**	**30**
Ethyl-t-butyl ether	1	58.7923	46.8355	23	30
cis-1,2-Dichloroethene	**1**	**59.1104**	**46.8461**	**23**	**30**
Bromochloromethane	1	60.479	49.1152	21	30
2,2-Dichloropropane	1	66.4509	52.6942	23	30
Ethyl acetate	1	38.0396	29.6919	25	30
1,4-Dioxane	**1**	**1665.665**	**1393.228**	**18**	**30**
1,1-Dichloropropene	1	60.8343	47.4642	25	30
Chloroform	**1**	**60.5195**	**49.2247**	**21**	**40**
Cyclohexane	1	59.0496	47.2544	22	30
1,2-Dichloroethane	**1**	**63.7527**	**50.5993**	**23**	**40**
2-Butanone	**1**	**41.6932**	**35.0116**	**17**	**40**
1,1,1-Trichloroethane	**1**	**61.3767**	**48.393**	**24**	**30**
Carbon Tetrachloride	**1**	**63.3933**	**49.2225**	**25**	**40**
Vinyl Acetate	1	34.9941	26.7753	27	30
Bromodichloromethane	**1**	**63.756**	**51.4302**	**21**	**30**
Methylcyclohexane	1	54.9876	43.6548	23	30
Dibromomethane	1	63.2225	51.2331	21	30
1,2-Dichloropropane	**1**	**59.2685**	**46.4778**	**24**	**30**
Trichloroethene	**1**	**59.1943**	**47.2894**	**22**	**40**
Benzene	**1**	**60.7508**	**47.2684**	**25**	**40**
tert-Amyl methyl ether	1	64.623	51.0368	23	30
Iso-propylacetate	1	39.2526	32.0845	20	30
Methyl methacrylate	1	60.0027	50.658	17	30
Dibromochloromethane	**1**	**51.6125**	**40.5709**	**24**	**30**
2-Chloroethylvinylether	**1**	**105.3625**	**85.9316**	**20**	**30**
cis-1,3-Dichloropropene	**1**	**48.2874**	**39.136**	**21**	**30**
trans-1,3-Dichloropropene	**1**	**49.1696**	**40.2661**	**20**	**30**
Ethyl methacrylate	1	38.9701	29.9644	26	30
1,1,2-Trichloroethane	**1**	**48.9709**	**39.9355**	**20**	**30**
1,2-Dibromoethane	1	47.4204	39.5143	18	30
1,3-Dichloropropane	**1**	**48.6332**	**39.0032**	**22**	**30**
4-Methyl-2-Pentanone	**1**	**37.6965**	**32.2657**	**16**	**30**
2-Hexanone	**1**	**32.6901**	**29.902**	**8.9**	**30**
Tetrachloroethene	**1**	**46.7026**	**36.0758**	**26**	**40**
Toluene	**1**	**44.1482**	**35.197**	**23**	**40**
1,1,1,2-Tetrachloroethane	1	48.5604	38.7295	23	30
Chlorobenzene	**1**	**44.2936**	**34.966**	**24**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits

QC Batch: MBS89300

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	35.1896	26.4058	29	30
n-Amyl acetate	1	28.5513	20.8648	31*	30
Bromoform	**1**	**69.1723**	**54.2103**	**24**	**30**
Ethylbenzene	**1**	**44.5852**	**34.0166**	**27**	**30**
1,1,2,2-Tetrachloroethane	**1**	**42.382**	**33.8868**	**22**	**30**
Styrene	**1**	**41.5523**	**31.3754**	**28**	**30**
m&p-Xylenes	**1**	**84.8346**	**63.8587**	**28**	**30**
o-Xylene	**1**	**41.8252**	**31.5526**	**28**	**30**
trans-1,4-Dichloro-2-butene	1	39.0256	30.8125	24	30
1,3-Dichlorobenzene	**1**	**39.5706**	**30.1803**	**27**	**30**
1,4-Dichlorobenzene	**1**	**38.1803**	**29.3631**	**26**	**40**
1,2-Dichlorobenzene	**1**	**40.0448**	**30.2778**	**28**	**40**
Isopropylbenzene	**1**	**42.1391**	**32.0661**	**27**	**30**
Cyclohexanone	1	115.1208	103.4941	11	30
Camphene	1	36.8254	27.1146	30	30
1,2,3-Trichloropropane	**1**	**39.5663**	**32.0142**	**21**	**30**
2-Chlorotoluene	1	43.119	33.4725	25	30
p-Ethyltoluene	1	40.5838	30.7714	28	30
4-Chlorotoluene	1	43.5239	32.9825	28	30
n-Propylbenzene	**1**	**42.394**	**32.1153**	**28**	**40**
Bromobenzene	1	40.6803	30.791	28	30
1,3,5-Trimethylbenzene	**1**	**45.5383**	**35.161**	**26**	**30**
Butyl methacrylate	1	38.912	27.5838	34*	30
t-Butylbenzene	**1**	**41.4871**	**31.0009**	**29**	**30**
1,2,4-Trimethylbenzene	**1**	**42.6087**	**32.2028**	**28**	**30**
sec-Butylbenzene	**1**	**41.3353**	**30.2751**	**31**	**40**
4-Isopropyltoluene	**1**	**41.3754**	**30.6962**	**30**	**30**
n-Butylbenzene	**1**	**39.7442**	**29.2736**	**30**	**30**
p-Diethylbenzene	1	40.4447	29.6348	31*	30
1,2,4,5-Tetramethylbenzene	1	39.7031	29.6141	29	30
1,2-Dibromo-3-Chloropropane	1	33.1673	27.8283	18	30
Camphor	1	464.3459	401.4661	15	30
Hexachlorobutadiene	1	23.9836	18.6257	25	30
1,2,4-Trichlorobenzene	1	30.2474	23.0528	27	30
1,2,3-Trichlorobenzene	1	27.3776	21.3084	25	30
Naphthalene	1	28.712	23.178	21	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 11M82707.D
Matrix: Aqueous

Blank Analysis Date: 09/14/20 17:00
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD19178-014	11M82724.D	09/14/20 22:13
MBS87835	11M82710.D	09/14/20 17:55

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M132538.D
Matrix: Soil

Blank Analysis Date: 09/17/20 12:37
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD19178-013	6M132564.D	09/17/20 21:36
AD19283-006(MSD	6M132543.D	09/17/20 14:21
AD19283-006(MS)	6M132542.D	09/17/20 14:00
MBS89300	6M132541.D	09/17/20 13:39
AD19283-006	6M132540.D	09/17/20 13:19

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6
Data File: 6M130900.D
Analysis Date: 08/01/20 11:54
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.385 to 7.397 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.5	16321	PASS
75	95	30	60	51.1	42800	PASS
95	95	100	100	100.0	83807	PASS
96	95	5	9	7.3	6128	PASS
173	174	0.00	2	1.7	1176	PASS
174	95	50	100	84.9	71135	PASS
175	174	5	9	7.4	5277	PASS
176	174	95	101	98.8	70251	PASS
177	176	5	9	6.4	4486	PASS

Data File	Sample Number	Analysis Date:
6M130901.D	BLK	08/01/20 12:09
6M130902.D	BLK	08/01/20 12:30
6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51
6M130904.D	CAL @ 1 PPB	08/01/20 13:11
6M130905.D	CAL @ 2 PPB	08/01/20 13:32
6M130906.D	CAL @ 5 PPB	08/01/20 13:52
6M130907.D	CAL @ 20 PPB	08/01/20 14:13
6M130908.D	CAL @ 50 PPB	08/01/20 14:34
6M130909.D	CAL @ 100 PPB	08/01/20 14:54
6M130910.D	BLK	08/01/20 15:15
6M130911.D	CAL @ 250 PPB	08/01/20 15:36
6M130912.D	BLK	08/01/20 15:56
6M130913.D	CAL @ 500 PPB	08/01/20 16:17
6M130914.D	BLK	08/01/20 16:37
6M130915.D	BLK	08/01/20 16:58
6M130916.D	BLK	08/01/20 17:19
6M130917.D	500 PPB	08/01/20 17:39
6M130918.D	BLK	08/01/20 18:00
6M130919.D	BLK	08/01/20 18:21
6M130920.D	250 PPB	08/01/20 18:41
6M130921.D	BLK	08/01/20 19:02
6M130922.D	BLK	08/01/20 19:22
6M130923.D	BLK	08/01/20 19:43
6M130924.D	BLK	08/01/20 20:04
6M130925.D	ICV	08/01/20 20:24
6M130926.D	BLK	08/01/20 20:45
6M130927.D	CCV	08/01/20 21:05
6M130928.D	BLK	08/01/20 21:26
6M130929.D	BLK	08/01/20 21:47
6M130930.D	BLK	08/01/20 22:07
6M130931.D	BLK	08/01/20 22:28
6M130932.D	BLK	08/01/20 22:49
6M130933.D	DAILY BLANK	08/01/20 23:09

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 11
Data File: 11M82667.D
Analysis Date: 09/11/20 18:54
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.164 to 7.167 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.5	5002	PASS
75	95	30	60	51.5	16609	PASS
95	95	100	100	100.0	32280	PASS
96	95	5	9	7.5	2425	PASS
173	174	0.00	2	1.4	376	PASS
174	95	50	100	82.9	26756	PASS
175	174	5	9	8.1	2157	PASS
176	174	95	101	99.1	26512	PASS
177	176	5	9	7.8	2078	PASS

Data File	Sample Number	Analysis Date:
11M82669.D	BLK	09/11/20 19:26
11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21
11M82673.D	CAL @ 1 PPB	09/11/20 20:40
11M82674.D	CAL @ 5 PPB	09/11/20 20:58
11M82675.D	CAL @ 10 PPB	09/11/20 21:17
11M82676.D	CAL @ 20 PPB	09/11/20 21:35
11M82678.D	CAL @ 50 PPB	09/11/20 22:12
11M82680.D	500 PPB	09/11/20 22:48
11M82683.D	250 PPB	09/11/20 23:44
11M82686.D	CAL @ 100 PPB	09/12/20 00:39
11M82690.D	BLK	09/12/20 01:52
11M82691.D	ICV	09/12/20 02:11
11M82693.D	BLK	09/12/20 02:47
11M82696.D	DAILY BLANK	09/12/20 03:43
11M82699.D	BLK	09/14/20 14:43

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 11
Data File: 11M82700.D
Analysis Date: 09/14/20 14:56
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.157 to 7.160 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	16.2	7926	PASS
75	95	30	60	50.3	24564	PASS
95	95	100	100	100.0	48836	PASS
96	95	5	9	7.6	3724	PASS
173	174	0.00	2	1.2	449	PASS
174	95	50	100	78.5	38312	PASS
175	174	5	9	7.5	2879	PASS
176	174	95	101	97.4	37308	PASS
177	176	5	9	6.7	2494	PASS

Data File	Sample Number	Analysis Date:
11M82701.D	20 PPB	09/14/20 15:10
11M82702.D	CAL @ 20 PPB	09/14/20 15:28
11M82703.D	BLK	09/14/20 15:46
11M82704.D	BLK	09/14/20 16:05
11M82705.D	BLK	09/14/20 16:23
11M82706.D	DAILY BLANK	09/14/20 16:41
11M82707.D	DAILY BLANK	09/14/20 17:00
11M82708.D	AD19145-007(T)	09/14/20 17:18
11M82709.D	AD19145-008(T)	09/14/20 17:37
11M82710.D	MBS87835	09/14/20 17:55
11M82711.D	MBS87836	09/14/20 18:14
11M82712.D	AD19145-007(T:M	09/14/20 18:32
11M82713.D	AD19145-007(T:M	09/14/20 18:50
11M82714.D	BLK	09/14/20 19:09
11M82715.D	BLK	09/14/20 19:27
11M82716.D	EF-3-V-13084(0911	09/14/20 19:45
11M82717.D	EF-3-V-13084(0912	09/14/20 20:04
11M82718.D	EF-3-V-13084(TES	09/14/20 20:22
11M82719.D	AD19178-014	09/14/20 20:41
11M82720.D	AD19196-001	09/14/20 20:59
11M82721.D	AD19199-002	09/14/20 21:18
11M82722.D	BLK	09/14/20 21:36
11M82724.D	AD19178-014	09/14/20 22:13
11M82725.D	19196-001	09/14/20 22:31
11M82726.D	19199-002	09/14/20 22:49
11M82727.D	AD19199-003	09/14/20 23:08
11M82728.D	AD19202-001	09/14/20 23:26
11M82729.D	AD19202-002	09/14/20 23:44
11M82730.D	AD19206-001	09/15/20 00:03
11M82731.D	AD19206-002	09/15/20 00:21
11M82732.D	AD19206-003	09/15/20 00:40
11M82733.D	AD19206-004	09/15/20 00:58
11M82734.D	BLK	09/15/20 01:16
11M82735.D	AD19204-001	09/15/20 01:35
11M82736.D	AD19204-002	09/15/20 01:53
11M82737.D	AD19204-003	09/15/20 02:11
11M82738.D	BLK	09/15/20 02:30
11M82739.D	AD19197-001	09/15/20 02:48
11M82740.D	AD19197-002	09/15/20 03:07
11M82741.D	AD19193-001	09/15/20 03:25
11M82742.D	AD19194-001	09/15/20 03:44
11M82743.D	AD19197-004	09/15/20 04:02
11M82744.D	AD19197-003	09/15/20 04:20
11M82745.D	BLK	09/15/20 04:39

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6
Data File: 6M132532.D
Analysis Date: 09/17/20 10:39
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.391 to 7.397 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.6	7594	PASS
75	95	30	60	50.8	20762	PASS
95	95	100	100	100.0	40856	PASS
96	95	5	9	7.2	2929	PASS
173	174	0.00	2	1.3	477	PASS
174	95	50	100	91.1	37220	PASS
175	174	5	9	9.0	3336	PASS
176	174	95	101	100.2	37288	PASS
177	176	5	9	5.4	1997	PASS

Data File	Sample Number	Analysis Date:
6M132533.D	CAL @ 50 PPB	09/17/20 10:54
6M132534.D	50 PPB	09/17/20 11:15
6M132535.D	BLK	09/17/20 11:35
6M132536.D	BLK	09/17/20 11:56
6M132537.D	BLK	09/17/20 12:17
6M132538.D	DAILY BLANK	09/17/20 12:37
6M132539.D	AD19263-002	09/17/20 12:58
6M132540.D	AD19283-006	09/17/20 13:19
6M132541.D	MBS89300	09/17/20 13:39
6M132542.D	AD19283-006(MS)	09/17/20 14:00
6M132543.D	AD19283-006(MSD	09/17/20 14:21
6M132544.D	BLK	09/17/20 14:42
6M132545.D	BLK	09/17/20 15:02
6M132546.D	AD19254-003	09/17/20 15:23
6M132547.D	AD19254-002	09/17/20 15:44
6M132548.D	AD19231-001	09/17/20 16:04
6M132549.D	AD19231-002	09/17/20 16:25
6M132550.D	AD19231-003	09/17/20 16:46
6M132551.D	AD19238-001	09/17/20 17:07
6M132552.D	AD19239-001	09/17/20 17:27
6M132553.D	AD19240-001	09/17/20 17:48
6M132554.D	AD19242-001	09/17/20 18:09
6M132555.D	AD19242-002	09/17/20 18:29
6M132556.D	AD19242-003	09/17/20 18:50
6M132557.D	BLK	09/17/20 19:11
6M132558.D	AD19257-004	09/17/20 19:32
6M132559.D	AD19257-008	09/17/20 19:52
6M132560.D	AD19257-010	09/17/20 20:13
6M132561.D	AD19257-011	09/17/20 20:34
6M132562.D	AD19257-012	09/17/20 20:54
6M132563.D	AD19257-013	09/17/20 21:15
6M132564.D	AD19178-013	09/17/20 21:36
6M132565.D	AD19224-001(5X)	09/17/20 21:56
6M132566.D	19224-001(5X)	09/17/20 22:17
6M132567.D	BLK	09/17/20 22:38
6M132568.D	BLK	09/17/20 22:58
6M132569.D	BLK	09/17/20 23:19
6M132570.D	BLK	09/17/20 23:40
6M132571.D	BLK	09/18/20 00:00
6M132572.D	BLK	09/18/20 00:21
6M132573.D	BLK	09/18/20 00:42
6M132574.D	BLK	09/18/20 01:02
6M132575.D	BLK	09/18/20 06:16
6M132576.D	BLK	09/18/20 06:36
6M132577.D	BLK	09/18/20 06:57
6M132578.D	BLK	09/18/20 07:18
6M132579.D	AD19286-002	09/18/20 07:38
6M132580.D	AD19286-004	09/18/20 07:59
6M132581.D	AD19286-005	09/18/20 08:20
6M132582.D	AD19286-006	09/18/20 08:59

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FORM8

Internal Standard Areas

Evaluation Std Data File: 6M130907.D Method: EPA 8260C

Analysis Date/Time: 08/01/20 14:13

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	391232	5.12	322837	6.76	175394	8.06								
Eval File Area Limit:	195616-782464		161418-645674		87697-350788									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.56-8.56									

Data File	Sample#						
6M130901.D	BLK	647108	5.13	584956	6.76	321998	8.06
6M130902.D	BLK	662673	5.13	568512	6.76	315208	8.06
6M130903.D	CAL @ 0.5 PPB	423816	5.13	356268	6.76	199185	8.06
6M130904.D	CAL @ 1 PPB	378400	5.13	324090	6.76	180373	8.06
6M130905.D	CAL @ 2 PPB	388738	5.13	331679	6.76	184301	8.06
6M130906.D	CAL @ 5 PPB	368139	5.13	310453	6.76	178697	8.06
6M130907.D	CAL @ 20 PPB	391232	5.12	322837	6.76	175394	8.06
6M130908.D	CAL @ 50 PPB	376294	5.12	318043	6.76	177889	8.06
6M130909.D	CAL @ 100 PPB	460018	5.13	373585	6.76	219087	8.06
6M130910.D	BLK	671229	5.13	569352	6.76	321567	8.06
6M130911.D	CAL @ 250 PPB	432672	5.13	358455	6.76	285114	8.06
6M130912.D	BLK	642212	5.13	553729	6.76	305240	8.06
6M130913.D	CAL @ 500 PPB	502146	5.13	414316	6.76	281684	8.06
6M130914.D	BLK	668873	5.13	580830	6.76	327121	8.06
6M130915.D	BLK	614880	5.13	527669	6.76	274397	8.06
6M130916.D	BLK	617160	5.13	513148	6.76	280171	8.06
6M130917.D	500 PPB	679447	5.13	571293	6.76	417829A	8.06
6M130918.D	BLK	642734	5.13	541838	6.76	297229	8.06
6M130919.D	BLK	626881	5.13	524938	6.76	282166	8.06
6M130920.D	250 PPB	398719	5.13	331004	6.76	292306	8.06
6M130921.D	BLK	678500	5.13	566061	6.76	310563	8.06
6M130922.D	BLK	611781	5.13	511917	6.76	276307	8.06
6M130923.D	BLK	645653	5.12	562098	6.76	314533	8.06
6M130924.D	BLK	637312	5.13	544069	6.76	302683	8.06
6M130925.D	ICV	562401	5.13	479620	6.76	275791	8.06
6M130926.D	BLK	612242	5.13	532032	6.76	296223	8.06
6M130927.D	CCV	479371	5.13	395051	6.76	229839	8.06
6M130928.D	BLK	626008	5.13	553278	6.76	305603	8.06
6M130929.D	BLK	653466	5.13	560376	6.76	310169	8.06
6M130930.D	BLK	636660	5.13	557215	6.76	311910	8.06
6M130931.D	BLK	624066	5.13	544071	6.76	305600	8.06
6M130932.D	BLK	577281	5.13	502367	6.76	285043	8.06

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0091101 0107

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M130907.D Method: EPA 8260C

Analysis Date/Time: 08/01/20 14:13

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	391232	5.12	322837	6.76	175394	8.06								
Eval File Area Limit:	195616-782464		161418-645674		87697-350788									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.56-8.56									
Data File Sample#														
6M130933.D DAILY BLANK	622512	5.13	537053	6.76	299436	8.06								

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0091101 0108

FORM8

Internal Standard Areas

Evaluation Std Data File: 11M82676.D Method: EPA 8260C

Analysis Date/Time: 09/11/20 21:35

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	261943	4.96	208671	6.55	104916	7.82								
Eval File Area Limit:	130972-523886		104336-417342		52458-209832									
Eval File Rt Limit:	4.46-5.46		6.05-7.05		7.32-8.32									

Data File	Sample#						
11M82669.D	BLK	262775	4.96	214512	6.55	96478	7.82
11M82672.D	CAL @ 0.5 PPB	247668	4.96	205853	6.55	94226	7.82
11M82673.D	CAL @ 1 PPB	247374	4.96	200307	6.55	93440	7.82
11M82674.D	CAL @ 5 PPB	254008	4.96	208903	6.55	98904	7.82
11M82675.D	CAL @ 10 PPB	258924	4.96	207537	6.55	102207	7.82
11M82676.D	CAL @ 20 PPB	261943	4.96	208671	6.55	104916	7.82
11M82678.D	CAL @ 50 PPB	280039	4.96	221229	6.55	113051	7.82
11M82680.D	500 PPB	480832	4.96	290123	6.55	253143A	7.82
11M82683.D	250 PPB	347579	4.96	265725	6.55	275627A	7.82
11M82686.D	CAL @ 100 PPB	304276	4.96	249762	6.55	158606	7.82
11M82690.D	BLK	244800	4.96	189212	6.55	90042	7.82
11M82691.D	ICV	252706	4.96	213750	6.55	106066	7.82
11M82693.D	BLK	265912	4.96	210579	6.55	99482	7.82
11M82696.D	DAILY BLANK	257744	4.96	211880	6.55	94190	7.82
11M82699.D	BLK	324497	4.96	273049	6.55	149394	7.82

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0091101 0109

FORM8

Internal Standard Areas

Evaluation Std Data File: 11M82702.D Method: EPA 8260C

Analysis Date/Time: 09/14/20 15:28

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	326770	4.96	253884	6.55	128548	7.82								
Eval File Area Limit:	163385-653540		126942-507768		64274-257096									
Eval File Rt Limit:	4.46-5.46		6.05-7.05		7.32-8.32									

Data File	Sample#						
11M82701.D	20 PPB	348965	4.96	281599	6.55	140217	7.82
11M82703.D	BLK	309647	4.96	245868	6.55	113299	7.82
11M82704.D	BLK	297878	4.96	242834	6.55	110309	7.82
11M82705.D	BLK	290121	4.96	221236	6.55	102810	7.82
11M82706.D	DAILY BLANK	286556	4.96	232133	6.55	116563	7.82
11M82707.D	DAILY BLANK	284959	4.96	228553	6.55	104004	7.82
11M82708.D	AD19145-007(T)	277868	4.96	222752	6.55	100903	7.82
11M82709.D	AD19145-008(T)	276167	4.96	213596	6.55	93837	7.82
11M82710.D	MBS87835	270991	4.96	224997	6.55	112681	7.82
11M82711.D	MBS87836	302114	4.96	229947	6.55	124704	7.82
11M82712.D	AD19145-007(T:MS)	293307	4.96	229090	6.55	113979	7.82
11M82713.D	AD19145-007(T:MSD)	304035	4.96	236651	6.55	118098	7.82
11M82714.D	BLK	265648	4.96	213338	6.55	97352	7.82
11M82715.D	BLK	256940	4.96	205819	6.55	94499	7.82
11M82716.D	EF-3-V-13084(091120	252667	4.96	205295	6.55	93144	7.82
11M82717.D	EF-3-V-13084(091220	256449	4.96	195076	6.55	88035	7.82
11M82718.D	EF-3-V-13084(TEST)	251706	4.96	199664	6.55	89319	7.82
11M82719.D	AD19178-014	247518	4.96	191192	6.55	84260	7.82
11M82720.D	AD19196-001	236096	4.96	189539	6.55	84086	7.82
11M82721.D	AD19199-002	240405	4.96	192339	6.55	84713	7.82
11M82722.D	BLK	230514	4.96	183527	6.55	85671	7.82
11M82724.D	AD19178-014	218103	4.96	182155	6.55	83978	7.82
11M82725.D	19196-001	221136	4.96	172305	6.55	78769	7.82
11M82726.D	19199-002	220547	4.96	169959	6.55	74719	7.82
11M82727.D	AD19199-003	230573	4.96	189541	6.55	85614	7.82
11M82728.D	AD19202-001	228030	4.96	173706	6.55	77728	7.82
11M82729.D	AD19202-002	214704	4.96	175974	6.55	78574	7.82
11M82730.D	AD19206-001	212787	4.96	167674	6.55	73256	7.82
11M82731.D	AD19206-002	217982	4.96	180991	6.55	79495	7.82
11M82732.D	AD19206-003	197138	4.96	155277	6.55	71063	7.82
11M82733.D	AD19206-004	202011	4.96	164344	6.55	72076	7.82
11M82734.D	BLK	201376	4.96	174023	6.55	78513	7.82

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 11M82702.D Method: EPA 8260C

Analysis Date/Time: 09/14/20 15:28

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	326770	4.96	253884	6.55	128548	7.82								
Eval File Area Limit:	163385-653540		126942-507768		64274-257096									
Eval File Rt Limit:	4.46-5.46		6.05-7.05		7.32-8.32									

Data File	Sample#						
11M82735.D	AD19204-001	206652	4.96	169521	6.55	77356	7.82
11M82736.D	AD19204-002	203660	4.96	163485	6.55	76490	7.82
11M82737.D	AD19204-003	202815	4.96	161290	6.55	75304	7.82
11M82738.D	BLK	213265	4.96	173715	6.55	77271	7.82
11M82739.D	AD19197-001	203427	4.96	169948	6.55	74916	7.82
11M82740.D	AD19197-002	200325	4.96	160356	6.55	73523	7.82
11M82741.D	AD19193-001	199254	4.96	162565	6.55	73336	7.82
11M82742.D	AD19194-001	193760	4.96	160398	6.55	71042	7.82
11M82743.D	AD19197-004	189243	4.96	139595	6.55	67215	7.82
11M82744.D	AD19197-003	213245	4.96	168899	6.55	82670	7.82
11M82745.D	BLK	208599	4.96	172546	6.55	79967	7.82

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0091101 0111

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M132533.D Method: EPA 8260C

Analysis Date/Time: 09/17/20 10:54

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	256311	5.12	281017	6.76	183778	8.05								
Eval File Area Limit:	128156-512622		140508-562034		91889-367556									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.55-8.55									

Data File	Sample#						
6M132534.D	50 PPB	264011	5.12	287374	6.76	183693	8.05
6M132535.D	BLK	260487	5.12	291196	6.76	177376	8.05
6M132536.D	BLK	284038	5.12	328263	6.76	200011	8.05
6M132537.D	BLK	276211	5.12	313016	6.76	191471	8.05
6M132538.D	DAILY BLANK	280410	5.12	311766	6.76	186117	8.05
6M132539.D	AD19263-002	258620	5.12	269164	6.76	143418	8.05
6M132540.D	AD19283-006	277457	5.12	307195	6.76	178376	8.05
6M132541.D	MBS89300	280964	5.13	303747	6.76	198012	8.05
6M132542.D	AD19283-006(MS)	296485	5.12	318320	6.76	203111	8.05
6M132543.D	AD19283-006(MSD)	306766	5.12	330755	6.76	203739	8.05
6M132544.D	BLK	280284	5.12	313820	6.76	193885	8.05
6M132545.D	BLK	275121	5.12	306297	6.76	185439	8.05
6M132546.D	AD19254-003	218503	5.12	192096	6.76	86200A	8.06
6M132547.D	AD19254-002	188877	5.13	165012	6.76	79666A	8.05
6M132548.D	AD19231-001	227058	5.12	246579	6.76	137679	8.05
6M132549.D	AD19231-002	230969	5.12	246464	6.76	128457	8.05
6M132550.D	AD19231-003	274459	5.12	321816	6.76	200025	8.05
6M132551.D	AD19238-001	259922	5.12	262022	6.76	122869	8.05
6M132552.D	AD19239-001	251469	5.12	263305	6.76	121985	8.05
6M132553.D	AD19240-001	220406	5.12	233646	6.76	126480	8.05
6M132554.D	AD19242-001	243816	5.12	279156	6.76	171524	8.05
6M132555.D	AD19242-002	254242	5.12	297340	6.76	191783	8.05
6M132556.D	AD19242-003	244133	5.12	282358	6.76	170895	8.05
6M132557.D	BLK	256288	5.12	293154	6.76	181545	8.05
6M132558.D	AD19257-004	263492	5.12	308253	6.76	182343	8.05
6M132559.D	AD19257-008	242757	5.12	247904	6.76	133519	8.05
6M132560.D	AD19257-010	260556	5.12	305531	6.76	185872	8.05
6M132561.D	AD19257-011	255972	5.12	295776	6.76	168556	8.05
6M132562.D	AD19257-012	259649	5.12	299093	6.76	183747	8.05
6M132563.D	AD19257-013	258186	5.12	300378	6.76	181791	8.05
6M132564.D	AD19178-013	220550	5.12	198796	6.76	87866A	8.05
6M132565.D	AD19224-001(5X)	236500	5.12	291314	6.76	183720	8.05

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0091101 0112

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M132533.D Method: EPA 8260C

Analysis Date/Time: 09/17/20 10:54

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	256311	5.12	281017	6.76	183778	8.05								
Eval File Area Limit:	128156-512622		140508-562034		91889-367556									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.55-8.55									

Data File	Sample#						
6M132566.D	19224-001(5X)	270251	5.12	326860	6.76	222229	8.05
6M132567.D	BLK	294772	5.12	336642	6.76	210062	8.05
6M132568.D	BLK	286607	5.12	331803	6.76	206932	8.05
6M132569.D	BLK	290183	5.12	339731	6.76	205940	8.05
6M132570.D	BLK	286355	5.12	330411	6.76	203464	8.05
6M132571.D	BLK	274952	5.12	316616	6.76	197456	8.05
6M132572.D	BLK	268284	5.12	303520	6.76	185226	8.05
6M132573.D	BLK	276891	5.12	315678	6.76	194608	8.05
6M132574.D	BLK	280198	5.13	320339	6.76	198212	8.05
6M132575.D	BLK	258170	5.12	298762	6.76	178997	8.05
6M132576.D	BLK	282524	5.12	323353	6.76	200534	8.05
6M132577.D	BLK	282221	5.12	322960	6.76	200248	8.05
6M132578.D	BLK	270393	5.12	301049	6.76	193193	8.05
6M132579.D	AD19286-002	252410	5.12	292642	6.76	177985	8.05
6M132580.D	AD19286-004	252725	5.12	284080	6.76	176293	8.05
6M132581.D	AD19286-005	254748	5.12	290383	6.76	179480	8.05
6M132582.D	AD19286-006	231499	5.12	272710	6.76	169281	8.05

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

GC/MS Volatile Data
Sample Data

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19178-013
Client Id: HRPB-1
Data File: 6M132564.D
Analysis Date: 09/17/20 21:36
Date Rec/Extracted: 09/11/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5.87g
Final Vol: NA
Dilution: 0.852
Solids: 66

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0026	U	56-23-5	Carbon Tetrachloride	0.0026	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0026	U	108-90-7	Chlorobenzene	0.0026	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0026	U	75-00-3	Chloroethane	0.0026	U
79-00-5	1,1,2-Trichloroethane	0.0026	U	67-66-3	Chloroform	0.0026	U
75-34-3	1,1-Dichloroethane	0.0026	U	74-87-3	Chloromethane	0.0026	U
75-35-4	1,1-Dichloroethene	0.0026	U	156-59-2	cis-1,2-Dichloroethene	0.0026	U
96-18-4	1,2,3-Trichloropropane	0.0026	U	10061-01-5	cis-1,3-Dichloropropene	0.0026	U
95-63-6	1,2,4-Trimethylbenzene	0.0013	U	124-48-1	Dibromochloromethane	0.0026	U
95-50-1	1,2-Dichlorobenzene	0.0026	U	75-71-8	Dichlorodifluoromethane	0.0026	U
107-06-2	1,2-Dichloroethane	0.0026	U	100-41-4	Ethylbenzene	0.0013	U
78-87-5	1,2-Dichloropropane	0.0026	U	98-82-8	Isopropylbenzene	0.0013	U
108-67-8	1,3,5-Trimethylbenzene	0.0013	U	79601-23-1	m&p-Xylenes	0.0015	U
541-73-1	1,3-Dichlorobenzene	0.0026	U	**75-09-2**	**Methylene Chloride**	**0.0026**	**0.0029**
142-28-9	1,3-Dichloropropane	0.0026	U	1634-04-4	Methyl-t-butyl ether	0.0013	U
106-46-7	1,4-Dichlorobenzene	0.0026	U	104-51-8	n-Butylbenzene	0.0013	U
123-91-1	1,4-Dioxane	0.13	U	103-65-1	n-Propylbenzene	0.0013	U
78-93-3	2-Butanone	0.0026	U	95-47-6	o-Xylene	0.0013	U
110-75-8	2-Chloroethylvinylether	0.0026	U	135-98-8	sec-Butylbenzene	0.0013	U
591-78-6	2-Hexanone	0.0026	U	100-42-5	Styrene	0.0026	U
99-87-6	4-Isopropyltoluene	0.0013	U	75-65-0	t-Butyl Alcohol	0.013	U
108-10-1	4-Methyl-2-Pentanone	0.0026	U	98-06-6	t-Butylbenzene	0.0013	U
67-64-1	**Acetone**	**0.013**	**0.040**	127-18-4	Tetrachloroethene	0.0026	U
107-02-8	Acrolein	0.013	U	108-88-3	Toluene	0.0013	U
107-13-1	Acrylonitrile	0.0026	U	156-60-5	trans-1,2-Dichloroethene	0.0026	U
71-43-2	Benzene	0.0013	U	10061-02-6	trans-1,3-Dichloropropene	0.0026	U
75-27-4	Bromodichloromethane	0.0026	U	79-01-6	Trichloroethene	0.0026	U
75-25-2	Bromoform	0.0026	U	75-69-4	Trichlorofluoromethane	0.0026	U
74-83-9	Bromomethane	0.0026	U	75-01-4	Vinyl Chloride	0.0026	U
75-15-0	Carbon Disulfide	0.0044	U	1330-20-7	Xylenes (Total)	0.0013	U

Worksheet #: 567344

Total Target Concentration 0.043

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

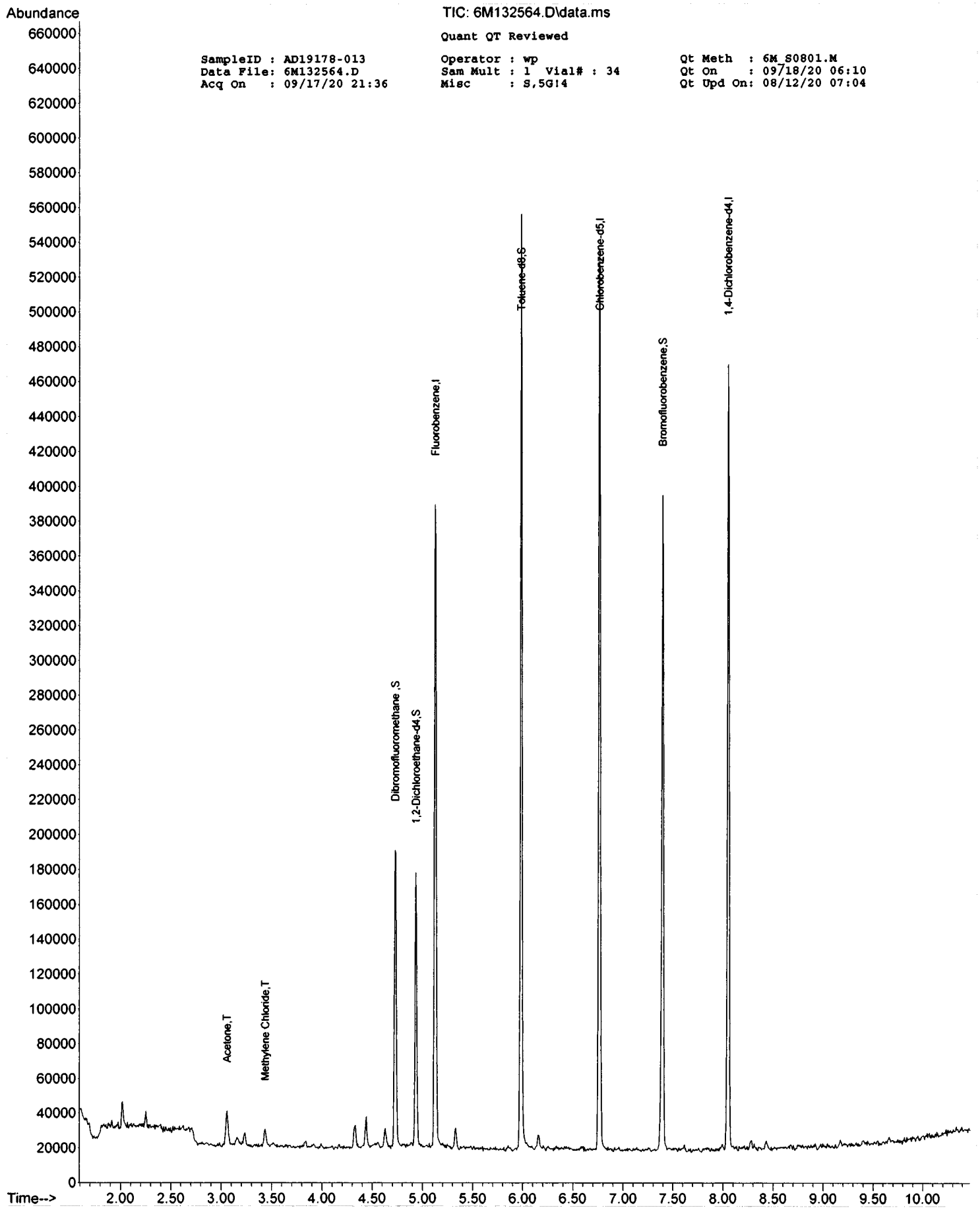
Quantitation Report (QT Reviewed)

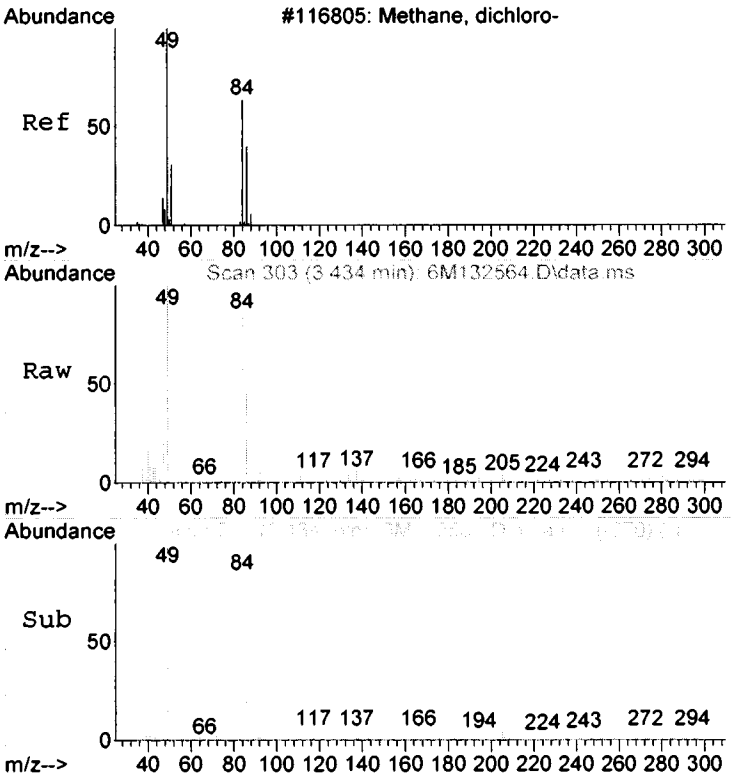
SampleID : AD19178-013 Operator : wp Qt Meth : 6M_S0801.M
Data File: 6M132564.D Sam Mult : 1 Vial# : 34 Qt On : 09/18/20 06:10
Acq On : 09/17/20 21:36 Misc : S,5G!4 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\09-17-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	220550	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	198796	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	87866	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	68498	34.95	ug/l	0.00
Spiked Amount 30.000			Recovery = 116.50%			
39) 1,2-Dichloroethane-d4	4.934	67	34723	32.85	ug/l	0.00
Spiked Amount 30.000			Recovery = 109.50%			
66) Toluene-d8	5.983	98	238516	29.08	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.93%			
76) Bromofluorobenzene	7.391	174	73946	31.97	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.57%			
Target Compounds						Qvalue
15) Methylene Chloride	3.434	84	4492	2.2517	ug/l	94
19) Acetone	3.056	43	23412	31.2895	ug/l	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

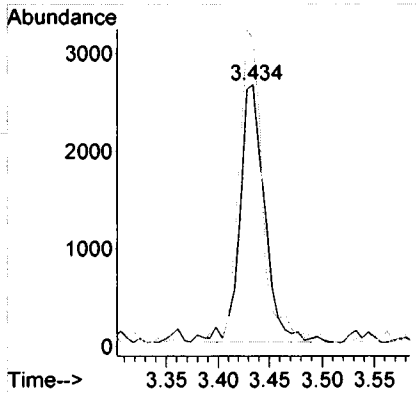

Abundance
TIC: 6M132564.D\data.ms
Quant QT Reviewed
SampleID : AD19178-013
Data File: 6M132564.D
Acq On : 09/17/20 21:36
Operator : wp
Sam Mult : 1 Vial# : 34
Misc : S,5G14
Qt Meth : 6M_S0801.M
Qt On : 09/18/20 06:10
Qt Upd On: 08/12/20 07:04
Acetone,T
Methylene Chloride,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

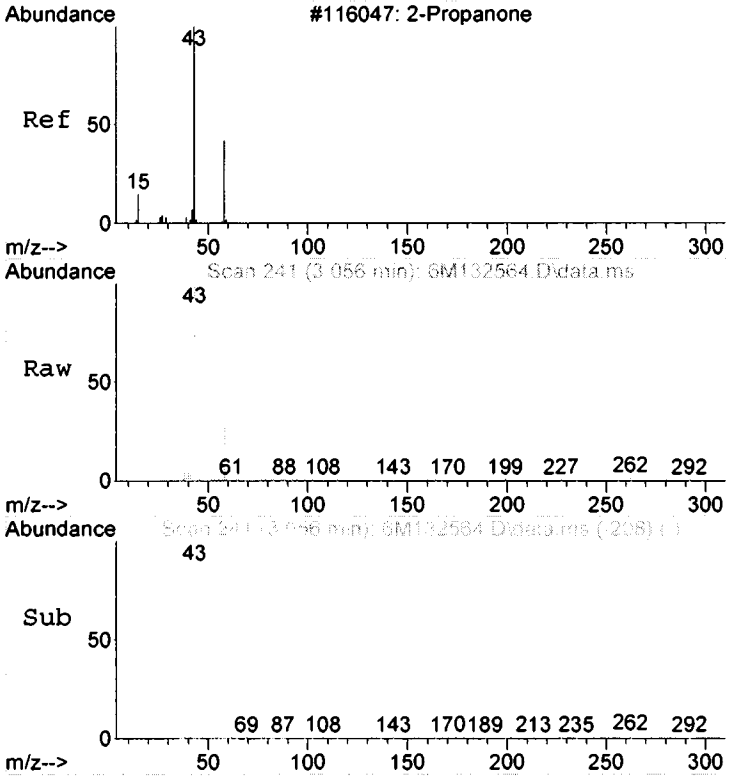


#15
Methylene Chloride
Concen: 2.25 ug/l
RT: 3.434 min Scan# 303
Delta R.T. -0.000 min
Lab File: 6M132564.D
Acq: 17 Sep 2020 21:36

Tgt Ion: 84 Resp: 4492

Ion	Ratio	Lower	Upper
84	100		
49	117.0	47.0	188.0
86	50.9	25.7	102.7

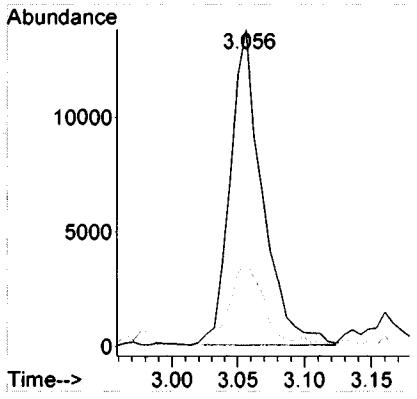




#19
Acetone
Concen: 31.29 ug/l
RT: 3.056 min Scan# 241
Delta R.T. -0.000 min
Lab File: 6M132564.D
Acq: 17 Sep 2020 21:36

Tgt Ion: 43 Resp: 23412

Ion	Ratio	Lower	Upper
43	100		
58	26.7	0.0	69.9



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19178-014
Client Id: Trip blank
Data File: 11M82724.D
Analysis Date: 09/14/20 22:13
Date Rec/Extracted: 09/11/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 567344

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

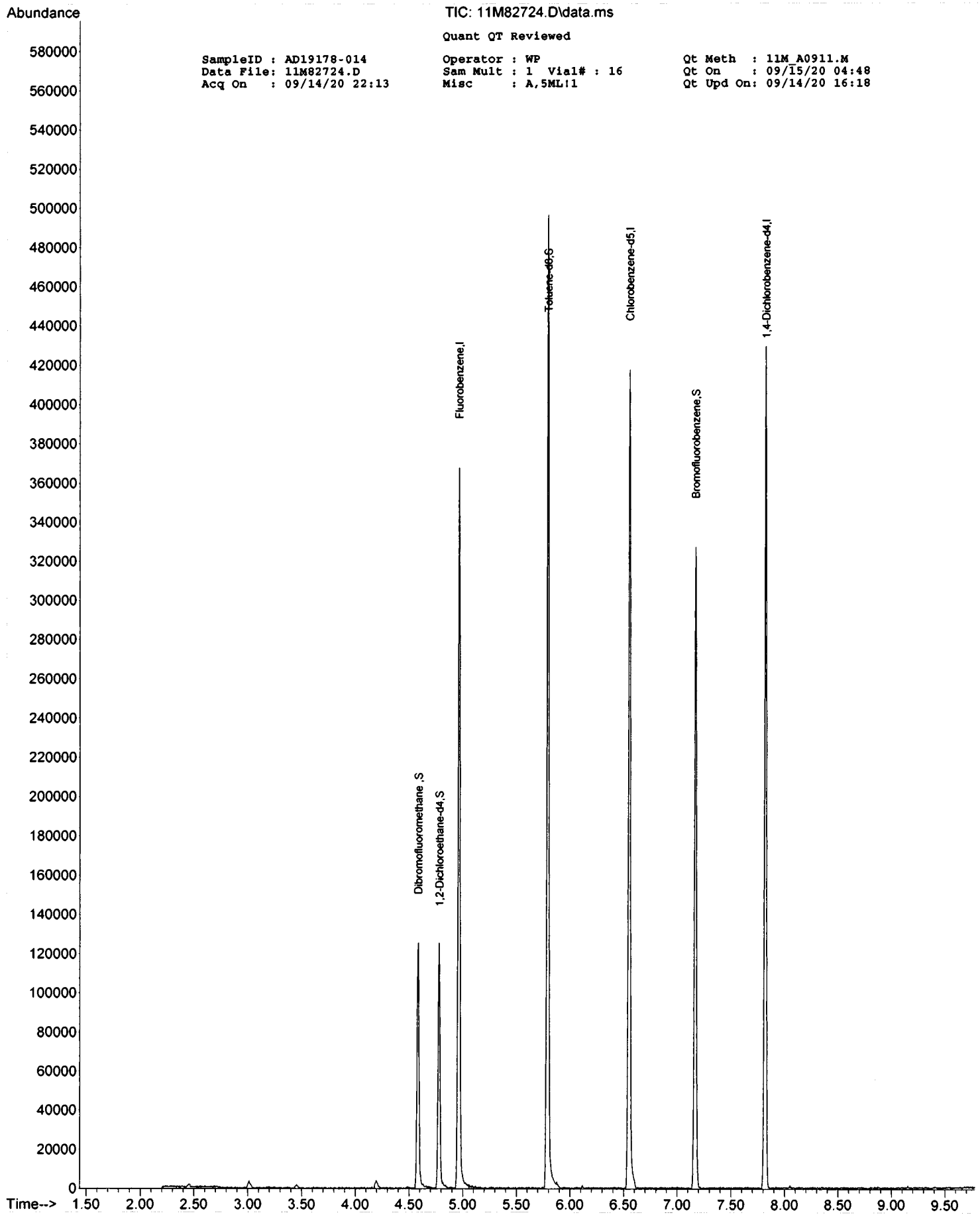
Quantitation Report (QT Reviewed)

SampleID : AD19178-014 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82724.D Sam Mult : 1 Vial# : 16 Qt On : 09/15/20 04:48
Acq On : 09/14/20 22:13 Misc : A,5ML!1 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-14-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	218103	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.549	117	182155	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.819	152	83978	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.585	111	51543	28.35	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.50%			
39) 1,2-Dichloroethane-d4	4.781	67	30382	31.85	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.17%			
66) Toluene-d8	5.791	98	242722	30.47	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.57%			
76) Bromofluorobenzene	7.167	174	65604	30.99	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.30%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 11M82724.D\data.ms
Quant QT Reviewed
SampleID : AD19178-014
Data File: 11M82724.D
Acq On : 09/14/20 22:13
Operator : WP
Sam Mult : 1 Vial# : 16
Misc : A,5ML:1
Qt Meth : 11M_A0911.M
Qt On : 09/15/20 04:48
Qt Upd On: 09/14/20 16:18
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

GC/MS Volatile Data
Standards Data

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M130907.D	CAL @ 20 PPB	08/01/20 14:13	2	6M130906.D	CAL @ 5 PPB	08/01/20 13:52
3	6M130905.D	CAL @ 2 PPB	08/01/20 13:32	4	6M130908.D	CAL @ 50 PPB	08/01/20 14:34
5	6M130909.D	CAL @ 100 PPB	08/01/20 14:54	6	6M130911.D	CAL @ 250 PPB	08/01/20 15:36
7	6M130913.D	CAL @ 500 PPB	08/01/20 16:17	8	6M130904.D	CAL @ 1 PPB	08/01/20 13:11
9	6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.3242	0.3766	0.3696	0.3486	0.2749	0.2732	0.2410	-----	-----	0.315	1.65	0.995	0.999	17	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dichlorodifluorometha	1	0	Avg	0.2181	0.2387	0.2337	0.2248	0.1825	0.1780	0.1623	-----	-----	0.205	1.64	0.997	1.00	15	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloromethane	1	0	Qua	0.3039	0.3449	0.3821	0.3138	0.2351	0.2269	0.1945	-----	-----	0.286	1.81	0.993	0.999	24	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromomethane	1	0	Avg	0.1809	0.2145	0.2351	0.1978	0.1570	0.1692	0.1689	-----	-----	0.189	2.23	0.999	0.999	15	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Chloride	1	0	Avg	0.3041	0.3528	0.3432	0.3247	0.2577	0.2580	0.2226	-----	-----	0.295	1.92	0.994	0.999	17	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroethane	1	0	Avg	0.2054	0.2373	0.2413	0.2180	0.1754	0.1741	0.1521	-----	-----	0.201	2.32	0.995	0.999	17	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichlorofluoromethan	1	0	Avg	0.4975	0.5513	0.5623	0.5308	0.4347	0.4376	0.3824	-----	-----	0.485	2.56	0.995	0.999	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl ether	1	0	Avg	0.1791	0.1884	0.2074	0.1831	0.1704	0.1672	0.1542	-----	-----	0.179	2.81	0.998	1.00	9.5	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Furan	1	0	Avg	0.4160	0.4753	0.4342	0.4353	0.3687	0.3632	0.3190	-----	-----	0.402	2.84	0.995	1.00	13	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1877	0.2097	0.2168	0.1972	0.1669	0.1668	0.1470	-----	-----	0.185	3.01	0.996	1.00	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methylene Chloride	1	0	Avg	0.2634	0.2964	0.3739	0.2832	0.2412	0.2330	0.2082	-----	-----	0.271	3.43	0.996	1.00	20	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acrolein	1	0	Avg	0.0358	0.0333	0.0349	0.0362	0.0361	0.0354	0.0332	-----	-----	0.0350	2.92	0.999	1.00	3.6		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Acrylonitrile	1	0	Avg	0.1111	0.1181	0.1223	0.1092	0.0967	0.0957	0.0891	-----	-----	0.106	3.64	0.999	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iodomethane	1	0	Qua	0.1647	0.1243	0.1405	0.2321	0.2322	0.2466	0.2599	-----	-----	0.200	3.17	0.999	1.00	28		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acetone	1	0	Avg	0.1057	0.1116	0.1275	0.1053	0.0914	0.0888	0.0818	-----	-----	0.102	3.06	0.998	1.00	15	0.10 a	100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Carbon Disulfide	1	0	Avg	0.6817	0.7408	0.7938	0.7350	0.6089	0.6217	0.5554	-----	-----	0.677	3.23	0.997	0.999	13	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butyl Alcohol	1	0	Avg	0.0520	0.0491	0.0522	0.0533	0.0466	0.0468	0.0450	-----	-----	0.0493	3.51	0.999	1.00	6.6		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
n-Hexane	1	0	Avg	0.2730	0.2774	0.2687	0.3058	0.2514	0.2497	0.2193	-----	-----	0.264	3.91	0.995	0.999	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Di-isopropyl-ether	1	0	Avg	0.6172	0.6209	0.6923	0.6771	0.6140	0.6071	0.5681	-----	-----	0.628	4.06	0.999	1.00	6.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1-Dichloroethene	1	0	Avg	0.3631	0.3650	0.3598	0.3828	0.3109	0.3145	0.2826	-----	-----	0.340	3.02	0.997	0.999	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl Acetate	1	0	Avg	0.2296	0.2172	0.2345	0.2212	0.1951	0.1905	0.1798	-----	-----	0.210	3.34	0.999	1.00	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl-t-butyl ether	1	0	Avg	0.5441	0.5269	0.5497	0.5497	0.5258	0.5118	0.4857	0.6095	-----	0.538	3.67	0.999	1.00	6.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethane	1	0	Avg	0.4524	0.4817	0.4543	0.4897	0.4207	0.4154	0.3666	-----	-----	0.440	4.03	0.996	1.00	9.7	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,2-Dichloroethe	1	0	Avg	0.2771	0.2919	0.2503	0.2893	0.2345	0.2378	0.2097	-----	-----	0.256	3.68	0.996	0.999	12	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl-t-butyl ether	1	0	Avg	0.6879	0.6910	0.7240	0.7260	0.6762	0.6746	0.6340	-----	-----	0.688	4.32	0.999	1.00	4.6	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,2-Dichloroethene	1	0	Avg	0.4552	0.4622	0.4795	0.4939	0.4227	0.4185	0.3835	-----	-----	0.445	4.44	0.998	1.00	8.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromochloromethane	1	0	Avg	0.2197	0.2330	0.2181	0.2191	0.1940	0.1829	0.1666	-----	-----	0.205	4.59	0.997	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2,2-Dichloropropane	1	0	Avg	0.3659	0.3861	0.3672	0.4074	0.3327	0.3418	0.3095	-----	-----	0.359	4.45	0.997	0.999	9.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl acetate	1	0	Avg	0.3062	0.3178	0.3838	0.3336	0.3021	0.2881	0.2736	-----	-----	0.315	4.46	0.999	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dioxane	1	0	Avg	0.0058	0.0051	0.0064	0.0058	0.0051	0.0054	0.0049	-----	-----	0.00553	5.52	0.998	1.00	9.3		1000.	250.0	100.0	2500.	5000.	12500	25000		
1,1-Dichloropropene	1	0	Avg	0.3662	0.3927	0.3913	0.4002	0.3336	0.3302	0.2997	-----	-----	0.359	4.85	0.997	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroform	1	0	Avg	0.4886	0.5029	0.4794	0.5092	0.4406	0.4384	0.3926	-----	-----	0.465	4.64	0.997	1.00	9.1	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromofluoromethan	1	0	Avg	0.2654	0.2692	0.2716	0.2701	0.2644	0.2586	0.2612	0.2768	0.2618	0.267	4.73	-1	-1	2.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.3863	0.3848	0.3951	0.4084	0.3448	0.3457	0.3093	-----	-----	0.368	4.80	0.997	1.00	9.6	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichloroethane-d4	1	0	Avg	0.1444	0.1461	0.1472	0.1512	0.1397	0.1348	0.1341	0.1492	0.1468	0.144	4.93	-1	-1	4.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3539	0.3790	0.3721	0.3639	0.3333	0.3213	0.3070	-----	-----	0.347	4.98	0.999	1.00	7.8	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Butanone	1	0	Avg	0.1524	0.1380	0.1574	0.1565	0.1473	0.1471	0.1433	-----	-----	0.149	4.43	1.00	1.00	4.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,1-Trichloroethane	1	0	Avg	0.4225	0.4503	0.4378	0.4587	0.3901	0.3949	0.3565	-----	-----	0.416	4.76	0.997	1.00	8.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Carbon Tetrachloride	1	0	Avg	0.3596	0.3680	0.3514	0.4003	0.3368	0.3523	0.3172	-----	-----	0.355	4.86	0.997	0.999	7.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Acetate	1	0	Avg	0.7402	0.7749	0.7104	0.7905	0.7601	0.7527	0.7183	-----	-----	0.750	4.05	0.999	1.00	3.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromodichloromethan	1	0	Avg	0.3293	0.3098	0.3224	0.3483	0.3290	0.3283	0.3129	-----	-----	0.326	5.60	0.999	1.00	3.9	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags	*Note:* Avg Rsd: 11.17
a - failed the min rf criteria	*Corr 1 = Correlation Coefficient for linear Eq.*
c - failed the minimum correlation coeff criteria(if applicable)	*Corr 2 = Correlation Coefficient for quad Eq.*
	Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M130907.D	CAL @ 20 PPB	08/01/20 14:13	2	6M130906.D	CAL @ 5 PPB	08/01/20 13:52
3	6M130905.D	CAL @ 2 PPB	08/01/20 13:32	4	6M130908.D	CAL @ 50 PPB	08/01/20 14:34
5	6M130909.D	CAL @ 100 PPB	08/01/20 14:54	6	6M130911.D	CAL @ 250 PPB	08/01/20 15:36
7	6M130913.D	CAL @ 500 PPB	08/01/20 16:17	8	6M130904.D	CAL @ 1 PPB	08/01/20 13:11
9	6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.3627	0.4137	0.4004	0.4215	0.3570	0.3594	0.3249	-----	-----	0.377	5.45	0.997	1.00	9.4	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromomethane	1	0	Avg	0.1687	0.1700	0.1803	0.1759	0.1694	0.1629	0.1594	-----	-----	0.170	5.53	1.00	1.00	4.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichloropropane	1	0	Avg	0.2580	0.2704	0.2913	0.2775	0.2467	0.2412	0.2261	-----	-----	0.259	5.46	0.999	1.00	8.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichloroethene	1	0	Avg	0.2951	0.3150	0.3303	0.3244	0.2707	0.2719	0.2454	-----	-----	0.293	5.33	0.997	1.00	11	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Benzene	1	0	Avg	1.0575	1.1184	1.1183	1.1238	0.9451	0.9413	0.8289	0.9677	-----	1.01	4.98	0.996	1.00	11	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
tert-Amyl methyl ether	1	0	Avg	0.5832	0.6371	0.5915	0.6130	0.5853	0.5828	0.5504	-----	-----	0.592	5.02	0.999	1.00	4.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iso-propylacetate	1	0	Avg	0.5311	0.4961	0.5080	0.5336	0.5416	0.5296	0.5171	-----	-----	0.522	4.98	1.00	1.00	3.1	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl methacrylate	1	0	Avg	0.2673	0.2618	0.2320	0.2661	0.2667	0.2615	0.2311	-----	-----	0.255	5.48	0.996	1.00	6.4	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromochloromethan	1	0	Avg	0.2800	0.2445	0.2470	0.2892	0.3050	0.3043	0.3006	-----	-----	0.282	6.45	1.00	1.00	9.2	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chloroethylvinylethe	1	0	Avg	0.0776	0.0757	0.0963	0.0795	0.0771	0.0749	0.0744	-----	-----	0.0794	5.73	1.00	1.00	9.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,3-Dichloropropen	1	0	Avg	0.4359	0.4419	0.4185	0.4810	0.4596	0.4608	0.4319	-----	-----	0.447	5.83	0.999	1.00	4.7	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,3-Dichloroprop	1	0	Avg	0.3907	0.3619	0.3471	0.4109	0.4138	0.4154	0.3997	-----	-----	0.391	6.12	1.00	1.00	6.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl methacrylate	1	0	Avg	0.2547	0.2517	0.2586	0.2542	0.2549	0.2499	0.2490	-----	-----	0.253	6.14	1.00	1.00	1.3	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloroethane	1	0	Avg	0.2652	0.2614	0.2671	0.2643	0.2569	0.2494	0.2383	-----	-----	0.258	6.22	0.999	1.00	4.0	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromoethane	1	0	Avg	0.2662	0.2400	0.2701	0.2841	0.2789	0.2673	0.2570	0.2749	-----	0.267	6.53	0.999	1.00	5.2	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.4699	0.4626	0.4806	0.4712	0.4484	0.4353	0.4219	-----	-----	0.456	6.32	1.00	1.00	4.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Methyl-2-Pentanone	1	0	Avg	0.3436	0.3517	0.4208	0.3380	0.3387	0.3326	0.3239	-----	-----	0.350	5.90	1.00	1.00	9.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Hexanone	1	0	Avg	0.2619	0.2833	0.3365	0.2716	0.2648	0.2576	0.2538	-----	-----	0.276	6.33	1.00	1.00	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Tetrachloroethene	1	0	Avg	0.2857	0.3011	0.2675	0.3048	0.2708	0.2651	0.2503	-----	-----	0.278	6.32	0.999	1.00	7.2	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Toluene-d8	1	0	Avg	1.2292	1.2646	1.2327	1.2146	1.2462	1.2572	1.2415	1.2297	1.2250	1.24	5.98	-1	-1	1.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.8244	0.8979	0.8864	0.8420	0.7512	0.7357	0.6785	0.8725	-----	0.811	6.02	0.998	1.00	9.9	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2781	0.2929	0.2887	0.2970	0.2921	0.2946	0.2849	-----	-----	0.290	6.81	1.00	1.00	2.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chlorobenzene	1	0	Avg	0.9025	0.9069	1.0477	0.9388	0.8438	0.8162	0.7483	-----	-----	0.886	6.78	0.998	1.00	11	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Butyl acrylate	1	0	Avg	0.8717	0.8120	0.9465	0.8808	0.8809	0.6395	0.9670	-----	-----	0.857	7.02	0.972	0.993	13	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Amyl acetate	1	0	Avg	0.8056	0.8074	0.9907	0.8273	0.8238	0.6002	0.8169	-----	-----	0.810	7.14	0.982	0.993	14	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromoform	1	0	Qua	0.3481	0.2725	0.2796	0.3608	0.3695	0.2812	0.4845	-----	-----	0.342	7.23	0.958	0.993	22	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethylbenzene	1	0	Avg	0.7583	0.7104	0.7448	0.7496	0.6512	0.4819	0.5397	0.6651	-----	0.663	6.82	0.994	0.994	15	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.6681	0.6039	0.6618	0.6727	0.6455	0.4629	0.7579	-----	-----	0.639	7.45	0.963	0.992	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromofluorobenzene	1	0	Avg	0.8262	0.7768	0.7943	0.8047	0.7807	0.5882	0.9826	0.7831	0.7704	0.790	7.40	-1	-1	13		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.7406	1.6391	1.8008	1.7771	1.6199	1.1577	1.7402	-----	-----	1.64	7.10	0.971	0.992	14	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
m&p-Xylenes	1	0	Avg	1.1026	1.0390	1.0764	1.1126	0.9605	0.6838	0.8126	1.0673	1.0909	0.994	6.88	0.991	0.992	15	0.10	40.00	10.00	4.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	1.0546	1.0286	1.0198	1.0630	0.9245	0.6814	1.0385	1.0303	-----	0.980	7.10	0.971	0.992	13	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.3183	0.2869	0.3284	0.3315	0.3173	0.2377	0.3554	-----	-----	0.311	7.47	0.973	0.993	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3-Dichlorobenzene	1	0	Avg	1.3539	1.3149	1.3399	1.3406	1.2277	1.1154	0.8935	-----	-----	1.23	8.02	0.985	1.00	14	0.60	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dichlorobenzene	1	0	Avg	1.3562	1.2893	1.3347	1.3502	1.2004	1.1148	1.2116	-----	-----	1.27	8.07	0.998	0.999	7.3	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichlorobenzene	1	0	Avg	1.2632	1.1702	1.2919	1.2264	1.1316	1.0451	0.8904	-----	-----	1.15	8.29	0.992	1.00	12	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Isopropylbenzene	1	0	Avg	2.8283	2.7057	2.6028	2.8658	2.4675	1.7756	2.3961	2.7365	-----	2.55	7.29	0.982	0.992	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Avg	0.0364	0.0407	0.0421	0.0347	0.0307	0.0238	0.0374	-----	-----	0.0352	7.37	0.967	0.994	18		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Camphene	1	0	Avg	0.9815	0.9204	0.9144	1.0342	0.9031	0.6618	1.0731	-----	-----	0.927	7.47	0.963	0.992	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichloropropane	1	0	Avg	0.8311	0.7429	0.8871	0.8547	0.8368	0.6162	1.0008	-----	-----	0.824	7.48	0.964	0.992	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chlorotoluene	1	0	Avg	1.7343	1.7104	1.6176	1.7691	1.4984	1.1491	1.2078	-----	-----	1.53	7.59	0.995	0.995	17		20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags	*Note:* Avg Rsd: 11.17
a - failed the min rf criteria	*Corr 1 = Correlation Coefficient for linear Eq.*
c - failed the minimum correlation coeff criteria(if applicable)	*Corr 2 = Correlation Coefficient for quad Eq.*
	Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M130907.D	CAL @ 20 PPB	08/01/20 14:13	2	6M130906.D	CAL @ 5 PPB	08/01/20 13:52
3	6M130905.D	CAL @ 2 PPB	08/01/20 13:32	4	6M130908.D	CAL @ 50 PPB	08/01/20 14:34
5	6M130909.D	CAL @ 100 PPB	08/01/20 14:54	6	6M130911.D	CAL @ 250 PPB	08/01/20 15:36
7	6M130913.D	CAL @ 500 PPB	08/01/20 16:17	8	6M130904.D	CAL @ 1 PPB	08/01/20 13:11
9	6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.9956	2.9458	2.4822	3.0340	2.6456	1.9674	2.2278	-----	-----	2.61	7.58	0.993	0.994	16		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Chlorotoluene	1	0	Avg	1.5729	1.5218	1.6109	1.6736	1.5502	1.3150	1.2372	-----	-----	1.50	7.65	0.997	0.999	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Propylbenzene	1	0	Avg	3.3894	3.2596	3.1553	3.4264	2.9464	2.1450	2.5093	3.0701	-----	2.99	7.53	0.991	0.993	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.6614	1.6731	1.5856	1.6780	1.5225	1.1020	1.7438	-----	-----	1.57	7.50	0.966	0.992	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3,5-Trimethylbenzen	1	0	Avg	1.9399	1.7872	2.2533	2.0330	1.8000	1.4687	1.5255	1.8343	-----	1.83	7.61	0.997	0.998	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	Qua	0.7160	0.7673	0.9715	0.7526	0.7082	0.5933	0.4857	-----	-----	0.714	7.61	0.985	1.00	21	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butylbenzene	1	0	Avg	2.2902	2.1506	2.1850	2.3903	2.0781	1.7941	1.4738	2.2964	-----	2.08	7.81	0.986	1.00	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Avg	2.2405	2.1697	2.2022	2.3099	2.0717	1.8591	1.2418	2.4344	-----	2.07	7.83	0.947	1.00	18		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	2.9235	2.8882	2.9996	3.1139	2.7230	2.4227	1.5196	2.6104	-----	2.65	7.93	0.928	0.999	19		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	2.4648	2.4179	2.3575	2.6286	2.3029	2.1137	1.2793	2.2205	-----	2.22	8.00	0.918	0.999	19		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	2.7542	2.6145	2.6688	2.9447	2.6177	2.4359	1.4395	2.7992	-----	2.53	8.24	0.910	0.998	18		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	1.4215	1.2987	1.4488	1.5173	1.3414	1.2496	0.9511	-----	-----	1.32	8.22	0.977	1.00	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4,5-Tetramethylbe	1	0	Avg	2.0569	1.9763	1.8620	2.2325	2.0312	1.5781	1.3085	-----	-----	1.86	8.68	0.983	0.998	17		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromo-3-Chloro	1	0	Avg	0.1759	0.1613	0.1976	0.1835	0.1725	0.1439	0.1495	-----	-----	0.169	8.74	0.998	0.998	11	0.05	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Camphor	1	0	Qua	0.1089	0.1137	0.1664	0.1048	0.0953	0.0717	0.1169	-----	-----	0.111	9.18	0.963	0.993	26		200.0	50.00	20.00	500.0	1000.	2500.	5000.		
Hexachlorobutadiene	1	0	Avg	0.4664	0.4663	0.4676	0.5144	0.4447	0.3336	0.5307	-----	-----	0.461	9.32	0.965	0.992	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4-Trichlorobenzen	1	0	Avg	0.8615	0.8585	0.9148	0.8672	0.8060	0.5757	0.9312	-----	-----	0.831	9.24	0.964	0.991	14	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichlorobenzen	1	0	Avg	0.7435	0.7439	0.8641	0.7774	0.7497	0.5255	0.8879	-----	-----	0.756	9.54	0.959	0.991	16		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Naphthalene	1	0	Avg	2.1328	2.0494	2.3504	2.0685	1.9919	1.4412	2.2041	2.3993	-----	2.08	9.40	0.971	0.992	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.17

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130907.D Sam Mult : 1 Vial# : 8 Qt On : 08/01/20 15:34
Acq On : 08/01/20 14:13 Misc : S,5G Qt Upd On: 08/01/20 15:33

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	391232	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	322837	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.055	152	175394	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	103838	29.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.30%			
39) 1,2-Dichloroethane-d4	4.934	67	56519	29.25	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.50%			
66) Toluene-d8	5.983	98	396832	29.90	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.67%			
76) Bromofluorobenzene	7.397	174	144919	31.54	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.13%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	84558	17.7661	ug/l	96
6) Dichlorodifluoromethane	1.636	85	56901	18.7722	ug/l	93
7) Chloromethane	1.813	50	79283	17.5213	ug/l	95
8) Bromomethane	2.233	94	47193	17.0583	ug/l	95
9) Vinyl Chloride	1.916	62	79323	17.8747	ug/l	98
10) Chloroethane	2.319	64	53595	17.6959	ug/l	97
11) Trichlorofluoromethane	2.556	101	129761	18.1514	ug/l	96
12) Ethyl ether	2.806	59	46724	18.5600	ug/l	99
13) Furan	2.843	39	108525	18.5616	ug/l	99
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	48955	18.0515	ug/l	96
15) Methylene Chloride	3.434	84	68717	16.5767	ug/l	98
16) Acrolein	2.922	56	46711	102.8732	ug/l	96
17) Acrylonitrile	3.642	53	28976	19.0572	ug/l	98
18) Iodomethane	3.166	142	42958	20.2068	ug/l	97
19) Acetone	3.056	43	137928	92.0988	ug/l	92
20) Carbon Disulfide	3.233	76	177825	18.0230	ug/l	100
21) t-Butyl Alcohol	3.508	59	67875	100.9541	ug/l	90
22) n-Hexane	3.910	57	71226	19.1190	ug/l	96
23) Di-isopropyl-ether	4.062	45	160985	18.6061	ug/l	95
24) 1,1-Dichloroethene	3.020	61	94725	19.6713	ug/l	98
25) Methyl Acetate	3.337	43	59896	20.4704	ug/l	100
26) Methyl-t-butyl ether	3.672	73	141918	19.4677	ug/l	98
27) 1,1-Dichloroethane	4.032	63	117998	19.0378	ug/l	96
28) trans-1,2-Dichloroethene	3.678	96	72289	19.9972	ug/l	94
29) Ethyl-t-butyl ether	4.324	59	179437	19.2789	ug/l	98
30) cis-1,2-Dichloroethene	4.440	61	118749	19.0268	ug/l	93
31) Bromochloromethane	4.593	49	57312	19.6714	ug/l	96
32) 2,2-Dichloropropane	4.446	77	95435	18.9123	ug/l	98
33) Ethyl acetate	4.465	43	79863	17.7447	ug/l	99
34) 1,4-Dioxane	5.519	88	76235	1008.9834	ug/l	91
35) 1,1-Dichloropropene	4.855	75	95518	18.5519	ug/l	99
36) Chloroform	4.635	83	127440	19.6540	ug/l	95
38) Cyclohexane	4.806	56	100760	19.5038	ug/l	98
40) 1,2-Dichloroethane	4.977	62	92329	19.0471	ug/l	99
41) 2-Butanone	4.440	43	39753	20.2319	ug/l	87
42) 1,1,1-Trichloroethane	4.763	97	110211	18.8215	ug/l	94
43) Carbon Tetrachloride	4.861	117	93792	19.2681	ug/l	98
44) Vinyl Acetate	4.050	43	193064	19.5138	ug/l	100
45) Bromodichloromethane	5.593	83	85912	20.1548	ug/l	94
46) Methylcyclohexane	5.446	83	94599	17.6108	ug/l	94
47) Dibromomethane	5.525	174	44017	19.2374	ug/l	94
48) 1,2-Dichloropropane	5.458	63	67307	18.4460	ug/l	100
49) Trichloroethene	5.330	130	76976	18.2584	ug/l	95
50) Benzene	4.977	78	275833	19.5467	ug/l	100
51) tert-Amyl methyl ether	5.019	73	152132	19.0020	ug/l	98
53) Iso-propylacetate	4.977	43	114307	20.7224	ug/l	100
54) Methyl methacrylate	5.483	41	57546	21.1076	ug/l	94
55) Dibromochloromethane	6.446	129	60268	21.5178	ug/l	84
56) 2-Chloroethylvinylether	5.733	63	16721	18.5311	ug/l	88
57) cis-1,3-Dichloropropene	5.830	75	93817	19.4965	ug/l	92
58) trans-1,3-Dichloropropene	6.117	75	84092	20.9293	ug/l	96
59) Ethyl methacrylate	6.135	41	54829	19.9897	ug/l	95
60) 1,1,2-Trichloroethane	6.220	97	57081	20.0678	ug/l	98
61) 1,2-Dibromoethane	6.525	107	57308	19.9204	ug/l	95
62) 1,3-Dichloropropane	6.318	76	101146	19.9333	ug/l	89
63) 4-Methyl-2-Pentanone	5.897	43	73965	18.5655	ug/l	99
64) 2-Hexanone	6.330	43	56370	17.6270	ug/l	98
65) Tetrachloroethene	6.324	164	61501	19.6257	ug/l	90
67) Toluene	6.019	92	177449	18.8502	ug/l	98

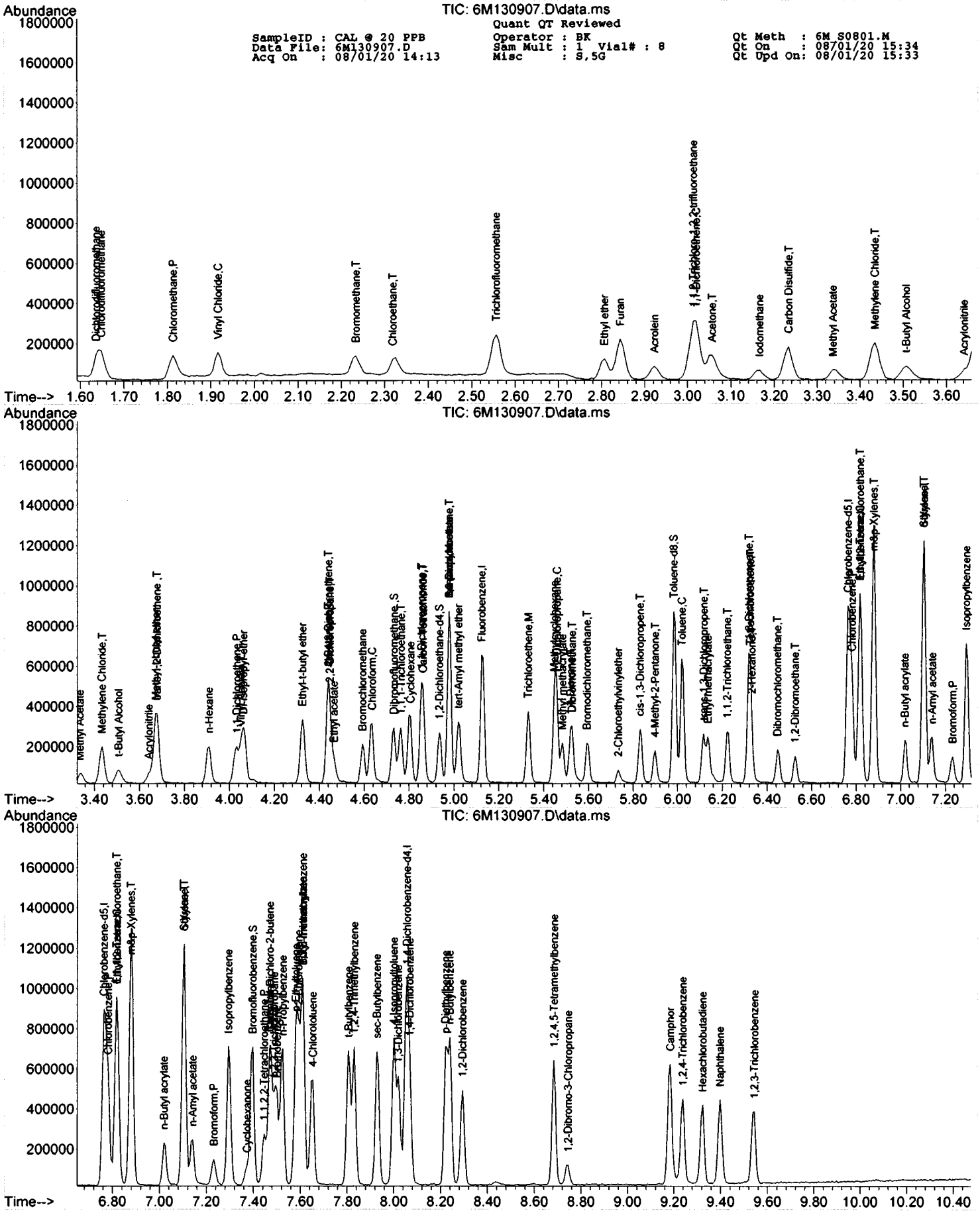
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130907.D Sam Mult : 1 Vial# : 8 Qt On : 08/01/20 15:34
Acq On : 08/01/20 14:13 Misc : S,5G Qt Upd On: 08/01/20 15:33

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.818	133	59870	18.9945	ug/l	88
69)	Chlorobenzene	6.781	112	194254	18.7150	ug/l	98
71)	n-Butyl acrylate	7.019	55	101934	19.8170	ug/l	99
72)	n-Amyl acetate	7.141	43	94198	19.3667	ug/l	99
73)	Bromoform	7.232	173	40708	22.8783	ug/l	95
74)	Ethylbenzene	6.818	106	88670	21.1374	ug/l	96
75)	1,1,2,2-Tetrachloroethane	7.446	83	78122	20.6788	ug/l	97
77)	Styrene	7.104	104	203535	20.0188	ug/l	99
78)	m&p-Xylenes	6.879	106	257871	40.9426	ug/l	95
79)	o-Xylene	7.104	106	123316	20.3700	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.470	53	37221	20.1680	ug/l	92
81)	1,3-Dichlorobenzene	8.019	146	158315	20.3315	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	158582	20.4745	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	147705	20.5475	ug/l	98
84)	Isopropylbenzene	7.293	105	330713	20.7374	ug/l	99
85)	Cyclohexanone	7.373	55	21285	93.2209	ug/l	95
86)	Camphene	7.470	93	114775	20.5267	ug/l	98
87)	1,2,3-Trichloropropane	7.489	75	97186	20.0697	ug/l	96
88)	2-Chlorotoluene	7.592	91	202790	20.4144	ug/l	98
89)	p-Ethyltoluene	7.580	105	350282	21.2404	ug/l	99
90)	4-Chlorotoluene	7.653	91	183924	19.6356	ug/l	99
91)	n-Propylbenzene	7.525	91	396325	21.0009	ug/l	100
92)	Bromobenzene	7.501	77	194274	20.1927	ug/l	99
93)	1,3,5-Trimethylbenzene	7.610	105	226831	19.6248	ug/l	98
94)	Butyl methacrylate	7.610	41	83727	18.2741	ug/l	94
95)	t-Butylbenzene	7.806	119	267791	20.3067	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	261988	19.6620	ug/l	99
97)	sec-Butylbenzene	7.927	105	341850	19.7027	ug/l	99
98)	4-Isopropyltoluene	8.001	119	288211	20.4877	ug/l	98
99)	n-Butylbenzene	8.238	91	322053	19.9811	ug/l	100
100)	p-Diethylbenzene	8.220	119	166225	19.9995	ug/l	100
101)	1,2,4,5-Tetramethylben...	8.683	119	240512	20.3289	ug/l	97
102)	1,2-Dibromo-3-Chloropr...	8.744	157	20569	19.4549	ug/l	98
103)	Camphor	9.183	95	127332	187.3083	ug/l	98
104)	Hexachlorobutadiene	9.324	225	54540	19.3222	ug/l	99
105)	1,2,4-Trichlorobenzene	9.238	180	100742	19.5756	ug/l	97
106)	1,2,3-Trichlorobenzene	9.543	180	86945	18.7025	ug/l	96
107)	Naphthalene	9.397	128	249397	19.2416	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 6M130907.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 6M130907.D
Acq On : 08/01/20 14:13
Operator : BK
Sam Mult : 1 Vial# : 8
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:34
Qt Upd On: 08/01/20 15:33
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130906.D Sam Mult : 1 Vial# : 7 Qt On : 08/01/20 15:33
Acq On : 08/01/20 13:52 Misc : S,5G Qt Upd On: 08/01/20 15:33

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	368139	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	310453	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	178697	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	99130	29.90	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.67%			
39) 1,2-Dichloroethane-d4	4.934	67	53818	29.51	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.37%			
66) Toluene-d8	5.983	98	392605	30.96	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.20%			
76) Bromofluorobenzene	7.397	174	138818	29.57	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.57%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	23110	5.2441	ug/l	99
6) Dichlorodifluoromethane	1.636	85	14650	5.2074	ug/l	94
7) Chloromethane	1.813	50	21164	4.9560	ug/l	100
8) Bromomethane	2.233	94	13164	4.6016	ug/l	99
9) Vinyl Chloride	1.916	62	21651	5.2826	ug/l	97
10) Chloroethane	2.325	64	14564	5.1674	ug/l	90
11) Trichlorofluoromethane	2.557	101	33830	5.0438	ug/l	93
12) Ethyl ether	2.806	59	11565	4.8252	ug/l	94
13) Furan	2.843	39	29165	5.4657	ug/l	96
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	12868	5.0641	ug/l	95
15) Methylene Chloride	3.434	84	18187	4.5103	ug/l	92
16) Acrolein	2.922	56	10217	23.4038	ug/l	84
17) Acrylonitrile	3.642	53	7250	5.1017	ug/l	84
18) Iodomethane	3.160	142	7630	4.2899	ug/l	90
19) Acetone	3.056	43	34247	23.9678	ug/l	95
20) Carbon Disulfide	3.233	76	45458	4.8460	ug/l	100
21) t-Butyl Alcohol	3.508	59	15065	23.2601	ug/l	97
22) n-Hexane	3.910	57	17022	5.1162	ug/l	82
23) Di-isopropyl-ether	4.062	45	38096	4.5338	ug/l	100
24) 1,1-Dichloroethene	3.020	61	22395	4.9142	ug/l	95
25) Methyl Acetate	3.343	43	13329	4.7655	ug/l	100
26) Methyl-t-butyl ether	3.672	73	32329	4.6244	ug/l	94
27) 1,1-Dichloroethane	4.032	63	29557	5.1025	ug/l	93
28) trans-1,2-Dichloroethene	3.678	96	17911	5.4091	ug/l	90
29) Ethyl-t-butyl ether	4.324	59	42399	4.7655	ug/l	98
30) cis-1,2-Dichloroethene	4.440	61	28363	4.7487	ug/l	96
31) Bromochloromethane	4.593	49	14296	5.3291	ug/l	98
32) 2,2-Dichloropropane	4.446	77	23694	4.9850	ug/l	93
33) Ethyl acetate	4.465	43	19504	4.4306	ug/l	92
34) 1,4-Dioxane	5.519	88	15873	211.9264	ug/l	89
35) 1,1-Dichloropropene	4.855	75	24100	4.9617	ug/l	96
36) Chloroform	4.635	83	30856	5.0862	ug/l	88
38) Cyclohexane	4.800	56	23614	4.7894	ug/l	94
40) 1,2-Dichloroethane	4.983	62	23255	5.1490	ug/l	94
41) 2-Butanone	4.440	43	8467	4.3947	ug/l	94
42) 1,1,1-Trichloroethane	4.763	97	27633	5.0227	ug/l	97
43) Carbon Tetrachloride	4.867	117	22583	4.8962	ug/l	98
44) Vinyl Acetate	4.050	43	47550	5.1631	ug/l	100
45) Bromodichloromethane	5.593	83	19011	4.6195	ug/l	98
46) Methylcyclohexane	5.446	83	25385	5.0333	ug/l	94
47) Dibromomethane	5.526	174	10433	4.7721	ug/l	93
48) 1,2-Dichloropropane	5.458	63	16593	4.7532	ug/l	96
49) Trichloroethene	5.330	130	19327	4.8102	ug/l	96
50) Benzene	4.983	78	68625	5.2267	ug/l	100
51) tert-Amyl methyl ether	5.019	73	39096	5.2899	ug/l	98
53) Iso-propylacetate	4.977	43	25670	4.7627	ug/l	96
54) Methyl methacrylate	5.483	41	13551	5.2574	ug/l	99
55) Dibromochloromethane	6.452	129	12653	4.5599	ug/l	90
56) 2-Chloroethylvinylether	5.733	63	3917	4.3050	ug/l	95
57) cis-1,3-Dichloropropene	5.830	75	22865	4.9123	ug/l	96
58) trans-1,3-Dichloropropene	6.117	75	18728	4.7741	ug/l	84
59) Ethyl methacrylate	6.135	41	13028	4.9094	ug/l	96
60) 1,1,2-Trichloroethane	6.227	97	13529	4.9196	ug/l	92
61) 1,2-Dibromoethane	6.525	107	12421	4.3421	ug/l	88
62) 1,3-Dichloropropane	6.318	76	23940	4.8605	ug/l	100
63) 4-Methyl-2-Pentanone	5.897	43	18201	4.6352	ug/l	95
64) 2-Hexanone	6.330	43	14660	4.6585	ug/l	85
65) Tetrachloroethene	6.324	164	15584	5.2616	ug/l	78
67) Toluene	6.025	92	46464	5.1785	ug/l	96

Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB
Data File: 6M130906.D
Acq On : 08/01/20 13:52

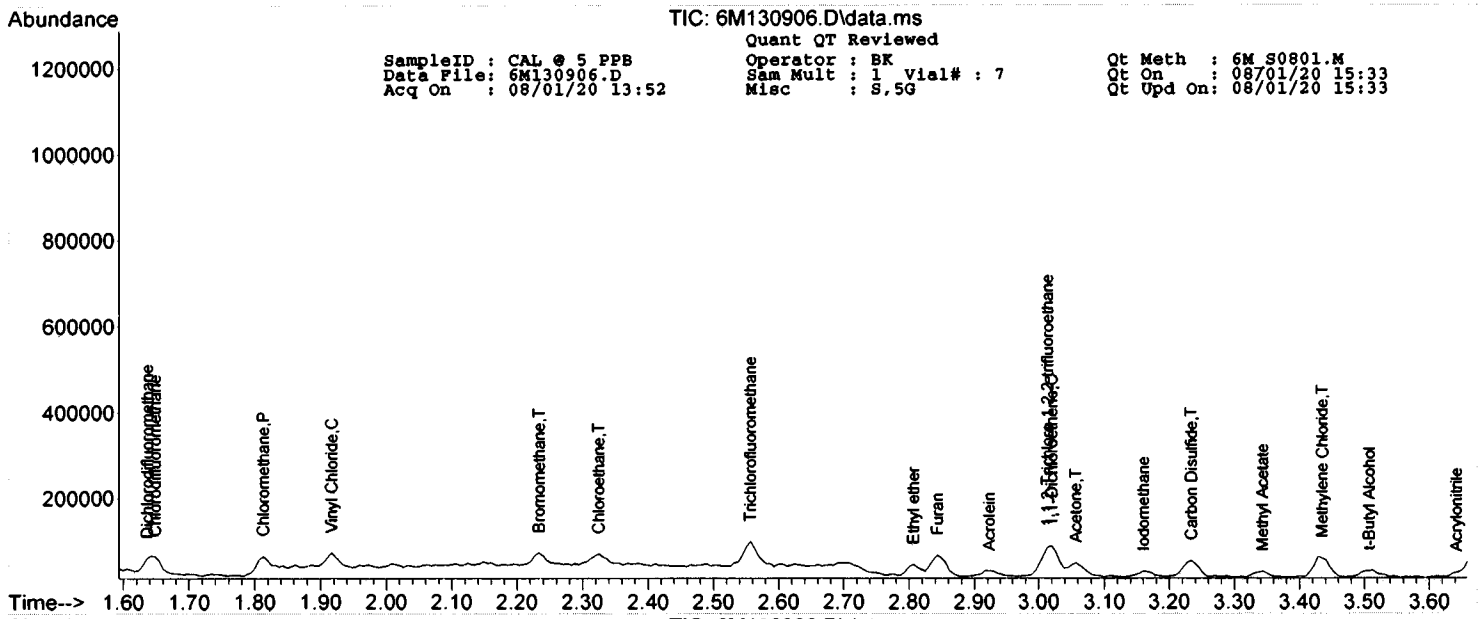
Operator : BK
Sam Mult : 1 Vial# : 7
Misc : S,5G

Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:33
Qt Upd On: 08/01/20 15:33

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	15156	5.0004	ug/l	90
69)	Chlorobenzene	6.781	112	46928	4.5653	ug/l	95
71)	n-Butyl acrylate	7.019	55	24184	4.4435	ug/l	97
72)	n-Amyl acetate	7.141	43	24048	4.1046	ug/l	92
73)	Bromoform	7.233	173	8116	4.2544	ug/l	96
74)	Ethylbenzene	6.824	106	21159	4.9345	ug/l	99
75)	1,1,2,2-Tetrachloroethane	7.446	83	17986	4.5248	ug/l	88
77)	Styrene	7.104	104	48818	4.5812	ug/l	99
78)	m&p-Xylenes	6.879	106	61892	9.5602	ug/l	86
79)	o-Xylene	7.104	106	30636	4.9562	ug/l	96
80)	trans-1,4-Dichloro-2-b...	7.470	53	8546	4.3472	ug/l	83
81)	1,3-Dichlorobenzene	8.019	146	39162	4.9052	ug/l	94
82)	1,4-Dichlorobenzene	8.068	146	38399	4.8018	ug/l	92
83)	1,2-Dichlorobenzene	8.293	146	34852	4.6466	ug/l	94
84)	Isopropylbenzene	7.293	105	80586	4.9465	ug/l	96
85)	Cyclohexanone	7.373	55	6072	24.4457	ug/l	97
86)	Camphene	7.470	93	27414	4.7235	ug/l	95
87)	1,2,3-Trichloropropane	7.489	75	22127	4.2653	ug/l	90
88)	2-Chlorotoluene	7.592	91	50942	5.0503	ug/l	95
89)	p-Ethyltoluene	7.580	105	87735	5.3402	ug/l	100
90)	4-Chlorotoluene	7.653	91	45326	4.6335	ug/l	98
91)	n-Propylbenzene	7.525	91	97082	5.0658	ug/l	100
92)	Bromobenzene	7.495	77	49830	5.1264	ug/l	97
93)	1,3,5-Trimethylbenzene	7.610	105	53230	4.3801	ug/l	94
94)	Butyl methacrylate	7.610	41	22853	3.9862	ug/l	99
95)	t-Butylbenzene	7.806	119	64053	4.6946	ug/l	96
96)	1,2,4-Trimethylbenzene	7.830	105	64621	4.6852	ug/l	99
97)	sec-Butylbenzene	7.928	105	86020	4.9236	ug/l	99
98)	4-Isopropyltoluene	8.001	119	72012	5.0326	ug/l	99
99)	n-Butylbenzene	8.238	91	77870	4.6618	ug/l	94
100)	p-Diethylbenzene	8.220	119	38679	4.3784	ug/l	92
101)	1,2,4,5-Tetramethylben...	8.683	119	58861	4.8268	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.744	157	4804	4.2312	ug/l	93
103)	Camphor	9.177	95	33889	34.5610	ug/l	100
104)	Hexachlorobutadiene	9.324	225	13888	4.7482	ug/l	97
105)	1,2,4-Trichlorobenzene	9.238	180	25571	4.8177	ug/l	97
106)	1,2,3-Trichlorobenzene	9.543	180	22156	4.5318	ug/l	97
107)	Naphthalene	9.397	128	61039	4.5087	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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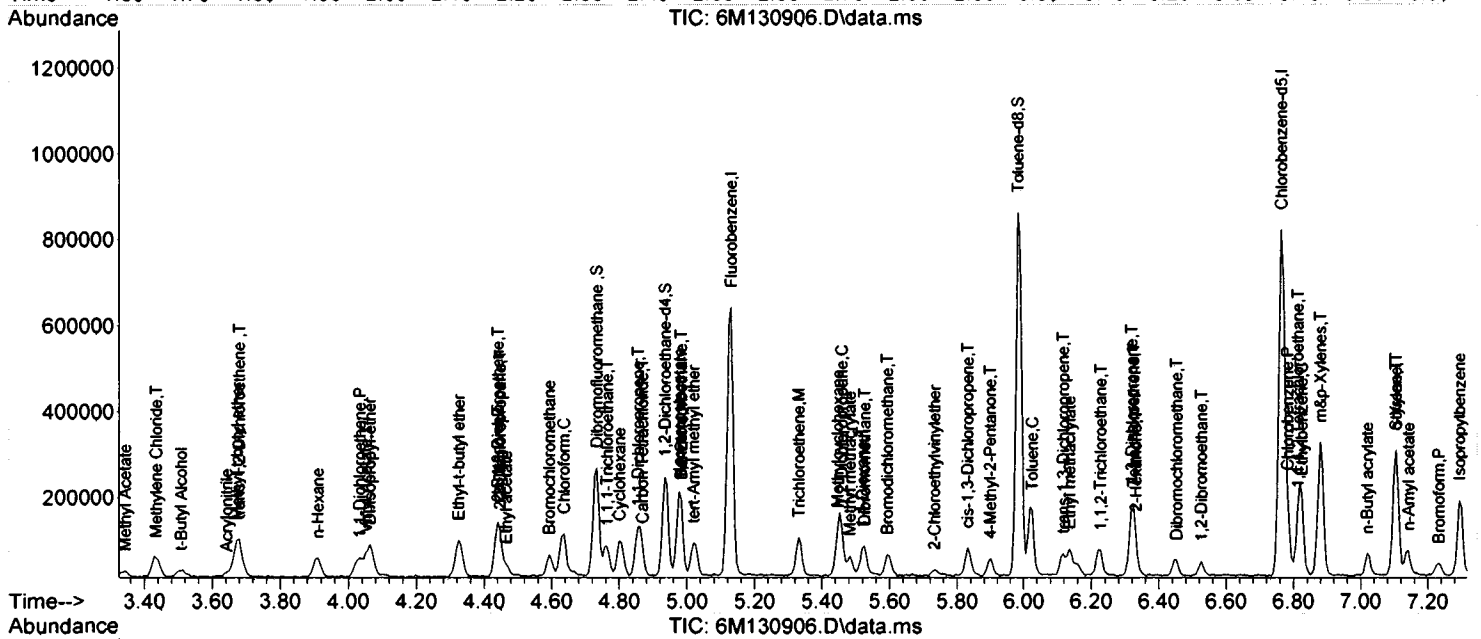
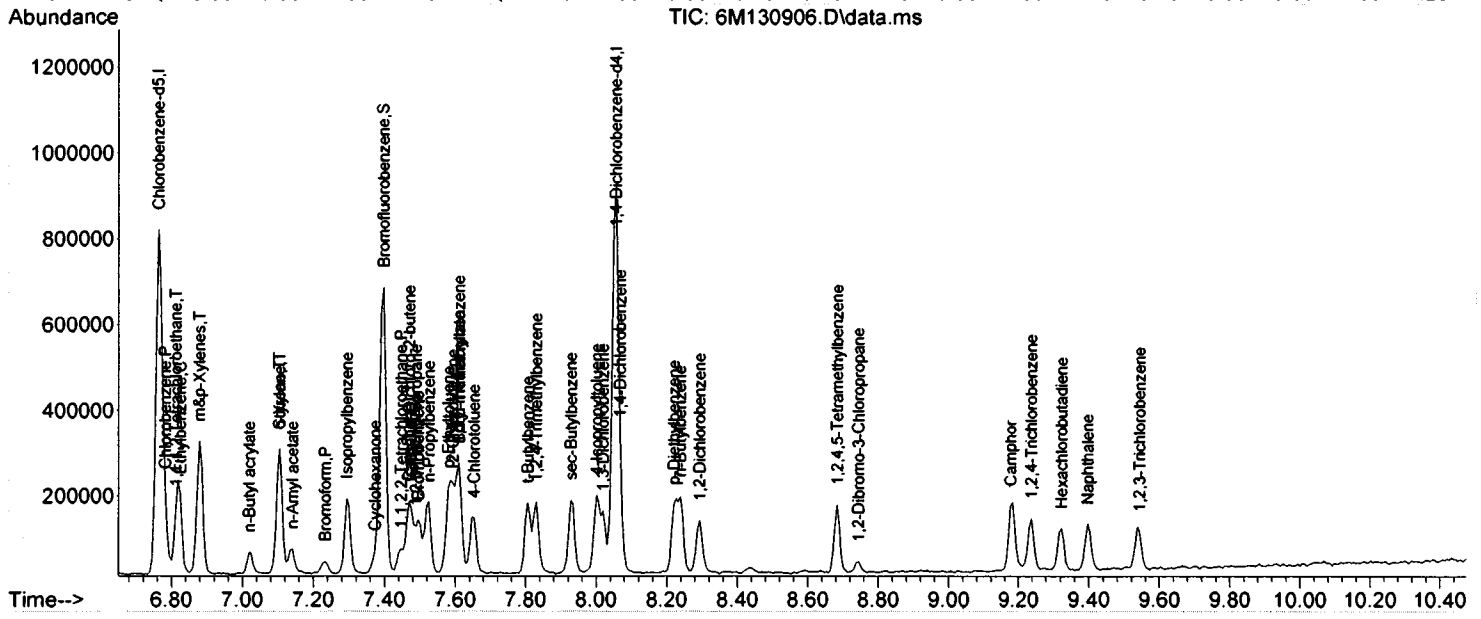
Quant QT Reviewed
SampleID : CAL @ 5 PPB
Data File: 6M130906.D
Acq On : 08/01/20 13:52
Operator : BK
Sam Mult : 1 Vial# : 7
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:33
Qt Upd On: 08/01/20 15:33
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 6M130906.D\data.ms
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
m&p-Xylenes,T
Time-->


Abundance
TIC: 6M130906.D\data.ms
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
m&p-Xylenes,T
4-Chlorotoluene
sec-Butylbenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 2 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130905.D Sam Mult : 1 Vial# : 6 Qt On : 08/01/20 15:32
Acq On : 08/01/20 13:32 Misc : S,5G Qt Upd On: 08/01/20 15:24

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	388738	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	331679	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	184301	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	105591	30.22	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.73%			
39) 1,2-Dichloroethane-d4	4.934	67	57252	29.63	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.77%			
66) Toluene-d8	5.983	98	408874	30.24	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.80%			
76) Bromofluorobenzene	7.397	174	146390	30.31	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.03%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	9579	2.1205	ug/l	98
6) Dichlorodifluoromethane	1.636	85	6057	2.0793	ug/l	98
7) Chloromethane	1.813	50	9903	2.4349	ug/l	90
8) Bromomethane	2.233	94	6094	No Calib		
9) Vinyl Chloride	1.916	62	8896	2.1142	ug/l	90
10) Chloroethane	2.325	64	6254	2.2136	ug/l	99
11) Trichlorofluoromethane	2.557	101	14574	2.1189	ug/l	91
12) Ethyl ether	2.800	59	5377	2.2656	ug/l	96
13) Furan	2.843	39	11255	1.9950	ug/l	100
14) 1,1,2-Trichloro-1,2,2-...	3.020	101	5620	2.1984	ug/l	96
15) Methylene Chloride	3.434	84	9692	2.6409	ug/l	78
16) Acrolein	2.922	56	4526	9.6429	ug/l	83
17) Acrylonitrile	3.642	53	3170	2.2384	ug/l	81
18) Iodomethane	3.160	142	3643	No Calib		
19) Acetone	3.057	43	16529	12.1113	ug/l	97
20) Carbon Disulfide	3.233	76	20572	2.1599	ug/l	100
21) t-Butyl Alcohol	3.514	59	6764	9.7826	ug/l	61
22) n-Hexane	3.910	57	6964	No Calib		
23) Di-isopropyl-ether	4.062	45	17944	2.0452	ug/l	91
24) 1,1-Dichloroethene	3.014	61	9326	1.8797	ug/l	83
25) Methyl Acetate	3.337	43	6079	2.1200	ug/l	100
26) Methyl-t-butyl ether	3.672	73	14247	1.8967	ug/l	90
27) 1,1-Dichloroethane	4.032	63	11776	1.8558	ug/l	97
28) trans-1,2-Dichloroethene	3.678	96	6488	1.7306	ug/l	71
29) Ethyl-t-butyl ether	4.325	59	18764	1.9945	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	12428	1.9419	ug/l	89
31) Bromochloromethane	4.593	49	5653	1.9912	ug/l	83
32) 2,2-Dichloropropane	4.440	77	9518	1.8030	ug/l	96
33) Ethyl acetate	4.465	43	9948	2.3013	ug/l	82
34) 1,4-Dioxane	5.526	88	8302	110.4590	ug/l	89
35) 1,1-Dichloropropene	4.855	75	10142	1.9553	ug/l	91
36) Chloroform	4.629	83	12426	1.8830	ug/l	99
38) Cyclohexane	4.806	56	10241	1.9351	ug/l	95
40) 1,2-Dichloroethane	4.977	62	9645	2.0453	ug/l	73
41) 2-Butanone	4.440	43	4080	2.0110	ug/l	91
42) 1,1,1-Trichloroethane	4.764	97	11348	1.9089	ug/l	92
43) Carbon Tetrachloride	4.861	117	9107	1.7556	ug/l	87
44) Vinyl Acetate	4.062	43	18411	1.7972	ug/l	100
45) Bromodichloromethane	5.599	83	8356	1.8514	ug/l	83
46) Methylcyclohexane	5.446	83	10378	1.9000	ug/l	96
47) Dibromomethane	5.519	174	4674	2.0498	ug/l	81
48) 1,2-Dichloropropane	5.459	63	7551	2.0992	ug/l	85
49) Trichloroethene	5.330	130	8562	2.0364	ug/l	79
50) Benzene	4.977	78	28983	2.1388	ug/l	100
51) tert-Amyl methyl ether	5.020	73	15330	1.9299	ug/l	94
53) Iso-propylacetate	4.977	43	11233	1.9039	ug/l	94
54) Methyl methacrylate	5.483	41	5131	1.7441	ug/l	88
55) Dibromochloromethane	6.446	129	5463	1.7085	ug/l	91
56) 2-Chloroethylvinylether	5.739	63	2130	2.4228	ug/l	63
57) cis-1,3-Dichloropropene	5.837	75	9254	1.7399	ug/l	96
58) trans-1,3-Dichloropropene	6.117	75	7677	1.6896	ug/l	86
59) Ethyl methacrylate	6.135	41	5719	2.0347	ug/l	89
60) 1,1,2-Trichloroethane	6.221	97	5906	2.0204	ug/l	90
61) 1,2-Dibromoethane	6.525	107	5974	1.9329	ug/l	77
62) 1,3-Dichloropropane	6.318	76	10629	2.0402	ug/l	100
63) 4-Methyl-2-Pentanone	5.897	43	9306	2.4901	ug/l	79
64) 2-Hexanone	6.330	43	7441	2.4773	ug/l	86
65) Tetrachloroethene	6.324	164	5916	1.7551	ug/l	100
67) Toluene	6.026	92	19602	2.0681	ug/l	71

Quantitation Report (QT Reviewed)

SampleID : CAL @ 2 PPB
Data File: 6M130905.D
Acq On : 08/01/20 13:32

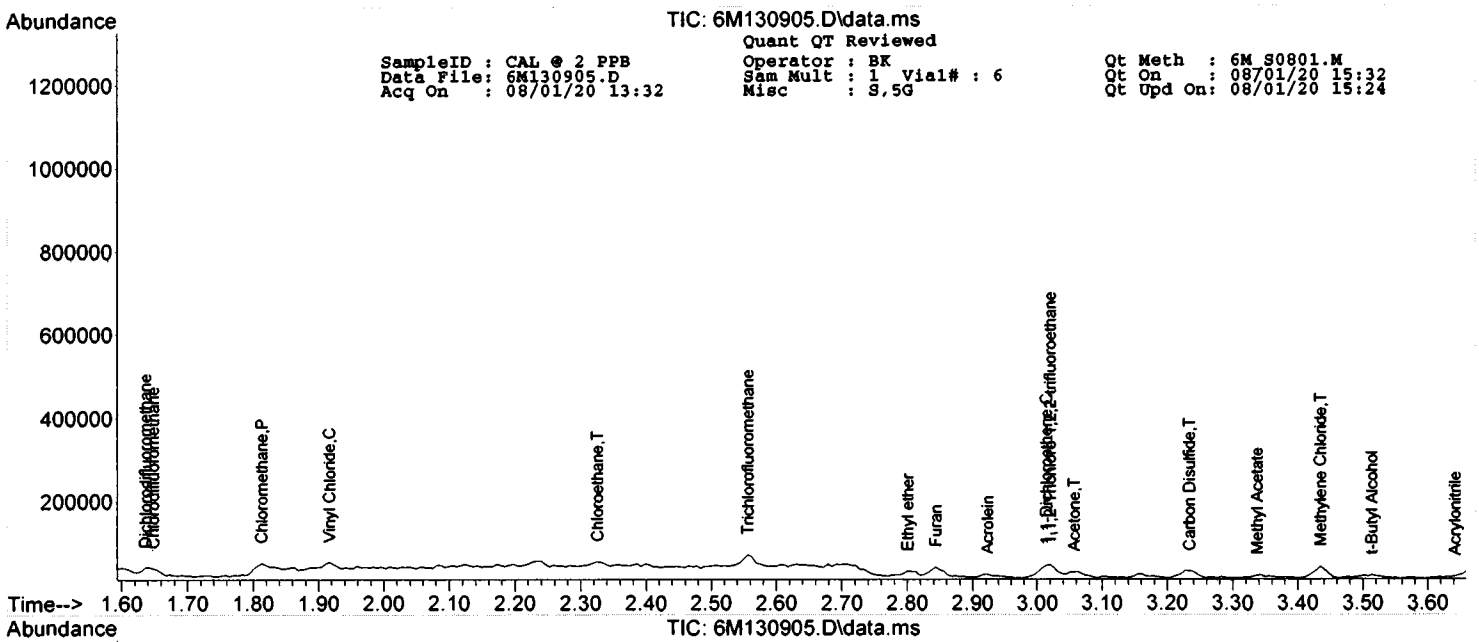
Operator : BK
Sam Mult : 1 Vial# : 6
Misc : S,5G

Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:32
Qt Upd On: 08/01/20 15:24

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.818	133	6384	1.9437	ug/l	98
69)	Chlorobenzene	6.781	112	23168	2.2319	ug/l	98
71)	n-Butyl acrylate	7.019	55	11630	2.1492	ug/l	86
72)	n-Amyl acetate	7.141	43	12173	No Calib		
73)	Bromoform	7.233	173	3436	1.5499	ug/l	95
74)	Ethylbenzene	6.824	106	9152	2.1060	ug/l	100
75)	1,1,2,2-Tetrachloroethane	7.446	83	8132	1.9675	ug/l	91
77)	Styrene	7.105	104	22126	2.0266	ug/l	88
78)	m&p-Xylenes	6.879	106	26453	3.9493	ug/l	95
79)	o-Xylene	7.098	106	12530	1.9486	ug/l	96
80)	trans-1,4-Dichloro-2-b...	7.470	53	4036	1.9813	ug/l	80
81)	1,3-Dichlorobenzene	8.019	146	16464	1.9989	ug/l	96
82)	1,4-Dichlorobenzene	8.068	146	16400	1.9770	ug/l	88
83)	1,2-Dichlorobenzene	8.293	146	15874	2.1068	ug/l	95
84)	Isopropylbenzene	7.294	105	31980	1.8584	ug/l	98
85)	Cyclohexanone	7.367	55	2589	No Calib		
86)	Camphene	7.470	93	11236	1.7684	ug/l	89
87)	1,2,3-Trichloropropane	7.483	75	10900	2.0759	ug/l	98
88)	2-Chlorotoluene	7.592	91	19876	1.8288	ug/l	97
89)	p-Ethyltoluene	7.580	105	30499	1.6363	ug/l	80
90)	4-Chlorotoluene	7.653	91	19793	1.9251	ug/l	96
91)	n-Propylbenzene	7.519	91	38769	1.9428	ug/l	99
92)	Bromobenzene	7.501	77	19483	1.8900	ug/l	93
93)	1,3,5-Trimethylbenzene	7.611	105	27686	2.3306	ug/l	78
94)	Butyl methacrylate	7.611	41	11937	No Calib		
95)	t-Butylbenzene	7.806	119	26847	1.8649	ug/l	95
96)	1,2,4-Trimethylbenzene	7.830	105	27058	1.8567	ug/l	97
97)	sec-Butylbenzene	7.928	105	36856	2.2866	ug/l	99
98)	4-Isopropyltoluene	8.001	119	28967	1.9447	ug/l	96
99)	n-Butylbenzene	8.239	91	32792	1.8586	ug/l	99
100)	p-Diethylbenzene	8.220	119	17801	1.9096	ug/l	94
101)	1,2,4,5-Tetramethylben...	8.684	119	22878	1.6681	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.745	157	2429	2.1544	ug/l	87
103)	Camphor	9.183	95	20456	No Calib		
104)	Hexachlorobutadiene	9.324	225	5746	1.8182	ug/l	93
105)	1,2,4-Trichlorobenzene	9.238	180	11241	2.1098	ug/l	91
106)	1,2,3-Trichlorobenzene	9.537	180	10617	2.2230	ug/l	96
107)	Naphthalene	9.397	128	28879	2.1043	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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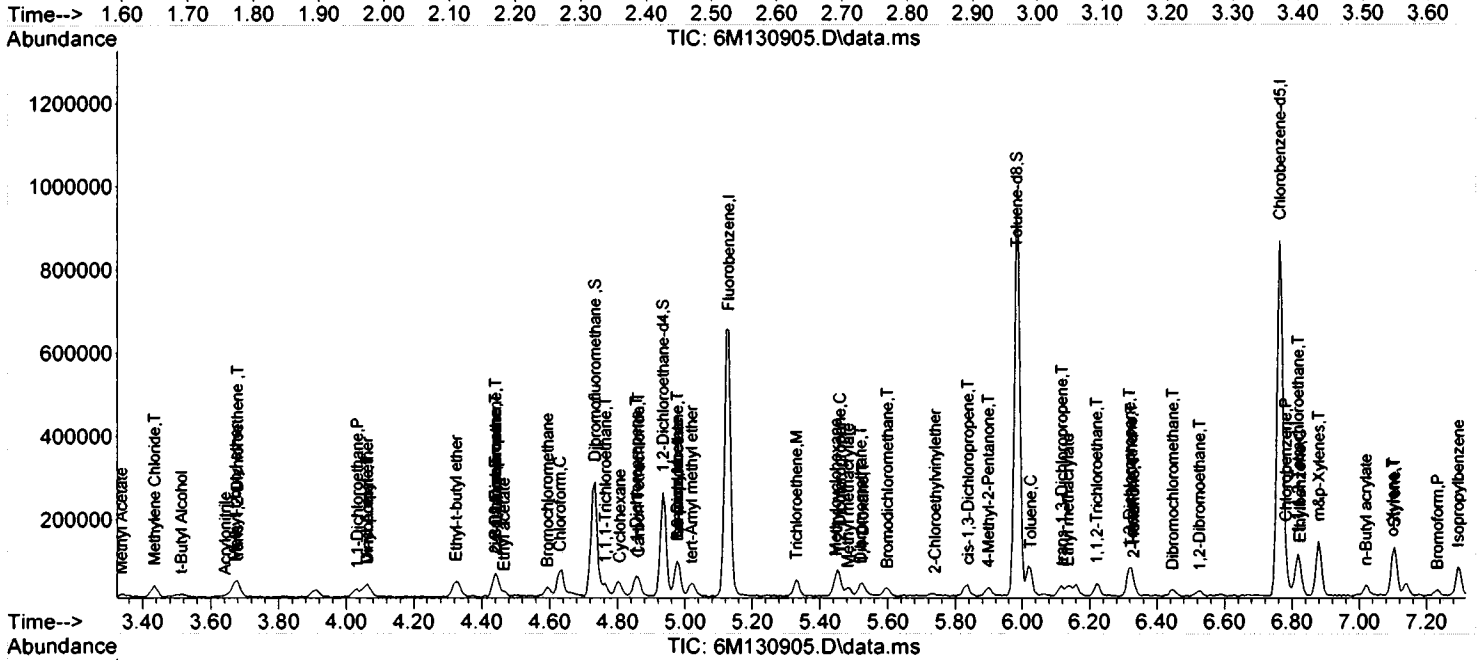
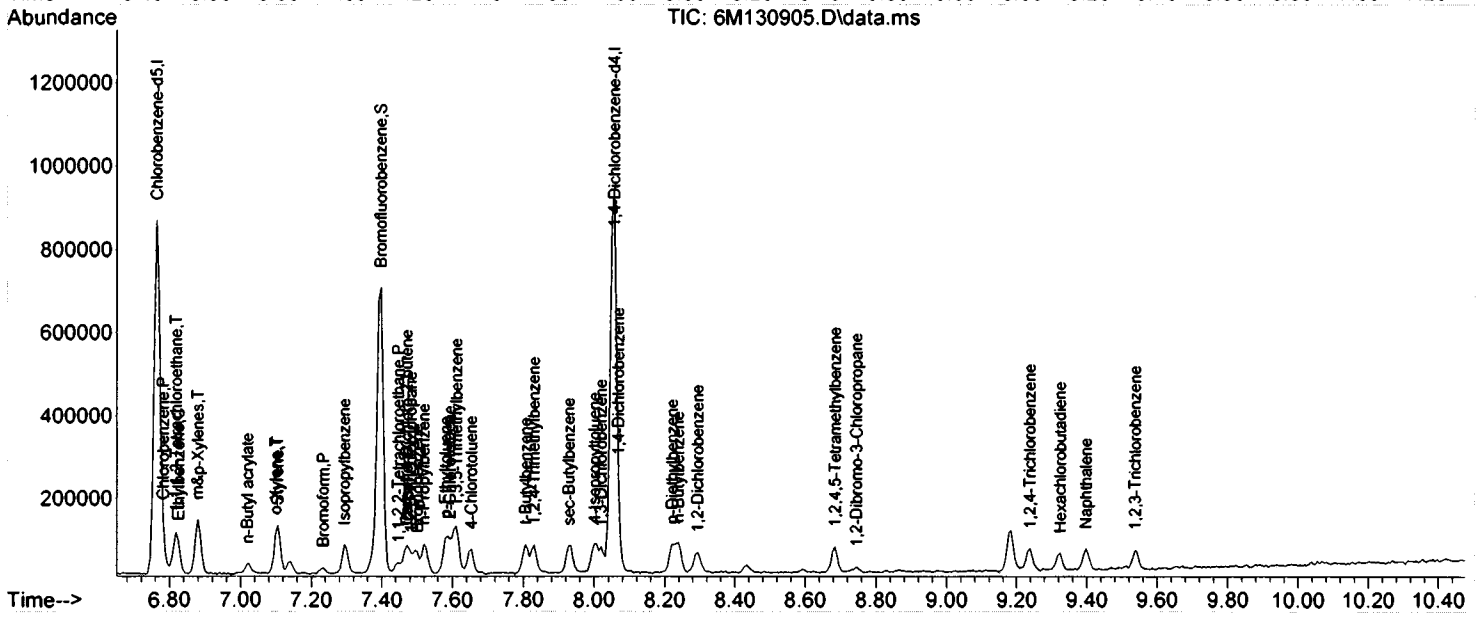
Quant QT Reviewed
SampleID : CAL @ 2 PPB
Data File: 6M130905.D
Acq On : 08/01/20 13:32
Operator : BK
Sam Mult : 1 Vial# : 6
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:32
Qt Upd On: 08/01/20 15:24
Chloromethane,P
Vinyl Chloride,C
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 6M130905.D\data.ms
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Bromochloromethane
Chloroform,C
Dibromofluoromethane,S
1,1,1-Trichloroethane,T
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
o-Xylene,T
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 6M130905.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
o-Xylene,T
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
sec-Butylbenzene
4-Chlorotoluene
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130908.D Sam Mult : 1 Vial# : 9 Qt On : 08/01/20 15:16
Acq On : 08/01/20 14:34 Misc : S,5G Qt Upd On: 07/26/20 16:16

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	376294	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	318043	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	177889	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	101661	29.71	ug/l	0.00
Spiked Amount 30.000			Recovery =	99.03%		
39) 1,2-Dichloroethane-d4	4.934	67	56916	31.76	ug/l	0.00
Spiked Amount 30.000			Recovery =	105.87%		
66) Toluene-d8	5.983	98	386315	29.13	ug/l	0.00
Spiked Amount 30.000			Recovery =	97.10%		
76) Bromofluorobenzene	7.397	174	143155	32.31	ug/l	0.00
Spiked Amount 30.000			Recovery =	107.70%		
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	218638	74.6540	ug/l	44
6) Dichlorodifluoromethane	1.636	85	140986	143.9245	ug/l	96
7) Chloromethane	1.813	50	196849	74.3520	ug/l	98
8) Bromomethane	2.227	94	124105	85.7440	ug/l	96
9) Vinyl Chloride	1.916	62	203655	78.1911	ug/l	97
10) Chloroethane	2.319	64	136743	68.9674	ug/l	97
11) Trichlorofluoromethane	2.557	101	332898	103.1225	ug/l	96
12) Ethyl ether	2.807	59	114866	57.2639	ug/l	98
13) Furan	2.843	39	273050	72.8969	ug/l	95
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	123730	151.8356	ug/l	97
15) Methylene Chloride	3.434	84	177624	60.6079	ug/l	92
16) Acrolein	2.922	56	113584	280.6000	ug/l	94
17) Acrylonitrile	3.642	53	68544	66.9078	ug/l	99
18) Iodomethane	3.166	142	145593	50.7653	ug/l	99
19) Acetone	3.056	43	330267	372.9779	ug/l	97
20) Carbon Disulfide	3.233	76	460989	67.3753	ug/l	100
21) t-Butyl Alcohol	3.508	59	167324	372.8191	ug/l	92
22) n-Hexane	3.910	57	191811	252.5697	ug/l	98
23) Di-isopropyl-ether	4.062	45	424645	62.6465	ug/l	95
24) 1,1-Dichloroethene	3.020	61	240131	78.8354	ug/l	96
25) Methyl Acetate	3.337	43	138786	67.8218	ug/l	100
26) Methyl-t-butyl ether	3.672	73	344781	53.9105	ug/l	96
27) 1,1-Dichloroethane	4.026	63	307121	67.7664	ug/l	97
28) trans-1,2-Dichloroethene	3.678	96	181453	72.6643	ug/l	100
29) Ethyl-t-butyl ether	4.325	59	455339	57.3239	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	309760	68.0787	ug/l	98
31) Bromochloromethane	4.593	49	137407	59.8470	ug/l	92
32) 2,2-Dichloropropane	4.446	77	255504	72.1930	ug/l	98
33) Ethyl acetate	4.465	43	209223	64.0788	ug/l	99
34) 1,4-Dioxane	5.519	88	181883	3750.5667	ug/l	95
35) 1,1-Dichloropropene	4.855	75	251043	75.2067	ug/l	100
36) Chloroform	4.635	83	319389	65.3579	ug/l	98
38) Cyclohexane	4.800	56	256136	129.9372	ug/l	98
40) 1,2-Dichloroethane	4.977	62	228241	59.1286	ug/l	98
41) 2-Butanone	4.440	43	98196	66.3149	ug/l	92
42) 1,1,1-Trichloroethane	4.763	97	287731	71.3964	ug/l	96
43) Carbon Tetrachloride	4.861	117	251063	75.1221	ug/l	100
44) Vinyl Acetate	4.050	43	495819	61.7704	ug/l	100
45) Bromodichloromethane	5.599	83	218445	58.1208	ug/l	98
46) Methylcyclohexane	5.452	83	264366	160.5965	ug/l	98
47) Dibromomethane	5.526	174	110359	53.6127	ug/l	99
48) 1,2-Dichloropropane	5.458	63	174094	63.9940	ug/l	98
49) Trichloroethene	5.330	130	203492	68.9152	ug/l	99
50) Benzene	4.977	78	704807	68.8165	ug/l	100
51) tert-Amyl methyl ether	5.020	73	384462	55.5815	ug/l	97
53) Iso-propylacetate	4.977	43	282874	52.9751	ug/l	99
54) Methyl methacrylate	5.483	41	141051	55.3821	ug/l	93
55) Dibromochloromethane	6.446	129	153305	49.2399	ug/l	92
56) 2-Chloroethylvinylether	5.733	63	42150	55.9807	ug/l	96
57) cis-1,3-Dichloropropene	5.830	75	255001	56.7488	ug/l	99
58) trans-1,3-Dichloropropene	6.117	75	217842	52.0913	ug/l	100
59) Ethyl methacrylate	6.135	41	134758	51.6999	ug/l	95
60) 1,1,2-Trichloroethane	6.227	97	140147	52.7004	ug/l	94
61) 1,2-Dibromoethane	6.525	107	150641	53.7348	ug/l	97
62) 1,3-Dichloropropane	6.318	76	249778	55.2768	ug/l	99
63) 4-Methyl-2-Pentanone	5.897	43	179180	54.9350	ug/l	98
64) 2-Hexanone	6.330	43	144007	59.1280	ug/l	92
65) Tetrachloroethene	6.324	164	161604	70.2092	ug/l	94
67) Toluene	6.019	92	446363	64.3948	ug/l	100

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB
Data File: 6M130908.D
Acq On : 08/01/20 14:34

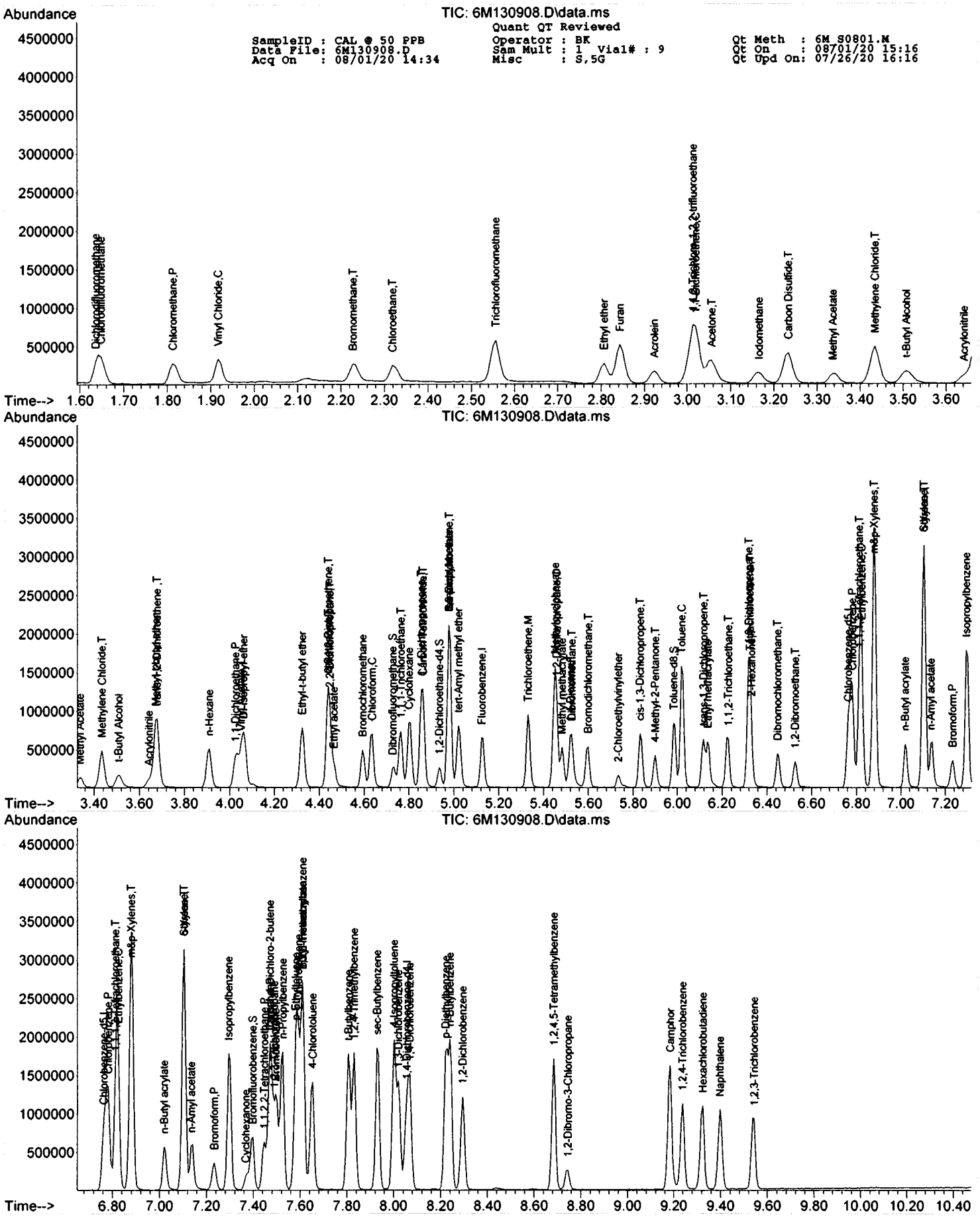
Operator : BK
Sam Mult : 1 Vial# : 9
Misc : S,5G

Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:16
Qt Upd On: 07/26/20 16:16

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	157470	56.2443	ug/l	99
69)	Chlorobenzene	6.781	112	497677	63.5639	ug/l	96
71)	n-Butyl acrylate	7.019	55	261158	49.9243	ug/l	98
72)	n-Amyl acetate	7.135	43	245295	49.4772	ug/l	97
73)	Bromoform	7.233	173	106991	50.3241	ug/l	98
74)	Ethylbenzene	6.824	106	222252	68.0400	ug/l	91
75)	1,1,2,2-Tetrachloroethane	7.446	83	199470	54.0478	ug/l	96
77)	Styrene	7.105	104	526893	66.3205	ug/l	98
78)	m&p-Xylenes	6.879	106	659766	139.6413	ug/l	100
79)	o-Xylene	7.105	106	315175	65.6245	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.470	53	98307	68.0750	ug/l	80
81)	1,3-Dichlorobenzene	8.019	146	397491	65.5108	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	400336	63.1047	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	363623	61.9760	ug/l	97
84)	Isopropylbenzene	7.294	105	849685	72.8055	ug/l	100
85)	Cyclohexanone	7.367	55	51555	429.0829	ug/l	98
86)	Camphene	7.470	93	306627	95.4588	ug/l	100
87)	1,2,3-Trichloropropane	7.489	75	253408	53.0946	ug/l	99
88)	2-Chlorotoluene	7.592	91	524517	70.7874	ug/l	99
89)	p-Ethyltoluene	7.580	105	899550	72.4308	ug/l	99
90)	4-Chlorotoluene	7.653	91	496193	69.2146	ug/l	99
91)	n-Propylbenzene	7.525	91	1015885	75.5015	ug/l	99
92)	Bromobenzene	7.495	77	497504	63.7816	ug/l	97
93)	1,3,5-Trimethylbenzene	7.611	105	602748	69.2292	ug/l	100
94)	Butyl methacrylate	7.611	41	223146	53.7746	ug/l	88
95)	t-Butylbenzene	7.806	119	708688	72.4621	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	684846	68.4959	ug/l	100
97)	sec-Butylbenzene	7.928	105	923242	65.8154	ug/l	99
98)	4-Isopropyltoluene	8.001	119	779331	75.7200	ug/l	99
99)	n-Butylbenzene	8.238	91	873067	78.5539	ug/l	98
100)	p-Diethylbenzene	8.220	119	449869	72.0018	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.684	119	661902	70.3800	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.745	157	54411	56.4470	ug/l	99
103)	Camphor	9.183	95	310756	892.3223	ug/l	97
104)	Hexachlorobutadiene	9.324	225	152518	77.8194	ug/l	100
105)	1,2,4-Trichlorobenzene	9.238	180	257126	62.6469	ug/l	97
106)	1,2,3-Trichlorobenzene	9.543	180	230496	58.9371	ug/l	99
107)	Naphthalene	9.397	128	613296	56.7327	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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SampleID : CAL @ 50 PPB
Data File: 6M130908.D
Acq On : 08/01/20 14:34
Operator : BK
Sam Mult : 1 Vial# : 9
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:16
Qt Upd On: 07/26/20 16:16
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 6M130908.D\data.ms
Methyl acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 6M130908.D\data.ms
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
4-Chlorotoluene
sec-Butylbenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130909.D Sam Mult : 1 Vial# : 10 Qt On : 08/01/20 15:35
Acq On : 08/01/20 14:54 Misc : S,5G Qt Upd On: 08/01/20 15:34

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	460018	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	373585	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	219087	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	121665	29.47	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.23%			
39) 1,2-Dichloroethane-d4	4.934	67	64263	28.41	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.70%			
66) Toluene-d8	5.983	98	465561	30.33	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.10%			
76) Bromofluorobenzene	7.397	174	171060	29.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.50%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	421537	77.4878	ug/l	98
6) Dichlorodifluoromethane	1.636	85	279945	79.7710	ug/l	100
7) Chloromethane	1.813	50	360588	69.9400	ug/l	95
8) Bromomethane	2.233	94	240777	75.4167	ug/l	99
9) Vinyl Chloride	1.916	62	395238	77.8129	ug/l	95
10) Chloroethane	2.325	64	269095	77.8046	ug/l	96
11) Trichlorofluoromethane	2.557	101	666570	81.1754	ug/l	98
12) Ethyl ether	2.806	59	261302	89.8937	ug/l	98
13) Furan	2.843	39	565412	83.7508	ug/l	97
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	256069	82.3078	ug/l	98
15) Methylene Chloride	3.434	84	369903	79.2821	ug/l	97
16) Acrolein	2.922	56	277148	515.4018	ug/l	100
17) Acrylonitrile	3.642	53	148340	83.9628	ug/l	96
18) Iodomethane	3.166	142	356076	78.3795	ug/l	99
19) Acetone	3.056	43	700850	406.0230	ug/l	100
20) Carbon Disulfide	3.233	76	933745	82.5257	ug/l	100
21) t-Butyl Alcohol	3.508	59	357788	451.5073	ug/l	95
22) n-Hexane	3.910	57	385523	75.7017	ug/l	99
23) Di-isopropyl-ether	4.062	45	941585	94.1940	ug/l	100
24) 1,1-Dichloroethene	3.020	61	476828	84.5626	ug/l	97
25) Methyl Acetate	3.337	43	299300	86.4866	ug/l	100
26) Methyl-t-butyl ether	3.672	73	806267	94.5656	ug/l	99
27) 1,1-Dichloroethane	4.026	63	645155	89.6027	ug/l	98
28) trans-1,2-Dichloroethene	3.678	96	359672	84.6212	ug/l	95
29) Ethyl-t-butyl ether	4.324	59	1036950	95.6138	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	648265	89.4259	ug/l	96
31) Bromochloromethane	4.593	49	297479	87.1952	ug/l	97
32) 2,2-Dichloropropane	4.446	77	510173	87.1685	ug/l	98
33) Ethyl acetate	4.465	43	463245	90.0768	ug/l	97
34) 1,4-Dioxane	5.519	88	394241	4427.6846	ug/l	96
35) 1,1-Dichloropropene	4.855	75	511613	86.0672	ug/l	99
36) Chloroform	4.635	83	675674	89.0070	ug/l	100
38) Cyclohexane	4.800	56	528815	87.5986	ug/l	95
40) 1,2-Dichloroethane	4.977	62	511201	90.7707	ug/l	97
41) 2-Butanone	4.434	43	225895	97.4936	ug/l	92
42) 1,1,1-Trichloroethane	4.763	97	598231	88.1868	ug/l	100
43) Carbon Tetrachloride	4.861	117	516470	91.0686	ug/l	98
44) Vinyl Acetate	4.050	43	1165639	100.8119	ug/l	100
45) Bromodichloromethane	5.599	83	504501	100.4630	ug/l	93
46) Methylcyclohexane	5.446	83	547474	89.3475	ug/l	96
47) Dibromomethane	5.526	174	259827	97.5056	ug/l	97
48) 1,2-Dichloropropane	5.458	63	378407	89.9456	ug/l	100
49) Trichloroethene	5.330	130	415159	85.6133	ug/l	97
50) Benzene	4.977	78	1449238	87.7402	ug/l	100
51) tert-Amyl methyl ether	5.019	73	897603	96.5548	ug/l	98
53) Iso-propylacetate	4.977	43	674511	104.7239	ug/l	99
54) Methyl methacrylate	5.483	41	332129	103.8371	ug/l	99
55) Dibromochloromethane	6.446	129	379809	115.0025	ug/l	97
56) 2-Chloroethylvinylether	5.733	63	96115	93.7717	ug/l	92
57) cis-1,3-Dichloropropene	5.830	75	572406	103.4464	ug/l	100
58) trans-1,3-Dichloropropene	6.117	75	515357	109.5688	ug/l	97
59) Ethyl methacrylate	6.135	41	317420	100.0184	ug/l	99
60) 1,1,2-Trichloroethane	6.221	97	319973	97.1288	ug/l	94
61) 1,2-Dibromoethane	6.525	107	347371	104.4277	ug/l	99
62) 1,3-Dichloropropane	6.318	76	558422	95.1807	ug/l	99
63) 4-Methyl-2-Pentanone	5.897	43	421800	93.1622	ug/l	95
64) 2-Hexanone	6.330	43	329750	91.8302	ug/l	98
65) Tetrachloroethene	6.324	164	337307	93.4544	ug/l	99
67) Toluene	6.019	92	935463	86.8730	ug/l	99

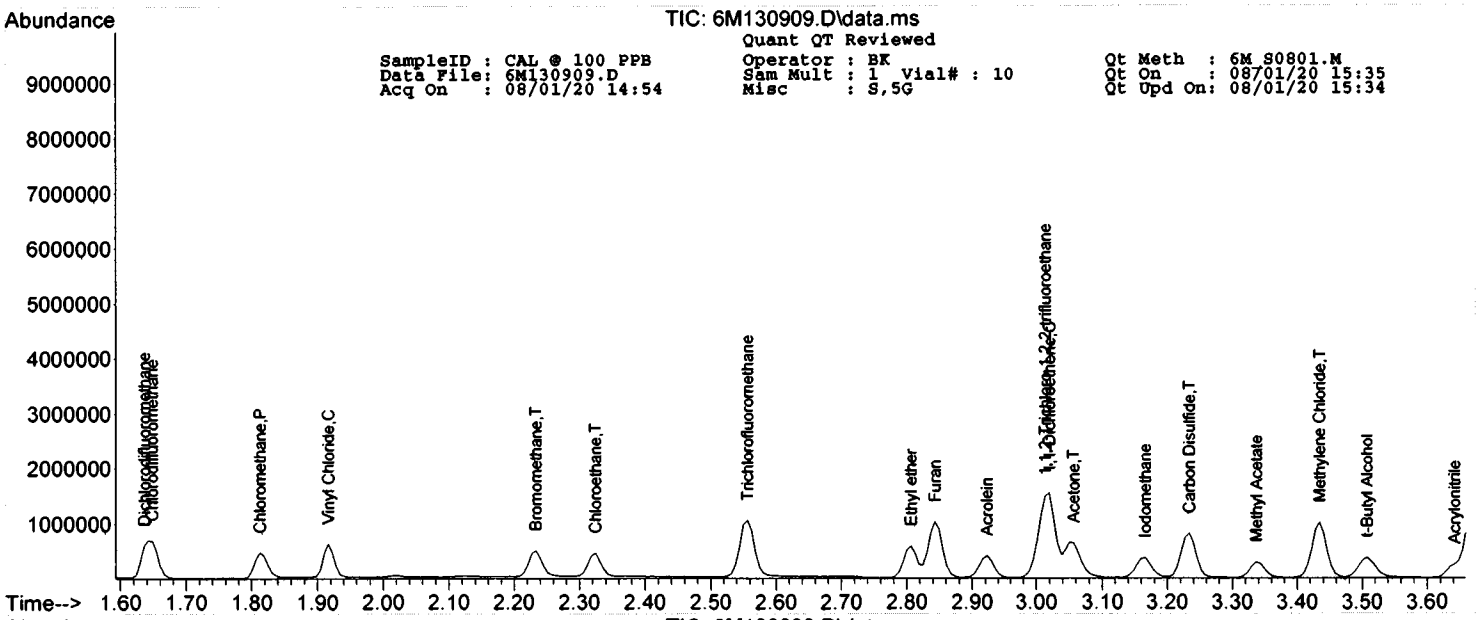
Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130909.D Sam Mult : 1 Vial# : 10 Qt On : 08/01/20 15:35
Acq On : 08/01/20 14:54 Misc : S,5G Qt Upd On: 08/01/20 15:34

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	363747	100.9962	ug/l	99
69)	Chlorobenzene	6.781	112	1050878	88.9198	ug/l	99
71)	n-Butyl acrylate	7.019	55	643371	100.3630	ug/l	99
72)	n-Amyl acetate	7.141	43	601633	96.3918	ug/l	99
73)	Bromoform	7.232	173	269870	117.2050	ug/l	97
74)	Ethylbenzene	6.824	106	475580	89.7397	ug/l	93
75)	1,1,2,2-Tetrachloroethane	7.446	83	471457	99.0655	ug/l	98
77)	Styrene	7.104	104	1183035	93.1307	ug/l	100
78)	m&p-Xylenes	6.879	106	1402903	177.6217	ug/l	99
79)	o-Xylene	7.104	106	675220	88.9632	ug/l	98
80)	trans-1,4-Dichloro-2-b...	7.470	53	231731	100.3104	ug/l	96
81)	1,3-Dichlorobenzene	8.019	146	896612	91.8023	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	876704	90.0830	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	826443	91.4139	ug/l	99
84)	Isopropylbenzene	7.293	105	1802004	89.7978	ug/l	100
85)	Cyclohexanone	7.367	55	112400	487.0385	ug/l	98
86)	Camphene	7.470	93	659522	93.8101	ug/l	99
87)	1,2,3-Trichloropropane	7.482	75	611120	100.9446	ug/l	98
88)	2-Chlorotoluene	7.592	91	1094292	87.7360	ug/l	99
89)	p-Ethyltoluene	7.580	105	1932089	92.3610	ug/l	91
90)	4-Chlorotoluene	7.653	91	1132117	97.2028	ug/l	99
91)	n-Propylbenzene	7.525	91	2151726	90.3744	ug/l	99
92)	Bromobenzene	7.501	77	1111907	92.2999	ug/l	99
93)	1,3,5-Trimethylbenzene	7.610	105	1314538	91.3915	ug/l	91
94)	Butyl methacrylate	7.610	41	517218	89.9185	ug/l	94
95)	t-Butylbenzene	7.806	119	1517655	91.8510	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	1512976	91.2111	ug/l	99
97)	sec-Butylbenzene	7.934	105	1988625	82.2493	ug/l	99
98)	4-Isopropyltoluene	8.001	119	1681838	95.2470	ug/l	99
99)	n-Butylbenzene	8.238	91	1911706	94.9714	ug/l	100
100)	p-Diethylbenzene	8.220	119	979638	94.3604	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.683	119	1483371	99.9638	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.744	157	126002	96.0639	ug/l	99
103)	Camphor	9.183	95	696562	989.4510	ug/l	99
104)	Hexachlorobutadiene	9.324	225	324785	92.9031	ug/l	98
105)	1,2,4-Trichlorobenzene	9.238	180	588616	92.0544	ug/l	98
106)	1,2,3-Trichlorobenzene	9.543	180	547555	95.8480	ug/l	99
107)	Naphthalene	9.397	128	1454703	90.5374	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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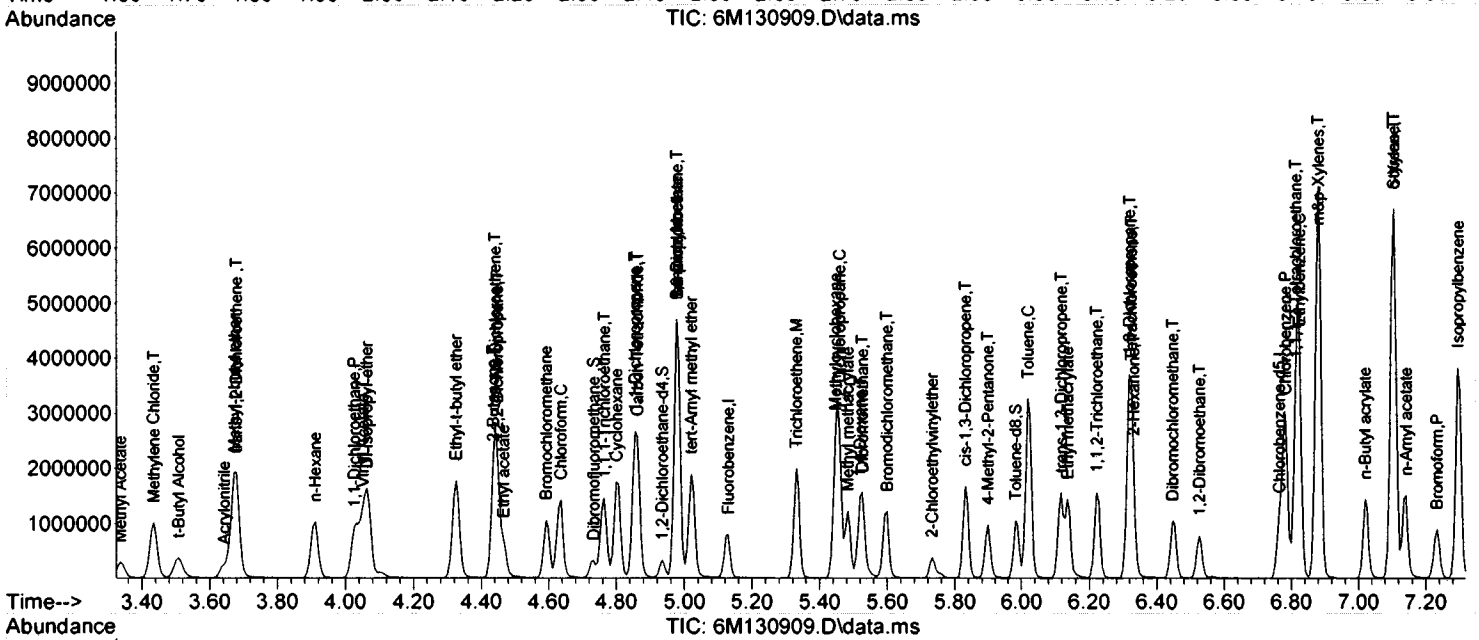
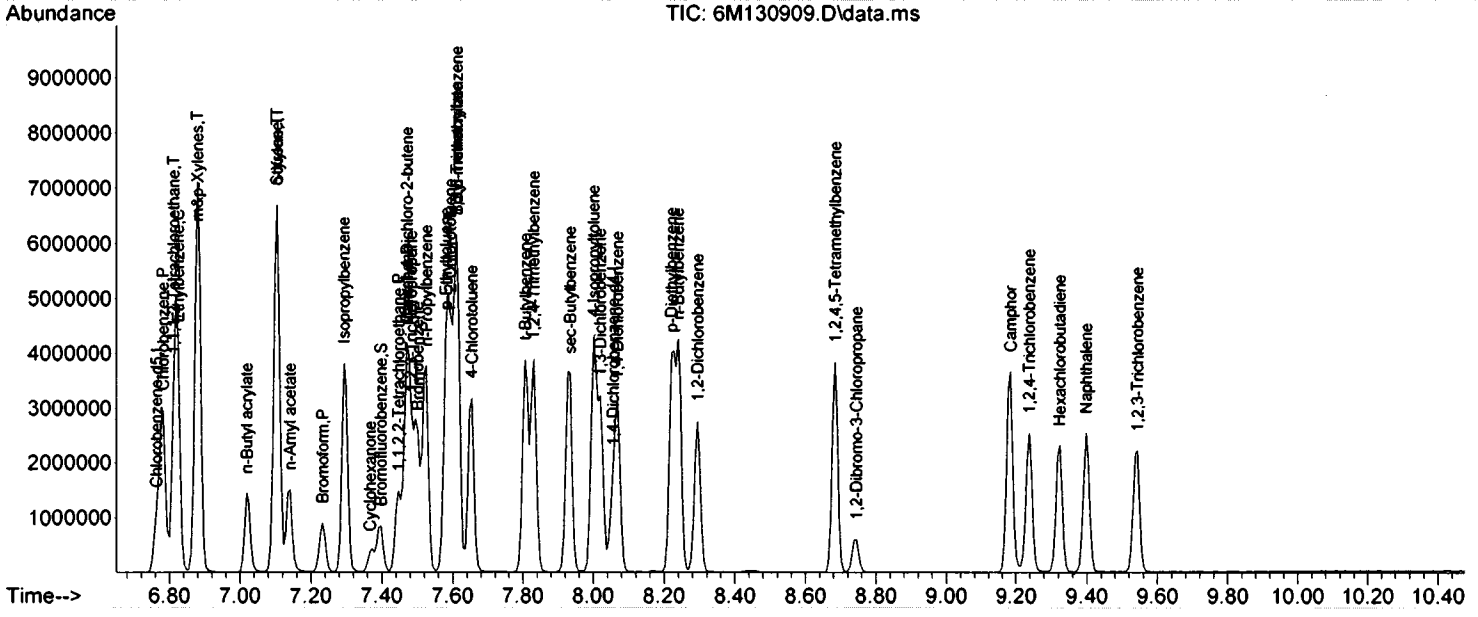
Quant QT Reviewed
SampleID : CAL @ 100 PPB
Data File: 6M130909.D
Acq On : 08/01/20 14:54
Operator : BK
Sam Mult : 1 Vial# : 10
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:35
Qt Upd On: 08/01/20 15:34
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 6M130909.D\data.ms
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 6M130909.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
p-Diethylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

Sample ID : CAL @ 250 PPB
Data File: 6M130911.D
Acq On : 08/01/20 15:36

Operator : BK
Sam Mult : 1 Vial# : 12
Misc : S,5G

Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:49
Qt Upd On: 08/01/20 15:35

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	432672	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	358455	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.055	152	285114	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	111891	28.89	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.30%			
39) 1,2-Dichloroethane-d4	4.934	67	58340	27.63	ug/l	0.00
Spiked Amount 30.000			Recovery = 92.10%			
66) Toluene-d8	5.989	98	450656	30.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.83%			
76) Bromofluorobenzene	7.397	174	167719	22.31	ug/l	0.00
Spiked Amount 30.000			Recovery = 74.37%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	985196	201.6247	ug/l	99
6) Dichlorodifluoromethane	1.636	85	642012	202.7064	ug/l	97
7) Chloromethane	1.813	50	818268	179.5369	ug/l	98
9) Vinyl Chloride	1.916	62	930481	203.8116	ug/l	96
10) Chloroethane	2.319	64	627863	201.9762	ug/l	99
11) Trichlorofluoromethane	2.556	101	1577987	212.3072	ug/l	99
12) Ethyl ether	2.806	59	603055	225.1270	ug/l	98
13) Furan	2.843	39	1309849	213.2110	ug/l	99
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	601502	213.0997	ug/l	98
15) Methylene Chloride	3.434	84	840087	199.7131	ug/l	95
16) Acrolein	2.922	56	639003	1255.6995	ug/l	99
17) Acrylonitrile	3.642	53	345385	214.7367	ug/l	97
18) Iodomethane	3.166	142	889253	227.5217	ug/l	98
19) Acetone	3.056	43	1602135	1025.3708	ug/l	99
20) Carbon Disulfide	3.233	76	2241594	218.2648	ug/l	100
21) t-Butyl Alcohol	3.507	59	844887	1156.0071	ug/l	93
23) Di-isopropyl-ether	4.062	45	2189058	235.5644	ug/l	97
24) 1,1-Dichloroethene	3.020	61	1134260	220.6812	ug/l	99
25) Methyl Acetate	3.337	43	687039	216.9396	ug/l	100
26) Methyl-t-butyl ether	3.672	73	1845504	232.2400	ug/l	99
27) 1,1-Dichloroethane	4.026	63	1498061	225.9066	ug/l	98
28) trans-1,2-Dichloroethene	3.678	96	857564	221.3210	ug/l	98
29) Ethyl-t-butyl ether	4.324	59	2432510	240.5804	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	1509155	226.1225	ug/l	98
31) Bromochloromethane	4.593	49	659504	210.9291	ug/l	96
32) 2,2-Dichloropropane	4.446	77	1232415	229.7767	ug/l	98
33) Ethyl acetate	4.465	43	1038785	219.1038	ug/l	99
34) 1,4-Dioxane	5.519	88	972723	11887.1518	ug/l	99
35) 1,1-Dichloropropene	4.855	75	1190638	219.0613	ug/l	98
36) Chloroform	4.635	83	1580979	226.4040	ug/l	99
38) Cyclohexane	4.806	56	1246540	225.1247	ug/l	97
40) 1,2-Dichloroethane	4.977	62	1158559	222.8331	ug/l	100
41) 2-Butanone	4.434	43	530517	244.6625	ug/l	91
42) 1,1,1-Trichloroethane	4.763	97	1424064	228.5936	ug/l	98
43) Carbon Tetrachloride	4.861	117	1270393	242.4966	ug/l	97
44) Vinyl Acetate	4.050	43	2714040	249.1582	ug/l	100
45) Bromodichloromethane	5.599	83	1183966	250.4363	ug/l	97
46) Methylcyclohexane	5.452	83	1295970	229.7644	ug/l	98
47) Dibromomethane	5.525	174	587657	235.6445	ug/l	96
48) 1,2-Dichloropropane	5.458	63	870004	224.3780	ug/l	96
49) Trichloroethene	5.330	130	980410	221.3247	ug/l	98
50) Benzene	4.977	78	3394218	223.0390	ug/l	100
51) tert-Amyl methyl ether	5.019	73	2101456	242.0075	ug/l	98
53) Iso-propylacetate	4.977	43	1582113	253.6094	ug/l	99
54) Methyl methacrylate	5.483	41	781400	252.6700	ug/l	99
55) Dibromochloromethane	6.446	129	909174	278.5508	ug/l	96
56) 2-Chloroethylvinylether	5.733	63	223990	230.6258	ug/l	98
57) cis-1,3-Dichloropropene	5.830	75	1376499	257.4890	ug/l	98
58) trans-1,3-Dichloropropene	6.117	75	1240876	269.7920	ug/l	99
59) Ethyl methacrylate	6.135	41	746658	245.1919	ug/l	99
60) 1,1,2-Trichloroethane	6.220	97	745069	237.0758	ug/l	93
61) 1,2-Dibromoethane	6.525	107	798591	248.3751	ug/l	99
62) 1,3-Dichloropropane	6.318	76	1300379	233.2477	ug/l	98
63) 4-Methyl-2-Pentanone	5.897	43	993721	231.9170	ug/l	97
64) 2-Hexanone	6.330	43	769708	227.1100	ug/l	97
65) Tetrachloroethene	6.324	164	791972	231.7191	ug/l	97
67) Toluene	6.025	92	2197745	217.4691	ug/l	97
68) 1,1,1,2-Tetrachloroethane	6.812	133	880220	254.2068	ug/l	98
69) Chlorobenzene	6.781	112	2438263	219.8943	ug/l	98

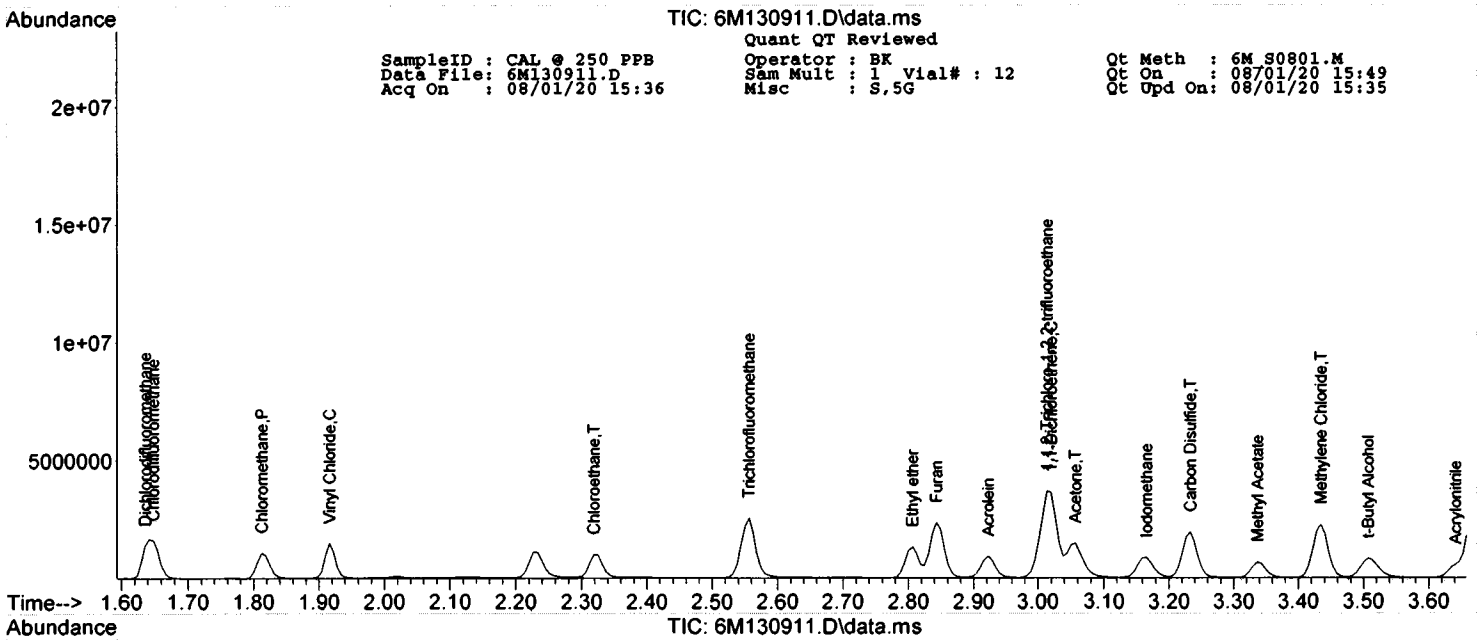
Quantitation Report (QT Reviewed)

SampleID : CAL @ 250 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130911.D Sam Mult : 1 Vial# : 12 Qt On : 08/01/20 15:49
Acq On : 08/01/20 15:36 Misc : S,5G Qt Upd On: 08/01/20 15:35

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
71)	n-Butyl acrylate	7.019	55	1519580	182.0198	ug/l	100
72)	n-Amyl acetate	7.141	43	1426151	181.7170	ug/l	100
73)	Bromoform	7.232	173	668213	215.5817	ug/l	98
74)	Ethylbenzene	6.824	106	1144973	168.9061	ug/l	91
75)	1,1,2,2-Tetrachloroethane	7.446	83	1099857	177.9209	ug/l	96
77)	Styrene	7.104	104	2750824	168.7191	ug/l	99
78)	m&p-Xylenes	6.879	106	3249527	321.2807	ug/l	96
79)	o-Xylene	7.104	106	1619109	166.9946	ug/l	99
80)	trans-1,4-Dichloro-2-b...	7.470	53	564795	187.7505	ug/l	95
81)	1,3-Dichlorobenzene	8.019	146	2650262	211.9899	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	2648802	213.3722	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	2483223	214.7512	ug/l	97
84)	Isopropylbenzene	7.293	105	4218802	164.3408	ug/l	99
86)	Camphene	7.470	93	1572545	174.0330	ug/l	100
87)	1,2,3-Trichloropropane	7.488	75	1464114	185.4855	ug/l	98
88)	2-Chlorotoluene	7.592	91	2730208	172.4343	ug/l	99
89)	p-Ethyltoluene	7.580	105	4674667	174.3800	ug/l	99
90)	4-Chlorotoluene	7.653	91	3124453	207.2984	ug/l	99
91)	n-Propylbenzene	7.525	91	5096605	167.1712	ug/l	99
92)	Bromobenzene	7.501	77	2618496	169.6380	ug/l	98
93)	1,3,5-Trimethylbenzene	7.610	105	3489758	189.1482	ug/l	99
94)	Butyl methacrylate	7.610	41	1409772	239.7873	ug/l	93
95)	t-Butylbenzene	7.806	119	4262859	200.9781	ug/l	98
96)	1,2,4-Trimethylbenzene	7.830	105	4417200	207.6678	ug/l	100
98)	4-Isopropyltoluene	8.001	119	5022133	220.2964	ug/l	99
99)	n-Butylbenzene	8.238	91	5787615	222.8049	ug/l	99
100)	p-Diethylbenzene	8.220	119	2969179	222.2720	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.683	119	3749662	194.1846	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.744	157	342093	202.0028	ug/l	96
104)	Hexachlorobutadiene	9.324	225	792653	176.7356	ug/l	99
105)	1,2,4-Trichlorobenzene	9.238	180	1368042	167.0578	ug/l	98
106)	1,2,3-Trichlorobenzene	9.543	180	1248740	169.3740	ug/l	100
107)	Naphthalene	9.397	128	3424245	166.3874	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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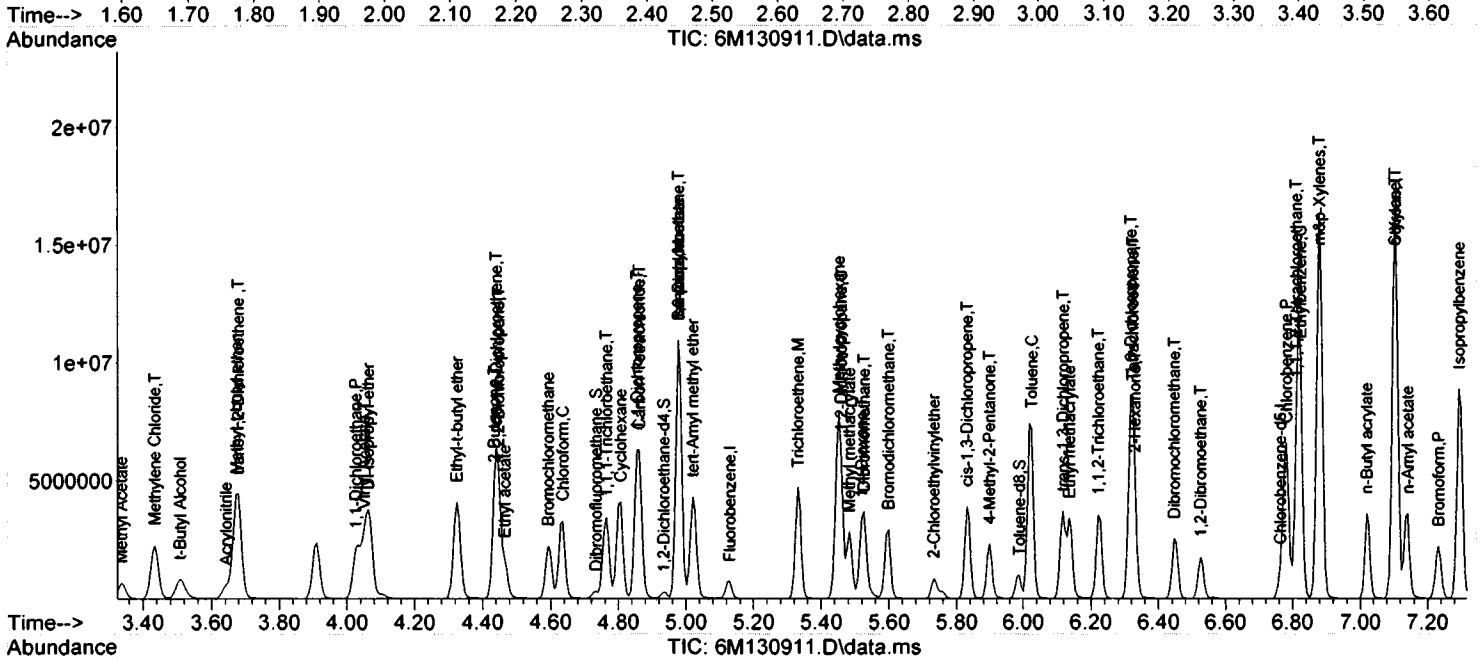
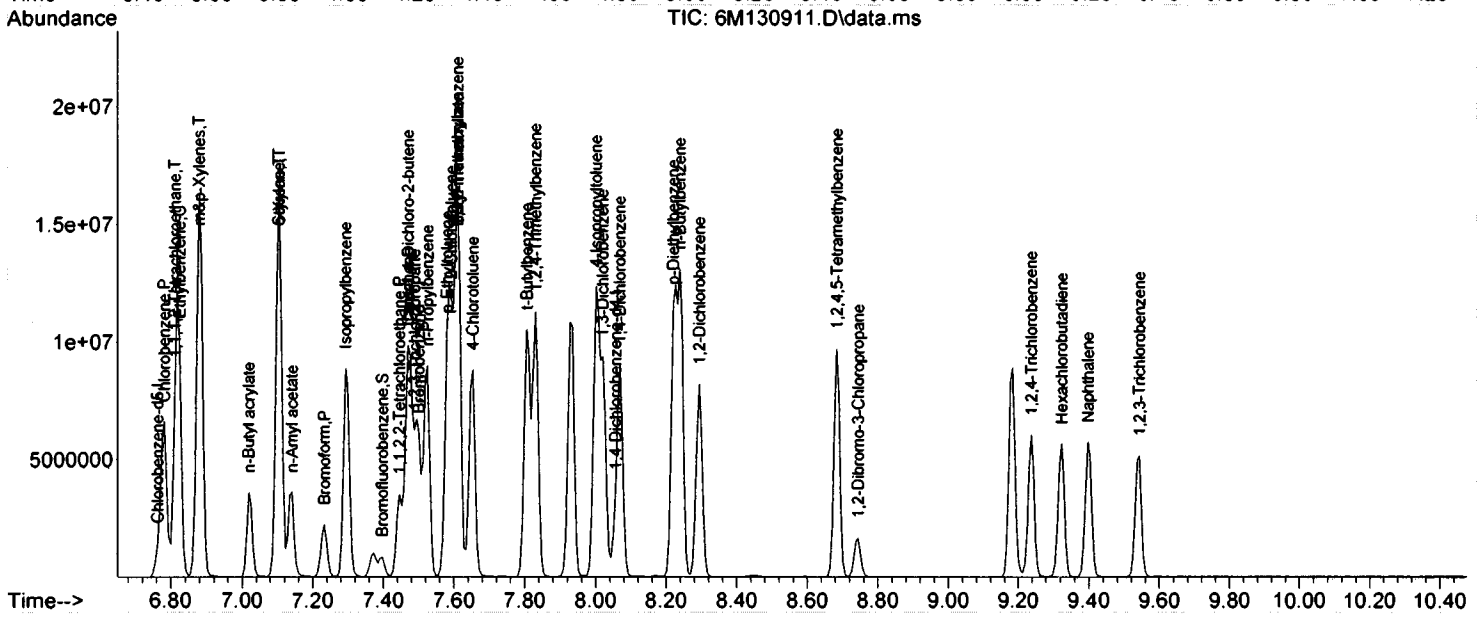
Data File: 6M130911.D
Acq On : 08/01/20 15:36
Quant QT Reviewed
Operator : BK
Sam Mult : 1 Vial# : 12
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:49
Qt Upd On: 08/01/20 15:35
2e+07
1.5e+07
1e+07
5000000
Chloromethane,P
Vinyl Chloride,C
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time--> 1.60 1.70 1.80 1.90 2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80 2.90 3.00 3.10 3.20 3.30 3.40 3.50 3.60


Abundance
TIC: 6M130911.D\data.ms
2e+07
1.5e+07
1e+07
5000000
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Dibromofluoromethane,S
1,1,1-Trichloroethane,T
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time--> 3.40 3.60 3.80 4.00 4.20 4.40 4.60 4.80 5.00 5.20 5.40 5.60 5.80 6.00 6.20 6.40 6.60 6.80 7.00 7.20


Abundance
TIC: 6M130911.D\data.ms
2e+07
1.5e+07
1e+07
5000000
Chlorobenzene-d5
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
1,1,2,2-Tetrachloroethane,P
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
n-Diethylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time--> 6.80 7.00 7.20 7.40 7.60 7.80 8.00 8.20 8.40 8.60 8.80 9.00 9.20 9.40 9.60 9.80 10.00 10.20 10.40

Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130913.D Sam Mult : 1 Vial# : 14 Qt On : 08/01/20 16:56
Acq On : 08/01/20 16:17 Misc : S,5G Qt Upd On: 08/01/20 15:35

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	502146	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	414316	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	281684	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	131190	29.19	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.30%			
39) 1,2-Dichloroethane-d4	4.934	67	67370	27.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 91.63%			
66) Toluene-d8	5.983	98	514407	30.17	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.57%			
76) Bromofluorobenzene	7.397	174	276800	37.27	ug/l	0.00
Spiked Amount 30.000			Recovery = 124.23%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	2017437	355.7541	ug/l	96
6) Dichlorodifluoromethane	1.636	85	1359022	369.7256	ug/l	99
7) Chloromethane	1.813	50	1627867	307.7555	ug/l	100
9) Vinyl Chloride	1.916	62	1863358	351.6790	ug/l	97
10) Chloroethane	2.319	64	1273592	353.0161	ug/l	98
11) Trichlorofluoromethane	2.550	101	3201080	371.0964	ug/l	98
12) Ethyl ether	2.806	59	1290886	415.2287	ug/l	96
13) Furan	2.843	39	2669772	374.4478	ug/l	100
14) 1,1,2-Trichloro-1,2,2-...	3.008	101	1230898	375.7479	ug/l	98
15) Methylene Chloride	3.434	84	1742681	356.9677	ug/l	96
16) Acrolein	2.922	56	1390669	2354.6989	ug/l	99
17) Acrylonitrile	3.642	53	746179	399.7372	ug/l	99
18) Iodomethane	3.160	142	2175914m	402.9896	ug/l	
19) Acetone	3.056	43	3426606	1889.6214	ug/l	100
20) Carbon Disulfide	3.233	76	4648210	389.9790	ug/l	100
21) t-Butyl Alcohol	3.508	59	1885362	2222.7233	ug/l	97
23) Di-isopropyl-ether	4.062	45	4754672	440.8611	ug/l	98
24) 1,1-Dichloroethene	3.020	61	2365634	396.5784	ug/l	100
25) Methyl Acetate	3.337	43	1505018	409.4754	ug/l	100
26) Methyl-t-butyl ether	3.672	73	4065332	440.8052	ug/l	99
27) 1,1-Dichloroethane	4.026	63	3068416	398.6965	ug/l	100
28) trans-1,2-Dichloroethene	3.678	96	1755462	390.3699	ug/l	97
29) Ethyl-t-butyl ether	4.324	59	5306374	452.2017	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	3209532	414.3624	ug/l	97
31) Bromochloromethane	4.593	49	1394482	384.2916	ug/l	96
32) 2,2-Dichloropropane	4.446	77	2590518	416.1639	ug/l	98
33) Ethyl acetate	4.465	43	2290157	416.2156	ug/l	99
34) 1,4-Dioxane	5.519	88	2065005	21743.9538	ug/l	99
35) 1,1-Dichloropropene	4.855	75	2508995	397.7539	ug/l	99
36) Chloroform	4.635	83	3285794	405.4405	ug/l	97
38) Cyclohexane	4.800	56	2588921	402.8696	ug/l	97
40) 1,2-Dichloroethane	4.977	62	2570104	425.9327	ug/l	99
41) 2-Butanone	4.434	43	1199777	476.7573	ug/l	90
42) 1,1,1-Trichloroethane	4.763	97	2984050	412.7333	ug/l	98
43) Carbon Tetrachloride	4.861	117	2655147	436.7017	ug/l	98
44) Vinyl Acetate	4.050	43	6011931	475.5561	ug/l	100
45) Bromodichloromethane	5.599	83	2618931	477.3214	ug/l	98
46) Methylcyclohexane	5.446	83	2719250	415.3992	ug/l	98
47) Dibromomethane	5.525	174	1334234	460.9928	ug/l	98
48) 1,2-Dichloropropane	5.458	63	1892419	420.5378	ug/l	98
49) Trichloroethene	5.330	130	2054440	399.6174	ug/l	99
50) Benzene	4.977	78	6937186	392.7834	ug/l	100
51) tert-Amyl methyl ether	5.019	73	4606930	457.1397	ug/l	98
53) Iso-propylacetate	4.977	43	3570890	495.2304	ug/l	100
54) Methyl methacrylate	5.483	41	1596018	446.4995	ug/l	92
55) Dibromochloromethane	6.446	129	2076290	550.3619	ug/l	95
56) 2-Chloroethylvinylether	5.733	63	514111	457.9723	ug/l	99
57) cis-1,3-Dichloropropene	5.830	75	2982708	482.7213	ug/l	99
58) trans-1,3-Dichloropropene	6.117	75	2760003	519.1744	ug/l	97
59) Ethyl methacrylate	6.135	41	1720007	488.6720	ug/l	98
60) 1,1,2-Trichloroethane	6.220	97	1646133	453.1673	ug/l	92
61) 1,2-Dibromoethane	6.525	107	1774649	477.5283	ug/l	99
62) 1,3-Dichloropropane	6.318	76	2913563	452.1420	ug/l	99
63) 4-Methyl-2-Pentanone	5.897	43	2237200	451.7268	ug/l	98
64) 2-Hexanone	6.330	43	1752811	447.4538	ug/l	95
65) Tetrachloroethene	6.324	164	1728602	437.5725	ug/l	99
67) Toluene	6.019	92	4685665	401.1386	ug/l	91
68) 1,1,1,2-Tetrachloroethane	6.812	133	1967779	491.6718	ug/l	100
69) Chlorobenzene	6.781	112	5167591	403.2037	ug/l	95

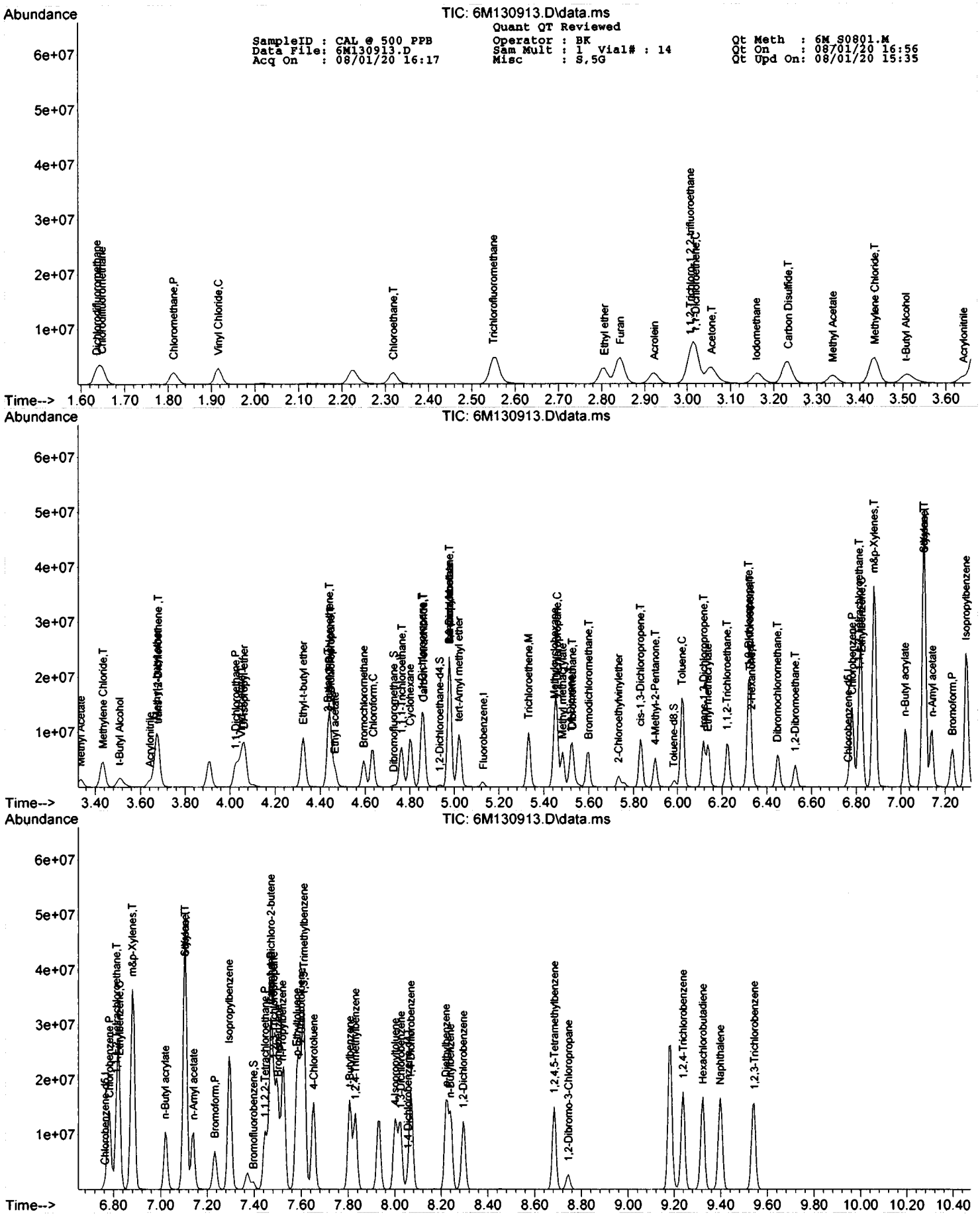
Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130913.D Sam Mult : 1 Vial# : 14 Qt On : 08/01/20 16:56
Acq On : 08/01/20 16:17 Misc : S,5G Qt Upd On: 08/01/20 15:35

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
71)	n-Butyl acrylate	7.019	55	4540242	550.4659	ug/l	100
72)	n-Amyl acetate	7.141	43	3835146	491.0376	ug/l	93
73)	Bromoform	7.232	173	2274753	742.8269	ug/l	99
74)	Ethylbenzene	6.824	106	2533762	378.3313	ug/l	79
75)	1,1,2,2-Tetrachloroethane	7.446	83	3558315	582.6282	ug/l	96
77)	Styrene	7.104	104	8169893	507.1941	ug/l	95
78)	m&p-Xylenes	6.879	106	7630447	763.6086	ug/l	58
79)	o-Xylene	7.104	106	4875760	509.0086	ug/l	85
80)	trans-1,4-Dichloro-2-b...	7.470	53	1668807	561.5039	ug/l	84
81)	1,3-Dichlorobenzene	8.025	146	4194808	339.6213	ug/l	96
82)	1,4-Dichlorobenzene	8.068	146	5688478	463.8107	ug/l	98
83)	1,2-Dichlorobenzene	8.293	146	4180484	365.9341	ug/l	96
84)	Isopropylbenzene	7.293	105	11249143	443.5392	ug/l	94
86)	Camphene	7.470	93	5038232	564.3688	ug/l	97
87)	1,2,3-Trichloropropane	7.482	75	4698878	602.5396	ug/l	98
88)	2-Chlorotoluene	7.598	91	5670598	362.5043	ug/l	93
89)	p-Ethyltoluene	7.580	105	10458943	394.9027	ug/l	94
90)	4-Chlorotoluene	7.653	91	5808725	390.0848	ug/l	95
91)	n-Propylbenzene	7.519	91	11780786	391.1210	ug/l	85
92)	Bromobenzene	7.501	77	8186911	536.8433	ug/l	97
93)	1,3,5-Trimethylbenzene	7.610	105	7162160	392.9229	ug/l	93
95)	t-Butylbenzene	7.806	119	6919225	330.1882	ug/l	94
96)	1,2,4-Trimethylbenzene	7.830	105	5830275	277.4391	ug/l	94
98)	4-Isopropyltoluene	8.001	119	6006253	266.6731	ug/l	96
99)	n-Butylbenzene	8.238	91	6758216	263.3380	ug/l	92
100)	p-Diethylbenzene	8.220	119	4465320	338.3431	ug/l	94
101)	1,2,4,5-Tetramethylben...	8.683	119	6143498	322.0288	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.744	157	702078	419.6187	ug/l	79
104)	Hexachlorobutadiene	9.324	225	2491481	562.2829	ug/l	99
105)	1,2,4-Trichlorobenzene	9.238	180	4371738	540.3533	ug/l	97
106)	1,2,3-Trichlorobenzene	9.543	180	4168590	572.2955	ug/l	99
107)	Naphthalene	9.397	128	10347976	508.9408	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M130913.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 500 PPB
Data File: 6M130913.D
Acq On : 08/01/20 16:17
Operator : BK
Sam Mult : 1 Vial# : 14
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 16:56
Qt Upd On: 08/01/20 15:35
Chloromethane,P
Vinyl Chloride,C
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 6M130913.D\data.ms
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 6M130913.D\data.ms
Chlorobenzene-d5,I
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
4-Chlorotoluene
n-Propylbenzene
2-Chlorotoluene
1,3,5-Trimethylbenzene
tert-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
p-Isopropyltoluene
1,3-Dichlorobenzene
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130904.D Sam Mult : 1 Vial# : 5 Qt On : 08/01/20 15:19
Acq On : 08/01/20 13:11 Misc : S,5G Qt Upd On: 08/01/20 15:19

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	378400	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	324090	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	180373	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	104773	31.23	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.10%			
39) 1,2-Dichloroethane-d4	4.934	67	56460	30.03	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.10%			
66) Toluene-d8	5.983	98	398534	30.24	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.80%			
76) Bromofluorobenzene	7.397	174	141258	29.83	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.43%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	0.000		0	N.D.	d	
6) Dichlorodifluoromethane	0.000		0	N.D.	d	
7) Chloromethane	0.000		0	N.D.	d	
8) Bromomethane	0.000		0	N.D.	d	
9) Vinyl Chloride	0.000		0	N.D.	d	
10) Chloroethane	0.000		0	N.D.	d	
11) Trichlorofluoromethane	0.000		0	N.D.	d	
12) Ethyl ether	0.000		0	N.D.	d	
13) Furan	0.000		0	N.D.	d	
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D.	d	
15) Methylene Chloride	0.000		0	N.D.	d	
16) Acrolein	0.000		0	N.D.	d	
17) Acrylonitrile	0.000		0	N.D.	d	
18) Iodomethane	0.000		0	N.D.	d	
19) Acetone	0.000		0	N.D.	d	
20) Carbon Disulfide	0.000		0	N.D.	d	
21) t-Butyl Alcohol	0.000		0	N.D.	d	
22) n-Hexane	0.000		0	N.D.	d	
23) Di-isopropyl-ether	0.000		0	N.D.	d	
24) 1,1-Dichloroethene	0.000		0	N.D.	d	
25) Methyl Acetate	0.000		0	N.D.	d	
26) Methyl-t-butyl ether	3.672	73	7689	1.1088	ug/l	85
27) 1,1-Dichloroethane	0.000		0	N.D.	d	
28) trans-1,2-Dichloroethene	0.000		0	N.D.	d	
29) Ethyl-t-butyl ether	0.000		0	N.D.	d	
30) cis-1,2-Dichloroethene	0.000		0	N.D.	d	
31) Bromochloromethane	0.000		0	N.D.	d	
32) 2,2-Dichloropropane	0.000		0	N.D.	d	
33) Ethyl acetate	0.000		0	N.D.	d	
34) 1,4-Dioxane	0.000		0	N.D.	d	
35) 1,1-Dichloropropene	0.000		0	N.D.	d	
36) Chloroform	0.000		0	N.D.	d	
38) Cyclohexane	0.000		0	N.D.	d	
40) 1,2-Dichloroethane	0.000		0	N.D.	d	
41) 2-Butanone	0.000		0	N.D.	d	
42) 1,1,1-Trichloroethane	0.000		0	N.D.	d	
43) Carbon Tetrachloride	0.000		0	N.D.	d	
44) Vinyl Acetate	0.000		0	N.D.	d	
45) Bromodichloromethane	0.000		0	N.D.	d	
46) Methylcyclohexane	0.000		0	N.D.	d	
47) Dibromomethane	0.000		0	N.D.	d	
48) 1,2-Dichloropropane	0.000		0	N.D.	d	
49) Trichloroethene	0.000		0	N.D.	d	
50) Benzene	4.977	78	12206	0.8611	ug/l	100
51) tert-Amyl methyl ether	0.000		0	N.D.	d	
53) Iso-propylacetate	0.000		0	N.D.	d	
54) Methyl methacrylate	0.000		0	N.D.	d	
55) Dibromochloromethane	0.000		0	N.D.	d	
56) 2-Chloroethylvinylether	0.000		0	N.D.	d	
57) cis-1,3-Dichloropropene	0.000		0	N.D.	d	
58) trans-1,3-Dichloropropene	0.000		0	N.D.	d	
59) Ethyl methacrylate	0.000		0	N.D.	d	
60) 1,1,2-Trichloroethane	0.000		0	N.D.	d	
61) 1,2-Dibromoethane	6.531	107	2970	0.9674	ug/l	81
62) 1,3-Dichloropropane	0.000		0	N.D.	d	
63) 4-Methyl-2-Pentanone	0.000		0	N.D.	d	
64) 2-Hexanone	0.000		0	N.D.	d	
65) Tetrachloroethene	0.000		0	N.D.	d	
67) Toluene	6.019	92	9426	1.0362	ug/l	92

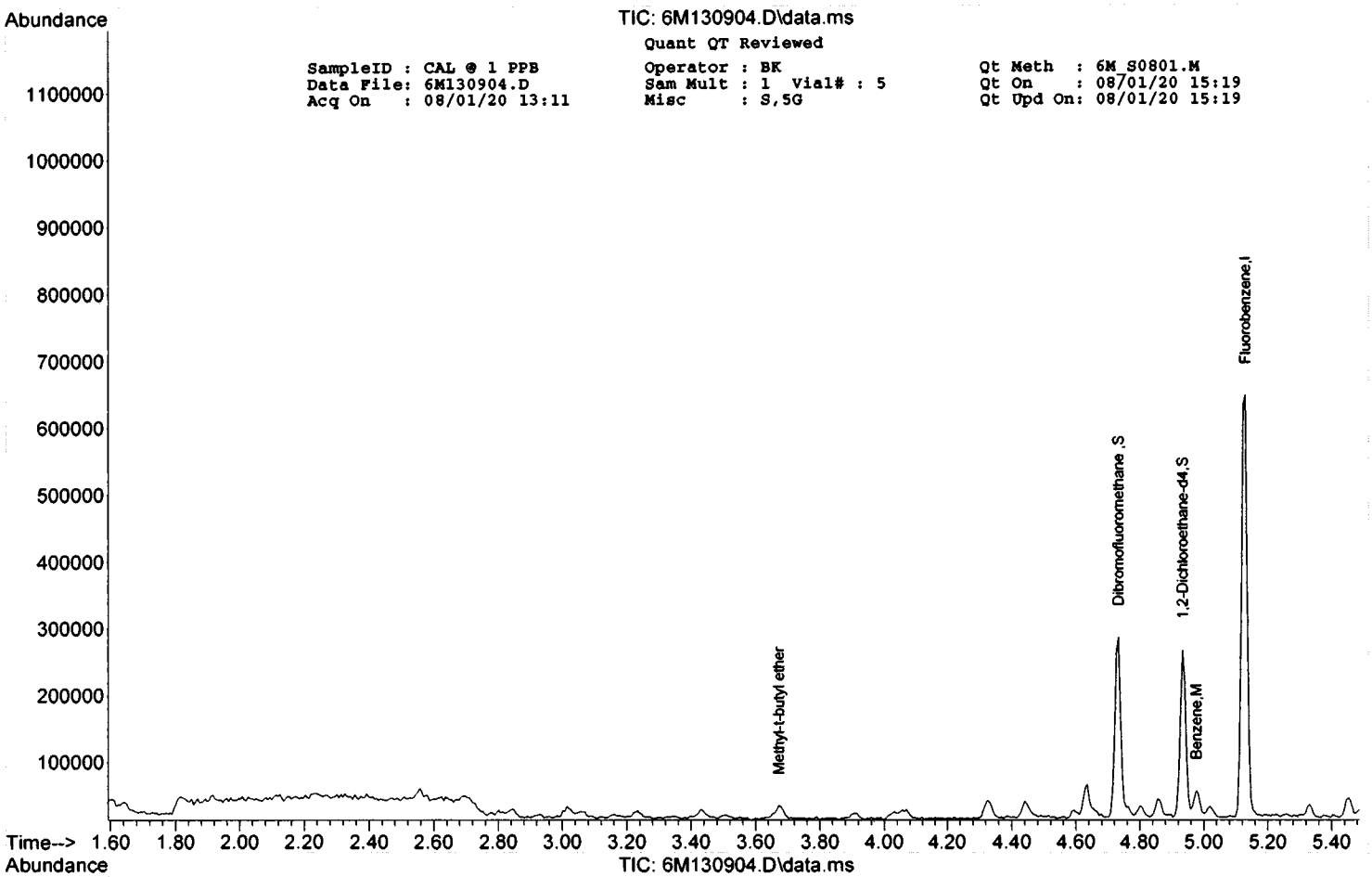
Quantitation Report (QT Reviewed)

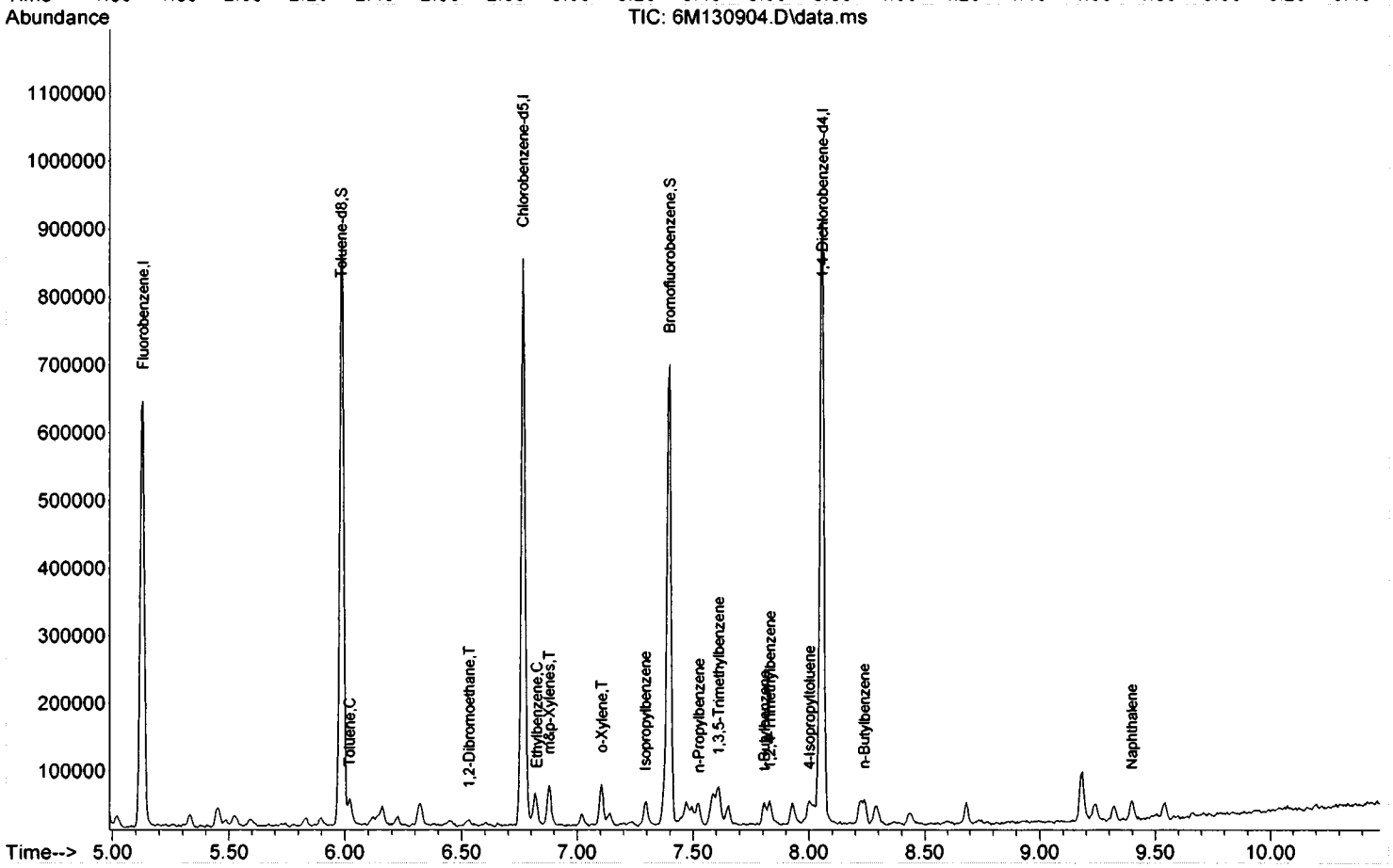
SampleID : CAL @ 1 PPB
Data File: 6M130904.D
Acq On : 08/01/20 13:11
Operator : BK
Sam Mult : 1 Vial# : 5
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:19
Qt Upd On: 08/01/20 15:19

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	0.000		0	N.D. d		
69)	Chlorobenzene	0.000		0	N.D. d		
71)	n-Butyl acrylate	0.000		0	N.D. d		
72)	n-Amyl acetate	0.000		0	N.D. d		
73)	Bromoform	0.000		0	N.D. d		
74)	Ethylbenzene	6.824	106	3999	0.8873	ug/l	98
75)	1,1,2,2-Tetrachloroethane	0.000		0	N.D. d		
77)	Styrene	0.000		0	N.D. d		
78)	m&p-Xylenes	6.879	106	12835	1.9375	ug/l	93
79)	o-Xylene	7.104	106	6195	0.9693	ug/l	94
80)	trans-1,4-Dichloro-2-b...	0.000		0	N.D. d		
81)	1,3-Dichlorobenzene	0.000		0	N.D. d		
82)	1,4-Dichlorobenzene	0.000		0	N.D. d		
83)	1,2-Dichlorobenzene	0.000		0	N.D. d		
84)	Isopropylbenzene	7.293	105	16453	0.9548	ug/l	91
85)	Cyclohexanone	0.000		0	N.D. d		
86)	Camphene	0.000		0	N.D. d		
87)	1,2,3-Trichloropropane	0.000		0	N.D. d		
88)	2-Chlorotoluene	0.000		0	N.D. d		
89)	p-Ethyltoluene	0.000		0	N.D. d		
90)	4-Chlorotoluene	0.000		0	N.D. d		
91)	n-Propylbenzene	7.525	91	18459	0.8960	ug/l	96
92)	Bromobenzene	0.000		0	N.D. d		
93)	1,3,5-Trimethylbenzene	7.610	105	11029	0.9023	ug/l	83
94)	Butyl methacrylate	0.000		0	N.D. d		
95)	t-Butylbenzene	7.806	119	13807	0.9607	ug/l	98
96)	1,2,4-Trimethylbenzene	7.830	105	14637	1.0539	ug/l	81
97)	sec-Butylbenzene	7.934	105	15695	No Calib		
98)	4-Isopropyltoluene	8.001	119	13351	0.8448	ug/l	98
99)	n-Butylbenzene	8.238	91	16830	0.9506	ug/l	97
100)	p-Diethylbenzene	0.000		0	N.D. d		
101)	1,2,4,5-Tetramethylben...	0.000		0	N.D. d		
102)	1,2-Dibromo-3-Chloropr...	0.000		0	N.D. d		
103)	Camphor	0.000		0	N.D. d		
104)	Hexachlorobutadiene	0.000		0	N.D. d		
105)	1,2,4-Trichlorobenzene	0.000		0	N.D. d		
106)	1,2,3-Trichlorobenzene	0.000		0	N.D. d		
107)	Naphthalene	9.397	128	14426	1.1599	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M130904.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 1 PPB
Data File: 6M130904.D
Acq On : 08/01/20 13:11
Operator : BK
Sam Mult : 1 Vial# : 5
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:19
Qt Upd On: 08/01/20 15:19
Methyl-t-butyl ether
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Benzene,M
Fluorobenzene,I
Time-->


Abundance
TIC: 6M130904.D\data.ms
Fluorobenzene,I
Toluene-d8,S
Toluene,C
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Ethylbenzene,C
m&p-Xylenes,T
o-Xylene,T
Isopropylbenzene
Bromofluorobenzene,S
n-Propylbenzene
1,3,5-Trimethylbenzene
4-Isopropyltoluene
1,4-Dichlorobenzene-d4,I
n-Butylbenzene
Naphthalene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : BK Qt Meth : 6M_S0801.M
Data File: 6M130903.D Sam Mult : 1 Vial# : 4 Qt On : 08/01/20 15:17
Acq On : 08/01/20 12:51 Misc : S,5G Qt Upd On: 08/01/20 15:17

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
4) Fluorobenzene	5.129	96	423816	30.00 ug/l	0.00
52) Chlorobenzene-d5	6.763	117	356268	30.00 ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	199185	30.00 ug/l	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	4.733	111	110986	29.08 ug/l	0.00
Spiked Amount 30.000			Recovery =	96.93%	
39) 1,2-Dichloroethane-d4	4.934	67	62223	29.12 ug/l	0.00
Spiked Amount 30.000			Recovery =	97.07%	
66) Toluene-d8	5.983	98	436450	30.26 ug/l	0.00
Spiked Amount 30.000			Recovery =	100.87%	
76) Bromofluorobenzene	7.397	174	153460	28.72 ug/l	0.00
Spiked Amount 30.000			Recovery =	95.73%	
Target Compounds					Qvalue
5) Chlorodifluoromethane	0.000		0	N.D. d	
6) Dichlorodifluoromethane	0.000		0	N.D. d	
7) Chloromethane	0.000		0	N.D. d	
8) Bromomethane	0.000		0	N.D. d	
9) Vinyl Chloride	0.000		0	N.D. d	
10) Chloroethane	0.000		0	N.D. d	
11) Trichlorofluoromethane	0.000		0	N.D. d	
12) Ethyl ether	0.000		0	N.D. d	
13) Furan	0.000		0	N.D. d	
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D. d	
15) Methylene Chloride	0.000		0	N.D. d	
16) Acrolein	0.000		0	N.D. d	
17) Acrylonitrile	0.000		0	N.D. d	
18) Iodomethane	0.000		0	N.D. d	
19) Acetone	0.000		0	N.D. d	
20) Carbon Disulfide	0.000		0	N.D. d	
21) t-Butyl Alcohol	0.000		0	N.D. d	
22) n-Hexane	0.000		0	N.D. d	
23) Di-isopropyl-ether	0.000		0	N.D. d	
24) 1,1-Dichloroethene	0.000		0	N.D. d	
25) Methyl Acetate	0.000		0	N.D. d	
26) Methyl-t-butyl ether	0.000		0	N.D. d	
27) 1,1-Dichloroethane	0.000		0	N.D. d	
28) trans-1,2-Dichloroethene	0.000		0	N.D. d	
29) Ethyl-t-butyl ether	0.000		0	N.D. d	
30) cis-1,2-Dichloroethene	0.000		0	N.D. d	
31) Bromochloromethane	0.000		0	N.D. d	
32) 2,2-Dichloropropane	0.000		0	N.D. d	
33) Ethyl acetate	0.000		0	N.D. d	
34) 1,4-Dioxane	0.000		0	N.D. d	
35) 1,1-Dichloropropene	0.000		0	N.D. d	
36) Chloroform	0.000		0	N.D. d	
38) Cyclohexane	0.000		0	N.D. d	
40) 1,2-Dichloroethane	0.000		0	N.D. d	
41) 2-Butanone	0.000		0	N.D. d	
42) 1,1,1-Trichloroethane	0.000		0	N.D. d	
43) Carbon Tetrachloride	0.000		0	N.D. d	
44) Vinyl Acetate	0.000		0	N.D. d	
45) Bromodichloromethane	0.000		0	N.D. d	
46) Methylcyclohexane	0.000		0	N.D. d	
47) Dibromomethane	0.000		0	N.D. d	
48) 1,2-Dichloropropane	0.000		0	N.D. d	
49) Trichloroethene	0.000		0	N.D. d	
50) Benzene	0.000		0	N.D. d	
51) tert-Amyl methyl ether	0.000		0	N.D. d	
53) Iso-propylacetate	0.000		0	N.D. d	
54) Methyl methacrylate	0.000		0	N.D. d	
55) Dibromochloromethane	0.000		0	N.D. d	
56) 2-Chloroethylvinylether	0.000		0	N.D. d	
57) cis-1,3-Dichloropropene	0.000		0	N.D. d	
58) trans-1,3-Dichloropropene	0.000		0	N.D. d	
59) Ethyl methacrylate	0.000		0	N.D. d	
60) 1,1,2-Trichloroethane	0.000		0	N.D. d	
61) 1,2-Dibromoethane	0.000		0	N.D. d	
62) 1,3-Dichloropropane	0.000		0	N.D. d	
63) 4-Methyl-2-Pentanone	0.000		0	N.D. d	
64) 2-Hexanone	0.000		0	N.D. d	
65) Tetrachloroethene	0.000		0	N.D. d	
67) Toluene	0.000		0	N.D. d	

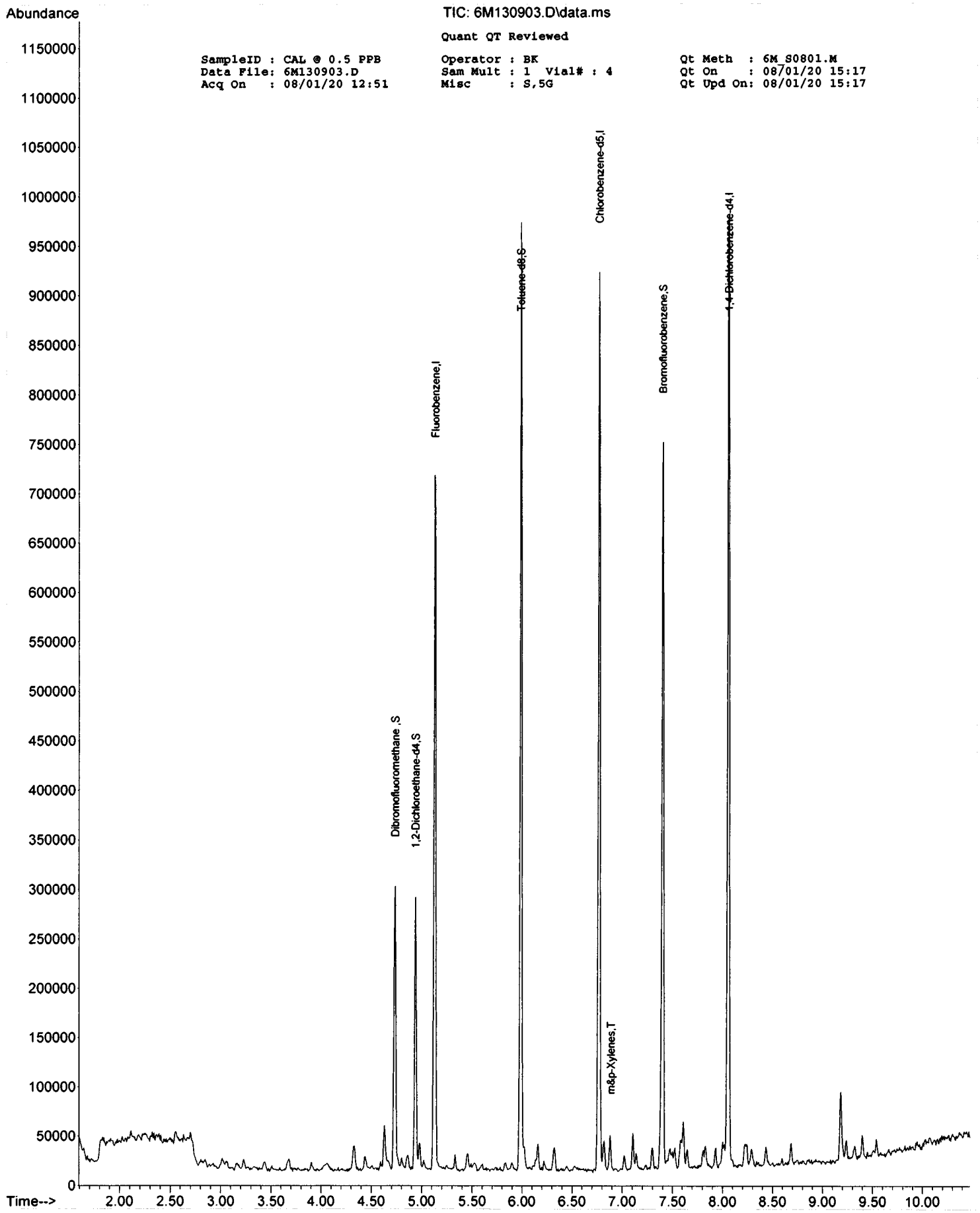
Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB
Data File: 6M130903.D
Acq On : 08/01/20 12:51
Operator : BK
Sam Mult : 1 Vial# : 4
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:17
Qt Upd On: 08/01/20 15:17

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	0.000		0	N.D. d		
69)	Chlorobenzene	0.000		0	N.D. d		
71)	n-Butyl acrylate	0.000		0	N.D. d		
72)	n-Amyl acetate	0.000		0	N.D. d		
73)	Bromoform	0.000		0	N.D. d		
74)	Ethylbenzene	0.000		0	N.D. d		
75)	1,1,2,2-Tetrachloroethane	0.000		0	N.D. d		
77)	Styrene	0.000		0	N.D. d		
78)	m&p-Xylenes	6.885	106	7243	0.9804	ug/l	71
79)	o-Xylene	0.000		0	N.D. d		
80)	trans-1,4-Dichloro-2-b...	0.000		0	N.D. d		
81)	1,3-Dichlorobenzene	0.000		0	N.D. d		
82)	1,4-Dichlorobenzene	0.000		0	N.D. d		
83)	1,2-Dichlorobenzene	0.000		0	N.D. d		
84)	Isopropylbenzene	0.000		0	N.D. d		
85)	Cyclohexanone	0.000		0	N.D. d		
86)	Camphene	0.000		0	N.D. d		
87)	1,2,3-Trichloropropane	0.000		0	N.D. d		
88)	2-Chlorotoluene	0.000		0	N.D. d		
89)	p-Ethyltoluene	0.000		0	N.D. d		
90)	4-Chlorotoluene	0.000		0	N.D. d		
91)	n-Propylbenzene	0.000		0	N.D. d		
92)	Bromobenzene	0.000		0	N.D. d		
93)	1,3,5-Trimethylbenzene	0.000		0	N.D. d		
94)	Butyl methacrylate	0.000		0	N.D. d		
95)	t-Butylbenzene	0.000		0	N.D. d		
96)	1,2,4-Trimethylbenzene	0.000		0	N.D. d		
97)	sec-Butylbenzene	0.000		0	N.D. d		
98)	4-Isopropyltoluene	0.000		0	N.D. d		
99)	n-Butylbenzene	0.000		0	N.D. d		
100)	p-Diethylbenzene	0.000		0	N.D. d		
101)	1,2,4,5-Tetramethylben...	0.000		0	N.D. d		
102)	1,2-Dibromo-3-Chloropr...	0.000		0	N.D. d		
103)	Camphor	0.000		0	N.D. d		
104)	Hexachlorobutadiene	0.000		0	N.D. d		
105)	1,2,4-Trichlorobenzene	0.000		0	N.D. d		
106)	1,2,3-Trichlorobenzene	0.000		0	N.D. d		
107)	Naphthalene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M130903.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 0.5 PPB
Data File: 6M130903.D
Acq On : 08/01/20 12:51
Operator : BK
Sam Mult : 1 Vial# : 4
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 08/01/20 15:17
Qt Upd On: 08/01/20 15:17
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
m&p-Xylenes,T
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M82676.D	CAL @ 20 PPB	09/11/20 21:35	2	11M82674.D	CAL @ 5 PPB	09/11/20 20:58
3	11M82675.D	CAL @ 10 PPB	09/11/20 21:17	4	11M82678.D	CAL @ 50 PPB	09/11/20 22:12
5	11M82686.D	CAL @ 100 PPB	09/12/20 00:39	6	11M82673.D	CAL @ 1 PPB	09/11/20 20:40
7	11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.2849	0.2543	0.2697	0.2583	0.2729	-----	-----	0.2688	-----	0.268	1.67	0.999	0.999	4.1	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Dichlorodifluorometha	1	0	Avg	0.1652	0.1623	0.1768	0.1567	0.1792	-----	-----	0.1262	-----	0.161	1.66	0.996	0.999	12	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Chloromethane	1	0	Avg	0.1864	0.1709	0.1771	0.1593	0.1727	-----	-----	0.1509	-----	0.170	1.84	0.998	0.999	7.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Bromomethane	1	0	Avg	0.1678	0.1752	0.1819	0.1509	0.2001	-----	-----	0.1780	-----	0.176	2.20	0.984	0.998	9.2	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Vinyl Chloride	1	0	Avg	0.2293	0.2252	0.2299	0.2035	0.2235	-----	-----	0.1971	-----	0.218	1.94	0.998	0.999	6.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Chloroethane	1	0	Avg	0.1563	0.1492	0.1551	0.1430	0.1502	-----	-----	0.1347	-----	0.148	2.29	0.999	0.999	5.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Trichlorofluoromethan	1	0	Avg	0.3507	0.3630	0.3868	0.3366	0.3986	-----	-----	0.3274	-----	0.361	2.53	0.994	0.999	7.8	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl ether	1	0	Avg	0.1311	0.1351	0.1292	0.1140	0.1292	-----	-----	0.1012	-----	0.123	2.77	0.996	0.999	11	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Furan	1	0	Avg	0.2290	0.2257	0.2205	0.1996	0.2322	-----	-----	0.2647	-----	0.229	2.81	0.995	0.999	9.2	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1279	0.1562	0.1583	0.1347	0.1586	-----	-----	0.1375	-----	0.146	2.96	0.993	0.999	9.4	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Methylene Chloride	1	0	Avg	0.2144	0.2100	0.2183	0.1914	0.2125	-----	-----	0.2541	-----	0.217	3.37	0.997	0.999	9.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Acrolein	1	0	Avg	0.0282	0.0251	0.0274	0.0263	0.0280	-----	-----	0.0196	-----	0.0258	2.88	0.999	1.00	12		100.0	25.00	50.00	250.0	500.0			5.00	
Acrylonitrile	1	0	Qua	0.0702	0.0686	0.0710	0.0651	0.0703	-----	-----	0.0342	-----	0.0633	3.57	0.999	0.999	23		20.00	5.00	10.00	50.00	100.0			1.00	
Iodomethane	1	0	Qua	0.2073	0.1238	0.1658	0.2196	0.2349	-----	-----	0.0853	-----	0.173	3.11	0.999	1.00	34		20.00	5.00	10.00	50.00	100.0			1.00	
Acetone	1	0	Avg	0.0498	0.0555	0.0528	0.0447	0.0481	-----	-----	0.0585	-----	0.0516	3.01	0.998	0.999	9.8	0.10 a	100.0	25.00	50.00	250.0	500.0			5.00	
Carbon Disulfide	1	0	Avg	0.4902	0.4578	0.4764	0.4811	0.5579	-----	-----	0.4966	-----	0.493	3.18	0.995	1.00	7.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
t-Butyl Alcohol	1	0	Avg	0.0121	0.0124	0.0129	0.0113	0.0147	-----	-----	0.0114	-----	0.0125	3.45	0.986	0.999	10		100.0	25.00	50.00	250.0	500.0			5.00	
n-Hexane	1	0	Avg	0.1310	0.1577	0.1706	0.1550	0.1720	-----	-----	0.1342	-----	0.153	3.81	0.996	0.999	11		20.00	5.00	10.00	50.00	100.0			1.00	
Di-isopropyl-ether	1	0	Avg	0.4549	0.4061	0.4359	0.4100	0.4564	-----	-----	0.3869	-----	0.425	3.95	0.997	0.999	6.7		20.00	5.00	10.00	50.00	100.0			1.00	
1,1-Dichloroethene	1	0	Avg	0.2777	0.2625	0.2787	0.2601	0.2908	-----	-----	0.2233	-----	0.266	2.97	0.997	0.999	8.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Methyl Acetate	1	0	Qua	0.1169	0.1273	0.1241	0.1076	0.1179	-----	-----	0.0838	0.0678	0.107	3.27	0.998	0.999	21	0.10 a	20.00	5.00	10.00	50.00	100.0			1.00	0.50
Methyl-t-butyl ether	1	0	Avg	0.4805	0.4390	0.4723	0.4599	0.5188	-----	-----	0.3892	0.4515	0.459	3.59	0.997	1.00	8.7	0.10	20.00	5.00	10.00	50.00	100.0			1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.3622	0.3363	0.3484	0.3383	0.3624	-----	-----	0.3205	-----	0.345	3.92	0.999	1.00	4.7	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2133	0.1927	0.2075	0.1906	0.2270	-----	-----	0.1952	-----	0.204	3.60	0.994	0.999	6.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl-t-butyl ether	1	0	Avg	0.4877	0.4457	0.4641	0.4690	0.5253	-----	-----	0.4067	-----	0.466	4.20	0.997	1.00	8.5	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.3598	0.3226	0.3449	0.3264	0.3625	-----	-----	0.3024	-----	0.336	4.31	0.997	0.999	7.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Bromochloromethane	1	0	Avg	0.1496	0.1398	0.1503	0.1428	0.1470	-----	-----	0.1256	-----	0.143	4.45	1.00	1.00	6.5		20.00	5.00	10.00	50.00	100.0			1.00	
2,2-Dichloropropane	1	0	Avg	0.2893	0.2602	0.2884	0.2790	0.3039	-----	-----	0.2132	-----	0.272	4.31	0.998	1.00	12		20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl acetate	1	0	Avg	0.1793	0.1699	0.1938	0.1684	0.1707	-----	-----	0.1304	-----	0.169	4.33	1.00	1.00	12		20.00	5.00	10.00	50.00	100.0			1.00	
1,4-Dioxane	1	0	Avg	0.0018	0.0018	0.0017	0.0014	0.0022	-----	-----	0.0019	-----	0.00186	5.34	0.968	0.996	14		1000.	250.0	500.0	2500.	5000.			50.00	
1,1-Dichloropropene	1	0	Avg	0.3004	0.2872	0.3188	0.3044	0.3302	-----	-----	0.2527	-----	0.299	4.70	0.998	1.00	9.1		20.00	5.00	10.00	50.00	100.0			1.00	
Chloroform	1	0	Avg	0.4134	0.3707	0.3997	0.3667	0.4075	-----	-----	0.3257	-----	0.381	4.49	0.997	0.999	8.7	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
Dibromofluoromethan	1	0	Avg	0.2448	0.2509	0.2569	0.2539	0.2487	-----	-----	0.2500	0.2451	0.250	4.58	-1	-1	1.8		30.00	30.00	30.00	30.00	30.00			30.00	30.00
Cyclohexane	1	0	Avg	0.2329	0.2472	0.2792	0.2487	0.2800	-----	-----	0.2206	-----	0.251	4.65	0.996	1.00	9.6	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1274	0.1335	0.1327	0.1258	0.1251	-----	-----	0.1364	0.1373	0.131	4.78	-1	-1	3.8		30.00	30.00	30.00	30.00	30.00			30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3035	0.2906	0.3030	0.2755	0.3044	-----	-----	0.2807	0.2982	0.294	4.82	0.998	0.999	4.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	0.50
2-Butanone	1	0	Avg	0.0736	0.0767	0.0624	0.0568	0.0736	-----	-----	0.0893	-----	0.0721	4.30	0.986	0.996	16	0.10 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,1-Trichloroethane	1	0	Avg	0.3554	0.3228	0.3601	0.3479	0.3767	-----	-----	0.3000	-----	0.344	4.61	0.999	1.00	8.1	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Carbon Tetrachloride	1	0	Avg	0.2863	0.2649	0.3111	0.3045	0.3450	-----	-----	0.2216	-----	0.289	4.71	0.997	1.00	15	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Vinyl Acetate	1	0	Avg	0.5220	0.4593	0.5144	0.5106	0.5596	-----	-----	0.4428	-----	0.502	3.94	0.998	1.00	8.6		20.00	5.00	10.00	50.00	100.0			1.00	
Bromodichloromethan	1	0	Avg	0.3038	0.2680	0.2754	0.2972	0.3190	-----	-----	0.2589	-----	0.287	5.41	0.999	1.00	8.1	0.20	20.00	5.00	10.00	50.00	100.0			1.00	

Avg Rsd: 9.934

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0091101 0153

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M82676.D	CAL @ 20 PPB	09/11/20 21:35	2	11M82674.D	CAL @ 5 PPB	09/11/20 20:58
3	11M82675.D	CAL @ 10 PPB	09/11/20 21:17	4	11M82678.D	CAL @ 50 PPB	09/11/20 22:12
5	11M82686.D	CAL @ 100 PPB	09/12/20 00:39	6	11M82673.D	CAL @ 1 PPB	09/11/20 20:40
7	11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.2076	0.2345	0.2602	0.2536	0.2871	-----	-----	0.1822	-----	0.238	5.27	0.995	0.999	16	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Dibromomethane	1	0	Avg	0.1444	0.1243	0.1395	0.1468	0.1582	-----	-----	0.1184	-----	0.139	5.34	0.999	1.00	11		20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dichloropropane	1	0	Avg	0.2080	0.1854	0.2103	0.2052	0.2151	-----	-----	0.1686	-----	0.199	5.28	1.00	1.00	9.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Trichloroethene	1	0	Avg	0.2436	0.2121	0.2417	0.2474	0.2589	-----	-----	0.2216	-----	0.238	5.16	1.00	1.00	7.3	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
Benzene	1	0	Avg	0.8920	0.8280	0.8776	0.8380	0.9406	-----	-----	0.7773	0.7888	0.849	4.82	0.997	0.999	6.9	0.50	20.00	5.00	10.00	50.00	100.0			1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.4955	0.4209	0.4673	0.4796	0.5378	-----	-----	0.3901	-----	0.465	4.86	0.997	1.00	11		20.00	5.00	10.00	50.00	100.0			1.00	
Iso-propylacetate	1	0	Avg	0.3560	0.3043	0.3342	0.3407	0.3657	-----	-----	0.2934	-----	0.332	4.81	0.999	1.00	8.6	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Methyl methacrylate	1	0	Avg	0.2018	0.1753	0.2080	0.1967	0.2106	-----	-----	0.2122	-----	0.201	5.30	0.999	1.00	6.9	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Dibromochloromethan	1	0	Avg	0.2913	0.2471	0.2825	0.3106	0.3419	-----	-----	0.2006	-----	0.279	6.24	0.998	1.00	18	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
2-Chloroethylvinylethe	1	0	Qua	0.0611	0.0538	0.0591	0.0598	0.0657	-----	-----	0.0196	-----	0.0532	5.54	0.998	1.00	32		20.00	5.00	10.00	50.00	100.0			1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.4230	0.3453	0.3827	0.4215	0.4627	-----	-----	0.3458	-----	0.397	5.64	0.998	1.00	12	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,3-Dichloroprop	1	0	Avg	0.4012	0.3231	0.3787	0.4178	0.4384	-----	-----	0.3028	-----	0.377	5.92	1.00	1.00	14	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl methacrylate	1	0	Avg	0.1877	0.1675	0.1819	0.1924	0.1887	-----	-----	0.1255	-----	0.174	5.94	1.00	1.00	15	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2747	0.2470	0.2710	0.2666	0.2793	-----	-----	0.2541	-----	0.266	6.02	1.00	1.00	4.7	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dibromoethane	1	0	Avg	0.2881	0.2595	0.2784	0.2966	0.3138	-----	-----	0.2442	-----	0.280	6.32	0.999	1.00	9.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,3-Dichloropropane	1	0	Avg	0.4608	0.4136	0.4499	0.4556	0.4724	-----	-----	0.3793	-----	0.439	6.11	1.00	1.00	8.0		20.00	5.00	10.00	50.00	100.0			1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.2162	0.1945	0.2087	0.2049	0.2116	-----	-----	0.1782	-----	0.202	5.70	1.00	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
2-Hexanone	1	0	Avg	0.1495	0.1317	0.1504	0.1513	0.1501	-----	-----	0.1277	-----	0.144	6.12	1.00	1.00	7.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Tetrachloroethene	1	0	Avg	0.2311	0.2198	0.2365	0.2408	0.2696	-----	-----	0.2077	-----	0.234	6.12	0.997	1.00	9.0	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
Toluene-d8	1	0	Avg	1.3023	1.3148	1.3301	1.3118	1.3066	-----	-----	1.3226	1.2958	1.31	5.79	-1	-1	0.90		30.00	30.00	30.00	30.00	30.00			30.00	30.00
Toluene	1	0	Avg	0.7591	0.7075	0.7430	0.7481	0.7909	-----	-----	0.6306	-----	0.730	5.82	0.999	1.00	7.6	0.40	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2775	0.2509	0.2660	0.2834	0.3169	-----	-----	0.2378	-----	0.272	6.60	0.997	1.00	10		20.00	5.00	10.00	50.00	100.0			1.00	
Chlorobenzene	1	0	Avg	0.8562	0.7970	0.8173	0.8529	0.8937	-----	-----	0.7699	-----	0.831	6.57	1.00	1.00	5.4	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
n-Butyl acrylate	1	0	Avg	0.8706	0.7492	0.8164	0.8889	0.7549	-----	-----	0.6723	-----	0.792	6.80	0.992	0.999	10	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
n-Amyl acetate	1	0	Avg	0.6632	0.5614	0.6209	0.6819	0.5717	-----	-----	0.4446	-----	0.591	6.92	0.991	0.999	15	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Bromoform	1	0	Avg	0.3742	0.3331	0.3672	0.4134	0.3910	-----	-----	0.2799	-----	0.360	7.01	0.999	0.999	13	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethylbenzene	1	0	Avg	0.7694	0.6929	0.7983	0.7710	0.6700	-----	-----	0.7175	-----	0.737	6.60	0.994	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.7453	0.7551	0.7604	0.7208	0.5827	-----	-----	0.6649	-----	0.705	7.22	0.986	1.00	9.8	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Bromofluorobenzene	1	0	Avg	0.7376	0.7797	0.7749	0.7765	0.6549	-----	-----	0.7752	0.7946	0.756	7.17	-1	-1	6.3		30.00	30.00	30.00	30.00	30.00			30.00	30.00
Styrene	1	0	Avg	1.8522	1.7057	1.8098	1.8199	1.6052	-----	-----	1.4977	-----	1.72	6.88	0.995	1.00	8.2	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
m&p-Xylenes	1	0	Avg	1.1174	0.9808	1.0693	1.0978	0.9491	-----	-----	0.9392	1.0236	1.03	6.66	0.994	1.00	7.0	0.10	40.00	10.00	20.00	100.0	200.0			2.00	1.00
o-Xylene	1	0	Avg	1.0660	1.0121	1.0798	1.0419	0.9268	-----	-----	0.8838	-----	1.00	6.88	0.996	1.00	7.9	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.2074	0.2068	0.2187	0.2249	0.1867	-----	-----	0.1560	-----	0.200	7.25	0.990	0.999	13		20.00	5.00	10.00	50.00	100.0			1.00	
1,3-Dichlorobenzene	1	0	Avg	1.2717	1.1255	1.1842	1.2022	1.2497	-----	-----	1.1089	-----	1.19	7.79	1.00	1.00	5.5	0.60	20.00	5.00	10.00	50.00	100.0			1.00	
1,4-Dichlorobenzene	1	0	Avg	1.3104	1.1744	1.2393	1.2155	1.2915	-----	-----	1.1673	-----	1.23	7.83	0.999	1.00	4.8	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dichlorobenzene	1	0	Avg	1.1496	1.0407	1.1216	1.1110	1.0748	-----	-----	1.0036	-----	1.08	8.05	1.00	1.00	5.0	0.40	20.00	5.00	10.00	50.00	100.0			1.00	
Isopropylbenzene	1	0	Avg	2.5256	2.5399	2.6457	2.6197	2.2687	-----	-----	2.1061	-----	2.45	7.07	0.994	0.999	8.8	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Cyclohexanone	1	0	Qua	0.0143	0.0180	0.0145	0.0109	0.0113	-----	-----	0.0064	-----	0.0126	7.15	0.996	0.996	31		100.0	25.00	50.00	250.0	500.0			5.00	
Camphene	1	0	Avg	0.5471	0.6067	0.6482	0.6311	0.5550	-----	-----	0.4931	-----	0.580	7.24	0.995	0.998	10		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,3-Trichloropropane	1	0	Avg	0.8533	0.8384	0.8598	0.8562	0.7279	-----	-----	0.7191	-----	0.809	7.26	0.992	1.00	8.2		20.00	5.00	10.00	50.00	100.0			1.00	
2-Chlorotoluene	1	0	Avg	1.7204	1.4928	1.6160	1.6270	1.4192	-----	-----	1.6200	-----	1.58	7.37	0.994	1.00	6.8		20.00	5.00	10.00	50.00	100.0			1.00	

Avg Rsd: 9.934

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M82676.D	CAL @ 20 PPB	09/11/20 21:35	2	11M82674.D	CAL @ 5 PPB	09/11/20 20:58
3	11M82675.D	CAL @ 10 PPB	09/11/20 21:17	4	11M82678.D	CAL @ 50 PPB	09/11/20 22:12
5	11M82686.D	CAL @ 100 PPB	09/12/20 00:39	6	11M82673.D	CAL @ 1 PPB	09/11/20 20:40
7	11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.6334	2.4583	2.6118	2.5423	2.3046	-----	-----	2.1138	-----	2.44	7.35	0.997	1.00	8.2		20.00	5.00	10.00	50.00	100.0			1.00	
4-Chlorotoluene	1	0	Avg	1.7200	1.6136	1.6089	1.6243	1.9152	-----	-----	1.3035	-----	1.63	7.42	0.995	0.999	12		20.00	5.00	10.00	50.00	100.0			1.00	
n-Propylbenzene	1	0	Avg	2.9830	2.9422	3.1393	3.0074	2.5773	-----	-----	2.6073	-----	2.88	7.30	0.993	1.00	8.0		20.00	5.00	10.00	50.00	100.0			1.00	
Bromobenzene	1	0	Avg	1.5309	1.4415	1.5463	1.4918	1.2516	-----	-----	1.4942	-----	1.46	7.27	0.991	1.00	7.4		20.00	5.00	10.00	50.00	100.0			1.00	
1,3,5-Trimethylbenzen	1	0	Avg	2.1546	1.9933	2.1405	2.1419	2.1661	-----	-----	1.7298	-----	2.05	7.38	1.00	1.00	8.3		20.00	5.00	10.00	50.00	100.0			1.00	
Butyl methacrylate	1	0	Avg	0.5809	0.5075	0.5530	0.5523	0.5954	-----	-----	0.3265	-----	0.519	7.38	0.999	1.00	19	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
t-Butylbenzene	1	0	Avg	1.9963	1.8770	1.9920	1.9740	1.9741	-----	-----	1.6387	-----	1.91	7.58	1.00	1.00	7.3		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trimethylbenzen	1	0	Avg	2.2826	2.0873	2.2635	2.1643	2.1917	-----	-----	1.7732	-----	2.13	7.60	1.00	1.00	8.8		20.00	5.00	10.00	50.00	100.0			1.00	
sec-Butylbenzene	1	0	Avg	2.3761	2.2051	2.4308	2.3868	2.2927	-----	-----	2.0291	-----	2.29	7.69	1.00	1.00	6.5		20.00	5.00	10.00	50.00	100.0			1.00	
4-Isopropyltoluene	1	0	Avg	2.0289	1.8411	2.0392	2.0511	2.0062	-----	-----	1.6733	-----	1.94	7.76	1.00	1.00	7.8		20.00	5.00	10.00	50.00	100.0			1.00	
n-Butylbenzene	1	0	Avg	2.0925	1.9360	2.1396	2.0538	1.8438	-----	-----	1.7305	-----	1.97	8.00	0.997	1.00	8.0		20.00	5.00	10.00	50.00	100.0			1.00	
p-Diethylbenzene	1	0	Avg	1.1186	1.0023	1.0900	1.1229	1.0377	-----	-----	0.8463	-----	1.04	7.98	0.998	1.00	10		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	1.6032	1.3177	1.4945	1.5829	1.3941	-----	-----	1.2261	-----	1.44	8.44	0.995	1.00	10		20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1391	0.1175	0.1340	0.1299	0.1186	-----	-----	0.0770	-----	0.119	8.50	0.997	1.00	19	0.05	20.00	5.00	10.00	50.00	100.0			1.00	
Camphor	1	0	Qua	0.0478	0.0374	0.0455	0.0447	0.0418	-----	-----	0.0325	0.0125	0.0375	8.93	0.998	1.00	32		200.0	50.00	100.0	500.0	1000.			10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.1729	0.1364	0.1646	0.1669	0.1511	-----	-----	0.1326	-----	0.154	9.07	0.997	1.00	11		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.4681	0.3988	0.4367	0.4282	0.3802	-----	-----	0.3997	-----	0.419	8.99	0.995	1.00	7.6	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.3022	0.2680	0.2842	0.2766	0.2385	-----	-----	0.2764	-----	0.274	9.29	0.993	1.00	7.7		20.00	5.00	10.00	50.00	100.0			1.00	
Naphthalene	1	0	Avg	1.1787	0.9410	1.1497	1.0755	0.9384	-----	-----	0.8992	-----	1.03	9.15	0.993	1.00	12		20.00	5.00	10.00	50.00	100.0			1.00	

Flags	*Note:* Avg Rsd: 9.934
a - failed the min rf criteria	*Corr 1 = Correlation Coefficient for linear Eq.*
c - failed the minimum correlation coeff criteria(if applicable)	*Corr 2 = Correlation Coefficient for quad Eq.*
	Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82676.D Sam Mult : 1 Vial# : 24 Qt On : 09/14/20 14:56
Acq On : 09/11/20 21:35 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	261943	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	208671	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	104916	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	64127	27.39	ug/l	0.00
Spiked Amount 30.000			Recovery = 91.30%			
39) 1,2-Dichloroethane-d4	4.778	67	33382	32.41	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.03%			
66) Toluene-d8	5.787	98	271772	33.69	ug/l	0.00
Spiked Amount 30.000			Recovery = 112.30%			
76) Bromofluorobenzene	7.167	174	77390	28.91	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.37%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.678	51	49752	18.4346	ug/l	55
6) Dichlorodifluoromethane	1.665	85	28851	14.5491	ug/l	96
7) Chloromethane	1.847	50	32554	17.1810	ug/l	99
8) Bromomethane	2.241	94	29319	15.1816	ug/l	95
9) Vinyl Chloride	1.943	62	40049	17.0602	ug/l	93
10) Chloroethane	2.328	64	27298	18.0062	ug/l	96
11) Trichlorofluoromethane	2.546	101	61253	17.4484	ug/l	98
12) Ethyl ether	2.775	59	22895	14.6215	ug/l	65
13) Furan	2.817	39	40004	15.1155	ug/l	48
14) 1,1,2-Trichloro-1,2,2-...	2.977	101	22336	13.1569	ug/l	85
15) Methylene Chloride	3.373	84	37442	16.6159	ug/l	54
16) Acrolein	2.890	56	24683	78.8142	ug/l	94
17) Acrylonitrile	3.566	53	12273	16.8875	ug/l	98
18) Iodomethane	3.119	142	36213	13.7113	ug/l	94
19) Acetone	3.009	43	43536	78.0588	ug/l	93
20) Carbon Disulfide	3.186	76	85610	15.2914	ug/l	100
21) t-Butyl Alcohol	3.437	59	10572	60.1255	ug/l	99
22) n-Hexane	3.813	57	22885	12.0849	ug/l	91
23) Di-isopropyl-ether	3.952	45	79442	16.6558	ug/l	61
24) 1,1-Dichloroethene	2.981	61	48506	17.0901	ug/l	82
25) Methyl Acetate	3.276	43	20421	16.1252	ug/l	100
26) Methyl-t-butyl ether	3.595	73	83911	15.7412	ug/l	85
27) 1,1-Dichloroethane	3.926	63	63253	17.4445	ug/l	92
28) trans-1,2-Dichloroethene	3.604	96	37258	16.1764	ug/l	84
29) Ethyl-t-butyl ether	4.196	59	85172	15.0724	ug/l	86
30) cis-1,2-Dichloroethene	4.308	61	62840	17.9345	ug/l	80
31) Bromochloromethane	4.453	49	26124	17.7347	ug/l	36
32) 2,2-Dichloropropane	4.315	77	50520	17.0450	ug/l	92
33) Ethyl acetate	4.328	43	31324	16.0531	ug/l	98
34) 1,4-Dioxane	5.337	88	15698	507.1279	ug/l	74
35) 1,1-Dichloropropene	4.701	75	52465	16.7585	ug/l	97
36) Chloroform	4.488	83	72191	18.1350	ug/l	92
38) Cyclohexane	4.652	56	40687m	14.1984	ug/l	
40) 1,2-Dichloroethane	4.820	62	53015	17.9991	ug/l	98
41) 2-Butanone	4.308	43	12853	16.6852	ug/l	77
42) 1,1,1-Trichloroethane	4.614	97	62070	17.1915	ug/l	98
43) Carbon Tetrachloride	4.710	117	50003	15.2959	ug/l	99
44) Vinyl Acetate	3.942	43	91164	16.4139	ug/l	100
45) Bromodichloromethane	5.411	83	53061	18.1338	ug/l	96
46) Methylcyclohexane	5.270	83	36261	12.3852	ug/l	69
47) Dibromomethane	5.344	174	25231	13.5154	ug/l	94
48) 1,2-Dichloropropane	5.279	63	36331	17.3133	ug/l	97
49) Trichloroethene	5.157	130	42549	14.9121	ug/l	94
50) Benzene	4.820	78	155782	17.0944	ug/l	100
51) tert-Amyl methyl ether	4.855	73	86540	14.6430	ug/l	96
53) Iso-propylacetate	4.813	43	49525	18.4262	ug/l	79
54) Methyl methacrylate	5.302	41	28085m	19.1965	ug/l	
55) Dibromochloromethane	6.238	129	40526	18.1695	ug/l	93
56) 2-Chloroethylvinylether	5.543	63	8502	23.3820	ug/l	79
57) cis-1,3-Dichloropropene	5.640	75	58851	20.8755	ug/l	96
58) trans-1,3-Dichloropropene	5.916	75	55823	20.9422	ug/l	100
59) Ethyl methacrylate	5.935	41	26116m	19.2136	ug/l	
60) 1,1,2-Trichloroethane	6.022	97	38223	20.0962	ug/l	83
61) 1,2-Dibromoethane	6.318	107	40086	20.3516	ug/l	96
62) 1,3-Dichloropropane	6.109	76	64105	20.6131	ug/l	100
63) 4-Methyl-2-Pentanone	5.701	43	30084	20.5341	ug/l	88
64) 2-Hexanone	6.125	43	20808	18.1988	ug/l	87
65) Tetrachloroethene	6.112	164	32152	16.1263	ug/l	88
67) Toluene	5.823	92	105601	20.1974	ug/l	96

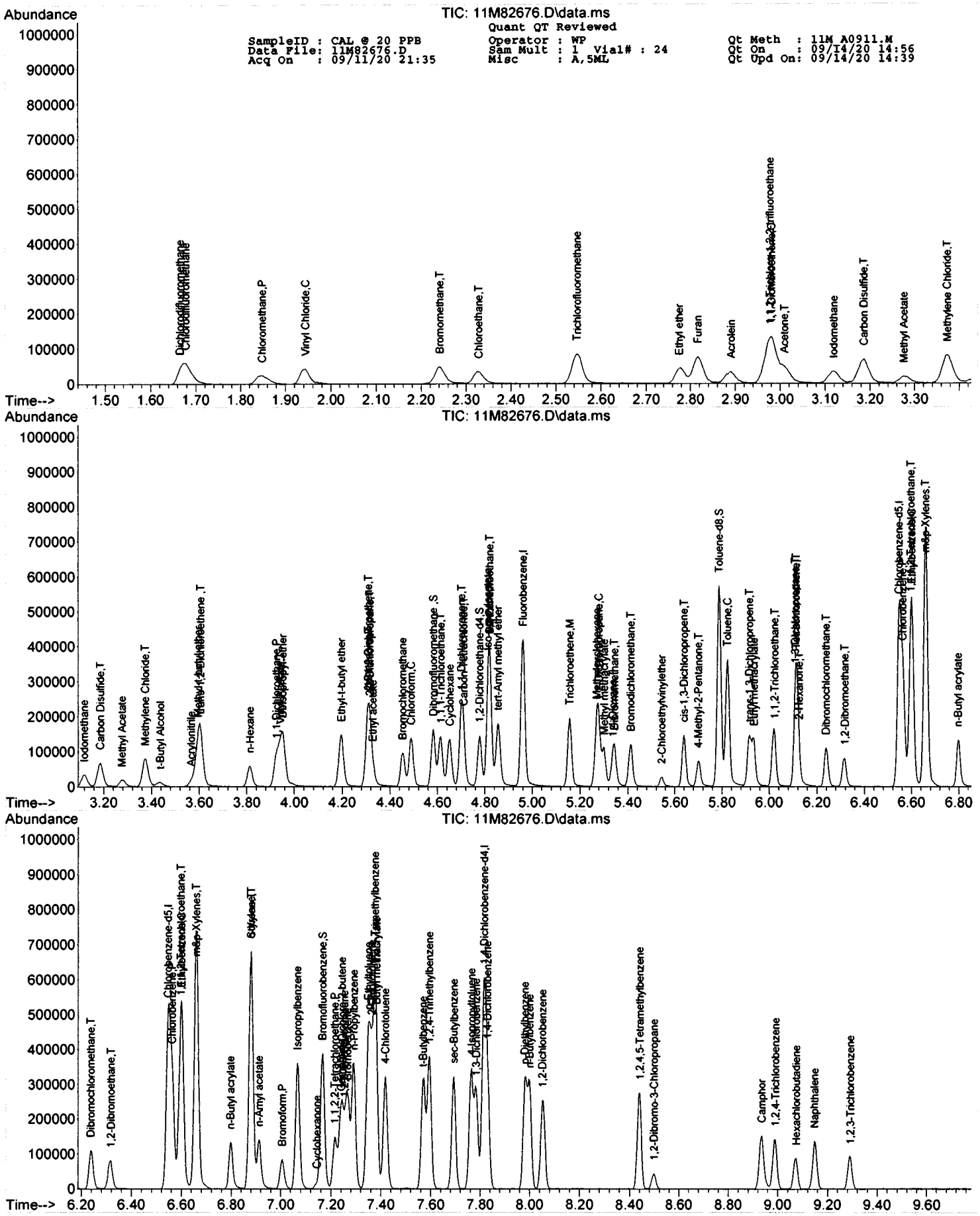
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82676.D Sam Mult : 1 Vial# : 24 Qt On : 09/14/20 14:56
Acq On : 09/11/20 21:35 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.598	133	38608	18.6381	ug/l	98
69)	Chlorobenzene	6.562	112	119112	19.9880	ug/l	100
71)	n-Butyl acrylate	6.797	55	60897	23.8919	ug/l	87
72)	n-Amyl acetate	6.913	43	46387	22.2446	ug/l	77
73)	Bromoform	7.006	173	26174	20.7911	ug/l	98
74)	Ethylbenzene	6.601	106	53816	24.5052	ug/l	98
75)	1,1,2,2-Tetrachloroethane	7.215	83	52132	25.8881	ug/l	93
77)	Styrene	6.881	104	129553	25.0556	ug/l	95
78)	m&p-Xylenes	6.659	106	156313	50.2937	ug/l	94
79)	o-Xylene	6.881	106	74560	24.9181	ug/l	98
80)	trans-1,4-Dichloro-2-b...	7.244	53	14511	21.7008	ug/l	76
81)	1,3-Dichlorobenzene	7.784	146	88951	22.6864	ug/l	98
82)	1,4-Dichlorobenzene	7.829	146	91660	22.3271	ug/l	100
83)	1,2-Dichlorobenzene	8.051	146	80408	22.5913	ug/l	98
84)	Isopropylbenzene	7.067	105	176656	24.5677	ug/l	98
85)	Cyclohexanone	7.144	55	5025	90.4366	ug/l	80
86)	Camphene	7.241	93	38273	17.5770	ug/l	93
87)	1,2,3-Trichloropropane	7.254	75	59689	24.2435	ug/l	89
88)	2-Chlorotoluene	7.363	91	120336	26.5363	ug/l	98
89)	p-Ethyltoluene	7.350	105	184197	22.2333	ug/l	100
90)	4-Chlorotoluene	7.418	91	120304	25.9930	ug/l	98
91)	n-Propylbenzene	7.292	91	208644	24.1904	ug/l	97
92)	Bromobenzene	7.266	77	107079	24.7677	ug/l	88
93)	1,3,5-Trimethylbenzene	7.376	105	150707	24.4849	ug/l	97
94)	Butyl methacrylate	7.382	41	40633m	27.5673	ug/l	
95)	t-Butylbenzene	7.569	119	139634	22.1994	ug/l	97
96)	1,2,4-Trimethylbenzene	7.594	105	159659	24.1761	ug/l	97
97)	sec-Butylbenzene	7.694	105	166199	22.1881	ug/l	98
98)	4-Isopropyltoluene	7.765	119	141915	21.8271	ug/l	99
99)	n-Butylbenzene	8.000	91	146362	23.2714	ug/l	86
100)	p-Diethylbenzene	7.980	119	78240	21.0407	ug/l	81
101)	1,2,4,5-Tetramethylben...	8.440	119	112139	20.3814	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.498	157	9731	25.4995	ug/l	95
103)	Camphor	8.935	95	33466	207.0262	ug/l	98
104)	Hexachlorobutadiene	9.073	225	12097	17.7256	ug/l	96
105)	1,2,4-Trichlorobenzene	8.990	180	32746	21.6155	ug/l	97
106)	1,2,3-Trichlorobenzene	9.292	180	21138	19.8601	ug/l	97
107)	Naphthalene	9.147	128	82446	25.1111	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 11M82676.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 11M82676.D
Acq On : 09/11/20 21:35
Operator : WP
Sam Mult : 1 Vial# : 24
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 14:56
Qt Upd On: 09/14/20 14:39
Abundance
Time-->
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene

Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82674.D Sam Mult : 1 Vial# : 22 Qt On : 09/14/20 15:00
Acq On : 09/11/20 20:58 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	254008	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	208903	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	98904	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	63749	28.08	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.60%			
39) 1,2-Dichloroethane-d4	4.778	67	33923	33.96	ug/l	0.00
Spiked Amount 30.000			Recovery = 113.20%			
66) Toluene-d8	5.787	98	274667	34.01	ug/l	0.00
Spiked Amount 30.000			Recovery = 113.37%			
76) Bromofluorobenzene	7.167	174	77117	30.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.83%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	10767m	4.1141	ug/l	
6) Dichlorodifluoromethane	1.665	85	6873	3.5742	ug/l	94
7) Chloromethane	1.854	50	7235	3.9377	ug/l	98
8) Bromomethane	2.238	94	7420	3.9621	ug/l	100
9) Vinyl Chloride	1.940	62	9534	4.1882	ug/l	92
10) Chloroethane	2.328	64	6317	4.2970	ug/l	84
11) Trichlorofluoromethane	2.546	101	15371	4.5153	ug/l	92
12) Ethyl ether	2.778	59	5723	3.7691	ug/l	65
13) Furan	2.817	39	9558m	3.7243	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.974	101	6614	4.0176	ug/l	94
15) Methylene Chloride	3.379	84	8894	4.0703	ug/l	51
16) Acrolein	2.887	56	5326	17.5375	ug/l	97
17) Acrylonitrile	3.566	53	2906m	4.1235	ug/l	
18) Iodomethane	3.119	142	5241	2.0464	ug/l	87
19) Acetone	3.009	43	11765	21.7533	ug/l	96
20) Carbon Disulfide	3.186	76	19381	3.5699	ug/l	100
21) t-Butyl Alcohol	3.437	59	2636	15.4599	ug/l	95
22) n-Hexane	3.813	57	6678	3.6366	ug/l	86
23) Di-isopropyl-ether	3.955	45	17196	3.7179	ug/l	79
24) 1,1-Dichloroethene	2.981	61	11116	4.0388	ug/l	83
25) Methyl Acetate	3.276	43	5391	4.3899	ug/l	100
26) Methyl-t-butyl ether	3.595	73	18588	3.5959	ug/l	86
27) 1,1-Dichloroethane	3.929	63	14241	4.0502	ug/l	100
28) trans-1,2-Dichloroethene	3.608	96	8161	3.6540	ug/l	76
29) Ethyl-t-butyl ether	4.196	59	18872	3.4440	ug/l	87
30) cis-1,2-Dichloroethene	4.308	61	13658	4.0198	ug/l	66
31) Bromochloromethane	4.456	49	5920	4.1444	ug/l	34
32) 2,2-Dichloropropane	4.318	77	11017	3.8332	ug/l	98
33) Ethyl acetate	4.328	43	7194m	3.8020	ug/l	
34) 1,4-Dioxane	5.337	88	3948	131.5254	ug/l	63
35) 1,1-Dichloropropene	4.701	75	12160	4.0055	ug/l	97
36) Chloroform	4.489	83	15696	4.0661	ug/l	93
38) Cyclohexane	4.649	56	10469m	3.7675	ug/l	
40) 1,2-Dichloroethane	4.820	62	12305	4.3082	ug/l	96
41) 2-Butanone	4.315	43	3249m	4.3495	ug/l	
42) 1,1,1-Trichloroethane	4.614	97	13666	3.9033	ug/l	89
43) Carbon Tetrachloride	4.710	117	11217	3.5385	ug/l	95
44) Vinyl Acetate	3.948	43	19448	3.6110	ug/l	100
45) Bromodichloromethane	5.415	83	11349	3.9997	ug/l	100
46) Methylcyclohexane	5.270	83	9931	3.4980	ug/l	69
47) Dibromomethane	5.341	174	5262	2.9067	ug/l	91
48) 1,2-Dichloropropane	5.276	63	7852	3.8587	ug/l	95
49) Trichloroethene	5.154	130	8979	3.2452	ug/l	96
50) Benzene	4.820	78	35055	3.9669	ug/l	100
51) tert-Amyl methyl ether	4.858	73	17820	3.1094	ug/l	97
53) Iso-propylacetate	4.813	43	10596	3.9380	ug/l	74
54) Methyl methacrylate	5.302	41	6104	4.1675	ug/l	53
55) Dibromochloromethane	6.241	129	8606	3.8542	ug/l	100
56) 2-Chloroethylvinylether	5.540	63	1873	5.1454	ug/l	79
57) cis-1,3-Dichloropropene	5.643	75	12025	4.2607	ug/l	93
58) trans-1,3-Dichloropropene	5.916	75	11251	4.2162	ug/l	100
59) Ethyl methacrylate	5.932	41	5832m	4.2858	ug/l	
60) 1,1,2-Trichloroethane	6.022	97	8603	4.5181	ug/l	87
61) 1,2-Dibromoethane	6.318	107	9038	4.5835	ug/l	90
62) 1,3-Dichloropropane	6.109	76	14401	4.6255	ug/l	98
63) 4-Methyl-2-Pentanone	5.704	43	6772	4.6172	ug/l	88
64) 2-Hexanone	6.122	43	4588	4.0082	ug/l	76
65) Tetrachloroethene	6.112	164	7656	3.8357	ug/l	98
67) Toluene	5.823	92	24633	4.7061	ug/l	95

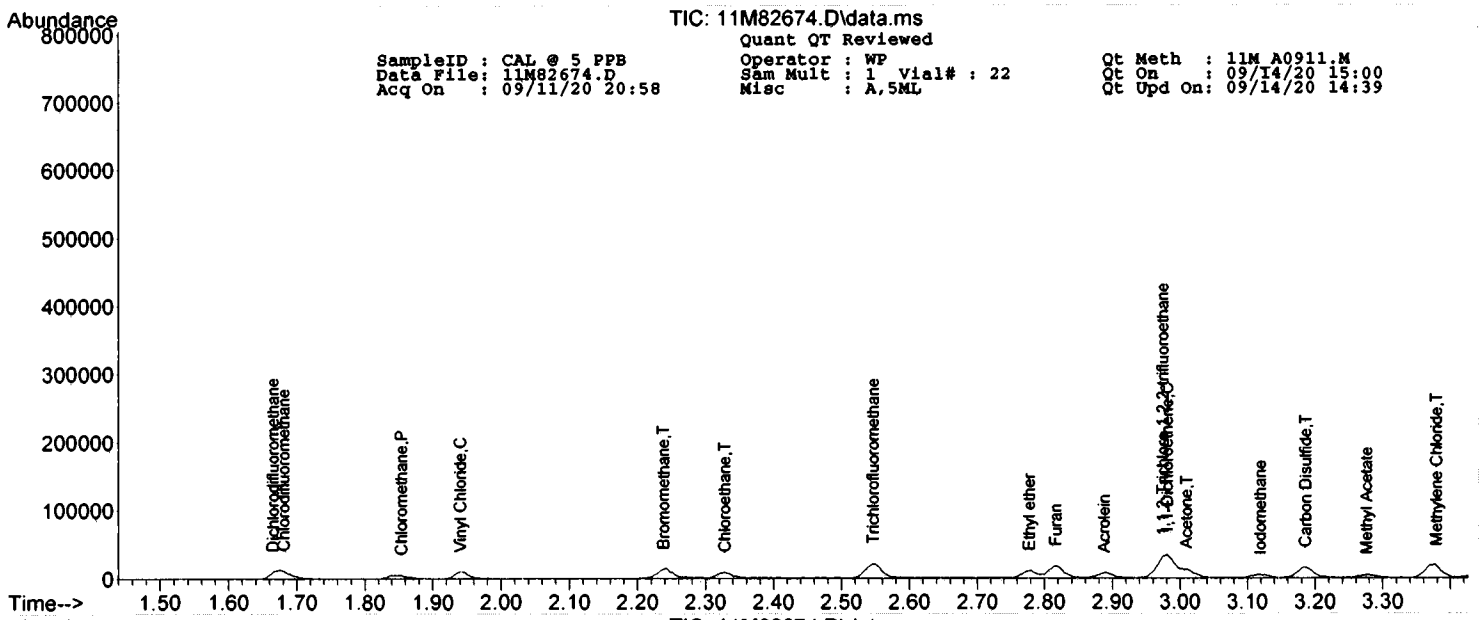
Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82674.D Sam Mult : 1 Vial# : 22 Qt On : 09/14/20 15:00
Acq On : 09/11/20 20:58 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.598	133	8737	4.2131	ug/l	92
69)	Chlorobenzene	6.562	112	27752	4.6518	ug/l	92
71)	n-Butyl acrylate	6.800	55	12351	5.1403	ug/l	89
72)	n-Amyl acetate	6.910	43	9255	4.7080	ug/l	76
73)	Bromoform	7.006	173	5492	4.6277	ug/l	88
74)	Ethylbenzene	6.601	106	11422	5.5172	ug/l	90
75)	1,1,2,2-Tetrachloroethane	7.215	83	12448	6.5573	ug/l	91
77)	Styrene	6.884	104	28118	5.7686	ug/l	96
78)	m&p-Xylenes	6.659	106	32337	11.0369	ug/l	88
79)	o-Xylene	6.881	106	16685	5.9151	ug/l	92
80)	trans-1,4-Dichloro-2-b...	7.244	53	3409	5.4080	ug/l	99
81)	1,3-Dichlorobenzene	7.784	146	18553	5.0195	ug/l	97
82)	1,4-Dichlorobenzene	7.829	146	19360	5.0025	ug/l	96
83)	1,2-Dichlorobenzene	8.054	146	17156	5.1131	ug/l	98
84)	Isopropylbenzene	7.067	105	41869	6.1767	ug/l	98
85)	Cyclohexanone	7.141	55	1488	28.4079	ug/l	75
86)	Camphene	7.241	93	10001	4.8722	ug/l	94
87)	1,2,3-Trichloropropane	7.257	75	13821	5.9548	ug/l	89
88)	2-Chlorotoluene	7.363	91	24608	5.7564	ug/l	95
89)	p-Ethyltoluene	7.350	105	40523	5.1886	ug/l	99
90)	4-Chlorotoluene	7.418	91	26600	6.0966	ug/l	98
91)	n-Propylbenzene	7.292	91	48500	5.9650	ug/l	96
92)	Bromobenzene	7.270	77	23763	5.8306	ug/l	89
93)	1,3,5-Trimethylbenzene	7.376	105	32859	5.6630	ug/l	97
94)	Butyl methacrylate	7.379	41	8366m	6.0209	ug/l	
95)	t-Butylbenzene	7.569	119	30941	5.2181	ug/l	96
96)	1,2,4-Trimethylbenzene	7.595	105	34407	5.5267	ug/l	96
97)	sec-Butylbenzene	7.694	105	36350	5.1478	ug/l	99
98)	4-Isopropyltoluene	7.762	119	30350	4.9517	ug/l	95
99)	n-Butylbenzene	8.000	91	31914	5.3827	ug/l	93
100)	p-Diethylbenzene	7.984	119	16522	4.7133	ug/l	92
101)	1,2,4,5-Tetramethylben...	8.440	119	21721	4.1878	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.501	157	1938	5.3871	ug/l	97
103)	Camphor	8.932	95	6169	40.4822	ug/l	98
104)	Hexachlorobutadiene	9.074	225	2249	3.4957	ug/l	89
105)	1,2,4-Trichlorobenzene	8.993	180	6575	4.6039	ug/l	95
106)	1,2,3-Trichlorobenzene	9.292	180	4418	4.4032	ug/l	94
107)	Naphthalene	9.147	128	15512	5.0118	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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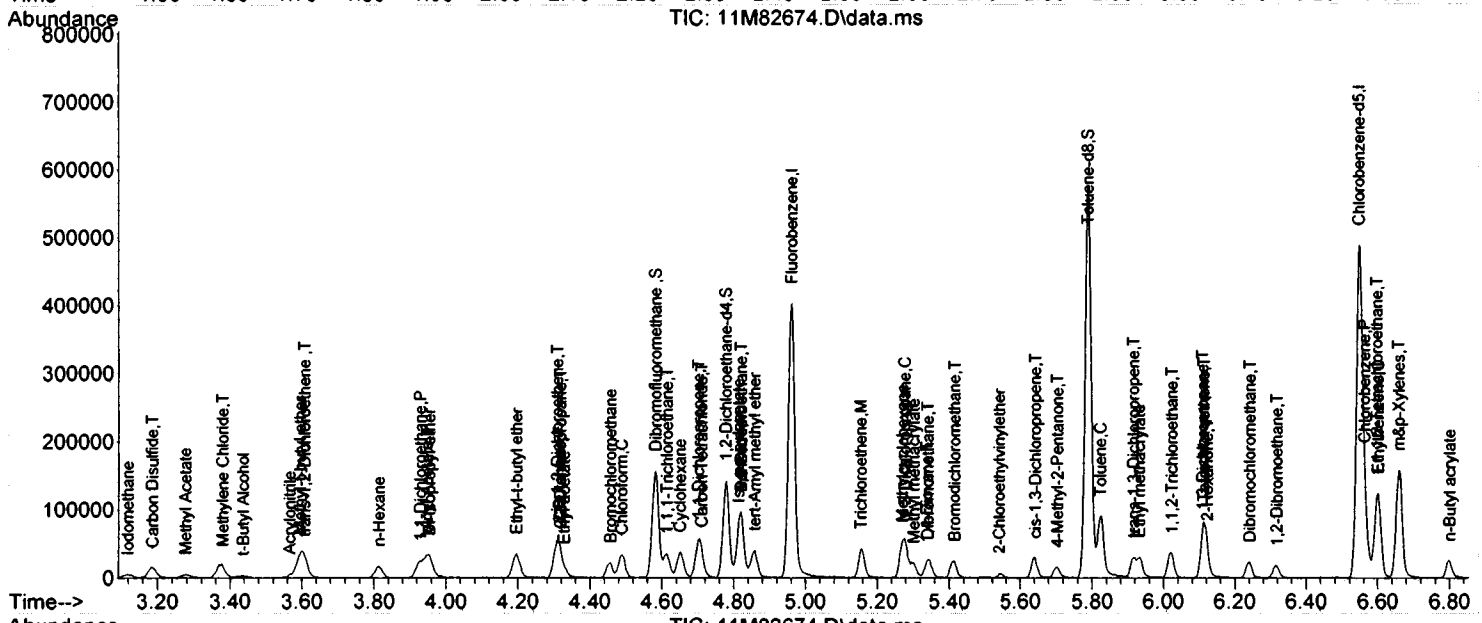
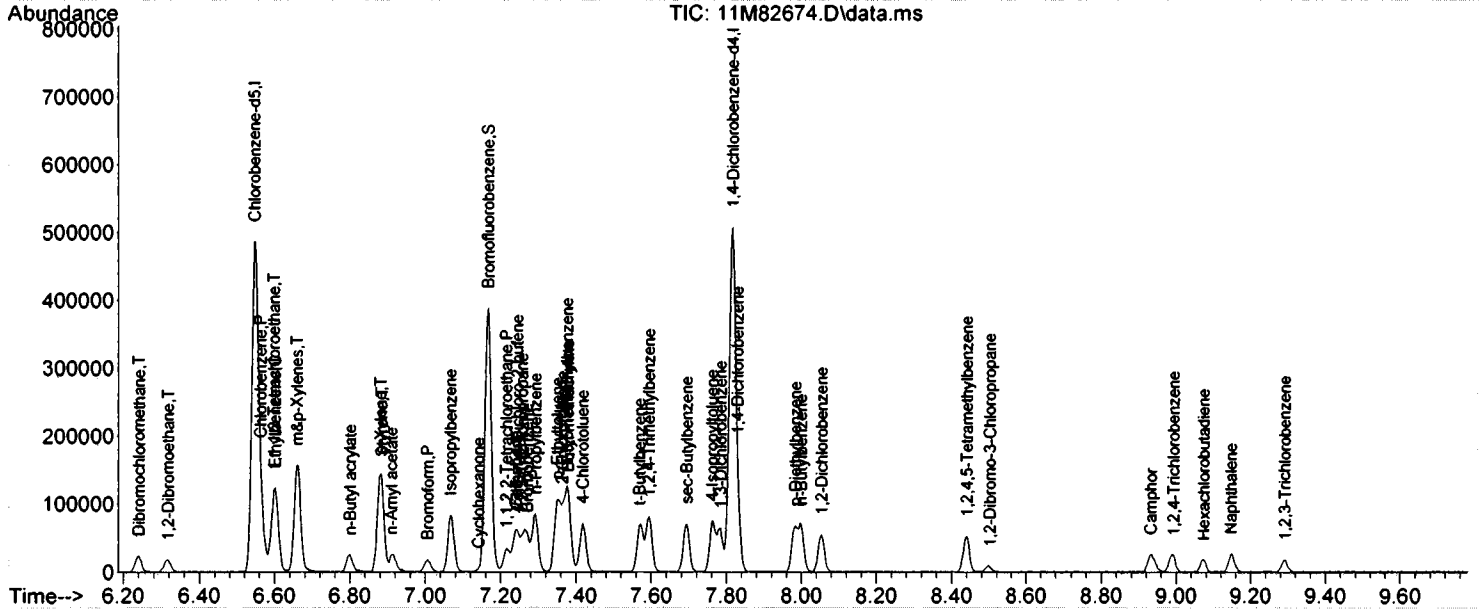
Quant QT Reviewed
SampleID : CAL @ 5 PPB
Data File: 11M82674.D
Acq On : 09/11/20 20:58
Operator : WP
Sam Mult : 1 Vial# : 22
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 15:00
Qt Upd On: 09/14/20 14:39
Dichlorodifluoromethane
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->


Abundance
TIC: 11M82674.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
Time-->


Abundance
TIC: 11M82674.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
1,4-Dichlorobenzene-d4,I
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82675.D Sam Mult : 1 Vial# : 23 Qt On : 09/14/20 14:57
Acq On : 09/11/20 21:17 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.958	96	258924	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.549	117	207537	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	102207	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	66522	28.74	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.80%			
39) 1,2-Dichloroethane-d4	4.778	67	34373	33.76	ug/l	0.00
Spiked Amount 30.000			Recovery = 112.53%			
66) Toluene-d8	5.787	98	276061	34.41	ug/l	0.00
Spiked Amount 30.000			Recovery = 114.70%			
76) Bromofluorobenzene	7.167	174	79205	30.37	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.23%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.684	51	23283m	8.7276	ug/l	
6) Dichlorodifluoromethane	1.668	85	15260	7.7851	ug/l	93
7) Chloromethane	1.844	50	15288	8.1626	ug/l	94
8) Bromomethane	2.241	94	15705	8.2270	ug/l	85
9) Vinyl Chloride	1.940	62	19844	8.5518	ug/l	95
10) Chloroethane	2.321	64	13391	8.9359	ug/l	97
11) Trichlorofluoromethane	2.546	101	33385	9.6209	ug/l	94
12) Ethyl ether	2.778	59	11152	7.2051	ug/l	65
13) Furan	2.816	39	19031	7.2747	ug/l	47
14) 1,1,2-Trichloro-1,2,2-...	2.974	101	13670	8.1461	ug/l	91
15) Methylene Chloride	3.369	84	18844	8.4601	ug/l	45
16) Acrolein	2.887	56	11855	38.2950	ug/l	96
17) Acrylonitrile	3.569	53	6132	8.5359	ug/l	99
18) Iodomethane	3.119	142	14315	5.4833	ug/l	93
19) Acetone	3.009	43	22815	41.3836	ug/l	99
20) Carbon Disulfide	3.186	76	41125	7.4313	ug/l	100
21) t-Butyl Alcohol	3.434	59	5582	32.1163	ug/l	94
22) n-Hexane	3.810	57	14728	7.8681	ug/l	89
23) Di-isopropyl-ether	3.951	45	37629	7.9813	ug/l	61
24) 1,1-Dichloroethene	2.980	61	24061	8.5763	ug/l	80
25) Methyl Acetate	3.279	43	10713	8.5580	ug/l	100
26) Methyl-t-butyl ether	3.595	73	40763	7.7360	ug/l	85
27) 1,1-Dichloroethane	3.926	63	30071	8.3900	ug/l	95
28) trans-1,2-Dichloroethene	3.601	96	17916	7.8693	ug/l	76
29) Ethyl-t-butyl ether	4.193	59	40060	7.1718	ug/l	86
30) cis-1,2-Dichloroethene	4.308	61	29768	8.5948	ug/l	64
31) Bromochloromethane	4.456	49	12978	8.9130	ug/l	43
32) 2,2-Dichloropropane	4.315	77	24899	8.4986	ug/l	95
33) Ethyl acetate	4.328	43	16728m	8.6728	ug/l	
34) 1,4-Dioxane	5.337	88	7503	245.2125	ug/l	75
35) 1,1-Dichloropropene	4.701	75	27518	8.8924	ug/l	93
36) Chloroform	4.488	83	34499	8.7675	ug/l	96
38) Cyclohexane	4.652	56	24101m	8.5085	ug/l	
40) 1,2-Dichloroethane	4.820	62	26152	8.9824	ug/l	95
41) 2-Butanone	4.305	43	5392	7.0813	ug/l	59
42) 1,1,1-Trichloroethane	4.611	97	31084	8.7097	ug/l	94
43) Carbon Tetrachloride	4.710	117	26858	8.3116	ug/l	94
44) Vinyl Acetate	3.945	43	44404	8.0881	ug/l	100
45) Bromodichloromethane	5.411	83	23775	8.2199	ug/l	96
46) Methylcyclohexane	5.270	83	22462	7.7615	ug/l	67
47) Dibromomethane	5.347	174	12045	6.5273	ug/l	98
48) 1,2-Dichloropropane	5.276	63	18158	8.7539	ug/l	94
49) Trichloroethene	5.157	130	20862	7.3967	ug/l	91
50) Benzene	4.820	78	75751	8.4093	ug/l	100
51) tert-Amyl methyl ether	4.855	73	40337	6.9048	ug/l	99
53) Iso-propylacetate	4.813	43	23122	8.6498	ug/l	79
54) Methyl methacrylate	5.302	41	14393m	9.8916	ug/l	
55) Dibromochloromethane	6.238	129	19544	8.8103	ug/l	98
56) 2-Chloroethylvinylether	5.543	63	4089	11.3069	ug/l	78
57) cis-1,3-Dichloropropene	5.640	75	26480	9.4442	ug/l	94
58) trans-1,3-Dichloropropene	5.913	75	26198	9.8820	ug/l	92
59) Ethyl methacrylate	5.932	41	12586m	9.3101	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	18751	9.9125	ug/l	92
61) 1,2-Dibromoethane	6.315	107	19264	9.8338	ug/l	93
62) 1,3-Dichloropropane	6.112	76	31125	10.0630	ug/l	98
63) 4-Methyl-2-Pentanone	5.704	43	14444	9.9127	ug/l	97
64) 2-Hexanone	6.125	43	10408	9.1527	ug/l	87
65) Tetrachloroethene	6.112	164	16366	8.2534	ug/l	98
67) Toluene	5.823	92	51401	9.8848	ug/l	93

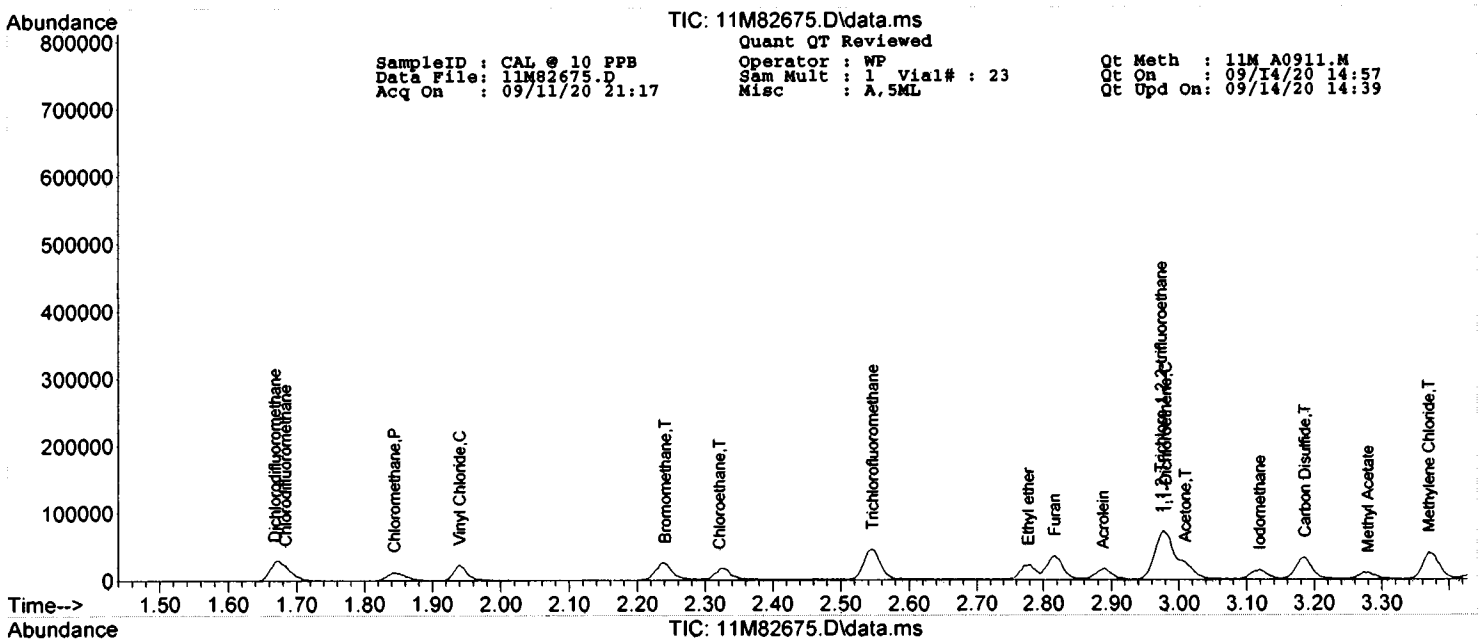
Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82675.D Sam Mult : 1 Vial# : 23 Qt On : 09/14/20 14:57
Acq On : 09/11/20 21:17 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.594	133	18406	8.9341	ug/l	97
69)	Chlorobenzene	6.562	112	56546	9.5407	ug/l	98
71)	n-Butyl acrylate	6.797	55	27814	11.2016	ug/l	89
72)	n-Amyl acetate	6.913	43	21156	10.4141	ug/l	74
73)	Bromoform	7.006	173	12510	10.2006	ug/l	96
74)	Ethylbenzene	6.604	106	27200	12.7139	ug/l	99
75)	1,1,2,2-Tetrachloroethane	7.215	83	25908	13.2066	ug/l	89
77)	Styrene	6.884	104	61658	12.2407	ug/l	91
78)	m&p-Xylenes	6.659	106	72860	24.0640	ug/l	99
79)	o-Xylene	6.881	106	36790	12.6212	ug/l	98
80)	trans-1,4-Dichloro-2-b...	7.244	53	7452	11.4397	ug/l	92
81)	1,3-Dichlorobenzene	7.784	146	40347	10.5630	ug/l	97
82)	1,4-Dichlorobenzene	7.829	146	42222	10.5573	ug/l	97
83)	1,2-Dichlorobenzene	8.054	146	38212	11.0205	ug/l	98
84)	Isopropylbenzene	7.067	105	90137	12.8677	ug/l	98
85)	Cyclohexanone	7.144	55	2482m	45.8533	ug/l	
86)	Camphene	7.241	93	22085	10.4114	ug/l	98
87)	1,2,3-Trichloropropane	7.257	75	29295	12.2139	ug/l	87
88)	2-Chlorotoluene	7.363	91	55056	12.4626	ug/l	97
89)	p-Ethyltoluene	7.350	105	88984	11.0254	ug/l	94
90)	4-Chlorotoluene	7.418	91	54816	12.1575	ug/l	97
91)	n-Propylbenzene	7.292	91	106953	12.7289	ug/l	97
92)	Bromobenzene	7.270	77	52684	12.5089	ug/l	92
93)	1,3,5-Trimethylbenzene	7.379	105	72925	12.1619	ug/l	97
94)	Butyl methacrylate	7.382	41	18841m	13.1214	ug/l	
95)	t-Butylbenzene	7.572	119	67866	11.0755	ug/l	96
96)	1,2,4-Trimethylbenzene	7.594	105	77117	11.9868	ug/l	97
97)	sec-Butylbenzene	7.694	105	82817	11.3494	ug/l	97
98)	4-Isopropyltoluene	7.765	119	69474	10.9686	ug/l	99
99)	n-Butylbenzene	8.000	91	72897	11.8978	ug/l	97
100)	p-Diethylbenzene	7.980	119	37138	10.2520	ug/l	96
101)	1,2,4,5-Tetramethylben...	8.440	119	50919	9.4999	ug/l	97
102)	1,2-Dibromo-3-Chloropr...	8.498	157	4568	12.2874	ug/l	94
103)	Camphor	8.938	95	15503	98.4461	ug/l	96
104)	Hexachlorobutadiene	9.073	225	5608	8.4351	ug/l	97
105)	1,2,4-Trichlorobenzene	8.990	180	14879	10.0819	ug/l	96
106)	1,2,3-Trichlorobenzene	9.292	180	9685	9.3407	ug/l	97
107)	Naphthalene	9.151	128	39171	12.2468	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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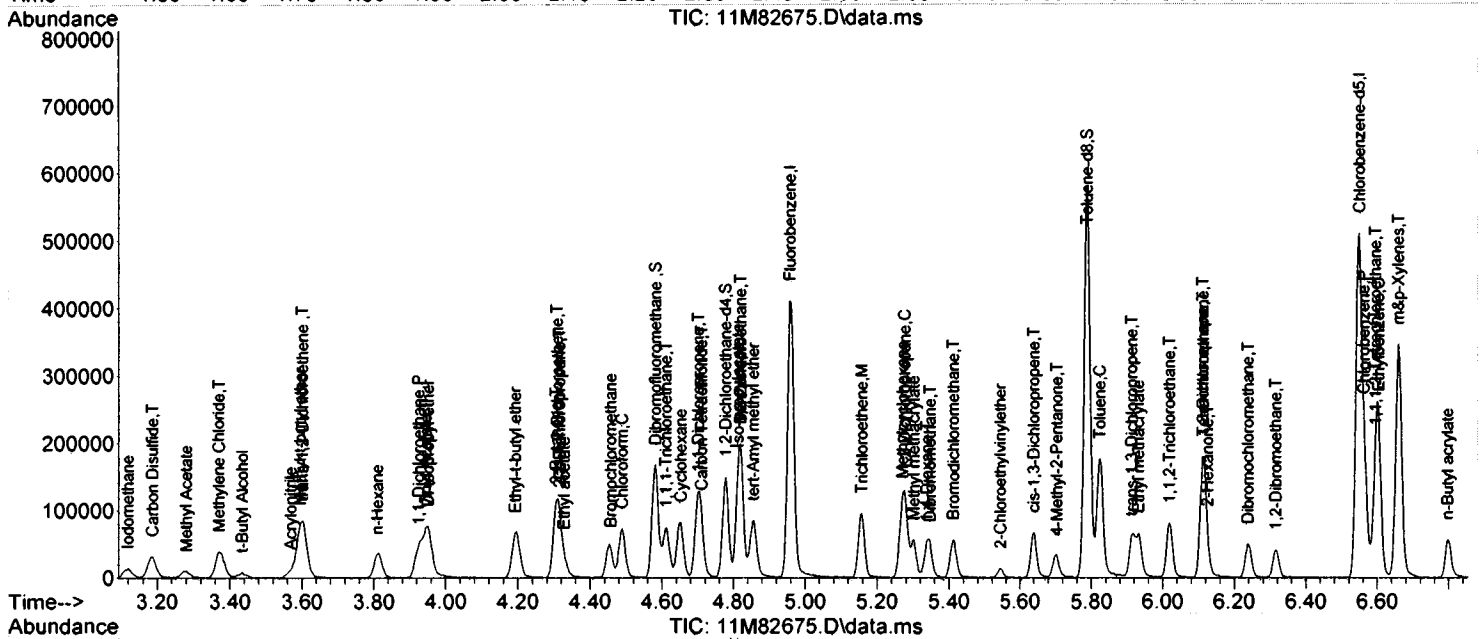
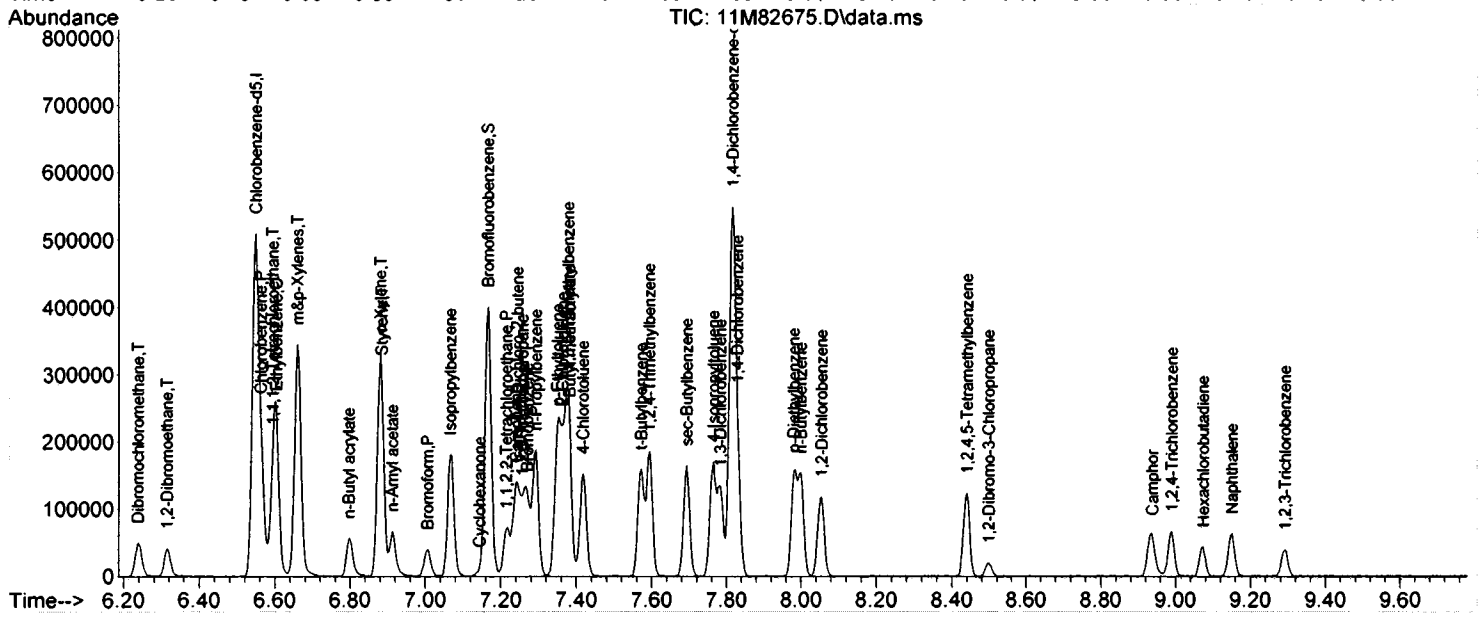
Quant QT Reviewed
SampleID : CAL @ 10 PPB
Data File: 11M82675.D
Acq On : 09/11/20 21:17
Operator : WP
Sam Mult : 1 Vial# : 23
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 14:57
Qt Upd On: 09/14/20 14:39
Chlorodifluoromethane
Dichlorodifluoromethane
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->


Abundance
TIC: 11M82675.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
1,1,1-Trichloroethane,T
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
Time-->


Abundance
TIC: 11M82675.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Chlorobenzene,P
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
1,4-Dichlorobenzene-d4,I
1,4-Dichlorobenzene
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82678.D Sam Mult : 1 Vial# : 26 Qt On : 09/14/20 14:54
Acq On : 09/11/20 22:12 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	280039	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.550	117	221229	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	113051	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.585	111	71102	28.41	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.70%			
39) 1,2-Dichloroethane-d4	4.778	67	35242	32.00	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.67%			
66) Toluene-d8	5.788	98	290222	33.94	ug/l	0.00
Spiked Amount 30.000			Recovery = 113.13%			
76) Bromofluorobenzene	7.167	174	87794	30.43	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.43%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	120576m	41.7899	ug/l	
6) Dichlorodifluoromethane	1.668	85	73159	34.5089	ug/l	97
7) Chloromethane	1.848	50	74354	36.7060	ug/l	95
8) Bromomethane	2.241	94	70466	34.1299	ug/l	99
9) Vinyl Chloride	1.940	62	94984	37.8470	ug/l	91
10) Chloroethane	2.328	64	66741	41.1786	ug/l	87
11) Trichlorofluoromethane	2.547	101	157114	41.8631	ug/l	98
12) Ethyl ether	2.778	59	53249	31.8091	ug/l	64
13) Furan	2.817	39	93165	32.9276	ug/l	43
14) 1,1,2-Trichloro-1,2,2-...	2.974	101	62907	34.6604	ug/l	94
15) Methylene Chloride	3.373	84	89348	37.0885	ug/l	58
16) Acrolein	2.887	56	61416	183.4325	ug/l	97
17) Acrylonitrile	3.569	53	30424	39.1579	ug/l	99
18) Iodomethane	3.122	142	102504	36.3030	ug/l	93
19) Acetone	3.006	43	104317	174.9512	ug/l	99
20) Carbon Disulfide	3.186	76	224546	37.5160	ug/l	100
21) t-Butyl Alcohol	3.434	59	26441	140.6590	ug/l	95
22) n-Hexane	3.813	57	72358	35.7412	ug/l	88
23) Di-isopropyl-ether	3.955	45	191371	37.5302	ug/l	61
24) 1,1-Dichloroethene	2.981	61	121436	40.0208	ug/l	78
25) Methyl Acetate	3.276	43	50234	37.1033	ug/l	100
26) Methyl-t-butyl ether	3.595	73	214672	37.6688	ug/l	83
27) 1,1-Dichloroethane	3.926	63	157908	40.7352	ug/l	100
28) trans-1,2-Dichloroethene	3.604	96	88988	36.1395	ug/l	80
29) Ethyl-t-butyl ether	4.196	59	218924	36.2382	ug/l	86
30) cis-1,2-Dichloroethene	4.308	61	152367	40.6754	ug/l	69
31) Bromochloromethane	4.453	49	66649	42.3220	ug/l	44
32) 2,2-Dichloropropane	4.315	77	130232	41.0998	ug/l	97
33) Ethyl acetate	4.328	43	78627	37.6913	ug/l	99
34) 1,4-Dioxane	5.337	88	34436	1040.5769	ug/l	73
35) 1,1-Dichloropropene	4.701	75	142098	42.4563	ug/l	99
36) Chloroform	4.489	83	171159	40.2182	ug/l	97
38) Cyclohexane	4.653	56	116100m	37.8970	ug/l	
40) 1,2-Dichloroethane	4.820	62	128591	40.8366	ug/l	100
41) 2-Butanone	4.302	43	26553	32.2424	ug/l	59
42) 1,1,1-Trichloroethane	4.614	97	162401	42.0736	ug/l	95
43) Carbon Tetrachloride	4.707	117	142151	40.6740	ug/l	97
44) Vinyl Acetate	3.942	43	238344	40.1403	ug/l	100
45) Bromodichloromethane	5.411	83	138754	44.3555	ug/l	97
46) Methylcyclohexane	5.270	83	118405m	37.8287	ug/l	
47) Dibromomethane	5.344	174	68560	34.3522	ug/l	98
48) 1,2-Dichloropropane	5.280	63	95813	42.7085	ug/l	96
49) Trichloroethene	5.157	130	115473	37.8546	ug/l	97
50) Benzene	4.820	78	391160	40.1495	ug/l	100
51) tert-Amyl methyl ether	4.858	73	223856	35.4300	ug/l	94
53) Iso-propylacetate	4.813	43	125643	44.0931	ug/l	81
54) Methyl methacrylate	5.302	41	72548m	46.7728	ug/l	
55) Dibromochloromethane	6.241	129	114525	48.4318	ug/l	97
56) 2-Chloroethylvinylether	5.546	63	22076	57.2667	ug/l	75
57) cis-1,3-Dichloropropene	5.640	75	155437	52.0064	ug/l	97
58) trans-1,3-Dichloropropene	5.916	75	154070	54.5189	ug/l	97
59) Ethyl methacrylate	5.932	41	70950m	49.2350	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	98307	48.7523	ug/l	88
61) 1,2-Dibromoethane	6.315	107	109362	52.3713	ug/l	99
62) 1,3-Dichloropropane	6.112	76	168007	50.9565	ug/l	99
63) 4-Methyl-2-Pentanone	5.701	43	75583	48.6614	ug/l	89
64) 2-Hexanone	6.125	43	55787	46.0221	ug/l	81
65) Tetrachloroethene	6.115	164	88809	42.0149	ug/l	91
67) Toluene	5.823	92	275843	49.7634	ug/l	99

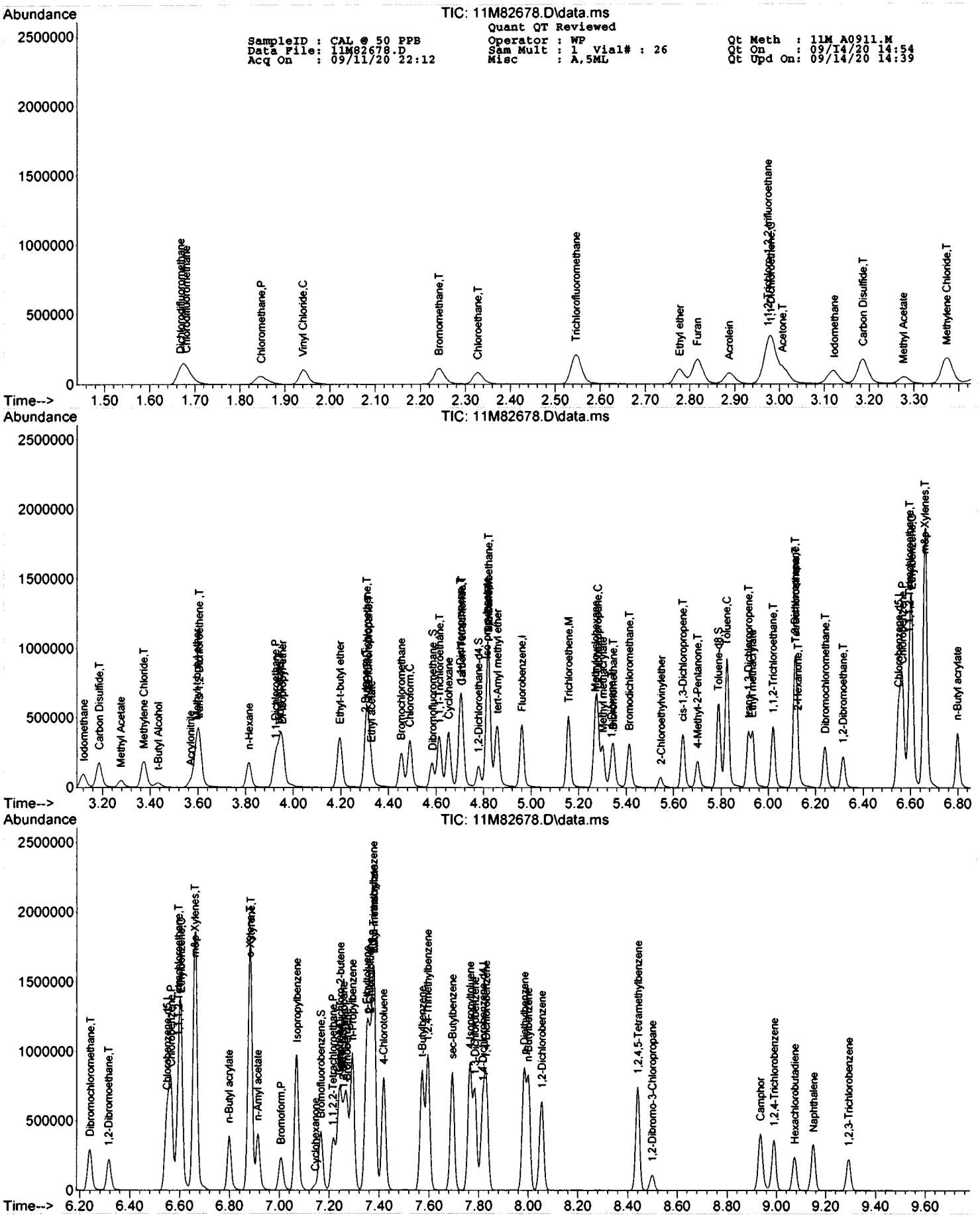
Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82678.D Sam Mult : 1 Vial# : 26 Qt On : 09/14/20 14:54
Acq On : 09/11/20 22:12 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.595	133	104511	47.5890	ug/l	98
69)	Chlorobenzene	6.566	112	314484	49.7774	ug/l	99
71)	n-Butyl acrylate	6.797	55	167495	60.9852	ug/l	88
72)	n-Amyl acetate	6.913	43	128487	57.1815	ug/l	74
73)	Bromoform	7.006	173	77909	57.4331	ug/l	97
74)	Ethylbenzene	6.604	106	145280	61.3933	ug/l	97
75)	1,1,2,2-Tetrachloroethane	7.215	83	135815	62.5908	ug/l	96
77)	Styrene	6.884	104	342916	61.5478	ug/l	95
78)	m&p-Xylenes	6.659	106	413703	123.5305	ug/l	100
79)	o-Xylene	6.881	106	196318	60.8886	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.244	53	42378	58.8148	ug/l	72
81)	1,3-Dichlorobenzene	7.784	146	226516	53.6143	ug/l	98
82)	1,4-Dichlorobenzene	7.829	146	229024	51.7726	ug/l	98
83)	1,2-Dichlorobenzene	8.054	146	209335	54.5822	ug/l	98
84)	Isopropylbenzene	7.070	105	493603	63.7062	ug/l	98
85)	Cyclohexanone	7.144	55	10321	172.3841	ug/l	81
86)	Camphene	7.241	93	118919	50.6839	ug/l	97
87)	1,2,3-Trichloropropane	7.257	75	161323	60.8086	ug/l	91
88)	2-Chlorotoluene	7.363	91	306560	62.7375	ug/l	96
89)	p-Ethyltoluene	7.350	105	479015	53.6584	ug/l	99
90)	4-Chlorotoluene	7.418	91	306048	61.3668	ug/l	99
91)	n-Propylbenzene	7.292	91	566657	60.9712	ug/l	98
92)	Bromobenzene	7.270	77	281098	60.3401	ug/l	92
93)	1,3,5-Trimethylbenzene	7.376	105	403583	60.8506	ug/l	98
94)	Butyl methacrylate	7.379	41	104078m	65.5302	ug/l	
95)	t-Butylbenzene	7.572	119	371941	54.8771	ug/l	98
96)	1,2,4-Trimethylbenzene	7.595	105	407807	57.3079	ug/l	98
97)	sec-Butylbenzene	7.694	105	449733	55.7202	ug/l	100
98)	4-Isopropyltoluene	7.765	119	386465	55.1625	ug/l	99
99)	n-Butylbenzene	8.000	91	386984	57.1025	ug/l	98
100)	p-Diethylbenzene	7.984	119	211586	52.8062	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.440	119	298263	50.3088	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.498	157	24489	59.5542	ug/l	95
103)	Camphor	8.935	95	84293	483.9275	ug/l	99
104)	Hexachlorobutadiene	9.074	225	31457	42.7767	ug/l	98
105)	1,2,4-Trichlorobenzene	8.990	180	80694	49.4328	ug/l	99
106)	1,2,3-Trichlorobenzene	9.292	180	52118	45.4435	ug/l	97
107)	Naphthalene	9.151	128	202659	57.2835	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 50 PPB
Data File: 11M82678.D
Acq On : 09/11/20 22:12
Operator : WP
Sam Mult : 1 Vial# : 26
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 14:54
Qt Upd On: 09/14/20 14:39
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->

Abundance
TIC: 11M82678.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
Time-->

Abundance
TIC: 11M82678.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82686.D Sam Mult : 1 Vial# : 34 Qt On : 09/14/20 14:53
Acq On : 09/12/20 00:39 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	304276	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.549	117	249762	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	158606	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	75684	27.83	ug/l	0.00
Spiked Amount 30.000			Recovery = 92.77%			
39) 1,2-Dichloroethane-d4	4.778	67	38078	31.82	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.07%			
66) Toluene-d8	5.787	98	326349	33.80	ug/l	0.00
Spiked Amount 30.000			Recovery = 112.67%			
76) Bromofluorobenzene	7.167	174	103879	25.67	ug/l	0.00
Spiked Amount 30.000			Recovery = 85.57%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	276869m	88.3152	ug/l	
6) Dichlorodifluoromethane	1.668	85	181835	78.9390	ug/l	99
7) Chloromethane	1.847	50	175239	79.6185	ug/l	99
8) Bromomethane	2.238	94	202973	90.4783	ug/l	95
9) Vinyl Chloride	1.940	62	226737	83.1484	ug/l	92
10) Chloroethane	2.328	64	152382	86.5293	ug/l	89
11) Trichlorofluoromethane	2.546	101	404308	99.1470	ug/l	98
12) Ethyl ether	2.778	59	131071	72.0605	ug/l	60
13) Furan	2.817	39	235510m	76.6068	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	160910	81.5960	ug/l	96
15) Methylene Chloride	3.373	84	215600	82.3671	ug/l	54
16) Acrolein	2.887	56	141991	390.3070	ug/l	100
17) Acrylonitrile	3.569	53	71397	84.5735	ug/l	95
18) Iodomethane	3.122	142	238263	77.6621	ug/l	94
19) Acetone	3.009	43	244391	377.2228	ug/l	91
20) Carbon Disulfide	3.186	76	565873	87.0123	ug/l	100
21) t-Butyl Alcohol	3.431	59	74826	366.3474	ug/l	94
22) n-Hexane	3.813	57	174543	79.3479	ug/l	87
23) Di-isopropyl-ether	3.955	45	462951	83.5584	ug/l	55
24) 1,1-Dichloroethene	2.981	61	295005	89.4784	ug/l	72
25) Methyl Acetate	3.276	43	119614	81.3107	ug/l	100
26) Methyl-t-butyl ether	3.595	73	526228	84.9827	ug/l	81
27) 1,1-Dichloroethane	3.926	63	367602	87.2760	ug/l	98
28) trans-1,2-Dichloroethene	3.604	96	230250	86.0600	ug/l	76
29) Ethyl-t-butyl ether	4.196	59	532803	81.1692	ug/l	84
30) cis-1,2-Dichloroethene	4.308	61	367676	90.3353	ug/l	60
31) Bromochloromethane	4.453	49	149190m	87.1892	ug/l	
32) 2,2-Dichloropropane	4.312	77	308248	89.5309	ug/l	94
33) Ethyl acetate	4.328	43	173157	76.3942	ug/l	99
34) 1,4-Dioxane	5.337	88	115969	3225.1819	ug/l	68
35) 1,1-Dichloropropene	4.701	75	334923	92.0980	ug/l	99
36) Chloroform	4.488	83	413373	89.3955	ug/l	96
38) Cyclohexane	4.652	56	284053m	85.3341	ug/l	
40) 1,2-Dichloroethane	4.820	62	308829	90.2627	ug/l	95
41) 2-Butanone	4.302	43	74676	83.4538	ug/l	61
42) 1,1,1-Trichloroethane	4.614	97	382130	91.1135	ug/l	96
43) Carbon Tetrachloride	4.707	117	349932	92.1512	ug/l	100
44) Vinyl Acetate	3.945	43	567593	87.9759	ug/l	100
45) Bromodichloromethane	5.411	83	323592	95.2030	ug/l	99
46) Methylcyclohexane	5.270	83	291221m	85.6299	ug/l	
47) Dibromomethane	5.344	174	160454	73.9920	ug/l	94
48) 1,2-Dichloropropane	5.279	63	218256	89.5379	ug/l	98
49) Trichloroethene	5.157	130	262606	79.2308	ug/l	94
50) Benzene	4.820	78	954066	90.1270	ug/l	100
51) tert-Amyl methyl ether	4.858	73	545507	79.4608	ug/l	92
53) Iso-propylacetate	4.813	43	304534	94.6638	ug/l	79
54) Methyl methacrylate	5.276	41	175406	100.1678	ug/l	60
55) Dibromochloromethane	6.241	129	284711	106.6474	ug/l	99
56) 2-Chloroethylvinylether	5.543	63	54748	125.7956	ug/l	81
57) cis-1,3-Dichloropropene	5.640	75	385291	114.1845	ug/l	96
58) trans-1,3-Dichloropropene	5.916	75	364982	114.3974	ug/l	99
59) Ethyl methacrylate	5.932	41	157167m	96.6047	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	232527	102.1408	ug/l	88
61) 1,2-Dibromoethane	6.315	107	261323	110.8461	ug/l	99
62) 1,3-Dichloropropane	6.112	76	393325	105.6670	ug/l	98
63) 4-Methyl-2-Pentanone	5.701	43	176192	100.4759	ug/l	94
64) 2-Hexanone	6.122	43	125023	91.3564	ug/l	79
65) Tetrachloroethene	6.115	164	224462	94.0599	ug/l	96
67) Toluene	5.823	92	658530	105.2300	ug/l	94

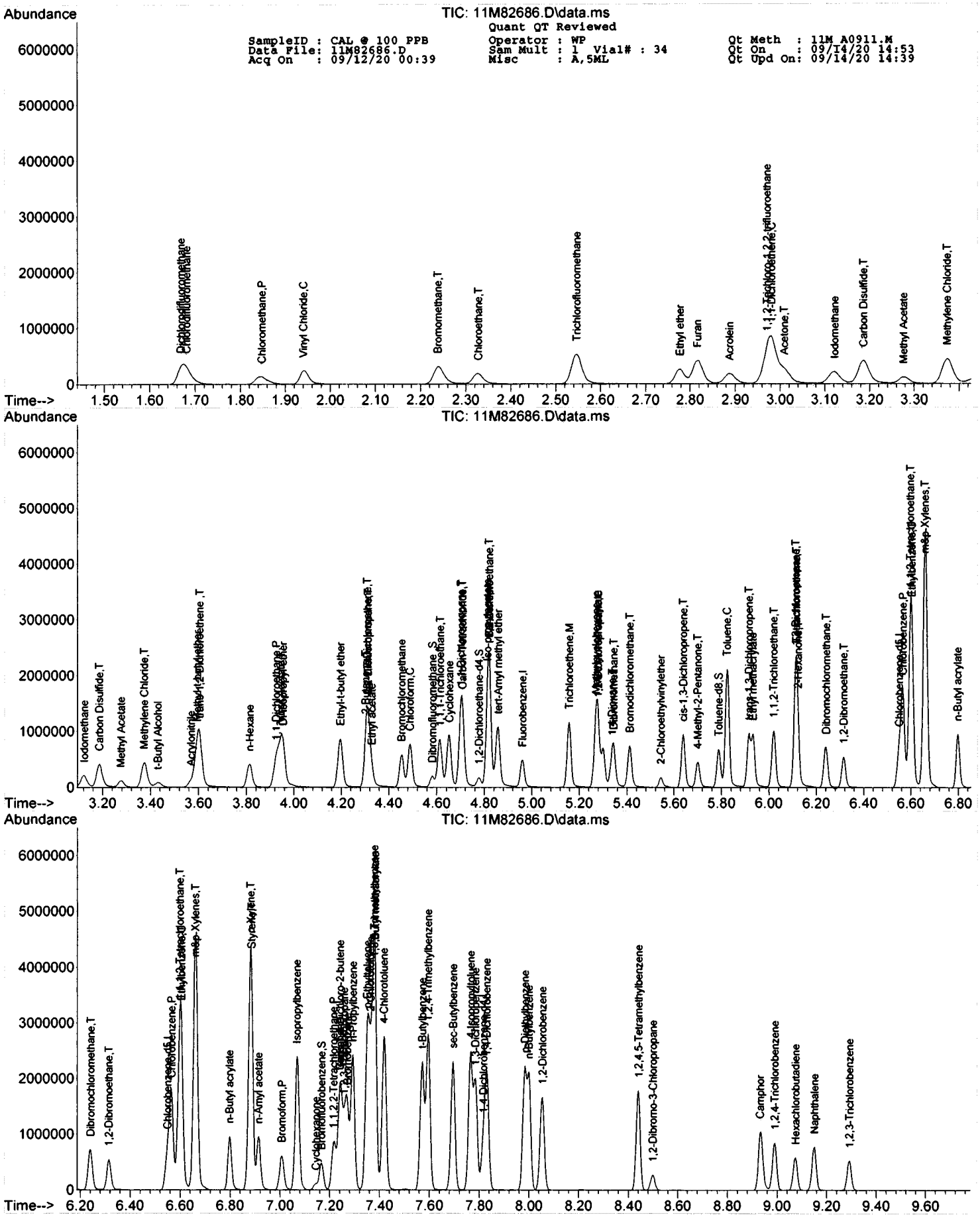
Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82686.D Sam Mult : 1 Vial# : 34 Qt On : 09/14/20 14:53
Acq On : 09/12/20 00:39 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.598	133	263834	106.4120	ug/l	97
69)	Chlorobenzene	6.566	112	744063	104.3179	ug/l	98
71)	n-Butyl acrylate	6.797	55	399113	103.5794	ug/l	88
72)	n-Amyl acetate	6.913	43	302253	95.8785	ug/l	73
73)	Bromoform	7.006	173	206760	108.6416	ug/l	98
74)	Ethylbenzene	6.604	106	354240	106.7007	ug/l	97
75)	1,1,2,2-Tetrachloroethane	7.215	83	308080	101.2001	ug/l	97
77)	Styrene	6.884	104	848653	108.5699	ug/l	93
78)	m&p-Xylenes	6.659	106	1003651	213.6107	ug/l	99
79)	o-Xylene	6.881	106	490009	108.3266	ug/l	98
80)	trans-1,4-Dichloro-2-b...	7.241	53	98747	97.6844	ug/l	67
81)	1,3-Dichlorobenzene	7.784	146	660726	111.4701	ug/l	96
82)	1,4-Dichlorobenzene	7.829	146	682827	110.0233	ug/l	96
83)	1,2-Dichlorobenzene	8.054	146	568259	105.6112	ug/l	96
84)	Isopropylbenzene	7.067	105	1199465	110.3434	ug/l	100
85)	Cyclohexanone	7.144	55	29914	356.1268	ug/l	76
86)	Camphene	7.241	93	293432	89.1418	ug/l	99
87)	1,2,3-Trichloropropane	7.257	75	384880	103.4067	ug/l	92
88)	2-Chlorotoluene	7.363	91	750336	109.4517	ug/l	95
89)	p-Ethyltoluene	7.350	105	1218434	97.2850	ug/l	99
90)	4-Chlorotoluene	7.418	91	1012590	144.7212	ug/l	96
91)	n-Propylbenzene	7.292	91	1362628	104.5049	ug/l	100
92)	Bromobenzene	7.270	77	661722	101.2461	ug/l	88
93)	1,3,5-Trimethylbenzene	7.379	105	1145217	123.0764	ug/l	98
94)	Butyl methacrylate	7.382	41	314782m	141.2692	ug/l	
95)	t-Butylbenzene	7.572	119	1043696	109.7605	ug/l	95
96)	1,2,4-Trimethylbenzene	7.594	105	1158751	116.0659	ug/l	99
97)	sec-Butylbenzene	7.694	105	1212145	107.0453	ug/l	97
98)	4-Isopropyltoluene	7.765	119	1060691	107.9140	ug/l	98
99)	n-Butylbenzene	8.000	91	974838	102.5296	ug/l	99
100)	p-Diethylbenzene	7.984	119	548662	97.6017	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.440	119	737055	88.6134	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.498	157	62738	108.7494	ug/l	87
103)	Camphor	8.932	95	221351	905.7849	ug/l	97
104)	Hexachlorobutadiene	9.073	225	79909	77.4533	ug/l	98
105)	1,2,4-Trichlorobenzene	8.990	180	201024	87.7762	ug/l	98
106)	1,2,3-Trichlorobenzene	9.292	180	126114	78.3794	ug/l	98
107)	Naphthalene	9.151	128	496131	99.9573	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 100 PPB
Data File: 11M82686.D
Acq On : 09/12/20 00:39
Operator : WP
Sam Mult : 1 Vial# : 34
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 14:53
Qt Upd On: 09/14/20 14:39
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->

Abundance
TIC: 11M82686.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
Time-->

Abundance
TIC: 11M82686.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82673.D Sam Mult : 1 Vial# : 21 Qt On : 09/14/20 15:02
Acq On : 09/11/20 20:40 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	247374	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	200307	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	93440	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	61864	27.98	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.27%			
39) 1,2-Dichloroethane-d4	4.778	67	33741	34.69	ug/l	0.00
Spiked Amount 30.000			Recovery = 115.63%			
66) Toluene-d8	5.787	98	264927	34.21	ug/l	0.00
Spiked Amount 30.000			Recovery = 114.03%			
76) Bromofluorobenzene	7.167	174	72441	30.38	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.27%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	2217	0.8698	ug/l	64
6) Dichlorodifluoromethane	1.668	85	1041	0.5559	ug/l	85
7) Chloromethane	1.841	50	1245m	0.6958	ug/l	
8) Bromomethane	2.241	94	1468	0.8049	ug/l	90
9) Vinyl Chloride	1.943	62	1626	0.7334	ug/l	94
10) Chloroethane	2.325	64	1111	0.7760	ug/l	92
11) Trichlorofluoromethane	2.546	101	2700	0.8144	ug/l	83
12) Ethyl ether	2.778	59	835	0.5647	ug/l	82
13) Furan	2.817	39	2183	0.8734	ug/l	91
14) 1,1,2-Trichloro-1,2,2-...	2.977	101	1134m	0.7073	ug/l	
15) Methylene Chloride	3.386	84	2096m	0.9849	ug/l	
16) Acrolein	2.881	56	812m	2.7455	ug/l	
17) Acrylonitrile	3.572	53	282m	0.4109	ug/l	
18) Iodomethane	3.116	142	704m	0.2823	ug/l	
19) Acetone	3.003	43	2415	4.5850	ug/l	79
20) Carbon Disulfide	3.186	76	4095	0.7745	ug/l	100
21) t-Butyl Alcohol	3.437	59	472	2.8425	ug/l	63
22) n-Hexane	3.820	57	1107m	0.6190	ug/l	
23) Di-isopropyl-ether	3.951	45	3191	0.7084	ug/l	71
24) 1,1-Dichloroethene	2.990	61	1842	0.6872	ug/l	88
25) Methyl Acetate	3.276	43	691	0.5778	ug/l	100
26) Methyl-t-butyl ether	3.598	73	3210	0.6376	ug/l	77
27) 1,1-Dichloroethane	3.929	63	2643	0.7718	ug/l	85
28) trans-1,2-Dichloroethene	3.598	96	1610m	0.7402	ug/l	
29) Ethyl-t-butyl ether	4.202	59	3354	0.6285	ug/l	87
30) cis-1,2-Dichloroethene	4.308	61	2494	0.7537	ug/l	89
31) Bromochloromethane	4.450	49	1036	0.7447	ug/l	50
32) 2,2-Dichloropropane	4.315	77	1758	0.6281	ug/l	90
33) Ethyl acetate	4.328	43	1076m	0.5839	ug/l	
34) 1,4-Dioxane	5.341	88	812m	27.7768	ug/l	
35) 1,1-Dichloropropene	4.694	75	2084	0.7049	ug/l	83
36) Chloroform	4.495	83	2686	0.7145	ug/l	82
38) Cyclohexane	4.652	56	1819	0.6722	ug/l	62
40) 1,2-Dichloroethane	4.820	62	2315	0.8323	ug/l	86
41) 2-Butanone	4.308	43	737	1.0131	ug/l	58
42) 1,1,1-Trichloroethane	4.611	97	2474	0.7256	ug/l	67
43) Carbon Tetrachloride	4.704	117	1828	0.5921	ug/l	99
44) Vinyl Acetate	3.945	43	3652	0.6963	ug/l	100
45) Bromodichloromethane	5.414	83	2135	0.7726	ug/l	83
46) Methylcyclohexane	5.270	83	1503	0.5436	ug/l	75
47) Dibromomethane	5.350	174	977m	0.5542	ug/l	
48) 1,2-Dichloropropane	5.283	63	1391	0.7019	ug/l	89
49) Trichloroethene	5.154	130	1828m	0.6784	ug/l	
50) Benzene	4.820	78	6410	0.7448	ug/l	100
51) tert-Amyl methyl ether	4.852	73	3217	0.5764	ug/l	95
53) Iso-propylacetate	4.816	43	1959m	0.7593	ug/l	
54) Methyl methacrylate	5.295	41	1417m	1.0090	ug/l	
55) Dibromochloromethane	6.241	129	1340	0.6259	ug/l	90
56) 2-Chloroethylvinylether	5.540	63	131m	0.3753	ug/l	
57) cis-1,3-Dichloropropene	5.636	75	2309	0.8532	ug/l	96
58) trans-1,3-Dichloropropene	5.913	75	2022	0.7902	ug/l	73
59) Ethyl methacrylate	5.935	41	838m	0.6423	ug/l	
60) 1,1,2-Trichloroethane	6.022	97	1697	0.9295	ug/l	84
61) 1,2-Dibromoethane	6.315	107	1631	0.8626	ug/l	84
62) 1,3-Dichloropropane	6.112	76	2533	0.8485	ug/l	96
63) 4-Methyl-2-Pentanone	5.701	43	1190	0.8462	ug/l	99
64) 2-Hexanone	6.125	43	853	0.7772	ug/l	90
65) Tetrachloroethene	6.112	164	1387	0.7247	ug/l	53
67) Toluene	5.823	92	4211	0.8390	ug/l	85

Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB
Data File: 11M82673.D
Acq On : 09/11/20 20:40

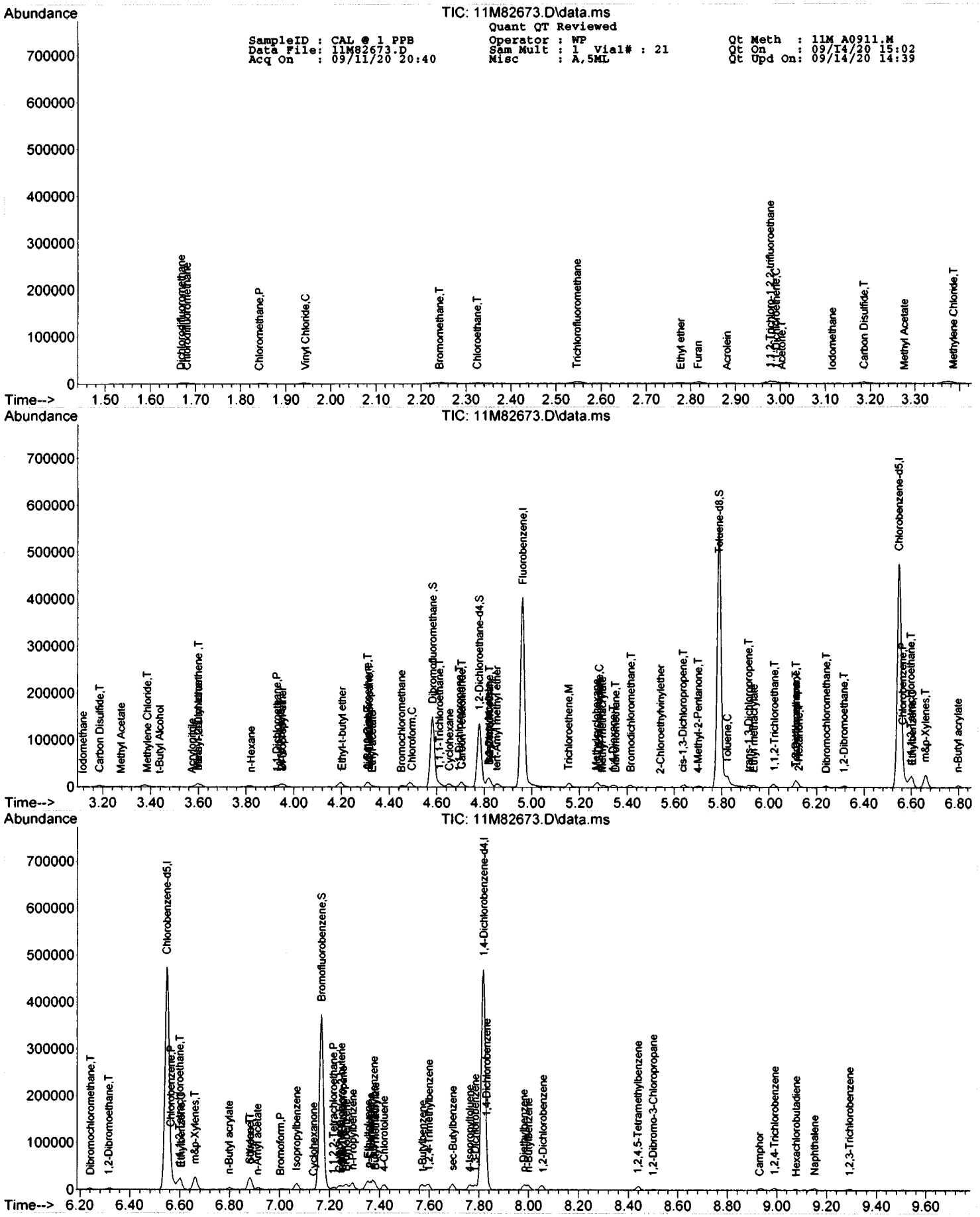
Operator : WP
Sam Mult : 1 Vial# : 21
Misc : A,5ML

Qt Meth : 11M_A0911.M
Qt On : 09/14/20 15:02
Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.598	133	1588	0.7986	ug/l	96
69)	Chlorobenzene	6.562	112	5141	0.8987	ug/l	92
71)	n-Butyl acrylate	6.797	55	2094	0.9224	ug/l	78
72)	n-Amyl acetate	6.910	43	1385	0.7457	ug/l	70
73)	Bromoform	7.003	173	872	0.7777	ug/l	75
74)	Ethylbenzene	6.604	106	2235	1.1427	ug/l	77
75)	1,1,2,2-Tetrachloroethane	7.215	83	2071	1.1547	ug/l	88
77)	Styrene	6.881	104	4665	1.0130	ug/l	91
78)	m&p-Xylenes	6.659	106	5851	2.1138	ug/l	86
79)	o-Xylene	6.881	106	2753	1.0331	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.247	53	486	0.8161	ug/l	100
81)	1,3-Dichlorobenzene	7.784	146	3454	0.9891	ug/l	98
82)	1,4-Dichlorobenzene	7.829	146	3636	0.9945	ug/l	66
83)	1,2-Dichlorobenzene	8.057	146	3126	0.9861	ug/l	98
84)	Isopropylbenzene	7.067	105	6560	1.0244	ug/l	96
85)	Cyclohexanone	7.135	55	101m	2.0410	ug/l	
86)	Camphene	7.241	93	1536	0.7920	ug/l	96
87)	1,2,3-Trichloropropane	7.254	75	2240	1.0215	ug/l	84
88)	2-Chlorotoluene	7.363	91	5046	1.2494	ug/l	95
89)	p-Ethyltoluene	7.353	105	6584	0.8923	ug/l	95
90)	4-Chlorotoluene	7.418	91	4060	0.9849	ug/l	89
91)	n-Propylbenzene	7.292	91	8121	1.0572	ug/l	96
92)	Bromobenzene	7.266	77	4654	1.2087	ug/l	95
93)	1,3,5-Trimethylbenzene	7.376	105	5388	0.9829	ug/l	96
94)	Butyl methacrylate	7.382	41	1017m	0.7747	ug/l	
95)	t-Butylbenzene	7.572	119	5104	0.9111	ug/l	97
96)	1,2,4-Trimethylbenzene	7.598	105	5523	0.9390	ug/l	99
97)	sec-Butylbenzene	7.694	105	6320	0.9474	ug/l	100
98)	4-Isopropyltoluene	7.762	119	5212	0.9001	ug/l	95
99)	n-Butylbenzene	8.000	91	5390	0.9623	ug/l	90
100)	p-Diethylbenzene	7.980	119	2636	0.7959	ug/l	79
101)	1,2,4,5-Tetramethylben...	8.437	119	3819	0.7794	ug/l	93
102)	1,2-Dibromo-3-Chloropr...	8.498	157	240	0.7061	ug/l	66
103)	Camphor	8.929	95	1015m	7.0501	ug/l	
104)	Hexachlorobutadiene	9.077	225	413m	0.6795	ug/l	
105)	1,2,4-Trichlorobenzene	8.990	180	1245m	0.9228	ug/l	
106)	1,2,3-Trichlorobenzene	9.292	180	861m	0.9083	ug/l	
107)	Naphthalene	9.151	128	2801	0.9579	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 11M82673.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 1 PPB
Data File: 11M82673.D
Acq On : 09/11/20 20:40
Operator : WP
Sam Mult : 1 Vial# : 21
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 15:02
Qt Upd On: 09/14/20 14:39
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->

Abundance
TIC: 11M82673.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
Time-->

Abundance
TIC: 11M82673.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
1,4-Dichlorobenzene-d4,I
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82672.D Sam Mult : 1 Vial# : 20 Qt On : 09/14/20 15:07
Acq On : 09/11/20 20:21 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	247668	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.550	117	205853	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	94226	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	60723	27.43	ug/l	0.00
Spiked Amount 30.000			Recovery = 91.43%			
39) 1,2-Dichloroethane-d4	4.778	67	34006	34.92	ug/l	0.00
Spiked Amount 30.000			Recovery = 116.40%			
66) Toluene-d8	5.787	98	266759	33.52	ug/l	0.00
Spiked Amount 30.000			Recovery = 111.73%			
76) Bromofluorobenzene	7.167	174	74874	31.14	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.80%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	0.000		0	N.D.	d	
6) Dichlorodifluoromethane	0.000		0	N.D.	d	
7) Chloromethane	0.000		0	N.D.	d	
8) Bromomethane	0.000		0	N.D.	d	
9) Vinyl Chloride	0.000		0	N.D.	d	
10) Chloroethane	0.000		0	N.D.	d	
11) Trichlorofluoromethane	0.000		0	N.D.	d	
12) Ethyl ether	0.000		0	N.D.	d	
13) Furan	0.000		0	N.D.	d	
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D.	d	
15) Methylene Chloride	0.000		0	N.D.	d	
16) Acrolein	0.000		0	N.D.	d	
17) Acrylonitrile	0.000		0	N.D.		
18) Iodomethane	0.000		0	N.D.	d	
19) Acetone	0.000		0	N.D.	d	
20) Carbon Disulfide	0.000		0	N.D.	d	
21) t-Butyl Alcohol	0.000		0	N.D.	d	
22) n-Hexane	0.000		0	N.D.	d	
23) Di-isopropyl-ether	0.000		0	N.D.	d	
24) 1,1-Dichloroethene	0.000		0	N.D.	d	
25) Methyl Acetate	3.283	43	280	0.2338	ug/l	100
26) Methyl-t-butyl ether	3.595	73	1864m	0.3698	ug/l	
27) 1,1-Dichloroethane	0.000		0	N.D.	d	
28) trans-1,2-Dichloroethene	0.000		0	N.D.	d	
29) Ethyl-t-butyl ether	0.000		0	N.D.	d	
30) cis-1,2-Dichloroethene	0.000		0	N.D.	d	
31) Bromochloromethane	0.000		0	N.D.	d	
32) 2,2-Dichloropropane	0.000		0	N.D.	d	
33) Ethyl acetate	0.000		0	N.D.	d	
34) 1,4-Dioxane	0.000		0	N.D.		
35) 1,1-Dichloropropene	0.000		0	N.D.	d	
36) Chloroform	0.000		0	N.D.	d	
38) Cyclohexane	0.000		0	N.D.	d	
40) 1,2-Dichloroethane	4.820	62	1231	0.4420	ug/l	95
41) 2-Butanone	0.000		0	N.D.	d	
42) 1,1,1-Trichloroethane	0.000		0	N.D.	d	
43) Carbon Tetrachloride	0.000		0	N.D.	d	
44) Vinyl Acetate	0.000		0	N.D.	d	
45) Bromodichloromethane	0.000		0	N.D.	d	
46) Methylcyclohexane	0.000		0	N.D.	d	
47) Dibromomethane	0.000		0	N.D.	d	
48) 1,2-Dichloropropane	0.000		0	N.D.	d	
49) Trichloroethene	0.000		0	N.D.	d	
50) Benzene	4.816	78	3256	0.3779	ug/l	100
51) tert-Amyl methyl ether	0.000		0	N.D.	d	
53) Iso-propylacetate	0.000		0	N.D.	d	
54) Methyl methacrylate	0.000		0	N.D.	d	
55) Dibromochloromethane	0.000		0	N.D.	d	
56) 2-Chloroethylvinylether	0.000		0	N.D.		
57) cis-1,3-Dichloropropene	0.000		0	N.D.	d	
58) trans-1,3-Dichloropropene	0.000		0	N.D.	d	
59) Ethyl methacrylate	0.000		0	N.D.	d	
60) 1,1,2-Trichloroethane	0.000		0	N.D.	d	
61) 1,2-Dibromoethane	0.000		0	N.D.	d	
62) 1,3-Dichloropropane	0.000		0	N.D.	d	
63) 4-Methyl-2-Pentanone	0.000		0	N.D.	d	
64) 2-Hexanone	0.000		0	N.D.	d	
65) Tetrachloroethene	0.000		0	N.D.	d	
67) Toluene	0.000		0	N.D.	d	

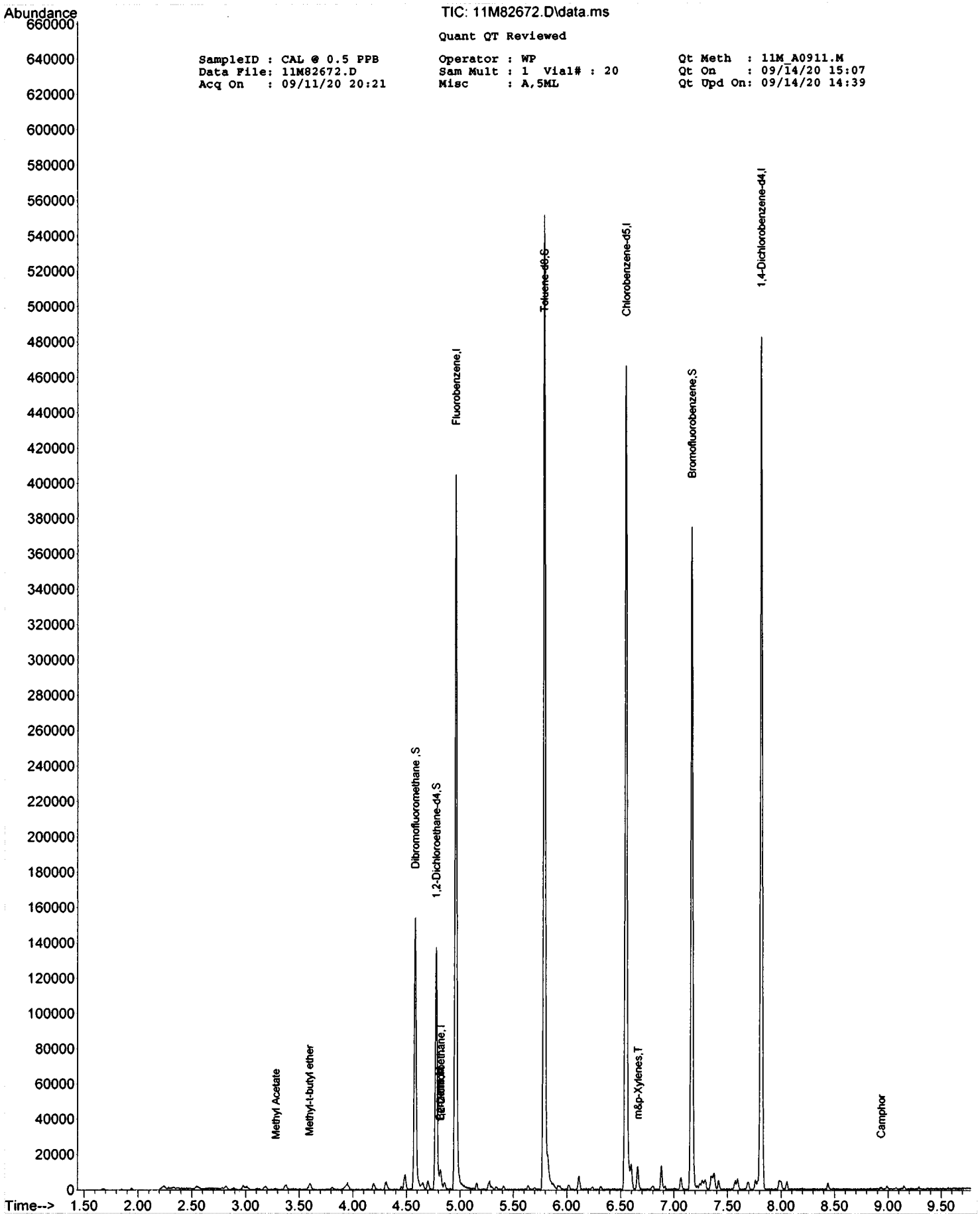
Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82672.D Sam Mult : 1 Vial# : 20 Qt On : 09/14/20 15:07
Acq On : 09/11/20 20:21 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	0.000		0	N.D. d		
69)	Chlorobenzene	0.000		0	N.D. d		
71)	n-Butyl acrylate	0.000		0	N.D. d		
72)	n-Amyl acetate	0.000		0	N.D. d		
73)	Bromoform	0.000		0	N.D. d		
74)	Ethylbenzene	0.000		0	N.D. d		
75)	1,1,2,2-Tetrachloroethane	0.000		0	N.D. d		
77)	Styrene	0.000		0	N.D. d		
78)	m&p-Xylenes	6.662	106	3215	1.1518	ug/l	62
79)	o-Xylene	0.000		0	N.D. d		
80)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
81)	1,3-Dichlorobenzene	0.000		0	N.D. d		
82)	1,4-Dichlorobenzene	0.000		0	N.D. d		
83)	1,2-Dichlorobenzene	0.000		0	N.D. d		
84)	Isopropylbenzene	0.000		0	N.D. d		
85)	Cyclohexanone	0.000		0	N.D. d		
86)	Camphene	0.000		0	N.D. d		
87)	1,2,3-Trichloropropane	0.000		0	N.D. d		
88)	2-Chlorotoluene	0.000		0	N.D. d		
89)	p-Ethyltoluene	0.000		0	N.D. d		
90)	4-Chlorotoluene	0.000		0	N.D. d		
91)	n-Propylbenzene	0.000		0	N.D. d		
92)	Bromobenzene	0.000		0	N.D. d		
93)	1,3,5-Trimethylbenzene	0.000		0	N.D. d		
94)	Butyl methacrylate	0.000		0	N.D. d		
95)	t-Butylbenzene	0.000		0	N.D. d		
96)	1,2,4-Trimethylbenzene	0.000		0	N.D. d		
97)	sec-Butylbenzene	0.000		0	N.D. d		
98)	4-Isopropyltoluene	0.000		0	N.D. d		
99)	n-Butylbenzene	0.000		0	N.D. d		
100)	p-Diethylbenzene	0.000		0	N.D. d		
101)	1,2,4,5-Tetramethylben...	0.000		0	N.D. d		
102)	1,2-Dibromo-3-Chloropr...	0.000		0	N.D.		
103)	Camphor	8.935	95	197	1.3569	ug/l #	44
104)	Hexachlorobutadiene	0.000		0	N.D.		
105)	1,2,4-Trichlorobenzene	0.000		0	N.D. d		
106)	1,2,3-Trichlorobenzene	0.000		0	N.D. d		
107)	Naphthalene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 11M82672.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 0.5 PPB
Data File: 11M82672.D
Acq On : 09/11/20 20:21
Operator : WP
Sam Mult : 1 Vial# : 20
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 15:07
Qt Upd On: 09/14/20 14:39
Methyl Acetate
Methyl-t-butyl ether
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
m&p-Xylenes,T
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Camphor
Time-->

TxtDfile: 11M82691.D ICV FORM Date/Time: 09/12/20 02:11

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
Chlorodifluoromethane	1	0		20.8727	20	104		70	130
Dichlorodifluoromethane	1	0		21.6227	20	108		50	150
Chloromethane	1	0		22.4799	20	112		70	130
Bromomethane	1	0		26.4031	20	132	*	70	130
Vinyl Chloride	1	0		21.3467	20	107		70	130
Chloroethane	1	0		22.4036	20	112		70	130
Trichlorofluoromethane	1	0		23.004	20	115		70	130
Ethyl ether	1	0		23.0525	20	115		70	130
Furan	1	0		20.7767	20	104		70	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	0		23.465	20	117		70	130
Methylene Chloride	1	0		21.0918	20	105		70	130
Acrolein	1	0		113.5428	100	114		50	150
Acrylonitrile	1	0		23.3597	20	117		50	150
Iodomethane	1	0		14.5338	20	73		70	130
Acetone	1	0		112.9465	100	113		50	150
Carbon Disulfide	1	0		22.3037	20	112		70	130
t-Butyl Alcohol	1	0		125.3041	100	125		50	150
n-Hexane	1	0		22.6108	20	113		70	130
Di-isopropyl-ether	1	0		22.3041	20	112		70	130
1,1-Dichloroethene	1	0		23.3258	20	117		70	130
Methyl Acetate	1	0		25.3838	20	127		70	130
Methyl-t-butyl ether	1	0		23.2102	20	116		70	130
1,1-Dichloroethane	1	0		21.6331	20	108		70	130
trans-1,2-Dichloroethene	1	0		22.1403	20	111		70	130
Ethyl-t-butyl ether	1	0		22.6125	20	113		70	130
cis-1,2-Dichloroethene	1	0		21.6052	20	108		70	130
Bromochloromethane	1	0		22.5745	20	113		70	130
2,2-Dichloropropane	1	0		20.6822	20	103		70	130
Ethyl acetate	1	0		22.5776	20	113		70	130
1,4-Dioxane	1	0		1185.235	1000	119		70	130
1,1-Dichloropropene	1	0		22.5593	20	113		70	130
Chloroform	1	0		21.8755	20	109		70	130
Cyclohexane	1	0		23.44	20	117		70	130
1,2-Dichloroethane	1	0		22.3857	20	112		70	130
2-Butanone	1	0		25.0007	20	125		70	130
1,1,1-Trichloroethane	1	0		21.7521	20	109		70	130
Carbon Tetrachloride	1	0		21.8544	20	109		70	130
Vinyl Acetate	1	0		21.3894	20	107		70	130
Bromodichloromethane	1	0		22.5226	20	113		70	130
Methylcyclohexane	1	0		24.1981	20	121		70	130
Dibromomethane	1	0		22.4095	20	112		70	130
1,2-Dichloropropane	1	0		23.3274	20	117		70	130
Trichloroethene	1	0		22.6702	20	113		70	130
Benzene	1	0		21.8993	20	109		70	130
Iso-propylacetate	1	0		21.4757	20	107		70	130
Methyl methacrylate	1	0		20.9617	20	105		70	130
Dibromochloromethane	1	0		22.136	20	111		70	130
2-Chloroethylvinylether	1	0		22.2217	20	111		70	130
cis-1,3-Dichloropropene	1	0		21.2768	20	106		70	130
trans-1,3-Dichloropropene	1	0		20.9469	20	105		70	130
Ethyl methacrylate	1	0		21.89	20	109		70	130
1,1,2-Trichloroethane	1	0		20.6612	20	103		70	130
1,2-Dibromoethane	1	0		21.6176	20	108		70	130
1,3-Dichloropropane	1	0		21.3924	20	107		70	130
4-Methyl-2-Pentanone	1	0		21.7746	20	109		70	130
2-Hexanone	1	0		21.9978	20	110		70	130
Tetrachloroethene	1	0		21.3541	20	107		70	130
Toluene	1	0		20.9236	20	105		70	130
1,1,1,2-Tetrachloroethane	1	0		21.4849	20	107		70	130
Chlorobenzene	1	0		21.2013	20	106		70	130
n-Butyl acrylate	1	0		22.9818	20	115		70	130
n-Amyl acetate	1	0		23.5433	20	118		70	130
Bromoform	1	0		24.0098	20	120		70	130
Ethylbenzene	1	0		21.836	20	109		70	130
1,1,2,2-Tetrachloroethane	1	0		23.2786	20	116		70	130
Styrene	1	0		22.6268	20	113		70	130
m&p-Xylenes	1	0		44.8713	40	112		70	130
o-Xylene	1	0		22.7125	20	114		70	130
trans-1,4-Dichloro-2-butene	1	0		23.5648	20	118		70	130
1,3-Dichlorobenzene	1	0		21.6814	20	108		70	130
1,4-Dichlorobenzene	1	0		21.1942	20	106		70	130
1,2-Dichlorobenzene	1	0		22.3561	20	112		70	130
Isopropylbenzene	1	0		23.3134	20	117		70	130
1,2,3-Trichloropropane	1	0		23.059	20	115		70	130
2-Chlorotoluene	1	0		21.3934	20	107		70	130
4-Chlorotoluene	1	0		21.2767	20	106		70	130
n-Propylbenzene	1	0		23.1118	20	116		70	130
Bromobenzene	1	0		22.8456	20	114		70	130
1,3,5-Trimethylbenzene	1	0		22.0748	20	110		70	130
Butyl methacrylate	1	0		23.3841	20	117		70	130
t-Butylbenzene	1	0		22.3711	20	112		70	130
1,2,4-Trimethylbenzene	1	0		22.638	20	113		70	130
sec-Butylbenzene	1	0		23.1813	20	116		70	130
4-Isopropyltoluene	1	0		22.8269	20	114		70	130
n-Butylbenzene	1	0		23.3433	20	117		70	130
1,2-Dibromo-3-Chloropropane	1	0		23.9801	20	120		70	130
Hexachlorobutadiene	1	0		24.187	20	121		70	130
1,2,4-Trichlorobenzene	1	0		22.692	20	113		70	130
1,2,3-Trichlorobenzene	1	0		22.6884	20	113		70	130
Naphthalene	1	0		23.3392	20	117		70	130

TxtDfile: 6M130925.D ICV FORM Date/Time: 08/01/20 20:24

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
Chlorodifluoromethane	1	0		37.918	50	76		70	130
Dichlorodifluoromethane	1	0		39.1803	50	78		50	150
Chloromethane	1	0		44.394	50	89		70	130
Bromomethane	1	0		40.5538	50	81		70	130
Vinyl Chloride	1	0		39.5923	50	79		70	130
Chloroethane	1	0		40.9182	50	82		70	130
Trichlorofluoromethane	1	0		39.7508	50	80		70	130
Ethyl ether	1	0		51.275	50	103		70	130
Furan	1	0		43.3933	50	87		70	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	0		39.7696	50	80		70	130
Methylene Chloride	1	0		43.643	50	87		70	130
Acrolein	1	0		238.0012	250	95		50	150
Acrylonitrile	1	0		43.5884	50	87		50	150
Iodomethane	1	0		35.7703	50	72		70	130
Acetone	1	0		193.2655	250	77		50	150
Carbon Disulfide	1	0		39.3224	50	79		70	130
t-Butyl Alcohol	1	0		200.2267	250	80		50	150
n-Hexane	1	0		43.1493	50	86		70	130
Di-isopropyl-ether	1	0		48.6109	50	97		70	130
1,1-Dichloroethene	1	0		41.2049	50	82		70	130
Methyl Acetate	1	0		46.1041	50	92		70	130
Methyl-t-butyl ether	1	0		51.7942	50	104		70	130
1,1-Dichloroethane	1	0		44.9087	50	90		70	130
trans-1,2-Dichloroethene	1	0		42.5709	50	85		70	130
Ethyl-t-butyl ether	1	0		51.2088	50	102		70	130
cis-1,2-Dichloroethene	1	0		45.1238	50	90		70	130
Bromochloromethane	1	0		50.3967	50	101		70	130
2,2-Dichloropropane	1	0		40.2065	50	80		70	130
Ethyl acetate	1	0		47.4794	50	95		70	130
1,4-Dioxane	1	0		1938.123	2500	78		70	130
1,1-Dichloropropene	1	0		41.5888	50	83		70	130
Chloroform	1	0		45.6177	50	91		70	130
Cyclohexane	1	0		41.7667	50	84		70	130
1,2-Dichloroethane	1	0		49.1215	50	98		70	130
2-Butanone	1	0		45.0879	50	90		70	130
1,1,1-Trichloroethane	1	0		41.7542	50	84		70	130
Carbon Tetrachloride	1	0		41.077	50	82		70	130
Vinyl Acetate	1	0		50.0722	50	100		70	130
Bromodichloromethane	1	0		47.8771	50	96		70	130
Methylcyclohexane	1	0		41.3787	50	83		70	130
Dibromomethane	1	0		51.5226	50	103		70	130
1,2-Dichloropropane	1	0		46.336	50	93		70	130
Trichloroethene	1	0		42.6422	50	85		70	130
Benzene	1	0		44.6377	50	89		70	130
Iso-propylacetate	1	0		51.0665	50	102		70	130
Methyl methacrylate	1	0		51.3283	50	103		70	130
Dibromochloromethane	1	0		50.7612	50	102		70	130
2-Chloroethylvinylether	1	0		48.8669	50	98		70	130
cis-1,3-Dichloropropene	1	0		47.1282	50	94		70	130
trans-1,3-Dichloropropene	1	0		48.5633	50	97		70	130
Ethyl methacrylate	1	0		51.8854	50	104		70	130
1,1,2-Trichloroethane	1	0		50.0265	50	100		70	130
1,2-Dibromoethane	1	0		51.3066	50	103		70	130
1,3-Dichloropropane	1	0		49.8571	50	100		70	130
4-Methyl-2-Pentanone	1	0		47.1566	50	94		70	130
2-Hexanone	1	0		45.5462	50	91		70	130
Tetrachloroethene	1	0		40.2801	50	81		70	130
Toluene	1	0		40.6851	50	81		70	130
1,1,1,2-Tetrachloroethane	1	0		47.0273	50	94		70	130
Chlorobenzene	1	0		43.0866	50	86		70	130
n-Butyl acrylate	1	0		53.7694	50	108		70	130
n-Amyl acetate	1	0		51.7786	50	104		70	130
Bromoform	1	0		78.182	50	156	*	70	130
Ethylbenzene	1	0		42.5621	50	85		70	130
1,1,2,2-Tetrachloroethane	1	0		50.4899	50	101		70	130
Styrene	1	0		44.933	50	90		70	130
m&p-Xylenes	1	0		86.9129	100	87		70	130
o-Xylene	1	0		43.3808	50	87		70	130
trans-1,4-Dichloro-2-butene	1	0		45.3098	50	91		70	130
1,3-Dichlorobenzene	1	0		45.5343	50	91		70	130
1,4-Dichlorobenzene	1	0		44.2284	50	88		70	130
1,2-Dichlorobenzene	1	0		46.8081	50	94		70	130
Isopropylbenzene	1	0		43.0828	50	86		70	130
1,2,3-Trichloropropane	1	0		47.9691	50	96		70	130
2-Chlorotoluene	1	0		44.8774	50	90		70	130
4-Chlorotoluene	1	0		43.4518	50	87		70	130
n-Propylbenzene	1	0		43.1464	50	86		70	130
Bromobenzene	1	0		44.8991	50	90		70	130
1,3,5-Trimethylbenzene	1	0		42.423	50	85		70	130
Butyl methacrylate	1	0		49.8923	50	100		70	130
t-Butylbenzene	1	0		43.9705	50	88		70	130
1,2,4-Trimethylbenzene	1	0		44.5312	50	89		70	130
sec-Butylbenzene	1	0		44.523	50	89		70	130
4-Isopropyltoluene	1	0		44.3629	50	89		70	130
n-Butylbenzene	1	0		42.8821	50	86		70	130
1,2-Dibromo-3-Chloropropane	1	0		48.9612	50	98		70	130
Hexachlorobutadiene	1	0		41.3306	50	83		70	130
1,2,4-Trichlorobenzene	1	0		44.0053	50	88		70	130
1,2,3-Trichlorobenzene	1	0		46.9252	50	94		70	130
Naphthalene	1	0		47.291	50	95		70	130

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** I1M82702.D **Instrument:** GCMS 11

Cont Calibration Date/Time 9/14/2020 3:28:00 P Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.96	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.68	18.52	20	20	0.1	0.268	0.248	7.39	
Dichlorodifluoromethane	1	0		1.67	22.17	20	20	0.1	0.161	0.179	10.87	
Chloromethane	1	0		1.85	20.05	20	20	0.1	0.170	0.170	0.25	
Bromomethane	1	0		2.24	18.14	20	20	0.1	0.176	0.159	9.29	
Vinyl Chloride	1	0		1.94	19.62	20	20	0.1	0.218	0.214	1.91	
Chloroethane	1	0		2.33	17.97	20	20	0.1	0.148	0.133	10.16	
Trichlorofluoromethane	1	0		2.55	18.65	20	20	0.1	0.361	0.336	6.74	
Ethyl ether	1	0		2.78	19.63	20	20	0.5	0.123	0.121	1.83	
Furan	1	0		2.82	18.14	20	20	0.5	0.229	0.207	9.32	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.98	18.27	20	20	0.1	0.146	0.133	8.67	
Methylene Chloride	1	0		3.38	18.40	20	20	0.1	0.217	0.199	8.02	
Acrolein	1	0		2.89	106.27	100	20		0.026	0.027	6.27	
Acrylonitrile	1	0		3.57	20.27	20	20		0.063	0.066	1.37	
Iodomethane	1	0		3.12	16.62	20	20		0.173	0.169	16.89	
Acetone	1	0		3.01	97.11	100	20	0.1	0.052	0.050	2.89	
Carbon Disulfide	1	0		3.19	18.91	20	20	0.1	0.493	0.466	5.47	
t-Butyl Alcohol	1	0		3.43	136.51	100	20		0.013	0.017	36.51	C1
n-Hexane	1	0		3.81	18.15	20	20		0.153	0.139	9.27	
Di-isopropyl-ether	1	0		3.95	18.78	20	20		0.425	0.399	6.08	
1,1-Dichloroethene	1	0		2.98	19.26	20	20	0.1	0.266	0.256	3.68	
Methyl Acetate	1	0		3.28	21.13	20	20	0.1	0.107	0.114	5.64	
Methyl-t-butyl ether	1	0		3.59	19.95	20	20	0.1	0.459	0.458	0.27	
1,1-Dichloroethane	1	0		3.93	18.34	20	20	0.2	0.345	0.316	8.32	
trans-1,2-Dichloroethene	1	0		3.60	19.73	20	20	0.1	0.204	0.202	1.34	
Ethyl-t-butyl ether	1	0		4.20	19.40	20	20	0.5	0.466	0.453	2.99	
cis-1,2-Dichloroethene	1	0		4.31	18.85	20	20	0.1	0.336	0.317	5.77	
Bromochloromethane	1	0		4.46	18.53	20	20		0.143	0.132	7.33	
2,2-Dichloropropane	1	0		4.31	21.46	20	20		0.272	0.292	7.32	
Ethyl acetate	1	0		4.33	18.93	20	20		0.169	0.160	5.37	
1,4-Dioxane	1	0		5.34	1591.40	1000	20		0.002	0.003	59.14	C1
1,1-Dichloropropene	1	0		4.70	18.84	20	20		0.299	0.282	5.80	
Chloroform	1	0		4.49	18.95	20	20	0.2	0.381	0.361	5.23	
Dibromofluoromethane	1	0	S	4.58	29.24	30	**		0.250	0.244	2.52	
Cyclohexane	1	0		4.65	17.31	20	20	0.1	0.251	0.218	13.43	
1,2-Dichloroethane-d4	1	0	S	4.78	28.56	30	**		0.131	0.125	4.80	
1,2-Dichloroethane	1	0		4.82	18.21	20	20	0.1	0.294	0.267	8.97	
2-Butanone	1	0		4.30	16.16	20	20	0.1	0.072	0.058	19.20	
1,1,1-Trichloroethane	1	0		4.61	18.34	20	20	0.1	0.344	0.315	8.30	
Carbon Tetrachloride	1	0		4.71	18.88	20	20	0.1	0.289	0.273	5.58	
Vinyl Acetate	1	0		3.95	18.66	20	20		0.502	0.468	6.72	
Bromodichloromethane	1	0		5.41	18.69	20	20	0.2	0.287	0.268	6.56	
Methylcyclohexane	1	0		5.27	17.70	20	20	0.1	0.238	0.210	11.48	
Dibromomethane	1	0		5.34	19.51	20	20		0.139	0.135	2.46	
1,2-Dichloropropane	1	0		5.28	18.40	20	20	0.1	0.199	0.183	8.02	
Trichloroethene	1	0		5.16	18.89	20	20	0.2	0.238	0.224	5.57	
Benzene	1	0		4.82	18.87	20	20	0.5	0.849	0.801	5.65	
tert-Amyl methyl ether	1	0		4.86	20.07	20	20		0.465	0.467	0.36	
Chlorobenzene-d5	1	0	I	6.55	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.81	19.83	20	20	0.5	0.332	0.330	0.87	
Methyl methacrylate	1	0		5.30	18.42	20	20	0.5	0.201	0.185	7.92	
Dibromochloromethane	1	0		6.24	20.30	20	20	0.1	0.279	0.283	1.50	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M82702.D **Instrument:** GCMS 11

Cont Calibration Date/Time 9/14/2020 3:28:00 P **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.54	19.46	20	20		0.053	0.056	2.69	
cis-1,3-Dichloropropene	1	0		5.64	20.14	20	20	0.2	0.397	0.400	0.70	
trans-1,3-Dichloropropene	1	0		5.92	19.79	20	20	0.1	0.377	0.373	1.04	
Ethyl methacrylate	1	0		5.94	20.66	20	20	0.5	0.174	0.180	3.28	
1,1,2-Trichloroethane	1	0		6.02	19.09	20	20	0.1	0.266	0.253	4.53	
1,2-Dibromoethane	1	0		6.31	19.99	20	20	0.1	0.280	0.280	0.04	
1,3-Dichloropropane	1	0		6.11	19.10	20	20		0.439	0.419	4.49	
4-Methyl-2-Pentanone	1	0		5.70	20.09	20	20	0.1	0.202	0.203	0.45	
2-Hexanone	1	0		6.12	21.27	20	20	0.1	0.144	0.153	6.36	
Tetrachloroethene	1	0		6.12	18.32	20	20	0.2	0.234	0.215	8.40	
Toluene-d8	1	0	S	5.79	29.99	30	**		1.312	1.312	0.02	
Toluene	1	0		5.82	19.10	20	20	0.4	0.730	0.697	4.50	
1,1,1,2-Tetrachloroethane	1	0		6.59	19.88	20	20		0.272	0.271	0.59	
Chlorobenzene	1	0		6.56	19.24	20	20	0.5	0.831	0.800	3.78	
1,4-Dichlorobenzene-d4	1	0	I	7.82	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.80	20.41	20	20	0.5	0.792	0.808	2.03	
n-Amyl acetate	1	0		6.91	21.28	20	20	0.5	0.591	0.629	6.42	
Bromoform	1	0		7.01	21.00	20	20	0.1	0.360	0.378	5.02	
Ethylbenzene	1	0		6.60	18.60	20	20	0.1	0.737	0.685	7.03	
1,1,2,2-Tetrachloroethane	1	0		7.22	19.88	20	20	0.1	0.705	0.701	0.58	
Bromofluorobenzene	1	0	S	7.17	30.83	30	**		0.756	0.777	2.76	
Styrene	1	0		6.88	19.68	20	20	0.3	1.715	1.688	1.60	
m&p-Xylenes	1	0		6.66	40.21	40	20	0.1	1.025	1.031	0.53	
o-Xylene	1	0		6.88	19.83	20	20	0.3	1.002	0.993	0.87	
trans-1,4-Dichloro-2-butene	1	0		7.24	21.08	20	20		0.200	0.211	5.39	
1,3-Dichlorobenzene	1	0		7.78	19.41	20	20	0.6	1.190	1.155	2.94	
1,4-Dichlorobenzene	1	0		7.83	18.87	20	20	0.5	1.233	1.164	5.63	
1,2-Dichlorobenzene	1	0		8.05	19.56	20	20	0.4	1.084	1.060	2.21	
Isopropylbenzene	1	0		7.07	19.45	20	20	0.1	2.451	2.383	2.77	
Cyclohexanone	1	0		7.14	160.78	100	20		0.013	0.019	60.77	C1
Camphene	1	0		7.24	19.01	20	20		0.580	0.552	4.95	
1,2,3-Trichloropropane	1	0		7.26	20.81	20	20		0.809	0.842	4.06	
2-Chlorotoluene	1	0		7.36	18.49	20	20		1.583	1.463	7.55	
p-Ethyltoluene	1	0		7.35	19.67	20	20		2.444	2.403	1.67	
4-Chlorotoluene	1	0		7.42	18.40	20	20		1.631	1.501	8.00	
n-Propylbenzene	1	0		7.29	19.13	20	20		2.876	2.751	4.34	
Bromobenzene	1	0		7.27	19.25	20	20		1.459	1.405	3.75	
1,3,5-Trimethylbenzene	1	0		7.38	18.47	20	20		2.054	1.897	7.64	
Butyl methacrylate	1	0		7.38	19.11	20	20	0.5	0.519	0.496	4.45	
t-Butylbenzene	1	0		7.57	18.83	20	20		1.909	1.797	5.86	
1,2,4-Trimethylbenzene	1	0		7.59	19.26	20	20		2.127	2.048	3.71	
sec-Butylbenzene	1	0		7.69	18.81	20	20		2.287	2.150	5.97	
4-Isopropyltoluene	1	0		7.76	19.17	20	20		1.940	1.859	4.17	
n-Butylbenzene	1	0		8.00	18.88	20	20		1.966	1.856	5.59	
p-Diethylbenzene	1	0		7.98	19.80	20	20		1.036	1.026	0.98	
1,2,4,5-Tetramethylbenzene	1	0		8.44	20.43	20	20		1.436	1.467	2.14	
1,2-Dibromo-3-Chloropropane	1	0		8.50	22.61	20	20	0.05	0.119	0.135	13.05	
Camphor	1	0		8.93	246.01	200	20		0.038	0.057	23.00	C1
Hexachlorobutadiene	1	0		9.07	21.94	20	20		0.154	0.169	9.70	
1,2,4-Trichlorobenzene	1	0		8.99	20.70	20	20	0.2	0.419	0.433	3.49	
1,2,3-Trichlorobenzene	1	0		9.29	22.65	20	20		0.274	0.311	13.23	
Naphthalene	1	0		9.15	23.66	20	20		1.030	1.219	18.29	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.
625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82702.D Sam Mult : 1 Vial# : 6 Qt On : 09/14/20 17:44
Acq On : 09/14/20 15:28 Misc : A,5ML Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-14-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	326770	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.550	117	253884	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	128548	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	79657	29.24	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.47%			
39) 1,2-Dichloroethane-d4	4.778	67	40816	28.56	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.20%			
66) Toluene-d8	5.787	98	333040	29.99	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.97%			
76) Bromofluorobenzene	7.167	174	99899	30.83	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.77%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.684	51	54110m	18.5226	ug/l	
6) Dichlorodifluoromethane	1.672	85	38910	22.1730	ug/l	99
7) Chloromethane	1.848	50	37036	20.0498	ug/l	97
8) Bromomethane	2.241	94	34722	18.1422	ug/l	99
9) Vinyl Chloride	1.940	62	46609	19.6180	ug/l	90
10) Chloroethane	2.328	64	28987	17.9679	ug/l	92
11) Trichlorofluoromethane	2.546	101	73252	18.6519	ug/l	99
12) Ethyl ether	2.781	59	26380	19.6347	ug/l	59
13) Furan	2.817	39	45170m	18.1366	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.977	101	28963	18.2651	ug/l	96
15) Methylene Chloride	3.376	84	43451	18.3969	ug/l	57
16) Acrolein	2.891	56	29885	106.2661	ug/l	93
17) Acrylonitrile	3.569	53	14387	20.2741	ug/l	93
18) Iodomethane	3.122	142	36844m	16.6220	ug/l	
19) Acetone	3.013	43	54613	97.1125	ug/l	92
20) Carbon Disulfide	3.186	76	101604	18.9070	ug/l	100
21) t-Butyl Alcohol	3.434	59	18594	136.5119	ug/l	87
22) n-Hexane	3.813	57	30335	18.1470	ug/l	89
23) Di-isopropyl-ether	3.955	45	86972	18.7835	ug/l	56
24) 1,1-Dichloroethene	2.981	61	55730	19.2643	ug/l	74
25) Methyl Acetate	3.280	43	24878	21.1284	ug/l	100
26) Methyl-t-butyl ether	3.595	73	99676	19.9460	ug/l	83
27) 1,1-Dichloroethane	3.926	63	68849	18.3363	ug/l	94
28) trans-1,2-Dichloroethene	3.601	96	43940	19.7321	ug/l	68
29) Ethyl-t-butyl ether	4.199	59	98577	19.4015	ug/l	85
30) cis-1,2-Dichloroethene	4.308	61	69069	18.8461	ug/l	64
31) Bromochloromethane	4.456	49	28779m	18.5340	ug/l	
32) 2,2-Dichloropropane	4.315	77	63677	21.4642	ug/l	95
33) Ethyl acetate	4.328	43	34797	18.9255	ug/l	99
34) 1,4-Dioxane	5.337	88	32165	1591.4013	ug/l	71
35) 1,1-Dichloropropene	4.701	75	61357	18.8405	ug/l	99
36) Chloroform	4.489	83	78588	18.9544	ug/l	92
38) Cyclohexane	4.649	56	47426m	17.3131	ug/l	
40) 1,2-Dichloroethane	4.820	62	58252	18.2061	ug/l	99
41) 2-Butanone	4.302	43	12694	16.1593	ug/l	65
42) 1,1,1-Trichloroethane	4.611	97	68688	18.3392	ug/l	100
43) Carbon Tetrachloride	4.707	117	59437	18.8842	ug/l	99
44) Vinyl Acetate	3.945	43	101910	18.6557	ug/l	100
45) Bromodichloromethane	5.411	83	58442	18.6878	ug/l	99
46) Methylcyclohexane	5.270	83	45819m	17.7046	ug/l	
47) Dibromomethane	5.344	174	29461	19.5074	ug/l	96
48) 1,2-Dichloropropane	5.276	63	39842	18.3952	ug/l	88
49) Trichloroethene	5.157	130	48872	18.8856	ug/l	96
50) Benzene	4.823	78	174501	18.8708	ug/l	100
51) tert-Amyl methyl ether	4.858	73	101718	20.0723	ug/l	94
53) Iso-propylacetate	4.810	43	55777	19.8269	ug/l	77
54) Methyl methacrylate	5.302	41	31298m	18.4159	ug/l	
55) Dibromochloromethane	6.238	129	47938	20.2996	ug/l	96
56) 2-Chloroethylvinylether	5.543	63	9521	19.4625	ug/l	82
57) cis-1,3-Dichloropropene	5.640	75	67647	20.1400	ug/l	93
58) trans-1,3-Dichloropropene	5.916	75	63152	19.7921	ug/l	95
59) Ethyl methacrylate	5.935	41	30414m	20.6566	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	42902	19.0943	ug/l	90
61) 1,2-Dibromoethane	6.315	107	47399	19.9916	ug/l	100
62) 1,3-Dichloropropane	6.112	76	70910	19.1025	ug/l	92
63) 4-Methyl-2-Pentanone	5.701	43	34412	20.0903	ug/l	96
64) 2-Hexanone	6.122	43	25834	21.2722	ug/l	85
65) Tetrachloroethene	6.115	164	36326	18.3204	ug/l	98
67) Toluene	5.823	92	117975	19.0991	ug/l	94

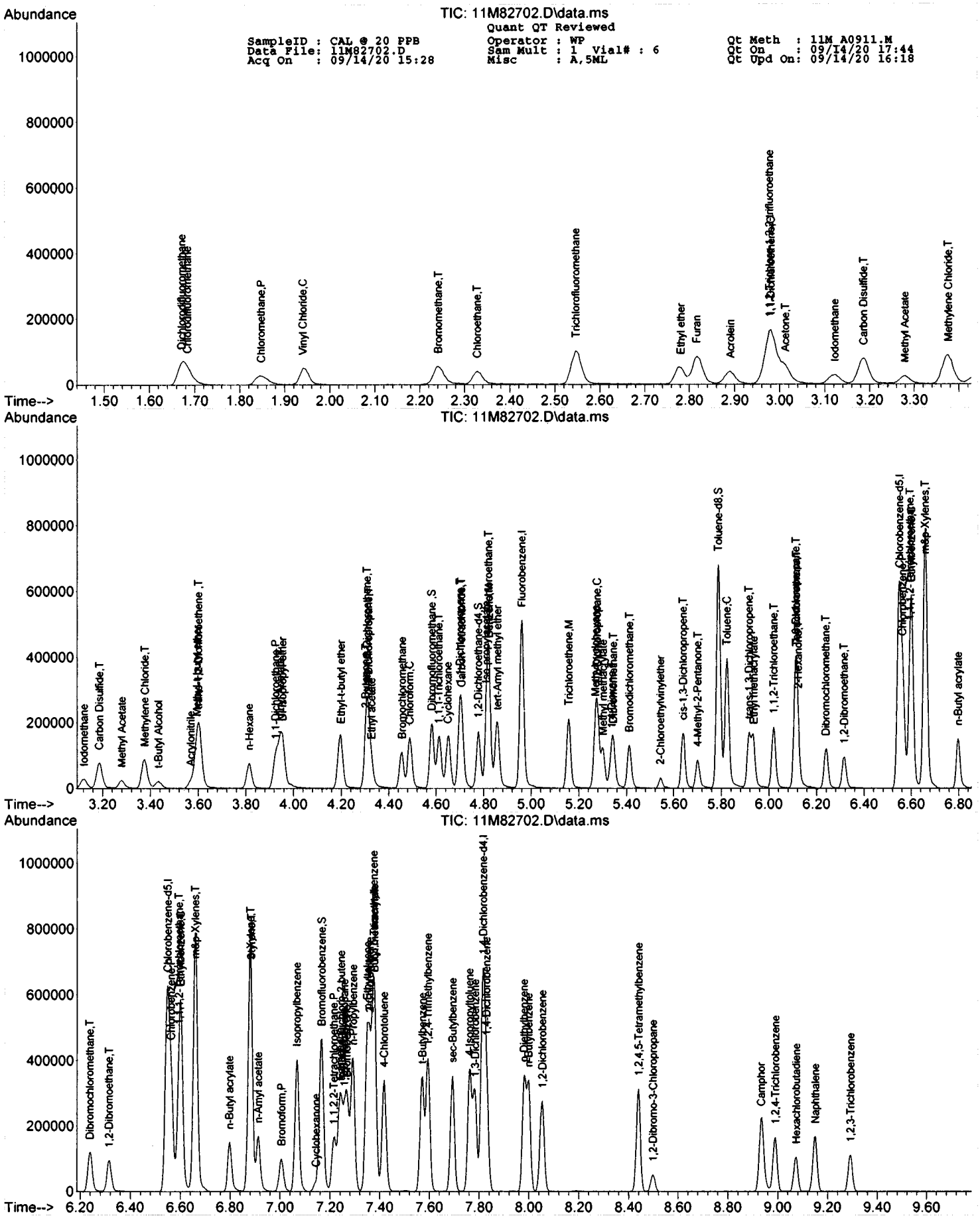
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82702.D Sam Mult : 1 Vial# : 6 Qt On : 09/14/20 17:44
Acq On : 09/14/20 15:28 Misc : A,5ML Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-14-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.595	133	45784	19.8811	ug/l	96
69)	Chlorobenzene	6.562	112	135375	19.2447	ug/l	99
71)	n-Butyl acrylate	6.797	55	69259	20.4062	ug/l	87
72)	n-Amyl acetate	6.913	43	53868	21.2840	ug/l	72
73)	Bromoform	7.006	173	32387	21.0040	ug/l	97
74)	Ethylbenzene	6.601	106	58688	18.5950	ug/l	100
75)	1,1,2,2-Tetrachloroethane	7.215	83	60058	19.8837	ug/l	98
77)	Styrene	6.884	104	144628	19.6794	ug/l	88
78)	m&p-Xylenes	6.659	106	176674	40.2120	ug/l	97
79)	o-Xylene	6.881	106	85107	19.8265	ug/l	99
80)	trans-1,4-Dichloro-2-b...	7.244	53	18075	21.0785	ug/l	77
81)	1,3-Dichlorobenzene	7.784	146	99018	19.4122	ug/l	98
82)	1,4-Dichlorobenzene	7.829	146	99727	18.8740	ug/l	99
83)	1,2-Dichlorobenzene	8.054	146	90807	19.5575	ug/l	99
84)	Isopropylbenzene	7.067	105	204238	19.4468	ug/l	99
85)	Cyclohexanone	7.144	55	8267	160.7750	ug/l	77
86)	Camphene	7.241	93	47267	19.0109	ug/l	98
87)	1,2,3-Trichloropropane	7.257	75	72158	20.8111	ug/l	90
88)	2-Chlorotoluene	7.360	91	125392	18.4906	ug/l	97
89)	p-Ethyltoluene	7.350	105	205952	19.6655	ug/l	100
90)	4-Chlorotoluene	7.418	91	128592	18.4004	ug/l	99
91)	n-Propylbenzene	7.292	91	235774	19.1313	ug/l	99
92)	Bromobenzene	7.267	77	120376	19.2491	ug/l	88
93)	1,3,5-Trimethylbenzene	7.376	105	162609	18.4718	ug/l	99
94)	Butyl methacrylate	7.379	41	42521m	19.1092	ug/l	
95)	t-Butylbenzene	7.572	119	153992	18.8284	ug/l	100
96)	1,2,4-Trimethylbenzene	7.595	105	175535	19.2585	ug/l	98
97)	sec-Butylbenzene	7.694	105	184282	18.8064	ug/l	100
98)	4-Isopropyltoluene	7.762	119	159323	19.1658	ug/l	100
99)	n-Butylbenzene	8.000	91	159067	18.8813	ug/l	100
100)	p-Diethylbenzene	7.980	119	87939	19.8031	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.440	119	125741	20.4285	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.498	157	11569	22.6103	ug/l	93
103)	Camphor	8.932	95	48732	246.0059	ug/l	99
104)	Hexachlorobutadiene	9.074	225	14488	21.9391	ug/l	97
105)	1,2,4-Trichlorobenzene	8.990	180	37133	20.6989	ug/l	99
106)	1,2,3-Trichlorobenzene	9.292	180	26622	22.6461	ug/l	98
107)	Naphthalene	9.151	128	104464	23.6585	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 11M82702.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 11M82702.D
Acq On : 09/14/20 15:28
Operator : WP
Sam Mult : 1 Vial# : 6
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 17:44
Qt Upd On: 09/14/20 16:18
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->
Abundance
TIC: 11M82702.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
Time-->
Abundance
TIC: 11M82702.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M132533.D **Instrument:** GCMS 6

Cont Calibration Date/Time 9/17/2020 10:54:00 **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.12	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.64	70.26	50	20	0.1	0.315	0.443	40.53	C1
Dichlorodifluoromethane	1	0		1.63	31.32	50	20	0.1	0.205	0.129	37.36	C1
Chloromethane	1	0		1.81	44.72	50	20	0.1	0.286	0.229	10.56	
Bromomethane	1	0		2.23	50.63	50	20	0.1	0.189	0.191	1.26	
Vinyl Chloride	1	0		1.91	46.60	50	20	0.1	0.295	0.275	6.80	
Chloroethane	1	0		2.32	49.11	50	20	0.1	0.201	0.197	1.77	
Trichlorofluoromethane	1	0		2.56	49.35	50	20	0.1	0.485	0.479	1.29	
Ethyl ether	1	0		2.81	51.01	50	20	0.5	0.179	0.182	2.02	
Furan	1	0		2.84	53.38	50	20	0.5	0.402	0.429	6.76	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.01	59.71	50	20	0.1	0.185	0.221	19.43	
Methylene Chloride	1	0		3.43	58.02	50	20	0.1	0.271	0.315	16.04	
Acrolein	1	0		2.92	265.17	250	20		0.035	0.037	6.07	
Acrylonitrile	1	0		3.64	47.86	50	20		0.106	0.102	4.28	
Iodomethane	1	0		3.16	71.30	50	20		0.200	0.333	42.60	C1
Acetone	1	0		3.05	233.07	250	20	0.1	0.102	0.095	6.77	
Carbon Disulfide	1	0		3.23	50.45	50	20	0.1	0.677	0.683	0.91	
t-Butyl Alcohol	1	0		3.50	175.33	250	20		0.049	0.035	29.87	C1
n-Hexane	1	0		3.91	63.75	50	20		0.264	0.336	27.50	C1
Di-isopropyl-ether	1	0		4.06	55.14	50	20		0.628	0.693	10.28	
1,1-Dichloroethene	1	0		3.02	59.83	50	20	0.1	0.340	0.407	19.66	
Methyl Acetate	1	0		3.34	45.71	50	20	0.1	0.210	0.192	8.58	
Methyl-t-butyl ether	1	0		3.67	57.45	50	20	0.1	0.538	0.618	14.90	
1,1-Dichloroethane	1	0		4.03	59.53	50	20	0.2	0.440	0.524	19.06	
trans-1,2-Dichloroethene	1	0		3.68	59.89	50	20	0.1	0.256	0.306	19.78	
Ethyl-t-butyl ether	1	0		4.32	49.56	50	20	0.5	0.688	0.682	0.88	
cis-1,2-Dichloroethene	1	0		4.44	60.06	50	20	0.1	0.445	0.535	20.12	
Bromochloromethane	1	0		4.59	59.20	50	20		0.205	0.242	18.39	
2,2-Dichloropropane	1	0		4.45	64.20	50	20		0.359	0.461	28.40	C1
Ethyl acetate	1	0		4.46	46.32	50	20		0.315	0.292	7.35	
1,4-Dioxane	1	0		5.52	1960.89	2500	20		0.006	0.004	21.56	C1
1,1-Dichloropropene	1	0		4.85	59.98	50	20		0.359	0.431	19.95	
Chloroform	1	0		4.64	59.93	50	20	0.2	0.465	0.557	19.86	
Dibromofluoromethane	1	0	S	4.73	34.15	75	**		0.267	0.304	13.84	
Cyclohexane	1	0		4.80	60.06	50	20	0.1	0.368	0.442	20.13	
1,2-Dichloroethane-d4	1	0	S	4.93	30.81	75	**		0.144	0.148	2.71	
1,2-Dichloroethane	1	0		4.98	60.00	50	20	0.1	0.347	0.417	20.00	
2-Butanone	1	0		4.43	47.05	50	20	0.1	0.149	0.140	5.91	
1,1,1-Trichloroethane	1	0		4.76	59.90	50	20	0.1	0.416	0.498	19.80	
Carbon Tetrachloride	1	0		4.86	62.27	50	20	0.1	0.355	0.442	24.55	C1
Vinyl Acetate	1	0		4.05	56.86	50	20		0.750	0.853	13.72	
Bromodichloromethane	1	0		5.59	60.01	50	20	0.2	0.326	0.391	20.01	
Methylcyclohexane	1	0		5.45	62.18	50	20	0.1	0.377	0.469	24.35	C1
Dibromomethane	1	0		5.53	59.57	50	20		0.170	0.202	19.14	
1,2-Dichloropropane	1	0		5.46	56.45	50	20	0.1	0.259	0.292	12.91	
Trichloroethene	1	0		5.33	55.77	50	20	0.2	0.293	0.327	11.53	
Benzene	1	0		4.98	57.56	50	20	0.5	1.013	1.166	15.11	
tert-Amyl methyl ether	1	0		5.02	52.99	50	20		0.592	0.627	5.97	
Chlorobenzene-d5	1	0	I	6.76	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.98	40.28	50	20	0.5	0.522	0.421	19.44	
Methyl methacrylate	1	0		5.48	39.96	50	20	0.5	0.255	0.204	20.09	
Dibromochloromethane	1	0		6.45	47.38	50	20	0.1	0.282	0.267	5.23	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M132533.D **Instrument:** GCMS 6

Cont Calibration Date/Time 9/17/2020 10:54:00 **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.73	39.90	50	20		0.079	0.063	20.19	
cis-1,3-Dichloropropene	1	0		5.83	43.93	50	20	0.2	0.447	0.393	12.14	
trans-1,3-Dichloropropene	1	0		6.12	47.76	50	20	0.1	0.391	0.374	4.48	
Ethyl methacrylate	1	0		6.14	43.33	50	20	0.5	0.253	0.220	13.35	
1,1,2-Trichloroethane	1	0		6.22	45.52	50	20	0.1	0.258	0.235	8.95	
1,2-Dibromoethane	1	0		6.53	44.89	50	20	0.1	0.267	0.240	10.22	
1,3-Dichloropropane	1	0		6.32	45.24	50	20		0.456	0.412	9.51	
4-Methyl-2-Pentanone	1	0		5.90	39.97	50	20	0.1	0.350	0.280	20.07	
2-Hexanone	1	0		6.33	40.63	50	20	0.1	0.276	0.224	18.75	
Tetrachloroethene	1	0		6.32	44.40	50	20	0.2	0.278	0.247	11.21	
Toluene-d8	1	0	S	5.98	24.87	75	**		1.238	1.026	17.10	
Toluene	1	0		6.02	42.62	50	20	0.4	0.811	0.691	14.75	
1,1,1,2-Tetrachloroethane	1	0		6.81	44.67	50	20		0.290	0.259	10.66	
Chlorobenzene	1	0		6.78	42.60	50	20	0.5	0.886	0.755	14.80	
1,4-Dichlorobenzene-d4	1	0	I	8.05	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.02	40.03	50	20	0.5	0.857	0.686	19.94	
n-Amyl acetate	1	0		7.13	40.79	50	20	0.5	0.810	0.661	18.42	
Bromoform	1	0		7.23	65.01	50	20	0.1	0.342	0.281	30.01	C1
Ethylbenzene	1	0		6.82	42.02	50	20	0.1	0.663	0.557	15.95	
1,1,2,2-Tetrachloroethane	1	0		7.45	40.34	50	20	0.1	0.639	0.516	19.33	
Bromofluorobenzene	1	0	S	7.39	27.99	75	**		0.790	0.737	6.69	
Styrene	1	0		7.10	39.73	50	20	0.3	1.639	1.303	20.54	C1
m&p-Xylenes	1	0		6.88	77.72	100	20	0.1	0.994	0.773	22.28	C1
o-Xylene	1	0		7.10	39.04	50	20	0.3	0.980	0.765	21.91	C1
trans-1,4-Dichloro-2-butene	1	0		7.47	40.73	50	20		0.311	0.253	18.54	
1,3-Dichlorobenzene	1	0		8.02	40.99	50	20	0.6	1.227	1.006	18.02	
1,4-Dichlorobenzene	1	0		8.07	39.57	50	20	0.5	1.265	1.001	20.87	C1
1,2-Dichlorobenzene	1	0		8.29	39.99	50	20	0.4	1.146	0.916	20.02	
Isopropylbenzene	1	0		7.29	40.99	50	20	0.1	2.547	2.088	18.02	
Cyclohexanone	1	0		7.37	135.54	250	20		0.035	0.019	45.78	C1
Camphene	1	0		7.47	41.27	50	20		0.927	0.765	17.47	
1,2,3-Trichloropropane	1	0		7.48	43.93	50	20		0.824	0.724	12.14	
2-Chlorotoluene	1	0		7.59	42.48	50	20		1.527	1.297	15.03	
p-Ethyltoluene	1	0		7.58	40.23	50	20		2.614	2.103	19.55	
4-Chlorotoluene	1	0		7.65	43.15	50	20		1.497	1.292	13.71	
n-Propylbenzene	1	0		7.52	42.03	50	20		2.988	2.512	15.93	
Bromobenzene	1	0		7.49	40.28	50	20		1.567	1.262	19.44	
1,3,5-Trimethylbenzene	1	0		7.60	45.19	50	20		1.830	1.654	9.62	
Butyl methacrylate	1	0		7.61	40.48	50	20	0.5	0.714	0.572	19.03	
t-Butylbenzene	1	0		7.81	41.57	50	20		2.082	1.731	16.86	
1,2,4-Trimethylbenzene	1	0		7.83	41.46	50	20		2.066	1.713	17.08	
sec-Butylbenzene	1	0		7.93	43.72	50	20		2.650	2.317	12.57	
4-Isopropyltoluene	1	0		8.00	43.60	50	20		2.223	1.939	12.80	
n-Butylbenzene	1	0		8.24	44.17	50	20		2.534	2.239	11.65	
p-Diethylbenzene	1	0		8.22	41.61	50	20		1.318	1.097	16.77	
1,2,4,5-Tetramethylbenzene	1	0		8.68	41.87	50	20		1.864	1.561	16.26	
1,2-Dibromo-3-Chloropropane	1	0		8.74	36.17	50	20	0.05	0.169	0.122	27.65	C1
Camphor	1	0		9.18	478.77	500	20		0.111	0.055	4.25	
Hexachlorobutadiene	1	0		9.32	40.49	50	20		0.461	0.373	19.02	
1,2,4-Trichlorobenzene	1	0		9.23	38.90	50	20	0.2	0.831	0.646	22.19	C1
1,2,3-Trichlorobenzene	1	0		9.54	39.25	50	20		0.756	0.593	21.50	C1
Naphthalene	1	0		9.40	36.51	50	20		2.080	1.519	26.98	C1

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : wp Qt Meth : 6M_S0801.M
Data File: 6M132533.D Sam Mult : 1 Vial# : 3 Qt On : 09/17/20 11:05
Acq On : 09/17/20 10:54 Misc : S,5G:.4 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\09-17-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	256311	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	281017	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	183778	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	77796	34.15	ug/l	0.00
Spiked Amount 30.000			Recovery = 113.83%			
39) 1,2-Dichloroethane-d4	4.934	67	37846	30.81	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.70%			
66) Toluene-d8	5.983	98	288387	24.87	ug/l	0.00
Spiked Amount 30.000			Recovery = 82.90%			
76) Bromofluorobenzene	7.391	174	135424	27.99	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.30%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.642	51	189380	70.2635	ug/l	55
6) Dichlorodifluoromethane	1.630	85	54987	31.3195	ug/l	100
7) Chloromethane	1.807	50	97896	44.7187	ug/l	100
8) Bromomethane	2.227	94	81798	50.6315	ug/l	97
9) Vinyl Chloride	1.910	62	117360	46.5990	ug/l	99
10) Chloroethane	2.319	64	84163	49.1137	ug/l	97
11) Trichlorofluoromethane	2.556	101	204621	49.3540	ug/l	95
12) Ethyl ether	2.806	59	77835	51.0103	ug/l	100
13) Furan	2.843	39	183216	53.3805	ug/l	98
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	94197m	59.7135	ug/l	
15) Methylene Chloride	3.434	84	134520	58.0219	ug/l	95
16) Acrolein	2.916	56	79327	265.1742	ug/l	95
17) Acrylonitrile	3.636	53	43377	47.8609	ug/l	95
18) Iodomethane	3.160	142	142456	71.3018	ug/l	93
19) Acetone	3.050	43	202667	233.0682	ug/l	93
20) Carbon Disulfide	3.233	76	291737	50.4532	ug/l	100
21) t-Butyl Alcohol	3.501	59	73891m	175.3265	ug/l	
22) n-Hexane	3.910	57	143595	63.7483	ug/l	97
23) Di-isopropyl-ether	4.062	45	295904	55.1385	ug/l	97
24) 1,1-Dichloroethene	3.020	61	173741m	59.8323	ug/l	
25) Methyl Acetate	3.337	43	81918	45.7103	ug/l	100
26) Methyl-t-butyl ether	3.672	73	264042	57.4505	ug/l	98
27) 1,1-Dichloroethane	4.026	63	223859	59.5282	ug/l	97
28) trans-1,2-Dichloroethene	3.678	96	130908	59.8887	ug/l	99
29) Ethyl-t-butyl ether	4.324	59	291182	49.5576	ug/l	99
30) cis-1,2-Dichloroethene	4.440	61	228399	60.0580	ug/l	97
31) Bromochloromethane	4.593	49	103569m	59.1951	ug/l	
32) 2,2-Dichloropropane	4.446	77	196740	64.2000	ug/l	97
33) Ethyl acetate	4.465	43	124694	46.3246	ug/l	99
34) 1,4-Dioxane	5.519	88	92620m	1960.8849	ug/l	
35) 1,1-Dichloropropene	4.855	75	184050m	59.9752	ug/l	
36) Chloroform	4.635	83	237862	59.9280	ug/l	99
38) Cyclohexane	4.800	56	188749m	60.0637	ug/l	
40) 1,2-Dichloroethane	4.977	62	178016m	59.9990	ug/l	
41) 2-Butanone	4.434	43	59846	47.0461	ug/l	85
42) 1,1,1-Trichloroethane	4.763	97	212833m	59.8982	ug/l	
43) Carbon Tetrachloride	4.861	117	188936	62.2731	ug/l	98
44) Vinyl Acetate	4.050	43	364183	56.8623	ug/l	100
45) Bromodichloromethane	5.592	83	167005	60.0058	ug/l	94
46) Methylcyclohexane	5.446	83	200325	62.1753	ug/l	97
47) Dibromomethane	5.525	174	86302	59.5705	ug/l	96
48) 1,2-Dichloropropane	5.458	63	124829	56.4541	ug/l	91
49) Trichloroethene	5.330	130	139745	55.7669	ug/l	97
50) Benzene	4.977	78	497958	57.5550	ug/l	100
51) tert-Amyl methyl ether	5.019	73	267972	52.9850	ug/l	98
53) Iso-propylacetate	4.977	43	197147m	40.2825	ug/l	
54) Methyl methacrylate	5.483	41	95541m	39.9567	ug/l	
55) Dibromochloromethane	6.446	129	124971	47.3843	ug/l	100
56) 2-Chloroethylvinylether	5.733	63	29682m	39.9039	ug/l	
57) cis-1,3-Dichloropropene	5.830	75	183994	43.9313	ug/l	96
58) trans-1,3-Dichloropropene	6.117	75	175109	47.7618	ug/l	100
59) Ethyl methacrylate	6.135	41	102817	43.3269	ug/l	99
60) 1,1,2-Trichloroethane	6.220	97	109834	45.5243	ug/l	92
61) 1,2-Dibromoethane	6.525	107	112428	44.8913	ug/l	97
62) 1,3-Dichloropropane	6.318	76	193151	45.2440	ug/l	92
63) 4-Methyl-2-Pentanone	5.897	43	131014m	39.9663	ug/l	
64) 2-Hexanone	6.330	43	104908m	40.6253	ug/l	
65) Tetrachloroethene	6.318	164	115592	44.3958	ug/l	97
67) Toluene	6.019	92	323858	42.6236	ug/l	97

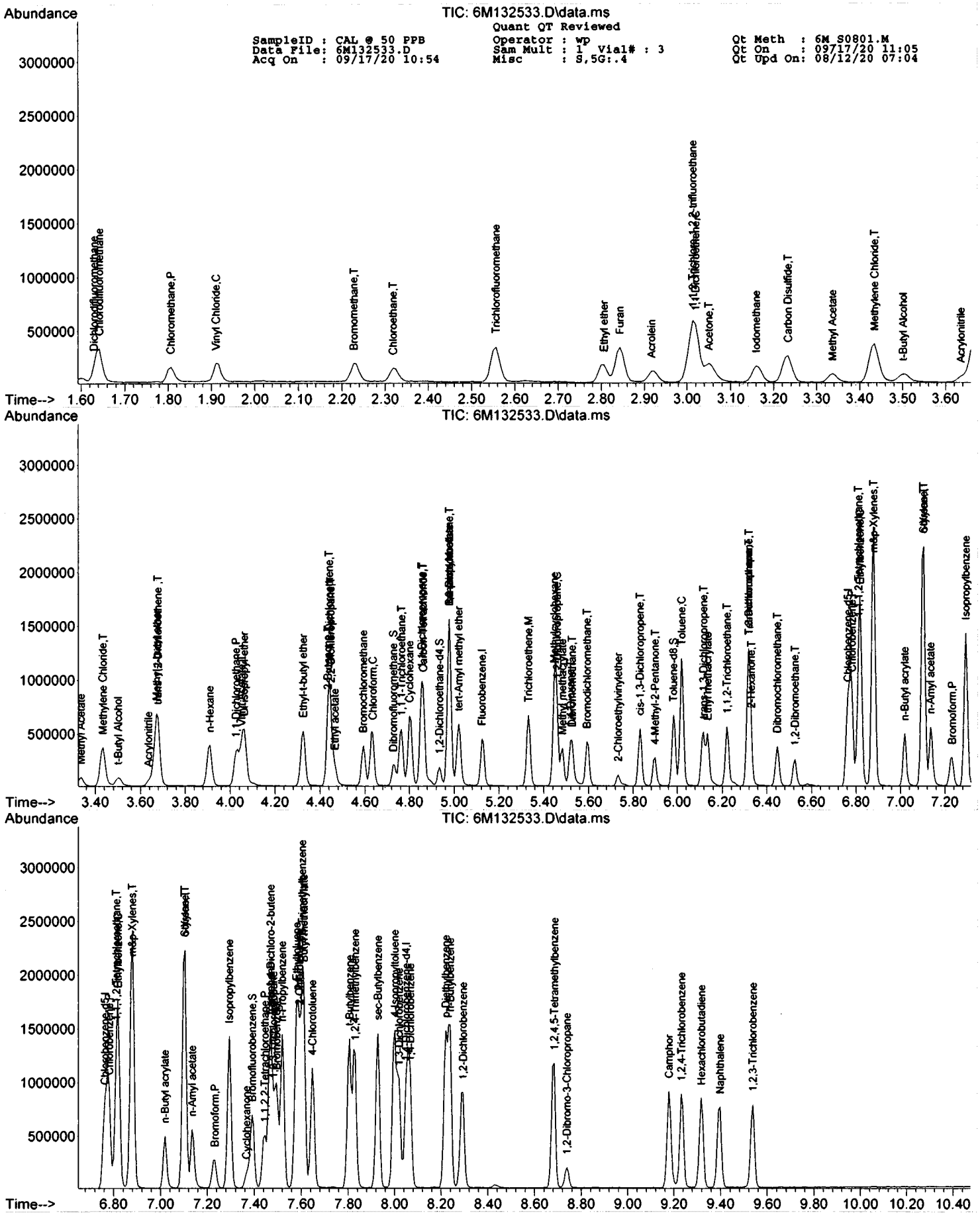
Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : wp Qt Meth : 6M_S0801.M
Data File: 6M132533.D Sam Mult : 1 Vial# : 3 Qt On : 09/17/20 11:05
Acq On : 09/17/20 10:54 Misc : S,5G:.4 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\09-17-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	121259	44.6685	ug/l	98
69)	Chlorobenzene	6.781	112	353714	42.6011	ug/l	93
71)	n-Butyl acrylate	7.019	55	210147m	40.0298	ug/l	
72)	n-Amyl acetate	7.135	43	202471m	40.7890	ug/l	
73)	Bromoform	7.232	173	86024	65.0054	ug/l	96
74)	Ethylbenzene	6.818	106	170587	42.0231	ug/l	99
75)	1,1,2,2-Tetrachloroethane	7.446	83	157900	40.3367	ug/l	96
77)	Styrene	7.104	104	399014m	39.7314	ug/l	
78)	m&p-Xylenes	6.879	106	473269	77.7216	ug/l	96
79)	o-Xylene	7.104	106	234433m	39.0445	ug/l	
80)	trans-1,4-Dichloro-2-b...	7.470	53	77556	40.7304	ug/l	94
81)	1,3-Dichlorobenzene	8.019	146	308018	40.9919	ug/l	98
82)	1,4-Dichlorobenzene	8.068	146	306707	39.5671	ug/l	100
83)	1,2-Dichlorobenzene	8.293	146	280642m	39.9901	ug/l	
84)	Isopropylbenzene	7.293	105	639640	40.9902	ug/l	99
85)	Cyclohexanone	7.367	55	29210	135.5408	ug/l	97
86)	Camphene	7.470	93	234333	41.2658	ug/l	99
87)	1,2,3-Trichloropropane	7.482	75	221821m	43.9301	ug/l	
88)	2-Chlorotoluene	7.592	91	397319	42.4826	ug/l	99
89)	p-Ethyltoluene	7.580	105	644195	40.2273	ug/l	92
90)	4-Chlorotoluene	7.647	91	395785	43.1464	ug/l	98
91)	n-Propylbenzene	7.519	91	769352	42.0349	ug/l	100
92)	Bromobenzene	7.495	77	386591	40.2808	ug/l	99
93)	1,3,5-Trimethylbenzene	7.604	105	506687	45.1908	ug/l	93
94)	Butyl methacrylate	7.610	41	175087	40.4849	ug/l	96
95)	t-Butylbenzene	7.805	119	530284	41.5703	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	524788	41.4609	ug/l	99
97)	sec-Butylbenzene	7.927	105	709738	43.7174	ug/l	100
98)	4-Isopropyltoluene	8.001	119	593786	43.5994	ug/l	99
99)	n-Butylbenzene	8.238	91	685797	44.1728	ug/l	98
100)	p-Diethylbenzene	8.220	119	336085	41.6135	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.683	119	478036	41.8714	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.738	157	37496	36.1726	ug/l	98
103)	Camphor	9.177	95	169818	478.7678	ug/l	96
104)	Hexachlorobutadiene	9.317	225	114235	40.4899	ug/l	99
105)	1,2,4-Trichlorobenzene	9.232	180	197992m	38.9047	ug/l	
106)	1,2,3-Trichlorobenzene	9.537	180	181784m	39.2497	ug/l	
107)	Naphthalene	9.397	128	465146	36.5094	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M132533.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 50 PPB
Data File: 6M132533.D
Acq On : 09/17/20 10:54
Operator : wp
Sam Mult : 1 Vial# : 3
Misc : S,5G:.4
Qt Meth : 6M_S0801.M
Qt On : 09/17/20 11:05
Qt Upd On: 08/12/20 07:04
Dichlorodifluoromethane
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 6M132533.D\data.ms
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 6M132533.D\data.ms
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
sec-Butylbenzene
4-Chlorotoluene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

GC/MS Volatile Data
Raw QC Data

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6
Data File: 6M130900.D
Analysis Date: 08/01/20 11:54
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.385 to 7.397 min

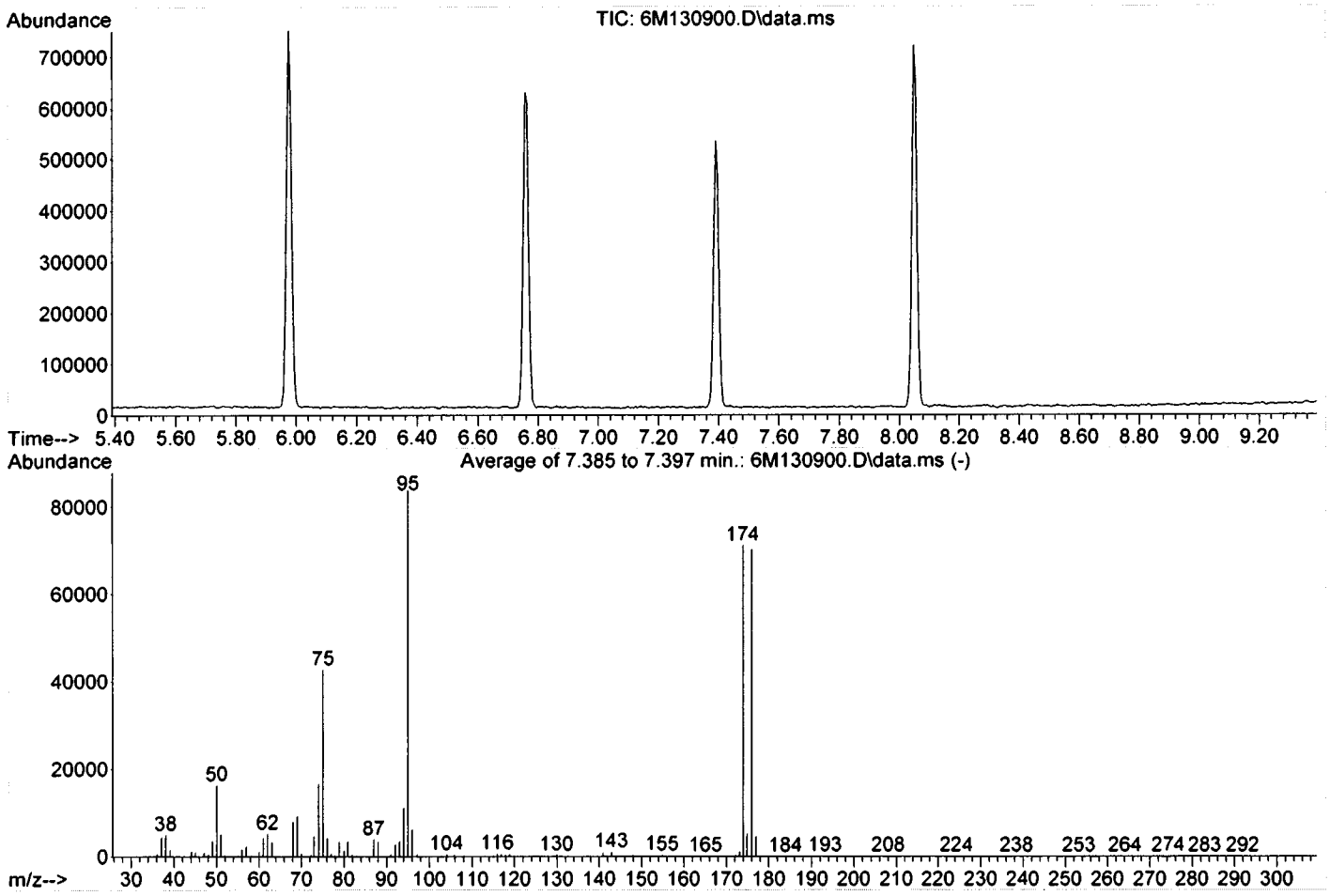
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.5	16321	PASS
75	95	30	60	51.1	42800	PASS
95	95	100	100	100.0	83807	PASS
96	95	5	9	7.3	6128	PASS
173	174	0.00	2	1.7	1176	PASS
174	95	50	100	84.9	71135	PASS
175	174	5	9	7.4	5277	PASS
176	174	95	101	98.8	70251	PASS
177	176	5	9	6.4	4486	PASS

Data File	Sample Number	Analysis Date:
6M130901.D	BLK	08/01/20 12:09
6M130902.D	BLK	08/01/20 12:30
6M130903.D	CAL @ 0.5 PPB	08/01/20 12:51
6M130904.D	CAL @ 1 PPB	08/01/20 13:11
6M130905.D	CAL @ 2 PPB	08/01/20 13:32
6M130906.D	CAL @ 5 PPB	08/01/20 13:52
6M130907.D	CAL @ 20 PPB	08/01/20 14:13
6M130908.D	CAL @ 50 PPB	08/01/20 14:34
6M130909.D	CAL @ 100 PPB	08/01/20 14:54
6M130910.D	BLK	08/01/20 15:15
6M130911.D	CAL @ 250 PPB	08/01/20 15:36
6M130912.D	BLK	08/01/20 15:56
6M130913.D	CAL @ 500 PPB	08/01/20 16:17
6M130914.D	BLK	08/01/20 16:37
6M130915.D	BLK	08/01/20 16:58
6M130916.D	BLK	08/01/20 17:19
6M130917.D	500 PPB	08/01/20 17:39
6M130918.D	BLK	08/01/20 18:00
6M130919.D	BLK	08/01/20 18:21
6M130920.D	250 PPB	08/01/20 18:41
6M130921.D	BLK	08/01/20 19:02
6M130922.D	BLK	08/01/20 19:22
6M130923.D	BLK	08/01/20 19:43
6M130924.D	BLK	08/01/20 20:04
6M130925.D	ICV	08/01/20 20:24
6M130926.D	BLK	08/01/20 20:45
6M130927.D	CCV	08/01/20 21:05
6M130928.D	BLK	08/01/20 21:26
6M130929.D	BLK	08/01/20 21:47
6M130930.D	BLK	08/01/20 22:07
6M130931.D	BLK	08/01/20 22:28
6M130932.D	BLK	08/01/20 22:49
6M130933.D	DAILY BLANK	08/01/20 23:09

Data Path : G:\GcMsData\2020\GCMS_6\Data\08-01-20\
Data File : 6M130900.D
Acq On : 01 Aug 2020 11:54
Operator : BK
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_6\METHODQT\6M_S0801.M
Title : @GCMS_6,ug,624,8260
Last Update : Sun Aug 02 08:55:28 2020



Spectrum Information: Average of 7.385 to 7.397 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	16321	PASS
75	95	30	60	51.1	42800	PASS
95	95	100	100	100.0	83807	PASS
96	95	5	9	7.3	6128	PASS
173	174	0.00	2	1.7	1176	PASS
174	95	50	100	84.9	71135	PASS
175	174	5	9	7.4	5277	PASS
176	174	95	101	98.8	70251	PASS
177	176	5	9	6.4	4486	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 11
Data File: 11M82667.D
Analysis Date: 09/11/20 18:54
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.164 to 7.167 min

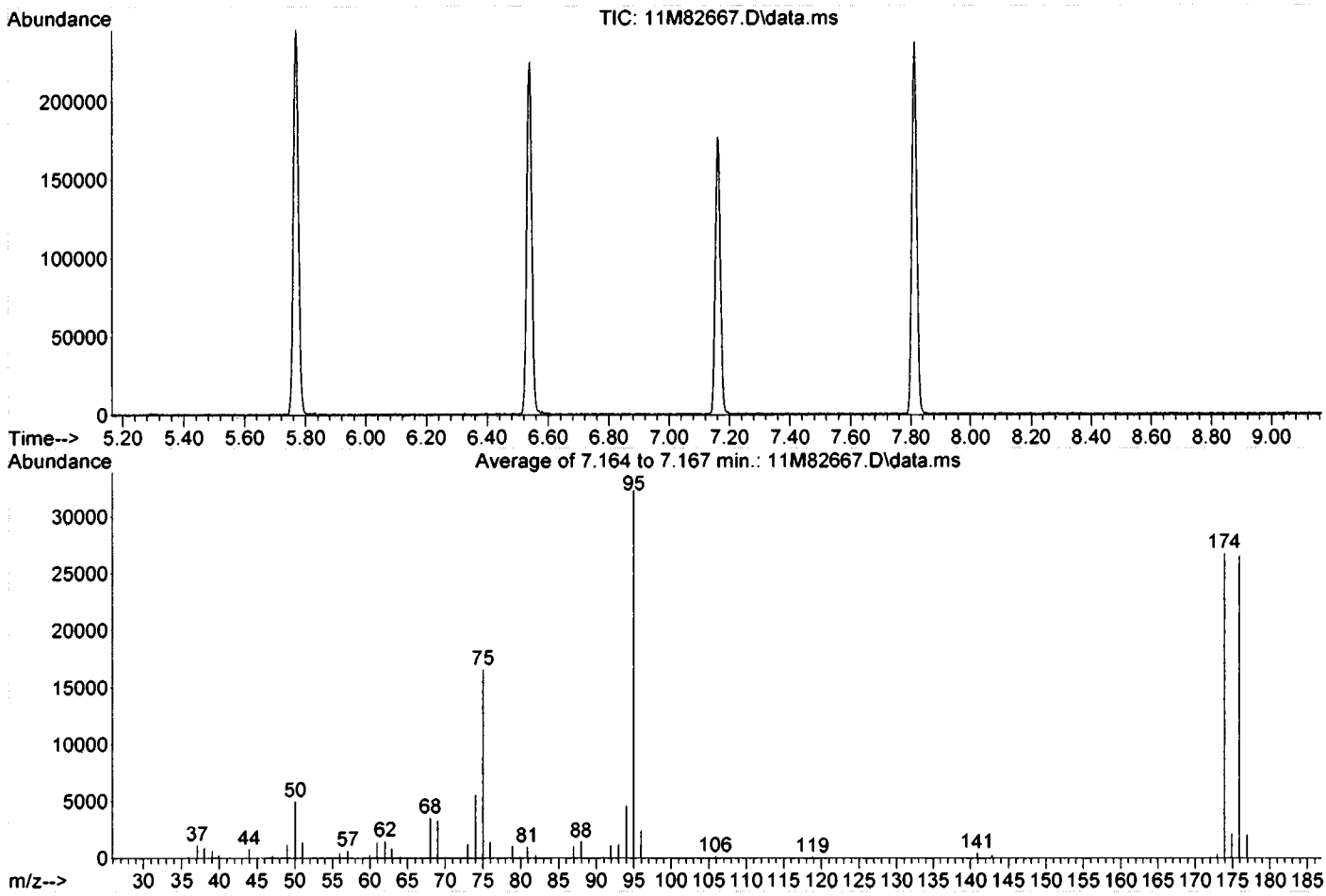
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.5	5002	PASS
75	95	30	60	51.5	16609	PASS
95	95	100	100	100.0	32280	PASS
96	95	5	9	7.5	2425	PASS
173	174	0.00	2	1.4	376	PASS
174	95	50	100	82.9	26756	PASS
175	174	5	9	8.1	2157	PASS
176	174	95	101	99.1	26512	PASS
177	176	5	9	7.8	2078	PASS

Data File	Sample Number	Analysis Date:
11M82669.D	BLK	09/11/20 19:26
11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21
11M82673.D	CAL @ 1 PPB	09/11/20 20:40
11M82674.D	CAL @ 5 PPB	09/11/20 20:58
11M82675.D	CAL @ 10 PPB	09/11/20 21:17
11M82676.D	CAL @ 20 PPB	09/11/20 21:35
11M82678.D	CAL @ 50 PPB	09/11/20 22:12
11M82680.D	500 PPB	09/11/20 22:48
11M82683.D	250 PPB	09/11/20 23:44
11M82686.D	CAL @ 100 PPB	09/12/20 00:39
11M82690.D	BLK	09/12/20 01:52
11M82691.D	ICV	09/12/20 02:11
11M82693.D	BLK	09/12/20 02:47
11M82696.D	DAILY BLANK	09/12/20 03:43
11M82699.D	BLK	09/14/20 14:43

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Data File : 11M82667.D
Acq On : 11 Sep 2020 18:54
Operator : WP
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 17 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS_11\MethodQt\11M_A0817.M
Title : @GCMS_11,ug,624,8260
Last Update : Tue Aug 18 07:37:22 2020



Spectrum Information: Average of 7.164 to 7.167 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.5	5002	PASS
75	95	30	60	51.5	16609	PASS
95	95	100	100	100.0	32280	PASS
96	95	5	9	7.5	2425	PASS
173	174	0.00	2	1.4	376	PASS
174	95	50	100	82.9	26756	PASS
175	174	5	9	8.1	2157	PASS
176	174	95	101	99.1	26512	PASS
177	176	5	9	7.8	2078	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 11
Data File: 11M82700.D
Analysis Date: 09/14/20 14:56
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.157 to 7.160 min

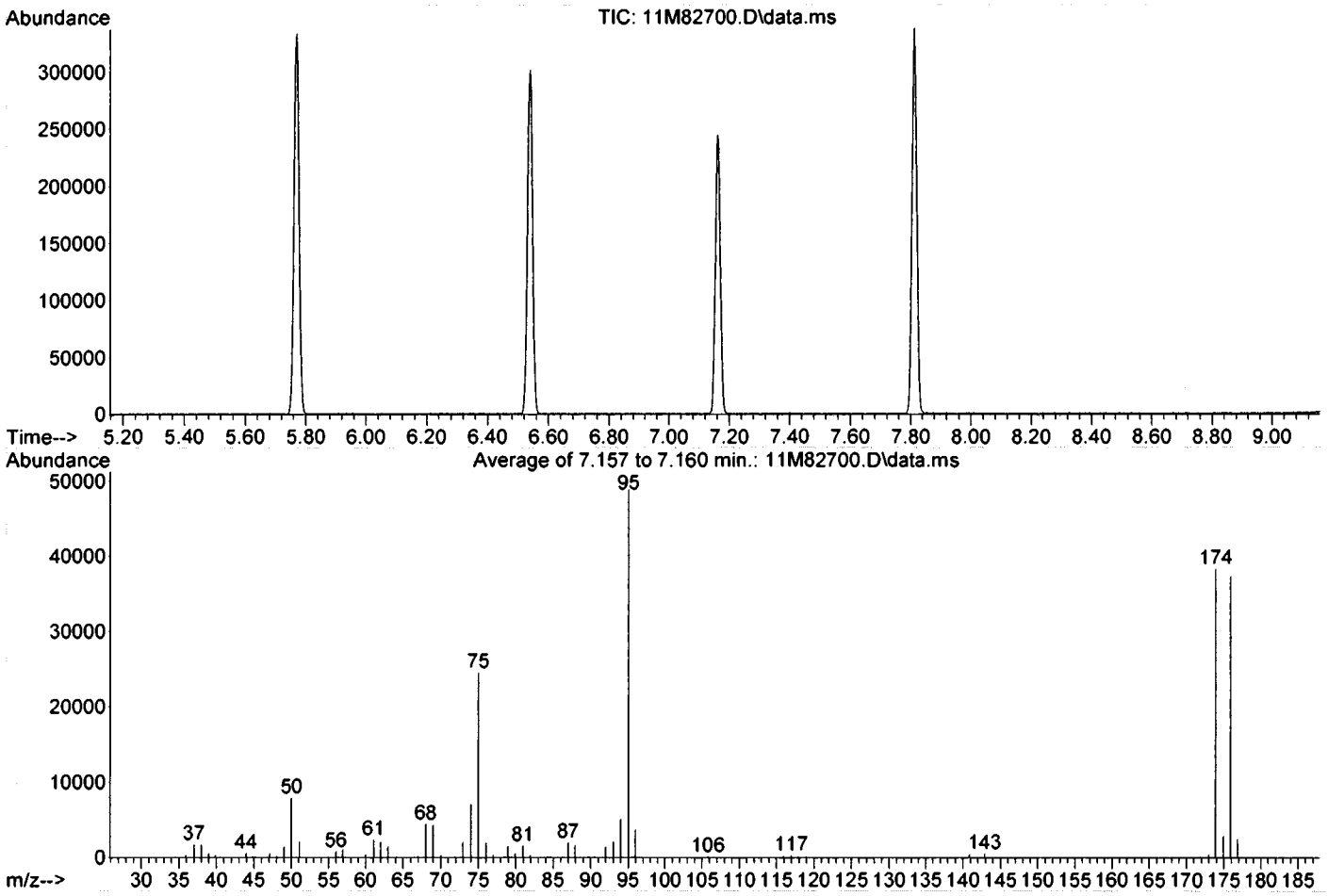
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	16.2	7926	PASS
75	95	30	60	50.3	24564	PASS
95	95	100	100	100.0	48836	PASS
96	95	5	9	7.6	3724	PASS
173	174	0.00	2	1.2	449	PASS
174	95	50	100	78.5	38312	PASS
175	174	5	9	7.5	2879	PASS
176	174	95	101	97.4	37308	PASS
177	176	5	9	6.7	2494	PASS

Data File	Sample Number	Analysis Date:
11M82701.D	20 PPB	09/14/20 15:10
11M82702.D	CAL @ 20 PPB	09/14/20 15:28
11M82703.D	BLK	09/14/20 15:46
11M82704.D	BLK	09/14/20 16:05
11M82705.D	BLK	09/14/20 16:23
11M82706.D	DAILY BLANK	09/14/20 16:41
11M82707.D	DAILY BLANK	09/14/20 17:00
11M82708.D	AD19145-007(T)	09/14/20 17:18
11M82709.D	AD19145-008(T)	09/14/20 17:37
11M82710.D	MBS87835	09/14/20 17:55
11M82711.D	MBS87836	09/14/20 18:14
11M82712.D	AD19145-007(T:M	09/14/20 18:32
11M82713.D	AD19145-007(T:M	09/14/20 18:50
11M82714.D	BLK	09/14/20 19:09
11M82715.D	BLK	09/14/20 19:27
11M82716.D	EF-3-V-13084(0911	09/14/20 19:45
11M82717.D	EF-3-V-13084(0912	09/14/20 20:04
11M82718.D	EF-3-V-13084(TES	09/14/20 20:22
11M82719.D	AD19178-014	09/14/20 20:41
11M82720.D	AD19196-001	09/14/20 20:59
11M82721.D	AD19199-002	09/14/20 21:18
11M82722.D	BLK	09/14/20 21:36
11M82724.D	AD19178-014	09/14/20 22:13
11M82725.D	19196-001	09/14/20 22:31
11M82726.D	19199-002	09/14/20 22:49
11M82727.D	AD19199-003	09/14/20 23:08
11M82728.D	AD19202-001	09/14/20 23:26
11M82729.D	AD19202-002	09/14/20 23:44
11M82730.D	AD19206-001	09/15/20 00:03
11M82731.D	AD19206-002	09/15/20 00:21
11M82732.D	AD19206-003	09/15/20 00:40
11M82733.D	AD19206-004	09/15/20 00:58
11M82734.D	BLK	09/15/20 01:16
11M82735.D	AD19204-001	09/15/20 01:35
11M82736.D	AD19204-002	09/15/20 01:53
11M82737.D	AD19204-003	09/15/20 02:11
11M82738.D	BLK	09/15/20 02:30
11M82739.D	AD19197-001	09/15/20 02:48
11M82740.D	AD19197-002	09/15/20 03:07
11M82741.D	AD19193-001	09/15/20 03:25
11M82742.D	AD19194-001	09/15/20 03:44
11M82743.D	AD19197-004	09/15/20 04:02
11M82744.D	AD19197-003	09/15/20 04:20
11M82745.D	BLK	09/15/20 04:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-14-20\
Data File : 11M82700.D
Acq On : 14 Sep 2020 14:56
Operator : WP
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 4 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS_11\MethodQt\11M_A0911.M
Title : @GCMS_11,ug,624,8260
Last Update : Mon Sep 14 15:14:57 2020



Spectrum Information: Average of 7.157 to 7.160 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.2	7926	PASS
75	95	30	60	50.3	24564	PASS
95	95	100	100	100.0	48836	PASS
96	95	5	9	7.6	3724	PASS
173	174	0.00	2	1.2	449	PASS
174	95	50	100	78.5	38312	PASS
175	174	5	9	7.5	2879	PASS
176	174	95	101	97.4	37308	PASS
177	176	5	9	6.7	2494	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6
Data File: 6M132532.D
Analysis Date: 09/17/20 10:39
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.391 to 7.397 min

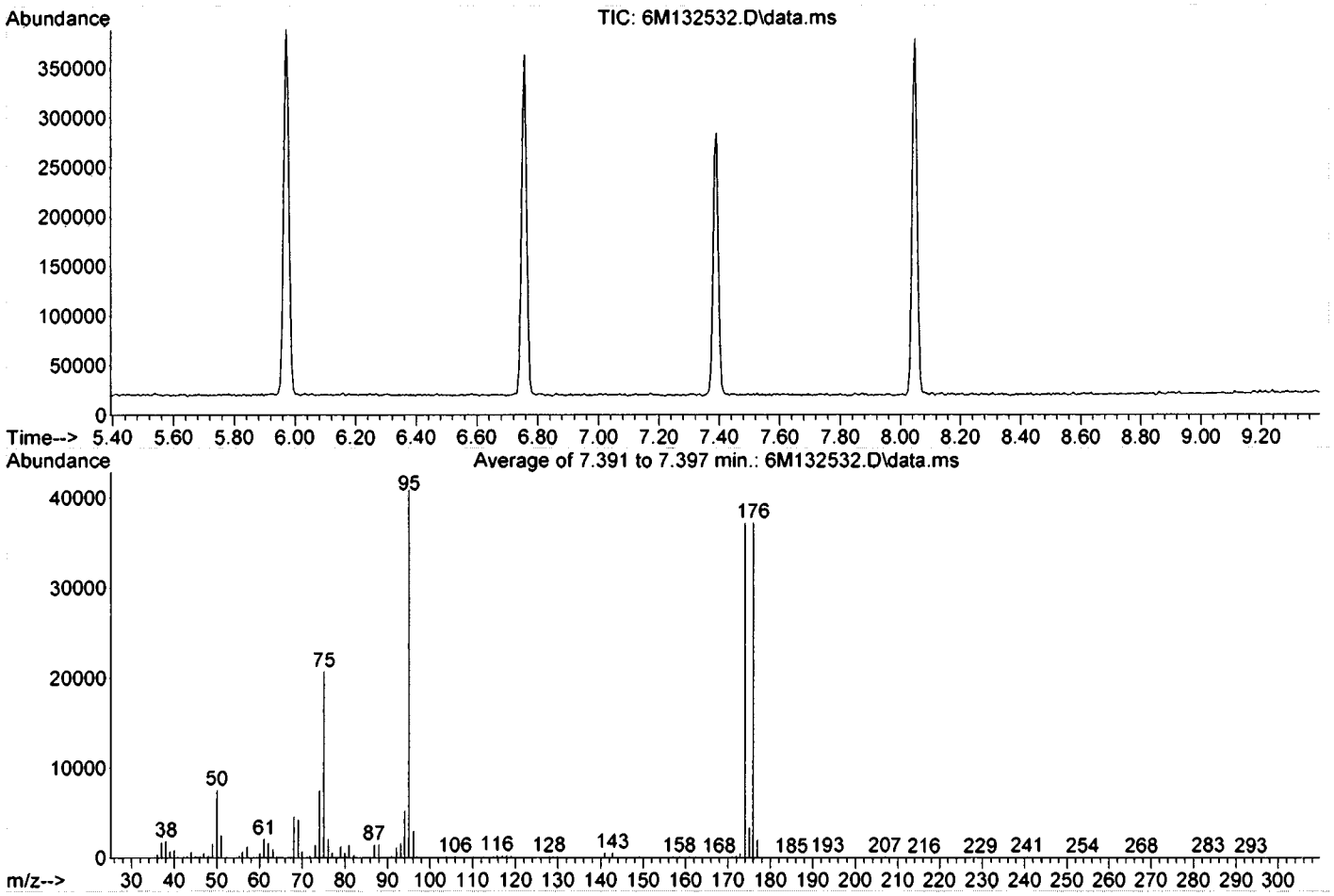
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.6	7594	PASS
75	95	30	60	50.8	20762	PASS
95	95	100	100	100.0	40856	PASS
96	95	5	9	7.2	2929	PASS
173	174	0.00	2	1.3	477	PASS
174	95	50	100	91.1	37220	PASS
175	174	5	9	9.0	3336	PASS
176	174	95	101	100.2	37288	PASS
177	176	5	9	5.4	1997	PASS

Data File	Sample Number	Analysis Date:
6M132533.D	CAL @ 50 PPB	09/17/20 10:54
6M132534.D	50 PPB	09/17/20 11:15
6M132535.D	BLK	09/17/20 11:35
6M132536.D	BLK	09/17/20 11:56
6M132537.D	BLK	09/17/20 12:17
6M132538.D	DAILY BLANK	09/17/20 12:37
6M132539.D	AD19263-002	09/17/20 12:58
6M132540.D	AD19283-006	09/17/20 13:19
6M132541.D	MBS89300	09/17/20 13:39
6M132542.D	AD19283-006(MS)	09/17/20 14:00
6M132543.D	AD19283-006(MSD	09/17/20 14:21
6M132544.D	BLK	09/17/20 14:42
6M132545.D	BLK	09/17/20 15:02
6M132546.D	AD19254-003	09/17/20 15:23
6M132547.D	AD19254-002	09/17/20 15:44
6M132548.D	AD19231-001	09/17/20 16:04
6M132549.D	AD19231-002	09/17/20 16:25
6M132550.D	AD19231-003	09/17/20 16:46
6M132551.D	AD19238-001	09/17/20 17:07
6M132552.D	AD19239-001	09/17/20 17:27
6M132553.D	AD19240-001	09/17/20 17:48
6M132554.D	AD19242-001	09/17/20 18:09
6M132555.D	AD19242-002	09/17/20 18:29
6M132556.D	AD19242-003	09/17/20 18:50
6M132557.D	BLK	09/17/20 19:11
6M132558.D	AD19257-004	09/17/20 19:32
6M132559.D	AD19257-008	09/17/20 19:52
6M132560.D	AD19257-010	09/17/20 20:13
6M132561.D	AD19257-011	09/17/20 20:34
6M132562.D	AD19257-012	09/17/20 20:54
6M132563.D	AD19257-013	09/17/20 21:15
6M132564.D	AD19178-013	09/17/20 21:36
6M132565.D	AD19224-001(5X)	09/17/20 21:56
6M132566.D	19224-001(5X)	09/17/20 22:17
6M132567.D	BLK	09/17/20 22:38
6M132568.D	BLK	09/17/20 22:58
6M132569.D	BLK	09/17/20 23:19
6M132570.D	BLK	09/17/20 23:40
6M132571.D	BLK	09/18/20 00:00
6M132572.D	BLK	09/18/20 00:21
6M132573.D	BLK	09/18/20 00:42
6M132574.D	BLK	09/18/20 01:02
6M132575.D	BLK	09/18/20 06:16
6M132576.D	BLK	09/18/20 06:36
6M132577.D	BLK	09/18/20 06:57
6M132578.D	BLK	09/18/20 07:18
6M132579.D	AD19286-002	09/18/20 07:38
6M132580.D	AD19286-004	09/18/20 07:59
6M132581.D	AD19286-005	09/18/20 08:20
6M132582.D	AD19286-006	09/18/20 08:59

Data Path : G:\GcMsData\2020\GCMS_6\Data\09-17-20\
Data File : 6M132532.D
Acq On : 17 Sep 2020 10:39
Operator : wp
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_6\METHODQT\6M_S0801.M
Title : @GCMS_6,ug,624,8260
Last Update : Sun Aug 02 08:55:28 2020



Spectrum Information: Average of 7.391 to 7.397 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	7594	PASS
75	95	30	60	50.8	20762	PASS
95	95	100	100	100.0	40856	PASS
96	95	5	9	7.2	2929	PASS
173	174	0.00	2	1.3	477	PASS
174	95	50	100	91.1	37220	PASS
175	174	5	9	9.0	3336	PASS
176	174	95	101	100.2	37288	PASS
177	176	5	9	5.4	1997	PASS

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 11M82707.D
Analysis Date: 09/14/20 17:00
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U				

Worksheet #: 567344

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

SampleID : DAILY BLANK
Data File: 11M82707.D
Acq On : 09/14/20 17:00

Operator : WP
Sam Mult : 1 Vial# : 11
Misc : A,5ML

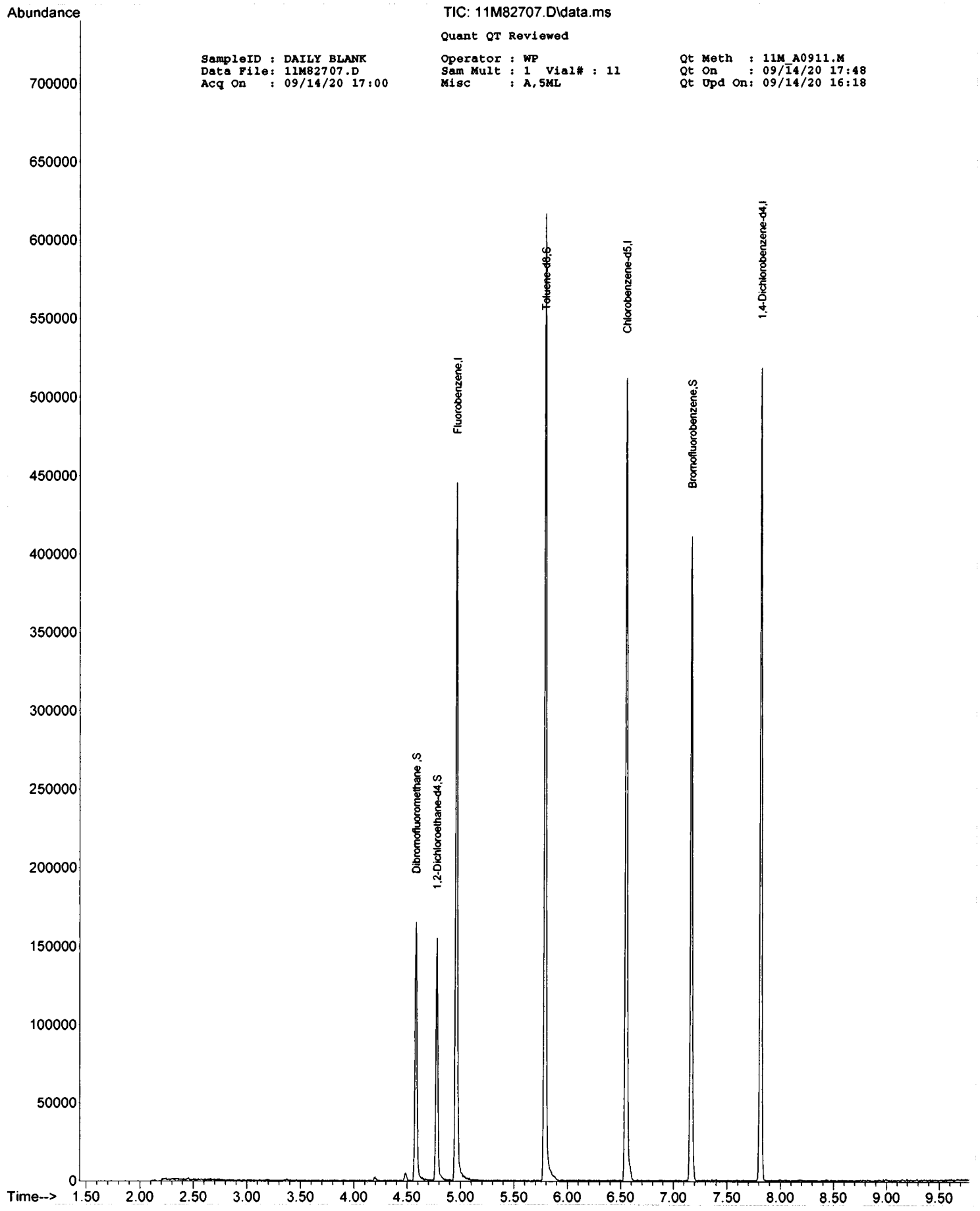
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 17:48
Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-14-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	284959	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	228553	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	104004	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	67375	28.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.53%			
39) 1,2-Dichloroethane-d4	4.778	67	36930	29.63	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.77%			
66) Toluene-d8	5.787	98	293448	29.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.87%			
76) Bromofluorobenzene	7.167	174	83707	31.93	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.43%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 11M82707.D\data.ms
Quant QT Reviewed
SampleID : DAILY BLANK
Data File: 11M82707.D
Acq On : 09/14/20 17:00
Operator : WP
Sam Mult : 1 Vial# : 11
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 17:48
Qt Upd On: 09/14/20 16:18
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->
1.50
2.00
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 6M132538.D
Analysis Date: 09/17/20 12:37
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0020	U	56-23-5	Carbon Tetrachloride	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0020	U	108-90-7	Chlorobenzene	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0020	U	75-00-3	Chloroethane	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.0020	U	67-66-3	Chloroform	0.0020	U
75-34-3	1,1-Dichloroethane	0.0020	U	74-87-3	Chloromethane	0.0020	U
75-35-4	1,1-Dichloroethene	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.0020	U
96-18-4	1,2,3-Trichloropropane	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.0020	U
95-63-6	1,2,4-Trimethylbenzene	0.0010	U	124-48-1	Dibromochloromethane	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.0020	U	75-71-8	Dichlorodifluoromethane	0.0020	U
107-06-2	1,2-Dichloroethane	0.0020	U	100-41-4	Ethylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0020	U	98-82-8	Isopropylbenzene	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	0.0010	U	79601-23-1	m&p-Xylenes	0.0012	U
541-73-1	1,3-Dichlorobenzene	0.0020	U	75-09-2	Methylene Chloride	0.0020	U
142-28-9	1,3-Dichloropropane	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0020	U	104-51-8	n-Butylbenzene	0.0010	U
123-91-1	1,4-Dioxane	0.10	U	103-65-1	n-Propylbenzene	0.0010	U
78-93-3	2-Butanone	0.0020	U	95-47-6	o-Xylene	0.0010	U
110-75-8	2-Chloroethylvinylether	0.0020	U	135-98-8	sec-Butylbenzene	0.0010	U
591-78-6	2-Hexanone	0.0020	U	100-42-5	Styrene	0.0020	U
99-87-6	4-Isopropyltoluene	0.0010	U	75-65-0	t-Butyl Alcohol	0.010	U
108-10-1	4-Methyl-2-Pentanone	0.0020	U	98-06-6	t-Butylbenzene	0.0010	U
67-64-1	Acetone	0.010	U	127-18-4	Tetrachloroethene	0.0020	U
107-02-8	Acrolein	0.010	U	108-88-3	Toluene	0.0010	U
107-13-1	Acrylonitrile	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0020	U
71-43-2	Benzene	0.0010	U	10061-02-6	trans-1,3-Dichloropropene	0.0020	U
75-27-4	Bromodichloromethane	0.0020	U	79-01-6	Trichloroethene	0.0020	U
75-25-2	Bromoform	0.0020	U	75-69-4	Trichlorofluoromethane	0.0020	U
74-83-9	Bromomethane	0.0020	U	75-01-4	Vinyl Chloride	0.0020	U
75-15-0	Carbon Disulfide	0.0034	U				

Worksheet #: 567344

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

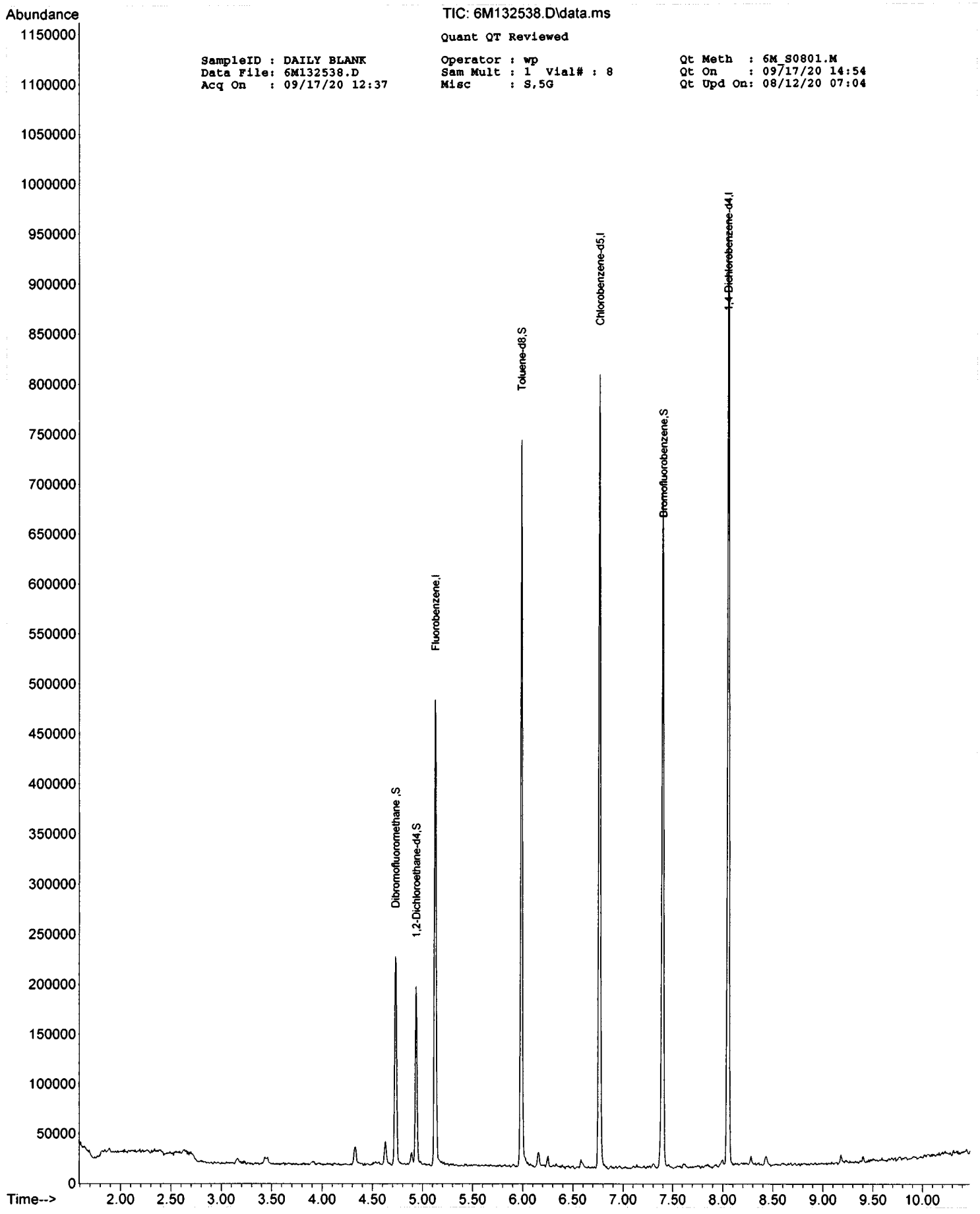
Quantitation Report (QT Reviewed)

SampleID : DAILY BLANK Operator : wp Qt Meth : 6M_S0801.M
Data File: 6M132538.D Sam Mult : 1 Vial# : 8 Qt On : 09/17/20 14:54
Acq On : 09/17/20 12:37 Misc : S,5G Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\09-17-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	280410	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	311766	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	186117	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.726	111	81963	32.89	ug/l	0.00
Spiked Amount 30.000			Recovery = 109.63%			
39) 1,2-Dichloroethane-d4	4.934	67	39050	29.06	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.87%			
66) Toluene-d8	5.982	98	320074	24.88	ug/l	0.00
Spiked Amount 30.000			Recovery = 82.93%			
76) Bromofluorobenzene	7.397	174	139785	28.53	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.10%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M132538.D\data.ms
Quant QT Reviewed
SampleID : DAILY BLANK
Data File: 6M132538.D
Acq On : 09/17/20 12:37
Operator : wp
Sam Mult : 1 Vial# : 8
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 09/17/20 14:54
Qt Upd On: 08/12/20 07:04
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87835

Data File	Sample ID:	Analysis Date
Spike or Dup: 11M82710.D	MBS87835	9/14/2020 5:55:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		
Method: 8260C	Matrix: Aqueous	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.6013	0	20	93	50	150
Dichlorodifluoromethane	1	18.8341	0	20	94	50	150
Chloromethane	1	19.7241	0	20	99	50	150
Bromomethane	1	17.5644	0	20	88	50	150
Vinyl Chloride	1	20.0175	0	20	100	50	150
Chloroethane	1	19.3955	0	20	97	50	150
Trichlorofluoromethane	1	19.3249	0	20	97	50	150
Ethyl ether	1	19.308	0	20	97	50	150
Furan	1	18.5256	0	20	93	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	20.0597	0	20	100	50	150
Methylene Chloride	1	17.5627	0	20	88	70	130
Acrolein	1	95.7496	0	100	96	50	150
Acrylonitrile	1	19.2547	0	20	96	50	150
Iodomethane	1	14.0589	0	20	70	50	150
Acetone	1	93.0756	0	100	93	50	150
Carbon Disulfide	1	18.9184	0	20	95	50	150
t-Butyl Alcohol	1	105.1723	0	100	105	50	150
n-Hexane	1	21.1025	0	20	106	70	130
Di-isopropyl-ether	1	18.9389	0	20	95	70	130
1,1-Dichloroethene	1	20.3518	0	20	102	70	130
Methyl Acetate	1	19.4569	0	20	97	50	150
Methyl-t-butyl ether	1	18.7525	0	20	94	70	130
1,1-Dichloroethane	1	19.0947	0	20	95	70	130
trans-1,2-Dichloroethene	1	19.4048	0	20	97	70	130
Ethyl-t-butyl ether	1	18.6546	0	20	93	70	130
cis-1,2-Dichloroethene	1	18.6674	0	20	93	70	130
Bromochloromethane	1	18.9817	0	20	95	70	130
2,2-Dichloropropane	1	20.7198	0	20	104	70	130
Ethyl acetate	1	18.5437	0	20	93	50	150
1,4-Dioxane	1	1116.895	0	1000	112	50	150
1,1-Dichloropropene	1	18.8455	0	20	94	70	130
Chloroform	1	18.5783	0	20	93	70	130
Cyclohexane	1	20.3793	0	20	102	70	130
1,2-Dichloroethane	1	18.2621	0	20	91	70	130
2-Butanone	1	15.8966	0	20	79	50	150
1,1,1-Trichloroethane	1	18.9033	0	20	95	70	130
Carbon Tetrachloride	1	19.7396	0	20	99	50	150
Vinyl Acetate	1	19.149	0	20	96	50	150
Bromodichloromethane	1	18.2868	0	20	91	70	130
Methylcyclohexane	1	21.2188	0	20	106	70	130
Dibromomethane	1	17.1799	0	20	86	70	130
1,2-Dichloropropane	1	18.8873	0	20	94	70	130
Trichloroethene	1	18.3722	0	20	92	70	130
Benzene	1	18.8456	0	20	94	70	130
tert-Amyl methyl ether	1	17.663	0	20	88	70	130
Iso-propylacetate	1	17.562	0	20	88	70	130
Methyl methacrylate	1	16.2668	0	20	81	70	130
Dibromochloromethane	1	18.638	0	20	93	70	130
2-Chloroethylvinylether	1	17.2376	0	20	86	70	130
cis-1,3-Dichloropropene	1	18.5879	0	20	93	70	130
trans-1,3-Dichloropropene	1	18.3519	0	20	92	70	130
Ethyl methacrylate	1	18.6598	0	20	93	70	130
1,1,2-Trichloroethane	1	17.0435	0	20	85	70	130
1,2-Dibromoethane	1	18.1684	0	20	91	70	130
1,3-Dichloropropane	1	18.1359	0	20	91	70	130
4-Methyl-2-Pentanone	1	17.5181	0	20	88	50	150
2-Hexanone	1	17.7056	0	20	89	50	150
Tetrachloroethene	1	18.5054	0	20	93	50	150
Toluene	1	17.8129	0	20	89	70	130
1,1,1,2-Tetrachloroethane	1	18.1041	0	20	91	70	130
Chlorobenzene	1	17.9954	0	20	90	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87835

Method: 8260C	Matrix: Aqueous	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	18.1833	0	20	91	70	130
n-Amyl acetate	1	19.367	0	20	97	70	130
Bromoform	**1**	**18.2921**	**0**	**20**	**91**	**70**	**130**
Ethylbenzene	**1**	**18.6687**	**0**	**20**	**93**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**18.0195**	**0**	**20**	**90**	**70**	**130**
Styrene	**1**	**18.8197**	**0**	**20**	**94**	**70**	**130**
m&p-Xylenes	**1**	**36.9085**	**0**	**40**	**92**	**70**	**130**
o-Xylene	**1**	**18.9857**	**0**	**20**	**95**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	20.3069	0	20	102	50	150
1,3-Dichlorobenzene	**1**	**18.0428**	**0**	**20**	**90**	**70**	**130**
1,4-Dichlorobenzene	**1**	**17.4919**	**0**	**20**	**87**	**70**	**130**
1,2-Dichlorobenzene	**1**	**17.7645**	**0**	**20**	**89**	**70**	**130**
Isopropylbenzene	**1**	**19.5336**	**0**	**20**	**98**	**70**	**130**
Cyclohexanone	1	123.5981	0	100	124	50	150
Camphene	1	21.091	0	20	105	70	130
1,2,3-Trichloropropane	**1**	**18.4059**	**0**	**20**	**92**	**70**	**130**
2-Chlorotoluene	1	18.7459	0	20	94	70	130
p-Ethyltoluene	1	19.5201	0	20	98	70	130
4-Chlorotoluene	1	17.9825	0	20	90	70	130
n-Propylbenzene	**1**	**19.5371**	**0**	**20**	**98**	**70**	**130**
Bromobenzene	1	18.4709	0	20	92	70	130
1,3,5-Trimethylbenzene	**1**	**18.7847**	**0**	**20**	**94**	**70**	**130**
Butyl methacrylate	1	18.7198	0	20	94	70	130
t-Butylbenzene	**1**	**18.7455**	**0**	**20**	**94**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**18.7101**	**0**	**20**	**94**	**70**	**130**
sec-Butylbenzene	**1**	**19.3518**	**0**	**20**	**97**	**70**	**130**
4-Isopropyltoluene	**1**	**19.0944**	**0**	**20**	**95**	**70**	**130**
n-Butylbenzene	**1**	**19.1884**	**0**	**20**	**96**	**70**	**130**
p-Diethylbenzene	1	19.2861	0	20	96	70	130
1,2,4,5-Tetramethylbenzene	1	18.7589	0	20	94	70	130
1,2-Dibromo-3-Chloropropane	1	18.5212	0	20	93	50	150
Camphor	1	159.6956	0	200	80	20	150
Hexachlorobutadiene	1	18.4413	0	20	92	50	150
1,2,4-Trichlorobenzene	1	16.6592	0	20	83	70	130
1,2,3-Trichlorobenzene	1	16.1064	0	20	81	70	130
Naphthalene	1	16.4646	0	20	82	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Quantitation Report (QT Reviewed)

SampleID : MBS
Data File: 11M82710.D
Acq On : 09/14/20 17:55

Operator : WP
Sam Mult : 1 Vial# : 14
Misc : A,5ML

Qt Meth : 11M_A0911.M
Qt On : 09/14/20 18:13
Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-14-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	270991	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.550	117	224997	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	112681	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	68608	30.37	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.23%			
39) 1,2-Dichloroethane-d4	4.778	67	36345	30.67	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.23%			
66) Toluene-d8	5.788	98	288321	29.30	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.67%			
76) Bromofluorobenzene	7.167	174	88317	31.09	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.63%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	45064m	18.6013	ug/l	
6) Dichlorodifluoromethane	1.668	85	27409	18.8341	ug/l	97
7) Chloromethane	1.841	50	30215	19.7241	ug/l	95
8) Bromomethane	2.241	94	27878	17.5644	ug/l	97
9) Vinyl Chloride	1.940	62	39440	20.0175	ug/l	92
10) Chloroethane	2.325	64	25949	19.3955	ug/l	93
11) Trichlorofluoromethane	2.550	101	62940	19.3249	ug/l	98
12) Ethyl ether	2.775	59	21513	19.3080	ug/l	68
13) Furan	2.817	39	38263	18.5256	ug/l	50
14) 1,1,2-Trichloro-1,2,2-...	2.977	101	26379	20.0597	ug/l	93
15) Methylene Chloride	3.373	84	34400	17.5627	ug/l	55
16) Acrolein	2.891	56	22331	95.7496	ug/l	87
17) Acrylonitrile	3.569	53	11320	19.2547	ug/l	92
18) Iodomethane	3.116	142	25719	14.0589	ug/l	91
19) Acetone	3.009	43	43408	93.0756	ug/l	88
20) Carbon Disulfide	3.183	76	84311	18.9184	ug/l	100
21) t-Butyl Alcohol	3.431	59	11880m	105.1723	ug/l	
22) n-Hexane	3.810	57	29254	21.1025	ug/l	90
23) Di-isopropyl-ether	3.952	45	72723	18.9389	ug/l	58
24) 1,1-Dichloroethene	2.984	61	48826	20.3518	ug/l	76
25) Methyl Acetate	3.280	43	18964	19.4569	ug/l	100
26) Methyl-t-butyl ether	3.595	73	77715	18.7525	ug/l	84
27) 1,1-Dichloroethane	3.926	63	59458	19.0947	ug/l	98
28) trans-1,2-Dichloroethene	3.604	96	35835	19.4048	ug/l	77
29) Ethyl-t-butyl ether	4.196	59	78603	18.6546	ug/l	86
30) cis-1,2-Dichloroethene	4.308	61	56736	18.6674	ug/l	72
31) Bromochloromethane	4.453	49	24443	18.9817	ug/l	32
32) 2,2-Dichloropropane	4.315	77	50976	20.7198	ug/l	97
33) Ethyl acetate	4.328	43	28275	18.5437	ug/l	98
34) 1,4-Dioxane	5.337	88	18721m	1116.8954	ug/l	
35) 1,1-Dichloropropene	4.701	75	50897	18.8455	ug/l	97
36) Chloroform	4.489	83	63880	18.5783	ug/l	94
38) Cyclohexane	4.649	56	46296m	20.3793	ug/l	
40) 1,2-Dichloroethane	4.820	62	48457	18.2621	ug/l	98
41) 2-Butanone	4.305	43	10356	15.8966	ug/l	73
42) 1,1,1-Trichloroethane	4.614	97	58715	18.9033	ug/l	86
43) Carbon Tetrachloride	4.710	117	51524	19.7396	ug/l	99
44) Vinyl Acetate	3.945	43	86749	19.1490	ug/l	100
45) Bromodichloromethane	5.411	83	47426	18.2868	ug/l	100
46) Methylcyclohexane	5.270	83	45540	21.2188	ug/l	68
47) Dibromomethane	5.344	174	21517	17.1799	ug/l	96
48) 1,2-Dichloropropane	5.279	63	33925	18.8873	ug/l	94
49) Trichloroethene	5.157	130	39428	18.3722	ug/l	98
50) Benzene	4.820	78	144521	18.8456	ug/l	100
51) tert-Amyl methyl ether	4.855	73	74230	17.6630	ug/l	96
53) Iso-propylacetate	4.813	43	43784	17.5620	ug/l	78
54) Methyl methacrylate	5.302	41	24500m	16.2668	ug/l	
55) Dibromochloromethane	6.241	129	39006	18.6380	ug/l	94
56) 2-Chloroethylvinylether	5.543	63	7445	17.2376	ug/l	74
57) cis-1,3-Dichloropropene	5.640	75	55330	18.5879	ug/l	96
58) trans-1,3-Dichloropropene	5.916	75	51894	18.3519	ug/l	98
59) Ethyl methacrylate	5.932	41	24348m	18.6598	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	33937	17.0435	ug/l	89
61) 1,2-Dibromoethane	6.315	107	38175	18.1684	ug/l	100
62) 1,3-Dichloropropane	6.112	76	59662	18.1359	ug/l	96
63) 4-Methyl-2-Pentanone	5.704	43	26592	17.5181	ug/l	98
64) 2-Hexanone	6.122	43	19056	17.7056	ug/l	70
65) Tetrachloroethene	6.115	164	32518	18.5054	ug/l	98
67) Toluene	5.823	92	97511	17.8129	ug/l	93

Quantitation Report (QT Reviewed)

SampleID : MBS
Data File: 11M82710.D
Acq On : 09/14/20 17:55

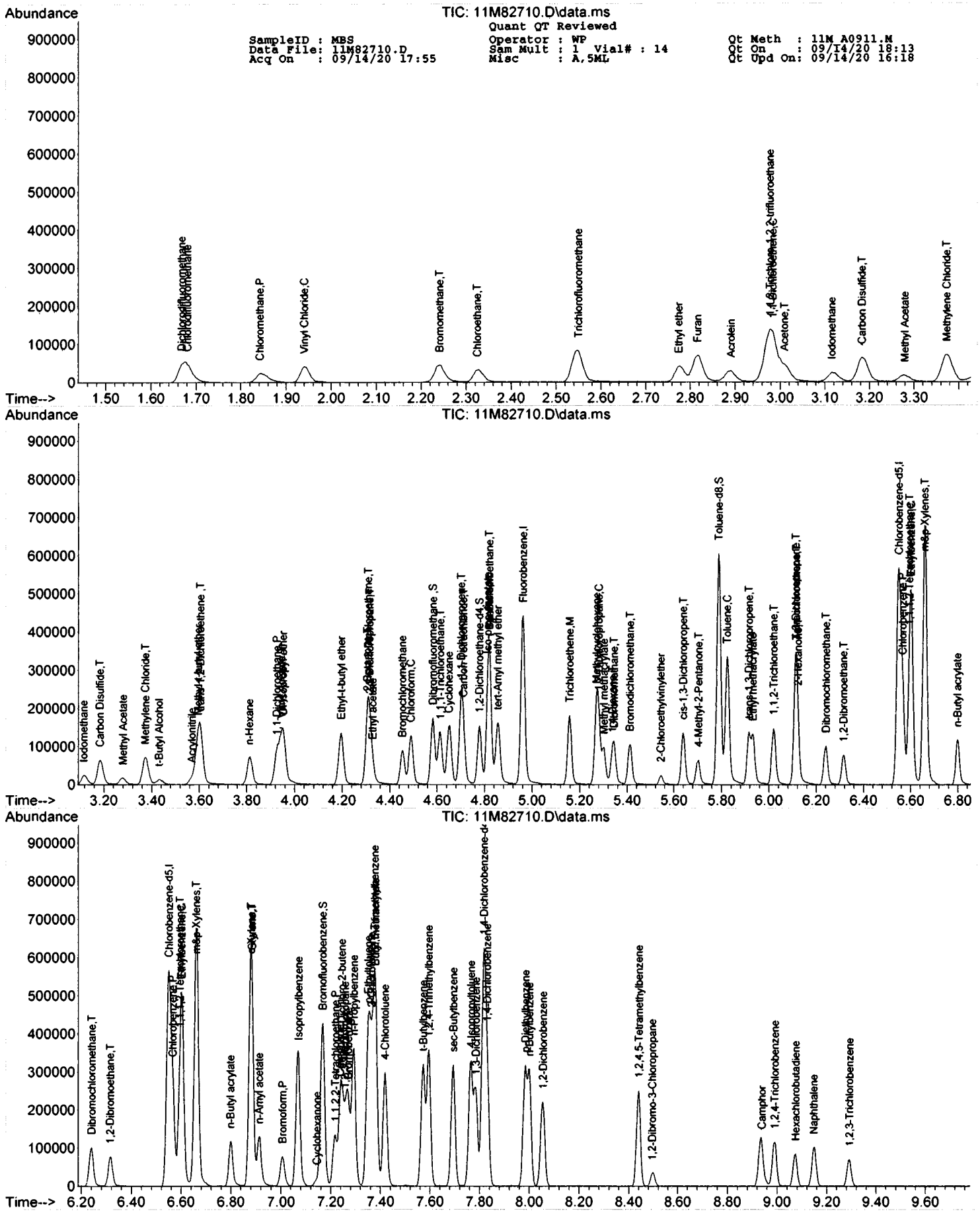
Operator : WP
Sam Mult : 1 Vial# : 14
Misc : A,5ML

Qt Meth : 11M_A0911.M
Qt On : 09/14/20 18:13
Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-14-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.595	133	36948	18.1041	ug/l	98
69)	Chlorobenzene	6.566	112	112184	17.9954	ug/l	98
71)	n-Butyl acrylate	6.797	55	54097	18.1833	ug/l	88
72)	n-Amyl acetate	6.913	43	42966	19.3670	ug/l	74
73)	Bromoform	7.006	173	24724	18.2921	ug/l	97
74)	Ethylbenzene	6.601	106	51648	18.6687	ug/l	100
75)	1,1,2,2-Tetrachloroethane	7.218	83	47709	18.0195	ug/l	97
77)	Styrene	6.884	104	121238	18.8197	ug/l	94
78)	m&p-Xylenes	6.659	106	142144	36.9085	ug/l	94
79)	o-Xylene	6.881	106	71438	18.9857	ug/l	95
80)	trans-1,4-Dichloro-2-b...	7.244	53	15264	20.3069	ug/l	88
81)	1,3-Dichlorobenzene	7.784	146	80673	18.0428	ug/l	98
82)	1,4-Dichlorobenzene	7.829	146	81016	17.4919	ug/l	97
83)	1,2-Dichlorobenzene	8.054	146	72301	17.7645	ug/l	99
84)	Isopropylbenzene	7.070	105	179827	19.5336	ug/l	97
85)	Cyclohexanone	7.144	55	5610	123.5981	ug/l	79
86)	Camphene	7.238	93	45966	21.0910	ug/l	96
87)	1,2,3-Trichloropropane	7.257	75	55941	18.4059	ug/l	90
88)	2-Chlorotoluene	7.363	91	111432	18.7459	ug/l	97
89)	p-Ethyltoluene	7.350	105	179196	19.5201	ug/l	99
90)	4-Chlorotoluene	7.418	91	110160	17.9825	ug/l	99
91)	n-Propylbenzene	7.292	91	211056	19.5371	ug/l	96
92)	Bromobenzene	7.270	77	101252	18.4709	ug/l	95
93)	1,3,5-Trimethylbenzene	7.376	105	144952	18.7847	ug/l	98
94)	Butyl methacrylate	7.379	41	36513m	18.7198	ug/l	
95)	t-Butylbenzene	7.572	119	134390	18.7455	ug/l	97
96)	1,2,4-Trimethylbenzene	7.595	105	149487	18.7101	ug/l	99
97)	sec-Butylbenzene	7.694	105	166220	19.3518	ug/l	100
98)	4-Isopropyltoluene	7.765	119	139137	19.0944	ug/l	99
99)	n-Butylbenzene	8.000	91	141701	19.1884	ug/l	98
100)	p-Diethylbenzene	7.984	119	75072	19.2861	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.440	119	101212	18.7589	ug/l	98
102)	1,2-Dibromo-3-Chloropr...	8.495	157	8307	18.5212	ug/l	96
103)	Camphor	8.939	95	28029	159.6956	ug/l	98
104)	Hexachlorobutadiene	9.074	225	10675	18.4413	ug/l	98
105)	1,2,4-Trichlorobenzene	8.990	180	26197	16.6592	ug/l	98
106)	1,2,3-Trichlorobenzene	9.292	180	16597	16.1064	ug/l	97
107)	Naphthalene	9.148	128	63726	16.4646	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 11M82710.D\data.ms
Quant QT Reviewed
SampleID : MBS
Data File: 11M82710.D
Acq On : 09/14/20 17:55
Operator : WP
Sam Mult : 1 Vial# : 14
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 18:13
Qt Upd On: 09/14/20 16:18
Time-->
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Abundance
TIC: 11M82710.D\data.ms
Time-->
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
Abundance
TIC: 11M82710.D\data.ms
Time-->
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

Data File	Sample ID:	Analysis Date
Spike or Dup: 6M132541.D	MBS89300	9/17/2020 1:39:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	63.7839	0	50	128	20	130
Dichlorodifluoromethane	1	59.0268	0	50	118	20	130
Chloromethane	1	57.3341	0	50	115	20	130
Bromomethane	1	53.6719	0	50	107	20	130
Vinyl Chloride	1	56.3629	0	50	113	20	130
Chloroethane	1	56.8226	0	50	114	20	130
Trichlorofluoromethane	1	58.6156	0	50	117	20	130
Ethyl ether	1	56.8643	0	50	114	50	130
Furan	1	52.7423	0	50	105	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	65.3251	0	50	131*	50	130
Methylene Chloride	1	58.8633	0	50	118	50	130
Acrolein	1	311.2093	0	200	156*	20	130
Acrylonitrile	1	49.746	0	50	99	20	130
Iodomethane	1	74.4734	0	50	149*	50	130
Acetone	1	224.7024	0	200	112	20	130
Carbon Disulfide	1	58.0752	0	50	116	50	130
t-Butyl Alcohol	1	167.8476	0	200	84	20	130
n-Hexane	1	67.5732	0	50	135*	50	130
Di-isopropyl-ether	1	63.7641	0	50	128	50	130
1,1-Dichloroethene	1	62.0946	0	50	124	50	130
Methyl Acetate	1	65.8467	0	50	132*	50	130
Methyl-t-butyl ether	1	65.5948	0	50	131*	50	130
1,1-Dichloroethane	1	58.923	0	50	118	50	130
trans-1,2-Dichloroethene	1	60.9174	0	50	122	50	130
Ethyl-t-butyl ether	1	55.3283	0	50	111	50	130
cis-1,2-Dichloroethene	1	60.3252	0	50	121	50	130
Bromochloromethane	1	60.0202	0	50	120	50	130
2,2-Dichloropropane	1	66.8187	0	50	134*	50	130
Ethyl acetate	1	51.6395	0	50	103	50	130
1,4-Dioxane	1	1853.394	0	2500	74	50	130
1,1-Dichloropropene	1	62.2675	0	50	125	50	130
Chloroform	1	61.0647	0	50	122	50	130
Cyclohexane	1	62.0593	0	50	124	50	130
1,2-Dichloroethane	1	63.2818	0	50	127	50	130
2-Butanone	1	48.2845	0	50	97	20	130
1,1,1-Trichloroethane	1	61.3151	0	50	123	50	130
Carbon Tetrachloride	1	64.7686	0	50	130	50	130
Vinyl Acetate	1	47.1166	0	50	94	50	130
Bromodichloromethane	1	63.7391	0	50	127	50	130
Methylcyclohexane	1	60.8754	0	50	122	50	130
Dibromomethane	1	60.1007	0	50	120	50	130
1,2-Dichloropropane	1	58.2902	0	50	117	50	130
Trichloroethene	1	60.8362	0	50	122	50	130
Benzene	1	60.1494	0	50	120	50	130
tert-Amyl methyl ether	1	62.9327	0	50	126	50	130
Iso-propylacetate	1	44.1683	0	50	88	50	130
Methyl methacrylate	1	43.8225	0	50	88	50	130
Dibromochloromethane	1	49.8745	0	50	100	50	130
2-Chloroethylvinylether	1	103.7397	0	50	207*	50	130
cis-1,3-Dichloropropene	1	48.7084	0	50	97	50	130
trans-1,3-Dichloropropene	1	49.5952	0	50	99	50	130
Ethyl methacrylate	1	46.0418	0	50	92	50	130
1,1,2-Trichloroethane	1	48.6557	0	50	97	50	130
1,2-Dibromoethane	1	49.379	0	50	99	50	130
1,3-Dichloropropane	1	47.7109	0	50	95	50	130
4-Methyl-2-Pentanone	1	40.3707	0	50	81	20	130
2-Hexanone	1	36.9077	0	50	74	20	130
Tetrachloroethene	1	48.3149	0	50	97	50	130
Toluene	1	43.9943	0	50	88	50	130
1,1,1,2-Tetrachloroethane	1	47.6696	0	50	95	50	130
Chlorobenzene	1	44.9722	0	50	90	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

Method: 8260C	Matrix: Soil	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	41.804	0	50	84	50	130
n-Amyl acetate	1	42.0005	0	50	84	50	130
Bromoform	**1**	**67.9123**	**0**	**50**	**136***	**20**	**130**
Ethylbenzene	**1**	**42.5142**	**0**	**50**	**85**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**41.5211**	**0**	**50**	**83**	**50**	**130**
Styrene	**1**	**41.0562**	**0**	**50**	**82**	**50**	**130**
m&p-Xylenes	**1**	**82.9624**	**0**	**100**	**83**	**50**	**130**
o-Xylene	**1**	**40.6001**	**0**	**50**	**81**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	42.8888	0	50	86	20	130
1,3-Dichlorobenzene	**1**	**42.3687**	**0**	**50**	**85**	**50**	**130**
1,4-Dichlorobenzene	**1**	**40.2403**	**0**	**50**	**80**	**50**	**130**
1,2-Dichlorobenzene	**1**	**42.0393**	**0**	**50**	**84**	**50**	**130**
Isopropylbenzene	**1**	**41.5715**	**0**	**50**	**83**	**50**	**130**
Cyclohexanone	1	128.3428	0	250	51	50	130
Camphene	1	42.9626	0	50	86	50	130
1,2,3-Trichloropropane	**1**	**39.937**	**0**	**50**	**80**	**50**	**130**
2-Chlorotoluene	1	43.3241	0	50	87	50	130
p-Ethyltoluene	1	41.1058	0	50	82	50	130
4-Chlorotoluene	1	45.4822	0	50	91	50	130
n-Propylbenzene	**1**	**43.1704**	**0**	**50**	**86**	**50**	**130**
Bromobenzene	1	41.5058	0	50	83	50	130
1,3,5-Trimethylbenzene	**1**	**47.0482**	**0**	**50**	**94**	**50**	**130**
Butyl methacrylate	1	42.3338	0	50	85	50	130
t-Butylbenzene	**1**	**42.6301**	**0**	**50**	**85**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**42.996**	**0**	**50**	**86**	**50**	**130**
sec-Butylbenzene	**1**	**44.8208**	**0**	**50**	**90**	**50**	**130**
4-Isopropyltoluene	**1**	**44.7488**	**0**	**50**	**89**	**50**	**130**
n-Butylbenzene	**1**	**45.2423**	**0**	**50**	**90**	**50**	**130**
p-Diethylbenzene	1	44.2677	0	50	89	50	130
1,2,4,5-Tetramethylbenzene	1	44.2703	0	50	89	50	130
1,2-Dibromo-3-Chloropropane	1	36.8726	0	50	74	50	130
Camphor	1	474.0762	0	500	95	50	130
Hexachlorobutadiene	1	42.148	0	50	84	50	130
1,2,4-Trichlorobenzene	1	41.4291	0	50	83	50	130
1,2,3-Trichlorobenzene	1	40.7301	0	50	81	50	130
Naphthalene	1	37.1703	0	50	74	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Quantitation Report (QT Reviewed)

SampleID : MBS
Data File: 6M132541.D
Acq On : 09/17/20 13:39

Operator : wp
Sam Mult : 1 Vial# : 11
Misc : S,5G

Qt Meth : 6M_S0801.M
Qt On : 09/17/20 14:54
Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\09-17-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.129	96	280964	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	303747	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	198012	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	83311	33.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 111.20%			
39) 1,2-Dichloroethane-d4	4.934	67	41205	30.60	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.00%			
66) Toluene-d8	5.983	98	315731	25.19	ug/l	0.00
Spiked Amount 30.000			Recovery = 83.97%			
76) Bromofluorobenzene	7.397	174	146133	28.04	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.47%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	188451	63.7839	ug/l	94
6) Dichlorodifluoromethane	1.636	85	113600	59.0268	ug/l	97
7) Chloromethane	1.813	50	136664	57.3341	ug/l	97
8) Bromomethane	2.233	94	95050	53.6719	ug/l	94
9) Vinyl Chloride	1.916	62	155604	56.3629	ug/l	96
10) Chloroethane	2.325	64	106739	56.8226	ug/l	100
11) Trichlorofluoromethane	2.556	101	266394	58.6156	ug/l	99
12) Ethyl ether	2.806	59	95113	56.8643	ug/l	99
13) Furan	2.843	39	198437	52.7423	ug/l	97
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	112961	65.3251	ug/l	95
15) Methylene Chloride	3.434	84	149597	58.8633	ug/l	95
16) Acrolein	2.922	56	102053	311.2093	ug/l	93
17) Acrylonitrile	3.642	53	49422	49.7460	ug/l	94
18) Iodomethane	3.160	142	163240	74.4734	ug/l	98
19) Acetone	3.056	43	214186	224.7024	ug/l	95
20) Carbon Disulfide	3.233	76	368109	58.0752	ug/l	100
21) t-Butyl Alcohol	3.508	59	77543	167.8476	ug/l	92
22) n-Hexane	3.910	57	166851	67.5732	ug/l	96
23) Di-isopropyl-ether	4.062	45	375107	63.7641	ug/l	100
24) 1,1-Dichloroethene	3.020	61	197653	62.0946	ug/l	99
25) Methyl Acetate	3.337	43	129355	65.8467	ug/l	100
26) Methyl-t-butyl ether	3.672	73	330470	65.5948	ug/l	97
27) 1,1-Dichloroethane	4.026	63	242896	58.9230	ug/l	100
28) trans-1,2-Dichloroethene	3.678	96	145964	60.9174	ug/l	98
29) Ethyl-t-butyl ether	4.324	59	356357	55.3283	ug/l	100
30) cis-1,2-Dichloroethene	4.440	61	251481	60.3252	ug/l	94
31) Bromochloromethane	4.593	49	115113	60.0202	ug/l	93
32) 2,2-Dichloropropane	4.446	77	224460	66.8187	ug/l	99
33) Ethyl acetate	4.465	43	152370m	51.6395	ug/l	
34) 1,4-Dioxane	5.519	88	95963	1853.3939	ug/l	96
35) 1,1-Dichloropropene	4.855	75	209464	62.2675	ug/l	99
36) Chloroform	4.635	83	265686	61.0647	ug/l	100
38) Cyclohexane	4.800	56	213778	62.0593	ug/l	97
40) 1,2-Dichloroethane	4.977	62	205815	63.2818	ug/l	99
41) 2-Butanone	4.440	43	67329m	48.2845	ug/l	
42) 1,1,1-Trichloroethane	4.763	97	238823	61.3151	ug/l	92
43) Carbon Tetrachloride	4.861	117	215408	64.7686	ug/l	96
44) Vinyl Acetate	4.056	43	330790	47.1166	ug/l	100
45) Bromodichloromethane	5.593	83	194458	63.7391	ug/l	96
46) Methylcyclohexane	5.446	83	215002	60.8754	ug/l	95
47) Dibromomethane	5.525	174	95445	60.1007	ug/l	97
48) 1,2-Dichloropropane	5.458	63	141286	58.2902	ug/l	96
49) Trichloroethene	5.330	130	167111	60.8362	ug/l	96
50) Benzene	4.977	78	570459	60.1494	ug/l	100
51) tert-Amyl methyl ether	5.019	73	348896	62.9327	ug/l	98
53) Iso-propylacetate	4.977	43	233649	44.1683	ug/l	97
54) Methyl methacrylate	5.483	41	113260	43.8225	ug/l	95
55) Dibromochloromethane	6.446	129	142178	49.8745	ug/l	97
56) 2-Chloroethylvinylether	5.733	63	83407	103.7397	ug/l	99
57) cis-1,3-Dichloropropene	5.830	75	220502	48.7084	ug/l	97
58) trans-1,3-Dichloropropene	6.117	75	196538	49.5952	ug/l	98
59) Ethyl methacrylate	6.135	41	118097	46.0418	ug/l	98
60) 1,1,2-Trichloroethane	6.220	97	126884	48.6557	ug/l	93
61) 1,2-Dibromoethane	6.525	107	133670	49.3790	ug/l	100
62) 1,3-Dichloropropane	6.318	76	220157	47.7109	ug/l	98
63) 4-Methyl-2-Pentanone	5.897	43	143044	40.3707	ug/l	99
64) 2-Hexanone	6.330	43	103017	36.9077	ug/l	93
65) Tetrachloroethene	6.318	164	135971	48.3149	ug/l	97
67) Toluene	6.019	92	361311	43.9943	ug/l	98

Quantitation Report (QT Reviewed)

SampleID : MBS
Data File: 6M132541.D
Acq On : 09/17/20 13:39

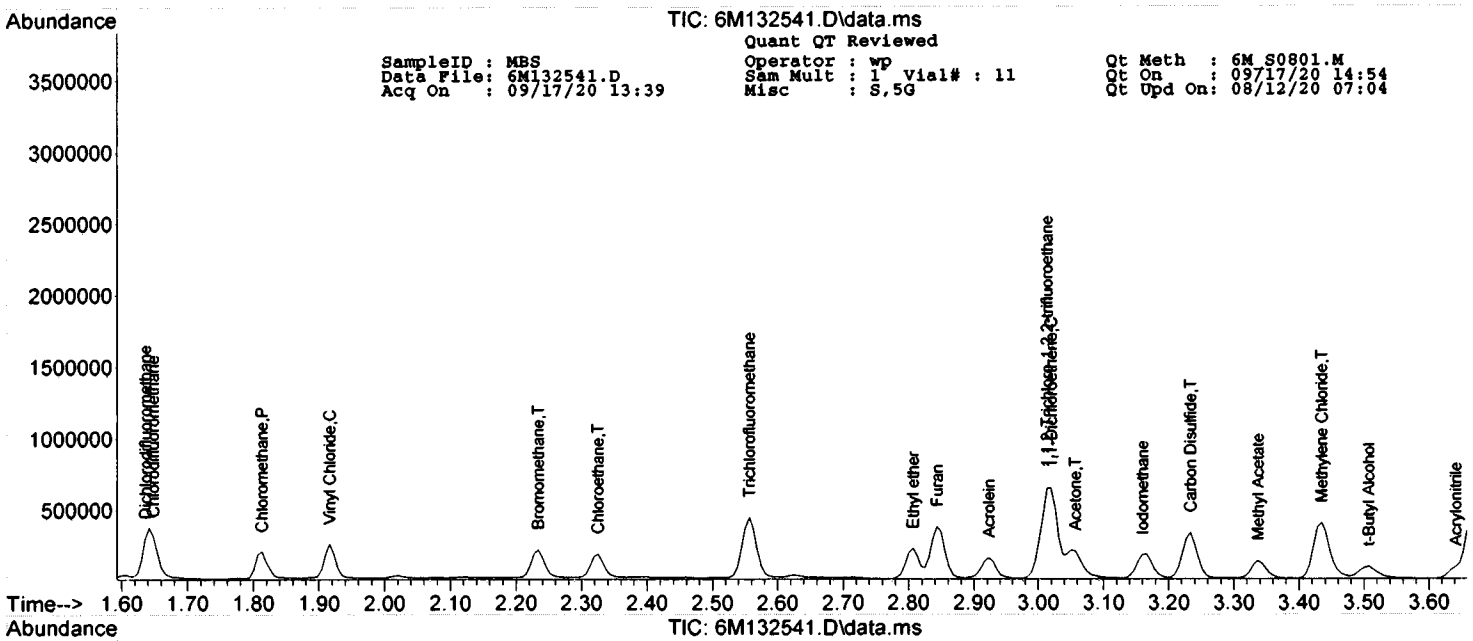
Operator : wp
Sam Mult : 1 Vial# : 11
Misc : S,5G

Qt Meth : 6M_S0801.M
Qt On : 09/17/20 14:54
Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\09-17-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	139873	47.6696	ug/l	96
69)	Chlorobenzene	6.781	112	403604	44.9722	ug/l	97
71)	n-Butyl acrylate	7.019	55	236459	41.8040	ug/l	99
72)	n-Amyl acetate	7.135	43	224632	42.0005	ug/l	100
73)	Bromoform	7.232	173	97622	67.9123	ug/l	95
74)	Ethylbenzene	6.818	106	185947	42.5142	ug/l	95
75)	1,1,2,2-Tetrachloroethane	7.446	83	175125	41.5211	ug/l	96
77)	Styrene	7.104	104	444253	41.0562	ug/l	97
78)	m&p-Xylenes	6.879	106	544309	82.9624	ug/l	97
79)	o-Xylene	7.098	106	262654	40.6001	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.470	53	87991	42.8888	ug/l	94
81)	1,3-Dichlorobenzene	8.019	146	343021	42.3687	ug/l	98
82)	1,4-Dichlorobenzene	8.068	146	336085	40.2403	ug/l	98
83)	1,2-Dichlorobenzene	8.293	146	317873	42.0393	ug/l	98
84)	Isopropylbenzene	7.293	105	698955	41.5715	ug/l	99
85)	Cyclohexanone	7.367	55	29801	128.3428	ug/l	95
86)	Camphene	7.470	93	262864	42.9626	ug/l	98
87)	1,2,3-Trichloropropane	7.482	75	217277	39.9370	ug/l	99
88)	2-Chlorotoluene	7.592	91	436572	43.3241	ug/l	99
89)	p-Ethyltoluene	7.580	105	709247	41.1058	ug/l	93
90)	4-Chlorotoluene	7.647	91	449525	45.4822	ug/l	98
91)	n-Propylbenzene	7.519	91	851331	43.1704	ug/l	100
92)	Bromobenzene	7.495	77	429201	41.5058	ug/l	99
93)	1,3,5-Trimethylbenzene	7.604	105	568370	47.0482	ug/l	90
94)	Butyl methacrylate	7.610	41	197014	42.3338	ug/l	94
95)	t-Butylbenzene	7.806	119	585922	42.6301	ug/l	100
96)	1,2,4-Trimethylbenzene	7.830	105	586370	42.9960	ug/l	98
97)	sec-Butylbenzene	7.927	105	784009	44.8208	ug/l	99
98)	4-Isopropyltoluene	8.001	119	656642	44.7488	ug/l	99
99)	n-Butylbenzene	8.238	91	756803	45.2423	ug/l	99
100)	p-Diethylbenzene	8.220	119	385212	44.2677	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.683	119	544570	44.2703	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.738	157	41182	36.8726	ug/l	99
103)	Camphor	9.177	95	180990	474.0762	ug/l	98
104)	Hexachlorobutadiene	9.324	225	128123	42.1480	ug/l	99
105)	1,2,4-Trichlorobenzene	9.238	180	227169	41.4291	ug/l	98
106)	1,2,3-Trichlorobenzene	9.537	180	203251	40.7301	ug/l	99
107)	Naphthalene	9.397	128	510245	37.1703	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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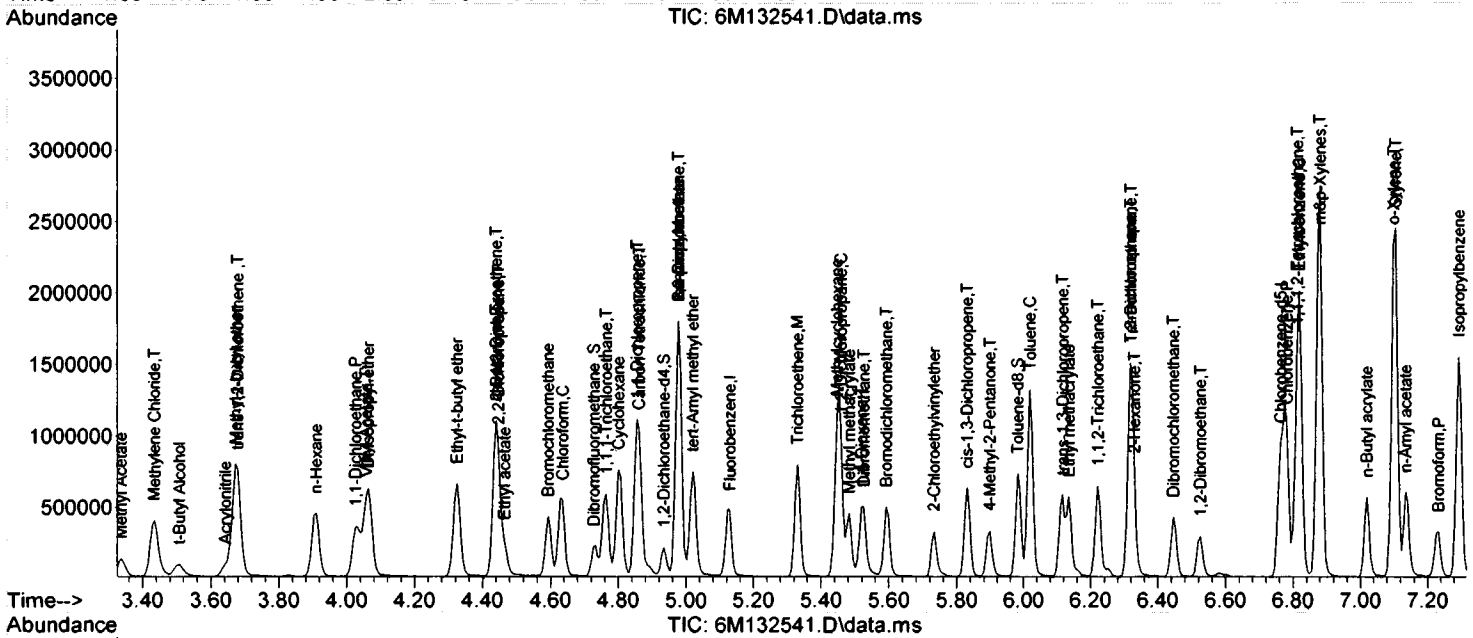
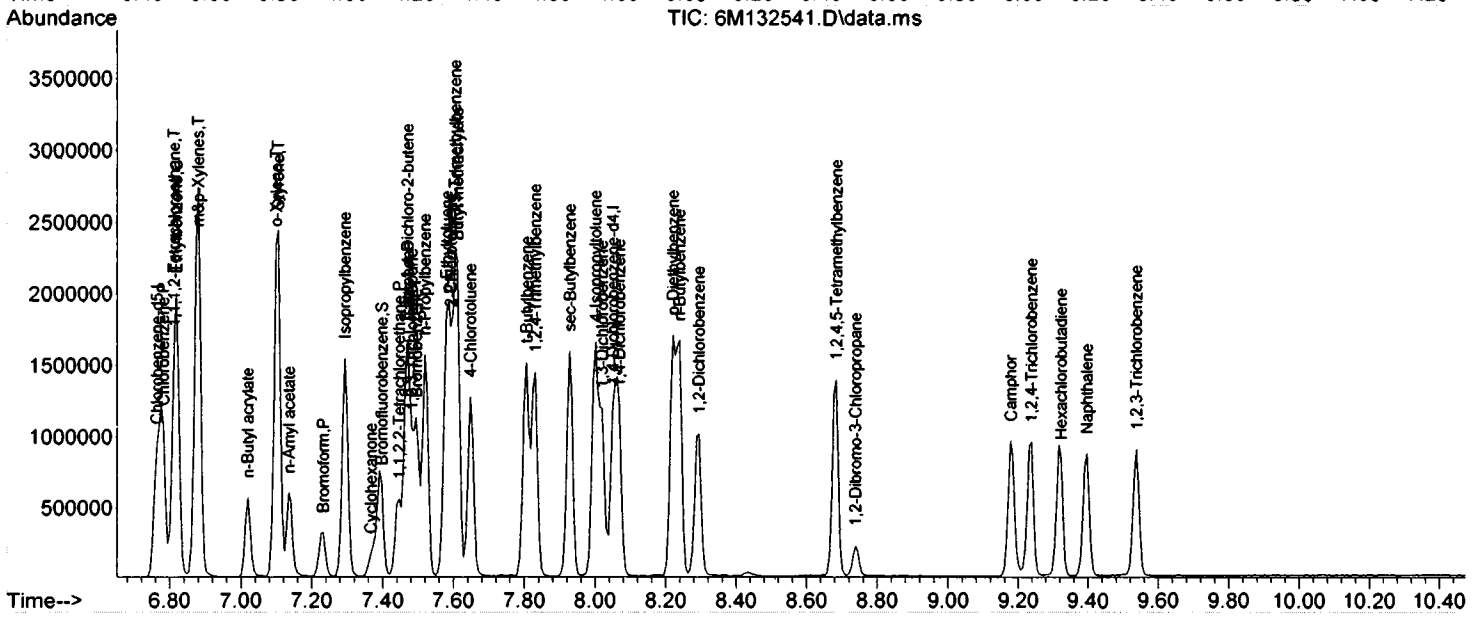
Quant QT Reviewed
SampleID : MBS
Data File: 6M132541.D
Acq On : 09/17/20 13:39
Operator : wp
Sam Mult : 1 Vial# : 11
Misc : S,5G
Qt Meth : 6M_S0801.M
Qt On : 09/17/20 14:54
Qt Upd On: 08/12/20 07:04
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 6M132541.D\data.ms
Methyl acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
1,1-Dichloroethane,P
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Dibromofluoromethane,S
1,1,1-Trichloroethane,T
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Methyl methacrylate
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Ethylbenzene,T
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 6M132541.D\data.ms
Chlorobenzene-d5,I
Ethylbenzene,T
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
1,1,2,2-Tetrachloroethane,P
1,4-Dichloro-2-butene
n-Propylbenzene
4-Chlorotoluene
sec-Butylbenzene
1,3-Dichlorobenzene-d4,I
n-Diethylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M132542.D	AD19283-006(MS)	9/17/2020 2:00:00 PM
Non Spike(If applicable):	6M132540.D	AD19283-006	9/17/2020 1:19:00 PM
Inst Blank(If applicable):			

Method: 8260C | Matrix: Soil | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	64.7742	0	50	130	20	130
Dichlorodifluoromethane	1	45.1906	0	50	90	20	130
Chloromethane	1	44.7465	0	50	89	20	130
Bromomethane	1	44.0331	0	50	88	20	130
Vinyl Chloride	1	46.093	0	50	92	20	130
Chloroethane	1	45.0962	0	50	90	20	130
Trichlorofluoromethane	1	46.1301	0	50	92	20	130
Ethyl ether	1	46.398	0	50	93	50	130
Furan	1	42.7872	0	50	86	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	49.2	0	50	98	50	130
Methylene Chloride	1	44.51	0	50	89	50	130
Acrolein	1	143.4404	0	200	72	20	130
Acrylonitrile	1	35.8528	0	50	72	20	130
Iodomethane	1	58.7058	0	50	117	50	130
Acetone	1	174.1374	0	200	87	20	130
Carbon Disulfide	1	43.0984	0	50	86	50	130
t-Butyl Alcohol	1	129.6621	0	200	65	20	130
n-Hexane	1	47.0845	0	50	94	50	130
Di-isopropyl-ether	1	50.6189	0	50	101	50	130
1,1-Dichloroethene	1	48.3692	0	50	97	50	130
Methyl Acetate	1	60.7803	0	50	122	50	130
Methyl-t-butyl ether	1	54.096	0	50	108	50	130
1,1-Dichloroethane	1	47.5492	0	50	95	50	130
trans-1,2-Dichloroethene	1	46.0283	0	50	92	50	130
Ethyl-t-butyl ether	1	46.8355	0	50	94	50	130
cis-1,2-Dichloroethene	1	46.8461	0	50	94	50	130
Bromochloromethane	1	49.1152	0	50	98	50	130
2,2-Dichloropropane	1	52.6942	0	50	105	50	130
Ethyl acetate	1	29.6919	0	50	59	50	130
1,4-Dioxane	1	1393.228	0	2500	56	50	130
1,1-Dichloropropene	1	47.4642	0	50	95	50	130
Chloroform	1	49.2247	0	50	98	50	130
Cyclohexane	1	47.2544	0	50	95	50	130
1,2-Dichloroethane	1	50.5993	0	50	101	50	130
2-Butanone	1	35.0116	0	50	70	20	130
1,1,1-Trichloroethane	1	48.393	0	50	97	50	130
Carbon Tetrachloride	1	49.2225	0	50	98	50	130
Vinyl Acetate	1	26.7753	0	50	54	50	130
Bromodichloromethane	1	51.4302	0	50	103	50	130
Methylcyclohexane	1	43.6548	0	50	87	50	130
Dibromomethane	1	51.2331	0	50	102	50	130
1,2-Dichloropropane	1	46.4778	0	50	93	50	130
Trichloroethene	1	47.2894	0	50	95	50	130
Benzene	1	47.2684	0	50	95	50	130
tert-Amyl methyl ether	1	51.0368	0	50	102	50	130
Iso-propylacetate	1	32.0845	0	50	64	50	130
Methyl methacrylate	1	50.658	0	50	101	50	130
Dibromochloromethane	1	40.5709	0	50	81	50	130
2-Chloroethylvinylether	1	85.9316	0	50	172*	50	130
cis-1,3-Dichloropropene	1	39.136	0	50	78	50	130
trans-1,3-Dichloropropene	1	40.2661	0	50	81	50	130
Ethyl methacrylate	1	29.9644	0	50	60	50	130
1,1,2-Trichloroethane	1	39.9355	0	50	80	50	130
1,2-Dibromoethane	1	39.5143	0	50	79	50	130
1,3-Dichloropropane	1	39.0032	0	50	78	50	130
4-Methyl-2-Pentanone	1	32.2657	0	50	65	20	130
2-Hexanone	1	29.902	0	50	60	20	130
Tetrachloroethene	1	36.0758	0	50	72	50	130
Toluene	1	35.197	0	50	70	50	130
1,1,1,2-Tetrachloroethane	1	38.7295	0	50	77	50	130
Chlorobenzene	1	34.966	0	50	70	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

Method: 8260C	Matrix: Soil	QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	26.4058	0	50	53	50	130
n-Amyl acetate	1	20.8648	0	50	42*	50	130
Bromoform	**1**	**54.2103**	**0**	**50**	**108**	**20**	**130**
Ethylbenzene	**1**	**34.0166**	**0**	**50**	**68**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**33.8868**	**0**	**50**	**68**	**50**	**130**
Styrene	**1**	**31.3754**	**0**	**50**	**63**	**50**	**130**
m&p-Xylenes	**1**	**63.8587**	**0**	**100**	**64**	**50**	**130**
o-Xylene	**1**	**31.5526**	**0**	**50**	**63**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	30.8125	0	50	62	20	130
1,3-Dichlorobenzene	**1**	**30.1803**	**0**	**50**	**60**	**50**	**130**
1,4-Dichlorobenzene	**1**	**29.3631**	**0**	**50**	**59**	**50**	**130**
1,2-Dichlorobenzene	**1**	**30.2778**	**0**	**50**	**61**	**50**	**130**
Isopropylbenzene	**1**	**32.0661**	**0**	**50**	**64**	**50**	**130**
Cyclohexanone	1	103.4941	0	250	41*	50	130
Camphene	1	27.1146	0	50	54	50	130
1,2,3-Trichloropropane	**1**	**32.0142**	**0**	**50**	**64**	**50**	**130**
2-Chlorotoluene	1	33.4725	0	50	67	50	130
p-Ethyltoluene	1	30.7714	0	50	62	50	130
4-Chlorotoluene	1	32.9825	0	50	66	50	130
n-Propylbenzene	**1**	**32.1153**	**0**	**50**	**64**	**50**	**130**
Bromobenzene	1	30.791	0	50	62	50	130
1,3,5-Trimethylbenzene	**1**	**35.161**	**0**	**50**	**70**	**50**	**130**
Butyl methacrylate	1	27.5838	0	50	55	50	130
t-Butylbenzene	**1**	**31.0009**	**0**	**50**	**62**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**32.2028**	**0**	**50**	**64**	**50**	**130**
sec-Butylbenzene	**1**	**30.2751**	**0**	**50**	**61**	**50**	**130**
4-Isopropyltoluene	**1**	**30.6962**	**0**	**50**	**61**	**50**	**130**
n-Butylbenzene	**1**	**29.2736**	**0**	**50**	**59**	**50**	**130**
p-Diethylbenzene	1	29.6348	0	50	59	50	130
1,2,4,5-Tetramethylbenzene	1	29.6141	0	50	59	50	130
1,2-Dibromo-3-Chloropropane	1	27.8283	0	50	56	50	130
Camphor	1	401.4661	0	500	80	50	130
Hexachlorobutadiene	1	18.6257	0	50	37*	50	130
1,2,4-Trichlorobenzene	1	23.0528	0	50	46*	50	130
1,2,3-Trichlorobenzene	1	21.3084	0	50	43*	50	130
Naphthalene	1	23.178	0	50	46*	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M132543.D	AD19283-006(MSD)	9/17/2020 2:21:00 PM
Non Spike(If applicable):	6M132540.D	AD19283-006	9/17/2020 1:19:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	53.5868	0	50	107	20	130
Dichlorodifluoromethane	1	56.2445	0	50	112	20	130
Chloromethane	1	55.8238	0	50	112	20	130
Bromomethane	1	55.9258	0	50	112	20	130
Vinyl Chloride	1	57.2243	0	50	114	20	130
Chloroethane	1	56.6026	0	50	113	20	130
Trichlorofluoromethane	1	58.1494	0	50	116	20	130
Ethyl ether	1	56.4034	0	50	113	50	130
Furan	1	53.6025	0	50	107	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	61.9143	0	50	124	50	130
Methylene Chloride	1	57.1644	0	50	114	50	130
Acrolein	1	190.1136	0	200	95	20	130
Acrylonitrile	1	41.7692	0	50	84	20	130
Iodomethane	1	72.4683	0	50	145*	50	130
Acetone	1	198.5386	0	200	99	20	130
Carbon Disulfide	1	52.9301	0	50	106	50	130
t-Butyl Alcohol	1	144.6204	0	200	72	20	130
n-Hexane	1	61.2966	0	50	123	50	130
Di-isopropyl-ether	1	63.4106	0	50	127	50	130
1,1-Dichloroethene	1	59.8916	0	50	120	50	130
Methyl Acetate	1	73.572	0	50	147*	50	130
Methyl-t-butyl ether	1	67.5456	0	50	135*	50	130
1,1-Dichloroethane	1	60.1723	0	50	120	50	130
trans-1,2-Dichloroethene	1	57.0738	0	50	114	50	130
Ethyl-t-butyl ether	1	58.7923	0	50	118	50	130
cis-1,2-Dichloroethene	1	59.1104	0	50	118	50	130
Bromochloromethane	1	60.479	0	50	121	50	130
2,2-Dichloropropane	1	66.4509	0	50	133*	50	130
Ethyl acetate	1	38.0396	0	50	76	50	130
1,4-Dioxane	1	1665.665	0	2500	67	50	130
1,1-Dichloropropene	1	60.8343	0	50	122	50	130
Chloroform	1	60.5195	0	50	121	50	130
Cyclohexane	1	59.0496	0	50	118	50	130
1,2-Dichloroethane	1	63.7527	0	50	128	50	130
2-Butanone	1	41.6932	0	50	83	20	130
1,1,1-Trichloroethane	1	61.3767	0	50	123	50	130
Carbon Tetrachloride	1	63.3933	0	50	127	50	130
Vinyl Acetate	1	34.9941	0	50	70	50	130
Bromodichloromethane	1	63.756	0	50	128	50	130
Methylcyclohexane	1	54.9876	0	50	110	50	130
Dibromomethane	1	63.2225	0	50	126	50	130
1,2-Dichloropropane	1	59.2685	0	50	119	50	130
Trichloroethene	1	59.1943	0	50	118	50	130
Benzene	1	60.7508	0	50	122	50	130
tert-Amyl methyl ether	1	64.623	0	50	129	50	130
Iso-propylacetate	1	39.2526	0	50	79	50	130
Methyl methacrylate	1	60.0027	0	50	120	50	130
Dibromochloromethane	1	51.6125	0	50	103	50	130
2-Chloroethylvinylether	1	105.3625	0	50	211*	50	130
cis-1,3-Dichloropropene	1	48.2874	0	50	97	50	130
trans-1,3-Dichloropropene	1	49.1696	0	50	98	50	130
Ethyl methacrylate	1	38.9701	0	50	78	50	130
1,1,2-Trichloroethane	1	48.9709	0	50	98	50	130
1,2-Dibromoethane	1	47.4204	0	50	95	50	130
1,3-Dichloropropane	1	48.6332	0	50	97	50	130
4-Methyl-2-Pentanone	1	37.6965	0	50	75	20	130
2-Hexanone	1	32.6901	0	50	65	20	130
Tetrachloroethene	1	46.7026	0	50	93	50	130
Toluene	1	44.1482	0	50	88	50	130
1,1,1,2-Tetrachloroethane	1	48.5604	0	50	97	50	130
Chlorobenzene	1	44.2936	0	50	89	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

Method: 8260C	Matrix: Soil	QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	35.1896	0	50	70	50	130
n-Amyl acetate	1	28.5513	0	50	57	50	130
Bromoform	**1**	**69.1723**	**0**	**50**	**138***	**20**	**130**
Ethylbenzene	**1**	**44.5852**	**0**	**50**	**89**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**42.382**	**0**	**50**	**85**	**50**	**130**
Styrene	**1**	**41.5523**	**0**	**50**	**83**	**50**	**130**
m&p-Xylenes	**1**	**84.8346**	**0**	**100**	**85**	**50**	**130**
o-Xylene	**1**	**41.8252**	**0**	**50**	**84**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	39.0256	0	50	78	20	130
1,3-Dichlorobenzene	**1**	**39.5706**	**0**	**50**	**79**	**50**	**130**
1,4-Dichlorobenzene	**1**	**38.1803**	**0**	**50**	**76**	**50**	**130**
1,2-Dichlorobenzene	**1**	**40.0448**	**0**	**50**	**80**	**50**	**130**
Isopropylbenzene	**1**	**42.1391**	**0**	**50**	**84**	**50**	**130**
Cyclohexanone	1	115.1208	0	250	46*	50	130
Camphene	1	36.8254	0	50	74	50	130
1,2,3-Trichloropropane	**1**	**39.5663**	**0**	**50**	**79**	**50**	**130**
2-Chlorotoluene	1	43.119	0	50	86	50	130
p-Ethyltoluene	1	40.5838	0	50	81	50	130
4-Chlorotoluene	1	43.5239	0	50	87	50	130
n-Propylbenzene	**1**	**42.394**	**0**	**50**	**85**	**50**	**130**
Bromobenzene	1	40.6803	0	50	81	50	130
1,3,5-Trimethylbenzene	**1**	**45.5383**	**0**	**50**	**91**	**50**	**130**
Butyl methacrylate	1	38.912	0	50	78	50	130
t-Butylbenzene	**1**	**41.4871**	**0**	**50**	**83**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**42.6087**	**0**	**50**	**85**	**50**	**130**
sec-Butylbenzene	**1**	**41.3353**	**0**	**50**	**83**	**50**	**130**
4-Isopropyltoluene	**1**	**41.3754**	**0**	**50**	**83**	**50**	**130**
n-Butylbenzene	**1**	**39.7442**	**0**	**50**	**79**	**50**	**130**
p-Diethylbenzene	1	40.4447	0	50	81	50	130
1,2,4,5-Tetramethylbenzene	1	39.7031	0	50	79	50	130
1,2-Dibromo-3-Chloropropane	1	33.1673	0	50	66	50	130
Camphor	1	464.3459	0	500	93	50	130
Hexachlorobutadiene	1	23.9836	0	50	48*	50	130
1,2,4-Trichlorobenzene	1	30.2474	0	50	60	50	130
1,2,3-Trichlorobenzene	1	27.3776	0	50	55	50	130
Naphthalene	1	28.712	0	50	57	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89300

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M132543.D	AD19283-006(MSD)	9/17/2020 2:21:00 PM
Duplicate(If applicable):	6M132542.D	AD19283-006(MS)	9/17/2020 2:00:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	53.5868	64.7742	19	30
Dichlorodifluoromethane	1	56.2445	45.1906	22	30
Chloromethane	1	55.8238	44.7465	22	30
Bromomethane	1	55.9258	44.0331	24	30
Vinyl Chloride	1	57.2243	46.093	22	40
Chloroethane	1	56.6026	45.0962	23	30
Trichlorofluoromethane	1	58.1494	46.1301	23	30
Ethyl ether	1	56.4034	46.398	19	30
Furan	1	53.6025	42.7872	22	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	61.9143	49.2	23	30
Methylene Chloride	1	57.1644	44.51	25	30
Acrolein	1	190.1136	143.4404	28	30
Acrylonitrile	1	41.7692	35.8528	15	30
Iodomethane	1	72.4683	58.7058	21	30
Acetone	1	198.5386	174.1374	13	30
Carbon Disulfide	1	52.9301	43.0984	20	30
t-Butyl Alcohol	1	144.6204	129.6621	11	30
n-Hexane	1	61.2966	47.0845	26	30
Di-isopropyl-ether	1	63.4106	50.6189	22	30
1,1-Dichloroethene	1	59.8916	48.3692	21	40
Methyl Acetate	1	73.572	60.7803	19	30
Methyl-t-butyl ether	1	67.5456	54.096	22	30
1,1-Dichloroethane	1	60.1723	47.5492	23	40
trans-1,2-Dichloroethene	1	57.0738	46.0283	21	30
Ethyl-t-butyl ether	1	58.7923	46.8355	23	30
cis-1,2-Dichloroethene	1	59.1104	46.8461	23	30
Bromochloromethane	1	60.479	49.1152	21	30
2,2-Dichloropropane	1	66.4509	52.6942	23	30
Ethyl acetate	1	38.0396	29.6919	25	30
1,4-Dioxane	1	1665.665	1393.228	18	30
1,1-Dichloropropene	1	60.8343	47.4642	25	30
Chloroform	1	60.5195	49.2247	21	40
Cyclohexane	1	59.0496	47.2544	22	30
1,2-Dichloroethane	1	63.7527	50.5993	23	40
2-Butanone	1	41.6932	35.0116	17	40
1,1,1-Trichloroethane	1	61.3767	48.393	24	30
Carbon Tetrachloride	1	63.3933	49.2225	25	40
Vinyl Acetate	1	34.9941	26.7753	27	30
Bromodichloromethane	1	63.756	51.4302	21	30
Methylcyclohexane	1	54.9876	43.6548	23	30
Dibromomethane	1	63.2225	51.2331	21	30
1,2-Dichloropropane	1	59.2685	46.4778	24	30
Trichloroethene	1	59.1943	47.2894	22	40
Benzene	1	60.7508	47.2684	25	40
tert-Amyl methyl ether	1	64.623	51.0368	23	30
Iso-propylacetate	1	39.2526	32.0845	20	30
Methyl methacrylate	1	60.0027	50.658	17	30
Dibromochloromethane	1	51.6125	40.5709	24	30
2-Chloroethylvinylether	1	105.3625	85.9316	20	30
cis-1,3-Dichloropropene	1	48.2874	39.136	21	30
trans-1,3-Dichloropropene	1	49.1696	40.2661	20	30
Ethyl methacrylate	1	38.9701	29.9644	26	30
1,1,2-Trichloroethane	1	48.9709	39.9355	20	30
1,2-Dibromoethane	1	47.4204	39.5143	18	30
1,3-Dichloropropane	1	48.6332	39.0032	22	30
4-Methyl-2-Pentanone	1	37.6965	32.2657	16	30
2-Hexanone	1	32.6901	29.902	8.9	30
Tetrachloroethene	1	46.7026	36.0758	26	40
Toluene	1	44.1482	35.197	23	40
1,1,1,2-Tetrachloroethane	1	48.5604	38.7295	23	30
Chlorobenzene	1	44.2936	34.966	24	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits

QC Batch: MBS89300

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	35.1896	26.4058	29	30
n-Amyl acetate	1	28.5513	20.8648	31*	30
Bromoform	**1**	**69.1723**	**54.2103**	**24**	**30**
Ethylbenzene	**1**	**44.5852**	**34.0166**	**27**	**30**
1,1,2,2-Tetrachloroethane	**1**	**42.382**	**33.8868**	**22**	**30**
Styrene	**1**	**41.5523**	**31.3754**	**28**	**30**
m&p-Xylenes	**1**	**84.8346**	**63.8587**	**28**	**30**
o-Xylene	**1**	**41.8252**	**31.5526**	**28**	**30**
trans-1,4-Dichloro-2-butene	1	39.0256	30.8125	24	30
1,3-Dichlorobenzene	**1**	**39.5706**	**30.1803**	**27**	**30**
1,4-Dichlorobenzene	**1**	**38.1803**	**29.3631**	**26**	**40**
1,2-Dichlorobenzene	**1**	**40.0448**	**30.2778**	**28**	**40**
Isopropylbenzene	**1**	**42.1391**	**32.0661**	**27**	**30**
Cyclohexanone	1	115.1208	103.4941	11	30
Camphene	1	36.8254	27.1146	30	30
1,2,3-Trichloropropane	**1**	**39.5663**	**32.0142**	**21**	**30**
2-Chlorotoluene	1	43.119	33.4725	25	30
p-Ethyltoluene	1	40.5838	30.7714	28	30
4-Chlorotoluene	1	43.5239	32.9825	28	30
n-Propylbenzene	**1**	**42.394**	**32.1153**	**28**	**40**
Bromobenzene	1	40.6803	30.791	28	30
1,3,5-Trimethylbenzene	**1**	**45.5383**	**35.161**	**26**	**30**
Butyl methacrylate	1	38.912	27.5838	34*	30
t-Butylbenzene	**1**	**41.4871**	**31.0009**	**29**	**30**
1,2,4-Trimethylbenzene	**1**	**42.6087**	**32.2028**	**28**	**30**
sec-Butylbenzene	**1**	**41.3353**	**30.2751**	**31**	**40**
4-Isopropyltoluene	**1**	**41.3754**	**30.6962**	**30**	**30**
n-Butylbenzene	**1**	**39.7442**	**29.2736**	**30**	**30**
p-Diethylbenzene	1	40.4447	29.6348	31*	30
1,2,4,5-Tetramethylbenzene	1	39.7031	29.6141	29	30
1,2-Dibromo-3-Chloropropane	1	33.1673	27.8283	18	30
Camphor	1	464.3459	401.4661	15	30
Hexachlorobutadiene	1	23.9836	18.6257	25	30
1,2,4-Trichlorobenzene	1	30.2474	23.0528	27	30
1,2,3-Trichlorobenzene	1	27.3776	21.3084	25	30
Naphthalene	1	28.712	23.178	21	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

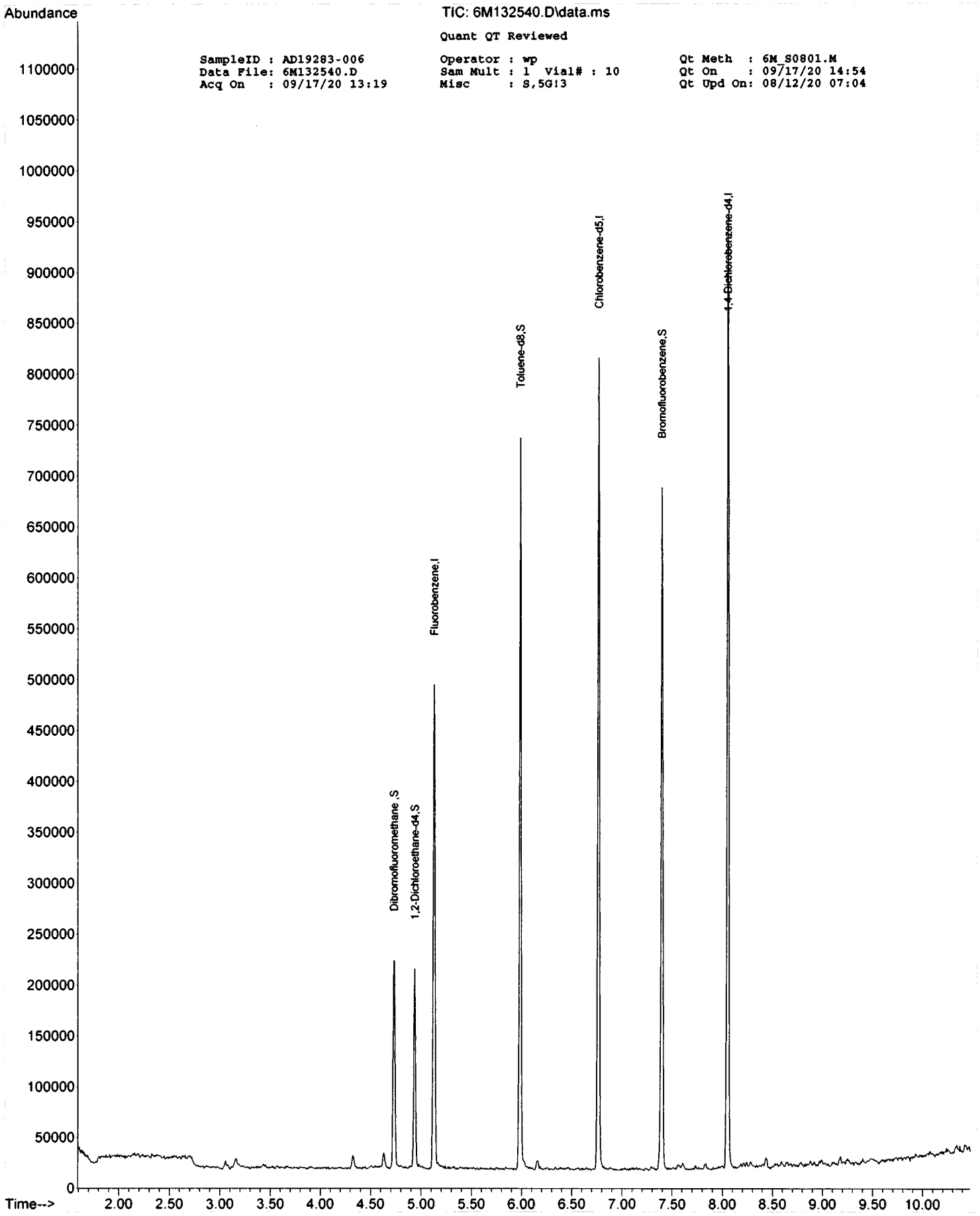
Quantitation Report (QT Reviewed)

SampleID : AD19283-006 Operator : wp Qt Meth : 6M_S0801.M
Data File: 6M132540.D Sam Mult : 1 Vial# : 10 Qt On : 09/17/20 14:54
Acq On : 09/17/20 13:19 Misc : S,5G!3 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\09-17-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	277457	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	307195	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	178376	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	84715	34.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 114.53%			
39) 1,2-Dichloroethane-d4	4.934	67	42987	32.33	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.77%			
66) Toluene-d8	5.983	98	312688	24.67	ug/l	0.00
Spiked Amount 30.000			Recovery = 82.23%			
76) Bromofluorobenzene	7.391	174	135107	28.77	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.90%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed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SampleID : AD19283-006
Data File: 6M132540.D
Acq On : 09/17/20 13:19
Operator : wp
Sam Mult : 1 Vial# : 10
Misc : S,5G!3
Qt Meth : 6M_S0801.M
Qt On : 09/17/20 14:54
Qt Upd On: 08/12/20 07:04
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Quantitation Report (QT Reviewed)

SampleID : AD19283-006(MS) Operator : wp Qt Meth : 6M_S0801.M
Data File: 6M132542.D Sam Mult : 1 Vial# : 12 Qt On : 09/17/20 14:55
Acq On : 09/17/20 14:00 Misc : S,5G!4 Qt Upd On: 08/12/20 07:04

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Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	296485	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	318320	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	203111	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	83358	31.64	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.47%			
39) 1,2-Dichloroethane-d4	4.934	67	41858	29.46	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.20%			
66) Toluene-d8	5.983	98	341257	25.98	ug/l	0.00
Spiked Amount 30.000			Recovery = 86.60%			
76) Bromofluorobenzene	7.391	174	150721	28.19	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.97%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	201949	64.7742	ug/l	76
6) Dichlorodifluoromethane	1.636	85	91776	45.1906	ug/l	98
7) Chloromethane	1.813	50	113309	44.7465	ug/l	98
8) Bromomethane	2.233	94	82288	44.0331	ug/l	98
9) Vinyl Chloride	1.916	62	134281	46.0930	ug/l	95
10) Chloroethane	2.325	64	89391	45.0962	ug/l	95
11) Trichlorofluoromethane	2.557	101	221232	46.1301	ug/l	98
12) Ethyl ether	2.807	59	81894	46.3980	ug/l	95
13) Furan	2.843	39	169875	42.7872	ug/l	99
14) 1,1,2-Trichloro-1,2,2-...	3.008	101	89777	49.2000	ug/l	96
15) Methylene Chloride	3.434	84	119368	44.5100	ug/l	97
16) Acrolein	2.922	56	49636	143.4404	ug/l	95
17) Acrylonitrile	3.636	53	37587	35.8528	ug/l	93
18) Iodomethane	3.160	142	135225	58.7058	ug/l	95
19) Acetone	3.050	43	175157	174.1374	ug/l	98
20) Carbon Disulfide	3.233	76	288270	43.0984	ug/l	100
21) t-Butyl Alcohol	3.508	59	63211	129.6621	ug/l	99
22) n-Hexane	3.910	57	122683	47.0845	ug/l	99
23) Di-isopropyl-ether	4.062	45	314227	50.6189	ug/l	95
24) 1,1-Dichloroethene	3.020	61	162469	48.3692	ug/l	95
25) Methyl Acetate	3.337	43	125998	60.7803	ug/l	100
26) Methyl-t-butyl ether	3.672	73	287594	54.0960	ug/l	99
27) 1,1-Dichloroethane	4.026	63	206838	47.5492	ug/l	94
28) trans-1,2-Dichloroethene	3.678	96	116381	46.0283	ug/l	95
29) Ethyl-t-butyl ether	4.325	59	318321	46.8355	ug/l	98
30) cis-1,2-Dichloroethene	4.440	61	206078	46.8461	ug/l	98
31) Bromochloromethane	4.593	49	99402	49.1152	ug/l	97
32) 2,2-Dichloropropane	4.446	77	186791	52.6942	ug/l	97
33) Ethyl acetate	4.465	43	92450	29.6919	ug/l	100
34) 1,4-Dioxane	5.519	88	76122	1393.2275	ug/l	95
35) 1,1-Dichloropropene	4.855	75	168487	47.4642	ug/l	97
36) Chloroform	4.629	83	226003	49.2247	ug/l	98
38) Cyclohexane	4.800	56	171771	47.2544	ug/l	96
40) 1,2-Dichloroethane	4.977	62	173658	50.5993	ug/l	99
41) 2-Butanone	4.434	43	51518	35.0116	ug/l	95
42) 1,1,1-Trichloroethane	4.763	97	198904	48.3930	ug/l	98
43) Carbon Tetrachloride	4.861	117	172748	49.2225	ug/l	97
44) Vinyl Acetate	4.062	43	198365	26.7753	ug/l	100
45) Bromodichloromethane	5.593	83	165573	51.4302	ug/l	99
46) Methylcyclohexane	5.446	83	162699	43.6548	ug/l	97
47) Dibromomethane	5.526	174	85857	51.2331	ug/l	95
48) 1,2-Dichloropropane	5.452	63	118878	46.4778	ug/l	95
49) Trichloroethene	5.330	130	137075	47.2894	ug/l	97
50) Benzene	4.977	78	473060	47.2684	ug/l	100
51) tert-Amyl methyl ether	5.020	73	298576	51.0368	ug/l	97
53) Iso-propylacetate	4.977	43	177869	32.0845	ug/l	97
54) Methyl methacrylate	5.483	41	137208	50.6580	ug/l	92
55) Dibromochloromethane	6.446	129	121205	40.5709	ug/l	100
56) 2-Chloroethylvinylether	5.733	63	72404	85.9316	ug/l	94
57) cis-1,3-Dichloropropene	5.830	75	185668	39.1360	ug/l	98
58) trans-1,3-Dichloropropene	6.117	75	167224	40.2661	ug/l	98
59) Ethyl methacrylate	6.135	41	80546	29.9644	ug/l	99
60) 1,1,2-Trichloroethane	6.221	97	109140	39.9355	ug/l	90
61) 1,2-Dibromoethane	6.525	107	112098	39.5143	ug/l	99
62) 1,3-Dichloropropane	6.318	76	188611	39.0032	ug/l	100
63) 4-Methyl-2-Pentanone	5.897	43	119811	32.2657	ug/l	99
64) 2-Hexanone	6.330	43	87467	29.9020	ug/l	96
65) Tetrachloroethene	6.318	164	106398	36.0758	ug/l	98
67) Toluene	6.019	92	302930	35.1970	ug/l	99

Quantitation Report (QT Reviewed)

SampleID : AD19283-006(MS) Operator : wp Qt Meth : 6M_S0801.M
Data File: 6M132542.D Sam Mult : 1 Vial# : 12 Qt On : 09/17/20 14:55
Acq On : 09/17/20 14:00 Misc : S,5G!4 Qt Upd On: 08/12/20 07:04

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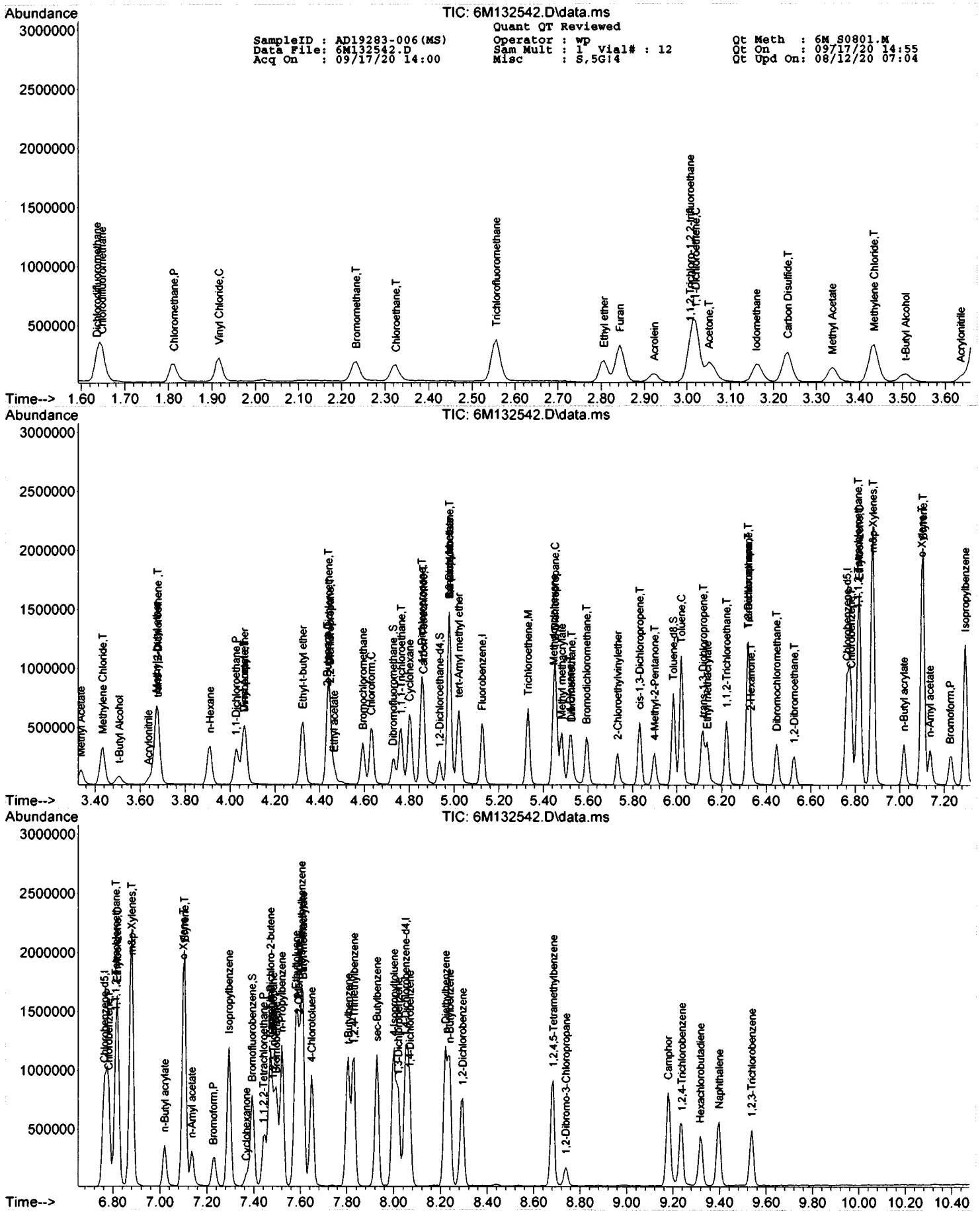
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	119093	38.7295	ug/l	98
69)	Chlorobenzene	6.781	112	328859	34.9660	ug/l	99
71)	n-Butyl acrylate	7.019	55	153207	26.4058	ug/l	98
72)	n-Amyl acetate	7.135	43	114465	20.8648	ug/l	98
73)	Bromoform	7.226	173	76882	54.2103	ug/l	97
74)	Ethylbenzene	6.818	106	152612	34.0166	ug/l	98
75)	1,1,2,2-Tetrachloroethane	7.440	83	146606	33.8868	ug/l	98
77)	Styrene	7.105	104	348244	31.3754	ug/l	97
78)	m&p-Xylenes	6.879	106	429760	63.8587	ug/l	98
79)	o-Xylene	7.098	106	209379	31.5526	ug/l	96
80)	trans-1,4-Dichloro-2-b...	7.470	53	64843	30.8125	ug/l	94
81)	1,3-Dichlorobenzene	8.019	146	250635	30.1803	ug/l	99
82)	1,4-Dichlorobenzene	8.068	146	251554	29.3631	ug/l	99
83)	1,2-Dichlorobenzene	8.293	146	234836	30.2778	ug/l	99
84)	Isopropylbenzene	7.294	105	553022	32.0661	ug/l	99
85)	Cyclohexanone	7.367	55	24650	103.4941	ug/l	99
86)	Camphene	7.470	93	170171	27.1146	ug/l	99
87)	1,2,3-Trichloropropane	7.483	75	178658	32.0142	ug/l	99
88)	2-Chlorotoluene	7.592	91	345984	33.4725	ug/l	99
89)	p-Ethyltoluene	7.580	105	544607	30.7714	ug/l	92
90)	4-Chlorotoluene	7.647	91	334378	32.9825	ug/l	98
91)	n-Propylbenzene	7.519	91	649631	32.1153	ug/l	99
92)	Bromobenzene	7.495	77	326601	30.7910	ug/l	98
93)	1,3,5-Trimethylbenzene	7.604	105	435704	35.1610	ug/l	90
94)	Butyl methacrylate	7.611	41	133003	27.5838	ug/l	89
95)	t-Butylbenzene	7.806	119	437059	31.0009	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	450484	32.2028	ug/l	99
97)	sec-Butylbenzene	7.928	105	543212	30.2751	ug/l	100
98)	4-Isopropyltoluene	8.001	119	462034	30.6962	ug/l	99
99)	n-Butylbenzene	8.238	91	502293	29.2736	ug/l	100
100)	p-Diethylbenzene	8.220	119	264519	29.6348	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.684	119	373664	29.6141	ug/l	98
102)	1,2-Dibromo-3-Chloropr...	8.738	157	31881	27.8283	ug/l	99
103)	Camphor	9.177	95	154692	401.4661	ug/l	100
104)	Hexachlorobutadiene	9.318	225	58077	18.6257	ug/l	98
105)	1,2,4-Trichlorobenzene	9.238	180	129661	23.0528	ug/l	98
106)	1,2,3-Trichlorobenzene	9.537	180	109071	21.3084	ug/l	99
107)	Naphthalene	9.397	128	326363	23.1780	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : AD19283-006(MS)
Data File: 6M132542.D
Acq On : 09/17/20 14:00
Operator : wp
Sam Mult : 1 Vial# : 12
Misc : S,5G!4
Qt Meth : 6M_S0801.M
Qt On : 09/17/20 14:55
Qt Upd On: 08/12/20 07:04
Time-->

Quantitation Report (QT Reviewed)

SampleID : AD19283-006(MSD) Operator : wp Qt Meth : 6M_S0801.M
Data File: 6M132543.D Sam Mult : 1 Vial# : 13 Qt On : 09/17/20 14:55
Acq On : 09/17/20 14:21 Misc : S,5G!5 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\09-17-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	306766	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	330755	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.049	152	203739	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	88583	32.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.30%			
39) 1,2-Dichloroethane-d4	4.934	67	44052	29.97	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.90%			
66) Toluene-d8	5.983	98	346308	25.37	ug/l	0.00
Spiked Amount 30.000			Recovery = 84.57%			
76) Bromofluorobenzene	7.391	174	157593	29.38	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.93%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.648	51	172863	53.5868	ug/l	95
6) Dichlorodifluoromethane	1.636	85	118186	56.2445	ug/l	98
7) Chloromethane	1.813	50	145401	55.8238	ug/l	97
8) Bromomethane	2.233	94	108137	55.9258	ug/l	98
9) Vinyl Chloride	1.916	62	172490	57.2243	ug/l	92
10) Chloroethane	2.325	64	116090	56.6026	ug/l	100
11) Trichlorofluoromethane	2.556	101	288545	58.1494	ug/l	96
12) Ethyl ether	2.806	59	103006	56.4034	ug/l	99
13) Furan	2.843	39	220194	53.6025	ug/l	97
14) 1,1,2-Trichloro-1,2,2-...	3.014	101	116895	61.9143	ug/l	96
15) Methylene Chloride	3.434	84	158621	57.1644	ug/l	95
16) Acrolein	2.922	56	68068	190.1136	ug/l	96
17) Acrylonitrile	3.642	53	45308	41.7692	ug/l	99
18) Iodomethane	3.166	142	173341	72.4683	ug/l	94
19) Acetone	3.050	43	206626	198.5386	ug/l	95
20) Carbon Disulfide	3.233	76	366307	52.9301	ug/l	100
21) t-Butyl Alcohol	3.507	59	72948	144.6204	ug/l	98
22) n-Hexane	3.910	57	165252	61.2966	ug/l	98
23) Di-isopropyl-ether	4.062	45	407284	63.4106	ug/l	94
24) 1,1-Dichloroethene	3.020	61	208148	59.8916	ug/l	97
25) Methyl Acetate	3.337	43	157804	73.5720	ug/l	100
26) Methyl-t-butyl ether	3.672	73	371549	67.5456	ug/l	98
27) 1,1-Dichloroethane	4.026	63	270825	60.1723	ug/l	97
28) trans-1,2-Dichloroethene	3.678	96	149313	57.0738	ug/l	89
29) Ethyl-t-butyl ether	4.324	59	413442	58.7923	ug/l	98
30) cis-1,2-Dichloroethene	4.440	61	269046	59.1104	ug/l	96
31) Bromochloromethane	4.593	49	126645	60.4790	ug/l	94
32) 2,2-Dichloropropane	4.446	77	243724	66.4509	ug/l	99
33) Ethyl acetate	4.465	43	122549	38.0396	ug/l	98
34) 1,4-Dioxane	5.519	88	94163	1665.6649	ug/l	85
35) 1,1-Dichloropropene	4.855	75	223436	60.8343	ug/l	99
36) Chloroform	4.629	83	287495	60.5195	ug/l	97
38) Cyclohexane	4.800	56	222090	59.0496	ug/l	95
40) 1,2-Dichloroethane	4.977	62	226388	63.7527	ug/l	100
41) 2-Butanone	4.434	43	63477	41.6932	ug/l	85
42) 1,1,1-Trichloroethane	4.763	97	261017	61.3767	ug/l	100
43) Carbon Tetrachloride	4.861	117	230196	63.3933	ug/l	96
44) Vinyl Acetate	4.062	43	268244	34.9941	ug/l	100
45) Bromodichloromethane	5.592	83	212372	63.7560	ug/l	96
46) Methylcyclohexane	5.446	83	212042	54.9876	ug/l	94
47) Dibromomethane	5.525	174	109623	63.2225	ug/l	95
48) 1,2-Dichloropropane	5.458	63	156850	59.2685	ug/l	96
49) Trichloroethene	5.330	130	177533	59.1943	ug/l	98
50) Benzene	4.977	78	629074	60.7508	ug/l	100
51) tert-Amyl methyl ether	5.019	73	391168	64.6230	ug/l	98
53) Iso-propylacetate	4.977	43	226108	39.2526	ug/l	95
54) Methyl methacrylate	5.483	41	168867	60.0027	ug/l	92
55) Dibromochloromethane	6.446	129	160215	51.6125	ug/l	93
56) 2-Chloroethylvinylether	5.733	63	92244	105.3625	ug/l	98
57) cis-1,3-Dichloropropene	5.830	75	238033	48.2874	ug/l	98
58) trans-1,3-Dichloropropene	6.117	75	212177	49.1696	ug/l	98
59) Ethyl methacrylate	6.135	41	108846	38.9701	ug/l	97
60) 1,1,2-Trichloroethane	6.220	97	139061	48.9709	ug/l	97
61) 1,2-Dibromoethane	6.525	107	139782	47.4204	ug/l	98
62) 1,3-Dichloropropane	6.318	76	244367	48.6332	ug/l	98
63) 4-Methyl-2-Pentanone	5.897	43	145445	37.6965	ug/l	98
64) 2-Hexanone	6.330	43	99358	32.6901	ug/l	97
65) Tetrachloroethene	6.318	164	143120	46.7026	ug/l	99
67) Toluene	6.019	92	394813	44.1482	ug/l	100

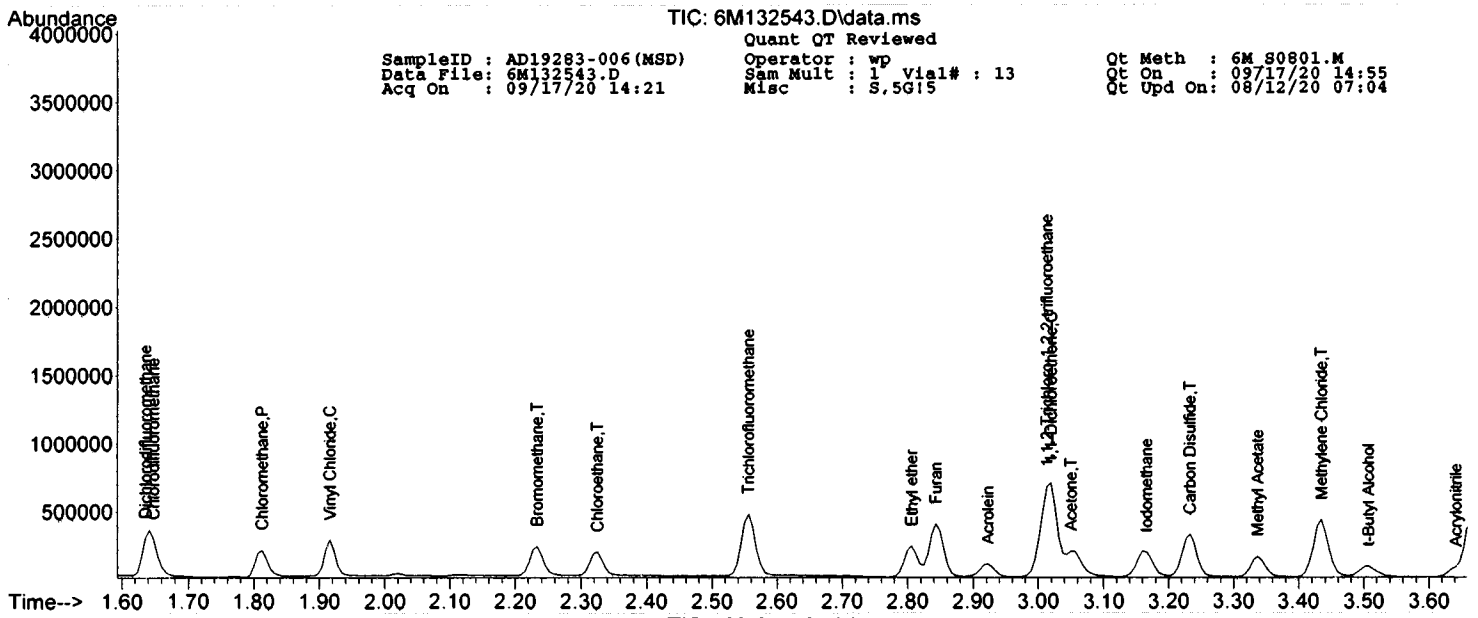
Quantitation Report (QT Reviewed)

SampleID : AD19283-006(MSD) Operator : wp Qt Meth : 6M_S0801.M
Data File: 6M132543.D Sam Mult : 1 Vial# : 13 Qt On : 09/17/20 14:55
Acq On : 09/17/20 14:21 Misc : S,5G!5 Qt Upd On: 08/12/20 07:04

Data Path : G:\GcMsData\2020\GCMS_6\Data\09-17-20\
Qt Path : G:\GCMSDATA\2020\GCMS_6\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.812	133	155156	48.5604	ug/l	99
69)	Chlorobenzene	6.781	112	432859	44.2936	ug/l	98
71)	n-Butyl acrylate	7.019	55	204802	35.1896	ug/l	99
72)	n-Amyl acetate	7.135	43	157118	28.5513	ug/l	97
73)	Bromoform	7.232	173	102668	69.1723	ug/l	98
74)	Ethylbenzene	6.818	106	200645	44.5852	ug/l	96
75)	1,1,2,2-Tetrachloroethane	7.446	83	183926	42.3820	ug/l	98
77)	Styrene	7.104	104	462625	41.5523	ug/l	97
78)	m&p-Xylenes	6.879	106	572690	84.8346	ug/l	98
79)	o-Xylene	7.098	106	278405	41.8252	ug/l	98
80)	trans-1,4-Dichloro-2-b...	7.470	53	82381	39.0256	ug/l	96
81)	1,3-Dichlorobenzene	8.019	146	329633	39.5706	ug/l	97
82)	1,4-Dichlorobenzene	8.068	146	328102	38.1803	ug/l	98
83)	1,2-Dichlorobenzene	8.293	146	311549	40.0448	ug/l	98
84)	Isopropylbenzene	7.293	105	728990	42.1391	ug/l	99
85)	Cyclohexanone	7.367	55	27504	115.1208	ug/l	99
86)	Camphene	7.470	93	231831	36.8254	ug/l	99
87)	1,2,3-Trichloropropane	7.482	75	221486	39.5663	ug/l	99
88)	2-Chlorotoluene	7.592	91	447072	43.1190	ug/l	98
89)	p-Ethyltoluene	7.580	105	720493	40.5838	ug/l	94
90)	4-Chlorotoluene	7.647	91	442612	43.5239	ug/l	98
91)	n-Propylbenzene	7.519	91	860201	42.3940	ug/l	100
92)	Bromobenzene	7.495	77	432831	40.6803	ug/l	99
93)	1,3,5-Trimethylbenzene	7.604	105	566040	45.5383	ug/l	91
94)	Butyl methacrylate	7.610	41	186763	38.9120	ug/l	94
95)	t-Butylbenzene	7.805	119	586705	41.4871	ug/l	99
96)	1,2,4-Trimethylbenzene	7.830	105	597894	42.6087	ug/l	100
97)	sec-Butylbenzene	7.927	105	743953	41.3353	ug/l	100
98)	4-Isopropyltoluene	8.001	119	624702	41.3754	ug/l	99
99)	n-Butylbenzene	8.238	91	684062	39.7442	ug/l	98
100)	p-Diethylbenzene	8.220	119	362124	40.4447	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.683	119	502514	39.7031	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.738	157	38115	33.1673	ug/l	99
103)	Camphor	9.177	95	182010	464.3459	ug/l	99
104)	Hexachlorobutadiene	9.317	225	75015	23.9836	ug/l	98
105)	1,2,4-Trichlorobenzene	9.238	180	170653	30.2474	ug/l	98
106)	1,2,3-Trichlorobenzene	9.537	180	140571	27.3776	ug/l	98
107)	Naphthalene	9.397	128	405536	28.7120	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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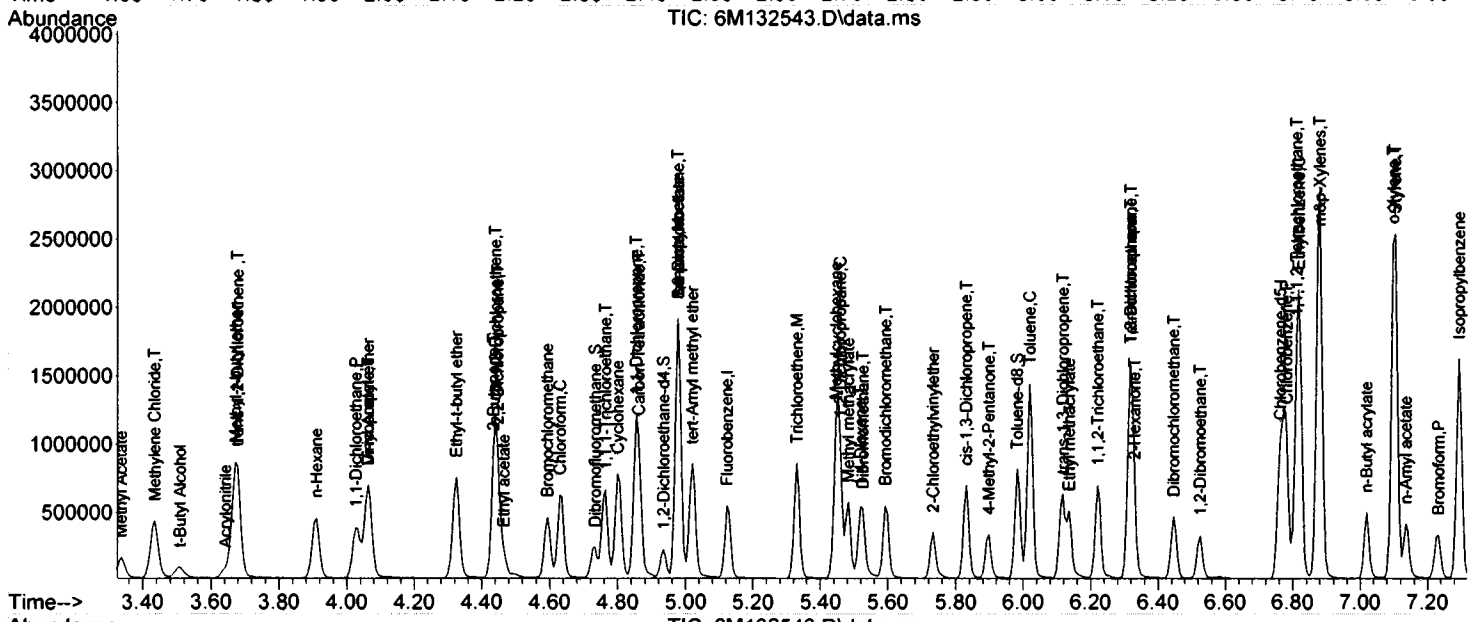
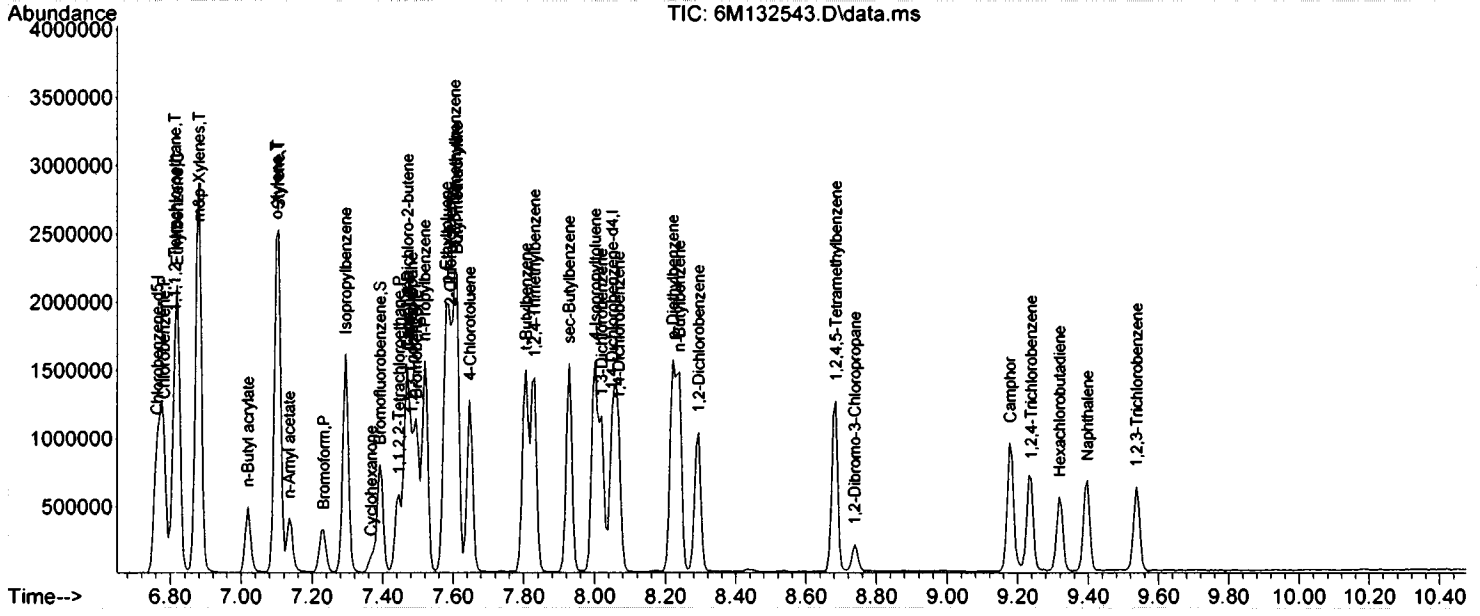
Quant QT Reviewed
SampleID : AD19283-006(MSD)
Data File: 6M132543.D
Acq On : 09/17/20 14:21
Operator : wp
Sam Mult : 1 Vial# : 13
Misc : S,5G15
Qt Meth : 6M_S0801.M
Qt On : 09/17/20 14:55
Qt Upd On: 08/12/20 07:04
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 6M132543.D\data.ms
Methyl acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
1,1-Dichloroethane,P
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 6M132543.D\data.ms
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone,S
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

GC/MS Volatile Data
Logbook Data

RUN LOG

Instrument: GCMS_6 Year: 2020
Analyst: BK

1-1-6M130900

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
6M130900.	BFB TUNE		V-321115,V-321040,V-331408	BK 08/02/20						08/01 11:54
6M130901.	BLK	CnAnc				Soil	1	1	8260C	08/01 12:09
6M130902.	BLK	CnAnc				Soil	1	1	8260C	08/01 12:30
6M130903.	CAL @ 0.5 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 12:51
6M130904.	CAL @ 1 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 13:11
6M130905.	CAL @ 2 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 13:32
6M130906.	CAL @ 5 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 13:52
6M130907.	CAL @ 20 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 14:13
6M130908.	CAL @ 50 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 14:34
6M130909.	CAL @ 100 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 14:54
6M130910.	BLK	Is				Soil	1	1	8260C	08/01 15:15
6M130911.	CAL @ 250 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 15:36
6M130912.	BLK					Soil	1	1	8260C	08/01 15:56
6M130913.	CAL @ 500 PPB		B-29469	BK 08/02/20		Soil	1	1	624\8260	08/01 16:17
6M130914.	BLK					Soil	1	1	8260C	08/01 16:37
6M130915.	BLK					Soil	1	1	8260C	08/01 16:58
6M130916.	BLK					Soil	1	1	8260C	08/01 17:19
6M130917.	500 PPB	S8Ao				Soil	1	1	8260C	08/01 17:39
6M130918.	BLK					Soil	1	1	8260C	08/01 18:00
6M130919.	BLK					Soil	1	1	8260C	08/01 18:21
6M130920.	250 PPB					Soil	1	1	8260C	08/01 18:41
6M130921.	BLK					Soil	1	1	8260C	08/01 19:02
6M130922.	BLK					Soil	1	1	8260C	08/01 19:22
6M130923.	BLK					Soil	1	1	8260C	08/01 19:43
6M130924.	BLK					Soil	1	1	8260C	08/01 20:04
6M130925.	ICV	IvoSd	V-332451	BK 08/02/20		Soil	2.5	1	8260C	08/01 20:24
6M130926.	BLK					Soil	1	1	8260C	08/01 20:45
6M130927.	CCV					Soil	1	1	8260C	08/01 21:05
6M130928.	BLK					Soil	1	1	8260C	08/01 21:26
6M130929.	BLK					Soil	1	1	8260C	08/01 21:47
6M130930.	BLK					Soil	1	1	8260C	08/01 22:07
6M130931.	BLK					Soil	1	1	8260C	08/01 22:28
6M130932.	BLK					Soil	1	1	8260C	08/01 22:49
6M130933.	DAILY BLANK					Soil	1	1	8260C	08/01 23:09

Anc	Area Not Checked	Fo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Fsm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Ftm	Tclp/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for anh
B8m	Blank 8000 series missing	Fto	Tclp Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Fv	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evm	Eval Mix missing ddt or anddn
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmb with calmpt csv for init calibration chek rds	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Pmperly for a samol	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

1-1-11M82667

Instrument: GCMS_11Year: 2020
Analyst: WP

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
11M82667.	BFB TUNE		V-330632,V-330631,V-333805	WP 09/14/20						09/11 18:54
11M82669.	BLK	IsCnBnfAnc				Aqueous	1	1	624\8260	09/11 19:26
11M82672.	CAL @ 0.5 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/11 20:21
11M82673.	CAL @ 1 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/11 20:40
11M82674.	CAL @ 5 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/11 20:58
11M82675.	CAL @ 10 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/11 21:17
11M82676.	CAL @ 20 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/11 21:35
11M82678.	CAL @ 50 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/11 22:12
11M82680.	500 PPB	Ao				Aqueous	1	1	624\8260	09/11 22:48
11M82683.	250 PPB	Ao				Aqueous	1	1	624\8260	09/11 23:44
11M82686.	CAL @ 100 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/12 00:39
11M82690.	BLK	IsBnf				Aqueous	1	1	624\8260	09/12 01:52
11M82691.	ICV	IsIvoBnf	V-334710	WP 09/14/20		Aqueous	1	1	624\8260	09/12 02:11
11M82693.	BLK	IsBnf				Aqueous	1	1	624\8260	09/12 02:47
11M82696.	DAILY BLANK	Is				Aqueous	1	1	624\8260	09/12 03:43
11M82699.	BLK	IsBnfTi8				Soil	1	1	8260C	09/14 14:43

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tetn/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for anh
B8m	Blank 8000 series missing	Eto	Tetn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evm	Eval Mix missing dtf or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rpd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rpd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmd csv for ical calibration chek rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Co	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a samol	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_11 Year: 2020
Analyst: WP

1-1-11M82700

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
11M82700.	BFB TUNE		V-330632,V-330631,V-333805,V-334776	WP 09/14/20						09/14 14:56
11M82701.	20 PPB	CnAnc				Aqueous	1	1	624\8260	09/14 15:10
11M82702.	CAL @ 20 PPB		OK	WP 09/14/20		Aqueous	1	1	624\8260	09/14 15:28
11M82703.	BLK					Aqueous	1	1	624\8260	09/14 15:46
11M82704.	BLK					Aqueous	1	1	624\8260	09/14 16:05
11M82705.	BLK					Aqueous	1	1	624\8260	09/14 16:23
11M82706.	DAILY BLANK		OK	WP 09/14/20		Methano	1	1	8260C	09/14 16:41
11M82707.	DAILY BLANK		OK	WP 09/14/20		Aqueous	1	1	624\8260	09/14 17:00
11M82708.	AD19145-007(T)		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	624\8260	09/14 17:18
11M82709.	AD19145-008(T)		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/14 17:37
11M82710.	MBS87835		OK MBS87835	WP 09/14/20		Aqueous	1	1	624\8260	09/14 17:55
11M82711.	MBS87836		OK MBS87836	WP 09/14/20		Methano	1	1	8260C	09/14 18:14
11M82712.	AD19145-007(T:MS	M16M18	OK MBS87835	WP 09/14/20	VO15-8260	Aqueous	1	1	624\8260	09/14 18:32
11M82713.	AD19145-007(T:MS	M16M18	OK MBS87835	WP 09/14/20	VO15-8260	Aqueous	1	1	624\8260	09/14 18:50
11M82714.	BLK					Aqueous	1	1	624\8260	09/14 19:09
11M82715.	BLK					Aqueous	1	1	624\8260	09/14 19:27
11M82716.	EF-3-V-13084(0911		OK	BK 09/15/20		Aqueous	1	91120	8260C	09/14 19:45
11M82717.	EF-3-V-13084(0912		OK	BK 09/15/20		Aqueous	1	91220	8260C	09/14 20:04
11M82718.	EF-3-V-13084(TEST			BK 09/15/20		Aqueous	1	1	8260C	09/14 20:22
11M82719.	AD19178-014		RR-1X,poss CO	BK 09/15/20	VO-8260	Aqueous	1	1	8260C	09/14 20:41
11M82720.	AD19196-001		OK	BK 09/15/20	VO-8260	Aqueous	1	1	8260C	09/14 20:59
11M82721.	AD19199-002		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/14 21:18
11M82722.	BLK					Aqueous	1	1	624\8260	09/14 21:36
11M82724.	AD19178-014		OK	BK 09/15/20	VO-8260	Aqueous	1	1	8260C	09/14 22:13
11M82725.	19196-001	S8S6	-	BK 09/15/20		Aqueous	1	1	624\8260	09/14 22:31
11M82726.	19199-002		-	BK 09/15/20		Aqueous	1	1	624\8260	09/14 22:49
11M82727.	AD19199-003		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/14 23:08
11M82728.	AD19202-001		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/14 23:26
11M82729.	AD19202-002		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/14 23:44
11M82730.	AD19206-001		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/15 00:03
11M82731.	AD19206-002		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/15 00:21
11M82732.	AD19206-003		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/15 00:40
11M82733.	AD19206-004		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/15 00:58
11M82734.	BLK					Aqueous	1	1	624\8260	09/15 01:16
11M82735.	AD19204-001		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/15 01:35
11M82736.	AD19204-002		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/15 01:53
11M82737.	AD19204-003		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/15 02:11
11M82738.	BLK					Aqueous	1	1	624\8260	09/15 02:30
11M82739.	AD19197-001		OK	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/15 02:48
11M82740.	AD19197-002	Ti8	RR-1X, >12 HR	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/15 03:07
11M82741.	AD19193-001	Ti8	RR-1X, >12 HR	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/15 03:25
11M82742.	AD19194-001	Ti8	RR-1X, >12 HR	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/15 03:44
11M82743.	AD19197-004	Ti8	RR-1X,dirty >12 HR	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/15 04:02
11M82744.	AD19197-003	Ti8	RR-1X,dirty >12 HR	BK 09/15/20	VO15-8260	Aqueous	1	1	8260C	09/15 04:20
11M82745.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	09/15 04:39

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B8m	Blank 600 series missing	Eto	Tolo/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for anh
B8m	Blank 8000 series missing	Eto	Tolo Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evm	Eval Mix missing dril or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rpd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rpd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmd csv for init calibration chek rls	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a samol	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

1-1-6M132532

Instrument: GCMS_6 Year: 2020
Analyst: wp

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
6M132532.	BFB TUNE		V-330632,V-330631,V-334699,V-335034!r	WP 09/17/20!r,WP 09/17/20,WP 09/17/20,WP 09/17/20						09/17 10:39
6M132533.	CAL @ 50 PPB	C16	!r	!r		Soil	0.4	1	624\8260	09/17 10:54
6M132534.	50 PPB	Sd	!r	!r		Soil	0.4	1	8260C	09/17 11:15
6M132535.	BLK		!r	!r		Soil	1	1	8260C	09/17 11:35
6M132536.	BLK		!r	!r		Soil	1	1	8260C	09/17 11:56
6M132537.	BLK		!r	!r		Soil	1	1	8260C	09/17 12:17
6M132538.	DAILY BLANK		OK!r	WP 09/17/20!r,WP 09/17/20,WP 09/17/20,WP 09/17/20		Soil	1	1	8260C	09/17 12:37
6M132539.	AD19263-002		OK!r	WP 09/17/20!r,WP 09/17/20,WP 09/17/20,WP 09/17/20	VO15-8260	Soil	1	1	8260C	09/17 12:58
6M132540.	AD19283-006		OK!r MBS89300	WP 09/17/20!r,WP 09/17/20,WP 09/17/20,WP 09/17/20	VO-8260	Soil	1	1	8260C	09/17 13:19
6M132541.	MBS89300	M18	OK!r MBS89300	WP 09/17/20!r,WP 09/17/20,WP 09/17/20,WP 09/17/20		Soil	1	1	8260C	09/17 13:39
6M132542.	AD19283-006(MS)	M18	OK!r MBS89300	WP 09/17/20!r,WP 09/17/20,WP 09/17/20,WP 09/17/20	VO-8260	Soil	1	1	8260C	09/17 14:00
6M132543.	AD19283-006(MSD)	R18M18	OK!r MBS89300	WP 09/17/20!r,WP 09/17/20,WP 09/17/20,WP 09/17/20	VO-8260	Soil	1	1	8260C	09/17 14:21
6M132544.	BLK		!r	!r		Soil	1	1	8260C	09/17 14:42
6M132545.	BLK		!r	!r		Soil	1	1	8260C	09/17 15:02
6M132546.	AD19254-003	Ao	OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO15-8260	Soil	1	1	8260C	09/17 15:23
6M132547.	AD19254-002	Ao	OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO15-8260	Soil	1	1	8260C	09/17 15:44
6M132548.	AD19231-001		OK!r	WP 09/17/20!r,WP 09/17/20,WP 09/17/20,WP 09/17/20	VO15-8260	Soil	1	1	8260C	09/17 16:04
6M132549.	AD19231-002		OK!r	WP 09/17/20!r,WP 09/17/20,WP 09/17/20,WP 09/17/20	VO15-8260	Soil	1	1	8260C	09/17 16:25
6M132550.	AD19231-003		OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO15-8260	Soil	1	1	8260C	09/17 16:46
6M132551.	AD19238-001		OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO10-8260	Soil	1	1	8260C	09/17 17:07
6M132552.	AD19239-001		OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO10-8260	Soil	1	1	8260C	09/17 17:27

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Eto	Tclp/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for anh
B8m	Blank 8000 series missing	Eto	Tclp Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evm	Eval Mix missing ddt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmh with calmt csv for init calibration chek rls	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

1-1-6M132553

Instrument: GCMS_6 Year: 2020
Analyst: wp

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
6M132553.	AD19240-001		OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO10-8260	Soil	1	1	8260C	09/17 17:48
6M132554.	AD19242-001		OK,dirty!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO-PAGAS82	Soil	1	1	8260C	09/17 18:09
6M132555.	AD19242-002		OK,dirty!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO-PAGAS82	Soil	1	1	8260C	09/17 18:29
6M132556.	AD19242-003		OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO-PAGAS82	Soil	1	1	8260C	09/17 18:50
6M132557.	BLK		!r	!r		Soil	1	1	8260C	09/17 19:11
6M132558.	AD19257-004		OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO-8260	Soil	1	1	8260C	09/17 19:32
6M132559.	AD19257-008		OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO-8260	Soil	1	1	8260C	09/17 19:52
6M132560.	AD19257-010		OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO-8260	Soil	1	1	8260C	09/17 20:13
6M132561.	AD19257-011		OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO-8260	Soil	1	1	8260C	09/17 20:34
6M132562.	AD19257-012		OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO-8260	Soil	1	1	8260C	09/17 20:54
6M132563.	AD19257-013		OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO-8260	Soil	1	1	8260C	09/17 21:15
6M132564.	AD19178-013	Ao	OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO-8260	Soil	1	1	8260C	09/17 21:36
6M132565.	AD19224-001(5X)		OK,dirty!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO-8260	Soil	1	5	8260C	09/17 21:56
6M132566.	19224-001(5X)		-!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20		Soil	1	5	8260C	09/17 22:17
6M132567.	BLK		!r	!r		Soil	1	1	8260C	09/17 22:38
6M132568.	BLK	Ti8	!r	!r		Soil	1	1	8260C	09/17 22:58
6M132569.	BLK	Ti8	!r	!r		Soil	1	1	8260C	09/17 23:19
6M132570.	BLK	Ti8	!r	!r		Soil	1	1	8260C	09/17 23:40
6M132571.	BLK	Ti8	!r	!r		Soil	1	1	8260C	09/18 00:00
6M132572.	BLK	Ti8	!r	!r		Soil	1	1	8260C	09/18 00:21
6M132573.	BLK	Ti8	!r	!r		Soil	1	1	8260C	09/18 00:42
6M132574.	BLK	Ti8	!r	!r		Soil	1	1	8260C	09/18 01:02
6M132575.	BLK	Ti8	!r	!r		Soil	1	1	8260C	09/18 06:16
6M132576.	BLK	Ti8	!r	!r		Soil	1	1	8260C	09/18 06:36
6M132577.	BLK	Ti8	!r	!r		Soil	1	1	8260C	09/18 06:57
6M132578.	BLK	Ti8	!r	!r		Soil	1	1	8260C	09/18 07:18
6M132579.	AD19286-002	Ti8	OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO15-8260	Soil	1	1	8260C	09/18 07:38

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tdn/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for anh
B8m	Blank 8000 series missing	Eto	Tdn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evnc	Eval Mix missing dd or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Diff
C8f	8000 series sample/blank did not have passing cal	Iv	Pmb with calmd csv for init calibration chek rfs	S6	600 series surrogate out
Cma	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a samol	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_6 Year: 2020
Analyst: wp

1-1-6M132580

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
6M132580.	AD19286-004	Ti8	OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO15-8260	Soil	1	1	8260C	09/18 07:59
6M132581.	AD19286-005	Ti8	OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO15-8260	Soil	1	1	8260C	09/18 08:20
6M132582.	AD19286-006	Ti8	OK!r	BK 09/18/20!r,BK 09/18/20,BK 09/18/20,BK 09/18/20	VO15-8260	Soil	1	1	8260C	09/18 08:59

Anc	Area Not Checked	Fo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Fsm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Ftn	Tclp/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for anh
B8m	Blank 8000 series missing	Fto	Tclp Extraction Performed Outside of Hold	FvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Fv	Eval Time Exceeded	Fvnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Fvm	Eval Mix missing ddt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rpd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rpd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmt.csv for init calibration chek rfs	S6	600 series surrogate out
Cma	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning. Ini cal file <> method	S8	8000 series surrogate out
Co	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-313322

Prepared By: Revolus, Jean
Description: VOA ADD MIX
Prep Date: 10/4/2019
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 5000/25000 p
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
12762	p-Diethylbenzene	50 mg	NEAT	5000 ppm
12588	Methyl alcohol		neat neat	
12764	Cyclohexanone	250 mg	NEAT	25000 ppm
12815	p-Ethyltoluene	50 mg	NEAT	5000 ppm

Veritech Lot Number: V-313323

Prepared By: Revolus, Jean
Description: VOA ADD MIX(2nd Source)
Prep Date: 10/4/2019
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 5000/25000 p
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
12762	p-Diethylbenzene	50 mg	NEAT	5000 ppm
12588	Methyl alcohol		neat neat	
12764	Cyclohexanone	250 mg	NEAT	25000 ppm
12815	p-Ethyltoluene	50 mg	NEAT	5000 ppm

Veritech Lot Number: V-313324

Prepared By: Revolus, Jean
Description: Voa Extra Add Mix
Prep Date: 10/4/2019
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 2000-20000 p
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12763	Isopropyl acetate	20 mg	NEAT	2000 ppm
12588	Methyl alcohol	10 ml	neat neat	
11935	Ethyl acetate	20 mg	Neat	2000 ppm
11578	n-Amyl Acetate	20 mg	NEAT neat	2000 ppm
9641	d-Camphor	200 mg	Neat	20000 ppm
12766	Ethyl methacrylate	20 mg	NEAT	2000 ppm
11931	Methyl methacrylate	20 mg	Neat	2000 ppm
11933	n-Butyl acrylate	20 mg	Neat	2000 ppm
12761	Camphene	20 mg	NEAT	2000 ppm
11932	Butyl methacrylate	20 mg	Neat	2000 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-313325

Prepared By: Revolus, Jean
Department: Organics
ApprovedBy: akmal
Description: Voa Extra Add Mix(2nd Source)
BatchNumber:
ApproveDate: 10/07/19
Prep Date: 10/4/2019
Concentration: 2000-20000 p
Checked: Yes
Expiration Date: 10/4/2020
Final Volume: 10 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12763	Isopropyl acetate	20 mg	NEAT	2000 ppm
12588	Methyl alcohol	10 ml	neat neat	
11935	Ethyl acetate	20 mg	Neat	2000 ppm
11578	n-Amyl Acetate	20 mg	NEAT neat	2000 ppm
11931	Methyl methacrylate	20 mg	Neat	2000 ppm
9641	d-Camphor	200 mg	Neat	20000 ppm
12766	Ethyl methacrylate	20 mg	NEAT	2000 ppm
12761	Camphene	20 mg	NEAT	2000 ppm
11933	n-Butyl acrylate	20 mg	Neat	2000 ppm
11932	Butyl methacrylate	20 mg	Neat	2000 ppm

Veritech Lot Number: V-321040

Prepared By: Previlon, Wilner
Department: Organics
ApprovedBy: akmal
Description: VOA WORKING INT/SURR MIX
BatchNumber:
ApproveDate: 02/05/20
Prep Date: 2/3/2020
Concentration: 150 ppm
Checked: Yes
Expiration Date: 8/3/2020
Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	88 ml	neat neat	
12137	8260A Surrogates Mix	6 ml	2500 ppm	150 ppm
12138	8260A Internal Standard Mix	6 ml	2500 ppm	150 ppm

Veritech Lot Number: V-321115

Prepared By: Previlon, Wilner
Department: Organics
ApprovedBy: akmal
Description: BFB Tune Mix
BatchNumber:
ApproveDate: 02/05/20
Prep Date: 2/3/2020
Concentration: 50 ppm
Checked: Yes
Expiration Date: 8/3/2020
Final Volume: 1.5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-321040	VOA WORKING INT/SURR MIX	500 ul	150 ppm	50 ppm
12804	methyl alcohol	1000 ul	neat neat	

Veritech Lot Number: V-327582

Prepared By: Revolus, Jean
Department: Organics
ApprovedBy: akmal
Description: Ethyl ether/Furan Mix
BatchNumber:
ApproveDate: 05/18/20
Prep Date: 5/13/2020
Concentration: 5000 ppm
Checked: Yes
Expiration Date: 5/13/2021
Final Volume: 10 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13224	methyl alcohol	10 ml	neat neat	
11587	Furan	50 mg	NEAT neat	5000 ppm
13193	Ethyl ether	50 mg	Neat	5000 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-327585

Prepared By: Revolus, Jean | Department: Organics | ApprovedBy: akmal
Description: Ethyl ether/Furan Mix(2ND SOURCE) | BatchNumber: | ApproveDate: 05/18/20
Prep Date: 5/13/2020 | Concentration: 5000 ppm | Checked: Yes
Expiration Date: 5/13/2021 | Final Volume: 10 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13224	methyl alcohol	10 ml	neat neat	
11587	Furan	50 mg	NEAT neat	5000 ppm
13193	Ethyl ether	50 mg	Neat	5000 ppm

Veritech Lot Number: V-328517

Prepared By: Revolus, Jean | Department: Organics | ApprovedBy: akmal
Description: 20ppm Freon VOA Working Std | BatchNumber: | ApproveDate: 06/04/20
Prep Date: 5/28/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 12/3/2020 | Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12588	Methyl alcohol	900 ul	neat neat	neat
12435	Chlorodifluoromethane(Freon #22)	100 ul	200 ppm	200 ppm

Veritech Lot Number: V-330631

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: VOA WORKING INT/SURR MIX | BatchNumber: | ApproveDate: 07/01/20
Prep Date: 7/1/2020 | Concentration: 150 ppm | Checked: Yes
Expiration Date: 1/1/2021 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	88 ml	neat neat	
12137	8260A Surrogates Mix	6 ml	2500 ppm	150 ppm
12138	8260A Internal Standard Mix	6 ml	2500 ppm	150 ppm

Veritech Lot Number: V-330632

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: BFB Tune Mix | BatchNumber: | ApproveDate: 07/01/20
Prep Date: 7/1/2020 | Concentration: 50 ppm | Checked: Yes
Expiration Date: 1/1/2021 | Final Volume: 1.5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330631	VOA WORKING INT/SURR MIX	500 ul	150 ppm	50 ppm
12804	methyl alcohol	1000 ul	neat neat	

Veritech Lot Number: V-331408

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: MBS | BatchNumber: | ApproveDate: 07/16/20
Prep Date: 7/14/2020 | Concentration: 100 ppm | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	610 ul	neat neat	neat neat
12776	502.2 Cal Mix #1(gases)	50 ul	2000 ppm	100 ppm
12605	Epa 502/524 VO Org Mix(2nd Sources)	50 ul	2000 ppm	100 ppm
12913	EPA 8260 CAL MIX 2	50 ul	2000 ppm	100 ppm
13124	Custom VOC Standard	50 ul	VARIOUS	various ppm
12993	tert-Amyl Methyl Ether	50 ul	2000 ppm	100 ppm
V-313323	VOA ADD MIX(2nd Source)	20 ul	5000/25000 p	various ppm
V-313325	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-327585	Ethyl ether/Furan Mix(2ND SOURCE)	20 ul	5000 ppm	100 ppm
11674	Ethyl-tert-Butyl Ether(ETBE)	50 ul	2000 ppm	100 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-331858

Prepared By: Previlon, Wilner
Description: 200ppm VOA Working Std
Prep Date: 7/22/2020
Expiration Date: 9/16/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	220 ul	neat neat	neat
12994	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
13185	502.2 Cal2000 Mega Mix	100 ul	2000 ppm	200 ppm
12907	EPA 8260 CAL. MIX 2	100 ul	2000 ppm	200 ppm
13124	Custom VOC Standard	100 ul	VARIOUS	various ppm
12774	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-313322	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-327582	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
V-313324	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
12992	Ethyl-tert-Butyl Ether(ETBTE)	100 ul	2000 ppm	200 ppm

Veritech Lot Number: V-332441

Prepared By: Kim, Benjamin
Description: Soil8260 Stock @ 500 PPB
Prep Date: 8/1/2020
Expiration Date: 8/8/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS ppb
Final Volume: 40 ml
ApprovedBy: akmal
ApproveDate: 08/03/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331858	200ppm VOA Working Std	100 ul	VARIOUS pp	500 ppb
12833	P&T Water	40 ml	NEAT neat	neat
13197	Chlorodifluoromethane (freon #22)	100 ul	200 ppm	500 ppb

Veritech Lot Number: V-332442

Prepared By: Kim, Benjamin
Description: Soil8260 CAL @ 250 PPB
Prep Date: 8/1/2020
Expiration Date: 8/8/2020
Department: Organics
BatchNumber: B-29469
Concentration: VARIOUS ppb
Final Volume: 5 ml
ApprovedBy: akmal
ApproveDate: 08/03/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	2.5 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	2.5 ml	VARIOUS pp	250 ppb

Veritech Lot Number: V-332443

Prepared By: Kim, Benjamin
Description: Soil8260 CAL @ 100 PPB
Prep Date: 8/1/2020
Expiration Date: 8/8/2020
Department: Organics
BatchNumber: B-29469
Concentration: VARIOUS ppb
Final Volume: 5 ml
ApprovedBy: akmal
ApproveDate: 08/03/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	1 ml	VARIOUS pp	100 ppb

Veritech Lot Number: V-332444

Prepared By: Kim, Benjamin
Description: Soil8260 CAL @ 50 PPB
Prep Date: 8/1/2020
Expiration Date: 8/8/2020
Department: Organics
BatchNumber: B-29469
Concentration: VARIOUS ppb
Final Volume: 5 ml
ApprovedBy: akmal
ApproveDate: 08/03/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.5 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.5 ml	VARIOUS pp	50 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332445

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 20 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.8 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.2 ml	VARIOUS pp	20 ppb

Veritech Lot Number: V-332446

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 2 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.98 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	20 ul	VARIOUS pp	2 ppb

Veritech Lot Number: V-332447

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 5 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.95 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.05 ml	VARIOUS pp	5 ppb

Veritech Lot Number: V-332448

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 1 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.99 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.01 ml	VARIOUS pp	1 ppb

Veritech Lot Number: V-332449

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 500 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-332441	Soil8260 Stock @ 500 PPB	5 ml	VARIOUS pp	500 ppb

Veritech Lot Number: V-332450

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: Soil8260 CAL @ 0.5 PPB | BatchNumber: B-29469 | ApproveDate: 08/03/20
Prep Date: 8/1/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 8/8/2020 | Final Volume: 5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	4.995 ml	NEAT neat	
V-332441	Soil8260 Stock @ 500 PPB	.005 ml	VARIOUS pp	0.5 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332451

Prepared By: Kim, Benjamin
Description: ICV CAL @ 50 PPB
Prep Date: 8/1/2020
Expiration Date: 8/8/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS ppb
Final Volume: 5 ml
ApprovedBy: akmal
ApproveDate: 08/03/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12833	P&T Water	5 ml	NEAT neat	
V-331408	MBS	2.5 ul	100 ppm	50 ppb
13198	Chlorodifluoromethane (freon #22)	1.25 ul	200 ppm	50 ppb

Veritech Lot Number: V-333804

Prepared By: Previlon, Wilner
Description: 200ppm VOA Working Std
Prep Date: 8/26/2020
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	220 ul	neat neat	neat
12994	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
13185	502.2 Cal2000 Mega Mix	100 ul	2000 ppm	200 ppm
12907	EPA 8260 CAL. MIX 2	100 ul	2000 ppm	200 ppm
13400	Custom VOC Standard	100 ul	VARIOUS	various ppm
12774	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-313322	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-313324	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
V-327582	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
12992	Ethyl-tert-Butyl Ether(ETBTE)	100 ul	2000 ppm	200 ppm

Veritech Lot Number: V-333805

Prepared By: Previlon, Wilner
Description: MBS
Prep Date: 8/26/2020
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 100 ppm
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	610 ul	neat neat	neat neat
13186	502.2 Cal Mix#1(Gases)	50 ul	2000 ppm	100 ppm
13185	502.2 Cal2000 Mega Mix	50 ul	2000 ppm	100 ppm
12913	EPA 8260 CAL MIX 2	50 ul	2000 ppm	100 ppm
13401	Custom VOC Standard(2nd Sources)	50 ul	VARIOUS	various ppm
12993	tert-Amyl Methyl Ether	50 ul	2000 ppm	100 ppm
V-313323	VOA ADD MIX(2nd Source)	20 ul	5000/25000 p	various ppm
V-313325	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-327585	Ethyl ether/Furan Mix(2ND SOURCE)	20 ul	5000 ppm	100 ppm
13038	Ethyl-tert-Butyl Ether (ETBE)	50 ul	2000 ppm	100 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334698

Prepared By: Previlon, Wilner
Department: Organics
ApprovedBy: akmal
Description: 200ppm VOA Working Std
BatchNumber:
ApproveDate: 09/15/20
Prep Date: 9/11/2020
Concentration: VARIOUS pp
Checked: Yes
Expiration Date: 10/4/2020
Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	220 ul	neat neat	neat
12994	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
13185	502.2 Cal2000 Mega Mix	100 ul	2000 ppm	200 ppm
12907	EPA 8260 CAL. MIX 2	100 ul	2000 ppm	200 ppm
13400	Custom VOC Standard	100 ul	VARIOUS	various ppm
12774	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-313322	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-313324	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
V-327582	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
12992	Ethyl-tert-Butyl Ether(ETBTE)	100 ul	2000 ppm	200 ppm

Veritech Lot Number: V-334699

Prepared By: Previlon, Wilner
Department: Organics
ApprovedBy: akmal
Description: MBS
BatchNumber:
ApproveDate: 09/15/20
Prep Date: 9/11/2020
Concentration: 100 ppm
Checked: Yes
Expiration Date: 10/4/2020
Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	610 ul	neat neat	neat neat
13186	502.2 Cal Mix#1(Gases)	50 ul	2000 ppm	100 ppm
13185	502.2 Cal2000 Mega Mix	50 ul	2000 ppm	100 ppm
12913	EPA 8260 CAL MIX 2	50 ul	2000 ppm	100 ppm
13401	Custom VOC Standard(2nd Sources)	50 ul	VARIOUS	various ppm
12993	tert-Amyl Methyl Ether	50 ul	2000 ppm	100 ppm
V-313323	VOA ADD MIX(2nd Source)	20 ul	5000/25000 p	various ppm
V-313325	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-327585	Ethyl ether/Furan Mix(2ND SOURCE)	20 ul	5000 ppm	100 ppm
13038	Ethyl-tert-Butyl Ether (ETBE)	50 ul	2000 ppm	100 ppm

Veritech Lot Number: V-334700

Prepared By: Previlon, Wilner
Department: Organics
ApprovedBy: akmal
Description: 624/8260 CAL @ 250 PPB
BatchNumber: B-29670
ApproveDate: 09/15/20
Prep Date: 9/11/2020
Concentration: VARIOUS ppb
Checked: Yes
Expiration Date: 9/18/2020
Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334698	200ppm VOA Working Std	125 ul	VARIOUS pp	250 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	125 ul	200 ppm	250 ppb

Veritech Lot Number: V-334701

Prepared By: Previlon, Wilner
Department: Organics
ApprovedBy: akmal
Description: 624/8260 CAL @ 100 PPB
BatchNumber: B-29670
ApproveDate: 09/15/20
Prep Date: 9/11/2020
Concentration: VARIOUS ppb
Checked: Yes
Expiration Date: 9/18/2020
Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334698	200ppm VOA Working Std	50 ul	VARIOUS pp	100 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	50 ul	200 ppm	100 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334702

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 50 PPB
Prep Date: 9/11/2020
Expiration Date: 9/18/2020
Department: Organics
BatchNumber: B-29670
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334698	200ppm VOA Working Std	25 ul	VARIOUS pp	50 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	25 ul	200 ppm	50 ppb

Veritech Lot Number: V-334703

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 20 PPB
Prep Date: 9/11/2020
Expiration Date: 9/18/2020
Department: Organics
BatchNumber: B-29670
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334698	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-334704

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 10 PPB
Prep Date: 9/11/2020
Expiration Date: 9/18/2020
Department: Organics
BatchNumber: B-29670
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334709	20ppm VOA Working Std	50 ul	VARIOUS pp	10 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	50 ul	VARIOUS pp	10 ppb

Veritech Lot Number: V-334705

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 5 PPB
Prep Date: 9/11/2020
Expiration Date: 9/18/2020
Department: Organics
BatchNumber: B-29670
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334709	20ppm VOA Working Std	25 ul	VARIOUS pp	5 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	25 ul	VARIOUS pp	5 ppb

Veritech Lot Number: V-334706

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 1 PPB
Prep Date: 9/11/2020
Expiration Date: 9/18/2020
Department: Organics
BatchNumber: B-29670
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334709	20ppm VOA Working Std	5 ul	VARIOUS pp	1 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	5 ul	VARIOUS pp	1 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334707

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 0.5 PPB
Prep Date: 9/11/2020
Expiration Date: 9/18/2020
Department: Organics
BatchNumber: B-29670
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334709	20ppm VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb

Veritech Lot Number: V-334708

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 500 PPB
Prep Date: 9/11/2020
Expiration Date: 9/18/2020
Department: Organics
BatchNumber: B-29670
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334698	200ppm VOA Working Std	250 ul	VARIOUS pp	500 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	250 ul	200 ppm	500 ppb

Veritech Lot Number: V-334709

Prepared By: Previlon, Wilner
Description: 20ppm VOA Working Std
Prep Date: 9/11/2020
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	900 ul	neat neat	neat
V-334698	200ppm VOA Working Std	100 ul	VARIOUS pp	200 ppm

Veritech Lot Number: V-334710

Prepared By: Previlon, Wilner
Description: ICV CAL @ 20 PPB
Prep Date: 9/11/2020
Expiration Date: 9/18/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333805	MBS	20 ul	100 ppm	20 ppb
9712	P&T Water	100 ml	Neat neat	neat
13198	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-334776

Prepared By: Previlon, Wilner
Description: CAL @ 20 PPB
Prep Date: 9/14/2020
Expiration Date: 9/21/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334698	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
12833	P&T Water	100 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-335034

Prepared By:	Previlon, Wilner	Department: Organics	ApprovedBy: akmal
Description:	CAL @ 50 PPB	BatchNumber:	ApproveDate: 09/21/20
Prep Date:	9/17/2020	Concentration: VARIOUS ppb	Checked: Yes
Expiration Date:	9/18/2020	Final Volume: 5 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333804	200ppm VOA Working Std	1.25 ul	VARIOUS pp	50 ppb
12833	P&T Water	5 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	1.25 ul	200 ppm	50 ppb

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 2889

Description
1,2,4,5-TETRAMETHYLBENZENE

ApprovedBy: jean
ApproveDate: 07/30/09
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACROS ORGANI	409390050	A0214190	11/20/07	11/30/20	Revolus, Jean	1	1ML	NEAT	

Veritech Control/Receipt Number: 9641

Description
d-Camphor

ApprovedBy: jean
ApproveDate: 08/11/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11556-1G	3256300	08/11/15	10/31/20	Revolus, Jean	2	1g	Neat	

Veritech Control/Receipt Number: 9712

Description
P&T Water

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Veritech	N/A	N/A	09/28/15	09/28/20	Goring, Shawn	1	N/A	Neat	Neat

Veritech Control/Receipt Number: 11578

Description
n-Amyl Acetate

ApprovedBy: akmal
ApproveDate: 04/03/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Chem Service	N-12508-1G	6972800	04/03/18	02/27/21	Hamid, Akmal	1	1G	NEAT	NEAT

Veritech Control/Receipt Number: 11587

Description
Furan

ApprovedBy: akmal
ApproveDate: 04/05/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Aldrich	185922	SHBG4510V	04/05/18	08/31/25	Hamid, Akmal	1	5ML	NEAT	NEAT

Veritech Control/Receipt Number: 11674

Description
Ethyl-tert-Butyl Ether(ETBE)

ApprovedBy: jean
ApproveDate: 05/14/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30628	A0137814	05/10/18	05/31/23	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 11931

Description
Methyl methacrylate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-12443-1G	7530100	08/22/18	03/31/21	Revolus, Jean	1	1g	Neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11932

Description
Butyl methacrylate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11371-1G	4695500	08/22/18	01/31/23	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 11933

Description
n-Butyl acrylate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-12513-1G	7528400	08/22/18	12/31/20	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 11935

Description
Ethyl acetate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11881-1G	7518400	08/22/18	05/31/22	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 12137

Description
8260A Surrogates Mix

ApprovedBy: jean
ApproveDate: 11/21/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30240	A0138193	11/21/18	05/31/23	Revolus, Jean	17	1ml	2500	PPM

Veritech Control/Receipt Number: 12138

Description
8260A Internal Standard Mix

ApprovedBy: jean
ApproveDate: 11/21/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30241	A0138856	11/21/18	06/30/23	Revolus, Jean	14	1ml	2500	PPM

Veritech Control/Receipt Number: 12435

Description
Chlorodifluoromethane(Freon #22)

ApprovedBy: jean
ApproveDate: 04/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	M-REF-03	217071159	04/18/19	07/12/27	Revolus, Jean	20	1ml	200	PPM

Veritech Control/Receipt Number: 12588

Description
Methyl alcohol

ApprovedBy: akmal
ApproveDate: 06/14/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	19010891	06/11/19	04/16/21	Lopez, Jose	6	1L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12605

Description
Epa 502/524 VO Org Mix(2nd Sources)

ApprovedBy: akmal
ApproveDate: 07/08/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SIGMA-ALDRICH	502111	LRAC0242	06/14/19	09/30/20	Revolus, Jean	10	1ml	2000	PPM

Veritech Control/Receipt Number: 12761

Description
Camphene

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11395-250G	8199400	09/19/19	01/31/22	Revolus, Jean	2	250m	NEAT	

Veritech Control/Receipt Number: 12762

Description
p-Diethylbenzene

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-12771-100MG	8949700	09/19/19	08/31/23	Revolus, Jean	4	100m	NEAT	

Veritech Control/Receipt Number: 12763

Description
Isopropyl acetate

ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-12223-1G	8816500	09/19/19	04/30/24	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12764

Description
Cyclohexanone

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11531-1G	8743900	09/19/19	05/31/23	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12766

Description
Ethyl methacrylate

ApprovedBy: jean
ApproveDate: 09/25/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11903-1G	8239900	09/19/19	01/31/23	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12774

Description
tert-Amyl Methyl Ether Standard

ApprovedBy: akmal
ApproveDate: 09/23/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30629	A0143927	09/20/19	12/31/23	Revolus, Jean	6	1ml	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12776

Description	ApprovedBy: akmal ApproveDate: 09/23/19 Checked: Yes
502.2 Cal Mix #1(gases)	

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30042	A0150712	09/20/19	03/31/26	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 12804

Description	ApprovedBy: akmal ApproveDate: 02/10/20 Checked: Yes
methyl alcohol	

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	19010891	09/30/19	03/16/21	Lopez, Jose	36	1L	neat	neat

Veritech Control/Receipt Number: 12815

Description	ApprovedBy: akmal ApproveDate: 10/07/19 Checked: Yes
p-Ethyltoluene	

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEMSERVICE	N-12776-1G	7926200	10/03/19	12/31/21	Revolus, Jean	4	250 m	NEAT	

Veritech Control/Receipt Number: 12833

Description	ApprovedBy: akmal ApproveDate: 10/16/19 Checked: Yes
P&T Water	

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Veritech	N/A	N/A	10/14/19	10/14/25	Goring, Shawn	1	N/A	NEAT	NEAT

Veritech Control/Receipt Number: 12907

Description	ApprovedBy: akmal ApproveDate: 12/03/19 Checked: Yes
EPA 8260 CAL. MIX 2	

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SIGMA-ALDRICH	46831-U	LRAC3827	12/02/19	10/31/22	Hamid, Akmal	18	1.5ML	2000	PPM

Veritech Control/Receipt Number: 12913

Description	ApprovedBy: akmal ApproveDate: 12/09/19 Checked: Yes
EPA 8260 CAL MIX 2	

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Sigma- Addrich	4S6831-U	LRAC0052	12/09/19	10/31/20	Hamid, Akmal	15	1.5ML	2000	PPM

Veritech Control/Receipt Number: 12992

Description	ApprovedBy: jean ApproveDate: 01/09/20 Checked: Yes
Ethyl-tert-Butyl Ether(ETBTE)	

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30628	A0153073	01/08/20	09/30/24	Revolus, Jean	2	1ml	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12993

Description
tert-Amyl Methyl Ether

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30629	A0143927	01/08/20	12/31/23	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 12994

Description
502.2 Cal Mix #1(Gases)

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30042	A0153419	01/08/20	05/31/26	Revolus, Jean	10	1ml	2000	PPM

Veritech Control/Receipt Number: 13038

Description
Ethyl-tert-Butyl Ether (ETBE)

ApprovedBy: akmal
ApproveDate: 02/05/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30628	A0157135	02/03/20	01/31/25	Revolus, Jean	3	1ml	2000	PPM

Veritech Control/Receipt Number: 13124

Description
Custom VOC Standard

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	S-16418	220031197	03/17/20	09/16/20	Revolus, Jean	5	1ml	VARIOU	

Veritech Control/Receipt Number: 13150

Description
methyl alcohol

ApprovedBy: akmal
ApproveDate: 04/01/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	19010891	03/30/20	04/16/21	Lopez, Jose	42	1L	neat	neat

Veritech Control/Receipt Number: 13185

Description
502.2 Cal2000 Mega Mix

ApprovedBy: jean
ApproveDate: 04/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30431	A0150913	04/15/20	07/31/21	Revolus, Jean	10	1ml	2000	PPM

Veritech Control/Receipt Number: 13186

Description
502.2 Cal Mix#1(Gases)

ApprovedBy: jean
ApproveDate: 04/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30042	A0156895	04/15/20	09/30/26	Revolus, Jean	10	1ml	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13193

Description
Ethyl ether

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11897-1G	9150400	04/17/20	11/30/21	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 13197

Description
Chlorodifluoromethane (freon #22)

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	M-REF-03	219081587	04/17/20	09/11/29	Revolus, Jean	10	1ml	200	PPM

Veritech Control/Receipt Number: 13198

Description
Chlorodifluoromethane (freon #22)

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	M-REF-03	220011384	04/17/20	01/28/30	Revolus, Jean	10	1ml	200	PPM

Veritech Control/Receipt Number: 13224

Description
methyl alcohol

ApprovedBy: akmal
ApproveDate: 05/05/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	20030219	05/04/20	03/13/22	Lopez, Jose	6	1L	neat	neat

Veritech Control/Receipt Number: 13400

Description
Custom VOC Standard

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	S-16418	220071002	07/15/20	01/08/21	Revolus, Jean	5	1ml	VARIOU	

Veritech Control/Receipt Number: 13401

Description
Custom VOC Standard(2nd Sources)

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	S-16418	220071003	07/15/20	04/21/21	Revolus, Jean	5	1ml	VARIOU	

Metal Data

Metal Data
Sample Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-001	% Solid:	90	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-4A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.22	6.0	1	0.5	100	09/16/20	852801	620BNEW	21	MS	MS3_7700SWA
7440-41-7	Beryllium	0.22	0.30	1	0.5	100	09/16/20	852801	620BNEW	21	MS	MS3_7700SWA
7782-49-2	Selenium	2.2	ND	1	0.5	100	09/16/20	852801	620BNEW	21	MS	MS3_7700SWA
7440-22-4	Silver	0.22	ND	1	0.5	100	09/16/20	852801	620BNEW	21	MS	MS3_7700SWA

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-001	% Solid:	90	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-4A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	39	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A
7440-47-3	Chromium	5.6	13	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A
7440-50-8	Copper	5.6	30	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A
7439-92-1	Lead	5.6	77	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A
7439-96-5	Manganese	11	240	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A
7439-97-6	Mercury	0.093	ND	1	0.15	25	09/16/20	85279	H26221S	16	CV	HGCV3A
7440-02-0	Nickel	5.6	28	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A
7440-66-6	Zinc	11	75	1	1	100	09/16/20	85279	S26226A3	46	P	PEICP3A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-002	% Solid:	91	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-4B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.22	7.5	1	0.5	100	09/16/20	852801	620BNEW	30	MS	MS3_7700SWA
7440-41-7	Beryllium	0.22	0.37	1	0.5	100	09/16/20	852801	620BNEW	30	MS	MS3_7700SWA
7782-49-2	Selenium	2.2	ND	1	0.5	100	09/16/20	852801	620BNEW	30	MS	MS3_7700SWA
7440-22-4	Silver	0.22	ND	1	0.5	100	09/16/20	852801	620BNEW	30	MS	MS3_7700SWA

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-002	% Solid:	91	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-4B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	33	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A
7440-47-3	Chromium	5.5	13	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A
7440-50-8	Copper	5.5	54	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A
7439-92-1	Lead	5.5	120	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A
7439-96-5	Manganese	11	250	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A
7439-97-6	Mercury	0.092	0.12	1	0.15	25	09/16/20	85279	H26221S	20	CV	HGCV3A
7440-02-0	Nickel	5.5	53	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A
7440-66-6	Zinc	11	73	1	0.5	50	09/16/20	85279	S26226A3	54	P	PEICP3A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-003	% Solid:	79	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-2A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	11	1	0.5	100	09/16/20	852801	620BNEW	31	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	0.41	1	0.5	100	09/16/20	852801	620BNEW	31	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	09/16/20	852801	620BNEW	31	MS	MS3_7700SWA
7440-22-4	Silver	0.25	0.28	1	0.5	100	09/16/20	852801	620BNEW	31	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-003	% Solid:	79	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-2A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	13	140	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A
7440-47-3	Chromium	6.3	13	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A
7440-50-8	Copper	6.3	140	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A
7439-92-1	Lead	6.3	180	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A
7439-96-5	Manganese	13	300	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A
7439-97-6	Mercury	0.11	0.14	1	0.15	25	09/16/20	85279	H26221S	23	CV	HGCV3A
7440-02-0	Nickel	6.3	33	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A
7440-66-6	Zinc	13	130	1	0.5	50	09/16/20	85279	S26226A3	55	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-004	% Solid:	86	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-2B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	8.7	1	0.5	100	09/16/20	852801	620BNEW	32	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	0.37	1	0.5	100	09/16/20	852801	620BNEW	32	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	ND	1	0.5	100	09/16/20	852801	620BNEW	32	MS	MS3_7700SWA
7440-22-4	Silver	0.23	ND	1	0.5	100	09/16/20	852801	620BNEW	32	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-004	% Solid:	86	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-2B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	230	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A
7440-47-3	Chromium	5.8	12	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A
7440-50-8	Copper	5.8	88	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A
7439-92-1	Lead	5.8	170	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A
7439-96-5	Manganese	12	380	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A
7439-97-6	Mercury	0.097	0.11	1	0.15	25	09/16/20	85279	H26221S	24	CV	HGCV3A
7440-02-0	Nickel	5.8	18	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A
7440-66-6	Zinc	12	100	1	0.5	50	09/16/20	85279	S26226A3	56	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-005	% Solid:	93	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-1A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.22	12	1	0.5	100	09/16/20	852801	620BNEW	33	MS	MS3_7700SWA
7440-41-7	Beryllium	0.22	0.30	1	0.5	100	09/16/20	852801	620BNEW	33	MS	MS3_7700SWA
7782-49-2	Selenium	2.2	ND	1	0.5	100	09/16/20	852801	620BNEW	33	MS	MS3_7700SWA
7440-22-4	Silver	0.22	ND	1	0.5	100	09/16/20	852801	620BNEW	33	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-005	% Solid:	93	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-1A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	100	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A
7440-47-3	Chromium	5.4	9.8	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A
7440-50-8	Copper	5.4	83	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A
7439-92-1	Lead	5.4	250	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A
7439-96-5	Manganese	11	250	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A
7439-97-6	Mercury	0.090	0.26	1	0.15	25	09/16/20	85279	H26221S	25	CV	HGCV3A
7440-02-0	Nickel	5.4	19	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A
7440-66-6	Zinc	11	110	1	0.5	50	09/16/20	85279	S26226A3	57	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-006	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-1B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	27	1	0.5	100	09/16/20	852801	620BNEW	34	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	0.37	1	0.5	100	09/16/20	852801	620BNEW	34	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	ND	1	0.5	100	09/16/20	852801	620BNEW	34	MS	MS3_7700SWA
7440-22-4	Silver	0.23	ND	1	0.5	100	09/16/20	852801	620BNEW	34	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-006	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-1B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	350	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A
7440-47-3	Chromium	5.7	13	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A
7440-50-8	Copper	5.7	200	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A
7439-92-1	Lead	5.7	730	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A
7439-96-5	Manganese	11	130	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A
7439-97-6	Mercury	0.096	0.17	1	0.15	25	09/16/20	85279	H26221S	26	CV	HGCV3A
7440-02-0	Nickel	5.7	18	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A
7440-66-6	Zinc	11	48	1	0.5	50	09/16/20	85279	S26226A3	58	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-007	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-6A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	16	1	0.5	100	09/16/20	852801	620BNEW	35	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	0.47	1	0.5	100	09/16/20	852801	620BNEW	35	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	09/16/20	852801	620BNEW	35	MS	MS3_7700SWA
7440-22-4	Silver	0.25	ND	1	0.5	100	09/16/20	852801	620BNEW	35	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-007	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-6A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	140	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A
7440-47-3	Chromium	6.2	ND	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A
7440-50-8	Copper	6.2	300	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A
7439-92-1	Lead	6.2	350	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A
7439-96-5	Manganese	12	91	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A
7439-97-6	Mercury	0.10	0.13	1	0.15	25	09/16/20	85279	H26221S	27	CV	HGCV3A
7440-02-0	Nickel	6.2	99	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A
7440-66-6	Zinc	12	130	1	0.5	50	09/16/20	85279	S26226A3	59	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-008	% Solid:	82	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-6B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	18	1	0.5	100	09/16/20	852801	620BNEW	36	MS	MS3_7700SWA
7440-41-7	Beryllium	0.24	0.45	1	0.5	100	09/16/20	852801	620BNEW	36	MS	MS3_7700SWA
7782-49-2	Selenium	2.4	ND	1	0.5	100	09/16/20	852801	620BNEW	36	MS	MS3_7700SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	09/16/20	852801	620BNEW	36	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-008	% Solid:	82	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-6B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	450	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A
7440-47-3	Chromium	6.1	14	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A
7440-50-8	Copper	6.1	420	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A
7439-92-1	Lead	6.1	340	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A
7439-96-5	Manganese	12	120	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A
7439-97-6	Mercury	0.10	0.30	1	0.15	25	09/16/20	85279	H26221S	28	CV	HGCV3A
7440-02-0	Nickel	6.1	110	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A
7440-66-6	Zinc	12	110	1	0.5	50	09/16/20	85279	S26226A3	60	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-009	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-7A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.25	6.3	1	0.5	100	09/16/20	852801	620BNEW	37	MS	MS3_7700SWA
7440-41-7	Beryllium	0.25	0.26	1	0.5	100	09/16/20	852801	620BNEW	37	MS	MS3_7700SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	09/16/20	852801	620BNEW	37	MS	MS3_7700SWA
7440-22-4	Silver	0.25	ND	1	0.5	100	09/16/20	852801	620BNEW	37	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-009	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-7A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	72	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A
7440-47-3	Chromium	6.2	7.4	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A
7440-50-8	Copper	6.2	41	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A
7439-92-1	Lead	6.2	35	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A
7439-96-5	Manganese	12	47	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A
7439-97-6	Mercury	0.10	ND	1	0.15	25	09/16/20	85279	H26221S	29	CV	HGCV3A
7440-02-0	Nickel	6.2	19	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A
7440-66-6	Zinc	12	25	1	0.5	50	09/16/20	85279	S26226A3	61	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-010	% Solid:	83	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-7B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	9.5	1	0.5	100	09/16/20	852801	620BNEW	38	MS	MS3_7700SWA
7440-41-7	Beryllium	0.24	0.39	1	0.5	100	09/16/20	852801	620BNEW	38	MS	MS3_7700SWA
7782-49-2	Selenium	2.4	ND	1	0.5	100	09/16/20	852801	620BNEW	38	MS	MS3_7700SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	09/16/20	852801	620BNEW	38	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-010	% Solid:	83	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-7B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	58	1	0.5	50	09/16/20	85279	S26226A3	64	P	PEICP3A
7440-47-3	Chromium	6.0	10	1	0.5	50	09/16/20	85279	S26226A3	64	P	PEICP3A
7440-50-8	Copper	6.0	57	1	0.5	50	09/16/20	85279	S26226A3	64	P	PEICP3A
7439-92-1	Lead	6.0	41	1	0.5	50	09/16/20	85279	S26226A3	64	P	PEICP3A
7439-96-5	Manganese	12	660	1	0.5	50	09/16/20	85279	S26226A3	64	P	PEICP3A
7439-97-6	Mercury	0.10	ND	1	0.15	25	09/16/20	85279	H26221S	30	CV	HGCV3A
7440-02-0	Nickel	6.0	22	1	0.5	50	09/16/20	85279	S26232B3	36	P	PEICP3A
7440-66-6	Zinc	12	83	1	0.5	50	09/16/20	85279	S26226A3	64	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-011	% Solid:	82	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-8A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	10	1	0.5	100	09/16/20	852801	620BNEW	42	MS	MS3_7700SWA
7440-41-7	Beryllium	0.24	0.31	1	0.5	100	09/16/20	852801	620BNEW	42	MS	MS3_7700SWA
7782-49-2	Selenium	2.4	ND	1	0.5	100	09/16/20	852801	620BNEW	42	MS	MS3_7700SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	09/16/20	852801	620BNEW	42	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-011	% Solid:	82	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-8A	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	64	1	0.5	50	09/16/20	85279	S26226A3	65	P	PEICP3A
7440-47-3	Chromium	6.1	15	1	0.5	50	09/16/20	85279	S26226A3	65	P	PEICP3A
7440-50-8	Copper	6.1	35	1	0.5	50	09/16/20	85279	S26226A3	65	P	PEICP3A
7439-92-1	Lead	6.1	60	1	0.5	50	09/16/20	85279	S26226A3	65	P	PEICP3A
7439-96-5	Manganese	12	390	1	0.5	50	09/16/20	85279	S26226A3	65	P	PEICP3A
7439-97-6	Mercury	0.10	ND	1	0.15	25	09/16/20	85279	H26221S	31	CV	HGCV3A
7440-02-0	Nickel	6.1	18	1	0.5	50	09/16/20	85279	S26232B3	37	P	PEICP3A
7440-66-6	Zinc	12	87	1	0.5	50	09/16/20	85279	S26226A3	65	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-012	% Solid:	85	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-8B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	13	1	0.5	100	09/16/20	852801	620BNEW	43	MS	MS3_7700SWA
7440-41-7	Beryllium	0.24	0.36	1	0.5	100	09/16/20	852801	620BNEW	43	MS	MS3_7700SWA
7782-49-2	Selenium	2.4	ND	1	0.5	100	09/16/20	852801	620BNEW	43	MS	MS3_7700SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	09/16/20	852801	620BNEW	43	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-012	% Solid:	85	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-8B	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	88	1	0.5	50	09/16/20	85279	S26226A3	66	P	PEICP3A
7440-47-3	Chromium	5.9	9.3	1	0.5	50	09/16/20	85279	S26226A3	66	P	PEICP3A
7440-50-8	Copper	5.9	41	1	0.5	50	09/16/20	85279	S26226A3	66	P	PEICP3A
7439-92-1	Lead	5.9	100	1	0.5	50	09/16/20	85279	S26226A3	66	P	PEICP3A
7439-96-5	Manganese	12	310	1	0.5	50	09/16/20	85279	S26226A3	66	P	PEICP3A
7439-97-6	Mercury	0.098	0.14	1	0.15	25	09/16/20	85279	H26221S	32	CV	HGCV3A
7440-02-0	Nickel	5.9	19	1	0.5	50	09/16/20	85279	S26232B3	38	P	PEICP3A
7440-66-6	Zinc	12	62	1	0.5	50	09/16/20	85279	S26226A3	66	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-013	% Solid:	66	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-1	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.30	10	1	0.5	100	09/16/20	852801	620BNEW	44	MS	MS3_7700SWA
7440-41-7	Beryllium	0.30	0.35	1	0.5	100	09/16/20	852801	620BNEW	44	MS	MS3_7700SWA
7782-49-2	Selenium	3.0	ND	1	0.5	100	09/16/20	852801	620BNEW	44	MS	MS3_7700SWA
7440-22-4	Silver	0.30	ND	1	0.5	100	09/16/20	852801	620BNEW	44	MS	MS3_7700SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-013	% Solid:	66	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-1	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	15	64	1	0.5	50	09/16/20	85279	S26226A3	67	P	PEICP3A
7440-47-3	Chromium	7.6	13	1	0.5	50	09/16/20	85279	S26226A3	67	P	PEICP3A
7440-50-8	Copper	7.6	25	1	0.5	50	09/16/20	85279	S26226A3	67	P	PEICP3A
7439-92-1	Lead	7.6	14	1	0.5	50	09/16/20	85279	S26226A3	67	P	PEICP3A
7439-96-5	Manganese	15	250	1	0.5	50	09/16/20	85279	S26226A3	67	P	PEICP3A
7439-97-6	Mercury	0.13	ND	1	0.15	25	09/16/20	85279	H26221S	35	CV	HGCV3A
7440-02-0	Nickel	7.6	25	1	0.5	50	09/16/20	85279	S26232B3	39	P	PEICP3A
7440-66-6	Zinc	15	74	1	0.5	50	09/16/20	85279	S26226A3	67	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Metal Data
QC Data

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/16/20
Data File: S091620BNEW
Prep Batch: 85280
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-334461-8	Rec	CCV V-334465-16	Rec	CCV V-334465-28	Rec	CCV V-334465-40	Rec	CCV V-334465-50	Rec		Rec		Rec		Rec
Antimony	50/50	50.20500	100	49.00800	98	51.21600	102	49.23000	98	50.11100	100						
Arsenic	50/50	49.96600	100	50.23600	100	49.97100	100	48.64300	97	48.71900	97						
Beryllium	50/50	50.51700	101	49.38600	99	49.26500	99	45.21800	90	47.99700	96						
Cadmium	50/50	50.20000	100	49.12900	98	51.36000	103	49.31400	99	50.18800	100						
Selenium	50/250	50.60700	101	255.16400	102	252.39500	101	246.65700	99	245.06900	98						
Silver	10/50	10.05200	101	49.96400	100	52.17000	104	49.86000	100	50.97600	102						
Thallium	50/50	48.40800	97	49.48000	99	51.03600	102	50.09500	100	50.73600	101						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/16/20
Data File: S091620BNEW
Prep Batch: 85280
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-334466	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-334464	Recovery	Low Limit	High Limit	
Magnesium	500	495.106	99	80	120		50000	51341.133	103	90	110	
Aluminum	500	502.278	100	80	120		15000	15545.567	104	90	110	
Chromium	2	2.041	102	80	120		500	522.499	104	90	110	
Copper	10	10.027	100	80	120		500	471.911	94	90	110	
Iron	500	519.301	104	80	120		50000	50977.569	102	90	110	
Arsenic	1	1.000	100	80	120		500	502.285	100	90	110	
Barium	5	4.806	96	80	120		500	511.449	102	90	110	
Beryllium	1	0.994	99	80	120		500	466.490	93	90	110	
Calcium	500	489.461	98	80	120		50000	52552.329	105	90	110	
Cadmium	2	1.901	95	80	120		500	514.641	103	90	110	
Silver	1	0.934	93	80	120		500	194.631	39 a	90	110	
Potassium	500	491.615	98	80	120		50000	51522.325	103	90	110	
Zinc	20	20.406	102	80	120		500	486.184	97	90	110	
Manganese	6	6.030	100	80	120		500	527.266	105	90	110	
Molybdenum	1	1.013	101	80	120		500	528.473	106	90	110	
Sodium	500	471.689	94	80	120		50000	52384.068	105	90	110	
Nickel	3	3.044	101	80	120		500	492.936	99	90	110	
Lead	2	1.669	93	80	120		500	476.080	95	90	110	
Antimony	4	3.855	96	80	120		500	517.670	104	90	110	
Selenium	10	9.888	99	80	120		2500	2444.392	98	90	110	
Thallium	2	1.794	90	80	120		500	471.867	94	90	110	
Vanadium	1	0.958	96	80	120		500	522.328	104	90	110	
Cobalt	2	2.006	100	80	120		500	511.208	102	90	110	

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/16/20
Data File: S26226A3
Prep Batch: 85279
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333673-5	Rec	CCV V-333673-12	Rec	CCV V-333673-23	Rec	CCV V-333673-32	Rec	CCV V-333673-41	Rec	CCV V-333673-52	Rec	CCV V-333673-62	Rec	CCV V-333673-73	Rec
Barium	.5/.5	0.47821	96	0.50471	101	0.48613	97	0.52433	105	0.51892	104	0.50006	100	0.49930	100	0.45445	91
Chromium	.5/.5	0.47793	96	0.52921	106	0.48645	97	0.52500	105	0.52010	104	0.50066	100	0.50036	100	0.45439	91
Copper	.5/.5	0.48189	96	0.50731	101	0.49096	98	0.50359	101	0.49998	100	0.50503	101	0.47951	96	0.46121	92
Lead	.5/.5	0.48603	97	0.49691	99	0.49018	98	0.49159	98	0.48417	97	0.49867	100	0.46712	93	0.45960	92
Manganese	.5/.5	0.48485	97	0.50708	101	0.49258	99	0.50125	100	0.49816	100	0.50757	102	0.47787	96	0.46061	92
Nickel	.5/.5	0.46401	93	0.50206	100	0.46921	94	0.49494	99	0.49095	98	0.48260	97	0.47262	95	0.43830	88 c
Vanadium	.5/.5	0.48541	97	0.51385	103	0.49623	99	0.51048	102	0.50706	101	0.51691	103	0.48338	97	0.46436	93
Zinc	.5/.5	0.47883	96	0.52088	104	0.48160	96	0.51192	102	0.50848	102	0.49806	100	0.49114	98	0.44983	90

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/16/20
Data File: S26226A3
Prep Batch: 85284 | 85279
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333671	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-333662	Recovery	Low Limit	High Limit
Molybdenum	0.025	0.0278166	111	80	120	10	9.76988	98	90	110
Aluminum	2.0	2.07182	104	80	120	500	493.513	99	90	110
Arsenic	0.04	0.0423530	106	80	120	10	10.7691	108	90	110
Barium	0.1	0.107164	107	80	120	10	10.0683	101	90	110
Beryllium	0.012	0.0142356	119	80	120	5	5.04343	101	90	110
Calcium	10	10.6264	106	80	120	500	474.676	95	90	110
Cadmium	0.012	0.0151089	126 a	80	120	5	5.11871	102	90	110
Cobalt	0.025	0.0268107	107	80	120	5	4.68115	94	90	110
Chromium	0.05	0.0493175	99	80	120	10	9.95391	100	90	110
Copper	0.05	0.0522848	105	80	120	10	10.4660	105	90	110
Iron	2.0	2.07611	104	80	120	400	369.004	92	90	110
Potassium	NA	-13.7109		80	120	200	-2673.70	- a	90	110
Silver	0.015	0.0157052	105	80	120	1	1.23919	1300 124 a	90	110
Manganese	0.1	0.103272	103	80	120	10	9.90252	99	90	110
Silicon	0.1	0.131969	132 a	80	120	25	0.168244	.67 a	90	110
Sodium	NA	2.49155		80	120	1000	1170.57	117 a	90	110
Nickel	0.05	0.0517343	103	80	120	10	9.28749	93	90	110
Lead	0.05	0.0519124	104	80	120	10	9.92348	99	90	110
Antimony	0.04	0.0423678	106	80	120	5	5.67810	114 a	90	110
Selenium	0.05	0.0560264	112	80	120	5	5.20664	104	90	110
Tin	0.2	0.207294	104	80	120	10	10.1526	102	90	110
Titanium	0.1	0.102638	103	80	120	10	10.2638	103	90	110
Thallium	0.05	0.0522333	104	80	120	5	5.18236	104	90	110
Vanadium	0.1	0.104868	105	80	120	10	10.2404	102	90	110
Zinc	0.1	0.0997324	100	80	120	10	9.51945	95	90	110
Boron	0.2	0.209454	105	80	120	5	3.83979	77 a	90	110
Magnesium	5.0	5.01843	100	80	120	500	477.184	95	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/16/20
Data File: S26232B3
Prep Batch: 85279
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-333673-5	Rec	CCV V-333673-12	Rec	CCV V-333673-23	Rec	CCV V-333673-34	Rec	CCV V-333673-44	Rec		Rec		Rec		Rec
Cobalt	.5/.5	0.48175	96	0.48599	97	0.47058	94	0.47765	96	0.47368	95						
Nickel	.5/.5	0.48605	97	0.48886	98	0.47051	94	0.48041	96	0.47557	95						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/16/20
Data File: S26232B3
Prep Batch: 85290 185279
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333671	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-333662	Recovery	Low Limit	High Limit
Magnesium	5.0	4.94232	99	80	120	500	464.467	93	90	110
Silver	0.015	0.0163989	109	80	120	1	1.20456	120 a	90	110
Aluminum	2.0	1.98463	99	80	120	500	485.028	97	90	110
Arsenic	0.04	0.0403245	101	80	120	10	10.2827	103	90	110
Boron	0.2	0.201525	101	80	120	5	3.72290	74 a	90	110
Barium	0.1	0.102230	102	80	120	10	9.70663	97	90	110
Beryllium	0.012	0.0095287	79 a	80	120	5	4.89452	98	90	110
Calcium	10	10.0376	100	80	120	500	450.709	90	90	110
Cadmium	0.012	0.0156595	130 a	80	120	5	4.98105	100	90	110
Cobalt	0.025	0.0264409	106	80	120	5	4.57678	92	90	110
Chromium	0.05	0.0489671	98	80	120	10	9.88213	99	90	110
Copper	0.05	0.0481570	96	80	120	10	10.3553	104	90	110
Silicon	0.1	0.101056	101	80	120	25	0.133810	.54 a	90	110
Potassium	NA	-2.13762		80	120	200	-2930.33	- a	90	110
Zinc	0.1	0.101504	102	80	120	10	9.43934	1500 94	90	110
Manganese	0.1	0.0971929	97	80	120	10	9.73967	97	90	110
Molybdenum	0.025	0.0239869	96	80	120	10	9.43000	94	90	110
Sodium	NA	2.48403		80	120	1000	1155.41	116 a	90	110
Nickel	0.05	0.0519951	104	80	120	10	9.13340	91	90	110
Lead	0.05	0.0450040	90	80	120	10	9.55470	96	90	110
Antimony	0.04	0.0394080	99	80	120	5	5.35445	107	90	110
Selenium	0.05	0.0513982	103	80	120	5	4.99630	100	90	110
Tin	0.2	0.201142	101	80	120	10	9.69306	97	90	110
Titanium	0.1	0.0953923	95	80	120	10	10.0945	101	90	110
Thallium	0.05	0.0489272	98	80	120	5	5.01259	100	90	110
Vanadium	0.1	0.0985707	99	80	120	10	10.1496	101	90	110
Iron	2.0	1.99861	100	80	120	400	362.886	91	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/16/20
Data File: H26221S
Prep Batch: 85279
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-21		CCV-33		CCV-41									
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Mercury	20/10	20.09000	100	10.45000	104	10.44000	104	10.35000	104								

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/16/20
Data File: S091620BNEW
Prep Batch: 85280
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-334462-10	CCB V-334462-17	CCB V-334462-29	CCB V-334462-41	CCB V-334462-51	MB 85280-18		
Antimony	2 U	4 U	4 U	4 U	4 U	400 U		
Arsenic	.5 U	1 U	1 U	1 U	1 U	100 U		
Beryllium	.5 U	1 U	1 U	1 U	1 U	100 U		
Cadmium	1 U	2 U	2 U	2 U	2 U	200 U		
Selenium	5 U	10 U	10 U	10 U	10 U	1000 U		
Silver	.5 U	1 U	1 U	1 U	1 U	100 U		
Thallium	1 U	2 U	2 U	2 U	2 U	200 U		

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/16/20
Data File: S26226A3
Prep Batch: 85279
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-24	CCB V-333667-33	CCB V-333667-42	CCB V-333667-53	CCB V-333667-63	CCB V-333667-74
Barium	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Chromium	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Copper	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Lead	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Manganese	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Vanadium	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Zinc	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U

Analyte	MB 85279 (100)-43							
Barium	5 U							
Chromium	2.5 U							
Copper	2.5 U							
Lead	2.5 U							
Manganese	5 U							
Nickel	2.5 U							
Vanadium	5 U							
Zinc	5 U							

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/16/20
Data File: S26232B3
Prep Batch: 85279
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-24	CCB V-333667-35	CCB V-333667-45			
Cobalt	.0125 U	.025 U	.025 U	.025 U	.025 U			
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U			

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/16/20
Data File: H26221S
Prep Batch: 85279
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-42	MB 85279 (167)-11			
Mercury	.5 U	.5 U	.5 U	.5 U	83 U			

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/16/20
Data File: S091620BNEW
Prep Batch: 85280
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-334463-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	50832.85	102							
Antimony	0	U								
Arsenic	0	U								
Beryllium	0	U								
Cadmium	0	U								
Calcium	150000	158881.5	106							
Iron	125000	126922.7	102							
Magnesium	50000	50364.81	101							
Selenium	0	U								
Silver	0	U								
Thallium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/16/20
Data File: S26226A3
Prep Batch: 85279
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	500.04	100							
Barium	0	U								
Calcium	500	479.236	96							
Chromium	0	U								
Copper	0	U								
Iron	200	189.303	95							
Lead	0	U								
Magnesium	500	497.068	99							
Manganes	0	U								
Nickel	0	U								
Vanadium	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/16/20
Data File: S26232B3
Prep Batch: 85279
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	490.193	98							
Calcium	500	457.14	91							
Cobalt	0	U								
Iron	200	186.1	93							
Magnesium	500	484.673	97							
Nickel	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85279

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85279

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85279	1	S26226A3	45	6.7493	8.92	76		65	110
Chromium	85279	1	S26226A3	45	1.7322	2.27	76		61	114
Copper	85279	1	S26226A3	45	1.6353	2.09	78		66	110
Lead	85279	1	S26226A3	45	1.2228	1.63	75		62	110
Manganese	85279	1	S26226A3	45	4.6026	6.03	76		68	110
Mercury	85279	4	H26221S	15	5.6140	41.64	54		39	110
Nickel	85279	1	S26226A3	45	0.4237	.553	77		61	114
Zinc	85279	1	S26226A3	45	5.3682	7.13	75		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85279

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85279	1	S26226A3	44	7.3764	8.92	83		65	110
Chromium	85279	1	S26226A3	44	1.8168	2.27	80		61	114
Copper	85279	1	S26226A3	44	1.7184	2.09	82		66	110
Lead	85279	1	S26226A3	44	1.2904	1.63	79		62	110
Manganese	85279	1	S26226A3	44	4.9165	6.03	82		68	110
Mercury	85279	4	H26221S	14	5.7840	41.64	56		39	110
Nickel	85279	1	S26226A3	44	0.4481	.553	81		61	114
Zinc	85279	1	S26226A3	44	5.5351	7.13	78		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD19178-001

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85279	1	S26226A3	49	S26226A3	46	0.8649	0.3504	0.5	103		75	125
Chromium	85279	1	S26226A3	49	S26226A3	46	0.6178	0.1193	0.5	100		75	125
Copper	85279	1	S26226A3	49	S26226A3	46	0.7521	0.2721	0.5	96		75	125
Lead	85279	1	S26226A3	49	S26226A3	46	1.1678	0.6959	0.5	94		75	125
Manganese	85279	1	S26226A3	49	S26226A3	46	2.6812	2.1389	0.5	108		75	125
Mercury	85279	1	H26221S	19	H26221S	16	10.1900	.5U	10	102		75	125
Nickel	85279	1	S26226A3	49	S26226A3	46	0.7147	0.2541	0.5	92		75	125
Zinc	85279	1	S26226A3	49	S26226A3	46	1.2005	0.6750	0.5	105		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19178-001

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85279	1	S26226A3	48	S26226A3	46	0.9088	0.3504	0.5	112		75	125
Chromium	85279	1	S26226A3	48	S26226A3	46	0.6727	0.1193	0.5	111		75	125
Copper	85279	1	S26226A3	48	S26226A3	46	0.7614	0.2721	0.5	98		75	125
Lead	85279	1	S26226A3	48	S26226A3	46	1.1751	0.6959	0.5	96		75	125
Manganese	85279	1	S26226A3	48	S26226A3	46	2.9680	2.1389	0.5	166	b	75	125
Mercury	85279	1	H26221S	18	H26221S	16	10.1700	.5U	10	102		75	125
Nickel	85279	1	S26226A3	48	S26226A3	46	1.1061	0.2541	0.5	170	a	75	125
Zinc	85279	1	S26226A3	48	S26226A3	46	1.2119	0.6750	0.5	107		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85279

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: SOIL SampleID: AD19178-001

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	1	S26226A3	50	S26226A3	46	0.8232	0.3504	0.50	95		75	125
Chromium	1	S26226A3	50	S26226A3	46	0.6151	0.1193	0.50	99		75	125
Copper	1	S26226A3	50	S26226A3	46	0.7403	0.2721	0.50	94		75	125
Lead	1	S26226A3	50	S26226A3	46	1.1359	0.6959	0.50	88		75	125
Manganese	1	S26226A3	50	S26226A3	46	2.6255	2.1389	0.50	97		75	125
Nickel	1	S26226A3	50	S26226A3	46	0.7080	0.2541	0.50	91		75	125
Zinc	1	S26226A3	50	S26226A3	46	1.1268	0.6750	0.50	90		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85280

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85280

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85280	1	S091620B	20	42.1200	49.4	85		61	113
Beryllium	85280	1	S091620B	20	137.0180	187	73		66	110
Selenium	85280	1	S091620B	20	300.4790	364	83		60	112
Silver	85280	1	S091620B	20	82.7220	94.0	88		61	111

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85280

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85280	1	S091620B	19	42.1670	49.4	85		61	113
Beryllium	85280	1	S091620B	19	141.4040	187	76		66	110
Selenium	85280	1	S091620B	19	301.5720	364	83		60	112
Silver	85280	1	S091620B	19	82.3800	94.0	88		61	111

TxtQcType: MSD Matrix: SOIL SampleID: AD19178-001

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85280	1	S091620B	25	S091620B	21	238.4720	27.0120	250	85		75	125
Beryllium	85280	1	S091620B	25	S091620B	21	180.2630	1.3610	250	72	a	75	125
Selenium	85280	1	S091620B	25	S091620B	21	207.3210	10U	250	83		75	125
Silver	85280	1	S091620B	25	S091620B	21	40.8980	1U	50	82		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19178-001

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85280	1	S091620B	24	S091620B	21	244.5100	27.0120	250	87		75	125
Beryllium	85280	1	S091620B	24	S091620B	21	184.4920	1.3610	250	73	a	75	125
Selenium	85280	1	S091620B	24	S091620B	21	207.6990	10U	250	83		75	125
Silver	85280	1	S091620B	24	S091620B	21	42.8060	1U	50	86		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85280

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: SOIL SampleID: AD19178-001

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	S091620B	26	S091620B	21	73.8070	27.0120	50	94		75	125
Beryllium	1	S091620B	26	S091620B	21	40.2000	1.3610	50	78		75	125
Selenium	1	S091620B	26	S091620B	21	233.4880	10U	250	93		75	125
Silver	1	S091620B	26	S091620B	21	45.7220	1U	50	91		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85279

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR | Matrix: SOIL | SampleID: LCS MR 85279

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85279	S26226A3	45	S26226A3	44	6.7493	7.3764	8.9		20
Chromium	85279	S26226A3	45	S26226A3	44	1.7322	1.8168	4.8		20
Copper	85279	S26226A3	45	S26226A3	44	1.6353	1.7184	5		20
Lead	85279	S26226A3	45	S26226A3	44	1.2228	1.2904	5.4		20
Manganese	85279	S26226A3	45	S26226A3	44	4.6026	4.9165	6.6		20
Mercury	85279	H26221S	15	H26221S	14	5.6140	5.7840	3		20
Nickel	85279	S26226A3	45	S26226A3	44	0.4237	0.4481	5.6		20
Zinc	85279	S26226A3	45	S26226A3	44	5.3682	5.5351	3.1		20

TxtQcType: MR | Matrix: SOIL | SampleID: AD19178-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85279	S26226A3	47	S26226A3	46	0.3805	0.3504	8.2		20
Chromium	85279	S26226A3	47	S26226A3	46	0.1313	0.1193	9.5		20
Copper	85279	S26226A3	47	S26226A3	46	0.2694	0.2721	1		20
Lead	85279	S26226A3	47	S26226A3	46	0.7141	0.6959	2.6		20
Manganese	85279	S26226A3	47	S26226A3	46	2.1452	2.1389	0.29		20
Mercury	85279	H26221S	17	H26221S	16	0.5170	.5U	---		20
Nickel	85279	S26226A3	47	S26226A3	46	0.3438	0.2541	30	a	20
Zinc	85279	S26226A3	47	S26226A3	46	0.6935	0.6750	2.7		20

TxtQcType: MSD | Matrix: SOIL | SampleID: AD19178-001

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85279	S26226A3	49	S26226A3	48	0.8649	0.9088	4.9		20
Chromium	85279	S26226A3	49	S26226A3	48	0.6178	0.6727	8.5		20
Copper	85279	S26226A3	49	S26226A3	48	0.7521	0.7614	1.2		20
Lead	85279	S26226A3	49	S26226A3	48	1.1678	1.1751	.62		20
Manganese	85279	S26226A3	49	S26226A3	48	2.6812	2.9680	10		20
Mercury	85279	H26221S	19	H26221S	18	10.1900	10.1700	.2		20
Nickel	85279	S26226A3	49	S26226A3	48	0.7147	1.1061	43	a	20
Zinc	85279	S26226A3	49	S26226A3	48	1.2005	1.2119	.95		20

TxtQcType: SD | Matrix: SOIL | SampleID: AD19178-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Barium	85279	S26226A3	51	S26226A3	46	5	0.0740	0.3504	5.5		10
Chromium	85279	S26226A3	51	S26226A3	46	5	0.0212	0.1193	11	a	10
Copper	85279	S26226A3	51	S26226A3	46	5	0.0576	0.2721	5.8		10
Lead	85279	S26226A3	51	S26226A3	46	5	0.1443	0.6959	3.7		10
Manganese	85279	S26226A3	51	S26226A3	46	5	0.4578	2.1389	7		10
Nickel	85279	S26226A3	51	S26226A3	46	5	0.0524	0.2541	3.2		10
Zinc	85279	S26226A3	51	S26226A3	46	5	0.1438	0.6750	6.5		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85280

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR | Matrix: SOIL | SampleID: LCS MR 85280

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85280	S091620B	20	S091620B	19	42.1200	42.1670	.11	20
Beryllium	85280	S091620B	20	S091620B	19	137.0180	141.4040	3.2	20
Selenium	85280	S091620B	20	S091620B	19	300.4790	301.5720	.36	20
Silver	85280	S091620B	20	S091620B	19	82.7220	82.3800	.41	20

TxtQcType: MR | Matrix: SOIL | SampleID: AD19178-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85280	S091620B	22	S091620B	21	27.5860	27.0120	2.1	20
Beryllium	85280	S091620B	22	S091620B	21	1.3550	1.3610	0.44	20
Selenium	85280	S091620B	22	S091620B	21	10U	10U	---	20
Silver	85280	S091620B	22	S091620B	21	1U	1U	---	20

TxtQcType: MSD | Matrix: SOIL | SampleID: AD19178-001

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85280	S091620B	25	S091620B	24	238.4720	244.5100	2.5	20
Beryllium	85280	S091620B	25	S091620B	24	180.2630	184.4920	2.3	20
Selenium	85280	S091620B	25	S091620B	24	207.3210	207.6990	.18	20
Silver	85280	S091620B	25	S091620B	24	40.8980	42.8060	4.6	20

TxtQcType: SD | Matrix: SOIL | SampleID: AD19178-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85280	S091620B	23	S091620B	21	5	5.5330	27.0120	2.4		20
Beryllium	85280	S091620B	23	S091620B	21	5	0.3290	1.3610	21	a	20
Selenium	85280	S091620B	23	S091620B	21	5	1.1920	5.8740	1.5		20
Silver	85280	S091620B	23	S091620B	21	5	0.0920	0.4620	0.43		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Metal Data
Verification of Instrument Parameters

INTERELEMENT CORRECTION SUMMARY PEICP2ax

Interfered Elements	Interfering Elements: Al	Ca	Fe	Mg	B	Ba	Ce	Cu	Mn
Al	N/A	0	0	0	0	0	-6.18497	0	0
Sb	0	0	0.0332865	0	0	0	-1.62618	0	0
As	0	0	-0.170638	0	0	0	0	0	0
Ba	0	0	0	0	0	N/A	0	0	0
Be	0	0	0	0	0	0	0	0	0
B	0	0	5.86388	0	N/A	0	0	0	0
Cd	0	0	0	0	0	0	-0.321734	0	0
Ca	0	N/A	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0	0
Ce	0	0	-0.810592	0	0	0	N/A	0	0
Cu	0	0	0	0	0	0	0	N/A	0
Fe	0	0	N/A	0	0	0	0	0	0
Pb	-0.104709	0	0	0	0	0	0.851109	0	0
Mg	0	0	0	N/A	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0	N/A
Mo	0	0	0	0	0	0	0	0	0
Ni	0	0	0	0	0	0	0	0	0
Se	0	0	-0.270247	0	0	0	0	0	0
Si	0	0	0	0	0	0	0	0	0
Ag	0	0	0	0	0	0	-3.49792	0	0
Na	0	0	0	0	0	0	0	0	0
Tl	0	0	0	0	0	0	-6.76851	0	0
Sn	0	0	0	0	0	0	0	0	0
Ti	0	0	0	0	0	0	0	0	0
V	0	0	0.0740709	0	0	0	0	0	0
Zn	0	0	0	0	0	0	0	0	0

IECs run 07/24/2020

INTERELEMENT CORRECTION SUMMARY PEICP2ax

Interfered Elements	Interfering Elements								
	Mo	Na	Ni	Se	Si	Sn	Ti	V	Zn
Al	20.7388	0	0	0	0	0	0	14.0607	0
Sb	-13.2842	0	0	0	0	-2.30	-1.75844	-1.45826	0
As	0	0	0	0	0	0	0	0	0
Ba	0	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0	-1.57995	0	0
B	0	0	0	0	0	0	0	0	0
Cd	0	0	0	0	0	0	0	0	0
Ca	0	0	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	1.46089	0	0
Ce	0	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	0	0	0
Fe	0	0	23.8802	76.9698	0	0	0	0	0
Pb	-2.86747	0	0	0	0	0	0	0	0
Mg	0	0	0	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0	0
Mo	N/A	0	0	0	0	0	0	0	0
Ni	0	0	N/A	0	0	0	0	0	0
Se	15.7635	0	0	N/A	0	0	0	0	0
Si	0	0	0	0	N/A	0	0	0	0
Ag	0	0	0	0	0	0	0	-3.20409	0
Na	0	N/A	0	0	0	0	0	0	-500.545
Tl	0	0	0	0	0	0	-6.58319	0	0
Sn	0	0	0	0	0	N/A	0	0	0
Ti	0	0	0	0	0	0	N/A	0	0
V	-15.9505	0	0	0	0	0	0	N/A	0
Zn	0	0	0	0	0	0	0	0	N/A

IECs run 07/24/2020

MDL / RL SUMMARY
SOIL
PE ICP 3 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/Kg)
Ag	0.24396749	1.5
Al	16.7078017	200
As	1.37117317	4
Ba	0.67596126	10
Be	0.71383086	1.2
Ca	100.98567	1000
Cd	0.52283194	1.2
Co	0.71289903	2.5
Cr	0.67036785	5
Cu	0.61619583	5
Fe	13.1992644	200
Mg	19.5137102	500
Mn	0.64172541	10
Mo	0.27417636	2.5
Na	111.789255	250
Ni	1.10372174	5
Pb	0.61639339	5
Sb	1.03795619	4
Se	1.72784998	5
Sn	1.86972983	20
Ti	0.63640908	10
Tl	16.577423	5
V	0.95770226	10
Zn	1.50868728	10
B	5.92873987	20

COMPLETED: 12/31/2019

MDL/RL
Method 6020/6020A
MS3_7700
SOIL

ELEMENT	MDL (MG/KG)	Reporting Limits (MG/KG)
Al	1.5871	100
Sb	0.0225	0.8
AS	0.0175	0.2
BA	0.0568	1
BE	0.0157	0.2
CA	19.0038	100
CD	0.0141	0.4
CR	0.0859	0.4
CO	0.0109	0.4
CU	0.1937	2
FE	4.2445	100
PB	0.0374	0.4
MG	2.3285	100
MN	0.2413	1.2
MO	0.0534	0.2
NA	17.8116	100
Ni	0.0522	0.6
K	5.8233	100
Se	0.0635	2
Ag	0.0261	0.2
TL	0.0176	0.4
V	0.0108	0.2
Zn	1.4649	4

MDL analyzed 5/21/2019, 7/12/2019, 9/5/2019, 10/29/2019.
Blanks 1/24/2019-1/24/2020

HGCV3 MDL/RL SUMMARY

Element:	*Mercury*	**Instrument ID:**	*HgCV3*
Instrument:	*PE FIMS 100*	**Analyst**	*Carmela Aliano*
Technique:	*CV*		

200 Series	METHOD	MDL (ppb)	Completed	RL (ppb)
H_2O	245.1	0.0794	12/31/2019	0.20
SW846				
H_2O	7470A	0.1740	12/31/2019	0.50
SOIL	7471 B	0.0757 (0.0126 mg/kg)	12/31/2019	0.50 (0.0833 mg/kg)

Metal Data
Raw Data

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85280 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85280 Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	50	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-36-0	Antimony	0.40	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-38-2	Arsenic	0.10	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-39-3	Barium	0.50	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-41-7	Beryllium	0.10	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-43-9	Cadmium	0.20	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-70-2	Calcium	50	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-47-3	Chromium	0.20	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-48-4	Cobalt	0.20	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-50-8	Copper	1.0	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7439-89-6	Iron	50	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7439-92-1	Lead	0.20	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7439-95-4	Magnesium	50	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7439-96-5	Manganese	0.60	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7439-98-7	Molybdenum	0.20	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-02-0	Nickel	0.30	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-09-7	Potassium	50	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7782-49-2	Selenium	1.0	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-22-4	Silver	0.10	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-23-5	Sodium	50	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-28-0	Thallium	0.20	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-62-2	Vanadium	0.10	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA
7440-66-6	Zinc	2.0	ND	1	0.5	100	09/16/20	85280	1620BNEW	18	MS	MS3_7700SWA

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85279 (100) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85279 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7440-39-3	Barium	5.0	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7440-70-2	Calcium	500	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7440-47-3	Chromium	2.5	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7440-48-4	Cobalt	1.2	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7440-50-8	Copper	2.5	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7439-89-6	Iron	100	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7439-92-1	Lead	2.5	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7439-95-4	Magnesium	250	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7439-96-5	Manganese	5.0	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7439-98-7	Molybdenum	1.2	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7440-02-0	Nickel	2.5	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7440-31-5	Tin	10	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7440-62-2	Vanadium	5.0	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A
7440-66-6	Zinc	5.0	ND	1	0.5	50	09/16/20	85279	S26226A3	43	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85279 (167) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85279 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	09/16/20	85279	H26221S	11	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Cr-SOIL

Sample	Total Cr (mg/kg)	RL	Hexavalent Cr (mg/kg)	RL	Trivalent Cr (mg/kg)	RL
AD19178-001	13.3	5.56	ND	0.889	13.3	5.56
AD19178-002	13.4	5.49	ND	0.879	13.4	5.49
AD19178-003	12.8	6.33	ND	1.013	12.8	6.33
AD19178-004	12.0	5.81	ND	0.930	12.0	5.81
AD19178-005	9.77	5.38	ND	0.860	9.77	5.38
AD19178-006	13.0	5.75	ND	0.920	13.0	5.75
AD19178-007	ND	6.17	ND	0.988	ND	6.17
AD19178-008	14.0	6.10	ND	0.976	14.0	6.10
AD19178-009	7.40	6.17	ND	0.988	7.40	6.17
AD19178-010	10.1	6.02	ND	0.964	10.1	6.02
AD19178-011	15.2	6.10	ND	0.976	15.2	6.10
AD19178-012	9.30	5.88	ND	0.941	9.30	5.88
AD19178-013	13.1	7.58	ND	1.212	13.1	7.58

Calculated using 3 significant figures. Reported using 2 significant figures.

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS3_7700SWA\S091620BNEW.txt

Analysis Date: 09/16/20 **Instrument:** MS3_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	15:22	1		SOIL	SOIL	SW846	85280		0
CalBlk V-334455	1	ISBLK	15:26	2		SOIL	SOIL				V-334455(Cal Blk WARNING)
CalStd1 V-334456	1	CAL	15:31	3							V-334456(Cal Std-1 WARNING)
CalStd2 V-334457	1	CAL	15:35	4							V-334457(Cal Std-2 WARNING)
CalStd3 V-334458	1	CAL	15:40	5							V-334458(Cal Std-3 WARNING)
CalStd4 V-334459	1	CAL	15:44	6							V-334459(Cal Std-4 WARNING)
CalStd5 V-334460	1	CAL	15:49	7							V-334460(Cal Std-5 WARNING)
ICV V-334461	1	ICV	15:53	8							V-334461(ICV WARNING)
LLICV V-334466	1	LLICV	15:58	9		SOIL	SOIL	SW846	85280		V-334466(LL-ICV/CCV SOIL WARNING)
ICB V-334462	1	ICB	16:02	10							V-334462(ICB/CCB WARNING)
ICSA V-334463	1	ICSA	16:07	11							V-334463(ICSA WARNING)
RINSE	1	NA	16:11	12		SOIL	SOIL	SW846	85280		0
LRS V-334464	1	LRS	16:16	13		SOIL	SOIL	SW846	85280	Ag fail.	V-334464(LRS WARNING)
RINSE	1	NA	16:20	14		SOIL	SOIL	SW846	85280		0
RINSE	1	NA	16:25	15		SOIL	SOIL	SW846	85280		0
CCV V-334465	1	CCV	16:29	16							V-334465(CCV WARNING)
CCB V-334462	1	CCB	16:34	17							V-334462(ICB/CCB WARNING)
MB 85280	1	MB	16:38	18		SOIL	SOIL	SW846	85280		0
LCS 85280	1	LCS	16:43	19		SOIL	SOIL	SW846	85280		0
LCS MR 85280	1	LCS	16:47	20		SOIL	SOIL	SW846	85280		0
AD19178-001	1	SMP	16:52	21	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-001	1	MR	16:56	22	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-001	5	SD	17:01	23	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-001	1	MS	17:05	24	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-001	1	MSD	17:09	25	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-001	1	PS	17:14	26	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
RINSE	1	NA	17:18	27		SOIL	SOIL	SW846	85280		0
CCV V-334465	1	CCV	17:23	28							V-334465(CCV WARNING)
CCB V-334462	1	CCB	17:27	29							V-334462(ICB/CCB WARNING)
AD19178-002	1	SMP	17:32	30	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-003	1	SMP	17:36	31	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-004	1	SMP	17:41	32	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-005	1	SMP	17:45	33	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-006	1	SMP	17:49	34	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-007	1	SMP	17:54	35	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-008	1	SMP	17:58	36	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-009	1	SMP	18:03	37	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-010	1	SMP	18:07	38	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
RINSE	1	NA	18:12	39		SOIL	SOIL	SW846	85280		0
CCV V-334465	1	CCV	18:16	40							V-334465(CCV WARNING)
CCB V-334462	1	CCB	18:21	41							V-334462(ICB/CCB WARNING)
AD19178-011	1	SMP	18:25	42	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-012	1	SMP	18:30	43	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19178-013	1	SMP	18:34	44	MET-TAL6020S	SOIL	SOIL	SW846	85280		0
AD19230-001	1	SMP	18:39	45	MET-PP6020S	SOIL	SOIL	SW846	85280		0
AD19228-001	1	SMP	18:43	46	MET-PP6020S	SOIL	SOIL	SW846	85280		0
AD19229-001	1	SMP	18:48	47	MET-PP6020S	SOIL	SOIL	SW846	85280		0
AD19233-002	1	SMP	18:52	48	MET-TAL6020S	SOIL	SOIL	SW846	85280	Rerun As (LR).	0
RINSE	1	NA	18:56	49		SOIL	SOIL	SW846	85280		0
CCV V-334465	1	CCV	19:01	50							V-334465(CCV WARNING)
CCB V-334462	1	CCB	19:05	51							V-334462(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.87 9/17/2020 9:14:05 AM

Run ok. Report Ag, As, Be, Cd, Sb, Se, Tl, V. LRS fail for Ag. Ag LR = 100ppb
Rerun As for 19233-002 (over LR). PC.

9/21/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: ne 9/16/20

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S26226A3.txt

Analysis Date: 09/16/20 **Instrument:** PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	09:59	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	10:03	2							V-333671(LLICV/LLCCV soil)
CALST3 V-333666	1	CAL	10:06	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	10:11	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	10:15	5							V-333673(CCV)
ICB V-333667	1	ICB	10:19	6							V-333667(ICB/CCB)
LRS V-333662	1	LRS	10:23	7		SOIL	SOIL	SW846	85284		V-333662(LRS)
ICS3 V-333666	1	ICS	10:27	8							V-333666(ICS3 - Middle Std)
RINSE	1	NA	10:31	9		SOIL	SOIL	SW846	85284		0
LLICV V-333671	1	LLICV	10:35	10		SOIL	SOIL	SW846	85284		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	10:39	11							V-333668(ICSA)
CCV V-333673	1	CCV	10:44	12							V-333673(CCV)
CCB V-333667	1	CCB	10:48	13							V-333667(ICB/CCB)
MB 85284 (100)	1	MB	10:52	14		SOIL	SOIL	SW846	85284		0
LCS 85284	1	LCS	10:55	15		SOIL	SOIL	SW846	85284		0
LCS MR 85284	1	LCS	11:00	16		SOIL	SOIL	SW846	85284		0
AD19210-002	1	SMP	11:05	17	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19210-002	1	MR	11:09	18	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19210-002	1	MS	11:13	19	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19210-002	1	MSD	11:18	20	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19210-002	1	PS	11:22	21	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19210-002	5	SD	11:26	22	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
CCV V-333673	1	CCV	11:30	23							V-333673(CCV)
CCB V-333667	1	CCB	11:34	24							V-333667(ICB/CCB)
AD19208-002	1	SMP	11:38	25	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19208-004	1	SMP	11:42	26	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19208-006	1	SMP	11:46	27	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19208-008	1	SMP	11:50	28	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19208-010	1	SMP	11:54	29	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19209-002	1	SMP	11:58	30	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19209-004	1	SMP	12:03	31	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
CCV V-333673	1	CCV	12:07	32							V-333673(CCV)
CCB V-333667	1	CCB	12:11	33							V-333667(ICB/CCB)
AD19209-006	1	SMP	12:14	34	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19209-008	1	SMP	12:19	35	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19209-010	1	SMP	12:23	36	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19210-004	1	SMP	12:27	37	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19210-006	1	SMP	12:31	38	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19210-008	1	SMP	12:35	39	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
AD19210-010	1	SMP	12:39	40	MET-TAL6010S	SOIL	SOIL	SW846	85284		0
CCV V-333673	1	CCV	12:43	41							V-333673(CCV)
CCB V-333667	1	CCB	12:47	42							V-333667(ICB/CCB)
MB 85279 (100)	1	MB	12:51	43		SOIL	SOIL	SW846	85279		0
LCS 85279	1	LCS	12:55	44		SOIL	SOIL	SW846	85279		0
LCS MR 85279	1	LCS	13:00	45		SOIL	SOIL	SW846	85279		0
AD19178-001	1	SMP	13:05	46	MET-TAL6010S	SOIL	SOIL	SW846	85279		0
AD19178-001	1	MR	13:09	47	MET-TAL6010S	SOIL	SOIL	SW846	85279		0
AD19178-001	1	MS	13:14	48	MET-TAL6010S	SOIL	SOIL	SW846	85279		0
AD19178-001	1	MSD	13:19	49	MET-TAL6010S	SOIL	SOIL	SW846	85279		0
AD19178-001	1	PS	13:24	50	MET-TAL6010S	SOIL	SOIL	SW846	85279		0
AD19178-001	5	SD	13:28	51	MET-TAL6010S	SOIL	SOIL	SW846	85279		0
CCV V-333673	1	CCV	13:32	52							V-333673(CCV)
CCB V-333667	1	CCB	13:36	53							V-333667(ICB/CCB)
AD19178-002	1	SMP	13:40	54	MET-TAL6010S	SOIL	SOIL	SW846	85279		0
AD19178-003	1	SMP	13:44	55	MET-TAL6010S	SOIL	SOIL	SW846	85279		0
AD19178-004	1	SMP	13:48	56	MET-TAL6010S	SOIL	SOIL	SW846	85279		0
AD19178-005	1	SMP	13:53	57	MET-TAL6010S	SOIL	SOIL	SW846	85279		0
AD19178-006	1	SMP	13:58	58	MET-TAL6010S	SOIL	SOIL	SW846	85279		0
AD19178-007	1	SMP	14:03	59	MET-TAL6010S	SOIL	SOIL	SW846	85279		0
AD19178-008	1	SMP	14:07	60	MET-TAL6010S	SOIL	SOIL	SW846	85279		0

Comments/Reviewedby:

olufemi
192.168.1.105 9/16/2020 5:19:12 PM

RUN IS OK
All elements reported, except Na, K

9/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S26226A3.txt

Analysis Date: 09/16/20 **Instrument:** PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
AD19178-009	1	SMP	14:11	61	MET-TAL6010S	SOIL	SOIL	SW846	85279		()
CCV V-333673	1	CCV	14:15	62							V-333673(CCV)
CCB V-333667	1	CCB	14:19	63							V-333667(ICB/CCB)
AD19178-010	1	SMP	14:23	64	MET-TAL6010S	SOIL	SOIL	SW846	85279	Co, Ni NOT reported	()
AD19178-011	1	SMP	14:27	65	MET-TAL6010S	SOIL	SOIL	SW846	85279	Co, Ni NOT reported	()
AD19178-012	1	SMP	14:31	66	MET-TAL6010S	SOIL	SOIL	SW846	85279	Co, Ni NOT reported	()
AD19178-013	1	SMP	14:36	67	MET-TAL6010S	SOIL	SOIL	SW846	85279	Co, Ni NOT reported	()
AD19230-001	1	SMP	14:41	68	MET-PP6010S	SOIL	SOIL	SW846	85279	Co, Ni NOT reported	()
AD19228-001	1	SMP	14:45	69	MET-PP6010S	SOIL	SOIL	SW846	85279	Co, Ni NOT reported	()
AD19229-001	1	SMP	14:50	70	MET-PP6010S	SOIL	SOIL	SW846	85279	Co, Ni NOT reported	()
AD19233-002	1	SMP	14:55	71	MET-TAL6010S	SOIL	SOIL	SW846	85279	Co, Ni NOT reported	()
Rinse	1	SMP	14:59	72		SOIL	SOIL	SW846	85279	rinse	()
CCV V-333673	1	CCV	15:03	73						Co, Ni failed	V-333673(CCV)
CCB V-333667	1	CCB	15:07	74							V-333667(ICB/CCB)

Comments/Reviewedby:

olufemi
192.168.1.105 9/16/2020 5:19:12 PM

RUN IS OK
All elements reported, except Na, K

9/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S26232B3.txt

Analysis Date: 09/16/20 **Instrument:** PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	19:28	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	19:32	2							V-333671(LLICV/LLCCV soil)
CALST3 V-333666	1	CAL	19:36	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	19:40	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	19:44	5							V-333673(CCV)
ICB V-333667	1	ICB	19:49	6							V-333667(ICB/CCB)
LRS V-333662	1	LRS	19:52	7	MET-TAL6010S	SOIL	SOIL	SW846	85290		V-333662(LRS)
ICS3 V-333666	1	ICS	19:57	8							V-333666(ICS3 - Middle Std)
RINSE	1	NA	20:01	9	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
LLICV V-333671	1	LLICV	20:05	10	MET-TAL6010S	SOIL	SOIL	SW846	85290		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	20:08	11							V-333668(ICSA)
CCV V-333673	1	CCV	20:14	12							V-333673(CCV)
CCB V-333667	1	CCB	20:18	13							V-333667(ICB/CCB)
AD19214-003	1	SMP	20:21	14	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
AD19214-005	1	SMP	20:25	15	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
AD19214-007	1	SMP	20:29	16	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
AD19214-008	1	SMP	20:33	17	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
AD19214-010	1	SMP	20:37	18	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
AD19214-011	1	SMP	20:41	19	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
AD19214-014	1	SMP	20:45	20	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
AD19214-017	1	SMP	20:49	21	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
AD19214-020	1	SMP	20:52	22	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
CCV V-333673	1	CCV	20:56	23							V-333673(CCV)
CCB V-333667	1	CCB	21:00	24							V-333667(ICB/CCB)
AD19214-021	1	SMP	21:04	25	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
AD19214-023	1	SMP	21:08	26	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
AD19214-025	1	NA	21:12	27	METALS-TCLP	SOIL	SOIL	SW846	85290	NOT required	()
AD19245-001	1	SMP	21:16	28	MET-PP6010S	SOIL	SOIL	SW846	85290		()
AD19245-002	1	SMP	21:19	29	MET-PP6010S	SOIL	SOIL	SW846	85290		()
AD19245-004	1	SMP	21:23	30	MET-PP6010S	SOIL	SOIL	SW846	85290		()
AD19245-005	1	SMP	21:27	31	MET-PP6010S	SOIL	SOIL	SW846	85290		()
AD19262-001	1	SMP	21:31	32	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
AD19262-003	1	SMP	21:36	33	MET-TAL6010S	SOIL	SOIL	SW846	85290		()
CCV V-333673	1	CCV	21:40	34							V-333673(CCV)
CCB V-333667	1	CCB	21:44	35							V-333667(ICB/CCB)
AD19178-010	1	SMP	21:48	36	MET-TAL6010S	SOIL	SOIL	SW846	85279	Co, Ni reported	()
AD19178-011	1	SMP	21:52	37	MET-TAL6010S	SOIL	SOIL	SW846	85279	Co, Ni reported	()
AD19178-012	1	SMP	21:56	38	MET-TAL6010S	SOIL	SOIL	SW846	85279	Co, Ni reported	()
AD19178-013	1	SMP	22:01	39	MET-TAL6010S	SOIL	SOIL	SW846	85279	Co, Ni reported	()
AD19230-001	1	SMP	22:06	40	MET-PP6010S	SOIL	SOIL	SW846	85279	Co, Ni reported	()
AD19228-001	1	SMP	22:11	41	MET-PP6010S	SOIL	SOIL	SW846	85279	Co, Ni reported	()
AD19229-001	1	SMP	22:15	42	MET-PP6010S	SOIL	SOIL	SW846	85279	Co, Ni reported	()
AD19233-002	1	SMP	22:20	43	MET-TAL6010S	SOIL	SOIL	SW846	85279	Co, Ni reported	()
CCV V-333673	1	CCV	22:24	44							V-333673(CCV)
CCB V-333667	1	CCB	22:28	45							V-333667(ICB/CCB)

Comments/Reviewedby:

olufemi
192.168.1.105 9/17/2020 9:52:13 AM

RUN IS OK
All elements reported, except Na, K

9/17/2020

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26221S.txt

Analysis Date: 09/16/20

Instrument: HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	13:55	1							0
.2 PPB	1	CAL	13:56	2							0
.5 PPB	1	CAL	13:58	3							0
1 PPB	1	CAL	13:59	4							0
2 PPB	1	CAL	14:00	5							0
5 PPB	1	CAL	14:02	6							0
10 PPB	1	CAL	14:03	7							0
25 PPB	1	CAL	14:05	8							0
ICV (2)	1	ICV	14:06	9							0
ICB	1	ICB	14:08	10							0
MB 85279 (167)	1	MB	14:09	11	HG-SOIL	SOIL	SOIL	SW846	85279		0
LCS 85279	1	NA	14:11	12	HG-SOIL	SOIL	SOIL	SW846	85279	Conc. Is greater than calibration limits.	0
LCS 85279 MR	1	NA	14:12	13	HG-SOIL	SOIL	SOIL	SW846	85279	Conc. Is greater than calibration limits.	0
LCS 4D	4	LCS	14:14	14	HG-SOIL	SOIL	SOIL	SW846	85279		0
LCS 4D MR	4	LCS	14:16	15	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-001	1	SMP	14:17	16	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-001	1	MR	14:18	17	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-001	1	MS	14:20	18	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-001	1	MSD	14:21	19	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-002	1	SMP	14:23	20	HG-SOIL	SOIL	SOIL	SW846	85279		0
CCV	1	CCV	14:24	21							0
CCB	1	CCB	14:26	22							0
AD19178-003	1	SMP	14:27	23	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-004	1	SMP	14:29	24	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-005	1	SMP	14:30	25	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-006	1	SMP	14:31	26	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-007	1	SMP	14:33	27	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-008	1	SMP	14:34	28	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-009	1	SMP	14:35	29	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-010	1	SMP	14:37	30	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-011	1	SMP	14:38	31	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19178-012	1	SMP	14:39	32	HG-SOIL	SOIL	SOIL	SW846	85279		0
CCV	1	CCV	14:41	33							0
CCB	1	CCB	14:42	34							0
AD19178-013	1	SMP	14:44	35	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19230-001	1	SMP	14:45	36	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19228-001	1	SMP	14:46	37	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19229-001	1	SMP	14:48	38	HG-SOIL	SOIL	SOIL	SW846	85279		0
AD19233-002	1	NA	14:49	39	HG-SOIL	SOIL	SOIL	SW846	85279	Conc. Is greater than calibration limits.	0
AD19233-002	1	NA	14:51	40	HG-SOIL	SOIL	SOIL	SW846	85279	Empty cup	0
CCV	1	CCV	14:52	41							0
CCB	1	CCB	14:54	42							0

Comments/Reviewedby:

bransaw
192.168.1.120 9/16/2020 3:52:41 PM

OK.

9/17/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334878

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: S091620BNSample ID: CalBlk V-334455 Sample Date 09/16/20 Sample Time: 15:26

IS ID:	Area	Area Limit		
Ho-1	1778678.18	1245074.726	-	2312281.634
In-1	1119445.10	783611.57	-	1455278.63
Sc-1	722208.66	505546.062	-	938871.258
Tb-1	1814355.83	1270049.081	-	2358662.579

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area		Area	Area	Area	Area
ISBLK	CalBlk V-334455	2	1778678.	1119445.	722208.6	1814355.					
SMP	RINSE	1	1773451.	1114829.	714424.5	1822197.					
CAL	CalStd1 V-33445	3	1791602.	1124108.	727196.6	1838267.					
CAL	CalStd2 V-33445	4	1797947.	1126867.	730492.7	1825548.					
CAL	CalStd3 V-33445	5	1812789.	1131706.	735930.4	1839354.					
CAL	CalStd4 V-33445	6	1786210.	1111265.	724133.3	1823171.					
CAL	CalStd5 V-33446	7	1783958.	1098197.	709118.3	1814067.					
ICV	ICV V-334461	8	1810286.	1119409.	717723.2	1845202.					
LLICV	LLICV V-334466	9	1862486.	1192845.	747764.9	1914272.					
ICB	ICB V-334462	10	1824869.	1136957.	723065.5	1864719.					
ICSA	ICSA V-334463	11	1934755.	1115211.	740525.6	1940379.					
SMP	RINSE	12	2018513.	1264746.	794400.9	2077281.					
LRS	LRS V-334464	13	1889178.	1128955.	746508.7	1924509.					
SMP	RINSE	14	1964221.	1251260.	791294.6	2031326.					
SMP	RINSE	15	1883012.	1164550.	737600.0	1912025.					
CCV	CCV V-334465	16	1855436.	1148041.	728377.1	1890779.					
CCB	CCB V-334462	17	1799237.	1131485.	705153.5	1840455.					
MB	MB 85280	18	1821520.	1120428.	685094.0	1875028.					
LCS	LCS 85280	19	1837992.	1099599.	699730.4	1874112.					
MR	LCS MR 85280	20	1831612.	1088338.	687172.3	1847767.					
SMP	AD19178-001	21	1875295.	1058743.	808580.1	1897853.					
MR	AD19178-001	22	1877600.	1048960.	810253.1	1890560.					
SD	AD19178-001	23	1783488.	1072711.	687053.7	1813930.					
MS	AD19178-001	24	1857040.	1050234.	823532.8	1869401.					
MSD	AD19178-001	25	1905363.	1105746.	857836.5	1932301.					
PS	AD19178-001	26	1924810.	1087997.	843270.9	1939299.					
SMP	RINSE	27	1775090.	1101808.	666767.9	1820439.					
CCV	CCV V-334465	28	1745513.	1057063.	661989.4	1777567.					
CCB	CCB V-334462	29	1720214.	1059268.	662390.0	1772196.					
SMP	AD19178-002	30	1814611.	1018296.	784050.4	1842060.					
SMP	AD19178-003	31	1798741.	1025880.	753866.1	1831738.					
SMP	AD19178-004	32	1764217.	1001410.	774603.4	1800634.					
SMP	AD19178-005	33	1678933.	956531.2	694034.4	1712754.					
SMP	AD19178-006	34	1741805.	1005326.	745104.5	1759355.					
SMP	AD19178-007	35	1732400.	1015877.	719026.3	1771389.					
SMP	AD19178-008	36	1758601.	1030624.	778543.1	1766491.					
SMP	AD19178-009	37	1705558.	993617.1	673245.8	1728811.					
SMP	AD19178-010	38	1735885.	975191.9	722598.8	1760798.					
SMP	RINSE	39	1649531.	1002095.	595204.0	1694753.					
CCV	CCV V-334465	40	1649165.	989659.1	608034.1	1672098.					
CCB	CCB V-334462	41	1667219.	1003995.	611636.7	1686215.					
SMP	AD19178-011	42	1629868.	905886.1	714608.6	1655500.					
SMP	AD19178-012	43	1626316.	900488.7	679170.9	1642031.					
SMP	AD19178-013	44	1619198.	873815.1	696151.3	1633655.					
SMP	AD19230-001	45	1714160.	951842.4	1000708.	*	1736014.				
SMP	AD19228-001	46	1796023.	1014271.	1033570.	*	1834846.				
SMP	AD19229-001	47	1845243.	1056052.	1070307.	*	1866583.				
SMP	AD19233-002	48	1810859.	1074986.	743616.0		1841952.				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 1

SMP	RINSE	49	1706251.	1044976.	646845.2	1745105.
CCV	CCV V-334465	50	1639016.	1000911.	630516.8	1685592.
CCB	CCB V-334462	51	1595602.	978253.4	606461.0	1642068.

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

Batch/FileID: S091620BNSample ID: CalBlk V-334455 Sample Date 09/16/20 Sample Time: 15:26

IS ID:	Area	Area Limit		
Ho-2	861026.24	602718.368	-	1119334.112
In-2	260773.41	182541.387	-	339005.433
Sc-2	38015.61	26610.927	-	49420.293
Tb-2	861473.58	603031.506	-	1119915.654

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-334455	2	861026.2	260773.4	38015.61	861473.5				
SMP	RINSE	1	860942.3	259659.3	37721.79	857537.3				
CAL	CalStd1 V-33445	3	864969.5	262713.3	37873.20	865379.0				
CAL	CalStd2 V-33445	4	870099.7	261973.4	37398.92	869298.4				
CAL	CalStd3 V-33445	5	880802.4	263834.8	37883.21	878596.7				
CAL	CalStd4 V-33445	6	877046.2	256362.5	37157.45	867614.3				
CAL	CalStd5 V-33446	7	870151.6	254326.8	37014.88	864537.8				
ICV	ICV V-334461	8	877085.6	258722.5	37454.72	872103.6				
LLICV	LLICV V-334466	9	878422.2	264695.1	38552.48	877728.5				
ICB	ICB V-334462	10	868930.9	262538.1	37803.13	867450.9				
ICSA	ICSA V-334463	11	929342.8	261918.9	41396.21	923663.4				
SMP	RINSE	12	936469.5	282615.6	41187.96	936816.0				
LRS	LRS V-334464	13	913822.3	262220.3	39709.35	908632.4				
SMP	RINSE	14	936864.8	282240.8	41347.25	928396.2				
SMP	RINSE	15	895290.2	270388.7	38736.05	888672.0				
CCV	CCV V-334465	16	883026.8	260999.5	38348.57	881832.0				
CCB	CCB V-334462	17	865691.6	257938.6	36949.11	861582.5				
MB	MB 85280	18	850233.9	245226.3	34810.63	847161.7				
LCS	LCS 85280	19	845804.7	236637.1	35451.95	845934.6				
MR	LCS MR 85280	20	848122.6	235893.4	34710.53	842354.8				
SMP	AD19178-001	21	869943.5	228461.5	41820.47	862580.5				
MR	AD19178-001	22	869965.9	228376.7	42038.69	859910.6				
SD	AD19178-001	23	837993.2	235603.4	35001.99	833655.4				
MS	AD19178-001	24	876627.0	233753.6	43185.66	869154.0				
MSD	AD19178-001	25	890849.5	240230.9	44396.31	880313.0				
PS	AD19178-001	26	882062.0	233822.8	42643.35	876304.4				
SMP	RINSE	27	836054.3	245023.6	34658.21	834082.9				
CCV	CCV V-334465	28	834158.0	242391.8	34499.14	830381.3				
CCB	CCB V-334462	29	830658.9	246444.8	34873.07	830090.9				
SMP	AD19178-002	30	839584.7	221680.1	40345.12	830484.0				
SMP	AD19178-003	31	836726.3	223397.5	38880.88	827749.8				
SMP	AD19178-004	32	828756.0	220044.2	40013.28	822890.0				
SMP	AD19178-005	33	767251.5	204407.6	34755.11	753440.8				
SMP	AD19178-006	34	815484.0	221485.9	38817.36	801729.5				
SMP	AD19178-007	35	818444.7	224526.9	36531.92	815234.1				
SMP	AD19178-008	36	828653.3	230519.5	40239.25	825595.9				
SMP	AD19178-009	37	807377.0	218286.7	34314.20	802554.2				
SMP	AD19178-010	38	807720.4	210066.3	37175.26	798230.0				
SMP	RINSE	39	784013.2	225194.3	30814.93	778880.6				
CCV	CCV V-334465	40	787065.0	226127.3	31732.97	784154.9				
CCB	CCB V-334462	41	786931.9	229805.3	31776.39	786043.1				
SMP	AD19178-011	42	755970.8	196311.3	37009.35	749539.9				
SMP	AD19178-012	43	754662.2	195254.1	35424.20	747925.2				
SMP	AD19178-013	44	749329.5	188572.6	35680.10	741732.1				
SMP	AD19230-001	45	827731.5	215031.8	56813.75	* 809814.3				
SMP	AD19228-001	46	841671.2	225194.7	56865.07	* 831024.1				
SMP	AD19229-001	47	867940.2	233042.6	57958.59	* 853163.0				
SMP	AD19233-002	48	837424.1	234018.0	37947.85	836865.7				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

SMP	RINSE	49	790875.2	233592.1	32473.16	780758.2
CCV	CCV V-334465	50	773632.6	226556.4	31895.40	772726.6
CCB	CCB V-334462	51	762283.9	223830.5	31520.40	759069.0

* Indicates Internal Standard Area outside of limits

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Control/Receipt Number: 13067

Description
hydrogen peroxide`

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	H325-4	197718	02/19/20	01/31/25	Lopez, Jose	4	4L	neat	neat

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-331982

Prepared By: Cousineau, Paul
Description: B, Si, Ce INTERMEDIATE
Prep Date: 7/23/2020
Expiration Date: 10/23/2020
Department: Metals
BatchNumber:
Concentration: 100 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 07/28/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	5 ml	neat neat	
13169	hydrochloric acid	5 ml	neat neat	
12976	BORON	10 ml	CONC conc	100 ppm
13092	CERIUM	10 ml	CONC conc	100 ppm
12977	SILICON	10 ml	CONC conc	100 ppm

Veritech Lot Number: V-333662

Prepared By: Aliano, Carmela
Description: LRS
Prep Date: 8/24/2020
Expiration Date: 10/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	335 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12915	LINEAR RANGE 1B	50 ml	neat neat	
12917	linear range 1C	50 ml	neat neat	
13092	CERIUM	12.5 ml	CONC conc	
12976	BORON	2.5 ml	CONC conc	
12977	SILICON	12.5 ml	CONC conc	

Veritech Lot Number: V-333665

Prepared By: Aliano, Carmela
Description: ICS4 High std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: various mg/l
Final Volume: 500 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	434.5 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	1
12977	SILICON	5 ml	CONC conc	10

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333666

Prepared By: Aliano, Carmela
Description: ICS3 - Middle Std
Prep Date: 8/24/2020
Expiration Date: 12/30/2020
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	944.75 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	.5
12977	SILICON	5 ml	CONC conc	5
13092	CERIUM	5 ml	CONC conc	5

Veritech Lot Number: V-333667

Prepared By: Aliano, Carmela
Description: ICB/CCB
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: 0 mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	

Veritech Lot Number: V-333668

Prepared By: Aliano, Carmela
Description: ICSA
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: MULTI mg/l
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13176	ICSA	50 ml	NEAT neat	

Veritech Lot Number: V-333671

Prepared By: Aliano, Carmela
Description: LLICV/LLCCV soil
Prep Date: 8/24/2020
Expiration Date: 12/31/2020
Department: WetChem
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
12982	LL-SOIL	10 ml		
12976	BORON	.2 ml	CONC conc	
12977	SILICON	.1 ml	CONC conc	
13092	CERIUM	.1 ml	CONC conc	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333673

Prepared By: Aliano, Carmela
Description: CCV
Prep Date: 8/24/2020
Expiration Date: 2/20/2021
Department: Metals
BatchNumber:
Concentration: MULTI multi
Final Volume: 1000 ml
ApprovedBy: carmela
ApproveDate: 08/24/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13171	ICV 1	10 ml	NEAT neat	
13170	ICV 2	10 ml	CONC conc	
12981	BORON	.5 ml	CONC conc	
13091	CERIUM	5 ml	CONC conc	
12933	silicon	5 ml	CONC conc	

Veritech Lot Number: V-334735

Prepared By: Silva, Amanda
Description: 1:1 HNO3 WARNING
Prep Date: 9/14/2020
Expiration Date: 3/14/2021
Department: Metals
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13440	nitric acid	500 ml	neat neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12915

Description
LINEAR RANGE 1B

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-40-500	7/271ab	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12917

Description
linear range 1C

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
spex	XHCV-44-500	8-002AB	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12933

Description
silicon

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-050-145	S191206040	12/13/19	12/30/21	Aliano, Carmela	4	500m	CONC	CONC

Veritech Control/Receipt Number: 12976

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLB9-2X	24-110BX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12977

Description
SILICON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSI9-2X	24-93SIX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12981

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-050-055	S190719015	01/06/20	07/30/21	Aliano, Carmela	3	500ml	CONC	CONC

Veritech Control/Receipt Number: 12982

Description
LL-SOIL

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-31-500	8/209AB	01/06/20	12/31/20	Aliano, Carmela	1	500m		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12983

Description
CALIBRATION 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	8/214AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 12984

Description
CALIBRATION 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	8/215AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13091

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-051-585	S190710006	03/04/20	07/30/21	Aliano, Carmela	2	500ml	CONC	CONC

Veritech Control/Receipt Number: 13092

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLCE2-2X	24-15CEX	03/04/20	02/28/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13168

Description
nitric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	245675	04/07/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13169

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	251602	04/07/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13170

Description
ICV 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S200306032	04/07/20	03/31/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13171

Description
ICV 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S200306031	04/07/20	03/31/21	Aliano, Carmela	2	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13176

Description
ICSA

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-30	9-265AB	04/07/20	03/31/21	Aliano, Carmela	4	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-329062

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Antimony Intermediate 1PPM | BatchNumber: | ApproveDate: 06/12/20
Prep Date: 6/5/2020 | Concentration: 1000 ppb | Checked: Yes
Expiration Date: 2/25/2021 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13251	nitric acid	2.5 ml	neat neat	
13296	ANTIMONY 1000 PPM	.1 ml	1000 ug/ml	

Veritech Lot Number: V-333325

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: carmela
Description: 6020 CALIBRATION STOCK | BatchNumber: | ApproveDate: 08/24/20
Prep Date: 8/16/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 11/15/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13331	Nitric acid	2 ml	neat neat	
13304	ALUMINUM 10000 PPM	.725 ml	10000 ug/ml	72.5
13305	CALCIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13308	IRON 10000 PPM	2.5 ml	10000 ug/ml	250
13306	MAGNESIUM 10000PPM	2.5 ml	10000 ug/ml	250
13309	POTASSIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13307	SODIUM 10000 PPM	2.5 ml	10000 ug/ml	250
13297	SELENIUM 1000 PPM	1 ml	1000 ug/ml	10
13323	CAL STD	12.5 ml	20 ug/ml	2.5

Veritech Lot Number: V-334455

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Blk WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: 0 ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-334456

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-1 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.02 ml	VARIOUS pp	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334457

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-2 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.2 ml	VARIOUS pp	

Veritech Lot Number: V-334458

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-3 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	.4 ml	VARIOUS pp	

Veritech Lot Number: V-334459

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-4 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-334460

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: Cal Std-5 WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	4 ml	VARIOUS pp	

Veritech Lot Number: V-334461

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: ICV WARNING | BatchNumber: B-29650 | ApproveDate: 09/15/20
Prep Date: 9/9/2020 | Concentration: various ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
13315	6020 ICV	.1 ml	MULTI ug/ml	
13314	6020 ICV (Ag only)	.1 ml	10 ug/ml	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334462

Prepared By: Cousineau, Paul
Description: ICB/CCB WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: 0 ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-334463

Prepared By: Cousineau, Paul
Description: ICSA WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	
12856	Interferents A	2.5 ml	NEAT mg/l	

Veritech Lot Number: V-334464

Prepared By: Cousineau, Paul
Description: LRS WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 50 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	1.25 ml	neat neat	2.5 %
V-333325	6020 CALIBRATION STOCK	10 ml	VARIOUS pp	

Veritech Lot Number: V-334465

Prepared By: Cousineau, Paul
Description: CCV WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
V-333325	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-334466

Prepared By: Cousineau, Paul
Description: LL-ICV/CCV SOIL WARNING
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29650
Concentration: various ppb
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13391	nitric acid	2.5 ml	neat neat	
12979	LLICV/CCV SOIL	1 ml	NEAT neat	
V-329062	Antimony Intermediate 1PPM	.3 ml	1000 ppb	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334735

Prepared By:	Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description:	1:1 HNO3 WARNING	BatchNumber:	ApproveDate: 09/15/20
Prep Date:	9/14/2020	Concentration: Reagent reag	Checked: Yes
Expiration Date:	3/14/2021	Final Volume: 1000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13440	nitric acid	500 ml	neat neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12856

Description
Interferents A

ApprovedBy: carmela
ApproveDate: 12/09/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-A1	CL51-020CRY	10/31/19	10/30/20	Cousineau, Paul	1		NEAT	mg/l

Veritech Control/Receipt Number: 12979

Description
LLICV/CCV SOIL

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	ZHCV-13-100	53-093CR	01/06/20	12/30/20	Aliano, Carmela	1	125ml	NEAT	NEAT

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13251

Description
nitric acid

ApprovedBy: jean
ApproveDate: 05/27/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	245675	05/19/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13296

Description
ANTIMONY 1000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSB7-2Y	24-153SBY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13297

Description
SELENIUM 1000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSE2-2Y	25-14SEY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13304

Description
ALUMINUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLAL2-3X	AP18-72ALX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13305

Description
CALCIUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLCA2-3X	AZ18-49CAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13306

Description
MAGNESIUM 10000PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLMG2-3X	AP18-57MGX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13307

Description
SODIUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLNA2-3X	AT18-84NAX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13308

Description
IRON 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLFE2-3X	AR18-89FEX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13309

Description
POTASSIUM 10000 PPM

ApprovedBy: carmela
ApproveDate: 09/04/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLK2-3X	AX18-77KX	06/04/20	06/30/21	Cousineau, Paul	1	500 M	10000	UG/ML

Veritech Control/Receipt Number: 13314

Description
6020 ICV (Ag only)

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-113	S200519030	06/04/20	05/31/21	Cousineau, Paul	1	125 M	10	UG/ML

Veritech Control/Receipt Number: 13315

Description
6020 ICV

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	600-225-112	S200519029	06/04/20	05/31/21	Cousineau, Paul	1	125 M	MULTI	UG/ML

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13323

Description
CAL STD

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-CAL-1	CL51-013CRY	06/15/20	06/30/21	Cousineau, Paul	1	125M	20	UG/ML

Veritech Control/Receipt Number: 13331

Description
Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13391

Description
nitric acid

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	07/14/20	02/03/25	Lopez, Jose	4	2.5	neat	neat

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Control/Receipt Number: 13067

Description
hrydrogen peroxide`

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	H325-4	197718	02/19/20	01/31/25	Lopez, Jose	4	4L	neat	neat

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

S26226A3 26221/85279 SOIL

Analysis Begun

Acceto - 09/16/2020.

Start Time: 9/16/2020 9:59:17 AM
Logged In Analyst: usermet
Spectrometer Model: Optima 7300 DV, S/N No Serial #
Plasma On Time: 9/16/2020 9:39:10 AM
Technique: ICP Continuous
Autosampler Model: S10

Sample Information File: C:\pe\Administrator\Sample Information\09.15.20.sif
Batch ID:
Results Data Set: S26226A3
Results Library: C:\pe\Administrator\Results\Results.mdb

9/18/20

Method Loaded
Method Name: PE3 7300DV SOIL AX
IEC File: IEC072420A.iec
Method Description: 6010D (SOIL)
Method Last Saved: 9/10/2020 5:13:24 PM
MSF File:

Sequence No.: 1
Sample ID: CALBLK V-333667
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 9/16/2020 9:59:17 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-333667

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	377106.4	3471.84	0.92%	100	%
Y 371.029	170886.2	1655.71	0.97%	100	%
Ag 328.068†	-237.2	26.97	11.37%	[0.00]	mg/L
Al 308.215†	2364.5	49.55	2.10%	[0.00]	mg/L
As 188.979†	-1.0	9.76	>999.9%	[0.00]	mg/L
Ba 233.527†	-6.1	8.64	141.03%	[0.00]	mg/L
Be 313.107†	-1127.8	27.14	2.41%	[0.00]	mg/L
Ca 317.933†	2078.5	32.23	1.55%	[0.00]	mg/L
Cd 228.802†	133.5	9.93	7.44%	[0.00]	mg/L
Co 228.616†	-39.9	8.34	20.92%	[0.00]	mg/L
Cr 267.716†	34.3	4.18	12.20%	[0.00]	mg/L
Cu 327.393†	-334.7	32.42	9.69%	[0.00]	mg/L
Fe 273.955†	-801.6	5.94	0.74%	[0.00]	mg/L
K 404.721†	53980.4	870.42	1.61%	[0.00]	mg/L
Mg 279.077†	-629.0	6.12	0.97%	[0.00]	mg/L
Mn 257.610†	40.4	7.61	18.84%	[0.00]	mg/L
Mo 202.031†	161.2	11.03	6.84%	[0.00]	mg/L
Na 330.237†	404.2	33.30	8.24%	[0.00]	mg/L
Ni 231.604†	-5.9	2.46	41.50%	[0.00]	mg/L
Pb 220.353†	51.5	6.10	11.85%	[0.00]	mg/L
Sb 206.836†	46.1	12.58	27.27%	[0.00]	mg/L
Se 196.026†	38.5	2.56	6.65%	[0.00]	mg/L
Sn 189.927†	-7.0	9.01	128.01%	[0.00]	mg/L
Ti 334.940†	224.1	19.64	8.76%	[0.00]	mg/L
Tl 190.801†	-44.9	1.40	3.12%	[0.00]	mg/L
V 290.880†	1294.4	21.89	1.69%	[0.00]	mg/L
Zn 206.200†	-89.4	4.95	5.54%	[0.00]	mg/L
B 249.772†	239.1	9.77	4.09%	[0.00]	mg/L
Si 251.611†	286.5	27.42	9.57%	[0.00]	mg/L
Ce 413.764†	-1867.2	50.66	2.71%	[0.00]	mg/L

26221/85279

All elements reported, except Na, K.

191780010-013
19230.001
19228.001
19229.001
19233.002

Co, Ni NOT reported.

Sequence No.: 2
Sample ID: CALST2 V-333671
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 9/16/2020 10:03:03 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST2 V-333671

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	367487.4	2323.22	0.63%	97.4	%
Y 371.029	166117.0	971.88	0.59%	97.2	%
Ag 328.068†	1435.5	49.76	3.47%	[0.015]	mg/L
Al 308.215†	17257.9	52.22	0.30%	[2]	mg/L
As 188.979†	82.2	5.43	6.61%	[0.04]	mg/L
Ba 233.527†	8842.0	57.63	0.65%	[0.1]	mg/L
Be 313.107†	13948.0	60.69	0.44%	[0.012]	mg/L
Ca 317.933†	903281.1	2109.16	0.23%	[10]	mg/L
Cd 228.802†	366.6	18.66	5.09%	[0.012]	mg/L
Co 228.616†	664.6	7.91	1.19%	[0.025]	mg/L
Cr 267.716†	3339.5	22.96	0.69%	[0.05]	mg/L
Cu 327.393†	3426.1	29.59	0.86%	[0.05]	mg/L
Fe 273.955†	17620.7	106.98	0.61%	[2]	mg/L
K 404.721†	1253.5	237.64	18.96%	[5]	mg/L
Mg 279.077†	51578.8	155.09	0.30%	[5]	mg/L
Mn 257.610†	27592.7	72.82	0.26%	[0.1]	mg/L
Mo 202.031†	264.2	1.61	0.61%	[0.025]	mg/L
Na 330.237†	781.8	6.59	0.84%	[2.5]	mg/L
Ni 231.604†	1400.9	16.95	1.21%	[0.05]	mg/L
Pb 220.353†	308.0	8.54	2.77%	[0.05]	mg/L
Sb 206.836†	84.0	6.57	7.82%	[0.04]	mg/L
Se 196.026†	88.4	7.49	8.48%	[0.05]	mg/L
Sn 189.927†	1177.7	9.20	0.78%	[0.2]	mg/L
Ti 334.940†	26588.9	136.93	0.51%	[0.1]	mg/L
Tl 190.801†	113.2	6.64	5.87%	[0.05]	mg/L
V 290.880†	4903.0	58.89	1.20%	[0.1]	mg/L
Zn 206.200†	4605.0	22.71	0.49%	[0.1]	mg/L
B 249.772†	12611.1	27.51	0.22%	[0.2]	mg/L
Si 251.611†	3326.6	91.71	2.76%	[0.1]	mg/L
Ce 413.764†	862.9	72.37	8.39%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-333666
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 9/16/2020 10:06:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST3 V-333666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	363471.4	4614.29	1.27%	96.4	%
Y 371.029	135257.7	1675.85	1.24%	79.2	%
Ag 328.068†	8818.6	75.70	0.86%	[0.1]	mg/L
Al 308.215†	43292.4	54.98	0.13%	[5]	mg/L
As 188.979†	950.0	5.27	0.55%	[0.5]	mg/L
Ba 233.527†	42233.5	23.52	0.06%	[0.5]	mg/L
Be 313.107†	598456.1	11267.55	1.88%	[0.5]	mg/L
Ca 317.933†	4352061.5	73737.02	1.69%	[50]	mg/L
Cd 228.802†	14991.8	143.45	0.96%	[0.5]	mg/L
Co 228.616†	13109.7	120.54	0.92%	[0.5]	mg/L
Cr 267.716†	33134.6	358.53	1.08%	[0.5]	mg/L
Cu 327.393†	34196.9	169.06	0.49%	[0.5]	mg/L
Fe 273.955†	43861.7	53.70	0.12%	[5]	mg/L
K 404.721†	3579.9	1009.47	28.20%	[50]	mg/L
Mg 279.077†	505100.7	512.51	0.10%	[50]	mg/L
Mn 257.610†	138145.7	85.43	0.06%	[0.5]	mg/L
Mo 202.031†	5341.2	45.50	0.85%	[0.5]	mg/L
Na 330.237†	20158.9	204.40	1.01%	[50]	mg/L
Ni 231.604†	13660.5	123.19	0.90%	[0.5]	mg/L
Pb 220.353†	3080.0	19.52	0.63%	[0.5]	mg/L
Sb 206.836†	1019.5	27.14	2.66%	[0.5]	mg/L
Se 196.026†	920.3	8.87	0.96%	[0.5]	mg/L
Sn 189.927†	2925.6	38.84	1.33%	[0.5]	mg/L
Ti 334.940†	135804.0	258.54	0.19%	[0.5]	mg/L
Tl 190.801†	1058.4	10.49	0.99%	[0.5]	mg/L
V 290.880†	24354.9	78.06	0.32%	[0.5]	mg/L
Zn 206.200†	23323.1	228.98	0.98%	[0.5]	mg/L
B 249.772†	34271.1	188.34	0.55%	[0.5]	mg/L
Si 251.611†	111101.9	180.44	0.16%	[5]	mg/L
Ce 413.764†	37538.5	44.83	0.12%	[5]	mg/L

Do to printing error, reprocessed 9/17

Sequence No.: 4
Sample ID: CALST4 V-333665
Analyst:
Logged In Analyst (Original) : usermet
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 9/16/2020 10:11:00 AM
Data Type: Reprocessed on 9/17/2020 4:45:28 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST4 V-333665

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	355131.2	811.25	0.23%	94.2	%
Y 371.029	105922.7	473.78	0.45%	62.0	%
Ag 328.068†	16881.6	74.08	0.44%	[0.2]	mg/L
Al 308.215†	87165.2	257.07	0.29%	[10]	mg/L
As 188.979†	1928.0	12.06	0.63%	[1]	mg/L
Ba 233.527†	84724.2	193.26	0.23%	[1]	mg/L
Be 313.107†	1226733.8	4222.20	0.34%	[1]	mg/L
Ca 317.933†	8685002.5	21086.83	0.24%	[100]	mg/L
Cd 228.802†	30763.5	108.08	0.35%	[1]	mg/L
Co 228.616†	26498.8	96.34	0.36%	[1]	mg/L
Cr 267.716†	63280.9	136.33	0.22%	[1]	mg/L
Cu 327.393†	68965.0	208.49	0.30%	[1]	mg/L
Fe 273.955†	87681.4	376.21	0.43%	[10]	mg/L
K 404.721†	6873.0	328.01	4.77%	[100]	mg/L
Mg 279.077†	985066.1	3017.44	0.31%	[100]	mg/L
Mn 257.610†	275427.9	838.23	0.30%	[1]	mg/L
Mo 202.031†	10849.7	62.74	0.58%	[1]	mg/L
Na 330.237†	40045.4	96.92	0.24%	[100]	mg/L
Ni 231.604†	27485.3	130.65	0.48%	[1]	mg/L
Pb 220.353†	6199.8	6.02	0.10%	[1]	mg/L
Sb 206.836†	2045.8	7.83	0.38%	[1]	mg/L
Se 196.026†	1869.4	14.90	0.80%	[1]	mg/L
Sn 189.927†	5881.6	30.91	0.53%	[1]	mg/L
Ti 334.940†	272162.7	847.81	0.31%	[1]	mg/L
Tl 190.801†	2084.3	14.12	0.68%	[1]	mg/L
V 290.880†	49333.0	180.18	0.37%	[1]	mg/L
Zn 206.200†	45052.2	239.67	0.53%	[1]	mg/L
B 249.772†	70879.0	263.92	0.37%	[1]	mg/L
Si 251.611†	222993.1	460.91	0.21%	[10]	mg/L
Ce 413.764†	74501.9	1277.72	1.72%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	145.4	84300	0.00000	0.999734	
Al 308.215	3	Lin, Calc Int	-129.5	8720	0.00000	0.999993	
As 188.979	3	Lin, Calc Int	-0.3	1923	0.00000	0.999962	
Ba 233.527	3	Lin, Calc Int	140.1	84520	0.00000	0.999987	
Be 313.107	3	Lin, Calc Int	-3065.1	1224000	0.00000	0.999922	
Ca 317.933	3	Lin, Calc Int	17200.3	86700	0.00000	0.999993	
Cd 228.802	3	Lin, Calc Int	-72.2	30690	0.00000	0.999914	
Co 228.616	3	Lin, Calc Int	-24.5	26470	0.00000	0.999985	
Cr 267.716	3	Lin, Calc Int	352.7	63450	0.00000	0.999705	
Cu 327.393	3	Lin, Calc Int	-62.3	68930	0.00000	0.999991	
Fe 273.955	3	Lin, Calc Int	39.4	8765	0.00000	1.000000	
K 404.721	3	Lin, Calc Int	436.2	64.27	0.00000	0.991906	
Mg 279.077	3	Lin, Calc Int	3349.4	9860	0.00000	0.999915	
Mn 257.610	3	Lin, Calc Int	102.2	275500	0.00000	0.999999	
Mo 202.031	3	Lin, Calc Int	-18.4	10840	0.00000	0.999969	
Na 330.237	3	Lin, Calc Int	-74.5	401.9	0.00000	0.999976	
Ni 231.604	3	Lin, Calc Int	-3.0	27460	0.00000	0.999994	
Pb 220.353	3	Lin, Calc Int	-4.5	6197	0.00000	0.999994	
Sb 206.836	3	Lin, Calc Int	0.4	2044	0.00000	0.999997	
Se 196.026	3	Lin, Calc Int	-4.9	1870	0.00000	0.999969	
Sn 189.927	3	Lin, Calc Int	-2.4	5879	0.00000	0.999995	
Ti 334.940	3	Lin, Calc Int	-329.7	272400	0.00000	0.999998	
Tl 190.801	3	Lin, Calc Int	7.0	2082	0.00000	0.999968	
V 290.880	3	Lin, Calc Int	-71.3	49300	0.00000	0.999977	
Zn 206.200	3	Lin, Calc Int	192.1	45130	0.00000	0.999826	
B 249.772	3	Lin, Calc Int	-881.3	71340	0.00000	0.999685	
Si 251.611	3	Lin, Calc Int	426.0	22230	0.00000	0.999986	
Ce 413.764	3	Lin, Calc Int	105.8	7449	0.00000	0.999993	

Sequence No.: 5
Sample ID: ICV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/16/2020 10:15:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	376920.4	100.0	%	3.17				3.17%
Y 371.029	140349.1	82.1	%	3.39				4.13%
Ag 328.068†	8028.3	0.0935114	mg/L	0.00484568	0.0935114	mg/L	0.00484568	5.18%
QC value within limits for Ag 328.068 Recovery = 93.51%								
Al 308.215†	41629.6	4.80350	mg/L	0.207628	4.80350	mg/L	0.207628	4.32%
QC value within limits for Al 308.215 Recovery = 96.07%								
As 188.979†	931.4	0.485365	mg/L	0.0182200	0.485365	mg/L	0.0182200	3.75%
QC value within limits for As 188.979 Recovery = 97.07%								
Ba 233.527†	40560.4	0.478208	mg/L	0.0204274	0.478208	mg/L	0.0204274	4.27%
QC value within limits for Ba 233.527 Recovery = 95.64%								
Be 313.107†	580973.5	0.476973	mg/L	0.0143190	0.476973	mg/L	0.0143190	3.00%
QC value within limits for Be 313.107 Recovery = 95.39%								
Ca 317.933†	4334543.2	49.7980	mg/L	1.51278	49.7980	mg/L	1.51278	3.04%
QC value within limits for Ca 317.933 Recovery = 99.60%								
Cd 228.802†	14033.0	0.459530	mg/L	0.0204876	0.459530	mg/L	0.0204876	4.46%
QC value within limits for Cd 228.802 Recovery = 91.91%								
Co 228.616†	12305.1	0.465745	mg/L	0.0218354	0.465745	mg/L	0.0218354	4.69%
QC value within limits for Co 228.616 Recovery = 93.15%								
Cr 267.716†	30676.0	0.477925	mg/L	0.0203775	0.477925	mg/L	0.0203775	4.26%
QC value within limits for Cr 267.716 Recovery = 95.58%								
Cu 327.393†	33153.1	0.481891	mg/L	0.0190269	0.481891	mg/L	0.0190269	3.95%
QC value within limits for Cu 327.393 Recovery = 96.38%								
Fe 273.955†	42467.1	4.84054	mg/L	0.205272	4.84054	mg/L	0.205272	4.24%
QC value within limits for Fe 273.955 Recovery = 96.81%								
K 404.721†	1312.6	-34.5908	mg/L	26.97022	-34.5908	mg/L	26.97022	77.97%
QC value less than the lower limit for K 404.721 Recovery = -69.18%								
Mg 279.077†	483830.9	48.7288	mg/L	1.57425	48.7288	mg/L	1.57425	3.23%
QC value within limits for Mg 279.077 Recovery = 97.46%								
Mn 257.610†	133664.9	0.484848	mg/L	0.0209022	0.484848	mg/L	0.0209022	4.31%
QC value within limits for Mn 257.610 Recovery = 96.97%								
Mo 202.031†	5226.4	0.483905	mg/L	0.0173792	0.483905	mg/L	0.0173792	3.59%
QC value within limits for Mo 202.031 Recovery = 96.78%								
Na 330.237†	18767.8	46.8874	mg/L	1.89686	46.8874	mg/L	1.89686	4.05%
QC value within limits for Na 330.237 Recovery = 93.77%								
Ni 231.604†	12737.5	0.464013	mg/L	0.0195459	0.464013	mg/L	0.0195459	4.21%
QC value within limits for Ni 231.604 Recovery = 92.80%								
Pb 220.353†	3022.4	0.486029	mg/L	0.0179228	0.486029	mg/L	0.0179228	3.69%
QC value within limits for Pb 220.353 Recovery = 97.21%								
Sb 206.836†	1002.7	0.507525	mg/L	0.0142067	0.507525	mg/L	0.0142067	2.80%
QC value within limits for Sb 206.836 Recovery = 101.51%								
Se 196.026†	901.8	0.486330	mg/L	0.0144282	0.486330	mg/L	0.0144282	2.97%
QC value within limits for Se 196.026 Recovery = 97.27%								
Sn 189.927†	2874.4	0.489327	mg/L	0.0165659	0.489327	mg/L	0.0165659	3.39%
QC value within limits for Sn 189.927 Recovery = 97.87%								
Ti 334.940†	132844.2	0.488852	mg/L	0.0212324	0.488852	mg/L	0.0212324	4.34%
QC value within limits for Ti 334.940 Recovery = 97.77%								
Tl 190.801†	996.4	0.512414	mg/L	0.0143371	0.512414	mg/L	0.0143371	2.80%
QC value within limits for Tl 190.801 Recovery = 102.48%								
V 290.880†	23495.3	0.485408	mg/L	0.0211139	0.485408	mg/L	0.0211139	4.35%
QC value within limits for V 290.880 Recovery = 97.08%								
Zn 206.200†	21803.0	0.478834	mg/L	0.0212943	0.478834	mg/L	0.0212943	4.45%
QC value within limits for Zn 206.200 Recovery = 95.77%								
B 249.772†	34217.0	0.520337	mg/L	0.0222552	0.520337	mg/L	0.0222552	4.28%
QC value within limits for B 249.772 Recovery = 104.07%								
Si 251.611†	111114.3	4.97094	mg/L	0.221678	4.97094	mg/L	0.221678	4.46%
QC value within limits for Si 251.611 Recovery = 99.42%								
Ce 413.764†	37638.9	5.043	mg/L	0.1788	5.043	mg/L	0.1788	3.55%
QC value within limits for Ce 413.764 Recovery = 100.85%								

QC Failed. Continue with analysis.

Sequence No.: 6
Sample ID: ICB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 9/16/2020 10:19:17 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	373666.8	99.1	%	0.97				0.98%
Y 371.029	169817.8	99.4	%	0.91				0.91%
Ag 328.068†	8.1	-0.0016284	mg/L	0.00021969	-0.0016284	mg/L	0.00021969	13.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-10.3	0.0135000	mg/L	0.00437981	0.0135000	mg/L	0.00437981	32.44%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	12.2	0.0064971	mg/L	0.00160436	0.0064971	mg/L	0.00160436	24.69%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-7.0	-0.0017404	mg/L	0.00009145	-0.0017404	mg/L	0.00009145	5.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-29.3	0.0024793	mg/L	0.00006384	0.0024793	mg/L	0.00006384	2.58%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	-13.6	-0.198552	mg/L	0.0004745	-0.198552	mg/L	0.0004745	0.24%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	11.1	0.0027119	mg/L	0.00008134	0.0027119	mg/L	0.00008134	3.00%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	4.1	0.0010807	mg/L	0.00052110	0.0010807	mg/L	0.00052110	48.22%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-20.1	-0.0058747	mg/L	0.00008389	-0.0058747	mg/L	0.00008389	1.43%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	56.4	0.0017222	mg/L	0.00067931	0.0017222	mg/L	0.00067931	39.45%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-4.8	-0.0050445	mg/L	0.00220712	-0.0050445	mg/L	0.00220712	43.75%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	5.0	-6.66026	mg/L	13.441472	-6.66026	mg/L	13.441472	201.82%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	31.2	-0.336522	mg/L	0.0045582	-0.336522	mg/L	0.0045582	1.35%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	6.3	-0.0003481	mg/L	0.00003631	-0.0003481	mg/L	0.00003631	10.43%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	11.6	0.0027699	mg/L	0.00028640	0.0027699	mg/L	0.00028640	10.34%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	24.0	0.245127	mg/L	0.0665909	0.245127	mg/L	0.0665909	27.17%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-3.7	-0.0000261	mg/L	0.00017022	-0.0000261	mg/L	0.00017022	652.56%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	7.8	0.0020136	mg/L	0.00083303	0.0020136	mg/L	0.00083303	41.37%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	4.5	0.0020579	mg/L	0.00173781	0.0020579	mg/L	0.00173781	84.45%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	8.1	0.0069726	mg/L	0.00211641	0.0069726	mg/L	0.00211641	30.35%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	3.1	0.0009281	mg/L	0.00076543	0.0009281	mg/L	0.00076543	82.47%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	49.3	0.0013913	mg/L	0.00006776	0.0013913	mg/L	0.00006776	4.87%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-5.5	-0.0060960	mg/L	0.00273082	-0.0060960	mg/L	0.00273082	44.80%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	35.2	0.0022037	mg/L	0.00029714	0.0022037	mg/L	0.00029714	13.48%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	15.2	-0.0039192	mg/L	0.00013942	-0.0039192	mg/L	0.00013942	3.56%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	419.6	0.0182053	mg/L	0.00059714	0.0182053	mg/L	0.00059714	3.28%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	4.8	-0.0189923	mg/L	0.00142518	-0.0189923	mg/L	0.00142518	7.50%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	10.1	-0.013	mg/L	0.0046	-0.013	mg/L	0.0046	35.96%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: LRS V-333662
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 9/16/2020 10:23:03 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LRS V-333662

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	310611.5	82.4	%	0.28				0.34%
Y 371.029	138785.1	81.2	%	0.43				0.53%
Ag 328.068†	104608.0	1.23919	mg/L	0.001522	1.23919	mg/L	0.001522	0.12%
QC value greater than the upper limit for Ag 328.068 Recovery = 123.92%								
Al 308.215†	4306116.2	493.513	mg/L	0.4943	493.513	mg/L	0.4943	0.10%
QC value within limits for Al 308.215 Recovery = 98.70%								
As 188.979†	20586.4	10.7691	mg/L	0.05536	10.7691	mg/L	0.05536	0.51%
QC value within limits for As 188.979 Recovery = 107.69%								
Ba 233.527†	851158.1	10.0683	mg/L	0.00688	10.0683	mg/L	0.00688	0.07%
QC value within limits for Ba 233.527 Recovery = 100.68%								
Be 313.107†	6172459.5	5.04343	mg/L	0.040672	5.04343	mg/L	0.040672	0.81%
QC value within limits for Be 313.107 Recovery = 100.87%								
Ca 317.933†	41170218.5	474.676	mg/L	3.1913	474.676	mg/L	3.1913	0.67%
QC value within limits for Ca 317.933 Recovery = 94.94%								
Cd 228.802†	157045.9	5.11871	mg/L	0.000855	5.11871	mg/L	0.000855	0.02%
QC value within limits for Cd 228.802 Recovery = 102.37%								
Co 228.616†	123899.0	4.68115	mg/L	0.008699	4.68115	mg/L	0.008699	0.19%
QC value within limits for Co 228.616 Recovery = 93.62%								
Cr 267.716†	631907.7	9.95391	mg/L	0.005306	9.95391	mg/L	0.005306	0.05%
QC value within limits for Cr 267.716 Recovery = 99.54%								
Cu 327.393†	721328.9	10.4660	mg/L	0.01458	10.4660	mg/L	0.01458	0.14%
QC value within limits for Cu 327.393 Recovery = 104.66%								
Fe 273.955†	3234387.0	369.004	mg/L	0.1567	369.004	mg/L	0.1567	0.04%
QC value within limits for Fe 273.955 Recovery = 92.25%								
K 404.721†	64876.9	-2673.70	mg/L	34.695	-2673.70	mg/L	34.695	1.30%
QC value less than the lower limit for K 404.721 Recovery = -1336.85%								
Mg 279.077†	4708529.2	477.184	mg/L	0.3062	477.184	mg/L	0.3062	0.06%
QC value within limits for Mg 279.077 Recovery = 95.44%								
Mn 257.610†	2727981.8	9.90252	mg/L	0.002482	9.90252	mg/L	0.002482	0.03%
QC value within limits for Mn 257.610 Recovery = 99.03%								
Mo 202.031†	105873.0	9.76988	mg/L	0.013038	9.76988	mg/L	0.013038	0.13%
QC value within limits for Mo 202.031 Recovery = 97.70%								
Na 330.237†	470335.7	1170.57	mg/L	0.977	1170.57	mg/L	0.977	0.08%
QC value greater than the upper limit for Na 330.237 Recovery = 117.06%								
Ni 231.604†	255006.8	9.28749	mg/L	0.007159	9.28749	mg/L	0.007159	0.08%
QC value within limits for Ni 231.604 Recovery = 92.87%								
Pb 220.353†	61001.6	9.92348	mg/L	0.100285	9.92348	mg/L	0.100285	1.01%
QC value within limits for Pb 220.353 Recovery = 99.23%								
Sb 206.836†	11251.1	5.67810	mg/L	0.025872	5.67810	mg/L	0.025872	0.46%
QC value greater than the upper limit for Sb 206.836 Recovery = 113.56%								
Se 196.026†	9542.8	5.20664	mg/L	0.017167	5.20664	mg/L	0.017167	0.33%
QC value within limits for Se 196.026 Recovery = 104.13%								
Sn 189.927†	59684.6	10.1526	mg/L	0.04877	10.1526	mg/L	0.04877	0.48%
QC value within limits for Sn 189.927 Recovery = 101.53%								
Ti 334.940†	2795763.9	10.2638	mg/L	0.01130	10.2638	mg/L	0.01130	0.11%
QC value within limits for Ti 334.940 Recovery = 102.64%								
Tl 190.801†	10656.2	5.18236	mg/L	0.014219	5.18236	mg/L	0.014219	0.27%
QC value within limits for Tl 190.801 Recovery = 103.65%								
V 290.880†	498418.1	10.2404	mg/L	0.00306	10.2404	mg/L	0.00306	0.03%
QC value within limits for V 290.880 Recovery = 102.40%								
Zn 206.200†	429828.0	9.51945	mg/L	0.018456	9.51945	mg/L	0.018456	0.19%
QC value within limits for Zn 206.200 Recovery = 95.19%								
B 249.772†	118692.1	3.83979	mg/L	0.004844	3.83979	mg/L	0.004844	0.13%
QC value less than the lower limit for B 249.772 Recovery = 76.80%								
Si 251.611†	7590.6	0.168244	mg/L	0.0038106	0.168244	mg/L	0.0038106	2.26%
QC value less than the lower limit for Si 251.611 Recovery = 0.67%								
Ce 413.764†	1134.5	0.437	mg/L	0.0068	0.437	mg/L	0.0068	1.56%
QC value less than the lower limit for Ce 413.764 Recovery = 1.75%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-333666
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 9/16/2020 10:27:29 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	360307.4	95.5	%	0.22				0.23%
Y 371.029	133632.7	78.2	%	0.22				0.28%
Ag 328.068†	9040.4	0.105518	mg/L	0.0006132	0.105518	mg/L	0.0006132	0.58%
QC value within limits for Ag 328.068 Recovery = 105.52%								
Al 308.215†	44413.8	5.12523	mg/L	0.023220	5.12523	mg/L	0.023220	0.45%
QC value within limits for Al 308.215 Recovery = 102.50%								
As 188.979†	973.2	0.507148	mg/L	0.0012981	0.507148	mg/L	0.0012981	0.26%
QC value within limits for As 188.979 Recovery = 101.43%								
Ba 233.527†	43271.4	0.510281	mg/L	0.0030120	0.510281	mg/L	0.0030120	0.59%
QC value within limits for Ba 233.527 Recovery = 102.06%								
Be 313.107†	616852.3	0.506274	mg/L	0.0011548	0.506274	mg/L	0.0011548	0.23%
QC value within limits for Be 313.107 Recovery = 101.25%								
Ca 317.933†	4501034.3	51.7184	mg/L	0.11626	51.7184	mg/L	0.11626	0.22%
QC value within limits for Ca 317.933 Recovery = 103.44%								
Cd 228.802†	15258.6	0.499457	mg/L	0.0023326	0.499457	mg/L	0.0023326	0.47%
QC value within limits for Cd 228.802 Recovery = 99.89%								
Co 228.616†	13347.8	0.505133	mg/L	0.0027436	0.505133	mg/L	0.0027436	0.54%
QC value within limits for Co 228.616 Recovery = 101.03%								
Cr 267.716†	33877.7	0.528387	mg/L	0.0025387	0.528387	mg/L	0.0025387	0.48%
QC value within limits for Cr 267.716 Recovery = 105.68%								
Cu 327.393†	34934.2	0.507732	mg/L	0.0034200	0.507732	mg/L	0.0034200	0.67%
QC value within limits for Cu 327.393 Recovery = 101.55%								
Fe 273.955†	44947.0	5.12347	mg/L	0.018298	5.12347	mg/L	0.018298	0.36%
QC value within limits for Fe 273.955 Recovery = 102.47%								
K 404.721†	3602.3	-1.78147	mg/L	2.689485	-1.78147	mg/L	2.689485	150.97%
QC value less than the lower limit for K 404.721 Recovery = -3.56%								
Mg 279.077†	516275.3	52.0193	mg/L	0.32574	52.0193	mg/L	0.32574	0.63%
QC value within limits for Mg 279.077 Recovery = 104.04%								
Mn 257.610†	141441.7	0.513079	mg/L	0.0026410	0.513079	mg/L	0.0026410	0.51%
QC value within limits for Mn 257.610 Recovery = 102.62%								
Mo 202.031†	5465.2	0.505933	mg/L	0.0017849	0.505933	mg/L	0.0017849	0.35%
QC value within limits for Mo 202.031 Recovery = 101.19%								
Na 330.237†	20503.5	51.2066	mg/L	0.24642	51.2066	mg/L	0.24642	0.48%
QC value within limits for Na 330.237 Recovery = 102.41%								
Ni 231.604†	13894.2	0.506140	mg/L	0.0024752	0.506140	mg/L	0.0024752	0.49%
QC value within limits for Ni 231.604 Recovery = 101.23%								
Pb 220.353†	3136.0	0.503987	mg/L	0.0015741	0.503987	mg/L	0.0015741	0.31%
QC value within limits for Pb 220.353 Recovery = 100.80%								
Sb 206.836†	1031.9	0.523108	mg/L	0.0054840	0.523108	mg/L	0.0054840	1.05%
QC value within limits for Sb 206.836 Recovery = 104.62%								
Se 196.026†	954.4	0.514504	mg/L	0.0049926	0.514504	mg/L	0.0049926	0.97%
QC value within limits for Se 196.026 Recovery = 102.90%								
Sn 189.927†	3013.0	0.512900	mg/L	0.0026686	0.512900	mg/L	0.0026686	0.52%
QC value within limits for Sn 189.927 Recovery = 102.58%								
Ti 334.940†	139303.6	0.512564	mg/L	0.0020115	0.512564	mg/L	0.0020115	0.39%
QC value within limits for Ti 334.940 Recovery = 102.51%								
Tl 190.801†	1076.4	0.554673	mg/L	0.0033661	0.554673	mg/L	0.0033661	0.61%
QC value greater than the upper limit for Tl 190.801 Recovery = 110.93%								
V 290.880†	25068.1	0.517644	mg/L	0.0045297	0.517644	mg/L	0.0045297	0.88%
QC value within limits for V 290.880 Recovery = 103.53%								
Zn 206.200†	23706.0	0.520998	mg/L	0.0042243	0.520998	mg/L	0.0042243	0.81%
QC value within limits for Zn 206.200 Recovery = 104.20%								
B 249.772†	35208.6	0.535894	mg/L	0.0065999	0.535894	mg/L	0.0065999	1.23%
QC value within limits for B 249.772 Recovery = 107.18%								
Si 251.611†	113658.5	5.08503	mg/L	0.029388	5.08503	mg/L	0.029388	0.58%
QC value within limits for Si 251.611 Recovery = 101.70%								
Ce 413.764†	41655.5	5.582	mg/L	0.1607	5.582	mg/L	0.1607	2.88%
QC value greater than the upper limit for Ce 413.764 Recovery = 111.64%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 9/16/2020 10:31:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	370452.6	98.2	%	0.76				0.77%
Y 371.029	169128.7	99.0	%	0.67				0.67%
Ag 328.068†	47.5	-0.0011612	mg/L	0.00056903	-0.0011612	mg/L	0.00056903	49.00%
Al 308.215†	48.6	0.0202806	mg/L	0.00357506	0.0202806	mg/L	0.00357506	17.63%
As 188.979†	9.9	0.0053075	mg/L	0.00085050	0.0053075	mg/L	0.00085050	16.02%
Ba 233.527†	10.6	-0.0015322	mg/L	0.00004790	-0.0015322	mg/L	0.00004790	3.13%
Be 313.107†	17.7	0.0025177	mg/L	0.00000188	0.0025177	mg/L	0.00000188	0.07%
Ca 317.933†	472.8	-0.192941	mg/L	0.0009097	-0.192941	mg/L	0.0009097	0.47%
Cd 228.802†	3.9	0.0024780	mg/L	0.00014616	0.0024780	mg/L	0.00014616	5.90%
Co 228.616†	-4.3	0.0007628	mg/L	0.00020791	0.0007628	mg/L	0.00020791	27.25%
Cr 267.716†	-8.2	-0.0056876	mg/L	0.00011890	-0.0056876	mg/L	0.00011890	2.09%
Cu 327.393†	29.9	0.0013381	mg/L	0.00024495	0.0013381	mg/L	0.00024495	18.31%
Fe 273.955†	39.9	0.0000556	mg/L	0.00095386	0.0000556	mg/L	0.00095386	>999.9%
K 404.721†	-508.4	-14.6987	mg/L	5.32228	-14.6987	mg/L	5.32228	36.21%
Mg 279.077†	41.4	-0.335481	mg/L	0.0017247	-0.335481	mg/L	0.0017247	0.51%
Mn 257.610†	28.2	-0.0002686	mg/L	0.00001472	-0.0002686	mg/L	0.00001472	5.48%
Mo 202.031†	8.3	0.0024686	mg/L	0.00015545	0.0024686	mg/L	0.00015545	6.30%
Na 330.237†	40.7	0.286598	mg/L	0.0132450	0.286598	mg/L	0.0132450	4.62%
Ni 231.604†	-13.1	-0.0003664	mg/L	0.00042686	-0.0003664	mg/L	0.00042686	116.49%
Pb 220.353†	-3.4	0.0002032	mg/L	0.00130328	0.0002032	mg/L	0.00130328	641.46%
Sb 206.836†	-0.3	-0.0003027	mg/L	0.00435379	-0.0003027	mg/L	0.00435379	>999.9%
Se 196.026†	-4.8	0.0000867	mg/L	0.00856423	0.0000867	mg/L	0.00856423	>999.9%
Sn 189.927†	17.5	0.0033695	mg/L	0.00142500	0.0033695	mg/L	0.00142500	42.29%
Ti 334.940†	60.0	0.0014305	mg/L	0.00001794	0.0014305	mg/L	0.00001794	1.25%
Tl 190.801†	2.6	-0.0021953	mg/L	0.00342774	-0.0021953	mg/L	0.00342774	156.14%
V 290.880†	36.0	0.0022153	mg/L	0.00012851	0.0022153	mg/L	0.00012851	5.80%
Zn 206.200†	46.7	-0.0032208	mg/L	0.00009594	-0.0032208	mg/L	0.00009594	2.98%
B 249.772†	279.3	0.0162685	mg/L	0.00046117	0.0162685	mg/L	0.00046117	2.83%
Si 251.611†	30.3	-0.0178392	mg/L	0.00046394	-0.0178392	mg/L	0.00046394	2.60%
Ce 413.764†	29.8	-0.010	mg/L	0.0086	-0.010	mg/L	0.0086	83.81%

0091101 0343

Sequence No.: 10
Sample ID: LLICV V-333671
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 9/16/2020 10:35:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LLICV V-333671

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	357833.0	94.9	%	0.53				0.56%
Y 371.029	162288.3	95.0	%	0.56				0.59%
Ag 328.068†	1469.3	0.0157052	mg/L	0.00033804	0.0157052	mg/L	0.00033804	2.15%
QC value within limits for Ag 328.068 Recovery = 104.70%								
Al 308.215†	17946.1	2.07182	mg/L	0.009911	2.07182	mg/L	0.009911	0.48%
QC value within limits for Al 308.215 Recovery = 103.59%								
As 188.979†	80.5	0.0423530	mg/L	0.00217436	0.0423530	mg/L	0.00217436	5.13%
QC value within limits for As 188.979 Recovery = 105.88%								
Ba 233.527†	9198.0	0.107164	mg/L	0.0010740	0.107164	mg/L	0.0010740	1.00%
QC value within limits for Ba 233.527 Recovery = 107.16%								
Be 313.107†	14365.9	0.0142356	mg/L	0.00005334	0.0142356	mg/L	0.00005334	0.37%
QC value within limits for Be 313.107 Recovery = 118.63%								
Ca 317.933†	938481.6	10.6264	mg/L	0.06566	10.6264	mg/L	0.06566	0.62%
QC value within limits for Ca 317.933 Recovery = 106.26%								
Cd 228.802†	391.6	0.0151089	mg/L	0.00003992	0.0151089	mg/L	0.00003992	0.26%
QC value greater than the upper limit for Cd 228.802 Recovery = 125.91%								
Co 228.616†	685.2	0.0268107	mg/L	0.00038661	0.0268107	mg/L	0.00038661	1.44%
QC value within limits for Co 228.616 Recovery = 107.24%								
Cr 267.716†	3481.7	0.0493175	mg/L	0.00070331	0.0493175	mg/L	0.00070331	1.43%
QC value within limits for Cr 267.716 Recovery = 98.63%								
Cu 327.393†	3541.5	0.0522848	mg/L	0.00082011	0.0522848	mg/L	0.00082011	1.57%
QC value within limits for Cu 327.393 Recovery = 104.57%								
Fe 273.955†	18236.7	2.07611	mg/L	0.010961	2.07611	mg/L	0.010961	0.53%
QC value within limits for Fe 273.955 Recovery = 103.81%								
K 404.721†	884.4	-13.7109	mg/L	3.85706	-13.7109	mg/L	3.85706	28.13%
QC value less than the lower limit for K 404.721 Recovery = -274.22%								
Mg 279.077†	52832.7	5.01843	mg/L	0.038419	5.01843	mg/L	0.038419	0.77%
QC value within limits for Mg 279.077 Recovery = 100.37%								
Mn 257.610†	28550.9	0.103272	mg/L	0.0005488	0.103272	mg/L	0.0005488	0.53%
QC value within limits for Mn 257.610 Recovery = 103.27%								
Mo 202.031†	283.1	0.0278166	mg/L	0.00017246	0.0278166	mg/L	0.00017246	0.62%
QC value within limits for Mo 202.031 Recovery = 111.27%								
Na 330.237†	926.7	2.49155	mg/L	0.135236	2.49155	mg/L	0.135236	5.43%
QC value within limits for Na 330.237 Recovery = 99.66%								
Ni 231.604†	1417.5	0.0517343	mg/L	0.00017001	0.0517343	mg/L	0.00017001	0.33%
QC value within limits for Ni 231.604 Recovery = 103.47%								
Pb 220.353†	316.1	0.0519124	mg/L	0.00065144	0.0519124	mg/L	0.00065144	1.25%
QC value within limits for Pb 220.353 Recovery = 103.82%								
Sb 206.836†	84.2	0.0423678	mg/L	0.00245617	0.0423678	mg/L	0.00245617	5.80%
QC value within limits for Sb 206.836 Recovery = 105.92%								
Se 196.026†	98.8	0.0560264	mg/L	0.00182354	0.0560264	mg/L	0.00182354	3.25%
QC value within limits for Se 196.026 Recovery = 112.05%								
Sn 189.927†	1216.3	0.207294	mg/L	0.0026904	0.207294	mg/L	0.0026904	1.30%
QC value within limits for Sn 189.927 Recovery = 103.65%								
Ti 334.940†	27631.0	0.102638	mg/L	0.0002074	0.102638	mg/L	0.0002074	0.20%
QC value within limits for Ti 334.940 Recovery = 102.64%								
Tl 190.801†	112.4	0.0522333	mg/L	0.00304687	0.0522333	mg/L	0.00304687	5.83%
QC value within limits for Tl 190.801 Recovery = 104.47%								
V 290.880†	5084.2	0.104868	mg/L	0.0018860	0.104868	mg/L	0.0018860	1.80%
QC value within limits for V 290.880 Recovery = 104.87%								
Zn 206.200†	4693.2	0.0997324	mg/L	0.00087565	0.0997324	mg/L	0.00087565	0.88%
QC value within limits for Zn 206.200 Recovery = 99.73%								
B 249.772†	13193.6	0.209454	mg/L	0.0011634	0.209454	mg/L	0.0011634	0.56%
QC value within limits for B 249.772 Recovery = 104.73%								
Si 251.611†	3369.8	0.131969	mg/L	0.0020159	0.131969	mg/L	0.0020159	1.53%
QC value greater than the upper limit for Si 251.611 Recovery = 131.97%								
Ce 413.764†	1170.6	0.145	mg/L	0.0042	0.145	mg/L	0.0042	2.88%
QC value greater than the upper limit for Ce 413.764 Recovery = 144.62%								

QC Failed. Continue with analysis.

Sequence No.: 11 Autosampler Location: 7
Sample ID: ICSA V-333668 Date Collected: 9/16/2020 10:39:11 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	329199.6	87.3	%	0.53				0.60%
Y 371.029	147128.0	86.1	%	0.64				0.74%
Ag 328.068†	-508.3	-0.0077539	mg/L	0.00021906	-0.0077539	mg/L	0.00021906	2.83%
Al 308.215†	4360037.9	500.040	mg/L	7.0747	500.040	mg/L	7.0747	1.41%
QC value within limits for Al 308.215 Recovery = 100.01%								
As 188.979†	-46.1	0.0084577	mg/L	0.00218618	0.0084577	mg/L	0.00218618	25.85%
Ba 233.527†	391.5	0.0029748	mg/L	0.00029406	0.0029748	mg/L	0.00029406	9.88%
Be 313.107†	-239.5	0.0023077	mg/L	0.00001566	0.0023077	mg/L	0.00001566	0.68%
Ca 317.933†	41565590.8	479.236	mg/L	4.8520	479.236	mg/L	4.8520	1.01%
QC value within limits for Ca 317.933 Recovery = 95.85%								
Cd 228.802†	-47.2	0.0008123	mg/L	0.00019891	0.0008123	mg/L	0.00019891	24.49%
Co 228.616†	52.7	0.0029181	mg/L	0.00049648	0.0029181	mg/L	0.00049648	17.01%
Cr 267.716†	-430.2	-0.0123382	mg/L	0.00048507	-0.0123382	mg/L	0.00048507	3.93%
Cu 327.393†	-2226.8	-0.0314028	mg/L	0.00041123	-0.0314028	mg/L	0.00041123	1.31%
Fe 273.955†	1659289.1	189.303	mg/L	3.1011	189.303	mg/L	3.1011	1.64%
QC value within limits for Fe 273.955 Recovery = 94.65%								
K 404.721†	29404.3	-1435.28	mg/L	32.150	-1435.28	mg/L	32.150	2.24%
Mg 279.077†	4904596.9	497.068	mg/L	8.2577	497.068	mg/L	8.2577	1.66%
QC value within limits for Mg 279.077 Recovery = 99.41%								
Mn 257.610†	-4908.9	-0.0181910	mg/L	0.00011312	-0.0181910	mg/L	0.00011312	0.62%
Mo 202.031†	59.5	0.0071909	mg/L	0.00021833	0.0071909	mg/L	0.00021833	3.04%
Na 330.237†	88.8	0.406282	mg/L	0.0597278	0.406282	mg/L	0.0597278	14.70%
Ni 231.604†	204.8	0.0075686	mg/L	0.00005148	0.0075686	mg/L	0.00005148	0.68%
Pb 220.353†	-314.5	0.0023890	mg/L	0.00232026	0.0023890	mg/L	0.00232026	97.12%
Sb 206.836†	21.6	0.0041437	mg/L	0.00995618	0.0041437	mg/L	0.00995618	240.27%
Se 196.026†	-135.7	-0.0187665	mg/L	0.00302091	-0.0187665	mg/L	0.00302091	16.10%
Sn 189.927†	-95.1	-0.0157704	mg/L	0.00074906	-0.0157704	mg/L	0.00074906	4.75%
Ti 334.940†	-1890.9	-0.0057307	mg/L	0.00011252	-0.0057307	mg/L	0.00011252	1.96%
Tl 190.801†	-16.5	-0.0115052	mg/L	0.00202003	-0.0115052	mg/L	0.00202003	17.56%
V 290.880†	1164.0	0.0111493	mg/L	0.00136751	0.0111493	mg/L	0.00136751	12.27%
Zn 206.200†	43.3	-0.0032959	mg/L	0.00035463	-0.0032959	mg/L	0.00035463	10.76%
B 249.772†	61071.0	1.97840	mg/L	0.024623	1.97840	mg/L	0.024623	1.24%
Si 251.611†	160.7	-0.0120499	mg/L	0.00185314	-0.0120499	mg/L	0.00185314	15.38%
Ce 413.764†	-86.3	0.128	mg/L	0.0049	0.128	mg/L	0.0049	3.87%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/16/2020 10:44:16 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	360130.1	95.5	%	1.03				1.08%
Y 371.029	133600.1	78.2	%	0.80				1.03%
Ag 328.068†	9024.6	0.105331	mg/L	0.0021503	0.105331	mg/L	0.0021503	2.04%
QC value within limits for Ag 328.068 Recovery = 105.33%								
Al 308.215†	44020.3	5.08237	mg/L	0.017541	5.08237	mg/L	0.017541	0.35%
QC value within limits for Al 308.215 Recovery = 101.65%								
As 188.979†	968.4	0.504609	mg/L	0.0072911	0.504609	mg/L	0.0072911	1.44%
QC value within limits for As 188.979 Recovery = 100.92%								
Ba 233.527†	42800.4	0.504709	mg/L	0.0016441	0.504709	mg/L	0.0016441	0.33%
QC value within limits for Ba 233.527 Recovery = 100.94%								
Be 313.107†	603847.2	0.495653	mg/L	0.0064966	0.495653	mg/L	0.0064966	1.31%
QC value within limits for Be 313.107 Recovery = 99.13%								
Ca 317.933†	4535987.1	52.1215	mg/L	0.71791	52.1215	mg/L	0.71791	1.38%
QC value within limits for Ca 317.933 Recovery = 104.24%								
Cd 228.802†	15175.6	0.496752	mg/L	0.0096834	0.496752	mg/L	0.0096834	1.95%
QC value within limits for Cd 228.802 Recovery = 99.35%								
Co 228.616†	13230.5	0.500700	mg/L	0.0095974	0.500700	mg/L	0.0095974	1.92%
QC value within limits for Co 228.616 Recovery = 100.14%								
Cr 267.716†	33929.9	0.529210	mg/L	0.0096648	0.529210	mg/L	0.0096648	1.83%
QC value within limits for Cr 267.716 Recovery = 105.84%								
Cu 327.393†	34905.2	0.507311	mg/L	0.0012862	0.507311	mg/L	0.0012862	0.25%
QC value within limits for Cu 327.393 Recovery = 101.46%								
Fe 273.955†	44829.8	5.11010	mg/L	0.020516	5.11010	mg/L	0.020516	0.40%
QC value within limits for Fe 273.955 Recovery = 102.20%								
K 404.721†	3423.8	-4.42531	mg/L	11.516604	-4.42531	mg/L	11.516604	260.24%
QC value less than the lower limit for K 404.721 Recovery = -8.85%								
Mg 279.077†	521369.7	52.5359	mg/L	0.10041	52.5359	mg/L	0.10041	0.19%
QC value within limits for Mg 279.077 Recovery = 105.07%								
Mn 257.610†	139788.6	0.507077	mg/L	0.0012103	0.507077	mg/L	0.0012103	0.24%
QC value within limits for Mn 257.610 Recovery = 101.42%								
Mo 202.031†	5377.4	0.497834	mg/L	0.0104956	0.497834	mg/L	0.0104956	2.11%
QC value within limits for Mo 202.031 Recovery = 99.57%								
Na 330.237†	20961.7	52.3467	mg/L	0.91293	52.3467	mg/L	0.91293	1.74%
QC value within limits for Na 330.237 Recovery = 104.69%								
Ni 231.604†	13782.2	0.502060	mg/L	0.0095708	0.502060	mg/L	0.0095708	1.91%
QC value within limits for Ni 231.604 Recovery = 100.41%								
Pb 220.353†	3094.0	0.496905	mg/L	0.0068158	0.496905	mg/L	0.0068158	1.37%
QC value within limits for Pb 220.353 Recovery = 99.38%								
Sb 206.836†	1043.6	0.529232	mg/L	0.0132264	0.529232	mg/L	0.0132264	2.50%
QC value within limits for Sb 206.836 Recovery = 105.85%								
Se 196.026†	930.1	0.501530	mg/L	0.0086488	0.501530	mg/L	0.0086488	1.72%
QC value within limits for Se 196.026 Recovery = 100.31%								
Sn 189.927†	2982.9	0.507791	mg/L	0.0095070	0.507791	mg/L	0.0095070	1.87%
QC value within limits for Sn 189.927 Recovery = 101.56%								
Ti 334.940†	138801.2	0.510719	mg/L	0.0011225	0.510719	mg/L	0.0011225	0.22%
QC value within limits for Ti 334.940 Recovery = 102.14%								
Tl 190.801†	1035.7	0.537341	mg/L	0.0114037	0.537341	mg/L	0.0114037	2.12%
QC value within limits for Tl 190.801 Recovery = 107.47%								
V 290.880†	24887.3	0.513848	mg/L	0.0031284	0.513848	mg/L	0.0031284	0.61%
QC value within limits for V 290.880 Recovery = 102.77%								
Zn 206.200†	23700.5	0.520876	mg/L	0.0095509	0.520876	mg/L	0.0095509	1.83%
QC value within limits for Zn 206.200 Recovery = 104.18%								
B 249.772†	35405.9	0.538581	mg/L	0.0027300	0.538581	mg/L	0.0027300	0.51%
QC value within limits for B 249.772 Recovery = 107.72%								
Si 251.611†	115790.3	5.18104	mg/L	0.009656	5.18104	mg/L	0.009656	0.19%
QC value within limits for Si 251.611 Recovery = 103.62%								
Ce 413.764†	44121.5	5.913	mg/L	0.1945	5.913	mg/L	0.1945	3.29%
QC value greater than the upper limit for Ce 413.764 Recovery = 118.26%								

QC Failed. Continue with analysis.

Sequence No.: 13 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 9/16/2020 10:48:20 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	363986.1	96.5	%	1.18				1.22%
Y 371.029	166584.4	97.5	%	1.27				1.30%
Ag 328.068†	63.6	-0.0009701	mg/L	0.00084697	-0.0009701	mg/L	0.00084697	87.31%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	126.6	0.0292208	mg/L	0.00165212	0.0292208	mg/L	0.00165212	5.65%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	6.0	0.0032600	mg/L	0.00098393	0.0032600	mg/L	0.00098393	30.18%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	6.3	-0.0015833	mg/L	0.00010838	-0.0015833	mg/L	0.00010838	6.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-11.6	0.0024938	mg/L	0.00001647	0.0024938	mg/L	0.00001647	0.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	1007.2	-0.186778	mg/L	0.0004301	-0.186778	mg/L	0.0004301	0.23%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	6.5	0.0025640	mg/L	0.00044821	0.0025640	mg/L	0.00044821	17.48%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-9.1	0.0005814	mg/L	0.00014167	0.0005814	mg/L	0.00014167	24.37%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-5.0	-0.0056368	mg/L	0.00031636	-0.0056368	mg/L	0.00031636	5.61%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	24.1	0.0012531	mg/L	0.00057087	0.0012531	mg/L	0.00057087	45.56%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	55.9	0.0018747	mg/L	0.00183201	0.0018747	mg/L	0.00183201	97.72%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	103.6	-5.19485	mg/L	15.396421	-5.19485	mg/L	15.396421	296.38%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	28.5	-0.336790	mg/L	0.0004401	-0.336790	mg/L	0.0004401	0.13%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	109.8	0.0000277	mg/L	0.00001262	0.0000277	mg/L	0.00001262	45.55%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.8	0.0016295	mg/L	0.00080822	0.0016295	mg/L	0.00080822	49.60%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	51.7	0.314166	mg/L	0.0698891	0.314166	mg/L	0.0698891	22.25%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	13.9	0.0006175	mg/L	0.00056485	0.0006175	mg/L	0.00056485	91.48%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-3.1	0.0002544	mg/L	0.00096461	0.0002544	mg/L	0.00096461	379.22%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	5.6	0.0025595	mg/L	0.00090500	0.0025595	mg/L	0.00090500	35.36%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	10.1	0.0080370	mg/L	0.00347344	0.0080370	mg/L	0.00347344	43.22%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	2.0	0.0007411	mg/L	0.00254310	0.0007411	mg/L	0.00254310	343.17%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	40.4	0.0013588	mg/L	0.00010563	0.0013588	mg/L	0.00010563	7.77%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-0.2	-0.0035247	mg/L	0.00315355	-0.0035247	mg/L	0.00315355	89.47%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	55.9	0.0026043	mg/L	0.00078440	0.0026043	mg/L	0.00078440	30.12%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	67.3	-0.0027655	mg/L	0.00016196	-0.0027655	mg/L	0.00016196	5.86%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	258.7	0.0159902	mg/L	0.00034368	0.0159902	mg/L	0.00034368	2.15%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	64.7	-0.0162772	mg/L	0.00165772	-0.0162772	mg/L	0.00165772	10.18%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	6.7	-0.013	mg/L	0.0112	-0.013	mg/L	0.0112	84.08%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 14
Sample ID: MB 85284 (100)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 9/16/2020 10:52:07 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85284 (100)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	369046.9	97.9	%	1.11				1.13%
Y 371.029	166369.6	97.4	%	0.91				0.93%
Ag 328.068†	83.0	-0.0007403	mg/L	0.00026602	-0.0007403	mg/L	0.00026602	35.94%
Al 308.215†	118.0	0.0282676	mg/L	0.00587854	0.0282676	mg/L	0.00587854	20.80%
As 188.979†	3.6	0.0020015	mg/L	0.00219824	0.0020015	mg/L	0.00219824	109.83%
Ba 233.527†	47.8	-0.0010924	mg/L	0.00010076	-0.0010924	mg/L	0.00010076	9.22%
Be 313.107†	-11.7	0.0024937	mg/L	0.00005647	0.0024937	mg/L	0.00005647	2.26%
Ca 317.933†	2845.8	-0.165571	mg/L	0.0003408	-0.165571	mg/L	0.0003408	0.21%
Cd 228.802†	1.9	0.0024121	mg/L	0.00046876	0.0024121	mg/L	0.00046876	19.43%
Co 228.616†	5.3	0.0011251	mg/L	0.00040543	0.0011251	mg/L	0.00040543	36.04%
Cr 267.716†	16.7	-0.0052951	mg/L	0.00012599	-0.0052951	mg/L	0.00012599	2.38%
Cu 327.393†	131.5	0.0028113	mg/L	0.00053547	0.0028113	mg/L	0.00053547	19.05%
Fe 273.955†	278.9	0.0273189	mg/L	0.00066786	0.0273189	mg/L	0.00066786	2.44%
K 404.721†	-1196.9	-25.6836	mg/L	12.25774	-25.6836	mg/L	12.25774	47.73%
Mg 279.077†	140.6	-0.325422	mg/L	0.0004434	-0.325422	mg/L	0.0004434	0.14%
Mn 257.610†	188.2	0.0003121	mg/L	0.00007060	0.0003121	mg/L	0.00007060	22.62%
Mo 202.031†	3.0	0.0019811	mg/L	0.00088495	0.0019811	mg/L	0.00088495	44.67%
Na 330.237†	126.4	0.500070	mg/L	0.0366567	0.500070	mg/L	0.0366567	7.33%
Ni 231.604†	-9.6	-0.0002397	mg/L	0.00077333	-0.0002397	mg/L	0.00077333	322.56%
Pb 220.353†	-5.0	-0.0000558	mg/L	0.00043566	-0.0000558	mg/L	0.00043566	781.26%
Sb 206.836†	-1.1	-0.0006696	mg/L	0.00262446	-0.0006696	mg/L	0.00262446	391.92%
Se 196.026†	-0.7	0.0022849	mg/L	0.00364330	0.0022849	mg/L	0.00364330	159.45%
Sn 189.927†	77.2	0.0135360	mg/L	0.00093952	0.0135360	mg/L	0.00093952	6.94%
Ti 334.940†	100.6	0.0015798	mg/L	0.00004130	0.0015798	mg/L	0.00004130	2.61%
Tl 190.801†	-0.9	-0.0038594	mg/L	0.00170090	-0.0038594	mg/L	0.00170090	44.07%
V 290.880†	35.8	0.0022014	mg/L	0.00047595	0.0022014	mg/L	0.00047595	21.62%
Zn 206.200†	207.0	0.0003308	mg/L	0.00021759	0.0003308	mg/L	0.00021759	65.77%
B 249.772†	145.4	0.0145511	mg/L	0.00005548	0.0145511	mg/L	0.00005548	0.38%
Si 251.611†	340.5	-0.0038794	mg/L	0.00085117	-0.0038794	mg/L	0.00085117	21.94%
Ce 413.764†	47.4	-0.008	mg/L	0.0031	-0.008	mg/L	0.0031	40.22%

Sequence No.: 15
Sample ID: LCS 85284
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 9/16/2020 10:55:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 85284

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	344242.6	91.3	%	0.35				0.38%
Y 371.029	184146.3	108	%	0.4				0.37%
Ag 328.068†	76643.0	0.907455	mg/L	0.0019187	0.907455	mg/L	0.0019187	0.21%
Al 308.215†	721307.9	82.6709	mg/L	0.15002	82.6709	mg/L	0.15002	0.18%
As 188.979†	746.1	0.410789	mg/L	0.0073784	0.410789	mg/L	0.0073784	1.80%
Ba 233.527†	628516.8	7.43424	mg/L	0.007190	7.43424	mg/L	0.007190	0.10%
Be 313.107†	1975247.1	1.61565	mg/L	0.005488	1.61565	mg/L	0.005488	0.34%
Ca 317.933†	16610682.1	191.396	mg/L	2.1595	191.396	mg/L	2.1595	1.13%
Cd 228.802†	47781.1	1.55900	mg/L	0.005347	1.55900	mg/L	0.005347	0.34%
Co 228.616†	61261.7	2.31506	mg/L	0.003436	2.31506	mg/L	0.003436	0.15%
Cr 267.716†	120812.2	1.89856	mg/L	0.002961	1.89856	mg/L	0.002961	0.16%
Cu 327.393†	125433.9	1.82071	mg/L	0.005726	1.82071	mg/L	0.005726	0.31%
Fe 273.955†	1161821.6	132.547	mg/L	0.2408	132.547	mg/L	0.2408	0.18%
K 404.721†	17611.2	-1053.33	mg/L	7.347	-1053.33	mg/L	7.347	0.70%
Mg 279.077†	617583.2	62.2936	mg/L	0.07844	62.2936	mg/L	0.07844	0.13%
Mn 257.610†	1423711.0	5.16786	mg/L	0.007532	5.16786	mg/L	0.007532	0.15%
Mo 202.031†	18207.6	1.68159	mg/L	0.016097	1.68159	mg/L	0.016097	0.96%
Na 330.237†	3108.0	7.91948	mg/L	0.179581	7.91948	mg/L	0.179581	2.27%
Ni 231.604†	13639.9	0.496877	mg/L	0.0051152	0.496877	mg/L	0.0051152	1.03%
Pb 220.353†	8449.7	1.37729	mg/L	0.014972	1.37729	mg/L	0.014972	1.09%
Sb 206.836†	834.6	0.440605	mg/L	0.0071154	0.440605	mg/L	0.0071154	1.61%
Se 196.026†	5470.1	2.96433	mg/L	0.036690	2.96433	mg/L	0.036690	1.24%
Sn 189.927†	7732.0	1.31560	mg/L	0.014700	1.31560	mg/L	0.014700	1.12%
Ti 334.940†	1128183.1	4.14252	mg/L	0.007232	4.14252	mg/L	0.007232	0.17%
Tl 190.801†	4228.8	2.05749	mg/L	0.019387	2.05749	mg/L	0.019387	0.94%
V 290.880†	119193.9	2.43630	mg/L	0.002472	2.43630	mg/L	0.002472	0.10%
Zn 206.200†	261717.0	5.79461	mg/L	0.009169	5.79461	mg/L	0.009169	0.16%
B 249.772†	205163.4	3.66524	mg/L	0.013878	3.66524	mg/L	0.013878	0.38%
Si 251.611†	103925.9	4.62874	mg/L	0.023843	4.62874	mg/L	0.023843	0.52%
Ce 413.764†	3289.1	0.535	mg/L	0.0039	0.535	mg/L	0.0039	0.73%

Sequence No.: 16
Sample ID: LCS MR 85284
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 9/16/2020 11:00:50 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS MR 85284

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	353071.2	93.6	%	0.33				0.35%
Y 371.029	188050.3	110	%	0.3				0.28%
Ag 328.068†	74507.9	0.882127	mg/L	0.0043523	0.882127	mg/L	0.0043523	0.49%
Al 308.215†	735067.5	84.2495	mg/L	0.55338	84.2495	mg/L	0.55338	0.66%
As 188.979†	746.3	0.411977	mg/L	0.0042585	0.411977	mg/L	0.0042585	1.03%
Ba 233.527†	633520.0	7.49344	mg/L	0.050294	7.49344	mg/L	0.050294	0.67%
Be 313.107†	1891788.7	1.54749	mg/L	0.012473	1.54749	mg/L	0.012473	0.81%
Ca 317.933†	16077295.6	185.244	mg/L	1.3600	185.244	mg/L	1.3600	0.73%
Cd 228.802†	46640.8	1.52185	mg/L	0.010274	1.52185	mg/L	0.010274	0.68%
Co 228.616†	60010.6	2.26780	mg/L	0.014739	2.26780	mg/L	0.014739	0.65%
Cr 267.716†	118851.0	1.86765	mg/L	0.011652	1.86765	mg/L	0.011652	0.62%
Cu 327.393†	122743.3	1.78167	mg/L	0.010143	1.78167	mg/L	0.010143	0.57%
Fe 273.955†	1219330.7	139.108	mg/L	0.8212	139.108	mg/L	0.8212	0.59%
K 404.721†	16655.2	-1133.57	mg/L	14.958	-1133.57	mg/L	14.958	1.32%
Mg 279.077†	616737.9	62.2078	mg/L	0.44224	62.2078	mg/L	0.44224	0.71%
Mn 257.610†	1428299.1	5.18452	mg/L	0.033701	5.18452	mg/L	0.033701	0.65%
Mo 202.031†	17923.5	1.65538	mg/L	0.011104	1.65538	mg/L	0.011104	0.67%
Na 330.237†	2965.7	7.56536	mg/L	0.065879	7.56536	mg/L	0.065879	0.87%
Ni 231.604†	12629.2	0.460068	mg/L	0.0033034	0.460068	mg/L	0.0033034	0.72%
Pb 220.353†	8231.0	1.34211	mg/L	0.014288	1.34211	mg/L	0.014288	1.06%
Sb 206.836†	820.0	0.432961	mg/L	0.0066401	0.432961	mg/L	0.0066401	1.53%
Se 196.026†	5438.8	2.94934	mg/L	0.028895	2.94934	mg/L	0.028895	0.98%
Sn 189.927†	7553.7	1.28527	mg/L	0.010809	1.28527	mg/L	0.010809	0.84%
Ti 334.940†	1159377.3	4.25703	mg/L	0.026130	4.25703	mg/L	0.026130	0.61%
Tl 190.801†	4130.3	2.01083	mg/L	0.011546	2.01083	mg/L	0.011546	0.57%
V 290.880†	118769.2	2.42678	mg/L	0.017679	2.42678	mg/L	0.017679	0.73%
Zn 206.200†	259145.7	5.73764	mg/L	0.043284	5.73764	mg/L	0.043284	0.75%
B 249.772†	207516.1	3.73669	mg/L	0.033091	3.73669	mg/L	0.033091	0.89%
Si 251.611†	105462.1	4.69825	mg/L	0.038912	4.69825	mg/L	0.038912	0.83%
Ce 413.764†	3147.0	0.521	mg/L	0.0148	0.521	mg/L	0.0148	2.84%

Sequence No.: 17
Sample ID: AD19210-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 9/16/2020 11:05:41 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19210-002

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	357851.3	94.9	%	0.30				0.32%
Y 371.029	173301.8	101	%	0.2				0.21%
Ag 328.068†	-96.4	-0.0028684	mg/L	0.00035720	-0.0028684	mg/L	0.00035720	12.45%
Al 308.215†	217136.2	24.9154	mg/L	0.09805	24.9154	mg/L	0.09805	0.39%
As 188.979†	22.0	0.0218440	mg/L	0.00018478	0.0218440	mg/L	0.00018478	0.85%
Ba 233.527†	44576.4	0.525720	mg/L	0.0014554	0.525720	mg/L	0.0014554	0.28%
Be 313.107†	-3103.6	-0.0000314	mg/L	0.00003194	-0.0000314	mg/L	0.00003194	101.81%
Ca 317.933†	12031465.8	138.577	mg/L	1.5226	138.577	mg/L	1.5226	1.10%
Cd 228.802†	52.5	0.0040604	mg/L	0.00029156	0.0040604	mg/L	0.00029156	7.18%
Co 228.616†	749.4	0.0292348	mg/L	0.00034317	0.0292348	mg/L	0.00034317	1.17%
Cr 267.716†	4612.3	0.0671358	mg/L	0.00022485	0.0671358	mg/L	0.00022485	0.33%
Cu 327.393†	25046.6	0.364282	mg/L	0.0030161	0.364282	mg/L	0.0030161	0.83%
Fe 273.955†	526626.5	60.0779	mg/L	0.20297	60.0779	mg/L	0.20297	0.34%
K 404.721†	6548.2	-503.456	mg/L	7.4168	-503.456	mg/L	7.4168	1.47%
Mg 279.077†	265987.2	26.6359	mg/L	0.09186	26.6359	mg/L	0.09186	0.34%
Mn 257.610†	187042.2	0.678614	mg/L	0.0018483	0.678614	mg/L	0.0018483	0.27%
Mo 202.031†	128.9	0.0135904	mg/L	0.00046662	0.0135904	mg/L	0.00046662	3.43%
Na 330.237†	435.1	1.26823	mg/L	0.142670	1.26823	mg/L	0.142670	11.25%
Ni 231.604†	2048.9	0.0747332	mg/L	0.00070699	0.0747332	mg/L	0.00070699	0.95%
Pb 220.353†	1100.9	0.180954	mg/L	0.0019421	0.180954	mg/L	0.0019421	1.07%
Sb 206.836†	12.8	0.0077296	mg/L	0.00541616	0.0077296	mg/L	0.00541616	70.07%
Se 196.026†	-19.5	0.0084230	mg/L	0.00836212	0.0084230	mg/L	0.00836212	99.28%
Sn 189.927†	80.8	0.0141384	mg/L	0.00154410	0.0141384	mg/L	0.00154410	10.92%
Ti 334.940†	486462.3	1.78691	mg/L	0.009321	1.78691	mg/L	0.009321	0.52%
Tl 190.801†	-35.7	-0.0081759	mg/L	0.00268557	-0.0081759	mg/L	0.00268557	32.85%
V 290.880†	5790.4	0.114671	mg/L	0.0034716	0.114671	mg/L	0.0034716	3.03%
Zn 206.200†	18099.5	0.396775	mg/L	0.0008210	0.396775	mg/L	0.0008210	0.21%
B 249.772†	22343.7	0.677820	mg/L	0.0011251	0.677820	mg/L	0.0011251	0.17%
Si 251.611†	98868.6	4.42756	mg/L	0.088311	4.42756	mg/L	0.088311	1.99%
Ce 413.764†	755.8	0.136	mg/L	0.0074	0.136	mg/L	0.0074	5.44%

Sequence No.: 18
Sample ID: AD19210-002 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 9/16/2020 11:09:47 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19210-002 MR

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	361897.1	96.0	%	1.30				1.35%
Y 371.029	173201.6	101	%	1.3				1.25%
Ag 328.068†	-130.6	-0.0032732	mg/L	0.00054224	-0.0032732	mg/L	0.00054224	16.57%
Al 308.215†	193888.7	22.2494	mg/L	0.08209	22.2494	mg/L	0.08209	0.37%
As 188.979†	9.6	0.0195680	mg/L	0.00199803	0.0195680	mg/L	0.00199803	10.21%
Ba 233.527†	15959.8	0.187161	mg/L	0.0007087	0.187161	mg/L	0.0007087	0.38%
Be 313.107†	-2207.5	0.0007005	mg/L	0.00009544	0.0007005	mg/L	0.00009544	13.63%
Ca 317.933†	8430716.0	97.0449	mg/L	1.51818	97.0449	mg/L	1.51818	1.56%
Cd 228.802†	51.3	0.0040239	mg/L	0.00027675	0.0040239	mg/L	0.00027675	6.88%
Co 228.616†	688.0	0.0269130	mg/L	0.00059096	0.0269130	mg/L	0.00059096	2.20%
Cr 267.716†	6026.1	0.0894187	mg/L	0.00133275	0.0894187	mg/L	0.00133275	1.49%
Cu 327.393†	23749.1	0.345457	mg/L	0.0010769	0.345457	mg/L	0.0010769	0.31%
Fe 273.955†	742115.8	84.6630	mg/L	1.25051	84.6630	mg/L	1.25051	1.48%
K 404.721†	8898.1	-711.832	mg/L	17.8644	-711.832	mg/L	17.8644	2.51%
Mg 279.077†	235627.2	23.5569	mg/L	0.09027	23.5569	mg/L	0.09027	0.38%
Mn 257.610†	219660.4	0.797021	mg/L	0.0024361	0.797021	mg/L	0.0024361	0.31%
Mo 202.031†	121.0	0.0128612	mg/L	0.00029403	0.0128612	mg/L	0.00029403	2.29%
Na 330.237†	394.1	1.16610	mg/L	0.058022	1.16610	mg/L	0.058022	4.98%
Ni 231.604†	1944.7	0.0709374	mg/L	0.00121340	0.0709374	mg/L	0.00121340	1.71%
Pb 220.353†	2104.1	0.342551	mg/L	0.0003285	0.342551	mg/L	0.0003285	0.10%
Sb 206.836†	11.6	0.0055698	mg/L	0.00638543	0.0055698	mg/L	0.00638543	114.64%
Se 196.026†	-28.5	0.0102580	mg/L	0.00499841	0.0102580	mg/L	0.00499841	48.73%
Sn 189.927†	78.9	0.0138179	mg/L	0.00073031	0.0138179	mg/L	0.00073031	5.29%
Ti 334.940†	369258.8	1.35668	mg/L	0.024247	1.35668	mg/L	0.024247	1.79%
Tl 190.801†	-23.1	-0.0050140	mg/L	0.00285021	-0.0050140	mg/L	0.00285021	56.85%
V 290.880†	5460.9	0.106155	mg/L	0.0003475	0.106155	mg/L	0.0003475	0.33%
Zn 206.200†	24356.3	0.535408	mg/L	0.0030577	0.535408	mg/L	0.0030577	0.57%
B 249.772†	28047.0	0.901924	mg/L	0.0089913	0.901924	mg/L	0.0089913	1.00%
Si 251.611†	84672.8	3.78907	mg/L	0.047797	3.78907	mg/L	0.047797	1.26%
Ce 413.764†	699.7	0.148	mg/L	0.0097	0.148	mg/L	0.0097	6.56%

Sequence No.: 19
Sample ID: AD19210-002 MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 9/16/2020 11:13:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19210-002 MS1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	349052.2	92.6	%	0.86				0.93%
Y 371.029	168810.4	98.8	%	0.99				1.00%
Ag 328.068†	9740.3	0.113820	mg/L	0.0021863	0.113820	mg/L	0.0021863	1.92%
Al 308.215†	297499.9	34.1192	mg/L	0.19317	34.1192	mg/L	0.19317	0.57%
As 188.979†	942.2	0.501569	mg/L	0.0116093	0.501569	mg/L	0.0116093	2.31%
Ba 233.527†	60047.9	0.708761	mg/L	0.0039735	0.708761	mg/L	0.0039735	0.56%
Be 313.107†	606844.9	0.498101	mg/L	0.0021739	0.498101	mg/L	0.0021739	0.44%
Ca 317.933†	22720207.6	261.866	mg/L	3.7447	261.866	mg/L	3.7447	1.43%
Cd 228.802†	14702.0	0.481323	mg/L	0.0080290	0.481323	mg/L	0.0080290	1.67%
Co 228.616†	13340.6	0.504861	mg/L	0.0083148	0.504861	mg/L	0.0083148	1.65%
Cr 267.716†	37746.1	0.589357	mg/L	0.0099756	0.589357	mg/L	0.0099756	1.69%
Cu 327.393†	57927.3	0.841318	mg/L	0.0027339	0.841318	mg/L	0.0027339	0.32%
Fe 273.955†	587032.7	66.9696	mg/L	0.29257	66.9696	mg/L	0.29257	0.44%
K 404.721†	7722.4	-553.848	mg/L	18.1669	-553.848	mg/L	18.1669	3.28%
Mg 279.077†	804252.8	81.2250	mg/L	0.50691	81.2250	mg/L	0.50691	0.62%
Mn 257.610†	351205.8	1.27455	mg/L	0.005933	1.27455	mg/L	0.005933	0.47%
Mo 202.031†	5316.3	0.492201	mg/L	0.0089921	0.492201	mg/L	0.0089921	1.83%
Na 330.237†	21071.5	52.6200	mg/L	0.78991	52.6200	mg/L	0.78991	1.50%
Ni 231.604†	15047.9	0.548156	mg/L	0.0091781	0.548156	mg/L	0.0091781	1.67%
Pb 220.353†	3981.2	0.647450	mg/L	0.0092557	0.647450	mg/L	0.0092557	1.43%
Sb 206.836†	717.4	0.362113	mg/L	0.0031035	0.362113	mg/L	0.0031035	0.86%
Se 196.026†	841.1	0.470642	mg/L	0.0102192	0.470642	mg/L	0.0102192	2.17%
Sn 189.927†	2894.3	0.492714	mg/L	0.0110243	0.492714	mg/L	0.0110243	2.24%
Ti 334.940†	577552.1	2.12128	mg/L	0.008839	2.12128	mg/L	0.008839	0.42%
Tl 190.801†	1044.8	0.517593	mg/L	0.0070903	0.517593	mg/L	0.0070903	1.37%
V 290.880†	30319.8	0.619374	mg/L	0.0015370	0.619374	mg/L	0.0015370	0.25%
Zn 206.200†	38000.3	0.837716	mg/L	0.0039334	0.837716	mg/L	0.0039334	0.47%
B 249.772†	53335.3	1.15262	mg/L	0.006174	1.15262	mg/L	0.006174	0.54%
Si 251.611†	112507.5	5.03347	mg/L	0.057231	5.03347	mg/L	0.057231	1.14%
Ce 413.764†	5930.0	0.836	mg/L	0.0217	0.836	mg/L	0.0217	2.59%

Sequence No.: 20
Sample ID: AD19210-002 MS2
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 53
Date Collected: 9/16/2020 11:18:05 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19210-002 MS2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	349444.8	92.7	%	0.07				0.08%
Y 371.029	169701.3	99.3	%	0.27				0.27%
Ag 328.068†	9694.7	0.113280	mg/L	0.0008734	0.113280	mg/L	0.0008734	0.77%
Al 308.215†	306576.3	35.1600	mg/L	0.07864	35.1600	mg/L	0.07864	0.22%
As 188.979†	941.2	0.501012	mg/L	0.0059405	0.501012	mg/L	0.0059405	1.19%
Ba 233.527†	59860.3	0.706543	mg/L	0.0026173	0.706543	mg/L	0.0026173	0.37%
Be 313.107†	601429.1	0.493678	mg/L	0.0011996	0.493678	mg/L	0.0011996	0.24%
Ca 317.933†	12872755.9	148.281	mg/L	2.1727	148.281	mg/L	2.1727	1.47%
Cd 228.802†	14643.3	0.479411	mg/L	0.0016186	0.479411	mg/L	0.0016186	0.34%
Co 228.616†	13439.4	0.508592	mg/L	0.0007799	0.508592	mg/L	0.0007799	0.15%
Cr 267.716†	37776.7	0.589838	mg/L	0.0019760	0.589838	mg/L	0.0019760	0.34%
Cu 327.393†	62442.9	0.906829	mg/L	0.0032573	0.906829	mg/L	0.0032573	0.36%
Fe 273.955†	584182.6	66.6445	mg/L	0.16537	66.6445	mg/L	0.16537	0.25%
K 404.721†	8116.8	-544.471	mg/L	9.3648	-544.471	mg/L	9.3648	1.72%
Mg 279.077†	789210.5	79.6994	mg/L	0.10290	79.6994	mg/L	0.10290	0.13%
Mn 257.610†	326764.2	1.18582	mg/L	0.003058	1.18582	mg/L	0.003058	0.26%
Mo 202.031†	5342.4	0.494612	mg/L	0.0020281	0.494612	mg/L	0.0020281	0.41%
Na 330.237†	20667.4	51.6143	mg/L	0.17598	51.6143	mg/L	0.17598	0.34%
Ni 231.604†	15369.7	0.559877	mg/L	0.0018129	0.559877	mg/L	0.0018129	0.32%
Pb 220.353†	4033.8	0.656073	mg/L	0.0004827	0.656073	mg/L	0.0004827	0.07%
Sb 206.836†	725.8	0.366243	mg/L	0.0011930	0.366243	mg/L	0.0011930	0.33%
Se 196.026†	836.2	0.467918	mg/L	0.0060215	0.467918	mg/L	0.0060215	1.29%
Sn 189.927†	2938.2	0.500180	mg/L	0.0014507	0.500180	mg/L	0.0014507	0.29%
Ti 334.940†	571916.6	2.10059	mg/L	0.003967	2.10059	mg/L	0.003967	0.19%
Tl 190.801†	1058.4	0.523817	mg/L	0.0027034	0.523817	mg/L	0.0027034	0.52%
V 290.880†	30089.2	0.614758	mg/L	0.0050810	0.614758	mg/L	0.0050810	0.83%
Zn 206.200†	40633.6	0.896064	mg/L	0.0008949	0.896064	mg/L	0.0008949	0.10%
B 249.772†	53235.2	1.14931	mg/L	0.003934	1.14931	mg/L	0.003934	0.34%
Si 251.611†	101077.7	4.51935	mg/L	0.066281	4.51935	mg/L	0.066281	1.47%
Ce 413.764†	5730.8	0.809	mg/L	0.0175	0.809	mg/L	0.0175	2.16%

Sequence No.: 21
Sample ID: AD19210-002 PS
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 54
Date Collected: 9/16/2020 11:22:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19210-002 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	348037.1	92.3	%	0.94				1.02%
Y 371.029	165926.4	97.1	%	1.07				1.10%
Ag 328.068†	10007.2	0.116986	mg/L	0.0010717	0.116986	mg/L	0.0010717	0.92%
Al 308.215†	256533.5	29.4205	mg/L	0.02904	29.4205	mg/L	0.02904	0.10%
As 188.979†	973.7	0.517278	mg/L	0.0085164	0.517278	mg/L	0.0085164	1.65%
Ba 233.527†	86581.2	1.02267	mg/L	0.002381	1.02267	mg/L	0.002381	0.23%
Be 313.107†	612101.1	0.502394	mg/L	0.0019777	0.502394	mg/L	0.0019777	0.39%
Ca 317.933†	16333696.1	188.201	mg/L	2.7437	188.201	mg/L	2.7437	1.46%
Cd 228.802†	15045.9	0.492529	mg/L	0.0050809	0.492529	mg/L	0.0050809	1.03%
Co 228.616†	13746.7	0.520199	mg/L	0.0055335	0.520199	mg/L	0.0055335	1.06%
Cr 267.716†	37716.8	0.588894	mg/L	0.0066921	0.588894	mg/L	0.0066921	1.14%
Cu 327.393†	58981.1	0.856605	mg/L	0.0026004	0.856605	mg/L	0.0026004	0.30%
Fe 273.955†	551387.5	62.9029	mg/L	0.12108	62.9029	mg/L	0.12108	0.19%
K 404.721†	8171.7	-506.340	mg/L	13.3329	-506.340	mg/L	13.3329	2.63%
Mg 279.077†	752507.2	75.9771	mg/L	0.19978	75.9771	mg/L	0.19978	0.26%
Mn 257.610†	319839.3	1.16068	mg/L	0.002869	1.16068	mg/L	0.002869	0.25%
Mo 202.031†	5533.2	0.512212	mg/L	0.0051393	0.512212	mg/L	0.0051393	1.00%
Na 330.237†	19999.8	49.9532	mg/L	0.12788	49.9532	mg/L	0.12788	0.26%
Ni 231.604†	15419.5	0.561690	mg/L	0.0068682	0.561690	mg/L	0.0068682	1.22%
Pb 220.353†	4064.8	0.660526	mg/L	0.0061080	0.660526	mg/L	0.0061080	0.92%
Sb 206.836†	1054.1	0.527516	mg/L	0.0095038	0.527516	mg/L	0.0095038	1.80%
Se 196.026†	889.9	0.495618	mg/L	0.0097354	0.495618	mg/L	0.0097354	1.96%
Sn 189.927†	3013.5	0.512997	mg/L	0.0046027	0.512997	mg/L	0.0046027	0.90%
Ti 334.940†	620382.6	2.27850	mg/L	0.019946	2.27850	mg/L	0.019946	0.88%
Tl 190.801†	1079.5	0.535120	mg/L	0.0046428	0.535120	mg/L	0.0046428	0.87%
V 290.880†	30174.1	0.617039	mg/L	0.0020133	0.617039	mg/L	0.0020133	0.33%
Zn 206.200†	39616.7	0.873533	mg/L	0.0027324	0.873533	mg/L	0.0027324	0.31%
B 249.772†	55211.8	1.15508	mg/L	0.002273	1.15508	mg/L	0.002273	0.20%
Si 251.611†	120891.5	5.41026	mg/L	0.054165	5.41026	mg/L	0.054165	1.00%
Ce 413.764†	5709.3	0.803	mg/L	0.0048	0.803	mg/L	0.0048	0.60%

Sequence No.: 22
Sample ID: AD19210-002 SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 9/16/2020 11:26:21 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19210-002 SD

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	376401.3	99.8	%	0.40				0.40%
Y 371.029	172046.6	101	%	0.4				0.41%
Ag 328.068†	-21.4	-0.0019788	mg/L	0.00032596	-0.0019788	mg/L	0.00032596	16.47%
Al 308.215†	43470.6	4.99989	mg/L	0.010303	4.99989	mg/L	0.010303	0.21%
As 188.979†	16.1	0.0105503	mg/L	0.00185210	0.0105503	mg/L	0.00185210	17.55%
Ba 233.527†	9374.6	0.109253	mg/L	0.0004631	0.109253	mg/L	0.0004631	0.42%
Be 313.107†	-633.5	0.0019859	mg/L	0.00002163	0.0019859	mg/L	0.00002163	1.09%
Ca 317.933†	2445663.3	28.0109	mg/L	0.09014	28.0109	mg/L	0.09014	0.32%
Cd 228.802†	16.9	0.0029017	mg/L	0.00028470	0.0029017	mg/L	0.00028470	9.81%
Co 228.616†	149.6	0.0065756	mg/L	0.00031148	0.0065756	mg/L	0.00031148	4.74%
Cr 267.716†	909.2	0.0087712	mg/L	0.00023520	0.0087712	mg/L	0.00023520	2.68%
Cu 327.393†	4950.9	0.0727324	mg/L	0.00132384	0.0727324	mg/L	0.00132384	1.82%
Fe 273.955†	105465.2	12.0279	mg/L	0.04939	12.0279	mg/L	0.04939	0.41%
K 404.721†	-479.4	-134.083	mg/L	3.5744	-134.083	mg/L	3.5744	2.67%
Mg 279.077†	54503.8	5.18791	mg/L	0.022596	5.18791	mg/L	0.022596	0.44%
Mn 257.610†	37825.3	0.136939	mg/L	0.0003793	0.136939	mg/L	0.0003793	0.28%
Mo 202.031†	19.7	0.0035184	mg/L	0.00100734	0.0035184	mg/L	0.00100734	28.63%
Na 330.237†	106.4	0.450148	mg/L	0.0814090	0.450148	mg/L	0.0814090	18.08%
Ni 231.604†	407.5	0.0149505	mg/L	0.00019748	0.0149505	mg/L	0.00019748	1.32%
Pb 220.353†	213.5	0.0356984	mg/L	0.00101009	0.0356984	mg/L	0.00101009	2.83%
Sb 206.836†	-2.5	-0.0010551	mg/L	0.00203652	-0.0010551	mg/L	0.00203652	193.02%
Se 196.026†	6.7	0.0094960	mg/L	0.00559026	0.0094960	mg/L	0.00559026	58.87%
Sn 189.927†	17.6	0.0033971	mg/L	0.00099646	0.0033971	mg/L	0.00099646	29.33%
Ti 334.940†	96169.2	0.354227	mg/L	0.0024281	0.354227	mg/L	0.0024281	0.69%
Tl 190.801†	-6.2	-0.0038762	mg/L	0.00338298	-0.0038762	mg/L	0.00338298	87.28%
V 290.880†	1294.2	0.0268642	mg/L	0.00012215	0.0268642	mg/L	0.00012215	0.45%
Zn 206.200†	3910.6	0.0823910	mg/L	0.00039379	0.0823910	mg/L	0.00039379	0.48%
B 249.772†	4949.0	0.152251	mg/L	0.0006868	0.152251	mg/L	0.0006868	0.45%
Si 251.611†	22611.1	0.997791	mg/L	0.0366989	0.997791	mg/L	0.0366989	3.68%
Ce 413.764†	250.3	0.029	mg/L	0.0049	0.029	mg/L	0.0049	16.78%

Sequence No.: 23
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 6
Date Collected: 9/16/2020 11:30:25 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	370677.7	98.3	%	1.24				1.26%
Y 371.029	138009.5	80.8	%	1.22				1.51%
Ag 328.068†	8219.7	0.0957823	mg/L	0.00102363	0.0957823	mg/L	0.00102363	1.07%
QC value within limits for Ag 328.068 Recovery = 95.78%								
Al 308.215†	42392.2	4.89736	mg/L	0.049429	4.89736	mg/L	0.049429	1.01%
QC value within limits for Al 308.215 Recovery = 97.95%								
As 188.979†	939.2	0.489420	mg/L	0.0096813	0.489420	mg/L	0.0096813	1.98%
QC value within limits for As 188.979 Recovery = 97.88%								
Ba 233.527†	41230.3	0.486133	mg/L	0.0043767	0.486133	mg/L	0.0043767	0.90%
QC value within limits for Ba 233.527 Recovery = 97.23%								
Be 313.107†	593301.4	0.487041	mg/L	0.0069893	0.487041	mg/L	0.0069893	1.44%
QC value within limits for Be 313.107 Recovery = 97.41%								
Ca 317.933†	4453605.1	51.1713	mg/L	0.73481	51.1713	mg/L	0.73481	1.44%
QC value within limits for Ca 317.933 Recovery = 102.34%								
Cd 228.802†	14154.0	0.463472	mg/L	0.0048372	0.463472	mg/L	0.0048372	1.04%
QC value within limits for Cd 228.802 Recovery = 92.69%								
Co 228.616†	12389.2	0.468922	mg/L	0.0024721	0.468922	mg/L	0.0024721	0.53%
QC value within limits for Co 228.616 Recovery = 93.78%								
Cr 267.716†	31217.1	0.486452	mg/L	0.0046455	0.486452	mg/L	0.0046455	0.95%
QC value within limits for Cr 267.716 Recovery = 97.29%								
Cu 327.393†	33778.2	0.490960	mg/L	0.0038367	0.490960	mg/L	0.0038367	0.78%
QC value within limits for Cu 327.393 Recovery = 98.19%								
Fe 273.955†	43277.9	4.93304	mg/L	0.038999	4.93304	mg/L	0.038999	0.79%
QC value within limits for Fe 273.955 Recovery = 98.66%								
K 404.721†	1712.9	-29.2839	mg/L	16.07380	-29.2839	mg/L	16.07380	54.89%
QC value less than the lower limit for K 404.721 Recovery = -58.57%								
Mg 279.077†	491696.6	49.5266	mg/L	0.86076	49.5266	mg/L	0.86076	1.74%
QC value within limits for Mg 279.077 Recovery = 99.05%								
Mn 257.610†	135794.9	0.492580	mg/L	0.0040386	0.492580	mg/L	0.0040386	0.82%
QC value within limits for Mn 257.610 Recovery = 98.52%								
Mo 202.031†	5313.5	0.491938	mg/L	0.0074028	0.491938	mg/L	0.0074028	1.50%
QC value within limits for Mo 202.031 Recovery = 98.39%								
Na 330.237†	19094.5	47.7002	mg/L	0.62101	47.7002	mg/L	0.62101	1.30%
QC value within limits for Na 330.237 Recovery = 95.40%								
Ni 231.604†	12880.1	0.469205	mg/L	0.0044887	0.469205	mg/L	0.0044887	0.96%
QC value within limits for Ni 231.604 Recovery = 93.84%								
Pb 220.353†	3053.7	0.490184	mg/L	0.0074511	0.490184	mg/L	0.0074511	1.52%
QC value within limits for Pb 220.353 Recovery = 98.04%								
Sb 206.836†	1006.6	0.511329	mg/L	0.0091441	0.511329	mg/L	0.0091441	1.79%
QC value within limits for Sb 206.836 Recovery = 102.27%								
Se 196.026†	903.8	0.487387	mg/L	0.0059306	0.487387	mg/L	0.0059306	1.22%
QC value within limits for Se 196.026 Recovery = 97.48%								
Sn 189.927†	2912.2	0.495756	mg/L	0.0063511	0.495756	mg/L	0.0063511	1.28%
QC value within limits for Sn 189.927 Recovery = 99.15%								
Ti 334.940†	135663.5	0.499202	mg/L	0.0032984	0.499202	mg/L	0.0032984	0.66%
QC value within limits for Ti 334.940 Recovery = 99.84%								
Tl 190.801†	1012.7	0.527700	mg/L	0.0061643	0.527700	mg/L	0.0061643	1.17%
QC value within limits for Tl 190.801 Recovery = 105.54%								
V 290.880†	24022.9	0.496231	mg/L	0.0066386	0.496231	mg/L	0.0066386	1.34%
QC value within limits for V 290.880 Recovery = 99.25%								
Zn 206.200†	21927.8	0.481599	mg/L	0.0036411	0.481599	mg/L	0.0036411	0.76%
QC value within limits for Zn 206.200 Recovery = 96.32%								
B 249.772†	34387.1	0.523263	mg/L	0.0054501	0.523263	mg/L	0.0054501	1.04%
QC value within limits for B 249.772 Recovery = 104.65%								
Si 251.611†	113431.9	5.07506	mg/L	0.028391	5.07506	mg/L	0.028391	0.56%
QC value within limits for Si 251.611 Recovery = 101.50%								
Ce 413.764†	45731.2	6.129	mg/L	0.1625	6.129	mg/L	0.1625	2.65%
QC value greater than the upper limit for Ce 413.764 Recovery = 122.58%								

QC Failed. Continue with analysis.

0091101 0357

Sequence No.: 24
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/16/2020 11:34:29 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	364951.0	96.8	%	1.04				1.07%
Y 371.029	167225.1	97.9	%	0.92				0.94%
Ag 328.068†	0.0	-0.0017240	mg/L	0.00016583	-0.0017240	mg/L	0.00016583	9.62%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	92.0	0.0252927	mg/L	0.00151950	0.0252927	mg/L	0.00151950	6.01%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	11.5	0.0061132	mg/L	0.00143157	0.0061132	mg/L	0.00143157	23.42%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	8.2	-0.0015607	mg/L	0.00005138	-0.0015607	mg/L	0.00005138	3.29%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-3.0	0.0025008	mg/L	0.00002322	0.0025008	mg/L	0.00002322	0.93%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	1033.9	-0.186469	mg/L	0.0006972	-0.186469	mg/L	0.0006972	0.37%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	9.9	0.0026719	mg/L	0.00030233	0.0026719	mg/L	0.00030233	11.32%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-3.5	0.0007953	mg/L	0.00024898	0.0007953	mg/L	0.00024898	31.31%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-6.2	-0.0056557	mg/L	0.00003573	-0.0056557	mg/L	0.00003573	0.63%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-48.3	0.0002035	mg/L	0.00052262	0.0002035	mg/L	0.00052262	256.87%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	82.7	0.0049420	mg/L	0.00133611	0.0049420	mg/L	0.00133611	27.04%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-768.4	-18.7936	mg/L	16.64780	-18.7936	mg/L	16.64780	88.58%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	47.0	-0.334910	mg/L	0.0023470	-0.334910	mg/L	0.0023470	0.70%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	109.0	0.0000245	mg/L	0.00005614	0.0000245	mg/L	0.00005614	229.52%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-2.5	0.0014657	mg/L	0.00020307	0.0014657	mg/L	0.00020307	13.85%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	79.3	0.382700	mg/L	0.0844509	0.382700	mg/L	0.0844509	22.07%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	11.6	0.0005345	mg/L	0.00099481	0.0005345	mg/L	0.00099481	186.12%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	3.2	0.0012680	mg/L	0.00155166	0.0012680	mg/L	0.00155166	122.37%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	4.2	0.0018913	mg/L	0.00727434	0.0018913	mg/L	0.00727434	384.63%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.4	0.0034143	mg/L	0.00374131	0.0034143	mg/L	0.00374131	109.58%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	2.9	0.0008941	mg/L	0.00121363	0.0008941	mg/L	0.00121363	135.74%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	55.5	0.0014140	mg/L	0.00014737	0.0014140	mg/L	0.00014737	10.42%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.9	-0.0029867	mg/L	0.00039556	-0.0029867	mg/L	0.00039556	13.24%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	35.0	0.0021791	mg/L	0.00049449	0.0021791	mg/L	0.00049449	22.69%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	76.4	-0.0025639	mg/L	0.00018288	-0.0025639	mg/L	0.00018288	7.13%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	307.3	0.0166894	mg/L	0.00081887	0.0166894	mg/L	0.00081887	4.91%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	210.1	-0.0097341	mg/L	0.00757116	-0.0097341	mg/L	0.00757116	77.78%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	40.2	-0.009	mg/L	0.0153	-0.009	mg/L	0.0153	173.74%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 25
Sample ID: AD19208-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 9/16/2020 11:38:15 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19208-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	357819.3	94.9	%	0.56				0.59%
Y 371.029	173862.7	102	%	1.1				1.04%
Ag 328.068†	-104.6	-0.0029646	mg/L	0.00044918	-0.0029646	mg/L	0.00044918	15.15%
Al 308.215†	199286.1	22.8684	mg/L	0.08906	22.8684	mg/L	0.08906	0.39%
As 188.979†	16.7	0.0177531	mg/L	0.00200289	0.0177531	mg/L	0.00200289	11.28%
Ba 233.527†	16273.5	0.190872	mg/L	0.0009133	0.190872	mg/L	0.0009133	0.48%
Be 313.107†	-2219.9	0.0006903	mg/L	0.00008236	0.0006903	mg/L	0.00008236	11.93%
Ca 317.933†	13077841.3	150.647	mg/L	1.7046	150.647	mg/L	1.7046	1.13%
Cd 228.802†	49.3	0.0039578	mg/L	0.00021166	0.0039578	mg/L	0.00021166	5.35%
Co 228.616†	834.8	0.0324596	mg/L	0.00031709	0.0324596	mg/L	0.00031709	0.98%
Cr 267.716†	4549.5	0.0661467	mg/L	0.00056746	0.0661467	mg/L	0.00056746	0.86%
Cu 327.393†	24883.9	0.361921	mg/L	0.0027507	0.361921	mg/L	0.0027507	0.76%
Fe 273.955†	458479.5	52.3031	mg/L	0.11155	52.3031	mg/L	0.11155	0.21%
K 404.721†	4326.3	-460.568	mg/L	2.3789	-460.568	mg/L	2.3789	0.52%
Mg 279.077†	255772.7	25.5999	mg/L	0.04707	25.5999	mg/L	0.04707	0.18%
Mn 257.610†	172581.8	0.626121	mg/L	0.0016771	0.626121	mg/L	0.0016771	0.27%
Mo 202.031†	106.1	0.0114858	mg/L	0.00055060	0.0114858	mg/L	0.00055060	4.79%
Na 330.237†	457.1	1.32292	mg/L	0.116275	1.32292	mg/L	0.116275	8.79%
Ni 231.604†	2102.5	0.0766842	mg/L	0.00076808	0.0766842	mg/L	0.00076808	1.00%
Pb 220.353†	1088.5	0.178732	mg/L	0.0005760	0.178732	mg/L	0.0005760	0.32%
Sb 206.836†	7.2	0.0044813	mg/L	0.00454564	0.0044813	mg/L	0.00454564	101.44%
Se 196.026†	-16.2	0.0081088	mg/L	0.00294546	0.0081088	mg/L	0.00294546	36.32%
Sn 189.927†	70.0	0.0123004	mg/L	0.00151468	0.0123004	mg/L	0.00151468	12.31%
Ti 334.940†	373843.5	1.37351	mg/L	0.006143	1.37351	mg/L	0.006143	0.45%
Tl 190.801†	-32.6	-0.0094594	mg/L	0.00350632	-0.0094594	mg/L	0.00350632	37.07%
V 290.880†	5500.3	0.109328	mg/L	0.0009706	0.109328	mg/L	0.0009706	0.89%
Zn 206.200†	17106.6	0.374775	mg/L	0.0005344	0.374775	mg/L	0.0005344	0.14%
B 249.772†	17169.1	0.559701	mg/L	0.0023033	0.559701	mg/L	0.0023033	0.41%
Si 251.611†	91094.4	4.07793	mg/L	0.073350	4.07793	mg/L	0.073350	1.80%
Ce 413.764†	686.6	0.120	mg/L	0.0083	0.120	mg/L	0.0083	6.91%

Sequence No.: 26
Sample ID: AD19208-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 9/16/2020 11:42:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19208-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	359015.3	95.2	%	0.41				0.43%
Y 371.029	176581.6	103	%	0.3				0.33%
Ag 328.068†	-140.8	-0.0033950	mg/L	0.00088326	-0.0033950	mg/L	0.00088326	26.02%
Al 308.215†	279120.8	32.0235	mg/L	0.05712	32.0235	mg/L	0.05712	0.18%
As 188.979†	17.3	0.0226728	mg/L	0.00415445	0.0226728	mg/L	0.00415445	18.32%
Ba 233.527†	19099.3	0.224304	mg/L	0.0002988	0.224304	mg/L	0.0002988	0.13%
Be 313.107†	-3565.9	-0.0004090	mg/L	0.00004841	-0.0004090	mg/L	0.00004841	11.84%
Ca 317.933†	13644704.6	157.185	mg/L	1.6927	157.185	mg/L	1.6927	1.08%
Cd 228.802†	43.9	0.0037803	mg/L	0.00043546	0.0037803	mg/L	0.00043546	11.52%
Co 228.616†	1025.0	0.0396456	mg/L	0.00055010	0.0396456	mg/L	0.00055010	1.39%
Cr 267.716†	5187.7	0.0762044	mg/L	0.00049734	0.0762044	mg/L	0.00049734	0.65%
Cu 327.393†	28143.0	0.409204	mg/L	0.0019863	0.409204	mg/L	0.0019863	0.49%
Fe 273.955†	693923.2	79.1647	mg/L	0.24303	79.1647	mg/L	0.24303	0.31%
K 404.721†	7941.1	-671.943	mg/L	6.8874	-671.943	mg/L	6.8874	1.03%
Mg 279.077†	460111.9	46.3233	mg/L	0.18791	46.3233	mg/L	0.18791	0.41%
Mn 257.610†	272760.0	0.989779	mg/L	0.0034793	0.989779	mg/L	0.0034793	0.35%
Mo 202.031†	96.6	0.0106088	mg/L	0.00046011	0.0106088	mg/L	0.00046011	4.34%
Na 330.237†	365.4	1.09465	mg/L	0.107801	1.09465	mg/L	0.107801	9.85%
Ni 231.604†	2367.7	0.0863415	mg/L	0.00068440	0.0863415	mg/L	0.00068440	0.79%
Pb 220.353†	1216.2	0.200246	mg/L	0.0031000	0.200246	mg/L	0.0031000	1.55%
Sb 206.836†	6.9	0.0047598	mg/L	0.00467094	0.0047598	mg/L	0.00467094	98.13%
Se 196.026†	-32.4	0.0066761	mg/L	0.00405691	0.0066761	mg/L	0.00405691	60.77%
Sn 189.927†	47.4	0.0084560	mg/L	0.00104549	0.0084560	mg/L	0.00104549	12.36%
Ti 334.940†	552312.7	2.02863	mg/L	0.003445	2.02863	mg/L	0.003445	0.17%
Tl 190.801†	-41.4	-0.0089737	mg/L	0.00208481	-0.0089737	mg/L	0.00208481	23.23%
V 290.880†	9020.2	0.178726	mg/L	0.0037992	0.178726	mg/L	0.0037992	2.13%
Zn 206.200†	18662.6	0.409252	mg/L	0.0013501	0.409252	mg/L	0.0013501	0.33%
B 249.772†	25765.0	0.837699	mg/L	0.0037857	0.837699	mg/L	0.0037857	0.45%
Si 251.611†	112403.1	5.03637	mg/L	0.050327	5.03637	mg/L	0.050327	1.00%
Ce 413.764†	1129.7	0.202	mg/L	0.0083	0.202	mg/L	0.0083	4.13%

0091101 0360

Sequence No.: 27
Sample ID: AD19208-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 9/16/2020 11:46:30 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19208-006

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	362720.3	96.2	%	0.57				0.59%
Y 371.029	179190.5	105	%	0.6				0.60%
Ag 328.068†	-85.9	-0.0027438	mg/L	0.00025572	-0.0027438	mg/L	0.00025572	9.32%
Al 308.215†	249032.4	28.5735	mg/L	0.05317	28.5735	mg/L	0.05317	0.19%
As 188.979†	21.1	0.0207083	mg/L	0.00435933	0.0207083	mg/L	0.00435933	21.05%
Ba 233.527†	19456.6	0.228531	mg/L	0.0008483	0.228531	mg/L	0.0008483	0.37%
Be 313.107†	-2339.2	0.0005929	mg/L	0.00003337	0.0005929	mg/L	0.00003337	5.63%
Ca 317.933†	9472684.6	109.063	mg/L	0.3215	109.063	mg/L	0.3215	0.29%
Cd 228.802†	40.6	0.0036722	mg/L	0.00033964	0.0036722	mg/L	0.00033964	9.25%
Co 228.616†	787.0	0.0306532	mg/L	0.00019374	0.0306532	mg/L	0.00019374	0.63%
Cr 267.716†	4740.2	0.0691521	mg/L	0.00080269	0.0691521	mg/L	0.00080269	1.16%
Cu 327.393†	24772.2	0.360301	mg/L	0.0003921	0.360301	mg/L	0.0003921	0.11%
Fe 273.955†	494053.5	56.3617	mg/L	0.08096	56.3617	mg/L	0.08096	0.14%
K 404.721†	5144.1	-488.278	mg/L	13.5951	-488.278	mg/L	13.5951	2.78%
Mg 279.077†	285978.3	28.6633	mg/L	0.03913	28.6633	mg/L	0.03913	0.14%
Mn 257.610†	192726.4	0.699248	mg/L	0.0012939	0.699248	mg/L	0.0012939	0.19%
Mo 202.031†	76.9	0.0087976	mg/L	0.00069698	0.0087976	mg/L	0.00069698	7.92%
Na 330.237†	625.6	1.74211	mg/L	0.073863	1.74211	mg/L	0.073863	4.24%
Ni 231.604†	2120.4	0.0773372	mg/L	0.00069358	0.0773372	mg/L	0.00069358	0.90%
Pb 220.353†	1041.4	0.171711	mg/L	0.0010618	0.171711	mg/L	0.0010618	0.62%
Sb 206.836†	6.1	0.0041919	mg/L	0.00518952	0.0041919	mg/L	0.00518952	123.80%
Se 196.026†	-23.3	0.0053980	mg/L	0.00534257	0.0053980	mg/L	0.00534257	98.97%
Sn 189.927†	81.4	0.0142465	mg/L	0.00135790	0.0142465	mg/L	0.00135790	9.53%
Ti 334.940†	431066.4	1.58356	mg/L	0.007377	1.58356	mg/L	0.007377	0.47%
Tl 190.801†	-32.2	-0.0077532	mg/L	0.00054798	-0.0077532	mg/L	0.00054798	7.07%
V 290.880†	6133.1	0.121821	mg/L	0.0009538	0.121821	mg/L	0.0009538	0.78%
Zn 206.200†	17872.8	0.391752	mg/L	0.0015685	0.391752	mg/L	0.0015685	0.40%
B 249.772†	18555.7	0.602935	mg/L	0.0020373	0.602935	mg/L	0.0020373	0.34%
Si 251.611†	131628.3	5.90112	mg/L	0.207813	5.90112	mg/L	0.207813	3.52%
Ce 413.764†	805.1	0.140	mg/L	0.0059	0.140	mg/L	0.0059	4.20%

Sequence No.: 28
Sample ID: AD19208-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 9/16/2020 11:50:36 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19208-008

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	362828.2	96.2	%	1.55				1.61%
Y 371.029	178562.1	104	%	1.7				1.60%
Ag 328.068†	-102.1	-0.0029354	mg/L	0.00062922	-0.0029354	mg/L	0.00062922	21.44%
Al 308.215†	217776.6	24.9887	mg/L	0.07656	24.9887	mg/L	0.07656	0.31%
As 188.979†	25.3	0.0233920	mg/L	0.00138322	0.0233920	mg/L	0.00138322	5.91%
Ba 233.527†	18867.7	0.221564	mg/L	0.0006872	0.221564	mg/L	0.0006872	0.31%
Be 313.107†	-2439.8	0.0005107	mg/L	0.00000348	0.0005107	mg/L	0.00000348	0.68%
Ca 317.933†	8958335.2	103.131	mg/L	2.0984	103.131	mg/L	2.0984	2.03%
Cd 228.802†	94.4	0.0054265	mg/L	0.00043872	0.0054265	mg/L	0.00043872	8.08%
Co 228.616†	823.5	0.0320320	mg/L	0.00082554	0.0320320	mg/L	0.00082554	2.58%
Cr 267.716†	4754.6	0.0693788	mg/L	0.00120511	0.0693788	mg/L	0.00120511	1.74%
Cu 327.393†	30399.7	0.441944	mg/L	0.0006374	0.441944	mg/L	0.0006374	0.14%
Fe 273.955†	519731.4	59.2913	mg/L	0.12993	59.2913	mg/L	0.12993	0.22%
K 404.721†	5261.9	-515.633	mg/L	15.2362	-515.633	mg/L	15.2362	2.95%
Mg 279.077†	290526.8	29.1246	mg/L	0.12523	29.1246	mg/L	0.12523	0.43%
Mn 257.610†	197455.3	0.716414	mg/L	0.0018679	0.716414	mg/L	0.0018679	0.26%
Mo 202.031†	187.2	0.0189715	mg/L	0.00122078	0.0189715	mg/L	0.00122078	6.43%
Na 330.237†	411.8	1.21021	mg/L	0.135184	1.21021	mg/L	0.135184	11.17%
Ni 231.604†	2387.6	0.0870656	mg/L	0.00167072	0.0870656	mg/L	0.00167072	1.92%
Pb 220.353†	1085.4	0.178459	mg/L	0.0027242	0.178459	mg/L	0.0027242	1.53%
Sb 206.836†	18.9	0.0103650	mg/L	0.00230366	0.0103650	mg/L	0.00230366	22.23%
Se 196.026†	-23.5	0.0061112	mg/L	0.00721731	0.0061112	mg/L	0.00721731	118.10%
Sn 189.927†	73.7	0.0129353	mg/L	0.00159506	0.0129353	mg/L	0.00159506	12.33%
Ti 334.940†	411540.6	1.51189	mg/L	0.003947	1.51189	mg/L	0.003947	0.26%
Tl 190.801†	-30.4	-0.0073327	mg/L	0.00329568	-0.0073327	mg/L	0.00329568	44.94%
V 290.880†	6207.1	0.123267	mg/L	0.0024809	0.123267	mg/L	0.0024809	2.01%
Zn 206.200†	23657.9	0.519932	mg/L	0.0005666	0.519932	mg/L	0.0005666	0.11%
B 249.772†	21254.7	0.657945	mg/L	0.0025350	0.657945	mg/L	0.0025350	0.39%
Si 251.611†	104181.6	4.66645	mg/L	0.042246	4.66645	mg/L	0.042246	0.91%
Ce 413.764†	840.2	0.147	mg/L	0.0125	0.147	mg/L	0.0125	8.50%

Sequence No.: 29
Sample ID: AD19208-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 9/16/2020 11:54:43 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19208-010

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	359085.8	95.2	%	0.39				0.41%
Y 371.029	177429.5	104	%	0.5				0.47%
Ag 328.068†	-186.7	-0.0039393	mg/L	0.00084553	-0.0039393	mg/L	0.00084553	21.46%
Al 308.215†	221273.7	25.3904	mg/L	0.14378	25.3904	mg/L	0.14378	0.57%
As 188.979†	32.9	0.0274247	mg/L	0.00368563	0.0274247	mg/L	0.00368563	13.44%
Ba 233.527†	16911.3	0.198418	mg/L	0.0007170	0.198418	mg/L	0.0007170	0.36%
Be 313.107†	-2501.2	0.0004606	mg/L	0.00003483	0.0004606	mg/L	0.00003483	7.56%
Ca 317.933†	20518240.9	236.467	mg/L	1.5802	236.467	mg/L	1.5802	0.67%
Cd 228.802†	53.3	0.0040863	mg/L	0.00020111	0.0040863	mg/L	0.00020111	4.92%
Co 228.616†	792.2	0.0308500	mg/L	0.00019687	0.0308500	mg/L	0.00019687	0.64%
Cr 267.716†	4950.1	0.0724601	mg/L	0.00074769	0.0724601	mg/L	0.00074769	1.03%
Cu 327.393†	24608.7	0.357929	mg/L	0.0017783	0.357929	mg/L	0.0017783	0.50%
Fe 273.955†	522653.3	59.6246	mg/L	0.22219	59.6246	mg/L	0.22219	0.37%
K 404.721†	5148.0	-520.727	mg/L	10.5316	-520.727	mg/L	10.5316	2.02%
Mg 279.077†	274393.9	27.4884	mg/L	0.19873	27.4884	mg/L	0.19873	0.72%
Mn 257.610†	205174.6	0.744436	mg/L	0.0038651	0.744436	mg/L	0.0038651	0.52%
Mo 202.031†	179.4	0.0182498	mg/L	0.00084113	0.0182498	mg/L	0.00084113	4.61%
Na 330.237†	421.8	1.23506	mg/L	0.045196	1.23506	mg/L	0.045196	3.66%
Ni 231.604†	2134.6	0.0778511	mg/L	0.00123972	0.0778511	mg/L	0.00123972	1.59%
Pb 220.353†	1004.4	0.165327	mg/L	0.0010835	0.165327	mg/L	0.0010835	0.66%
Sb 206.836†	10.9	0.0066641	mg/L	0.00896764	0.0066641	mg/L	0.00896764	134.57%
Se 196.026†	-10.2	0.0133098	mg/L	0.00284009	0.0133098	mg/L	0.00284009	21.34%
Sn 189.927†	67.4	0.0118616	mg/L	0.00211054	0.0118616	mg/L	0.00211054	17.79%
Ti 334.940†	415299.0	1.52568	mg/L	0.012706	1.52568	mg/L	0.012706	0.83%
Tl 190.801†	-35.6	-0.0090012	mg/L	0.00509379	-0.0090012	mg/L	0.00509379	56.59%
V 290.880†	6539.9	0.129982	mg/L	0.0017216	0.129982	mg/L	0.0017216	1.32%
Zn 206.200†	20025.0	0.439438	mg/L	0.0036242	0.439438	mg/L	0.0036242	0.82%
B 249.772†	19450.1	0.634606	mg/L	0.0028802	0.634606	mg/L	0.0028802	0.45%
Si 251.611†	100698.0	4.50977	mg/L	0.054617	4.50977	mg/L	0.054617	1.21%
Ce 413.764†	1676.0	0.259	mg/L	0.0109	0.259	mg/L	0.0109	4.21%

Sequence No.: 30
Sample ID: AD19209-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 9/16/2020 11:58:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19209-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	363723.2	96.5	%	0.70				0.73%
Y 371.029	177911.9	104	%	0.7				0.65%
Ag 328.068†	-116.9	-0.0031114	mg/L	0.00068989	-0.0031114	mg/L	0.00068989	22.17%
Al 308.215†	234131.8	26.8646	mg/L	0.01023	26.8646	mg/L	0.01023	0.04%
As 188.979†	26.9	0.0242801	mg/L	0.00309574	0.0242801	mg/L	0.00309574	12.75%
Ba 233.527†	18596.6	0.218357	mg/L	0.0003815	0.218357	mg/L	0.0003815	0.17%
Be 313.107†	-2322.8	0.0006063	mg/L	0.00004898	0.0006063	mg/L	0.00004898	8.08%
Ca 317.933†	11725688.3	135.050	mg/L	1.7107	135.050	mg/L	1.7107	1.27%
Cd 228.802†	48.7	0.0039364	mg/L	0.00034597	0.0039364	mg/L	0.00034597	8.79%
Co 228.616†	889.6	0.0345298	mg/L	0.00071876	0.0345298	mg/L	0.00071876	2.08%
Cr 267.716†	5103.3	0.0748755	mg/L	0.00093234	0.0748755	mg/L	0.00093234	1.25%
Cu 327.393†	28066.9	0.408101	mg/L	0.0005757	0.408101	mg/L	0.0005757	0.14%
Fe 273.955†	522294.1	59.5837	mg/L	0.11194	59.5837	mg/L	0.11194	0.19%
K 404.721†	4128.1	-536.188	mg/L	8.4093	-536.188	mg/L	8.4093	1.57%
Mg 279.077†	328065.0	32.9316	mg/L	0.08829	32.9316	mg/L	0.08829	0.27%
Mn 257.610†	242034.2	0.878241	mg/L	0.0007871	0.878241	mg/L	0.0007871	0.09%
Mo 202.031†	116.5	0.0124537	mg/L	0.00050119	0.0124537	mg/L	0.00050119	4.02%
Na 330.237†	475.7	1.36917	mg/L	0.134578	1.36917	mg/L	0.134578	9.83%
Ni 231.604†	2230.5	0.0813462	mg/L	0.00082144	0.0813462	mg/L	0.00082144	1.01%
Pb 220.353†	1581.4	0.258666	mg/L	0.0058460	0.258666	mg/L	0.0058460	2.26%
Sb 206.836†	10.7	0.0063210	mg/L	0.00099316	0.0063210	mg/L	0.00099316	15.71%
Se 196.026†	-20.8	0.0076206	mg/L	0.00311480	0.0076206	mg/L	0.00311480	40.87%
Sn 189.927†	81.1	0.0141892	mg/L	0.00229360	0.0141892	mg/L	0.00229360	16.16%
Ti 334.940†	422605.9	1.55250	mg/L	0.001884	1.55250	mg/L	0.001884	0.12%
Tl 190.801†	-33.9	-0.0087886	mg/L	0.00171791	-0.0087886	mg/L	0.00171791	19.55%
V 290.880†	5983.5	0.118606	mg/L	0.0024267	0.118606	mg/L	0.0024267	2.05%
Zn 206.200†	17786.9	0.389849	mg/L	0.0018534	0.389849	mg/L	0.0018534	0.48%
B 249.772†	19412.6	0.633840	mg/L	0.0017678	0.633840	mg/L	0.0017678	0.28%
Si 251.611†	109059.5	4.88595	mg/L	0.008122	4.88595	mg/L	0.008122	0.17%
Ce 413.764†	833.2	0.146	mg/L	0.0048	0.146	mg/L	0.0048	3.30%

0091101 0364

Sequence No.: 31
Sample ID: AD19209-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 9/16/2020 12:03:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19209-004

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	373735.7	99.1	%	1.42				1.44%
Y 371.029	178736.8	105	%	1.4				1.35%
Ag 328.068†	3.8	-0.0016794	mg/L	0.00073123	-0.0016794	mg/L	0.00073123	43.54%
Al 308.215†	205202.0	23.5466	mg/L	0.18806	23.5466	mg/L	0.18806	0.80%
As 188.979†	16.9	0.0186005	mg/L	0.00236508	0.0186005	mg/L	0.00236508	12.72%
Ba 233.527†	16527.5	0.193877	mg/L	0.0014661	0.193877	mg/L	0.0014661	0.76%
Be 313.107†	-2419.8	0.0005270	mg/L	0.00003821	0.0005270	mg/L	0.00003821	7.25%
Ca 317.933†	6647840.9	76.4805	mg/L	0.45282	76.4805	mg/L	0.45282	0.59%
Cd 228.802†	48.2	0.0039216	mg/L	0.00013125	0.0039216	mg/L	0.00013125	3.35%
Co 228.616†	785.9	0.0306117	mg/L	0.00069836	0.0306117	mg/L	0.00069836	2.28%
Cr 267.716†	6257.4	0.0930650	mg/L	0.00198799	0.0930650	mg/L	0.00198799	2.14%
Cu 327.393†	37886.2	0.550560	mg/L	0.0033395	0.550560	mg/L	0.0033395	0.61%
Fe 273.955†	496579.4	56.6499	mg/L	0.32688	56.6499	mg/L	0.32688	0.58%
K 404.721†	3670.7	-514.076	mg/L	16.2825	-514.076	mg/L	16.2825	3.17%
Mg 279.077†	214346.7	21.3987	mg/L	0.17082	21.3987	mg/L	0.17082	0.80%
Mn 257.610†	176592.7	0.640681	mg/L	0.0043693	0.640681	mg/L	0.0043693	0.68%
Mo 202.031†	324.8	0.0316634	mg/L	0.00040658	0.0316634	mg/L	0.00040658	1.28%
Na 330.237†	352.8	1.06326	mg/L	0.118881	1.06326	mg/L	0.118881	11.18%
Ni 231.604†	4280.0	0.155987	mg/L	0.0024137	0.155987	mg/L	0.0024137	1.55%
Pb 220.353†	1151.0	0.188914	mg/L	0.0044597	0.188914	mg/L	0.0044597	2.36%
Sb 206.836†	9.2	0.0057367	mg/L	0.00175836	0.0057367	mg/L	0.00175836	30.65%
Se 196.026†	-26.8	0.0036274	mg/L	0.00584989	0.0036274	mg/L	0.00584989	161.27%
Sn 189.927†	77.2	0.0135319	mg/L	0.00127284	0.0135319	mg/L	0.00127284	9.41%
Ti 334.940†	390675.7	1.43530	mg/L	0.006225	1.43530	mg/L	0.006225	0.43%
Tl 190.801†	-22.1	-0.0038271	mg/L	0.00242225	-0.0038271	mg/L	0.00242225	63.29%
V 290.880†	5476.3	0.108842	mg/L	0.0008207	0.108842	mg/L	0.0008207	0.75%
Zn 206.200†	18644.9	0.408860	mg/L	0.0029910	0.408860	mg/L	0.0029910	0.73%
B 249.772†	19238.7	0.614199	mg/L	0.0032522	0.614199	mg/L	0.0032522	0.53%
Si 251.611†	71201.9	3.18288	mg/L	0.021434	3.18288	mg/L	0.021434	0.67%
Ce 413.764†	904.3	0.153	mg/L	0.0111	0.153	mg/L	0.0111	7.28%

Sequence No.: 32
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/16/2020 12:07:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	361353.4	95.8	%	0.90				0.93%
Y 371.029	134938.4	79.0	%	0.86				1.09%
Ag 328.068†	8910.8	0.103981	mg/L	0.0015202	0.103981	mg/L	0.0015202	1.46%
QC value within limits for Ag 328.068 Recovery = 103.98%								
Al 308.215†	43553.4	5.03278	mg/L	0.011916	5.03278	mg/L	0.011916	0.24%
QC value within limits for Al 308.215 Recovery = 100.66%								
As 188.979†	941.6	0.490680	mg/L	0.0029330	0.490680	mg/L	0.0029330	0.60%
QC value within limits for As 188.979 Recovery = 98.14%								
Ba 233.527†	44458.6	0.524327	mg/L	0.0061965	0.524327	mg/L	0.0061965	1.18%
QC value within limits for Ba 233.527 Recovery = 104.87%								
Be 313.107†	598707.8	0.491456	mg/L	0.0022590	0.491456	mg/L	0.0022590	0.46%
QC value within limits for Be 313.107 Recovery = 98.29%								
Ca 317.933†	4503197.9	51.7433	mg/L	0.23755	51.7433	mg/L	0.23755	0.46%
QC value within limits for Ca 317.933 Recovery = 103.49%								
Cd 228.802†	15040.2	0.492341	mg/L	0.0057958	0.492341	mg/L	0.0057958	1.18%
QC value within limits for Cd 228.802 Recovery = 98.47%								
Co 228.616†	13083.8	0.495160	mg/L	0.0054095	0.495160	mg/L	0.0054095	1.09%
QC value within limits for Co 228.616 Recovery = 99.03%								
Cr 267.716†	33663.0	0.525003	mg/L	0.0065138	0.525003	mg/L	0.0065138	1.24%
QC value within limits for Cr 267.716 Recovery = 105.00%								
Cu 327.393†	34648.5	0.503586	mg/L	0.0017760	0.503586	mg/L	0.0017760	0.35%
QC value within limits for Cu 327.393 Recovery = 100.72%								
Fe 273.955†	44277.0	5.04703	mg/L	0.007019	5.04703	mg/L	0.007019	0.14%
QC value within limits for Fe 273.955 Recovery = 100.94%								
K 404.721†	2805.3	-13.4205	mg/L	4.62807	-13.4205	mg/L	4.62807	34.49%
QC value less than the lower limit for K 404.721 Recovery = -26.84%								
Mg 279.077†	511365.3	51.5213	mg/L	0.10539	51.5213	mg/L	0.10539	0.20%
QC value within limits for Mg 279.077 Recovery = 103.04%								
Mn 257.610†	138182.6	0.501248	mg/L	0.0003787	0.501248	mg/L	0.0003787	0.08%
QC value within limits for Mn 257.610 Recovery = 100.25%								
Mo 202.031†	5331.0	0.493552	mg/L	0.0055156	0.493552	mg/L	0.0055156	1.12%
QC value within limits for Mo 202.031 Recovery = 98.71%								
Na 330.237†	20822.5	52.0003	mg/L	0.69806	52.0003	mg/L	0.69806	1.34%
QC value within limits for Na 330.237 Recovery = 104.00%								
Ni 231.604†	13586.6	0.494935	mg/L	0.0070805	0.494935	mg/L	0.0070805	1.43%
QC value within limits for Ni 231.604 Recovery = 98.99%								
Pb 220.353†	3064.5	0.491594	mg/L	0.0076756	0.491594	mg/L	0.0076756	1.56%
QC value within limits for Pb 220.353 Recovery = 98.32%								
Sb 206.836†	1028.5	0.522754	mg/L	0.0063651	0.522754	mg/L	0.0063651	1.22%
QC value within limits for Sb 206.836 Recovery = 104.55%								
Se 196.026†	912.9	0.492320	mg/L	0.0034847	0.492320	mg/L	0.0034847	0.71%
QC value within limits for Se 196.026 Recovery = 98.46%								
Sn 189.927†	2938.4	0.500206	mg/L	0.0073070	0.500206	mg/L	0.0073070	1.46%
QC value within limits for Sn 189.927 Recovery = 100.04%								
Ti 334.940†	137726.2	0.506773	mg/L	0.0007209	0.506773	mg/L	0.0007209	0.14%
QC value within limits for Ti 334.940 Recovery = 101.35%								
Tl 190.801†	1027.8	0.537724	mg/L	0.0047297	0.537724	mg/L	0.0047297	0.88%
QC value within limits for Tl 190.801 Recovery = 107.54%								
V 290.880†	24724.6	0.510484	mg/L	0.0009622	0.510484	mg/L	0.0009622	0.19%
QC value within limits for V 290.880 Recovery = 102.10%								
Zn 206.200†	23296.2	0.511918	mg/L	0.0062070	0.511918	mg/L	0.0062070	1.21%
QC value within limits for Zn 206.200 Recovery = 102.38%								
B 249.772†	35045.6	0.533162	mg/L	0.0023300	0.533162	mg/L	0.0023300	0.44%
QC value within limits for B 249.772 Recovery = 106.63%								
Si 251.611†	114639.7	5.12936	mg/L	0.008148	5.12936	mg/L	0.008148	0.16%
QC value within limits for Si 251.611 Recovery = 102.59%								
Ce 413.764†	48726.3	6.531	mg/L	0.1070	6.531	mg/L	0.1070	1.64%
QC value greater than the upper limit for Ce 413.764 Recovery = 130.62%								

QC Failed. Continue with analysis.

Sequence No.: 33
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/16/2020 12:11:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	371968.3	98.6	%	0.72				0.73%
Y 371.029	170565.1	99.8	%	0.57				0.57%
Ag 328.068†	20.9	-0.0014767	mg/L	0.00019807	-0.0014767	mg/L	0.00019807	13.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	52.7	0.0208011	mg/L	0.00315224	0.0208011	mg/L	0.00315224	15.15%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	7.4	0.0040006	mg/L	0.00095971	0.0040006	mg/L	0.00095971	23.99%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	9.6	-0.0015436	mg/L	0.00010733	-0.0015436	mg/L	0.00010733	6.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-30.6	0.0024783	mg/L	0.00002959	0.0024783	mg/L	0.00002959	1.19%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	1035.2	-0.186455	mg/L	0.0006174	-0.186455	mg/L	0.0006174	0.33%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	0.6	0.0023707	mg/L	0.00032753	0.0023707	mg/L	0.00032753	13.82%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-2.1	0.0008462	mg/L	0.00022502	0.0008462	mg/L	0.00022502	26.59%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-17.4	-0.0058318	mg/L	0.00008434	-0.0058318	mg/L	0.00008434	1.45%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	48.0	0.0015998	mg/L	0.00184948	0.0015998	mg/L	0.00184948	115.61%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	73.6	0.0038992	mg/L	0.00069192	0.0038992	mg/L	0.00069192	17.75%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-1397.1	-28.5663	mg/L	11.22812	-28.5663	mg/L	11.22812	39.31%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	26.3	-0.337016	mg/L	0.0022681	-0.337016	mg/L	0.0022681	0.67%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	110.1	0.0000285	mg/L	0.00004485	0.0000285	mg/L	0.00004485	157.21%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-5.3	0.0012143	mg/L	0.00065982	0.0012143	mg/L	0.00065982	54.34%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	72.9	0.366868	mg/L	0.0727520	0.366868	mg/L	0.0727520	19.83%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-5.9	-0.0001053	mg/L	0.00035919	-0.0001053	mg/L	0.00035919	341.06%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-8.3	-0.0005897	mg/L	0.00144431	-0.0005897	mg/L	0.00144431	244.92%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.8	-0.0010449	mg/L	0.00556341	-0.0010449	mg/L	0.00556341	532.43%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.4	0.0024451	mg/L	0.00123593	0.0024451	mg/L	0.00123593	50.55%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	3.5	0.0009905	mg/L	0.00074815	0.0009905	mg/L	0.00074815	75.53%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	59.6	0.0014293	mg/L	0.00008694	0.0014293	mg/L	0.00008694	6.08%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	9.5	0.0011752	mg/L	0.00205142	0.0011752	mg/L	0.00205142	174.56%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	40.7	0.0022893	mg/L	0.00015618	0.0022893	mg/L	0.00015618	6.82%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	71.5	-0.0026724	mg/L	0.00002392	-0.0026724	mg/L	0.00002392	0.90%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	200.8	0.0151903	mg/L	0.00064537	0.0151903	mg/L	0.00064537	4.25%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	200.0	-0.0101848	mg/L	0.00173989	-0.0101848	mg/L	0.00173989	17.08%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	55.8	-0.007	mg/L	0.0045	-0.007	mg/L	0.0045	67.52%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 34
Sample ID: AD19209-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 9/16/2020 12:14:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19209-006

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	358417.4	95.0	%	0.49				0.52%
Y 371.029	175727.8	103	%	0.6				0.55%
Ag 328.068†	-132.8	-0.0032999	mg/L	0.00032154	-0.0032999	mg/L	0.00032154	9.74%
Al 308.215†	222115.8	25.4868	mg/L	0.07619	25.4868	mg/L	0.07619	0.30%
As 188.979†	19.9	0.0219557	mg/L	0.00229995	0.0219557	mg/L	0.00229995	10.48%
Ba 233.527†	17781.2	0.208710	mg/L	0.0004802	0.208710	mg/L	0.0004802	0.23%
Be 313.107†	-2575.8	0.0003996	mg/L	0.00005780	0.0003996	mg/L	0.00005780	14.46%
Ca 317.933†	15272834.9	175.965	mg/L	0.7625	175.965	mg/L	0.7625	0.43%
Cd 228.802†	56.2	0.0041830	mg/L	0.00027468	0.0041830	mg/L	0.00027468	6.57%
Co 228.616†	803.2	0.0312651	mg/L	0.00021283	0.0312651	mg/L	0.00021283	0.68%
Cr 267.716†	4752.8	0.0693501	mg/L	0.00040851	0.0693501	mg/L	0.00040851	0.59%
Cu 327.393†	27933.9	0.406171	mg/L	0.0008333	0.406171	mg/L	0.0008333	0.21%
Fe 273.955†	588715.1	67.1616	mg/L	0.07116	67.1616	mg/L	0.07116	0.11%
K 404.721†	5475.7	-590.718	mg/L	5.6822	-590.718	mg/L	5.6822	0.96%
Mg 279.077†	605726.7	61.0911	mg/L	0.19750	61.0911	mg/L	0.19750	0.32%
Mn 257.610†	213496.9	0.774647	mg/L	0.0015694	0.774647	mg/L	0.0015694	0.20%
Mo 202.031†	84.0	0.0094480	mg/L	0.00062071	0.0094480	mg/L	0.00062071	6.57%
Na 330.237†	488.9	1.40189	mg/L	0.146263	1.40189	mg/L	0.146263	10.43%
Ni 231.604†	2005.6	0.0731554	mg/L	0.00069566	0.0731554	mg/L	0.00069566	0.95%
Pb 220.353†	1126.0	0.184994	mg/L	0.0041591	0.184994	mg/L	0.0041591	2.25%
Sb 206.836†	3.8	0.0027840	mg/L	0.00232830	0.0027840	mg/L	0.00232830	83.63%
Se 196.026†	-19.1	0.0105505	mg/L	0.00382626	0.0105505	mg/L	0.00382626	36.27%
Sn 189.927†	73.4	0.0128799	mg/L	0.00173026	0.0128799	mg/L	0.00173026	13.43%
Ti 334.940†	425480.9	1.56306	mg/L	0.003442	1.56306	mg/L	0.003442	0.22%
Tl 190.801†	-31.2	-0.0070448	mg/L	0.00315133	-0.0070448	mg/L	0.00315133	44.73%
V 290.880†	6619.5	0.130898	mg/L	0.0004428	0.130898	mg/L	0.0004428	0.34%
Zn 206.200†	17755.3	0.389149	mg/L	0.0014957	0.389149	mg/L	0.0014957	0.38%
B 249.772†	22349.0	0.719432	mg/L	0.0009285	0.719432	mg/L	0.0009285	0.13%
Si 251.611†	80898.7	3.61937	mg/L	0.030564	3.61937	mg/L	0.030564	0.84%
Ce 413.764†	1215.0	0.203	mg/L	0.0018	0.203	mg/L	0.0018	0.88%

0091101 0368

Sequence No.: 35
Sample ID: AD19209-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 64
Date Collected: 9/16/2020 12:19:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19209-008

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	372656.9	98.8	%	0.67				0.68%
Y 371.029	179415.8	105	%	0.6				0.58%
Ag 328.068†	-110.1	-0.0030308	mg/L	0.00059574	-0.0030308	mg/L	0.00059574	19.66%
Al 308.215†	209824.5	24.0769	mg/L	0.07169	24.0769	mg/L	0.07169	0.30%
As 188.979†	19.1	0.0192716	mg/L	0.00096732	0.0192716	mg/L	0.00096732	5.02%
Ba 233.527†	16476.7	0.193276	mg/L	0.0007514	0.193276	mg/L	0.0007514	0.39%
Be 313.107†	-2170.7	0.0007305	mg/L	0.00004868	0.0007305	mg/L	0.00004868	6.66%
Ca 317.933†	8021802.1	92.3283	mg/L	1.10590	92.3283	mg/L	1.10590	1.20%
Cd 228.802†	54.6	0.0041287	mg/L	0.00019405	0.0041287	mg/L	0.00019405	4.70%
Co 228.616†	748.5	0.0292019	mg/L	0.00019321	0.0292019	mg/L	0.00019321	0.66%
Cr 267.716†	4565.4	0.0663968	mg/L	0.00075396	0.0663968	mg/L	0.00075396	1.14%
Cu 327.393†	24145.9	0.351215	mg/L	0.0007369	0.351215	mg/L	0.0007369	0.21%
Fe 273.955†	473139.0	53.9756	mg/L	0.66203	53.9756	mg/L	0.66203	1.23%
K 404.721†	3273.6	-493.611	mg/L	5.4095	-493.611	mg/L	5.4095	1.10%
Mg 279.077†	246460.0	24.6555	mg/L	0.08696	24.6555	mg/L	0.08696	0.35%
Mn 257.610†	168586.5	0.611617	mg/L	0.0022135	0.611617	mg/L	0.0022135	0.36%
Mo 202.031†	147.1	0.0152735	mg/L	0.00075240	0.0152735	mg/L	0.00075240	4.93%
Na 330.237†	354.8	1.06842	mg/L	0.065562	1.06842	mg/L	0.065562	6.14%
Ni 231.604†	2006.5	0.0731877	mg/L	0.00008487	0.0731877	mg/L	0.00008487	0.12%
Pb 220.353†	1055.5	0.173529	mg/L	0.0008415	0.173529	mg/L	0.0008415	0.48%
Sb 206.836†	9.1	0.0054565	mg/L	0.00284721	0.0054565	mg/L	0.00284721	52.18%
Se 196.026†	-25.7	0.0034731	mg/L	0.00341508	0.0034731	mg/L	0.00341508	98.33%
Sn 189.927†	67.0	0.0117956	mg/L	0.00224332	0.0117956	mg/L	0.00224332	19.02%
Ti 334.940†	371375.3	1.36445	mg/L	0.018260	1.36445	mg/L	0.018260	1.34%
Tl 190.801†	-24.6	-0.0055355	mg/L	0.00096130	-0.0055355	mg/L	0.00096130	17.37%
V 290.880†	6147.2	0.122388	mg/L	0.0019913	0.122388	mg/L	0.0019913	1.63%
Zn 206.200†	22479.7	0.493827	mg/L	0.0031365	0.493827	mg/L	0.0031365	0.64%
B 249.772†	18316.8	0.585595	mg/L	0.0030079	0.585595	mg/L	0.0030079	0.51%
Si 251.611†	94788.3	4.24402	mg/L	0.017090	4.24402	mg/L	0.017090	0.40%
Ce 413.764†	863.4	0.145	mg/L	0.0112	0.145	mg/L	0.0112	7.68%

0091101 0369

Sequence No.: 36
Sample ID: AD19209-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 65
Date Collected: 9/16/2020 12:23:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19209-010

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	363355.8	96.4	%	0.76				0.79%
Y 371.029	177958.5	104	%	0.8				0.74%
Ag 328.068†	-97.7	-0.0028836	mg/L	0.00034333	-0.0028836	mg/L	0.00034333	11.91%
Al 308.215†	217319.0	24.9365	mg/L	0.02104	24.9365	mg/L	0.02104	0.08%
As 188.979†	25.5	0.0230506	mg/L	0.00245149	0.0230506	mg/L	0.00245149	10.64%
Ba 233.527†	22477.5	0.264271	mg/L	0.0004568	0.264271	mg/L	0.0004568	0.17%
Be 313.107†	-2721.3	0.0002808	mg/L	0.00004534	0.0002808	mg/L	0.00004534	16.14%
Ca 317.933†	8652068.0	99.5981	mg/L	0.71416	99.5981	mg/L	0.71416	0.72%
Cd 228.802†	54.2	0.0041169	mg/L	0.00019359	0.0041169	mg/L	0.00019359	4.70%
Co 228.616†	800.4	0.0311606	mg/L	0.00022756	0.0311606	mg/L	0.00022756	0.73%
Cr 267.716†	5109.2	0.0749671	mg/L	0.00080801	0.0749671	mg/L	0.00080801	1.08%
Cu 327.393†	24790.7	0.360568	mg/L	0.0010263	0.360568	mg/L	0.0010263	0.28%
Fe 273.955†	496175.1	56.6038	mg/L	0.09092	56.6038	mg/L	0.09092	0.16%
K 404.721†	4413.9	-502.052	mg/L	4.2461	-502.052	mg/L	4.2461	0.85%
Mg 279.077†	263331.3	26.3665	mg/L	0.04072	26.3665	mg/L	0.04072	0.15%
Mn 257.610†	176056.6	0.638735	mg/L	0.0004916	0.638735	mg/L	0.0004916	0.08%
Mo 202.031†	121.3	0.0128961	mg/L	0.00094984	0.0128961	mg/L	0.00094984	7.37%
Na 330.237†	501.7	1.43392	mg/L	0.067642	1.43392	mg/L	0.067642	4.72%
Ni 231.604†	2883.7	0.105136	mg/L	0.0006178	0.105136	mg/L	0.0006178	0.59%
Pb 220.353†	1214.3	0.199228	mg/L	0.0007369	0.199228	mg/L	0.0007369	0.37%
Sb 206.836†	9.3	0.0058929	mg/L	0.00401906	0.0058929	mg/L	0.00401906	68.20%
Se 196.026†	-29.1	0.0023873	mg/L	0.00406498	0.0023873	mg/L	0.00406498	170.28%
Sn 189.927†	75.6	0.0132610	mg/L	0.00171619	0.0132610	mg/L	0.00171619	12.94%
Ti 334.940†	441161.4	1.62062	mg/L	0.001587	1.62062	mg/L	0.001587	0.10%
Tl 190.801†	-30.0	-0.0064078	mg/L	0.00271867	-0.0064078	mg/L	0.00271867	42.43%
V 290.880†	5699.6	0.113075	mg/L	0.0021586	0.113075	mg/L	0.0021586	1.91%
Zn 206.200†	18066.8	0.396051	mg/L	0.0012217	0.396051	mg/L	0.0012217	0.31%
B 249.772†	18405.7	0.602253	mg/L	0.0012476	0.602253	mg/L	0.0012476	0.21%
Si 251.611†	74599.2	3.33598	mg/L	0.020056	3.33598	mg/L	0.020056	0.60%
Ce 413.764†	877.6	0.149	mg/L	0.0101	0.149	mg/L	0.0101	6.72%

0091101 0370

Sequence No.: 37
Sample ID: AD19210-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 9/16/2020 12:27:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19210-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	360681.6	95.6	%	1.11				1.17%
Y 371.029	174217.0	102	%	1.1				1.11%
Ag 328.068†	-111.5	-0.0030475	mg/L	0.00117096	-0.0030475	mg/L	0.00117096	38.42%
Al 308.215†	192520.1	22.0926	mg/L	0.03985	22.0926	mg/L	0.03985	0.18%
As 188.979†	28.6	0.0243642	mg/L	0.00277257	0.0243642	mg/L	0.00277257	11.38%
Ba 233.527†	16310.2	0.191306	mg/L	0.0004782	0.191306	mg/L	0.0004782	0.25%
Be 313.107†	-2337.4	0.0005943	mg/L	0.00005769	0.0005943	mg/L	0.00005769	9.71%
Ca 317.933†	15857739.7	182.711	mg/L	2.0950	182.711	mg/L	2.0950	1.15%
Cd 228.802†	42.3	0.0037305	mg/L	0.00042955	0.0037305	mg/L	0.00042955	11.51%
Co 228.616†	681.4	0.0266667	mg/L	0.00026517	0.0266667	mg/L	0.00026517	0.99%
Cr 267.716†	4401.7	0.0638164	mg/L	0.00085017	0.0638164	mg/L	0.00085017	1.33%
Cu 327.393†	22873.8	0.332759	mg/L	0.0015235	0.332759	mg/L	0.0015235	0.46%
Fe 273.955†	479081.3	54.6535	mg/L	0.24104	54.6535	mg/L	0.24104	0.44%
K 404.721†	3405.3	-498.316	mg/L	12.3195	-498.316	mg/L	12.3195	2.47%
Mg 279.077†	770958.0	77.8483	mg/L	0.40612	77.8483	mg/L	0.40612	0.52%
Mn 257.610†	185445.0	0.672815	mg/L	0.0023447	0.672815	mg/L	0.0023447	0.35%
Mo 202.031†	87.7	0.0097912	mg/L	0.00005877	0.0097912	mg/L	0.00005877	0.60%
Na 330.237†	427.2	1.24850	mg/L	0.127145	1.24850	mg/L	0.127145	10.18%
Ni 231.604†	2052.9	0.0748765	mg/L	0.00086267	0.0748765	mg/L	0.00086267	1.15%
Pb 220.353†	1295.0	0.211959	mg/L	0.0035725	0.211959	mg/L	0.0035725	1.69%
Sb 206.836†	5.1	0.0034047	mg/L	0.00373397	0.0034047	mg/L	0.00373397	109.67%
Se 196.026†	-12.4	0.0107901	mg/L	0.01072108	0.0107901	mg/L	0.01072108	99.36%
Sn 189.927†	71.1	0.0124906	mg/L	0.00184544	0.0124906	mg/L	0.00184544	14.77%
Ti 334.940†	380691.5	1.39865	mg/L	0.002784	1.39865	mg/L	0.002784	0.20%
Tl 190.801†	-25.6	-0.0058192	mg/L	0.00249030	-0.0058192	mg/L	0.00249030	42.79%
V 290.880†	5398.9	0.107070	mg/L	0.0022792	0.107070	mg/L	0.0022792	2.13%
Zn 206.200†	16132.1	0.353182	mg/L	0.0018211	0.353182	mg/L	0.0018211	0.52%
B 249.772†	17764.6	0.581831	mg/L	0.0026939	0.581831	mg/L	0.0026939	0.46%
Si 251.611†	80610.8	3.60642	mg/L	0.013272	3.60642	mg/L	0.013272	0.37%
Ce 413.764†	802.6	0.138	mg/L	0.0053	0.138	mg/L	0.0053	3.84%

Sequence No.: 38
Sample ID: AD19210-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 67
Date Collected: 9/16/2020 12:31:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19210-006

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	375633.1	99.6	%	0.07				0.07%
Y 371.029	179351.2	105	%	0.1				0.10%
Ag 328.068†	-63.7	-0.0024797	mg/L	0.00054757	-0.0024797	mg/L	0.00054757	22.08%
Al 308.215†	196264.9	22.5223	mg/L	0.05053	22.5223	mg/L	0.05053	0.22%
As 188.979†	20.4	0.0202317	mg/L	0.00152406	0.0202317	mg/L	0.00152406	7.53%
Ba 233.527†	16034.2	0.188042	mg/L	0.0003694	0.188042	mg/L	0.0003694	0.20%
Be 313.107†	-2272.2	0.0006476	mg/L	0.00003982	0.0006476	mg/L	0.00003982	6.15%
Ca 317.933†	7204101.6	82.8966	mg/L	0.48477	82.8966	mg/L	0.48477	0.58%
Cd 228.802†	26.9	0.0032287	mg/L	0.00042177	0.0032287	mg/L	0.00042177	13.06%
Co 228.616†	638.1	0.0250286	mg/L	0.00043462	0.0250286	mg/L	0.00043462	1.74%
Cr 267.716†	4602.2	0.0669771	mg/L	0.00053855	0.0669771	mg/L	0.00053855	0.80%
Cu 327.393†	23256.2	0.338306	mg/L	0.0013872	0.338306	mg/L	0.0013872	0.41%
Fe 273.955†	487317.3	55.5932	mg/L	0.31942	55.5932	mg/L	0.31942	0.57%
K 404.721†	2889.5	-515.703	mg/L	5.1597	-515.703	mg/L	5.1597	1.00%
Mg 279.077†	216940.8	21.6617	mg/L	0.04133	21.6617	mg/L	0.04133	0.19%
Mn 257.610†	167106.5	0.606245	mg/L	0.0009321	0.606245	mg/L	0.0009321	0.15%
Mo 202.031†	91.9	0.0101780	mg/L	0.00103531	0.0101780	mg/L	0.00103531	10.17%
Na 330.237†	284.4	0.893045	mg/L	0.1425774	0.893045	mg/L	0.1425774	15.97%
Ni 231.604†	1872.6	0.0683099	mg/L	0.00019207	0.0683099	mg/L	0.00019207	0.28%
Pb 220.353†	1004.7	0.165139	mg/L	0.0017541	0.165139	mg/L	0.0017541	1.06%
Sb 206.836†	7.9	0.0047580	mg/L	0.00319433	0.0047580	mg/L	0.00319433	67.14%
Se 196.026†	-34.3	-0.0006882	mg/L	0.00620119	-0.0006882	mg/L	0.00620119	901.05%
Sn 189.927†	77.6	0.0136068	mg/L	0.00131106	0.0136068	mg/L	0.00131106	9.64%
Ti 334.940†	373632.0	1.37273	mg/L	0.007004	1.37273	mg/L	0.007004	0.51%
Tl 190.801†	-22.7	-0.0043972	mg/L	0.00167022	-0.0043972	mg/L	0.00167022	37.98%
V 290.880†	5258.3	0.104155	mg/L	0.0012541	0.104155	mg/L	0.0012541	1.20%
Zn 206.200†	16189.9	0.354463	mg/L	0.0011928	0.354463	mg/L	0.0011928	0.34%
B 249.772†	18565.5	0.598566	mg/L	0.0018637	0.598566	mg/L	0.0018637	0.31%
Si 251.611†	80242.4	3.58984	mg/L	0.015492	3.58984	mg/L	0.015492	0.43%
Ce 413.764†	1001.9	0.165	mg/L	0.0114	0.165	mg/L	0.0114	6.87%

0091101 0372

Sequence No.: 39
Sample ID: AD19210-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 68
Date Collected: 9/16/2020 12:35:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19210-008

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	373805.3	99.1	%	1.32				1.33%
Y 371.029	230002.1	135	%	1.6				1.21%
Ag 328.068†	-165.8	-0.0036907	mg/L	0.00047174	-0.0036907	mg/L	0.00047174	12.78%
Al 308.215†	209008.7	23.9839	mg/L	0.03037	23.9839	mg/L	0.03037	0.13%
As 188.979†	28.3	0.0246055	mg/L	0.00515692	0.0246055	mg/L	0.00515692	20.96%
Ba 233.527†	15755.5	0.184744	mg/L	0.0007078	0.184744	mg/L	0.0007078	0.38%
Be 313.107†	-2413.1	0.0005325	mg/L	0.00002323	0.0005325	mg/L	0.00002323	4.36%
Ca 317.933†	6828045.9	78.5590	mg/L	0.48137	78.5590	mg/L	0.48137	0.61%
Cd 228.802†	54.3	0.0041214	mg/L	0.00029556	0.0041214	mg/L	0.00029556	7.17%
Co 228.616†	709.0	0.0277087	mg/L	0.00063809	0.0277087	mg/L	0.00063809	2.30%
Cr 267.716†	4860.7	0.0710509	mg/L	0.00154312	0.0710509	mg/L	0.00154312	2.17%
Cu 327.393†	24476.4	0.356009	mg/L	0.0008985	0.356009	mg/L	0.0008985	0.25%
Fe 273.955†	501674.3	57.2312	mg/L	0.45456	57.2312	mg/L	0.45456	0.79%
K 404.721†	3347.8	-524.891	mg/L	9.1708	-524.891	mg/L	9.1708	1.75%
Mg 279.077†	212102.5	21.1711	mg/L	0.05411	21.1711	mg/L	0.05411	0.26%
Mn 257.610†	192850.5	0.699699	mg/L	0.0004937	0.699699	mg/L	0.0004937	0.07%
Mo 202.031†	108.8	0.0117353	mg/L	0.00065276	0.0117353	mg/L	0.00065276	5.56%
Na 330.237†	391.8	1.16031	mg/L	0.181656	1.16031	mg/L	0.181656	15.66%
Ni 231.604†	1991.5	0.0726420	mg/L	0.00097624	0.0726420	mg/L	0.00097624	1.34%
Pb 220.353†	1541.8	0.251925	mg/L	0.0026495	0.251925	mg/L	0.0026495	1.05%
Sb 206.836†	4.4	0.0031491	mg/L	0.00169327	0.0031491	mg/L	0.00169327	53.77%
Se 196.026†	-38.1	-0.0022640	mg/L	0.00083722	-0.0022640	mg/L	0.00083722	36.98%
Sn 189.927†	84.7	0.0148100	mg/L	0.00047582	0.0148100	mg/L	0.00047582	3.21%
Ti 334.940†	382709.1	1.40605	mg/L	0.008402	1.40605	mg/L	0.008402	0.60%
Tl 190.801†	-29.5	-0.0071824	mg/L	0.00355608	-0.0071824	mg/L	0.00355608	49.51%
V 290.880†	5570.6	0.110393	mg/L	0.0004146	0.110393	mg/L	0.0004146	0.38%
Zn 206.200†	17016.8	0.372786	mg/L	0.0017168	0.372786	mg/L	0.0017168	0.46%
B 249.772†	18795.0	0.611388	mg/L	0.0020944	0.611388	mg/L	0.0020944	0.34%
Si 251.611†	84533.7	3.78283	mg/L	0.075123	3.78283	mg/L	0.075123	1.99%
Ce 413.764†	1293.5	0.206	mg/L	0.0056	0.206	mg/L	0.0056	2.73%

Sequence No.: 40
Sample ID: AD19210-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 69
Date Collected: 9/16/2020 12:39:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19210-010

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	364377.7	96.6	%	1.99				2.06%
Y 371.029	180733.1	106	%	2.2				2.06%
Ag 328.068†	-103.9	-0.0029575	mg/L	0.00073774	-0.0029575	mg/L	0.00073774	24.95%
Al 308.215†	205279.7	23.5558	mg/L	0.15212	23.5558	mg/L	0.15212	0.65%
As 188.979†	20.3	0.0210010	mg/L	0.00348836	0.0210010	mg/L	0.00348836	16.61%
Ba 233.527†	16682.1	0.195706	mg/L	0.0011711	0.195706	mg/L	0.0011711	0.60%
Be 313.107†	-2511.8	0.0004519	mg/L	0.00001927	0.0004519	mg/L	0.00001927	4.26%
Ca 317.933†	13569077.2	156.313	mg/L	4.4099	156.313	mg/L	4.4099	2.82%
Cd 228.802†	45.0	0.0038172	mg/L	0.00030594	0.0038172	mg/L	0.00030594	8.01%
Co 228.616†	699.7	0.0273570	mg/L	0.00034908	0.0273570	mg/L	0.00034908	1.28%
Cr 267.716†	5557.4	0.0820323	mg/L	0.00132892	0.0820323	mg/L	0.00132892	1.62%
Cu 327.393†	23975.9	0.348748	mg/L	0.0014461	0.348748	mg/L	0.0014461	0.41%
Fe 273.955†	528936.0	60.3414	mg/L	0.20502	60.3414	mg/L	0.20502	0.34%
K 404.721†	3519.6	-553.205	mg/L	11.5394	-553.205	mg/L	11.5394	2.09%
Mg 279.077†	602841.2	60.7985	mg/L	0.27579	60.7985	mg/L	0.27579	0.45%
Mn 257.610†	206875.7	0.750611	mg/L	0.0032571	0.750611	mg/L	0.0032571	0.43%
Mo 202.031†	93.1	0.0102894	mg/L	0.00018924	0.0102894	mg/L	0.00018924	1.84%
Na 330.237†	449.0	1.30280	mg/L	0.037950	1.30280	mg/L	0.037950	2.91%
Ni 231.604†	1919.5	0.0700188	mg/L	0.00121703	0.0700188	mg/L	0.00121703	1.74%
Pb 220.353†	1276.9	0.209183	mg/L	0.0047943	0.209183	mg/L	0.0047943	2.29%
Sb 206.836†	9.9	0.0058455	mg/L	0.00182583	0.0058455	mg/L	0.00182583	31.23%
Se 196.026†	-31.3	0.0022205	mg/L	0.00556712	0.0022205	mg/L	0.00556712	250.71%
Sn 189.927†	65.1	0.0114811	mg/L	0.00087706	0.0114811	mg/L	0.00087706	7.64%
Ti 334.940†	416486.5	1.53004	mg/L	0.005615	1.53004	mg/L	0.005615	0.37%
Tl 190.801†	-20.3	-0.0023338	mg/L	0.00479497	-0.0023338	mg/L	0.00479497	205.46%
V 290.880†	5918.6	0.117200	mg/L	0.0020865	0.117200	mg/L	0.0020865	1.78%
Zn 206.200†	16982.7	0.372031	mg/L	0.0007315	0.372031	mg/L	0.0007315	0.20%
B 249.772†	19401.2	0.638123	mg/L	0.0025549	0.638123	mg/L	0.0025549	0.40%
Si 251.611†	74896.0	3.34937	mg/L	0.034231	3.34937	mg/L	0.034231	1.02%
Ce 413.764†	895.1	0.155	mg/L	0.0056	0.155	mg/L	0.0056	3.61%

Sequence No.: 41
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/16/2020 12:43:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	359314.3	95.3	%	0.93				0.97%
Y 371.029	134820.0	78.9	%	0.80				1.02%
Ag 328.068†	8859.8	0.103375	mg/L	0.0012379	0.103375	mg/L	0.0012379	1.20%
Al 308.215†	43363.2	5.01392	mg/L	0.014698	5.01392	mg/L	0.014698	0.29%
As 188.979†	939.8	0.489735	mg/L	0.0071173	0.489735	mg/L	0.0071173	1.45%
Ba 233.527†	44001.2	0.518916	mg/L	0.0052195	0.518916	mg/L	0.0052195	1.01%
Be 313.107†	595916.0	0.489176	mg/L	0.0039460	0.489176	mg/L	0.0039460	0.81%
Ca 317.933†	4488359.3	51.5722	mg/L	0.42537	51.5722	mg/L	0.42537	0.82%
Cd 228.802†	14893.3	0.487557	mg/L	0.0047525	0.487557	mg/L	0.0047525	0.97%
Co 228.616†	12906.8	0.488474	mg/L	0.0052960	0.488474	mg/L	0.0052960	1.08%
Cr 267.716†	33352.0	0.520100	mg/L	0.0059195	0.520100	mg/L	0.0059195	1.14%
Cu 327.393†	34399.6	0.499975	mg/L	0.0013078	0.499975	mg/L	0.0013078	0.26%
Fe 273.955†	44083.5	5.02495	mg/L	0.007418	5.02495	mg/L	0.007418	0.15%
K 404.721†	3165.9	-7.58999	mg/L	8.657277	-7.58999	mg/L	8.657277	114.06%
Mg 279.077†	507294.8	51.1085	mg/L	0.09053	51.1085	mg/L	0.09053	0.18%
Mn 257.610†	137330.9	0.498156	mg/L	0.0009750	0.498156	mg/L	0.0009750	0.20%
Mo 202.031†	5281.1	0.488952	mg/L	0.0052947	0.488952	mg/L	0.0052947	1.08%
Na 330.237†	20721.0	51.7478	mg/L	0.55100	51.7478	mg/L	0.55100	1.06%
Ni 231.604†	13477.1	0.490947	mg/L	0.0052600	0.490947	mg/L	0.0052600	1.07%
Pb 220.353†	3020.9	0.484171	mg/L	0.0033796	0.484171	mg/L	0.0033796	0.70%
Sb 206.836†	1019.4	0.518994	mg/L	0.0040366	0.518994	mg/L	0.0040366	0.78%
Se 196.026†	896.8	0.483693	mg/L	0.0065351	0.483693	mg/L	0.0065351	1.35%
Sn 189.927†	2919.7	0.497040	mg/L	0.0047600	0.497040	mg/L	0.0047600	0.96%
Ti 334.940†	137052.9	0.504302	mg/L	0.0008074	0.504302	mg/L	0.0008074	0.16%
Tl 190.801†	1027.2	0.540474	mg/L	0.0110822	0.540474	mg/L	0.0110822	2.05%
V 290.880†	24559.4	0.507061	mg/L	0.0026945	0.507061	mg/L	0.0026945	0.53%
Zn 206.200†	23140.8	0.508475	mg/L	0.0061387	0.508475	mg/L	0.0061387	1.21%
B 249.772†	34767.4	0.529132	mg/L	0.0040811	0.529132	mg/L	0.0040811	0.77%
Si 251.611†	113759.9	5.08986	mg/L	0.012583	5.08986	mg/L	0.012583	0.25%
Ce 413.764†	52108.1	6.985	mg/L	0.0834	6.985	mg/L	0.0834	1.19%

Sequence No.: 42
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/16/2020 12:47:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	371652.4	98.6	%	0.76				0.77%
Y 371.029	170555.5	99.8	%	0.82				0.82%
Ag 328.068†	57.5	-0.0010418	mg/L	0.00049879	-0.0010418	mg/L	0.00049879	47.88%
Al 308.215†	65.3	0.0222180	mg/L	0.00769386	0.0222180	mg/L	0.00769386	34.63%
As 188.979†	5.9	0.0032232	mg/L	0.00248793	0.0032232	mg/L	0.00248793	77.19%
Ba 233.527†	8.5	-0.0015570	mg/L	0.00007515	-0.0015570	mg/L	0.00007515	4.83%
Be 313.107†	8.2	0.0025100	mg/L	0.00002131	0.0025100	mg/L	0.00002131	0.85%
Ca 317.933†	1052.8	-0.186251	mg/L	0.0004350	-0.186251	mg/L	0.0004350	0.23%
Cd 228.802†	1.5	0.0023991	mg/L	0.00026466	0.0023991	mg/L	0.00026466	11.03%
Co 228.616†	0.1	0.0009304	mg/L	0.00028101	0.0009304	mg/L	0.00028101	30.20%
Cr 267.716†	-19.5	-0.0058661	mg/L	0.00013827	-0.0058661	mg/L	0.00013827	2.36%
Cu 327.393†	-5.7	0.0008206	mg/L	0.00082877	0.0008206	mg/L	0.00082877	100.99%
Fe 273.955†	86.0	0.0053086	mg/L	0.00157534	0.0053086	mg/L	0.00157534	29.68%
K 404.721†	-1695.7	-33.2259	mg/L	7.25357	-33.2259	mg/L	7.25357	21.83%
Mg 279.077†	46.7	-0.334948	mg/L	0.0006156	-0.334948	mg/L	0.0006156	0.18%
Mn 257.610†	105.9	0.0000134	mg/L	0.00002274	0.0000134	mg/L	0.00002274	170.12%
Mo 202.031†	2.4	0.0019215	mg/L	0.00071974	0.0019215	mg/L	0.00071974	37.46%
Na 330.237†	10.7	0.212055	mg/L	0.0825397	0.212055	mg/L	0.0825397	38.92%
Ni 231.604†	6.9	0.0003618	mg/L	0.00044258	0.0003618	mg/L	0.00044258	122.33%
Pb 220.353†	-11.3	-0.0010693	mg/L	0.00046592	-0.0010693	mg/L	0.00046592	43.57%
Sb 206.836†	6.2	0.0028782	mg/L	0.00213436	0.0028782	mg/L	0.00213436	74.16%
Se 196.026†	5.3	0.0054599	mg/L	0.00523330	0.0054599	mg/L	0.00523330	95.85%
Sn 189.927†	-2.6	-0.0000405	mg/L	0.00065165	-0.0000405	mg/L	0.00065165	>999.9%
Ti 334.940†	62.0	0.0014381	mg/L	0.00010609	0.0014381	mg/L	0.00010609	7.38%
Tl 190.801†	6.4	-0.0003632	mg/L	0.00409427	-0.0003632	mg/L	0.00409427	>999.9%
V 290.880†	10.6	0.0016907	mg/L	0.00029387	0.0016907	mg/L	0.00029387	17.38%
Zn 206.200†	67.5	-0.0027607	mg/L	0.00032925	-0.0027607	mg/L	0.00032925	11.93%
B 249.772†	202.0	0.0152152	mg/L	0.00061718	0.0152152	mg/L	0.00061718	4.06%
Si 251.611†	125.9	-0.0135313	mg/L	0.00125842	-0.0135313	mg/L	0.00125842	9.30%
Ce 413.764†	37.0	-0.009	mg/L	0.0039	-0.009	mg/L	0.0039	42.77%

Sequence No.: 43
Sample ID: MB 85279 (100)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 70
Date Collected: 9/16/2020 12:51:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 85279 (100)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	376446.6	99.8	%	0.77				0.77%
Y 371.029	169982.7	99.5	%	0.83				0.84%
Ag 328.068†	-11.4	-0.0018592	mg/L	0.00067660	-0.0018592	mg/L	0.00067660	36.39%
Al 308.215†	67.0	0.0224340	mg/L	0.00249697	0.0224340	mg/L	0.00249697	11.13%
As 188.979†	4.6	0.0025214	mg/L	0.00216820	0.0025214	mg/L	0.00216820	85.99%
Ba 233.527†	31.7	-0.0012817	mg/L	0.00006266	-0.0012817	mg/L	0.00006266	4.89%
Be 313.107†	24.3	0.0025231	mg/L	0.00005238	0.0025231	mg/L	0.00005238	2.08%
Ca 317.933†	2858.6	-0.165422	mg/L	0.0006556	-0.165422	mg/L	0.0006556	0.40%
Cd 228.802†	8.5	0.0026293	mg/L	0.00027401	0.0026293	mg/L	0.00027401	10.42%
Co 228.616†	3.4	0.0010555	mg/L	0.00041870	0.0010555	mg/L	0.00041870	39.67%
Cr 267.716†	4.4	-0.0054883	mg/L	0.00020153	-0.0054883	mg/L	0.00020153	3.67%
Cu 327.393†	67.9	0.0018883	mg/L	0.00165159	0.0018883	mg/L	0.00165159	87.47%
Fe 273.955†	312.6	0.0311708	mg/L	0.00068542	0.0311708	mg/L	0.00068542	2.20%
K 404.721†	-2608.6	-47.6891	mg/L	6.65228	-47.6891	mg/L	6.65228	13.95%
Mg 279.077†	139.5	-0.325529	mg/L	0.0023498	-0.325529	mg/L	0.0023498	0.72%
Mn 257.610†	557.8	0.0016539	mg/L	0.00001797	0.0016539	mg/L	0.00001797	1.09%
Mo 202.031†	-6.4	0.0011137	mg/L	0.00047456	0.0011137	mg/L	0.00047456	42.61%
Na 330.237†	122.4	0.489874	mg/L	0.0605330	0.489874	mg/L	0.0605330	12.36%
Ni 231.604†	-8.6	-0.0002016	mg/L	0.00044318	-0.0002016	mg/L	0.00044318	219.78%
Pb 220.353†	-10.0	-0.0008681	mg/L	0.00164784	-0.0008681	mg/L	0.00164784	189.82%
Sb 206.836†	0.4	0.0000365	mg/L	0.00086929	0.0000365	mg/L	0.00086929	>999.9%
Se 196.026†	6.8	0.0062839	mg/L	0.00056799	0.0062839	mg/L	0.00056799	9.04%
Sn 189.927†	77.2	0.0135360	mg/L	0.00164087	0.0135360	mg/L	0.00164087	12.12%
Ti 334.940†	599.9	0.0034126	mg/L	0.00273121	0.0034126	mg/L	0.00273121	80.03%
Tl 190.801†	-1.5	-0.0041473	mg/L	0.00321652	-0.0041473	mg/L	0.00321652	77.56%
V 290.880†	10.3	0.0016700	mg/L	0.00034607	0.0016700	mg/L	0.00034607	20.72%
Zn 206.200†	122.0	-0.0015526	mg/L	0.00024547	-0.0015526	mg/L	0.00024547	15.81%
B 249.772†	71.3	0.0135349	mg/L	0.00005875	0.0135349	mg/L	0.00005875	0.43%
Si 251.611†	660.6	0.0105322	mg/L	0.00400880	0.0105322	mg/L	0.00400880	38.06%
Ce 413.764†	41.2	-0.009	mg/L	0.0072	-0.009	mg/L	0.0072	82.69%

Sequence No.: 44
Sample ID: LCS 85279
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 71
Date Collected: 9/16/2020 12:55:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 85279

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	359202.6	95.3	%	0.48				0.50%
Y 371.029	192110.4	112	%	0.7				0.60%
Ag 328.068†	72359.5	0.856641	mg/L	0.0010807	0.856641	mg/L	0.0010807	0.13%
Al 308.215†	747667.9	85.6974	mg/L	0.09513	85.6974	mg/L	0.09513	0.11%
As 188.979†	712.6	0.395061	mg/L	0.0035570	0.395061	mg/L	0.0035570	0.90%
Ba 233.527†	623625.5	7.37638	mg/L	0.003789	7.37638	mg/L	0.003789	0.05%
Be 313.107†	1867098.1	1.52732	mg/L	0.001134	1.52732	mg/L	0.001134	0.07%
Ca 317.933†	15641781.3	180.220	mg/L	0.1417	180.220	mg/L	0.1417	0.08%
Cd 228.802†	45209.4	1.47522	mg/L	0.002703	1.47522	mg/L	0.002703	0.18%
Co 228.616†	58043.5	2.19349	mg/L	0.001001	2.19349	mg/L	0.001001	0.05%
Cr 267.716†	115625.3	1.81681	mg/L	0.000509	1.81681	mg/L	0.000509	0.03%
Cu 327.393†	118383.9	1.71843	mg/L	0.002327	1.71843	mg/L	0.002327	0.14%
Fe 273.955†	1249083.4	142.503	mg/L	0.1389	142.503	mg/L	0.1389	0.10%
K 404.721†	13235.1	-1220.61	mg/L	1.652	-1220.61	mg/L	1.652	0.14%
Mg 279.077†	597335.5	60.2401	mg/L	0.06962	60.2401	mg/L	0.06962	0.12%
Mn 257.610†	1354452.5	4.91645	mg/L	0.001991	4.91645	mg/L	0.001991	0.04%
Mo 202.031†	17234.8	1.59184	mg/L	0.006239	1.59184	mg/L	0.006239	0.39%
Na 330.237†	2798.7	7.14960	mg/L	0.026964	7.14960	mg/L	0.026964	0.38%
Ni 231.604†	12301.1	0.448116	mg/L	0.0029651	0.448116	mg/L	0.0029651	0.66%
Pb 220.353†	7911.4	1.29040	mg/L	0.008029	1.29040	mg/L	0.008029	0.62%
Sb 206.836†	832.6	0.437688	mg/L	0.0049945	0.437688	mg/L	0.0049945	1.14%
Se 196.026†	5167.1	2.80495	mg/L	0.021170	2.80495	mg/L	0.021170	0.75%
Sn 189.927†	7219.0	1.22833	mg/L	0.006853	1.22833	mg/L	0.006853	0.56%
Ti 334.940†	1089989.1	4.00232	mg/L	0.005830	4.00232	mg/L	0.005830	0.15%
Tl 190.801†	4042.3	1.96767	mg/L	0.009701	1.96767	mg/L	0.009701	0.49%
V 290.880†	115926.6	2.36786	mg/L	0.000474	2.36786	mg/L	0.000474	0.02%
Zn 206.200†	250006.3	5.53514	mg/L	0.003997	5.53514	mg/L	0.003997	0.07%
B 249.772†	202168.6	3.68165	mg/L	0.009851	3.68165	mg/L	0.009851	0.27%
Si 251.611†	99426.0	4.42776	mg/L	0.240816	4.42776	mg/L	0.240816	5.44%
Ce 413.764†	3979.2	0.635	mg/L	0.0126	0.635	mg/L	0.0126	1.98%

Sequence No.: 45
Sample ID: LCS MR 85279
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 72
Date Collected: 9/16/2020 1:00:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS MR 85279

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	370839.3	98.3	%	0.55				0.56%
Y 371.029	195521.8	114	%	0.8				0.68%
Ag 328.068†	68934.7	0.816015	mg/L	0.0020702	0.816015	mg/L	0.0020702	0.25%
Al 308.215†	692203.6	79.3392	mg/L	0.46767	79.3392	mg/L	0.46767	0.59%
As 188.979†	665.8	0.369258	mg/L	0.0024887	0.369258	mg/L	0.0024887	0.67%
Ba 233.527†	570624.0	6.74932	mg/L	0.017059	6.74932	mg/L	0.017059	0.25%
Be 313.107†	1746777.9	1.42906	mg/L	0.008609	1.42906	mg/L	0.008609	0.60%
Ca 317.933†	14635896.1	168.618	mg/L	0.5838	168.618	mg/L	0.5838	0.35%
Cd 228.802†	43007.4	1.40348	mg/L	0.005371	1.40348	mg/L	0.005371	0.38%
Co 228.616†	55305.0	2.09005	mg/L	0.006088	2.09005	mg/L	0.006088	0.29%
Cr 267.716†	110260.0	1.73224	mg/L	0.003286	1.73224	mg/L	0.003286	0.19%
Cu 327.393†	112653.2	1.63528	mg/L	0.004442	1.63528	mg/L	0.004442	0.27%
Fe 273.955†	1174934.8	134.043	mg/L	1.0316	134.043	mg/L	1.0316	0.77%
K 404.721†	11534.7	-1162.78	mg/L	10.617	-1162.78	mg/L	10.617	0.91%
Mg 279.077†	582880.2	58.7741	mg/L	0.15454	58.7741	mg/L	0.15454	0.26%
Mn 257.610†	1267983.4	4.60255	mg/L	0.031094	4.60255	mg/L	0.031094	0.68%
Mo 202.031†	16291.7	1.50482	mg/L	0.010551	1.50482	mg/L	0.010551	0.70%
Na 330.237†	2610.1	6.68052	mg/L	0.014742	6.68052	mg/L	0.014742	0.22%
Ni 231.604†	11631.0	0.423713	mg/L	0.0028876	0.423713	mg/L	0.0028876	0.68%
Pb 220.353†	7497.7	1.22281	mg/L	0.009443	1.22281	mg/L	0.009443	0.77%
Sb 206.836†	793.4	0.416774	mg/L	0.0002958	0.416774	mg/L	0.0002958	0.07%
Se 196.026†	4904.8	2.66238	mg/L	0.023605	2.66238	mg/L	0.023605	0.89%
Sn 189.927†	6846.6	1.16498	mg/L	0.006735	1.16498	mg/L	0.006735	0.58%
Ti 334.940†	1024819.0	3.76310	mg/L	0.024211	3.76310	mg/L	0.024211	0.64%
Tl 190.801†	3807.4	1.85269	mg/L	0.013297	1.85269	mg/L	0.013297	0.72%
V 290.880†	110898.0	2.26509	mg/L	0.004834	2.26509	mg/L	0.004834	0.21%
Zn 206.200†	242471.8	5.36819	mg/L	0.014397	5.36819	mg/L	0.014397	0.27%
B 249.772†	193981.4	3.51729	mg/L	0.014549	3.51729	mg/L	0.014549	0.41%
Si 251.611†	89775.1	3.99505	mg/L	0.096138	3.99505	mg/L	0.096138	2.41%
Ce 413.764†	3325.0	0.541	mg/L	0.0037	0.541	mg/L	0.0037	0.69%

Sequence No.: 46
Sample ID: AD19178-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 73
Date Collected: 9/16/2020 1:05:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	378164.6	100	%	0.9				0.89%
Y 371.029	213507.5	125	%	0.9				0.69%
Ag 328.068†	-222.4	-0.0043622	mg/L	0.00100713	-0.0043622	mg/L	0.00100713	23.09%
Al 308.215†	360159.2	41.3190	mg/L	0.35508	41.3190	mg/L	0.35508	0.86%
As 188.979†	57.8	0.0563131	mg/L	0.00394027	0.0563131	mg/L	0.00394027	7.00%
Ba 233.527†	29759.4	0.350422	mg/L	0.0012500	0.350422	mg/L	0.0012500	0.36%
Be 313.107†	1642.2	0.0038444	mg/L	0.00002652	0.0038444	mg/L	0.00002652	0.69%
Ca 317.933†	9139074.3	105.215	mg/L	0.4131	105.215	mg/L	0.4131	0.39%
Cd 228.802†	53.0	0.0040769	mg/L	0.00018638	0.0040769	mg/L	0.00018638	4.57%
Co 228.616†	1343.1	0.0516590	mg/L	0.00065218	0.0516590	mg/L	0.00065218	1.26%
Cr 267.716†	7924.2	0.119334	mg/L	0.0013640	0.119334	mg/L	0.0013640	1.14%
Cu 327.393†	18695.8	0.272144	mg/L	0.0023042	0.272144	mg/L	0.0023042	0.85%
Fe 273.955†	1340399.5	152.921	mg/L	1.3010	152.921	mg/L	1.3010	0.85%
K 404.721†	11999.8	-1343.62	mg/L	5.727	-1343.62	mg/L	5.727	0.43%
Mg 279.077†	494988.4	49.8604	mg/L	0.40216	49.8604	mg/L	0.40216	0.81%
Mn 257.610†	589317.4	2.13892	mg/L	0.018773	2.13892	mg/L	0.018773	0.88%
Mo 202.031†	11.5	0.0027615	mg/L	0.00081392	0.0027615	mg/L	0.00081392	29.47%
Na 330.237†	41.9	0.289802	mg/L	0.0513514	0.289802	mg/L	0.0513514	17.72%
Ni 231.604†	6973.9	0.254099	mg/L	0.0027106	0.254099	mg/L	0.0027106	1.07%
Pb 220.353†	4282.8	0.695926	mg/L	0.0065462	0.695926	mg/L	0.0065462	0.94%
Sb 206.836†	10.5	0.0022694	mg/L	0.00661434	0.0022694	mg/L	0.00661434	291.45%
Se 196.026†	-108.7	-0.0141543	mg/L	0.00391194	-0.0141543	mg/L	0.00391194	27.64%
Sn 189.927†	244.3	0.0419590	mg/L	0.00146758	0.0419590	mg/L	0.00146758	3.50%
Ti 334.940†	260483.6	0.957389	mg/L	0.0142198	0.957389	mg/L	0.0142198	1.49%
Tl 190.801†	-18.1	-0.0041058	mg/L	0.00140506	-0.0041058	mg/L	0.00140506	34.22%
V 290.880†	5918.1	0.110211	mg/L	0.0029621	0.110211	mg/L	0.0029621	2.69%
Zn 206.200†	30656.3	0.674997	mg/L	0.0032162	0.674997	mg/L	0.0032162	0.48%
B 249.772†	52104.7	1.63938	mg/L	0.011792	1.63938	mg/L	0.011792	0.72%
Si 251.611†	87725.5	3.92654	mg/L	0.130511	3.92654	mg/L	0.130511	3.32%
Ce 413.764†	1918.6	0.367	mg/L	0.0159	0.367	mg/L	0.0159	4.33%

Sequence No.: 47
Sample ID: AD19178-001 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 74
Date Collected: 9/16/2020 1:09:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-001 MR

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	374251.8	99.2	%	1.17				1.18%
Y 371.029	213609.2	125	%	1.1				0.91%
Ag 328.068†	-219.8	-0.0043321	mg/L	0.00101164	-0.0043321	mg/L	0.00101164	23.35%
Al 308.215†	370198.6	42.4705	mg/L	0.57238	42.4705	mg/L	0.57238	1.35%
As 188.979†	69.4	0.0621097	mg/L	0.00581095	0.0621097	mg/L	0.00581095	9.36%
Ba 233.527†	32301.0	0.380492	mg/L	0.0017386	0.380492	mg/L	0.0017386	0.46%
Be 313.107†	1772.2	0.0039506	mg/L	0.00003777	0.0039506	mg/L	0.00003777	0.96%
Ca 317.933†	8630433.5	99.3485	mg/L	1.18024	99.3485	mg/L	1.18024	1.19%
Cd 228.802†	52.7	0.0040694	mg/L	0.00004145	0.0040694	mg/L	0.00004145	1.02%
Co 228.616†	1348.4	0.0518621	mg/L	0.00096446	0.0518621	mg/L	0.00096446	1.86%
Cr 267.716†	8682.8	0.131291	mg/L	0.0021567	0.131291	mg/L	0.0021567	1.64%
Cu 327.393†	18507.7	0.269415	mg/L	0.0011958	0.269415	mg/L	0.0011958	0.44%
Fe 273.955†	1327845.7	151.488	mg/L	2.1238	151.488	mg/L	2.1238	1.40%
K 404.721†	12075.1	-1328.18	mg/L	15.939	-1328.18	mg/L	15.939	1.20%
Mg 279.077†	482403.1	48.5840	mg/L	0.64002	48.5840	mg/L	0.64002	1.32%
Mn 257.610†	591039.1	2.14517	mg/L	0.029937	2.14517	mg/L	0.029937	1.40%
Mo 202.031†	14.6	0.0030493	mg/L	0.00021717	0.0030493	mg/L	0.00021717	7.12%
Na 330.237†	99.7	0.433600	mg/L	0.0780023	0.433600	mg/L	0.0780023	17.99%
Ni 231.604†	9436.3	0.343780	mg/L	0.0065176	0.343780	mg/L	0.0065176	1.90%
Pb 220.353†	4394.6	0.714071	mg/L	0.0134454	0.714071	mg/L	0.0134454	1.88%
Sb 206.836†	3.8	-0.0009939	mg/L	0.00116014	-0.0009939	mg/L	0.00116014	116.73%
Se 196.026†	-108.2	-0.0142985	mg/L	0.00409199	-0.0142985	mg/L	0.00409199	28.62%
Sn 189.927†	165.9	0.0286207	mg/L	0.00131759	0.0286207	mg/L	0.00131759	4.60%
Ti 334.940†	259156.2	0.952516	mg/L	0.0025892	0.952516	mg/L	0.0025892	0.27%
Tl 190.801†	-21.4	-0.0056255	mg/L	0.00158502	-0.0056255	mg/L	0.00158502	28.18%
V 290.880†	5965.5	0.111284	mg/L	0.0029313	0.111284	mg/L	0.0029313	2.63%
Zn 206.200†	31493.2	0.693539	mg/L	0.0042692	0.693539	mg/L	0.0042692	0.62%
B 249.772†	51135.3	1.61740	mg/L	0.011062	1.61740	mg/L	0.011062	0.68%
Si 251.611†	88648.8	3.96806	mg/L	0.166125	3.96806	mg/L	0.166125	4.19%
Ce 413.764†	2048.5	0.384	mg/L	0.0156	0.384	mg/L	0.0156	4.07%

Sequence No.: 48
Sample ID: AD19178-001 MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 75
Date Collected: 9/16/2020 1:14:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-001 MS1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	356216.6	94.5	%	0.33				0.35%
Y 371.029	206414.5	121	%	0.3				0.28%
Ag 328.068†	9111.6	0.106362	mg/L	0.0003436	0.106362	mg/L	0.0003436	0.32%
Al 308.215†	460877.7	52.8584	mg/L	0.14004	52.8584	mg/L	0.14004	0.26%
As 188.979†	927.5	0.513354	mg/L	0.0047419	0.513354	mg/L	0.0047419	0.92%
Ba 233.527†	76957.6	0.908818	mg/L	0.0023548	0.908818	mg/L	0.0023548	0.26%
Be 313.107†	567033.6	0.465588	mg/L	0.0015400	0.465588	mg/L	0.0015400	0.33%
Ca 317.933†	13119758.6	151.130	mg/L	1.6138	151.130	mg/L	1.6138	1.07%
Cd 228.802†	13945.7	0.456684	mg/L	0.0010136	0.456684	mg/L	0.0010136	0.22%
Co 228.616†	13691.3	0.518107	mg/L	0.0005317	0.518107	mg/L	0.0005317	0.10%
Cr 267.716†	43037.2	0.672749	mg/L	0.0006524	0.672749	mg/L	0.0006524	0.10%
Cu 327.393†	52416.9	0.761371	mg/L	0.0035751	0.761371	mg/L	0.0035751	0.47%
Fe 273.955†	1585103.3	180.839	mg/L	0.5721	180.839	mg/L	0.5721	0.32%
K 404.721†	17288.8	-1539.47	mg/L	2.125	-1539.47	mg/L	2.125	0.14%
Mg 279.077†	966659.3	97.6957	mg/L	0.27556	97.6957	mg/L	0.27556	0.28%
Mn 257.610†	817709.9	2.96801	mg/L	0.008789	2.96801	mg/L	0.008789	0.30%
Mo 202.031†	4887.7	0.452654	mg/L	0.0005778	0.452654	mg/L	0.0005778	0.13%
Na 330.237†	20154.7	50.3386	mg/L	0.15977	50.3386	mg/L	0.15977	0.32%
Ni 231.604†	30366.1	1.10605	mg/L	0.000866	1.10605	mg/L	0.000866	0.08%
Pb 220.353†	7241.0	1.17511	mg/L	0.002244	1.17511	mg/L	0.002244	0.19%
Sb 206.836†	513.3	0.257138	mg/L	0.0004505	0.257138	mg/L	0.0004505	0.18%
Se 196.026†	683.8	0.417289	mg/L	0.0077372	0.417289	mg/L	0.0077372	1.85%
Sn 189.927†	2842.9	0.483974	mg/L	0.0013076	0.483974	mg/L	0.0013076	0.27%
Ti 334.940†	395093.0	1.45151	mg/L	0.000372	1.45151	mg/L	0.000372	0.03%
Tl 190.801†	979.7	0.483476	mg/L	0.0059684	0.483476	mg/L	0.0059684	1.23%
V 290.880†	29686.1	0.597453	mg/L	0.0017414	0.597453	mg/L	0.0017414	0.29%
Zn 206.200†	54888.2	1.21190	mg/L	0.005326	1.21190	mg/L	0.005326	0.44%
B 249.772†	88581.8	2.31437	mg/L	0.002640	2.31437	mg/L	0.002640	0.11%
Si 251.611†	111414.6	4.98494	mg/L	0.286728	4.98494	mg/L	0.286728	5.75%
Ce 413.764†	7645.1	1.159	mg/L	0.0113	1.159	mg/L	0.0113	0.98%

Sequence No.: 49
Sample ID: AD19178-001 MS2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 76
Date Collected: 9/16/2020 1:19:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-001 MS2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	355452.9	94.3	%	0.30				0.32%
Y 371.029	201913.4	118	%	0.4				0.33%
Ag 328.068†	9201.4	0.107428	mg/L	0.0008174	0.107428	mg/L	0.0008174	0.76%
Al 308.215†	455277.6	52.2163	mg/L	0.02918	52.2163	mg/L	0.02918	0.06%
As 188.979†	939.3	0.514800	mg/L	0.0004137	0.514800	mg/L	0.0004137	0.08%
Ba 233.527†	73249.1	0.864943	mg/L	0.0006402	0.864943	mg/L	0.0006402	0.07%
Be 313.107†	572240.9	0.469841	mg/L	0.0004703	0.469841	mg/L	0.0004703	0.10%
Ca 317.933†	12320117.3	141.907	mg/L	1.3216	141.907	mg/L	1.3216	0.93%
Cd 228.802†	14054.7	0.460237	mg/L	0.0042575	0.460237	mg/L	0.0042575	0.93%
Co 228.616†	13628.7	0.515742	mg/L	0.0041611	0.515742	mg/L	0.0041611	0.81%
Cr 267.716†	39549.6	0.617781	mg/L	0.0007725	0.617781	mg/L	0.0007725	0.13%
Cu 327.393†	51776.7	0.752083	mg/L	0.0004479	0.752083	mg/L	0.0004479	0.06%
Fe 273.955†	1343991.6	153.331	mg/L	0.1190	153.331	mg/L	0.1190	0.08%
K 404.721†	14279.9	-1312.23	mg/L	10.527	-1312.23	mg/L	10.527	0.80%
Mg 279.077†	952229.2	96.2322	mg/L	0.15302	96.2322	mg/L	0.15302	0.16%
Mn 257.610†	738712.0	2.68124	mg/L	0.001651	2.68124	mg/L	0.001651	0.06%
Mo 202.031†	4918.7	0.455519	mg/L	0.0048193	0.455519	mg/L	0.0048193	1.06%
Na 330.237†	19521.6	48.7630	mg/L	0.42401	48.7630	mg/L	0.42401	0.87%
Ni 231.604†	19621.7	0.714734	mg/L	0.0054370	0.714734	mg/L	0.0054370	0.76%
Pb 220.353†	7196.2	1.16780	mg/L	0.012165	1.16780	mg/L	0.012165	1.04%
Sb 206.836†	511.4	0.257229	mg/L	0.0083376	0.257229	mg/L	0.0083376	3.24%
Se 196.026†	719.0	0.428635	mg/L	0.0100640	0.428635	mg/L	0.0100640	2.35%
Sn 189.927†	2825.3	0.480984	mg/L	0.0057430	0.480984	mg/L	0.0057430	1.19%
Ti 334.940†	405512.9	1.48976	mg/L	0.005952	1.48976	mg/L	0.005952	0.40%
Tl 190.801†	1007.4	0.497147	mg/L	0.0020467	0.497147	mg/L	0.0020467	0.41%
V 290.880†	29423.2	0.594205	mg/L	0.0018845	0.594205	mg/L	0.0018845	0.32%
Zn 206.200†	54373.0	1.20049	mg/L	0.001198	1.20049	mg/L	0.001198	0.10%
B 249.772†	79737.3	2.02909	mg/L	0.002173	2.02909	mg/L	0.002173	0.11%
Si 251.611†	104583.8	4.67766	mg/L	0.050316	4.67766	mg/L	0.050316	1.08%
Ce 413.764†	7731.9	1.148	mg/L	0.0254	1.148	mg/L	0.0254	2.22%

Sequence No.: 50
Sample ID: AD19178-001 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 77
Date Collected: 9/16/2020 1:24:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-001 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	357868.1	94.9	%	1.10				1.16%
Y 371.029	200433.6	117	%	1.4				1.16%
Ag 328.068†	9014.5	0.105210	mg/L	0.0017167	0.105210	mg/L	0.0017167	1.63%
Al 308.215†	407226.5	46.7054	mg/L	0.02525	46.7054	mg/L	0.02525	0.05%
As 188.979†	936.8	0.514421	mg/L	0.0073201	0.514421	mg/L	0.0073201	1.42%
Ba 233.527†	69720.1	0.823192	mg/L	0.0019995	0.823192	mg/L	0.0019995	0.24%
Be 313.107†	570236.6	0.468204	mg/L	0.0014150	0.468204	mg/L	0.0014150	0.30%
Ca 317.933†	13500178.5	155.518	mg/L	3.2634	155.518	mg/L	3.2634	2.10%
Cd 228.802†	14016.4	0.458988	mg/L	0.0044253	0.458988	mg/L	0.0044253	0.96%
Co 228.616†	13421.9	0.507933	mg/L	0.0050168	0.507933	mg/L	0.0050168	0.99%
Cr 267.716†	39381.1	0.615126	mg/L	0.0059460	0.615126	mg/L	0.0059460	0.97%
Cu 327.393†	50967.9	0.740349	mg/L	0.0011559	0.740349	mg/L	0.0011559	0.16%
Fe 273.955†	1391839.1	158.789	mg/L	0.4448	158.789	mg/L	0.4448	0.28%
K 404.721†	14730.8	-1359.60	mg/L	27.857	-1359.60	mg/L	27.857	2.05%
Mg 279.077†	972456.6	98.2836	mg/L	0.16444	98.2836	mg/L	0.16444	0.17%
Mn 257.610†	723367.4	2.62554	mg/L	0.006168	2.62554	mg/L	0.006168	0.23%
Mo 202.031†	5017.2	0.464604	mg/L	0.0045589	0.464604	mg/L	0.0045589	0.98%
Na 330.237†	20550.9	51.3244	mg/L	0.55652	51.3244	mg/L	0.55652	1.08%
Ni 231.604†	19436.2	0.707978	mg/L	0.0052473	0.707978	mg/L	0.0052473	0.74%
Pb 220.353†	7001.8	1.13590	mg/L	0.009285	1.13590	mg/L	0.009285	0.82%
Sb 206.836†	977.9	0.485220	mg/L	0.0016030	0.485220	mg/L	0.0016030	0.33%
Se 196.026†	734.3	0.438292	mg/L	0.0106469	0.438292	mg/L	0.0106469	2.43%
Sn 189.927†	2934.5	0.499552	mg/L	0.0052040	0.499552	mg/L	0.0052040	1.04%
Ti 334.940†	381527.6	1.40171	mg/L	0.015444	1.40171	mg/L	0.015444	1.10%
Tl 190.801†	1017.8	0.501337	mg/L	0.0064458	0.501337	mg/L	0.0064458	1.29%
V 290.880†	28934.0	0.584021	mg/L	0.0001939	0.584021	mg/L	0.0001939	0.03%
Zn 206.200†	51046.6	1.12678	mg/L	0.004649	1.12678	mg/L	0.004649	0.41%
B 249.772†	83771.3	2.11765	mg/L	0.007437	2.11765	mg/L	0.007437	0.35%
Si 251.611†	98268.9	4.39348	mg/L	0.116309	4.39348	mg/L	0.116309	2.65%
Ce 413.764†	7508.9	1.123	mg/L	0.0243	1.123	mg/L	0.0243	2.17%

Sequence No.: 51
Sample ID: AD19178-001 SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 78
Date Collected: 9/16/2020 1:28:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-001 SD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	382868.4	102	%	0.6				0.58%
Y 371.029	181580.3	106	%	0.6				0.61%
Ag 328.068†	-38.7	-0.0021832	mg/L	0.00031728	-0.0021832	mg/L	0.00031728	14.53%
Al 308.215†	75990.2	8.72956	mg/L	0.026861	8.72956	mg/L	0.026861	0.31%
As 188.979†	18.3	0.0153736	mg/L	0.00244050	0.0153736	mg/L	0.00244050	15.87%
Ba 233.527†	6390.8	0.0739517	mg/L	0.00084313	0.0739517	mg/L	0.00084313	1.14%
Be 313.107†	309.0	0.0027556	mg/L	0.00002899	0.0027556	mg/L	0.00002899	1.05%
Ca 317.933†	1930015.5	22.0632	mg/L	0.05630	22.0632	mg/L	0.05630	0.26%
Cd 228.802†	4.8	0.0025085	mg/L	0.00027479	0.0025085	mg/L	0.00027479	10.95%
Co 228.616†	278.9	0.0114594	mg/L	0.00057885	0.0114594	mg/L	0.00057885	5.05%
Cr 267.716†	1698.3	0.0212082	mg/L	0.00029426	0.0212082	mg/L	0.00029426	1.39%
Cu 327.393†	3908.2	0.0576036	mg/L	0.00079170	0.0576036	mg/L	0.00079170	1.37%
Fe 273.955†	293981.6	33.5357	mg/L	0.07706	33.5357	mg/L	0.07706	0.23%
K 404.721†	-164.7	-343.467	mg/L	9.8897	-343.467	mg/L	9.8897	2.88%
Mg 279.077†	107778.5	10.5909	mg/L	0.05176	10.5909	mg/L	0.05176	0.49%
Mn 257.610†	126201.5	0.457755	mg/L	0.0009720	0.457755	mg/L	0.0009720	0.21%
Mo 202.031†	-7.3	0.0010292	mg/L	0.00023339	0.0010292	mg/L	0.00023339	22.68%
Na 330.237†	26.5	0.251451	mg/L	0.0276165	0.251451	mg/L	0.0276165	10.98%
Ni 231.604†	1436.9	0.0524428	mg/L	0.00090617	0.0524428	mg/L	0.00090617	1.73%
Pb 220.353†	884.3	0.144296	mg/L	0.0007286	0.144296	mg/L	0.0007286	0.50%
Sb 206.836†	3.4	0.0008388	mg/L	0.00487909	0.0008388	mg/L	0.00487909	581.64%
Se 196.026†	-14.8	0.0037893	mg/L	0.00493380	0.0037893	mg/L	0.00493380	130.20%
Sn 189.927†	38.2	0.0068906	mg/L	0.00091573	0.0068906	mg/L	0.00091573	13.29%
Ti 334.940†	51803.8	0.191371	mg/L	0.0007944	0.191371	mg/L	0.0007944	0.42%
Tl 190.801†	1.9	-0.0008880	mg/L	0.00337523	-0.0008880	mg/L	0.00337523	380.07%
V 290.880†	1370.2	0.0267720	mg/L	0.00094164	0.0267720	mg/L	0.00094164	3.52%
Zn 206.200†	6682.7	0.143813	mg/L	0.0014993	0.143813	mg/L	0.0014993	1.04%
B 249.772†	11122.9	0.364905	mg/L	0.0022305	0.364905	mg/L	0.0022305	0.61%
Si 251.611†	17325.9	0.760109	mg/L	0.0274993	0.760109	mg/L	0.0274993	3.62%
Ce 413.764†	467.6	0.076	mg/L	0.0101	0.076	mg/L	0.0101	13.30%

Sequence No.: 52
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/16/2020 1:32:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	358763.6	95.1	%	4.27				4.49%
Y 371.029	133418.4	78.1	%	4.11				5.26%
Ag 328.068†	8357.6	0.0974182	mg/L	0.00533225	0.0974182	mg/L	0.00533225	5.47%
Al 308.215†	43839.2	5.06824	mg/L	0.276633	5.06824	mg/L	0.276633	5.46%
As 188.979†	952.3	0.496262	mg/L	0.0274668	0.496262	mg/L	0.0274668	5.53%
Ba 233.527†	42407.6	0.500061	mg/L	0.0243163	0.500061	mg/L	0.0243163	4.86%
Be 313.107†	600994.8	0.493324	mg/L	0.0247054	0.493324	mg/L	0.0247054	5.01%
Ca 317.933†	4513613.6	51.8635	mg/L	2.55374	51.8635	mg/L	2.55374	4.92%
Cd 228.802†	14613.1	0.478428	mg/L	0.0245357	0.478428	mg/L	0.0245357	5.13%
Co 228.616†	12740.6	0.482196	mg/L	0.0235759	0.482196	mg/L	0.0235759	4.89%
Cr 267.716†	32118.6	0.500662	mg/L	0.0264152	0.500662	mg/L	0.0264152	5.28%
Cu 327.393†	34747.8	0.505027	mg/L	0.0248726	0.505027	mg/L	0.0248726	4.93%
Fe 273.955†	44702.6	5.09559	mg/L	0.255745	5.09559	mg/L	0.255745	5.02%
K 404.721†	3867.6	2.62400	mg/L	39.114801	2.62400	mg/L	39.114801	>999.9%
Mg 279.077†	498681.0	50.2349	mg/L	2.38673	50.2349	mg/L	2.38673	4.75%
Mn 257.610†	139924.4	0.507570	mg/L	0.0256178	0.507570	mg/L	0.0256178	5.05%
Mo 202.031†	5417.4	0.501522	mg/L	0.0246617	0.501522	mg/L	0.0246617	4.92%
Na 330.237†	19757.2	49.3494	mg/L	2.70971	49.3494	mg/L	2.70971	5.49%
Ni 231.604†	13247.8	0.482595	mg/L	0.0246976	0.482595	mg/L	0.0246976	5.12%
Pb 220.353†	3110.7	0.498674	mg/L	0.0235104	0.498674	mg/L	0.0235104	4.71%
Sb 206.836†	1034.4	0.526576	mg/L	0.0299994	0.526576	mg/L	0.0299994	5.70%
Se 196.026†	925.5	0.499065	mg/L	0.0290743	0.499065	mg/L	0.0290743	5.83%
Sn 189.927†	2968.4	0.505323	mg/L	0.0250406	0.505323	mg/L	0.0250406	4.96%
Ti 334.940†	140749.7	0.517872	mg/L	0.0255833	0.517872	mg/L	0.0255833	4.94%
Tl 190.801†	1045.4	0.549424	mg/L	0.0341802	0.549424	mg/L	0.0341802	6.22%
V 290.880†	25035.1	0.516906	mg/L	0.0245135	0.516906	mg/L	0.0245135	4.74%
Zn 206.200†	22670.5	0.498055	mg/L	0.0253011	0.498055	mg/L	0.0253011	5.08%
B 249.772†	35301.8	0.537037	mg/L	0.0271281	0.537037	mg/L	0.0271281	5.05%
Si 251.611†	115957.3	5.18849	mg/L	0.258865	5.18849	mg/L	0.258865	4.99%
Ce 413.764†	52257.6	7.005	mg/L	0.3527	7.005	mg/L	0.3527	5.03%

Sequence No.: 53
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/16/2020 1:36:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	369611.1	98.0	%	0.31				0.32%
Y 371.029	169591.4	99.2	%	0.21				0.22%
Ag 328.068†	48.8	-0.0011461	mg/L	0.00043450	-0.0011461	mg/L	0.00043450	37.91%
Al 308.215†	47.3	0.0201488	mg/L	0.00421158	0.0201488	mg/L	0.00421158	20.90%
As 188.979†	8.8	0.0047361	mg/L	0.00300590	0.0047361	mg/L	0.00300590	63.47%
Ba 233.527†	8.1	-0.0015616	mg/L	0.00004702	-0.0015616	mg/L	0.00004702	3.01%
Be 313.107†	22.2	0.0025213	mg/L	0.00006628	0.0025213	mg/L	0.00006628	2.63%
Ca 317.933†	1033.2	-0.186477	mg/L	0.0004206	-0.186477	mg/L	0.0004206	0.23%
Cd 228.802†	10.5	0.0026943	mg/L	0.00020065	0.0026943	mg/L	0.00020065	7.45%
Co 228.616†	9.0	0.0012669	mg/L	0.00040054	0.0012669	mg/L	0.00040054	31.62%
Cr 267.716†	-28.9	-0.0060130	mg/L	0.00036306	-0.0060130	mg/L	0.00036306	6.04%
Cu 327.393†	25.9	0.0012791	mg/L	0.00107223	0.0012791	mg/L	0.00107223	83.83%
Fe 273.955†	84.3	0.0051172	mg/L	0.00114663	0.0051172	mg/L	0.00114663	22.41%
K 404.721†	-1247.2	-26.2447	mg/L	4.10909	-26.2447	mg/L	4.10909	15.66%
Mg 279.077†	33.3	-0.336304	mg/L	0.0010207	-0.336304	mg/L	0.0010207	0.30%
Mn 257.610†	105.6	0.0000123	mg/L	0.00001808	0.0000123	mg/L	0.00001808	146.92%
Mo 202.031†	-3.7	0.0013563	mg/L	0.00071240	0.0013563	mg/L	0.00071240	52.53%
Na 330.237†	84.0	0.394499	mg/L	0.0228671	0.394499	mg/L	0.0228671	5.80%
Ni 231.604†	8.2	0.0004091	mg/L	0.00022973	0.0004091	mg/L	0.00022973	56.16%
Pb 220.353†	-16.9	-0.0019761	mg/L	0.00051591	-0.0019761	mg/L	0.00051591	26.11%
Sb 206.836†	4.7	0.0021003	mg/L	0.00022904	0.0021003	mg/L	0.00022904	10.91%
Se 196.026†	7.8	0.0068063	mg/L	0.00615837	0.0068063	mg/L	0.00615837	90.48%
Sn 189.927†	-1.2	0.0001940	mg/L	0.00133617	0.0001940	mg/L	0.00133617	688.57%
Ti 334.940†	48.1	0.0013871	mg/L	0.00002057	0.0013871	mg/L	0.00002057	1.48%
Tl 190.801†	-0.4	-0.0036294	mg/L	0.00215290	-0.0036294	mg/L	0.00215290	59.32%
V 290.880†	38.6	0.0022505	mg/L	0.00024212	0.0022505	mg/L	0.00024212	10.76%
Zn 206.200†	69.6	-0.0027133	mg/L	0.00011209	-0.0027133	mg/L	0.00011209	4.13%
B 249.772†	319.7	0.0168636	mg/L	0.00054162	0.0168636	mg/L	0.00054162	3.21%
Si 251.611†	212.6	-0.0096212	mg/L	0.00442414	-0.0096212	mg/L	0.00442414	45.98%
Ce 413.764†	26.3	-0.011	mg/L	0.0056	-0.011	mg/L	0.0056	52.03%

0091101 0387

Sequence No.: 54
Sample ID: AD19178-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 79
Date Collected: 9/16/2020 1:40:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	368777.2	97.8	%	0.29				0.30%
Y 371.029	208206.2	122	%	1.3				1.08%
Ag 328.068†	-298.7	-0.0052673	mg/L	0.00136509	-0.0052673	mg/L	0.00136509	25.92%
Al 308.215†	260384.4	29.8763	mg/L	0.23839	29.8763	mg/L	0.23839	0.80%
As 188.979†	77.3	0.0751320	mg/L	0.00534900	0.0751320	mg/L	0.00534900	7.12%
Ba 233.527†	25823.0	0.303851	mg/L	0.0030250	0.303851	mg/L	0.0030250	1.00%
Be 313.107†	2655.5	0.0046719	mg/L	0.00007335	0.0046719	mg/L	0.00007335	1.57%
Ca 317.933†	14279292.7	164.505	mg/L	1.4966	164.505	mg/L	1.4966	0.91%
Cd 228.802†	43.8	0.0037774	mg/L	0.00013522	0.0037774	mg/L	0.00013522	3.58%
Co 228.616†	1669.3	0.0639844	mg/L	0.00030041	0.0639844	mg/L	0.00030041	0.47%
Cr 267.716†	8096.0	0.122043	mg/L	0.0014200	0.122043	mg/L	0.0014200	1.16%
Cu 327.393†	33818.7	0.491548	mg/L	0.0035090	0.491548	mg/L	0.0035090	0.71%
Fe 273.955†	1785926.0	203.751	mg/L	0.7514	203.751	mg/L	0.7514	0.37%
K 404.721†	18828.5	-1743.79	mg/L	17.183	-1743.79	mg/L	17.183	0.99%
Mg 279.077†	362048.4	36.3781	mg/L	0.39461	36.3781	mg/L	0.39461	1.08%
Mn 257.610†	620815.2	2.25326	mg/L	0.007023	2.25326	mg/L	0.007023	0.31%
Mo 202.031†	16.4	0.0032175	mg/L	0.00054948	0.0032175	mg/L	0.00054948	17.08%
Na 330.237†	100.8	0.436167	mg/L	0.0764908	0.436167	mg/L	0.0764908	17.54%
Ni 231.604†	13141.5	0.478727	mg/L	0.0057221	0.478727	mg/L	0.0057221	1.20%
Pb 220.353†	6517.0	1.05526	mg/L	0.003623	1.05526	mg/L	0.003623	0.34%
Sb 206.836†	25.0	0.0076728	mg/L	0.00433978	0.0076728	mg/L	0.00433978	56.56%
Se 196.026†	-149.1	-0.0220658	mg/L	0.00605271	-0.0220658	mg/L	0.00605271	27.43%
Sn 189.927†	183.4	0.0315937	mg/L	0.00038348	0.0315937	mg/L	0.00038348	1.21%
Ti 334.940†	275731.5	1.01336	mg/L	0.014531	1.01336	mg/L	0.014531	1.43%
Tl 190.801†	-20.0	-0.0048294	mg/L	0.00219894	-0.0048294	mg/L	0.00219894	45.53%
V 290.880†	5862.4	0.105324	mg/L	0.0021507	0.105324	mg/L	0.0021507	2.04%
Zn 206.200†	29989.5	0.660223	mg/L	0.0072617	0.660223	mg/L	0.0072617	1.10%
B 249.772†	66893.4	2.14473	mg/L	0.008941	2.14473	mg/L	0.008941	0.42%
Si 251.611†	76726.0	3.43179	mg/L	0.073208	3.43179	mg/L	0.073208	2.13%
Ce 413.764†	1743.1	0.385	mg/L	0.0090	0.385	mg/L	0.0090	2.33%

Sequence No.: 55
Sample ID: AD19178-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 80
Date Collected: 9/16/2020 1:44:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-003

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	388456.4	103	%	0.6				0.59%
Y 371.029	206837.2	121	%	0.7				0.61%
Ag 328.068†	-21.0	-0.0019735	mg/L	0.00028091	-0.0019735	mg/L	0.00028091	14.23%
Al 308.215†	350828.0	40.2475	mg/L	0.48979	40.2475	mg/L	0.48979	1.22%
As 188.979†	132.2	0.0943600	mg/L	0.00321106	0.0943600	mg/L	0.00321106	3.40%
Ba 233.527†	94809.3	1.12002	mg/L	0.002583	1.12002	mg/L	0.002583	0.23%
Be 313.107†	1980.3	0.0041205	mg/L	0.00003407	0.0041205	mg/L	0.00003407	0.83%
Ca 317.933†	9436710.0	108.648	mg/L	1.5352	108.648	mg/L	1.5352	1.41%
Cd 228.802†	710.9	0.0255096	mg/L	0.00018714	0.0255096	mg/L	0.00018714	0.73%
Co 228.616†	1237.0	0.0476544	mg/L	0.00042010	0.0476544	mg/L	0.00042010	0.88%
Cr 267.716†	6759.2	0.100973	mg/L	0.0007435	0.100973	mg/L	0.0007435	0.74%
Cu 327.393†	77365.7	1.12333	mg/L	0.000707	1.12333	mg/L	0.000707	0.06%
Fe 273.955†	1307290.0	149.143	mg/L	1.5829	149.143	mg/L	1.5829	1.06%
K 404.721†	10664.8	-1326.76	mg/L	6.721	-1326.76	mg/L	6.721	0.51%
Mg 279.077†	396821.0	39.9046	mg/L	0.39502	39.9046	mg/L	0.39502	0.99%
Mn 257.610†	654325.6	2.37491	mg/L	0.024159	2.37491	mg/L	0.024159	1.02%
Mo 202.031†	77.7	0.0088656	mg/L	0.00015991	0.0088656	mg/L	0.00015991	1.80%
Na 330.237†	170.0	0.608401	mg/L	0.0293674	0.608401	mg/L	0.0293674	4.83%
Ni 231.604†	7079.2	0.257936	mg/L	0.0017777	0.257936	mg/L	0.0017777	0.69%
Pb 220.353†	8829.3	1.42951	mg/L	0.008288	1.42951	mg/L	0.008288	0.58%
Sb 206.836†	19.5	0.0072932	mg/L	0.00020220	0.0072932	mg/L	0.00020220	2.77%
Se 196.026†	-107.3	-0.0144386	mg/L	0.00444639	-0.0144386	mg/L	0.00444639	30.80%
Sn 189.927†	279.5	0.0479435	mg/L	0.00032077	0.0479435	mg/L	0.00032077	0.67%
Ti 334.940†	324899.4	1.19384	mg/L	0.023396	1.19384	mg/L	0.023396	1.96%
Tl 190.801†	-25.1	-0.0063897	mg/L	0.00546478	-0.0063897	mg/L	0.00546478	85.52%
V 290.880†	8959.9	0.172292	mg/L	0.0010300	0.172292	mg/L	0.0010300	0.60%
Zn 206.200†	46932.5	1.03563	mg/L	0.006407	1.03563	mg/L	0.006407	0.62%
B 249.772†	52344.1	1.62059	mg/L	0.010347	1.62059	mg/L	0.010347	0.64%
Si 251.611†	73670.1	3.29426	mg/L	0.139362	3.29426	mg/L	0.139362	4.23%
Ce 413.764†	1415.7	0.297	mg/L	0.0018	0.297	mg/L	0.0018	0.62%

0091101 0389

Sequence No.: 56
Sample ID: AD19178-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 81
Date Collected: 9/16/2020 1:48:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-004

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	383861.6	102	%	0.4				0.39%
Y 371.029	209935.1	123	%	0.6				0.49%
Ag 328.068†	-127.8	-0.0032401	mg/L	0.00021347	-0.0032401	mg/L	0.00021347	6.59%
Al 308.215†	443951.4	50.9281	mg/L	0.52743	50.9281	mg/L	0.52743	1.04%
As 188.979†	111.0	0.0841586	mg/L	0.00240493	0.0841586	mg/L	0.00240493	2.86%
Ba 233.527†	164980.7	1.95021	mg/L	0.004148	1.95021	mg/L	0.004148	0.21%
Be 313.107†	3131.7	0.0050608	mg/L	0.00003294	0.0050608	mg/L	0.00003294	0.65%
Ca 317.933†	14906255.7	171.736	mg/L	1.7969	171.736	mg/L	1.7969	1.05%
Cd 228.802†	135.0	0.0067502	mg/L	0.00042151	0.0067502	mg/L	0.00042151	6.24%
Co 228.616†	1350.0	0.0519226	mg/L	0.00030609	0.0519226	mg/L	0.00030609	0.59%
Cr 267.716†	6885.0	0.102956	mg/L	0.0006119	0.102956	mg/L	0.0006119	0.59%
Cu 327.393†	52317.2	0.759925	mg/L	0.0017116	0.759925	mg/L	0.0017116	0.23%
Fe 273.955†	1349814.3	153.995	mg/L	1.6962	153.995	mg/L	1.6962	1.10%
K 404.721†	10822.8	-1372.64	mg/L	11.866	-1372.64	mg/L	11.866	0.86%
Mg 279.077†	384202.5	38.6249	mg/L	0.10705	38.6249	mg/L	0.10705	0.28%
Mn 257.610†	909128.8	3.29987	mg/L	0.033711	3.29987	mg/L	0.033711	1.02%
Mo 202.031†	54.5	0.0067279	mg/L	0.00044287	0.0067279	mg/L	0.00044287	6.58%
Na 330.237†	244.6	0.794021	mg/L	0.0521530	0.794021	mg/L	0.0521530	6.57%
Ni 231.604†	4320.3	0.157455	mg/L	0.0017472	0.157455	mg/L	0.0017472	1.11%
Pb 220.353†	8898.6	1.44177	mg/L	0.011517	1.44177	mg/L	0.011517	0.80%
Sb 206.836†	18.9	0.0066958	mg/L	0.00683316	0.0066958	mg/L	0.00683316	102.05%
Se 196.026†	-113.0	-0.0161965	mg/L	0.00704772	-0.0161965	mg/L	0.00704772	43.51%
Sn 189.927†	1040.8	0.177445	mg/L	0.0022535	0.177445	mg/L	0.0022535	1.27%
Ti 334.940†	268129.7	0.985456	mg/L	0.0033121	0.985456	mg/L	0.0033121	0.34%
Tl 190.801†	-20.6	-0.0053591	mg/L	0.00045311	-0.0053591	mg/L	0.00045311	8.45%
V 290.880†	6592.5	0.123876	mg/L	0.0029754	0.123876	mg/L	0.0029754	2.40%
Zn 206.200†	39399.6	0.868721	mg/L	0.0034775	0.868721	mg/L	0.0034775	0.40%
B 249.772†	51581.4	1.63835	mg/L	0.015469	1.63835	mg/L	0.015469	0.94%
Si 251.611†	109882.1	4.92304	mg/L	0.017219	4.92304	mg/L	0.017219	0.35%
Ce 413.764†	1665.3	0.334	mg/L	0.0032	0.334	mg/L	0.0032	0.95%

Sequence No.: 57
Sample ID: AD19178-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 82
Date Collected: 9/16/2020 1:53:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-005

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	352076.8	93.4	%	0.88				0.94%
Y 371.029	185452.0	109	%	0.9				0.79%
Ag 328.068†	-323.6	-0.0055626	mg/L	0.00026373	-0.0055626	mg/L	0.00026373	4.74%
Al 308.215†	211757.3	24.2967	mg/L	0.09997	24.2967	mg/L	0.09997	0.41%
As 188.979†	152.1	0.112875	mg/L	0.0046266	0.112875	mg/L	0.0046266	4.10%
Ba 233.527†	78667.5	0.929047	mg/L	0.0028938	0.929047	mg/L	0.0028938	0.31%
Be 313.107†	1142.6	0.0034364	mg/L	0.00001136	0.0034364	mg/L	0.00001136	0.33%
Ca 317.933†	38738817.6	446.631	mg/L	2.4868	446.631	mg/L	2.4868	0.56%
Cd 228.802†	146.5	0.0071232	mg/L	0.00029591	0.0071232	mg/L	0.00029591	4.15%
Co 228.616†	949.4	0.0367880	mg/L	0.00053079	0.0367880	mg/L	0.00053079	1.44%
Cr 267.716†	6116.2	0.0908392	mg/L	0.00041573	0.0908392	mg/L	0.00041573	0.46%
Cu 327.393†	52924.8	0.768741	mg/L	0.0029591	0.768741	mg/L	0.0029591	0.38%
Fe 273.955†	1728740.0	197.226	mg/L	0.8897	197.226	mg/L	0.8897	0.45%
K 404.721†	18519.9	-1683.59	mg/L	6.582	-1683.59	mg/L	6.582	0.39%
Mg 279.077†	1666140.9	168.635	mg/L	0.4361	168.635	mg/L	0.4361	0.26%
Mn 257.610†	633326.9	2.29868	mg/L	0.010027	2.29868	mg/L	0.010027	0.44%
Mo 202.031†	91.2	0.0101114	mg/L	0.00049471	0.0101114	mg/L	0.00049471	4.89%
Na 330.237†	369.1	1.10389	mg/L	0.057115	1.10389	mg/L	0.057115	5.17%
Ni 231.604†	4957.2	0.180653	mg/L	0.0011795	0.180653	mg/L	0.0011795	0.65%
Pb 220.353†	14423.7	2.33051	mg/L	0.008842	2.33051	mg/L	0.008842	0.38%
Sb 206.836†	56.9	0.0245780	mg/L	0.00131093	0.0245780	mg/L	0.00131093	5.33%
Se 196.026†	-142.8	-0.0204407	mg/L	0.00552209	-0.0204407	mg/L	0.00552209	27.02%
Sn 189.927†	1412.7	0.240699	mg/L	0.0024519	0.240699	mg/L	0.0024519	1.02%
Ti 334.940†	309896.2	1.13877	mg/L	0.003766	1.13877	mg/L	0.003766	0.33%
Tl 190.801†	-15.3	-0.0017736	mg/L	0.00303016	-0.0017736	mg/L	0.00303016	170.85%
V 290.880†	15196.3	0.295256	mg/L	0.0015074	0.295256	mg/L	0.0015074	0.51%
Zn 206.200†	44895.0	0.990484	mg/L	0.0037731	0.990484	mg/L	0.0037731	0.38%
B 249.772†	67123.0	2.10969	mg/L	0.010216	2.10969	mg/L	0.010216	0.48%
Si 251.611†	72125.8	3.22477	mg/L	0.137713	3.22477	mg/L	0.137713	4.27%
Ce 413.764†	1702.7	0.374	mg/L	0.0072	0.374	mg/L	0.0072	1.92%

Sequence No.: 58
Sample ID: AD19178-006
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 83
Date Collected: 9/16/2020 1:58:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-006

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	374551.4	99.3	%	0.56				0.57%
Y 371.029	183748.3	108	%	0.3				0.32%
Ag 328.068†	-278.4	-0.0050273	mg/L	0.00032656	-0.0050273	mg/L	0.00032656	6.50%
Al 308.215†	140316.1	16.1036	mg/L	0.03694	16.1036	mg/L	0.03694	0.23%
As 188.979†	422.3	0.277671	mg/L	0.0010591	0.277671	mg/L	0.0010591	0.38%
Ba 233.527†	254623.9	3.01076	mg/L	0.004453	3.01076	mg/L	0.004453	0.15%
Be 313.107†	-2895.4	0.0001386	mg/L	0.00002738	0.0001386	mg/L	0.00002738	19.76%
Ca 317.933†	7241077.3	83.3231	mg/L	0.39785	83.3231	mg/L	0.39785	0.48%
Cd 228.802†	119.2	0.0062359	mg/L	0.00038636	0.0062359	mg/L	0.00038636	6.20%
Co 228.616†	928.5	0.0359999	mg/L	0.00039729	0.0359999	mg/L	0.00039729	1.10%
Cr 267.716†	7525.6	0.113052	mg/L	0.0013763	0.113052	mg/L	0.0013763	1.22%
Cu 327.393†	117615.0	1.70727	mg/L	0.003544	1.70727	mg/L	0.003544	0.21%
Fe 273.955†	2975951.5	339.520	mg/L	1.5359	339.520	mg/L	1.5359	0.45%
K 404.721†	33560.0	-2867.24	mg/L	13.764	-2867.24	mg/L	13.764	0.48%
Mg 279.077†	295528.0	29.6318	mg/L	0.05942	29.6318	mg/L	0.05942	0.20%
Mn 257.610†	305084.1	1.10712	mg/L	0.001014	1.10712	mg/L	0.001014	0.09%
Mo 202.031†	298.6	0.0292471	mg/L	0.00051821	0.0292471	mg/L	0.00051821	1.77%
Na 330.237†	72.1	0.364764	mg/L	0.0377057	0.364764	mg/L	0.0377057	10.34%
Ni 231.604†	4224.1	0.153952	mg/L	0.0013922	0.153952	mg/L	0.0013922	0.90%
Pb 220.353†	39482.3	6.37323	mg/L	0.001443	6.37323	mg/L	0.001443	0.02%
Sb 206.836†	191.9	0.0880403	mg/L	0.00413917	0.0880403	mg/L	0.00413917	4.70%
Se 196.026†	-289.3	-0.0603653	mg/L	0.00782471	-0.0603653	mg/L	0.00782471	12.96%
Sn 189.927†	416.4	0.0712232	mg/L	0.01433171	0.0712232	mg/L	0.01433171	20.12%
Ti 334.940†	716076.2	2.62977	mg/L	0.018888	2.62977	mg/L	0.018888	0.72%
Tl 190.801†	-43.2	-0.0061658	mg/L	0.00124081	-0.0061658	mg/L	0.00124081	20.12%
V 290.880†	11199.2	0.203940	mg/L	0.0018587	0.203940	mg/L	0.0018587	0.91%
Zn 206.200†	19208.2	0.421341	mg/L	0.0037187	0.421341	mg/L	0.0037187	0.88%
B 249.772†	112870.7	3.58530	mg/L	0.005894	3.58530	mg/L	0.005894	0.16%
Si 251.611†	69675.9	3.11428	mg/L	0.028102	3.11428	mg/L	0.028102	0.90%
Ce 413.764†	792.5	0.367	mg/L	0.0094	0.367	mg/L	0.0094	2.56%

Sequence No.: 59
Sample ID: AD19178-007
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 84
Date Collected: 9/16/2020 2:03:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-007

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	397161.7	105	%	0.8				0.80%
Y 371.029	198198.2	116	%	0.8				0.69%
Ag 328.068†	-111.6	-0.0030485	mg/L	0.00072589	-0.0030485	mg/L	0.00072589	23.81%
Al 308.215†	182692.0	20.9660	mg/L	0.10717	20.9660	mg/L	0.10717	0.51%
As 188.979†	196.7	0.131724	mg/L	0.0039523	0.131724	mg/L	0.0039523	3.00%
Ba 233.527†	97728.4	1.15456	mg/L	0.005589	1.15456	mg/L	0.005589	0.48%
Be 313.107†	2464.1	0.0045157	mg/L	0.00008806	0.0045157	mg/L	0.00008806	1.95%
Ca 317.933†	4461800.0	51.2658	mg/L	0.63870	51.2658	mg/L	0.63870	1.25%
Cd 228.802†	2213.4	0.0744595	mg/L	0.00095726	0.0744595	mg/L	0.00095726	1.29%
Co 228.616†	4672.2	0.177414	mg/L	0.0027995	0.177414	mg/L	0.0027995	1.58%
Cr 267.716†	3509.1	0.0497483	mg/L	0.00093428	0.0497483	mg/L	0.00093428	1.88%
Cu 327.393†	168281.8	2.44235	mg/L	0.011458	2.44235	mg/L	0.011458	0.47%
Fe 273.955†	1503071.4	171.480	mg/L	2.1117	171.480	mg/L	2.1117	1.23%
K 404.721†	13360.6	-1507.35	mg/L	8.985	-1507.35	mg/L	8.985	0.60%
Mg 279.077†	71521.8	6.91383	mg/L	0.035092	6.91383	mg/L	0.035092	0.51%
Mn 257.610†	203018.9	0.736611	mg/L	0.0034666	0.736611	mg/L	0.0034666	0.47%
Mo 202.031†	102.8	0.0111832	mg/L	0.00034468	0.0111832	mg/L	0.00034468	3.08%
Na 330.237†	427.4	1.24906	mg/L	0.095357	1.24906	mg/L	0.095357	7.63%
Ni 231.604†	22012.6	0.801812	mg/L	0.0042858	0.801812	mg/L	0.0042858	0.53%
Pb 220.353†	17375.6	2.80655	mg/L	0.006313	2.80655	mg/L	0.006313	0.22%
Sb 206.836†	61.7	0.0264831	mg/L	0.00165986	0.0264831	mg/L	0.00165986	6.27%
Se 196.026†	-138.1	-0.0248831	mg/L	0.00370393	-0.0248831	mg/L	0.00370393	14.89%
Sn 189.927†	243.8	0.0418718	mg/L	0.00113067	0.0418718	mg/L	0.00113067	2.70%
Ti 334.940†	248954.3	0.915067	mg/L	0.0211657	0.915067	mg/L	0.0211657	2.31%
Tl 190.801†	-3.9	0.0016830	mg/L	0.00108365	0.0016830	mg/L	0.00108365	64.39%
V 290.880†	4359.2	0.0773483	mg/L	0.00081547	0.0773483	mg/L	0.00081547	1.05%
Zn 206.200†	45966.6	1.01423	mg/L	0.004941	1.01423	mg/L	0.004941	0.49%
B 249.772†	58035.4	1.83134	mg/L	0.016496	1.83134	mg/L	0.016496	0.90%
Si 251.611†	101230.5	4.53384	mg/L	0.064120	4.53384	mg/L	0.064120	1.41%
Ce 413.764†	1116.3	0.275	mg/L	0.0059	0.275	mg/L	0.0059	2.14%

Sequence No.: 60
Sample ID: AD19178-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 85
Date Collected: 9/16/2020 2:07:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-008

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	382649.6	101	%	0.7				0.65%
Y 371.029	198734.2	116	%	0.6				0.51%
Ag 328.068†	-251.2	-0.0047048	mg/L	0.00014256	-0.0047048	mg/L	0.00014256	3.03%
Al 308.215†	343176.5	39.3705	mg/L	0.18447	39.3705	mg/L	0.18447	0.47%
As 188.979†	189.7	0.148659	mg/L	0.0012371	0.148659	mg/L	0.0012371	0.83%
Ba 233.527†	315471.7	3.73065	mg/L	0.015115	3.73065	mg/L	0.015115	0.41%
Be 313.107†	3209.2	0.0051242	mg/L	0.00002266	0.0051242	mg/L	0.00002266	0.44%
Ca 317.933†	3547400.5	40.7188	mg/L	0.12009	40.7188	mg/L	0.12009	0.29%
Cd 228.802†	1107.3	0.0384253	mg/L	0.00022856	0.0384253	mg/L	0.00022856	0.59%
Co 228.616†	1819.8	0.0696676	mg/L	0.00095112	0.0696676	mg/L	0.00095112	1.37%
Cr 267.716†	7650.8	0.115026	mg/L	0.0017116	0.115026	mg/L	0.0017116	1.49%
Cu 327.393†	238184.0	3.45649	mg/L	0.013164	3.45649	mg/L	0.013164	0.38%
Fe 273.955†	2562372.3	292.335	mg/L	1.3142	292.335	mg/L	1.3142	0.45%
K 404.721†	29367.7	-2462.36	mg/L	5.401	-2462.36	mg/L	5.401	0.22%
Mg 279.077†	85342.0	8.31542	mg/L	0.037868	8.31542	mg/L	0.037868	0.46%
Mn 257.610†	270122.8	0.980206	mg/L	0.0034740	0.980206	mg/L	0.0034740	0.35%
Mo 202.031†	104.9	0.0113830	mg/L	0.00082219	0.0113830	mg/L	0.00082219	7.22%
Na 330.237†	189.5	0.657007	mg/L	0.0564655	0.657007	mg/L	0.0564655	8.59%
Ni 231.604†	24601.0	0.896082	mg/L	0.0092388	0.896082	mg/L	0.0092388	1.03%
Pb 220.353†	17389.4	2.81064	mg/L	0.034213	2.81064	mg/L	0.034213	1.22%
Sb 206.836†	57.3	0.0214852	mg/L	0.00121647	0.0214852	mg/L	0.00121647	5.66%
Se 196.026†	-246.5	-0.0502262	mg/L	0.01199184	-0.0502262	mg/L	0.01199184	23.88%
Sn 189.927†	1250.8	0.213159	mg/L	0.0038594	0.213159	mg/L	0.0038594	1.81%
Ti 334.940†	339729.8	1.24828	mg/L	0.005029	1.24828	mg/L	0.005029	0.40%
Tl 190.801†	-16.2	-0.0015774	mg/L	0.00510463	-0.0015774	mg/L	0.00510463	323.60%
V 290.880†	7447.2	0.131041	mg/L	0.0022179	0.131041	mg/L	0.0022179	1.69%
Zn 206.200†	39633.5	0.873904	mg/L	0.0062806	0.873904	mg/L	0.0062806	0.72%
B 249.772†	94777.3	3.05501	mg/L	0.019797	3.05501	mg/L	0.019797	0.65%
Si 251.611†	77463.0	3.46481	mg/L	0.074554	3.46481	mg/L	0.074554	2.15%
Ce 413.764†	1615.7	0.440	mg/L	0.0062	0.440	mg/L	0.0062	1.40%

Sequence No.: 61
Sample ID: AD19178-009
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 9/16/2020 2:11:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-009

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	383685.7	102	%	0.9				0.89%
Y 371.029	198516.8	116	%	0.9				0.77%
Ag 328.068†	-178.2	-0.0038382	mg/L	0.00084174	-0.0038382	mg/L	0.00084174	21.93%
Al 308.215†	120877.5	13.8766	mg/L	0.06721	13.8766	mg/L	0.06721	0.48%
As 188.979†	58.1	0.0537570	mg/L	0.00240772	0.0537570	mg/L	0.00240772	4.48%
Ba 233.527†	49737.7	0.586783	mg/L	0.0020801	0.586783	mg/L	0.0020801	0.35%
Be 313.107†	1165.0	0.0034546	mg/L	0.00005404	0.0034546	mg/L	0.00005404	1.56%
Ca 317.933†	6658474.8	76.6031	mg/L	0.17624	76.6031	mg/L	0.17624	0.23%
Cd 228.802†	5.7	0.0025376	mg/L	0.00014285	0.0025376	mg/L	0.00014285	5.63%
Co 228.616†	3484.0	0.132532	mg/L	0.0016121	0.132532	mg/L	0.0016121	1.22%
Cr 267.716†	4155.4	0.0599354	mg/L	0.00107719	0.0599354	mg/L	0.00107719	1.80%
Cu 327.393†	22951.6	0.333887	mg/L	0.0011112	0.333887	mg/L	0.0011112	0.33%
Fe 273.955†	1201445.5	137.068	mg/L	0.1877	137.068	mg/L	0.1877	0.14%
K 404.721†	11634.6	-1191.36	mg/L	4.797	-1191.36	mg/L	4.797	0.40%
Mg 279.077†	66147.0	6.36872	mg/L	0.034650	6.36872	mg/L	0.034650	0.54%
Mn 257.610†	104711.9	0.379745	mg/L	0.0012681	0.379745	mg/L	0.0012681	0.33%
Mo 202.031†	202.0	0.0203402	mg/L	0.00057404	0.0203402	mg/L	0.00057404	2.82%
Na 330.237†	250.3	0.808219	mg/L	0.0333267	0.808219	mg/L	0.0333267	4.12%
Ni 231.604†	4282.3	0.156072	mg/L	0.0015462	0.156072	mg/L	0.0015462	0.99%
Pb 220.353†	1740.5	0.282998	mg/L	0.0020022	0.282998	mg/L	0.0020022	0.71%
Sb 206.836†	5.7	0.0007562	mg/L	0.00212046	0.0007562	mg/L	0.00212046	280.41%
Se 196.026†	-90.7	-0.0088387	mg/L	0.00756527	-0.0088387	mg/L	0.00756527	85.59%
Sn 189.927†	49.5	0.0088291	mg/L	0.00080359	0.0088291	mg/L	0.00080359	9.10%
Ti 334.940†	333802.1	1.22652	mg/L	0.003032	1.22652	mg/L	0.003032	0.25%
Tl 190.801†	-19.7	-0.0040741	mg/L	0.00266149	-0.0040741	mg/L	0.00266149	65.33%
V 290.880†	3747.5	0.0676344	mg/L	0.00119733	0.0676344	mg/L	0.00119733	1.77%
Zn 206.200†	9455.5	0.205249	mg/L	0.0021961	0.205249	mg/L	0.0021961	1.07%
B 249.772†	46311.5	1.46522	mg/L	0.004307	1.46522	mg/L	0.004307	0.29%
Si 251.611†	84852.0	3.79701	mg/L	0.026088	3.79701	mg/L	0.026088	0.69%
Ce 413.764†	837.0	0.209	mg/L	0.0022	0.209	mg/L	0.0022	1.05%

Sequence No.: 62
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 6
Date Collected: 9/16/2020 2:15:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	372087.8	98.7	%	0.10				0.10%
Y 371.029	140872.7	82.4	%	0.03				0.03%
Ag 328.068†	8505.0	0.0991661	mg/L	0.00032086	0.0991661	mg/L	0.00032086	0.32%
Al 308.215†	41442.9	4.79060	mg/L	0.016593	4.79060	mg/L	0.016593	0.35%
As 188.979†	905.4	0.471828	mg/L	0.0008762	0.471828	mg/L	0.0008762	0.19%
Ba 233.527†	42343.3	0.499301	mg/L	0.0019000	0.499301	mg/L	0.0019000	0.38%
Be 313.107†	569294.5	0.467435	mg/L	0.0035859	0.467435	mg/L	0.0035859	0.77%
Ca 317.933†	4280635.4	49.1762	mg/L	0.31477	49.1762	mg/L	0.31477	0.64%
Cd 228.802†	14345.8	0.469719	mg/L	0.0020415	0.469719	mg/L	0.0020415	0.43%
Co 228.616†	12458.7	0.471547	mg/L	0.0022234	0.471547	mg/L	0.0022234	0.47%
Cr 267.716†	32099.6	0.500362	mg/L	0.0023737	0.500362	mg/L	0.0023737	0.47%
Cu 327.393†	32988.6	0.479505	mg/L	0.0012366	0.479505	mg/L	0.0012366	0.26%
Fe 273.955†	42458.7	4.83959	mg/L	0.019451	4.83959	mg/L	0.019451	0.40%
K 404.721†	1202.9	-36.2881	mg/L	4.93167	-36.2881	mg/L	4.93167	13.59%
Mg 279.077†	487440.8	49.0950	mg/L	0.27780	49.0950	mg/L	0.27780	0.57%
Mn 257.610†	131742.2	0.477868	mg/L	0.0018756	0.477868	mg/L	0.0018756	0.39%
Mo 202.031†	5082.4	0.470618	mg/L	0.0009037	0.470618	mg/L	0.0009037	0.19%
Na 330.237†	19895.5	49.6935	mg/L	0.20629	49.6935	mg/L	0.20629	0.42%
Ni 231.604†	12973.9	0.472622	mg/L	0.0019947	0.472622	mg/L	0.0019947	0.42%
Pb 220.353†	2912.5	0.467119	mg/L	0.0021054	0.467119	mg/L	0.0021054	0.45%
Sb 206.836†	978.6	0.497687	mg/L	0.0056009	0.497687	mg/L	0.0056009	1.13%
Se 196.026†	869.7	0.469115	mg/L	0.0043783	0.469115	mg/L	0.0043783	0.93%
Sn 189.927†	2811.7	0.478663	mg/L	0.0020965	0.478663	mg/L	0.0020965	0.44%
Ti 334.940†	131246.9	0.482989	mg/L	0.0011475	0.482989	mg/L	0.0011475	0.24%
Tl 190.801†	990.9	0.518749	mg/L	0.0017195	0.518749	mg/L	0.0017195	0.33%
V 290.880†	23405.7	0.483379	mg/L	0.0048849	0.483379	mg/L	0.0048849	1.01%
Zn 206.200†	22358.4	0.491139	mg/L	0.0009045	0.491139	mg/L	0.0009045	0.18%
B 249.772†	33329.5	0.507891	mg/L	0.0033866	0.507891	mg/L	0.0033866	0.67%
Si 251.611†	109479.6	4.89763	mg/L	0.022047	4.89763	mg/L	0.022047	0.45%
Ce 413.764†	47530.7	6.371	mg/L	0.0497	6.371	mg/L	0.0497	0.78%

0091101 0396

Sequence No.: 63
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 9/16/2020 2:19:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	383545.3	102	%	1.0				0.94%
Y 371.029	176149.1	103	%	0.9				0.90%
Ag 328.068†	91.4	-0.0006406	mg/L	0.00095758	-0.0006406	mg/L	0.00095758	149.49%
Al 308.215†	-3.0	0.0144302	mg/L	0.00353665	0.0144302	mg/L	0.00353665	24.51%
As 188.979†	6.4	0.0034500	mg/L	0.00162087	0.0034500	mg/L	0.00162087	46.98%
Ba 233.527†	11.0	-0.0015270	mg/L	0.00014432	-0.0015270	mg/L	0.00014432	9.45%
Be 313.107†	38.2	0.0025344	mg/L	0.00001644	0.0025344	mg/L	0.00001644	0.65%
Ca 317.933†	1040.4	-0.186394	mg/L	0.0001077	-0.186394	mg/L	0.0001077	0.06%
Cd 228.802†	5.2	0.0025203	mg/L	0.00032878	0.0025203	mg/L	0.00032878	13.04%
Co 228.616†	7.4	0.0012069	mg/L	0.00040905	0.0012069	mg/L	0.00040905	33.89%
Cr 267.716†	-27.5	-0.0059921	mg/L	0.00013313	-0.0059921	mg/L	0.00013313	2.22%
Cu 327.393†	39.2	0.0014731	mg/L	0.00031277	0.0014731	mg/L	0.00031277	21.23%
Fe 273.955†	125.2	0.0097880	mg/L	0.00065811	0.0097880	mg/L	0.00065811	6.72%
K 404.721†	-3226.0	-57.0824	mg/L	10.97437	-57.0824	mg/L	10.97437	19.23%
Mg 279.077†	78.7	-0.331697	mg/L	0.0023650	-0.331697	mg/L	0.0023650	0.71%
Mn 257.610†	104.9	0.0000097	mg/L	0.00008236	0.0000097	mg/L	0.00008236	846.43%
Mo 202.031†	-4.3	0.0013037	mg/L	0.00008981	0.0013037	mg/L	0.00008981	6.89%
Na 330.237†	1.0	0.187990	mg/L	0.1110780	0.187990	mg/L	0.1110780	59.09%
Ni 231.604†	7.1	0.0003691	mg/L	0.00016558	0.0003691	mg/L	0.00016558	44.86%
Pb 220.353†	-1.4	0.0005228	mg/L	0.00114309	0.0005228	mg/L	0.00114309	218.63%
Sb 206.836†	-5.9	-0.0030752	mg/L	0.00548218	-0.0030752	mg/L	0.00548218	178.27%
Se 196.026†	3.5	0.0045328	mg/L	0.00433334	0.0045328	mg/L	0.00433334	95.60%
Sn 189.927†	4.5	0.0011699	mg/L	0.00040874	0.0011699	mg/L	0.00040874	34.94%
Ti 334.940†	77.8	0.0014960	mg/L	0.00003099	0.0014960	mg/L	0.00003099	2.07%
Tl 190.801†	4.2	-0.0013671	mg/L	0.00161229	-0.0013671	mg/L	0.00161229	117.94%
V 290.880†	-1.1	0.0014440	mg/L	0.00040993	0.0014440	mg/L	0.00040993	28.39%
Zn 206.200†	76.4	-0.0025635	mg/L	0.00012473	-0.0025635	mg/L	0.00012473	4.87%
B 249.772†	215.8	0.0154356	mg/L	0.00059347	0.0154356	mg/L	0.00059347	3.84%
Si 251.611†	295.6	-0.0058872	mg/L	0.00162542	-0.0058872	mg/L	0.00162542	27.61%
Ce 413.764†	71.5	-0.005	mg/L	0.0049	-0.005	mg/L	0.0049	105.75%

Sequence No.: 64
Sample ID: AD19178-010
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 87
Date Collected: 9/16/2020 2:23:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-010

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	376775.3	99.9	%	0.36				0.36%
Y 371.029	217127.6	127	%	0.6				0.51%
Ag 328.068†	-195.9	-0.0040478	mg/L	0.00035311	-0.0040478	mg/L	0.00035311	8.72%
Al 308.215†	401867.1	46.1014	mg/L	0.05148	46.1014	mg/L	0.05148	0.11%
As 188.979†	100.2	0.0805875	mg/L	0.00314759	0.0805875	mg/L	0.00314759	3.91%
Ba 233.527†	41044.3	0.483932	mg/L	0.0006772	0.483932	mg/L	0.0006772	0.14%
Be 313.107†	3558.8	0.0054097	mg/L	0.00003977	0.0054097	mg/L	0.00003977	0.74%
Ca 317.933†	10233981.4	117.844	mg/L	2.2641	117.844	mg/L	2.2641	1.92%
Cd 228.802†	52.5	0.0040605	mg/L	0.00014764	0.0040605	mg/L	0.00014764	3.64%
Co 228.616†	1903.8	0.0728402	mg/L	0.00072917	0.0728402	mg/L	0.00072917	1.00%
Cr 267.716†	5654.2	0.0835569	mg/L	0.00018178	0.0835569	mg/L	0.00018178	0.22%
Cu 327.393†	32274.8	0.469149	mg/L	0.0014304	0.469149	mg/L	0.0014304	0.30%
Fe 273.955†	1456032.8	166.113	mg/L	0.0851	166.113	mg/L	0.0851	0.05%
K 404.721†	15439.6	-1421.54	mg/L	10.138	-1421.54	mg/L	10.138	0.71%
Mg 279.077†	392930.0	39.5100	mg/L	0.06562	39.5100	mg/L	0.06562	0.17%
Mn 257.610†	1499841.7	5.44423	mg/L	0.004001	5.44423	mg/L	0.004001	0.07%
Mo 202.031†	240.7	0.0239111	mg/L	0.00053158	0.0239111	mg/L	0.00053158	2.22%
Na 330.237†	130.4	0.510023	mg/L	0.0376624	0.510023	mg/L	0.0376624	7.38%
Ni 231.604†	4905.8	0.178781	mg/L	0.0008073	0.178781	mg/L	0.0008073	0.45%
Pb 220.353†	2058.8	0.337657	mg/L	0.0021798	0.337657	mg/L	0.0021798	0.65%
Sb 206.836†	13.6	0.0032052	mg/L	0.00493119	0.0032052	mg/L	0.00493119	153.85%
Se 196.026†	-120.3	-0.0168247	mg/L	0.00371297	-0.0168247	mg/L	0.00371297	22.07%
Sn 189.927†	50.4	0.0089700	mg/L	0.00143576	0.0089700	mg/L	0.00143576	16.01%
Ti 334.940†	212448.3	0.781061	mg/L	0.0142864	0.781061	mg/L	0.0142864	1.83%
Tl 190.801†	-28.0	-0.0102226	mg/L	0.00282210	-0.0102226	mg/L	0.00282210	27.61%
V 290.880†	6751.8	0.126483	mg/L	0.0022058	0.126483	mg/L	0.0022058	1.74%
Zn 206.200†	31469.0	0.693003	mg/L	0.0017374	0.693003	mg/L	0.0017374	0.25%
B 249.772†	54659.1	1.75255	mg/L	0.000988	1.75255	mg/L	0.000988	0.06%
Si 251.611†	102183.0	4.57648	mg/L	0.111969	4.57648	mg/L	0.111969	2.45%
Ce 413.764†	1695.9	0.348	mg/L	0.0068	0.348	mg/L	0.0068	1.95%

Sequence No.: 65
Sample ID: AD19178-011
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 88
Date Collected: 9/16/2020 2:27:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-011

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	377891.4	100	%	0.4				0.41%
Y 371.029	208615.7	122	%	0.5				0.42%
Ag 328.068†	-264.0	-0.0048558	mg/L	0.00157882	-0.0048558	mg/L	0.00157882	32.51%
Al 308.215†	363683.6	41.7229	mg/L	0.09834	41.7229	mg/L	0.09834	0.24%
As 188.979†	111.6	0.0811422	mg/L	0.00342410	0.0811422	mg/L	0.00342410	4.22%
Ba 233.527†	44578.4	0.525745	mg/L	0.0006838	0.525745	mg/L	0.0006838	0.13%
Be 313.107†	1972.7	0.0041143	mg/L	0.00001638	0.0041143	mg/L	0.00001638	0.40%
Ca 317.933†	30848673.4	355.623	mg/L	1.6362	355.623	mg/L	1.6362	0.46%
Cd 228.802†	61.3	0.0043465	mg/L	0.00016714	0.0043465	mg/L	0.00016714	3.85%
Co 228.616†	1556.6	0.0597255	mg/L	0.00019924	0.0597255	mg/L	0.00019924	0.33%
Cr 267.716†	8257.6	0.124590	mg/L	0.0002801	0.124590	mg/L	0.0002801	0.22%
Cu 327.393†	19966.5	0.290580	mg/L	0.0010079	0.290580	mg/L	0.0010079	0.35%
Fe 273.955†	1178268.4	134.423	mg/L	0.2387	134.423	mg/L	0.2387	0.18%
K 404.721†	9585.8	-1196.90	mg/L	5.313	-1196.90	mg/L	5.313	0.44%
Mg 279.077†	567559.8	57.2204	mg/L	0.03735	57.2204	mg/L	0.03735	0.07%
Mn 257.610†	886205.9	3.21666	mg/L	0.004947	3.21666	mg/L	0.004947	0.15%
Mo 202.031†	-0.6	0.0016465	mg/L	0.00040255	0.0016465	mg/L	0.00040255	24.45%
Na 330.237†	259.6	0.831411	mg/L	0.0951793	0.831411	mg/L	0.0951793	11.45%
Ni 231.604†	3978.2	0.144996	mg/L	0.0011298	0.144996	mg/L	0.0011298	0.78%
Pb 220.353†	2995.9	0.488340	mg/L	0.0035958	0.488340	mg/L	0.0035958	0.74%
Sb 206.836†	7.9	0.0010667	mg/L	0.00097915	0.0010667	mg/L	0.00097915	91.80%
Se 196.026†	-87.1	-0.0076480	mg/L	0.00351646	-0.0076480	mg/L	0.00351646	45.98%
Sn 189.927†	81.8	0.0143092	mg/L	0.00139901	0.0143092	mg/L	0.00139901	9.78%
Ti 334.940†	194514.9	0.715232	mg/L	0.0143889	0.715232	mg/L	0.0143889	2.01%
Tl 190.801†	-8.9	-0.0014929	mg/L	0.00340342	-0.0014929	mg/L	0.00340342	227.97%
V 290.880†	6576.0	0.124908	mg/L	0.0018665	0.124908	mg/L	0.0018665	1.49%
Zn 206.200†	32291.2	0.711221	mg/L	0.0014246	0.711221	mg/L	0.0014246	0.20%
B 249.772†	43498.9	1.41029	mg/L	0.003276	1.41029	mg/L	0.003276	0.23%
Si 251.611†	66347.9	2.96503	mg/L	0.095814	2.96503	mg/L	0.095814	3.23%
Ce 413.764†	1693.8	0.322	mg/L	0.0014	0.322	mg/L	0.0014	0.42%

Sequence No.: 66
Sample ID: AD19178-012
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 89
Date Collected: 9/16/2020 2:31:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-012

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	395048.9	105	%	0.9				0.85%
Y 371.029	213241.3	125	%	1.0				0.78%
Ag 328.068†	-217.6	-0.0043062	mg/L	0.00086586	-0.0043062	mg/L	0.00086586	20.11%
Al 308.215†	340761.2	39.0938	mg/L	1.05833	39.0938	mg/L	1.05833	2.71%
As 188.979†	211.6	0.135652	mg/L	0.0054801	0.135652	mg/L	0.0054801	4.04%
Ba 233.527†	63074.7	0.744571	mg/L	0.0028423	0.744571	mg/L	0.0028423	0.38%
Be 313.107†	2814.3	0.0048016	mg/L	0.00001876	0.0048016	mg/L	0.00001876	0.39%
Ca 317.933†	22195859.9	255.818	mg/L	2.8523	255.818	mg/L	2.8523	1.11%
Cd 228.802†	82.7	0.0050448	mg/L	0.00034091	0.0050448	mg/L	0.00034091	6.76%
Co 228.616†	2963.9	0.112885	mg/L	0.0013702	0.112885	mg/L	0.0013702	1.21%
Cr 267.716†	5367.9	0.0790453	mg/L	0.00078525	0.0790453	mg/L	0.00078525	0.99%
Cu 327.393†	23762.8	0.345656	mg/L	0.0011543	0.345656	mg/L	0.0011543	0.33%
Fe 273.955†	1308426.0	149.273	mg/L	4.3253	149.273	mg/L	4.3253	2.90%
K 404.721†	10300.4	-1333.72	mg/L	28.764	-1333.72	mg/L	28.764	2.16%
Mg 279.077†	397258.6	39.9490	mg/L	1.18289	39.9490	mg/L	1.18289	2.96%
Mn 257.610†	728824.1	2.64534	mg/L	0.074944	2.64534	mg/L	0.074944	2.83%
Mo 202.031†	35.8	0.0050010	mg/L	0.00114764	0.0050010	mg/L	0.00114764	22.95%
Na 330.237†	148.3	0.554497	mg/L	0.0551973	0.554497	mg/L	0.0551973	9.95%
Ni 231.604†	4007.9	0.146080	mg/L	0.0014671	0.146080	mg/L	0.0014671	1.00%
Pb 220.353†	5380.5	0.872886	mg/L	0.0100374	0.872886	mg/L	0.0100374	1.15%
Sb 206.836†	26.1	0.0092761	mg/L	0.00284315	0.0092761	mg/L	0.00284315	30.65%
Se 196.026†	-99.1	-0.0100503	mg/L	0.00220037	-0.0100503	mg/L	0.00220037	21.89%
Sn 189.927†	83.4	0.0145899	mg/L	0.00058052	0.0145899	mg/L	0.00058052	3.98%
Ti 334.940†	171005.2	0.628933	mg/L	0.0082476	0.628933	mg/L	0.0082476	1.31%
Tl 190.801†	-6.4	-0.0012020	mg/L	0.00118958	-0.0012020	mg/L	0.00118958	98.97%
V 290.880†	6041.4	0.113018	mg/L	0.0026678	0.113018	mg/L	0.0026678	2.36%
Zn 206.200†	24148.9	0.530811	mg/L	0.0024841	0.530811	mg/L	0.0024841	0.47%
B 249.772†	48829.5	1.57209	mg/L	0.028427	1.57209	mg/L	0.028427	1.81%
Si 251.611†	72999.4	3.26415	mg/L	0.052307	3.26415	mg/L	0.052307	1.60%
Ce 413.764†	1330.3	0.285	mg/L	0.0005	0.285	mg/L	0.0005	0.19%

Sequence No.: 67
Sample ID: AD19178-013
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 90
Date Collected: 9/16/2020 2:36:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-013

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	393494.3	104	%	1.7				1.65%
Y 371.029	212240.0	124	%	1.9				1.55%
Ag 328.068†	-222.1	-0.0043591	mg/L	0.00041404	-0.0043591	mg/L	0.00041404	9.50%
Al 308.215†	476767.0	54.6916	mg/L	0.91882	54.6916	mg/L	0.91882	1.68%
As 188.979†	140.1	0.0950825	mg/L	0.00413320	0.0950825	mg/L	0.00413320	4.35%
Ba 233.527†	36056.4	0.424922	mg/L	0.0008891	0.424922	mg/L	0.0008891	0.21%
Be 313.107†	2329.7	0.0044059	mg/L	0.00002564	0.0044059	mg/L	0.00002564	0.58%
Ca 317.933†	17872787.2	205.954	mg/L	5.3030	205.954	mg/L	5.3030	2.57%
Cd 228.802†	63.1	0.0044055	mg/L	0.00010357	0.0044055	mg/L	0.00010357	2.35%
Co 228.616†	1440.5	0.0553407	mg/L	0.00193277	0.0553407	mg/L	0.00193277	3.49%
Cr 267.716†	5849.2	0.0866307	mg/L	0.00218507	0.0866307	mg/L	0.00218507	2.52%
Cu 327.393†	11506.5	0.167841	mg/L	0.0004785	0.167841	mg/L	0.0004785	0.29%
Fe 273.955†	1134842.7	129.469	mg/L	2.2327	129.469	mg/L	2.2327	1.72%
K 404.721†	8156.7	-1169.77	mg/L	26.433	-1169.77	mg/L	26.433	2.26%
Mg 279.077†	989235.9	99.9853	mg/L	1.61471	99.9853	mg/L	1.61471	1.61%
Mn 257.610†	454348.9	1.64897	mg/L	0.027372	1.64897	mg/L	0.027372	1.66%
Mo 202.031†	-43.5	-0.0023093	mg/L	0.00100875	-0.0023093	mg/L	0.00100875	43.68%
Na 330.237†	413.8	1.21507	mg/L	0.163499	1.21507	mg/L	0.163499	13.46%
Ni 231.604†	4135.2	0.150714	mg/L	0.0035646	0.150714	mg/L	0.0035646	2.37%
Pb 220.353†	534.8	0.0926177	mg/L	0.00044075	0.0926177	mg/L	0.00044075	0.48%
Sb 206.836†	15.1	0.0042685	mg/L	0.00250028	0.0042685	mg/L	0.00250028	58.58%
Se 196.026†	-96.8	-0.0141445	mg/L	0.00598920	-0.0141445	mg/L	0.00598920	42.34%
Sn 189.927†	-16.0	-0.0023244	mg/L	0.00191058	-0.0023244	mg/L	0.00191058	82.20%
Ti 334.940†	156191.8	0.574556	mg/L	0.0229229	0.574556	mg/L	0.0229229	3.99%
Tl 190.801†	-10.3	-0.0034894	mg/L	0.00383980	-0.0034894	mg/L	0.00383980	110.04%
V 290.880†	5677.2	0.106981	mg/L	0.0010740	0.106981	mg/L	0.0010740	1.00%
Zn 206.200†	22093.9	0.485279	mg/L	0.0013381	0.485279	mg/L	0.0013381	0.28%
B 249.772†	43755.1	1.38483	mg/L	0.014639	1.38483	mg/L	0.014639	1.06%
Si 251.611†	194486.0	8.72853	mg/L	0.060064	8.72853	mg/L	0.060064	0.69%
Ce 413.764†	1232.9	0.256	mg/L	0.0077	0.256	mg/L	0.0077	2.99%

Sequence No.: 68
Sample ID: AD19230-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 91
Date Collected: 9/16/2020 2:41:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19230-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	413726.9	110	%	1.0				0.87%
Y 371.029	226923.3	133	%	1.1				0.83%
Ag 328.068†	-321.3	-0.0055361	mg/L	0.00007435	-0.0055361	mg/L	0.00007435	1.34%
Al 308.215†	1022664.7	117.294	mg/L	1.1198	117.294	mg/L	1.1198	0.95%
As 188.979†	-13.8	0.0300082	mg/L	0.00301865	0.0300082	mg/L	0.00301865	10.06%
Ba 233.527†	76571.0	0.904244	mg/L	0.0010820	0.904244	mg/L	0.0010820	0.12%
Be 313.107†	-12888.2	-0.0080223	mg/L	0.00009366	-0.0080223	mg/L	0.00009366	1.17%
Ca 317.933†	4233611.8	48.6338	mg/L	0.46723	48.6338	mg/L	0.46723	0.96%
Cd 228.802†	-51.8	0.0006649	mg/L	0.00021824	0.0006649	mg/L	0.00021824	32.82%
Co 228.616†	2766.1	0.105414	mg/L	0.0013442	0.105414	mg/L	0.0013442	1.28%
Cr 267.716†	16420.6	0.253246	mg/L	0.0023877	0.253246	mg/L	0.0023877	0.94%
Cu 327.393†	21006.1	0.305662	mg/L	0.0013513	0.305662	mg/L	0.0013513	0.44%
Fe 273.955†	1903453.4	217.159	mg/L	2.4735	217.159	mg/L	2.4735	1.14%
K 404.721†	18412.1	-1883.86	mg/L	8.740	-1883.86	mg/L	8.740	0.46%
Mg 279.077†	447883.8	45.0832	mg/L	0.15138	45.0832	mg/L	0.15138	0.34%
Mn 257.610†	819465.0	2.97438	mg/L	0.031868	2.97438	mg/L	0.031868	1.07%
Mo 202.031†	17.6	0.0033214	mg/L	0.00070903	0.0033214	mg/L	0.00070903	21.35%
Na 330.237†	439.8	1.27971	mg/L	0.055567	1.27971	mg/L	0.055567	4.34%
Ni 231.604†	4402.8	0.160461	mg/L	0.0017857	0.160461	mg/L	0.0017857	1.11%
Pb 220.353†	1120.7	0.193592	mg/L	0.0038543	0.193592	mg/L	0.0038543	1.99%
Sb 206.836†	3.8	0.0087370	mg/L	0.00214876	0.0087370	mg/L	0.00214876	24.59%
Se 196.026†	-184.8	-0.0375097	mg/L	0.00838948	-0.0375097	mg/L	0.00838948	22.37%
Sn 189.927†	59.7	0.0105491	mg/L	0.00123442	0.0105491	mg/L	0.00123442	11.70%
Ti 334.940†	2031631.4	7.45888	mg/L	0.068775	7.45888	mg/L	0.068775	0.92%
Tl 190.801†	-126.7	-0.0129581	mg/L	0.00205406	-0.0129581	mg/L	0.00205406	15.85%
V 290.880†	20317.9	0.397562	mg/L	0.0045914	0.397562	mg/L	0.0045914	1.15%
Zn 206.200†	27674.7	0.608932	mg/L	0.0053470	0.608932	mg/L	0.0053470	0.88%
B 249.772†	73218.3	2.31201	mg/L	0.022471	2.31201	mg/L	0.022471	0.97%
Si 251.611†	61864.2	2.76333	mg/L	0.060251	2.76333	mg/L	0.060251	2.18%
Ce 413.764†	2467.1	0.493	mg/L	0.0059	0.493	mg/L	0.0059	1.19%

Sequence No.: 69
Sample ID: AD19228-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 92
Date Collected: 9/16/2020 2:45:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19228-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	404305.2	107	%	0.3				0.24%
Y 371.029	211959.7	124	%	0.3				0.27%
Ag 328.068†	-271.9	-0.0049494	mg/L	0.00034400	-0.0049494	mg/L	0.00034400	6.95%
Al 308.215†	735881.5	84.4050	mg/L	0.60436	84.4050	mg/L	0.60436	0.72%
As 188.979†	16.4	0.0392813	mg/L	0.00338671	0.0392813	mg/L	0.00338671	8.62%
Ba 233.527†	60501.6	0.714129	mg/L	0.0005109	0.714129	mg/L	0.0005109	0.07%
Be 313.107†	-9419.6	-0.0051895	mg/L	0.00004319	-0.0051895	mg/L	0.00004319	0.83%
Ca 317.933†	4592955.2	52.7786	mg/L	0.41711	52.7786	mg/L	0.41711	0.79%
Cd 228.802†	-18.3	0.0017538	mg/L	0.00011832	0.0017538	mg/L	0.00011832	6.75%
Co 228.616†	1946.7	0.0744604	mg/L	0.00048888	0.0744604	mg/L	0.00048888	0.66%
Cr 267.716†	14715.6	0.226374	mg/L	0.0020932	0.226374	mg/L	0.0020932	0.92%
Cu 327.393†	22666.6	0.329752	mg/L	0.0008440	0.329752	mg/L	0.0008440	0.26%
Fe 273.955†	1573160.0	179.476	mg/L	1.3020	179.476	mg/L	1.3020	0.73%
K 404.721†	14058.4	-1576.16	mg/L	15.880	-1576.16	mg/L	15.880	1.01%
Mg 279.077†	339680.2	34.1096	mg/L	0.18819	34.1096	mg/L	0.18819	0.55%
Mn 257.610†	627218.0	2.27650	mg/L	0.005840	2.27650	mg/L	0.005840	0.26%
Mo 202.031†	13.9	0.0029844	mg/L	0.00093482	0.0029844	mg/L	0.00093482	31.32%
Na 330.237†	774.1	2.11164	mg/L	0.036894	2.11164	mg/L	0.036894	1.75%
Ni 231.604†	3407.8	0.124224	mg/L	0.0008099	0.124224	mg/L	0.0008099	0.65%
Pb 220.353†	1822.2	0.303385	mg/L	0.0005753	0.303385	mg/L	0.0005753	0.19%
Sb 206.836†	18.7	0.0129901	mg/L	0.00274156	0.0129901	mg/L	0.00274156	21.11%
Se 196.026†	-153.6	-0.0310248	mg/L	0.00271061	-0.0310248	mg/L	0.00271061	8.74%
Sn 189.927†	80.6	0.0141163	mg/L	0.00213357	0.0141163	mg/L	0.00213357	15.11%
Ti 334.940†	1392130.4	5.11142	mg/L	0.043578	5.11142	mg/L	0.043578	0.85%
Tl 190.801†	-93.4	-0.0128505	mg/L	0.00469796	-0.0128505	mg/L	0.00469796	36.56%
V 290.880†	17550.3	0.344208	mg/L	0.0027331	0.344208	mg/L	0.0027331	0.79%
Zn 206.200†	27980.6	0.615711	mg/L	0.0017479	0.615711	mg/L	0.0017479	0.28%
B 249.772†	61777.1	1.93067	mg/L	0.003144	1.93067	mg/L	0.003144	0.16%
Si 251.611†	67501.6	3.01690	mg/L	0.037029	3.01690	mg/L	0.037029	1.23%
Ce 413.764†	2021.7	0.403	mg/L	0.0041	0.403	mg/L	0.0041	1.03%

Sequence No.: 70
Sample ID: AD19229-001
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 93
Date Collected: 9/16/2020 2:50:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19229-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	413727.5	110	%	0.4				0.39%
Y 371.029	220829.1	129	%	0.6				0.45%
Ag 328.068†	-340.4	-0.0057621	mg/L	0.00015851	-0.0057621	mg/L	0.00015851	2.75%
Al 308.215†	888017.2	101.852	mg/L	0.4902	101.852	mg/L	0.4902	0.48%
As 188.979†	10.8	0.0475418	mg/L	0.00130906	0.0475418	mg/L	0.00130906	2.75%
Ba 233.527†	59668.4	0.704272	mg/L	0.0009109	0.704272	mg/L	0.0009109	0.13%
Be 313.107†	-7029.5	-0.0032376	mg/L	0.00007845	-0.0032376	mg/L	0.00007845	2.42%
Ca 317.933†	4204078.5	48.2931	mg/L	0.25265	48.2931	mg/L	0.25265	0.52%
Cd 228.802†	-39.6	0.0010617	mg/L	0.00007917	0.0010617	mg/L	0.00007917	7.46%
Co 228.616†	2154.2	0.0822983	mg/L	0.00123412	0.0822983	mg/L	0.00123412	1.50%
Cr 267.716†	19265.2	0.298080	mg/L	0.0033952	0.298080	mg/L	0.0033952	1.14%
Cu 327.393†	21549.3	0.313542	mg/L	0.0004077	0.313542	mg/L	0.0004077	0.13%
Fe 273.955†	2145298.5	244.751	mg/L	1.2729	244.751	mg/L	1.2729	0.52%
K 404.721†	21579.7	-2109.47	mg/L	18.729	-2109.47	mg/L	18.729	0.89%
Mg 279.077†	383817.4	38.5858	mg/L	0.08271	38.5858	mg/L	0.08271	0.21%
Mn 257.610†	686803.5	2.49280	mg/L	0.013864	2.49280	mg/L	0.013864	0.56%
Mo 202.031†	19.2	0.0034682	mg/L	0.00080761	0.0034682	mg/L	0.00080761	23.29%
Na 330.237†	672.2	1.85821	mg/L	0.042221	1.85821	mg/L	0.042221	2.27%
Ni 231.604†	4271.1	0.155665	mg/L	0.0024441	0.155665	mg/L	0.0024441	1.57%
Pb 220.353†	3647.5	0.599701	mg/L	0.0060618	0.599701	mg/L	0.0060618	1.01%
Sb 206.836†	31.3	0.0182324	mg/L	0.00261613	0.0182324	mg/L	0.00261613	14.35%
Se 196.026†	-218.9	-0.0483251	mg/L	0.00077710	-0.0483251	mg/L	0.00077710	1.61%
Sn 189.927†	2092.1	0.356261	mg/L	0.0045735	0.356261	mg/L	0.0045735	1.28%
Ti 334.940†	1430503.5	5.25228	mg/L	0.019103	5.25228	mg/L	0.019103	0.36%
Tl 190.801†	-90.9	-0.0103086	mg/L	0.00220695	-0.0103086	mg/L	0.00220695	21.41%
V 290.880†	21500.9	0.419518	mg/L	0.0006978	0.419518	mg/L	0.0006978	0.17%
Zn 206.200†	30023.9	0.660984	mg/L	0.0013532	0.660984	mg/L	0.0013532	0.20%
B 249.772†	82584.3	2.60508	mg/L	0.014245	2.60508	mg/L	0.014245	0.55%
Si 251.611†	65692.4	2.93551	mg/L	0.030580	2.93551	mg/L	0.030580	1.04%
Ce 413.764†	2447.6	0.513	mg/L	0.0048	0.513	mg/L	0.0048	0.94%

Sequence No.: 71
Sample ID: AD19233-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 94
Date Collected: 9/16/2020 2:55:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19233-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	412050.1	109	%	1.9				1.76%
Y 371.029	197909.7	116	%	2.1				1.77%
Ag 328.068†	674.8	0.0062803	mg/L	0.00041732	0.0062803	mg/L	0.00041732	6.64%
Al 308.215†	144188.4	16.5463	mg/L	0.15687	16.5463	mg/L	0.15687	0.95%
As 188.979†	1980.5	1.04088	mg/L	0.025489	1.04088	mg/L	0.025489	2.45%
Ba 233.527†	183571.1	2.17015	mg/L	0.017899	2.17015	mg/L	0.017899	0.82%
Be 313.107†	327.2	0.0027705	mg/L	0.00005905	0.0027705	mg/L	0.00005905	2.13%
Ca 317.933†	6487012.2	74.6254	mg/L	1.73693	74.6254	mg/L	1.73693	2.33%
Cd 228.802†	771.4	0.0274826	mg/L	0.00108020	0.0274826	mg/L	0.00108020	3.93%
Co 228.616†	441.5	0.0176042	mg/L	0.00066522	0.0176042	mg/L	0.00066522	3.78%
Cr 267.716†	7713.8	0.116018	mg/L	0.0034276	0.116018	mg/L	0.0034276	2.95%
Cu 327.393†	32489.4	0.472262	mg/L	0.0040080	0.472262	mg/L	0.0040080	0.85%
Fe 273.955†	554061.1	63.2079	mg/L	1.41245	63.2079	mg/L	1.41245	2.23%
K 404.721†	102.8	-634.931	mg/L	3.3381	-634.931	mg/L	3.3381	0.53%
Mg 279.077†	64970.7	6.24943	mg/L	0.065892	6.24943	mg/L	0.065892	1.05%
Mn 257.610†	767121.0	2.78437	mg/L	0.063411	2.78437	mg/L	0.063411	2.28%
Mo 202.031†	130.5	0.0137426	mg/L	0.00047503	0.0137426	mg/L	0.00047503	3.46%
Na 330.237†	1595.0	4.15449	mg/L	0.116055	4.15449	mg/L	0.116055	2.79%
Ni 231.604†	2833.7	0.103314	mg/L	0.0032635	0.103314	mg/L	0.0032635	3.16%
Pb 220.353†	2690.5	0.436579	mg/L	0.0116851	0.436579	mg/L	0.0116851	2.68%
Sb 206.836†	11.5	0.0051170	mg/L	0.00183659	0.0051170	mg/L	0.00183659	35.89%
Se 196.026†	-14.7	0.0118506	mg/L	0.00252067	0.0118506	mg/L	0.00252067	21.27%
Sn 189.927†	198.4	0.0341439	mg/L	0.00094479	0.0341439	mg/L	0.00094479	2.77%
Ti 334.940†	137668.5	0.506561	mg/L	0.0129894	0.506561	mg/L	0.0129894	2.56%
Tl 190.801†	-14.6	-0.0065700	mg/L	0.00423613	-0.0065700	mg/L	0.00423613	64.48%
V 290.880†	16577.3	0.333253	mg/L	0.0039221	0.333253	mg/L	0.0039221	1.18%
Zn 206.200†	23560.5	0.517775	mg/L	0.0035011	0.517775	mg/L	0.0035011	0.68%
B 249.772†	29380.0	0.794799	mg/L	0.0093425	0.794799	mg/L	0.0093425	1.18%
Si 251.611†	92445.7	4.13867	mg/L	0.188989	4.13867	mg/L	0.188989	4.57%
Ce 413.764†	645.6	0.124	mg/L	0.0023	0.124	mg/L	0.0023	1.83%

Sequence No.: 72
Sample ID: Rinse
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 9/16/2020 2:59:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Rinse

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	383849.6	102	%	1.2				1.13%
Y 371.029	177193.0	104	%	1.2				1.15%
Ag 328.068†	29.8	-0.0013706	mg/L	0.00009630	-0.0013706	mg/L	0.00009630	7.03%
Al 308.215†	-6.6	0.0140112	mg/L	0.00207680	0.0140112	mg/L	0.00207680	14.82%
As 188.979†	8.8	0.0047290	mg/L	0.00247594	0.0047290	mg/L	0.00247594	52.36%
Ba 233.527†	19.8	-0.0014235	mg/L	0.00004736	-0.0014235	mg/L	0.00004736	3.33%
Be 313.107†	53.7	0.0025471	mg/L	0.00005403	0.0025471	mg/L	0.00005403	2.12%
Ca 317.933†	407.0	-0.193700	mg/L	0.0007174	-0.193700	mg/L	0.0007174	0.37%
Cd 228.802†	-4.1	0.0022179	mg/L	0.00018041	0.0022179	mg/L	0.00018041	8.13%
Co 228.616†	-5.0	0.0007384	mg/L	0.00020895	0.0007384	mg/L	0.00020895	28.30%
Cr 267.716†	1.8	-0.0055298	mg/L	0.00016795	-0.0055298	mg/L	0.00016795	3.04%
Cu 327.393†	18.4	0.0011705	mg/L	0.00043894	0.0011705	mg/L	0.00043894	37.50%
Fe 273.955†	112.0	0.0082784	mg/L	0.00194120	0.0082784	mg/L	0.00194120	23.45%
K 404.721†	-3317.6	-58.4918	mg/L	8.00951	-58.4918	mg/L	8.00951	13.69%
Mg 279.077†	67.2	-0.332865	mg/L	0.0012698	-0.332865	mg/L	0.0012698	0.38%
Mn 257.610†	36.2	-0.0002395	mg/L	0.00002354	-0.0002395	mg/L	0.00002354	9.83%
Mo 202.031†	-10.6	0.0007204	mg/L	0.00012558	0.0007204	mg/L	0.00012558	17.43%
Na 330.237†	60.7	0.336403	mg/L	0.0622928	0.336403	mg/L	0.0622928	18.52%
Ni 231.604†	-0.8	0.0000807	mg/L	0.00010453	0.0000807	mg/L	0.00010453	129.58%
Pb 220.353†	-13.3	-0.0014084	mg/L	0.00155551	-0.0014084	mg/L	0.00155551	110.45%
Sb 206.836†	2.1	0.0008338	mg/L	0.00447337	0.0008338	mg/L	0.00447337	536.53%
Se 196.026†	-1.6	0.0017619	mg/L	0.00385318	0.0017619	mg/L	0.00385318	218.69%
Sn 189.927†	7.8	0.0017321	mg/L	0.00045448	0.0017321	mg/L	0.00045448	26.24%
Ti 334.940†	89.0	0.0015370	mg/L	0.00008995	0.0015370	mg/L	0.00008995	5.85%
Tl 190.801†	0.5	-0.0031842	mg/L	0.00364654	-0.0031842	mg/L	0.00364654	114.52%
V 290.880†	-25.7	0.0009346	mg/L	0.00046733	0.0009346	mg/L	0.00046733	50.00%
Zn 206.200†	28.7	-0.0036188	mg/L	0.00019021	-0.0036188	mg/L	0.00019021	5.26%
B 249.772†	38.9	0.0129468	mg/L	0.00015787	0.0129468	mg/L	0.00015787	1.22%
Si 251.611†	557.0	0.0058794	mg/L	0.00290945	0.0058794	mg/L	0.00290945	49.49%
Ce 413.764†	33.0	-0.010	mg/L	0.0066	-0.010	mg/L	0.0066	67.89%

Sequence No.: 73
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/16/2020 3:03:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	387955.1	103	%	0.2				0.23%
Y 371.029	146327.6	85.6	%	0.26				0.31%
Ag 328.068†	7634.9	0.0888442	mg/L	0.00028167	0.0888442	mg/L	0.00028167	0.32%
QC value less than the lower limit for Ag 328.068 Recovery = 88.84%								
Al 308.215†	39635.7	4.58071	mg/L	0.014024	4.58071	mg/L	0.014024	0.31%
QC value within limits for Al 308.215 Recovery = 91.61%								
As 188.979†	874.3	0.455619	mg/L	0.0038536	0.455619	mg/L	0.0038536	0.85%
QC value within limits for As 188.979 Recovery = 91.12%								
Ba 233.527†	38552.5	0.454452	mg/L	0.0007075	0.454452	mg/L	0.0007075	0.16%
QC value within limits for Ba 233.527 Recovery = 90.89%								
Be 313.107†	549484.5	0.451256	mg/L	0.0035493	0.451256	mg/L	0.0035493	0.79%
QC value within limits for Be 313.107 Recovery = 90.25%								
Ca 317.933†	4124189.9	47.3717	mg/L	0.36404	47.3717	mg/L	0.36404	0.77%
QC value within limits for Ca 317.933 Recovery = 94.74%								
Cd 228.802†	13252.9	0.434114	mg/L	0.0010054	0.434114	mg/L	0.0010054	0.23%
QC value less than the lower limit for Cd 228.802 Recovery = 86.82%								
Co 228.616†	11575.0	0.438166	mg/L	0.0013334	0.438166	mg/L	0.0013334	0.30%
QC value less than the lower limit for Co 228.616 Recovery = 87.63%								
Cr 267.716†	29182.8	0.454391	mg/L	0.0009786	0.454391	mg/L	0.0009786	0.22%
QC value within limits for Cr 267.716 Recovery = 90.88%								
Cu 327.393†	31727.7	0.461212	mg/L	0.0013622	0.461212	mg/L	0.0013622	0.30%
QC value within limits for Cu 327.393 Recovery = 92.24%								
Fe 273.955†	40613.9	4.62911	mg/L	0.005293	4.62911	mg/L	0.005293	0.11%
QC value within limits for Fe 273.955 Recovery = 92.58%								
K 404.721†	-1143.3	-70.6985	mg/L	3.87285	-70.6985	mg/L	3.87285	5.48%
QC value less than the lower limit for K 404.721 Recovery = -141.40%								
Mg 279.077†	454405.3	45.7446	mg/L	0.33328	45.7446	mg/L	0.33328	0.73%
QC value within limits for Mg 279.077 Recovery = 91.49%								
Mn 257.610†	126987.7	0.460609	mg/L	0.0005306	0.460609	mg/L	0.0005306	0.12%
QC value within limits for Mn 257.610 Recovery = 92.12%								
Mo 202.031†	4962.0	0.459514	mg/L	0.0024280	0.459514	mg/L	0.0024280	0.53%
QC value within limits for Mo 202.031 Recovery = 91.90%								
Na 330.237†	17849.4	44.6020	mg/L	0.10261	44.6020	mg/L	0.10261	0.23%
QC value less than the lower limit for Na 330.237 Recovery = 89.20%								
Ni 231.604†	12031.4	0.438296	mg/L	0.0006548	0.438296	mg/L	0.0006548	0.15%
QC value less than the lower limit for Ni 231.604 Recovery = 87.66%								
Pb 220.353†	2863.5	0.459597	mg/L	0.0029981	0.459597	mg/L	0.0029981	0.65%
QC value within limits for Pb 220.353 Recovery = 91.92%								
Sb 206.836†	946.4	0.480840	mg/L	0.0034472	0.480840	mg/L	0.0034472	0.72%
QC value within limits for Sb 206.836 Recovery = 96.17%								
Se 196.026†	836.4	0.451278	mg/L	0.0057672	0.451278	mg/L	0.0057672	1.28%
QC value within limits for Se 196.026 Recovery = 90.26%								
Sn 189.927†	2725.1	0.463937	mg/L	0.0026948	0.463937	mg/L	0.0026948	0.58%
QC value within limits for Sn 189.927 Recovery = 92.79%								
Ti 334.940†	126855.1	0.466868	mg/L	0.0016269	0.466868	mg/L	0.0016269	0.35%
QC value within limits for Ti 334.940 Recovery = 93.37%								
Tl 190.801†	955.6	0.498239	mg/L	0.0042690	0.498239	mg/L	0.0042690	0.86%
QC value within limits for Tl 190.801 Recovery = 99.65%								
V 290.880†	22475.9	0.464356	mg/L	0.0026259	0.464356	mg/L	0.0026259	0.57%
QC value within limits for V 290.880 Recovery = 92.87%								
Zn 206.200†	20493.8	0.449825	mg/L	0.0010342	0.449825	mg/L	0.0010342	0.23%
QC value less than the lower limit for Zn 206.200 Recovery = 89.97%								
B 249.772†	31709.2	0.483946	mg/L	0.0014383	0.483946	mg/L	0.0014383	0.30%
QC value within limits for B 249.772 Recovery = 96.79%								
Si 251.611†	105188.7	4.70480	mg/L	0.021066	4.70480	mg/L	0.021066	0.45%
QC value within limits for Si 251.611 Recovery = 94.10%								
Ce 413.764†	43758.4	5.864	mg/L	0.0526	5.864	mg/L	0.0526	0.90%
QC value greater than the upper limit for Ce 413.764 Recovery = 117.28%								

QC Failed. Continue with analysis.

Sequence No.: 74
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 9/16/2020 3:07:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	394082.9	105	%	1.0				1.00%
Y 371.029	180612.8	106	%	1.1				1.01%
Ag 328.068†	53.9	-0.0010846	mg/L	0.00085589	-0.0010846	mg/L	0.00085589	78.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-166.9	-0.0043036	mg/L	0.00198248	-0.0043036	mg/L	0.00198248	46.07%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	7.2	0.0039122	mg/L	0.00141569	0.0039122	mg/L	0.00141569	36.19%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	12.0	-0.0015158	mg/L	0.00006412	-0.0015158	mg/L	0.00006412	4.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	98.8	0.0025840	mg/L	0.00002366	0.0025840	mg/L	0.00002366	0.92%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	116.1	-0.197056	mg/L	0.0003671	-0.197056	mg/L	0.0003671	0.19%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	0.3	0.0023618	mg/L	0.00026080	0.0023618	mg/L	0.00026080	11.04%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	5.0	0.0011137	mg/L	0.00028851	0.0011137	mg/L	0.00028851	25.90%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-15.2	-0.0057984	mg/L	0.00023443	-0.0057984	mg/L	0.00023443	4.04%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	49.1	0.0016156	mg/L	0.00022408	0.0016156	mg/L	0.00022408	13.87%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	103.2	0.0072804	mg/L	0.00212472	0.0072804	mg/L	0.00212472	29.18%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-4402.8	-75.3686	mg/L	10.16343	-75.3686	mg/L	10.16343	13.48%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	64.0	-0.333194	mg/L	0.0014759	-0.333194	mg/L	0.0014759	0.44%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	16.5	-0.0003111	mg/L	0.00003631	-0.0003111	mg/L	0.00003631	11.67%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-13.6	0.0004495	mg/L	0.00008396	0.0004495	mg/L	0.00008396	18.68%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	51.9	0.314505	mg/L	0.0438241	0.314505	mg/L	0.0438241	13.93%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-6.3	-0.0001192	mg/L	0.00029132	-0.0001192	mg/L	0.00029132	244.43%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.7	0.0010110	mg/L	0.00155438	0.0010110	mg/L	0.00155438	153.74%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-2.2	-0.0012434	mg/L	0.00741502	-0.0012434	mg/L	0.00741502	596.33%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	10.3	0.0081244	mg/L	0.00363417	0.0081244	mg/L	0.00363417	44.73%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-1.4	0.0001630	mg/L	0.00061913	0.0001630	mg/L	0.00061913	379.90%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	113.7	0.0016278	mg/L	0.00049889	0.0016278	mg/L	0.00049889	30.65%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.7	-0.0025582	mg/L	0.00216005	-0.0025582	mg/L	0.00216005	84.44%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-57.2	0.0002925	mg/L	0.00037759	0.0002925	mg/L	0.00037759	129.09%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	15.5	-0.0039131	mg/L	0.00011521	-0.0039131	mg/L	0.00011521	2.94%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	186.0	0.0150033	mg/L	0.00058551	0.0150033	mg/L	0.00058551	3.90%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	156.9	-0.0121127	mg/L	0.00102220	-0.0121127	mg/L	0.00102220	8.44%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	101.6	-0.001	mg/L	0.0060	-0.001	mg/L	0.0060	>999.9%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Outliers: 26232+26221 0091101 0408

S26232B3 26221/85279 SOIL

Reject - 09/17/2020.

Analysis Begun

Start Time: 9/16/2020 7:28:54 PM
Logged In Analyst: usermet
Spectrometer Model: Optima 7300 DV, S/N No Serial #
Plasma On Time: 9/16/2020 3:51:35 PM
Technique: ICP Continuous
Autosampler Model: S10

Sample Information File: C:\pe\Administrator\Sample Information\09.15.20.sif
Batch ID:
Results Data Set: S26232B3
Results Library: C:\pe\Administrator\Results\Results.mdb

9/18/20

Method Loaded
Method Name: PE3 7300DV SOIL AX
IEC File: IEC072420A.iec
Method Description: 6010D (SOIL)
Method Last Saved: 9/10/2020 5:13:24 PM
MSF File:

Sequence No.: 1
Sample ID: CALBLK V-333667
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 9/16/2020 7:28:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-333667

26221/85279

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	440882.8	3663.03	0.83%	100	%
Y 371.029	200698.6	1453.70	0.72%	100	%
Ag 328.068†	-305.1	58.64	19.22%	[0.00]	mg/L
Al 308.215†	2429.2	43.51	1.79%	[0.00]	mg/L
As 188.979†	5.2	4.93	95.02%	[0.00]	mg/L
Ba 233.527†	-4.2	12.33	294.88%	[0.00]	mg/L
Be 313.107†	-1075.9	24.27	2.26%	[0.00]	mg/L
Ca 317.933†	2388.4	96.54	4.04%	[0.00]	mg/L
Cd 228.802†	137.7	3.30	2.40%	[0.00]	mg/L
Co 228.616†	-41.0	4.52	11.01%	[0.00]	mg/L
Cr 267.716†	21.5	18.10	84.17%	[0.00]	mg/L
Cu 327.393†	-327.1	53.41	16.33%	[0.00]	mg/L
Fe 273.955†	-686.1	49.33	7.19%	[0.00]	mg/L
K 404.721†	51105.2	474.64	0.93%	[0.00]	mg/L
Mg 279.077†	-578.3	22.35	3.86%	[0.00]	mg/L
Mn 257.610†	55.7	13.83	24.84%	[0.00]	mg/L
Mo 202.031†	149.3	1.54	1.03%	[0.00]	mg/L
Na 330.237†	465.1	11.11	2.39%	[0.00]	mg/L
Ni 231.604†	2.0	16.77	858.23%	[0.00]	mg/L
Pb 220.353†	62.5	14.16	22.66%	[0.00]	mg/L
Sb 206.836†	41.4	11.99	28.98%	[0.00]	mg/L
Se 196.026†	40.7	8.54	20.97%	[0.00]	mg/L
Sn 189.927†	-4.3	11.71	273.21%	[0.00]	mg/L
Ti 334.940†	565.6	482.72	85.34%	[0.00]	mg/L
Tl 190.801†	-46.6	2.28	4.89%	[0.00]	mg/L
V 290.880†	1305.8	15.05	1.15%	[0.00]	mg/L
Zn 206.200†	-80.0	7.52	9.39%	[0.00]	mg/L
B 249.772†	182.5	7.74	4.24%	[0.00]	mg/L
Si 251.611†	1643.1	1214.36	73.91%	[0.00]	mg/L
Ce 413.764†	-1859.9	61.44	3.30%	[0.00]	mg/L

19178.010-013
19230.001
19228.001
19229.001
19233.002

Co, Ni reported.

Sequence No.: 2
Sample ID: CALST2 V-333671
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 9/16/2020 7:32:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST2 V-333671

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	425178.7	4331.20	1.02%	96.4	%
Y 371.029	192818.1	1681.49	0.87%	96.1	%
Ag 328.068†	1327.2	63.76	4.80%	[0.015]	mg/L
Al 308.215†	16628.9	228.02	1.37%	[2]	mg/L
As 188.979†	64.7	4.36	6.73%	[0.04]	mg/L
Ba 233.527†	8540.0	140.06	1.64%	[0.1]	mg/L
Be 313.107†	13347.0	137.72	1.03%	[0.012]	mg/L
Ca 317.933†	873999.1	9435.73	1.08%	[10]	mg/L
Cd 228.802†	350.0	9.77	2.79%	[0.012]	mg/L
Co 228.616†	636.8	12.23	1.92%	[0.025]	mg/L
Cr 267.716†	3230.7	50.69	1.57%	[0.05]	mg/L
Cu 327.393†	3285.3	114.13	3.47%	[0.05]	mg/L
Fe 273.955†	16852.0	149.94	0.89%	[2]	mg/L
K 404.721†	2277.5	615.12	27.01%	[5]	mg/L
Mg 279.077†	48938.5	536.26	1.10%	[5]	mg/L
Mn 257.610†	26576.6	250.97	0.94%	[0.1]	mg/L
Mo 202.031†	254.7	15.14	5.94%	[0.025]	mg/L
Na 330.237†	721.7	34.65	4.80%	[2.5]	mg/L
Ni 231.604†	1357.7	15.78	1.16%	[0.05]	mg/L
Pb 220.353†	282.6	8.87	3.14%	[0.05]	mg/L
Sb 206.836†	84.6	6.91	8.17%	[0.04]	mg/L
Se 196.026†	79.7	20.67	25.92%	[0.05]	mg/L
Sn 189.927†	1108.7	15.58	1.41%	[0.2]	mg/L
Ti 334.940†	25402.1	251.77	0.99%	[0.1]	mg/L
Tl 190.801†	114.2	5.20	4.55%	[0.05]	mg/L
V 290.880†	4658.4	120.52	2.59%	[0.1]	mg/L
Zn 206.200†	4417.1	66.25	1.50%	[0.1]	mg/L
B 249.772†	12138.5	129.71	1.07%	[0.2]	mg/L
Si 251.611†	1818.7	41.28	2.27%	[0.1]	mg/L
Ce 413.764†	1017.6	43.91	4.32%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-333666
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 3
Date Collected: 9/16/2020 7:36:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST3 V-333666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	412990.9	5062.80	1.23%	93.7	%
Y 371.029	164342.8	437.34	0.27%	81.9	%
Ag 328.068†	8192.3	116.72	1.42%	[0.1]	mg/L
Al 308.215†	42544.3	681.26	1.60%	[5]	mg/L
As 188.979†	918.2	15.50	1.69%	[0.5]	mg/L
Ba 233.527†	41550.2	663.09	1.60%	[0.5]	mg/L
Be 313.107†	590874.8	1184.42	0.20%	[0.5]	mg/L
Ca 317.933†	4318079.1	5085.02	0.12%	[50]	mg/L
Cd 228.802†	14141.3	221.29	1.56%	[0.5]	mg/L
Co 228.616†	12408.6	181.42	1.46%	[0.5]	mg/L
Cr 267.716†	31118.4	494.59	1.59%	[0.5]	mg/L
Cu 327.393†	33641.6	509.42	1.51%	[0.5]	mg/L
Fe 273.955†	42705.7	683.45	1.60%	[5]	mg/L
K 404.721†	6338.5	816.31	12.88%	[50]	mg/L
Mg 279.077†	476014.3	457.07	0.10%	[50]	mg/L
Mn 257.610†	136221.4	2092.46	1.54%	[0.5]	mg/L
Mo 202.031†	5316.7	81.16	1.53%	[0.5]	mg/L
Na 330.237†	18371.8	325.18	1.77%	[50]	mg/L
Ni 231.604†	12864.7	194.54	1.51%	[0.5]	mg/L
Pb 220.353†	3047.3	52.28	1.72%	[0.5]	mg/L
Sb 206.836†	1008.5	2.51	0.25%	[0.5]	mg/L
Se 196.026†	879.4	16.51	1.88%	[0.5]	mg/L
Sn 189.927†	2851.3	41.81	1.47%	[0.5]	mg/L
Ti 334.940†	134573.6	2101.33	1.56%	[0.5]	mg/L
Tl 190.801†	1023.3	13.45	1.31%	[0.5]	mg/L
V 290.880†	23952.0	460.56	1.92%	[0.5]	mg/L
Zn 206.200†	21573.6	411.17	1.91%	[0.5]	mg/L
B 249.772†	33443.9	598.02	1.79%	[0.5]	mg/L
Si 251.611†	107734.1	1792.69	1.66%	[5]	mg/L
Ce 413.764†	38535.7	561.86	1.46%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-333665
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 9/16/2020 7:40:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST4 V-333665

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	403549.7	1381.88	0.34%	91.5	%
Y 371.029	130930.7	298.63	0.23%	65.2	%
Ag 328.068†	16332.8	15.11	0.09%	[0.2]	mg/L
Al 308.215†	82835.4	317.67	0.38%	[10]	mg/L
As 188.979†	1803.0	3.66	0.20%	[1]	mg/L
Ba 233.527†	82130.1	257.49	0.31%	[1]	mg/L
Be 313.107†	1152754.6	3577.73	0.31%	[1]	mg/L
Ca 317.933†	8431917.2	50903.71	0.60%	[100]	mg/L
Cd 228.802†	29293.7	98.96	0.34%	[1]	mg/L
Co 228.616†	25123.5	80.10	0.32%	[1]	mg/L
Cr 267.716†	59623.4	199.22	0.33%	[1]	mg/L
Cu 327.393†	65210.2	122.52	0.19%	[1]	mg/L
Fe 273.955†	82724.3	201.88	0.24%	[10]	mg/L
K 404.721†	9663.9	509.29	5.27%	[100]	mg/L
Mg 279.077†	930725.3	4473.12	0.48%	[100]	mg/L
Mn 257.610†	260109.3	742.58	0.29%	[1]	mg/L
Mo 202.031†	10450.9	48.85	0.47%	[1]	mg/L
Na 330.237†	38278.6	194.37	0.51%	[100]	mg/L
Ni 231.604†	25866.3	99.34	0.38%	[1]	mg/L
Pb 220.353†	5823.0	33.84	0.58%	[1]	mg/L
Sb 206.836†	1966.9	6.92	0.35%	[1]	mg/L
Se 196.026†	1726.9	6.94	0.40%	[1]	mg/L
Sn 189.927†	5575.4	31.48	0.56%	[1]	mg/L
Ti 334.940†	258553.9	561.76	0.22%	[1]	mg/L
Tl 190.801†	1958.0	8.55	0.44%	[1]	mg/L
V 290.880†	46362.0	250.61	0.54%	[1]	mg/L
Zn 206.200†	41595.9	169.02	0.41%	[1]	mg/L
B 249.772†	68244.0	459.86	0.67%	[1]	mg/L
Si 251.611†	217827.9	630.74	0.29%	[10]	mg/L
Ce 413.764†	74163.1	1108.48	1.49%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	50.5	81430	0.00000	0.999983	
Al 308.215	3	Lin, Calc Int	244.3	8296	0.00000	0.999883	
As 188.979	3	Lin, Calc Int	-0.3	1810	0.00000	0.999934	
Ba 233.527	3	Lin, Calc Int	235.0	82050	0.00000	0.999979	
Be 313.107	3	Lin, Calc Int	2418.5	1156000	0.00000	0.999914	
Ca 317.933	3	Lin, Calc Int	32606.3	84330	0.00000	0.999921	
Cd 228.802	3	Lin, Calc Int	-92.7	29200	0.00000	0.999840	
Co 228.616	3	Lin, Calc Int	-24.0	25090	0.00000	0.999979	
Cr 267.716	3	Lin, Calc Int	351.7	59720	0.00000	0.999751	
Cu 327.393	3	Lin, Calc Int	201.0	65380	0.00000	0.999861	
Fe 273.955	3	Lin, Calc Int	389.0	8278	0.00000	0.999844	
K 404.721	3	Lin, Calc Int	1084.4	89.95	0.00000	0.977344	
Mg 279.077	3	Lin, Calc Int	3033.1	9313	0.00000	0.999932	
Mn 257.610	3	Lin, Calc Int	1394.7	260800	0.00000	0.999684	
Mo 202.031	3	Lin, Calc Int	13.7	10470	0.00000	0.999957	
Na 330.237	3	Lin, Calc Int	-246.5	382.7	0.00000	0.999800	
Ni 231.604	3	Lin, Calc Int	16.5	25820	0.00000	0.999991	
Pb 220.353	3	Lin, Calc Int	21.0	5851	0.00000	0.999687	
Sb 206.836	3	Lin, Calc Int	7.2	1968	0.00000	0.999918	
Se 196.026	3	Lin, Calc Int	-0.1	1733	0.00000	0.999936	
Sn 189.927	3	Lin, Calc Int	9.6	5586	0.00000	0.999910	
Ti 334.940	3	Lin, Calc Int	781.4	259600	0.00000	0.999741	
Tl 190.801	3	Lin, Calc Int	15.5	1957	0.00000	0.999738	
V 290.880	3	Lin, Calc Int	152.9	46480	0.00000	0.999840	
Zn 206.200	3	Lin, Calc Int	258.1	41600	0.00000	0.999813	
B 249.772	3	Lin, Calc Int	-763.5	68750	0.00000	0.999740	
Si 251.611	3	Lin, Calc Int	-378.0	21780	0.00000	0.999986	

Sequence No.: 5
Sample ID: ICV V-333673
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 9/16/2020 7:44:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	428235.8	97.1	%	0.66				0.68%
Y 371.029	165731.0	82.6	%	0.62				0.75%
Ag 328.068†	8247.4	0.100662	mg/L	0.0006563	0.100662	mg/L	0.0006563	0.65%
QC value within limits for Ag 328.068 Recovery = 100.66%								
Al 308.215†	40250.0	4.83538	mg/L	0.009199	4.83538	mg/L	0.009199	0.19%
QC value within limits for Al 308.215 Recovery = 96.71%								
As 188.979†	863.7	0.478249	mg/L	0.0025413	0.478249	mg/L	0.0025413	0.53%
QC value within limits for As 188.979 Recovery = 95.65%								
Ba 233.527†	39460.0	0.478062	mg/L	0.0010643	0.478062	mg/L	0.0010643	0.22%
QC value within limits for Ba 233.527 Recovery = 95.61%								
Be 313.107†	559342.8	0.481925	mg/L	0.0034888	0.481925	mg/L	0.0034888	0.72%
QC value within limits for Be 313.107 Recovery = 96.39%								
Ca 317.933†	4192569.9	49.3268	mg/L	0.34077	49.3268	mg/L	0.34077	0.69%
QC value within limits for Ca 317.933 Recovery = 98.65%								
Cd 228.802†	13808.0	0.475994	mg/L	0.0032874	0.475994	mg/L	0.0032874	0.69%
QC value within limits for Cd 228.802 Recovery = 95.20%								
Co 228.616†	12063.9	0.481747	mg/L	0.0038328	0.481747	mg/L	0.0038328	0.80%
QC value within limits for Co 228.616 Recovery = 96.35%								
Cr 267.716†	31048.6	0.514017	mg/L	0.0040126	0.514017	mg/L	0.0040126	0.78%
QC value within limits for Cr 267.716 Recovery = 102.80%								
Cu 327.393†	32244.7	0.490143	mg/L	0.0006341	0.490143	mg/L	0.0006341	0.13%
QC value within limits for Cu 327.393 Recovery = 98.03%								
Fe 273.955†	40750.6	4.87577	mg/L	0.007023	4.87577	mg/L	0.007023	0.14%
QC value within limits for Fe 273.955 Recovery = 97.52%								
K 404.721†	4037.9	-15.7425	mg/L	4.58682	-15.7425	mg/L	4.58682	29.14%
QC value less than the lower limit for K 404.721 Recovery = -31.48%								
Mg 279.077†	472571.9	50.4165	mg/L	0.07890	50.4165	mg/L	0.07890	0.16%
QC value within limits for Mg 279.077 Recovery = 100.83%								
Mn 257.610†	128272.6	0.486439	mg/L	0.0006606	0.486439	mg/L	0.0006606	0.14%
QC value within limits for Mn 257.610 Recovery = 97.29%								
Mo 202.031†	4938.2	0.470317	mg/L	0.0033115	0.470317	mg/L	0.0033115	0.70%
QC value within limits for Mo 202.031 Recovery = 94.06%								
Na 330.237†	19128.5	50.6301	mg/L	0.39261	50.6301	mg/L	0.39261	0.78%
QC value within limits for Na 330.237 Recovery = 101.26%								
Ni 231.604†	12566.9	0.486053	mg/L	0.0037046	0.486053	mg/L	0.0037046	0.76%
QC value within limits for Ni 231.604 Recovery = 97.21%								
Pb 220.353†	2821.0	0.476334	mg/L	0.0034145	0.476334	mg/L	0.0034145	0.72%
QC value within limits for Pb 220.353 Recovery = 95.27%								
Sb 206.836†	963.1	0.502234	mg/L	0.0036816	0.502234	mg/L	0.0036816	0.73%
QC value within limits for Sb 206.836 Recovery = 100.45%								
Se 196.026†	823.7	0.476625	mg/L	0.0031744	0.476625	mg/L	0.0031744	0.67%
QC value within limits for Se 196.026 Recovery = 95.32%								
Sn 189.927†	2716.4	0.484530	mg/L	0.0036662	0.484530	mg/L	0.0036662	0.76%
QC value within limits for Sn 189.927 Recovery = 96.91%								
Ti 334.940†	127610.2	0.488503	mg/L	0.0003149	0.488503	mg/L	0.0003149	0.06%
QC value within limits for Ti 334.940 Recovery = 97.70%								
Tl 190.801†	933.4	0.504678	mg/L	0.0063243	0.504678	mg/L	0.0063243	1.25%
QC value within limits for Tl 190.801 Recovery = 100.94%								
V 290.880†	22705.3	0.492394	mg/L	0.0014692	0.492394	mg/L	0.0014692	0.30%
QC value within limits for V 290.880 Recovery = 98.48%								
Zn 206.200†	21272.5	0.505199	mg/L	0.0042316	0.505199	mg/L	0.0042316	0.84%
QC value within limits for Zn 206.200 Recovery = 101.04%								
B 249.772†	33042.4	0.520290	mg/L	0.0012424	0.520290	mg/L	0.0012424	0.24%
QC value within limits for B 249.772 Recovery = 104.06%								
Si 251.611†	105167.0	4.83833	mg/L	0.001122	4.83833	mg/L	0.001122	0.02%
QC value within limits for Si 251.611 Recovery = 96.77%								
Ce 413.764†	36004.2	4.799	mg/L	0.0572	4.799	mg/L	0.0572	1.19%
QC value within limits for Ce 413.764 Recovery = 95.98%								

QC Failed. Continue with analysis.

Sequence No.: 6 Autosampler Location: 1
Sample ID: ICB V-333667 Date Collected: 9/16/2020 7:49:00 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	441407.7	100	%	0.8				0.80%
Y 371.029	201283.1	100	%	0.7				0.67%
Ag 328.068†	22.6	-0.0003429	mg/L	0.00049072	-0.0003429	mg/L	0.00049072	143.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-43.7	-0.0349121	mg/L	0.00238443	-0.0349121	mg/L	0.00238443	6.83%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	3.0	0.0018292	mg/L	0.00525786	0.0018292	mg/L	0.00525786	287.45%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-1.5	-0.0028826	mg/L	0.00028320	-0.0028826	mg/L	0.00028320	9.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	17.7	-0.0020775	mg/L	0.00003246	-0.0020775	mg/L	0.00003246	1.56%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	59.1	-0.385927	mg/L	0.0008235	-0.385927	mg/L	0.0008235	0.21%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	4.8	0.0033404	mg/L	0.00024605	0.0033404	mg/L	0.00024605	7.37%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	2.7	0.0010615	mg/L	0.00007898	0.0010615	mg/L	0.00007898	7.44%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-0.3	-0.0058952	mg/L	0.00007265	-0.0058952	mg/L	0.00007265	1.23%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	17.7	-0.0028034	mg/L	0.00037865	-0.0028034	mg/L	0.00037865	13.51%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-26.5	-0.0501852	mg/L	0.00143794	-0.0501852	mg/L	0.00143794	2.87%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	87.4	-10.5844	mg/L	6.48198	-10.5844	mg/L	6.48198	61.24%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	5.4	-0.325098	mg/L	0.0008896	-0.325098	mg/L	0.0008896	0.27%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-14.7	-0.0054034	mg/L	0.00001371	-0.0054034	mg/L	0.00001371	0.25%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.4	-0.0006922	mg/L	0.00073224	-0.0006922	mg/L	0.00073224	105.78%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	6.8	0.661981	mg/L	0.0737009	0.661981	mg/L	0.0737009	11.13%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-15.4	-0.0012341	mg/L	0.00063832	-0.0012341	mg/L	0.00063832	51.72%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-27.9	-0.0083314	mg/L	0.00045859	-0.0083314	mg/L	0.00045859	5.50%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	4.9	-0.0012935	mg/L	0.00303276	-0.0012935	mg/L	0.00303276	234.46%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-3.2	-0.0018223	mg/L	0.00563099	-0.0018223	mg/L	0.00563099	309.00%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-2.6	-0.0021948	mg/L	0.00143362	-0.0021948	mg/L	0.00143362	65.32%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-323.8	-0.0042568	mg/L	0.00006329	-0.0042568	mg/L	0.00006329	1.49%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	7.3	-0.0044979	mg/L	0.00299005	-0.0044979	mg/L	0.00299005	66.48%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	21.4	-0.0028364	mg/L	0.00056147	-0.0028364	mg/L	0.00056147	19.80%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	8.2	-0.0060088	mg/L	0.00012756	-0.0060088	mg/L	0.00012756	2.12%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	451.7	0.0173812	mg/L	0.00099601	0.0173812	mg/L	0.00099601	5.73%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	-1287.4	-0.0417427	mg/L	0.00063847	-0.0417427	mg/L	0.00063847	1.53%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	80.3	-0.042	mg/L	0.0044	-0.042	mg/L	0.0044	10.55%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: LRS V-333662
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 9/16/2020 7:52:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LRS V-333662

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	366224.7	83.1	%	0.76				0.91%
Y 371.029	164504.8	82.0	%	0.74				0.90%
Ag 328.068†	98136.7	1.20456	mg/L	0.001658	1.20456	mg/L	0.001658	0.14%
QC value greater than the upper limit for Ag 328.068 Recovery = 120.46%								
Al 308.215†	4026809.7	485.028	mg/L	0.5645	485.028	mg/L	0.5645	0.12%
QC value within limits for Al 308.215 Recovery = 97.01%								
As 188.979†	18496.8	10.2827	mg/L	0.21750	10.2827	mg/L	0.21750	2.12%
QC value within limits for As 188.979 Recovery = 102.83%								
Ba 233.527†	796665.2	9.70663	mg/L	0.014367	9.70663	mg/L	0.014367	0.15%
QC value within limits for Ba 233.527 Recovery = 97.07%								
Be 313.107†	5658642.2	4.89452	mg/L	0.095792	4.89452	mg/L	0.095792	1.96%
QC value within limits for Be 313.107 Recovery = 97.89%								
Ca 317.933†	38043063.6	450.709	mg/L	8.2998	450.709	mg/L	8.2998	1.84%
QC value within limits for Ca 317.933 Recovery = 90.14%								
Cd 228.802†	145371.9	4.98105	mg/L	0.006015	4.98105	mg/L	0.006015	0.12%
QC value within limits for Cd 228.802 Recovery = 99.62%								
Co 228.616†	114815.2	4.57678	mg/L	0.009704	4.57678	mg/L	0.009704	0.21%
QC value within limits for Co 228.616 Recovery = 91.54%								
Cr 267.716†	590509.5	9.88213	mg/L	0.018455	9.88213	mg/L	0.018455	0.19%
QC value within limits for Cr 267.716 Recovery = 98.82%								
Cu 327.393†	677194.2	10.3553	mg/L	0.00457	10.3553	mg/L	0.00457	0.04%
QC value within limits for Cu 327.393 Recovery = 103.55%								
Fe 273.955†	3004358.9	362.886	mg/L	0.4873	362.886	mg/L	0.4873	0.13%
QC value within limits for Fe 273.955 Recovery = 90.72%								
K 404.721†	62708.6	-2930.33	mg/L	5.902	-2930.33	mg/L	5.902	0.20%
QC value less than the lower limit for K 404.721 Recovery = -1465.17%								
Mg 279.077†	4328706.7	464.467	mg/L	1.6271	464.467	mg/L	1.6271	0.35%
QC value within limits for Mg 279.077 Recovery = 92.89%								
Mn 257.610†	2541796.3	9.73967	mg/L	0.015140	9.73967	mg/L	0.015140	0.16%
QC value within limits for Mn 257.610 Recovery = 97.40%								
Mo 202.031†	98751.3	9.43000	mg/L	0.019201	9.43000	mg/L	0.019201	0.20%
QC value within limits for Mo 202.031 Recovery = 94.30%								
Na 330.237†	441902.9	1155.41	mg/L	4.675	1155.41	mg/L	4.675	0.40%
QC value greater than the upper limit for Na 330.237 Recovery = 115.54%								
Ni 231.604†	235851.0	9.13340	mg/L	0.029415	9.13340	mg/L	0.029415	0.32%
QC value within limits for Ni 231.604 Recovery = 91.33%								
Pb 220.353†	55468.9	9.55470	mg/L	0.179307	9.55470	mg/L	0.179307	1.88%
QC value within limits for Pb 220.353 Recovery = 95.55%								
Sb 206.836†	10215.2	5.35445	mg/L	0.099830	5.35445	mg/L	0.099830	1.86%
QC value within limits for Sb 206.836 Recovery = 107.09%								
Se 196.026†	8489.0	4.99630	mg/L	0.084600	4.99630	mg/L	0.084600	1.69%
QC value within limits for Se 196.026 Recovery = 99.93%								
Sn 189.927†	54158.3	9.69306	mg/L	0.197781	9.69306	mg/L	0.197781	2.04%
QC value within limits for Sn 189.927 Recovery = 96.93%								
Ti 334.940†	2621584.9	10.0945	mg/L	0.00786	10.0945	mg/L	0.00786	0.08%
QC value within limits for Ti 334.940 Recovery = 100.94%								
Tl 190.801†	9694.7	5.01259	mg/L	0.073010	5.01259	mg/L	0.073010	1.46%
QC value within limits for Tl 190.801 Recovery = 100.25%								
V 290.880†	466120.9	10.1496	mg/L	0.01472	10.1496	mg/L	0.01472	0.15%
QC value within limits for V 290.880 Recovery = 101.50%								
Zn 206.200†	392900.4	9.43934	mg/L	0.017888	9.43934	mg/L	0.017888	0.19%
QC value within limits for Zn 206.200 Recovery = 94.39%								
B 249.772†	108896.5	3.72290	mg/L	0.007138	3.72290	mg/L	0.007138	0.19%
QC value less than the lower limit for B 249.772 Recovery = 74.46%								
Si 251.611†	5774.3	0.133810	mg/L	0.0113016	0.133810	mg/L	0.0113016	8.45%
QC value less than the lower limit for Si 251.611 Recovery = 0.54%								
Ce 413.764†	1052.6	0.383	mg/L	0.0054	0.383	mg/L	0.0054	1.40%
QC value less than the lower limit for Ce 413.764 Recovery = 1.53%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-333666
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 9/16/2020 7:57:11 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	409895.5	93.0	%	0.72				0.78%
Y 371.029	165888.6	82.7	%	0.47				0.57%
Ag 328.068†	8236.0	0.100522	mg/L	0.0015582	0.100522	mg/L	0.0015582	1.55%
QC value within limits for Ag 328.068 Recovery = 100.52%								
Al 308.215†	42960.7	5.16248	mg/L	0.063694	5.16248	mg/L	0.063694	1.23%
QC value within limits for Al 308.215 Recovery = 103.25%								
As 188.979†	914.5	0.506357	mg/L	0.0090931	0.506357	mg/L	0.0090931	1.80%
QC value within limits for As 188.979 Recovery = 101.27%								
Ba 233.527†	41942.8	0.508320	mg/L	0.0058942	0.508320	mg/L	0.0058942	1.16%
QC value within limits for Ba 233.527 Recovery = 101.66%								
Be 313.107†	586692.1	0.505592	mg/L	0.0008850	0.505592	mg/L	0.0008850	0.18%
QC value within limits for Be 313.107 Recovery = 101.12%								
Ca 317.933†	4299217.1	50.5913	mg/L	0.03920	50.5913	mg/L	0.03920	0.08%
QC value within limits for Ca 317.933 Recovery = 101.18%								
Cd 228.802†	14241.9	0.490850	mg/L	0.0064126	0.490850	mg/L	0.0064126	1.31%
QC value within limits for Cd 228.802 Recovery = 98.17%								
Co 228.616†	12528.6	0.500268	mg/L	0.0063188	0.500268	mg/L	0.0063188	1.26%
QC value within limits for Co 228.616 Recovery = 100.05%								
Cr 267.716†	31377.2	0.519518	mg/L	0.0063761	0.519518	mg/L	0.0063761	1.23%
QC value within limits for Cr 267.716 Recovery = 103.90%								
Cu 327.393†	33992.6	0.516879	mg/L	0.0063359	0.516879	mg/L	0.0063359	1.23%
QC value within limits for Cu 327.393 Recovery = 103.38%								
Fe 273.955†	43093.8	5.15883	mg/L	0.063884	5.15883	mg/L	0.063884	1.24%
QC value within limits for Fe 273.955 Recovery = 103.18%								
K 404.721†	6403.9	7.74090	mg/L	4.458070	7.74090	mg/L	4.458070	57.59%
QC value less than the lower limit for K 404.721 Recovery = 15.48%								
Mg 279.077†	474402.5	50.6131	mg/L	0.11698	50.6131	mg/L	0.11698	0.23%
QC value within limits for Mg 279.077 Recovery = 101.23%								
Mn 257.610†	137425.3	0.521529	mg/L	0.0063098	0.521529	mg/L	0.0063098	1.21%
QC value within limits for Mn 257.610 Recovery = 104.31%								
Mo 202.031†	5385.0	0.512991	mg/L	0.0040767	0.512991	mg/L	0.0040767	0.79%
QC value within limits for Mo 202.031 Recovery = 102.60%								
Na 330.237†	18526.4	49.0567	mg/L	0.65574	49.0567	mg/L	0.65574	1.34%
QC value within limits for Na 330.237 Recovery = 98.11%								
Ni 231.604†	12980.4	0.502066	mg/L	0.0062691	0.502066	mg/L	0.0062691	1.25%
QC value within limits for Ni 231.604 Recovery = 100.41%								
Pb 220.353†	3027.7	0.511586	mg/L	0.0029631	0.511586	mg/L	0.0029631	0.58%
QC value within limits for Pb 220.353 Recovery = 102.32%								
Sb 206.836†	1008.3	0.526369	mg/L	0.0072485	0.526369	mg/L	0.0072485	1.38%
QC value within limits for Sb 206.836 Recovery = 105.27%								
Se 196.026†	889.5	0.514651	mg/L	0.0079649	0.514651	mg/L	0.0079649	1.55%
QC value within limits for Se 196.026 Recovery = 102.93%								
Sn 189.927†	2891.8	0.515934	mg/L	0.0032390	0.515934	mg/L	0.0032390	0.63%
QC value within limits for Sn 189.927 Recovery = 103.19%								
Ti 334.940†	136046.9	0.520998	mg/L	0.0059256	0.520998	mg/L	0.0059256	1.14%
QC value within limits for Ti 334.940 Recovery = 104.20%								
Tl 190.801†	1033.0	0.557599	mg/L	0.0043286	0.557599	mg/L	0.0043286	0.78%
QC value greater than the upper limit for Tl 190.801 Recovery = 111.52%								
V 290.880†	24129.5	0.523698	mg/L	0.0073539	0.523698	mg/L	0.0073539	1.40%
QC value within limits for V 290.880 Recovery = 104.74%								
Zn 206.200†	21743.0	0.516508	mg/L	0.0062939	0.516508	mg/L	0.0062939	1.22%
QC value within limits for Zn 206.200 Recovery = 103.30%								
B 249.772†	33685.4	0.531303	mg/L	0.0047985	0.531303	mg/L	0.0047985	0.90%
QC value within limits for B 249.772 Recovery = 106.26%								
Si 251.611†	108679.0	4.99890	mg/L	0.059595	4.99890	mg/L	0.059595	1.19%
QC value within limits for Si 251.611 Recovery = 99.98%								
Ce 413.764†	37991.8	5.067	mg/L	0.1476	5.067	mg/L	0.1476	2.91%
QC value within limits for Ce 413.764 Recovery = 101.33%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 9/16/2020 8:01:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	431543.3	97.9	%	0.87				0.88%
Y 371.029	196870.7	98.1	%	0.90				0.91%
Ag 328.068†	4.6	-0.0005644	mg/L	0.00078970	-0.0005644	mg/L	0.00078970	139.93%
Al 308.215†	-28.0	-0.0331250	mg/L	0.00413625	-0.0331250	mg/L	0.00413625	12.49%
As 188.979†	0.6	0.0005014	mg/L	0.00194178	0.0005014	mg/L	0.00194178	387.28%
Ba 233.527†	-0.2	-0.0028671	mg/L	0.00009727	-0.0028671	mg/L	0.00009727	3.39%
Be 313.107†	-9.5	-0.0021011	mg/L	0.00002327	-0.0021011	mg/L	0.00002327	1.11%
Ca 317.933†	603.6	-0.379472	mg/L	0.0004967	-0.379472	mg/L	0.0004967	0.13%
Cd 228.802†	7.8	0.0034423	mg/L	0.00027439	0.0034423	mg/L	0.00027439	7.97%
Co 228.616†	10.2	0.0013622	mg/L	0.00024556	0.0013622	mg/L	0.00024556	18.03%
Cr 267.716†	-7.9	-0.0060214	mg/L	0.00021755	-0.0060214	mg/L	0.00021755	3.61%
Cu 327.393†	84.8	-0.0017767	mg/L	0.00066579	-0.0017767	mg/L	0.00066579	37.47%
Fe 273.955†	-28.4	-0.0504235	mg/L	0.00163824	-0.0504235	mg/L	0.00163824	3.25%
K 404.721†	1724.5	7.61793	mg/L	2.053058	7.61793	mg/L	2.053058	26.95%
Mg 279.077†	-2.4	-0.325935	mg/L	0.0010482	-0.325935	mg/L	0.0010482	0.32%
Mn 257.610†	21.1	-0.0052665	mg/L	0.00003500	-0.0052665	mg/L	0.00003500	0.66%
Mo 202.031†	16.5	0.0002646	mg/L	0.00076695	0.0002646	mg/L	0.00076695	289.83%
Na 330.237†	19.2	0.694432	mg/L	0.0398974	0.694432	mg/L	0.0398974	5.75%
Ni 231.604†	-10.2	-0.0010344	mg/L	0.00099973	-0.0010344	mg/L	0.00099973	96.65%
Pb 220.353†	-9.8	-0.0052238	mg/L	0.00031130	-0.0052238	mg/L	0.00031130	5.96%
Sb 206.836†	6.3	-0.0005578	mg/L	0.00244256	-0.0005578	mg/L	0.00244256	437.91%
Se 196.026†	2.2	0.0012891	mg/L	0.00663855	0.0012891	mg/L	0.00663855	514.99%
Sn 189.927†	19.0	0.0016802	mg/L	0.00059677	0.0016802	mg/L	0.00059677	35.52%
Ti 334.940†	-295.4	-0.0041476	mg/L	0.00011631	-0.0041476	mg/L	0.00011631	2.80%
Tl 190.801†	5.7	-0.0054084	mg/L	0.00306778	-0.0054084	mg/L	0.00306778	56.72%
V 290.880†	18.4	-0.0028843	mg/L	0.00085827	-0.0028843	mg/L	0.00085827	29.76%
Zn 206.200†	45.6	-0.0051098	mg/L	0.00011331	-0.0051098	mg/L	0.00011331	2.22%
B 249.772†	332.5	0.0156461	mg/L	0.00071084	0.0156461	mg/L	0.00071084	4.54%
Si 251.611†	-1265.6	-0.0407555	mg/L	0.00108102	-0.0407555	mg/L	0.00108102	2.65%
Ce 413.764†	-27.1	-0.056	mg/L	0.0046	-0.056	mg/L	0.0046	8.21%

Sequence No.: 10
Sample ID: LLICV V-333671
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 5
Date Collected: 9/16/2020 8:05:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LLICV V-333671

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	421082.3	95.5	%	0.44				0.46%
Y 371.029	191105.5	95.2	%	0.43				0.46%
Ag 328.068†	1385.9	0.0163989	mg/L	0.00086129	0.0163989	mg/L	0.00086129	5.25%
QC value within limits for Ag 328.068 Recovery = 109.33%								
Al 308.215†	16720.0	1.98463	mg/L	0.009193	1.98463	mg/L	0.009193	0.46%
QC value within limits for Al 308.215 Recovery = 99.23%								
As 188.979†	72.1	0.0403245	mg/L	0.00276828	0.0403245	mg/L	0.00276828	6.86%
QC value within limits for As 188.979 Recovery = 100.81%								
Ba 233.527†	8623.0	0.102230	mg/L	0.0010182	0.102230	mg/L	0.0010182	1.00%
QC value within limits for Ba 233.527 Recovery = 102.23%								
Be 313.107†	13430.1	0.0095287	mg/L	0.00001175	0.0095287	mg/L	0.00001175	0.12%
QC value less than the lower limit for Be 313.107 Recovery = 79.41%								
Ca 317.933†	879121.7	10.0376	mg/L	0.01489	10.0376	mg/L	0.01489	0.15%
QC value within limits for Ca 317.933 Recovery = 100.38%								
Cd 228.802†	364.6	0.0156595	mg/L	0.00021546	0.0156595	mg/L	0.00021546	1.38%
QC value greater than the upper limit for Cd 228.802 Recovery = 130.50%								
Co 228.616†	639.5	0.0264409	mg/L	0.00029336	0.0264409	mg/L	0.00029336	1.11%
QC value within limits for Co 228.616 Recovery = 105.76%								
Cr 267.716†	3276.0	0.0489671	mg/L	0.00063622	0.0489671	mg/L	0.00063622	1.30%
QC value within limits for Cr 267.716 Recovery = 97.93%								
Cu 327.393†	3349.3	0.0481570	mg/L	0.00032332	0.0481570	mg/L	0.00032332	0.67%
QC value within limits for Cu 327.393 Recovery = 96.31%								
Fe 273.955†	16933.5	1.99861	mg/L	0.006893	1.99861	mg/L	0.006893	0.34%
QC value within limits for Fe 273.955 Recovery = 99.93%								
K 404.721†	2683.2	-2.13762	mg/L	3.397372	-2.13762	mg/L	3.397372	158.93%
QC value less than the lower limit for K 404.721 Recovery = -42.75%								
Mg 279.077†	49061.8	4.94232	mg/L	0.019095	4.94232	mg/L	0.019095	0.39%
QC value within limits for Mg 279.077 Recovery = 98.85%								
Mn 257.610†	26745.6	0.0971929	mg/L	0.00011185	0.0971929	mg/L	0.00011185	0.12%
QC value within limits for Mn 257.610 Recovery = 97.19%								
Mo 202.031†	264.8	0.0239869	mg/L	0.00129851	0.0239869	mg/L	0.00129851	5.41%
QC value within limits for Mo 202.031 Recovery = 95.95%								
Na 330.237†	704.1	2.48403	mg/L	0.039840	2.48403	mg/L	0.039840	1.60%
QC value within limits for Na 330.237 Recovery = 99.36%								
Ni 231.604†	1359.1	0.0519951	mg/L	0.00087470	0.0519951	mg/L	0.00087470	1.68%
QC value within limits for Ni 231.604 Recovery = 103.99%								
Pb 220.353†	283.2	0.0450040	mg/L	0.00228241	0.0450040	mg/L	0.00228241	5.07%
QC value within limits for Pb 220.353 Recovery = 90.01%								
Sb 206.836†	82.5	0.0394080	mg/L	0.00194535	0.0394080	mg/L	0.00194535	4.94%
QC value within limits for Sb 206.836 Recovery = 98.52%								
Se 196.026†	88.1	0.0513982	mg/L	0.00406030	0.0513982	mg/L	0.00406030	7.90%
QC value within limits for Se 196.026 Recovery = 102.80%								
Sn 189.927†	1133.3	0.201142	mg/L	0.0026395	0.201142	mg/L	0.0026395	1.31%
QC value within limits for Sn 189.927 Recovery = 100.57%								
Ti 334.940†	25547.9	0.0953923	mg/L	0.00007992	0.0953923	mg/L	0.00007992	0.08%
QC value within limits for Ti 334.940 Recovery = 95.39%								
Tl 190.801†	108.9	0.0489272	mg/L	0.00441379	0.0489272	mg/L	0.00441379	9.02%
QC value within limits for Tl 190.801 Recovery = 97.85%								
V 290.880†	4723.1	0.0985707	mg/L	0.00045777	0.0985707	mg/L	0.00045777	0.46%
QC value within limits for V 290.880 Recovery = 98.57%								
Zn 206.200†	4480.3	0.101504	mg/L	0.0012275	0.101504	mg/L	0.0012275	1.21%
QC value within limits for Zn 206.200 Recovery = 101.50%								
B 249.772†	12286.2	0.201525	mg/L	0.0007129	0.201525	mg/L	0.0007129	0.35%
QC value within limits for B 249.772 Recovery = 100.76%								
Si 251.611†	1831.3	0.101056	mg/L	0.0009339	0.101056	mg/L	0.0009339	0.92%
QC value within limits for Si 251.611 Recovery = 101.06%								
Ce 413.764†	1018.1	0.086	mg/L	0.0099	0.086	mg/L	0.0099	11.47%
QC value within limits for Ce 413.764 Recovery = 86.19%								

QC Failed. Continue with analysis.

Sequence No.: 11 Autosampler Location: 7
Sample ID: ICSA V-333668 Date Collected: 9/16/2020 8:08:56 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	388827.2	88.2	%	0.75				0.85%
Y 371.029	173805.2	86.6	%	0.70				0.81%
Ag 328.068†	-526.7	-0.0070893	mg/L	0.00025417	-0.0070893	mg/L	0.00025417	3.59%
Al 308.215†	4066883.9	490.193	mg/L	3.5459	490.193	mg/L	3.5459	0.72%
QC value within limits for Al 308.215 Recovery = 98.04%								
As 188.979†	-37.0	0.0114887	mg/L	0.00338322	0.0114887	mg/L	0.00338322	29.45%
Ba 233.527†	370.7	0.0016535	mg/L	0.00006309	0.0016535	mg/L	0.00006309	3.82%
Be 313.107†	-190.2	-0.0022574	mg/L	0.00001376	-0.0022574	mg/L	0.00001376	0.61%
Ca 317.933†	38585428.9	457.140	mg/L	6.8516	457.140	mg/L	6.8516	1.50%
QC value within limits for Ca 317.933 Recovery = 91.43%								
Cd 228.802†	-56.2	0.0012502	mg/L	0.00020244	0.0012502	mg/L	0.00020244	16.19%
Co 228.616†	51.9	0.0030253	mg/L	0.00054428	0.0030253	mg/L	0.00054428	17.99%
Cr 267.716†	-322.0	-0.0112813	mg/L	0.00019475	-0.0112813	mg/L	0.00019475	1.73%
Cu 327.393†	-2094.4	-0.0351109	mg/L	0.00024887	-0.0351109	mg/L	0.00024887	0.71%
Fe 273.955†	1540923.4	186.100	mg/L	1.1618	186.100	mg/L	1.1618	0.62%
QC value within limits for Fe 273.955 Recovery = 93.05%								
K 404.721†	31912.0	-1511.39	mg/L	3.694	-1511.39	mg/L	3.694	0.24%
Mg 279.077†	4516891.2	484.673	mg/L	2.9168	484.673	mg/L	2.9168	0.60%
QC value within limits for Mg 279.077 Recovery = 96.93%								
Mn 257.610†	-4412.9	-0.0222660	mg/L	0.00010281	-0.0222660	mg/L	0.00010281	0.46%
Mo 202.031†	61.3	0.0045446	mg/L	0.00076058	0.0045446	mg/L	0.00076058	16.74%
Na 330.237†	47.0	0.767056	mg/L	0.0488335	0.767056	mg/L	0.0488335	6.37%
Ni 231.604†	225.7	0.0081025	mg/L	0.00045250	0.0081025	mg/L	0.00045250	5.58%
Pb 220.353†	-309.2	-0.0050397	mg/L	0.00041608	-0.0050397	mg/L	0.00041608	8.26%
Sb 206.836†	23.0	0.0017316	mg/L	0.01433569	0.0017316	mg/L	0.01433569	827.90%
Se 196.026†	-133.8	-0.0268862	mg/L	0.00437285	-0.0268862	mg/L	0.00437285	16.26%
Sn 189.927†	-84.5	-0.0168580	mg/L	0.00170347	-0.0168580	mg/L	0.00170347	10.10%
Ti 334.940†	-2052.2	-0.0109140	mg/L	0.00004988	-0.0109140	mg/L	0.00004988	0.46%
Tl 190.801†	-22.9	-0.0202116	mg/L	0.00342359	-0.0202116	mg/L	0.00342359	16.94%
V 290.880†	1105.7	0.0067909	mg/L	0.00026618	0.0067909	mg/L	0.00026618	3.92%
Zn 206.200†	107.9	-0.0036117	mg/L	0.00061364	-0.0036117	mg/L	0.00061364	16.99%
B 249.772†	55899.5	1.91542	mg/L	0.010379	1.91542	mg/L	0.010379	0.54%
Si 251.611†	-910.0	-0.0244976	mg/L	0.02530287	-0.0244976	mg/L	0.02530287	103.29%
Ce 413.764†	-175.2	0.075	mg/L	0.0051	0.075	mg/L	0.0051	6.82%

All analyte(s) passed QC.

Sequence No.: 12 Autosampler Location: 6
Sample ID: CCV V-333673 Date Collected: 9/16/2020 8:14:01 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	424819.9	96.4	%	0.56				0.59%
Y 371.029	164397.6	81.9	%	0.50				0.62%
Ag 328.068†	8325.0	0.101616	mg/L	0.0008721	0.101616	mg/L	0.0008721	0.86%
QC value within limits for Ag 328.068 Recovery = 101.62%								
Al 308.215†	40447.2	4.85967	mg/L	0.002054	4.85967	mg/L	0.002054	0.04%
QC value within limits for Al 308.215 Recovery = 97.19%								
As 188.979†	872.3	0.482992	mg/L	0.0071539	0.482992	mg/L	0.0071539	1.48%
QC value within limits for As 188.979 Recovery = 96.60%								
Ba 233.527†	39487.4	0.478396	mg/L	0.0006047	0.478396	mg/L	0.0006047	0.13%
QC value within limits for Ba 233.527 Recovery = 95.68%								
Be 313.107†	559142.8	0.481752	mg/L	0.0049125	0.481752	mg/L	0.0049125	1.02%
QC value within limits for Be 313.107 Recovery = 96.35%								
Ca 317.933†	4202296.1	49.4421	mg/L	0.47612	49.4421	mg/L	0.47612	0.96%
QC value within limits for Ca 317.933 Recovery = 98.88%								
Cd 228.802†	13923.9	0.479962	mg/L	0.0038450	0.479962	mg/L	0.0038450	0.80%
QC value within limits for Cd 228.802 Recovery = 95.99%								
Co 228.616†	12170.3	0.485989	mg/L	0.0040577	0.485989	mg/L	0.0040577	0.83%
QC value within limits for Co 228.616 Recovery = 97.20%								
Cr 267.716†	31290.9	0.518074	mg/L	0.0036049	0.518074	mg/L	0.0036049	0.70%
QC value within limits for Cr 267.716 Recovery = 103.61%								
Cu 327.393†	32347.1	0.491709	mg/L	0.0004043	0.491709	mg/L	0.0004043	0.08%
QC value within limits for Cu 327.393 Recovery = 98.34%								
Fe 273.955†	40910.7	4.89510	mg/L	0.008353	4.89510	mg/L	0.008353	0.17%
QC value within limits for Fe 273.955 Recovery = 97.90%								
K 404.721†	4137.8	-14.8244	mg/L	3.90977	-14.8244	mg/L	3.90977	26.37%
QC value less than the lower limit for K 404.721 Recovery = -29.65%								
Mg 279.077†	472977.4	50.4600	mg/L	0.05541	50.4600	mg/L	0.05541	0.11%
QC value within limits for Mg 279.077 Recovery = 100.92%								
Mn 257.610†	128486.4	0.487258	mg/L	0.0008649	0.487258	mg/L	0.0008649	0.18%
QC value within limits for Mn 257.610 Recovery = 97.45%								
Mo 202.031†	4975.2	0.473849	mg/L	0.0043058	0.473849	mg/L	0.0043058	0.91%
QC value within limits for Mo 202.031 Recovery = 94.77%								
Na 330.237†	19228.1	50.8906	mg/L	0.38303	50.8906	mg/L	0.38303	0.75%
QC value within limits for Na 330.237 Recovery = 101.78%								
Ni 231.604†	12639.3	0.488855	mg/L	0.0040976	0.488855	mg/L	0.0040976	0.84%
QC value within limits for Ni 231.604 Recovery = 97.77%								
Pb 220.353†	2850.2	0.481244	mg/L	0.0049343	0.481244	mg/L	0.0049343	1.03%
QC value within limits for Pb 220.353 Recovery = 96.25%								
Sb 206.836†	963.2	0.502478	mg/L	0.0046870	0.502478	mg/L	0.0046870	0.93%
QC value within limits for Sb 206.836 Recovery = 100.50%								
Se 196.026†	844.0	0.488340	mg/L	0.0063840	0.488340	mg/L	0.0063840	1.31%
QC value within limits for Se 196.026 Recovery = 97.67%								
Sn 189.927†	2729.5	0.486873	mg/L	0.0025173	0.486873	mg/L	0.0025173	0.52%
QC value within limits for Sn 189.927 Recovery = 97.37%								
Ti 334.940†	127806.2	0.489258	mg/L	0.0007545	0.489258	mg/L	0.0007545	0.15%
QC value within limits for Ti 334.940 Recovery = 97.85%								
Tl 190.801†	947.0	0.512328	mg/L	0.0066154	0.512328	mg/L	0.0066154	1.29%
QC value within limits for Tl 190.801 Recovery = 102.47%								
V 290.880†	22848.9	0.495539	mg/L	0.0004096	0.495539	mg/L	0.0004096	0.08%
QC value within limits for V 290.880 Recovery = 99.11%								
Zn 206.200†	21467.2	0.509879	mg/L	0.0030125	0.509879	mg/L	0.0030125	0.59%
QC value within limits for Zn 206.200 Recovery = 101.98%								
B 249.772†	32397.9	0.511031	mg/L	0.0025088	0.511031	mg/L	0.0025088	0.49%
QC value within limits for B 249.772 Recovery = 102.21%								
Si 251.611†	105115.0	4.83589	mg/L	0.002274	4.83589	mg/L	0.002274	0.05%
QC value within limits for Si 251.611 Recovery = 96.72%								
Ce 413.764†	36753.3	4.900	mg/L	0.0426	4.900	mg/L	0.0426	0.87%
QC value within limits for Ce 413.764 Recovery = 97.99%								

QC Failed. Continue with analysis.

Sequence No.: 13 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 9/16/2020 8:18:05 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	431449.1	97.9	%	0.70				0.72%
Y 371.029	197991.5	98.7	%	0.67				0.68%
Ag 328.068†	8.4	-0.0005177	mg/L	0.00052412	-0.0005177	mg/L	0.00052412	101.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	9.6	-0.0286049	mg/L	0.00356928	-0.0286049	mg/L	0.00356928	12.48%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.1	0.0000973	mg/L	0.00029673	0.0000973	mg/L	0.00029673	305.09%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-3.4	-0.0029054	mg/L	0.00002314	-0.0029054	mg/L	0.00002314	0.80%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-61.1	-0.0021457	mg/L	0.00002336	-0.0021457	mg/L	0.00002336	1.09%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	989.8	-0.374892	mg/L	0.0008127	-0.374892	mg/L	0.0008127	0.22%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	12.4	0.0035984	mg/L	0.00020527	0.0035984	mg/L	0.00020527	5.70%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-5.8	0.0007262	mg/L	0.00046992	0.0007262	mg/L	0.00046992	64.71%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-5.8	-0.0059867	mg/L	0.00011432	-0.0059867	mg/L	0.00011432	1.91%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	34.6	-0.0025450	mg/L	0.00060865	-0.0025450	mg/L	0.00060865	23.92%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	14.7	-0.0452092	mg/L	0.00100419	-0.0452092	mg/L	0.00100419	2.22%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	1371.5	3.64224	mg/L	6.391347	3.64224	mg/L	6.391347	175.48%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	19.2	-0.323610	mg/L	0.0003594	-0.323610	mg/L	0.0003594	0.11%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	55.2	-0.0051355	mg/L	0.00001689	-0.0051355	mg/L	0.00001689	0.33%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.8	-0.0006603	mg/L	0.00040088	-0.0006603	mg/L	0.00040088	60.71%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	14.6	0.682411	mg/L	0.0925163	0.682411	mg/L	0.0925163	13.56%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	4.8	-0.0004519	mg/L	0.00026753	-0.0004519	mg/L	0.00026753	59.20%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-13.3	-0.0058176	mg/L	0.00205967	-0.0058176	mg/L	0.00205967	35.40%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	8.8	0.0006576	mg/L	0.00170817	0.0006576	mg/L	0.00170817	259.76%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.6	-0.0003169	mg/L	0.00296316	-0.0003169	mg/L	0.00296316	935.08%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-2.7	-0.0022024	mg/L	0.00062618	-0.0022024	mg/L	0.00062618	28.43%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-305.3	-0.0041855	mg/L	0.00011135	-0.0041855	mg/L	0.00011135	2.66%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	6.4	-0.0050598	mg/L	0.00107815	-0.0050598	mg/L	0.00107815	21.31%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	21.7	-0.0028287	mg/L	0.00031862	-0.0028287	mg/L	0.00031862	11.26%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	52.1	-0.0049531	mg/L	0.00014811	-0.0049531	mg/L	0.00014811	2.99%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	319.5	0.0154873	mg/L	0.00047332	0.0154873	mg/L	0.00047332	3.06%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	-1313.6	-0.0429455	mg/L	0.00046576	-0.0429455	mg/L	0.00046576	1.08%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	-51.6	-0.059	mg/L	0.0012	-0.059	mg/L	0.0012	2.01%
QC value within limits for Ce 413.764 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: AD19214-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 9/16/2020 8:21:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19214-003

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	434555.9	98.6	%	0.43				0.43%
Y 371.029	204497.5	102	%	0.6				0.64%
Ag 328.068†	-11.2	-0.0007584	mg/L	0.00057679	-0.0007584	mg/L	0.00057679	76.05%
Al 308.215†	230854.8	27.7972	mg/L	0.01964	27.7972	mg/L	0.01964	0.07%
As 188.979†	32.6	0.0254344	mg/L	0.00314463	0.0254344	mg/L	0.00314463	12.36%
Ba 233.527†	13209.9	0.158134	mg/L	0.0001793	0.158134	mg/L	0.0001793	0.11%
Be 313.107†	-1698.2	-0.0035623	mg/L	0.00002056	-0.0035623	mg/L	0.00002056	0.58%
Ca 317.933†	738542.0	8.37063	mg/L	0.007706	8.37063	mg/L	0.007706	0.09%
Cd 228.802†	24.6	0.0040154	mg/L	0.00013027	0.0040154	mg/L	0.00013027	3.24%
Co 228.616†	328.2	0.0140346	mg/L	0.00038160	0.0140346	mg/L	0.00038160	2.72%
Cr 267.716†	4465.9	0.0688920	mg/L	0.00049974	0.0688920	mg/L	0.00049974	0.73%
Cu 327.393†	4817.8	0.0706194	mg/L	0.00055715	0.0706194	mg/L	0.00055715	0.79%
Fe 273.955†	352569.2	42.5441	mg/L	0.04179	42.5441	mg/L	0.04179	0.10%
K 404.721†	7067.9	-357.346	mg/L	8.2792	-357.346	mg/L	8.2792	2.32%
Mg 279.077†	62824.9	6.42011	mg/L	0.020173	6.42011	mg/L	0.020173	0.31%
Mn 257.610†	73345.7	0.275854	mg/L	0.0002517	0.275854	mg/L	0.0002517	0.09%
Mo 202.031†	46.4	0.0031278	mg/L	0.00061002	0.0031278	mg/L	0.00061002	19.50%
Na 330.237†	111.9	0.936483	mg/L	0.1420228	0.936483	mg/L	0.1420228	15.17%
Ni 231.604†	771.1	0.0292224	mg/L	0.00012895	0.0292224	mg/L	0.00012895	0.44%
Pb 220.353†	2236.3	0.381475	mg/L	0.0011122	0.381475	mg/L	0.0011122	0.29%
Sb 206.836†	11.3	0.0028096	mg/L	0.00167403	0.0028096	mg/L	0.00167403	59.58%
Se 196.026†	-35.7	-0.0090519	mg/L	0.00129804	-0.0090519	mg/L	0.00129804	14.34%
Sn 189.927†	107.3	0.0174870	mg/L	0.00247032	0.0174870	mg/L	0.00247032	14.13%
Ti 334.940†	271214.2	1.04162	mg/L	0.003090	1.04162	mg/L	0.003090	0.30%
Tl 190.801†	-16.1	-0.0087167	mg/L	0.00290950	-0.0087167	mg/L	0.00290950	33.38%
V 290.880†	3718.9	0.0736287	mg/L	0.00134297	0.0736287	mg/L	0.00134297	1.82%
Zn 206.200†	11219.0	0.263506	mg/L	0.0013966	0.263506	mg/L	0.0013966	0.53%
B 249.772†	13187.1	0.452382	mg/L	0.0002595	0.452382	mg/L	0.0002595	0.06%
Si 251.611†	48414.0	2.24007	mg/L	0.019369	2.24007	mg/L	0.019369	0.86%
Ce 413.764†	995.3	0.116	mg/L	0.0064	0.116	mg/L	0.0064	5.49%

Sequence No.: 15
Sample ID: AD19214-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 9/16/2020 8:25:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19214-005

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	435050.7	98.7	%	0.57				0.58%
Y 371.029	204693.1	102	%	0.5				0.52%
Ag 328.068†	24.5	-0.0003201	mg/L	0.00037520	-0.0003201	mg/L	0.00037520	117.23%
Al 308.215†	180352.7	21.7095	mg/L	0.01489	21.7095	mg/L	0.01489	0.07%
As 188.979†	54.9	0.0371395	mg/L	0.00604794	0.0371395	mg/L	0.00604794	16.28%
Ba 233.527†	13036.3	0.156018	mg/L	0.0003277	0.156018	mg/L	0.0003277	0.21%
Be 313.107†	-1721.3	-0.0035823	mg/L	0.00000766	-0.0035823	mg/L	0.00000766	0.21%
Ca 317.933†	523808.2	5.82443	mg/L	0.010361	5.82443	mg/L	0.010361	0.18%
Cd 228.802†	40.2	0.0045498	mg/L	0.00041664	0.0045498	mg/L	0.00041664	9.16%
Co 228.616†	376.7	0.0159694	mg/L	0.00028808	0.0159694	mg/L	0.00028808	1.80%
Cr 267.716†	3184.7	0.0474373	mg/L	0.00064462	0.0474373	mg/L	0.00064462	1.36%
Cu 327.393†	6695.8	0.0993452	mg/L	0.00102625	0.0993452	mg/L	0.00102625	1.03%
Fe 273.955†	323213.7	38.9979	mg/L	0.06812	38.9979	mg/L	0.06812	0.17%
K 404.721†	5730.8	-336.882	mg/L	4.9809	-336.882	mg/L	4.9809	1.48%
Mg 279.077†	60446.4	6.16473	mg/L	0.017027	6.16473	mg/L	0.017027	0.28%
Mn 257.610†	85822.7	0.323689	mg/L	0.0002267	0.323689	mg/L	0.0002267	0.07%
Mo 202.031†	20.0	0.0006039	mg/L	0.00032766	0.0006039	mg/L	0.00032766	54.25%
Na 330.237†	173.4	1.09716	mg/L	0.097763	1.09716	mg/L	0.097763	8.91%
Ni 231.604†	866.4	0.0329136	mg/L	0.00093297	0.0329136	mg/L	0.00093297	2.83%
Pb 220.353†	3040.1	0.518263	mg/L	0.0013897	0.518263	mg/L	0.0013897	0.27%
Sb 206.836†	10.3	0.0022634	mg/L	0.00292014	0.0022634	mg/L	0.00292014	129.01%
Se 196.026†	-26.5	-0.0047073	mg/L	0.00642585	-0.0047073	mg/L	0.00642585	136.51%
Sn 189.927†	124.8	0.0206192	mg/L	0.00116818	0.0206192	mg/L	0.00116818	5.67%
Ti 334.940†	263799.3	1.01306	mg/L	0.001750	1.01306	mg/L	0.001750	0.17%
Tl 190.801†	-14.7	-0.0085871	mg/L	0.00449355	-0.0085871	mg/L	0.00449355	52.33%
V 290.880†	3397.5	0.0669341	mg/L	0.00131301	0.0669341	mg/L	0.00131301	1.96%
Zn 206.200†	12056.5	0.283640	mg/L	0.0010217	0.283640	mg/L	0.0010217	0.36%
B 249.772†	11882.2	0.412608	mg/L	0.0019873	0.412608	mg/L	0.0019873	0.48%
Si 251.611†	45311.5	2.09767	mg/L	0.015144	2.09767	mg/L	0.015144	0.72%
Ce 413.764†	586.6	0.058	mg/L	0.0066	0.058	mg/L	0.0066	11.29%

Sequence No.: 16
Sample ID: AD19214-007
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 106
Date Collected: 9/16/2020 8:29:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19214-007

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	443062.0	100	%	0.4				0.38%
Y 371.029	205373.2	102	%	0.4				0.42%
Ag 328.068†	267.9	0.0026692	mg/L	0.00034120	0.0026692	mg/L	0.00034120	12.78%
Al 308.215†	263442.9	31.7249	mg/L	0.21879	31.7249	mg/L	0.21879	0.69%
As 188.979†	78.8	0.0572582	mg/L	0.00294209	0.0572582	mg/L	0.00294209	5.14%
Ba 233.527†	110932.8	1.34915	mg/L	0.007562	1.34915	mg/L	0.007562	0.56%
Be 313.107†	-959.7	-0.0029233	mg/L	0.00005126	-0.0029233	mg/L	0.00005126	1.75%
Ca 317.933†	2331862.8	27.2634	mg/L	0.51820	27.2634	mg/L	0.51820	1.90%
Cd 228.802†	145.6	0.0081602	mg/L	0.00030459	0.0081602	mg/L	0.00030459	3.73%
Co 228.616†	408.7	0.0172453	mg/L	0.00029858	0.0172453	mg/L	0.00029858	1.73%
Cr 267.716†	4637.4	0.0717635	mg/L	0.00023391	0.0717635	mg/L	0.00023391	0.33%
Cu 327.393†	30005.3	0.455889	mg/L	0.0028339	0.455889	mg/L	0.0028339	0.62%
Fe 273.955†	658739.7	79.5301	mg/L	1.59233	79.5301	mg/L	1.59233	2.00%
K 404.721†	11492.5	-676.649	mg/L	11.6043	-676.649	mg/L	11.6043	1.71%
Mg 279.077†	36385.6	3.58121	mg/L	0.033734	3.58121	mg/L	0.033734	0.94%
Mn 257.610†	191532.6	0.728972	mg/L	0.0047167	0.728972	mg/L	0.0047167	0.65%
Mo 202.031†	35.2	0.0020570	mg/L	0.00070838	0.0020570	mg/L	0.00070838	34.44%
Na 330.237†	238.1	1.26634	mg/L	0.199961	1.26634	mg/L	0.199961	15.79%
Ni 231.604†	1297.6	0.0496144	mg/L	0.00054780	0.0496144	mg/L	0.00054780	1.10%
Pb 220.353†	18168.0	3.10488	mg/L	0.029217	3.10488	mg/L	0.029217	0.94%
Sb 206.836†	37.6	0.0153676	mg/L	0.00491908	0.0153676	mg/L	0.00491908	32.01%
Se 196.026†	-54.6	-0.0099843	mg/L	0.00124321	-0.0099843	mg/L	0.00124321	12.45%
Sn 189.927†	1708.4	0.304097	mg/L	0.0019531	0.304097	mg/L	0.0019531	0.64%
Ti 334.940†	241896.9	0.928698	mg/L	0.0066397	0.928698	mg/L	0.0066397	0.71%
Tl 190.801†	-12.1	-0.0075984	mg/L	0.00520615	-0.0075984	mg/L	0.00520615	68.52%
V 290.880†	4989.7	0.0982153	mg/L	0.00069059	0.0982153	mg/L	0.00069059	0.70%
Zn 206.200†	93830.2	2.24953	mg/L	0.013363	2.24953	mg/L	0.013363	0.59%
B 249.772†	24460.6	0.833235	mg/L	0.0125189	0.833235	mg/L	0.0125189	1.50%
Si 251.611†	62452.4	2.88462	mg/L	0.086773	2.88462	mg/L	0.086773	3.01%
Ce 413.764†	811.4	0.121	mg/L	0.0108	0.121	mg/L	0.0108	8.92%

Sequence No.: 17
Sample ID: AD19214-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 107
Date Collected: 9/16/2020 8:33:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19214-008

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	431173.7	97.8	%	0.61				0.62%
Y 371.029	202007.7	101	%	0.6				0.55%
Ag 328.068†	430.1	0.0046612	mg/L	0.00048447	0.0046612	mg/L	0.00048447	10.39%
Al 308.215†	315560.9	38.0075	mg/L	0.08254	38.0075	mg/L	0.08254	0.22%
As 188.979†	25.6	0.0229334	mg/L	0.00161352	0.0229334	mg/L	0.00161352	7.04%
Ba 233.527†	15945.0	0.191469	mg/L	0.0006678	0.191469	mg/L	0.0006678	0.35%
Be 313.107†	-2021.8	-0.0038424	mg/L	0.00004889	-0.0038424	mg/L	0.00004889	1.27%
Ca 317.933†	1133936.4	13.0590	mg/L	0.02728	13.0590	mg/L	0.02728	0.21%
Cd 228.802†	44.8	0.0047094	mg/L	0.00026800	0.0047094	mg/L	0.00026800	5.69%
Co 228.616†	368.3	0.0156350	mg/L	0.00022995	0.0156350	mg/L	0.00022995	1.47%
Cr 267.716†	6853.3	0.108869	mg/L	0.0004791	0.108869	mg/L	0.0004791	0.44%
Cu 327.393†	8396.7	0.125363	mg/L	0.0010631	0.125363	mg/L	0.0010631	0.85%
Fe 273.955†	419295.3	50.6047	mg/L	0.08122	50.6047	mg/L	0.08122	0.16%
K 404.721†	8154.7	-425.573	mg/L	4.3605	-425.573	mg/L	4.3605	1.02%
Mg 279.077†	98853.8	10.2887	mg/L	0.03625	10.2887	mg/L	0.03625	0.35%
Mn 257.610†	78607.9	0.296029	mg/L	0.0006485	0.296029	mg/L	0.0006485	0.22%
Mo 202.031†	30.0	0.0015564	mg/L	0.00057640	0.0015564	mg/L	0.00057640	37.03%
Na 330.237†	167.8	1.08270	mg/L	0.065552	1.08270	mg/L	0.065552	6.05%
Ni 231.604†	1033.0	0.0393675	mg/L	0.00058940	0.0393675	mg/L	0.00058940	1.50%
Pb 220.353†	1080.9	0.185042	mg/L	0.0008811	0.185042	mg/L	0.0008811	0.48%
Sb 206.836†	9.1	0.0017390	mg/L	0.00534696	0.0017390	mg/L	0.00534696	307.47%
Se 196.026†	-44.5	-0.0119431	mg/L	0.00718405	-0.0119431	mg/L	0.00718405	60.15%
Sn 189.927†	104.5	0.0169865	mg/L	0.00215699	0.0169865	mg/L	0.00215699	12.70%
Ti 334.940†	312823.1	1.20188	mg/L	0.001601	1.20188	mg/L	0.001601	0.13%
Tl 190.801†	-22.4	-0.0107558	mg/L	0.00150742	-0.0107558	mg/L	0.00150742	14.01%
V 290.880†	4909.5	0.0986234	mg/L	0.00194395	0.0986234	mg/L	0.00194395	1.97%
Zn 206.200†	15136.4	0.357683	mg/L	0.0021709	0.357683	mg/L	0.0021709	0.61%
B 249.772†	21045.2	0.613943	mg/L	0.0021574	0.613943	mg/L	0.0021574	0.35%
Si 251.611†	51250.5	2.37033	mg/L	0.012178	2.37033	mg/L	0.012178	0.51%
Ce 413.764†	1109.4	0.138	mg/L	0.0111	0.138	mg/L	0.0111	8.03%

Sequence No.: 18
Sample ID: AD19214-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 9/16/2020 8:37:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19214-010

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	445205.8	101	%	0.3				0.26%
Y 371.029	206620.1	103	%	0.3				0.26%
Ag 328.068†	15.9	-0.0004254	mg/L	0.00027779	-0.0004254	mg/L	0.00027779	65.30%
Al 308.215†	246491.0	29.6818	mg/L	0.08472	29.6818	mg/L	0.08472	0.29%
As 188.979†	14.3	0.0140831	mg/L	0.00368001	0.0140831	mg/L	0.00368001	26.13%
Ba 233.527†	5315.0	0.0619135	mg/L	0.00020367	0.0619135	mg/L	0.00020367	0.33%
Be 313.107†	-711.7	-0.0027087	mg/L	0.00004043	-0.0027087	mg/L	0.00004043	1.49%
Ca 317.933†	263165.6	2.73386	mg/L	0.003912	2.73386	mg/L	0.003912	0.14%
Cd 228.802†	6.1	0.0033836	mg/L	0.00001211	0.0033836	mg/L	0.00001211	0.36%
Co 228.616†	109.2	0.0053077	mg/L	0.00033480	0.0053077	mg/L	0.00033480	6.31%
Cr 267.716†	3267.1	0.0488183	mg/L	0.00014720	0.0488183	mg/L	0.00014720	0.30%
Cu 327.393†	2140.8	0.0296710	mg/L	0.00034914	0.0296710	mg/L	0.00034914	1.18%
Fe 273.955†	292479.0	35.2851	mg/L	0.04978	35.2851	mg/L	0.04978	0.14%
K 404.721†	4152.2	-317.440	mg/L	2.8346	-317.440	mg/L	2.8346	0.89%
Mg 279.077†	14600.1	1.24200	mg/L	0.004946	1.24200	mg/L	0.004946	0.40%
Mn 257.610†	23133.0	0.0833427	mg/L	0.00016531	0.0833427	mg/L	0.00016531	0.20%
Mo 202.031†	19.5	0.0005534	mg/L	0.00048160	0.0005534	mg/L	0.00048160	87.02%
Na 330.237†	4.9	0.656989	mg/L	0.0527868	0.656989	mg/L	0.0527868	8.03%
Ni 231.604†	392.2	0.0145491	mg/L	0.00024211	0.0145491	mg/L	0.00024211	1.66%
Pb 220.353†	254.8	0.0430345	mg/L	0.00145102	0.0430345	mg/L	0.00145102	3.37%
Sb 206.836†	6.9	-0.0003405	mg/L	0.00414368	-0.0003405	mg/L	0.00414368	>999.9%
Se 196.026†	-27.3	-0.0061570	mg/L	0.00204867	-0.0061570	mg/L	0.00204867	33.27%
Sn 189.927†	72.7	0.0112832	mg/L	0.00251853	0.0112832	mg/L	0.00251853	22.32%
Ti 334.940†	119863.3	0.458664	mg/L	0.0070475	0.458664	mg/L	0.0070475	1.54%
Tl 190.801†	-10.9	-0.0101734	mg/L	0.00313287	-0.0101734	mg/L	0.00313287	30.79%
V 290.880†	3881.4	0.0776216	mg/L	0.00016811	0.0776216	mg/L	0.00016811	0.22%
Zn 206.200†	2483.3	0.0534950	mg/L	0.00028350	0.0534950	mg/L	0.00028350	0.53%
B 249.772†	10507.9	0.370848	mg/L	0.0011335	0.370848	mg/L	0.0011335	0.31%
Si 251.611†	60445.0	2.79248	mg/L	0.011264	2.79248	mg/L	0.011264	0.40%
Ce 413.764†	688.1	0.069	mg/L	0.0078	0.069	mg/L	0.0078	11.28%

Sequence No.: 19
Sample ID: AD19214-011
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 109
Date Collected: 9/16/2020 8:41:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19214-011

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	439307.2	99.6	%	0.63				0.64%
Y 371.029	201944.6	101	%	0.7				0.70%
Ag 328.068†	14.3	-0.0004451	mg/L	0.00056351	-0.0004451	mg/L	0.00056351	126.59%
Al 308.215†	262022.6	31.5541	mg/L	0.00721	31.5541	mg/L	0.00721	0.02%
As 188.979†	26.7	0.0202672	mg/L	0.00508348	0.0202672	mg/L	0.00508348	25.08%
Ba 233.527†	8786.5	0.104222	mg/L	0.0009093	0.104222	mg/L	0.0009093	0.87%
Be 313.107†	-638.0	-0.0026449	mg/L	0.00003926	-0.0026449	mg/L	0.00003926	1.48%
Ca 317.933†	1004372.1	11.5227	mg/L	0.01277	11.5227	mg/L	0.01277	0.11%
Cd 228.802†	21.7	0.0039193	mg/L	0.00005194	0.0039193	mg/L	0.00005194	1.33%
Co 228.616†	150.1	0.0069390	mg/L	0.00057388	0.0069390	mg/L	0.00057388	8.27%
Cr 267.716†	3682.6	0.0557753	mg/L	0.00035472	0.0557753	mg/L	0.00035472	0.64%
Cu 327.393†	3294.2	0.0473140	mg/L	0.00048233	0.0473140	mg/L	0.00048233	1.02%
Fe 273.955†	260915.2	31.4721	mg/L	0.02311	31.4721	mg/L	0.02311	0.07%
K 404.721†	4035.9	-280.745	mg/L	3.3621	-280.745	mg/L	3.3621	1.20%
Mg 279.077†	28588.1	2.74396	mg/L	0.010715	2.74396	mg/L	0.010715	0.39%
Mn 257.610†	61868.0	0.231849	mg/L	0.0001230	0.231849	mg/L	0.0001230	0.05%
Mo 202.031†	28.0	0.0013669	mg/L	0.00082716	0.0013669	mg/L	0.00082716	60.51%
Na 330.237†	96.7	0.896780	mg/L	0.0625025	0.896780	mg/L	0.0625025	6.97%
Ni 231.604†	490.3	0.0183480	mg/L	0.00010147	0.0183480	mg/L	0.00010147	0.55%
Pb 220.353†	593.0	0.101007	mg/L	0.0034924	0.101007	mg/L	0.0034924	3.46%
Sb 206.836†	10.0	0.0015049	mg/L	0.00469238	0.0015049	mg/L	0.00469238	311.81%
Se 196.026†	-27.5	-0.0072974	mg/L	0.00337443	-0.0072974	mg/L	0.00337443	46.24%
Sn 189.927†	76.0	0.0118869	mg/L	0.00031141	0.0118869	mg/L	0.00031141	2.62%
Ti 334.940†	135189.2	0.517695	mg/L	0.0061006	0.517695	mg/L	0.0061006	1.18%
Tl 190.801†	-8.4	-0.0083881	mg/L	0.00074155	-0.0083881	mg/L	0.00074155	8.84%
V 290.880†	3751.3	0.0751168	mg/L	0.00089969	0.0751168	mg/L	0.00089969	1.20%
Zn 206.200†	7977.5	0.185579	mg/L	0.0017447	0.185579	mg/L	0.0017447	0.94%
B 249.772†	9877.1	0.339314	mg/L	0.0002754	0.339314	mg/L	0.0002754	0.08%
Si 251.611†	69700.7	3.21741	mg/L	0.035754	3.21741	mg/L	0.035754	1.11%
Ce 413.764†	845.1	0.087	mg/L	0.0013	0.087	mg/L	0.0013	1.49%

0091101 0427

Sequence No.: 20
Sample ID: AD19214-014
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 110
Date Collected: 9/16/2020 8:45:11 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19214-014

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	442385.2	100	%	1.1				1.11%
Y 371.029	203979.5	102	%	1.1				1.06%
Ag 328.068†	2.8	-0.0005857	mg/L	0.00033786	-0.0005857	mg/L	0.00033786	57.69%
Al 308.215†	77296.0	9.28745	mg/L	0.015748	9.28745	mg/L	0.015748	0.17%
As 188.979†	9.4	0.0077388	mg/L	0.00095157	0.0077388	mg/L	0.00095157	12.30%
Ba 233.527†	2589.4	0.0286941	mg/L	0.00031389	0.0286941	mg/L	0.00031389	1.09%
Be 313.107†	-844.1	-0.0028233	mg/L	0.00005456	-0.0028233	mg/L	0.00005456	1.93%
Ca 317.933†	307417.3	3.25857	mg/L	0.002080	3.25857	mg/L	0.002080	0.06%
Cd 228.802†	5.8	0.0033732	mg/L	0.00026037	0.0033732	mg/L	0.00026037	7.72%
Co 228.616†	160.2	0.0073409	mg/L	0.00044925	0.0073409	mg/L	0.00044925	6.12%
Cr 267.716†	1584.6	0.0206444	mg/L	0.00042362	0.0206444	mg/L	0.00042362	2.05%
Cu 327.393†	964.2	0.0116752	mg/L	0.00030036	0.0116752	mg/L	0.00030036	2.57%
Fe 273.955†	115824.5	13.9448	mg/L	0.02170	13.9448	mg/L	0.02170	0.16%
K 404.721†	1825.6	-130.693	mg/L	6.9689	-130.693	mg/L	6.9689	5.33%
Mg 279.077†	24378.6	2.29196	mg/L	0.001458	2.29196	mg/L	0.001458	0.06%
Mn 257.610†	30938.0	0.113266	mg/L	0.0000860	0.113266	mg/L	0.0000860	0.08%
Mo 202.031†	4.8	-0.0008509	mg/L	0.00119011	-0.0008509	mg/L	0.00119011	139.87%
Na 330.237†	58.8	0.797682	mg/L	0.0076333	0.797682	mg/L	0.0076333	0.96%
Ni 231.604†	295.2	0.0107921	mg/L	0.00034888	0.0107921	mg/L	0.00034888	3.23%
Pb 220.353†	454.9	0.0751324	mg/L	0.00141673	0.0751324	mg/L	0.00141673	1.89%
Sb 206.836†	1.3	-0.0026128	mg/L	0.00276351	-0.0026128	mg/L	0.00276351	105.77%
Se 196.026†	-11.8	-0.0030170	mg/L	0.00481629	-0.0030170	mg/L	0.00481629	159.64%
Sn 189.927†	69.7	0.0107501	mg/L	0.00028264	0.0107501	mg/L	0.00028264	2.63%
Ti 334.940†	123139.7	0.471284	mg/L	0.0028527	0.471284	mg/L	0.0028527	0.61%
Tl 190.801†	-4.8	-0.0073455	mg/L	0.00312027	-0.0073455	mg/L	0.00312027	42.48%
V 290.880†	1300.0	0.0236371	mg/L	0.00051189	0.0236371	mg/L	0.00051189	2.17%
Zn 206.200†	5292.7	0.121033	mg/L	0.0016919	0.121033	mg/L	0.0016919	1.40%
B 249.772†	4723.5	0.161578	mg/L	0.0002751	0.161578	mg/L	0.0002751	0.17%
Si 251.611†	36490.7	1.69272	mg/L	0.054511	1.69272	mg/L	0.054511	3.22%
Ce 413.764†	305.8	0.000	mg/L	0.0066	0.000	mg/L	0.0066	>999.9%

Sequence No.: 21
Sample ID: AD19214-017
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 111
Date Collected: 9/16/2020 8:49:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19214-017

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	447905.6	102	%	1.0				0.94%
Y 371.029	207759.2	104	%	0.8				0.82%
Ag 328.068†	11.8	-0.0004752	mg/L	0.00064683	-0.0004752	mg/L	0.00064683	136.11%
Al 308.215†	76790.4	9.22651	mg/L	0.040179	9.22651	mg/L	0.040179	0.44%
As 188.979†	10.5	0.0089778	mg/L	0.00386051	0.0089778	mg/L	0.00386051	43.00%
Ba 233.527†	3207.0	0.0362216	mg/L	0.00045313	0.0362216	mg/L	0.00045313	1.25%
Be 313.107†	-1101.8	-0.0030463	mg/L	0.00004358	-0.0030463	mg/L	0.00004358	1.43%
Ca 317.933†	271675.3	2.83476	mg/L	0.005952	2.83476	mg/L	0.005952	0.21%
Cd 228.802†	16.8	0.0037499	mg/L	0.00029906	0.0037499	mg/L	0.00029906	7.97%
Co 228.616†	181.2	0.0081761	mg/L	0.00027109	0.0081761	mg/L	0.00027109	3.32%
Cr 267.716†	2453.1	0.0351876	mg/L	0.00040712	0.0351876	mg/L	0.00040712	1.16%
Cu 327.393†	3088.4	0.0441668	mg/L	0.00079617	0.0441668	mg/L	0.00079617	1.80%
Fe 273.955†	147121.3	17.7256	mg/L	0.06397	17.7256	mg/L	0.06397	0.36%
K 404.721†	1341.8	-173.739	mg/L	7.4822	-173.739	mg/L	7.4822	4.31%
Mg 279.077†	29646.0	2.85755	mg/L	0.013936	2.85755	mg/L	0.013936	0.49%
Mn 257.610†	40664.4	0.150556	mg/L	0.0003189	0.150556	mg/L	0.0003189	0.21%
Mo 202.031†	3.1	-0.0010118	mg/L	0.00006174	-0.0010118	mg/L	0.00006174	6.10%
Na 330.237†	138.8	1.00683	mg/L	0.042548	1.00683	mg/L	0.042548	4.23%
Ni 231.604†	524.8	0.0196863	mg/L	0.00020665	0.0196863	mg/L	0.00020665	1.05%
Pb 220.353†	1034.0	0.174098	mg/L	0.0031239	0.174098	mg/L	0.0031239	1.79%
Sb 206.836†	5.1	-0.0006092	mg/L	0.00426840	-0.0006092	mg/L	0.00426840	700.71%
Se 196.026†	-15.1	-0.0039035	mg/L	0.00233548	-0.0039035	mg/L	0.00233548	59.83%
Sn 189.927†	77.3	0.0121168	mg/L	0.00157319	0.0121168	mg/L	0.00157319	12.98%
Ti 334.940†	152797.5	0.585516	mg/L	0.0048716	0.585516	mg/L	0.0048716	0.83%
Tl 190.801†	-10.4	-0.0093790	mg/L	0.00245542	-0.0093790	mg/L	0.00245542	26.18%
V 290.880†	1417.6	0.0258837	mg/L	0.00117789	0.0258837	mg/L	0.00117789	4.55%
Zn 206.200†	6949.7	0.160871	mg/L	0.0026435	0.160871	mg/L	0.0026435	1.64%
B 249.772†	5856.9	0.200234	mg/L	0.0013967	0.200234	mg/L	0.0013967	0.70%
Si 251.611†	39307.5	1.82204	mg/L	0.054806	1.82204	mg/L	0.054806	3.01%
Ce 413.764†	360.4	0.010	mg/L	0.0143	0.010	mg/L	0.0143	137.30%

Sequence No.: 22
Sample ID: AD19214-020
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 112
Date Collected: 9/16/2020 8:52:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19214-020

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	441842.3	100	%	0.5				0.47%
Y 371.029	204745.5	102	%	0.5				0.53%
Ag 328.068†	2.5	-0.0005902	mg/L	0.00026772	-0.0005902	mg/L	0.00026772	45.36%
Al 308.215†	109015.7	13.1108	mg/L	0.03652	13.1108	mg/L	0.03652	0.28%
As 188.979†	15.1	0.0117529	mg/L	0.00456852	0.0117529	mg/L	0.00456852	38.87%
Ba 233.527†	3331.1	0.0377335	mg/L	0.00047122	0.0377335	mg/L	0.00047122	1.25%
Be 313.107†	-819.6	-0.0028021	mg/L	0.00007651	-0.0028021	mg/L	0.00007651	2.73%
Ca 317.933†	393444.9	4.27864	mg/L	0.007465	4.27864	mg/L	0.007465	0.17%
Cd 228.802†	11.6	0.0035710	mg/L	0.00017479	0.0035710	mg/L	0.00017479	4.89%
Co 228.616†	131.4	0.0061939	mg/L	0.00012460	0.0061939	mg/L	0.00012460	2.01%
Cr 267.716†	2041.7	0.0282978	mg/L	0.00020745	0.0282978	mg/L	0.00020745	0.73%
Cu 327.393†	1308.5	0.0169401	mg/L	0.00057296	0.0169401	mg/L	0.00057296	3.38%
Fe 273.955†	159597.4	19.2327	mg/L	0.06781	19.2327	mg/L	0.06781	0.35%
K 404.721†	1828.1	-183.348	mg/L	5.5317	-183.348	mg/L	5.5317	3.02%
Mg 279.077†	21711.3	2.00557	mg/L	0.015693	2.00557	mg/L	0.015693	0.78%
Mn 257.610†	27104.7	0.0985697	mg/L	0.00015412	0.0985697	mg/L	0.00015412	0.16%
Mo 202.031†	16.6	0.0002771	mg/L	0.00079681	0.0002771	mg/L	0.00079681	287.52%
Na 330.237†	22.3	0.702356	mg/L	0.0435755	0.702356	mg/L	0.0435755	6.20%
Ni 231.604†	297.8	0.0108941	mg/L	0.00042002	0.0108941	mg/L	0.00042002	3.86%
Pb 220.353†	667.0	0.111781	mg/L	0.0021716	0.111781	mg/L	0.0021716	1.94%
Sb 206.836†	11.4	0.0023462	mg/L	0.00280359	0.0023462	mg/L	0.00280359	119.49%
Se 196.026†	-10.9	-0.0010435	mg/L	0.00151388	-0.0010435	mg/L	0.00151388	145.08%
Sn 189.927†	60.5	0.0090984	mg/L	0.00070480	0.0090984	mg/L	0.00070480	7.75%
Ti 334.940†	120747.5	0.462070	mg/L	0.0209583	0.462070	mg/L	0.0209583	4.54%
Tl 190.801†	-4.7	-0.0072912	mg/L	0.00376658	-0.0072912	mg/L	0.00376658	51.66%
V 290.880†	1849.1	0.0350782	mg/L	0.00010466	0.0350782	mg/L	0.00010466	0.30%
Zn 206.200†	4182.8	0.0943518	mg/L	0.00124777	0.0943518	mg/L	0.00124777	1.32%
B 249.772†	6331.9	0.215980	mg/L	0.0010710	0.215980	mg/L	0.0010710	0.50%
Si 251.611†	47330.1	2.19035	mg/L	0.066394	2.19035	mg/L	0.066394	3.03%
Ce 413.764†	333.9	0.008	mg/L	0.0040	0.008	mg/L	0.0040	49.18%

Sequence No.: 23
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 6
Date Collected: 9/16/2020 8:56:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	422261.6	95.8	%	0.78				0.81%
Y 371.029	170978.7	85.2	%	0.20				0.24%
Ag 328.068†	7851.2	0.0957968	mg/L	0.00074109	0.0957968	mg/L	0.00074109	0.77%
QC value within limits for Ag 328.068 Recovery = 95.80%								
Al 308.215†	40354.7	4.84915	mg/L	0.065633	4.84915	mg/L	0.065633	1.35%
QC value within limits for Al 308.215 Recovery = 96.98%								
As 188.979†	871.3	0.482414	mg/L	0.0075839	0.482414	mg/L	0.0075839	1.57%
QC value within limits for As 188.979 Recovery = 96.48%								
Ba 233.527†	39333.3	0.476517	mg/L	0.0041065	0.476517	mg/L	0.0041065	0.86%
QC value within limits for Ba 233.527 Recovery = 95.30%								
Be 313.107†	556734.4	0.479668	mg/L	0.0033199	0.479668	mg/L	0.0033199	0.69%
QC value within limits for Be 313.107 Recovery = 95.93%								
Ca 317.933†	4177371.4	49.1465	mg/L	0.28216	49.1465	mg/L	0.28216	0.57%
QC value within limits for Ca 317.933 Recovery = 98.29%								
Cd 228.802†	13471.9	0.464485	mg/L	0.0037845	0.464485	mg/L	0.0037845	0.81%
QC value within limits for Cd 228.802 Recovery = 92.90%								
Co 228.616†	11783.6	0.470576	mg/L	0.0036447	0.470576	mg/L	0.0036447	0.77%
QC value within limits for Co 228.616 Recovery = 94.12%								
Cr 267.716†	29761.2	0.492458	mg/L	0.0042232	0.492458	mg/L	0.0042232	0.86%
QC value within limits for Cr 267.716 Recovery = 98.49%								
Cu 327.393†	32431.9	0.493007	mg/L	0.0047030	0.493007	mg/L	0.0047030	0.95%
QC value within limits for Cu 327.393 Recovery = 98.60%								
Fe 273.955†	40878.2	4.89118	mg/L	0.055409	4.89118	mg/L	0.055409	1.13%
QC value within limits for Fe 273.955 Recovery = 97.82%								
K 404.721†	4490.9	-10.8594	mg/L	2.96753	-10.8594	mg/L	2.96753	27.33%
QC value less than the lower limit for K 404.721 Recovery = -21.72%								
Mg 279.077†	458226.6	48.8762	mg/L	0.25822	48.8762	mg/L	0.25822	0.53%
QC value within limits for Mg 279.077 Recovery = 97.75%								
Mn 257.610†	128952.9	0.489047	mg/L	0.0045311	0.489047	mg/L	0.0045311	0.93%
QC value within limits for Mn 257.610 Recovery = 97.81%								
Mo 202.031†	5026.0	0.478701	mg/L	0.0026804	0.478701	mg/L	0.0026804	0.56%
QC value within limits for Mo 202.031 Recovery = 95.74%								
Na 330.237†	18122.5	48.0015	mg/L	0.62851	48.0015	mg/L	0.62851	1.31%
QC value within limits for Na 330.237 Recovery = 96.00%								
Ni 231.604†	12165.7	0.470514	mg/L	0.0040309	0.470514	mg/L	0.0040309	0.86%
QC value within limits for Ni 231.604 Recovery = 94.10%								
Pb 220.353†	2868.4	0.484273	mg/L	0.0023494	0.484273	mg/L	0.0023494	0.49%
QC value within limits for Pb 220.353 Recovery = 96.85%								
Sb 206.836†	959.9	0.501077	mg/L	0.0022281	0.501077	mg/L	0.0022281	0.44%
QC value within limits for Sb 206.836 Recovery = 100.22%								
Se 196.026†	850.5	0.492080	mg/L	0.0025943	0.492080	mg/L	0.0025943	0.53%
QC value within limits for Se 196.026 Recovery = 98.42%								
Sn 189.927†	2738.5	0.488490	mg/L	0.0028515	0.488490	mg/L	0.0028515	0.58%
QC value within limits for Sn 189.927 Recovery = 97.70%								
Ti 334.940†	128772.5	0.492980	mg/L	0.0046935	0.492980	mg/L	0.0046935	0.95%
QC value within limits for Ti 334.940 Recovery = 98.60%								
Tl 190.801†	945.3	0.512258	mg/L	0.0058420	0.512258	mg/L	0.0058420	1.14%
QC value within limits for Tl 190.801 Recovery = 102.45%								
V 290.880†	22763.4	0.493776	mg/L	0.0040853	0.493776	mg/L	0.0040853	0.83%
QC value within limits for V 290.880 Recovery = 98.76%								
Zn 206.200†	20621.1	0.489539	mg/L	0.0051336	0.489539	mg/L	0.0051336	1.05%
QC value within limits for Zn 206.200 Recovery = 97.91%								
B 249.772†	32212.2	0.508306	mg/L	0.0024092	0.508306	mg/L	0.0024092	0.47%
QC value within limits for B 249.772 Recovery = 101.66%								
Si 251.611†	105314.4	4.84497	mg/L	0.042427	4.84497	mg/L	0.042427	0.88%
QC value within limits for Si 251.611 Recovery = 96.90%								
Ce 413.764†	37610.0	5.015	mg/L	0.0537	5.015	mg/L	0.0537	1.07%
QC value within limits for Ce 413.764 Recovery = 100.30%								

QC Failed. Continue with analysis.

Sequence No.: 24 Autosampler Location: 2
Sample ID: CCB V-333667 Date Collected: 9/16/2020 9:00:46 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	431810.1	97.9	%	1.56				1.59%
Y 371.029	198794.5	99.1	%	1.55				1.56%
Ag 328.068†	44.1	-0.0000791	mg/L	0.00021219	-0.0000791	mg/L	0.00021219	268.32%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-18.8	-0.0320566	mg/L	0.00293156	-0.0320566	mg/L	0.00293156	9.14%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.9	0.0011788	mg/L	0.00226297	0.0011788	mg/L	0.00226297	191.98%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	4.6	-0.0028086	mg/L	0.00016843	-0.0028086	mg/L	0.00016843	6.00%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-58.2	-0.0021432	mg/L	0.00002476	-0.0021432	mg/L	0.00002476	1.16%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	974.7	-0.375071	mg/L	0.0007412	-0.375071	mg/L	0.0007412	0.20%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	3.4	0.0032899	mg/L	0.00040472	0.0032899	mg/L	0.00040472	12.30%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	3.5	0.0010935	mg/L	0.00037221	0.0010935	mg/L	0.00037221	34.04%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-25.4	-0.0063142	mg/L	0.00015310	-0.0063142	mg/L	0.00015310	2.42%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	35.1	-0.0025375	mg/L	0.00034593	-0.0025375	mg/L	0.00034593	13.63%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	19.6	-0.0446253	mg/L	0.00178266	-0.0446253	mg/L	0.00178266	3.99%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	1093.6	0.546933	mg/L	11.1665298	0.546933	mg/L	11.1665298	>999.9%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	-4.6	-0.326175	mg/L	0.0005602	-0.326175	mg/L	0.0005602	0.17%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	47.2	-0.0051662	mg/L	0.00003237	-0.0051662	mg/L	0.00003237	0.63%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.6	-0.0004828	mg/L	0.00104917	-0.0004828	mg/L	0.00104917	217.31%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-6.4	0.627546	mg/L	0.0485751	0.627546	mg/L	0.0485751	7.74%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-5.9	-0.0008675	mg/L	0.00071935	-0.0008675	mg/L	0.00071935	82.93%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-21.8	-0.0072691	mg/L	0.00099607	-0.0072691	mg/L	0.00099607	13.70%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	3.8	-0.0018889	mg/L	0.00202951	-0.0018889	mg/L	0.00202951	107.44%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	6.4	0.0037224	mg/L	0.00130369	0.0037224	mg/L	0.00130369	35.02%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	3.2	-0.0011472	mg/L	0.00100200	-0.0011472	mg/L	0.00100200	87.34%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-324.0	-0.0042578	mg/L	0.00006133	-0.0042578	mg/L	0.00006133	1.44%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.9	-0.0073642	mg/L	0.00335981	-0.0073642	mg/L	0.00335981	45.62%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	26.5	-0.0027231	mg/L	0.00049253	-0.0027231	mg/L	0.00049253	18.09%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	44.7	-0.0051313	mg/L	0.00013075	-0.0051313	mg/L	0.00013075	2.55%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	274.0	0.0148281	mg/L	0.00047896	0.0148281	mg/L	0.00047896	3.23%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	-1313.3	-0.0429355	mg/L	0.00083438	-0.0429355	mg/L	0.00083438	1.94%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	-79.3	-0.063	mg/L	0.0104	-0.063	mg/L	0.0104	16.41%
QC value within limits for Ce 413.764 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 25
Sample ID: AD19214-021
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 113
Date Collected: 9/16/2020 9:04:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19214-021

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	444292.2	101	%	1.3				1.25%
Y 371.029	205739.5	103	%	1.3				1.22%
Ag 328.068†	-86.8	-0.0016871	mg/L	0.00037542	-0.0016871	mg/L	0.00037542	22.25%
Al 308.215†	194705.8	23.4396	mg/L	0.03528	23.4396	mg/L	0.03528	0.15%
As 188.979†	7.4	0.0111341	mg/L	0.00226387	0.0111341	mg/L	0.00226387	20.33%
Ba 233.527†	14493.6	0.173779	mg/L	0.0004933	0.173779	mg/L	0.0004933	0.28%
Be 313.107†	-1218.3	-0.0031471	mg/L	0.00002104	-0.0031471	mg/L	0.00002104	0.67%
Ca 317.933†	797574.0	9.07060	mg/L	0.027628	9.07060	mg/L	0.027628	0.30%
Cd 228.802†	63.5	0.0053494	mg/L	0.00006034	0.0053494	mg/L	0.00006034	1.13%
Co 228.616†	263.8	0.0114710	mg/L	0.00033390	0.0114710	mg/L	0.00033390	2.91%
Cr 267.716†	4296.1	0.0660478	mg/L	0.00098026	0.0660478	mg/L	0.00098026	1.48%
Cu 327.393†	5844.0	0.0863169	mg/L	0.00067968	0.0863169	mg/L	0.00067968	0.79%
Fe 273.955†	334237.9	40.3296	mg/L	0.09995	40.3296	mg/L	0.09995	0.25%
K 404.721†	5308.9	-354.839	mg/L	7.1876	-354.839	mg/L	7.1876	2.03%
Mg 279.077†	34762.1	3.40688	mg/L	0.016498	3.40688	mg/L	0.016498	0.48%
Mn 257.610†	70320.8	0.264256	mg/L	0.0004628	0.264256	mg/L	0.0004628	0.18%
Mo 202.031†	34.0	0.0019356	mg/L	0.00039113	0.0019356	mg/L	0.00039113	20.21%
Na 330.237†	278.6	1.37221	mg/L	0.148293	1.37221	mg/L	0.148293	10.81%
Ni 231.604†	735.8	0.0278570	mg/L	0.00085994	0.0278570	mg/L	0.00085994	3.09%
Pb 220.353†	2882.1	0.491454	mg/L	0.0068627	0.491454	mg/L	0.0068627	1.40%
Sb 206.836†	5.2	-0.0007320	mg/L	0.00156151	-0.0007320	mg/L	0.00156151	213.31%
Se 196.026†	-33.9	-0.0085992	mg/L	0.00402352	-0.0085992	mg/L	0.00402352	46.79%
Sn 189.927†	430.8	0.0753871	mg/L	0.00095685	0.0753871	mg/L	0.00095685	1.27%
Ti 334.940†	193428.6	0.742014	mg/L	0.0052536	0.742014	mg/L	0.0052536	0.71%
Tl 190.801†	-14.7	-0.0104471	mg/L	0.00398361	-0.0104471	mg/L	0.00398361	38.13%
V 290.880†	3233.5	0.0633292	mg/L	0.00154062	0.0633292	mg/L	0.00154062	2.43%
Zn 206.200†	22799.8	0.541916	mg/L	0.0022097	0.541916	mg/L	0.0022097	0.41%
B 249.772†	12288.9	0.426333	mg/L	0.0006411	0.426333	mg/L	0.0006411	0.15%
Si 251.611†	47947.2	2.21866	mg/L	0.023469	2.21866	mg/L	0.023469	1.06%
Ce 413.764†	505.2	0.048	mg/L	0.0034	0.048	mg/L	0.0034	7.05%

Sequence No.: 26
Sample ID: AD19214-023
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 114
Date Collected: 9/16/2020 9:08:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19214-023

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	444872.4	101	%	0.4				0.39%
Y 371.029	204817.6	102	%	0.4				0.42%
Ag 328.068†	-31.7	-0.0010094	mg/L	0.00035022	-0.0010094	mg/L	0.00035022	34.69%
Al 308.215†	150900.9	18.1590	mg/L	0.03912	18.1590	mg/L	0.03912	0.22%
As 188.979†	18.7	0.0169566	mg/L	0.00049191	0.0169566	mg/L	0.00049191	2.90%
Ba 233.527†	6275.0	0.0736133	mg/L	0.00029870	0.0736133	mg/L	0.00029870	0.41%
Be 313.107†	-2355.5	-0.0041312	mg/L	0.00005630	-0.0041312	mg/L	0.00005630	1.36%
Ca 317.933†	334967.1	3.58524	mg/L	0.000730	3.58524	mg/L	0.000730	0.02%
Cd 228.802†	21.5	0.0039102	mg/L	0.00021789	0.0039102	mg/L	0.00021789	5.57%
Co 228.616†	248.9	0.0108768	mg/L	0.00022600	0.0108768	mg/L	0.00022600	2.08%
Cr 267.716†	4747.5	0.0736075	mg/L	0.00068409	0.0736075	mg/L	0.00068409	0.93%
Cu 327.393†	2894.5	0.0412001	mg/L	0.00056594	0.0412001	mg/L	0.00056594	1.37%
Fe 273.955†	313174.5	37.7851	mg/L	0.08019	37.7851	mg/L	0.08019	0.21%
K 404.721†	5203.4	-330.662	mg/L	2.9139	-330.662	mg/L	2.9139	0.88%
Mg 279.077†	54924.3	5.57179	mg/L	0.009053	5.57179	mg/L	0.009053	0.16%
Mn 257.610†	52677.3	0.196613	mg/L	0.0001695	0.196613	mg/L	0.0001695	0.09%
Mo 202.031†	91.9	0.0074715	mg/L	0.00119678	0.0074715	mg/L	0.00119678	16.02%
Na 330.237†	111.2	0.934793	mg/L	0.0992205	0.934793	mg/L	0.0992205	10.61%
Ni 231.604†	631.1	0.0238023	mg/L	0.00048090	0.0238023	mg/L	0.00048090	2.02%
Pb 220.353†	1444.4	0.245196	mg/L	0.0019284	0.245196	mg/L	0.0019284	0.79%
Sb 206.836†	4.8	-0.0002344	mg/L	0.00629951	-0.0002344	mg/L	0.00629951	>999.9%
Se 196.026†	-35.6	-0.0102955	mg/L	0.00548149	-0.0102955	mg/L	0.00548149	53.24%
Sn 189.927†	77.2	0.0120976	mg/L	0.00112428	0.0120976	mg/L	0.00112428	9.29%
Ti 334.940†	296959.5	1.14078	mg/L	0.002280	1.14078	mg/L	0.002280	0.20%
Tl 190.801†	-19.9	-0.0105078	mg/L	0.00133598	-0.0105078	mg/L	0.00133598	12.71%
V 290.880†	3888.5	0.0776987	mg/L	0.00129640	0.0776987	mg/L	0.00129640	1.67%
Zn 206.200†	10200.9	0.239030	mg/L	0.0015969	0.239030	mg/L	0.0015969	0.67%
B 249.772†	11741.5	0.403450	mg/L	0.0016311	0.403450	mg/L	0.0016311	0.40%
Si 251.611†	44416.6	2.05648	mg/L	0.033880	2.05648	mg/L	0.033880	1.65%
Ce 413.764†	432.6	0.036	mg/L	0.0117	0.036	mg/L	0.0117	32.27%

Sequence No.: 27
Sample ID: AD19214-025
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 115
Date Collected: 9/16/2020 9:12:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19214-025

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	446167.1	101	%	0.7				0.68%
Y 371.029	206075.7	103	%	0.7				0.69%
Ag 328.068†	232.1	0.0022293	mg/L	0.00102232	0.0022293	mg/L	0.00102232	45.86%
Al 308.215†	225696.4	27.1750	mg/L	0.05205	27.1750	mg/L	0.05205	0.19%
As 188.979†	21.7	0.0187739	mg/L	0.00384634	0.0187739	mg/L	0.00384634	20.49%
Ba 233.527†	46659.5	0.565806	mg/L	0.0015661	0.565806	mg/L	0.0015661	0.28%
Be 313.107†	-1580.0	-0.0034601	mg/L	0.00002941	-0.0034601	mg/L	0.00002941	0.85%
Ca 317.933†	781347.8	8.87820	mg/L	0.018140	8.87820	mg/L	0.018140	0.20%
Cd 228.802†	48.8	0.0048457	mg/L	0.00025901	0.0048457	mg/L	0.00025901	5.35%
Co 228.616†	224.1	0.0098890	mg/L	0.00046168	0.0098890	mg/L	0.00046168	4.67%
Cr 267.716†	4182.0	0.0641378	mg/L	0.00112864	0.0641378	mg/L	0.00112864	1.76%
Cu 327.393†	10343.9	0.155147	mg/L	0.0008550	0.155147	mg/L	0.0008550	0.55%
Fe 273.955†	321171.5	38.7512	mg/L	0.08411	38.7512	mg/L	0.08411	0.22%
K 404.721†	5655.3	-335.262	mg/L	0.9604	-335.262	mg/L	0.9604	0.29%
Mg 279.077†	33521.3	3.27365	mg/L	0.016905	3.27365	mg/L	0.016905	0.52%
Mn 257.610†	55986.5	0.209300	mg/L	0.0004713	0.209300	mg/L	0.0004713	0.23%
Mo 202.031†	33.6	0.0019048	mg/L	0.00119920	0.0019048	mg/L	0.00119920	62.96%
Na 330.237†	13.3	0.678791	mg/L	0.0712659	0.678791	mg/L	0.0712659	10.50%
Ni 231.604†	736.7	0.0278919	mg/L	0.00041577	0.0278919	mg/L	0.00041577	1.49%
Pb 220.353†	5451.0	0.930894	mg/L	0.0065834	0.930894	mg/L	0.0065834	0.71%
Sb 206.836†	11.1	0.0027040	mg/L	0.00261238	0.0027040	mg/L	0.00261238	96.61%
Se 196.026†	-35.9	-0.0101841	mg/L	0.00286748	-0.0101841	mg/L	0.00286748	28.16%
Sn 189.927†	490.7	0.0861166	mg/L	0.00077168	0.0861166	mg/L	0.00077168	0.90%
Ti 334.940†	241532.5	0.927295	mg/L	0.0002371	0.927295	mg/L	0.0002371	0.03%
Tl 190.801†	-12.8	-0.0082429	mg/L	0.00387076	-0.0082429	mg/L	0.00387076	46.96%
V 290.880†	4040.3	0.0808039	mg/L	0.00102807	0.0808039	mg/L	0.00102807	1.27%
Zn 206.200†	30489.5	0.726779	mg/L	0.0010712	0.726779	mg/L	0.0010712	0.15%
B 249.772†	11843.6	0.410599	mg/L	0.0016940	0.410599	mg/L	0.0016940	0.41%
Si 251.611†	56786.3	2.62448	mg/L	0.026491	2.62448	mg/L	0.026491	1.01%
Ce 413.764†	517.9	0.049	mg/L	0.0044	0.049	mg/L	0.0044	9.02%

Sequence No.: 28
Sample ID: AD19245-001
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 116
Date Collected: 9/16/2020 9:16:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19245-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	444859.3	101	%	1.0				1.00%
Y 371.029	242973.1	121	%	1.3				1.08%
Ag 328.068†	-225.2	-0.0033859	mg/L	0.00039275	-0.0033859	mg/L	0.00039275	11.60%
Al 308.215†	325963.6	39.2620	mg/L	0.09107	39.2620	mg/L	0.09107	0.23%
As 188.979†	9.6	0.0182405	mg/L	0.00162115	0.0182405	mg/L	0.00162115	8.89%
Ba 233.527†	17668.2	0.212470	mg/L	0.0003751	0.212470	mg/L	0.0003751	0.18%
Be 313.107†	-1567.2	-0.0034490	mg/L	0.00003048	-0.0034490	mg/L	0.00003048	0.88%
Ca 317.933†	1002101.4	11.4958	mg/L	0.01993	11.4958	mg/L	0.01993	0.17%
Cd 228.802†	-6.5	0.0029515	mg/L	0.00049463	0.0029515	mg/L	0.00049463	16.76%
Co 228.616†	868.8	0.0355812	mg/L	0.00033397	0.0355812	mg/L	0.00033397	0.94%
Cr 267.716†	5121.9	0.0798765	mg/L	0.00062036	0.0798765	mg/L	0.00062036	0.78%
Cu 327.393†	6809.6	0.101086	mg/L	0.0012589	0.101086	mg/L	0.0012589	1.25%
Fe 273.955†	619508.7	74.7909	mg/L	0.21242	74.7909	mg/L	0.21242	0.28%
K 404.721†	10937.8	-635.600	mg/L	9.2419	-635.600	mg/L	9.2419	1.45%
Mg 279.077†	113164.0	11.8253	mg/L	0.05260	11.8253	mg/L	0.05260	0.44%
Mn 257.610†	347782.4	1.32802	mg/L	0.002929	1.32802	mg/L	0.002929	0.22%
Mo 202.031†	-5.7	-0.0018502	mg/L	0.00058247	-0.0018502	mg/L	0.00058247	31.48%
Na 330.237†	-43.6	0.530109	mg/L	0.1550580	0.530109	mg/L	0.1550580	29.25%
Ni 231.604†	1515.6	0.0580586	mg/L	0.00079200	0.0580586	mg/L	0.00079200	1.36%
Pb 220.353†	339.7	0.0583612	mg/L	0.00155169	0.0583612	mg/L	0.00155169	2.66%
Sb 206.836†	0.6	-0.0013653	mg/L	0.00203282	-0.0013653	mg/L	0.00203282	148.89%
Se 196.026†	-47.5	-0.0071514	mg/L	0.00265040	-0.0071514	mg/L	0.00265040	37.06%
Sn 189.927†	58.6	0.0087651	mg/L	0.00034649	0.0087651	mg/L	0.00034649	3.95%
Ti 334.940†	578018.8	2.22333	mg/L	0.001979	2.22333	mg/L	0.001979	0.09%
Tl 190.801†	-42.4	-0.0132257	mg/L	0.00327776	-0.0132257	mg/L	0.00327776	24.78%
V 290.880†	6448.5	0.129891	mg/L	0.0013382	0.129891	mg/L	0.0013382	1.03%
Zn 206.200†	4866.5	0.110788	mg/L	0.0007943	0.110788	mg/L	0.0007943	0.72%
B 249.772†	22347.4	0.774708	mg/L	0.0015519	0.774708	mg/L	0.0015519	0.20%
Si 251.611†	46999.4	2.17520	mg/L	0.024283	2.17520	mg/L	0.024283	1.12%
Ce 413.764†	2262.9	0.313	mg/L	0.0044	0.313	mg/L	0.0044	1.39%

Sequence No.: 29
Sample ID: AD19245-002
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 117
Date Collected: 9/16/2020 9:19:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19245-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	442865.9	100	%	0.7				0.68%
Y 371.029	227304.9	113	%	0.6				0.57%
Ag 328.068†	-119.3	-0.0020852	mg/L	0.00127306	-0.0020852	mg/L	0.00127306	61.05%
Al 308.215†	376232.7	45.3209	mg/L	0.20938	45.3209	mg/L	0.20938	0.46%
As 188.979†	-1.2	0.0156882	mg/L	0.00614504	0.0156882	mg/L	0.00614504	39.17%
Ba 233.527†	19979.8	0.240643	mg/L	0.0006336	0.240643	mg/L	0.0006336	0.26%
Be 313.107†	-319.0	-0.0023689	mg/L	0.00002867	-0.0023689	mg/L	0.00002867	1.21%
Ca 317.933†	302551.1	3.20087	mg/L	0.006083	3.20087	mg/L	0.006083	0.19%
Cd 228.802†	-22.9	0.0023902	mg/L	0.00027577	0.0023902	mg/L	0.00027577	11.54%
Co 228.616†	1009.4	0.0411860	mg/L	0.00044752	0.0411860	mg/L	0.00044752	1.09%
Cr 267.716†	5025.5	0.0782617	mg/L	0.00061571	0.0782617	mg/L	0.00061571	0.79%
Cu 327.393†	8461.5	0.126354	mg/L	0.0007371	0.126354	mg/L	0.0007371	0.58%
Fe 273.955†	785785.3	94.8774	mg/L	0.58174	94.8774	mg/L	0.58174	0.61%
K 404.721†	14224.3	-799.184	mg/L	13.8380	-799.184	mg/L	13.8380	1.73%
Mg 279.077†	149153.2	15.6896	mg/L	0.04020	15.6896	mg/L	0.04020	0.26%
Mn 257.610†	524991.3	2.00742	mg/L	0.007596	2.00742	mg/L	0.007596	0.38%
Mo 202.031†	4.8	-0.0008443	mg/L	0.00042483	-0.0008443	mg/L	0.00042483	50.32%
Na 330.237†	24.7	0.708672	mg/L	0.0762206	0.708672	mg/L	0.0762206	10.76%
Ni 231.604†	1976.2	0.0758938	mg/L	0.00018955	0.0758938	mg/L	0.00018955	0.25%
Pb 220.353†	241.1	0.0422528	mg/L	0.00084946	0.0422528	mg/L	0.00084946	2.01%
Sb 206.836†	8.6	0.0005950	mg/L	0.00357182	0.0005950	mg/L	0.00357182	600.36%
Se 196.026†	-83.3	-0.0223736	mg/L	0.00650423	-0.0223736	mg/L	0.00650423	29.07%
Sn 189.927†	62.5	0.0094537	mg/L	0.00049878	0.0094537	mg/L	0.00049878	5.28%
Ti 334.940†	395504.6	1.52034	mg/L	0.004867	1.52034	mg/L	0.004867	0.32%
Tl 190.801†	-29.2	-0.0120179	mg/L	0.00072904	-0.0120179	mg/L	0.00072904	6.07%
V 290.880†	5600.8	0.110181	mg/L	0.0012471	0.110181	mg/L	0.0012471	1.13%
Zn 206.200†	7861.5	0.182790	mg/L	0.0014996	0.182790	mg/L	0.0014996	0.82%
B 249.772†	29173.9	0.991783	mg/L	0.0063214	0.991783	mg/L	0.0063214	0.64%
Si 251.611†	47156.1	2.18238	mg/L	0.043977	2.18238	mg/L	0.043977	2.02%
Ce 413.764†	1291.0	0.198	mg/L	0.0084	0.198	mg/L	0.0084	4.23%

Sequence No.: 30
Sample ID: AD19245-004
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 118
Date Collected: 9/16/2020 9:23:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19245-004

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	439325.0	99.6	%	1.63				1.64%
Y 371.029	221716.7	110	%	1.7				1.58%
Ag 328.068†	23.0	-0.0003379	mg/L	0.00077922	-0.0003379	mg/L	0.00077922	230.61%
Al 308.215†	255420.1	30.7585	mg/L	0.15223	30.7585	mg/L	0.15223	0.49%
As 188.979†	-0.1	0.0136286	mg/L	0.00497434	0.0136286	mg/L	0.00497434	36.50%
Ba 233.527†	24719.4	0.298408	mg/L	0.0005012	0.298408	mg/L	0.0005012	0.17%
Be 313.107†	155.0	-0.0019587	mg/L	0.00002359	-0.0019587	mg/L	0.00002359	1.20%
Ca 317.933†	1024392.9	11.7601	mg/L	0.05686	11.7601	mg/L	0.05686	0.48%
Cd 228.802†	-10.1	0.0028274	mg/L	0.00012722	0.0028274	mg/L	0.00012722	4.50%
Co 228.616†	863.6	0.0353745	mg/L	0.00069162	0.0353745	mg/L	0.00069162	1.96%
Cr 267.716†	3583.6	0.0541168	mg/L	0.00101003	0.0541168	mg/L	0.00101003	1.87%
Cu 327.393†	4239.6	0.0617759	mg/L	0.00069322	0.0617759	mg/L	0.00069322	1.12%
Fe 273.955†	656892.3	79.3069	mg/L	0.44262	79.3069	mg/L	0.44262	0.56%
K 404.721†	12581.0	-662.324	mg/L	3.9117	-662.324	mg/L	3.9117	0.59%
Mg 279.077†	99345.0	10.3414	mg/L	0.09540	10.3414	mg/L	0.09540	0.92%
Mn 257.610†	547159.7	2.09241	mg/L	0.008933	2.09241	mg/L	0.008933	0.43%
Mo 202.031†	-5.6	-0.0018436	mg/L	0.00070222	-0.0018436	mg/L	0.00070222	38.09%
Na 330.237†	146.6	1.02718	mg/L	0.201916	1.02718	mg/L	0.201916	19.66%
Ni 231.604†	1828.7	0.0701819	mg/L	0.00119402	0.0701819	mg/L	0.00119402	1.70%
Pb 220.353†	318.8	0.0539984	mg/L	0.00087201	0.0539984	mg/L	0.00087201	1.61%
Sb 206.836†	9.7	0.0006499	mg/L	0.00556300	0.0006499	mg/L	0.00556300	856.01%
Se 196.026†	-70.4	-0.0191432	mg/L	0.00380898	-0.0191432	mg/L	0.00380898	19.90%
Sn 189.927†	54.5	0.0080327	mg/L	0.00043553	0.0080327	mg/L	0.00043553	5.42%
Ti 334.940†	256143.6	0.983572	mg/L	0.0040373	0.983572	mg/L	0.0040373	0.41%
Tl 190.801†	-26.7	-0.0142682	mg/L	0.00190895	-0.0142682	mg/L	0.00190895	13.38%
V 290.880†	4131.4	0.0797014	mg/L	0.00180615	0.0797014	mg/L	0.00180615	2.27%
Zn 206.200†	6563.0	0.151572	mg/L	0.0025117	0.151572	mg/L	0.0025117	1.66%
B 249.772†	24180.8	0.827856	mg/L	0.0064627	0.827856	mg/L	0.0064627	0.78%
Si 251.611†	59442.7	2.74650	mg/L	0.047876	2.74650	mg/L	0.047876	1.74%
Ce 413.764†	1265.3	0.182	mg/L	0.0102	0.182	mg/L	0.0102	5.61%

Sequence No.: 31
Sample ID: AD19245-005
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 119
Date Collected: 9/16/2020 9:27:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19245-005

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	443428.1	101	%	1.1				1.07%
Y 371.029	288838.6	144	%	0.7				0.50%
Ag 328.068†	-415.0	-0.0057175	mg/L	0.00016939	-0.0057175	mg/L	0.00016939	2.96%
Al 308.215†	326974.9	39.3803	mg/L	0.38982	39.3803	mg/L	0.38982	0.99%
As 188.979†	-38.6	0.0167201	mg/L	0.00293645	0.0167201	mg/L	0.00293645	17.56%
Ba 233.527†	16056.7	0.192829	mg/L	0.0026172	0.192829	mg/L	0.0026172	1.36%
Be 313.107†	3081.9	0.0005740	mg/L	0.00005445	0.0005740	mg/L	0.00005445	9.49%
Ca 317.933†	158162.4	1.48878	mg/L	0.027334	1.48878	mg/L	0.027334	1.84%
Cd 228.802†	-55.6	0.0012720	mg/L	0.00019385	0.0012720	mg/L	0.00019385	15.24%
Co 228.616†	928.9	0.0379742	mg/L	0.00060897	0.0379742	mg/L	0.00060897	1.60%
Cr 267.716†	6720.4	0.106644	mg/L	0.0014731	0.106644	mg/L	0.0014731	1.38%
Cu 327.393†	3408.3	0.0490591	mg/L	0.00044984	0.0490591	mg/L	0.00044984	0.92%
Fe 273.955†	1839830.7	222.208	mg/L	2.0616	222.208	mg/L	2.0616	0.93%
K 404.721†	33634.6	-1851.99	mg/L	10.704	-1851.99	mg/L	10.704	0.58%
Mg 279.077†	47783.4	4.80505	mg/L	0.077569	4.80505	mg/L	0.077569	1.61%
Mn 257.610†	533323.1	2.03937	mg/L	0.019029	2.03937	mg/L	0.019029	0.93%
Mo 202.031†	-35.2	-0.0046719	mg/L	0.00122558	-0.0046719	mg/L	0.00122558	26.23%
Na 330.237†	100.2	0.905989	mg/L	0.1474822	0.905989	mg/L	0.1474822	16.28%
Ni 231.604†	1120.2	0.0427460	mg/L	0.00085149	0.0427460	mg/L	0.00085149	1.99%
Pb 220.353†	168.2	0.0291463	mg/L	0.00307817	0.0291463	mg/L	0.00307817	10.56%
Sb 206.836†	18.1	0.0002713	mg/L	0.00406680	0.0002713	mg/L	0.00406680	>999.9%
Se 196.026†	-196.1	-0.0530810	mg/L	0.00325305	-0.0530810	mg/L	0.00325305	6.13%
Sn 189.927†	41.0	0.0056207	mg/L	0.00110261	0.0056207	mg/L	0.00110261	19.62%
Ti 334.940†	218159.1	0.837267	mg/L	0.0117575	0.837267	mg/L	0.0117575	1.40%
Tl 190.801†	-17.6	-0.0105420	mg/L	0.00235289	-0.0105420	mg/L	0.00235289	22.32%
V 290.880†	16072.1	0.325995	mg/L	0.0060818	0.325995	mg/L	0.0060818	1.87%
Zn 206.200†	6697.1	0.154797	mg/L	0.0015973	0.154797	mg/L	0.0015973	1.03%
B 249.772†	67018.6	2.28888	mg/L	0.025478	2.28888	mg/L	0.025478	1.11%
Si 251.611†	41606.6	1.92765	mg/L	0.007266	1.92765	mg/L	0.007266	0.38%
Ce 413.764†	1327.8	0.306	mg/L	0.0061	0.306	mg/L	0.0061	1.98%

Sequence No.: 32
Sample ID: AD19262-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 120
Date Collected: 9/16/2020 9:31:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19262-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	427119.3	96.9	%	0.75				0.77%
Y 371.029	243495.1	121	%	0.1				0.09%
Ag 328.068†	-369.3	-0.0051555	mg/L	0.00031119	-0.0051555	mg/L	0.00031119	6.04%
Al 308.215†	275744.3	33.2064	mg/L	0.30395	33.2064	mg/L	0.30395	0.92%
As 188.979†	-21.7	0.0241099	mg/L	0.00245793	0.0241099	mg/L	0.00245793	10.19%
Ba 233.527†	36759.1	0.445143	mg/L	0.0038167	0.445143	mg/L	0.0038167	0.86%
Be 313.107†	-4521.6	-0.0060055	mg/L	0.00010567	-0.0060055	mg/L	0.00010567	1.76%
Ca 317.933†	11734601.9	138.756	mg/L	1.6374	138.756	mg/L	1.6374	1.18%
Cd 228.802†	41.2	0.0045864	mg/L	0.00031424	0.0045864	mg/L	0.00031424	6.85%
Co 228.616†	1347.8	0.0546692	mg/L	0.00077771	0.0546692	mg/L	0.00077771	1.42%
Cr 267.716†	22345.1	0.368276	mg/L	0.0031655	0.368276	mg/L	0.0031655	0.86%
Cu 327.393†	40230.4	0.612293	mg/L	0.0045920	0.612293	mg/L	0.0045920	0.75%
Fe 273.955†	1745348.9	210.795	mg/L	0.4619	210.795	mg/L	0.4619	0.22%
K 404.721†	32427.5	-1751.70	mg/L	7.595	-1751.70	mg/L	7.595	0.43%
Mg 279.077†	718271.7	76.7984	mg/L	0.11067	76.7984	mg/L	0.11067	0.14%
Mn 257.610†	494482.8	1.89046	mg/L	0.001344	1.89046	mg/L	0.001344	0.07%
Mo 202.031†	221.9	0.0198831	mg/L	0.00101997	0.0198831	mg/L	0.00101997	5.13%
Na 330.237†	239.4	1.26974	mg/L	0.082785	1.26974	mg/L	0.082785	6.52%
Ni 231.604†	4582.0	0.176811	mg/L	0.0015784	0.176811	mg/L	0.0015784	0.89%
Pb 220.353†	1064.8	0.181824	mg/L	0.0004122	0.181824	mg/L	0.0004122	0.23%
Sb 206.836†	51.5	0.0208381	mg/L	0.00187782	0.0208381	mg/L	0.00187782	9.01%
Se 196.026†	-162.3	-0.0366408	mg/L	0.00353262	-0.0366408	mg/L	0.00353262	9.64%
Sn 189.927†	192.0	0.0326414	mg/L	0.00026066	0.0326414	mg/L	0.00026066	0.80%
Ti 334.940†	671288.0	2.58257	mg/L	0.006475	2.58257	mg/L	0.006475	0.25%
Tl 190.801†	-50.3	-0.0157807	mg/L	0.00186593	-0.0157807	mg/L	0.00186593	11.82%
V 290.880†	9465.8	0.185086	mg/L	0.0048505	0.185086	mg/L	0.0048505	2.62%
Zn 206.200†	78843.7	1.88924	mg/L	0.014857	1.88924	mg/L	0.014857	0.79%
B 249.772†	65587.4	2.20114	mg/L	0.011054	2.20114	mg/L	0.011054	0.50%
Si 251.611†	61706.1	2.85007	mg/L	0.084531	2.85007	mg/L	0.084531	2.97%
Ce 413.764†	1277.2	0.290	mg/L	0.0157	0.290	mg/L	0.0157	5.42%

Sequence No.: 33 Autosampler Location: 121
Sample ID: AD19262-003 Date Collected: 9/16/2020 9:36:13 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: AD19262-003

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	433068.1	98.2	%	0.55				0.56%
Y 371.029	254845.1	127	%	0.8				0.63%
Ag 328.068†	-380.3	-0.0052910	mg/L	0.00094503	-0.0052910	mg/L	0.00094503	17.86%
Al 308.215†	273065.4	32.8843	mg/L	0.19376	32.8843	mg/L	0.19376	0.59%
As 188.979†	-35.1	0.0228969	mg/L	0.00536854	0.0228969	mg/L	0.00536854	23.45%
Ba 233.527†	31881.4	0.385696	mg/L	0.0026324	0.385696	mg/L	0.0026324	0.68%
Be 313.107†	-2645.8	-0.0043824	mg/L	0.00006619	-0.0043824	mg/L	0.00006619	1.51%
Ca 317.933†	5638717.8	66.4745	mg/L	0.05124	66.4745	mg/L	0.05124	0.08%
Cd 228.802†	5.8	0.0033735	mg/L	0.00017283	0.0033735	mg/L	0.00017283	5.12%
Co 228.616†	1381.4	0.0560104	mg/L	0.00035253	0.0560104	mg/L	0.00035253	0.63%
Cr 267.716†	33649.4	0.557567	mg/L	0.0042252	0.557567	mg/L	0.0042252	0.76%
Cu 327.393†	43916.5	0.668675	mg/L	0.0040793	0.668675	mg/L	0.0040793	0.61%
Fe 273.955†	2045316.4	247.031	mg/L	0.0769	247.031	mg/L	0.0769	0.03%
K 404.721†	39896.0	-2029.69	mg/L	16.802	-2029.69	mg/L	16.802	0.83%
Mg 279.077†	307675.7	32.7108	mg/L	0.14347	32.7108	mg/L	0.14347	0.44%
Mn 257.610†	420285.8	1.60599	mg/L	0.002255	1.60599	mg/L	0.002255	0.14%
Mo 202.031†	225.9	0.0202669	mg/L	0.00002012	0.0202669	mg/L	0.00002012	0.10%
Na 330.237†	251.3	1.30078	mg/L	0.098106	1.30078	mg/L	0.098106	7.54%
Ni 231.604†	5746.6	0.221914	mg/L	0.0017433	0.221914	mg/L	0.0017433	0.79%
Pb 220.353†	1446.8	0.247008	mg/L	0.0028652	0.247008	mg/L	0.0028652	1.16%
Sb 206.836†	43.8	0.0143888	mg/L	0.00319627	0.0143888	mg/L	0.00319627	22.21%
Se 196.026†	-202.6	-0.0501055	mg/L	0.00175180	-0.0501055	mg/L	0.00175180	3.50%
Sn 189.927†	187.0	0.0317487	mg/L	0.00232665	0.0317487	mg/L	0.00232665	7.33%
Ti 334.940†	462570.7	1.77866	mg/L	0.002640	1.77866	mg/L	0.002640	0.15%
Tl 190.801†	-38.8	-0.0146433	mg/L	0.00156364	-0.0146433	mg/L	0.00156364	10.68%
V 290.880†	8286.7	0.157038	mg/L	0.0032076	0.157038	mg/L	0.0032076	2.04%
Zn 206.200†	93596.1	2.24390	mg/L	0.011607	2.24390	mg/L	0.011607	0.52%
B 249.772†	76548.8	2.57305	mg/L	0.010867	2.57305	mg/L	0.010867	0.42%
Si 251.611†	47878.0	2.21519	mg/L	0.058306	2.21519	mg/L	0.058306	2.63%
Ce 413.764†	1882.1	0.401	mg/L	0.0141	0.401	mg/L	0.0141	3.52%

Sequence No.: 34
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 6
Date Collected: 9/16/2020 9:40:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	425680.6	96.6	%	0.69				0.72%
Y 371.029	171414.1	85.4	%	0.51				0.60%
Ag 328.068†	7850.2	0.0957843	mg/L	0.00056923	0.0957843	mg/L	0.00056923	0.59%
QC value within limits for Ag 328.068 Recovery = 95.78%								
Al 308.215†	40668.2	4.88479	mg/L	0.036247	4.88479	mg/L	0.036247	0.74%
QC value within limits for Al 308.215 Recovery = 97.70%								
As 188.979†	879.7	0.487098	mg/L	0.0018149	0.487098	mg/L	0.0018149	0.37%
QC value within limits for As 188.979 Recovery = 97.42%								
Ba 233.527†	39777.7	0.481933	mg/L	0.0033855	0.481933	mg/L	0.0033855	0.70%
QC value within limits for Ba 233.527 Recovery = 96.39%								
Be 313.107†	563762.4	0.485750	mg/L	0.0011449	0.485750	mg/L	0.0011449	0.24%
QC value within limits for Be 313.107 Recovery = 97.15%								
Ca 317.933†	4225521.8	49.7175	mg/L	0.11980	49.7175	mg/L	0.11980	0.24%
QC value within limits for Ca 317.933 Recovery = 99.43%								
Cd 228.802†	13631.7	0.469956	mg/L	0.0029950	0.469956	mg/L	0.0029950	0.64%
QC value within limits for Cd 228.802 Recovery = 93.99%								
Co 228.616†	11961.1	0.477651	mg/L	0.0039385	0.477651	mg/L	0.0039385	0.82%
QC value within limits for Co 228.616 Recovery = 95.53%								
Cr 267.716†	30100.5	0.498141	mg/L	0.0032539	0.498141	mg/L	0.0032539	0.65%
QC value within limits for Cr 267.716 Recovery = 99.63%								
Cu 327.393†	32436.5	0.493078	mg/L	0.0035496	0.493078	mg/L	0.0035496	0.72%
QC value within limits for Cu 327.393 Recovery = 98.62%								
Fe 273.955†	41382.3	4.95208	mg/L	0.030952	4.95208	mg/L	0.030952	0.63%
QC value within limits for Fe 273.955 Recovery = 99.04%								
K 404.721†	4777.7	-8.27784	mg/L	5.476783	-8.27784	mg/L	5.476783	66.16%
QC value less than the lower limit for K 404.721 Recovery = -16.56%								
Mg 279.077†	466154.7	49.7274	mg/L	0.12376	49.7274	mg/L	0.12376	0.25%
QC value within limits for Mg 279.077 Recovery = 99.45%								
Mn 257.610†	130602.4	0.495371	mg/L	0.0032302	0.495371	mg/L	0.0032302	0.65%
QC value within limits for Mn 257.610 Recovery = 99.07%								
Mo 202.031†	5093.1	0.485110	mg/L	0.0024951	0.485110	mg/L	0.0024951	0.51%
QC value within limits for Mo 202.031 Recovery = 97.02%								
Na 330.237†	18207.2	48.2227	mg/L	0.32431	48.2227	mg/L	0.32431	0.67%
QC value within limits for Na 330.237 Recovery = 96.45%								
Ni 231.604†	12421.3	0.480411	mg/L	0.0045942	0.480411	mg/L	0.0045942	0.96%
QC value within limits for Ni 231.604 Recovery = 96.08%								
Pb 220.353†	2915.7	0.492641	mg/L	0.0004764	0.492641	mg/L	0.0004764	0.10%
QC value within limits for Pb 220.353 Recovery = 98.53%								
Sb 206.836†	973.7	0.507714	mg/L	0.0031938	0.507714	mg/L	0.0031938	0.63%
QC value within limits for Sb 206.836 Recovery = 101.54%								
Se 196.026†	857.9	0.496386	mg/L	0.0012026	0.496386	mg/L	0.0012026	0.24%
QC value within limits for Se 196.026 Recovery = 99.28%								
Sn 189.927†	2775.7	0.495149	mg/L	0.0023877	0.495149	mg/L	0.0023877	0.48%
QC value within limits for Sn 189.927 Recovery = 99.03%								
Ti 334.940†	129888.3	0.497277	mg/L	0.0032551	0.497277	mg/L	0.0032551	0.65%
QC value within limits for Ti 334.940 Recovery = 99.46%								
Tl 190.801†	956.0	0.515666	mg/L	0.0025503	0.515666	mg/L	0.0025503	0.49%
QC value within limits for Tl 190.801 Recovery = 103.13%								
V 290.880†	23148.2	0.502153	mg/L	0.0029467	0.502153	mg/L	0.0029467	0.59%
QC value within limits for V 290.880 Recovery = 100.43%								
Zn 206.200†	21044.5	0.499718	mg/L	0.0057778	0.499718	mg/L	0.0057778	1.16%
QC value within limits for Zn 206.200 Recovery = 99.94%								
B 249.772†	32712.7	0.515943	mg/L	0.0021044	0.515943	mg/L	0.0021044	0.41%
QC value within limits for B 249.772 Recovery = 103.19%								
Si 251.611†	106717.0	4.90926	mg/L	0.027611	4.90926	mg/L	0.027611	0.56%
QC value within limits for Si 251.611 Recovery = 98.19%								
Ce 413.764†	35328.8	4.708	mg/L	0.0683	4.708	mg/L	0.0683	1.45%
QC value within limits for Ce 413.764 Recovery = 94.16%								

QC Failed. Continue with analysis.

Sequence No.: 35
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 2
Date Collected: 9/16/2020 9:44:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	443965.2	101	%	1.2				1.24%
Y 371.029	203851.7	102	%	1.2				1.16%
Ag 328.068†	3.5	-0.0005776	mg/L	0.00023842	-0.0005776	mg/L	0.00023842	41.28%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	2.9	-0.0293816	mg/L	0.00379899	-0.0293816	mg/L	0.00379899	12.93%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-2.3	-0.0011214	mg/L	0.00108735	-0.0011214	mg/L	0.00108735	96.97%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-4.4	-0.0029177	mg/L	0.00001973	-0.0029177	mg/L	0.00001973	0.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-54.8	-0.0021402	mg/L	0.00004167	-0.0021402	mg/L	0.00004167	1.95%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	953.9	-0.375318	mg/L	0.0007417	-0.375318	mg/L	0.0007417	0.20%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	4.7	0.0033355	mg/L	0.00018122	0.0033355	mg/L	0.00018122	5.43%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	10.9	0.0013913	mg/L	0.00049942	0.0013913	mg/L	0.00049942	35.90%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-13.1	-0.0061086	mg/L	0.00011966	-0.0061086	mg/L	0.00011966	1.96%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-6.9	-0.0031791	mg/L	0.00135623	-0.0031791	mg/L	0.00135623	42.66%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	65.3	-0.0390967	mg/L	0.00207888	-0.0390967	mg/L	0.00207888	5.32%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-65.3	-12.3930	mg/L	10.00173	-12.3930	mg/L	10.00173	80.70%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	9.8	-0.324628	mg/L	0.0019538	-0.324628	mg/L	0.0019538	0.60%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	58.4	-0.0051235	mg/L	0.00004444	-0.0051235	mg/L	0.00004444	0.87%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	2.7	-0.0010540	mg/L	0.00078089	-0.0010540	mg/L	0.00078089	74.09%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-13.6	0.608513	mg/L	0.1460550	0.608513	mg/L	0.1460550	24.00%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-4.4	-0.0008075	mg/L	0.00028681	-0.0008075	mg/L	0.00028681	35.52%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-17.6	-0.0065599	mg/L	0.00066433	-0.0065599	mg/L	0.00066433	10.13%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.3	-0.0044590	mg/L	0.00298836	-0.0044590	mg/L	0.00298836	67.02%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	5.7	0.0033423	mg/L	0.00606770	0.0033423	mg/L	0.00606770	181.54%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.2	-0.0016877	mg/L	0.00057223	-0.0016877	mg/L	0.00057223	33.91%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-309.4	-0.0042014	mg/L	0.00006206	-0.0042014	mg/L	0.00006206	1.48%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.8	-0.0074243	mg/L	0.00235322	-0.0074243	mg/L	0.00235322	31.70%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-7.1	-0.0034552	mg/L	0.00029155	-0.0034552	mg/L	0.00029155	8.44%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	62.0	-0.0047148	mg/L	0.00019557	-0.0047148	mg/L	0.00019557	4.15%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	253.9	0.0145689	mg/L	0.00065827	0.0145689	mg/L	0.00065827	4.52%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	-1294.7	-0.0420691	mg/L	0.00117300	-0.0420691	mg/L	0.00117300	2.79%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	-44.5	-0.059	mg/L	0.0107	-0.059	mg/L	0.0107	18.34%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 36
Sample ID: AD19178-010
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 87
Date Collected: 9/16/2020 9:48:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-010

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	445622.9	101	%	1.0				0.99%
Y 371.029	244341.4	122	%	1.0				0.80%
Ag 328.068†	-223.9	-0.0033703	mg/L	0.00044513	-0.0033703	mg/L	0.00044513	13.21%
Al 308.215†	375956.7	45.2869	mg/L	0.01824	45.2869	mg/L	0.01824	0.04%
As 188.979†	77.2	0.0709741	mg/L	0.00186185	0.0709741	mg/L	0.00186185	2.62%
Ba 233.527†	38201.8	0.462727	mg/L	0.0015803	0.462727	mg/L	0.0015803	0.34%
Be 313.107†	3374.6	0.0008273	mg/L	0.00002577	0.0008273	mg/L	0.00002577	3.12%
Ca 317.933†	9708642.6	114.734	mg/L	0.7009	114.734	mg/L	0.7009	0.61%
Cd 228.802†	36.1	0.0044103	mg/L	0.00071619	0.0044103	mg/L	0.00071619	16.24%
Co 228.616†	1797.1	0.0725759	mg/L	0.00112487	0.0725759	mg/L	0.00112487	1.55%
Cr 267.716†	5380.6	0.0842075	mg/L	0.00147577	0.0842075	mg/L	0.00147577	1.75%
Cu 327.393†	30027.6	0.456231	mg/L	0.0013974	0.456231	mg/L	0.0013974	0.31%
Fe 273.955†	1365447.9	164.902	mg/L	0.2061	164.902	mg/L	0.2061	0.13%
K 404.721†	23658.4	-1391.96	mg/L	10.235	-1391.96	mg/L	10.235	0.74%
Mg 279.077†	370790.5	39.4878	mg/L	0.05427	39.4878	mg/L	0.05427	0.14%
Mn 257.610†	1415122.7	5.42011	mg/L	0.005474	5.42011	mg/L	0.005474	0.10%
Mo 202.031†	240.1	0.0216259	mg/L	0.00106208	0.0216259	mg/L	0.00106208	4.91%
Na 330.237†	59.2	0.798777	mg/L	0.0729515	0.798777	mg/L	0.0729515	9.13%
Ni 231.604†	4632.7	0.178777	mg/L	0.0028247	0.178777	mg/L	0.0028247	1.58%
Pb 220.353†	1950.6	0.334511	mg/L	0.0036462	0.334511	mg/L	0.0036462	1.09%
Sb 206.836†	13.1	-0.0005401	mg/L	0.00607123	-0.0005401	mg/L	0.00607123	>999.9%
Se 196.026†	-117.8	-0.0233503	mg/L	0.00572257	-0.0233503	mg/L	0.00572257	24.51%
Sn 189.927†	37.5	0.0049842	mg/L	0.00172867	0.0049842	mg/L	0.00172867	34.68%
Ti 334.940†	190740.5	0.731660	mg/L	0.0032386	0.731660	mg/L	0.0032386	0.44%
Tl 190.801†	-24.3	-0.0147886	mg/L	0.00217921	-0.0147886	mg/L	0.00217921	14.74%
V 290.880†	6095.9	0.116006	mg/L	0.0010670	0.116006	mg/L	0.0010670	0.92%
Zn 206.200†	29105.5	0.693508	mg/L	0.0028344	0.693508	mg/L	0.0028344	0.41%
B 249.772†	50134.9	1.70727	mg/L	0.002213	1.70727	mg/L	0.002213	0.13%
Si 251.611†	66252.3	3.05877	mg/L	0.044239	3.05877	mg/L	0.044239	1.45%
Ce 413.764†	1175.1	0.239	mg/L	0.0025	0.239	mg/L	0.0025	1.05%

Sequence No.: 37
Sample ID: AD19178-011
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 88
Date Collected: 9/16/2020 9:52:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-011

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	445337.0	101	%	0.4				0.44%
Y 371.029	236690.7	118	%	0.6				0.52%
Ag 328.068†	-333.1	-0.0047117	mg/L	0.00072703	-0.0047117	mg/L	0.00072703	15.43%
Al 308.215†	345100.8	41.5681	mg/L	0.06332	41.5681	mg/L	0.06332	0.15%
As 188.979†	96.5	0.0764731	mg/L	0.00031072	0.0764731	mg/L	0.00031072	0.41%
Ba 233.527†	42578.0	0.516063	mg/L	0.0003484	0.516063	mg/L	0.0003484	0.07%
Be 313.107†	1901.8	-0.0004472	mg/L	0.00004745	-0.0004472	mg/L	0.00004745	10.61%
Ca 317.933†	29567680.5	350.212	mg/L	3.0949	350.212	mg/L	3.0949	0.88%
Cd 228.802†	46.6	0.0047690	mg/L	0.00031184	0.0047690	mg/L	0.00031184	6.54%
Co 228.616†	1472.8	0.0596534	mg/L	0.00058266	0.0596534	mg/L	0.00058266	0.98%
Cr 267.716†	7894.3	0.126300	mg/L	0.0009227	0.126300	mg/L	0.0009227	0.73%
Cu 327.393†	18965.7	0.287027	mg/L	0.0008905	0.287027	mg/L	0.0008905	0.31%
Fe 273.955†	1115556.3	134.714	mg/L	0.1321	134.714	mg/L	0.1321	0.10%
K 404.721†	17335.7	-1161.49	mg/L	10.689	-1161.49	mg/L	10.689	0.92%
Mg 279.077†	541271.7	57.7931	mg/L	0.05166	57.7931	mg/L	0.05166	0.09%
Mn 257.610†	844901.3	3.23393	mg/L	0.002323	3.23393	mg/L	0.002323	0.07%
Mo 202.031†	10.4	-0.0003171	mg/L	0.00077611	-0.0003171	mg/L	0.00077611	244.77%
Na 330.237†	180.8	1.11655	mg/L	0.094801	1.11655	mg/L	0.094801	8.49%
Ni 231.604†	3799.3	0.146499	mg/L	0.0008405	0.146499	mg/L	0.0008405	0.57%
Pb 220.353†	2853.0	0.488266	mg/L	0.0040042	0.488266	mg/L	0.0040042	0.82%
Sb 206.836†	12.9	0.0000226	mg/L	0.00399730	0.0000226	mg/L	0.00399730	>999.9%
Se 196.026†	-81.1	-0.0103528	mg/L	0.00197611	-0.0103528	mg/L	0.00197611	19.09%
Sn 189.927†	66.3	0.0101429	mg/L	0.00052917	0.0101429	mg/L	0.00052917	5.22%
Ti 334.940†	180729.6	0.693102	mg/L	0.0021473	0.693102	mg/L	0.0021473	0.31%
Tl 190.801†	-14.7	-0.0099745	mg/L	0.00203180	-0.0099745	mg/L	0.00203180	20.37%
V 290.880†	6077.8	0.117502	mg/L	0.0010376	0.117502	mg/L	0.0010376	0.88%
Zn 206.200†	30522.2	0.727567	mg/L	0.0022801	0.727567	mg/L	0.0022801	0.31%
B 249.772†	40613.0	1.39176	mg/L	0.001490	1.39176	mg/L	0.001490	0.11%
Si 251.611†	49197.6	2.27610	mg/L	0.021847	2.27610	mg/L	0.021847	0.96%
Ce 413.764†	1328.4	0.236	mg/L	0.0042	0.236	mg/L	0.0042	1.77%

Sequence No.: 38
Sample ID: AD19178-012
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 89
Date Collected: 9/16/2020 9:56:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-012

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	443585.4	101	%	0.6				0.60%
Y 371.029	241815.4	120	%	0.5				0.43%
Ag 328.068†	-319.5	-0.0045441	mg/L	0.00033197	-0.0045441	mg/L	0.00033197	7.31%
Al 308.215†	339967.9	40.9490	mg/L	0.06085	40.9490	mg/L	0.06085	0.15%
As 188.979†	204.1	0.139807	mg/L	0.0039650	0.139807	mg/L	0.0039650	2.84%
Ba 233.527†	64005.5	0.777213	mg/L	0.0076537	0.777213	mg/L	0.0076537	0.98%
Be 313.107†	2770.9	0.0003049	mg/L	0.00007127	0.0003049	mg/L	0.00007127	23.37%
Ca 317.933†	22354120.0	264.677	mg/L	2.2922	264.677	mg/L	2.2922	0.87%
Cd 228.802†	86.2	0.0061280	mg/L	0.00012373	0.0061280	mg/L	0.00012373	2.02%
Co 228.616†	3018.2	0.121244	mg/L	0.0023759	0.121244	mg/L	0.0023759	1.96%
Cr 267.716†	5464.2	0.0856085	mg/L	0.00172002	0.0856085	mg/L	0.00172002	2.01%
Cu 327.393†	23974.0	0.363633	mg/L	0.0048186	0.363633	mg/L	0.0048186	1.33%
Fe 273.955†	1305399.2	157.648	mg/L	0.4791	157.648	mg/L	0.4791	0.30%
K 404.721†	23136.6	-1325.49	mg/L	8.196	-1325.49	mg/L	8.196	0.62%
Mg 279.077†	398487.3	42.4617	mg/L	0.11139	42.4617	mg/L	0.11139	0.26%
Mn 257.610†	731670.8	2.79981	mg/L	0.005948	2.79981	mg/L	0.005948	0.21%
Mo 202.031†	57.7	0.0042018	mg/L	0.00065636	0.0042018	mg/L	0.00065636	15.62%
Na 330.237†	146.8	1.02767	mg/L	0.095579	1.02767	mg/L	0.095579	9.30%
Ni 231.604†	4107.5	0.158436	mg/L	0.0029836	0.158436	mg/L	0.0029836	1.88%
Pb 220.353†	5521.3	0.944321	mg/L	0.0181202	0.944321	mg/L	0.0181202	1.92%
Sb 206.836†	28.8	0.0072357	mg/L	0.00434467	0.0072357	mg/L	0.00434467	60.05%
Se 196.026†	-108.9	-0.0201939	mg/L	0.00335689	-0.0201939	mg/L	0.00335689	16.62%
Sn 189.927†	83.7	0.0132502	mg/L	0.00075169	0.0132502	mg/L	0.00075169	5.67%
Ti 334.940†	168540.5	0.646153	mg/L	0.0091404	0.646153	mg/L	0.0091404	1.41%
Tl 190.801†	-14.6	-0.0105529	mg/L	0.00230110	-0.0105529	mg/L	0.00230110	21.81%
V 290.880†	5957.9	0.113295	mg/L	0.0048826	0.113295	mg/L	0.0048826	4.31%
Zn 206.200†	24328.6	0.578668	mg/L	0.0070981	0.578668	mg/L	0.0070981	1.23%
B 249.772†	48669.7	1.64342	mg/L	0.008824	1.64342	mg/L	0.008824	0.54%
Si 251.611†	53071.8	2.45390	mg/L	0.078379	2.45390	mg/L	0.078379	3.19%
Ce 413.764†	975.3	0.207	mg/L	0.0076	0.207	mg/L	0.0076	3.69%

Sequence No.: 39
Sample ID: AD19178-013
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 90
Date Collected: 9/16/2020 10:01:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19178-013

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	436774.5	99.1	%	1.02				1.03%
Y 371.029	230995.8	115	%	1.3				1.09%
Ag 328.068†	-259.5	-0.0038071	mg/L	0.00033981	-0.0038071	mg/L	0.00033981	8.93%
Al 308.215†	479737.3	57.7973	mg/L	0.11322	57.7973	mg/L	0.11322	0.20%
As 188.979†	126.7	0.0942864	mg/L	0.00154684	0.0942864	mg/L	0.00154684	1.64%
Ba 233.527†	36244.9	0.438877	mg/L	0.0009810	0.438877	mg/L	0.0009810	0.22%
Be 313.107†	2651.6	0.0002017	mg/L	0.00004786	0.0002017	mg/L	0.00004786	23.73%
Ca 317.933†	18255666.2	216.080	mg/L	0.3562	216.080	mg/L	0.3562	0.16%
Cd 228.802†	73.1	0.0056761	mg/L	0.00017204	0.0056761	mg/L	0.00017204	3.03%
Co 228.616†	1459.5	0.0591205	mg/L	0.00080018	0.0591205	mg/L	0.00080018	1.35%
Cr 267.716†	5911.3	0.0930939	mg/L	0.00128312	0.0930939	mg/L	0.00128312	1.38%
Cu 327.393†	11697.4	0.175850	mg/L	0.0012289	0.175850	mg/L	0.0012289	0.70%
Fe 273.955†	1170921.3	141.403	mg/L	0.3565	141.403	mg/L	0.3565	0.25%
K 404.721†	19922.1	-1199.37	mg/L	12.239	-1199.37	mg/L	12.239	1.02%
Mg 279.077†	1018969.9	109.086	mg/L	0.1569	109.086	mg/L	0.1569	0.14%
Mn 257.610†	467224.8	1.78595	mg/L	0.003428	1.78595	mg/L	0.003428	0.19%
Mo 202.031†	-20.7	-0.0032865	mg/L	0.00068196	-0.0032865	mg/L	0.00068196	20.75%
Na 330.237†	386.5	1.65407	mg/L	0.093946	1.65407	mg/L	0.093946	5.68%
Ni 231.604†	4194.2	0.161793	mg/L	0.0019438	0.161793	mg/L	0.0019438	1.20%
Pb 220.353†	550.9	0.0965273	mg/L	0.00111489	0.0965273	mg/L	0.00111489	1.16%
Sb 206.836†	16.8	0.0012312	mg/L	0.00208360	0.0012312	mg/L	0.00208360	169.24%
Se 196.026†	-96.0	-0.0171148	mg/L	0.00262492	-0.0171148	mg/L	0.00262492	15.34%
Sn 189.927†	-26.7	-0.0065029	mg/L	0.00225482	-0.0065029	mg/L	0.00225482	34.67%
Ti 334.940†	124548.3	0.476710	mg/L	0.0084948	0.476710	mg/L	0.0084948	1.78%
Tl 190.801†	-13.4	-0.0109698	mg/L	0.00372657	-0.0109698	mg/L	0.00372657	33.97%
V 290.880†	5501.5	0.104559	mg/L	0.0018597	0.104559	mg/L	0.0018597	1.78%
Zn 206.200†	22386.5	0.531980	mg/L	0.0018393	0.531980	mg/L	0.0018393	0.35%
B 249.772†	43707.1	1.47598	mg/L	0.001753	1.47598	mg/L	0.001753	0.12%
Si 251.611†	83975.7	3.87287	mg/L	0.095286	3.87287	mg/L	0.095286	2.46%
Ce 413.764†	1068.5	0.206	mg/L	0.0061	0.206	mg/L	0.0061	2.96%

Sequence No.: 40
Sample ID: AD19230-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 91
Date Collected: 9/16/2020 10:06:11 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19230-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	474192.1	108	%	0.7				0.65%
Y 371.029	252071.6	126	%	0.9				0.69%
Ag 328.068†	-379.1	-0.0052760	mg/L	0.00019814	-0.0052760	mg/L	0.00019814	3.76%
Al 308.215†	996112.2	120.038	mg/L	0.4710	120.038	mg/L	0.4710	0.39%
As 188.979†	-16.1	0.0293789	mg/L	0.00204030	0.0293789	mg/L	0.00204030	6.94%
Ba 233.527†	75030.6	0.911584	mg/L	0.0006021	0.911584	mg/L	0.0006021	0.07%
Be 313.107†	-13190.4	-0.0135070	mg/L	0.00011270	-0.0135070	mg/L	0.00011270	0.83%
Ca 317.933†	4134977.3	48.6439	mg/L	0.22645	48.6439	mg/L	0.22645	0.47%
Cd 228.802†	-54.4	0.0013102	mg/L	0.00032742	0.0013102	mg/L	0.00032742	24.99%
Co 228.616†	2704.3	0.108731	mg/L	0.0013946	0.108731	mg/L	0.0013946	1.28%
Cr 267.716†	16155.9	0.264640	mg/L	0.0029114	0.264640	mg/L	0.0029114	1.10%
Cu 327.393†	20672.2	0.313130	mg/L	0.0011225	0.313130	mg/L	0.0011225	0.36%
Fe 273.955†	1849649.8	223.394	mg/L	1.1624	223.394	mg/L	1.1624	0.52%
K 404.721†	30292.1	-1900.97	mg/L	7.182	-1900.97	mg/L	7.182	0.38%
Mg 279.077†	437323.5	46.6317	mg/L	0.09989	46.6317	mg/L	0.09989	0.21%
Mn 257.610†	799685.8	3.06058	mg/L	0.015723	3.06058	mg/L	0.015723	0.51%
Mo 202.031†	33.1	0.0018536	mg/L	0.00050364	0.0018536	mg/L	0.00050364	27.17%
Na 330.237†	448.4	1.81580	mg/L	0.081942	1.81580	mg/L	0.081942	4.51%
Ni 231.604†	4330.3	0.167065	mg/L	0.0014151	0.167065	mg/L	0.0014151	0.85%
Pb 220.353†	1091.5	0.195344	mg/L	0.0022590	0.195344	mg/L	0.0022590	1.16%
Sb 206.836†	16.6	0.0117560	mg/L	0.00341307	0.0117560	mg/L	0.00341307	29.03%
Se 196.026†	-184.0	-0.0457526	mg/L	0.00116971	-0.0457526	mg/L	0.00116971	2.56%
Sn 189.927†	52.1	0.0076013	mg/L	0.00111386	0.0076013	mg/L	0.00111386	14.65%
Ti 334.940†	1980950.0	7.62696	mg/L	0.033454	7.62696	mg/L	0.033454	0.44%
Tl 190.801†	-129.9	-0.0226216	mg/L	0.00147815	-0.0226216	mg/L	0.00147815	6.53%
V 290.880†	19700.5	0.404082	mg/L	0.0014938	0.404082	mg/L	0.0014938	0.37%
Zn 206.200†	26873.5	0.639850	mg/L	0.0067071	0.639850	mg/L	0.0067071	1.05%
B 249.772†	70206.0	2.34219	mg/L	0.008801	2.34219	mg/L	0.008801	0.38%
Si 251.611†	53107.9	2.45560	mg/L	0.021590	2.45560	mg/L	0.021590	0.88%
Ce 413.764†	1981.1	0.395	mg/L	0.0086	0.395	mg/L	0.0086	2.18%

Sequence No.: 41 Autosampler Location: 92
Sample ID: AD19228-001 Date Collected: 9/16/2020 10:11:01 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: AD19228-001

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	446139.2	101	%	0.4				0.44%
Y 371.029	238348.7	119	%	1.6				1.36%
Ag 328.068†	-290.8	-0.0041914	mg/L	0.00052623	-0.0041914	mg/L	0.00052623	12.56%
Al 308.215†	755521.6	91.0371	mg/L	0.20740	91.0371	mg/L	0.20740	0.23%
As 188.979†	9.9	0.0387793	mg/L	0.00227645	0.0387793	mg/L	0.00227645	5.87%
Ba 233.527†	62506.6	0.758946	mg/L	0.0155110	0.758946	mg/L	0.0155110	2.04%
Be 313.107†	-9449.5	-0.0102698	mg/L	0.00020967	-0.0102698	mg/L	0.00020967	2.04%
Ca 317.933†	4727494.7	55.6696	mg/L	0.18886	55.6696	mg/L	0.18886	0.34%
Cd 228.802†	-8.8	0.0028750	mg/L	0.00055084	0.0028750	mg/L	0.00055084	19.16%
Co 228.616†	2014.8	0.0812552	mg/L	0.00035758	0.0812552	mg/L	0.00035758	0.44%
Cr 267.716†	14625.1	0.239006	mg/L	0.0050016	0.239006	mg/L	0.0050016	2.09%
Cu 327.393†	23347.7	0.354054	mg/L	0.0057495	0.354054	mg/L	0.0057495	1.62%
Fe 273.955†	1608459.4	194.258	mg/L	0.5275	194.258	mg/L	0.5275	0.27%
K 404.721†	30595.7	-1607.31	mg/L	9.601	-1607.31	mg/L	9.601	0.60%
Mg 279.077†	354235.9	37.7102	mg/L	0.75821	37.7102	mg/L	0.75821	2.01%
Mn 257.610†	617553.6	2.36230	mg/L	0.006328	2.36230	mg/L	0.006328	0.27%
Mo 202.031†	33.4	0.0018782	mg/L	0.00030886	0.0018782	mg/L	0.00030886	16.44%
Na 330.237†	758.2	2.62539	mg/L	0.061288	2.62539	mg/L	0.061288	2.33%
Ni 231.604†	3575.7	0.137841	mg/L	0.0019274	0.137841	mg/L	0.0019274	1.40%
Pb 220.353†	1885.4	0.328039	mg/L	0.0032977	0.328039	mg/L	0.0032977	1.01%
Sb 206.836†	21.1	0.0111704	mg/L	0.00378191	0.0111704	mg/L	0.00378191	33.86%
Se 196.026†	-151.4	-0.0348157	mg/L	0.00709376	-0.0348157	mg/L	0.00709376	20.38%
Sn 189.927†	78.4	0.0123140	mg/L	0.00059340	0.0123140	mg/L	0.00059340	4.82%
Ti 334.940†	1431414.8	5.51033	mg/L	0.013616	5.51033	mg/L	0.013616	0.25%
Tl 190.801†	-91.3	-0.0170720	mg/L	0.00338092	-0.0170720	mg/L	0.00338092	19.80%
V 290.880†	18050.6	0.370741	mg/L	0.0068237	0.370741	mg/L	0.0068237	1.84%
Zn 206.200†	28567.8	0.680580	mg/L	0.0154995	0.680580	mg/L	0.0154995	2.28%
B 249.772†	63015.0	2.06675	mg/L	0.021975	2.06675	mg/L	0.021975	1.06%
Si 251.611†	62121.5	2.86943	mg/L	0.073165	2.86943	mg/L	0.073165	2.55%
Ce 413.764†	1718.6	0.336	mg/L	0.0062	0.336	mg/L	0.0062	1.85%

Sequence No.: 42
Sample ID: AD19229-001
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 93
Date Collected: 9/16/2020 10:15:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19229-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	470596.1	107	%	0.8				0.78%
Y 371.029	245275.0	122	%	0.9				0.72%
Ag 328.068†	-405.3	-0.0055976	mg/L	0.00026180	-0.0055976	mg/L	0.00026180	4.68%
Al 308.215†	880782.1	106.135	mg/L	0.7783	106.135	mg/L	0.7783	0.73%
As 188.979†	2.0	0.0450998	mg/L	0.00422390	0.0450998	mg/L	0.00422390	9.37%
Ba 233.527†	59565.8	0.723104	mg/L	0.0012273	0.723104	mg/L	0.0012273	0.17%
Be 313.107†	-7898.6	-0.0089278	mg/L	0.00007656	-0.0089278	mg/L	0.00007656	0.86%
Ca 317.933†	4181589.5	49.1966	mg/L	0.34966	49.1966	mg/L	0.34966	0.71%
Cd 228.802†	-38.9	0.0018432	mg/L	0.00034853	0.0018432	mg/L	0.00034853	18.91%
Co 228.616†	2155.3	0.0868511	mg/L	0.00072241	0.0868511	mg/L	0.00072241	0.83%
Cr 267.716†	19188.4	0.315418	mg/L	0.0026221	0.315418	mg/L	0.0026221	0.83%
Cu 327.393†	21465.2	0.325259	mg/L	0.0002371	0.325259	mg/L	0.0002371	0.07%
Fe 273.955†	2126290.0	256.813	mg/L	1.9075	256.813	mg/L	1.9075	0.74%
K 404.721†	37299.1	-2156.02	mg/L	26.280	-2156.02	mg/L	26.280	1.22%
Mg 279.077†	382673.0	40.7636	mg/L	0.19149	40.7636	mg/L	0.19149	0.47%
Mn 257.610†	682972.6	2.61311	mg/L	0.019527	2.61311	mg/L	0.019527	0.75%
Mo 202.031†	29.7	0.0015281	mg/L	0.00060141	0.0015281	mg/L	0.00060141	39.36%
Na 330.237†	661.5	2.37286	mg/L	0.074042	2.37286	mg/L	0.074042	3.12%
Ni 231.604†	4235.5	0.163395	mg/L	0.0014397	0.163395	mg/L	0.0014397	0.88%
Pb 220.353†	3624.1	0.626757	mg/L	0.0061288	0.626757	mg/L	0.0061288	0.98%
Sb 206.836†	29.6	0.0142720	mg/L	0.00171431	0.0142720	mg/L	0.00171431	12.01%
Se 196.026†	-207.9	-0.0505214	mg/L	0.00652509	-0.0505214	mg/L	0.00652509	12.92%
Sn 189.927†	2079.7	0.370560	mg/L	0.0008601	0.370560	mg/L	0.0008601	0.23%
Ti 334.940†	1418267.6	5.45969	mg/L	0.046577	5.45969	mg/L	0.046577	0.85%
Tl 190.801†	-92.1	-0.0176393	mg/L	0.00290550	-0.0176393	mg/L	0.00290550	16.47%
V 290.880†	21318.9	0.436424	mg/L	0.0013307	0.436424	mg/L	0.0013307	0.30%
Zn 206.200†	29798.3	0.710162	mg/L	0.0043118	0.710162	mg/L	0.0043118	0.61%
B 249.772†	81582.3	2.70362	mg/L	0.020884	2.70362	mg/L	0.020884	0.77%
Si 251.611†	57362.9	2.65095	mg/L	0.010581	2.65095	mg/L	0.010581	0.40%
Ce 413.764†	1929.7	0.415	mg/L	0.0101	0.415	mg/L	0.0101	2.44%

Sequence No.: 43
Sample ID: AD19233-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 94
Date Collected: 9/16/2020 10:20:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AD19233-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	454675.3	103	%	0.3				0.34%
Y 371.029	225122.0	112	%	1.0				0.91%
Ag 328.068†	634.6	0.0071721	mg/L	0.00058204	0.0071721	mg/L	0.00058204	8.12%
Al 308.215†	144958.8	17.4386	mg/L	0.07753	17.4386	mg/L	0.07753	0.44%
As 188.979†	2028.5	1.13264	mg/L	0.005598	1.13264	mg/L	0.005598	0.49%
Ba 233.527†	190874.4	2.32345	mg/L	0.010871	2.32345	mg/L	0.010871	0.47%
Be 313.107†	298.0	-0.0018350	mg/L	0.00007561	-0.0018350	mg/L	0.00007561	4.12%
Ca 317.933†	6651021.8	78.4779	mg/L	0.29260	78.4779	mg/L	0.29260	0.37%
Cd 228.802†	742.2	0.0285893	mg/L	0.00020976	0.0285893	mg/L	0.00020976	0.73%
Co 228.616†	434.2	0.0182594	mg/L	0.00081223	0.0182594	mg/L	0.00081223	4.45%
Cr 267.716†	7865.9	0.125824	mg/L	0.0006419	0.125824	mg/L	0.0006419	0.51%
Cu 327.393†	33475.2	0.508966	mg/L	0.0030637	0.508966	mg/L	0.0030637	0.60%
Fe 273.955†	564375.8	68.1307	mg/L	0.33834	68.1307	mg/L	0.33834	0.50%
K 404.721†	9271.0	-587.774	mg/L	4.9125	-587.774	mg/L	4.9125	0.84%
Mg 279.077†	67233.1	6.89344	mg/L	0.039336	6.89344	mg/L	0.039336	0.57%
Mn 257.610†	784956.9	3.00411	mg/L	0.012846	3.00411	mg/L	0.012846	0.43%
Mo 202.031†	144.4	0.0124816	mg/L	0.00013553	0.0124816	mg/L	0.00013553	1.09%
Na 330.237†	1609.3	4.84964	mg/L	0.038553	4.84964	mg/L	0.038553	0.79%
Ni 231.604†	2927.1	0.112722	mg/L	0.0001282	0.112722	mg/L	0.0001282	0.11%
Pb 220.353†	2763.0	0.470493	mg/L	0.0014047	0.470493	mg/L	0.0014047	0.30%
Sb 206.836†	7.5	-0.0004403	mg/L	0.00073831	-0.0004403	mg/L	0.00073831	167.70%
Se 196.026†	-6.0	0.0149826	mg/L	0.00483321	0.0149826	mg/L	0.00483321	32.26%
Sn 189.927†	193.0	0.0328179	mg/L	0.00208359	0.0328179	mg/L	0.00208359	6.35%
Ti 334.940†	133198.7	0.510028	mg/L	0.0126423	0.510028	mg/L	0.0126423	2.48%
Tl 190.801†	-16.7	-0.0130022	mg/L	0.00207441	-0.0130022	mg/L	0.00207441	15.95%
V 290.880†	17187.5	0.361682	mg/L	0.0025292	0.361682	mg/L	0.0025292	0.70%
Zn 206.200†	24526.6	0.583429	mg/L	0.0027879	0.583429	mg/L	0.0027879	0.48%
B 249.772†	30534.3	0.854731	mg/L	0.0038459	0.854731	mg/L	0.0038459	0.45%
Si 251.611†	51533.8	2.38316	mg/L	0.024470	2.38316	mg/L	0.024470	1.03%
Ce 413.764†	456.3	0.064	mg/L	0.0125	0.064	mg/L	0.0125	19.55%

Sequence No.: 44
Sample ID: CCV V-333673
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 6
Date Collected: 9/16/2020 10:24:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV V-333673

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Calib. Std.Dev.	Sample Conc.	Units	Sample Std.Dev.	RSD
Sc 361.383	430952.5	97.7	%	0.87				0.89%
Y 371.029	174949.3	87.2	%	0.97				1.12%
Ag 328.068†	7766.1	0.0947516	mg/L	0.00079147	0.0947516	mg/L	0.00079147	0.84%
QC value within limits for Ag 328.068 Recovery = 94.75%								
Al 308.215†	40257.7	4.83536	mg/L	0.065546	4.83536	mg/L	0.065546	1.36%
QC value within limits for Al 308.215 Recovery = 96.71%								
As 188.979†	880.2	0.487337	mg/L	0.0075449	0.487337	mg/L	0.0075449	1.55%
QC value within limits for As 188.979 Recovery = 97.47%								
Ba 233.527†	39412.2	0.477479	mg/L	0.0071455	0.477479	mg/L	0.0071455	1.50%
QC value within limits for Ba 233.527 Recovery = 95.50%								
Be 313.107†	558653.6	0.481329	mg/L	0.0008273	0.481329	mg/L	0.0008273	0.17%
QC value within limits for Be 313.107 Recovery = 96.27%								
Ca 317.933†	4185548.2	49.2435	mg/L	0.02504	49.2435	mg/L	0.02504	0.05%
QC value within limits for Ca 317.933 Recovery = 98.49%								
Cd 228.802†	13519.9	0.466127	mg/L	0.0056496	0.466127	mg/L	0.0056496	1.21%
QC value within limits for Cd 228.802 Recovery = 93.23%								
Co 228.616†	11861.4	0.473679	mg/L	0.0061769	0.473679	mg/L	0.0061769	1.30%
QC value within limits for Co 228.616 Recovery = 94.74%								
Cr 267.716†	29887.8	0.494579	mg/L	0.0079448	0.494579	mg/L	0.0079448	1.61%
QC value within limits for Cr 267.716 Recovery = 98.92%								
Cu 327.393†	32252.0	0.490255	mg/L	0.0070163	0.490255	mg/L	0.0070163	1.43%
QC value within limits for Cu 327.393 Recovery = 98.05%								
Fe 273.955†	41183.5	4.92806	mg/L	0.064372	4.92806	mg/L	0.064372	1.31%
QC value within limits for Fe 273.955 Recovery = 98.56%								
K 404.721†	4179.9	-14.6847	mg/L	0.45003	-14.6847	mg/L	0.45003	3.06%
QC value less than the lower limit for K 404.721 Recovery = -29.37%								
Mg 279.077†	461922.6	49.2730	mg/L	0.03097	49.2730	mg/L	0.03097	0.06%
QC value within limits for Mg 279.077 Recovery = 98.55%								
Mn 257.610†	129573.8	0.491427	mg/L	0.0071051	0.491427	mg/L	0.0071051	1.45%
QC value within limits for Mn 257.610 Recovery = 98.29%								
Mo 202.031†	5046.1	0.480624	mg/L	0.0055624	0.480624	mg/L	0.0055624	1.16%
QC value within limits for Mo 202.031 Recovery = 96.12%								
Na 330.237†	17966.8	47.5944	mg/L	0.55225	47.5944	mg/L	0.55225	1.16%
QC value within limits for Na 330.237 Recovery = 95.19%								
Ni 231.604†	12296.3	0.475572	mg/L	0.0072070	0.475572	mg/L	0.0072070	1.52%
QC value within limits for Ni 231.604 Recovery = 95.11%								
Pb 220.353†	2905.7	0.490926	mg/L	0.0061566	0.490926	mg/L	0.0061566	1.25%
QC value within limits for Pb 220.353 Recovery = 98.19%								
Sb 206.836†	980.8	0.511196	mg/L	0.0074002	0.511196	mg/L	0.0074002	1.45%
QC value within limits for Sb 206.836 Recovery = 102.24%								
Se 196.026†	854.7	0.494530	mg/L	0.0146552	0.494530	mg/L	0.0146552	2.96%
QC value within limits for Se 196.026 Recovery = 98.91%								
Sn 189.927†	2760.3	0.492388	mg/L	0.0061199	0.492388	mg/L	0.0061199	1.24%
QC value within limits for Sn 189.927 Recovery = 98.48%								
Ti 334.940†	128896.0	0.493455	mg/L	0.0077490	0.493455	mg/L	0.0077490	1.57%
QC value within limits for Ti 334.940 Recovery = 98.69%								
Tl 190.801†	961.0	0.518111	mg/L	0.0058645	0.518111	mg/L	0.0058645	1.13%
QC value within limits for Tl 190.801 Recovery = 103.62%								
V 290.880†	22965.5	0.498153	mg/L	0.0060386	0.498153	mg/L	0.0060386	1.21%
QC value within limits for V 290.880 Recovery = 99.63%								
Zn 206.200†	20904.5	0.496351	mg/L	0.0055489	0.496351	mg/L	0.0055489	1.12%
QC value within limits for Zn 206.200 Recovery = 99.27%								
B 249.772†	32433.9	0.511746	mg/L	0.0048525	0.511746	mg/L	0.0048525	0.95%
QC value within limits for B 249.772 Recovery = 102.35%								
Si 251.611†	105839.6	4.86905	mg/L	0.067400	4.86905	mg/L	0.067400	1.38%
QC value within limits for Si 251.611 Recovery = 97.38%								
Ce 413.764†	35215.3	4.693	mg/L	0.0792	4.693	mg/L	0.0792	1.69%
QC value within limits for Ce 413.764 Recovery = 93.85%								

QC Failed. Continue with analysis.

Sequence No.: 45 Autosampler Location: 1
Sample ID: CCB V-333667 Date Collected: 9/16/2020 10:28:52 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	451716.9	102	%	0.5				0.46%
Y 371.029	207343.3	103	%	0.5				0.50%
Ag 328.068†	4.5	-0.0005650	mg/L	0.00067751	-0.0005650	mg/L	0.00067751	119.90%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-87.7	-0.0403299	mg/L	0.00726935	-0.0403299	mg/L	0.00726935	18.02%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	5.8	0.0033718	mg/L	0.00208182	0.0033718	mg/L	0.00208182	61.74%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	7.1	-0.0027779	mg/L	0.00017449	-0.0027779	mg/L	0.00017449	6.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-3.3	-0.0020957	mg/L	0.00004651	-0.0020957	mg/L	0.00004651	2.22%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	165.0	-0.384672	mg/L	0.0006994	-0.384672	mg/L	0.0006994	0.18%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	1.3	0.0032208	mg/L	0.00008236	0.0032208	mg/L	0.00008236	2.56%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	6.3	0.0012073	mg/L	0.00022477	0.0012073	mg/L	0.00022477	18.62%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.9	-0.0058747	mg/L	0.00022809	-0.0058747	mg/L	0.00022809	3.88%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	6.0	-0.0029820	mg/L	0.00010218	-0.0029820	mg/L	0.00010218	3.43%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	9.3	-0.0458588	mg/L	0.00064412	-0.0458588	mg/L	0.00064412	1.40%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-475.4	-16.8841	mg/L	1.06447	-16.8841	mg/L	1.06447	6.30%
QC value less than the lower limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	3.4	-0.325314	mg/L	0.0022669	-0.325314	mg/L	0.0022669	0.70%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-1.4	-0.0053526	mg/L	0.00005224	-0.0053526	mg/L	0.00005224	0.98%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.3	-0.0007086	mg/L	0.00029029	-0.0007086	mg/L	0.00029029	40.97%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-0.8	0.641956	mg/L	0.0873080	0.641956	mg/L	0.0873080	13.60%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-15.7	-0.0012482	mg/L	0.00044150	-0.0012482	mg/L	0.00044150	35.37%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-17.2	-0.0064935	mg/L	0.00229937	-0.0064935	mg/L	0.00229937	35.41%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	11.7	0.0021309	mg/L	0.00269190	0.0021309	mg/L	0.00269190	126.32%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.8	0.0004600	mg/L	0.00454933	0.0004600	mg/L	0.00454933	989.07%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.9	-0.0018927	mg/L	0.00124741	-0.0018927	mg/L	0.00124741	65.91%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-276.1	-0.0040731	mg/L	0.00015193	-0.0040731	mg/L	0.00015193	3.73%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	5.9	-0.0053178	mg/L	0.00442897	-0.0053178	mg/L	0.00442897	83.29%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-27.8	-0.0038959	mg/L	0.00054480	-0.0038959	mg/L	0.00054480	13.98%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	8.2	-0.0060079	mg/L	0.00028614	-0.0060079	mg/L	0.00028614	4.76%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772†	279.7	0.0149047	mg/L	0.00012460	0.0149047	mg/L	0.00012460	0.84%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611†	-1283.0	-0.0415398	mg/L	0.00239415	-0.0415398	mg/L	0.00239415	5.76%
QC value within limits for Si 251.611 Recovery = Not calculated								
Ce 413.764†	-75.9	-0.063	mg/L	0.0042	-0.063	mg/L	0.0042	6.77%
QC value within limits for Ce 413.764 Recovery = Not calculated								

QC Failed. Continue with analysis.

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13005

Description
LCS SOIL (lot# 251)

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
PHENOVA	QC-MET-SOIL	7076-04	01/15/20	10/21/20	Aliano, Carmela	50	10g	NEAT	NEAT

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334880

Prepared By: Lucca, Daniela
Description: Hg Intermediate Standard -WARNING
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29685
Concentration: .25 ppm
Final Volume: 500 ml
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13311	MERCURY 1000 PPM	.125 ml	1000 ug/ml	
13421	nitric acid	12.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334881

Prepared By: Lucca, Daniela
Description: Hg intermediate Control -WARNING
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29685
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334927

Prepared By: Silva, Amanda
Description: Aquaregia
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29688
Concentration: 0 neat
Final Volume: 80 ml
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13440	nitric acid	20 ml	neat neat	
13130	hydrochloric acid	60 ml	neat neat	

Veritech Lot Number: V-334928

Prepared By: Silva, Amanda
Description: Hg Soil ICV Soil
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29688
Concentration: 20 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334881	Hg intermediate Control -WARNING	.5 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334929

Prepared By: Silva, Amanda
Description: Hg soil CCV 10ppb
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29688
Concentration: 10 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334881	Hg intermediate Control -WARNING	.25 ml	1.0 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334930

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg soil standard blk | BatchNumber: B-29688 | ApproveDate: 09/25/20
Prep Date: 9/16/2020 | Concentration: 0 ppm | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			

Veritech Lot Number: V-334931

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg soil standard .2 ppb | BatchNumber: B-29688 | ApproveDate: 09/25/20
Prep Date: 9/16/2020 | Concentration: .2 ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334880	Hg Intermediate Standard -WARNING	.02 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334932

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg soil standard .5 ppb | BatchNumber: B-29688 | ApproveDate: 09/25/20
Prep Date: 9/16/2020 | Concentration: .5 ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334880	Hg Intermediate Standard -WARNING	.05 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334933

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg soil standard 1 ppb | BatchNumber: B-29688 | ApproveDate: 09/25/20
Prep Date: 9/16/2020 | Concentration: 1 ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334880	Hg Intermediate Standard -WARNING	.1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334934

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg soil standard 2 ppb | BatchNumber: B-29688 | ApproveDate: 09/25/20
Prep Date: 9/16/2020 | Concentration: 2 ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334880	Hg Intermediate Standard -WARNING	.2 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334935

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: Hg soil standard 5 ppb | BatchNumber: B-29688 | ApproveDate: 09/25/20
Prep Date: 9/16/2020 | Concentration: 5 ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334880	Hg Intermediate Standard -WARNING	.5 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334936

Prepared By: Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description: Hg soil standard 10 ppb	BatchNumber: B-29688	ApproveDate: 09/25/20
Prep Date: 9/16/2020	Concentration: 10 ppb	Checked: Yes
Expiration Date: 9/16/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334880	Hg Intermediate Standard -WARNING	1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334937

Prepared By: Silva, Amanda	Department: Metals	ApprovedBy: shiamala
Description: Hg soil standard 25 ppb	BatchNumber: B-29688	ApproveDate: 09/25/20
Prep Date: 9/16/2020	Concentration: 25 ppb	Checked: Yes
Expiration Date: 9/16/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334880	Hg Intermediate Standard -WARNING	2.5 ml	.25 ppm	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13311

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	140-051-801	S200130001	06/04/20	12/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-317822

Prepared By: Aliano, Carmela
Description: Hydroxylamine Hydrochloride WARNIN
Prep Date: 12/13/2019
Expiration Date: 1/8/2020
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 10 l
ApprovedBy: shiamala
ApproveDate: 12/16/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12651	DI H2O			
12218	Sodium Chloride	1200 g	neat neat	
12619	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-331286

Prepared By: Lucca, Daniela
Description: 5% Potassium Permanganate WARNIN
Prep Date: 7/13/2020
Expiration Date: 2/13/2021
Department: Metals
BatchNumber:
Concentration: reagent reage
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 07/16/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12621	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-334877

Prepared By: Ransaw, Brianna
Description: 3% HCL WARNING
Prep Date: 9/16/2020
Expiration Date: 9/23/2020
Department: WetChem
BatchNumber:
Concentration: 3 %
Final Volume: 20 l
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13130	hydrochloric acid	600 ml	neat neat	3%
13084	DI H20			

Veritech Lot Number: V-334878

Prepared By: Ransaw, Brianna
Description: SnCl2 "WARNING:"
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber:
Concentration: reagent I
Final Volume: 2 l
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334877	3% HCL WARNING	2000 ml	3 %	
13089	STANNOUS CHOLORIDE	26.4 g		

Veritech Lot Number: V-334881

Prepared By: Lucca, Daniela
Description: Hg intermediate Control -WARNING
Prep Date: 9/16/2020
Expiration Date: 9/16/2020
Department: Metals
BatchNumber: B-29685
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334988

Prepared By:	Ransaw, Brianna	Department: Metals	ApprovedBy: shiamala
Description:	SnCl2 "WARNING:"	BatchNumber:	ApproveDate: 09/25/20
Prep Date:	9/17/2020	Concentration: reagent I	Checked: Yes
Expiration Date:	9/17/2020	Final Volume: 2 l	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334877	3% HCL WARNING	2000 ml	3 %	
13089	STANNOUS CHOLORIDE	26.4 g		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12218

Description
Sodium Chloride

ApprovedBy: akmal
ApproveDate: 12/31/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	SX0420-5	17F145203	12/27/18	12/26/23	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12619

Description
HYDROXYLAMINE HYDROCHLORIDE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LAB SALES	LS-1580015	190318-4C	06/25/19	06/24/23	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12621

Description
POTASSIUM PERMANGANATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LAB SALES	LC-T10208	190318-3C	06/25/19	06/24/29	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12651

Description
DI H2O

ApprovedBy: janee
ApproveDate: 10/10/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	07/08/19	07/07/20	Cousineau, Paul	1			

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13089

Description
STANNOUS CHOLORIDE

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LAB CHEM	LC-P33805	190620-3C	02/15/20	02/14/23	Aliano, Carmela	1	1Gal		

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

H26221S
SnCl2V- 334878
9/16/20
BR
9/17/20

Analysis Begun

Logged In Analyst: usermet
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26221S.sif
Batch ID: H26221S
Results Data Set: H26221S
Results Library: C:\data-AA\johns\Results\Results.mdb

Method Loaded
Method Name: HGCV3 Soil (7471B)
Method Last Saved: 9/10/2020 1:02:51 PM
Method Description: HgCV3 Soil (7471B)

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calibration Blank
Date Collected: 9/16/2020 1:55:22 PM
Analyst:
Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0003	0.0022	0.0003	13:56:08	Yes
2		[0.00]	0.0002	0.0017	0.0002	13:56:41	Yes
Mean:		[0.00]	0.0003				
SD:		0.00	0.0000				
%RSD:		0.00	9.24				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 2
Sample ID: .2 PPB
Date Collected: 9/16/2020 1:56:42 PM
Analyst:
Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0014	0.0080	0.0016	13:57:28	Yes
2		[0.2]	0.0014	0.0078	0.0016	13:58:00	Yes
Mean:		[0.2]	0.0014				
SD:		0.0	0.0000				
%RSD:		0.0	0.64				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00680 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 3
Sample ID: .5 PPB
Date Collected: 9/16/2020 1:58:02 PM
Analyst:
Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0032	0.0159	0.0034	13:58:47	Yes
2		[0.5]	0.0032	0.0156	0.0034	13:59:20	Yes
Mean:		[0.5]	0.0032				
SD:		0.0	0.0000				
%RSD:		0.0	0.23				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999369 Slope: 0.00629 Intercept: 0.00004

Sequence No.: 4
Autosampler Location: 4
Sample ID: 1 PPB
Date Collected: 9/16/2020 1:59:21 PM
Analyst:
Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0062	0.0294	0.0065	14:00:07	Yes
2		[1]	0.0062	0.0289	0.0064	14:00:40	Yes
Mean:		[1]	0.0062				
SD:		0	0.0000				
%RSD:		0	0.25				

Standard number 3 applied. [1]
Correlation Coef.: 0.999775 Slope: 0.00614 Intercept: 0.00006

Sequence No.: 5 Autosampler Location: 5
Sample ID: 2 PPB Date Collected: 9/16/2020 2:00:41 PM
Analyst: Data Type: Original

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0123	0.0563	0.0125	14:01:26	Yes
2		[2]	0.0124	0.0566	0.0127	14:01:59	Yes
Mean:		[2]	0.0124				
SD:		0	0.0001				
%RSD:		0	0.89				

Standard number 4 applied. [2]
Correlation Coef.: 0.999950 Slope: 0.00614 Intercept: 0.00006

Sequence No.: 6 Autosampler Location: 6
Sample ID: 5 PPB Date Collected: 9/16/2020 2:02:00 PM
Analyst: Data Type: Original

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0310	0.1402	0.0313	14:02:46	Yes
2		[5]	0.0309	0.1383	0.0311	14:03:18	Yes
Mean:		[5]	0.0309				
SD:		0	0.0001				
%RSD:		0	0.30				

Standard number 5 applied. [5]
Correlation Coef.: 0.999991 Slope: 0.00618 Intercept: 0.00004

Sequence No.: 7 Autosampler Location: 7
Sample ID: 10 PPB Date Collected: 9/16/2020 2:03:19 PM
Analyst: Data Type: Original

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0622	0.2795	0.0624	14:04:05	Yes
2		[10]	0.0618	0.2761	0.0620	14:04:37	Yes
Mean:		[10]	0.0620				
SD:		0	0.0003				
%RSD:		0	0.45				

Standard number 6 applied. [10]
Correlation Coef.: 0.999997 Slope: 0.00619 Intercept: 0.00003

Sequence No.: 8 Autosampler Location: 8
Sample ID: 25 PPB Date Collected: 9/16/2020 2:05:03 PM
Analyst: Data Type: Original

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[25]	0.1528	0.6913	0.1531	14:05:53	Yes
2	[25]	0.1523	0.6851	0.1526	14:06:25	Yes
Mean:	[25]	0.1526				
SD:	0	0.0003				
%RSD:	0	0.22				

Standard number 7 applied. [25]
Correlation Coef.: 0.999982 Slope: 0.00611 Intercept: 0.00021

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.034	0.00	9.2
.2 PPB	0.0014	0.2	0.189	0.00	0.6
.5 PPB	0.0032	0.5	0.483	0.00	0.2
1 PPB	0.0062	1.0	0.978	0.00	0.2
2 PPB	0.0124	2.0	1.989	0.00	0.9
5 PPB	0.0309	5.0	5.033	0.00	0.3
10 PPB	0.0620	10.0	10.113	0.00	0.5
25 PPB	0.1526	25.0	24.950	0.00	0.2

Correlation Coef.: 0.999982 Slope: 0.00611 Intercept: 0.00021

==========

Sequence No.: 9 **Autosampler Location: 10**
Sample ID: ICV (2) **Date Collected: 9/16/2020 2:06:51 PM**
Analyst: **Data Type: Original**

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.14	20.14	0.1232	0.5538	0.1235	14:07:38	Yes
2	20.05	20.05	0.1227	0.5473	0.1229	14:08:10	Yes
Mean:	20.09	20.09	0.1229				
SD:	0.063	0.063	0.0004				
%RSD:	0.315	0.315	0.31				

QC value within limits for Hg 253.7 Recovery = 100.47%
All analyte(s) passed QC.

==========

Sequence No.: 10 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 9/16/2020 2:08:33 PM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.057	-0.057	-0.0001	0.0001	0.0001	14:09:19	Yes
2	-0.049	-0.049	-0.0001	0.0007	0.0002	14:09:52	Yes
Mean:	-0.053	-0.053	-0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	9.963	9.963	28.23				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 11 **Autosampler Location: 11**
Sample ID: MB 85279 (167) **Date Collected: 9/16/2020 2:09:53 PM**
Analyst: **Data Type: Original**

Replicate Data: MB 85279 (167)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.032	-0.032	0.0000	0.0013	0.0003	14:10:40	Yes
2	-0.032	-0.032	0.0000	0.0015	0.0003	14:11:12	Yes
Mean:	-0.032	-0.032	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.246	0.246	3.56				

Sequence No.: 12 Autosampler Location: 12
Sample ID: LCS 85279 Date Collected: 9/16/2020 2:11:14 PM
Analyst: Data Type: Original

Replicate Data: LCS 85279

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	23.45	23.45	0.1434	0.6454	0.1437	14:11:59	Yes
2	23.42	23.42	0.1432	0.6401	0.1435	14:12:32	Yes
Mean:	23.43	23.43	0.1433				
SD:	0.020	0.020	0.0001				
%RSD:	0.085	0.085	0.09				

Sequence No.: 13 Autosampler Location: 13
Sample ID: LCS 85279 MR Date Collected: 9/16/2020 2:12:56 PM
Analyst: Data Type: Original

Replicate Data: LCS 85279 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	22.94	22.94	0.1403	0.6291	0.1406	14:13:43	Yes
2	22.58	22.58	0.1381	0.6180	0.1384	14:14:16	Yes
Mean:	22.76	22.76	0.1392				
SD:	0.253	0.253	0.0015				
%RSD:	1.111	1.111	1.11				

Sequence No.: 14 Autosampler Location: 14
Sample ID: LCS 4D Date Collected: 9/16/2020 2:14:40 PM
Analyst: Data Type: Original

Replicate Data: LCS 4D

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.815	5.815	0.0357	0.1595	0.0360	14:15:28	Yes
2	5.753	5.753	0.0353	0.1568	0.0356	14:16:01	Yes
Mean:	5.784	5.784	0.0355				
SD:	0.044	0.044	0.0003				
%RSD:	0.752	0.752	0.75				

Sequence No.: 15 Autosampler Location: 15
Sample ID: LCS 4D MR Date Collected: 9/16/2020 2:16:02 PM
Analyst: Data Type: Original

Replicate Data: LCS 4D MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.623	5.623	0.0346	0.1546	0.0348	14:16:48	Yes
2	5.605	5.605	0.0344	0.1525	0.0347	14:17:20	Yes
Mean:	5.614	5.614	0.0345				
SD:	0.013	0.013	0.0001				
%RSD:	0.238	0.238	0.24				

Sequence No.: 16 Autosampler Location: 16
Sample ID: AD19178-001 Date Collected: 9/16/2020 2:17:22 PM
Analyst: Data Type: Original

Replicate Data: AD19178-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.436	0.436	0.0029	0.0135	0.0031	14:18:07	Yes
2	0.432	0.432	0.0028	0.0136	0.0031	14:18:40	Yes
Mean:	0.434	0.434	0.0029				

SD:	0.003	0.003	0.0000
%RSD:	0.634	0.634	0.59

Sequence No.: 17 Autosampler Location: 17
Sample ID: AD19178-001 MR Date Collected: 9/16/2020 2:18:41 PM
Analyst: Data Type: Original

Replicate Data: AD19178-001 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.520	0.520	0.0034	0.0165	0.0036	14:19:26	Yes
2	0.514	0.514	0.0033	0.0160	0.0036	14:19:59	Yes
Mean:	0.517	0.517	0.0034				
SD:	0.004	0.004	0.0000				
%RSD:	0.808	0.808	0.76				

Sequence No.: 18 Autosampler Location: 18
Sample ID: AD19178-001 MS 1 Date Collected: 9/16/2020 2:20:00 PM
Analyst: Data Type: Original

Replicate Data: AD19178-001 MS 1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.14	10.14	0.0621	0.2762	0.0624	14:20:46	Yes
2	10.19	10.19	0.0624	0.2756	0.0627	14:21:18	Yes
Mean:	10.17	10.17	0.0623				
SD:	0.035	0.035	0.0002				
%RSD:	0.340	0.340	0.34				

Sequence No.: 19 Autosampler Location: 19
Sample ID: AD19178-001 MS 2 Date Collected: 9/16/2020 2:21:44 PM
Analyst: Data Type: Original

Replicate Data: AD19178-001 MS 2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.22	10.22	0.0626	0.2783	0.0629	14:22:30	Yes
2	10.16	10.16	0.0622	0.2754	0.0625	14:23:02	Yes
Mean:	10.19	10.19	0.0624				
SD:	0.045	0.045	0.0003				
%RSD:	0.445	0.445	0.44				

Sequence No.: 20 Autosampler Location: 20
Sample ID: AD19178-002 Date Collected: 9/16/2020 2:23:25 PM
Analyst: Data Type: Original

Replicate Data: AD19178-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.658	0.658	0.0042	0.0197	0.0045	14:24:11	Yes
2	0.656	0.656	0.0042	0.0196	0.0045	14:24:43	Yes
Mean:	0.657	0.657	0.0042				
SD:	0.002	0.002	0.0000				
%RSD:	0.300	0.300	0.29				

Sequence No.: 21 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/16/2020 2:24:45 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	10.50	10.50	0.0643	0.2859	0.0646	14:25:31	Yes
2	10.40	10.40	0.0637	0.2812	0.0640	14:26:04	Yes
Mean:	10.45	10.45	0.0640				
SD:	0.066	0.066	0.0004				
%RSD:	0.635	0.635	0.63				

QC value within limits for Hg 253.7 Recovery = 104.51%
All analyte(s) passed QC.

Sequence No.: 22 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/16/2020 2:26:26 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.057	-0.057	-0.0001	0.0002	0.0001	14:27:13	Yes
2	-0.053	-0.053	-0.0001	0.0004	0.0001	14:27:45	Yes
Mean:	-0.055	-0.055	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	4.986	4.986	13.30				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 21**
Sample ID: AD19178-003 **Date Collected: 9/16/2020 2:27:47 PM**
Analyst: **Data Type: Original**

Replicate Data: AD19178-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.663	0.663	0.0043	0.0202	0.0045	14:28:34	Yes
2	0.659	0.659	0.0042	0.0199	0.0045	14:29:07	Yes
Mean:	0.661	0.661	0.0042				
SD:	0.003	0.003	0.0000				
%RSD:	0.474	0.474	0.45				

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: AD19178-004 **Date Collected: 9/16/2020 2:29:08 PM**
Analyst: **Data Type: Original**

Replicate Data: AD19178-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.551	0.551	0.0036	0.0171	0.0038	14:29:53	Yes
2	0.554	0.554	0.0036	0.0173	0.0039	14:30:26	Yes
Mean:	0.552	0.552	0.0036				
SD:	0.002	0.002	0.0000				
%RSD:	0.425	0.425	0.40				

Sequence No.: 25 **Autosampler Location: 23**
Sample ID: AD19178-005 **Date Collected: 9/16/2020 2:30:27 PM**
Analyst: **Data Type: Original**

Replicate Data: AD19178-005

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.471	1.471	0.0092	0.0420	0.0095	14:31:13	Yes
2	1.468	1.468	0.0092	0.0411	0.0094	14:31:45	Yes
Mean:	1.470	1.470	0.0092				
SD:	0.002	0.002	0.0000				
%RSD:	0.159	0.159	0.16				

Sequence No.: 26 **Autosampler Location: 24**

Sample ID: AD19178-006 Date Collected: 9/16/2020 2:31:47 PM
Analyst: Data Type: Original

Replicate Data: AD19178-006

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.898	0.898	0.0057	0.0265	0.0060	14:32:32	Yes
2	0.909	0.909	0.0058	0.0265	0.0060	14:33:05	Yes
Mean:	0.904	0.904	0.0057				
SD:	0.008	0.008	0.0000				
%RSD:	0.856	0.856	0.82				

Sequence No.: 27 Autosampler Location: 25
Sample ID: AD19178-007 Date Collected: 9/16/2020 2:33:06 PM
Analyst: Data Type: Original

Replicate Data: AD19178-007

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.614	0.614	0.0040	0.0189	0.0042	14:33:52	Yes
2	0.614	0.614	0.0040	0.0189	0.0042	14:34:24	Yes
Mean:	0.614	0.614	0.0040				
SD:	0.000	0.000	0.0000				
%RSD:	0.071	0.071	0.07				

Sequence No.: 28 Autosampler Location: 26
Sample ID: AD19178-008 Date Collected: 9/16/2020 2:34:26 PM
Analyst: Data Type: Original

Replicate Data: AD19178-008

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.501	1.501	0.0094	0.0426	0.0096	14:35:11	Yes
2	1.480	1.480	0.0092	0.0416	0.0095	14:35:44	Yes
Mean:	1.490	1.490	0.0093				
SD:	0.015	0.015	0.0001				
%RSD:	0.982	0.982	0.96				

Sequence No.: 29 Autosampler Location: 27
Sample ID: AD19178-009 Date Collected: 9/16/2020 2:35:45 PM
Analyst: Data Type: Original

Replicate Data: AD19178-009

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.376	0.376	0.0025	0.0118	0.0028	14:36:31	Yes
2	0.374	0.374	0.0025	0.0116	0.0028	14:37:03	Yes
Mean:	0.375	0.375	0.0025				
SD:	0.002	0.002	0.0000				
%RSD:	0.481	0.481	0.44				

Sequence No.: 30 Autosampler Location: 28
Sample ID: AD19178-010 Date Collected: 9/16/2020 2:37:05 PM
Analyst: Data Type: Original

Replicate Data: AD19178-010

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.350	0.350	0.0023	0.0107	0.0026	14:37:53	Yes
2	0.358	0.358	0.0024	0.0113	0.0027	14:38:26	Yes
Mean:	0.354	0.354	0.0024				
SD:	0.006	0.006	0.0000				
%RSD:	1.738	1.738	1.58				

Sequence No.: 31 Autosampler Location: 29
Sample ID: AD19178-011 Date Collected: 9/16/2020 2:38:27 PM
Analyst: Data Type: Original

Replicate Data: AD19178-011

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.279	0.279	0.0019	0.0092	0.0022	14:39:12	Yes
2	0.279	0.279	0.0019	0.0092	0.0022	14:39:45	Yes
Mean:	0.279	0.279	0.0019				
SD:	0.000	0.000	0.0000				
%RSD:	0.040	0.040	0.04				

Sequence No.: 32 Autosampler Location: 30
Sample ID: AD19178-012 Date Collected: 9/16/2020 2:39:46 PM
Analyst: Data Type: Original

Replicate Data: AD19178-012

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.739	0.739	0.0047	0.0218	0.0050	14:40:32	Yes
2	0.735	0.735	0.0047	0.0216	0.0050	14:41:04	Yes
Mean:	0.737	0.737	0.0047				
SD:	0.003	0.003	0.0000				
%RSD:	0.411	0.411	0.39				

Sequence No.: 33 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/16/2020 2:41:06 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.47	10.47	0.0642	0.2837	0.0644	14:41:53	Yes
2	10.41	10.41	0.0638	0.2803	0.0640	14:42:26	Yes
Mean:	10.44	10.44	0.0640				
SD:	0.045	0.045	0.0003				
%RSD:	0.435	0.435	0.43				

QC value within limits for Hg 253.7 Recovery = 104.42%
All analyte(s) passed QC.

Sequence No.: 34 Autosampler Location: 1
Sample ID: CCB Date Collected: 9/16/2020 2:42:48 PM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.062	-0.062	-0.0002	-0.0001	0.0001	14:43:35	Yes
2	-0.056	-0.056	-0.0001	0.0003	0.0001	14:44:07	Yes
Mean:	-0.059	-0.059	-0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	6.869	6.869	16.40				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 35 Autosampler Location: 31
Sample ID: AD19178-013 Date Collected: 9/16/2020 2:44:09 PM
Analyst: Data Type: Original

Replicate Data: AD19178-013

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.062	0.062	0.0006	0.0036	0.0008	14:44:57	Yes
2	0.067	0.067	0.0006	0.0037	0.0009	14:45:29	Yes
Mean:	0.064	0.064	0.0006				
SD:	0.004	0.004	0.0000				
%RSD:	6.097	6.097	3.98				

==========

Sequence No.: 36
Sample ID: ~~AD19218-001~~ AD19230-001 DL 9/17
Analyst:
Autosampler Location: 32
Date Collected: 9/16/2020 2:45:31 PM
Data Type: Original

Replicate Data: ~~AD19218-001~~ AD19230-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.094	0.094	0.0008	0.0045	0.0010	14:46:16	Yes
2	0.099	0.099	0.0008	0.0046	0.0011	14:46:49	Yes
Mean:	0.097	0.097	0.0008				
SD:	0.004	0.004	0.0000				
%RSD:	3.904	3.904	2.88				

==========

Sequence No.: 37
Sample ID: ~~AD19230-001~~ AD19228-001 DL 9/17
Analyst:
Autosampler Location: 33
Date Collected: 9/16/2020 2:46:50 PM
Data Type: Original

Replicate Data: ~~AD19230-001~~ AD19228-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.164	0.164	0.0012	0.0066	0.0015	14:47:36	Yes
2	0.166	0.166	0.0012	0.0066	0.0015	14:48:08	Yes
Mean:	0.165	0.165	0.0012				
SD:	0.001	0.001	0.0000				
%RSD:	0.774	0.774	0.64				

==========

Sequence No.: 38
Sample ID: ~~AD19228-001~~ AD19229-001 DL 9/17
Analyst:
Autosampler Location: 34
Date Collected: 9/16/2020 2:48:09 PM
Data Type: Original

Replicate Data: ~~AD19228-001~~ AD19229-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.415	0.415	0.0027	0.0130	0.0030	14:48:55	Yes
2	0.413	0.413	0.0027	0.0128	0.0030	14:49:27	Yes
Mean:	0.414	0.414	0.0027				
SD:	0.002	0.002	0.0000				
%RSD:	0.393	0.393	0.36				

==========

Sequence No.: 39
Sample ID: ~~AD19229-001~~ AD19233-002 DL 9/17
Analyst:
Autosampler Location: 35
Date Collected: 9/16/2020 2:49:29 PM
Data Type: Original

N/A

Replicate Data: ~~AD19229-001~~ AD19233-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	96.40	96.40	0.5889	2.8251	0.5892	14:50:14	Yes
	Sample concentration is greater than that of the highest standard.						
2	95.53	95.53	0.5836	2.7774	0.5839	14:50:47	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	95.97	95.97	0.5863				
SD:	0.615	0.615	0.0038				
%RSD:	0.641	0.641	0.64				
	Sample concentration is greater than that of the highest standard.						

==========

Sequence No.: 40 Autosampler Location: 36
Sample ID: AD19233-002 Date Collected: 9/16/2020 2:51:11 PM
Analyst: Data Type: Original

DL 9/17

Replicate Data: AD19233-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.081	-0.081	-0.0003	-0.0025	-0.0000	14:52:00	Yes
2	-0.081	-0.081	-0.0003	-0.0018	-0.0000	14:52:33	Yes
Mean:	-0.081	-0.081	-0.0003				
SD:	0.000	0.000	0.0000				
%RSD:	0.088	0.088	0.15				

Sequence No.: 41 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/16/2020 2:52:34 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.39	10.39	0.0636	0.2809	0.0639	14:53:24	Yes
2	10.30	10.30	0.0631	0.2773	0.0634	14:53:56	Yes
Mean:	10.35	10.35	0.0634				
SD:	0.059	0.059	0.0004				
%RSD:	0.568	0.568	0.57				

QC value within limits for Hg 253.7 Recovery = 103.46%
All analyte(s) passed QC.

Sequence No.: 42 Autosampler Location: 1
Sample ID: CCB Date Collected: 9/16/2020 2:54:18 PM
Analyst: Data Type: Original

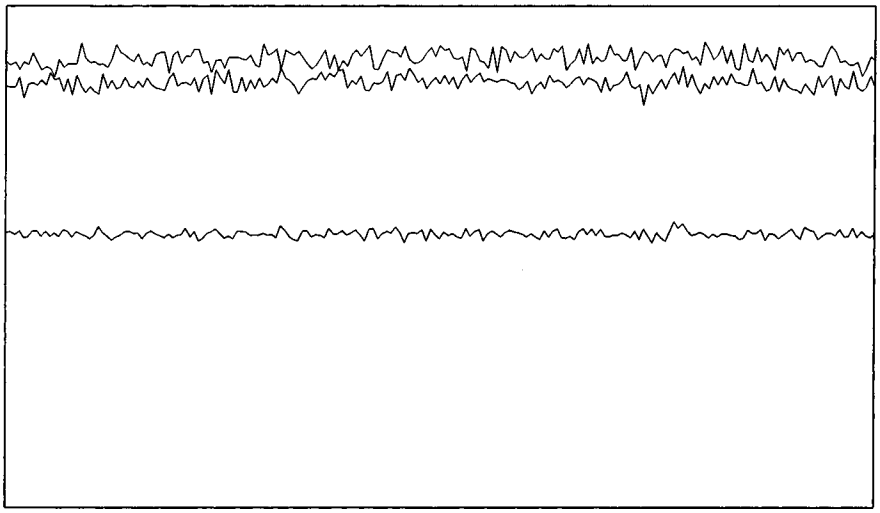
Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.060	-0.060	-0.0002	-0.0001	0.0001	14:55:05	Yes
2	-0.063	-0.063	-0.0002	-0.0000	0.0001	14:55:38	Yes
Mean:	-0.061	-0.061	-0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	4.204	4.204	9.50				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

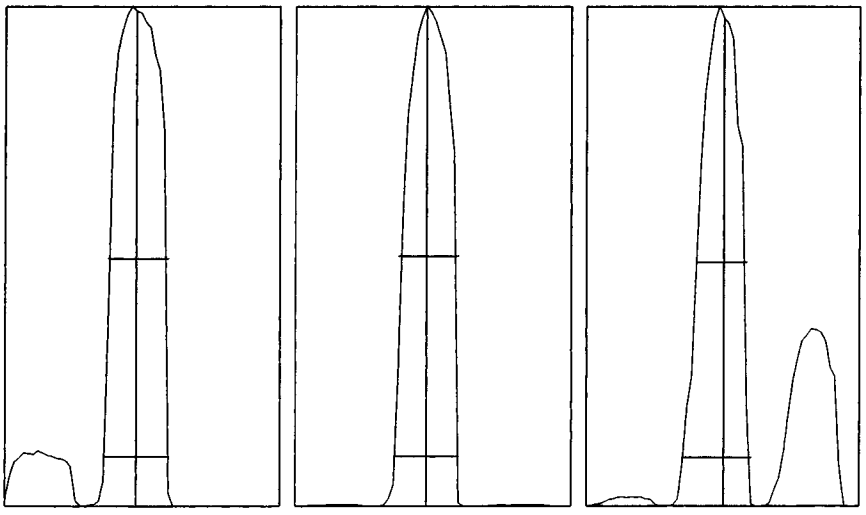
Tune Report

Tune File : ATUNE.U
Comment : TN091620



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	1.32
Doubly Charged:	70/140	0.88

m/z	Range	Count	Mean	RSD%	Background
7	50,000	27199.0	27237.4	1.35	0.40
89	50,000	41870.0	42304.1	1.56	0.80
205	50,000	44563.0	44767.1	1.66	2.20
156/140	2	1.286%	1.316%	5.96	
70/140	2	0.889%	0.863%	6.05	



m/z:	7	89	
Height:	27,364	42,181	4
Axis:	6.95	88.95	2
W-50%:	0.65	0.65	
W-10%:	0.700	0.700	

Integration Time:	0.1000 sec
Acquisition Time:	22.7600 sec

Y axis : Linear

Generated : Sep 16, 2020 08:31:15
Printed : Sep 16, 2020 08:31:19

Tune Report

Tune File : ATUNE.U
Comment : TN091620

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1500 W	Extract 1	:	0 V	AMU Gain	:	127
RF Matching	:	2.5 V	Extract 2	:	-115 V	AMU Offset	:	127
Smpl Depth	:	8.5 mm	Omega Bias	:	-65 V	Axis Gain	:	0.9999
Torch-H	:	-1.3 mm	Omega Lens	:	6.5 V	Axis Offset	:	0.01
Torch-V	:	0.5 mm	Cell Entrance	:	-40 V	QP Bias	:	-3 V
Carrier Gas	:	0.6 L/min	Cell Exit	:	-60 V			
Dilution Mode	:	ON	Deflect	:	13 V	===Detector Parameters===		
Dilution Gas	:	0.45 L/min	Plate Bias	:	-40 V	Discriminator	:	4.6 mV
Optional Gas	:	--- %	===Octopole Parameters===			Analog HV	:	1724 V
Nebulizer Pump	:	0.1 rps	OctP RF	:	190 V	Pulse HV	:	1668 V
Sample Pump	:	--- rps	OctP Bias	:	-8 V			
S/C Temp	:	2 degC						

===Reaction Cell===								
Reaction Mode	:	OFF						
H2 Gas	:	--- mL/min	He Gas	:	4.3 mL/min	Optional Gas	:	--- %

Generated : Sep 16, 2020 08:31:15
Printed : Sep 16, 2020 08:31:21

C:\ICPMH\1\7500\QCTUNE.D

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 16 Sep 2020 08:52:15 am
Operator: PC
Misc Info:
Vial Number: 4
Current Method: C:\ICPMH\1\METHODS\TN6020.m

Minimum Response(CPS)

Element	Actual	Required	Flag
7 Li	3176260.00	0.00	
59 Co	2568150.00	0.00	
115 In	4654460.00	0.00	
205 Tl	4564830.00	0.00	

RSD (%)

Element	Actual	Required	Flag
7 Li	1.40	5.00	
59 Co	1.48	5.00	
115 In	0.75	5.00	
205 Tl	1.24	5.00	

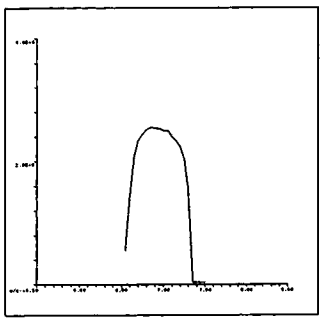
Ion Ratio

Element	Actual	Required	Flag
7 Li			
59 Co			
115 In			
205 Tl			

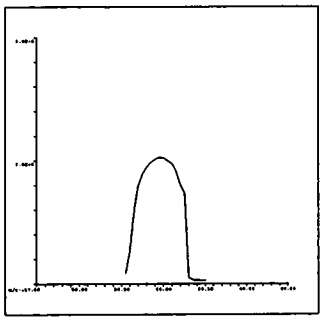
Maximum Bkg. Count(CPS)

Element	Actual	Required	Flag

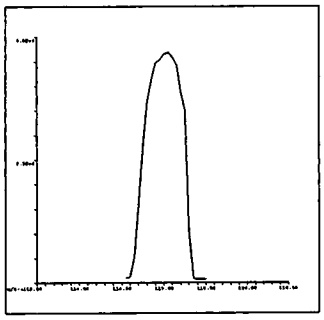
C:\ICPMH\1\7500\QCTUNE.D



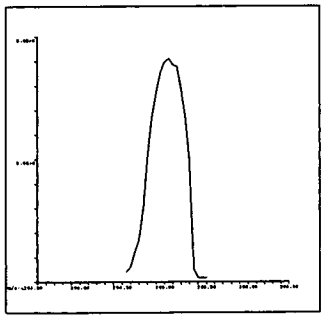
7 Li
Mass Calib.
Actual: 6.90
Required: 6.90-7.10
Flag:
Peak Width
Actual: 0.75
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.05
Required: 204.90-205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

QC Tune Result:Pass

Calibration Blank Report

File S091620B
B- 26222
QC 85280

Sample Name	**RINSE**
Data File Name	**001CALB.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T15:22:13-04:00**
Type	**CalBlk**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

Run ok.

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	149	5.63
Na	23	115	2	12201	0.48
Mg	24	115	2	1200	11.15
Al	27	115	2	281	10.76
K	39	115	2	21675	1.08
Ca	44	115	2	76	16.70
V	51	115	2	43	23.09
Cr	52	115	2	768	6.95
Mn	55	115	2	522	5.43
Fe	56	115	2	16659	5.18
Co	59	115	2	142	6.77
Ni	60	115	2	301	17.93
Cu	65	115	2	722	13.26
Zn	66	115	2	434	7.29
As	75	115	2	1	100.00
Se	78	115	2	10	73.24
Kr	83	115	1	98	11.98
Mo	95	115	1	111	14.18
Ag	107	115	1	324	12.17
Cd	111	115	1	16	25.83
Sb	121	115	1	280	18.02
Ba	137	159	1	201	11.03
Tl	205	165	1	795	4.92
(Pb)	206	165	1	1117	1.79
(Pb)	207	165	1	873	13.01
Pb	208	165	1	1992	7.10

Report As, Ag, Be, Cd, Sb, Se, Tl, V

LRS fnd for Ag.

Ag LR = 10 PPB

Rerun As for 19233-002 (over LR)

9/17/20

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	714425	0.50
Sc	45	2	37722	1.08
In	115	1	1114830	0.31
In	115	2	259659	0.55
Tb	159	1	1822198	0.30
Tb	159	2	857537	0.72
Ho	165	1	1773452	1.01
Ho	165	2	860942	0.38

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Blank Report

Sample Name	**CalBlk V-334455**
Data File Name	**002CALB.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T15:26:43-04:00**
Type	**CalBlk**
VialNumber	**2101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	211	9.25
Na	23	115	2	10825	3.05
Mg	24	115	2	1041	4.75
Al	27	115	2	226	13.97
K	39	115	2	21457	0.21
Ca	44	115	2	80	23.20
V	51	115	2	51	32.17
Cr	52	115	2	698	9.34
Mn	55	115	2	393	14.48
Fe	56	115	2	15385	3.65
Co	59	115	2	122	13.45
Ni	60	115	2	264	11.91
Cu	65	115	2	222	13.61
Zn	66	115	2	378	19.52
As	75	115	2	6	47.21
Se	78	115	2	14	48.86
Kr	83	115	1	111	32.91
Mo	95	115	1	72	37.30
Ag	107	115	1	334	3.77
Cd	111	115	1	11	55.06
Sb	121	115	1	271	3.76
Ba	137	159	1	561	17.65
Tl	205	165	1	847	5.47
(Pb)	206	165	1	746	10.17
(Pb)	207	165	1	638	3.40
Pb	208	165	1	1692	10.16

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD
Sc	45	1	722209	1.14
Sc	45	2	38016	0.70
In	115	1	1119445	0.51
In	115	2	260773	0.18
Tb	159	1	1814356	0.23
Tb	159	2	861474	0.54
Ho	165	1	1778678	0.81
Ho	165	2	861026	0.21

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd1 V-334456**
Data File Name	**003CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T15:31:16-04:00**
Type	**CalStd**
VialNumber	**2102**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	3533	1.72
Na	23	115	2	62817	1.48
Mg	24	115	2	24587	3.12
Al	27	115	2	3568	5.45
K	39	115	2	39625	1.03
Ca	44	115	2	1108	3.93
V	51	115	2	1861	3.33
Cr	52	115	2	3596	6.61
Mn	55	115	2	2857	3.16
Fe	56	115	2	265529	1.99
Co	59	115	2	3658	0.50
Ni	60	115	2	1476	5.25
Cu	65	115	2	2185	2.52
Zn	66	115	2	6167	0.95
As	75	115	2	245	13.69
Se	78	115	2	108	7.14
Kr	83	115	1	109	39.48
Mo	95	115	1	2884	1.92
Ag	107	115	1	8121	0.84
Cd	111	115	1	1562	1.83
Sb	121	115	1	6034	5.24
Ba	137	159	1	3217	3.69
Tl	205	165	1	18912	5.27
(Pb)	206	165	1	6897	6.78
(Pb)	207	165	1	5925	1.52
Pb	208	165	1	14380	3.97

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	727197	0.55	722209	100.7	70	130	
Sc	45	2	37873	1.46	38016	99.6	70	130	
In	115	1	1124108	0.70	1119445	100.4	70	130	
In	115	2	262713	0.57	260773	100.7	70	130	
Tb	159	1	1838268	0.95	1814356	101.3	70	130	
Tb	159	2	865379	0.95	861474	100.5	70	130	
Ho	165	1	1791602	0.22	1778678	100.7	70	130	
Ho	165	2	864970	0.88	861026	100.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd2 V-334457**
Data File Name	**004CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T15:35:48-04:00**
Type	**CalStd**
VialNumber	**2103**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	32362	5.23
Na	23	115	2	443366	1.08
Mg	24	115	2	221410	1.56
Al	27	115	2	26083	2.61
K	39	115	2	188575	1.11
Ca	44	115	2	8541	0.64
V	51	115	2	18107	3.97
Cr	52	115	2	23183	2.68
Mn	55	115	2	14442	2.07
Fe	56	115	2	1955608	2.80
Co	59	115	2	35867	2.22
Ni	60	115	2	9853	1.52
Cu	65	115	2	12599	2.64
Zn	66	115	2	4762	3.13
As	75	115	2	2287	1.05
Se	78	115	2	1094	4.48
Kr	83	115	1	56	33.04
Mo	95	115	1	26594	3.69
Ag	107	115	1	75507	4.54
Cd	111	115	1	15386	3.83
Sb	121	115	1	55569	4.70
Ba	137	159	1	24048	3.11
Tl	205	165	1	184032	4.26
(Pb)	206	165	1	60141	4.49
(Pb)	207	165	1	49283	2.76
Pb	208	165	1	122567	4.18

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	730493	0.31	722209	101.1	70	130	
Sc	45	2	37399	0.85	38016	98.4	70	130	
In	115	1	1126867	0.82	1119445	100.7	70	130	
In	115	2	261973	0.53	260773	100.5	70	130	
Tb	159	1	1825549	0.61	1814356	100.6	70	130	
Tb	159	2	869298	0.85	861474	100.9	70	130	
Ho	165	1	1797947	0.29	1778678	101.1	70	130	
Ho	165	2	870100	0.87	861026	101.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd3 V-334458**
Data File Name	**005CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T15:40:19-04:00**
Type	**CalStd**
VialNumber	**2104**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	63457	3.49
Na	23	115	2	872497	0.79
Mg	24	115	2	441967	1.01
Al	27	115	2	51532	1.33
K	39	115	2	356020	0.69
Ca	44	115	2	16871	1.99
V	51	115	2	35855	1.40
Cr	52	115	2	45795	0.69
Mn	55	115	2	27514	1.83
Fe	56	115	2	3933842	1.72
Co	59	115	2	72394	1.81
Ni	60	115	2	19391	0.78
Cu	65	115	2	25562	1.15
Zn	66	115	2	8541	1.72
As	75	115	2	4786	1.20
Se	78	115	2	2203	6.17
Kr	83	115	1	71	21.14
Mo	95	115	1	52087	1.09
Ag	107	115	1	150624	3.81
Cd	111	115	1	30101	1.96
Sb	121	115	1	111553	2.25
Ba	137	159	1	47961	3.27
Tl	205	165	1	363410	3.33
(Pb)	206	165	1	117421	3.34
(Pb)	207	165	1	97469	3.56
Pb	208	165	1	242219	3.41

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	735930	0.00	722209	101.9	70	130	
Sc	45	2	37883	0.93	38016	99.7	70	130	
In	115	1	1131707	1.01	1119445	101.1	70	130	
In	115	2	263835	0.94	260773	101.2	70	130	
Tb	159	1	1839355	0.52	1814356	101.4	70	130	
Tb	159	2	878597	0.86	861474	102.0	70	130	
Ho	165	1	1812790	1.31	1778678	101.9	70	130	
Ho	165	2	880802	1.01	861026	102.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd4 V-334459**
Data File Name	**006CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T15:44:51-04:00**
Type	**CalStd**
VialNumber	**2105**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	318637	4.97
Na	23	115	2	4549554	1.11
Mg	24	115	2	2198332	2.00
Al	27	115	2	249588	1.43
K	39	115	2	1691737	0.40
Ca	44	115	2	82909	0.74
V	51	115	2	176219	1.80
Cr	52	115	2	218286	1.74
Mn	55	115	2	133082	1.93
Fe	56	115	2	18698033	0.97
Co	59	115	2	348797	0.78
Ni	60	115	2	92130	1.86
Cu	65	115	2	120904	1.10
Zn	66	115	2	39481	0.57
As	75	115	2	23172	1.10
Se	78	115	2	10397	2.11
Kr	83	115	1	96	35.29
Mo	95	115	1	262318	4.39
Ag	107	115	1	740432	4.56
Cd	111	115	1	151208	4.26
Sb	121	115	1	554606	5.17
Ba	137	159	1	236395	4.50
Tl	205	165	1	1997612	3.95
(Pb)	206	165	1	581830	4.76
(Pb)	207	165	1	486846	4.41
Pb	208	165	1	1210526	4.80

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	724133	0.08	722209	100.3	70	130	
Sc	45	2	37157	1.77	38016	97.7	70	130	
In	115	1	1111266	0.51	1119445	99.3	70	130	
In	115	2	256363	0.05	260773	98.3	70	130	
Tb	159	1	1823171	1.56	1814356	100.5	70	130	
Tb	159	2	867614	0.49	861474	100.7	70	130	
Ho	165	1	1786210	0.51	1778678	100.4	70	130	
Ho	165	2	877046	0.80	861026	101.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Calibration Standard Report

Sample Name	**CalStd5 V-334460**
Data File Name	**007CALS.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T15:49:19-04:00**
Type	**CalStd**
VialNumber	**2106**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	CPS	%RSD
Be	9	165	1	639757	4.20
Na	23	115	2	8942219	0.15
Mg	24	115	2	4309018	1.22
Al	27	115	2	494150	1.73
K	39	115	2	3298406	0.82
Ca	44	115	2	165991	1.51
V	51	115	2	355526	1.46
Cr	52	115	2	432973	2.21
Mn	55	115	2	263943	1.41
Fe	56	115	2	36843757	1.51
Co	59	115	2	690173	1.76
Ni	60	115	2	180451	1.86
Cu	65	115	2	244186	1.73
Zn	66	115	2	76439	1.87
As	75	115	2	45892	1.18
Se	78	115	2	20550	2.38
Kr	83	115	1	87	7.70
Mo	95	115	1	528763	3.85
Ag	107	115	1	1519608	6.76
Cd	111	115	1	302284	4.16
Sb	121	115	1	1119113	4.23
Ba	137	159	1	480279	4.21
Tl	205	165	1	3983582	3.18
(Pb)	206	165	1	1197668	4.69
(Pb)	207	165	1	1002388	4.30
Pb	208	165	1	2671891	3.66

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	709118	0.40	722209	98.2	70	130	
Sc	45	2	37015	2.20	38016	97.4	70	130	
In	115	1	1098198	0.49	1119445	98.1	70	130	
In	115	2	254327	0.78	260773	97.5	70	130	
Tb	159	1	1814067	1.07	1814356	100.0	70	130	
Tb	159	2	864538	0.57	861474	100.4	70	130	
Ho	165	1	1783958	0.15	1778678	100.3	70	130	
Ho	165	2	870152	0.81	861026	101.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Verification (ICV) - US EPA Method 6020

Sample Name	**ICV V-334461**
Data File Name	**008_ICV.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T15:53:45-04:00**
Type	**6-ICV**
VialNumber	**2108**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	50.52	ppb	50	327602	4.23	101.03	90	110	
Na	23	115	2	5144.69	ppb	5000	4689864	0.36	102.89	90	110	
Mg	24	115	2	5117.43	ppb	5000	2248808	1.22	102.35	90	110	
Al	27	115	2	5110.18	ppb	5000	856465	1.74	102.20	90	110	
K	39	115	2	5089.41	ppb	5000	1721763	1.07	101.79	90	110	
Ca	44	115	2	5021.40	ppb	5000	84655	1.74	100.43	90	110	
V	51	115	2	49.11	ppb	50	177033	2.05	98.23	90	110	
Cr	52	115	2	50.38	ppb	50	222198	1.70	100.76	90	110	
Mn	55	115	2	50.34	ppb	50	135326	1.52	100.67	90	110	
Fe	56	115	2	5112.14	ppb	5000	19198228	1.74	102.24	90	110	
Co	59	115	2	50.20	ppb	50	352731	1.53	100.40	90	110	
Ni	60	115	2	50.13	ppb	50	92391	1.94	100.26	90	110	
Cu	65	115	2	49.26	ppb	50	122032	2.16	98.52	90	110	
Zn	66	115	2	50.63	ppb	50	39741	2.19	101.26	90	110	
As	75	115	2	49.97	ppb	50	23336	0.67	99.93	90	110	
Se	78	115	2	50.61	ppb	50	2130	5.01	101.21	90	110	
Mo	95	115	1	48.88	ppb	50	262402	3.94	97.77	90	110	
Ag	107	115	1	10.05	ppb	10	154812	3.91	100.52	90	110	
Cd	111	115	1	50.20	ppb	50	154301	3.62	100.40	90	110	
Sb	121	115	1	50.21	ppb	50	570325	3.73	100.41	90	110	
Ba	137	159	1	49.66	ppb	50	241806	4.24	99.32	90	110	
Tl	205	165	1	48.41	ppb	50	1955843	4.48	96.82	90	110	
Pb	208	165	1	47.27	ppb	50	1256713	4.39	94.54	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	717723	0.34	722209	99.4	70	130	
Sc	45	2	37455	0.11	38016	98.5	70	130	
In	115	1	1119409	0.43	1119445	100.0	70	130	
In	115	2	258723	0.61	260773	99.2	70	130	
Tb	159	1	1845203	0.63	1814356	101.7	70	130	
Tb	159	2	872104	0.64	861474	101.2	70	130	
Ho	165	1	1810286	0.86	1778678	101.8	70	130	
Ho	165	2	877086	0.96	861026	101.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Low Level Initial/Continuing Calibration Verification (ICV/CCV) - US EPA Method 6020

Sample Name	**LLICV V-334466**
Data File Name	**009_LCS.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T15:58:13-04:00**
Type	**6-LCS**
VialNumber	**2110**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	ExpectedValue	%Recovery	%QC Low	%QC High	QC Flag
Be	9	165	1	0.99	ppb	1	99.4	80	120	
Na	23	115	2	471.89	ppb	500	94.4	80	120	
Mg	24	115	2	495.11	ppb	500	99.0	80	120	
Al	27	115	2	502.28	ppb	500	100.5	80	120	
K	39	115	2	491.61	ppb	500	98.3	80	120	
Ca	44	115	2	489.46	ppb	500	97.9	80	120	
V	51	115	2	0.96	ppb	1	95.8	80	120	
Cr	52	115	2	2.04	ppb	2	102.1	80	120	
Mn	55	115	2	6.03	ppb	6	100.5	80	120	
Fe	56	115	2	519.30	ppb	500	103.9	80	120	
Co	59	115	2	2.01	ppb	2	100.3	80	120	
Ni	60	115	2	3.04	ppb	3	101.5	80	120	
Cu	65	115	2	10.03	ppb	10	100.3	80	120	
Zn	66	115	2	20.41	ppb	20	102.0	80	120	
As	75	115	2	1.00	ppb	1	100.0	80	120	
Se	78	115	2	9.89	ppb	10	98.9	80	120	
Mo	95	115	1	1.01	ppb	1	101.3	80	120	
Ag	107	115	1	0.93	ppb	1	93.4	80	120	
Cd	111	115	1	1.90	ppb	2	95.0	80	120	
Sb	121	115	1	3.85	ppb	4	96.4	80	120	
Ba	137	159	1	4.81	ppb	5	96.1	80	120	
Tl	205	165	1	1.79	ppb	2	89.7	80	120	
Pb	208	165	1	1.87	ppb	2	93.4	80	120	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	747765	3.45	722209	103.5	70	130	
Sc	45	2	38552	2.35	38016	101.4	70	130	
In	115	1	1192845	6.52	1119445	106.6	70	130	
In	115	2	264695	0.54	260773	101.5	70	130	
Tb	159	1	1914272	3.61	1814356	105.5	70	130	
Tb	159	2	877729	0.59	861474	101.9	70	130	
Ho	165	1	1862486	3.40	1778678	104.7	70	130	
Ho	165	2	878422	0.77	861026	102.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Initial Calibration Blank (ICB) - US EPA Method 6020

Sample Name	**ICB V-334462**
Data File Name	**010_ICB.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T16:02:45-04:00**
Type	**6-ICB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	0.5	
Na	23	115	2	1.72	ppb	250	
Mg	24	115	2	0.42	ppb	250	
Al	27	115	2	0.46	ppb	250	
K	39	115	2	0.50	ppb	250	
Ca	44	115	2	0.34	ppb	250	
V	51	115	2	0.01	ppb	0.5	
Cr	52	115	2	0.02	ppb	1	
Mn	55	115	2	0.03	ppb	3	
Fe	56	115	2	1.08	ppb	250	
Co	59	115	2	0.01	ppb	1	
Ni	60	115	2	0.05	ppb	1.5	
Cu	65	115	2	0.03	ppb	5	
Zn	66	115	2	0.01	ppb	10	
As	75	115	2	0.02	ppb	0.5	
Se	78	115	2	0.22	ppb	5	
Mo	95	115	1	0.03	ppb	0.5	
Ag	107	115	1	0.00	ppb	0.5	
Cd	111	115	1	0.00	ppb	1	
Sb	121	115	1	0.02	ppb	2	
Ba	137	159	1	-0.08	ppb	2.5	
Tl	205	165	1	0.01	ppb	1	
Pb	208	165	1	0.01	ppb	1	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	723066	0.16	722209	100.1	70	130	
Sc	45	2	37803	0.41	38016	99.4	70	130	
In	115	1	1136957	0.41	1119445	101.6	70	130	
In	115	2	262538	1.24	260773	100.7	70	130	
Tb	159	1	1864719	0.98	1814356	102.8	70	130	
Tb	159	2	867451	1.15	861474	100.7	70	130	
Ho	165	1	1824870	0.65	1778678	102.6	70	130	
Ho	165	2	868931	0.69	861026	100.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Interference Check Sample A (ICS-A) - US EPA Method 6020

Sample Name	**ICSA V-334463**
Data File Name	**011ICSA.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T16:07:20-04:00**
Type	**6-ICSA**
VialNumber	**2107**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	130367.67	ppb	162500	
Mg	24	115	2	50364.81	ppb	65000	
Al	27	115	2	50832.85	ppb	65000	
K	39	115	2	51214.05	ppb	65000	
Ca	44	115	2	158881.53	ppb	195000	
V	51	115	2	0.08	ppb	1	
Cr	52	115	2	0.56	ppb	2	
Mn	55	115	2	1.66	ppb	6	
Fe	56	115	2	126922.74	ppb	162500	
Co	59	115	2	0.24	ppb	2	
Ni	60	115	2	0.81	ppb	3	
Cu	65	115	2	0.63	ppb	10	
Zn	66	115	2	1.39	ppb	20	
As	75	115	2	0.28	ppb	1	
Se	78	115	2	0.09	ppb	10	
Mo	95	115	1	1023.80	ppb	1300	
Ag	107	115	1	0.11	ppb	1	
Cd	111	115	1	1.35	ppb	2	
Sb	121	115	1	0.36	ppb	1	
Ba	137	159	1	0.77	ppb	5	
Tl	205	165	1	0.01	ppb	2	
Pb	208	165	1	0.04	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	740526	1.10	722209	102.5	70	130	
Sc	45	2	41396	0.67	38016	108.9	70	130	
In	115	1	1115211	0.85	1119445	99.6	70	130	
In	115	2	261919	2.02	260773	100.4	70	130	
Tb	159	1	1940379	1.02	1814356	106.9	70	130	
Tb	159	2	923663	0.87	661474	107.2	70	130	
Ho	165	1	1934755	0.62	1778678	108.8	70	130	
Ho	165	2	929343	1.81	861026	107.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**012SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T16:11:45-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.00	0.00	ppb	258	11.30	550	
Na	23	115	2	10.60	10.60	ppb	22256	4.79	55000	
Mg	24	115	2	0.36	0.36	ppb	1300	2.82	55000	
Al	27	115	2	0.34	0.34	ppb	307	11.96	16500	
K	39	115	2	1.49	1.49	ppb	23797	0.83	55000	
Ca	44	115	2	-0.06	-0.06	ppb	86	5.95	55000	
V	51	115	2	0.00	0.00	ppb	56	54.45	550	
Cr	52	115	2	0.01	0.01	ppb	788	6.84	550	
Mn	55	115	2	0.02	0.02	ppb	479	7.11	550	
Fe	56	115	2	5.01	5.01	ppb	37214	1.05	55000	
Co	59	115	2	-0.01	-0.01	ppb	50	35.28	550	
Ni	60	115	2	0.02	0.02	ppb	330	13.36	550	
Cu	65	115	2	0.23	0.23	ppb	868	4.80	550	
Zn	66	115	2	0.07	0.07	ppb	464	9.34	550	
As	75	115	2	0.00	0.00	ppb	5	65.53	550	
Se	78	115	2	0.04	0.04	ppb	17	29.07	2750	
Mo	95	115	1	0.62	0.62	ppb	3825	10.55	550	
Ag	107	115	1	0.00	0.00	ppb	292	13.94	550	
Cd	111	115	1	0.00	0.00	ppb	27	29.34	550	
Sb	121	115	1	0.00	0.00	ppb	340	22.10	550	
Ba	137	159	1	-0.09	-0.09	ppb	158	23.75	550	
Tl	205	165	1	0.00	0.00	ppb	832	10.61	550	
Pb	208	165	1	0.01	0.01	ppb	2138	3.83	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	794401	0.42	722209	110.0	70	130	
Sc	45	2	41188	1.28	38016	108.3	70	130	
In	115	1	1264746	0.55	1119445	113.0	70	130	
In	115	2	282616	0.82	260773	108.4	70	130	
Tb	159	1	2077282	1.39	1814356	114.5	70	130	
Tb	159	2	936816	1.29	861474	108.7	70	130	
Ho	165	1	2018514	1.68	1778678	113.5	70	130	
Ho	165	2	936470	0.55	861026	108.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

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Sample Report

Sample Name	**LRS V-334464**
Data File Name	**013SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T16:16:19-04:00**
Type	**Sample**
VialNumber	**2109**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	466.49	466.49	ppb	3155743	3.50	550	
Na	23	115	2	52384.07	52384.07	ppb	48290383	1.54	55000	
Mg	24	115	2	51341.13	51341.13	ppb	22855422	2.33	55000	
Al	27	115	2	15545.57	15545.57	ppb	2639758	1.93	16500	
K	39	115	2	51522.32	51522.32	ppb	17466687	2.07	55000	
Ca	44	115	2	52552.33	52552.33	ppb	897161	2.68	55000	
V	51	115	2	522.33	522.33	ppb	1907298	1.88	550	
Cr	52	115	2	522.50	522.50	ppb	2328936	2.58	550	
Mn	55	115	2	527.27	527.27	ppb	1432753	1.94	550	
Fe	56	115	2	50977.57	50977.57	ppb	193862590	2.12	55000	
Co	59	115	2	511.21	511.21	ppb	3638995	2.21	550	
Ni	60	115	2	492.94	492.94	ppb	918381	2.62	550	
Cu	65	115	2	471.91	471.91	ppb	1182857	2.50	550	
Zn	66	115	2	486.18	486.18	ppb	383488	2.46	550	
As	75	115	2	502.29	502.29	ppb	237700	2.48	550	
Se	78	115	2	2444.39	2444.39	ppb	103607	2.05	2750	
Mo	95	115	1	528.47	528.47	ppb	2859973	3.62	550	
Ag	107	115	1	194.63	194.63	ppb	3016658	3.50	550	
Cd	111	115	1	514.64	514.64	ppb	1595139	3.09	550	
Sb	121	115	1	517.67	517.67	ppb	5927736	3.02	550	
Ba	137	159	1	511.45	511.45	ppb	2592089	3.02	550	
Tl	205	165	1	471.87	471.87	ppb	19889536	2.97	550	
Pb	208	165	1	476.08	476.08	ppb	13194473	2.52	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	746509	0.67	722209	103.4	70	130	
Sc	45	2	39709	1.08	38016	104.5	70	130	
In	115	1	1128955	0.37	1119445	100.8	70	130	
In	115	2	262220	2.57	260773	100.6	70	130	
Tb	159	1	1924510	0.69	1814356	106.1	70	130	
Tb	159	2	908632	1.83	861474	105.5	70	130	
Ho	165	1	1889178	0.58	1778678	106.2	70	130	
Ho	165	2	913822	1.72	861026	106.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 4:17 PM on:9/16/2020

Sample Report

Sample Name	**RINSE**
Data File Name	**014SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T16:20:36-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.11	0.11	ppb	980	8.68	550	
Na	23	115	2	11.33	11.33	ppb	22958	1.49	55000	
Mg	24	115	2	0.42	0.42	ppb	1330	4.41	55000	
Al	27	115	2	0.56	0.56	ppb	346	21.25	16500	
K	39	115	2	5.03	5.03	ppb	25057	0.55	55000	
Ca	44	115	2	3.09	3.09	ppb	143	28.58	55000	
V	51	115	2	0.00	0.00	ppb	59	55.85	550	
Cr	52	115	2	0.01	0.01	ppb	799	11.73	550	
Mn	55	115	2	0.02	0.02	ppb	496	15.52	550	
Fe	56	115	2	3.72	3.72	ppb	31886	1.98	55000	
Co	59	115	2	0.01	0.01	ppb	210	7.94	550	
Ni	60	115	2	0.03	0.03	ppb	350	10.98	550	
Cu	65	115	2	0.23	0.23	ppb	860	1.34	550	
Zn	66	115	2	0.14	0.14	ppb	527	7.30	550	
As	75	115	2	0.06	0.06	ppb	38	5.88	550	
Se	78	115	2	0.38	0.38	ppb	32	20.68	2750	
Mo	95	115	1	0.39	0.39	ppb	2400	9.91	550	
Ag	107	115	1	0.01	0.01	ppb	487	8.22	550	
Cd	111	115	1	0.01	0.01	ppb	39	43.32	550	
Sb	121	115	1	0.38	0.38	ppb	5148	4.55	550	
Ba	137	159	1	-0.07	-0.07	ppb	239	22.34	550	
Tl	205	165	1	0.07	0.07	ppb	3883	7.03	550	
Pb	208	165	1	0.02	0.02	ppb	2508	4.19	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	791295	0.37	722209	109.6	70	130	
Sc	45	2	41347	1.60	38016	108.8	70	130	
In	115	1	1251260	0.36	1119445	111.8	70	130	
In	115	2	282241	0.76	260773	108.2	70	130	
Tb	159	1	2031327	0.63	1814356	112.0	70	130	
Tb	159	2	928396	0.24	861474	107.8	70	130	
Ho	165	1	1964222	0.30	1778678	110.4	70	130	
Ho	165	2	936865	1.36	861026	108.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**015SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T16:25:07-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.06	0.06	ppb	652	7.94	550	
Na	23	115	2	9.62	9.62	ppb	20370	2.43	55000	
Mg	24	115	2	1.83	1.83	ppb	1918	8.35	55000	
Al	27	115	2	1.29	1.29	ppb	459	16.89	16500	
K	39	115	2	2.02	2.02	ppb	22952	0.44	55000	
Ca	44	115	2	3.75	3.75	ppb	149	26.71	55000	
V	51	115	2	0.01	0.01	ppb	100	26.04	550	
Cr	52	115	2	0.02	0.02	ppb	794	10.56	550	
Mn	55	115	2	0.04	0.04	ppb	529	15.49	550	
Fe	56	115	2	3.96	3.96	ppb	31476	1.22	55000	
Co	59	115	2	0.01	0.01	ppb	223	8.31	550	
Ni	60	115	2	0.07	0.07	ppb	407	4.92	550	
Cu	65	115	2	0.24	0.24	ppb	850	11.57	550	
Zn	66	115	2	0.08	0.08	ppb	453	11.10	550	
As	75	115	2	0.03	0.03	ppb	19	38.58	550	
Se	78	115	2	0.03	0.03	ppb	16	46.82	2750	
Mo	95	115	1	0.11	0.11	ppb	688	2.67	550	
Ag	107	115	1	0.01	0.01	ppb	429	10.14	550	
Cd	111	115	1	0.02	0.02	ppb	75	14.11	550	
Sb	121	115	1	0.09	0.09	ppb	1395	8.62	550	
Ba	137	159	1	-0.07	-0.07	ppb	248	20.24	550	
Tl	205	165	1	0.03	0.03	ppb	2214	1.38	550	
Pb	208	165	1	0.02	0.02	ppb	2416	7.95	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	737600	0.35	722209	102.1	70	130	
Sc	45	2	38736	2.18	38016	101.9	70	130	
In	115	1	1164550	0.43	1119445	104.0	70	130	
In	115	2	270389	0.66	260773	103.7	70	130	
Tb	159	1	1912025	1.01	1814356	105.4	70	130	
Tb	159	2	888672	0.34	861474	103.2	70	130	
Ho	165	1	1883013	1.53	1778678	105.9	70	130	
Ho	165	2	895290	0.68	861026	104.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0166CCV.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T16:29:38-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	49.39	ppb	50	328325	4.23	98.77	90	110	
Na	23	115	2	5035.02	ppb	5000	4630553	1.22	100.70	90	110	
Mg	24	115	2	5056.67	ppb	5000	2241626	2.34	101.13	90	110	
Al	27	115	2	1496.39	ppb	1500	253148	2.02	99.76	90	110	
K	39	115	2	5040.75	ppb	5000	1720496	0.93	100.82	90	110	
Ca	44	115	2	4966.98	ppb	5000	84472	1.21	99.34	90	110	
V	51	115	2	49.36	ppb	50	179464	1.85	98.72	90	110	
Cr	52	115	2	50.10	ppb	50	222886	2.38	100.19	90	110	
Mn	55	115	2	50.22	ppb	50	136205	2.69	100.45	90	110	
Fe	56	115	2	5039.40	ppb	5000	19090771	1.30	100.79	90	110	
Co	59	115	2	49.78	ppb	50	352852	1.55	99.56	90	110	
Ni	60	115	2	49.61	ppb	50	92231	0.10	99.22	90	110	
Cu	65	115	2	48.82	ppb	50	122001	0.49	97.64	90	110	
Zn	66	115	2	50.84	ppb	50	40250	1.22	101.67	90	110	
As	75	115	2	50.24	ppb	50	23669	1.63	100.47	90	110	
Se	78	115	2	255.16	ppb	250	10778	1.37	102.07	90	110	
Mo	95	115	1	48.52	ppb	50	267149	4.93	97.04	90	110	
Ag	107	115	1	49.96	ppb	50	787943	4.53	99.93	90	110	
Cd	111	115	1	49.13	ppb	50	154901	5.19	98.26	90	110	
Sb	121	115	1	49.01	ppb	50	571066	5.09	98.02	90	110	
Ba	137	159	1	48.90	ppb	50	244035	5.27	97.80	90	110	
Tl	205	165	1	49.48	ppb	50	2049216	3.55	98.96	90	110	
Pb	208	165	1	45.85	ppb	50	1249839	5.15	91.71	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	728377	0.38	722209	100.9	70	130	
Sc	45	2	38349	1.78	38016	100.9	70	130	
In	115	1	1148041	0.89	1119445	102.6	70	130	
In	115	2	261000	0.16	260773	100.1	70	130	
Tb	159	1	1890780	0.73	1814356	104.2	70	130	
Tb	159	2	881832	0.51	861474	102.4	70	130	
Ho	165	1	1855436	0.69	1778678	104.3	70	130	
Ho	165	2	883027	0.95	861026	102.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0176CCB.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T16:34:04-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.04	ppb	1	
Na	23	115	2	5.04	ppb	500	
Mg	24	115	2	0.52	ppb	500	
Al	27	115	2	0.50	ppb	500	
K	39	115	2	0.86	ppb	500	
Ca	44	115	2	0.79	ppb	500	
V	51	115	2	0.00	ppb	1	
Cr	52	115	2	0.02	ppb	2	
Mn	55	115	2	0.02	ppb	6	
Fe	56	115	2	1.65	ppb	500	
Co	59	115	2	0.01	ppb	2	
Ni	60	115	2	0.04	ppb	3	
Cu	65	115	2	0.03	ppb	10	
Zn	66	115	2	0.05	ppb	20	
As	75	115	2	0.01	ppb	1	
Se	78	115	2	0.12	ppb	10	
Mo	95	115	1	0.11	ppb	1	
Ag	107	115	1	0.00	ppb	1	
Cd	111	115	1	0.01	ppb	2	
Sb	121	115	1	0.07	ppb	4	
Ba	137	159	1	-0.07	ppb	5	
Tl	205	165	1	0.02	ppb	2	
Pb	208	165	1	0.02	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	705154	0.34	722209	97.6	70	130	
Sc	45	2	36949	2.17	38016	97.2	70	130	
In	115	1	1131485	0.41	1119445	101.1	70	130	
In	115	2	257939	0.70	260773	98.9	70	130	
Tb	159	1	1840456	0.90	1814356	101.4	70	130	
Tb	159	2	861583	0.28	861474	100.0	70	130	
Ho	165	1	1799237	1.17	1778678	101.2	70	130	
Ho	165	2	865692	0.26	861026	100.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**MB 85280**
Data File Name	**018SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T16:38:38-04:00**
Type	**Sample**
VialNumber	**2501**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.02	0.02	ppb	370	10.81	550	
Na	23	115	2	17.23	17.23	ppb	25032	2.35	55000	
Mg	24	115	2	1.29	1.29	ppb	1517	2.29	55000	
Al	27	115	2	1.77	1.77	ppb	493	7.79	16500	
K	39	115	2	1.56	1.56	ppb	20671	0.37	55000	
Ca	44	115	2	9.98	9.98	ppb	234	4.34	55000	
V	51	115	2	0.13	0.13	ppb	490	25.61	550	
Cr	52	115	2	0.17	0.17	ppb	1385	2.41	550	
Mn	55	115	2	0.53	0.53	ppb	1720	9.78	550	
Fe	56	115	2	5.72	5.72	ppb	34806	2.48	55000	
Co	59	115	2	0.00	0.00	ppb	132	18.92	550	
Ni	60	115	2	0.09	0.09	ppb	400	1.67	550	
Cu	65	115	2	0.53	0.53	ppb	1460	9.69	550	
Zn	66	115	2	2.37	2.37	ppb	2105	3.15	550	
As	75	115	2	0.04	0.04	ppb	23	11.37	550	
Se	78	115	2	-0.01	-0.01	ppb	13	13.47	2750	
Mo	95	115	1	0.06	0.06	ppb	390	10.50	550	
Ag	107	115	1	-0.01	-0.01	ppb	231	18.26	550	
Cd	111	115	1	0.01	0.01	ppb	36	27.77	550	
Sb	121	115	1	0.04	0.04	ppb	760	4.18	550	
Ba	137	159	1	0.01	0.01	ppb	650	8.54	550	
Tl	205	165	1	0.01	0.01	ppb	1465	2.75	550	
Pb	208	165	1	0.07	0.07	ppb	3518	5.11	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	685094	0.24	722209	94.9	70	130	
Sc	45	2	34811	3.03	38016	91.6	70	130	
In	115	1	1120428	0.26	1119445	100.1	70	130	
In	115	2	245226	1.02	260773	94.0	70	130	
Tb	159	1	1875029	0.93	1814356	103.3	70	130	
Tb	159	2	847162	0.55	861474	98.3	70	130	
Ho	165	1	1821521	0.62	1778678	102.4	70	130	
Ho	165	2	850234	0.83	861026	98.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LCS 85280**
Data File Name	**019SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T16:43:13-04:00**
Type	**Sample**
VialNumber	**2502**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	141.40	141.40	ppb	930777	4.07	550	
Na	23	115	2	849.02	849.02	ppb	716107	1.26	55000	
Mg	24	115	2	6462.20	6462.20	ppb	2597178	2.14	55000	
Al	27	115	2	8324.18	8324.18	ppb	1275895	2.04	16500	
K	39	115	2	1750.89	1750.89	ppb	554526	1.08	55000	
Ca	44	115	2	19951.69	19951.69	ppb	307438	1.86	55000	
V	51	115	2	246.64	246.64	ppb	812930	1.76	550	
Cr	52	115	2	197.11	197.11	ppb	793324	1.82	550	
Mn	55	115	2	542.62	542.62	ppb	1330843	2.23	550	
Fe	56	115	2	12695.82	12695.82	ppb	43585458	1.26	55000	
Co	59	115	2	262.17	262.17	ppb	1684404	1.82	550	
Ni	60	115	2	48.53	48.53	ppb	81826	2.34	550	
Cu	65	115	2	184.60	184.60	ppb	417699	1.50	550	
Zn	66	115	2	606.62	606.62	ppb	431723	1.04	550	>LDR
As	75	115	2	42.17	42.17	ppb	18013	1.47	550	
Se	78	115	2	301.57	301.57	ppb	11547	1.91	2750	
Mo	95	115	1	177.37	177.37	ppb	935212	4.43	550	
Ag	107	115	1	82.38	82.38	ppb	1244185	4.56	550	
Cd	111	115	1	176.44	176.44	ppb	532810	4.36	550	
Sb	121	115	1	38.97	38.97	ppb	434958	4.24	550	
Ba	137	159	1	785.96	785.96	ppb	3878750	4.24	550	>LDR
Tl	205	165	1	190.57	190.57	ppb	7815279	4.46	550	
Pb	208	165	1	150.41	150.41	ppb	4056659	3.92	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	699730	0.88	722209	96.9	70	130	
Sc	45	2	35452	0.40	38016	93.3	70	130	
In	115	1	1099599	1.19	1119445	98.2	70	130	
In	115	2	236637	1.18	260773	90.7	70	130	
Tb	159	1	1874112	0.59	1814356	103.3	70	130	
Tb	159	2	845935	0.80	861474	98.2	70	130	
Ho	165	1	1837993	0.32	1778678	103.3	70	130	
Ho	165	2	845805	0.39	861026	98.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**LCS MR 85280**
Data File Name	**020SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T16:47:39-04:00**
Type	**Sample**
VialNumber	**2503**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	137.02	137.02	ppb	898886	3.42	550	
Na	23	115	2	892.62	892.62	ppb	750027	1.45	55000	
Mg	24	115	2	6231.22	6231.22	ppb	2496425	1.32	55000	
Al	27	115	2	7935.15	7935.15	ppb	1212492	2.07	16500	
K	39	115	2	1699.90	1699.90	ppb	537259	1.17	55000	
Ca	44	115	2	19577.94	19577.94	ppb	300721	1.24	55000	
V	51	115	2	242.62	242.62	ppb	797145	1.65	550	
Cr	52	115	2	193.02	193.02	ppb	774396	1.46	550	
Mn	55	115	2	534.08	534.08	ppb	1305669	0.66	550	
Fe	56	115	2	12326.95	12326.95	ppb	42187521	1.43	55000	
Co	59	115	2	257.89	257.89	ppb	1651635	1.25	550	
Ni	60	115	2	48.43	48.43	ppb	81386	1.83	550	
Cu	65	115	2	182.32	182.32	ppb	411269	1.84	550	
Zn	66	115	2	598.60	598.60	ppb	424703	1.78	550	>LDR
As	75	115	2	42.12	42.12	ppb	17939	3.10	550	
Se	78	115	2	300.48	300.48	ppb	11469	1.05	2750	
Mo	95	115	1	177.22	177.22	ppb	924764	4.22	550	
Ag	107	115	1	82.72	82.72	ppb	1236376	4.22	550	
Cd	111	115	1	176.46	176.46	ppb	527350	4.74	550	
Sb	121	115	1	37.19	37.19	ppb	410788	4.42	550	
Ba	137	159	1	780.95	780.95	ppb	3799856	4.53	550	>LDR
Tl	205	165	1	191.16	191.16	ppb	7813621	3.97	550	
Pb	208	165	1	150.95	150.95	ppb	4058214	4.48	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	687172	1.04	722209	95.1	70	130	
Sc	45	2	34711	2.01	38016	91.3	70	130	
In	115	1	1088339	0.49	1119445	97.2	70	130	
In	115	2	235893	1.02	260773	90.5	70	130	
Tb	159	1	1847767	0.82	1814356	101.8	70	130	
Tb	159	2	842355	0.37	861474	97.8	70	130	
Ho	165	1	1831613	1.42	1778678	103.0	70	130	
Ho	165	2	848123	1.09	861026	98.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

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Sample Report

Sample Name	**AD19178-001**
Data File Name	**021SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T16:52:05-04:00**
Type	**Sample**
VialNumber	**2504**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.36	1.36	ppb	9362	2.36	550	
Na	23	115	2	243.88	243.88	ppb	205364	1.74	55000	
Mg	24	115	2	22590.21	22590.21	ppb	8762937	1.85	55000	
Al	27	115	2	19759.76	19759.76	ppb	2923790	1.65	16500	>LDR
K	39	115	2	3497.12	3497.12	ppb	1050541	0.79	55000	
Ca	44	115	2	46870.54	46870.54	ppb	697170	1.62	55000	
V	51	115	2	49.06	49.06	ppb	156150	2.54	550	
Cr	52	115	2	62.94	62.94	ppb	244966	1.10	550	
Mn	55	115	2	1019.23	1019.23	ppb	2412885	1.25	550	>LDR
Fe	56	115	2	65729.35	65729.35	ppb	217795899	1.02	55000	>LDR
Co	59	115	2	23.82	23.82	ppb	147822	1.18	550	
Ni	60	115	2	112.23	112.23	ppb	182370	2.09	550	
Cu	65	115	2	129.23	129.23	ppb	282376	2.08	550	
Zn	66	115	2	333.27	333.27	ppb	229141	1.59	550	
As	75	115	2	27.01	27.01	ppb	11141	0.78	550	
Se	78	115	2	5.87	5.87	ppb	229	1.94	2750	
Mo	95	115	1	3.11	3.11	ppb	15843	4.27	550	
Ag	107	115	1	0.46	0.46	ppb	7027	5.52	550	
Cd	111	115	1	1.04	1.04	ppb	3023	3.84	550	
Sb	121	115	1	1.12	1.12	ppb	12269	2.62	550	
Ba	137	159	1	156.10	156.10	ppb	780592	4.27	550	
Tl	205	165	1	0.83	0.83	ppb	35525	4.70	550	
Pb	208	165	1	330.00	330.00	ppb	9079657	4.23	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	808580	1.00	722209	112.0	70	130	
Sc	45	2	41820	0.52	38016	110.0	70	130	
In	115	1	1058743	0.60	1119445	94.6	70	130	
In	115	2	228462	1.03	260773	87.6	70	130	
Tb	159	1	1897854	1.11	1814356	104.6	70	130	
Tb	159	2	862581	0.64	861474	100.1	70	130	
Ho	165	1	1875296	0.90	1778678	105.4	70	130	
Ho	165	2	869944	1.19	861026	101.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-001 MR**
Data File Name	**022SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T16:56:31-04:00**
Type	**Sample**
VialNumber	**2505**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.35	1.35	ppb	9329	2.00	550	
Na	23	115	2	238.35	238.35	ppb	200847	2.49	55000	
Mg	24	115	2	23474.83	23474.83	ppb	9102829	1.79	55000	
Al	27	115	2	19985.62	19985.62	ppb	2956183	1.94	16500	>LDR
K	39	115	2	3524.22	3524.22	ppb	1058205	1.37	55000	
Ca	44	115	2	51292.68	51292.68	ppb	762698	2.44	55000	
V	51	115	2	49.27	49.27	ppb	156757	2.23	550	
Cr	52	115	2	74.55	74.55	ppb	289968	2.45	550	
Mn	55	115	2	1085.15	1085.15	ppb	2568282	2.54	550	>LDR
Fe	56	115	2	72140.90	72140.90	ppb	238973910	2.25	55000	>LDR
Co	59	115	2	24.24	24.24	ppb	150417	2.60	550	
Ni	60	115	2	123.59	123.59	ppb	200734	2.34	550	
Cu	65	115	2	138.60	138.60	ppb	302736	1.85	550	
Zn	66	115	2	340.21	340.21	ppb	233827	1.42	550	
As	75	115	2	27.59	27.59	ppb	11377	3.33	550	
Se	78	115	2	5.41	5.41	ppb	212	2.98	2750	
Mo	95	115	1	3.23	3.23	ppb	16293	6.68	550	
Ag	107	115	1	0.43	0.43	ppb	6501	3.09	550	
Cd	111	115	1	1.19	1.19	ppb	3431	6.72	550	
Sb	121	115	1	1.34	1.34	ppb	14543	3.91	550	
Ba	137	159	1	165.23	165.23	ppb	823156	4.86	550	
Tl	205	165	1	0.49	0.49	ppb	21220	4.88	550	
Pb	208	165	1	335.95	335.95	ppb	9254493	4.83	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	810253	0.61	722209	112.2	70	130	
Sc	45	2	42039	2.26	38016	110.6	70	130	
In	115	1	1048960	0.29	1119445	93.7	70	130	
In	115	2	228377	0.86	260773	87.6	70	130	
Tb	159	1	1890560	1.01	1814356	104.2	70	130	
Tb	159	2	859911	0.58	861474	99.8	70	130	
Ho	165	1	1877600	0.89	1778678	105.6	70	130	
Ho	165	2	869966	0.79	861026	101.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-001 SD**
Data File Name	**023SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:01:00-04:00**
Type	**Sample**
VialNumber	**2509**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.33	0.33	ppb	2310	2.53	550	
Na	23	115	2	59.16	59.16	ppb	58778	1.32	55000	
Mg	24	115	2	4760.28	4760.28	ppb	1905064	1.93	55000	
Al	27	115	2	4114.23	4114.23	ppb	627964	1.60	16500	
K	39	115	2	725.40	725.40	ppb	240094	1.24	55000	
Ca	44	115	2	9523.19	9523.19	ppb	146140	1.79	55000	
V	51	115	2	9.84	9.84	ppb	32328	0.50	550	
Cr	52	115	2	12.79	12.79	ppb	51848	2.18	550	
Mn	55	115	2	204.77	204.77	ppb	500216	0.83	550	
Fe	56	115	2	13508.06	13508.06	ppb	46171773	1.42	55000	
Co	59	115	2	4.84	4.84	ppb	31082	0.60	550	
Ni	60	115	2	23.30	23.30	ppb	39237	0.58	550	
Cu	65	115	2	27.37	27.37	ppb	61832	2.04	550	
Zn	66	115	2	74.63	74.63	ppb	53181	2.01	550	
As	75	115	2	5.53	5.53	ppb	2358	3.20	550	
Se	78	115	2	1.19	1.19	ppb	58	8.81	2750	
Mo	95	115	1	0.62	0.62	ppb	3258	4.28	550	
Ag	107	115	1	0.09	0.09	ppb	1676	11.87	550	
Cd	111	115	1	0.22	0.22	ppb	644	6.41	550	
Sb	121	115	1	0.23	0.23	ppb	2786	5.63	550	
Ba	137	159	1	33.76	33.76	ppb	161742	4.28	550	
Tl	205	165	1	0.13	0.13	ppb	6081	7.34	550	
Pb	208	165	1	72.77	72.77	ppb	1905365	3.09	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	687054	0.46	722209	95.1	70	130	
Sc	45	2	35002	1.91	38016	92.1	70	130	
In	115	1	1072712	0.49	1119445	95.8	70	130	
In	115	2	235603	0.89	260773	90.3	70	130	
Tb	159	1	1813931	0.56	1814356	100.0	70	130	
Tb	159	2	833655	0.23	861474	96.8	70	130	
Ho	165	1	1783489	0.29	1778678	100.3	70	130	
Ho	165	2	837993	0.55	861026	97.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-001 MS 1**
Data File Name	**024SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:05:31-04:00**
Type	**Sample**
VialNumber	**2506**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	184.49	184.49	ppb	1226513	3.13	550	
Na	23	115	2	22239.46	22239.46	ppb	18284830	1.58	55000	
Mg	24	115	2	45702.27	45702.27	ppb	18138180	1.96	55000	
Al	27	115	2	24166.77	24166.77	ppb	3658601	1.73	16500	>LDR
K	39	115	2	24611.76	24611.76	ppb	7448563	1.31	55000	
Ca	44	115	2	72268.37	72268.37	ppb	1099764	1.47	55000	>LDR
V	51	115	2	270.00	270.00	ppb	879049	2.01	550	
Cr	52	115	2	282.66	282.66	ppb	1123486	2.25	550	
Mn	55	115	2	1304.45	1304.45	ppb	3159829	2.29	550	>LDR
Fe	56	115	2	69809.76	69809.76	ppb	236705474	2.70	55000	>LDR
Co	59	115	2	253.31	253.31	ppb	1607658	1.90	550	
Ni	60	115	2	326.66	326.66	ppb	542594	1.49	550	
Cu	65	115	2	340.20	340.20	ppb	760178	1.31	550	
Zn	66	115	2	538.34	538.34	ppb	378498	1.57	550	
As	75	115	2	244.51	244.51	ppb	103151	1.18	550	
Se	78	115	2	207.70	207.70	ppb	7858	1.43	2750	
Mo	95	115	1	225.03	225.03	ppb	1133282	5.29	550	
Ag	107	115	1	42.81	42.81	ppb	617595	4.35	550	
Cd	111	115	1	220.79	220.79	ppb	636765	4.19	550	
Sb	121	115	1	103.80	103.80	ppb	1106269	4.92	550	
Ba	137	159	1	398.15	398.15	ppb	1960314	4.03	550	
Tl	205	165	1	195.04	195.04	ppb	8078544	4.15	550	
Pb	208	165	1	554.27	554.27	ppb	15094692	3.90	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	823533	1.46	722209	114.0	70	130	
Sc	45	2	43186	3.29	38016	113.6	70	130	
In	115	1	1050234	1.22	1119445	93.8	70	130	
In	115	2	233754	1.55	260773	89.6	70	130	
Tb	159	1	1869401	1.74	1814356	103.0	70	130	
Tb	159	2	869154	1.20	861474	100.9	70	130	
Ho	165	1	1857040	1.04	1778678	104.4	70	130	
Ho	165	2	876627	1.20	861026	101.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-001 MS 2**
Data File Name	**025SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:09:51-04:00**
Type	**Sample**
VialNumber	**2507**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	180.26	180.26	ppb	1229509	3.74	550	
Na	23	115	2	21732.00	21732.00	ppb	18363357	1.64	55000	
Mg	24	115	2	44698.05	44698.05	ppb	18231027	1.64	55000	
Al	27	115	2	23366.01	23366.01	ppb	3635571	2.42	16500	>LDR
K	39	115	2	24233.32	24233.32	ppb	7537638	1.07	55000	
Ca	44	115	2	72674.79	72674.79	ppb	1136649	2.25	55000	>LDR
V	51	115	2	261.14	261.14	ppb	873798	2.08	550	
Cr	52	115	2	278.61	278.61	ppb	1138072	1.99	550	
Mn	55	115	2	1277.55	1277.55	ppb	3180421	2.01	550	>LDR
Fe	56	115	2	71347.42	71347.42	ppb	248599292	1.47	55000	>LDR
Co	59	115	2	249.69	249.69	ppb	1628531	2.14	550	
Ni	60	115	2	332.19	332.19	ppb	567088	1.72	550	
Cu	65	115	2	336.38	336.38	ppb	772525	1.71	550	
Zn	66	115	2	528.36	528.36	ppb	381797	1.81	550	
As	75	115	2	238.47	238.47	ppb	103402	2.02	550	
Se	78	115	2	207.32	207.32	ppb	8064	2.64	2750	
Mo	95	115	1	213.16	213.16	ppb	1129759	4.96	550	
Ag	107	115	1	40.90	40.90	ppb	621069	4.41	550	
Cd	111	115	1	209.59	209.59	ppb	636213	4.82	550	
Sb	121	115	1	84.34	84.34	ppb	946082	4.55	550	
Ba	137	159	1	387.73	387.73	ppb	1973069	4.23	550	
Tl	205	165	1	182.93	182.93	ppb	7774447	3.95	550	
Pb	208	165	1	523.93	523.93	ppb	14639890	3.12	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	857837	1.24	722209	118.8	70	130	
Sc	45	2	44396	1.30	38016	116.8	70	130	
In	115	1	1105746	0.91	1119445	98.8	70	130	
In	115	2	240231	0.94	260773	92.1	70	130	
Tb	159	1	1932302	0.20	1814356	106.5	70	130	
Tb	159	2	880313	1.30	861474	102.2	70	130	
Ho	165	1	1905364	1.29	1778678	107.1	70	130	
Ho	165	2	890850	0.52	861026	103.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-001 PS**
Data File Name	**026SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:14:11-04:00**
Type	**Sample**
VialNumber	**2508**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	40.20	40.20	ppb	277169	3.21	550	
Na	23	115	2	5131.54	5131.54	ppb	4227482	1.09	55000	
Mg	24	115	2	27169.57	27169.57	ppb	10784901	1.31	55000	
Al	27	115	2	21122.18	21122.18	ppb	3198486	1.51	16500	>LDR
K	39	115	2	8200.51	8200.51	ppb	2495464	1.62	55000	
Ca	44	115	2	51062.96	51062.96	ppb	777261	1.11	55000	
V	51	115	2	96.51	96.51	ppb	314312	1.86	550	
Cr	52	115	2	111.03	111.03	ppb	441789	1.91	550	
Mn	55	115	2	1057.91	1057.91	ppb	2563032	0.72	550	>LDR
Fe	56	115	2	69424.97	69424.97	ppb	235429830	1.33	55000	>LDR
Co	59	115	2	72.02	72.02	ppb	457256	1.07	550	
Ni	60	115	2	157.38	157.38	ppb	261608	1.41	550	
Cu	65	115	2	174.02	174.02	ppb	389068	1.09	550	
Zn	66	115	2	371.11	371.11	ppb	261085	0.78	550	
As	75	115	2	73.81	73.81	ppb	31150	2.23	550	
Se	78	115	2	233.49	233.49	ppb	8837	0.78	2750	
Mo	95	115	1	52.47	52.47	ppb	273710	4.61	550	
Ag	107	115	1	45.72	45.72	ppb	683202	3.75	550	
Cd	111	115	1	48.97	48.97	ppb	146281	4.20	550	
Sb	121	115	1	50.87	50.87	ppb	561622	4.61	550	
Ba	137	159	1	199.59	199.59	ppb	1019772	4.71	550	
Tl	205	165	1	46.50	46.50	ppb	1996744	4.63	550	
Pb	208	165	1	361.35	361.35	ppb	10199706	3.56	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	843271	0.56	722209	116.8	70	130	
Sc	45	2	42643	1.94	38016	112.2	70	130	
In	115	1	1087998	0.49	1119445	97.2	70	130	
In	115	2	233823	0.91	260773	89.7	70	130	
Tb	159	1	1939299	1.17	1814356	106.9	70	130	
Tb	159	2	876304	1.52	861474	101.7	70	130	
Ho	165	1	1924811	1.31	1778678	108.2	70	130	
Ho	165	2	882062	0.78	861026	102.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**027SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:18:33-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.08	0.08	ppb	699	10.11	550	
Na	23	115	2	7.14	7.14	ppb	16319	2.67	55000	
Mg	24	115	2	2.20	2.20	ppb	1895	8.29	55000	
Al	27	115	2	1.54	1.54	ppb	456	13.60	16500	
K	39	115	2	0.51	0.51	ppb	20322	0.68	55000	
Ca	44	115	2	3.73	3.73	ppb	134	27.20	55000	
V	51	115	2	0.02	0.02	ppb	126	32.77	550	
Cr	52	115	2	0.02	0.02	ppb	741	8.79	550	
Mn	55	115	2	0.05	0.05	ppb	490	17.49	550	
Fe	56	115	2	6.69	6.69	ppb	38243	1.36	55000	
Co	59	115	2	0.01	0.01	ppb	203	4.34	550	
Ni	60	115	2	0.04	0.04	ppb	311	5.90	550	
Cu	65	115	2	0.24	0.24	ppb	771	6.62	550	
Zn	66	115	2	0.17	0.17	ppb	483	8.39	550	
As	75	115	2	0.03	0.03	ppb	19	15.08	550	
Se	78	115	2	0.13	0.13	ppb	18	17.69	2750	
Mo	95	115	1	0.09	0.09	ppb	571	13.83	550	
Ag	107	115	1	0.00	0.00	ppb	348	8.70	550	
Cd	111	115	1	0.02	0.02	ppb	75	14.65	550	
Sb	121	115	1	0.11	0.11	ppb	1538	4.57	550	
Ba	137	159	1	-0.05	-0.05	ppb	330	10.55	550	
Tl	205	165	1	0.13	0.13	ppb	6144	4.95	550	
Pb	208	165	1	0.07	0.07	ppb	3602	2.21	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	666768	0.74	722209	92.3	70	130	
Sc	45	2	34658	1.20	38016	91.2	70	130	
In	115	1	1101808	0.59	1119445	98.4	70	130	
In	115	2	245024	0.70	260773	94.0	70	130	
Tb	159	1	1820439	1.00	1814356	100.3	70	130	
Tb	159	2	834083	0.41	861474	96.8	70	130	
Ho	165	1	1775090	0.13	1778678	99.8	70	130	
Ho	165	2	836054	0.46	861026	97.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0286CCV.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:23:06-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	49.27	ppb	50	308018	3.70	98.53	90	110	
Na	23	115	2	4916.70	ppb	5000	4199335	0.44	98.33	90	110	
Mg	24	115	2	4979.87	ppb	5000	2050294	1.81	99.60	90	110	
Al	27	115	2	1482.33	ppb	1500	232905	1.78	98.82	90	110	
K	39	115	2	4925.63	ppb	5000	1561713	0.85	98.51	90	110	
Ca	44	115	2	4905.96	ppb	5000	77491	2.19	98.12	90	110	
V	51	115	2	49.15	ppb	50	165964	1.56	98.30	90	110	
Cr	52	115	2	49.74	ppb	50	205523	1.48	99.48	90	110	
Mn	55	115	2	49.83	ppb	50	125505	1.18	99.66	90	110	
Fe	56	115	2	5060.56	ppb	5000	17804273	1.25	101.21	90	110	
Co	59	115	2	50.03	ppb	50	329358	1.47	100.07	90	110	
Ni	60	115	2	50.57	ppb	50	87330	2.59	101.15	90	110	
Cu	65	115	2	49.25	ppb	50	114302	1.55	98.50	90	110	
Zn	66	115	2	50.40	ppb	50	37061	0.23	100.80	90	110	
As	75	115	2	49.97	ppb	50	21864	0.80	99.94	90	110	
Se	78	115	2	252.39	ppb	250	9899	1.66	100.96	90	110	
Mo	95	115	1	50.46	ppb	50	255775	3.04	100.93	90	110	
Ag	107	115	1	52.17	ppb	50	757372	4.05	104.34	90	110	
Cd	111	115	1	51.36	ppb	50	149069	3.19	102.72	90	110	
Sb	121	115	1	51.22	ppb	50	549367	3.65	102.43	90	110	
Ba	137	159	1	50.04	ppb	50	234746	4.09	100.07	90	110	
Tl	205	165	1	51.04	ppb	50	1987825	3.25	102.07	90	110	
Pb	208	165	1	47.57	ppb	50	1219262	4.15	95.14	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	661989	0.41	722209	91.7	70	130	
Sc	45	2	34499	1.97	38016	90.7	70	130	
In	115	1	1057064	0.09	1119445	94.4	70	130	
In	115	2	242392	1.24	260773	93.0	70	130	
Tb	159	1	1777567	0.87	1814356	98.0	70	130	
Tb	159	2	830381	0.44	861474	96.4	70	130	
Ho	165	1	1745513	0.74	1778678	98.1	70	130	
Ho	165	2	834158	0.74	861026	96.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0296CCB.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:27:35-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.05	ppb	1	
Na	23	115	2	3.02	ppb	500	
Mg	24	115	2	0.51	ppb	500	
Al	27	115	2	0.61	ppb	500	
K	39	115	2	-0.30	ppb	500	
Ca	44	115	2	-0.35	ppb	500	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	0.01	ppb	2	
Mn	55	115	2	0.05	ppb	6	
Fe	56	115	2	2.38	ppb	500	
Co	59	115	2	0.01	ppb	2	
Ni	60	115	2	0.07	ppb	3	
Cu	65	115	2	0.05	ppb	10	
Zn	66	115	2	0.06	ppb	20	
As	75	115	2	0.01	ppb	1	
Se	78	115	2	0.08	ppb	10	
Mo	95	115	1	0.10	ppb	1	
Ag	107	115	1	0.01	ppb	1	
Cd	111	115	1	0.01	ppb	2	
Sb	121	115	1	0.09	ppb	4	
Ba	137	159	1	-0.06	ppb	5	
Tl	205	165	1	0.05	ppb	2	
Pb	208	165	1	0.04	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	662390	0.14	722209	91.7	70	130	
Sc	45	2	34873	1.41	38016	91.7	70	130	
In	115	1	1059268	0.95	1119445	94.6	70	130	
In	115	2	246445	1.29	260773	94.5	70	130	
Tb	159	1	1772197	0.52	1814356	97.7	70	130	
Tb	159	2	830091	0.37	861474	96.4	70	130	
Ho	165	1	1720214	1.29	1778678	96.7	70	130	
Ho	165	2	830659	0.19	861026	96.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-002**
Data File Name	**030SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:32:10-04:00**
Type	**Sample**
VialNumber	**2510**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.68	1.68	ppb	11137	6.91	550	
Na	23	115	2	259.64	259.64	ppb	211529	0.54	55000	
Mg	24	115	2	18494.19	18494.19	ppb	6961017	1.33	55000	
Al	27	115	2	12451.23	12451.23	ppb	1787750	1.88	16500	
K	39	115	2	1944.60	1944.60	ppb	574928	1.03	55000	
Ca	44	115	2	70934.18	70934.18	ppb	1023745	1.86	55000	>LDR
V	51	115	2	42.30	42.30	ppb	130649	1.22	550	
Cr	52	115	2	63.90	63.90	ppb	241309	1.21	550	
Mn	55	115	2	1079.62	1079.62	ppb	2480034	1.11	550	>LDR
Fe	56	115	2	98670.37	98670.37	ppb	317244811	1.30	55000	>LDR
Co	59	115	2	31.91	31.91	ppb	192142	1.77	550	
Ni	60	115	2	217.72	217.72	ppb	343037	1.22	550	
Cu	65	115	2	219.80	219.80	ppb	465862	1.37	550	
Zn	66	115	2	318.52	318.52	ppb	212513	1.39	550	
As	75	115	2	33.92	33.92	ppb	13577	1.68	550	
Se	78	115	2	7.45	7.45	ppb	279	8.78	2750	
Mo	95	115	1	4.05	4.05	ppb	19847	5.96	550	
Ag	107	115	1	0.48	0.48	ppb	7069	3.13	550	
Cd	111	115	1	0.96	0.96	ppb	2702	4.59	550	
Sb	121	115	1	2.50	2.50	ppb	26024	3.65	550	
Ba	137	159	1	135.69	135.69	ppb	658437	3.76	550	
Tl	205	165	1	0.80	0.80	ppb	33073	5.43	550	
Pb	208	165	1	435.96	435.96	ppb	11605326	4.13	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	784050	0.86	722209	108.6	70	130	
Sc	45	2	40345	1.89	38016	106.1	70	130	
In	115	1	1018296	0.54	1119445	91.0	70	130	
In	115	2	221680	0.94	260773	85.0	70	130	
Tb	159	1	1842060	1.11	1814356	101.5	70	130	
Tb	159	2	830484	0.51	861474	96.4	70	130	
Ho	165	1	1814612	0.31	1778678	102.0	70	130	
Ho	165	2	839585	0.39	861026	97.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-003**
Data File Name	**031SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:36:37-04:00**
Type	**Sample**
VialNumber	**2511**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.61	1.61	ppb	10590	4.83	550	
Na	23	115	2	297.40	297.40	ppb	242850	2.28	55000	
Mg	24	115	2	17318.06	17318.06	ppb	6569099	1.35	55000	
Al	27	115	2	17067.45	17067.45	ppb	2469474	1.79	16500	>LDR
K	39	115	2	2830.38	2830.38	ppb	834940	1.07	55000	
Ca	44	115	2	43745.16	43745.16	ppb	636277	1.85	55000	
V	51	115	2	68.13	68.13	ppb	212011	2.16	550	
Cr	52	115	2	44.32	44.32	ppb	168876	2.17	550	
Mn	55	115	2	1030.87	1030.87	ppb	2386557	1.82	550	>LDR
Fe	56	115	2	58905.02	58905.02	ppb	190871288	1.83	55000	>LDR
Co	59	115	2	20.20	20.20	ppb	122612	1.37	550	
Ni	60	115	2	169.08	169.08	ppb	268532	2.41	550	
Cu	65	115	2	460.39	460.39	ppb	983188	1.81	550	
Zn	66	115	2	473.01	473.01	ppb	317889	1.65	550	
As	75	115	2	44.39	44.39	ppb	17901	1.97	550	
Se	78	115	2	5.32	5.32	ppb	204	7.97	2750	
Mo	95	115	1	6.24	6.24	ppb	30774	3.06	550	
Ag	107	115	1	1.09	1.09	ppb	15684	6.71	550	
Cd	111	115	1	10.61	10.61	ppb	29907	5.51	550	
Sb	121	115	1	1.90	1.90	ppb	20000	4.43	550	
Ba	137	159	1	603.45	603.45	ppb	2910582	3.69	550	>LDR
Tl	205	165	1	0.47	0.47	ppb	19806	6.51	550	
Pb	208	165	1	619.17	619.17	ppb	16337553	4.15	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	753866	0.78	722209	104.4	70	130	
Sc	45	2	38881	1.55	38016	102.3	70	130	
In	115	1	1025880	0.55	1119445	91.6	70	130	
In	115	2	223398	0.79	260773	85.7	70	130	
Tb	159	1	1831738	0.60	1814356	101.0	70	130	
Tb	159	2	827750	1.18	861474	96.1	70	130	
Ho	165	1	1798741	0.41	1778678	101.1	70	130	
Ho	165	2	836726	0.96	861026	97.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-004**
Data File Name	**032SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:41:05-04:00**
Type	**Sample**
VialNumber	**2512**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.58	1.58	ppb	10187	3.92	550	
Na	23	115	2	362.75	362.75	ppb	289675	2.37	55000	
Mg	24	115	2	16195.36	16195.36	ppb	6049994	1.36	55000	
Al	27	115	2	21646.86	21646.86	ppb	3084382	1.90	16500	>LDR
K	39	115	2	2890.53	2890.53	ppb	839385	0.84	55000	
Ca	44	115	2	73182.34	73182.34	ppb	1048211	2.11	55000	>LDR
V	51	115	2	51.47	51.47	ppb	157723	2.35	550	
Cr	52	115	2	47.00	47.00	ppb	176318	2.26	550	
Mn	55	115	2	1370.54	1370.54	ppb	3124553	2.40	550	>LDR
Fe	56	115	2	72189.19	72189.19	ppb	230349972	2.13	55000	>LDR
Co	59	115	2	23.11	23.11	ppb	138152	1.61	550	
Ni	60	115	2	67.28	67.28	ppb	105367	2.24	550	
Cu	65	115	2	460.34	460.34	ppb	968123	2.16	550	
Zn	66	115	2	379.37	379.37	ppb	251149	2.02	550	
As	75	115	2	37.45	37.45	ppb	14878	1.99	550	
Se	78	115	2	4.88	4.88	ppb	185	1.38	2750	
Mo	95	115	1	4.86	4.86	ppb	23398	4.51	550	
Ag	107	115	1	0.51	0.51	ppb	7331	5.07	550	
Cd	111	115	1	1.81	1.81	ppb	4984	3.50	550	
Sb	121	115	1	1.48	1.48	ppb	15269	3.84	550	
Ba	137	159	1	755.84	755.84	ppb	3584677	4.82	550	>LDR
Tl	205	165	1	0.41	0.41	ppb	17081	8.68	550	
Pb	208	165	1	700.69	700.69	ppb	18137240	4.33	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	774603	1.24	722209	107.3	70	130	
Sc	45	2	40013	1.21	38016	105.3	70	130	
In	115	1	1001411	1.13	1119445	89.5	70	130	
In	115	2	220044	1.17	260773	84.4	70	130	
Tb	159	1	1800634	1.55	1814356	99.2	70	130	
Tb	159	2	822890	0.86	861474	95.5	70	130	
Ho	165	1	1764217	1.16	1778678	99.2	70	130	
Ho	165	2	828756	1.23	861026	96.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-005**
Data File Name	**033SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:45:31-04:00**
Type	**Sample**
VialNumber	**3101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.38	1.38	ppb	8467	3.13	550	
Na	23	115	2	497.91	497.91	ppb	366233	0.91	55000	
Mg	24	115	2	76874.83	76874.83	ppb	26675560	0.88	55000	>LDR
Al	27	115	2	11374.46	11374.46	ppb	1505631	2.47	16500	
K	39	115	2	1717.92	1717.92	ppb	470266	0.53	55000	
Ca	44	115	2	259145.04	259145.04	ppb	3448025	1.24	55000	>LDR
V	51	115	2	130.22	130.22	ppb	370710	1.78	550	
Cr	52	115	2	38.54	38.54	ppb	134421	0.69	550	
Mn	55	115	2	1072.92	1072.92	ppb	2272427	1.53	550	>LDR
Fe	56	115	2	73287.52	73287.52	ppb	217252186	1.06	55000	>LDR
Co	59	115	2	15.25	15.25	ppb	84718	1.86	550	
Ni	60	115	2	83.43	83.43	ppb	121322	1.12	550	
Cu	65	115	2	312.07	312.07	ppb	609738	1.60	550	
Zn	66	115	2	417.25	417.25	ppb	256581	0.44	550	
As	75	115	2	54.01	54.01	ppb	19926	0.77	550	
Se	78	115	2	5.40	5.40	ppb	189	1.48	2750	
Mo	95	115	1	6.42	6.42	ppb	29504	2.74	550	
Ag	107	115	1	0.70	0.70	ppb	9432	3.39	550	
Cd	111	115	1	1.80	1.80	ppb	4744	4.89	550	
Sb	121	115	1	6.17	6.17	ppb	60075	3.14	550	
Ba	137	159	1	596.94	596.94	ppb	2691614	2.73	550	>LDR
Tl	205	165	1	0.52	0.52	ppb	20133	4.03	550	
Pb	208	165	1	1003.86	1003.86	ppb	24717443	3.98	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	694034	0.38	722209	96.1	70	130	
Sc	45	2	34755	1.04	38016	91.4	70	130	
In	115	1	956531	0.20	1119445	85.4	70	130	
In	115	2	204408	0.94	260773	78.4	70	130	
Tb	159	1	1712754	0.92	1814356	94.4	70	130	
Tb	159	2	753441	0.64	861474	87.5	70	130	
Ho	165	1	1678934	0.62	1778678	94.4	70	130	
Ho	165	2	767252	0.48	861026	89.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-006**
Data File Name	**034SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:49:58-04:00**
Type	**Sample**
VialNumber	**3102**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.62	1.62	ppb	10342	5.18	550	
Na	23	115	2	588.21	588.21	ppb	467193	1.23	55000	
Mg	24	115	2	6390.63	6390.63	ppb	2403945	1.85	55000	
Al	27	115	2	6857.58	6857.58	ppb	983849	1.84	16500	
K	39	115	2	2048.23	2048.23	ppb	604078	0.83	55000	
Ca	44	115	2	39092.08	39092.08	ppb	563751	2.34	55000	
V	51	115	2	82.67	82.67	ppb	255072	1.86	550	
Cr	52	115	2	46.52	46.52	ppb	175671	0.89	550	
Mn	55	115	2	403.03	403.03	ppb	925266	1.65	550	
Fe	56	115	2	131013.99	131013.99	ppb	420871474	1.39	55000	>LDR
Co	59	115	2	13.49	13.49	ppb	81247	2.45	550	
Ni	60	115	2	55.82	55.82	ppb	88044	1.84	550	
Cu	65	115	2	697.62	697.62	ppb	1476933	1.59	550	>LDR
Zn	66	115	2	158.04	158.04	ppb	105517	1.45	550	
As	75	115	2	119.56	119.56	ppb	47800	1.81	550	
Se	78	115	2	4.12	4.12	ppb	159	14.25	2750	
Mo	95	115	1	12.97	12.97	ppb	62589	4.01	550	
Ag	107	115	1	0.72	0.72	ppb	10243	5.49	550	
Cd	111	115	1	0.34	0.34	ppb	946	8.38	550	
Sb	121	115	1	29.55	29.55	ppb	301560	4.70	550	
Ba	137	159	1	1653.03	1653.03	ppb	7657215	3.61	550	>LDR
Tl	205	165	1	0.59	0.59	ppb	23869	2.51	550	
Pb	208	165	1	3535.35	3535.35	ppb	90342935	3.89	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	745105	0.91	722209	103.2	70	130	
Sc	45	2	38817	1.15	38016	102.1	70	130	
In	115	1	1005327	0.22	1119445	89.8	70	130	
In	115	2	221486	0.57	260773	84.9	70	130	
Tb	159	1	1759356	0.36	1814356	97.0	70	130	
Tb	159	2	801730	0.63	861474	93.1	70	130	
Ho	165	1	1741806	1.73	1778678	97.9	70	130	
Ho	165	2	815484	1.04	861026	94.7	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

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Sample Report

Sample Name	**AD19178-007**
Data File Name	**035SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:54:27-04:00**
Type	**Sample**
VialNumber	**3103**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.90	1.90	ppb	11997	3.66	550	
Na	23	115	2	437.62	437.62	ppb	354750	1.65	55000	
Mg	24	115	2	3309.02	3309.02	ppb	1262219	1.23	55000	
Al	27	115	2	8464.82	8464.82	ppb	1231091	2.11	16500	
K	39	115	2	3672.64	3672.64	ppb	1083411	1.63	55000	
Ca	44	115	2	30799.72	30799.72	ppb	450270	1.72	55000	
V	51	115	2	36.51	36.51	ppb	114216	1.89	550	
Cr	52	115	2	27.71	27.71	ppb	106340	1.46	550	
Mn	55	115	2	383.78	383.78	ppb	893164	1.59	550	
Fe	56	115	2	90361.35	90361.35	ppb	294266451	1.37	55000	>LDR
Co	59	115	2	83.23	83.23	ppb	507476	2.09	550	
Ni	60	115	2	327.96	327.96	ppb	523301	2.13	550	
Cu	65	115	2	934.36	934.36	ppb	2005279	1.97	550	>LDR
Zn	66	115	2	443.58	443.58	ppb	299645	2.44	550	
As	75	115	2	65.93	65.93	ppb	26721	1.80	550	
Se	78	115	2	6.60	6.60	ppb	251	5.93	2750	
Mo	95	115	1	9.89	9.89	ppb	48245	4.49	550	
Ag	107	115	1	0.37	0.37	ppb	5464	8.55	550	
Cd	111	115	1	33.30	33.30	ppb	92899	4.95	550	
Sb	121	115	1	12.92	12.92	ppb	133383	4.46	550	
Ba	137	159	1	547.46	547.46	ppb	2553754	3.77	550	
Tl	205	165	1	1.21	1.21	ppb	47718	5.29	550	
Pb	208	165	1	1136.40	1136.40	ppb	28880110	3.81	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	719026	1.20	722209	99.6	70	130	
Sc	45	2	36532	2.00	38016	96.1	70	130	
In	115	1	1015878	0.45	1119445	90.7	70	130	
In	115	2	224527	0.74	260773	86.1	70	130	
Tb	159	1	1771390	0.88	1814356	97.6	70	130	
Tb	159	2	815234	1.50	861474	94.6	70	130	
Ho	165	1	1732400	1.10	1778678	97.4	70	130	
Ho	165	2	818445	1.36	861026	95.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-008**
Data File Name	**036SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T17:58:53-04:00**
Type	**Sample**
VialNumber	**3104**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.85	1.85	ppb	11833	2.49	550	
Na	23	115	2	368.31	368.31	ppb	308037	1.63	55000	
Mg	24	115	2	10429.78	10429.78	ppb	4082743	1.79	55000	
Al	27	115	2	12902.47	12902.47	ppb	1926370	1.71	16500	
K	39	115	2	2104.13	2104.13	ppb	645339	1.04	55000	
Ca	44	115	2	32261.08	32261.08	ppb	484194	1.99	55000	
V	51	115	2	44.44	44.44	ppb	142719	1.14	550	
Cr	52	115	2	46.62	46.62	ppb	183238	3.30	550	
Mn	55	115	2	357.89	357.89	ppb	855152	1.79	550	
Fe	56	115	2	116948.57	116948.57	ppb	390997816	1.83	55000	>LDR
Co	59	115	2	33.13	33.13	ppb	207407	1.68	550	
Ni	60	115	2	423.97	423.97	ppb	694438	2.12	550	
Cu	65	115	2	1651.19	1651.19	ppb	3637984	1.68	550	>LDR
Zn	66	115	2	337.58	337.58	ppb	234197	1.97	550	
As	75	115	2	74.11	74.11	ppb	30837	1.89	550	
Se	78	115	2	5.51	5.51	ppb	217	11.01	2750	
Mo	95	115	1	9.81	9.81	ppb	48531	4.09	550	
Ag	107	115	1	0.50	0.50	ppb	7363	4.94	550	
Cd	111	115	1	20.16	20.16	ppb	57051	4.89	550	
Sb	121	115	1	11.48	11.48	ppb	120228	3.72	550	
Ba	137	159	1	1511.73	1511.73	ppb	7032014	3.83	550	>LDR
Tl	205	165	1	1.06	1.06	ppb	42230	4.58	550	
Pb	208	165	1	1523.58	1523.58	ppb	39299251	4.66	550	>LDR

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	778543	1.12	722209	107.8	70	130	
Sc	45	2	40239	2.28	38016	105.8	70	130	
In	115	1	1030625	0.25	1119445	92.1	70	130	
In	115	2	230519	1.19	260773	88.4	70	130	
Tb	159	1	1766492	0.98	1814356	97.4	70	130	
Tb	159	2	825596	0.40	861474	95.8	70	130	
Ho	165	1	1758601	0.12	1778678	98.9	70	130	
Ho	165	2	828653	0.51	861026	96.2	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Printed at: 6:00 PM on:9/16/2020

Sample Report

Sample Name	**AD19178-009**
Data File Name	**037SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T18:03:21-04:00**
Type	**Sample**
VialNumber	**3105**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.07	1.07	ppb	6753	3.81	550	
Na	23	115	2	297.55	297.55	ppb	237166	0.79	55000	
Mg	24	115	2	7245.99	7245.99	ppb	2683538	1.84	55000	
Al	27	115	2	5939.20	5939.20	ppb	838984	1.94	16500	
K	39	115	2	1147.93	1147.93	ppb	341265	0.83	55000	
Ca	44	115	2	72286.46	72286.46	ppb	1026288	1.51	55000	>LDR
V	51	115	2	30.85	30.85	ppb	93744	0.66	550	
Cr	52	115	2	31.79	31.79	ppb	118424	2.28	550	
Mn	55	115	2	304.31	304.31	ppb	687899	1.82	550	
Fe	56	115	2	37376.78	37376.78	ppb	118239027	1.63	55000	
Co	59	115	2	64.10	64.10	ppb	379591	1.72	550	
Ni	60	115	2	60.74	60.74	ppb	94310	1.82	550	
Cu	65	115	2	213.12	213.12	ppb	444401	1.55	550	
Zn	66	115	2	151.84	151.84	ppb	99844	1.26	550	
As	75	115	2	25.51	25.51	ppb	10046	3.34	550	
Se	78	115	2	2.81	2.81	ppb	110	14.95	2750	
Mo	95	115	1	7.32	7.32	ppb	34920	3.76	550	
Ag	107	115	1	0.29	0.29	ppb	4240	4.20	550	
Cd	111	115	1	0.53	0.53	ppb	1442	0.95	550	
Sb	121	115	1	0.89	0.89	ppb	9224	6.62	550	
Ba	137	159	1	192.09	192.09	ppb	874683	3.86	550	
Tl	205	165	1	0.30	0.30	ppb	12246	5.94	550	
Pb	208	165	1	195.81	195.81	ppb	4900000	4.31	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	673246	0.35	722209	93.2	70	130	
Sc	45	2	34314	2.28	38016	90.3	70	130	
In	115	1	993617	0.79	1119445	88.8	70	130	
In	115	2	218287	3.52	260773	83.7	70	130	
Tb	159	1	1728812	0.84	1814356	95.3	70	130	
Tb	159	2	802554	3.62	861474	93.2	70	130	
Ho	165	1	1705559	1.14	1778678	95.9	70	130	
Ho	165	2	807377	3.22	861026	93.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

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Sample Report

Sample Name	**AD19178-010**
Data File Name	**038SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T18:07:50-04:00**
Type	**Sample**
VialNumber	**3106**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.61	1.61	ppb	10236	4.33	550	
Na	23	115	2	228.94	228.94	ppb	177777	0.96	55000	
Mg	24	115	2	9192.68	9192.68	ppb	3279300	1.64	55000	
Al	27	115	2	15671.02	15671.02	ppb	2132210	2.30	16500	
K	39	115	2	2421.74	2421.74	ppb	674264	1.39	55000	
Ca	44	115	2	54268.98	54268.98	ppb	742239	2.07	55000	
V	51	115	2	51.87	51.87	ppb	151803	2.00	550	
Cr	52	115	2	31.39	31.39	ppb	112613	2.09	550	
Mn	55	115	2	2575.74	2575.74	ppb	5606605	1.64	550	>LDR
Fe	56	115	2	61401.74	61401.74	ppb	187081719	1.52	55000	>LDR
Co	59	115	2	46.23	46.23	ppb	263725	1.75	550	
Ni	60	115	2	81.22	81.22	ppb	121408	1.23	550	
Cu	65	115	2	226.50	226.50	ppb	454924	1.68	550	
Zn	66	115	2	266.88	266.88	ppb	168786	1.93	550	
As	75	115	2	39.32	39.32	ppb	14911	2.24	550	
Se	78	115	2	4.68	4.68	ppb	170	10.21	2750	
Mo	95	115	1	11.28	11.28	ppb	52809	3.32	550	
Ag	107	115	1	0.25	0.25	ppb	3585	3.34	550	
Cd	111	115	1	0.98	0.98	ppb	2646	6.18	550	
Sb	121	115	1	5.98	5.98	ppb	59420	4.40	550	
Ba	137	159	1	221.24	221.24	ppb	1026234	4.99	550	
Tl	205	165	1	0.87	0.87	ppb	34398	3.91	550	
Pb	208	165	1	181.86	181.86	ppb	4633063	4.03	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	722599	1.15	722209	100.1	70	130	
Sc	45	2	37175	1.70	38016	97.8	70	130	
In	115	1	975192	0.62	1119445	87.1	70	130	
In	115	2	210066	1.18	260773	80.6	70	130	
Tb	159	1	1760798	0.51	1814356	97.0	70	130	
Tb	159	2	798230	0.14	861474	92.7	70	130	
Ho	165	1	1735886	1.18	1778678	97.6	70	130	
Ho	165	2	807720	0.27	861026	93.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**039SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T18:12:17-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.01	0.01	ppb	253	10.53	550	
Na	23	115	2	3.37	3.37	ppb	12012	2.08	55000	
Mg	24	115	2	2.34	2.34	ppb	1795	6.32	55000	
Al	27	115	2	2.07	2.07	ppb	498	16.96	16500	
K	39	115	2	-3.15	-3.15	ppb	17612	0.27	55000	
Ca	44	115	2	3.78	3.78	ppb	124	16.14	55000	
V	51	115	2	0.01	0.01	ppb	91	21.44	550	
Cr	52	115	2	0.02	0.02	ppb	692	12.28	550	
Mn	55	115	2	0.09	0.09	ppb	539	4.12	550	
Fe	56	115	2	8.85	8.85	ppb	42187	5.10	55000	
Co	59	115	2	0.01	0.01	ppb	151	23.59	550	
Ni	60	115	2	0.02	0.02	ppb	260	14.28	550	
Cu	65	115	2	0.23	0.23	ppb	682	6.19	550	
Zn	66	115	2	0.06	0.06	ppb	370	3.25	550	
As	75	115	2	0.01	0.01	ppb	9	45.02	550	
Se	78	115	2	0.13	0.13	ppb	17	30.55	2750	
Mo	95	115	1	0.04	0.04	ppb	276	11.93	550	
Ag	107	115	1	0.00	0.00	ppb	334	23.61	550	
Cd	111	115	1	0.02	0.02	ppb	57	21.46	550	
Sb	121	115	1	0.04	0.04	ppb	677	10.06	550	
Ba	137	159	1	-0.03	-0.03	ppb	377	4.06	550	
Tl	205	165	1	0.02	0.02	ppb	1510	6.01	550	
Pb	208	165	1	0.13	0.13	ppb	4766	5.13	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	595204	0.60	722209	82.4	70	130	
Sc	45	2	30815	1.09	38016	81.1	70	130	
In	115	1	1002095	0.28	1119445	89.5	70	130	
In	115	2	225194	1.06	260773	86.4	70	130	
Tb	159	1	1694754	1.14	1814356	93.4	70	130	
Tb	159	2	778881	0.74	861474	90.4	70	130	
Ho	165	1	1649531	0.13	1778678	92.7	70	130	
Ho	165	2	784013	0.67	861026	91.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0406CCV.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T18:16:49-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	45.22	ppb	50	267176	4.43	90.44	90	110	
Na	23	115	2	4744.20	ppb	5000	3780553	1.59	94.88	90	110	
Mg	24	115	2	4779.91	ppb	5000	1835796	1.03	95.60	90	110	
Al	27	115	2	1412.82	ppb	1500	207078	1.65	94.19	90	110	
K	39	115	2	4829.21	ppb	5000	1428734	1.32	96.58	90	110	
Ca	44	115	2	4803.71	ppb	5000	70779	1.26	96.07	90	110	
V	51	115	2	47.60	ppb	50	149951	1.89	95.20	90	110	
Cr	52	115	2	48.18	ppb	50	185761	2.22	96.37	90	110	
Mn	55	115	2	48.02	ppb	50	112828	1.52	96.03	90	110	
Fe	56	115	2	4879.57	ppb	5000	16015820	1.57	97.59	90	110	
Co	59	115	2	49.01	ppb	50	300941	1.26	98.01	90	110	
Ni	60	115	2	49.03	ppb	50	78968	3.07	98.05	90	110	
Cu	65	115	2	47.87	ppb	50	103641	0.99	95.74	90	110	
Zn	66	115	2	49.92	ppb	50	34247	1.62	99.85	90	110	
As	75	115	2	48.64	ppb	50	19856	1.28	97.29	90	110	
Se	78	115	2	246.66	ppb	250	9028	2.51	98.66	90	110	
Mo	95	115	1	48.21	ppb	50	228819	5.00	96.42	90	110	
Ag	107	115	1	49.86	ppb	50	677833	4.88	99.72	90	110	
Cd	111	115	1	49.31	ppb	50	134029	4.98	98.63	90	110	
Sb	121	115	1	49.23	ppb	50	494505	5.22	98.46	90	110	
Ba	137	159	1	47.95	ppb	50	211537	4.91	95.89	90	110	
Tl	205	165	1	50.09	ppb	50	1843770	4.61	100.19	90	110	
Pb	208	165	1	46.29	ppb	50	1121239	4.97	92.58	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	608034	0.66	722209	84.2	70	130	
Sc	45	2	31733	2.01	38016	83.5	70	130	
In	115	1	989659	0.79	1119445	88.4	70	130	
In	115	2	226127	1.04	260773	86.7	70	130	
Tb	159	1	1672099	0.74	1814356	92.2	70	130	
Tb	159	2	784155	0.29	861474	91.0	70	130	
Ho	165	1	1649166	0.09	1778678	92.7	70	130	
Ho	165	2	787065	0.77	861026	91.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0416CCB.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T18:21:15-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune Step	Mass Value	Units	QC High	QC Flag
Be	9	165	1	0.02	ppb	1	
Na	23	115	2	0.71	ppb	500	
Mg	24	115	2	0.55	ppb	500	
Al	27	115	2	0.55	ppb	500	
K	39	115	2	-2.83	ppb	500	
Ca	44	115	2	4.19	ppb	500	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	0.01	ppb	2	
Mn	55	115	2	0.03	ppb	6	
Fe	56	115	2	2.88	ppb	500	
Co	59	115	2	0.00	ppb	2	
Ni	60	115	2	0.05	ppb	3	
Cu	65	115	2	0.04	ppb	10	
Zn	66	115	2	0.07	ppb	20	
As	75	115	2	0.03	ppb	1	
Se	78	115	2	0.16	ppb	10	
Mo	95	115	1	0.08	ppb	1	
Ag	107	115	1	0.01	ppb	1	
Cd	111	115	1	0.01	ppb	2	
Sb	121	115	1	0.08	ppb	4	
Ba	137	159	1	-0.06	ppb	5	
Tl	205	165	1	0.03	ppb	2	
Pb	208	165	1	0.10	ppb	2	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	611637	0.34	722209	84.7	70	130	
Sc	45	2	31776	0.56	38016	83.6	70	130	
In	115	1	1003995	0.66	1119445	89.7	70	130	
In	115	2	229805	1.07	260773	88.1	70	130	
Tb	159	1	1686215	0.25	1814356	92.9	70	130	
Tb	159	2	786043	0.48	861474	91.2	70	130	
Ho	165	1	1667220	0.64	1778678	93.7	70	130	
Ho	165	2	786932	0.25	861026	91.4	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-011**
Data File Name	**042SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T18:25:48-04:00**
Type	**Sample**
VialNumber	**3107**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.26	1.26	ppb	7523	2.24	550	
Na	23	115	2	780.46	780.46	ppb	546750	1.31	55000	
Mg	24	115	2	25840.78	25840.78	ppb	8612776	1.37	55000	
Al	27	115	2	20694.50	20694.50	ppb	2631051	0.57	16500	>LDR
K	39	115	2	3929.56	3929.56	ppb	1012355	0.74	55000	
Ca	44	115	2	242376.75	242376.75	ppb	3097516	1.03	55000	>LDR
V	51	115	2	61.96	61.96	ppb	169446	1.12	550	
Cr	52	115	2	58.81	58.81	ppb	196702	1.21	550	
Mn	55	115	2	1788.31	1788.31	ppb	3637665	0.86	550	>LDR
Fe	56	115	2	67134.96	67134.96	ppb	191151210	1.11	55000	>LDR
Co	59	115	2	33.30	33.30	ppb	177554	1.56	550	
Ni	60	115	2	68.69	68.69	ppb	95978	1.71	550	
Cu	65	115	2	142.69	142.69	ppb	267872	2.21	550	
Zn	66	115	2	618.71	618.71	ppb	365287	1.93	550	>LDR
As	75	115	2	41.75	41.75	ppb	14796	1.44	550	
Se	78	115	2	4.63	4.63	ppb	157	20.81	2750	
Mo	95	115	1	3.08	3.08	ppb	13418	5.14	550	
Ag	107	115	1	0.30	0.30	ppb	3984	3.28	550	
Cd	111	115	1	1.21	1.21	ppb	3025	5.06	550	
Sb	121	115	1	1.36	1.36	ppb	12733	8.65	550	
Ba	137	159	1	231.61	231.61	ppb	1010033	3.78	550	
Tl	205	165	1	0.67	0.67	ppb	25117	4.09	550	
Pb	208	165	1	317.02	317.02	ppb	7580299	3.47	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	714609	1.01	722209	98.9	70	130	
Sc	45	2	37009	0.31	38016	97.4	70	130	
In	115	1	905886	0.54	1119445	80.9	70	130	
In	115	2	196311	0.24	260773	75.3	70	130	
Tb	159	1	1655500	0.59	1814356	91.2	70	130	
Tb	159	2	749540	0.99	861474	87.0	70	130	
Ho	165	1	1629869	0.28	1778678	91.6	70	130	
Ho	165	2	755971	1.20	861026	87.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-012**
Data File Name	**043SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T18:30:15-04:00**
Type	**Sample**
VialNumber	**3108**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.54	1.54	ppb	9140	3.38	550	
Na	23	115	2	219.01	219.01	ppb	158430	0.76	55000	
Mg	24	115	2	16854.97	16854.97	ppb	5587965	1.27	55000	
Al	27	115	2	20869.96	20869.96	ppb	2639149	1.33	16500	>LDR
K	39	115	2	2758.58	2758.58	ppb	711642	0.76	55000	
Ca	44	115	2	83605.01	83605.01	ppb	1062774	1.39	55000	>LDR
V	51	115	2	53.12	53.12	ppb	144487	1.46	550	
Cr	52	115	2	39.94	39.94	ppb	133070	2.10	550	
Mn	55	115	2	1313.23	1313.23	ppb	2656965	0.84	550	>LDR
Fe	56	115	2	65095.67	65095.67	ppb	184353388	1.49	55000	>LDR
Co	59	115	2	24.97	24.97	ppb	132445	1.03	550	
Ni	60	115	2	69.24	69.24	ppb	96225	1.04	550	
Cu	65	115	2	165.46	165.46	ppb	308930	1.08	550	
Zn	66	115	2	265.75	265.75	ppb	156216	1.01	550	
As	75	115	2	57.35	57.35	ppb	20213	0.99	550	
Se	78	115	2	5.88	5.88	ppb	196	8.30	2750	
Mo	95	115	1	3.66	3.66	ppb	15859	7.12	550	
Ag	107	115	1	0.33	0.33	ppb	4334	5.90	550	
Cd	111	115	1	0.87	0.87	ppb	2161	3.22	550	
Sb	121	115	1	3.40	3.40	ppb	31248	3.66	550	
Ba	137	159	1	303.45	303.45	ppb	1312498	4.38	550	
Tl	205	165	1	1.35	1.35	ppb	49709	3.60	550	
Pb	208	165	1	480.35	480.35	ppb	11461790	4.27	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	679171	1.26	722209	94.0	70	130	
Sc	45	2	35424	1.56	38016	93.2	70	130	
In	115	1	900489	0.37	1119445	80.4	70	130	
In	115	2	195254	0.82	260773	74.9	70	130	
Tb	159	1	1642031	0.74	1814356	90.5	70	130	
Tb	159	2	747925	0.92	861474	86.8	70	130	
Ho	165	1	1626316	0.84	1778678	91.4	70	130	
Ho	165	2	754662	0.37	861026	87.6	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19178-013**
Data File Name	**044SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T18:34:44-04:00**
Type	**Sample**
VialNumber	**3109**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	1.16	1.16	ppb	6943	3.97	550	
Na	23	115	2	648.60	648.60	ppb	437728	0.78	55000	
Mg	24	115	2	56379.99	56379.99	ppb	18048040	1.11	55000	>LDR
Al	27	115	2	27434.31	27434.31	ppb	3349753	1.38	16500	>LDR
K	39	115	2	3628.67	3628.67	ppb	899025	0.68	55000	
Ca	44	115	2	127980.54	127980.54	ppb	1570801	0.51	55000	>LDR
V	51	115	2	47.85	47.85	ppb	125689	1.71	550	
Cr	52	115	2	45.37	45.37	ppb	145859	0.61	550	
Mn	55	115	2	942.05	942.05	ppb	1840539	1.15	550	>LDR
Fe	56	115	2	68187.36	68187.36	ppb	186468771	1.43	55000	>LDR
Co	59	115	2	30.98	30.98	ppb	158683	1.27	550	
Ni	60	115	2	78.08	78.08	ppb	104759	0.54	550	
Cu	65	115	2	88.65	88.65	ppb	159893	0.39	550	
Zn	66	115	2	247.99	247.99	ppb	140793	2.02	550	
As	75	115	2	34.40	34.40	ppb	11711	1.50	550	
Se	78	115	2	4.15	4.15	ppb	136	6.93	2750	
Mo	95	115	1	1.52	1.52	ppb	6406	5.10	550	
Ag	107	115	1	0.27	0.27	ppb	3534	5.01	550	
Cd	111	115	1	0.77	0.77	ppb	1862	6.10	550	
Sb	121	115	1	0.29	0.29	ppb	2797	9.40	550	
Ba	137	159	1	218.47	218.47	ppb	940020	4.44	550	
Tl	205	165	1	0.26	0.26	ppb	10264	5.90	550	
Pb	208	165	1	47.72	47.72	ppb	1134364	5.83	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	696151	1.60	722209	96.4	70	130	
Sc	45	2	35680	0.67	38016	93.9	70	130	
In	115	1	873815	0.33	1119445	78.1	70	130	
In	115	2	188573	1.92	260773	72.3	70	130	
Tb	159	1	1633656	0.50	1814356	90.0	70	130	
Tb	159	2	741732	0.56	861474	86.1	70	130	
Ho	165	1	1619198	1.52	1778678	91.0	70	130	
Ho	165	2	749330	0.56	861026	87.0	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19230-001**
Data File Name	**045SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T18:39:13-04:00**
Type	**Sample**
VialNumber	**3110**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	2.13	2.13	ppb	13297	2.88	550	
Na	23	115	2	1543.26	1543.26	ppb	1175595	2.27	55000	
Mg	24	115	2	23828.49	23828.49	ppb	8700491	2.64	55000	
Al	27	115	2	65329.43	65329.43	ppb	9098129	2.28	16500	>LDR
K	39	115	2	26139.96	26139.96	ppb	7276480	1.78	55000	
Ca	44	115	2	19906.96	19906.96	ppb	278757	2.80	55000	
V	51	115	2	189.44	189.44	ppb	567405	2.14	550	
Cr	52	115	2	135.95	135.95	ppb	497376	2.37	550	
Mn	55	115	2	1611.46	1611.46	ppb	3590423	1.32	550	>LDR
Fe	56	115	2	108212.65	108212.65	ppb	337498346	2.18	55000	>LDR
Co	59	115	2	59.58	59.58	ppb	347905	1.76	550	
Ni	60	115	2	87.86	87.86	ppb	134431	2.70	550	
Cu	65	115	2	162.26	162.26	ppb	333653	1.88	550	
Zn	66	115	2	281.80	281.80	ppb	182422	2.19	550	
As	75	115	2	11.01	11.01	ppb	4279	2.85	550	
Se	78	115	2	4.08	4.08	ppb	153	7.13	2750	
Mo	95	115	1	4.12	4.12	ppb	18847	4.22	550	
Ag	107	115	1	0.21	0.21	ppb	2976	5.40	550	
Cd	111	115	1	0.37	0.37	ppb	977	6.03	550	
Sb	121	115	1	0.45	0.45	ppb	4609	5.02	550	
Ba	137	159	1	517.43	517.43	ppb	2365355	5.08	550	
Tl	205	165	1	0.75	0.75	ppb	29548	6.16	550	
Pb	208	165	1	79.35	79.35	ppb	1996709	4.46	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1000709	2.38	722209	138.6	70	130	IS Fail
Sc	45	2	56814	2.33	38016	149.4	70	130	IS Fail
In	115	1	951842	1.51	1119445	85.0	70	130	
In	115	2	215032	1.69	260773	82.5	70	130	
Tb	159	1	1736015	0.19	1814356	95.7	70	130	
Tb	159	2	809814	1.48	861474	94.0	70	130	
Ho	165	1	1714160	0.50	1778678	96.4	70	130	
Ho	165	2	827732	1.69	861026	96.1	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19228-001**
Data File Name	**046SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T18:43:38-04:00**
Type	**Sample**
VialNumber	**3111**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	2.06	2.06	ppb	13487	4.04	550	
Na	23	115	2	1873.36	1873.36	ppb	1492052	0.82	55000	
Mg	24	115	2	20568.78	20568.78	ppb	7863700	1.65	55000	
Al	27	115	2	52164.38	52164.38	ppb	7606512	1.50	16500	>LDR
K	39	115	2	21462.30	21462.30	ppb	6258956	1.63	55000	
Ca	44	115	2	28997.16	28997.16	ppb	425098	1.73	55000	
V	51	115	2	189.95	189.95	ppb	595722	1.54	550	
Cr	52	115	2	127.51	127.51	ppb	488507	1.75	550	
Mn	55	115	2	1476.86	1476.86	ppb	3445741	1.33	550	>LDR
Fe	56	115	2	108612.57	108612.57	ppb	354715635	1.91	55000	>LDR
Co	59	115	2	46.12	46.12	ppb	282029	1.56	550	
Ni	60	115	2	74.74	74.74	ppb	119764	1.44	550	
Cu	65	115	2	192.87	192.87	ppb	415269	2.21	550	
Zn	66	115	2	339.25	339.25	ppb	229902	2.69	550	
As	75	115	2	19.52	19.52	ppb	7936	2.83	550	
Se	78	115	2	4.26	4.26	ppb	167	7.86	2750	
Mo	95	115	1	4.83	4.83	ppb	23532	6.76	550	
Ag	107	115	1	0.26	0.26	ppb	3982	3.98	550	
Cd	111	115	1	0.60	0.60	ppb	1695	4.42	550	
Sb	121	115	1	1.10	1.10	ppb	11545	4.55	550	
Ba	137	159	1	396.46	396.46	ppb	1915963	5.68	550	
Tl	205	165	1	0.61	0.61	ppb	25333	4.87	550	
Pb	208	165	1	214.85	214.85	ppb	5662812	4.41	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1033571	1.65	722209	143.1	70	130	IS Fail
Sc	45	2	56865	2.32	38016	149.6	70	130	IS Fail
In	115	1	1014272	0.62	1119445	90.6	70	130	
In	115	2	225195	2.25	260773	86.4	70	130	
Tb	159	1	1834846	0.79	1814356	101.1	70	130	
Tb	159	2	831024	1.47	861474	96.5	70	130	
Ho	165	1	1796023	1.34	1778678	101.0	70	130	
Ho	165	2	841671	0.98	861026	97.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19229-001**
Data File Name	**047SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T18:48:03-04:00**
Type	**Sample**
VialNumber	**3112**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	2.29	2.29	ppb	15310	6.72	550	
Na	23	115	2	1676.67	1676.67	ppb	1382912	0.46	55000	
Mg	24	115	2	18330.01	18330.01	ppb	7252548	1.91	55000	
Al	27	115	2	50278.60	50278.60	ppb	7588010	2.24	16500	>LDR
K	39	115	2	19778.26	19778.26	ppb	5970627	1.09	55000	
Ca	44	115	2	23401.94	23401.94	ppb	355096	2.29	55000	
V	51	115	2	185.64	185.64	ppb	602546	2.21	550	
Cr	52	115	2	140.85	140.85	ppb	558439	2.44	550	
Mn	55	115	2	1694.97	1694.97	ppb	4093126	2.44	550	>LDR
Fe	56	115	2	120417.54	120417.54	ppb	406972269	1.54	55000	>LDR
Co	59	115	2	52.46	52.46	ppb	331955	1.42	550	
Ni	60	115	2	76.13	76.13	ppb	126252	2.56	550	
Cu	65	115	2	171.41	171.41	ppb	381998	2.68	550	
Zn	66	115	2	291.38	291.38	ppb	204384	1.55	550	
As	75	115	2	16.87	16.87	ppb	7102	4.04	550	
Se	78	115	2	3.81	3.81	ppb	156	9.57	2750	
Mo	95	115	1	3.99	3.99	ppb	20246	3.80	550	
Ag	107	115	1	0.26	0.26	ppb	4047	8.12	550	
Cd	111	115	1	0.45	0.45	ppb	1313	5.50	550	
Sb	121	115	1	0.91	0.91	ppb	10035	4.40	550	
Ba	137	159	1	396.35	396.35	ppb	1947573	4.16	550	
Tl	205	165	1	0.53	0.53	ppb	22724	7.19	550	
Pb	208	165	1	148.56	148.56	ppb	4021087	4.53	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	1070307	1.94	722209	148.2	70	130	IS Fail
Sc	45	2	57959	1.06	38016	152.5	70	130	IS Fail
In	115	1	1056053	0.54	1119445	94.3	70	130	
In	115	2	233043	2.08	260773	89.4	70	130	
Tb	159	1	1866583	1.00	1814356	102.9	70	130	
Tb	159	2	853163	1.08	861474	99.0	70	130	
Ho	165	1	1845244	0.99	1778678	103.7	70	130	
Ho	165	2	867940	0.84	861026	100.8	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**AD19233-002**
Data File Name	**048SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T18:52:27-04:00**
Type	**Sample**
VialNumber	**3201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Fail**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	ConcConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.68	0.68	ppb	4612	4.76	550	
Na	23	115	2	1645.47	1645.47	ppb	1363383	0.36	55000	
Mg	24	115	2	4105.25	4105.25	ppb	1631923	1.68	55000	
Al	27	115	2	10443.81	10443.81	ppb	1582986	1.28	16500	
K	39	115	2	944.19	944.19	ppb	304602	0.79	55000	
Ca	44	115	2	22545.32	22545.32	ppb	343544	1.72	55000	
V	51	115	2	124.96	124.96	ppb	407330	1.62	550	
Cr	52	115	2	45.25	45.25	ppb	180594	1.90	550	
Mn	55	115	2	5305.26	5305.26	ppb	12864133	1.29	550	>LDR
Fe	56	115	2	73151.75	73151.75	ppb	248294825	1.33	55000	>LDR
Co	59	115	2	17.36	17.36	ppb	110372	1.47	550	
Ni	60	115	2	58.96	58.96	ppb	98246	0.72	550	
Cu	65	115	2	199.36	199.36	ppb	446086	1.64	550	
Zn	66	115	2	330.77	330.77	ppb	232960	1.61	550	
As	75	115	2	777.06	777.06	ppb	328193	1.11	550	>LDR
Se	78	115	2	6.94	6.94	ppb	275	9.17	2750	
Mo	95	115	1	7.39	7.39	ppb	38166	4.39	550	
Ag	107	115	1	3.30	3.30	ppb	48946	3.05	550	
Cd	111	115	1	1.05	1.05	ppb	3107	3.84	550	
Sb	121	115	1	2.07	2.07	ppb	22785	3.99	550	
Ba	137	159	1	732.64	732.84	ppb	3552444	3.79	550	>LDR
Tl	205	165	1	0.12	0.12	ppb	5575	4.00	550	
Pb	208	165	1	252.57	252.57	ppb	6709857	2.97	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	743616	0.38	722209	103.0	70	130	
Sc	45	2	37948	0.47	38016	99.8	70	130	
In	115	1	1074987	0.61	1119445	96.0	70	130	
In	115	2	234018	0.57	260773	89.7	70	130	
Tb	159	1	1841952	0.74	1814356	101.5	70	130	
Tb	159	2	836866	0.37	861474	97.1	70	130	
Ho	165	1	1810859	0.59	1778678	101.8	70	130	
Ho	165	2	837424	0.51	861026	97.3	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Sample Report

Sample Name	**RINSE**
Data File Name	**049SMPL.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T18:56:53-04:00**
Type	**Sample**
VialNumber	**1101**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	CorrConc	RawConc	Units	CPS	%RSD	High Value	QC Flag
Be	9	165	1	0.01	0.01	ppb	259	19.33	550	
Na	23	115	2	3.34	3.34	ppb	12438	0.30	55000	
Mg	24	115	2	2.55	2.55	ppb	1942	4.26	55000	
Al	27	115	2	4.30	4.30	ppb	855	45.09	16500	
K	39	115	2	-0.29	-0.29	ppb	19132	1.15	55000	
Ca	44	115	2	4.12	4.12	ppb	134	16.51	55000	
V	51	115	2	0.04	0.04	ppb	166	24.02	550	
Cr	52	115	2	0.03	0.03	ppb	724	6.13	550	
Mn	55	115	2	0.17	0.17	ppb	756	16.58	550	
Fe	56	115	2	10.23	10.23	ppb	48434	3.82	55000	
Co	59	115	2	0.01	0.01	ppb	176	35.29	550	
Ni	60	115	2	0.04	0.04	ppb	296	18.54	550	
Cu	65	115	2	0.23	0.23	ppb	721	8.17	550	
Zn	66	115	2	0.08	0.08	ppb	392	10.38	550	
As	75	115	2	0.09	0.09	ppb	43	25.90	550	
Se	78	115	2	0.15	0.15	ppb	18	10.81	2750	
Mo	95	115	1	0.05	0.05	ppb	303	8.30	550	
Ag	107	115	1	0.00	0.00	ppb	318	12.11	550	
Cd	111	115	1	0.01	0.01	ppb	46	18.02	550	
Sb	121	115	1	0.01	0.01	ppb	403	16.77	550	
Ba	137	159	1	-0.03	-0.03	ppb	399	26.65	550	
Tl	205	165	1	0.01	0.01	ppb	1320	3.94	550	
Pb	208	165	1	0.10	0.10	ppb	4083	1.35	550	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	646845	0.05	722209	89.6	70	130	
Sc	45	2	32473	2.55	38016	85.4	70	130	
In	115	1	1044977	0.14	1119445	93.3	70	130	
In	115	2	233592	0.76	260773	89.6	70	130	
Tb	159	1	1745105	0.38	1814356	96.2	70	130	
Tb	159	2	780758	1.40	861474	90.6	70	130	
Ho	165	1	1706251	0.74	1778678	95.9	70	130	
Ho	165	2	790875	1.53	861026	91.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Verification (CCV) - US EPA Method 6020

Sample Name	**CCV V-334465**
Data File Name	**0506CCV.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T19:01:25-04:00**
Type	**6-CCV**
VialNumber	**1201**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

QC Analyte Table

Element	m/z	ISTD	Tune	Conc	Units	Expected	CPS	%RSD	%Rec	%QC Low	%QC High	QC Flag
Be	9	165	1	48.00	ppb	50	281824	4.53	95.99	90	110	
Na	23	115	2	4829.35	ppb	5000	3855683	0.48	96.59	90	110	
Mg	24	115	2	4875.13	ppb	5000	1876017	1.28	97.50	90	110	
Al	27	115	2	1443.63	ppb	1500	212004	0.77	96.24	90	110	
K	39	115	2	4896.07	ppb	5000	1451140	1.37	97.92	90	110	
Ca	44	115	2	4805.06	ppb	5000	70938	0.95	96.10	90	110	
V	51	115	2	48.80	ppb	50	154008	0.12	97.59	90	110	
Cr	52	115	2	48.84	ppb	50	188648	1.99	97.68	90	110	
Mn	55	115	2	48.67	ppb	50	114590	0.47	97.34	90	110	
Fe	56	115	2	4995.05	ppb	5000	16425984	0.67	99.90	90	110	
Co	59	115	2	49.75	ppb	50	306109	0.72	99.50	90	110	
Ni	60	115	2	49.37	ppb	50	79684	1.43	98.75	90	110	
Cu	65	115	2	48.79	ppb	50	105830	1.75	97.57	90	110	
Zn	66	115	2	49.55	ppb	50	34062	1.95	99.09	90	110	
As	75	115	2	48.72	ppb	50	19925	1.37	97.44	90	110	
Se	78	115	2	245.07	ppb	250	8986	0.66	98.03	90	110	
Mo	95	115	1	49.58	ppb	50	237933	4.09	99.16	90	110	
Ag	107	115	1	50.98	ppb	50	700715	4.13	101.95	90	110	
Cd	111	115	1	50.19	ppb	50	137924	4.56	100.38	90	110	
Sb	121	115	1	50.11	ppb	50	508938	4.79	100.22	90	110	
Ba	137	159	1	49.08	ppb	50	218334	4.66	98.16	90	110	
Tl	205	165	1	50.74	ppb	50	1855734	3.15	101.47	90	110	
Pb	208	165	1	47.05	ppb	50	1132549	4.31	94.10	90	110	

QC ISTD Table

Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	630517	0.33	722209	87.3	70	130	
Sc	45	2	31895	1.27	38016	83.9	70	130	
In	115	1	1000911	0.39	1119445	89.4	70	130	
In	115	2	226556	0.38	260773	86.9	70	130	
Tb	159	1	1685593	0.47	1814356	92.9	70	130	
Tb	159	2	772727	0.32	861474	89.7	70	130	
Ho	165	1	1639017	1.70	1778678	92.1	70	130	
Ho	165	2	773633	0.18	861026	89.9	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u

Continuing Calibration Blank (CCB) - US EPA Method 6020

Sample Name	**CCB V-334462**
Data File Name	**0516CCB.D**
DataPath	**C:\ICPMH\1\DATA\S091620B.b**
Acq Date Time	**2020-09-16T19:05:52-04:00**
Type	**6-CCB**
VialNumber	**1202**
Dilution	**1**
Comment	**MS_7700 6020 SOIL**
Operator	
ISTDRefDataFileName	**002CALB.D**
SamplePassFail	**Pass**
ISTD PassFail	**Pass**

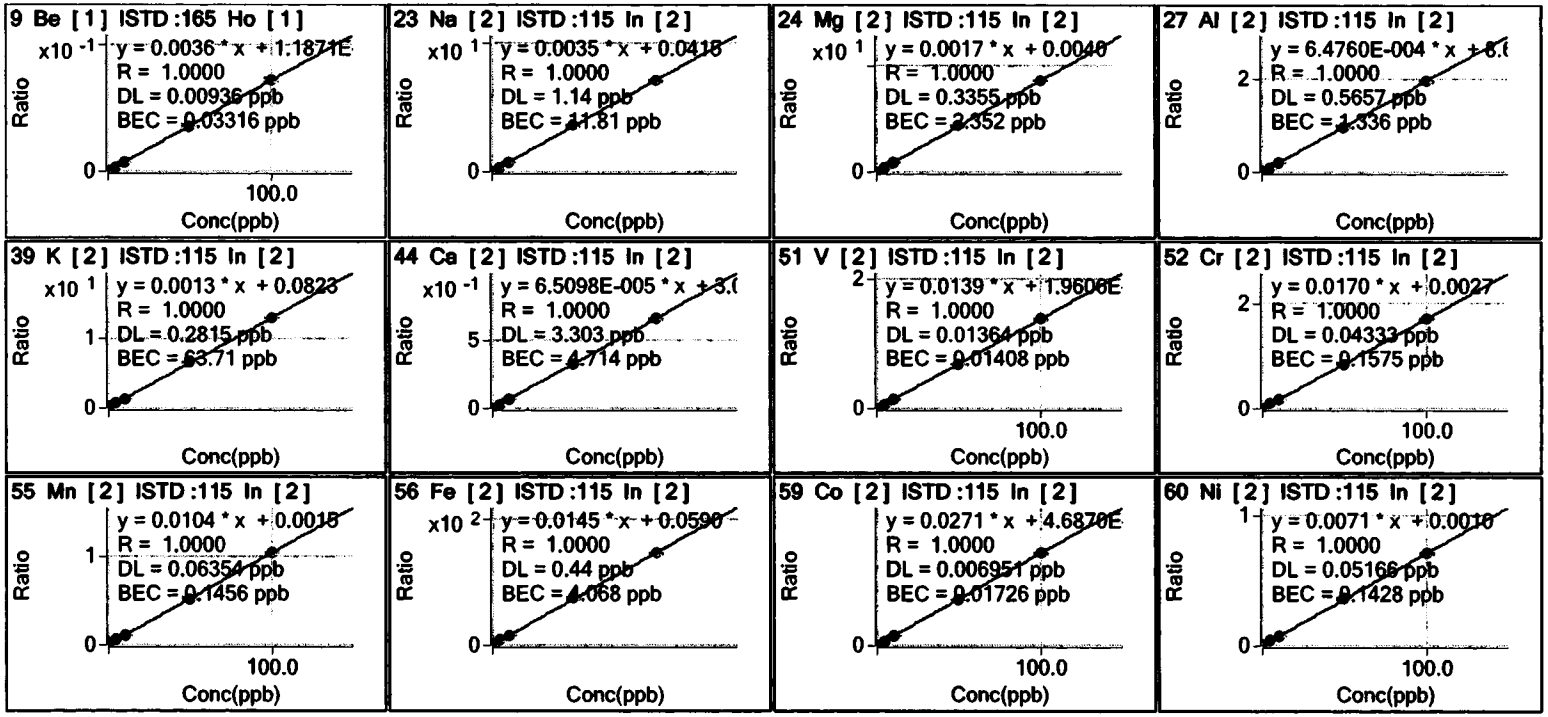
QC Analyte Table

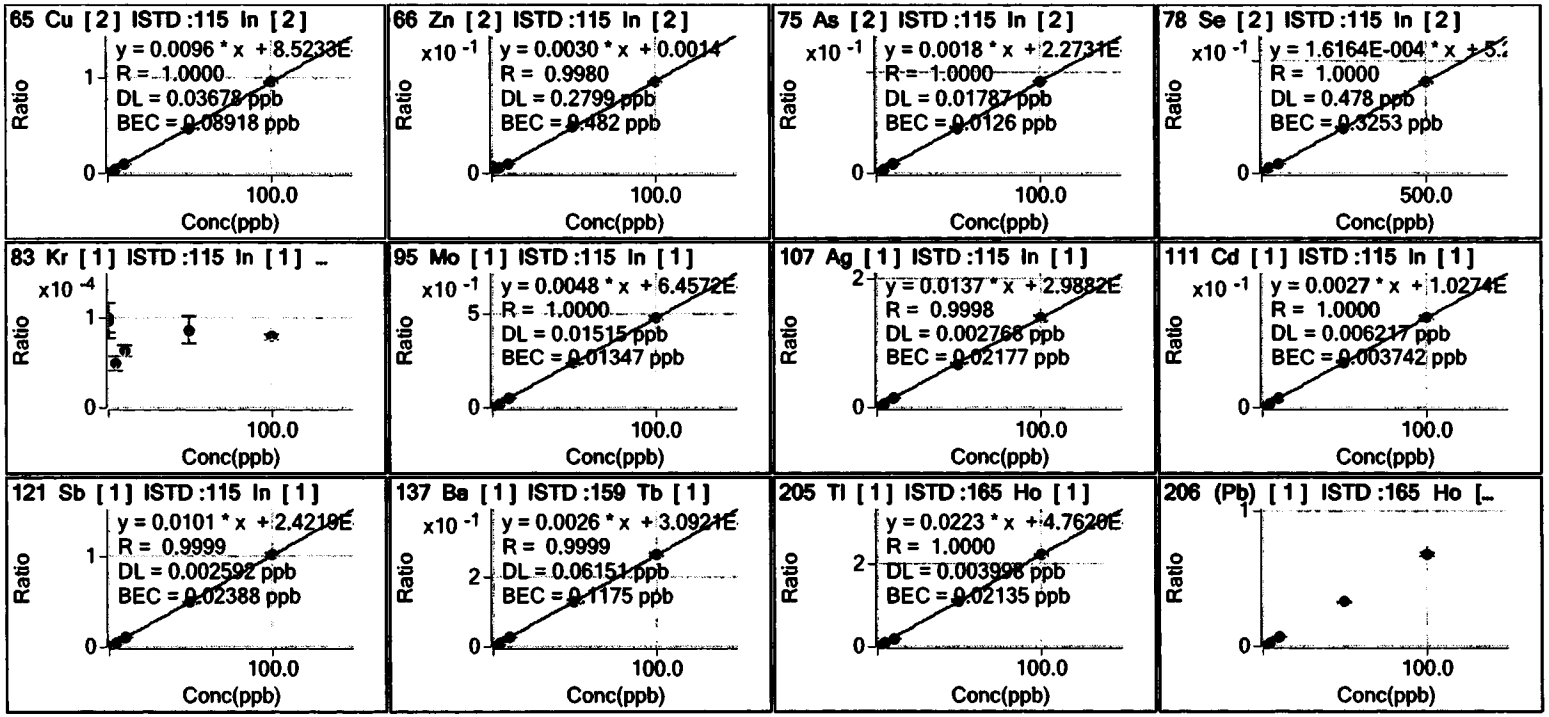
Element	m/z	ISTD	Tune Step	Meas Value	Units	QC High	QC Flag
Be	9	165	1	0.01	ppb	1	
Na	23	115	2	0.87	ppb	500	
Mg	24	115	2	0.56	ppb	500	
Al	27	115	2	0.89	ppb	500	
K	39	115	2	-1.17	ppb	500	
Ca	44	115	2	2.47	ppb	500	
V	51	115	2	0.01	ppb	1	
Cr	52	115	2	0.02	ppb	2	
Mn	55	115	2	0.08	ppb	6	
Fe	56	115	2	3.29	ppb	500	
Co	59	115	2	0.01	ppb	2	
Ni	60	115	2	0.05	ppb	3	
Cu	65	115	2	0.01	ppb	10	
Zn	66	115	2	0.06	ppb	20	
As	75	115	2	0.02	ppb	1	
Se	78	115	2	0.01	ppb	10	
Mo	95	115	1	0.08	ppb	1	
Ag	107	115	1	0.02	ppb	1	
Cd	111	115	1	0.01	ppb	2	
Sb	121	115	1	0.05	ppb	4	
Ba	137	159	1	-0.06	ppb	5	
Tl	205	165	1	0.02	ppb	2	
Pb	208	165	1	0.08	ppb	2	

QC ISTD Table

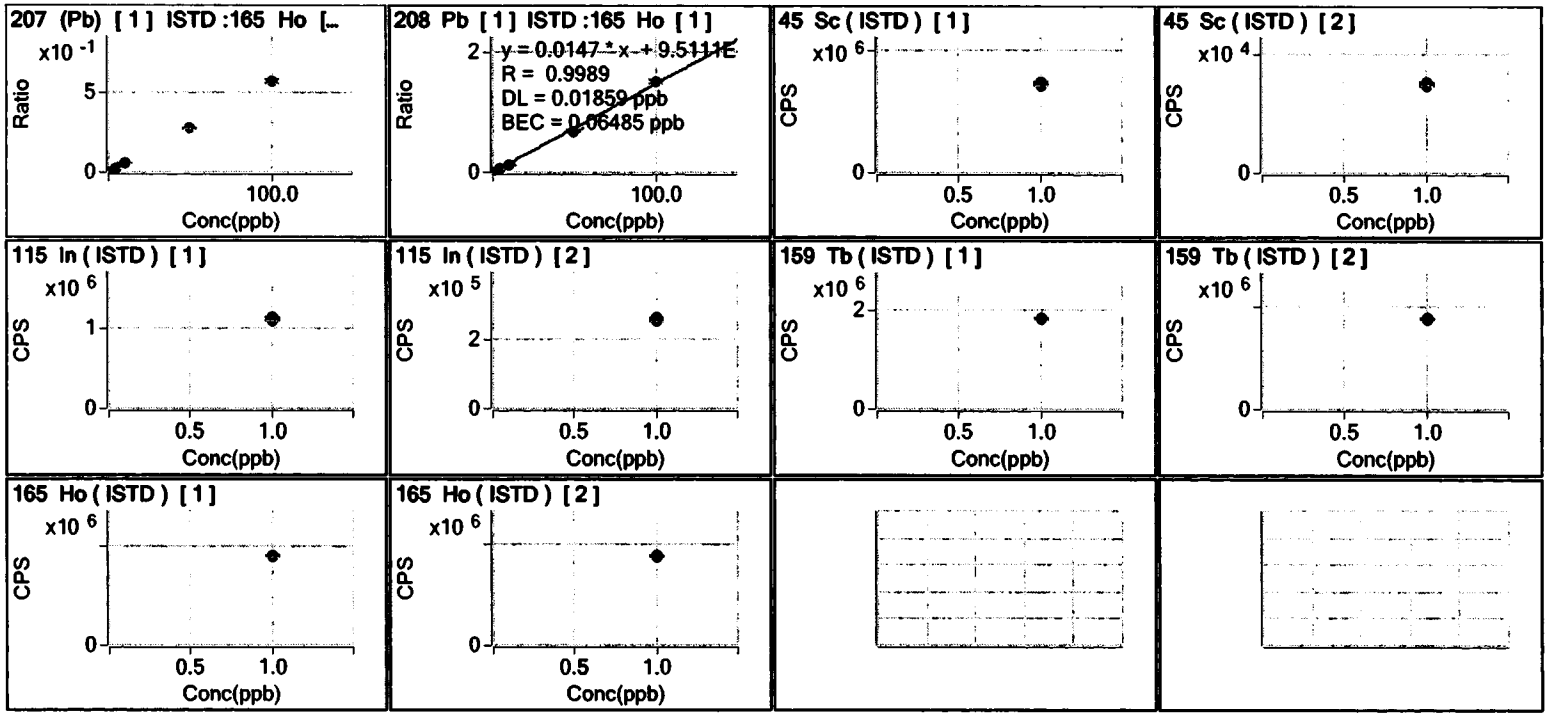
Element	m/z	Tune Step	CPS	%RSD	Reference CPS	%Recovery	Lower Limit	Upper Limit	QC Flag
Sc	45	1	606461	0.53	722209	84.0	70	130	
Sc	45	2	31520	1.14	38016	82.9	70	130	
In	115	1	978253	0.65	1119445	87.4	70	130	
In	115	2	223831	0.84	260773	85.8	70	130	
Tb	159	1	1642068	0.56	1814356	90.5	70	130	
Tb	159	2	759069	0.75	861474	88.1	70	130	
Ho	165	1	1595603	0.55	1778678	89.7	70	130	
Ho	165	2	762284	0.65	861026	88.5	70	130	

TuneStep	TuneFile
1	nogas.u
2	he.u


9 Be [1] ISTD :165 Ho [1]
y = 0.0036 * x + 1.1871E
R = 1.0000
DL = 0.00936 ppb
BEC = 0.03316 ppb
23 Na [2] ISTD :115 In [2]
y = 0.0035 * x + 0.0418
R = 1.0000
DL = 1.14 ppb
BEC = 11.81 ppb
24 Mg [2] ISTD :115 In [2]
y = 0.0017 * x + 0.0046
R = 1.0000
DL = 0.3355 ppb
BEC = 2.352 ppb
27 Al [2] ISTD :115 In [2]
y = 6.4760E-004 * x +
R = 1.0000
DL = 0.5657 ppb
BEC = 1.336 ppb
39 K [2] ISTD :115 In [2]
y = 0.0013 * x + 0.0823
R = 1.0000
DL = 0.2815 ppb
BEC = 63.71 ppb
44 Ca [2] ISTD :115 In [2]
y = 6.5098E-005 * x +
R = 1.0000
DL = 3.303 ppb
BEC = 4.714 ppb
51 V [2] ISTD :115 In [2]
y = 0.0139 * x + 1.9606E
R = 1.0000
DL = 0.01364 ppb
BEC = 0.01408 ppb
52 Cr [2] ISTD :115 In [2]
y = 0.0170 * x + 0.0027
R = 1.0000
DL = 0.04333 ppb
BEC = 0.1575 ppb
55 Mn [2] ISTD :115 In [2]
y = 0.0104 * x + 0.0015
R = 1.0000
DL = 0.06354 ppb
BEC = 0.1456 ppb
56 Fe [2] ISTD :115 In [2]
y = 0.0145 * x + 0.0590
R = 1.0000
DL = 0.44 ppb
BEC = 4.068 ppb
59 Co [2] ISTD :115 In [2]
y = 0.0271 * x + 4.6870E
R = 1.0000
DL = 0.006951 ppb
BEC = 0.01726 ppb
60 Ni [2] ISTD :115 In [2]
y = 0.0071 * x + 0.0010
R = 1.0000
DL = 0.05166 ppb
BEC = 0.1428 ppb
Ratio
Conc(ppb)
100.0


65 Cu [2] ISTD :115 In [2]
y = 0.0096 * x + 8.5233E
R = 1.0000
DL = 0.03678 ppb
BEC = 0.08918 ppb
66 Zn [2] ISTD :115 In [2]
y = 0.0030 * x + 0.0014
R = 0.9980
DL = 0.2799 ppb
BEC = 0.482 ppb
75 As [2] ISTD :115 In [2]
y = 0.0018 * x + 2.2731E
R = 1.0000
DL = 0.01787 ppb
BEC = 0.0126 ppb
78 Se [2] ISTD :115 In [2]
y = 1.6164E-004 * x + 5.
R = 1.0000
DL = 0.478 ppb
BEC = 0.3253 ppb
83 Kr [1] ISTD :115 In [1] ...
95 Mo [1] ISTD :115 In [1]
y = 0.0048 * x + 6.4572E
R = 1.0000
DL = 0.01515 ppb
BEC = 0.01347 ppb
107 Ag [1] ISTD :115 In [1]
y = 0.0137 * x + 2.9882E
R = 0.9998
DL = 0.002766 ppb
BEC = 0.02177 ppb
111 Cd [1] ISTD :115 In [1]
y = 0.0027 * x + 1.0274E
R = 1.0000
DL = 0.006217 ppb
BEC = 0.003742 ppb
121 Sb [1] ISTD :115 In [1]
y = 0.0101 * x + 2.4219E
R = 0.9999
DL = 0.002592 ppb
BEC = 0.02388 ppb
137 Ba [1] ISTD :159 Tb [1]
y = 0.0026 * x + 3.0921E
R = 0.9999
DL = 0.06151 ppb
BEC = 0.1175 ppb
205 Tl [1] ISTD :165 Ho [1]
y = 0.0223 * x + 4.7628E
R = 1.0000
DL = 0.003998 ppb
BEC = 0.02135 ppb
206 (Pb) [1] ISTD :165 Ho [...
Ratio
Conc(ppb)
100.0
500.0

0091101 0529



Metal Data
Digestion Logbook Data

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A (3050B) 200.7/200.8 OTHER_____

Batch No.: 26222 Analyst: ANS

QC Number: 85280 Prep Date: 9/16/20

Matrix: soil 6020 Reviewed By: [signature]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml	25ml	50ml		--	
LCS	0.1g					--	
LCSD	0.1g					--	
1. AD 19178-001	0.5g						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -001							
MS -001							Balance used: 032
MSD -001							Pipettes used: 149,155
2. 19178-002							
3. -003							Hot Block used: 4
4. -004							
5. -005							
6. -006							
7. -007							
8. -008							
9. -009							
10. -010							
11. -011							
12. -012							
13. -013							
14. 19230-001							
15. 19228-001							
16. 19229-001							
17. 19233-002							
18.							
19.							
20.							

Hot Plate Temperature: 93.3 C (90-95° C) Start Time: 8:30am End Time: 11:00am

	Volume mL	Lot #
LCS, LCSD	0.1g	V- 13005
LLLCS, LLLCSD		V-
MS, MSD	0.25ml	V- 13177, 13178
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2.5	V- 13440
HCl		V-
H_2O_2	1.5	V- 13067

Acid	Vol mL	Lot#
1:1 HNO_3	5.0	V- 334735
1:1 HCl		V-

Relinquished By ANS Date 9/16/20

Received By [signature] Date 9/17/20

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Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A (3050B) 200.7/200.8 OTHER_____

Batch No.: 26221 Analyst: ANS

QC Number: 85279 Prep Date: 9/16/20

Matrix: soil 6010 Reviewed By: [signature]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS	0.5g					--	
LCSD						--	
1. AO 19178-001							Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -001							
MS -001							Balance used: 032
MSD -001							Pipettes used: 149, 155
2. 19178-002							
3. -003							Hot Block used: 5
4. -004							
5. -005							
6. -006							
7. -007							
8. -008							
9. -009							
10. -010							
11. -011							
12. -012							
13. -013							
14. 19230-001							
15. 19228-001							
16. 19229-001							
17. 19233-002							
18.							
19.							
20.							

Hot Plate Temperature: 94.1 C (90-95° C) Start Time: 8:30am End Time: 11:00am

	Volume mL	Lot #
LCS, LCSD	0.5g	V- 13005
LLLCS, LLLCSD		V-
MS, MSD	0.25ml	V- 13177, 13178
LLMS, LLMSD		V- 331982

Acid	Vol mL	Lot#
HNO_3	2.5	V-13440
HCl	5	V-13130
H_2O_2	1-5	V-13067

Acid	Vol mL	Lot#
1:1 HNO_3	5.0	V-334735
1:1 HCl		V-

Relinquished By ANS Date 9/16/20

Received By [signature] Date 9/16/2020

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HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 7470A (7471B) OTHER_____

Batch No.:* 26221

QC Number: 85279

Matrix: Soil

Analyst: ANS

Prep Date: 9/16/20

Review By: BR

LAB ID#	MERCURY		COMMENTS	STANDARDS
	INITIAL	FINAL		
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 334930
LCS	0.15g			
LCSD	0.15g			STD 0.2 ppb V- 334931
1 A0 19178-001	0.15g			STD 0.5 ppb V- 334932
MR -001				STD 1.0 ppb V- 334933
MS -001				STD 2.0 ppb V- 334934
MSD -001				STD 5.0 ppb V- 334935
2 19178-002				STD 10.0 ppb V- 334936
3 -003				STD 25.0 ppb V- 334937
4 -004				ICV 10.0 ppb V- 334928
5 -005				CCV 20.0 ppb V- 334929
6 -006				
7 -007				
8 -008				Balance used: 032
9 -009				Pipettes used: 155, 143, 159
10 -010				
11 -011				Hot Block used: 7
12 -012				
13 -013				
14 19230-001				
15 19229-001				
16 19228-001				
17 19233-002				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KMnO_4$: V- 331286	3.75	HNO3		V-
$K_2S_2O_8$: V-		HCl		V-
NH_2OH: V- 317822	1.5	H2SO4		V-
		Aqua Regia	1.25	V- 334927

**Block Temp.: °C 93.7

Time in Block: 8:30

Time Out of Block: 9:00am

Spike Volume & Lot #

☐ LCS V- 13005 0.15/0.25 ml

☐ MS V- 334881 0.250 ml

☐ Standards/Control Batch B- 29688

Start time: 8:30am End Time: 9:30am

**Temperature
245.1 / 7470A: 90-95C
7471B : 92-98C

Relinquished By: ANS

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

HG PREP 2016

Wet Chemistry Data

Wet Chemistry Data
Sample Data

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19178-001 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-4A | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.27	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	280	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.0	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	23	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.89	09/14/20	09/15/20

Lab#: AD19178-002 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-4B | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.26	09/14/20	09/14/20
Oxidation Reduction Potenial	CR6-ORP	1	330	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.1	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	23	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.88	09/14/20	09/15/20

Lab#: AD19178-003 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-2A | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.51	mg/Kg	0.30	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	320	MV		09/14/20	09/14/20
pH	CR6-PH	1	7.9	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.0	09/14/20	09/15/20

Lab#: AD19178-004 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-2B | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.28	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	350	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.4	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.93	09/14/20	09/15/20

Lab#: AD19178-005 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-1A | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.54	mg/Kg	0.26	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	330	MV		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
pH	CR6-PH	1	8.0	PH		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.86	09/14/20	09/15/20

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19178-006 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-1B | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.28	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	330	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.0	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.92	09/14/20	09/15/20

Lab#: AD19178-007 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-6A | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	1.8	mg/Kg	0.30	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	220	MV		09/14/20	09/14/20
pH	CR6-PH	1	9.4	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.99	09/14/20	09/15/20

Lab#: AD19178-008 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-6B | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.29	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	330	MV		09/14/20	09/14/20
pH	CR6-PH	1	7.9	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	23	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.98	09/14/20	09/15/20

Lab#: AD19178-009 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-7A | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.44	mg/Kg	0.30	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	280	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.8	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.99	09/14/20	09/15/20

Lab#: AD19178-010 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-7B | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	0.36	mg/Kg	0.29	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	1	310	MV		09/14/20	09/14/20
pH	CR6-PH	1	8.3	PH		09/14/20	09/14/20
Temperature	CR6-PH	1	22	C		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.96	09/14/20	09/15/20

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD19178-011 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-8A | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.29	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	**1**	**270**	**MV**		09/14/20	09/14/20
pH	CR6-PH	**1**	**8.7**	**PH**		09/14/20	09/14/20
Temperature	CR6-PH	**1**	**22**	**C**		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.98	09/18/20	09/18/20

Lab#: AD19178-012 | Project Number: 0091101
Matrix: Soil | Received Date: 9/11/2020
Client SampleID: SS-8B | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.28	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	**1**	**310**	**MV**		09/14/20	09/14/20
Temperature	CR6-PH	**1**	**22**	**C**		09/14/20	09/14/20
pH	CR6-PH	**1**	**8.2**	**PH**		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	0.94	09/18/20	09/18/20

Lab#: AD19178-013 | Project Number: 0091101
Matrix: Soil/Terracore | Received Date: 9/11/2020
Client SampleID: HRPB-1 | Collect Date: 9/10/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.36	09/15/20	09/15/20
Oxidation Reduction Potenial	CR6-ORP	**1**	**260**	**MV**		09/14/20	09/14/20
pH	CR6-PH	**1**	**8.0**	**PH**		09/14/20	09/14/20
Temperature	CR6-PH	**1**	**22**	**C**		09/14/20	09/14/20
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.2	09/18/20	09/18/20

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 0091101**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD19178-001	SS-4A	Soil	1	90	Percent			09/13/20	09/11/20	09/10/20
AD19178-002	SS-4B	Soil	1	91	Percent			09/13/20	09/11/20	09/10/20
AD19178-003	SS-2A	Soil	1	79	Percent			09/13/20	09/11/20	09/10/20
AD19178-004	SS-2B	Soil	1	86	Percent			09/13/20	09/11/20	09/10/20
AD19178-005	SS-1A	Soil	1	93	Percent			09/13/20	09/11/20	09/10/20
AD19178-006	SS-1B	Soil	1	87	Percent			09/13/20	09/11/20	09/10/20
AD19178-007	SS-6A	Soil	1	81	Percent			09/13/20	09/11/20	09/10/20
AD19178-008	SS-6B	Soil	1	82	Percent			09/13/20	09/11/20	09/10/20
AD19178-009	SS-7A	Soil	1	81	Percent			09/13/20	09/11/20	09/10/20
AD19178-010	SS-7B	Soil	1	83	Percent			09/13/20	09/11/20	09/10/20
AD19178-011	SS-8A	Soil	1	82	Percent			09/13/20	09/11/20	09/10/20
AD19178-012	SS-8B	Soil	1	85	Percent			09/13/20	09/11/20	09/10/20
AD19178-013	HRPB-1	Soil/Terracore	1	66	Percent			09/13/20	09/11/20	09/10/20

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-10974

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD19178-001	90	90.11628	Percent	1.37	11.69	10.67	09/13/20	DISHAM	0.086	5
Sample	AD19178-001	90	90.19417	Percent	1.38	11.68	10.67	09/13/20	DISHAM		
Sample	AD19178-002	91	91.10867	Percent	1.37	10.48	9.67	09/13/20	DISHAM		
Sample	AD19178-003	79	78.57143	Percent	1.35	9.47	7.73	09/13/20	DISHAM		
Sample	AD19178-004	86	86.40857	Percent	1.38	13.52	11.87	09/13/20	DISHAM		
Sample	AD19178-005	93	93.06122	Percent	1.37	11.17	10.49	09/13/20	DISHAM		
Sample	AD19178-006	87	87.16645	Percent	1.37	9.24	8.23	09/13/20	DISHAM		
Sample	AD19178-007	81	81.10599	Percent	1.37	12.22	10.17	09/13/20	DISHAM		
Sample	AD19178-008	82	81.55102	Percent	1.38	13.63	11.37	09/13/20	DISHAM		
Sample	AD19178-009	81	81.22555	Percent	1.37	9.04	7.60	09/13/20	DISHAM		
Sample	AD19178-010	83	82.63104	Percent	1.35	11.08	9.39	09/13/20	DISHAM		
Sample	AD19178-011	82	82.27092	Percent	1.36	11.40	9.62	09/13/20	DISHAM		
Sample	AD19178-012	85	84.86328	Percent	1.37	11.61	10.07	09/13/20	DISHAM		
Sample	AD19178-013	66	65.92978	Percent	1.35	9.04	6.42	09/13/20	DISHAM		
Sample	AD19203-003	92	91.73486	Percent	1.35	13.57	12.56	09/13/20	DISHAM		
Sample	AD19203-004	95	94.81268	Percent	1.37	15.25	14.53	09/13/20	DISHAM		
Sample	AD19203-005	89	88.96926	Percent	1.38	12.44	11.22	09/13/20	DISHAM		
Sample	AD19203-008	100	99.66611	Percent	1.36	13.34	13.30	09/13/20	DISHAM		
Sample	AD19203-010	94	93.62618	Percent	1.35	12.96	12.22	09/13/20	DISHAM		
Sample	AD19203-012	84	83.55197	Percent	1.36	11.27	9.64	09/13/20	DISHAM		
Sample	AD19203-015	87	87.19577	Percent	1.36	10.81	9.61	09/13/20	DISHAM		

* - Indicates Failed Rpd Criteria

Wet Chemistry Data
QC Data

Hex-Cr Soil SW-846 3060A / 7196A

Cr6 soil curve		Date	9/15/2020			Batch #	785			TestGroupID	CR6-SOIL	
										TestID:	CR-HEX	
STD ppm			ABS									
0			-0.0001		Intercept	Constant	0.005916596					
0.02			0.0208									
0.25			0.1671		Slope	X Coefficients	0.640009617					
0.5			0.3321									
1			0.6425									

STD mg/L		ABS		PPM	DIFF					
0		-0.0001		-0.00940079	0.00940079					
0.02		0.0208		0.02325497	-0.00325497					
0.25		0.1671		0.251845285	-0.001845285					
0.5		0.3321		0.509653911	-0.009653911					
1		0.6425		0.994646624	0.005353376					

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.999836682
R Square	0.999673391
Adjusted R Square	0.999564522
Standard Error	0.005533171
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.28112512	0.28112512	9182.300572	2.50538E-06
Residual	3	9.18479E-05	3.0616E-05		
Total	4	0.281216968			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.005916596	0.003422485	1.728742578	0.182299251	-0.00497529	0.016808481	-0.00497529	0.016808481
X Variable 1	0.640009617	0.006678989	95.8243214	2.50538E-06	0.618754072	0.661265161	0.618754072	0.661265161

	Hex-Cr Soil		Q.C. DATA									
Batch#	785		QC Sample	AD19159-004 NS.Sample								
Date	9/14/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	19.96	19.96	100%	80-120%	NA	NA	PASS	
			MS(Sol)	22.73	12.38	10.14	45%	75-125%	NA	NA	[illegible]	
			MS(Insol)	1096.36	562.79	560.55	51%	75-125%	NA	20%	[illegible]	PASS
			Sample	NA	2.24	NA	NA	NA	NA	NA		
			Sample Dup	NA	2.65	NA	NA	NA	17	20%		PASS
			PVS	22.73	15.90	13.67	60%	85-115%	NA	NA	[illegible]	
			MS(Sol)	43.48	55.99	26.81	62%	75-125%	NA	NA	[illegible]	
			MS(Insol)	978.78	544.43	515.26	53%	75-125%	NA	20%	[illegible]	PASS
			Sample	NA	29.18	NA	NA	NA	NA	NA		
Lead Chromate Added :	0.015	0.014	g									
Upper Calibration Abbsorbance:	0.6425											

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate

Hex-Cr Soil SW-846 3060A / 7196A

ICV.Control	0.3163	0.0000	0.3163	0.484966789	1	1	1	1	0.485	0.500	97	9/15/20 12:33	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	-0.0002	0.0000	-0.0002	-0.009557037	1	1	1	1	-0.010	0.020		9/15/20 12:33	
MB.Sample	-0.0028	0.0000	-0.0028	-0.013619476	1	2.5	1	100	-0.545	0.800		9/15/20 12:33	
LCS.Sample	0.3253	0.0000	0.3253	0.499029083	1	2.5	1	100	19.961	0.800		9/15/20 12:33	
AD19159-004 NS.Sample	0.0415	0.0041	0.0374	0.049192077	0.88	2.5	1	100	2.236	0.909		9/15/20 12:34	
AD19159-004 DUP.Sample	0.0473	0.0041	0.0432	0.058254443	0.88	2.5	1	100	2.648	0.909		9/15/20 12:34	
AD19159-005 MS.Sample	0.1872	0.0070	0.1802	0.272313719	0.88	2.5	1	100	12.378	0.909		9/15/20 12:35	
AD19159-006 50X MSD.Sample	0.1651	0.0007	0.1644	0.247626588	0.88	2.5	50	100	562.788	45.455		9/15/20 12:36	
AD19159-004 PVS.Sample	0.2339	0.0041	0.2298	0.349812556	0.88	2.5	1	100	15.901	0.909		9/15/20 12:37	
AD19192-002.Sample	0.4456	0.0102	0.4354	0.67105774	0.92	2.5	1	100	29.176	0.870		9/15/20 12:46	
AD19192-004MS2.Sample	0.8015	0.0079	0.7936	1.230736862	0.92	2.5	1	100	53.510	0.870		9/15/20 12:47	
AD19192-004MS2 2X.Sample	0.4259	0.0079	0.4180	0.643870664	0.92	2.5	2	100	55.989	1.739		9/15/20 12:48	
AD19192-005MSD2.Sample	3.9658	0.0076	3.9582	6.175350103	0.92	2.5	1	100	268.493	0.870		9/15/20 12:48	
AD19192-005 50XMSD2.Sample	0.1672	0.0010	0.1662	0.250439055	0.92	2.5	50	100	544.433	43.478		9/15/20 12:51	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3163		0.3163	0.484966789	1	1	1	1	0.485	0.020	97	9/15/20 12:33	PASS
ICB.Sample	-0.0002		-0.0002	-0.009557037	1	1	1	1	-0.010	0.020		9/15/20 12:33	
MB.Sample	-0.0028		-0.0028	-0.013619476	1	2.5	1	100	-0.545	0.800		9/15/20 12:33	
LCS.Sample	0.3253		0.3253	0.499029083	1	2.5	1	100	19.961	0.800		9/15/20 12:33	
AD19159-004 NS.Sample	0.0415	0.0041	0.0374	0.049192077	0.88	2.5	1	100	2.236	0.909		9/15/20 12:34	
AD19159-004 DUP.Sample	0.0473	0.0041	0.0432	0.058254443	0.88	2.5	1	100	2.648	0.909		9/15/20 12:34	
AD19159-005 MS.Sample	0.1872	0.0070	0.1802	0.272313719	0.88	2.5	1	100	12.378	0.909		9/15/20 12:35	
AD19159-006 XXX.Sample	3.7897	0.0068	3.7829	5.901447944	0.88	2.5	1	100	268.248	0.909		9/15/20 12:35	
AD19159-006 50X MSD.Sample	0.1651	0.0007	0.1644	0.247626588	0.88	2.5	50	100	562.788	45.455		9/15/20 12:36	
AD19159-004 PVS.Sample	0.2339	0.0041	0.2298	0.349812556	0.88	2.5	1	100	15.901	0.909		9/15/20 12:37	
CCV-1.Control	0.3236		0.3236	0.496372852	1	1	1	1	0.496	0.020	99	9/15/20 12:37	PASS
CCB-1.Sample	0.0011		0.0011	-0.007525818	1	1	1	1	-0.008	0.020		9/15/20 12:37	
AD19159-008.Sample	0.0017	0.0022	-0.0005	-0.01002578	0.65	2.5	1	100	-0.617	1.231		9/15/20 12:38	
AD19159-009.Sample	0.0044	0.0030	0.0014	-0.007057075	0.68	2.5	1	100	-0.415	1.176		9/15/20 12:38	
AD19159-010.Sample	-0.0012	-0.0008	-0.0004	-0.009869533	0.87	2.5	1	100	-0.454	0.920		9/15/20 12:38	
AD19160-001.Sample	0.0065	0.0031	0.0034	-0.003932122	0.65	2.5	1	100	-0.242	1.231		9/15/20 12:39	
AD19160-002.Sample	-0.0033	0.0023	-0.0056	-0.017994411	0.78	2.5	1	100	-0.923	1.026		9/15/20 12:39	
AD19178-001.Sample	0.0571	0.0616	-0.0045	-0.016275683	0.9	2.5	1	100	-0.723	0.889		9/15/20 12:40	
AD19178-002.Sample	0.0166	0.0124	0.0042	-0.002682142	0.91	2.5	1	100	-0.118	0.879		9/15/20 12:40	
AD19178-003.Sample	0.0702	0.0639	0.0063	0.000599064	0.79	2.5	1	100	0.030	1.013		9/15/20 12:41	
AD19178-004.Sample	0.0153	0.0127	0.0026	-0.005182103	0.86	2.5	1	100	-0.241	0.930		9/15/20 12:42	
AD19178-005.Sample	0.0599	0.0660	-0.0061	-0.018775647	0.93	2.5	1	100	-0.808	0.860		9/15/20 12:42	
CCV-2.Control	0.3225		0.3225	0.494654122	1	1	1	1	0.495	0.020	99	9/15/20 12:43	PASS
CCB-2.Sample	-0.0024		-0.0024	-0.012994486	1	1	1	1	-0.013	0.020		9/15/20 12:43	
AD19178-006.Sample	0.0176	0.0175	0.0001	-0.009088295	0.87	2.5	1	100	-0.418	0.920		9/15/20 12:43	
AD19178-007.Sample	0.0157	0.0130	0.0027	-0.005025857	0.81	2.5	1	100	-0.248	0.988		9/15/20 12:44	
AD19178-008.Sample	0.0294	0.0350	-0.0056	-0.01799441	0.82	2.5	1	100	-0.878	0.976		9/15/20 12:44	
AD19178-009.Sample	0.0238	0.0302	-0.0064	-0.019244392	0.81	2.5	1	100	-0.950	0.988		9/15/20 12:44	
AD19178-010.Sample	0.0114	0.0141	-0.0027	-0.013463229	0.83	2.5	1	100	-0.649	0.964		9/15/20 12:44	
AD19180-001.Sample	0.0142	0.0000	0.0142	0.012942625	0.92	2.5	1	100	0.563	0.870		9/15/20 12:46	
AD19192-002.Sample	0.4456	0.0102	0.4354	0.67105774	0.92	2.5	1	100	29.176	0.870		9/15/20 12:46	
AD19192-004MS2.Sample	0.8015	0.0079	0.7936	1.230736862	0.92	2.5	1	100	53.510	0.870		9/15/20 12:47	
AD19192-004MS2 2X.Sample	0.4259	0.0079	0.4180	0.643870664	0.92	2.5	2	100	55.989	1.739		9/15/20 12:48	
AD19192-005MSD2.Sample	3.9658	0.0076	3.9582	6.175350103	0.92	2.5	1	100	268.493	0.870		9/15/20 12:48	
CCV-3.Control.Cycle1	0.3207		0.3207	0.491841663	1	1	1	1	0.492	0.020	98	9/15/20 12:50	PASS
CCB-3.Sample	0.0013		0.0013	-0.007213322	1	1	1	1	-0.007	0.020		9/15/20 12:50	
AD19192-005 50XMSD2.Sample	0.1672	0.0010	0.1662	0.250439055	0.92	2.5	50	100	544.433	43.478		9/15/20 12:51	
AD19159-004 T.Sample	0.0041		0.0041	-0.002838388	0.88	2.5	1	100	-0.129	0.909		9/15/20 12:54	
AD19159-005 T.Sample	0.0070		0.0070	0.001692794	0.88	2.5	1	100	0.077	0.909		9/15/20 12:54	
AD19159-006 T.Sample	0.0068		0.0068	0.001380299	0.88	2.5	1	100	0.063	0.909		9/15/20 12:54	
AD19159-006 50X T.Sample	0.0007		0.0007	-0.008150808	0.88	2.5	1	100	-0.370	0.909		9/15/20 12:55	

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AD19159-008 T.Sample	0.0022	0.0022	-0.005807094	0.65	2.5	1	100	-0.357	1.231		9/15/20 12:55	
AD19159-009 T.Sample	0.0030	0.0030	-0.004557112	0.68	2.5	1	100	-0.268	1.176		9/15/20 12:55	
AD19159-010 T.Sample	-0.0008	-0.0008	-0.010494523	0.87	2.5	1	100	-0.483	0.920		9/15/20 12:56	
AD19160-001 T.Sample	0.0031	0.0031	-0.004400865	0.65	2.5	1	100	-0.271	1.231		9/15/20 12:56	
AD19160-002 T.Sample	0.0023	0.0023	-0.005650846	0.78	2.5	1	100	-0.290	1.026		9/15/20 12:56	
CCV-4.Control	0.3193	0.3193	0.489654205	1	1	1	1	0.490	0.020	98	9/15/20 12:56	PASS
CCB-4.Sample	0.0007	0.0007	-0.008150808	1	1	1	1	-0.008	0.020		9/15/20 12:57	
AD19178-001 T.Sample	0.0616	0.0616	0.087004011	0.9	2.5	1	100	3.867	0.889		9/15/20 12:57	
AD19178-002 T.Sample	0.0124	0.0124	0.010130167	0.91	2.5	1	100	0.445	0.879		9/15/20 12:58	
AD19178-003 T.Sample Cycle1	0.0639	0.0639	0.09059771	0.79	2.5	1	100	4.587	1.013		9/15/20 12:59	
AD19178-004 T.Sample	0.0127	0.0127	0.01059891	0.86	2.5	1	100	0.493	0.930		9/15/20 13:00	
AD19178-005 T.Sample	0.0660	0.0660	0.093878908	0.93	2.5	1	100	4.038	0.860		9/15/20 13:00	
AD19178-006 T.Sample	0.0175	0.0175	0.018098797	0.87	2.5	1	100	0.832	0.920		9/15/20 13:01	
AD19178-007 T.Sample	0.0130	0.0130	0.011067653	0.81	2.5	1	100	0.547	0.988		9/15/20 13:01	
AD19178-008 T.Sample	0.0350	0.0350	0.045442137	0.82	2.5	1	100	2.217	0.976		9/15/20 13:02	
AD19178-009 T.Sample	0.0302	0.0302	0.03794225	0.81	2.5	1	100	1.874	0.988		9/15/20 13:03	
AD19178-010 T.Sample	0.0141	0.0141	0.012786377	0.83	2.5	1	100	0.616	0.964		9/15/20 13:03	
CCV-5.Control	0.3174	0.3174	0.486685519	1	1	1	1	0.487	0.020	97	9/15/20 13:03	PASS
CCB-5.Sample	0.0001	0.0001	-0.009088294	1	1	1	1	-0.009	0.020		9/15/20 13:03	
AD19180-001 T.Sample	0.0000	0.0000	-0.009244542	0.92	2.5	1	100	-0.402	0.870		9/15/20 13:04	
AD19192-002 T.Sample	0.0102	0.0102	0.006692719	0.92	2.5	1	100	0.291	0.870		9/15/20 13:05	
AD19192-004 T.Sample	0.0079	0.0079	0.003099022	0.92	2.5	1	100	0.135	0.870		9/15/20 13:05	
AD19192-005 T.Sample	0.0076	0.0076	0.00263028	0.92	2.5	1	100	0.114	0.870		9/15/20 13:05	
AD19192-005 50X T.Sample	0.0010	0.0010	-0.007682065	0.92	2.5	1	100	-0.334	0.870		9/15/20 13:06	
CCV-6.Control	0.3166	0.3166	0.485435517	1	1	1	1	0.485	0.020	97	9/15/20 13:06	PASS
CCB-6.Sample	0.0001	0.0001	-0.009088294	1	1	1	1	-0.009	0.020		9/15/20 13:07	

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Hex-Cr Soil SW-846 3060A / 7196A

Cr6 soil curve		Date	9/15/2020			Batch #	785 A			TestGroupID	CR6-SOIL
										TestID:	CR-HEX
STD ppm			ABS								
0			-0.0001		Intercept	Constant	0.005916596				
0.02			0.0208								
0.25			0.1671		Slope	X Coefficients	0.640009617				
0.5			0.3321								
1			0.6425								

STD mg/L			ABS		PPM	DIFF					
0			-0.0001		-0.00940079	0.00940079					
0.02			0.0208		0.02325497	-0.00325497					
0.25			0.1671		0.251845285	-0.001845285					
0.5			0.3321		0.509653911	-0.009653911					
1			0.6425		0.994646624	0.005353376					

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.999836682
R Square	0.999673391
Adjusted R Square	0.999564522
Standard Error	0.005533171
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.28112512	0.28112512	9182.300572	2.50538E-06
Residual	3	9.18479E-05	3.0616E-05		
Total	4	0.281216968			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.005916596	0.003422485	1.728742578	0.182299251	-0.00497529	0.016808481	-0.00497529	0.016808481
X Variable 1	0.640009617	0.006678989	95.8243214	2.50538E-06	0.618754072	0.661265161	0.618754072	0.661265161

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Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA								
Batch#	785 A		QC Sample	AD19159-004 NS.Sample							
Date	9/14/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	19.30	19.30	96%	80-120%	NA	NA	PASS	
			MS(Sol)	22.73	14.01	12.56	55%	75-125%	NA	NA	FAIL	
			MS(Insol)	1096.36	511.65	510.20	47%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	1.45	NA	NA	NA	NA	NA		
			Sample Dup	NA	1.59	NA	NA	NA	9	20%		PASS
			PVS	22.73	18.71	17.27	76%	85-115%	NA	NA	FAIL	
			MS(Sol)	43.48	53.87	26.10	60%	75-125%	NA	NA	FAIL	
			MS(Insol)	978.78	518.62	490.85	50%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	27.77	NA	NA	NA	NA	NA		
Lead Chromate Added	0.015	0.014	G									
Upper Calibration Abbsorbance	0.6425											

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3288	0.0000	0.3288	0.504497727	1	1	1	1	0.504	0.500	101	9/15/20 13:22	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	-0.0007	0.0000	-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB.Sample	0.0036	0.0000	0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS.Sample	0.3147	0.0000	0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS.Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP.Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS.Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 50X MSD.Sample	0.1534	0.0034	0.1500	0.225126943	0.88	2.5	50	100	511.652	45.455		9/15/20 13:25	
AD19159-004 PVS.Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
AD19192-002.Sample	0.4208	0.0061	0.4147	0.638714473	0.92	2.5	1	100	27.770	0.870		9/15/20 13:33	
AD19192-004MS2.Sample	0.7877	0.0068	0.7809	1.21089337	0.92	2.5	1	100	52.648	0.870		9/15/20 13:34	
AD19192-004MS2 2X.Sample	0.4092	0.0068	0.4024	0.61949603	0.92	2.5	2	100	53.869	1.739		9/15/20 13:34	
AD19192-005MSD2.Sample	4.3662	0.0062	4.3600	6.80315305	0.92	2.5	1	100	295.789	0.870		9/15/20 13:35	
AD19192-005 50XMSD2.Sample	0.1579	-0.0007	0.1586	0.238564243	0.92	2.5	50	100	518.618	43.478		9/15/20 13:36	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3288		0.3288	0.504497727	1	1	1	1	0.504	0.020	101	9/15/20 13:22	PASS
ICB.Sample	-0.0007		-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB.Sample	0.0036		0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS.Sample	0.3147		0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS.Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP.Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS.Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 XXX.Sample	3.9269	0.0081	3.9188	6.113788314	0.88	2.5	1	100	277.899	0.909		9/15/20 13:24	
AD19159-006 50X MSD.Sample	0.1534	0.0081	0.1453	0.217783303	0.88	2.5	50	100	494.962	45.455		9/15/20 13:25	
AD19159-004 PVS.Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
CCV-1.Control	0.3268		0.3268	0.501372768	1	1	1	1	0.501	0.020	100	9/15/20 13:26	PASS
CCB-1.Sample	-0.0005		-0.0005	-0.01002578	1	1	1	1	-0.010	0.020		9/15/20 13:27	
AD19159-008.Sample	0.0099	0.0068	0.0031	-0.004400865	0.65	2.5	1	100	-0.271	1.231		9/15/20 13:27	
AD19159-009.Sample	0.0092	0.0082	0.0010	-0.007682065	0.68	2.5	1	100	-0.452	1.176		9/15/20 13:27	
AD19159-010.Sample	0.0080	0.0066	0.0014	-0.007057074	0.87	2.5	1	100	-0.324	0.920		9/15/20 13:27	
AD19160-001.Sample	0.0220	0.0196	0.0024	-0.005494599	0.65	2.5	1	100	-0.338	1.231		9/15/20 13:28	
AD19160-002.Sample	0.0013	0.0036	-0.0023	-0.012838238	0.78	2.5	1	100	-0.658	1.026		9/15/20 13:28	
AD19178-001.Sample	0.0361	0.0413	-0.0052	-0.017369418	0.9	2.5	1	100	-0.772	0.889		9/15/20 13:28	
AD19178-002.Sample	0.0243	0.0231	0.0012	-0.00736957	0.91	2.5	1	100	-0.324	0.879		9/15/20 13:29	
AD19178-003.Sample	0.0554	0.0701	-0.0147	-0.032212951	0.79	2.5	1	100	-1.631	1.013		9/15/20 13:29	

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AD19178-004.Sample	0.0127	0.0152	-0.0025	-0.013150734	0.86	2.5	1	100	-0.612	0.930		9/15/20 13:29	
AD19178-005.Sample	0.0611	0.0545	0.0066	0.001067803	0.93	2.5	1	100	0.046	0.860		9/15/20 13:29	
CCV-2.Control	0.3229		0.3229	0.495279123	1	1	1	1	0.495	0.020	99	9/15/20 13:30	PASS
CCB-2.Sample	0.0001		0.0001	-0.009088294	1	1	1	1	-0.009	0.020		9/15/20 13:30	
AD19178-006.Sample	0.0205	0.3167	-0.2962	-0.472050105	0.87	2.5	1	100	-21.703	0.920		9/15/20 13:30	
AD19178-007.Sample	0.0005	0.0000	0.0005	-0.008463304	0.81	2.5	1	100	-0.418	0.988		9/15/20 13:31	
AD19178-008.Sample	0.0016	0.0024	-0.0008	-0.010494523	0.82	2.5	1	100	-0.512	0.976		9/15/20 13:31	
AD19178-009.Sample	0.0098	0.0069	0.0029	-0.00471336	0.81	2.5	1	100	-0.233	0.988		9/15/20 13:32	
AD19178-010.Sample	0.0039	0.0049	-0.0010	-0.010807019	0.83	2.5	1	100	-0.521	0.964		9/15/20 13:32	
AD19180-001.Sample	0.0190	0.0029	0.0161	0.015911329	0.92	2.5	1	100	0.692	0.870		9/15/20 13:33	
AD19192-002.Sample	0.4208	0.0061	0.4147	0.638714473	0.92	2.5	1	100	27.770	0.870		9/15/20 13:33	
AD19192-004MS2.Sample	0.7877	0.0068	0.7809	1.21089337	0.92	2.5	1	100	52.648	0.870		9/15/20 13:34	
AD19192-004MS2 2X.Sample	0.4092	0.0068	0.4024	0.61949603	0.92	2.5	2	100	53.869	1.739		9/15/20 13:34	
AD19192-005MSD2.Sample	4.3662	0.0062	4.3600	6.80315305	0.92	2.5	1	100	295.789	0.870		9/15/20 13:35	
CCV-3.Control	0.3214		0.3214	0.492935392	1	1	1	1	0.493	0.020	99	9/15/20 13:35	PASS
CCB-3.Sample	0.0038		0.0038	-0.003307131	1	1	1	1	-0.003	0.020		9/15/20 13:36	
AD19192-005 50XMSD2.Sample	0.1579	-0.0007	0.1586	0.238564243	0.92	2.5	50	100	518.618	43.478		9/15/20 13:36	
AD19159-004 T.Sample	0.0073		0.0073	0.002161537	0.88	2.5	1	100	0.098	0.909		9/15/20 13:36	
AD19159-005 T.Sample	0.0058		0.0058	-0.000182178	0.88	2.5	1	100	-0.008	0.909		9/15/20 13:37	
AD19159-006 T.Sample	0.0081		0.0081	0.003411518	0.88	2.5	1	100	0.155	0.909		9/15/20 13:37	
AD19159-006 50X T.Sample	0.0034		0.0034	-0.003932122	0.88	2.5	1	100	-0.179	0.909		9/15/20 13:37	
AD19159-008 T.Sample	0.0068		0.0068	0.001380299	0.65	2.5	1	100	0.085	1.231		9/15/20 13:38	
AD19159-009 T.Sample	0.0082		0.0082	0.003567766	0.68	2.5	1	100	0.210	1.176		9/15/20 13:38	
AD19159-010 T.Sample	0.0066		0.0066	0.001067803	0.87	2.5	1	100	0.049	0.920		9/15/20 13:38	
AD19160-001 T.Sample	0.0196		0.0196	0.021379998	0.65	2.5	1	100	1.316	1.231		9/15/20 13:38	
AD19160-002 T.Sample	0.0036		0.0036	-0.003619627	0.78	2.5	1	100	-0.186	1.026		9/15/20 13:52	
CCV-4.Control	0.3165		0.3165	0.48527929	1	1	1	1	0.485	0.020	97	9/15/20 13:53	PASS
CCB-4.Sample	0.0038		0.0038	-0.003307131	1	1	1	1	-0.003	0.020		9/15/20 13:53	
AD19178-001 T.Sample	0.0413		0.0413	0.055285736	0.9	2.5	1	100	2.457	0.889		9/15/20 13:53	
AD19178-002 T.Sample	0.0231		0.0231	0.026848666	0.91	2.5	1	100	1.180	0.879		9/15/20 13:55	
AD19178-003 T.Sample	0.0701		0.0701	0.100285065	0.79	2.5	1	100	5.078	1.013		9/15/20 13:55	
AD19178-004 T.Sample	0.0152		0.0152	0.014505102	0.86	2.5	1	100	0.675	0.930		9/15/20 13:56	
AD19178-005 T.Sample	0.0545		0.0545	0.075910426	0.93	2.5	1	100	3.265	0.860		9/15/20 13:56	
AD19178-006 T.Sample	0.3167		0.3167	0.485591791	0.87	2.5	1	100	22.326	0.920		9/15/20 13:56	
AD19178-007 T.Sample.Cycle1	0.0000		0.0000	-0.009244542	0.81	2.5	1	100	-0.457	0.988		9/15/20 13:57	
AD19178-008 T.Sample	0.0024		0.0024	-0.005494598	0.82	2.5	1	100	-0.268	0.976		9/15/20 13:58	
AD19178-009 T.Sample	0.0069		0.0069	0.001536546	0.81	2.5	1	100	0.076	0.988		9/15/20 13:58	
AD19178-010 T.Sample	0.0049		0.0049	-0.001588407	0.83	2.5	1	100	-0.077	0.964		9/15/20 13:58	
CCV-5.Control	0.3157		0.3157	0.484029288	1	1	1	1	0.484	0.020	97	9/15/20 13:59	PASS
CCB-5.Sample	-0.0009		-0.0009	-0.010650771	1	1	1	1	-0.011	0.020		9/15/20 13:59	
AD19180-001 T.Sample	0.0029		0.0029	-0.00471336	0.92	2.5	1	100	-0.205	0.870		9/15/20 13:59	
AD19192-002 T.Sample	0.0061		0.0061	0.000286565	0.92	2.5	1	100	0.012	0.870		9/15/20 13:59	
AD19192-004 T.Sample	0.0068		0.0068	0.001380299	0.92	2.5	1	100	0.060	0.870		9/15/20 14:00	
AD19192-005 T.Sample	0.0062		0.0062	0.000442813	0.92	2.5	1	100	0.019	0.870		9/15/20 14:00	
AD19192-005 50X T.Sample	-0.0007		-0.0007	-0.010338275	0.92	2.5	1	100	-0.449	0.870		9/15/20 14:00	
CCV-6.Control	0.3141		0.3141	0.48152933	1	1	1	1	0.482	0.020	96	9/15/20 14:01	PASS
CCB-6.Control	-0.0006		-0.0006	-0.010182028	1	1	1	1	-0.010	0.020		9/15/20 14:01	

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Cr6 soil curve		Date	9/18/2020			Batch #	786			TestGroupID	CR6-SOIL
										TestID:	CR-HEX
STD ppm			ABS								
0			0.0083		Intercept	Constant	0.002469647				
0.02			0.0187								
0.25			0.1805		Slope	X Coefficients	0.701102693				
0.5			0.3329								
1			0.7129								

STD mg/L		ABS		PPM	DIFF					
0		0.0083		0.008315976	-0.008315976					
0.02		0.0187		0.023149752	-0.003149752					
0.25		0.1805		0.253929068	-0.003929068					
0.5		0.3329		0.471300933	0.028699067					
1		0.7129		1.013304271	-0.013304271					

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.999203109
R Square	0.998406852
Adjusted R Square	0.997875803
Standard Error	0.01339549
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.337357155	0.337357155	1880.064269	2.70011E-05
Residual	3	0.000538317	0.000179439		
Total	4	0.337895472			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.002469647	0.008265641	0.298063461	0.785105638	-0.023898985	0.028838279	-0.023898985	0.028838279
X Variable 1	0.701102693	0.016169451	43.35970789	2.70011E-05	0.649644233	0.752561152	0.649644233	0.752561152

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	Hex-Cr Soil		Q.C. DATA									
Batch#	786		QC Sample	AD19290-002 NS.Sample								
Date	9/18/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	JMP		LCS	20.00	19.25	19.25	96%	80-120%	NA	NA	PASS	
			MS(Sol)	21.74	15.85	14.52	67%	75-125%	NA	NA		
			MS(Insol)	1095.56	535.52	534.19	49%	75-125%	NA	20%		PASS
			Sample	NA	1.33	NA	NA	NA	NA	NA		
			Sample Dup	NA	1.50	NA	NA	NA	12	20%		PASS
			PVS	21.98	20.92	19.60	89%	85-115%	NA	NA	PASS	
Lead Chromate Added :	0.0155	g										
Upper Calibration Abbsorbance:	0.7129											

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3213	0.0000	0.3213	0.454755568	1	1	1	1	0.455	0.500	91	9/18/20 15:19	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0062	0.0000	0.0062	0.005320695	1	1	1	1	0.005	0.020		9/18/20 15:20	
MB.Sample	0.0030	0.0000	0.0030	0.000756456	1	2.5	1	100	0.030	0.800		9/18/20 15:20	
LCS.Sample	0.3399	0.0000	0.3399	0.481285186	1	2.5	1	100	19.251	0.800		9/18/20 15:21	
AD19290-002 NS.Sample	0.0233	-0.0003	0.0236	0.030138741	0.91	2.5	1	100	1.325	0.879		9/18/20 15:21	
AD19290-002 DUP.Sample	0.0261	-0.0003	0.0264	0.034132451	0.91	2.5	1	100	1.500	0.879		9/18/20 15:22	
AD19290-003 MS.Sample	0.2579	-0.0001	0.2580	0.364469222	0.92	2.5	1	100	15.846	0.870		9/18/20 15:22	
AD19290-004 50X MSD.Sample	0.1731	-0.0002	0.1733	0.243659523	0.91	2.5	50	100	535.515	43.956		9/18/20 15:23	
AD19290-002 PVS.Sample	0.3359	-0.0003	0.3362	0.476007817	0.91	2.5	1	100	20.923	0.879		9/18/20 15:23	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3213		0.3213	0.454755568	1	1	1	1	0.455	0.020	91	9/18/20 15:19	PASS
ICB.Sample	0.0062		0.0062	0.005320695	1	1	1	1	0.005	0.020		9/18/20 15:20	
MB.Sample	0.0030		0.0030	0.000756456	1	2.5	1	100	0.030	0.800		9/18/20 15:20	
LCS.Sample	0.3399		0.3399	0.481285186	1	2.5	1	100	19.251	0.800		9/18/20 15:21	
AD19290-002 NS.Sample	0.0233	-0.0003	0.0236	0.030138741	0.91	2.5	1	100	1.325	0.879		9/18/20 15:21	
AD19290-002 DUP.Sample	0.0261	-0.0003	0.0264	0.034132451	0.91	2.5	1	100	1.500	0.879		9/18/20 15:22	
AD19290-003 MS.Sample	0.2579	-0.0001	0.2580	0.364469222	0.92	2.5	1	100	15.846	0.870		9/18/20 15:22	
AD19290-004 XXX.Sample	3.9278	0.0028	3.9250	5.594801353	0.91	2.5	1	100	245.925	0.879		9/18/20 15:22	
AD19290-004 50X MSD.Sample	0.1731	-0.0002	0.1733	0.243659523	0.91	2.5	50	100	535.515	43.956		9/18/20 15:23	
AD19290-002 PVS.Sample	0.3359	-0.0003	0.3362	0.476007817	0.91	2.5	1	100	20.923	0.879		9/18/20 15:23	
CCV-1.Control	0.3397		0.3397	0.480999959	1	1	1	1	0.481	0.020	96	9/18/20 15:24	PASS
CCB-1.Sample	0.0027		0.0027	0.000328559	1	1	1	1	0.000	0.020		9/18/20 15:24	
AD19290-001.Sample	0.0076	-0.0002	0.0078	0.007602814	0.81	2.5	1	100	0.375	0.988		9/18/20 15:25	
AD19178-011.Sample	0.0810	0.0766	0.0044	0.00275331	0.82	2.5	1	100	0.134	0.976		9/18/20 15:25	
AD19178-012.Sample	0.1677	0.1528	0.0149	0.017729717	0.85	2.5	1	100	0.834	0.941		9/18/20 15:26	
AD19178-013.Sample	0.0125	0.0099	0.0026	0.000185926	0.66	2.5	1	100	0.011	1.212		9/18/20 15:26	
AD19262-001.Sample	0.0055	0.0079	-0.0024	-0.006945696	0.73	2.5	1	100	-0.381	1.096		9/18/20 15:27	
AD19262-003.Sample	0.0154	0.0141	0.0013	-0.001668296	0.69	2.5	1	100	-0.097	1.159		9/18/20 15:27	
AD19274-001.Sample	0.0000	0.0002	-0.0002	-0.003807783	1	2.5	1	100	-0.152	0.800		9/18/20 15:27	
AD19294-001.Sample	0.0679	0.0658	0.0021	-0.000527239	0.9	2.5	1	100	-0.023	0.889		9/18/20 15:28	
AD19292-001.Sample	0.0009	-0.0002	0.0011	-0.001953561	0.96	2.5	1	100	-0.081	0.833		9/18/20 15:28	
AD19292-002.Sample	0.0000	-0.0004	0.0004	-0.002951988	0.97	2.5	1	100	-0.122	0.825		9/18/20 15:28	
CCV-2.Control	0.3392		0.3392	0.480286764	1	1	1	1	0.480	0.020	96	9/18/20 15:28	PASS
CCB-2.Sample	0.0027		0.0027	0.000328559	1	1	1	1	0.000	0.020		9/18/20 15:29	
AD19292-003.Sample	0.0015	0.0004	0.0011	-0.001953561	0.94	2.5	1	100	-0.083	0.851		9/18/20 15:30	
AD19290-002 T.Sample	-0.0003		-0.0003	-0.003950415	0.91	2.5	1	100	-0.174	0.879		9/18/20 15:30	
AD19290-003 T.Sample	-0.0001		-0.0001	-0.00366515	0.92	2.5	1	100	-0.159	0.870		9/18/20 15:30	
AD19290-004 T.Sample	0.0028		0.0028	0.000471191	0.91	2.5	1	100	0.021	0.879		9/18/20 15:31	

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AD19290-004 50XT.Sample	-0.0002		-0.0002	-0.003807783	0.91	2.5	1	100	-0.167	0.879		9/18/20 15:31	
AD19178-011 T.Sample	0.0766		0.0766	0.105733945	0.82	2.5	1	100	5.158	0.976		9/18/20 15:32	
AD19178-012 T.Sample	0.1528		0.1528	0.214419868	0.85	2.5	1	100	10.090	0.941		9/18/20 15:32	
AD19178-013 T.Sample	0.0099		0.0099	0.010598095	0.66	2.5	1	100	0.642	1.212		9/18/20 15:33	
AD19262-001 T.Sample	0.0079		0.0079	0.007745446	0.73	2.5	1	100	0.424	1.096		9/18/20 15:33	
AD19262-003 T.Sample	0.0141		0.0141	0.016588659	0.69	2.5	1	100	0.962	1.159		9/18/20 15:34	
CCV-3.Control	0.3381		0.3381	0.478717801	1	1	1	1	0.479	0.020	96	9/18/20 15:34	PASS
CCB-3.Sample	-0.0003		-0.0003	-0.003950415	1	1	1	1	-0.004	0.020		9/18/20 15:34	
AD19274-001 T.Sample	0.0002		0.0002	-0.003237253	1	2.5	1	100	-0.129	0.800		9/18/20 15:35	
AD19292-001 T.Sample	-0.0002		-0.0002	-0.003807783	0.96	2.5	1	100	-0.159	0.833		9/18/20 15:35	
AD19292-002 T.Sample	-0.0004		-0.0004	-0.004093048	0.97	2.5	1	100	-0.169	0.825		9/18/20 15:35	
AD19292-003 T.Sample	0.0004		0.0004	-0.002951988	0.94	2.5	1	100	-0.126	0.851		9/18/20 15:35	
AD19294-001 T.Sample	0.0658		0.0658	0.090329644	0.9	2.5	1	100	4.015	0.889		9/18/20 15:36	
AD19290-001 T.Sample	-0.0002		-0.0002	-0.003807783	0.81	2.5	1	100	-0.188	0.988		9/18/20 15:36	
CCV-4.Control	0.3376		0.3376	0.478004648	1	1	1	1	0.478	0.020	96	9/18/20 15:36	PASS
CCB-4.Sample	-0.0002		-0.0002	-0.003807783	1	1	1	1	-0.004	0.020		9/18/20 15:37	

Hex-Cr Soil SW-846 3060A / 7196A

Cr6 soil curve		Date	9/18/2020			Batch #	786 A			TestGroupID	CR6-SOIL
										TestID:	CR-HEX
STD ppm			ABS								
0			0.0083		Intercept	Constant	0.002469647				
0.02			0.0187								
0.25			0.1805		Slope	X Coefficients	0.701102693				
0.5			0.3329								
1			0.7129								

STD mg/L			ABS		PPM	DIFF					
0			0.0083		0.008315976	-0.008315976					
0.02			0.0187		0.023149752	-0.003149752					
0.25			0.1805		0.253929068	-0.003929068					
0.5			0.3329		0.471300933	0.028699067					
1			0.7129		1.013304271	-0.013304271					

SUMMARY OUTPUT											
Regression Statistics											
Multiple R	0.999203109										
R Square	0.998406852										
Adjusted R Square	0.997875803										
Standard Error	0.01339549										
Observations	5										
ANOVA											
	df	*SS*	*MS*	*F*	*Significance F*						
Regression	1	0.337357155	0.337357155	1880.064269	2.70011E-05						
Residual	3	0.000538317	0.000179439								
Total	4	0.337895472									
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*			
Intercept	0.002469647	0.008285641	0.298063481	0.785105638	-0.023898985	0.028838279	-0.023898985	0.028838279			
X Variable 1	0.701102693	0.016169451	43.35970789	2.70011E-05	0.649644233	0.752561152	0.649644233	0.752561152			

9/18/20

9/18/20

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA								
Batch#	786 A		QC Sample	AD19290-002 NS.Sample							
Date	9/18/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	JMP		LCS	20.00	18.94	18.94	95%	80-120%	NA	NA	PASS	
			MS(Sol)	21.74	19.02	17.91	82%	75-125%	NA	NA	PASS	
			MS(Insol)	1095.56	539.90	538.80	49%	75-125%	NA	20%	[redacted]	PASS
			Sample	NA	1.11	NA	NA	NA	NA	NA		
			Sample Dup	NA	1.11	NA	NA	NA	0	20%		PASS
			PVS	21.98	21.09	19.99	91%	85-115%	NA	NA	PASS	
Lead Chromate Added :	0.0155	g										
Upper Calibration Abbsorbance:	0.7129											

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3374	0.0000	0.3374	0.477719378	1	1	1	1	0.478	0.500	96	9/18/20 15:42	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	-0.0002	0.0000	-0.0002	-0.003807783	1	1	1	1	-0.004	0.020		9/18/20 15:42	
MB.Sample	0.0001	0.0000	0.0001	-0.003379885	1	2.5	1	100	-0.135	0.800		9/18/20 15:42	
LCS.Sample	0.3344	0.0000	0.3344	0.473440417	1	2.5	1	100	18.938	0.800		9/18/20 15:43	
AD19290-002 NS.Sample	0.0242	0.0041	0.0201	0.025146606	0.91	2.5	1	100	1.105	0.879		9/18/20 15:43	
AD19290-002 DUP.Sample	0.0242	0.0041	0.0201	0.025146606	0.91	2.5	1	100	1.105	0.879		9/18/20 15:43	
AD19290-003 MS.Sample	0.3110	0.0019	0.3091	0.437354393	0.92	2.5	1	100	19.015	0.870		9/18/20 15:44	
AD19290-004 50X MSD.Sample	0.1744	-0.0003	0.1747	0.245656388	0.91	2.5	50	100	539.904	43.956		9/18/20 15:44	
AD19290-002 PVS.Sample	0.3430	0.0041	0.3389	0.479858873	0.91	2.5	1	100	21.093	0.879		9/18/20 15:45	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3374		0.3374	0.477719378	1	1	1	1	0.478	0.020	96	9/18/20 15:42	PASS
ICB.Sample	-0.0002		-0.0002	-0.003807783	1	1	1	1	-0.004	0.020		9/18/20 15:42	
MB.Sample	0.0001		0.0001	-0.003379885	1	2.5	1	100	-0.135	0.800		9/18/20 15:42	
LCS.Sample	0.3344		0.3344	0.473440417	1	2.5	1	100	18.938	0.800		9/18/20 15:43	
AD19290-002 NS.Sample	0.0242	0.0041	0.0201	0.025146606	0.91	2.5	1	100	1.105	0.879		9/18/20 15:43	
AD19290-002 DUP.Sample	0.0242	0.0041	0.0201	0.025146606	0.91	2.5	1	100	1.105	0.879		9/18/20 15:43	
AD19290-003 MS.Sample	0.3110	0.0019	0.3091	0.437354393	0.92	2.5	1	100	19.015	0.870		9/18/20 15:44	
AD19290-004 XXX.Sample	3.9282	0.0020	3.9262	5.596513037	0.91	2.5	1	100	246.001	0.879		9/18/20 15:44	
AD19290-004 50X MSD.Sample	0.1744	-0.0003	0.1747	0.245656388	0.91	2.5	50	100	539.904	43.956		9/18/20 15:44	
AD19290-002 PVS.Sample	0.3430	0.0041	0.3389	0.479858873	0.91	2.5	1	100	21.093	0.879		9/18/20 15:45	
CCV-1.Control	0.3365		0.3365	0.476435686	1	1	1	1	0.476	0.020	95	9/18/20 15:45	PASS
CCB-1.Sample	0.0001		0.0001	-0.003379885	1	1	1	1	-0.003	0.020		9/18/20 15:45	
AD19290-001.Sample	0.0152	0.0019	0.0133	0.015447599	0.81	2.5	1	100	0.763	0.988		9/18/20 15:46	
AD19178-011.Sample	0.0661	0.0670	-0.0009	-0.004806211	0.82	2.5	1	100	-0.234	0.976		9/18/20 15:46	
AD19178-012.Sample	0.1925	0.1981	-0.0056	-0.011509943	0.85	2.5	1	100	-0.542	0.941		9/18/20 15:46	
AD19178-013.Sample	0.0146	0.0086	0.0060	0.00503543	0.66	2.5	1	100	0.305	1.212		9/18/20 15:46	
AD19262-001.Sample	0.0155	0.0099	0.0056	0.004464899	0.73	2.5	1	100	0.245	1.096		9/18/20 15:47	
AD19262-003.Sample	0.0145	0.0136	0.0009	-0.002238827	0.69	2.5	1	100	-0.130	1.159		9/18/20 15:47	
AD19274-001.Sample	0.0038	0.0038	0.0000	-0.003522518	1	2.5	1	100	-0.141	0.800		9/18/20 15:48	
AD19294-001.Sample	0.0440	0.0445	-0.0005	-0.004235682	0.9	2.5	1	100	-0.188	0.889		9/18/20 15:48	
AD19292-001.Sample	0.0001	0.0021	-0.0020	-0.006375167	0.96	2.5	1	100	-0.266	0.833		9/18/20 15:48	
AD19292-002.Sample	-0.0003	0.0045	-0.0048	-0.010368876	0.97	2.5	1	100	-0.428	0.825		9/18/20 15:48	
CCV-2.Control	0.3359		0.3359	0.475579919	1	1	1	1	0.476	0.020	95	9/18/20 15:49	PASS
CCB-2.Sample	-0.0003		-0.0003	-0.003950415	1	1	1	1	-0.004	0.020		9/18/20 15:49	
AD19292-003.Sample	0.0000	-0.0004	0.0004	-0.002951988	0.94	2.5	1	100	-0.126	0.851		9/18/20 15:49	
AD19290-002 T.Sample	0.0041		0.0041	0.002325413	0.91	2.5	1	100	0.102	0.879		9/18/20 15:49	
AD19290-003 T.Sample	0.0019		0.0019	-0.000812501	0.92	2.5	1	100	-0.035	0.870		9/18/20 15:50	
AD19290-004 T.Sample	0.0020		0.0020	-0.000669869	0.91	2.5	1	100	-0.029	0.879		9/18/20 15:50	
AD19290-004 50XT.Sample	-0.0003		-0.0003	-0.003950415	0.91	2.5	1	100	-0.174	0.879		9/18/20 15:50	

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AD19178-011 T.Sample	0.0670		0.0670	0.092041231	0.82	2.5	1	100	4.490	0.976		9/18/20 15:51	
AD19178-012 T.Sample	0.1981		0.1981	0.279032381	0.85	2.5	1	100	13.131	0.941		9/18/20 15:52	
AD19178-013 T.Sample	0.0086		0.0086	0.008743874	0.66	2.5	1	100	0.530	1.212		9/18/20 15:52	
AD19262-001 T.Sample	0.0099		0.0099	0.010598095	0.73	2.5	1	100	0.581	1.096		9/18/20 15:53	
AD19262-003 T.Sample	0.0136		0.0136	0.015875497	0.69	2.5	1	100	0.920	1.159		9/18/20 15:53	
CCV-3.Control	0.3351		0.3351	0.47443884	1	1	1	1	0.474	0.020	95	9/18/20 15:53	PASS
CCB-3.Sample	-0.0013		-0.0013	-0.00537674	1	1	1	1	-0.005	0.020		9/18/20 15:54	
AD19274-001 T.Sample	0.0038		0.0038	0.001897516	1	2.5	1	100	0.076	0.800		9/18/20 15:54	
AD19292-001 T.Sample	0.0021		0.0021	-0.000527236	0.96	2.5	1	100	-0.022	0.833		9/18/20 15:54	
AD19292-002 T.Sample	0.0045		0.0045	0.002895942	0.97	2.5	1	100	0.119	0.825		9/18/20 15:55	
AD19292-003 T.Sample	-0.0004		-0.0004	-0.004093048	0.94	2.5	1	100	-0.174	0.851		9/18/20 15:55	
AD19294-001 T.Sample	0.0445		0.0445	0.059948927	0.9	2.5	1	100	2.664	0.889		9/18/20 15:55	
AD19290-001 T.Sample	0.0019		0.0019	-0.000812501	0.81	2.5	1	100	-0.040	0.988		9/18/20 15:55	
CCV-4.Control	0.3344		0.3344	0.473440417	1	1	1	1	0.473	0.020	95	9/18/20 15:56	PASS
CCB-4.Sample	-0.0005		-0.0005	-0.00423568	1	1	1	1	-0.004	0.020		9/18/20 15:56	

MS/MSD/DUP Recovery

0091101 0554

Prep Batch: S-2421 Sample ID: AD19177-002
Method: EPA 9012B Matrix: Soil

Qc Type: DUP

Analyte	Limits Rpd	Dil	DUP Conc	Sample Conc	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	35	1	0	0	NA		20200914160	15	09/14/20 16:40	20200914160	14	09/14/20 16:38

Qc Type: MS

Analyte	Amt	Limits Recov	Dil	MS Conc	Sample Conc	% Rec	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.335	0	84		20200914160	16	09/14/20 16:43	20200914160	14	09/14/20 16:38

Qc Type: MSD

Analyte	Amt	Limits Recov	Rpd	Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.3459	0	86	3.2		20200914160	17	09/14/20 16:45	20200914160	14	09/14/20 16:38

LCS Recoveries

	BatchRunID/RunID:=====>	202009141607-12							
	QcBatchID:=====>	LCSS-2421							
	Date/Time:=====>	09/14/20 16:33							
	Analytical Method:=====>	EPA 9012B							
	Matrix:=====>	Soil	Soil		Soil		Soil		Soil	
Analyte	EPA 9012B Amt Limits	Amt Limits	% Rec Flags		% Rec Flags		% Rec Flags		% Rec Flags		% Rec Flags
Cyanide	0.4 80-120		101							

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200914160	9	ICV	109	0.4	85-115
Cyanide	20200914160	21	CCV	110	0.4	85-115
Cyanide	20200914160	33	CCV	109	0.4	85-115
Cyanide	20200914160	41	CCV	112	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 9/14/20

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200914160	9/14/20 16:31	MBS-2421	11	Cyanide	ND	0.020

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200914160	9/14/20 16:29	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200914160	9/14/20 16:56	CCB	22	Cyanide	ND	0.020
20200914160	9/14/20 17:24	CCB	34	Cyanide	ND	0.020
20200914160	9/14/20 17:40	CCB	42	Cyanide	ND	0.020

MS/MSD/DUP Recovery

0091101 0558

Prep Batch: S-2422 Sample ID: AD19217-001
Method: EPA 9012B Matrix: Soil

Qc Type: DUP

Analyte	Limits Rpd	Dil	DUP Conc	Sample Conc	Rpd	Flag	MS/MSD/DUP Batch	MS/MSD/DUP RunID	MS/MSD/DUP Analysis Date	Non Spike Batch	Non Spike RunID	Non Spike Analysis Date
Cyanide	35	1	0	0	NA		20200915133	15	09/15/20 14:10	20200915133	14	09/15/20 14:07

Qc Type: MS

Analyte	Amt	Limits Recov	Dil	MS Conc	Sample Conc	% Rec	Flag	MS/MSD/DUP Batch	MS/MSD/DUP RunID	MS/MSD/DUP Analysis Date	Non Spike Batch	Non Spike RunID	Non Spike Analysis Date
Cyanide	0.4	75-125	1	0.3203	0	80		20200915133	16	09/15/20 14:12	20200915133	14	09/15/20 14:07

Qc Type: MSD

Analyte	Amt	Limits Recov	Rpd	Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	MS/MSD/DUP Batch	MS/MSD/DUP RunID	MS/MSD/DUP Analysis Date	Non Spike Batch	Non Spike RunID	Non Spike Analysis Date
Cyanide	0.4	75-125	20	1	0.3165	0	79	1.2		20200915133	17	09/15/20 14:14	20200915133	14	09/15/20 14:07

LCS Recoveries

	BatchRunID/RunID:====>	202009151337-12				
	QcBatchID:====>	LCSS-2422				
	Date/Time:====>	09/15/20 14:03				
	Analytical Method:====>	EPA 9012B				
	Matrix:====>	Soil	Soil	Soil	Soil	Soil
Analyte	EPA 9012B Amt Limits Amt Limits	% Rec Flags	% Rec Flags	% Rec Flags	% Rec Flags	% Rec Flags
Cyanide	0.4 80-120	93				

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200915133	9	ICV	103	0.4	85-115
Cyanide	20200915133	21	CCV	102	0.4	85-115
Cyanide	20200915133	33	CCV	104	0.4	85-115
Cyanide	20200915133	41	CCV	105	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 9/15/20

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200915133	9/15/20 14:00	MBS-2422	11	Cyanide	ND	0.020

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200915133	9/15/20 13:58	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200915133	9/15/20 14:26	CCB	22	Cyanide	ND	0.020
20200915133	9/15/20 14:54	CCB	34	Cyanide	ND	0.020
20200915133	9/15/20 15:09	CCB	42	Cyanide	ND	0.020

MS/MSD/DUP Recovery

0091101 0562

Prep Batch: S-2423 Sample ID: AD19214-001
Method: EPA 9012B Matrix: Soil

Qc Type: DUP	Limits		DUP	Sample			MS/MSD/DUP			Non Spike		
Analyte	Rpd	Dil	Conc	Conc	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	35	1	0	0	NA		20200915152	15	09/15/20 16:00	20200915152	14	09/15/20 15:58

Qc Type: MS		Limits		MS	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.3074	0	77		20200915152	16	09/15/20 16:03	20200915152	14	09/15/20 15:58

Qc Type: MSD		Limits		MSD	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.3043	0	76	1		20200915152	17	09/15/20 16:05	20200915152	14	09/15/20 15:58

LCS Recoveries

	BatchRunID/RunID:===>	202009151528-12				
	QcBatchID:===>	LCSS-2423				
	Date/Time:===>	09/15/20 15:53				
	Analytical Method:===>	EPA 9012B				
	Matrix:===>	Soil	Soil	Soil	Soil	Soil
Analyte	EPA 9012B Amt Limits Amt Limits	% Rec Flags	% Rec Flags	% Rec Flags	% Rec Flags	% Rec Flags
Cyanide	0.4 80-120	96				

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200915152	9	ICV	105	0.4	85-115
Cyanide	20200915152	21	CCV	108	0.4	85-115
Cyanide	20200915152	33	CCV	105	0.4	85-115
Cyanide	20200915152	39	CCV	110	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 9/15/20

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200915152	9/15/20 15:51	MBS-2423	11	Cyanide	ND	0.020

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200915152	9/15/20 15:49	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200915152	9/15/20 16:16	CCB	22	Cyanide	ND	0.020
20200915152	9/15/20 16:44	CCB	34	Cyanide	ND	0.020
20200915152	9/15/20 16:55	CCB	40	Cyanide	ND	0.020

Wet Chemistry Data
Raw Data

RUN LOG

Instrument: DA1 BatchId: 202009141607 Analyzed By: jw

Run#	Qc Type	Sample ID	Flag summary:	Comments	An Date/Time:	Dil	Prep Batch	Method Blank
1	ICS	STANDARD 1		.g	09/14/20 16:07	1		
2	ICS	STANDARD 90		.g V-334723	09/14/20 16:10	1		
3	ICS	STANDARD 91		.g V-334723	09/14/20 16:12	1		
4	ICS	STANDARD 92		.g V-334723	09/14/20 16:15	1		
5	ICS	STANDARD 93		.g V-334723	09/14/20 16:17	1		
6	ICS	STANDARD 94		.g V-334723	09/14/20 16:19	1		
7	ICS	STANDARD 95		.g V-334723	09/14/20 16:22	1		
8	ICS	STANDARD 0		.g	09/14/20 16:24	1		
9	ICV	CCV		.g V-334719	09/14/20 16:26	1		
10	ICB	CCB		.g	09/14/20 16:29	1		
11	MB	MBS-2421		.g	09/14/20 16:31	1	S-2421	MBS-2421
12	LCS	LCSS-2421		.g V-334718	09/14/20 16:33	1	S-2421	MBS-2421
13	LCS	LCSS-2421 DUP		.g V-334718	09/14/20 16:36	1	S-2421	MBS-2421
14	SMP	AD19177-002		.g	09/14/20 16:38	1	S-2421	MBS-2421
15	DUP	AD19177-002 DUP		.g	09/14/20 16:40	1	S-2421	MBS-2421
16	MS	AD19177-026 MS		.g V-334718	09/14/20 16:43	1	S-2421	MBS-2421
17	MSD	AD19177-028 MSD		.g V-334718	09/14/20 16:45	1	S-2421	MBS-2421
18	SMP	AD19177-004		.g	09/14/20 16:47	1	S-2421	MBS-2421
19	SMP	AD19177-006		.g	09/14/20 16:49	1	S-2421	MBS-2421
20	SMP	AD19177-008		.g	09/14/20 16:52	1	S-2421	MBS-2421
21	CCV	CCV		.g V-334719	09/14/20 16:54	1		
22	CCB	CCB		.g	09/14/20 16:56	1		
23	SMP	AD19177-010		.g	09/14/20 16:59	1	S-2421	MBS-2421
24	SMP	AD19177-012		.g	09/14/20 17:01	1	S-2421	MBS-2421
25	SMP	AD19177-014		.g	09/14/20 17:03	1	S-2421	MBS-2421
26	SMP	AD19177-016		.g	09/14/20 17:06	1	S-2421	MBS-2421
27	SMP	AD19177-018		.g	09/14/20 17:08	1	S-2421	MBS-2421
28	SMP	AD19177-020		.g	09/14/20 17:10	1	S-2421	MBS-2421
29	SMP	AD19177-022		.g	09/14/20 17:13	1	S-2421	MBS-2421
30	SMP	AD19177-024		.g	09/14/20 17:15	1	S-2421	MBS-2421
31	SMP	AD19177-030		.g	09/14/20 17:17	1	S-2421	MBS-2421
32	SMP	AD19164-001		.g	09/14/20 17:20	1	S-2421	MBS-2421
33	CCV	CCV		.g V-334719	09/14/20 17:22	1		
34	CCB	CCB		.g	09/14/20 17:24	1		
35	SMP	AD19171-002		.g	09/14/20 17:27	1	S-2421	MBS-2421
36	SMP	AD19171-004		.g	09/14/20 17:29	1	S-2421	MBS-2421
37	SMP	AD19171-006		.g	09/14/20 17:31	1	S-2421	MBS-2421
38	SMP	AD19178-001		.g	09/14/20 17:33	1	S-2421	MBS-2421
39	SMP	AD19178-002		.g	09/14/20 17:35	1	S-2421	MBS-2421
40	SMP	AD19180-002		.g	09/14/20 17:36	1	S-2421	MBS-2421
41	CCV	CCV		.g V-334719	09/14/20 17:38	1		
42	CCB	CCB		.g	09/14/20 17:40	1		

Flag Code:	Flag Code Description	Flag Code:	Flag Code Description
Cs	CCV Out epa9056	Cw	CCV out 300.0 rev2.1
Ho	Hold Time Exceeded	I1	Init Cal x and y value problem
I2	Init Cal missing a data point	I3	Init Cal missing a Compound
I4	Init Cal Rsd < .995	Is	ICV out epa 9056
Iw	ICV Out 300.0 rev2.1	Ls	LCS Out EPA 9056
Lw	LCS Out 300.0 rev2.1	Ms	Spike Out EPA 9056
Mw	Spike Out EPA 300.0 REV2.1	Oc	Over Calibration/Linear Range

0091401 0568

Logo

AQ-2 Report

Serial Number:	090817
Report Requested By:	Janee
Date & Time:	Tue Sep 15 09:29:35 2020
Tray Number:	91
Tray Name:	CNS 2421

Worklist

Cup	Type	ID	Details	Tests
2	U1	MBS-2421		tCN-m
3	U2	LCSS-2421		tCN-m
4	U3	LCSS-2421 DUP		tCN-m
5	U4	AD19177-002		tCN-m
6	U5	AD19177-002 DUP		tCN-m
7	U6	AD19177-026 MS		tCN-m
8	U7	AD19177-028 MSD		tCN-m
9	U8	AD19177-004		tCN-m
10	U9	AD19177-006		tCN-m
11	U10	AD19177-008		tCN-m
12	U11	AD19177-010		tCN-m
13	U12	AD19177-012		tCN-m
14	U13	AD19177-014		tCN-m
15	U14	AD19177-016		tCN-m
16	U15	AD19177-018		tCN-m
17	U16	AD19177-020		tCN-m
18	U17	AD19177-022		tCN-m
19	U18	AD19177-024		tCN-m
20	U19	AD19177-030		tCN-m
21	U20	AD19164-001		tCN-m
22	U21	AD19171-002		tCN-m
23	U22	AD19171-004		tCN-m
24	U23	AD19171-006		tCN-m
25	U24	AD19178-001		tCN-m
26	U25	AD19178-002		tCN-m
27	U26	AD19180-002		tCN-m

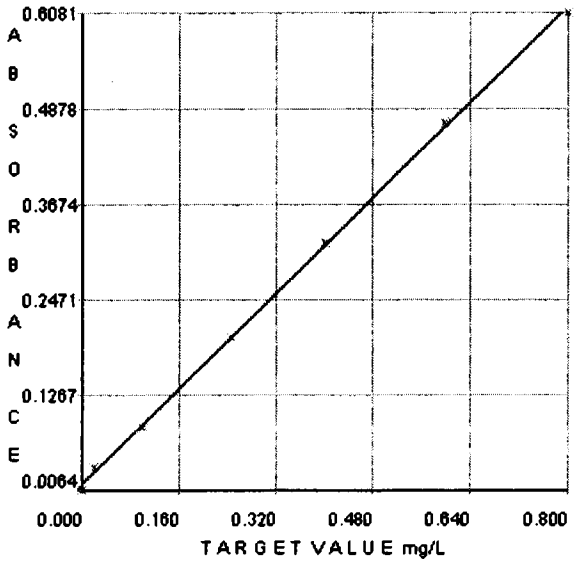
AQ2 tCN mod

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0064	-0.0094	0.0000	
S90	0.0352	0.0290	0.0200	44.81
S91	0.0852	0.0955	0.1000	-4.54
S92	0.1985	0.2461	0.2480	-0.75
S93	0.3200	0.4077	0.4000	1.92
S94	0.4707	0.6081	0.6000	1.36
S95	0.6081	0.7910	0.8000	-1.13
S0	0.0072	-0.0082	0.0000	

Polynomial Order:	1
Correlation Coefficient:	0.9996
Carryover(%):	0.1
Calibration Equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured Absorbance
a =:	-1.785779E-002
b =:	1.330024E+000
Date & Time:	Mon Sep 14 16:24:22 2020

Calibration Graph



9/15/20

Reagents

Name	Batch	Prepared By	Expiry Date
tCN Neutral	V-333445	JMP	Fri Sep 18 22:00:00 2020
tCN Chlor T	V-334720	JW	Tue Sep 15 22:00:00 2020
tCN Pyr Barb	V-334659	JW	Fri Sep 18 22:00:00 2020

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
	S1	STANDARD 1	0.0064		0.006383			jw	Mon Sep 14 16:07:59 2020
	S90	STANDARD 90	0.0352		0.035203			jw	Mon Sep 14 16:10:20 2020
	S91	STANDARD 91	0.0852		0.085202			jw	Mon Sep 14 16:12:41 2020
	S92	STANDARD 92	0.1985		0.198492			jw	Mon Sep 14 16:15:02 2020
	S93	STANDARD 93	0.3200		0.319956			jw	Mon Sep 14 16:17:22 2020
	S94	STANDARD 94	0.4707		0.470669			jw	Mon Sep 14 16:19:43 2020
	S95	STANDARD 95	0.6081		0.608127			jw	Mon Sep 14 16:22:02 2020
	S0	STANDARD 0	0.0072		0.007243			jw	Mon Sep 14 16:24:22 2020
	C11	C C V	0.4355	mg/L	0.340854			jw	Mon Sep 14 16:26:42 2020
	C12	C C B	-0.0093	mg/L	0.006456			jw	Mon Sep 14 16:29:02 2020
2	U1	MBS-2421	-0.0065	mg/L	0.008506			jw	Mon Sep 14 16:31:22 2020
3	U2	LCSS-2421	0.4038	mg/L	0.317017			jw	Mon Sep 14 16:33:41 2020
4	U3	LCSS-2421 DUP	0.4018	mg/L	0.315542			jw	Mon Sep 14 16:36:01 2020
5	U4	AD19177-002	-0.0049	mg/L	0.009737			jw	Mon Sep 14 16:38:20 2020
6	U5	AD19177-002 DUP	-0.0055	mg/L	0.009282			jw	Mon Sep 14 16:40:41 2020
7	U6	AD19177-026 MS	0.3350	mg/L	0.265304			jw	Mon Sep 14 16:43:02 2020
8	U7	AD19177-028 MSD	0.3459	mg/L	0.273503			jw	Mon Sep 14 16:45:21 2020
9	U8	AD19177-004	-0.0066	mg/L	0.008492			jw	Mon Sep 14 16:47:40 2020
10	U9	AD19177-006	-0.0064	mg/L	0.008648			jw	Mon Sep 14 16:49:59 2020
11	U10	AD19177-008	-0.0064	mg/L	0.008594			jw	Mon Sep 14 16:52:18 2020
	C11	C C V	0.4394	mg/L	0.343794			jw	Mon Sep 14 16:54:37 2020
	C12	C C B	-0.0093	mg/L	0.006417			jw	Mon Sep 14 16:56:56 2020
12	U11	AD19177-010	-0.0058	mg/L	0.009062			jw	Mon Sep 14 16:59:15 2020
13	U12	AD19177-012	-0.0047	mg/L	0.009892			jw	Mon Sep 14 17:01:34 2020
14	U13	AD19177-014	-0.0041	mg/L	0.010370			jw	Mon Sep 14 17:03:53 2020
15	U14	AD19177-016	-0.0061	mg/L	0.008812			jw	Mon Sep 14 17:06:12 2020
16	U15	AD19177-018	-0.0064	mg/L	0.008650			jw	Mon Sep 14 17:08:34 2020
17	U16	AD19177-020	-0.0063	mg/L	0.008704			jw	Mon Sep 14 17:10:54 2020
18	U17	AD19177-022	-0.0062	mg/L	0.008782			jw	Mon Sep 14 17:13:14 2020
19	U18	AD19177-024	-0.0066	mg/L	0.008492			jw	Mon Sep 14 17:15:33 2020
20	U19	AD19177-030	-0.0061	mg/L	0.008837			jw	Mon Sep 14 17:17:52 2020
21	U20	AD19164-001	-0.0082	mg/L	0.007267			jw	Mon Sep 14 17:20:12 2020
	C11	C C V	0.4362	mg/L	0.341375			jw	Mon Sep 14 17:22:31 2020
	C12	C C B	-0.0094	mg/L	0.006371			jw	Mon Sep 14 17:24:51 2020
22	U21	AD19171-002	-0.0015	mg/L	0.012300			jw	Mon Sep 14 17:27:13 2020
23	U22	AD19171-004	0.0039	mg/L	0.016342			jw	Mon Sep 14 17:29:33 2020
24	U23	AD19171-006	0.0013	mg/L	0.014412			jw	Mon Sep 14 17:31:30 2020
25	U24	AD19178-001	0.0197	mg/L	0.028272			jw	Mon Sep 14 17:33:21 2020
26	U25	AD19178-002	-0.0004	mg/L	0.013146			jw	Mon Sep 14 17:35:03 2020
27	U26	AD19180-002	-0.0040	mg/L	0.010410			jw	Mon Sep 14 17:36:44 2020
	C11	C C V	0.4482	mg/L	0.350441			jw	Mon Sep 14 17:38:26 2020
	C12	C C B	-0.0082	mg/L	0.007226			jw	Mon Sep 14 17:40:08 2020

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332257

Prepared By: Trivedi, Beena
Description: 1 N NAOH
Prep Date: 7/28/2020
Expiration Date: 1/27/2021
Department: Metals
BatchNumber:
Concentration: 1 n
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 07/28/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12987	sodium hydroxide	80 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-333445

Prepared By: Patel, Jessica
Description: Sodium Phosphate
Prep Date: 8/19/2020
Expiration Date: 9/18/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 08/19/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13261	sodium phosphate monobasic	34.5 g	NEAT neat	
13084	DI H20			

Veritech Lot Number: V-334102

Prepared By: louis lombardi
Description: 0.25 N NaOH
Prep Date: 9/1/2020
Expiration Date: 2/25/2021
Department: WetChem
BatchNumber:
Concentration: 0.25 n
Final Volume: 6000 ml
ApprovedBy: jessica
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12834	sodium hydroxide	60 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334659

Prepared By: Wonge, Janee
Description: Pyridine/Barbaturic acid
Prep Date: 9/11/2020
Expiration Date: 9/18/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13135	Barbituric Acid	3.75 g	neat neat	
12769	Pyridine	18.75 ml	neat neat	
13096	hydrochloric acid	3.75 ml	neat neat	

Veritech Lot Number: V-334717

Prepared By: Wonge, Janee
Description: 20 ppm CN standard
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: WetChem
BatchNumber:
Concentration: 20 ppm
Final Volume: 100 ml
ApprovedBy: JMR
ApproveDate: 9/14/20
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13179	1000 ppm cn std	2 ml	1000 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334718

Prepared By: Wonge, Janee
Description: 20 ppm CN control
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: WetChem
BatchNumber:
Concentration: 20 ppm
Final Volume: 100 ml
ApprovedBy: JMP
ApproveDate: 9/14/20
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13213	1000 PPM CN STD	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334719

Prepared By: Wonge, Janee
Description: ICV/CCV
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: WetChem
BatchNumber:
Concentration: 0.40 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334718	20 ppm CN control	2 ml	20 ppm	
V-334102	0.25 N NaOH	98 ml	0.25 n	

Veritech Lot Number: V-334720

Prepared By: Wonge, Janee
Description: Chloramine -T (AQ2)
Prep Date: 9/14/2020
Expiration Date: 9/15/2020
Department: WetChem
BatchNumber:
Concentration: reagent reage
Final Volume: 50 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10778	Chloramine T trihydrate	.5 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334723

Prepared By: Wonge, Janee
Description: 0.80 ppm Cyanide
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: WetChem
BatchNumber:
Concentration: 0.80 ppm
Final Volume: 6 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334717	20 ppm CN standard	.24 ml	20 ppm	
V-332257	1 N NAOH	1.5 ml	1 n	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10778

Description
Chloramine T trihydrate

ApprovedBy: janee
ApproveDate: 03/02/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Emd Millipore	1.02426.0250	K48314926 637	03/02/17	03/01/27	Wonge, Janee	1	250 g	neat	neat

Veritech Control/Receipt Number: 12769

Description
Pyridine

ApprovedBy: janee
ApproveDate: 09/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	P368-1	190224	09/20/19	09/19/24	Wonge, Janee	1	1 L	neat	neat

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12987

Description
sodium hydroxide

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069931	01/07/20	01/06/25	Lopez, Jose	4	12kg	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13096

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9530-33	251602	03/10/20	01/15/25	Burwell, John	6	2.5	neat	neat

Veritech Control/Receipt Number: 13135

Description
Barbituric Acid

ApprovedBy: jessica
ApproveDate: 03/25/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
GFS chemicals	LS-1580004	17501828	03/25/20	03/24/30	Patel, Jessica	1	100 g	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13179

Description
1000 ppm cn std

ApprovedBy: jessica
ApproveDate: 04/08/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
labchem	LC135451	K070-001	04/08/20	09/20/20	Patel, Jessica	1	500M	1000	PPM

Veritech Control/Receipt Number: 13213

Description
1000 PPM CN STD

ApprovedBy: jessica
ApproveDate: 04/21/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RICCA	2543-16	4003H35	04/21/20	09/30/20	Patel, Jessica	1	500 M	1000	PPM

Veritech Control/Receipt Number: 13261

Description
sodium phosphate monobasic

ApprovedBy: jessica
ApproveDate: 05/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
lab chem	LC247751	K086-13	05/26/20	05/25/30	Patel, Jessica	3	500 G	NEAT	NEAT

RUN LOG

Instrument: DA1 BatchId: 202009151337 Analyzed By: jw

Run#	Qc Type	Sample ID	Flag summary:	Comments	An Date/Time:	Dil	Prep Batch	Method Blank
1	ICS	STANDARD 1		.g	09/15/20 13:37	1		
2	ICS	STANDARD 90		.g V-334843	09/15/20 13:39	1		
3	ICS	STANDARD 91		.g V-334843	09/15/20 13:42	1		
4	ICS	STANDARD 92		.g V-334843	09/15/20 13:44	1		
5	ICS	STANDARD 93		.g V-334843	09/15/20 13:47	1		
6	ICS	STANDARD 94		.g V-334843	09/15/20 13:49	1		
7	ICS	STANDARD 95		.g V-334843	09/15/20 13:51	1		
8	ICS	STANDARD 0		.g	09/15/20 13:53	1		
9	ICV	CCV		.g V-334841	09/15/20 13:56	1		
10	ICB	CCB		.g	09/15/20 13:58	1		
11	MB	MBS-2422		.g	09/15/20 14:00	1	S-2422	MBS-2422
12	LCS	LCSS-2422		.g V-334840	09/15/20 14:03	1	S-2422	MBS-2422
13	LCS	LCSS-2422 DUP		.g V-334840	09/15/20 14:05	1	S-2422	MBS-2422
14	SMP	AD19217-001		.g	09/15/20 14:07	1	S-2422	MBS-2422
15	DUP	AD19217-001 DUP		.g	09/15/20 14:10	1	S-2422	MBS-2422
16	MS	AD19217-001 MS		.g V-334840	09/15/20 14:12	1	S-2422	MBS-2422
17	MSD	AD19217-001 MSD		.g V-334840	09/15/20 14:14	1	S-2422	MBS-2422
18	SMP	AD19217-002		.g	09/15/20 14:17	1	S-2422	MBS-2422
19	SMP	AD19217-003		.g	09/15/20 14:19	1	S-2422	MBS-2422
20	SMP	AD19217-004		.g	09/15/20 14:21	1	S-2422	MBS-2422
21	CCV	CCV		.g V-334841	09/15/20 14:24	1		
22	CCB	CCB		.g	09/15/20 14:26	1		
23	SMP	AD19217-005		.g	09/15/20 14:28	1	S-2422	MBS-2422
24	SMP	AD19217-006		.g	09/15/20 14:31	1	S-2422	MBS-2422
25	SMP	AD19217-007		.g	09/15/20 14:33	1	S-2422	MBS-2422
26	SMP	AD19217-008		.g	09/15/20 14:35	1	S-2422	MBS-2422
27	SMP	AD19217-009		.g	09/15/20 14:38	1	S-2422	MBS-2422
28	SMP	AD19217-010		.g	09/15/20 14:40	1	S-2422	MBS-2422
29	SMP	AD19231-001		.g	09/15/20 14:42	1	S-2422	MBS-2422
30	SMP	AD19231-002		.g	09/15/20 14:45	1	S-2422	MBS-2422
31	SMP	AD19231-003		.g	09/15/20 14:47	1	S-2422	MBS-2422
32	SMP	AD19178-003		.g	09/15/20 14:49	1	S-2422	MBS-2422
33	CCV	CCV		.g V-334841	09/15/20 14:52	1		
34	CCB	CCB		.g	09/15/20 14:54	1		
35	SMP	AD19178-004		.g	09/15/20 14:56	1	S-2422	MBS-2422
36	SMP	AD19178-005		.g	09/15/20 14:59	1	S-2422	MBS-2422
37	SMP	AD19178-006		.g	09/15/20 15:01	1	S-2422	MBS-2422
38	SMP	AD19178-007		.g	09/15/20 15:03	1	S-2422	MBS-2422
39	SMP	AD19178-008		.g	09/15/20 15:04	1	S-2422	MBS-2422
40	SMP	AD19178-009		.g	09/15/20 15:06	1	S-2422	MBS-2422
41	CCV	CCV		.g V-334841	09/15/20 15:08	1		
42	CCB	CCB		.g	09/15/20 15:09	1		

Flag Code:	Flag Code Description	Flag Code:	Flag Code Description
Cs	CCV Out epa9056	Cw	CCV out 300.0 rev2.1
Ho	Hold Time Exceeded	I1	Init Cal x and y value problem
I2	Init Cal missing a data point	I3	Init Cal missing a Compound
I4	Init Cal Rsd < .995	Is	ICV out epa 9056
Iw	ICV Out 300.0 rev2.1	Ls	LCS Out EPA 9056
Lw	LCS Out 300.0 rev2.1	Ms	Spike Out EPA 9056
Mw	Spike Out EPA 300.0 REV2.1	Oc	Over Calibration/Linear Range

Logo

AQ-2 Report

Serial Number: 090817
Report Requested By: Janee
Date & Time: Tue Sep 15 15:21:17 2020
Tray Number: 92
Tray Name: CNS 2422

Worklist

Cup	Type	ID	Details	Tests
2	U1	MBS-2422		tCN-m
3	U2	LCSS-2422		tCN-m
4	U3	LCSS-2422 DUP		tCN-m
5	U4	AD19217-001		tCN-m
6	U5	AD19217-001 DUP		tCN-m
7	U6	AD19217-001 MS		tCN-m
8	U7	AD19217-001 MSD		tCN-m
9	U8	AD19217-002		tCN-m
10	U9	AD19217-003		tCN-m
11	U10	AD19217-004		tCN-m
12	U11	AD19217-005		tCN-m
13	U12	AD19217-006		tCN-m
14	U13	AD19217-007		tCN-m
15	U14	AD19217-008		tCN-m
16	U15	AD19217-009		tCN-m
17	U16	AD19217-010		tCN-m
18	U17	AD19231-001		tCN-m
19	U18	AD19231-002		tCN-m
20	U19	AD19231-003		tCN-m
21	U20	AD19178-003		tCN-m
22	U21	AD19178-004		tCN-m
23	U22	AD19178-005		tCN-m
24	U23	AD19178-006		tCN-m
25	U24	AD19178-007		tCN-m
26	U25	AD19178-008		tCN-m
27	U26	AD19178-009		tCN-m

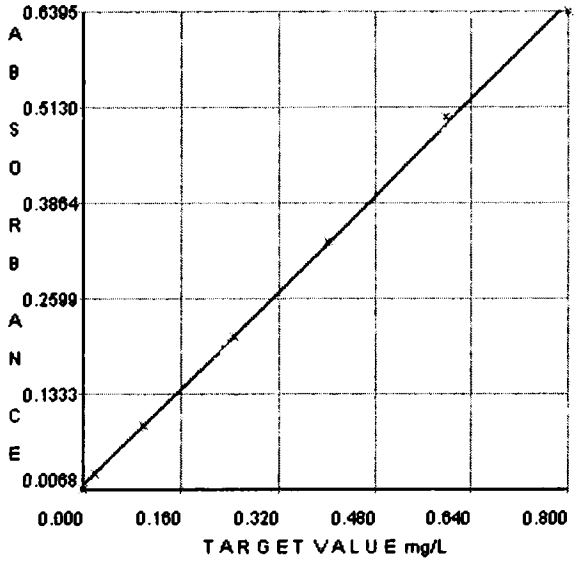
AQ2 tCN mod

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0068	-0.0054	0.0000	
S90	0.0271	0.0200	0.0200	0.01
S91	0.0903	0.0993	0.1000	-0.71
S92	0.2091	0.2482	0.2480	0.09
S93	0.3345	0.4054	0.4000	1.36
S94	0.4999	0.6127	0.6000	2.12
S95	0.6395	0.7878	0.8000	-1.53
S0	0.0069	-0.0053	0.0000	

Polynomial Order:	1
Correlation Coefficient:	0.9997
Carryover(%):	0.0
Calibration Equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured Absorbance
a =:	-1.391750E-002
b =:	1.253540E+000
Date & Time:	Tue Sep 15 13:53:58 2020

Calibration Graph



9/16/20

Reagents

Name	Batch	Prepared By	Expiry Date
tCN Neutral	V-333445	JMP	Fri Sep 18 22:00:00 2020
tCN Chlor T	V-334720	JW	Tue Sep 15 22:00:00 2020
tCN Pyr Barb	V-334659	JW	Fri Sep 18 22:00:00 2020

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
	S1	STANDARD 1	0.0068		0.006776			jw	Tue Sep 15 13:37:39 2020
	S90	STANDARD 90	0.0271		0.027059			jw	Tue Sep 15 13:39:59 2020
	S91	STANDARD 91	0.0903		0.090313			jw	Tue Sep 15 13:42:21 2020
	S92	STANDARD 92	0.2091		0.209110			jw	Tue Sep 15 13:44:41 2020
	S93	STANDARD 93	0.3345		0.334537			jw	Tue Sep 15 13:47:00 2020
	S94	STANDARD 94	0.4999		0.499879			jw	Tue Sep 15 13:49:19 2020
	S95	STANDARD 95	0.6395		0.639546			jw	Tue Sep 15 13:51:38 2020
	S0	STANDARD 0	0.0069		0.006856			jw	Tue Sep 15 13:53:58 2020
	C11	C C V	0.4112	mg/L	0.339133			jw	Tue Sep 15 13:56:17 2020
	C12	C C B	-0.0054	mg/L	0.006809			jw	Tue Sep 15 13:58:36 2020
2	U1	MBS-2422	-0.0043	mg/L	0.007635			jw	Tue Sep 15 14:00:55 2020
3	U2	LCSS-2422	0.3737	mg/L	0.309190			jw	Tue Sep 15 14:03:15 2020
4	U3	LCSS-2422 DUP	0.3820	mg/L	0.315845			jw	Tue Sep 15 14:05:34 2020
5	U4	AD19217-001	0.0044	mg/L	0.014641			jw	Tue Sep 15 14:07:54 2020
6	U5	AD19217-001 DUP	0.0039	mg/L	0.014183			jw	Tue Sep 15 14:10:15 2020
7	U6	AD19217-001 MS	0.3203	mg/L	0.266579			jw	Tue Sep 15 14:12:36 2020
8	U7	AD19217-001 MSD	0.3165	mg/L	0.263556			jw	Tue Sep 15 14:14:56 2020
9	U8	AD19217-002	0.0005	mg/L	0.011530			jw	Tue Sep 15 14:17:15 2020
10	U9	AD19217-003	0.0005	mg/L	0.011469			jw	Tue Sep 15 14:19:35 2020
11	U10	AD19217-004	-0.0008	mg/L	0.010498			jw	Tue Sep 15 14:21:55 2020
	C11	C C V	0.4069	mg/L	0.335700			jw	Tue Sep 15 14:24:15 2020
	C12	C C B	-0.0054	mg/L	0.006795			jw	Tue Sep 15 14:26:35 2020
12	U11	AD19217-005	0.0022	mg/L	0.012859			jw	Tue Sep 15 14:28:56 2020
13	U12	AD19217-006	-0.0002	mg/L	0.010918			jw	Tue Sep 15 14:31:16 2020
14	U13	AD19217-007	0.0008	mg/L	0.011746			jw	Tue Sep 15 14:33:36 2020
15	U14	AD19217-008	0.0025	mg/L	0.013118			jw	Tue Sep 15 14:35:56 2020
16	U15	AD19217-009	0.0215	mg/L	0.028276			jw	Tue Sep 15 14:38:17 2020
17	U16	AD19217-010	-0.0022	mg/L	0.009336			jw	Tue Sep 15 14:40:38 2020
18	U17	AD19231-001	0.0273	mg/L	0.032893			jw	Tue Sep 15 14:42:57 2020
19	U18	AD19231-002	0.0439	mg/L	0.046138			jw	Tue Sep 15 14:45:17 2020
20	U19	AD19231-003	0.0337	mg/L	0.037961			jw	Tue Sep 15 14:47:36 2020
21	U20	AD19178-003	0.0337	mg/L	0.038013			jw	Tue Sep 15 14:49:56 2020
	C11	C C V	0.4141	mg/L	0.341433			jw	Tue Sep 15 14:52:15 2020
	C12	C C B	-0.0053	mg/L	0.006913			jw	Tue Sep 15 14:54:34 2020
22	U21	AD19178-004	0.0111	mg/L	0.019947			jw	Tue Sep 15 14:56:56 2020
23	U22	AD19178-005	0.0421	mg/L	0.044673			jw	Tue Sep 15 14:59:16 2020
24	U23	AD19178-006	0.0113	mg/L	0.020139			jw	Tue Sep 15 15:01:13 2020
25	U24	AD19178-007	0.1237	mg/L	0.109812			jw	Tue Sep 15 15:03:04 2020
26	U25	AD19178-008	0.0065	mg/L	0.016294			jw	Tue Sep 15 15:04:46 2020
27	U26	AD19178-009	0.0295	mg/L	0.034651			jw	Tue Sep 15 15:06:28 2020
	C11	C C V	0.4191	mg/L	0.345421			jw	Tue Sep 15 15:08:09 2020
	C12	C C B	-0.0042	mg/L	0.007723			jw	Tue Sep 15 15:09:52 2020

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-330629

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: 0.4N Sulfamic Acid
BatchNumber:
ApproveDate: 07/01/20
Prep Date: 7/1/2020
Concentration: 0.4 n
Checked: Yes
Expiration Date: 12/31/2020
Final Volume: 250 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10606	Sulfamic Acid, ACS	10 g	neat neat	.4 n
13084	DI H20			

Veritech Lot Number: V-330630

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: CN Release Solution
BatchNumber:
ApproveDate: 07/01/20
Prep Date: 7/1/2020
Concentration: various neat
Checked: Yes
Expiration Date: 12/31/2020
Final Volume: 930.6 g

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12312	Magnesium Chloride Hexahydrate	96.6 g	neat neat	
13084	DI H20	332.4 g		
13280	sulfuric acid	417 g	neat neat	
V-330629	0.4N Sulfamic Acid	84.6 g	0.4 n	

Veritech Lot Number: V-332257

Prepared By: Trivedi, Beena
Department: Metals
ApprovedBy: jessica
Description: 1 N NAOH
BatchNumber:
ApproveDate: 07/28/20
Prep Date: 7/28/2020
Concentration: 1 n
Checked: Yes
Expiration Date: 1/27/2021
Final Volume: 2000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12987	sodium hydroxide	80 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-333445

Prepared By: Patel, Jessica
Department: WetChem
ApprovedBy: jessica
Description: Sodium Phosphate
BatchNumber:
ApproveDate: 08/19/20
Prep Date: 8/19/2020
Concentration: Reagent reag
Checked: Yes
Expiration Date: 9/18/2020
Final Volume: 250 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13261	sodium phosphate monobasic	34.5 g	NEAT neat	
13084	DI H20			

Veritech Lot Number: V-334102

Prepared By: louis lombardi
Department: WetChem
ApprovedBy: jessica
Description: 0.25 N NaOH
BatchNumber:
ApproveDate: 09/02/20
Prep Date: 9/1/2020
Concentration: 0.25 n
Checked: Yes
Expiration Date: 2/25/2021
Final Volume: 6000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12834	sodium hydroxide	60 g	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334659

Prepared By: Wonge, Janee | Department: WetChem | ApprovedBy: jessica
Description: Pyridine/Barbaturic acid | BatchNumber: | ApproveDate: 09/11/20
Prep Date: 9/11/2020 | Concentration: Reagent reag | Checked: Yes
Expiration Date: 9/18/2020 | Final Volume: 250 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13135	Barbituric Acid	3.75 g	neat neat	
12769	Pyridine	18.75 ml	neat neat	
13096	hydrochloric acid	3.75 ml	neat neat	

Veritech Lot Number: V-334720

Prepared By: Wonge, Janee | Department: WetChem | ApprovedBy: jessica
Description: Chloramine -T (AQ2) | BatchNumber: | ApproveDate: 09/14/20
Prep Date: 9/14/2020 | Concentration: reagent reage | Checked: Yes
Expiration Date: 9/15/2020 | Final Volume: 50 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10778	Chloramine T trihydrate	.5 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334839

Prepared By: Wonge, Janee | Department: WetChem | ApprovedBy: [signature]
Description: 20 ppm CN standard | BatchNumber: | ApproveDate: 9/15/20
Prep Date: 9/15/2020 | Concentration: 20 ppm | Checked: No
Expiration Date: 9/15/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13179	1000 ppm cn std	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334840

Prepared By: Wonge, Janee | Department: WetChem | ApprovedBy:
Description: 20 ppm CN control | BatchNumber: | ApproveDate:
Prep Date: 9/15/2020 | Concentration: 20 ppm | Checked: No
Expiration Date: 9/15/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13213	1000 PPM CN STD	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334841

Prepared By: Wonge, Janee | Department: WetChem | ApprovedBy:
Description: ICV/CCV | BatchNumber: | ApproveDate:
Prep Date: 9/15/2020 | Concentration: 0.40 ppm | Checked: No
Expiration Date: 9/15/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334840	20 ppm CN control	2 ml	20 ppm	
V-334102	0.25 N NaOH	98 ml	0.25 n	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334843

Prepared By: Wonge, Janee
Description: 0.80 ppm Cyanide
Prep Date: 9/15/2020
Expiration Date: 9/15/2020

Department: WetChem
BatchNumber:
Concentration: 0.80 ppm
Final Volume: 6 ml

ApprovedBy: JMP
ApproveDate: 9/15/20
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334839	20 ppm CN standard	.24 ml	20 ppm	
V-332257	1 N NAOH	1.5 ml	1 n	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10606

Description
Sulfamic Acid, ACS

ApprovedBy: janee
ApproveDate: 12/21/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Lab chem	LC254201	F308-21	12/19/16	12/18/26	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 10778

Description
Chloramine T trihydrate

ApprovedBy: janee
ApproveDate: 03/02/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Emd Millipore	1.02426.0250	K48314926 637	03/02/17	03/01/27	Wonge, Janee	1	250 g	neat	neat

Veritech Control/Receipt Number: 12312

Description
Magnesium Chloride Hexahydrate

ApprovedBy: janee
ApproveDate: 02/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	M35-500	182951	02/20/19	08/31/21	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12769

Description
Pyridine

ApprovedBy: janee
ApproveDate: 09/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	P368-1	190224	09/20/19	09/19/24	Wonge, Janee	1	1 L	neat	neat

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12987

Description
sodium hydroxide

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069931	01/07/20	01/06/25	Lopez, Jose	4	12kg	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13096

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9530-33	251602	03/10/20	01/15/25	Burwell, John	6	2.5	neat	neat

Veritech Control/Receipt Number: 13135

Description
Barbituric Acid

ApprovedBy: jessica
ApproveDate: 03/25/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
GFS chemicals	LS-1580004	17501828	03/25/20	03/24/30	Patel, Jessica	1	100 g	neat	neat

Veritech Control/Receipt Number: 13179

Description
1000 ppm cn std

ApprovedBy: jessica
ApproveDate: 04/08/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
labchem	LC135451	K070-001	04/08/20	09/20/20	Patel, Jessica	1	500M	1000	PPM

Veritech Control/Receipt Number: 13213

Description
1000 PPM CN STD

ApprovedBy: jessica
ApproveDate: 04/21/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RICCA	2543-16	4003H35	04/21/20	09/30/20	Patel, Jessica	1	500 M	1000	PPM

Veritech Control/Receipt Number: 13261

Description
sodium phosphate monobasic

ApprovedBy: jessica
ApproveDate: 05/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
lab chem	LC247751	K086-13	05/26/20	05/25/30	Patel, Jessica	3	500 G	NEAT	NEAT

Veritech Control/Receipt Number: 13280

Description
sulfuric acid

ApprovedBy: jessica
ApproveDate: 06/22/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/04/20	08/30/22	Lopez, Jose	2	2.5L	neat	neat

RUN LOG

Instrument: DA1 BatchId: 202009151528 Analyzed By: jw

Run#	Qc Type	Sample ID	Flag summary:	Comments	An Date/Time:	Dil	Prep Batch	Method Blank
1	ICS	STANDARD 1		.g	09/15/20 15:28	1		
2	ICS	STANDARD 90		.g V-334844	09/15/20 15:30	1		
3	ICS	STANDARD 91		.g V-334844	09/15/20 15:32	1		
4	ICS	STANDARD 92		.g V-334844	09/15/20 15:35	1		
5	ICS	STANDARD 93		.g V-334844	09/15/20 15:37	1		
6	ICS	STANDARD 94		.g V-334844	09/15/20 15:39	1		
7	ICS	STANDARD 95		.g V-334844	09/15/20 15:42	1		
8	ICS	STANDARD 0		.g	09/15/20 15:44	1		
9	ICV	CCV		.g V-334841	09/15/20 15:46	1		
10	ICB	CCB		.g	09/15/20 15:49	1		
11	MB	MBS-2423		.g	09/15/20 15:51	1	S-2423	MBS-2423
12	LCS	LCSS-2423		.g V-334840	09/15/20 15:53	1	S-2423	MBS-2423
13	LCS	LCSS-2423 DUP		.g V-334840	09/15/20 15:56	1	S-2423	MBS-2423
14	SMP	AD19214-001		.g	09/15/20 15:58	1	S-2423	MBS-2423
15	DUP	AD19214-001 DUP		.g	09/15/20 16:00	1	S-2423	MBS-2423
16	MS	AD19214-001 MS		.g V-334840	09/15/20 16:03	1	S-2423	MBS-2423
17	MSD	AD19214-001 MSD		.g V-334840	09/15/20 16:05	1	S-2423	MBS-2423
18	SMP	AD19214-003		.g	09/15/20 16:07	1	S-2423	MBS-2423
19	SMP	AD19214-005		.g	09/15/20 16:09	1	S-2423	MBS-2423
20	SMP	AD19214-007		.g	09/15/20 16:12	1	S-2423	MBS-2423
21	CCV	CCV		.g V-334841	09/15/20 16:14	1		
22	CCB	CCB		.g	09/15/20 16:16	1		
23	SMP	AD19214-008		.g	09/15/20 16:19	1	S-2423	MBS-2423
24	SMP	AD19214-010		.g	09/15/20 16:21	1	S-2423	MBS-2423
25	SMP	AD19214-011		.g	09/15/20 16:23	1	S-2423	MBS-2423
26	SMP	AD19214-013		.g	09/15/20 16:26	1	S-2423	MBS-2423
27	SMP	AD19214-014		.g	09/15/20 16:28	1	S-2423	MBS-2423
28	SMP	AD19214-017		.g	09/15/20 16:30	1	S-2423	MBS-2423
29	SMP	AD19214-020		.g	09/15/20 16:33	1	S-2423	MBS-2423
30	SMP	AD19214-021		.g	09/15/20 16:35	1	S-2423	MBS-2423
31	SMP	AD19214-023		.g	09/15/20 16:37	1	S-2423	MBS-2423
32	SMP	AD19233-002		.g	09/15/20 16:40	1	S-2423	MBS-2423
33	CCV	CCV		.g V-334841	09/15/20 16:42	1		
34	CCB	CCB		.g	09/15/20 16:44	1		
35	SMP	AD19178-010		.g	09/15/20 16:46	1	S-2423	MBS-2423
36	SMP	AD19178-011		.g	09/15/20 16:48	1	S-2423	MBS-2423
37	SMP	AD19178-012		.g	09/15/20 16:50	1	S-2423	MBS-2423
38	SMP	AD19178-013		.g	09/15/20 16:52	1	S-2423	MBS-2423
39	CCV	CCV		.g V-334841	09/15/20 16:53	1		
40	CCB	CCB		.g	09/15/20 16:55	1		

Flag Code:	Flag Code Description	Flag Code:	Flag Code Description
Cs	CCV Out epa9056	Cw	CCV out 300.0 rev2.1
Ho	Hold Time Exceeded	I1	Init Cal x and y value problem
I2	Init Cal missing a data point	I3	Init Cal missing a Compound
I4	Init Cal Rsd < .995	Is	ICV out epa 9056
Iw	ICV Out 300.0 rev2.1	Ls	LCS Out EPA 9056
Lw	LCS Out 300.0 rev2.1	Ms	Spike Out EPA 9056
Mw	Spike Out EPA 300.0 REV2.1	Oc	Over Calibration/Linear Range

Logo

AQ-2 Report

Serial Number: 090817
Report Requested By: Janee
Date & Time: Tue Sep 15 17:05:07 2020
Tray Number: 93
Tray Name: CNS 2423

Worklist

Cup	Type	ID	Details	Tests
2	U1	MBS-2423		tCN-m
3	U2	LCSS-2423		tCN-m
4	U3	LCSS-2423 DUP		tCN-m
5	U4	AD19214-001		tCN-m
6	U5	AD19214-001 DUP		tCN-m
7	U6	AD19214-001 MS		tCN-m
8	U7	AD19214-001 MSD		tCN-m
9	U8	AD19214-003		tCN-m
10	U9	AD19214-005		tCN-m
11	U10	AD19214-007		tCN-m
12	U11	AD19214-008		tCN-m
13	U12	AD19214-010		tCN-m
14	U13	AD19214-011		tCN-m
15	U14	AD19214-013		tCN-m
16	U15	AD19214-014		tCN-m
17	U16	AD19214-017		tCN-m
18	U17	AD19214-020		tCN-m
19	U18	AD19214-021		tCN-m
20	U19	AD19214-023		tCN-m
21	U20	AD19233-002		tCN-m
22	U21	AD19178-010		tCN-m
23	U22	AD19178-011		tCN-m
24	U23	AD19178-012		tCN-m
25	U24	AD19178-013		tCN-m

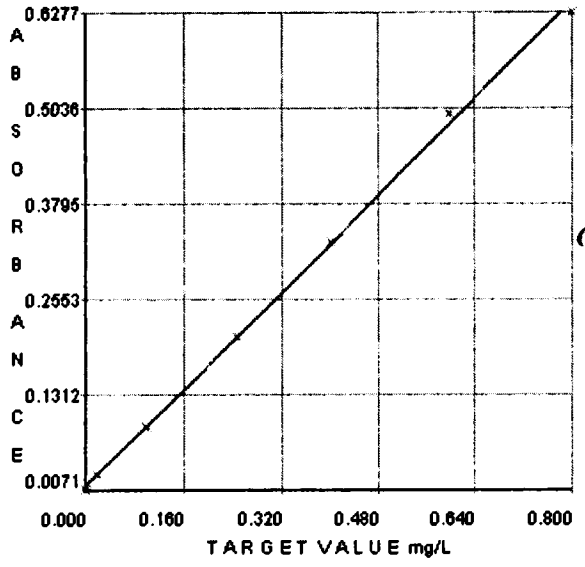
AQ2 tCN mod

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0071	-0.0039	0.0000	
S90	0.0250	0.0189	0.0200	-5.57
S91	0.0880	0.0988	0.1000	-1.16
S92	0.2042	0.2466	0.2480	-0.56
S93	0.3290	0.4052	0.4000	1.29
S94	0.4961	0.6176	0.6000	2.93
S95	0.6277	0.7848	0.8000	-1.90
S0	0.0071	-0.0040	0.0000	

Polynomial Order: 1
Correlation Coefficient: 0.9995
Carryover(%): -0.0
Calibration Equation: y = bx + a
y =: Concentration mg/L
x =: Measured Absorbance
a =: -1.292731E-002
b =: 1.270852E+000
Date & Time: Tue Sep 15 15:44:30 2020

Calibration Graph



2nd 9/16/20

Reagents

Name	Batch	Prepared By	Expiry Date
tCN Neutral	V-333445	JMP	Fri Sep 18 22:00:00 2020
tCN Chlor T	V-334720	JW	Tue Sep 15 22:00:00 2020
tCN Pyr Barb	V-334659	JW	Fri Sep 18 22:00:00 2020

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
	S1	STANDARD 1	0.0071		0.007090			jw	Tue Sep 15 15:28:10 2020
	S90	STANDARD 90	0.0250		0.025032			jw	Tue Sep 15 15:30:31 2020
	S91	STANDARD 91	0.0880		0.087950			jw	Tue Sep 15 15:32:52 2020
	S92	STANDARD 92	0.2042		0.204217			jw	Tue Sep 15 15:35:13 2020
	S93	STANDARD 93	0.3290		0.328988			jw	Tue Sep 15 15:37:32 2020
	S94	STANDARD 94	0.4961		0.496130			jw	Tue Sep 15 15:39:52 2020
	S95	STANDARD 95	0.6277		0.627739			jw	Tue Sep 15 15:42:11 2020
	S0	STANDARD 0	0.0071		0.007060			jw	Tue Sep 15 15:44:30 2020
	C11	C C V	0.4191	mg/L	0.339930			jw	Tue Sep 15 15:46:49 2020
	C12	C C B	-0.0040	mg/L	0.007021			jw	Tue Sep 15 15:49:08 2020
2	U1	MBS-2423	-0.0031	mg/L	0.007708			jw	Tue Sep 15 15:51:27 2020
3	U2	LCSS-2423	0.3824	mg/L	0.311041			jw	Tue Sep 15 15:53:46 2020
4	U3	LCSS-2423 DUP	0.3812	mg/L	0.310141			jw	Tue Sep 15 15:56:05 2020
5	U4	AD19214-001	0.0025	mg/L	0.012157			jw	Tue Sep 15 15:58:24 2020
6	U5	AD19214-001 DUP	0.0017	mg/L	0.011500			jw	Tue Sep 15 16:00:46 2020
7	U6	AD19214-001 MS	0.3074	mg/L	0.252074			jw	Tue Sep 15 16:03:06 2020
8	U7	AD19214-001 MSD	0.3043	mg/L	0.249607			jw	Tue Sep 15 16:05:25 2020
9	U8	AD19214-003	-0.0006	mg/L	0.009706			jw	Tue Sep 15 16:07:42 2020
10	U9	AD19214-005	-0.0008	mg/L	0.009573			jw	Tue Sep 15 16:09:59 2020
11	U10	AD19214-007	0.0107	mg/L	0.018608			jw	Tue Sep 15 16:12:17 2020
	C11	C C V	0.4331	mg/L	0.350971			jw	Tue Sep 15 16:14:35 2020
	C12	C C B	-0.0040	mg/L	0.007030			jw	Tue Sep 15 16:16:54 2020
12	U11	AD19214-008	-0.0007	mg/L	0.009629			jw	Tue Sep 15 16:19:14 2020
13	U12	AD19214-010	0.0132	mg/L	0.020547			jw	Tue Sep 15 16:21:33 2020
14	U13	AD19214-011	0.0006	mg/L	0.010660			jw	Tue Sep 15 16:23:53 2020
15	U14	AD19214-013	0.0050	mg/L	0.014128			jw	Tue Sep 15 16:26:13 2020
16	U15	AD19214-014	0.0011	mg/L	0.011020			jw	Tue Sep 15 16:28:34 2020
17	U16	AD19214-017	0.0003	mg/L	0.010382			jw	Tue Sep 15 16:30:55 2020
18	U17	AD19214-020	-0.0010	mg/L	0.009370			jw	Tue Sep 15 16:33:15 2020
19	U18	AD19214-021	0.0068	mg/L	0.015515			jw	Tue Sep 15 16:35:34 2020
20	U19	AD19214-023	0.0034	mg/L	0.012819			jw	Tue Sep 15 16:37:55 2020
21	U20	AD19233-002	0.0215	mg/L	0.027054			jw	Tue Sep 15 16:40:15 2020
	C11	C C V	0.4216	mg/L	0.341948			jw	Tue Sep 15 16:42:36 2020
	C12	C C B	-0.0035	mg/L	0.007398			jw	Tue Sep 15 16:44:57 2020
22	U21	AD19178-010	0.0247	mg/L	0.029645			jw	Tue Sep 15 16:46:54 2020
23	U22	AD19178-011	0.0074	mg/L	0.015979			jw	Tue Sep 15 16:48:46 2020
24	U23	AD19178-012	0.0050	mg/L	0.014127			jw	Tue Sep 15 16:50:27 2020
25	U24	AD19178-013	0.0163	mg/L	0.022980			jw	Tue Sep 15 16:52:09 2020
	C11	C C V	0.4391	mg/L	0.355659			jw	Tue Sep 15 16:53:51 2020
	C12	C C B	0.0065	mg/L	0.015324			jw	Tue Sep 15 16:55:33 2020

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-330629

Prepared By: Patel, Jessica
Description: 0.4N Sulfamic Acid
Prep Date: 7/1/2020
Expiration Date: 12/31/2020
Department: WetChem
BatchNumber:
Concentration: 0.4 n
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 07/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10606	Sulfamic Acid, ACS	10 g	neat neat	.4 n
13084	DI H20			

Veritech Lot Number: V-330630

Prepared By: Patel, Jessica
Description: CN Release Solution
Prep Date: 7/1/2020
Expiration Date: 12/31/2020
Department: WetChem
BatchNumber:
Concentration: various neat
Final Volume: 930.6 g
ApprovedBy: jessica
ApproveDate: 07/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12312	Magnesium Chloride Hexahydrate	96.6 g	neat neat	
13084	DI H20	332.4 g		
13280	sulfuric acid	417 g	neat neat	
V-330629	0.4N Sulfamic Acid	84.6 g	0.4 n	

Veritech Lot Number: V-332257

Prepared By: Trivedi, Beena
Description: 1 N NAOH
Prep Date: 7/28/2020
Expiration Date: 1/27/2021
Department: Metals
BatchNumber:
Concentration: 1 n
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 07/28/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12987	sodium hydroxide	80 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-333445

Prepared By: Patel, Jessica
Description: Sodium Phosphate
Prep Date: 8/19/2020
Expiration Date: 9/18/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 08/19/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13261	sodium phosphate monobasic	34.5 g	NEAT neat	
13084	DI H20			

Veritech Lot Number: V-334102

Prepared By: louis lombardi
Description: 0.25 N NaOH
Prep Date: 9/1/2020
Expiration Date: 2/25/2021
Department: WetChem
BatchNumber:
Concentration: 0.25 n
Final Volume: 6000 ml
ApprovedBy: jessica
ApproveDate: 09/02/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12834	sodium hydroxide	60 g	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334659

Prepared By: Wonge, Janee
Description: Pyridine/Barbaturic acid
Prep Date: 9/11/2020
Expiration Date: 9/18/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13135	Barbituric Acid	3.75 g	neat neat	
12769	Pyridine	18.75 ml	neat neat	
13096	hydrochloric acid	3.75 ml	neat neat	

Veritech Lot Number: V-334720

Prepared By: Wonge, Janee
Description: Chloramine -T (AQ2)
Prep Date: 9/14/2020
Expiration Date: 9/15/2020
Department: WetChem
BatchNumber:
Concentration: reagent reage
Final Volume: 50 ml
ApprovedBy: jessica
ApproveDate: 09/14/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10778	Chloramine T trihydrate	.5 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334839

Prepared By: Wonge, Janee
Description: 20 ppm CN standard
Prep Date: 9/15/2020
Expiration Date: 9/15/2020
Department: WetChem
BatchNumber:
Concentration: 20 ppm
Final Volume: 100 ml
ApprovedBy: [illegible]
ApproveDate: 9/15/20
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13179	1000 ppm cn std	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334840

Prepared By: Wonge, Janee
Description: 20 ppm CN control
Prep Date: 9/15/2020
Expiration Date: 9/15/2020
Department: WetChem
BatchNumber:
Concentration: 20 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13213	1000 PPM CN STD	2 ml	1000 ppm	
13084	DI H20			

Veritech Lot Number: V-334841

Prepared By: Wonge, Janee
Description: ICV/CCV
Prep Date: 9/15/2020
Expiration Date: 9/15/2020
Department: WetChem
BatchNumber:
Concentration: 0.40 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334840	20 ppm CN control	2 ml	20 ppm	
V-334102	0.25 N NaOH	98 ml	0.25 n	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334844

Prepared By:	Wonge, Janee	Department: WetChem	ApprovedBy: JJ 9/15/20
Description:	0.80 ppm Cyanide	BatchNumber:	ApproveDate:
Prep Date:	9/15/2020	Concentration: 0.80 ppm	Checked: No
Expiration Date:	9/15/2020	Final Volume: 6 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334839	20 ppm CN standard	.24 ml	20 ppm	
V-332257	1 N NAOH	1.5 ml	1 n	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10606

Description
Sulfamic Acid, ACS

ApprovedBy: janee
ApproveDate: 12/21/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Lab chem	LC254201	F308-21	12/19/16	12/18/26	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 10778

Description
Chloramine T trihydrate

ApprovedBy: janee
ApproveDate: 03/02/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Emd Millipore	1.02426.0250	K48314926 637	03/02/17	03/01/27	Wonge, Janee	1	250 g	neat	neat

Veritech Control/Receipt Number: 12312

Description
Magnesium Chloride Hexahydrate

ApprovedBy: janee
ApproveDate: 02/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	M35-500	182951	02/20/19	08/31/21	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12769

Description
Pyridine

ApprovedBy: janee
ApproveDate: 09/20/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	P368-1	190224	09/20/19	09/19/24	Wonge, Janee	1	1 L	neat	neat

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12987

Description
sodium hydroxide

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EMD	1.06469.9012	B1714069931	01/07/20	01/06/25	Lopez, Jose	4	12kg	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13096

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
J.T.BAKER	9530-33	251602	03/10/20	01/15/25	Burwell, John	6	2.5	neat	neat

Veritech Control/Receipt Number: 13135

Description
Barbituric Acid

ApprovedBy: jessica
ApproveDate: 03/25/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
GFS chemicals	LS-1580004	17501828	03/25/20	03/24/30	Patel, Jessica	1	100 g	neat	neat

Veritech Control/Receipt Number: 13179

Description
1000 ppm cn std

ApprovedBy: jessica
ApproveDate: 04/08/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
labchem	LC135451	K070-001	04/08/20	09/20/20	Patel, Jessica	1	500M	1000	PPM

Veritech Control/Receipt Number: 13213

Description
1000 PPM CN STD

ApprovedBy: jessica
ApproveDate: 04/21/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RICCA	2543-16	4003H35	04/21/20	09/30/20	Patel, Jessica	1	500 M	1000	PPM

Veritech Control/Receipt Number: 13261

Description
sodium phosphate monobasic

ApprovedBy: jessica
ApproveDate: 05/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
lab chem	LC247751	K086-13	05/26/20	05/25/30	Patel, Jessica	3	500 G	NEAT	NEAT

Veritech Control/Receipt Number: 13280

Description
sulfuric acid

ApprovedBy: jessica
ApproveDate: 06/22/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/04/20	08/30/22	Lopez, Jose	2	2.5L	neat	neat

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 785 Analyst PM Date 9/14/20

Digestion Start: 1530 Finish: 1630 Hot Plate Temp 1: 90c Hot Plate Temp 2: 90c

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 (from)	0.0mL	7.19	140	1.95	
Cal Curve 0.02 (140 ppm)	0.02	7.64		1.77	
Cal Curve 0.25 (ppm)	0.25	7.33		1.70	Balance used: 031
Cal Curve 0.5	0.5	7.48		1.65	Pipettes used: 11,19
Cal Curve 1.0	1.0	7.11		2.03	
MB	2.59mL	7.56		2.08	
LCS		7.39		1.94	
~~AD19154004~~					
PDS		7.16		1.96	
DUP	21	7.08		1.77	
(Sol) MS	009	7.18		1.70	
(Insol) MSD	006	7.26		1.69	
AD19159004		7.55		1.58	
2.	008	7.78		1.73	
3.	009	7.93		1.78	
4.	010	7.48		1.95	
5. AD19192.002		7.14		2.00	
6.	MS 004	7.91		2.11	
7.	MSD 005	7.71		2.14	
8. AD19160.001		7.06		1.94	
9.	002	7.55		1.98	
10. AD19180.001		7.87		2.07	
11. AD19178.001		7.90		1.90	
12.	002	7.14		1.88	
13.	003	7.28		1.73	
14.	004	7.15		1.92	
15.	005	7.57		2.05	
16.	006	7.71		2.00	
17.	007	7.70		1.98	
18.	008	7.54		1.73	
19.	009	7.83		1.70	
20.	010	7.80		1.84	

Reagent	Lot #:		$MgCl_2$	# 12689
Digestion Solution - pH must be > 11.5. If not, discard	V- 334593	pH 13.21	Lead Chromate ($PbCrO_4$)	# 6413
Phosphate Buffer	V- 331888		Weight of $PbCrO_4$ (10-20mg)	MSD-1 0.0150 MS-2 0.0140 g
			Volume PVS 0.5 ml	10% H_2SO_4 V: 334640
			PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3 V: 334641
			Spike Volume 0.5ml V- ~~331890~~	Col Rea V: 334645

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 785A Analyst MH Date 9/14/20

Digestion Start: 1630 Finish: 1730 Hot Plate Temp 1: 90°C Hot Plate Temp 2: 90°C

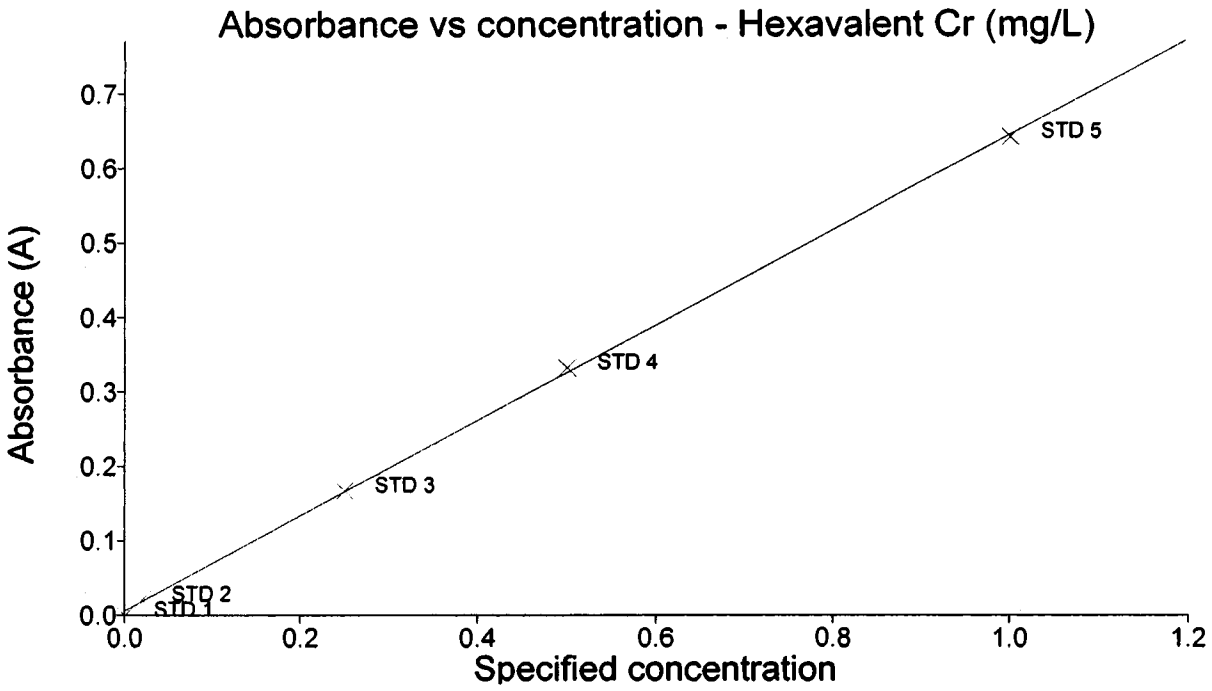
Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 from	0 mm	7.19	100	1.95	
Cal Curve 0.02 100	0.02 g	7.64		1.77	
Cal Curve 0.25 ppm	0.25	7.33		1.70	Balance used: 031
Cal Curve 0.5	0.5	7.48		1.65	Pipettes used: 11, 19
Cal Curve 1.0 ↓	1.0	7.52		2.03	
MB	2.5gm	7.88		1.99	
LCS		7.95		1.90	
AD19159-004					
PDS		7.04		2.03	
DUP		7.68		2.07	
(Sol) MS 005		7.13		1.91	
(Insol) MSD 006		7.25		1.98	
AD19159-004		7.19		1.64	
2. 008		7.87		1.78	
3. 009		7.61		1.84	
4. 010		7.10		2.05	
AD19192-002		7.14		2.08	
6. MS 004		7.13		1.97	
7. MSD 005		7.91		1.87	
AD19160-001		7.78		1.65	
9. 002		7.60		1.73	
10 AD19180-001		7.54		2.08	
11 AD19178-001		7.50		2.00	
12. 002		7.87		1.95	
13. 003		7.11		1.90	
14. 004		7.44		1.83	
15. 005		7.30		1.75	
16. 006		7.65		1.70	
17. 007		7.89		2.06	
18. 008		7.90		2.05	
19. 009		7.10		1.95	
20. 010		7.15		1.90	

Reagent	Lot #:	$MgCl_2$	# 12689
Digestion Solution - pH must be > 11.5. If not, discard	V- 334593 pH 13.21	Lead Chromate ($PbCrO_4$)	# 6413
Phosphate Buffer	V- 331886	Weight of $PbCrO_4$ (10-20mg)	MSD-1 0.0150 MSD-2 0.0140 g
		PVS Volume 0.5 ml	10% H_2SO_4 V: 334540
		PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3 V: 334541
		Spike Volume 0.5ml V- 331890	Col Rea. V: 334545

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9999

Calibrated on: 09/15/20 12:09:16

User name: wet chem

Method name: Hexavalent Cr

CCDD 9/15/20

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	-0.0093	0.0093	-0.0001
STD 2.Sample	0.0200	0.0232	-0.0032	0.0208
STD 3.Sample	0.2500	0.2518	-0.0018	0.1671
STD 4.Sample	0.5000	0.5097	-0.0097	0.3321
STD 5.Sample	1.0000	0.9947	0.0053	0.6425

Report Generated On:09/15/2020 13:08

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		09/15/20 12:33:13	0.5000	0.0150	0.3163	0.4850
ICB.Sample		09/15/20 12:33:26			-0.0002	-0.0096 : Exceeded calibration limits.
MB.Sample		09/15/20 12:33:39			-0.0028	-0.0136 : Exceeded calibration limits.
LCS.Sample		09/15/20 12:33:58			0.3253	0.4991
AD19159-004 NS.Sample		09/15/20 12:34:19			0.0415	0.0555
AD19159-004 DUP.Sample		09/15/20 12:34:37			0.0473	0.0646
AD19159-005 MS.Sample		09/15/20 12:35:38			0.1872	0.2833
AD19159-006 XXX.Sample		09/15/20 12:35:57			3.7897	5.9126 : Exceeded calibration limits.
AD19159-006 50X MSD.Sample	50	09/15/20 12:36:48			0.1651	0.2488
AD19159-004 PVS.Sample		09/15/20 12:37:09			0.2339	0.3563
CCV-1.Control		09/15/20 12:37:27	0.5000	0.0036	0.3236	0.4964
CCB-1.Sample		09/15/20 12:37:46			0.0011	-0.0075 : Exceeded calibration limits.
AD19159-008.Sample		09/15/20 12:38:20			0.0017	-0.0065 : Exceeded calibration limits.
AD19159-009.Sample		09/15/20 12:38:36			0.0044	-0.0024 : Exceeded calibration limits.
AD19159-010.Sample		09/15/20 12:38:54			-0.0012	-0.0112 : Exceeded calibration limits.
AD19160-001.Sample		09/15/20 12:39:11			0.0065	0.0010
AD19160-002.Sample		09/15/20 12:39:29			-0.0033	-0.0145 : Exceeded calibration limits.
AD19178-001.Sample		09/15/20 12:40:42			0.0571	0.0800
AD19178-002.Sample		09/15/20 12:40:59			0.0166	0.0167
AD19178-003.Sample		09/15/20 12:41:57			0.0702	0.1004
AD19178-004.Sample		09/15/20 12:42:13			0.0153	0.0146
AD19178-005.Sample		09/15/20 12:42:49			0.0599	0.0844

Report Generated On:09/15/2020 13:08

Perkin-Elmer UV-VIS Lambda 20 ***Instrument ID: UV1***

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCV-2.Control		09/15/20 12:43:02	0.5000	0.0053	0.3225	0.4947
CCB-2.Sample		09/15/20 12:43:17			-0.0024	-0.0130 : Exceeded calibration limits
AD19178-006.Sample		09/15/20 12:43:49			0.0176	0.0182
AD19178-007.Sample		09/15/20 12:44:01			0.0157	0.0153
AD19178-008.Sample		09/15/20 12:44:16			0.0294	0.0367
AD19178-009.Sample		09/15/20 12:44:39			0.0238	0.0279
AD19178-010.Sample		09/15/20 12:44:55			0.0114	0.0086
AD19180-001.Sample		09/15/20 12:46:16			0.0142	0.0129
AD19192-002.Sample		09/15/20 12:46:52			0.4456	0.6870
AD19192-004MS2.Sample		09/15/20 12:47:42			0.8015	1.2431 : Exceeded calibration limits
AD19192-004MS2 2X.Sample	2	09/15/20 12:48:27			0.4259	0.6563
AD19192-005MSD2.Sample		09/15/20 12:48:50			3.9658	6.1877 : Exceeded calibration limits
CCV-3.Control.Cycle1		09/15/20 12:50:22	0.5000	0.0081	0.3207	0.4919
CCB-3.Sample		09/15/20 12:50:35			0.0013	-0.0073 : Exceeded calibration limits
AD19192-005 50XMSD2.Sample	50	09/15/20 12:51:05			0.1672	0.2519
AD19159-004 T.Sample		09/15/20 12:54:11			0.0041	-0.0028 : Exceeded calibration limits
AD19159-005 T.Sample		09/15/20 12:54:31			0.0070	0.0017
AD19159-006 T.Sample		09/15/20 12:54:52			0.0068	0.0014
AD19159-006 50X T.Sample		09/15/20 12:55:15			0.0007	-0.0082 : Exceeded calibration limits
AD19159-008 T.Sample		09/15/20 12:55:29			0.0022	-0.0058 : Exceeded calibration limits
AD19159-009 T.Sample		09/15/20 12:55:47			0.0030	-0.0045 : Exceeded calibration limits

Report Generated On:09/15/2020 13:08

Perkin-Elmer UV-VIS Lambda 20 *Instrument ID: UV1*

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD19159-010 T.Sample		09/15/20 12:56:04			-0.0008	-0.0105 : Exceeded calibration limits
AD19160-001 T.Sample		09/15/20 12:56:22			0.0031	-0.0043 : Exceeded calibration limits
AD19160-002 T.Sample		09/15/20 12:56:39			0.0023	-0.0057 : Exceeded calibration limits
CCV-4.Control		09/15/20 12:56:56	0.5000	0.0104	0.3193	0.4896
CCB-4.Sample		09/15/20 12:57:12			0.0007	-0.0082 : Exceeded calibration limits
AD19178-001 T.Sample		09/15/20 12:57:41			0.0616	0.0871
AD19178-002 T.Sample		09/15/20 12:58:03			0.0124	0.0101
AD19178-003 T.Sample.Cycle1		09/15/20 12:59:40			0.0639	0.0906
AD19178-004 T.Sample		09/15/20 13:00:28			0.0127	0.0105
AD19178-005 T.Sample		09/15/20 13:00:45			0.0660	0.0938
AD19178-006 T.Sample		09/15/20 13:01:03			0.0175	0.0181
AD19178-007 T.Sample		09/15/20 13:01:25			0.0130	0.0111
AD19178-008 T.Sample		09/15/20 13:02:29			0.0350	0.0454
AD19178-009 T.Sample		09/15/20 13:03:08			0.0302	0.0379
AD19178-010 T.Sample		09/15/20 13:03:24			0.0141	0.0127
CCV-5.Control		09/15/20 13:03:40	0.5000	0.0133	0.3174	0.4867
CCB-5.Sample		09/15/20 13:03:57			0.0001	-0.0091 : Exceeded calibration limits
AD19180-001 T.Sample		09/15/20 13:04:26			0.0000	-0.0092 : Exceeded calibration limits
AD19192-002 T.Sample		09/15/20 13:05:09			0.0102	0.0067
AD19192-004 T.Sample		09/15/20 13:05:30			0.0079	0.0031
AD19192-005 T.Sample		09/15/20 13:05:50			0.0076	0.0026
AD19192-005 50X T.Sample		09/15/20 13:06:42			0.0010	-0.0076 : Exceeded calibration limits

Report Generated On:09/15/2020 13:08

Perkin-Elmer UV-VIS Lambda 20 ***Instrument ID: UV1***

Results Table

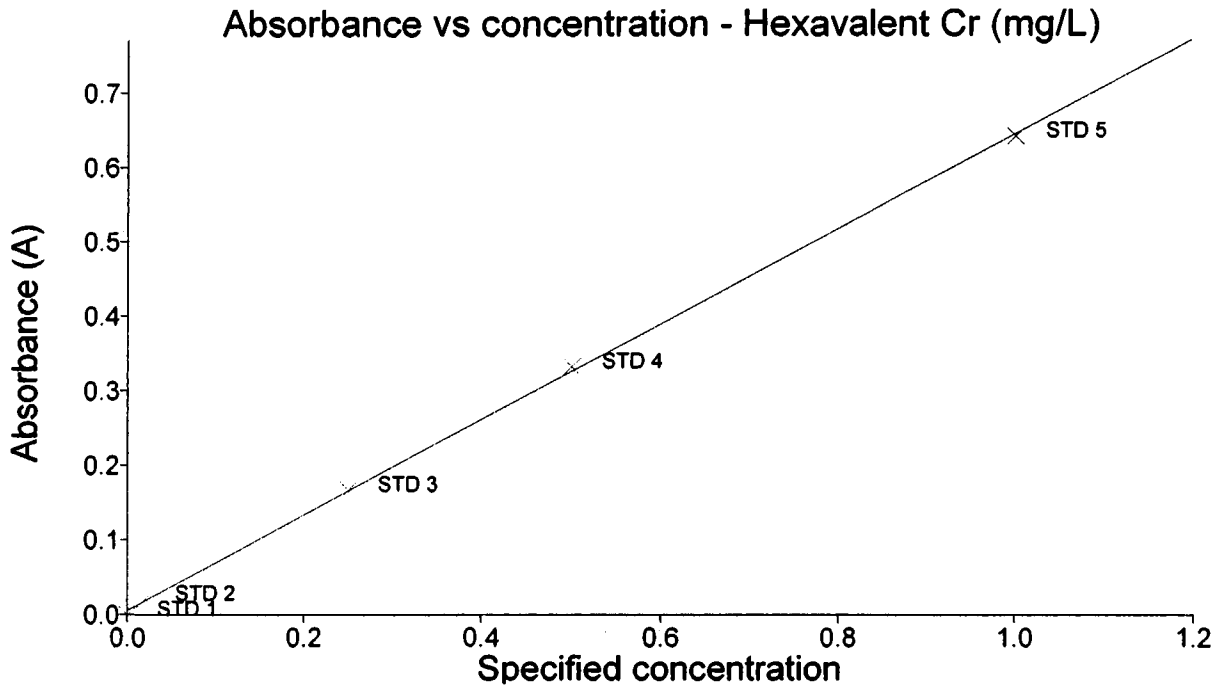
Units: **mg/L**

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCV-6.Control		09/15/20 13:06:56	0.5000	0.0146	0.3166	0.4654
CCB-6.Sample		09/15/20 13:07:10			0.0001	-0.0091 : Exceeded calibration limits.

Report Generated On:09/15/2020 13:08

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9999

Calibrated on: 09/15/20 12:09:16

User name: wet chem

Method name: Hexavalent Cr

9/15/20

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	-0.0093	0.0093	-0.0001
STD 2.Sample	0.0200	0.0232	-0.0032	0.0208
STD 3.Sample	0.2500	0.2518	-0.0018	0.1671
STD 4.Sample	0.5000	0.5097	-0.0097	0.3321
STD 5.Sample	1.0000	0.9947	0.0053	0.6425

Report Generated On:09/15/2020 14:02

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		09/15/20 13:22:13	0.5000	-0.0045	0.3288	0.5045
ICB.Sample		09/15/20 13:22:27			-0.0007	-0.0104 : Exceeded calibration limits.
MB.Sample		09/15/20 13:22:40			0.0036	-0.0036 : Exceeded calibration limits.
LCS.Sample		09/15/20 13:22:54			0.3147	0.4825
AD19159-004 NS.Sample		09/15/20 13:23:28			0.0336	0.0433
AD19159-004 DUP.Sample		09/15/20 13:23:46			0.0356	0.0463
AD19159-005 MS.Sample		09/15/20 13:24:20			0.2090	0.3173
AD19159-006 XXX.Sample		09/15/20 13:24:54			3.9269	6.1269 : Exceeded calibration limits.
AD19159-006 50X MSD.Sample	50	09/15/20 13:25:44			0.1534	0.2304
AD19159-004 PVS.Sample		09/15/20 13:26:01			0.2767	0.4231
CCV-1.Control		09/15/20 13:26:47	0.5000	-0.0014	0.3268	0.5014
CCB-1.Sample		09/15/20 13:27:01			-0.0005	-0.0100 : Exceeded calibration limits.
AD19159-008.Sample		09/15/20 13:27:13			0.0099	0.0063
AD19159-009.Sample		09/15/20 13:27:31			0.0092	0.0051
AD19159-010.Sample		09/15/20 13:27:48			0.0080	0.0032
AD19160-001.Sample		09/15/20 13:28:05			0.0220	0.0251
AD19160-002.Sample		09/15/20 13:28:20			0.0013	-0.0073 : Exceeded calibration limits.
AD19178-001.Sample		09/15/20 13:28:36			0.0361	0.0472
AD19178-002.Sample		09/15/20 13:29:00			0.0243	0.0287
AD19178-003.Sample		09/15/20 13:29:17			0.0554	0.0774
AD19178-004.Sample		09/15/20 13:29:34			0.0127	0.0105
AD19178-005.Sample		09/15/20 13:29:52			0.0611	0.0863
CCV-2.Control		09/15/20 13:30:17	0.5000	0.0047	0.3229	0.4953

Report Generated On:09/15/2020 14:02

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCB-2.Sample		09/15/20 13:30:30			0.0001	-0.0092 : Exceeded calibration limits
AD19178-006.Sample		09/15/20 13:30:44			0.0205	0.0228
AD19178-007.Sample		09/15/20 13:31:02			0.0005	-0.0085 : Exceeded calibration limits
AD19178-008.Sample		09/15/20 13:31:18			0.0016	-0.0067 : Exceeded calibration limits
AD19178-009.Sample		09/15/20 13:32:27			0.0098	0.0060
AD19178-010.Sample		09/15/20 13:32:46			0.0039	-0.0032 : Exceeded calibration limits
AD19180-001.Sample		09/15/20 13:33:19			0.0190	0.0205
AD19192-002.Sample		09/15/20 13:33:46			0.4208	0.6483
AD19192-004MS2.Sample		09/15/20 13:34:15			0.7877	1.2216 : Exceeded calibration limits
AD19192-004MS2 2X.Sample	2	09/15/20 13:34:56			0.4092	0.6302
AD19192-005MSD2.Sample		09/15/20 13:35:23			4.3662	6.6134 : Exceeded calibration limits
CCV-3.Control		09/15/20 13:35:48	0.5000	0.0070	0.3214	0.4930
CCB-3.Sample		09/15/20 13:36:03			0.0038	-0.0034 : Exceeded calibration limits
AD19192-005 50XMSD2.Sample	50	09/15/20 13:36:21			0.1579	0.2375
AD19159-004 T.Sample		09/15/20 13:36:43			0.0073	0.0022
AD19159-005 T.Sample		09/15/20 13:37:27			0.0058	-0.0002 : Exceeded calibration limits
AD19159-006 T.Sample		09/15/20 13:37:39			0.0081	0.0034
AD19159-006 50X T.Sample		09/15/20 13:37:53			0.0034	-0.0039 : Exceeded calibration limits
AD19159-008 T.Sample		09/15/20 13:38:10			0.0068	0.0014
AD19159-009 T.Sample		09/15/20 13:38:26			0.0082	0.0035
AD19159-010 T.Sample		09/15/20 13:38:40			0.0066	0.0010

Report Generated On:09/15/2020 14:02

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD19160-001 T.Sample		09/15/20 13:38:57			0.0196	0.0214
AD19160-002 T.Sample		09/15/20 13:52:46			0.0036	-0.0036 : Exceeded calibration limits
CCV-4.Control		09/15/20 13:53:03	0.5000	0.0147	0.3165	0.4853
CCB-4.Sample		09/15/20 13:53:21			0.0038	-0.0033 : Exceeded calibration limits
AD19178-001 T.Sample		09/15/20 13:53:52			0.0413	0.0553
AD19178-002 T.Sample		09/15/20 13:55:19			0.0231	0.0269
AD19178-003 T.Sample		09/15/20 13:55:41			0.0701	0.1002
AD19178-004 T.Sample		09/15/20 13:56:02			0.0152	0.0145
AD19178-005 T.Sample		09/15/20 13:56:21			0.0545	0.0759
AD19178-006 T.Sample		09/15/20 13:56:41			0.3167	0.4857
AD19178-007 T.Sample.Cycle1		09/15/20 13:57:40			-0.0000	-0.0093 : Exceeded calibration limits
AD19178-008 T.Sample		09/15/20 13:58:19			0.0024	-0.0055 : Exceeded calibration limits
AD19178-009 T.Sample		09/15/20 13:58:34			0.0069	0.0016
AD19178-010 T.Sample		09/15/20 13:58:50			0.0049	-0.0015 : Exceeded calibration limits
CCV-5.Control		09/15/20 13:59:05	0.5000	0.0159	0.3157	0.4841
CCB-5.Sample		09/15/20 13:59:20			-0.0009	-0.0106 : Exceeded calibration limits
AD19180-001 T.Sample		09/15/20 13:59:35			0.0029	-0.0047 : Exceeded calibration limits
AD19192-002 T.Sample		09/15/20 13:59:52			0.0061	0.0003
AD19192-004 T.Sample		09/15/20 14:00:11			0.0068	0.0014
AD19192-005 T.Sample		09/15/20 14:00:29			0.0062	0.0004
AD19192-005 50X T.Sample		09/15/20 14:00:45			-0.0007	-0.0103 : Exceeded calibration limits
CCV-6.Control		09/15/20 14:01:00	0.5000	0.0185	0.3141	0.4815

Report Generated On:09/15/2020 14:02

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCB-6.Control		09/15/20 14:01:15			-0.0006	-0.0101 : Exceeded calibration limits

Report Generated On:09/15/2020 14:02

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-325340

Prepared By: Patel, Jessica
Description: 100 ppm cr6 CCV
Prep Date: 4/7/2020
Expiration Date: 10/6/2020
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 04/07/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12101	1000 ppm Cr6 Std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-331888

Prepared By: Trivedi, Beena
Description: Phosphate Buffer
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9811	Potassium Phosphate Monobasic	68.04 g	neat neat	
12908	potassium phosphate dibasic anhydrous	87.09 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-331889

Prepared By: Trivedi, Beena
Description: 100 ppm cr6 std
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12831	1000 ppm cr6 std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-334593

Prepared By: Trivedi, Beena
Description: Cr6 digestion solution
Prep Date: 9/10/2020
Expiration Date: 10/9/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 6000 ml
ApprovedBy: jessica
ApproveDate: 09/10/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12852	Sodium Carbonate, Anhydrous	180 g	neat neat	
12834	sodium hydroxide	120 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334640

Prepared By: Patel, Jessica
Description: 10 % H2SO4
Prep Date: 9/11/2020
Expiration Date: 2/25/2021
Department: WetChem
BatchNumber:
Concentration: 10 %
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13343	sulfuric acid	200 ml	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334641

Prepared By: Patel, Jessica	Department: WetChem	ApprovedBy: jessica
Description: 5 M HNO3	BatchNumber:	ApproveDate: 09/11/20
Prep Date: 9/11/2020	Concentration: 5 m	Checked: Yes
Expiration Date: 2/25/2021	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13331	Nitric acid	640 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334790

Prepared By: Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description: 0.02 PPM	BatchNumber: B-29678	ApproveDate: 09/15/20
Prep Date: 9/14/2020	Concentration: 0.02 ppm	Checked: Yes
Expiration Date: 9/14/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.02 ml	100 mg/l	
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334791

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: jessica
Description: 0.25 PPM	BatchNumber: B-29678	ApproveDate: 09/15/20
Prep Date: 9/14/2020	Concentration: 0.25 ppm	Checked: Yes
Expiration Date: 9/14/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.25 ml	100 mg/l	

Veritech Lot Number: V-334792

Prepared By: Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description: 0.5 PPM	BatchNumber: B-29678	ApproveDate: 09/15/20
Prep Date: 9/14/2020	Concentration: 0.5 ppm	Checked: Yes
Expiration Date: 9/14/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	

Veritech Lot Number: V-334793

Prepared By: Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description: 1.0 PPM	BatchNumber: B-29678	ApproveDate: 09/15/20
Prep Date: 9/14/2020	Concentration: 1 ppm	Checked: Yes
Expiration Date: 9/14/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	1 ml	100 mg/l	
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334794

Prepared By: Trivedi, Beena
Description: ICV
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Wet Lab
BatchNumber: B-29678
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334795

Prepared By: Trivedi, Beena
Description: CCV
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Wet Lab
BatchNumber: B-29678
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-334796

Prepared By: Trivedi, Beena
Description: LCS
Prep Date: 9/14/2020
Expiration Date: 9/14/2020
Department: Wet Lab
BatchNumber: B-29678
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	

Veritech Lot Number: V-334845

Prepared By: Trivedi, Beena
Description: Cr6 Color Reagent
Prep Date: 9/15/2020
Expiration Date: 12/3/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: [illegible]
ApproveDate: 9/15/20
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11768	1,5-Diphenylcarbazide	1.25 g	neat neat	
12943	acetone	250 ml	neat neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9811

Description
Potassium Phosphate Monobasic

ApprovedBy: janee
ApproveDate: 11/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	P285-500	151912	11/17/15	11/16/25	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 11768

Description
1,5-Diphenylcarbazide

ApprovedBy: janee
ApproveDate: 09/08/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	LC136558	H134-17	06/12/18	05/15/23	Wonge, Janee	1	25 g	neat	neat

Veritech Control/Receipt Number: 12101

Description
1000 ppm Cr6 Std

ApprovedBy: janee
ApproveDate: 11/29/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	19036-100mL	BCBV2169	11/05/18	04/30/21	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12831

Description
1000 ppm cr6 std

ApprovedBy: janee
ApproveDate: 12/26/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Hach	1466442	A9240	10/14/19	08/31/24	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12852

Description
Sodium Carbonate, Anhydrous

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Lab Chem	LC229651	J192-03	10/21/19	10/20/29	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12908

Description
potassium phosphate dibasic anhydrous

ApprovedBy: janee
ApproveDate: 12/04/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
fisher	p288-500	188106	12/04/19	12/03/29	Wonge, Janee	1	500 g	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12943

Description
acetone

ApprovedBy: akmal
ApproveDate: 12/18/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9254-03	236884	12/17/19	05/13/22	Lopez, Jose	32	4L	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13331

Description
Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6413

Description
Lead Chromate

ApprovedBy: aurora
ApproveDate: 11/05/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Pfaltz & Bauer inc	L01745	A056-5	10/27/11	10/26/21	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 12689

Description
Magnesium Chloride Anhydrous

ApprovedBy: janee
ApproveDate: 08/01/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Laboratory Sales	LC-2758812	190726-A	07/31/19	07/30/24	Wonge, Janee	1	2.5 kg	neat	neat

0091101 0608

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1115 Meter #: 465486

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.3	23.5	235.3	23.5	LCS: 4.41	25	25	9/10/20 1330	BY
DUP 159.004	346.0	23.1	348.3	23.1	DUP: 8.00				
1. 001	140.2	23.0	137.8	23.0	11.39				
2. 002	357.1	23.2	355.2	23.2	8.23				
3. 003	335.7	23.3	336.2	23.3	8.11				
4. 004	347.8	23.0	350.2	23.0	8.08				
5. 005	344.6	23.1	345.7	23.1	8.11				
6. 006	358.9	23.0	354.0	23.0	8.18				
7. 007	446.7	22.8	444.2	22.8	7.74				
8. 008	296.6	22.7	297.4	22.7	8.41				
9. 009	282.8	22.4	290.0	22.4	8.04				
10. 010	434.8	23.0	440.9	23.0	7.90				
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
ZoBell's Solution (228 ± 10 mV)	233.3	23.6	231.8	23.6					

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: DMP

Date Reviewed: 9/11/20

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V-832544

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0091101 0609

Hampton-Clarke

pH CALIBRATION RECORD

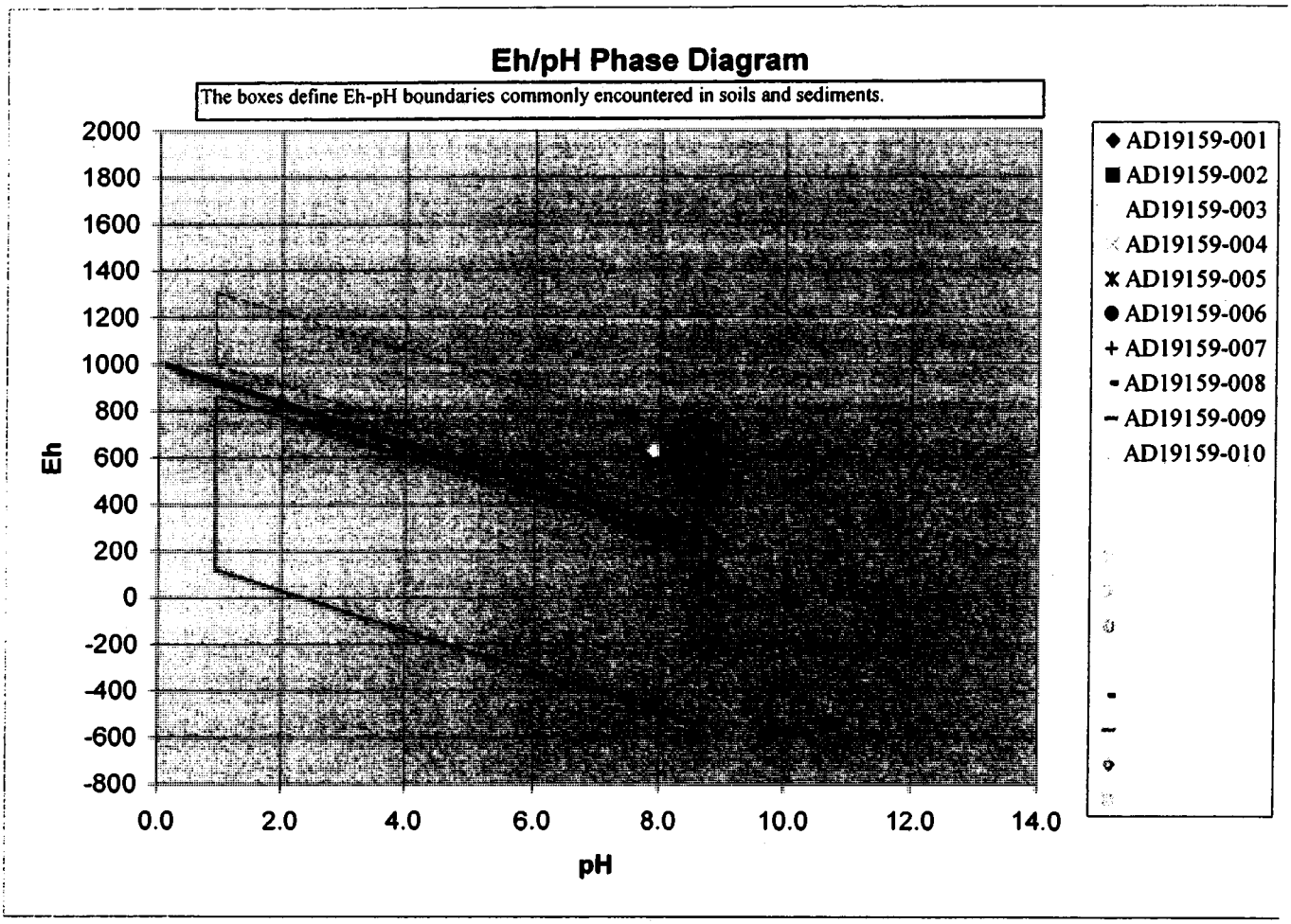
pH Meter: Orion Star A211

Serial # X55486

Date	Calibration						Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate: Buffer 1	Calibrate: Buffer 2	Calibrate: Buffer 3	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Buffer 1	Buffer 2 / Mid pt	Buffer 3
9/10/20	BM 11:30	23.3	7.00	10.00	11.99	9.98							133584	13026	12555
9/11/20	BM 14:40	23.6	4.00	7.00	10.00	7.02							13022	133844	13016

Calibrate using pH 4.0, pH 7.0, and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0, 0.4 and 7.0, check with 4.0. For basic samples calibrate with 7.0, 10.0, and 12.0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-



Sample	ORP	pH
AD19159-001	140	11.0
AD19159-002	360	8.2
AD19159-003	340	8.1
AD19159-004	350	8.1
AD19159-005	340	8.1
AD19159-006	360	8.2
AD19159-007	450	7.7
AD19159-008	300	8.4
AD19159-009	280	8.0
AD19159-010	430	7.9

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

9/11/20

9/11/20

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332644

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: jessica
Description: KHP LCS	BatchNumber:	ApproveDate: 08/05/20
Prep Date: 8/5/2020	Concentration: 300 ppm	Checked: Yes
Expiration Date: 2/4/2021	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE	600 mg	NEAT	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10292

Description
Potassium Chloride, 4M

ApprovedBy: janee
ApproveDate: 12/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	SP135-500	156731	07/01/16	12/31/20	Wonge, Janee	1	500 m	4	M

Veritech Control/Receipt Number: 13162

Description
zobell"s solution

ApprovedBy: jessica
ApproveDate: 04/06/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LABCHEM	LC273101	K050-17	04/06/20	02/20/21	Patel, Jessica	1	500M	NEAT	NEAT

0091101 0614

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1116 Meter #: 16004 X55486

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.5	23.0	233.9	23.0	LCS: 23.4° 4.43	25	25	9/14/20 12:25	BG/LL
AD19160.001 DUP	5.1	23.1	6.3	23.1	DUP: 7.26				
1. 001	4.9	22.7	5.8	22.7	7.41				
2. 002	252.4	22.7	250.7	22.7	8.48				
AD19178.001	281.3	22.7	280.7	22.7	7.97				
4. 003	327.2	22.6	326.8	22.6	8.07				
5. 003	323.0	22.3	322.6	22.3	7.91				
6. 004	345.8	22.5	346.3	22.5	8.37				
7. 005	327.1	22.5	329.2	22.5	8.03				
8. 006	333.9	22.5	331.5	22.5	7.99				
9. 007	221.5	22.5	219.6	22.5	9.37				
10. 008	326.0	22.6	325.7	22.6	7.87				
11. 009	280.5	22.5	281.3	22.5	8.80				
12. 010	313.7	22.4	314.8	22.4	8.26				
13. 011	273.3	22.1	271.1	22.1	8.69				
14. 012	310.8	22.1	311.2	22.1	8.18				
15. 013	257.3	21.9	259.9	21.9	8.02				
AD19180.001	42.5	22.6	40.5	22.6	12.46	10			
AD19192.001	469.7	22.0	470.3	22.0	5.38	25			
18. 002	500.3	21.9	502.3	21.9	4.76				
19. 003	484.3	22.0	486.3	22.0	4.93				
20.									
ZoBell's Solution (228 ± 10 mV)	233.6	23.2	231.5	23.2					

* Reading 1 and Reading 2 must agree within ± 10 mV

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V-332644

Reviewed by: [signature]

Date Reviewed: 9/15/20

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0003

0091101 0615

Hampton-Clarke

pH CALIBRATION RECORD

pH Meter: Orion 3 Star

Serial # 16004

Date	Calibration					Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate: Buffer 1	Calibrate: Buffer 2	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Buffer 1	Buffer 2	Mid point Buffer
9/11/20	BM 9:00	23.3	4.00	10.00	7.06							13022	13016	13384
9/14/20	BM 9:30	23.6	4.00	10.00	7.07	BM 11:00	23.4	7.08	BM 16:00	23.0	7.07	/	/	/

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0 and 7.0, check with 4.0. For basic samples calibrate with 7.0 and 12. 0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-

Hampton-Clarke

pH CALIBRATION RECORD

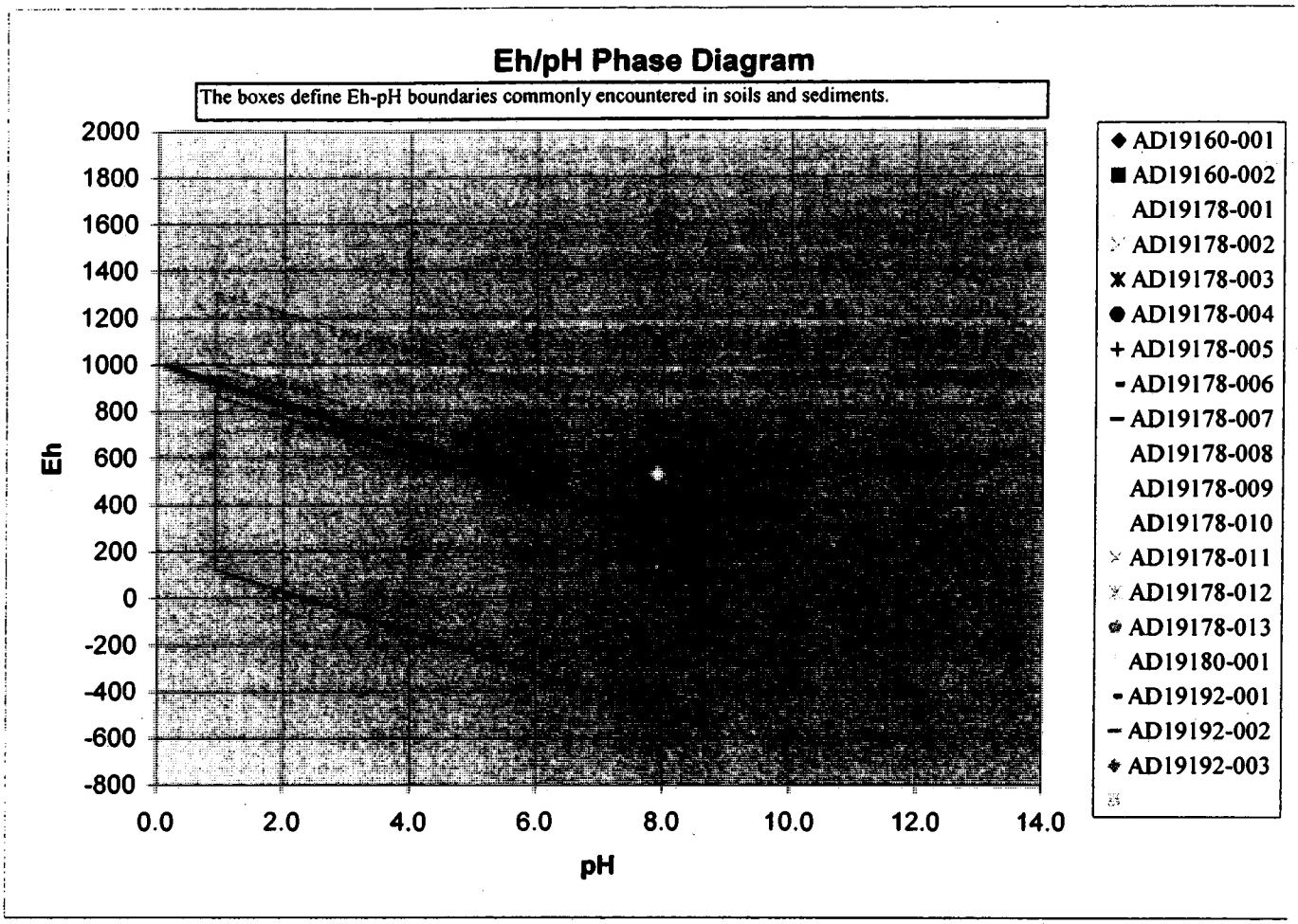
pH Meter: Orion Star A211

Serial # X55486

Date	Calibration						Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate: Buffer 1	Calibrate: Buffer 2	Calibrate: Buffer 3	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Buffer 1	Buffer 2 / Mid pt	Buffer 3
9/10/20	BG 11:30	23.3	7.00	10.00	11.99	9.98							13384	13016	12555
9/10/20	BG 14:40	23.6	4.00	7.00	10.00	7.02							13022	13384	13016
9/11/20	BG 9:00	24.0	4.00	7.00	10.00	6.99									
9/14/20	BG 9:30	23.7	4.00	7.00	10.00	7.03									
9/14/20	BG 12:00	23.8	7.00	10.00	11.99	9.99							13384	13016	12555

Calibrate using pH 4.0, pH 7.0, and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0, 0.4 and 7.0, check with 4.0. For basic samples calibrate with 7.0, 10.0, and 12.0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-



Sample	ORP	pH
AD19160-001	4.9	7.4
AD19160-002	250	8.5
AD19178-001	280	8.0
AD19178-002	330	8.1
AD19178-003	320	7.9
AD19178-004	350	8.4
AD19178-005	330	8.0
AD19178-006	330	8.0
AD19178-007	220	9.4
AD19178-008	330	7.9
AD19178-009	280	8.8
AD19178-010	310	8.3
AD19178-011	270	8.7
AD19178-012	310	8.2
AD19178-013	260	8.0
AD19180-001	42	12.0
AD19192-001	470	5.4
AD19192-002	500	4.8
AD19192-003	480	4.9

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

BJ 9/14/20

9/15/20

Data Entry Report

0091101 0618

Report Printed By: llombardi Printed on: 9/14/2020 3:59:55

Lab#:	TestGroupID:	TxtAnalyte:	Result	Mdl	Units	Dilution	Weight	Volume	Prep Date	Prep By:	Anal Date:	Anal By
AD19160-001	CR6-PH	pH	7.4		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19160-001	CR6-PH	Temperature	23		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19160-002	CR6-PH	pH	8.5		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19160-002	CR6-PH	Temperature	23		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-001	CR6-PH	pH	8.0		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-001	CR6-PH	Temperature	23		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-002	CR6-PH	pH	8.1		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-002	CR6-PH	Temperature	23		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-003	CR6-PH	pH	7.9		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-003	CR6-PH	Temperature	22		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-004	CR6-PH	pH	8.4		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-004	CR6-PH	Temperature	22		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-005	CR6-PH	pH	8.0		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-005	CR6-PH	Temperature	22		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-006	CR6-PH	pH	8.0		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-006	CR6-PH	Temperature	22		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-007	CR6-PH	pH	9.4		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-007	CR6-PH	Temperature	22		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-008	CR6-PH	pH	7.9		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-008	CR6-PH	Temperature	23		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-009	CR6-PH	pH	8.8		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-009	CR6-PH	Temperature	22		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-010	CR6-PH	pH	8.3		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-010	CR6-PH	Temperature	22		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-011	CR6-PH	pH	8.7		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-011	CR6-PH	Temperature	22		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-012	CR6-PH	pH	8.2		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-012	CR6-PH	Temperature	22		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-013	CR6-PH	pH	8.0		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19178-013	CR6-PH	Temperature	22		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19180-001	CR6-PH	pH	12		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19180-001	CR6-PH	Temperature	23		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19192-002	CR6-PH	pH	4.8		PH	1	1	1	09/14/20	BCT	09/14/20 12:25	LL
AD19192-002	CR6-PH	Temperature	22		C	1	1	1	09/14/20	BCT	09/14/20 12:25	LL

BT 9/14/20

DOOR 9/15/20

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332644

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: jessica
Description: KHP LCS	BatchNumber:	ApproveDate: 08/05/20
Prep Date: 8/5/2020	Concentration: 300 ppm	Checked: Yes
Expiration Date: 2/4/2021	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE	600 mg	NEAT	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10292

Description
Potassium Chloride, 4M

ApprovedBy: janee
ApproveDate: 12/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	SP135-500	156731	07/01/16	12/31/20	Wonge, Janee	1	500 m	4	M

Veritech Control/Receipt Number: 13162

Description
zobell"s solution

ApprovedBy: jessica
ApproveDate: 04/06/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LABCHEM	LC273101	K050-17	04/06/20	02/20/21	Patel, Jessica	1	500M	NEAT	NEAT

0091101 0622

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1117 Meter #: 16004

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.5	23.0	233.9	23.0	LCS: 23.7 4.38	25	25	9/14/20 16:10	BY
DUP 9192-004	486.1	24.1	484.9	24.1	DUP: 4.81	1	1	1	1
1. 004	489.3	23.8	490.1	23.8	4.86	1	1	1	1
2. 005	492.0	23.6	491.8	23.6	4.78	1	1		1
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
ZoBell's Solution (228 ± 10 mV)	232.7	23.2	233.1	23.2					

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: MMP

Date Reviewed: 9/15/20

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V-332644

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0004

0091101 0623

Hampton-Clarke

pH CALIBRATION RECORD

pH Meter: Orion 3 Star

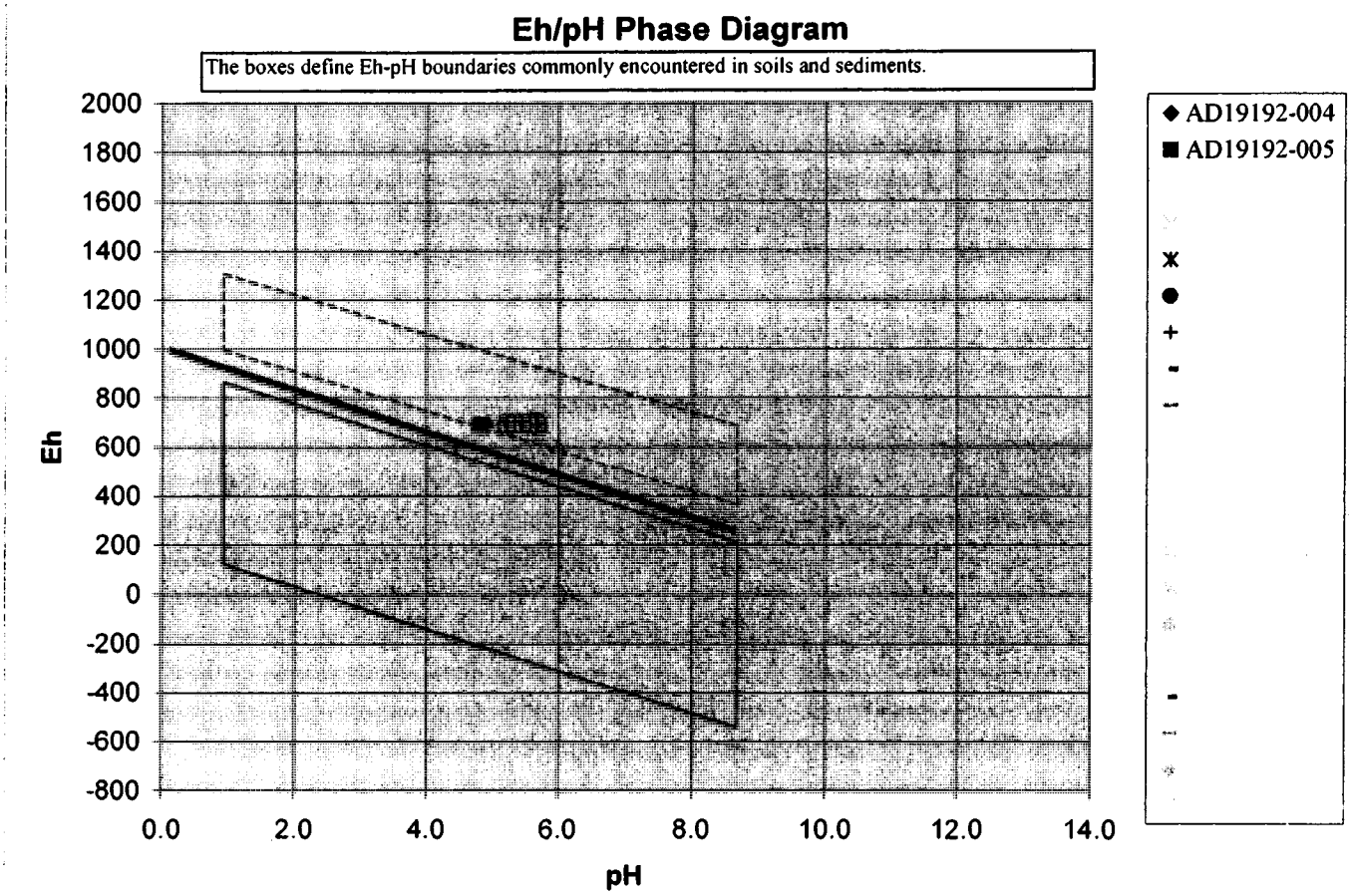
Serial # 16004

Date	Calibration					Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate: Buffer 1	Calibrate: Buffer 2	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Buffer 1	Buffer 2	Mid point Buffer
9/11/20	BM 9:00	23.3	4.00	10.00	7.06							13022	13016	13384
9/14/20	BM 9:30	23.6	4.00	10.00	7.07	BM 11:00	23.4	7.08	BM 16:00	23.0	7.07	/	/	/

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0 and 7.0, check with 4.0. For basic samples calibrate with 7.0 and 12. 0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-

0075



Sample	ORP	pH
AD19192-004	490	4.9
AD19192-005	490	4.8

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

9/15/20

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332644

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: jessica	
Description: KHP LCS	BatchNumber:	ApproveDate: 08/05/20	
Prep Date: 8/5/2020	Concentration: 300 ppm	Checked: Yes	
Expiration Date: 2/4/2021	Final Volume: 2000 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE	600 mg	NEAT	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10292

Description
Potassium Chloride, 4M

ApprovedBy: janee
ApproveDate: 12/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	SP135-500	156731	07/01/16	12/31/20	Wonge, Janee	1	500 m	4	M

Veritech Control/Receipt Number: 13162

Description
zobell"s solution

ApprovedBy: jessica
ApproveDate: 04/06/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LABCHEM	LC273101	K050-17	04/06/20	02/20/21	Patel, Jessica	1	500M	NEAT	NEAT

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 786 Analyst MJ/JMP Date 9/18/20

Digestion Start: 9145 Finish: 1045 Hot Plate Temp 1: 90C Hot Plate Temp 2: 90C

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 from	0.0mL	7.18	100	2.08	
Cal Curve 0.02 100	0.02	7.69		2.11	
Cal Curve 0.25 ppm	0.25	7.12		1.96	Balance used: 031
Cal Curve 0.5	0.5	7.48		1.93	Pipettes used: 11, 19
Cal Curve 1.0	1.0	7.30		1.78	
MB	2.5mL	7.96		1.75	
LCS		7.90		2.03	
~~ADI9290-002~~					
PDS		7.84		2.00	
DUP	11	7.23		1.99	
(Sol) MS	003	7.18		1.80	
(Insol) MSD	004	7.17		1.73	
1.	002	7.06		1.60	
2.	001	7.98		1.84	
3ADI9178-011		7.45		1.78	
4.	012	7.14		2.07	
5.	013	7.64		2.09	
6ADI9262-001		7.38		1.95	
7.	003	7.30		1.90	
8ADI9274-001		7.29		1.86	
9ADI9292-001		7.91		1.75	
10.	002	7.98		1.70	
11.	003	7.37		1.74	
12ADI9294-001		7.35		1.78	
13.					
14.					
15.					
16.					
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18.					
19.					
20.					

Reagent	Lot #:		$MgCl_2$	# 12689
Digestion Solution - pH must be > 11.5. If not, discard	V- 334593	pH 13.21	Lead Chromate ($PbCrO_4$)	# 6413
Phosphate Buffer	V- 331888		Weight of $PbCrO_4$ (10-20mg)	0.01535 g
			PVS Volume 0.5 ml	10% H_2SO_4 V: 334640
			PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3 V: 334641
			Spike Volume 0.5ml V- 331890	Col Rea. V: 334845

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 786A Analyst MJ/MP Date 9/18/20

Digestion Start: 9145 Finish: 10145 Hot Plate Temp 1: 90°C Hot Plate Temp 2: 90 C

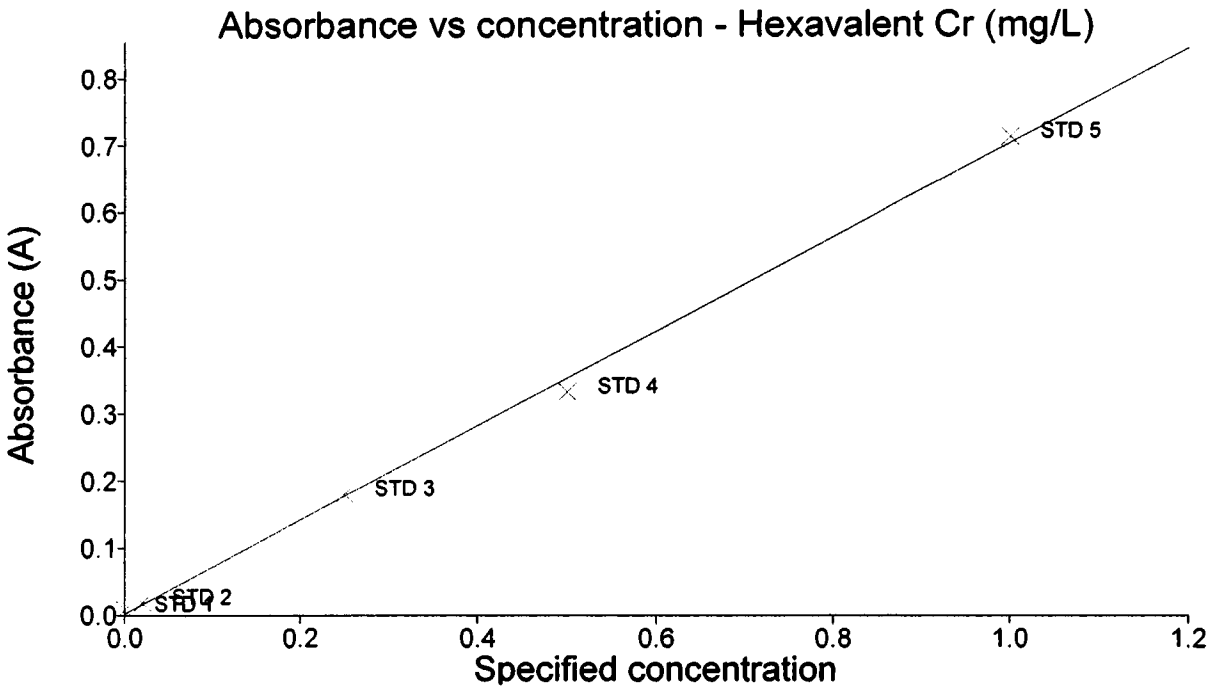
Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 (50ml)	0.0ml	7.18	100	2.08	
Cal Curve 0.05 100 ppm	0.02	7.69		2.11	
Cal Curve 0.25 ppm	0.25	7.12		1.96	Balance used: 031
Cal Curve 0.5	0.5	7.48		1.93	Pipettes used: 11,19
Cal Curve 1.0	1.0	7.30		1.78	
MB	2.5gm	7.66		1.97	
LCS		7.40		1.90	
~~AD19290.002~~					
PDS		7.89		2.14	
DUP		7.33		2.11	
(Sol) MS 003		7.25		2.13	
(Insol) MSD 005		7.97		1.95	
AD19290.002		7.87		1.98	
2. 001		7.64		1.73	
3. AD19178.011		7.39		1.76	
4. 012		7.25		2.05	
5. 013		7.30		1.94	
6. AD19262.001		7.11		1.90	
7. 003		7.95		2.06	
8. AD19292.001		7.90		2.14	
9. 002		7.88		2.19	
10. 003		7.34		1.97	
11. AD19274.001		7.30		1.98	
12. AD19294.001		7.68		2.03	
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					

Reagent	Lot #:			
Digestion Solution - pH must be > 11.5. If not, discard	V- 334593	pH 13.21	$MgCl_2$	# 12689
Phosphate Buffer	V- 337888		Lead Chromate ($PbCrO_4$)	# 6413
			Weight of $PbCrO_4$ (10-20mg)	0.0155 g
			PVS Volume 0.5 ml	10% H_2SO_4 V: 334640
			PVS should be spiked at 0.5 mg/L or 2X sample conc, whichever greater	5 M HNO_3 V: 334641
			Spike Volume 0.5ml V- 331890	Col Rea. V: 334845

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9993

Calibrated on: 09/18/20 14:57:22

User name: wet chem

Method name: Hexavalent Cr

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	0.0083	-0.0083	0.0083
STD 2.Sample	0.0200	0.0232	-0.0032	0.0187
STD 3.Sample	0.2500	0.2539	-0.0039	0.1805
STD 4.Sample	0.5000	0.4713	0.0287	0.3329
STD 5.Sample	1.0000	1.0133	-0.0133	0.7129

Report Generated On:09/18/2020 15:38

Perkin-Elmer UV-VIS Lambda 20 ***Instrument ID: UV1***

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		09/18/20 15:19:37	0.5000	0.0452	0.3213	0.4548
ICB.Sample		09/18/20 15:20:02			0.0062	0.0053
MB.Sample		09/18/20 15:20:19			0.0030	0.0007
LCS.Sample		09/18/20 15:21:04			0.3399	0.4813
AD19290-002 NS.Sample		09/18/20 15:21:42			0.0233	0.0297
AD19290-002 DUP.Sample		09/18/20 15:22:09			0.0261	0.0338
AD19290-003 MS.Sample		09/18/20 15:22:30			0.2579	0.3643
AD19290-004 XXX.Sample		09/18/20 15:22:46			3.9278	5.5991 : Exceeded calibration limits.
AD19290-004 50X MSD.Sample	50	09/18/20 15:23:36			0.1731	0.2434
AD19290-002 PVS.Sample		09/18/20 15:23:56			0.3359	0.4756
CCV-1.Control		09/18/20 15:24:11	0.5000	0.0190	0.3397	0.4810
CCB-1.Sample		09/18/20 15:24:24			0.0027	0.0003
AD19290-001.Sample		09/18/20 15:25:03			0.0076	0.0074
AD19178-011.Sample		09/18/20 15:25:45			0.0810	0.1121
AD19178-012.Sample		09/18/20 15:26:24			0.1677	0.2356
AD19178-013.Sample		09/18/20 15:26:46			0.0125	0.0144
AD19262-001.Sample		09/18/20 15:27:04			0.0055	0.0044
AD19262-003.Sample		09/18/20 15:27:30			0.0154	0.0185
AD19274-001.Sample		09/18/20 15:27:46			0.0000	-0.0035 : Exceeded calibration limits.
AD19294-001.Sample		09/18/20 15:28:02			0.0679	0.0933
AD19292-001.Sample		09/18/20 15:28:17			0.0009	-0.0022 : Exceeded calibration limits.
AD19292-002.Sample		09/18/20 15:28:33			0.0000	-0.0035 : Exceeded calibration limits.
CCV-2.Control		09/18/20 15:28:59	0.5000	0.0197	0.3392	0.4803
CCB-2.Sample		09/18/20 15:29:12			0.0027	0.0004

Report Generated On:09/18/2020 15:38

Perkin-Elmer UV-VIS Lambda 20 ***Instrument ID: UV1***

Results Table

Units:mg/L

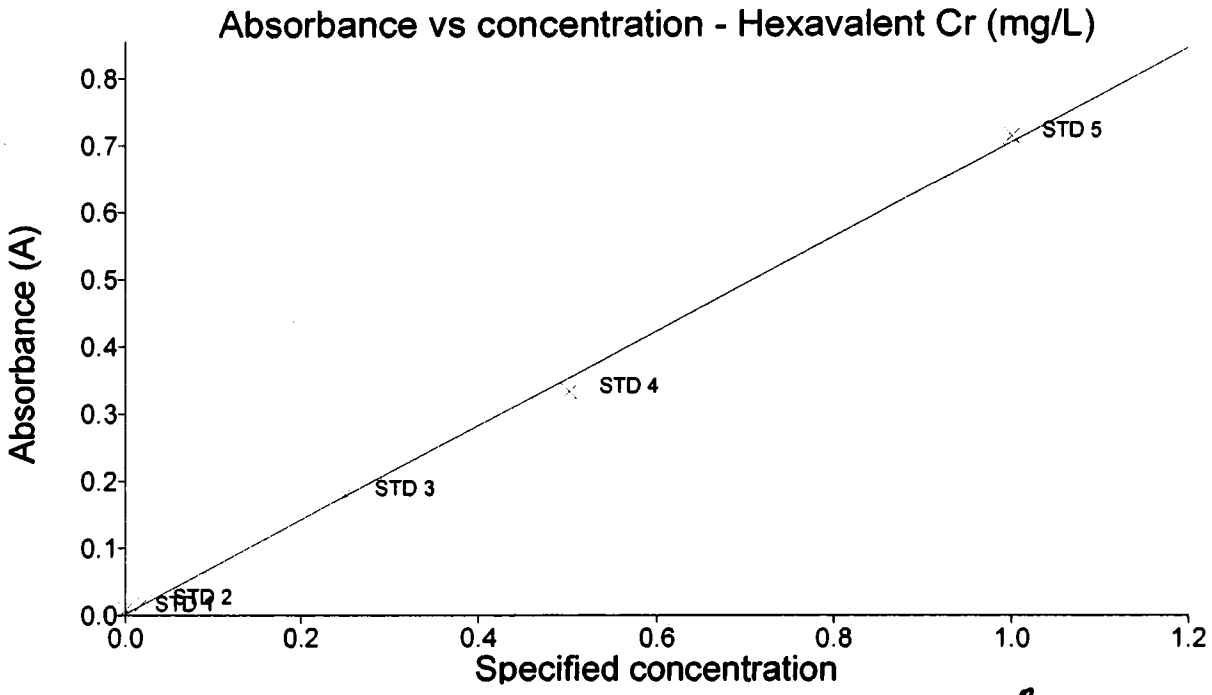
Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AD19292-003.Sample		09/18/20 15:30:09			0.0015	-0.0013 : Exceeded calibration limits
AD19290-002 T.Sample		09/18/20 15:30:30			-0.0003	-0.0039 : Exceeded calibration limits
AD19290-003 T.Sample		09/18/20 15:30:47			-0.0001	-0.0037 : Exceeded calibration limits
AD19290-004 T.Sample		09/18/20 15:31:13			0.0028	0.0005
AD19290-004 50XT.Sample		09/18/20 15:31:28			-0.0002	-0.0039 : Exceeded calibration limits
AD19178-011 T.Sample		09/18/20 15:32:01			0.0766	0.1057
AD19178-012 T.Sample		09/18/20 15:32:43			0.1528	0.2144
AD19178-013 T.Sample		09/18/20 15:33:15			0.0099	0.0106
AD19262-001 T.Sample		09/18/20 15:33:49			0.0079	0.0078
AD19262-003 T.Sample		09/18/20 15:34:13			0.0141	0.0165
CCV-3.Control		09/18/20 15:34:27	0.5000	0.0213	0.3381	0.4787
CCB-3.Sample		09/18/20 15:34:43			-0.0003	-0.0040 : Exceeded calibration limits
AD19274-001 T.Sample		09/18/20 15:35:00			0.0002	-0.0033 : Exceeded calibration limits
AD19292-001 T.Sample		09/18/20 15:35:21			-0.0002	-0.0039 : Exceeded calibration limits
AD19292-002 T.Sample		09/18/20 15:35:36			-0.0004	-0.0042 : Exceeded calibration limits
AD19292-003 T.Sample		09/18/20 15:35:52			0.0004	-0.0030 : Exceeded calibration limits
AD19294-001 T.Sample		09/18/20 15:36:08			0.0658	0.0903
AD19290-001 T.Sample		09/18/20 15:36:25			-0.0002	-0.0038 : Exceeded calibration limits
CCV-4.Control		09/18/20 15:36:57	0.5000	0.0219	0.3376	0.4781
CCB-4.Sample		09/18/20 15:37:12			-0.0002	-0.0038 : Exceeded calibration limits

Report Generated On:09/18/2020 15:38

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9993

Calibrated on: 09/18/20 14:57:22

User name: wet chem

Method name: Hexavalent Cr

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	0.0083	-0.0083	0.0083
STD 2.Sample	0.0200	0.0232	-0.0032	0.0187
STD 3.Sample	0.2500	0.2539	-0.0039	0.1805
STD 4.Sample	0.5000	0.4713	0.0287	0.3329
STD 5.Sample	1.0000	1.0133	-0.0133	0.7129

Report Generated On:09/18/2020 15:57

Perkin-Elmer UV-VIS Lambda 20 ***Instrument ID: UV1***

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		09/18/20 15:42:26	0.5000	0.0222	0.3374	0.4778
ICB.Sample		09/18/20 15:42:39			-0.0002	-0.0038 : Exceeded calibration limits.
MB.Sample		09/18/20 15:42:52			0.0001	-0.0034 : Exceeded calibration limits.
LCS.Sample		09/18/20 15:43:05			0.3344	0.4734
AD19290-002 NS.Sample		09/18/20 15:43:32			0.0242	0.0309
AD19290-002 DUP.Sample		09/18/20 15:43:45			0.0242	0.0310
AD19290-003 MS.Sample		09/18/20 15:44:12			0.3110	0.4401
AD19290-004 XXX.Sample		09/18/20 15:44:31			3.9282	5.5995 : Exceeded calibration limits.
AD19290-004 50X MSD.Sample	50	09/18/20 15:44:50			0.1744	0.2453
AD19290-002 PVS.Sample		09/18/20 15:45:25			0.3430	0.4857
CCV-1.Control		09/18/20 15:45:40	0.5000	0.0236	0.3365	0.4764
CCB-1.Sample		09/18/20 15:45:53			0.0001	-0.0033 : Exceeded calibration limits.
AD19290-001.Sample		09/18/20 15:46:11			0.0152	0.0182
AD19178-011.Sample		09/18/20 15:46:25			0.0661	0.0908
AD19178-012.Sample		09/18/20 15:46:45			0.1925	0.2710
AD19178-013.Sample		09/18/20 15:46:58			0.0146	0.0173
AD19262-001.Sample		09/18/20 15:47:30			0.0155	0.0186
AD19262-003.Sample		09/18/20 15:47:49			0.0145	0.0171
AD19274-001.Sample		09/18/20 15:48:10			0.0038	0.0019
AD19294-001.Sample		09/18/20 15:48:27			0.0440	0.0592
AD19292-001.Sample		09/18/20 15:48:39			0.0001	-0.0033 : Exceeded calibration limits.
AD19292-002.Sample		09/18/20 15:48:53			-0.0003	-0.0040 : Exceeded calibration limits.
CCV-2.Control		09/18/20 15:49:07	0.5000	0.0245	0.3359	0.4755

Report Generated On:09/18/2020 15:57

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units:mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCB-2.Sample		09/18/20 15:49:20			-0.0003	-0.0039 : Exceeded calibration limits.
AD19292-003.Sample		09/18/20 15:49:33			-0.0000	-0.0036 : Exceeded calibration limits.
AD19290-002 T.Sample		09/18/20 15:49:48			0.0041	0.0023
AD19290-003 T.Sample		09/18/20 15:50:03			0.0019	-0.0008 : Exceeded calibration limits.
AD19290-004 T.Sample		09/18/20 15:50:19			0.0020	-0.0007 : Exceeded calibration limits.
AD19290-004 50XT.Sample		09/18/20 15:50:35			-0.0003	-0.0040 : Exceeded calibration limits.
AD19178-011 T.Sample		09/18/20 15:51:10			0.0670	0.0920
AD19178-012 T.Sample		09/18/20 15:52:08			0.1981	0.2791
AD19178-013 T.Sample		09/18/20 15:52:41			0.0086	0.0087
AD19262-001 T.Sample		09/18/20 15:53:23			0.0099	0.0106
AD19262-003 T.Sample		09/18/20 15:53:43			0.0136	0.0158
CCV-3.Control		09/18/20 15:53:56	0.5000	0.0256	0.3351	0.4744
CCB-3.Sample		09/18/20 15:54:09			-0.0013	-0.0054 : Exceeded calibration limits.
AD19274-001 T.Sample		09/18/20 15:54:26			0.0038	0.0019
AD19292-001 T.Sample		09/18/20 15:54:48			0.0021	-0.0005 : Exceeded calibration limits.
AD19292-002 T.Sample		09/18/20 15:55:03			0.0045	0.0029
AD19292-003 T.Sample		09/18/20 15:55:16			-0.0004	-0.0041 : Exceeded calibration limits.
AD19294-001 T.Sample		09/18/20 15:55:32			0.0445	0.0599
AD19290-001 T.Sample		09/18/20 15:55:47			0.0019	-0.0009 : Exceeded calibration limits.
CCV-4.Control		09/18/20 15:56:02	0.5000	0.0265	0.3344	0.4735
CCB-4.Sample		09/18/20 15:56:20			-0.0005	-0.0042 : Exceeded calibration

Report Generated On:09/18/2020 15:57

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-325340

Prepared By: Patel, Jessica
Description: 100 ppm cr6 CCV
Prep Date: 4/7/2020
Expiration Date: 10/6/2020
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 04/07/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12101	1000 ppm Cr6 Std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-331888

Prepared By: Trivedi, Beena
Description: Phosphate Buffer
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9811	Potassium Phosphate Monobasic	68.04 g	neat neat	
12908	potassium phosphate dibasic anhydrous	87.09 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-331889

Prepared By: Trivedi, Beena
Description: 100 ppm cr6 std
Prep Date: 7/22/2020
Expiration Date: 1/21/2021
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 07/22/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12831	1000 ppm cr6 std	10 ml	1000 ppm	100 mg/l
13084	DI H20			

Veritech Lot Number: V-334593

Prepared By: Trivedi, Beena
Description: Cr6 digestion solution
Prep Date: 9/10/2020
Expiration Date: 10/9/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 6000 ml
ApprovedBy: jessica
ApproveDate: 09/10/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12852	Sodium Carbonate, Anhydrous	180 g	neat neat	
12834	sodium hydroxide	120 g	neat neat	
13084	DI H20			

Veritech Lot Number: V-334640

Prepared By: Patel, Jessica
Description: 10 % H2SO4
Prep Date: 9/11/2020
Expiration Date: 2/25/2021
Department: WetChem
BatchNumber:
Concentration: 10 %
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13343	sulfuric acid	200 ml	neat neat	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334641

Prepared By: Patel, Jessica
Description: 5 M HNO3
Prep Date: 9/11/2020
Expiration Date: 2/25/2021
Department: WetChem
BatchNumber:
Concentration: 5 m
Final Volume: 2000 ml
ApprovedBy: jessica
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13331	Nitric acid	640 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334845

Prepared By: Trivedi, Beena
Description: Cr6 Color Reagent
Prep Date: 9/15/2020
Expiration Date: 12/3/2020
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 250 ml
ApprovedBy: jessica
ApproveDate: 09/15/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11768	1,5-Diphenylcarbazide	1.25 g	neat neat	
12943	acetone	250 ml	neat neat	

Veritech Lot Number: V-335092

Prepared By: Trivedi, Beena
Description: 0.02 PPM
Prep Date: 9/18/2020
Expiration Date: 9/18/2020
Department: Wet Lab
BatchNumber: B-29701
Concentration: 0.02 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/18/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	.02 ml	100 mg/l	
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-335093

Prepared By: Trivedi, Beena
Description: 0.25 PPM
Prep Date: 9/18/2020
Expiration Date: 9/18/2020
Department: WetChem
BatchNumber: B-29701
Concentration: 0.25 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/18/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.25 ml	100 mg/l	

Veritech Lot Number: V-335094

Prepared By: Trivedi, Beena
Description: 0.5 PPM
Prep Date: 9/18/2020
Expiration Date: 9/18/2020
Department: Wet Lab
BatchNumber: B-29701
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy: jessica
ApproveDate: 09/18/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-335095

Prepared By:	Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description:	1.0 PPM	BatchNumber: B-29701	ApproveDate: 09/18/20
Prep Date:	9/18/2020	Concentration: 1 ppm	Checked: Yes
Expiration Date:	9/18/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-331889	100 ppm cr6 std	1 ml	100 mg/l	
V-334593	Cr6 digestion solution	50 ml	Reagent reag	
13084	DI H20			

Veritech Lot Number: V-335096

Prepared By:	Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description:	ICV	BatchNumber: B-29701	ApproveDate: 09/18/20
Prep Date:	9/18/2020	Concentration: 0.5 ppm	Checked: Yes
Expiration Date:	9/18/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-335097

Prepared By:	Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description:	CCV	BatchNumber: B-29701	ApproveDate: 09/18/20
Prep Date:	9/18/2020	Concentration: 0.5 ppm	Checked: Yes
Expiration Date:	9/18/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-325340	100 ppm cr6 CCV	.5 ml	100 mg/l	
13084	DI H20			
V-334593	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-335098

Prepared By:	Trivedi, Beena	Department: Wet Lab	ApprovedBy: jessica
Description:	LCS	BatchNumber: B-29701	ApproveDate: 09/18/20
Prep Date:	9/18/2020	Concentration: 0.5 ppm	Checked: Yes
Expiration Date:	9/18/2020	Final Volume: 100 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
V-331889	100 ppm cr6 std	.5 ml	100 mg/l	
V-334593	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9811

Description
Potassium Phosphate Monobasic

ApprovedBy: janee
ApproveDate: 11/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	P285-500	151912	11/17/15	11/16/25	Wonge, Janee	2	500 g	neat	neat

Veritech Control/Receipt Number: 11768

Description
1,5-Diphenylcarbazide

ApprovedBy: janee
ApproveDate: 09/08/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	LC136558	H134-17	06/12/18	05/15/23	Wonge, Janee	1	25 g	neat	neat

Veritech Control/Receipt Number: 12101

Description
1000 ppm Cr6 Std

ApprovedBy: janee
ApproveDate: 11/29/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	19036-100mL	BCBV2169	11/05/18	04/30/21	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12831

Description
1000 ppm cr6 std

ApprovedBy: janee
ApproveDate: 12/26/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Hach	1466442	A9240	10/14/19	08/31/24	Wonge, Janee	1	100 m	1000	ppm

Veritech Control/Receipt Number: 12834

Description
sodium hydroxide

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	1.06469.9012	B1714069	10/15/19	10/14/24	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12852

Description
Sodium Carbonate, Anhydrous

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Lab Chem	LC229651	J192-03	10/21/19	10/20/29	Wonge, Janee	1	500 g	neat	neat

Veritech Control/Receipt Number: 12908

Description
potassium phosphate dibasic anhydrous

ApprovedBy: janee
ApproveDate: 12/04/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
fisher	p288-500	188106	12/04/19	12/03/29	Wonge, Janee	1	500 g	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12943

Description
acetone

ApprovedBy: akmal
ApproveDate: 12/18/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9254-03	236884	12/17/19	05/13/22	Lopez, Jose	32	4L	neat	neat

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13331

Description
Nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	06/16/20	02/03/25	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6413

Description
Lead Chromate

ApprovedBy: aurora
ApproveDate: 11/05/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Pfaltz & Bauer inc	L01745	A056-5	10/27/11	10/26/21	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 12689

Description
Magnesium Chloride Anhydrous

ApprovedBy: janee
ApproveDate: 08/01/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Laboratory Sales	LC-2758812	190726-A	07/31/19	07/30/24	Wonge, Janee	1	2.5 kg	neat	neat

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Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1116 Meter #: 16004 X55486

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	234.5	23.0	233.9	23.0	LCS: 23.4° 4.43	25	25	9/14/20 12:25	BG/LL
AD19160.001 DUP	5.1	23.1	6.3	23.1	DUP: 7.26				
1. 001	4.9	22.7	5.8	22.7	7.41				
2. 002	252.4	22.7	250.7	22.7	8.48				
AD19178.001	281.3	22.7	280.7	22.7	7.97				
4. 002	327.2	22.6	326.8	22.6	8.07				
5. 003	323.0	22.3	322.6	22.3	7.91				
6. 004	345.8	22.5	346.3	22.5	8.37				
7. 005	327.1	22.5	329.2	22.5	8.03				
8. 006	333.9	22.5	331.5	22.5	7.99				
9. 007	221.5	22.5	219.6	22.5	9.37				
10. 008	326.0	22.6	326.7	22.6	7.87				
11. 009	280.5	22.5	281.3	22.5	8.80				
12. 010	313.7	22.4	314.8	22.4	8.26				
13. 011	273.3	22.1	271.1	22.1	8.69				
14. 012	310.8	22.1	311.2	22.1	8.18				
15. 013	257.3	21.9	259.9	21.9	8.02				
16 AD19180.001	42.5	22.6	40.5	22.6	12.46	10			
17 AD19192.001	469.7	22.0	470.3	22.0	5.38	25			
18. 002	500.3	21.9	502.3	21.9	4.76				
19. 003	484.3	22.0	486.3	22.0	4.93				
20.									
ZoBell's Solution (228 ± 10 mV)	233.6	23.2	231.5	23.2					

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: mmp

Date Reviewed: 9/15/20

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V-332644

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Hampton-Clarke

pH CALIBRATION RECORD

pH Meter: Orion 3 Star

Serial # 16004

Date	Calibration					Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate Buffer 1	Calibrate Buffer 2	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Initials / Time	Temp	Read Mid point Buffer	Buffer 1	Buffer 2	Mid point Buffer
9/11/20	BM 9:00	23.3	4.00	10.00	7.06							13022	13016	13384
9/14/20	BM 9:30	23.6	4.00	10.00	7.07	BM 11:00	23.4	7.08	BM 16:00	23.0	7.07	/	/	/

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0 and 7.0, check with 4.0. For basic samples calibrate with 7.0 and 12. 0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-

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Hampton-Clarke

pH CALIBRATION RECORD

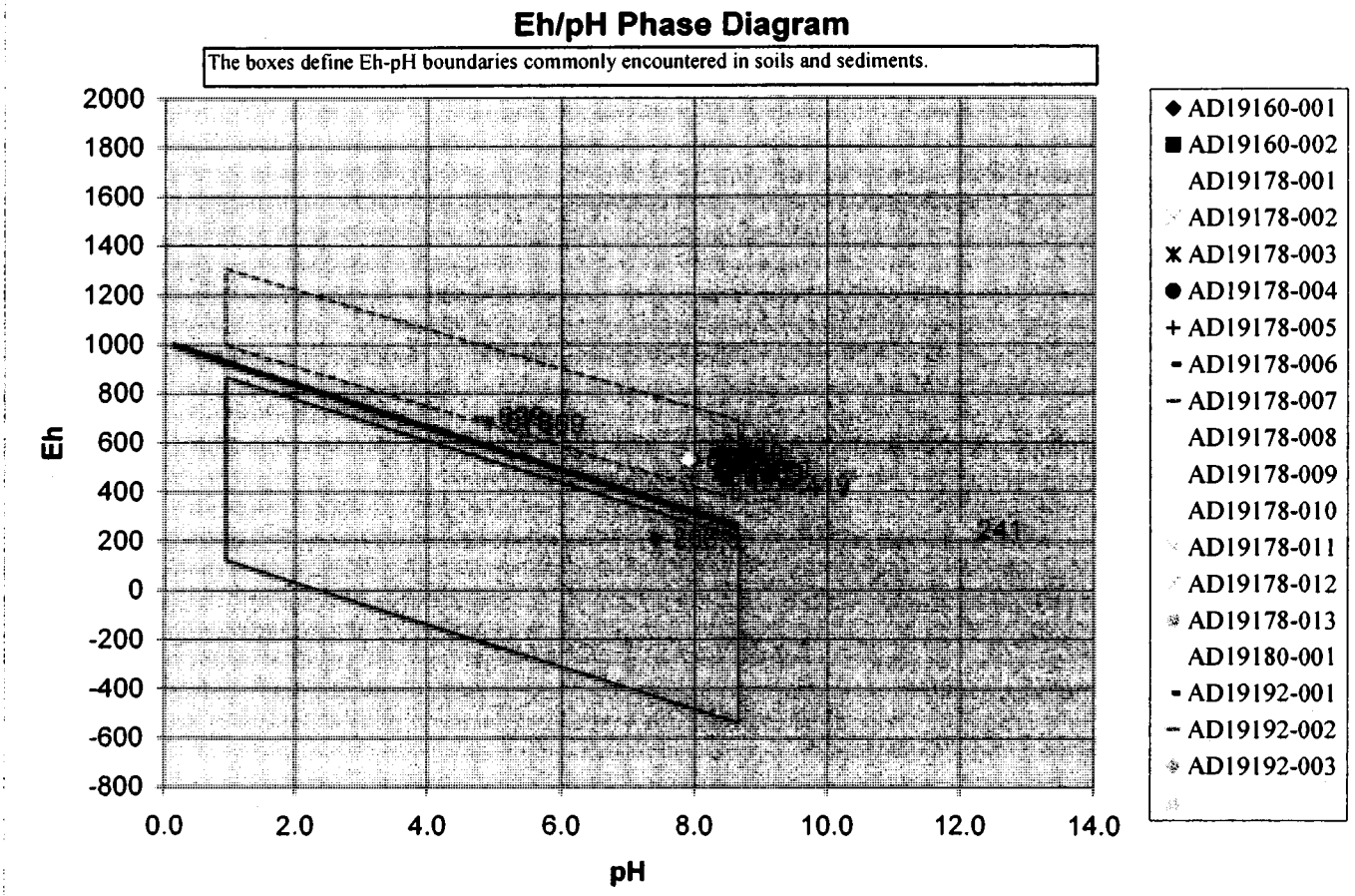
pH Meter: Orion Star A211

Serial # X55486

Date	Calibration						Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate: Buffer 1	Calibrate: Buffer 2	Calibrate: Buffer 3	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Buffer 1	Buffer 2 / Mid pt	Buffer 3
9/10/20	BG 11:30	23.3	7.00	10.00	11.99	9.98							13384	13016	12555
9/10/20	BG 14:40	23.6	4.00	7.00	10.00	7.02							13022	13384	13016
9/11/20	BG 9:00	24.0	4.00	7.00	10.00	6.99									
9/14/20	BG 9:30	23.7	4.00	7.00	10.00	7.03									
9/14/20	BG 12:00	23.8	7.00	10.00	11.99	9.99							13384	13016	12555

Calibrate using pH 4.0, pH 7.0, and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0, 0.4 and 7.0, check with 4.0. For basic samples calibrate with 7.0, 10.0, and 12.0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-



Sample	ORP	pH
AD19160-001	4.9	7.4
AD19160-002	250	8.5
AD19178-001	280	8.0
AD19178-002	330	8.1
AD19178-003	320	7.9
AD19178-004	350	8.4
AD19178-005	330	8.0
AD19178-006	330	8.0
AD19178-007	220	9.4
AD19178-008	330	7.9
AD19178-009	280	8.8
AD19178-010	310	8.3
AD19178-011	270	8.7
AD19178-012	310	8.2
AD19178-013	260	8.0
AD19180-001	42	12.0
AD19192-001	470	5.4
AD19192-002	500	4.8
AD19192-003	480	4.9

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

PB 9/14/20

9/15/20

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332644

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: jessica
Description: KHP LCS	BatchNumber:	ApproveDate: 08/05/20
Prep Date: 8/5/2020	Concentration: 300 ppm	Checked: Yes
Expiration Date: 2/4/2021	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE	600 mg	NEAT	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10292

Description
Potassium Chloride, 4M

ApprovedBy: janee
ApproveDate: 12/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	SP135-500	156731	07/01/16	12/31/20	Wonge, Janee	1	500 m	4	M

Veritech Control/Receipt Number: 13162

Description
zobell"s solution

ApprovedBy: jessica
ApproveDate: 04/06/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LABCHEM	LC273101	K050-17	04/06/20	02/20/21	Patel, Jessica	1	500M	NEAT	NEAT

0091101 0649

Hampton-Clarke

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 1118 Meter #: 16004

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	232.5	23.1	231.9	23.1	LCS: 4.60 22.7°C	25	25	09/18/2020 11:23	LL/mp
DUP AD19262-001	116.3	22.4	117.5	22.4	DUP: 6.95			09	
1. -001	121.5	22.1	122.3	22.1	6.99				
2. -003	21.5	22.1	22.9	22.1	7.00				
3. AD19290-001	453.4	21.9	454.8	21.9	5.38				
4. -002	463.2	22.0	461.7	22.0	5.89				
5. -003	466.5	22.0	465.3	22.0	5.92				
6. -004	461.8	21.9	463.7	21.9	5.86				
7. AD19294-001	309.8	22.0	311.5	22.0	8.53				
8. AD19274-001	253.8	22.4	252.7	22.4	8.54				
9. AD19292-001	344.8	22.1	341.3	22.1	8.09				
10. -002	374.9	22.6	375.4	22.6	7.17				
11. -003	305.8	22.2	307.6	22.2	8.61				
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
ZoBell's Solution (228 ± 10 mV)	233.2	23.2	232.4	23.2					

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: BJ

Date Reviewed: 9/18/20

Solution	Manufacturer's Lot #
ZoBell's Solution	13162
4 M KCl Filling Solution	10292
LCS	V- 332644

5000

Hampton-Clarke

pH CALIBRATION RECORD

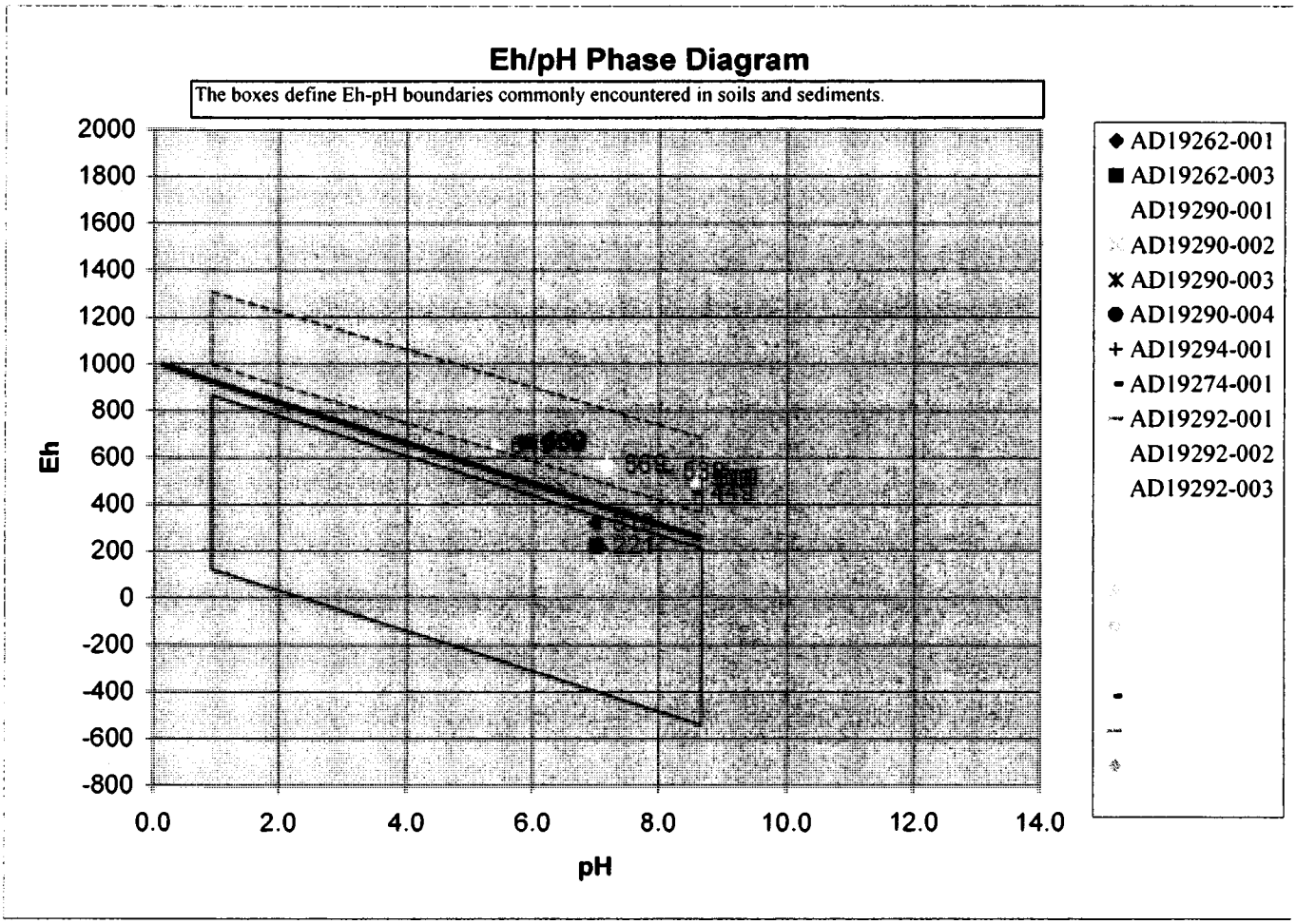
pH Meter: Orion 3 Star

Serial # 16004

Date	Calibration					Checks						Buffer Lot #s		
	Initials / Time	Temp	Calibrate: Buffer 1	Calibrate: Buffer 2	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Initials / Time	Temp	Read: Mid point Buffer	Buffer 1	Buffer 2	Mid point Buffer
9/1/20	BM 9:40	23.3	4.00	10.00	7.06							13022	13016	13384
9/14/20	BM 9:30	23.6	4.00	10.00	7.07	BM 11:40	23.4	7.08	BM 16:40	23.0	7.07	"	"	"
9/15/20	JW 9/20	23.0	4.00	10.00	7.06							"	"	"
9/16/20	JW 650	21.5	4.00	10.05	7.07	SDC 10:50	22.0	7.08				13022	13385	13384
9/16/20	SDC 11:45	22.4	4.00	10.05	7.07							"	"	"
9/17/20	JMP 900	22.5	4.00	10.00	7.06	SDC 14:15	23.3	7.04				"	"	"
9/18/20	BM 9:40	23.6	4.00	10.00	7.04									

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0*
(the pH 7.0 must agree within ±0.1 pH units).
Record temp and refer to table to determine target pH.
When using the pH meter more for analysis and more than 3 hours
has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.
*For method 9040C,buffer pH must bracket sample pH. For acidic samples calibrate with pH 2.0 and 7.0, check with 4.0. For basic samples calibrate with 7.0 and 12. 0, check with 10.0

Temp (deg. C)	pH 2	pH 4	pH 7	pH 10	pH 12
0	-	4.00	7.12	10.31	-
5	-	4.00	7.09	10.23	-
10	1.93	4.00	7.06	10.17	-
15	1.98	4.00	7.04	10.11	12.35
20	1.98	4.00	7.02	10.05	12.17
25	2.00	4.00	7.00	10.00	11.99
30	2.01	4.01	6.99	9.95	11.78
35	2.03	4.02	6.98	9.91	11.62
40	2.03	4.03	6.98	9.87	11.46
45	2.04	4.04	6.97	-	-
50	2.04	4.06	6.97	9.81	-



Sample	ORP	pH
AD19262-001	120	7.0
AD19262-003	22	7.0
AD19290-001	450	5.4
AD19290-002	460	5.9
AD19290-003	470	5.9
AD19290-004	460	5.9
AD19294-001	310	8.5
AD19274-001	250	8.5
AD19292-001	340	8.1
AD19292-002	370	7.2
AD19292-003	310	8.6

Reducing | Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units was added for the combination platinum electrode used.

ORP 9/18/20

BJ 9/18/20

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-332644

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: jessica
Description: KHP LCS	BatchNumber:	ApproveDate: 08/05/20
Prep Date: 8/5/2020	Concentration: 300 ppm	Checked: Yes
Expiration Date: 2/4/2021	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE	600 mg	NEAT	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10292

Description
Potassium Chloride, 4M

ApprovedBy: janee
ApproveDate: 12/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Fisher	SP135-500	156731	07/01/16	12/31/20	Wonge, Janee	1	500 m	4	M

Veritech Control/Receipt Number: 13162

Description
zobell"s solution

ApprovedBy: jessica
ApproveDate: 04/06/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
LABCHEM	LC273101	K050-17	04/06/20	02/20/21	Patel, Jessica	1	500M	NEAT	NEAT

Wet Chemistry Data
Preparation and Distillation Logbook Data

0091101 06

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B____ Total CN____ Amenable CN____ OIA 1677 Avail CN 9/14/20 SM4500 WAD CN____

Batch No. 2421 STD Cont/ Batch: _____ Distilled by: JW Start Distill. Time: 1245 End Distill. Time ~~1330~~ 1345 Date: ~~9/14/20~~ 9/14/20 Reviewed by: mg Date: 9/15/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
MB	✓		0.5	5.5	6.0					
LCS / LCSD		0.12								Balance Used: 023
MS AD19177-026										Pipettes Used: 11, 19
MSD 028										
1. 002										Micro-dist used: 2, 3
Dup 1. 002										
2. 004										
3. 006										
4. 008										
5. 010										
6. 012										
7. 014										
8. 016										
9. 018										
10. 020										
Cal Curve Blank										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. 0.8 ppm		0.24								V-334723 *

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:	V-332257	V-330630	V.334718			

* Samples analyzed on AQ2. Only 0.8 ppm std used.

0083

0091101 0650

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B ✓ Total CN____ Amenable CN____ OIA 1677 Avail CN____ SM4500 WAD CN____

Batch No. 2421 STD Cont/ Batch: ____ Distilled by: JW Start Distill. Time: 1245 End Distill. Time 1330 Date: 9/14/16 Reviewed by: [illegible] Date: 9/15/16

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
MB										
LCS										Balance Used:
MS JW 9/14/16										Pipettes Used:
MSD										
1.										Micro-dist used:
~~Dup~~ 1. AD19177-022	✓		0.5	5.5	6.0					
2. ↓ 024										
3. 030										
4. AD19171-002										
5. ↓ 004										
6. 006										
7. AD19164-001										
8. AD19180-002										
9. AD19178-001										
10. ↓ 002	↓		↓	↓	↓					
Cal Curve Blank										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:						

0084

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B ✓ Total CN^-____ Amenable CN^-____ OIA 1677 Avail CN^-____ SM4500 WAD CN^-____

Batch No. 2422 STD Cont/ Batch: ____ Distilled by: JW Start Distill. Time: 1215 End Distill. Time 1300 Date: 9/15/20 Reviewed by: DMP Date: 9/16/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
MB	✓		0.5	5.5	6.0					
LCS / LCSD		0.12								Balance Used: 023
MS AD19217-001										Pipettes Used: 11, 19
MSD										
1.										Micro-dist used: 1, 2
Dup 1.										
2. 002										
3. 003										
4. 004										
5. 005										
6. 006										
7. 007										
8. 008										
9. 009										
10. 010										
Cal Curve Blank										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. 0.8 ppm		0.24								V-334843 *

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:	V-332257	V-330630	V-334840			

* Samples analyzed on AQ2. Only 0.8 ppm std used.

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B ✓ Total CN____ Amenable CN____ OIA 1677 Avail CN____ SM4500 WAD CN____

Batch No. 2422 STD Cont/ Batch: ____ Distilled by: JW Start Distill. Time: 1215 End Distill. Time 1300 Date: 9/15/20 Reviewed by: [illegible] Date: 9/16/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
~~MB~~										
LCS										Balance Used:
MS										Pipettes Used:
MSD JW 9/15/20										
1.										Micro-dist used:
~~Dup~~ 1. AD19231-001	✓		0.5	5.5	6.0					
2. 002										
3. 003										
4. AD19178-003										
5. 004										
6. 005										
7. 006										
8. 007										
9. 008										
10. 009										
Cal Curve Blank										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:						

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9800

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B ✓ Total CN____ Amenable CN____ OIA 1677 Avail CN____ SM4500 WAD CN____

Batch No. 2423 STD Cont/ Batch: _____ Distilled by: JW Start Distill. Time: 1215 End Distill. Time 1300 Date: 9/15/20 Reviewed by: [illegible] Date: 9/16/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
MB	✓		0.5	5.5	6.0					
LCS / LCSD		0.12								Balance Used: 023
MS AD19214-001										Pipettes Used: 11, 19
MSD										
1.										Micro-dist used: 2,3
Dup 1.										
2. 003										
3. 005										
4. 007										
5. 008										
6. 010										
7. 011										
8. 013										
9. 014										
10. 017										
Cal Curve Blank										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. 0.8 ppm		0.24								V-334 844 *

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:	V-332257	V-330630	V-334840			

* Samples analyzed on AQ2 only 0.8 ppm std used.

0091101 08
0087

Hampton-Clarke

CYANIDE DISTILLATION DATA / BATCHING SHEET (SOIL SAMPLES ONLY)

Method: SM4500 (Total)____ 9012B ✓ Total CN⁻____ Amenable CN⁻____ OIA 1677 Avail CN⁻____ SM4500 WAD CN⁻____

Batch No. 2423 STD Cont/ Batch: ____ Distilled by: JW Start Distill. Time: 1215 End Distill. Time 1300 Date: 9/15/20 Reviewed by: DMP Date: 9/16/20

Laboratory Sample No.	Sulfamic Acid Added?	Spike Volume	Sample Weight (g)	Initial Vol. (ml)	Final Volume (ml)	Sulfide Check	$PbCO_3$ Added (gm)	Oxidizer Check	Sodium Thiosulfate Added (gm)	Comments
MB										
LCS										Balance Used:
MS JW 9/15/20										Pipettes Used:
MSD										
1.										Micro-dist used:
Dup 1. AD19214-020	✓		0.5	5.5	6.0					
2. 021	↓		↓	↓	↓					
3. 023										
4. AD19233-002										
5. AD19178-010										
6. 011										
7. 012										
8. 013	↓		↓	↓	↓					
9.										
10.										
Cal Curve Blank										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										
Std. ____ ppm										

Reagent:	1 M NaOH	Releasing Solution	Spike	$PbCO_3$	Sodium Thiosulfate	Sulfamic Acid
Lot #:						

TCLP
Metal Data

TCLP
Metal Data
Sample Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-4A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7440-39-3	Barium	0.25	0.45	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223T	14	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	100	100	09/16/20	85281	T26213B4	38	P	PEICP4A

Comments: _____

_____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-4B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A
7440-39-3	Barium	0.25	0.33	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223T	17	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/16/20	85281	T26213B4	62	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	46	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-2A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7440-39-3	Barium	0.25	0.93	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223T	18	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	47	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-2B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A
7440-39-3	Barium	0.25	0.99	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223T	19	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/16/20	85281	T26213B4	63	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	48	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-1A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A
7440-39-3	Barium	0.25	0.71	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223T	20	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/16/20	85281	T26213B4	64	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	49	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-1B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7440-39-3	Barium	0.25	3.0	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7439-92-1	Lead	0.050	0.29	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	11	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	50	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-007	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-6A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7440-39-3	Barium	0.25	1.1	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7440-43-9	Cadmium	0.050	0.082	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7439-92-1	Lead	0.050	0.52	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	12	CV	HGCV3A
7440-02-0	Nickel	0.10	0.17	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	51	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-6B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7440-39-3	Barium	0.25	1.1	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7440-43-9	Cadmium	0.050	0.055	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7439-92-1	Lead	0.050	0.30	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	13	CV	HGCV3A
7440-02-0	Nickel	0.10	0.19	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	54	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-009	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-7A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7440-39-3	Barium	0.25	0.61	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	14	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	55	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-010	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-7B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7440-39-3	Barium	0.25	0.56	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	15	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	56	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-8A	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A
7440-39-3	Barium	0.25	0.70	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	16	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/16/20	85281	T26213B4	65	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	57	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-012	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SS-8B	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A
7440-39-3	Barium	0.25	0.88	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	17	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A
7782-49-2	Selenium	0.20	ND	2	50	50	09/17/20	85281	T26234B4	19	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	58	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD19178-013	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	HRPB-1	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/11/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7440-39-3	Barium	0.25	0.98	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7439-92-1	Lead	0.050	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223TB	18	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	09/16/20	85281	T26213B4	59	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

TCLP
Metal Data
QC Data

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/16/20
Data File: T26213B4
Prep Batch: 85281
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-334775-5	Rec	CCV V-334775-12	Rec	CCV V-334775-23	Rec	CCV V-334775-33	Rec	CCV V-334775-44	Rec	CCV V-334775-52	Rec	CCV V-334775-60	Rec	CCV V-334775-66	Rec
Arsenic	.5/.5	0.48269	97	0.52870	106	0.47650	95	0.50203	100	0.45313	91	0.50883	102	0.51371	103	0.49554	99
Barium	.5/.5	0.49655	99	0.54840	110	0.48475	97	0.47170	94	0.46694	93	0.49535	99	0.47387	95	0.46936	94
Cadmium	.5/.5	0.48439	97	0.47673	95	0.46598	93	0.46205	92	0.46659	93	0.50388	101	0.48723	97	0.48333	97
Chromium	.5/.5	0.47761	96	0.46970	94	0.46601	93	0.46679	93	0.48730	97	0.51407	103	0.49494	99	0.49038	98
Lead	.5/.5	0.49664	99	0.49127	98	0.48968	98	0.48696	97	0.46764	94	0.51298	103	0.49087	98	0.47585	95
Nickel	.5/.5	0.49433	99	0.48392	97	0.47343	95	0.47043	94	0.47531	95	0.50951	102	0.49639	99	0.48717	97
Selenium	.5/.5	0.48877	98	0.50023	100	0.49321	99	0.50553	101	0.46936	94	0.52201	104	0.48312	97	0.46576	93
Silver	0.1/0.1	0.10182	102	0.10111	101	0.09928	99	0.10038	100	0.09665	97	0.10279	103	0.09863	99	0.09833	98

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/16/20
Data File: T26213B4
Prep Batch: 85271 / 85281
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333672	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-333660	Recovery	Low Limit	High Limit
Magnesium	5.0	4.90700	98	80	120	500	509.214	102	90	110
Silver	0.05	0.0477579	96	80	120	1	1.04912	105	90	110
Aluminum	1.0	1.03235	103	80	120	500	539.048	108	90	110
Arsenic	0.1	0.101721	102	80	120	10	10.2977	103	90	110
Boron	0.2	0.186847	93	80	120	5	0.976690	20 a	90	110
Barium	0.25	0.254482	102	80	120	10	10.4094	104	90	110
Beryllium	0.012	0.0109975	92	80	120	5	4.97386	99	90	110
Calcium	5.0	4.60816	92	80	120	500	492.669	99	90	110
Cadmium	0.05	0.0506531	101	80	120	5	5.24311	105	90	110
Cobalt	0.1	0.0967436	97	80	120	5	5.03749	101	90	110
Chromium	0.1	0.0994521	99	80	120	10	8.95785	90	90	110
Copper	0.1	0.0913865	91	80	120	10	11.2881	113 a	90	110
Silicon	0.1	0.115405	115	80	120	25	5.85560	23 a	90	110
Iron	1.0	0.898028	90	80	120	200	200.443	100	90	110
Zinc	0.1	0.0975433	98	80	120	10	9.44972	94	90	110
Manganese	0.1	0.101922	102	80	120	10	9.82211	98	90	110
Molybdenum	0.1	0.0979892	98	80	120	10	9.60617	96	90	110
Sodium	NA	22.4015		80	120	1000	1337.24	134 a	90	110
Nickel	0.1	0.0977273	98	80	120	10	9.18202	92	90	110
Lead	0.05	0.0460787	92	80	120	10	9.98704	100	90	110
Antimony	0.07	0.0783161	112	80	120	5	5.73675	115 a	90	110
Selenium	0.1	0.0898208	90	80	120	5	5.46916	109	90	110
Tin	0.1	0.102916	103	80	120	10	10.2236	102	90	110
Titanium	0.1	0.103654	104	80	120	10	10.1480	101	90	110
Thallium	0.1	0.0927382	93	80	120	5	4.49398	90	90	110
Vanadium	0.1	0.0853353	85	80	120	10	9.58466	96	90	110
Potassium	NA	-6.75523		80	120	200	-2040.73	- a	90	110
								1000		

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/17/20
Data File: T26234B4
Prep Batch: 85281
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-334775-5	Rec	CCV V-334775-12	Rec	CCV V-334775-20	Rec	CCV V-334775-23	Rec	Rec	Rec	Rec	Rec
Selenium	.5/.5	0.50325	101	0.47502	95	0.46342	93	0.44436	89 c				

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 09/17/20
Data File: T26234B4
Prep Batch: 85292 / 85281
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333672	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-333660	Recovery	Low Limit	High Limit
Manganese	0.1	0.108371	108	80	120		10	9.91274	99	90	110
Aluminum	1.0	1.09179	109	80	120		500	546.333	109	90	110
Arsenic	0.1	0.0909402	91	80	120		10	10.4011	104	90	110
Boron	0.2	0.210026	105	80	120		5	1.78675	36 a	90	110
Barium	0.25	0.252139	101	80	120		10	10.2829	103	90	110
Beryllium	0.012	0.0144843	121 a	80	120		5	5.01345	100	90	110
Calcium	5.0	5.14239	103	80	120		500	498.386	100	90	110
Cadmium	0.05	0.0554726	111	80	120		5	5.28002	106	90	110
Cobalt	0.1	0.104092	104	80	120		5	5.05346	101	90	110
Chromium	0.1	0.102870	103	80	120		10	9.40267	94	90	110
Copper	0.1	0.0984687	98	80	120		10	11.3021	113 a	90	110
Iron	1.0	1.00316	100	80	120		200	202.330	101	90	110
Silver	0.05	0.0496143	99	80	120		1	1.05190	105	90	110
Magnesium	5.0	5.40410	108	80	120		500	517.146	103	90	110
Zinc	0.1	0.104205	104	80	120		10	9.26677	93	90	110
Molybdenum	0.1	0.104662	105	80	120		10	9.70905	97	90	110
Sodium	NA	23.3557		80	120		1000	1355.05	136 a	90	110
Nickel	0.1	0.102358	102	80	120		10	9.23514	92	90	110
Lead	0.05	0.0557882	112	80	120		10	9.92188	99	90	110
Antimony	0.07	0.0768443	110	80	120		5	5.77973	116 a	90	110
Selenium	0.1	0.0947253	95	80	120		5	5.42570	109	90	110
Silicon	0.1	0.184962	185 a	80	120		25	9.53396	38 a	90	110
Tin	0.1	0.110468	110	80	120		10	10.3077	103	90	110
Titanium	0.1	0.110590	111	80	120		10	10.2277	102	90	110
Thallium	0.1	0.107153	107	80	120		5	4.50438	90	90	110
Vanadium	0.1	0.0923959	92	80	120		10	9.51324	95	90	110
Potassium	NA	-6.90902		80	120		200	-2031.73	- a	90	110

1000

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/16/20
Data File: H26223T
Prep Batch: 85281
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-21													
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec		Rec
Mercury	20/10	19.52000	98	10.02000	100												

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/16/20
Data File: H26223TB
Prep Batch: 85281
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-20													
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec		Rec
Mercury	20/10	19.65000	98	9.96500	100												

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/16/20
Data File: T26213B4
Prep Batch: 85281
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-24	CCB V-333667-34	CCB V-333667-45	CCB V-333667-53	CCB V-333667-61	CCB V-333667-67
Arsenic	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Barium	.125 U	.25 U	.25 U	.25 U	.25 U	.25 U	.25 U	.25 U
Cadmium	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Chromium	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Lead	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Nickel	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Selenium	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Silver	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U

Analyte	MB 85281 (1)-35	EF-V-334696-43						
Arsenic	.05 U	.1 U						
Barium	.13 U	.25 U						
Cadmium	.025 U	.05 U						
Chromium	.05 U	.1 U						
Lead	.025 U	.05 U						
Nickel	.05 U	.1 U						
Selenium	.05 U	.1 U						
Silver	.025 U	.05 U						

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/17/20
Data File: T26234B4
Prep Batch: 85281
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-21	CCB V-333667-24				
Selenium	.05 U	.1 U	.1 U	.1 U				

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/16/20
Data File: H26223T
Prep Batch: 85281
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	MB 85281 (1)-11					
Mercury	.5 U	.5 U	.5 U					

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/16/20
Data File: H26223TB
Prep Batch: 85281
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-21	EF V-334696-19					
Mercury	.5 U	.5 U	.5 U					

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/16/20
Data File: T26213B4
Prep Batch: 85281
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	523.2	105							
Arsenic	0	U								
Barium	0	U								
Cadmium	0	U								
Calcium	500	479.425	96							
Chromium	0	U								
Iron	200	176.951	88							
Lead	0	U								
Magnesium	500	505.456	101							
Nickel	0	U								
Selenium	0	U								
Silver	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/17/20
Data File: T26234B4
Prep Batch: 85281
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0091101

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	535.262	107							
Calcium	500	494.016	99							
Iron	200	186.254	93							
Magnesium	500	520.073	104							
Selenium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85281

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCSW MR 85281

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85281	1	T26213B4	37	0.4180	0.50	84		80	120
Barium	85281	1	T26213B4	37	0.4704	0.50	94		80	120
Cadmium	85281	1	T26213B4	37	0.4450	0.50	89		80	120
Chromium	85281	1	T26213B4	37	0.4552	0.50	91		80	120
Lead	85281	1	T26213B4	37	0.4750	0.50	95		80	120
Mercury	85281	1	H26223T	13	9.9810	10	100		80	120
Nickel	85281	1	T26213B4	37	0.4553	0.50	91		80	120
Selenium	85281	1	T26213B4	37	0.4735	0.50	95		80	120
Silver	85281	1	T26213B4	37	0.0940	0.100	94		80	120

TxtQcType: LCS Matrix: TCLP SampleID: LCSW 85281

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85281	1	T26213B4	36	0.4454	0.50	89		80	120
Barium	85281	1	T26213B4	36	0.4733	0.50	95		80	120
Cadmium	85281	1	T26213B4	36	0.4490	0.50	90		80	120
Chromium	85281	1	T26213B4	36	0.4563	0.50	91		80	120
Lead	85281	1	T26213B4	36	0.4719	0.50	94		80	120
Mercury	85281	1	H26223T	12	9.8910	10	99		80	120
Nickel	85281	1	T26213B4	36	0.4596	0.50	92		80	120
Selenium	85281	1	T26213B4	36	0.4751	0.50	95		80	120
Silver	85281	1	T26213B4	36	0.0943	0.100	94		80	120

TxtQcType: MS Matrix: TCLP SampleID: AD19178-001

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85281	1	T26213B4	40	T26213B4	38	0.4681	0.1U	0.50	94		50	
Barium	85281	1	T26213B4	40	T26213B4	38	0.8960	0.4544	0.50	88		50	
Cadmium	85281	1	T26213B4	40	T26213B4	38	0.4548	0.05U	0.50	91		50	
Chromium	85281	1	T26213B4	40	T26213B4	38	0.4389	0.1U	0.50	88		50	
Lead	85281	1	T26213B4	40	T26213B4	38	0.4350	0.05U	0.50	87		50	
Mercury	85281	1	H26223T	16	H26223T	14	9.9290	0.50U	10	99		50	
Nickel	85281	1	T26213B4	40	T26213B4	38	0.4317	0.1U	0.50	86		50	
Selenium	85281	1	T26213B4	40	T26213B4	38	0.5830	0.1U	0.50	117		50	
Silver	85281	1	T26213B4	40	T26213B4	38	0.1034	0.05U	0.100	103		50	

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85281

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: TCLP SampleID: AD19178-001

Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	T26213B4	41	T26213B4	38	0.4627	0.1U	0.5	93		75	125
Barium	1	T26213B4	41	T26213B4	38	0.8552	0.4544	0.5	80		75	125
Cadmium	1	T26213B4	41	T26213B4	38	0.4517	0.05U	0.5	90		75	125
Chromium	1	T26213B4	41	T26213B4	38	0.4369	0.1U	0.5	87		75	125
Lead	1	T26213B4	41	T26213B4	38	0.4374	0.05U	0.5	87		75	125
Nickel	1	T26213B4	41	T26213B4	38	0.4282	0.1U	0.5	86		75	125
Selenium	1	T26213B4	41	T26213B4	38	0.5714	0.1U	0.5	114		75	125
Silver	1	T26213B4	41	T26213B4	38	0.1018	0.05U	0.1	102		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85281

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCSW MR 85281

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85281	T26213B4	37	T26213B4	36	0.4180	0.4454	6.4	20
Barium	85281	T26213B4	37	T26213B4	36	0.4704	0.4733	.61	20
Cadmium	85281	T26213B4	37	T26213B4	36	0.4450	0.4490	.89	20
Chromium	85281	T26213B4	37	T26213B4	36	0.4552	0.4563	.25	20
Lead	85281	T26213B4	37	T26213B4	36	0.4750	0.4719	.65	20
Mercury	85281	H26223T	13	H26223T	12	9.9810	9.8910	.91	20
Nickel	85281	T26213B4	37	T26213B4	36	0.4553	0.4596	.95	20
Selenium	85281	T26213B4	37	T26213B4	36	0.4735	0.4751	.34	20
Silver	85281	T26213B4	37	T26213B4	36	0.0940	0.0943	.35	20

TxtQcType: MR Matrix: TCLP SampleID: AD19178-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85281	T26213B4	39	T26213B4	38	0.1U	0.1U	---	20
Barium	85281	T26213B4	39	T26213B4	38	0.4630	0.4544	1.9	20
Cadmium	85281	T26213B4	39	T26213B4	38	0.05U	0.05U	---	20
Chromium	85281	T26213B4	39	T26213B4	38	0.1U	0.1U	---	20
Lead	85281	T26213B4	39	T26213B4	38	0.05U	0.05U	---	20
Mercury	85281	H26223T	15	H26223T	14	0.50U	0.50U	---	20
Nickel	85281	T26213B4	39	T26213B4	38	0.1U	0.1U	---	20
Selenium	85281	T26213B4	39	T26213B4	38	0.1U	0.1U	---	20
Silver	85281	T26213B4	39	T26213B4	38	0.05U	0.05U	---	20

TxtQcType: SD Matrix: TCLP SampleID: AD19178-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85281	T26213B4	42	T26213B4	38	5	0.0137	0.0226	202	c	10
Barium	85281	T26213B4	42	T26213B4	38	5	0.0863	0.4544	5		10
Cadmium	85281	T26213B4	42	T26213B4	38	5	0.0044	0.0060	270	c	10
Chromium	85281	T26213B4	42	T26213B4	38	5	0.0098	0.0115	325	a	10
Lead	85281	T26213B4	42	T26213B4	38	5	-0.0047	0.0011	---		10
Nickel	85281	T26213B4	42	T26213B4	38	5	0.0010	0.0083	---		10
Selenium	85281	T26213B4	42	T26213B4	38	5	0.0108	0.0418	---		10
Silver	85281	T26213B4	42	T26213B4	38	5	0.0028	0.0062	125	c	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

TCLP
Metal Data
Verification of Instrument Parameters

INTERELEMENT CORRECTION SUMMARY PEICP4ax

Interfered Elements	Interfering Elements: Al	Ca	Fe	Mg	B	Ba	Cu	Mn	Mo
Al	N/A	0	0	0	0	0	0	0	25.4
Sb	0	0	0	0	0	0	0	0	-17.50
As	0.032	0	-0.07	0	0	0	0	0	24.8
Ba	0	0	0	0	0	N/A	0	0	0
Be	0	0	0	0	0	0	0	0	0
B	0	0	3.4	0	N/A	-3.91	0	-2.61	-5.9
Cd	0	0	0	0	0	0	0	0	0
Ca	0	N/A	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	0	0	0
Co	0	0	0	0	0	0	0	0	0
Cu	0	0	-0.1	0	0	0	N/A	0	0
Fe	0	0	N/A	0	0	0	0	0	0
Pb	-0.04	0	0.125	0	0	0	3.06	0	-3.66
Mg	0	0	0	N/A	0	0	0	0	0
Mn	0	0	0	0	0	0	0	N/A	0
Mo	0	0	0.0000	0	0	0	0	0	N/A
Ni	0	0	0	0	0	0	0	0	-2.79
Se	0	-0.08	-0.5	-0.034	0	0	0	0	0
Si	-0.288	-0.234	-2.39	-0.127	-22.10	-12.4	-14.50	-19.5	3.97
Ag	0	0	-0.065	0	0	0	0	0	0
Na	0	0	0	0	0	0	0	0	0
Tl	-0.028	0.06	0	0	0	2.32	0	-3.65	4.3
Sn	0	0	0	0	0	0	0	0	0
Ti	0	-0.076	0	0	0	0	0	0	0
V	0	0	0.035	-0.058	0	0	0	0	0
Zn	0	0	0	0	0	0	0	0	0
K	0	0	10771.7	0	0	0	0	0	0

IECs run 07/15/19. Sn mod 07/19/19; Cu mod 08/12/19; V mod 01/06/20; Sb mod 01/09/20; B, Ti mod 01/18/20; Ag, As, Mo, Pb, Se, Tl mod 03/11/20.

INTERELEMENT CORRECTION SUMMARY PEICP4ax

Interfered Elements	Interfering Elements							
	Na	Ni	Se	Si	Sn	Ti	V	Zn
Al	0	0	0	0	0	0	-53.2	0
Sb	0	0	0	0	-2.52	0	-3.51	0
As	0	0	0	0	5.11	0	18.3	0
Ba	0	0	0	0	0	0	0	0
Be	0	0	0	0	0	0	0	0
B	0.0096	-3.28	-7.4	-1.39	-3.26	-3.97	-4.33	-4.06
Cd	0	0	0	0	0	0	0	0
Ca	0	0	0	0	0	0	0	0
Cr	0	0	0	0	0	0	-4.63	0
Co	0	0	0	0	0	0	0	0
Cu	0	0	0	0	0	0	0	0
Fe	0	0	0	0	0	0	0.0	0
Pb	0	0	0	0	0	0	0	0
Mg	0	0	0	0	0	0	0	0
Mn	0	0	0	0	0	0	0	0
Mo	0	0	0	0	0	0	0	0
Ni	0	N/A	0	0	0	0	0	0
Se	0	0	N/A	0	0	0	0	0
Si	-0.0333	-12.5	-19.90	N/A	-8.16	-10.1	-12.90	-11.9
Ag	0	0	0	0	0	0	-5.03	0
Na	N/A	0	0	0	0	0	0	0
Tl	0	0	0	0	0	-4.11	3.17	0
Sn	0	0	0	0	N/A	3.64	0	0
Ti	0	0	0	0	0	N/A	0	0
V	0	0	0	0	0	0	N/A	0
Zn	0	0	0	0	0	0	0	N/A
K	0	0	0	0	0	0	0	0

IECs run 07/15/19. Sn mod 07/19/19; Cu mod 08/12/19; V mod 01/06/20; Sb mod 01/09/20; B, Ti mod 01/18/20; Ag, As, Mo, Pb, Se, Tl mod 03/11/20.

MDL / RL SUMMARY
TCLP/SPLP
PE ICP 4 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/L)
AL	0.04124271	1
SB	0.03931955	0.07
AS	0.03438659	0.1
BA	0.00333959	0.25
BE	0.00524005	0.012
B	0.02711428	0.2
CD	0.00615363	0.05
CA	2.65167871	5
CR	0.00700712	0.1
CO	0.00382472	0.1
CU	0.02781758	0.1
FE	0.58649802	1
PB	0.0133322	0.05
MG	0.84264167	5
MN	0.00845022	0.1
MO	0.00271515	0.1
NI	0.00521027	0.1
SE	0.03922213	0.1
SI*	0.27653066	0.1
AG	0.01003449	0.05
NA	3.54005202	25
TL	0.04446035	0.1
SN	0.01672084	0.1
TI	0.00534095	0.1
V	0.01672283	0.1
ZN	0.02197619	0.1

COMPLETED: 12/2019

HGCV3 MDL/RL SUMMARY

Element: *Mercury*
Instrument: *PE FIMS 100*
Technique: *CV*

Instrument ID: *HgCV3*
Analyst *Carmela Aliano*

200 Series	METHOD	MDL (ppb)	Completed	RL (ppb)
H_2O	245.1	0.0794	12/31/2019	0.20
SW846				
H_2O	7470A	0.1740	12/31/2019	0.50
SOIL	7471 B	0.0757 (0.0126 mg/kg)	12/31/2019	0.50 (0.0833 mg/kg)

TCLP
Metal Data
Raw Data

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 85281 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 85281 (1) Units: MG/L Lab Code:
Matrix: TCLP
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	0.50	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-36-0	Antimony	0.035	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-38-2	Arsenic	0.050	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-39-3	Barium	0.12	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-41-7	Beryllium	0.0060	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-42-8	Boron	0.10	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-43-9	Cadmium	0.025	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-70-2	Calcium	2.5	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-47-3	Chromium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-48-4	Cobalt	0.050	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-50-8	Copper	0.050	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7439-89-6	Iron	0.50	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7439-92-1	Lead	0.025	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7439-95-4	Magnesium	2.5	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7439-96-5	Manganese	0.050	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	09/16/20	85281	H26223T	11	CV	HGCV3A
7439-98-7	Molybdenum	0.050	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-02-0	Nickel	0.050	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7782-49-2	Selenium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-22-4	Silver	0.025	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-28-0	Thallium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-31-5	Tin	0.050	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-32-6	Titanium	0.050	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A
7440-66-6	Zinc	0.050	ND	1	50	50	09/16/20	85281	T26213B4	35	P	PEICP4A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\T26213B4.txt

Analysis Date: 09/16/20 **Instrument:** PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	13:20	1							V-333667(ICB/CCB)
CALST2 V-333672	1	CAL	13:24	2							V-333672(LLICV/CCV leachate)
CALST3 V-334773	1	CAL	13:28	3							V-334773(ICS3 - Middle Std)
CALST4 V-334774	1	CAL	13:32	4							V-334774(ICS4 High std)
ICV V-334775	1	ICV	13:36	5							V-334775(CCV)
ICB V-333667	1	ICB	13:40	6							V-333667(ICB/CCB)
LRS V-333660	1	LRS	13:44	7		TCLP	TCLP	SW846	85271		V-333660(LRS 1/2 Fe)
ICS3 V-333666	1	ICS	13:49	8							V-333666(ICS3 - Middle Std)
RINSE	1	NA	13:53	9		TCLP	TCLP	SW846	85271		()
LLICV V-333672	1	LLICV	13:57	10		TCLP	TCLP	SW846	85271		V-333672(LLICV/CCV leachate)
ICSA V-333668	1	ICSA	14:01	11							V-333668(ICSA)
CCV V-334775	1	CCV	14:05	12							V-334775(CCV)
CCB V-333667	1	CCB	14:09	13							V-333667(ICB/CCB)
MB 85271 (1)	1	MB	14:13	14		TCLP	TCLP	SW846	85271		()
LCSW 85271	1	LCS	14:17	15		TCLP	TCLP	SW846	85271		()
LCSW MR 85271	1	LCS	14:21	16		TCLP	TCLP	SW846	85271		()
AD19164-001	1	SMP	14:25	17	METALS-TCLP	TCLP	TCLP	SW846	85271		()
AD19164-001	1	MR	14:29	18	METALS-TCLP	TCLP	TCLP	SW846	85271		()
AD19164-001	1	MS	14:33	19	METALS-TCLP	TCLP	TCLP	SW846	85271		()
AD19164-001	1	PS	14:37	20	METALS-TCLP	TCLP	TCLP	SW846	85271		()
AD19164-001	5	SD	14:41	21	METALS-TCLP	TCLP	TCLP	SW846	85271		()
AD19198-001	1	SMP	14:45	22	MET-TCLP-XL	TCLP	TCLP	SW846	85271		()
CCV V-334775	1	CCV	14:49	23							V-334775(CCV)
CCB V-333667	1	CCB	14:53	24							V-333667(ICB/CCB)
AD19163-001	1	SMP	14:57	25	METALS-TCLP	TCLP	TCLP	SW846	85271		()
AD19167-001	1	SMP	15:01	26	METALS-TCLP	TCLP	TCLP	SW846	85271		()
AD19172-001	1	SMP	15:05	27	METALS-TCLP	TCLP	TCLP	SW846	85271		()
AD19195-002	1	SMP	15:09	28	METALS-TCLP	TCLP	TCLP	SW846	85271		()
AD19188-005	1	SMP	15:13	29	METALS-TCLP	TCLP	TCLP	SW846	85271		()
AD19214-015	1	SMP	15:17	30	METALS-TCLP	TCLP	TCLP	SW846	85271		()
AD19214-025	1	SMP	15:21	31	METALS-TCLP	TCLP	TCLP	SW846	85271		()
EF-V-334696	1	EF	15:25	32		TCLP	TCLP	SW846	85271		V-334696(EF-1 WARNING)
CCV V-334775	1	CCV	15:29	33							V-334775(CCV)
CCB V-333667	1	CCB	15:33	34							V-333667(ICB/CCB)
MB 85281 (1)	1	MB	15:37	35		TCLP	TCLP	SW846	85281		()
LCSW 85281	1	LCS	15:41	36		TCLP	TCLP	SW846	85281		()
LCSW MR 85281	1	LCS	15:45	37		TCLP	TCLP	SW846	85281		()
AD19178-001	1	SMP	15:49	38	METALS-TCLP	TCLP	TCLP	SW846	85281		()
AD19178-001	1	MR	15:53	39	METALS-TCLP	TCLP	TCLP	SW846	85281		()
AD19178-001	1	MS	15:58	40	METALS-TCLP	TCLP	TCLP	SW846	85281		()
AD19178-001	1	PS	16:02	41	METALS-TCLP	TCLP	TCLP	SW846	85281		()
AD19178-001	5	SD	16:06	42	METALS-TCLP	TCLP	TCLP	SW846	85281		()
EF-V-334696	1	EF	16:10	43		TCLP	TCLP	SW846	85281		V-334696(EF-1 WARNING)
CCV V-334775	1	CCV	16:14	44							V-334775(CCV)
CCB V-333667	1	CCB	16:18	45							V-333667(ICB/CCB)
AD19178-002	1	SMP	16:22	46	METALS-TCLP	TCLP	TCLP	SW846	85281	Se NOT reported (Ca> LR)	()
AD19178-003	1	SMP	16:26	47	METALS-TCLP	TCLP	TCLP	SW846	85281		()
AD19178-004	1	SMP	16:30	48	METALS-TCLP	TCLP	TCLP	SW846	85281	Se NOT reported (Ca> LR)	()
AD19178-005	1	SMP	16:35	49	METALS-TCLP	TCLP	TCLP	SW846	85281	Se NOT reported (Ca> LR)	()
AD19178-006	1	SMP	16:39	50	METALS-TCLP	TCLP	TCLP	SW846	85281		()
AD19178-007	1	SMP	16:43	51	METALS-TCLP	TCLP	TCLP	SW846	85281		()
CCV V-334775	1	CCV	16:47	52							V-334775(CCV)
CCB V-333667	1	CCB	16:51	53							V-333667(ICB/CCB)
AD19178-008	1	SMP	16:55	54	METALS-TCLP	TCLP	TCLP	SW846	85281		()
AD19178-009	1	SMP	16:59	55	METALS-TCLP	TCLP	TCLP	SW846	85281		()
AD19178-010	1	SMP	17:04	56	METALS-TCLP	TCLP	TCLP	SW846	85281		()
AD19178-011	1	SMP	17:08	57	METALS-TCLP	TCLP	TCLP	SW846	85281	Se NOT reported (Ca> LR)	()
AD19178-012	1	SMP	17:12	58	METALS-TCLP	TCLP	TCLP	SW846	85281	Se NOT reported (Ca> LR)	()
AD19178-013	1	SMP	17:16	59	METALS-TCLP	TCLP	TCLP	SW846	85281		()
CCV V-334775	1	CCV	17:21	60							V-334775(CCV)

Comments/Reviewedby:

olufemi
192.168.1.105 9/17/2020 12:37:38 PM

RUN IS OK
All elements reported, except K

9/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\T26213B4.txt

Analysis Date: 09/16/20

Instrument: PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CCB V-333667	1	CCB	17:25	61							V-333667(ICB/CCB)
AD19178-002	2	SMP	17:29	62	METALS-TCLP	TCLP	TCLP	SW846	85281	Se reported	()
AD19178-004	2	SMP	17:33	63	METALS-TCLP	TCLP	TCLP	SW846	85281	Se reported	()
AD19178-005	2	SMP	17:37	64	METALS-TCLP	TCLP	TCLP	SW846	85281	Se reported	()
AD19178-011	2	SMP	17:41	65	METALS-TCLP	TCLP	TCLP	SW846	85281	Se reported	()
CCV V-334775	1	CCV	17:45	66							V-334775(CCV)
CCB V-333667	1	CCB	17:49	67							V-333667(ICB/CCB)

Comments/Reviewedby:

olufemi
192.168.1.105 9/17/2020 12:37:38 PM

RUN IS OK
All elements reported, except K

9/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\T26234B4.txt

Analysis Date: 09/17/20 **Instrument:** PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	17:12	1							V-333667(ICB/CCB)
CALST2 V-333672	1	CAL	17:16	2							V-333672(LLICV/CCV leachate)
CALST3 V-334773	1	CAL	17:20	3							V-334773(ICS3 - Middle Std)
CALST4 V-334774	1	CAL	17:24	4							V-334774(ICS4 High std)
ICV V-334775	1	ICV	17:29	5							V-334775(CCV)
ICB V-333667	1	ICB	17:33	6							V-333667(ICB/CCB)
LRS V-333660	1	LRS	17:37	7		TCLP	TCLP	SW846	85292		V-333660(LRS 1/2 Fe)
ICS3 V-333666	1	ICS	17:41	8							V-333666(ICS3 - Middle Std)
RINSE	1	SMP	17:45	9		TCLP	TCLP	SW846	85292		0
LLICV V-333672	1	LLICV	17:49	10		TCLP	TCLP	SW846	85292		V-333672(LLICV/CCV leachate)
ICSA V-333668	1	ICSA	17:53	11							V-333668(ICSA)
CCV V-334775	1	CCV	17:58	12							V-334775(CCV)
CCB V-333667	1	CCB	18:02	13							V-333667(ICB/CCB)
EF-V-334696	1	EF	18:06	14		TCLP	TCLP	SW846	85292	Cd,Se REPORTED	V-334696(EF-1 WARNING)
AD19224-002	1	SMP	18:10	15	METALS-TCLP	TCLP	TCLP	SW846	85292	Cd,Se,Ni REPORTED	0
AD19180-002	1	SMP	18:14	16	METALS-TCLP	TCLP	TCLP	SW846	85292	Cd,Se,Ni REPORTED	0
AD19233-002	1	NA	18:18	17	METALS-TCLP	TCLP	TCLP	SW846	85292	MISSED CUP	0
AD19180-002	4	SMP	18:22	18	METALS-TCLP	TCLP	TCLP	SW846	85292	Se REPORTED	0
AD19178-012	2	SMP	18:26	19	METALS-TCLP	TCLP	TCLP	SW846	85281	Se REPORTED	0
CCV V-334775	1	CCV	18:31	20							V-334775(CCV)
CCB V-333667	1	CCB	18:35	21							V-333667(ICB/CCB)
AD19233-002	1	SMP	18:39	22	METALS-TCLP	TCLP	TCLP	SW846	85292	Cd,Se,Ni REPORTED	0
CCV V-334775	1	CCV	18:43	23							V-334775(CCV)
CCB V-333667	1	CCB	18:47	24							V-333667(ICB/CCB)

Comments/Reviewedby:

CARMELA
192.168.1.89 9/17/2020 7:28:13 PM

OK
Cd,Se,Ni REPORTED

9/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26223T.txt

Analysis Date: 09/16/20 **Instrument:** HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	12:01	1							0
.2 PPB	1	CAL	12:02	2							0
.5 PPB	1	CAL	12:04	3							0
1 PPB	1	CAL	12:05	4							0
2 PPB	1	CAL	12:06	5							0
5 PPB	1	CAL	12:08	6							0
10 PPB	1	CAL	12:09	7							0
25 PPB	1	CAL	12:11	8							0
ICV (2)	1	ICV	12:13	9							0
ICB	1	ICB	12:14	10							0
MB 85281 (1)	1	MB	12:16	11	HG-TCLP	TCLP	TCLP	SW846	85281		0
LCS 85281	1	LCS	12:17	12	HG-TCLP	TCLP	TCLP	SW846	85281		0
LCS 85281 MR	1	LCS	12:19	13	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-001	1	SMP	12:20	14	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-001	1	MR	12:22	15	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-001	1	MS	12:23	16	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-002	1	SMP	12:25	17	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-003	1	SMP	12:26	18	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-004	1	SMP	12:27	19	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-005	1	SMP	12:29	20	HG-TCLP	TCLP	TCLP	SW846	85281		0
CCV	1	CCV	12:30	21							0
CCB	1	CCB	12:32	22							0

Comments/Reviewedby:

bransaw
192.168.1.120 9/16/2020 12:46:35 PM

OK

9/17/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334878

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26223TB.txt

Analysis Date: 09/16/20 **Instrument:** HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	12:42	1							0
.2 PPB	1	CAL	12:43	2							0
.5 PPB	1	CAL	12:44	3							0
1 PPB	1	CAL	12:46	4							0
2 PPB	1	CAL	12:47	5							0
5 PPB	1	CAL	12:48	6							0
10 PPB	1	CAL	12:50	7							0
25 PPB	1	CAL	12:51	8							0
ICV (2)	1	ICV	12:53	9							0
ICB	1	ICB	12:55	10							0
AD19178-006	1	SMP	12:56	11	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-007	1	SMP	12:58	12	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-008	1	SMP	12:59	13	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-009	1	SMP	13:00	14	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-010	1	SMP	13:02	15	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-011	1	SMP	13:03	16	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-012	1	SMP	13:04	17	HG-TCLP	TCLP	TCLP	SW846	85281		0
AD19178-013	1	SMP	13:06	18	HG-TCLP	TCLP	TCLP	SW846	85281		0
EF V-334696	1	EF	13:07	19	HG-TCLP	TCLP	TCLP	SW846	85281		V-334696(EF-1 WARNING)
CCV	1	CCV	13:08	20							0
CCB	1	CCB	13:10	21							0

Comments/Reviewedby:

bransaw
192.168.1.120 9/16/2020 1:38:11 PM

OK

9/17/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-334878

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13440

Description
nitric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	252932	08/11/20	02/03/25	Lopez, Jose	4	4L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-331024

Prepared By: Silva, Amanda | Department: Metals | ApprovedBy: shiamala
Description: 1:1 HCl WARNING | BatchNumber: | ApproveDate: 07/16/20
Prep Date: 7/7/2020 | Concentration: Reagent reag | Checked: Yes
Expiration Date: 1/7/2021 | Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	500 ml		
13275	hydrochloric acid	500 ml	neat neat	

Veritech Lot Number: V-331982

Prepared By: Cousineau, Paul | Department: Metals | ApprovedBy: shiamala
Description: B, Si, Ce INTERMEDIATE | BatchNumber: | ApproveDate: 07/28/20
Prep Date: 7/23/2020 | Concentration: 100 ppm | Checked: Yes
Expiration Date: 10/23/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	5 ml	neat neat	
13169	hydrochloric acid	5 ml	neat neat	
12976	BORON	10 ml	CONC conc	100 ppm
12977	SILICON	10 ml	CONC conc	100 ppm
13092	CERIUM	10 ml	CONC conc	100 ppm

Veritech Lot Number: V-333660

Prepared By: Aliano, Carmela | Department: Metals | ApprovedBy: carmela
Description: LRS 1/2 Fe | BatchNumber: | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: MULTI multi | Checked: Yes
Expiration Date: 10/30/2020 | Final Volume: 500 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	335 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12915	LINEAR RANGE 1B	50 ml	neat neat	
12917	linear range 1C	50 ml	neat neat	
13092	CERIUM	12.5 ml	CONC conc	
12976	BORON	2.5 ml	CONC conc	
12977	SILICON	12.5 ml	CONC conc	

Veritech Lot Number: V-333666

Prepared By: Aliano, Carmela | Department: Metals | ApprovedBy: carmela
Description: ICS3 - Middle Std | BatchNumber: | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: MULTI multi | Checked: Yes
Expiration Date: 12/30/2020 | Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	944.75 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
12983	CALIBRATION 1	5 ml		
12984	CALIBRATION 2	5 ml		
12976	BORON	.5 ml	CONC conc	.5
12977	SILICON	5 ml	CONC conc	5
13092	CERIUM	5 ml	CONC conc	5

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333667

Prepared By: Aliano, Carmela | Department: Metals | ApprovedBy: carmela
Description: ICB/CCB | BatchNumber: | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: 0 mg/l | Checked: Yes
Expiration Date: 2/20/2021 | Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	

Veritech Lot Number: V-333668

Prepared By: Aliano, Carmela | Department: Metals | ApprovedBy: carmela
Description: ICSA | BatchNumber: | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: MULTI mg/l | Checked: Yes
Expiration Date: 2/20/2021 | Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13176	ICSA	50 ml	NEAT neat	

Veritech Lot Number: V-333672

Prepared By: Aliano, Carmela | Department: WetChem | ApprovedBy: carmela
Description: LLICV/CCV leachate | BatchNumber: | ApproveDate: 08/24/20
Prep Date: 8/24/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 10/30/2020 | Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
12918	LL-LEACH	10 ml	neat neat	
12976	BORON	.2 ml	CONC conc	0.2 ppm
12977	SILICON	.05 ml	CONC conc	0.05 ppm
13092	CERIUM	.05 ml	CONC conc	0.05 ppm

Veritech Lot Number: V-334773

Prepared By: Olufemi | Department: Metals | ApprovedBy: shiamala
Description: ICS3 - Middle Std | BatchNumber: | ApproveDate: 09/15/20
Prep Date: 9/14/2020 | Concentration: MULTI multi | Checked: Yes
Expiration Date: 12/15/2020 | Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	944.75 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
13177	CALIBRATION STD 1	5 ml	NEAT neat	
13178	CALIBRATION STD 2	5 ml	NEAT neat	
12976	BORON	.5 ml	CONC conc	.5
12977	SILICON	5 ml	CONC conc	5
13092	CERIUM	5 ml	CONC conc	5

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334774

Prepared By: Olufemi | Department: Metals | ApprovedBy: shiamala
Description: ICS4 High std | BatchNumber: | ApproveDate: 09/15/20
Prep Date: 9/14/2020 | Concentration: various mg/l | Checked: Yes
Expiration Date: 12/15/2020 | Final Volume: 500 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20	434.5 ml		
13168	nitric acid	25 ml	neat neat	
13169	hydrochloric acid	25 ml	neat neat	
13177	CALIBRATION STD 1	5 ml	NEAT neat	
13178	CALIBRATION STD 2	5 ml	NEAT neat	
12976	BORON	.5 ml	CONC conc	1
12977	SILICON	5 ml	CONC conc	10
13092	CERIUM	5 ml	CONC conc	10

Veritech Lot Number: V-334775

Prepared By: Olufemi | Department: Metals | ApprovedBy: shiamala
Description: CCV | BatchNumber: | ApproveDate: 09/15/20
Prep Date: 9/14/2020 | Concentration: MULTI multi | Checked: Yes
Expiration Date: 12/15/2020 | Final Volume: 1000 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
13168	nitric acid	50 ml	neat neat	
13169	hydrochloric acid	50 ml	neat neat	
13171	ICV 1	10 ml	NEAT neat	
13170	ICV 2	10 ml	CONC conc	
12545	BORON	.5 ml	1000 ug/ml	
12933	silicon	5 ml	CONC conc	
13091	CERIUM	5 ml	CONC conc	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12545

Description
BORON

ApprovedBy: carmela
ApproveDate: 06/03/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	14005005X	S190122026	05/30/19	01/30/21	Aliano, Carmela	1	500m	1000	UG/ML

Veritech Control/Receipt Number: 12915

Description
LINEAR RANGE 1B

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-40-500	7/271ab	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12917

Description
linear range 1C

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
spex	XHCV-44-500	8-002AB	10/19/19	10/30/20	Aliano, Carmela	2	500ml	neat	neat

Veritech Control/Receipt Number: 12918

Description
LL-LEACH

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
spex	XHCV-25-500	8-001AB	10/19/19	10/30/20	Aliano, Carmela	1	500ml	neat	neat

Veritech Control/Receipt Number: 12933

Description
silicon

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-050-145	S191206040	12/13/19	12/30/21	Aliano, Carmela	4	500m	CONC	CONC

Veritech Control/Receipt Number: 12976

Description
BORON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLB9-2X	24-110BX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Control/Receipt Number: 12977

Description
SILICON

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSI9-2X	24-93SIX	01/06/20	12/31/20	Aliano, Carmela	1	500ml	CONC	CONC

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12983

Description
CALIBRATION 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	8/214AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 12984

Description
CALIBRATION 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	8/215AB	01/06/20	12/30/20	Aliano, Carmela	1	500m		

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13091

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-051-585	S190710006	03/04/20	07/30/21	Aliano, Carmela	2	500ml	CONC	CONC

Veritech Control/Receipt Number: 13092

Description
CERIUM

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLCE2-2X	24-15CEX	03/04/20	02/28/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13168

Description
nitric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	245675	04/07/20	11/05/24	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 13169

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	251602	04/07/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13170

Description
ICV 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S200306032	04/07/20	03/31/21	Aliano, Carmela	2	500m	CONC	CONC

Veritech Control/Receipt Number: 13171

Description
ICV 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S200306031	04/07/20	03/31/21	Aliano, Carmela	2	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13176

Description
ICSA

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-30	9-265AB	04/07/20	03/31/21	Aliano, Carmela	4	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13177

Description
CALIBRATION STD 1

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	1-041MF	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13178

Description
CALIBRATION STD 2

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	9-264AB	04/07/20	03/31/21	Aliano, Carmela	3	500ml	NEAT	NEAT

Veritech Control/Receipt Number: 13275

Description
hydrochloric acid

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	251602	06/02/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Batches: 26213 + 26223 0091101 0712

Method: PE 4 8300DV LEACH AX Page 1 Date: 9/16/2020 1:23:09 PM

T26213B4 26223/85281 TCLP

Analysis Begun

Start Time: 9/16/2020 1:20:14 PM
Logged In Analyst: usermet
Spectrometer: Optima 8300 , S/N 078S1410156

Plasma On Time: 9/16/2020 10:14:02 AM
Technique: ICP Continuous
Autosampler: S10

Sample Information File: C:\Users\Public\PerkinElmer\ICP\Data\Sample Information\09.16.20.sif
Batch ID: ICP4
Results Data Set: T26213B4
Results Library: C:\Users\Public\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: CALBLK V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 9/16/2020 1:20:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-333667

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	37446.2	117.61	0.31%	100	%
Y 371.029	11785.9	81.24	0.69%	100	%
Ag 328.068†	-14.7	4.64	31.63%	[0.00]	mg/L
Al 308.215†	84.2	1.05	1.25%	[0.00]	mg/L
As 188.979†	-1.5	0.26	17.26%	[0.00]	mg/L
Ba 233.527†	-2.6	2.02	76.64%	[0.00]	mg/L
Be 313.107†	-397.0	6.42	1.62%	[0.00]	mg/L
Ca 315.887†	-235.5	3.56	1.51%	[0.00]	mg/L
Cd 228.802†	14.8	1.51	10.21%	[0.00]	mg/L
Co 228.616†	-2.0	1.00	50.01%	[0.00]	mg/L
Cr 267.716†	5.4	1.42	26.04%	[0.00]	mg/L
Cu 327.393†	-201.4	2.97	1.47%	[0.00]	mg/L
Fe 273.955†	0.6	1.29	228.58%	[0.00]	mg/L
K 404.721†	-27.7	6.82	24.64%	[0.00]	mg/L
Mg 279.077†	-4.6	2.57	56.03%	[0.00]	mg/L
Mn 257.610†	14.4	1.01	6.99%	[0.00]	mg/L
Mo 202.031†	2.6	0.52	19.57%	[0.00]	mg/L
Na 330.237†	21.4	5.33	24.86%	[0.00]	mg/L
Ni 231.604†	45.8	1.45	3.16%	[0.00]	mg/L
Pb 220.353†	0.4	1.04	260.27%	[0.00]	mg/L
Sb 206.836†	1.7	1.92	110.24%	[0.00]	mg/L
Se 196.026†	5.1	1.62	31.81%	[0.00]	mg/L
Sn 189.927†	0.1	0.59	645.83%	[0.00]	mg/L
Ti 334.940†	19.0	1.43	7.52%	[0.00]	mg/L
Tl 190.801†	-1.3	0.76	60.18%	[0.00]	mg/L
V 290.880†	51.1	1.35	2.65%	[0.00]	mg/L
Zn 206.200†	0.8	1.47	176.90%	[0.00]	mg/L
B 249.772	18.4	1.18	6.42%	[0.00]	mg/L
Si 251.611	29.5	1.42	4.80%	[0.00]	mg/L

26223/85281

All elements reported.

19178-002 2D
-004 2D
-005 2D
-011 2D
} Se reported

19178-012 } Se NOT reported.

Sequence No.: 2
Sample ID: CALST2 V-333672
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 9/16/2020 1:24:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST2 V-333672

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	37200.4	124.04	0.33%	99.3	%
Y 371.029	11465.6	27.23	0.24%	97.3	%
Ag 328.068†	442.0	2.26	0.51%	[0.05]	mg/L
Al 308.215†	1017.7	5.40	0.53%	[1]	mg/L
As 188.979†	5.7	1.00	17.66%	[0.1]	mg/L
Ba 233.527†	1579.4	5.00	0.32%	[0.25]	mg/L
Be 313.107†	1852.3	14.38	0.78%	[0.012]	mg/L
Ca 315.887†	9545.2	52.06	0.55%	[5]	mg/L
Cd 228.802†	77.0	1.31	1.70%	[0.05]	mg/L
Co 228.616†	140.1	1.91	1.37%	[0.1]	mg/L
Cr 267.716†	381.1	3.55	0.93%	[0.1]	mg/L
Cu 327.393†	677.6	2.79	0.41%	[0.1]	mg/L
Fe 273.955†	324.6	2.59	0.80%	[1]	mg/L
K 404.721†	14.6	5.00	34.13%	[5]	mg/L
Mg 279.077†	3010.3	7.46	0.25%	[5]	mg/L
Mn 257.610†	1828.1	11.27	0.62%	[0.1]	mg/L
Mo 202.031†	80.2	0.52	0.65%	[0.1]	mg/L
Na 330.237†	735.2	6.97	0.95%	[25]	mg/L
Ni 231.604†	173.6	2.86	1.64%	[0.1]	mg/L
Pb 220.353†	15.6	1.55	9.96%	[0.05]	mg/L
Sb 206.836†	8.2	1.55	19.02%	[0.07]	mg/L
Se 196.026†	12.1	2.26	18.69%	[0.1]	mg/L
Sn 189.927†	27.4	0.47	1.73%	[0.1]	mg/L
Ti 334.940†	1899.3	10.53	0.55%	[0.1]	mg/L
Tl 190.801†	12.6	2.18	17.23%	[0.1]	mg/L
V 290.880†	331.0	3.97	1.20%	[0.1]	mg/L
Zn 206.200†	181.1	1.71	0.94%	[0.1]	mg/L
B 249.772	734.4	1.94	0.26%	[0.2]	mg/L
Si 251.611	168.0	2.95	1.76%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-334773
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 3
Date Collected: 9/16/2020 1:28:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST3 V-334773

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	35807.5	186.02	0.52%	95.6	%
Y 371.029	10959.8	153.96	1.40%	93.0	%
Ag 328.068†	924.1	7.63	0.83%	[0.10]	mg/L
Al 308.215†	4720.2	30.64	0.65%	[5.0]	mg/L
As 188.979†	29.7	1.31	4.42%	[0.50]	mg/L
Ba 233.527†	3011.7	3.13	0.10%	[0.50]	mg/L
Be 313.107†	80566.6	239.26	0.30%	[0.50]	mg/L
Ca 315.887†	102508.3	209.36	0.20%	[50]	mg/L
Cd 228.802†	794.4	6.76	0.85%	[0.50]	mg/L
Co 228.616†	706.3	6.22	0.88%	[0.50]	mg/L
Cr 267.716†	1961.8	22.30	1.14%	[0.50]	mg/L
Cu 327.393†	3458.6	18.86	0.55%	[0.50]	mg/L
Fe 273.955†	1695.3	18.37	1.08%	[5.0]	mg/L
K 404.721†	719.1	5.41	0.75%	[50]	mg/L
Mg 279.077†	30496.6	71.38	0.23%	[50]	mg/L
Mn 257.610†	8485.6	23.45	0.28%	[0.50]	mg/L
Mo 202.031†	416.0	6.25	1.50%	[0.50]	mg/L
Na 330.237†	1663.9	16.97	1.02%	[50]	mg/L
Ni 231.604†	870.1	9.47	1.09%	[0.50]	mg/L
Pb 220.353†	170.7	1.74	1.02%	[0.50]	mg/L
Sb 206.836†	50.7	1.08	2.14%	[0.50]	mg/L
Se 196.026†	69.8	1.37	1.97%	[0.50]	mg/L
Sn 189.927†	138.5	1.03	0.74%	[0.50]	mg/L
Ti 334.940†	8528.5	46.45	0.54%	[0.50]	mg/L
Tl 190.801†	59.1	0.58	0.98%	[0.50]	mg/L
V 290.880†	1847.5	12.85	0.70%	[0.50]	mg/L
Zn 206.200†	943.1	10.92	1.16%	[0.50]	mg/L
B 249.772	1960.8	9.24	0.47%	[0.50]	mg/L
Si 251.611	6265.5	47.11	0.75%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-334774
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 4
Date Collected: 9/16/2020 1:32:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST4 V-334774

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	34661.7	59.68	0.17%	92.6	%
Y 371.029	10300.1	98.16	0.95%	87.4	%
Ag 328.068†	1887.2	2.86	0.15%	[0.20]	mg/L
Al 308.215†	9445.3	18.75	0.20%	[10]	mg/L
As 188.979†	59.0	1.59	2.70%	[1.00]	mg/L
Ba 233.527†	5969.3	31.54	0.53%	[1.00]	mg/L
Be 313.107†	159703.5	383.29	0.24%	[1.00]	mg/L
Ca 315.887†	202039.0	866.39	0.43%	[100]	mg/L
Cd 228.802†	1641.5	6.58	0.40%	[1.00]	mg/L
Co 228.616†	1423.1	3.83	0.27%	[1.00]	mg/L
Cr 267.716†	4178.6	33.49	0.80%	[1.00]	mg/L
Cu 327.393†	6283.2	21.31	0.34%	[1.00]	mg/L
Fe 273.955†	3052.2	28.36	0.93%	[10.0]	mg/L
K 404.721†	1483.0	7.56	0.51%	[100]	mg/L
Mg 279.077†	61207.2	70.94	0.12%	[100]	mg/L
Mn 257.610†	16722.2	49.79	0.30%	[1.00]	mg/L
Mo 202.031†	836.5	4.85	0.58%	[1.00]	mg/L
Na 330.237†	3225.7	7.29	0.23%	[100]	mg/L
Ni 231.604†	1737.6	12.29	0.71%	[1.00]	mg/L
Pb 220.353†	334.4	2.43	0.73%	[1.00]	mg/L
Sb 206.836†	102.6	1.72	1.68%	[1.00]	mg/L
Se 196.026†	139.7	3.13	2.24%	[1.00]	mg/L
Sn 189.927†	273.2	1.29	0.47%	[1.00]	mg/L
Ti 334.940†	16871.5	105.18	0.62%	[1.00]	mg/L
Tl 190.801†	116.5	2.07	1.77%	[1.00]	mg/L
V 290.880†	3165.1	9.03	0.29%	[1.00]	mg/L
Zn 206.200†	1902.1	8.74	0.46%	[1.00]	mg/L
B 249.772	3667.7	25.45	0.69%	[1.00]	mg/L
Si 251.611	12220.0	68.79	0.56%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-15.8	9476	0.00000	0.999841	
Al 308.215	3	Lin, Calc Int	32.0	940.9	0.00000	0.999970	
As 188.979	3	Lin, Calc Int	-0.1	59.17	0.00000	0.999981	
Ba 233.527	3	Lin, Calc Int	40.2	5943	0.00000	0.999879	
Be 313.107	3	Lin, Calc Int	101.0	159900	0.00000	0.999989	
Ca 315.887	3	Lin, Calc Int	21.8	2026	0.00000	0.999960	
Cd 228.802	3	Lin, Calc Int	-7.1	1640	0.00000	0.999865	
Co 228.616	3	Lin, Calc Int	-1.9	1423	0.00000	0.999993	
Cr 267.716	3	Lin, Calc Int	-39.9	4176	0.00000	0.999498	
Cu 327.393	3	Lin, Calc Int	80.6	6311	0.00000	0.998607	
Fe 273.955	3	Lin, Calc Int	40.0	307.0	0.00000	0.998300	
K 404.721	3	Lin, Calc Int	-30.9	15.10	0.00000	0.999364	
Mg 279.077	3	Lin, Calc Int	-42.1	612.1	0.00000	0.999998	
Mn 257.610	3	Lin, Calc Int	92.3	16670	0.00000	0.999947	
Mo 202.031	3	Lin, Calc Int	-2.0	837.8	0.00000	0.999991	
Na 330.237	3	Lin, Calc Int	-18.3	32.56	0.00000	0.999391	
Ni 231.604	3	Lin, Calc Int	0.2	1738	0.00000	1.000000	
Pb 220.353	3	Lin, Calc Int	0.1	335.6	0.00000	0.999924	
Sb 206.836	3	Lin, Calc Int	0.3	102.0	0.00000	0.999921	
Se 196.026	3	Lin, Calc Int	-0.9	140.6	0.00000	0.999915	
Sn 189.927	3	Lin, Calc Int	0.4	273.5	0.00000	0.999972	
Ti 334.940	3	Lin, Calc Int	111.3	16780	0.00000	0.999927	
Tl 190.801	3	Lin, Calc Int	0.6	116.1	0.00000	0.999953	
V 290.880	3	Lin, Calc Int	55.6	3201	0.00000	0.996079	
Zn 206.200	3	Lin, Calc Int	-5.5	1905	0.00000	0.999985	

B 249.772	3	Lin, Calc Int	24.9	3684	0.00000	0.999230
Si 251.611	3	Lin, Calc Int	49.1	1222	0.00000	0.999921

Sequence No.: 5 **Autosampler Location: 6**
Sample ID: ICV V-334775 **Date Collected: 9/16/2020 1:36:40 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 85 **Auto Dilution Factor: 1**

Mean Data: ICV V-334775

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	35487.4	94.8	%	0.84				0.89%
Y 371.029	10716.2	90.9	%	0.83				0.91%
Ag 328.068†	919.3	0.101823	mg/L	0.0009062	0.101823	mg/L	0.0009062	0.89%
QC value within limits for Ag 328.068 Recovery = 101.82%								
Al 308.215†	4676.4	4.95284	mg/L	0.022306	4.95284	mg/L	0.022306	0.45%
QC value within limits for Al 308.215 Recovery = 99.06%								
As 188.979†	30.0	0.482692	mg/L	0.0480427	0.482692	mg/L	0.0480427	9.95%
QC value within limits for As 188.979 Recovery = 96.54%								
Ba 233.527†	2991.0	0.496547	mg/L	0.0031033	0.496547	mg/L	0.0031033	0.62%
QC value within limits for Ba 233.527 Recovery = 99.31%								
Be 313.107†	79823.9	0.498684	mg/L	0.0006109	0.498684	mg/L	0.0006109	0.12%
QC value within limits for Be 313.107 Recovery = 99.74%								
Ca 315.887†	101594.8	50.1387	mg/L	0.22461	50.1387	mg/L	0.22461	0.45%
QC value within limits for Ca 315.887 Recovery = 100.28%								
Cd 228.802†	787.1	0.484387	mg/L	0.0043558	0.484387	mg/L	0.0043558	0.90%
QC value within limits for Cd 228.802 Recovery = 96.88%								
Co 228.616†	702.2	0.494726	mg/L	0.0072280	0.494726	mg/L	0.0072280	1.46%
QC value within limits for Co 228.616 Recovery = 98.95%								
Cr 267.716†	1943.7	0.477605	mg/L	0.0010329	0.477605	mg/L	0.0010329	0.22%
QC value within limits for Cr 267.716 Recovery = 95.52%								
Cu 327.393†	3424.2	0.530366	mg/L	0.0032714	0.530366	mg/L	0.0032714	0.62%
QC value within limits for Cu 327.393 Recovery = 106.07%								
Fe 273.955†	1660.9	5.27973	mg/L	0.067492	5.27973	mg/L	0.067492	1.28%
QC value within limits for Fe 273.955 Recovery = 105.59%								
K 404.721†	702.7	-8.28858	mg/L	1.065795	-8.28858	mg/L	1.065795	12.86%
QC value less than the lower limit for K 404.721 Recovery = -16.58%								
Mg 279.077†	30171.7	49.3573	mg/L	0.16322	49.3573	mg/L	0.16322	0.33%
QC value within limits for Mg 279.077 Recovery = 98.71%								
Mn 257.610†	8412.6	0.499216	mg/L	0.0018703	0.499216	mg/L	0.0018703	0.37%
QC value within limits for Mn 257.610 Recovery = 99.84%								
Mo 202.031†	412.4	0.494539	mg/L	0.0018214	0.494539	mg/L	0.0018214	0.37%
QC value within limits for Mo 202.031 Recovery = 98.91%								
Na 330.237†	1654.8	51.3845	mg/L	0.19705	51.3845	mg/L	0.19705	0.38%
QC value within limits for Na 330.237 Recovery = 102.77%								
Ni 231.604†	856.9	0.494329	mg/L	0.0028877	0.494329	mg/L	0.0028877	0.58%
QC value within limits for Ni 231.604 Recovery = 98.87%								
Pb 220.353†	166.6	0.496635	mg/L	0.0037943	0.496635	mg/L	0.0037943	0.76%
QC value within limits for Pb 220.353 Recovery = 99.33%								
Sb 206.836†	50.8	0.506227	mg/L	0.0018329	0.506227	mg/L	0.0018329	0.36%
QC value within limits for Sb 206.836 Recovery = 101.25%								
Se 196.026†	66.6	0.488772	mg/L	0.0116680	0.488772	mg/L	0.0116680	2.39%
QC value within limits for Se 196.026 Recovery = 97.75%								
Sn 189.927†	135.0	0.490445	mg/L	0.0018438	0.490445	mg/L	0.0018438	0.38%
QC value within limits for Sn 189.927 Recovery = 98.09%								
Ti 334.940†	8463.8	0.501458	mg/L	0.0023014	0.501458	mg/L	0.0023014	0.46%
QC value within limits for Ti 334.940 Recovery = 100.29%								
Tl 190.801†	59.6	0.504239	mg/L	0.0093528	0.504239	mg/L	0.0093528	1.85%
QC value within limits for Tl 190.801 Recovery = 100.85%								
V 290.880†	1832.5	0.557820	mg/L	0.0035381	0.557820	mg/L	0.0035381	0.63%
QC value greater than the upper limit for V 290.880 Recovery = 111.56%								
Zn 206.200†	940.9	0.496745	mg/L	0.0040305	0.496745	mg/L	0.0040305	0.81%
QC value within limits for Zn 206.200 Recovery = 99.35%								
B 249.772	1934.1	0.526026	mg/L	0.0065581	0.526026	mg/L	0.0065581	1.25%
QC value within limits for B 249.772 Recovery = 105.21%								
Si 251.611	6174.5	5.11596	mg/L	0.043670	5.11596	mg/L	0.043670	0.85%
QC value within limits for Si 251.611 Recovery = 102.32%								

QC Failed. Continue with analysis.

Sequence No.: 6 **Autosampler Location: 1**
Sample ID: ICB V-333667 **Date Collected: 9/16/2020 1:40:36 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	35874.1	95.8	%	0.37				0.39%
Y 371.029	11226.9	95.3	%	0.70				0.73%
Ag 328.068†	3.0	0.0018896	mg/L	0.00034214	0.0018896	mg/L	0.00034214	18.11%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	6.7	-0.0278619	mg/L	0.00345160	-0.0278619	mg/L	0.00345160	12.39%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.5	0.0096227	mg/L	0.00688403	0.0096227	mg/L	0.00688403	71.54%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.6	-0.0066725	mg/L	0.00017489	-0.0066725	mg/L	0.00017489	2.62%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-0.8	-0.0006373	mg/L	0.00005497	-0.0006373	mg/L	0.00005497	8.63%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	11.7	-0.0049451	mg/L	0.00110293	-0.0049451	mg/L	0.00110293	22.30%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	1.1	0.0050539	mg/L	0.00016019	0.0050539	mg/L	0.00016019	3.17%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.4	0.0016554	mg/L	0.00092729	0.0016554	mg/L	0.00092729	56.01%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.1	0.0095096	mg/L	0.00065526	0.0095096	mg/L	0.00065526	6.89%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	4.7	-0.0120450	mg/L	0.00129937	-0.0120450	mg/L	0.00129937	10.79%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.0	-0.133287	mg/L	0.0031631	-0.133287	mg/L	0.0031631	2.37%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-9.6	2.84722	mg/L	0.569590	2.84722	mg/L	0.569590	20.01%
QC value greater than the upper limit for K 404.721 Recovery = Not calculated								
Mg 279.077†	2.6	0.0730237	mg/L	0.00386123	0.0730237	mg/L	0.00386123	5.29%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	3.4	-0.0053323	mg/L	0.00009417	-0.0053323	mg/L	0.00009417	1.77%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.4	0.0018480	mg/L	0.00066189	0.0018480	mg/L	0.00066189	35.82%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-3.2	0.462800	mg/L	0.0955307	0.462800	mg/L	0.0955307	20.64%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	0.7	0.0003150	mg/L	0.00084922	0.0003150	mg/L	0.00084922	269.58%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.6	0.0015172	mg/L	0.00267806	0.0015172	mg/L	0.00267806	176.52%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.6	0.0126597	mg/L	0.00372770	0.0126597	mg/L	0.00372770	29.45%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.9	-0.0004875	mg/L	0.00959128	-0.0004875	mg/L	0.00959128	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.1	0.0027059	mg/L	0.00353557	0.0027059	mg/L	0.00353557	130.66%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	5.5	-0.0063082	mg/L	0.00008519	-0.0063082	mg/L	0.00008519	1.35%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.1	-0.0147009	mg/L	0.00868576	-0.0147009	mg/L	0.00868576	59.08%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-2.0	-0.0179677	mg/L	0.00089277	-0.0179677	mg/L	0.00089277	4.97%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	2.1	0.0040254	mg/L	0.00017660	0.0040254	mg/L	0.00017660	4.39%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	7.8	-0.0043683	mg/L	0.00030900	-0.0043683	mg/L	0.00030900	7.07%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	3.3	-0.0384898	mg/L	0.00216530	-0.0384898	mg/L	0.00216530	5.63%
QC value within limits for Si 251.611 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 7 **Autosampler Location: 13**
Sample ID: LRS V-333660 **Date Collected: 9/16/2020 1:44:34 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: LRS V-333660

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	30038.1	80.2	%	1.25				1.56%
Y 371.029	9230.2	78.3	%	1.43				1.82%
Ag 328.068†	9346.3	1.04912	mg/L	0.000612	1.04912	mg/L	0.000612	0.06%
QC value within limits for Ag 328.068 Recovery = 104.91%								
Al 308.215†	506997.1	539.048	mg/L	7.7823	539.048	mg/L	7.7823	1.44%
QC value within limits for Al 308.215 Recovery = 107.81%								
As 188.979†	637.0	10.2977	mg/L	0.12334	10.2977	mg/L	0.12334	1.20%
QC value within limits for As 188.979 Recovery = 102.98%								
Ba 233.527†	61898.4	10.4094	mg/L	0.01148	10.4094	mg/L	0.01148	0.11%
QC value within limits for Ba 233.527 Recovery = 104.09%								
Be 313.107†	795255.6	4.97386	mg/L	0.067731	4.97386	mg/L	0.067731	1.36%
QC value within limits for Be 313.107 Recovery = 99.48%								
Ca 315.887†	998092.1	492.669	mg/L	7.8376	492.669	mg/L	7.8376	1.59%
QC value within limits for Ca 315.887 Recovery = 98.53%								
Cd 228.802†	8589.5	5.24311	mg/L	0.012550	5.24311	mg/L	0.012550	0.24%
QC value within limits for Cd 228.802 Recovery = 104.86%								
Co 228.616†	7168.1	5.03749	mg/L	0.038659	5.03749	mg/L	0.038659	0.77%
QC value within limits for Co 228.616 Recovery = 100.75%								
Cr 267.716†	37181.0	8.95785	mg/L	0.008215	8.95785	mg/L	0.008215	0.09%
QC value less than the lower limit for Cr 267.716 Recovery = 89.58%								
Cu 327.393†	71187.6	11.2881	mg/L	0.01702	11.2881	mg/L	0.01702	0.15%
QC value greater than the upper limit for Cu 327.393 Recovery = 112.88%								
Fe 273.955†	61577.8	200.443	mg/L	0.9182	200.443	mg/L	0.9182	0.46%
QC value within limits for Fe 273.955 Recovery = 100.22%								
K 404.721†	1756.5	-2040.73	mg/L	10.451	-2040.73	mg/L	10.451	0.51%
QC value less than the lower limit for K 404.721 Recovery = -1020.36%								
Mg 279.077†	311671.2	509.214	mg/L	7.8274	509.214	mg/L	7.8274	1.54%
QC value within limits for Mg 279.077 Recovery = 101.84%								
Mn 257.610†	163795.6	9.82211	mg/L	0.145646	9.82211	mg/L	0.145646	1.48%
QC value within limits for Mn 257.610 Recovery = 98.22%								
Mo 202.031†	8045.9	9.60617	mg/L	0.036569	9.60617	mg/L	0.036569	0.38%
QC value within limits for Mo 202.031 Recovery = 96.06%								
Na 330.237†	43521.0	1337.24	mg/L	1.911	1337.24	mg/L	1.911	0.14%
QC value greater than the upper limit for Na 330.237 Recovery = 133.72%								
Ni 231.604†	15911.1	9.18202	mg/L	0.019867	9.18202	mg/L	0.019867	0.22%
QC value within limits for Ni 231.604 Recovery = 91.82%								
Pb 220.353†	3331.2	9.98704	mg/L	0.082331	9.98704	mg/L	0.082331	0.82%
QC value within limits for Pb 220.353 Recovery = 99.87%								
Sb 206.836†	562.4	5.73675	mg/L	0.062490	5.73675	mg/L	0.062490	1.09%
QC value greater than the upper limit for Sb 206.836 Recovery = 114.73%								
Se 196.026†	743.3	5.46916	mg/L	0.069172	5.46916	mg/L	0.069172	1.26%
QC value within limits for Se 196.026 Recovery = 109.38%								
Sn 189.927†	2806.5	10.2236	mg/L	0.07872	10.2236	mg/L	0.07872	0.77%
QC value within limits for Sn 189.927 Recovery = 102.24%								
Ti 334.940†	169804.3	10.1480	mg/L	0.17162	10.1480	mg/L	0.17162	1.69%
QC value within limits for Ti 334.940 Recovery = 101.48%								
Tl 190.801†	526.2	4.49398	mg/L	0.066189	4.49398	mg/L	0.066189	1.47%
QC value less than the lower limit for Tl 190.801 Recovery = 89.88%								
V 290.880†	30662.1	9.58466	mg/L	0.009455	9.58466	mg/L	0.009455	0.10%
QC value within limits for V 290.880 Recovery = 95.85%								
Zn 206.200†	17998.6	9.44972	mg/L	0.016942	9.44972	mg/L	0.016942	0.18%
QC value within limits for Zn 206.200 Recovery = 94.50%								
B 249.772	4890.8	0.976690	mg/L	0.0240055	0.976690	mg/L	0.0240055	2.46%
QC value less than the lower limit for B 249.772 Recovery = 19.53%								
Si 251.611	4790.9	5.85560	mg/L	0.082738	5.85560	mg/L	0.082738	1.41%
QC value less than the lower limit for Si 251.611 Recovery = 23.42%								

QC Failed. Continue with analysis.

Sequence No.: 8 **Autosampler Location: 3**
Sample ID: ICS3 V-333666 **Date Collected: 9/16/2020 1:49:21 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 85 **Auto Dilution Factor: 1**

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	36879.8	98.5	%	0.41				0.41%
Y 371.029	11066.0	93.9	%	0.31				0.33%
Ag 328.068†	916.7	0.101549	mg/L	0.0011276	0.101549	mg/L	0.0011276	1.11%
QC value within limits for Ag 328.068 Recovery = 101.55%								
Al 308.215†	4678.4	4.95503	mg/L	0.015084	4.95503	mg/L	0.015084	0.30%
QC value within limits for Al 308.215 Recovery = 99.10%								
As 188.979†	30.5	0.490892	mg/L	0.0220000	0.490892	mg/L	0.0220000	4.48%
QC value within limits for As 188.979 Recovery = 98.18%								
Ba 233.527†	2999.6	0.498002	mg/L	0.0027197	0.498002	mg/L	0.0027197	0.55%
QC value within limits for Ba 233.527 Recovery = 99.60%								
Be 313.107†	80257.0	0.501393	mg/L	0.0006159	0.501393	mg/L	0.0006159	0.12%
QC value within limits for Be 313.107 Recovery = 100.28%								
Ca 315.887†	101941.3	50.3097	mg/L	0.07987	50.3097	mg/L	0.07987	0.16%
QC value within limits for Ca 315.887 Recovery = 100.62%								
Cd 228.802†	781.4	0.480936	mg/L	0.0023919	0.480936	mg/L	0.0023919	0.50%
QC value within limits for Cd 228.802 Recovery = 96.19%								
Co 228.616†	705.4	0.496949	mg/L	0.0057114	0.496949	mg/L	0.0057114	1.15%
QC value within limits for Co 228.616 Recovery = 99.39%								
Cr 267.716†	1935.0	0.475524	mg/L	0.0055902	0.475524	mg/L	0.0055902	1.18%
QC value within limits for Cr 267.716 Recovery = 95.10%								
Cu 327.393†	3407.6	0.527741	mg/L	0.0054649	0.527741	mg/L	0.0054649	1.04%
QC value within limits for Cu 327.393 Recovery = 105.55%								
Fe 273.955†	1666.7	5.29876	mg/L	0.039893	5.29876	mg/L	0.039893	0.75%
QC value within limits for Fe 273.955 Recovery = 105.98%								
K 404.721†	704.5	-8.37548	mg/L	0.440784	-8.37548	mg/L	0.440784	5.26%
QC value less than the lower limit for K 404.721 Recovery = -16.75%								
Mg 279.077†	30440.4	49.7962	mg/L	0.08676	49.7962	mg/L	0.08676	0.17%
QC value within limits for Mg 279.077 Recovery = 99.59%								
Mn 257.610†	8423.8	0.499891	mg/L	0.0012113	0.499891	mg/L	0.0012113	0.24%
QC value within limits for Mn 257.610 Recovery = 99.98%								
Mo 202.031†	411.8	0.493829	mg/L	0.0061113	0.493829	mg/L	0.0061113	1.24%
QC value within limits for Mo 202.031 Recovery = 98.77%								
Na 330.237†	1637.5	50.8540	mg/L	0.56956	50.8540	mg/L	0.56956	1.12%
QC value within limits for Na 330.237 Recovery = 101.71%								
Ni 231.604†	857.4	0.494604	mg/L	0.0067151	0.494604	mg/L	0.0067151	1.36%
QC value within limits for Ni 231.604 Recovery = 98.92%								
Pb 220.353†	167.5	0.499503	mg/L	0.0042130	0.499503	mg/L	0.0042130	0.84%
QC value within limits for Pb 220.353 Recovery = 99.90%								
Sb 206.836†	52.2	0.520116	mg/L	0.0076035	0.520116	mg/L	0.0076035	1.46%
QC value within limits for Sb 206.836 Recovery = 104.02%								
Se 196.026†	67.1	0.491823	mg/L	0.0181583	0.491823	mg/L	0.0181583	3.69%
QC value within limits for Se 196.026 Recovery = 98.36%								
Sn 189.927†	135.2	0.491253	mg/L	0.0069659	0.491253	mg/L	0.0069659	1.42%
QC value within limits for Sn 189.927 Recovery = 98.25%								
Ti 334.940†	8404.5	0.497941	mg/L	0.0020519	0.497941	mg/L	0.0020519	0.41%
QC value within limits for Ti 334.940 Recovery = 99.59%								
Tl 190.801†	58.7	0.496698	mg/L	0.0056953	0.496698	mg/L	0.0056953	1.15%
QC value within limits for Tl 190.801 Recovery = 99.34%								
V 290.880†	1835.7	0.558847	mg/L	0.0078291	0.558847	mg/L	0.0078291	1.40%
QC value greater than the upper limit for V 290.880 Recovery = 111.77%								
Zn 206.200†	944.1	0.498409	mg/L	0.0056556	0.498409	mg/L	0.0056556	1.13%
QC value within limits for Zn 206.200 Recovery = 99.68%								
B 249.772	2004.7	0.545416	mg/L	0.0029132	0.545416	mg/L	0.0029132	0.53%
QC value within limits for B 249.772 Recovery = 109.08%								
Si 251.611	6396.0	5.29773	mg/L	0.033494	5.29773	mg/L	0.033494	0.63%
QC value within limits for Si 251.611 Recovery = 105.95%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 14
Date Collected: 9/16/2020 1:53:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	36078.9	96.3	%	0.42				0.43%
Y 371.029	11230.6	95.3	%	0.85				0.90%
Ag 328.068†	-1.0	0.0014617	mg/L	0.00047298	0.0014617	mg/L	0.00047298	32.36%
Al 308.215†	16.4	-0.0176648	mg/L	0.00585753	-0.0176648	mg/L	0.00585753	33.16%
As 188.979†	0.7	0.0138129	mg/L	0.00400736	0.0138129	mg/L	0.00400736	29.01%
Ba 233.527†	2.0	-0.0064326	mg/L	0.00037623	-0.0064326	mg/L	0.00037623	5.85%
Be 313.107†	15.5	-0.0005352	mg/L	0.00006539	-0.0005352	mg/L	0.00006539	12.22%
Ca 315.887†	184.5	0.0803233	mg/L	0.00227620	0.0803233	mg/L	0.00227620	2.83%
Cd 228.802†	0.3	0.0045217	mg/L	0.00021204	0.0045217	mg/L	0.00021204	4.69%
Co 228.616†	-0.3	0.0011720	mg/L	0.00086831	0.0011720	mg/L	0.00086831	74.08%
Cr 267.716†	-2.8	0.0088147	mg/L	0.00039352	0.0088147	mg/L	0.00039352	4.46%
Cu 327.393†	0.6	-0.0126965	mg/L	0.00055408	-0.0126965	mg/L	0.00055408	4.36%
Fe 273.955†	0.2	-0.129580	mg/L	0.0060290	-0.129580	mg/L	0.0060290	4.65%
K 404.721†	-15.6	2.41051	mg/L	0.187927	2.41051	mg/L	0.187927	7.80%
Mg 279.077†	4.5	0.0762496	mg/L	0.00401020	0.0762496	mg/L	0.00401020	5.26%
Mn 257.610†	6.9	-0.0051180	mg/L	0.00014060	-0.0051180	mg/L	0.00014060	2.75%
Mo 202.031†	0.1	0.0024491	mg/L	0.00074868	0.0024491	mg/L	0.00074868	30.57%
Na 330.237†	-8.6	0.297585	mg/L	0.0805874	0.297585	mg/L	0.0805874	27.08%
Ni 231.604†	5.8	0.0032644	mg/L	0.00175373	0.0032644	mg/L	0.00175373	53.72%
Pb 220.353†	-1.6	-0.0051746	mg/L	0.00233450	-0.0051746	mg/L	0.00233450	45.12%
Sb 206.836†	0.2	-0.0015019	mg/L	0.01041374	-0.0015019	mg/L	0.01041374	693.38%
Se 196.026†	-2.0	-0.0083351	mg/L	0.01267862	-0.0083351	mg/L	0.01267862	152.11%
Sn 189.927†	1.4	0.0036289	mg/L	0.00184513	0.0036289	mg/L	0.00184513	50.85%
Ti 334.940†	4.7	-0.0063462	mg/L	0.00010649	-0.0063462	mg/L	0.00010649	1.68%
Tl 190.801†	0.0	-0.0050363	mg/L	0.01266338	-0.0050363	mg/L	0.01266338	251.44%
V 290.880†	-3.3	-0.0183881	mg/L	0.00123218	-0.0183881	mg/L	0.00123218	6.70%
Zn 206.200†	35.0	0.0212660	mg/L	0.00068547	0.0212660	mg/L	0.00068547	3.22%
B 249.772	8.8	-0.0040674	mg/L	0.00056372	-0.0040674	mg/L	0.00056372	13.86%
Si 251.611	4.1	-0.0377370	mg/L	0.00241397	-0.0377370	mg/L	0.00241397	6.40%

Sequence No.: 10 **Autosampler Location: 5**
Sample ID: LLICV V-333672 **Date Collected: 9/16/2020 1:57:16 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: LLICV V-333672

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	36295.2	96.9	%	1.51				1.56%
Y 371.029	11103.3	94.2	%	1.73				1.84%
Ag 328.068†	432.1	0.0477579	mg/L	0.00063337	0.0477579	mg/L	0.00063337	1.33%
QC value within limits for Ag 328.068 Recovery = 95.52%								
Al 308.215†	1001.5	1.03235	mg/L	0.021548	1.03235	mg/L	0.021548	2.09%
QC value within limits for Al 308.215 Recovery = 103.24%								
As 188.979†	6.2	0.101721	mg/L	0.0237212	0.101721	mg/L	0.0237212	23.32%
QC value within limits for As 188.979 Recovery = 101.72%								
Ba 233.527†	1552.5	0.254482	mg/L	0.0055646	0.254482	mg/L	0.0055646	2.19%
QC value within limits for Ba 233.527 Recovery = 101.79%								
Be 313.107†	1859.2	0.0109975	mg/L	0.00023458	0.0109975	mg/L	0.00023458	2.13%
QC value within limits for Be 313.107 Recovery = 91.65%								
Ca 315.887†	9357.2	4.60816	mg/L	0.073822	4.60816	mg/L	0.073822	1.60%
QC value within limits for Ca 315.887 Recovery = 92.16%								
Cd 228.802†	75.9	0.0506531	mg/L	0.00059115	0.0506531	mg/L	0.00059115	1.17%
QC value within limits for Cd 228.802 Recovery = 101.31%								
Co 228.616†	135.8	0.0967436	mg/L	0.00100110	0.0967436	mg/L	0.00100110	1.03%
QC value within limits for Co 228.616 Recovery = 96.74%								
Cr 267.716†	373.7	0.0994521	mg/L	0.00135399	0.0994521	mg/L	0.00135399	1.36%
QC value within limits for Cr 267.716 Recovery = 99.45%								
Cu 327.393†	656.8	0.0913865	mg/L	0.00150692	0.0913865	mg/L	0.00150692	1.65%
QC value within limits for Cu 327.393 Recovery = 91.39%								
Fe 273.955†	315.7	0.898028	mg/L	0.0165099	0.898028	mg/L	0.0165099	1.84%
QC value within limits for Fe 273.955 Recovery = 89.80%								
K 404.721†	13.2	-6.75523	mg/L	0.849774	-6.75523	mg/L	0.849774	12.58%
QC value less than the lower limit for K 404.721 Recovery = -135.10%								
Mg 279.077†	2961.7	4.90700	mg/L	0.074374	4.90700	mg/L	0.074374	1.52%
QC value within limits for Mg 279.077 Recovery = 98.14%								
Mn 257.610†	1791.0	0.101922	mg/L	0.0022872	0.101922	mg/L	0.0022872	2.24%
QC value within limits for Mn 257.610 Recovery = 101.92%								
Mo 202.031†	80.1	0.0979892	mg/L	0.00326756	0.0979892	mg/L	0.00326756	3.33%
QC value within limits for Mo 202.031 Recovery = 97.99%								
Na 330.237†	711.1	22.4015	mg/L	0.36353	22.4015	mg/L	0.36353	1.62%
QC value within limits for Na 330.237 Recovery = 89.61%								
Ni 231.604†	169.5	0.0977273	mg/L	0.00230118	0.0977273	mg/L	0.00230118	2.35%
QC value within limits for Ni 231.604 Recovery = 97.73%								
Pb 220.353†	15.5	0.0460787	mg/L	0.00200623	0.0460787	mg/L	0.00200623	4.35%
QC value within limits for Pb 220.353 Recovery = 92.16%								
Sb 206.836†	8.1	0.0783161	mg/L	0.01418017	0.0783161	mg/L	0.01418017	18.11%
QC value within limits for Sb 206.836 Recovery = 111.88%								
Se 196.026†	11.6	0.0898208	mg/L	0.01053523	0.0898208	mg/L	0.01053523	11.73%
QC value within limits for Se 196.026 Recovery = 89.82%								
Sn 189.927†	28.6	0.102916	mg/L	0.0013931	0.102916	mg/L	0.0013931	1.35%
QC value within limits for Sn 189.927 Recovery = 102.92%								
Ti 334.940†	1845.2	0.103654	mg/L	0.0020280	0.103654	mg/L	0.0020280	1.96%
QC value within limits for Ti 334.940 Recovery = 103.65%								
Tl 190.801†	11.5	0.0927382	mg/L	0.00905832	0.0927382	mg/L	0.00905832	9.77%
QC value within limits for Tl 190.801 Recovery = 92.74%								
V 290.880†	327.9	0.0853353	mg/L	0.00251720	0.0853353	mg/L	0.00251720	2.95%
QC value within limits for V 290.880 Recovery = 85.34%								
Zn 206.200†	180.3	0.0975433	mg/L	0.00304779	0.0975433	mg/L	0.00304779	3.12%
QC value within limits for Zn 206.200 Recovery = 97.54%								
B 249.772	709.0	0.186847	mg/L	0.0011822	0.186847	mg/L	0.0011822	0.63%
QC value within limits for B 249.772 Recovery = 93.42%								
Si 251.611	163.0	0.115405	mg/L	0.0024504	0.115405	mg/L	0.0024504	2.12%
QC value within limits for Si 251.611 Recovery = 115.40%								

QC Failed. Continue with analysis.

Sequence No.: 11 **Autosampler Location: 7**
Sample ID: ICSA V-333668 **Date Collected: 9/16/2020 2:01:16 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	30800.3	82.3	%	0.52				0.64%
Y 371.029	9319.1	79.1	%	0.25				0.32%
Ag 328.068†	-363.8	-0.0244699	mg/L	0.00056916	-0.0244699	mg/L	0.00056916	2.33%
Al 308.215†	492326.1	523.200	mg/L	1.8325	523.200	mg/L	1.8325	0.35%
QC value within limits for Al 308.215 Recovery = 104.64%								
As 188.979†	-0.4	-0.0119314	mg/L	0.01423428	-0.0119314	mg/L	0.01423428	119.30%
Ba 233.527†	34.0	-0.0010487	mg/L	0.00015179	-0.0010487	mg/L	0.00015179	14.47%
Be 313.107†	-72.2	-0.0010837	mg/L	0.00007896	-0.0010837	mg/L	0.00007896	7.29%
Ca 315.887†	971261.8	479.425	mg/L	0.6397	479.425	mg/L	0.6397	0.13%
QC value within limits for Ca 315.887 Recovery = 95.89%								
Cd 228.802†	-0.3	0.0041835	mg/L	0.00138538	0.0041835	mg/L	0.00138538	33.12%
Co 228.616†	-0.2	0.0012513	mg/L	0.00133234	0.0012513	mg/L	0.00133234	106.48%
Cr 267.716†	-7.2	0.0085202	mg/L	0.00185192	0.0085202	mg/L	0.00185192	21.74%
Cu 327.393†	-96.3	-0.0103394	mg/L	0.00139182	-0.0103394	mg/L	0.00139182	13.46%
Fe 273.955†	54365.7	176.951	mg/L	1.3145	176.951	mg/L	1.3145	0.74%
QC value within limits for Fe 273.955 Recovery = 88.48%								
K 404.721†	-18.5	-1905.24	mg/L	14.838	-1905.24	mg/L	14.838	0.78%
Mg 279.077†	309370.9	505.456	mg/L	0.4595	505.456	mg/L	0.4595	0.09%
QC value within limits for Mg 279.077 Recovery = 101.09%								
Mn 257.610†	-161.2	-0.0152053	mg/L	0.00029326	-0.0152053	mg/L	0.00029326	1.93%
Mo 202.031†	-3.1	-0.0013262	mg/L	0.00063974	-0.0013262	mg/L	0.00063974	48.24%
Na 330.237†	-26.4	-0.250634	mg/L	0.0752148	-0.250634	mg/L	0.0752148	30.01%
Ni 231.604†	9.2	0.0051700	mg/L	0.00054246	0.0051700	mg/L	0.00054246	10.49%
Pb 220.353†	-14.8	0.0152586	mg/L	0.00910177	0.0152586	mg/L	0.00910177	59.65%
Sb 206.836†	1.2	0.0093274	mg/L	0.01385737	0.0093274	mg/L	0.01385737	148.57%
Se 196.026†	-27.6	-0.0277842	mg/L	0.06060038	-0.0277842	mg/L	0.06060038	218.11%
Sn 189.927†	-12.4	-0.0465057	mg/L	0.00431123	-0.0465057	mg/L	0.00431123	9.27%
Ti 334.940†	-139.6	0.0214876	mg/L	0.00038644	0.0214876	mg/L	0.00038644	1.80%
Tl 190.801†	-4.5	-0.0585659	mg/L	0.01517323	-0.0585659	mg/L	0.01517323	25.91%
V 290.880†	532.8	0.172210	mg/L	0.0012398	0.172210	mg/L	0.0012398	0.72%
Zn 206.200†	14.5	0.0105121	mg/L	0.00040105	0.0105121	mg/L	0.00040105	3.82%
B 249.772	2500.4	0.0687085	mg/L	0.00421061	0.0687085	mg/L	0.00421061	6.13%
Si 251.611	3.7	0.725090	mg/L	0.0022421	0.725090	mg/L	0.0022421	0.31%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCV V-334775
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 85

Autosampler Location: 6
Date Collected: 9/16/2020 2:05:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-334775

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34295.5	91.6	%	0.62				0.68%
Y 371.029	10304.7	87.4	%	1.23				1.41%
Ag 328.068†	913.1	0.101106	mg/L	0.0004862	0.101106	mg/L	0.0004862	0.48%
QC value within limits for Ag 328.068 Recovery = 101.11%								
Al 308.215†	4644.7	4.91891	mg/L	0.028346	4.91891	mg/L	0.028346	0.58%
QC value within limits for Al 308.215 Recovery = 98.38%								
As 188.979†	32.7	0.528701	mg/L	0.0216298	0.528701	mg/L	0.0216298	4.09%
QC value within limits for As 188.979 Recovery = 105.74%								
Ba 233.527†	3299.1	0.548397	mg/L	0.0032493	0.548397	mg/L	0.0032493	0.59%
QC value within limits for Ba 233.527 Recovery = 109.68%								
Be 313.107†	78417.3	0.489885	mg/L	0.0019272	0.489885	mg/L	0.0019272	0.39%
QC value within limits for Be 313.107 Recovery = 97.98%								
Ca 315.887†	99795.7	49.2506	mg/L	0.19792	49.2506	mg/L	0.19792	0.40%
QC value within limits for Ca 315.887 Recovery = 98.50%								
Cd 228.802†	774.5	0.476734	mg/L	0.0025812	0.476734	mg/L	0.0025812	0.54%
QC value within limits for Cd 228.802 Recovery = 95.35%								
Co 228.616†	692.2	0.487664	mg/L	0.0041248	0.487664	mg/L	0.0041248	0.85%
QC value within limits for Co 228.616 Recovery = 97.53%								
Cr 267.716†	1910.8	0.469697	mg/L	0.0030503	0.469697	mg/L	0.0030503	0.65%
QC value within limits for Cr 267.716 Recovery = 93.94%								
Cu 327.393†	3354.6	0.519315	mg/L	0.0044943	0.519315	mg/L	0.0044943	0.87%
QC value within limits for Cu 327.393 Recovery = 103.86%								
Fe 273.955†	1615.4	5.13161	mg/L	0.049466	5.13161	mg/L	0.049466	0.96%
QC value within limits for Fe 273.955 Recovery = 102.63%								
K 404.721†	704.2	-6.59121	mg/L	0.787944	-6.59121	mg/L	0.787944	11.95%
QC value less than the lower limit for K 404.721 Recovery = -13.18%								
Mg 279.077†	29699.4	48.5857	mg/L	0.13738	48.5857	mg/L	0.13738	0.28%
QC value within limits for Mg 279.077 Recovery = 97.17%								
Mn 257.610†	8269.3	0.490621	mg/L	0.0027176	0.490621	mg/L	0.0027176	0.55%
QC value within limits for Mn 257.610 Recovery = 98.12%								
Mo 202.031†	403.8	0.484300	mg/L	0.0007976	0.484300	mg/L	0.0007976	0.16%
QC value within limits for Mo 202.031 Recovery = 96.86%								
Na 330.237†	1615.6	50.1811	mg/L	0.26053	50.1811	mg/L	0.26053	0.52%
QC value within limits for Na 330.237 Recovery = 100.36%								
Ni 231.604†	838.8	0.483919	mg/L	0.0067988	0.483919	mg/L	0.0067988	1.40%
QC value within limits for Ni 231.604 Recovery = 96.78%								
Pb 220.353†	164.8	0.491273	mg/L	0.0028478	0.491273	mg/L	0.0028478	0.58%
QC value within limits for Pb 220.353 Recovery = 98.25%								
Sb 206.836†	51.1	0.509640	mg/L	0.0126815	0.509640	mg/L	0.0126815	2.49%
QC value within limits for Sb 206.836 Recovery = 101.93%								
Se 196.026†	68.3	0.500228	mg/L	0.0153803	0.500228	mg/L	0.0153803	3.07%
QC value within limits for Se 196.026 Recovery = 100.05%								
Sn 189.927†	133.4	0.484756	mg/L	0.0055741	0.484756	mg/L	0.0055741	1.15%
QC value within limits for Sn 189.927 Recovery = 96.95%								
Ti 334.940†	8258.3	0.489153	mg/L	0.0018719	0.489153	mg/L	0.0018719	0.38%
QC value within limits for Ti 334.940 Recovery = 97.83%								
Tl 190.801†	55.8	0.471598	mg/L	0.0152443	0.471598	mg/L	0.0152443	3.23%
QC value within limits for Tl 190.801 Recovery = 94.32%								
V 290.880†	1804.0	0.548870	mg/L	0.0042802	0.548870	mg/L	0.0042802	0.78%
QC value within limits for V 290.880 Recovery = 109.77%								
Zn 206.200†	926.9	0.489389	mg/L	0.0026473	0.489389	mg/L	0.0026473	0.54%
QC value within limits for Zn 206.200 Recovery = 97.88%								
B 249.772	1812.4	0.493147	mg/L	0.0022184	0.493147	mg/L	0.0022184	0.45%
QC value within limits for B 249.772 Recovery = 98.63%								
Si 251.611	5811.6	4.81767	mg/L	0.010371	4.81767	mg/L	0.010371	0.22%
QC value within limits for Si 251.611 Recovery = 96.35%								

QC Failed. Continue with analysis.

Sequence No.: 13 **Autosampler Location: 2**
Sample ID: CCB V-333667 **Date Collected: 9/16/2020 2:09:55 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	36191.1	96.6	%	0.85				0.88%
Y 371.029	11218.0	95.2	%	1.29				1.36%
Ag 328.068†	5.4	0.0021409	mg/L	0.00007168	0.0021409	mg/L	0.00007168	3.35%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	1.4	-0.0335046	mg/L	0.00142203	-0.0335046	mg/L	0.00142203	4.24%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.1	-0.0000537	mg/L	0.02046724	-0.0000537	mg/L	0.02046724	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.2	-0.0067358	mg/L	0.00015582	-0.0067358	mg/L	0.00015582	2.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1.8	-0.0006434	mg/L	0.00004145	-0.0006434	mg/L	0.00004145	6.44%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	6.6	-0.0074602	mg/L	0.00224462	-0.0074602	mg/L	0.00224462	30.09%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	0.7	0.0048049	mg/L	0.00035520	0.0048049	mg/L	0.00035520	7.39%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-1.1	0.0005837	mg/L	0.00017944	0.0005837	mg/L	0.00017944	30.74%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-1.3	0.0091756	mg/L	0.00039079	0.0091756	mg/L	0.00039079	4.26%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-0.0	-0.0127984	mg/L	0.00074323	-0.0127984	mg/L	0.00074323	5.81%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.2	-0.134002	mg/L	0.0075046	-0.134002	mg/L	0.0075046	5.60%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-7.6	2.98975	mg/L	0.154502	2.98975	mg/L	0.154502	5.17%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	4.6	0.0764067	mg/L	0.00219223	0.0764067	mg/L	0.00219223	2.87%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	2.4	-0.0053898	mg/L	0.00006573	-0.0053898	mg/L	0.00006573	1.22%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.5	0.0017994	mg/L	0.00144754	0.0017994	mg/L	0.00144754	80.45%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-8.1	0.310879	mg/L	0.0598681	0.310879	mg/L	0.0598681	19.26%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	1.1	0.0005390	mg/L	0.00053558	0.0005390	mg/L	0.00053558	99.36%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.3	-0.0043730	mg/L	0.00398590	-0.0043730	mg/L	0.00398590	91.15%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.1	-0.0022264	mg/L	0.00928407	-0.0022264	mg/L	0.00928407	417.00%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.6	0.0014179	mg/L	0.01198066	0.0014179	mg/L	0.01198066	844.96%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.7	0.0010673	mg/L	0.00400563	0.0010673	mg/L	0.00400563	375.30%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	1.9	-0.0065180	mg/L	0.00018446	-0.0065180	mg/L	0.00018446	2.83%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-0.8	-0.0118359	mg/L	0.00162950	-0.0118359	mg/L	0.00162950	13.77%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-1.3	-0.0177728	mg/L	0.00089570	-0.0177728	mg/L	0.00089570	5.04%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	1.9	0.0039205	mg/L	0.00020890	0.0039205	mg/L	0.00020890	5.33%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	3.0	-0.0056673	mg/L	0.00082930	-0.0056673	mg/L	0.00082930	14.63%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	2.3	-0.0393093	mg/L	0.00076638	-0.0393093	mg/L	0.00076638	1.95%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: MB 85271 (1)
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 40
Date Collected: 9/16/2020 2:13:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: MB 85271 (1)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	36269.6	96.9	%	0.92				0.95%
Y 371.029	11289.0	95.8	%	0.94				0.99%
Ag 328.068†	0.7	0.0016432	mg/L	0.00039802	0.0016432	mg/L	0.00039802	24.22%
Al 308.215†	4.5	-0.0302309	mg/L	0.00231548	-0.0302309	mg/L	0.00231548	7.66%
As 188.979†	0.8	0.0153710	mg/L	0.01924306	0.0153710	mg/L	0.01924306	125.19%
Ba 233.527†	1.6	-0.0064974	mg/L	0.00018317	-0.0064974	mg/L	0.00018317	2.82%
Be 313.107†	-3.2	-0.0006518	mg/L	0.00001771	-0.0006518	mg/L	0.00001771	2.72%
Ca 315.887†	39.1	0.0085392	mg/L	0.00156143	0.0085392	mg/L	0.00156143	18.29%
Cd 228.802†	0.2	0.0044947	mg/L	0.00078577	0.0044947	mg/L	0.00078577	17.48%
Co 228.616†	0.6	0.0017911	mg/L	0.00049253	0.0017911	mg/L	0.00049253	27.50%
Cr 267.716†	0.8	0.0096697	mg/L	0.00049909	0.0096697	mg/L	0.00049909	5.16%
Cu 327.393†	1.5	-0.0125467	mg/L	0.00060027	-0.0125467	mg/L	0.00060027	4.78%
Fe 273.955†	2.5	-0.121895	mg/L	0.0004091	-0.121895	mg/L	0.0004091	0.34%
K 404.721†	-12.1	2.55778	mg/L	0.696103	2.55778	mg/L	0.696103	27.22%
Mg 279.077†	3.0	0.0736737	mg/L	0.00457229	0.0736737	mg/L	0.00457229	6.21%
Mn 257.610†	13.1	-0.0047520	mg/L	0.00004806	-0.0047520	mg/L	0.00004806	1.01%
Mo 202.031†	-0.4	0.0019174	mg/L	0.00103035	0.0019174	mg/L	0.00103035	53.74%
Na 330.237†	-7.5	0.331154	mg/L	0.1014014	0.331154	mg/L	0.1014014	30.62%
Ni 231.604†	2.8	0.0014962	mg/L	0.00219335	0.0014962	mg/L	0.00219335	146.59%
Pb 220.353†	-0.8	-0.0028653	mg/L	0.00662875	-0.0028653	mg/L	0.00662875	231.34%
Sb 206.836†	-1.3	-0.0160131	mg/L	0.01257237	-0.0160131	mg/L	0.01257237	78.51%
Se 196.026†	0.2	0.0071245	mg/L	0.02317732	0.0071245	mg/L	0.02317732	325.32%
Sn 189.927†	1.0	0.0021519	mg/L	0.00786294	0.0021519	mg/L	0.00786294	365.39%
Ti 334.940†	8.4	-0.0061295	mg/L	0.00006530	-0.0061295	mg/L	0.00006530	1.07%
Tl 190.801†	-0.4	-0.0084888	mg/L	0.01145733	-0.0084888	mg/L	0.01145733	134.97%
V 290.880†	-2.6	-0.0181700	mg/L	0.00107676	-0.0181700	mg/L	0.00107676	5.93%
Zn 206.200†	3.9	0.0049641	mg/L	0.00050147	0.0049641	mg/L	0.00050147	10.10%
B 249.772	-2.2	-0.0070417	mg/L	0.00117374	-0.0070417	mg/L	0.00117374	16.67%
Si 251.611	18.9	-0.0255999	mg/L	0.00051561	-0.0255999	mg/L	0.00051561	2.01%

Sequence No.: 15
Sample ID: LCSW 85271
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 41
Date Collected: 9/16/2020 2:17:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LCSW 85271

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	33339.8	89.0	%	0.38				0.43%
Y 371.029	10210.2	86.6	%	0.80				0.92%
Ag 328.068†	917.3	0.101674	mg/L	0.0009010	0.101674	mg/L	0.0009010	0.89%
Al 308.215†	4820.2	5.10598	mg/L	0.019958	5.10598	mg/L	0.019958	0.39%
As 188.979†	28.3	0.454185	mg/L	0.0149822	0.454185	mg/L	0.0149822	3.30%
Ba 233.527†	3441.3	0.572328	mg/L	0.0052416	0.572328	mg/L	0.0052416	0.92%
Be 313.107†	81780.4	0.510922	mg/L	0.0013312	0.510922	mg/L	0.0013312	0.26%
Ca 315.887†	102143.4	50.4095	mg/L	0.06421	50.4095	mg/L	0.06421	0.13%
Cd 228.802†	795.2	0.489354	mg/L	0.0042180	0.489354	mg/L	0.0042180	0.86%
Co 228.616†	719.6	0.506936	mg/L	0.0064353	0.506936	mg/L	0.0064353	1.27%
Cr 267.716†	2003.4	0.491954	mg/L	0.0055268	0.491954	mg/L	0.0055268	1.12%
Cu 327.393†	3520.5	0.545637	mg/L	0.0046021	0.545637	mg/L	0.0046021	0.84%
Fe 273.955†	1676.7	5.33136	mg/L	0.012536	5.33136	mg/L	0.012536	0.24%
K 404.721†	257.3	-38.3427	mg/L	0.52796	-38.3427	mg/L	0.52796	1.38%
Mg 279.077†	30515.0	49.9180	mg/L	0.15728	49.9180	mg/L	0.15728	0.32%
Mn 257.610†	8601.2	0.510531	mg/L	0.0010813	0.510531	mg/L	0.0010813	0.21%
Mo 202.031†	424.0	0.508405	mg/L	0.0055155	0.508405	mg/L	0.0055155	1.08%
Na 330.237†	1647.9	51.1730	mg/L	0.20340	51.1730	mg/L	0.20340	0.40%
Ni 231.604†	874.6	0.504549	mg/L	0.0014088	0.504549	mg/L	0.0014088	0.28%
Pb 220.353†	173.5	0.517164	mg/L	0.0096463	0.517164	mg/L	0.0096463	1.87%
Sb 206.836†	53.5	0.533187	mg/L	0.0145050	0.533187	mg/L	0.0145050	2.72%
Se 196.026†	71.5	0.523445	mg/L	0.0055895	0.523445	mg/L	0.0055895	1.07%
Sn 189.927†	136.9	0.497436	mg/L	0.0081858	0.497436	mg/L	0.0081858	1.65%
Ti 334.940†	8607.9	0.510068	mg/L	0.0012550	0.510068	mg/L	0.0012550	0.25%
Tl 190.801†	60.1	0.508002	mg/L	0.0178396	0.508002	mg/L	0.0178396	3.51%
V 290.880†	1870.7	0.569802	mg/L	0.0039514	0.569802	mg/L	0.0039514	0.69%
Zn 206.200†	952.1	0.502633	mg/L	0.0055138	0.502633	mg/L	0.0055138	1.10%
B 249.772	1744.4	0.468907	mg/L	0.0013484	0.468907	mg/L	0.0013484	0.29%
Si 251.611	636.8	0.587135	mg/L	0.0014861	0.587135	mg/L	0.0014861	0.25%

Sequence No.: 16
Sample ID: LCSW MR 85271
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 42
Date Collected: 9/16/2020 2:21:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LCSW MR 85271

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34097.3	91.1	%	0.21				0.23%
Y 371.029	10435.7	88.5	%	0.71				0.80%
Ag 328.068†	863.9	0.0958697	mg/L	0.00035786	0.0958697	mg/L	0.00035786	0.37%
Al 308.215†	4561.6	4.83023	mg/L	0.020146	4.83023	mg/L	0.020146	0.42%
As 188.979†	28.1	0.452273	mg/L	0.0051330	0.452273	mg/L	0.0051330	1.13%
Ba 233.527†	3257.6	0.541412	mg/L	0.0021010	0.541412	mg/L	0.0021010	0.39%
Be 313.107†	77834.8	0.486241	mg/L	0.0015314	0.486241	mg/L	0.0015314	0.31%
Ca 315.887†	99770.4	49.2381	mg/L	0.21261	49.2381	mg/L	0.21261	0.43%
Cd 228.802†	756.5	0.465756	mg/L	0.0014628	0.465756	mg/L	0.0014628	0.31%
Co 228.616†	688.0	0.484749	mg/L	0.0051275	0.484749	mg/L	0.0051275	1.06%
Cr 267.716†	1892.7	0.465320	mg/L	0.0021834	0.465320	mg/L	0.0021834	0.47%
Cu 327.393†	3322.7	0.514260	mg/L	0.0019814	0.514260	mg/L	0.0019814	0.39%
Fe 273.955†	1584.0	5.02926	mg/L	0.055847	5.02926	mg/L	0.055847	1.11%
K 404.721†	243.4	-36.0066	mg/L	1.02322	-36.0066	mg/L	1.02322	2.84%
Mg 279.077†	29790.4	48.7343	mg/L	0.22254	48.7343	mg/L	0.22254	0.46%
Mn 257.610†	8192.2	0.485995	mg/L	0.0033228	0.485995	mg/L	0.0033228	0.68%
Mo 202.031†	402.0	0.482187	mg/L	0.0016564	0.482187	mg/L	0.0016564	0.34%
Na 330.237†	1590.6	49.4146	mg/L	0.12380	49.4146	mg/L	0.12380	0.25%
Ni 231.604†	833.0	0.480539	mg/L	0.0027217	0.480539	mg/L	0.0027217	0.57%
Pb 220.353†	165.1	0.492264	mg/L	0.0046791	0.492264	mg/L	0.0046791	0.95%
Sb 206.836†	49.9	0.497437	mg/L	0.0088191	0.497437	mg/L	0.0088191	1.77%
Se 196.026†	63.3	0.464815	mg/L	0.0232449	0.464815	mg/L	0.0232449	5.00%
Sn 189.927†	130.1	0.472634	mg/L	0.0045490	0.472634	mg/L	0.0045490	0.96%
Ti 334.940†	8140.2	0.482115	mg/L	0.0035932	0.482115	mg/L	0.0035932	0.75%
Tl 190.801†	56.6	0.478510	mg/L	0.0064794	0.478510	mg/L	0.0064794	1.35%
V 290.880†	1778.0	0.540765	mg/L	0.0030330	0.540765	mg/L	0.0030330	0.56%
Zn 206.200†	909.3	0.480189	mg/L	0.0006215	0.480189	mg/L	0.0006215	0.13%
B 249.772	1716.5	0.461077	mg/L	0.0016060	0.461077	mg/L	0.0016060	0.35%
Si 251.611	612.1	0.561739	mg/L	0.0033160	0.561739	mg/L	0.0033160	0.59%

Sequence No.: 17
Sample ID: AD19164-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 43
Date Collected: 9/16/2020 2:25:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19164-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	33224.4	88.7	%	2.93				3.30%
Y 371.029	12527.3	106	%	3.51				3.30%
Ag 328.068†	-8.8	0.0006622	mg/L	0.00028989	0.0006622	mg/L	0.00028989	43.78%
Al 308.215†	948.8	0.973451	mg/L	0.0230665	0.973451	mg/L	0.0230665	2.37%
As 188.979†	0.0	0.0014791	mg/L	0.00863975	0.0014791	mg/L	0.00863975	584.12%
Ba 233.527†	890.2	0.143029	mg/L	0.0024433	0.143029	mg/L	0.0024433	1.71%
Be 313.107†	-40.2	-0.0008836	mg/L	0.00007923	-0.0008836	mg/L	0.00007923	8.97%
Ca 315.887†	2924.1	1.43265	mg/L	0.018656	1.43265	mg/L	0.018656	1.30%
Cd 228.802†	-0.2	0.0042423	mg/L	0.00013126	0.0042423	mg/L	0.00013126	3.09%
Co 228.616†	-0.3	0.0011351	mg/L	0.00053441	0.0011351	mg/L	0.00053441	47.08%
Cr 267.716†	7.2	0.0112105	mg/L	0.00048803	0.0112105	mg/L	0.00048803	4.35%
Cu 327.393†	3.5	-0.0122403	mg/L	0.00065664	-0.0122403	mg/L	0.00065664	5.36%
Fe 273.955†	8.7	-0.101897	mg/L	0.0041656	-0.101897	mg/L	0.0041656	4.09%
K 404.721†	1.7	3.25602	mg/L	0.434422	3.25602	mg/L	0.434422	13.34%
Mg 279.077†	271.0	0.511514	mg/L	0.0104728	0.511514	mg/L	0.0104728	2.05%
Mn 257.610†	199.1	0.0064121	mg/L	0.00027881	0.0064121	mg/L	0.00027881	4.35%
Mo 202.031†	1.1	0.0036260	mg/L	0.00091799	0.0036260	mg/L	0.00091799	25.32%
Na 330.237†	52724.0	1619.90	mg/L	27.652	1619.90	mg/L	27.652	1.71%
Ni 231.604†	9.1	0.0051336	mg/L	0.00128658	0.0051336	mg/L	0.00128658	25.06%
Pb 220.353†	3.2	0.0091150	mg/L	0.00796677	0.0091150	mg/L	0.00796677	87.40%
Sb 206.836†	0.4	0.0007895	mg/L	0.00702241	0.0007895	mg/L	0.00702241	889.48%
Se 196.026†	-1.3	-0.0033074	mg/L	0.00962511	-0.0033074	mg/L	0.00962511	291.01%
Sn 189.927†	1.5	0.0043100	mg/L	0.00493921	0.0043100	mg/L	0.00493921	114.60%
Ti 334.940†	15.5	-0.0056029	mg/L	0.00027245	-0.0056029	mg/L	0.00027245	4.86%
Tl 190.801†	1.3	0.0057825	mg/L	0.01068197	0.0057825	mg/L	0.01068197	184.73%
V 290.880†	7.7	-0.0149252	mg/L	0.00144030	-0.0149252	mg/L	0.00144030	9.65%
Zn 206.200†	58.6	0.0336851	mg/L	0.00208081	0.0336851	mg/L	0.00208081	6.18%
B 249.772	226.0	0.0405680	mg/L	0.00146664	0.0405680	mg/L	0.00146664	3.62%
Si 251.611	523.0	0.445277	mg/L	0.0120891	0.445277	mg/L	0.0120891	2.71%

Sequence No.: 18 **Autosampler Location: 44**
Sample ID: AD19164-001 MR **Date Collected: 9/16/2020 2:29:46 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD19164-001 MR

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	34936.0	93.3	%	2.62				2.80%
Y 371.029	13213.2	112	%	2.71				2.42%
Ag 328.068†	-9.4	0.0005953	mg/L	0.00039551	0.0005953	mg/L	0.00039551	66.43%
Al 308.215†	1001.5	1.02950	mg/L	0.026337	1.02950	mg/L	0.026337	2.56%
As 188.979†	0.9	0.0154872	mg/L	0.01051436	0.0154872	mg/L	0.01051436	67.89%
Ba 233.527†	941.0	0.151588	mg/L	0.0028475	0.151588	mg/L	0.0028475	1.88%
Be 313.107†	-43.6	-0.0009047	mg/L	0.00011050	-0.0009047	mg/L	0.00011050	12.21%
Ca 315.887†	11078.4	5.45782	mg/L	0.035655	5.45782	mg/L	0.035655	0.65%
Cd 228.802†	0.6	0.0047310	mg/L	0.00113462	0.0047310	mg/L	0.00113462	23.98%
Co 228.616†	1.3	0.0023033	mg/L	0.00158995	0.0023033	mg/L	0.00158995	69.03%
Cr 267.716†	14.2	0.0129057	mg/L	0.00054502	0.0129057	mg/L	0.00054502	4.22%
Cu 327.393†	12.2	-0.0108478	mg/L	0.00031153	-0.0108478	mg/L	0.00031153	2.87%
Fe 273.955†	14.6	-0.0826246	mg/L	0.00338896	-0.0826246	mg/L	0.00338896	4.10%
K 404.721†	-0.5	2.90123	mg/L	0.588438	2.90123	mg/L	0.588438	20.28%
Mg 279.077†	327.0	0.603101	mg/L	0.0153650	0.603101	mg/L	0.0153650	2.55%
Mn 257.610†	254.6	0.0097423	mg/L	0.00046080	0.0097423	mg/L	0.00046080	4.73%
Mo 202.031†	1.2	0.0037716	mg/L	0.00043707	0.0037716	mg/L	0.00043707	11.59%
Na 330.237†	54196.1	1665.11	mg/L	6.809	1665.11	mg/L	6.809	0.41%
Ni 231.604†	4.5	0.0025128	mg/L	0.00136931	0.0025128	mg/L	0.00136931	54.49%
Pb 220.353†	4.8	0.0141538	mg/L	0.00934442	0.0141538	mg/L	0.00934442	66.02%
Sb 206.836†	2.6	0.0224114	mg/L	0.00181819	0.0224114	mg/L	0.00181819	8.11%
Se 196.026†	-0.7	0.0016739	mg/L	0.01220688	0.0016739	mg/L	0.01220688	729.23%
Sn 189.927†	1.4	0.0037531	mg/L	0.00449288	0.0037531	mg/L	0.00449288	119.71%
Ti 334.940†	15.8	-0.0052736	mg/L	0.00024950	-0.0052736	mg/L	0.00024950	4.73%
Tl 190.801†	0.5	-0.0015507	mg/L	0.00891539	-0.0015507	mg/L	0.00891539	574.91%
V 290.880†	10.9	-0.0139069	mg/L	0.00017605	-0.0139069	mg/L	0.00017605	1.27%
Zn 206.200†	63.8	0.0364091	mg/L	0.00059286	0.0364091	mg/L	0.00059286	1.63%
B 249.772	251.8	0.0472061	mg/L	0.00150034	0.0472061	mg/L	0.00150034	3.18%
Si 251.611	586.9	0.500504	mg/L	0.0090074	0.500504	mg/L	0.0090074	1.80%

Sequence No.: 19
Sample ID: AD19164-001 MS1
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 45
Date Collected: 9/16/2020 2:33:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19164-001 MS1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34194.7	91.3	%	1.49				1.63%
Y 371.029	13048.1	111	%	0.04				0.04%
Ag 328.068†	935.1	0.103508	mg/L	0.0016340	0.103508	mg/L	0.0016340	1.58%
Al 308.215†	5528.2	5.85793	mg/L	0.063592	5.85793	mg/L	0.063592	1.09%
As 188.979†	32.1	0.518307	mg/L	0.0060017	0.518307	mg/L	0.0060017	1.16%
Ba 233.527†	3850.6	0.641206	mg/L	0.0047881	0.641206	mg/L	0.0047881	0.75%
Be 313.107†	83147.9	0.519476	mg/L	0.0052870	0.519476	mg/L	0.0052870	1.02%
Ca 315.887†	103951.4	51.3019	mg/L	0.57902	51.3019	mg/L	0.57902	1.13%
Cd 228.802†	817.7	0.503047	mg/L	0.0074972	0.503047	mg/L	0.0074972	1.49%
Co 228.616†	693.9	0.488897	mg/L	0.0065446	0.488897	mg/L	0.0065446	1.34%
Cr 267.716†	1959.0	0.481259	mg/L	0.0078258	0.481259	mg/L	0.0078258	1.63%
Cu 327.393†	3510.5	0.544082	mg/L	0.0077099	0.544082	mg/L	0.0077099	1.42%
Fe 273.955†	1776.3	5.65555	mg/L	0.115288	5.65555	mg/L	0.115288	2.04%
K 404.721†	357.5	-35.1990	mg/L	0.68326	-35.1990	mg/L	0.68326	1.94%
Mg 279.077†	28875.3	47.2394	mg/L	0.44958	47.2394	mg/L	0.44958	0.95%
Mn 257.610†	8566.2	0.508433	mg/L	0.0052922	0.508433	mg/L	0.0052922	1.04%
Mo 202.031†	415.1	0.497845	mg/L	0.0114267	0.497845	mg/L	0.0114267	2.30%
Na 330.237†	54304.6	1668.44	mg/L	15.588	1668.44	mg/L	15.588	0.93%
Ni 231.604†	842.7	0.486175	mg/L	0.0093409	0.486175	mg/L	0.0093409	1.92%
Pb 220.353†	169.1	0.504310	mg/L	0.0129692	0.504310	mg/L	0.0129692	2.57%
Sb 206.836†	55.7	0.554602	mg/L	0.0055255	0.554602	mg/L	0.0055255	1.00%
Se 196.026†	80.4	0.587180	mg/L	0.0086597	0.587180	mg/L	0.0086597	1.47%
Sn 189.927†	136.4	0.495435	mg/L	0.0093158	0.495435	mg/L	0.0093158	1.88%
Ti 334.940†	8272.8	0.490169	mg/L	0.0068741	0.490169	mg/L	0.0068741	1.40%
Tl 190.801†	54.5	0.460183	mg/L	0.0020813	0.460183	mg/L	0.0020813	0.45%
V 290.880†	1827.6	0.556168	mg/L	0.0104164	0.556168	mg/L	0.0104164	1.87%
Zn 206.200†	1055.5	0.556901	mg/L	0.0081039	0.556901	mg/L	0.0081039	1.46%
B 249.772	2147.9	0.563192	mg/L	0.0022062	0.563192	mg/L	0.0022062	0.39%
Si 251.611	1265.1	1.16047	mg/L	0.002585	1.16047	mg/L	0.002585	0.22%

Sequence No.: 20
Sample ID: AD19164-001 PS
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 46
Date Collected: 9/16/2020 2:37:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19164-001 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34168.7	91.2	%	0.76				0.83%
Y 371.029	12891.7	109	%	2.13				1.95%
Ag 328.068†	937.6	0.103775	mg/L	0.0006489	0.103775	mg/L	0.0006489	0.63%
Al 308.215†	5501.4	5.82970	mg/L	0.015099	5.82970	mg/L	0.015099	0.26%
As 188.979†	31.7	0.512282	mg/L	0.0392594	0.512282	mg/L	0.0392594	7.66%
Ba 233.527†	3839.6	0.639346	mg/L	0.0005881	0.639346	mg/L	0.0005881	0.09%
Be 313.107†	84506.4	0.527974	mg/L	0.0025165	0.527974	mg/L	0.0025165	0.48%
Ca 315.887†	105371.2	52.0028	mg/L	0.28479	52.0028	mg/L	0.28479	0.55%
Cd 228.802†	823.1	0.506363	mg/L	0.0074629	0.506363	mg/L	0.0074629	1.47%
Co 228.616†	703.8	0.495812	mg/L	0.0047219	0.495812	mg/L	0.0047219	0.95%
Cr 267.716†	1990.1	0.488749	mg/L	0.0047097	0.488749	mg/L	0.0047097	0.96%
Cu 327.393†	3550.6	0.550382	mg/L	0.0024516	0.550382	mg/L	0.0024516	0.45%
Fe 273.955†	1617.0	5.13684	mg/L	0.064579	5.13684	mg/L	0.064579	1.26%
K 404.721†	338.8	-30.8449	mg/L	0.88790	-30.8449	mg/L	0.88790	2.88%
Mg 279.077†	29282.9	47.9052	mg/L	0.26229	47.9052	mg/L	0.26229	0.55%
Mn 257.610†	8537.2	0.506690	mg/L	0.0033262	0.506690	mg/L	0.0033262	0.66%
Mo 202.031†	420.3	0.504026	mg/L	0.0038545	0.504026	mg/L	0.0038545	0.76%
Na 330.237†	51803.0	1591.61	mg/L	3.507	1591.61	mg/L	3.507	0.22%
Ni 231.604†	849.8	0.490300	mg/L	0.0042504	0.490300	mg/L	0.0042504	0.87%
Pb 220.353†	170.2	0.507391	mg/L	0.0106121	0.507391	mg/L	0.0106121	2.09%
Sb 206.836†	55.6	0.554009	mg/L	0.0078078	0.554009	mg/L	0.0078078	1.41%
Se 196.026†	82.4	0.601082	mg/L	0.0114304	0.601082	mg/L	0.0114304	1.90%
Sn 189.927†	135.9	0.493778	mg/L	0.0040455	0.493778	mg/L	0.0040455	0.82%
Ti 334.940†	8323.0	0.493212	mg/L	0.0007743	0.493212	mg/L	0.0007743	0.16%
Tl 190.801†	55.2	0.465789	mg/L	0.0248003	0.465789	mg/L	0.0248003	5.32%
V 290.880†	1853.8	0.564405	mg/L	0.0035403	0.564405	mg/L	0.0035403	0.63%
Zn 206.200†	1064.9	0.561846	mg/L	0.0051444	0.561846	mg/L	0.0051444	0.92%
B 249.772	2121.7	0.558758	mg/L	0.0055764	0.558758	mg/L	0.0055764	1.00%
Si 251.611	1239.5	1.13633	mg/L	0.008974	1.13633	mg/L	0.008974	0.79%

Sequence No.: 21
Sample ID: AD19164-001 SD
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 47
Date Collected: 9/16/2020 2:41:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19164-001 SD

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	37087.3	99.0	%	1.86				1.88%
Y 371.029	11750.5	99.7	%	1.90				1.91%
Ag 328.068†	0.3	0.0016025	mg/L	0.00047625	0.0016025	mg/L	0.00047625	29.72%
Al 308.215†	192.5	0.169617	mg/L	0.0051721	0.169617	mg/L	0.0051721	3.05%
As 188.979†	0.6	0.0112840	mg/L	0.00904240	0.0112840	mg/L	0.00904240	80.13%
Ba 233.527†	177.5	0.0230934	mg/L	0.00023842	0.0230934	mg/L	0.00023842	1.03%
Be 313.107†	-19.4	-0.0007534	mg/L	0.00004772	-0.0007534	mg/L	0.00004772	6.33%
Ca 315.887†	643.8	0.307069	mg/L	0.0018527	0.307069	mg/L	0.0018527	0.60%
Cd 228.802†	0.3	0.0045135	mg/L	0.00097511	0.0045135	mg/L	0.00097511	21.60%
Co 228.616†	-0.2	0.0012369	mg/L	0.00081292	0.0012369	mg/L	0.00081292	65.72%
Cr 267.716†	3.3	0.0102686	mg/L	0.00023307	0.0102686	mg/L	0.00023307	2.27%
Cu 327.393†	-7.0	-0.0138995	mg/L	0.00013713	-0.0138995	mg/L	0.00013713	0.99%
Fe 273.955†	0.9	-0.127142	mg/L	0.0067430	-0.127142	mg/L	0.0067430	5.30%
K 404.721†	-4.3	3.12971	mg/L	0.700969	3.12971	mg/L	0.700969	22.40%
Mg 279.077†	58.8	0.164922	mg/L	0.0043946	0.164922	mg/L	0.0043946	2.66%
Mn 257.610†	40.9	-0.0030807	mg/L	0.00005046	-0.0030807	mg/L	0.00005046	1.64%
Mo 202.031†	0.1	0.0025063	mg/L	0.00206010	0.0025063	mg/L	0.00206010	82.20%
Na 330.237†	8764.7	269.757	mg/L	3.8925	269.757	mg/L	3.8925	1.44%
Ni 231.604†	2.3	0.0012146	mg/L	0.00115371	0.0012146	mg/L	0.00115371	94.99%
Pb 220.353†	-1.1	-0.0036723	mg/L	0.00084534	-0.0036723	mg/L	0.00084534	23.02%
Sb 206.836†	1.2	0.0084058	mg/L	0.00484836	0.0084058	mg/L	0.00484836	57.68%
Se 196.026†	-0.1	0.0055942	mg/L	0.00804748	0.0055942	mg/L	0.00804748	143.85%
Sn 189.927†	1.5	0.0042145	mg/L	0.00244817	0.0042145	mg/L	0.00244817	58.09%
Ti 334.940†	5.5	-0.0062819	mg/L	0.00017927	-0.0062819	mg/L	0.00017927	2.85%
Tl 190.801†	1.5	0.0079394	mg/L	0.01146606	0.0079394	mg/L	0.01146606	144.42%
V 290.880†	-0.0	-0.0173522	mg/L	0.00137415	-0.0173522	mg/L	0.00137415	7.92%
Zn 206.200†	15.1	0.0108115	mg/L	0.00097838	0.0108115	mg/L	0.00097838	9.05%
B 249.772	66.8	0.0093785	mg/L	0.00082071	0.0093785	mg/L	0.00082071	8.75%
Si 251.611	115.7	0.0635941	mg/L	0.00342988	0.0635941	mg/L	0.00342988	5.39%

Sequence No.: 22
Sample ID: AD19198-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 53
Date Collected: 9/16/2020 2:45:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19198-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	33570.0	89.6	%	0.29				0.32%
Y 371.029	10325.5	87.6	%	0.58				0.66%
Ag 328.068†	11.0	0.0028404	mg/L	0.00022814	0.0028404	mg/L	0.00022814	8.03%
Al 308.215†	214.0	0.193280	mg/L	0.0009005	0.193280	mg/L	0.0009005	0.47%
As 188.979†	0.5	0.0094713	mg/L	0.03316129	0.0094713	mg/L	0.03316129	350.12%
Ba 233.527†	3062.8	0.508632	mg/L	0.0013167	0.508632	mg/L	0.0013167	0.26%
Be 313.107†	-65.8	-0.0010438	mg/L	0.00003106	-0.0010438	mg/L	0.00003106	2.98%
Ca 315.887†	126609.1	62.4863	mg/L	0.30181	62.4863	mg/L	0.30181	0.48%
Cd 228.802†	2.6	0.0059477	mg/L	0.00150045	0.0059477	mg/L	0.00150045	25.23%
Co 228.616†	6.9	0.0062000	mg/L	0.00082949	0.0062000	mg/L	0.00082949	13.38%
Cr 267.716†	0.5	0.0096799	mg/L	0.00053250	0.0096799	mg/L	0.00053250	5.50%
Cu 327.393†	156.0	0.0119585	mg/L	0.00115428	0.0119585	mg/L	0.00115428	9.65%
Fe 273.955†	74.0	0.110745	mg/L	0.0034672	0.110745	mg/L	0.0034672	3.13%
K 404.721†	15.2	1.85939	mg/L	0.791951	1.85939	mg/L	0.791951	42.59%
Mg 279.077†	4607.0	7.59477	mg/L	0.018081	7.59477	mg/L	0.018081	0.24%
Mn 257.610†	63440.7	3.80087	mg/L	0.016332	3.80087	mg/L	0.016332	0.43%
Mo 202.031†	2.9	0.0057866	mg/L	0.00190659	0.0057866	mg/L	0.00190659	32.95%
Na 330.237†	53960.1	1657.86	mg/L	10.617	1657.86	mg/L	10.617	0.64%
Ni 231.604†	18.8	0.0107451	mg/L	0.00083467	0.0107451	mg/L	0.00083467	7.77%
Pb 220.353†	2.6	0.0073324	mg/L	0.00371615	0.0073324	mg/L	0.00371615	50.68%
Sb 206.836†	2.2	0.0185359	mg/L	0.00974929	0.0185359	mg/L	0.00974929	52.60%
Se 196.026†	1.9	0.0250321	mg/L	0.01370246	0.0250321	mg/L	0.01370246	54.74%
Sn 189.927†	-4.1	-0.0164394	mg/L	0.00372350	-0.0164394	mg/L	0.00372350	22.65%
Ti 334.940†	8.4	-0.0013834	mg/L	0.00024074	-0.0013834	mg/L	0.00024074	17.40%
Tl 190.801†	-0.9	-0.0036473	mg/L	0.01326225	-0.0036473	mg/L	0.01326225	363.62%
V 290.880†	56.6	0.0007670	mg/L	0.00070475	0.0007670	mg/L	0.00070475	91.88%
Zn 206.200†	1793.3	0.944141	mg/L	0.0080016	0.944141	mg/L	0.0080016	0.85%
B 249.772	648.2	0.171145	mg/L	0.0011443	0.171145	mg/L	0.0011443	0.67%
Si 251.611	2153.9	1.88916	mg/L	0.011262	1.88916	mg/L	0.011262	0.60%

Sequence No.: 23 **Autosampler Location: 6**
Sample ID: CCV V-334775 **Date Collected: 9/16/2020 2:49:40 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCV V-334775

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	35465.1	94.7	%	1.54				1.63%
Y 371.029	10574.1	89.7	%	1.54				1.72%
Ag 328.068†	896.6	0.0992847	mg/L	0.00097496	0.0992847	mg/L	0.00097496	0.98%
QC value within limits for Ag 328.068 Recovery = 99.28%								
Al 308.215†	4580.7	4.85041	mg/L	0.032417	4.85041	mg/L	0.032417	0.67%
QC value within limits for Al 308.215 Recovery = 97.01%								
As 188.979†	29.5	0.476497	mg/L	0.0202431	0.476497	mg/L	0.0202431	4.25%
QC value within limits for As 188.979 Recovery = 95.30%								
Ba 233.527†	2920.9	0.484751	mg/L	0.0037261	0.484751	mg/L	0.0037261	0.77%
QC value within limits for Ba 233.527 Recovery = 96.95%								
Be 313.107†	78446.7	0.490069	mg/L	0.0003351	0.490069	mg/L	0.0003351	0.07%
QC value within limits for Be 313.107 Recovery = 98.01%								
Ca 315.887†	99316.2	49.0139	mg/L	0.07985	49.0139	mg/L	0.07985	0.16%
QC value within limits for Ca 315.887 Recovery = 98.03%								
Cd 228.802†	756.9	0.465980	mg/L	0.0037399	0.465980	mg/L	0.0037399	0.80%
QC value within limits for Cd 228.802 Recovery = 93.20%								
Co 228.616†	682.8	0.481054	mg/L	0.0043574	0.481054	mg/L	0.0043574	0.91%
QC value within limits for Co 228.616 Recovery = 96.21%								
Cr 267.716†	1895.7	0.466008	mg/L	0.0033745	0.466008	mg/L	0.0033745	0.72%
QC value within limits for Cr 267.716 Recovery = 93.20%								
Cu 327.393†	3333.9	0.516017	mg/L	0.0034168	0.516017	mg/L	0.0034168	0.66%
QC value within limits for Cu 327.393 Recovery = 103.20%								
Fe 273.955†	1553.4	4.92945	mg/L	0.030094	4.92945	mg/L	0.030094	0.61%
QC value within limits for Fe 273.955 Recovery = 98.59%								
K 404.721†	699.4	-4.73135	mg/L	0.483465	-4.73135	mg/L	0.483465	10.22%
QC value less than the lower limit for K 404.721 Recovery = -9.46%								
Mg 279.077†	29671.4	48.5399	mg/L	0.09206	48.5399	mg/L	0.09206	0.19%
QC value within limits for Mg 279.077 Recovery = 97.08%								
Mn 257.610†	8189.5	0.485833	mg/L	0.0016333	0.485833	mg/L	0.0016333	0.34%
QC value within limits for Mn 257.610 Recovery = 97.17%								
Mo 202.031†	397.0	0.476232	mg/L	0.0052229	0.476232	mg/L	0.0052229	1.10%
QC value within limits for Mo 202.031 Recovery = 95.25%								
Na 330.237†	1607.2	49.9247	mg/L	0.41783	49.9247	mg/L	0.41783	0.84%
QC value within limits for Na 330.237 Recovery = 99.85%								
Ni 231.604†	820.6	0.473425	mg/L	0.0075388	0.473425	mg/L	0.0075388	1.59%
QC value within limits for Ni 231.604 Recovery = 94.69%								
Pb 220.353†	164.3	0.489681	mg/L	0.0086956	0.489681	mg/L	0.0086956	1.78%
QC value within limits for Pb 220.353 Recovery = 97.94%								
Sb 206.836†	50.0	0.498365	mg/L	0.0219694	0.498365	mg/L	0.0219694	4.41%
QC value within limits for Sb 206.836 Recovery = 99.67%								
Se 196.026†	67.3	0.493211	mg/L	0.0193155	0.493211	mg/L	0.0193155	3.92%
QC value within limits for Se 196.026 Recovery = 98.64%								
Sn 189.927†	130.1	0.472677	mg/L	0.0034194	0.472677	mg/L	0.0034194	0.72%
QC value within limits for Sn 189.927 Recovery = 94.54%								
Ti 334.940†	8124.4	0.481154	mg/L	0.0019637	0.481154	mg/L	0.0019637	0.41%
QC value within limits for Ti 334.940 Recovery = 96.23%								
Tl 190.801†	56.0	0.473398	mg/L	0.0087692	0.473398	mg/L	0.0087692	1.85%
QC value within limits for Tl 190.801 Recovery = 94.68%								
V 290.880†	1759.6	0.535000	mg/L	0.0065177	0.535000	mg/L	0.0065177	1.22%
QC value within limits for V 290.880 Recovery = 107.00%								
Zn 206.200†	919.3	0.485410	mg/L	0.0044158	0.485410	mg/L	0.0044158	0.91%
QC value within limits for Zn 206.200 Recovery = 97.08%								
B 249.772	1848.5	0.503237	mg/L	0.0065372	0.503237	mg/L	0.0065372	1.30%
QC value within limits for B 249.772 Recovery = 100.65%								
Si 251.611	5944.8	4.92471	mg/L	0.093970	4.92471	mg/L	0.093970	1.91%
QC value within limits for Si 251.611 Recovery = 98.49%								

QC Failed. Continue with analysis.

Sequence No.: 24 **Autosampler Location: 2**
Sample ID: CCB V-333667 **Date Collected: 9/16/2020 2:53:38 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	37044.0	98.9	%	0.18				0.19%
Y 371.029	11398.5	96.7	%	0.87				0.90%
Ag 328.068†	7.1	0.0023123	mg/L	0.00033213	0.0023123	mg/L	0.00033213	14.36%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-6.0	-0.0414447	mg/L	0.00193591	-0.0414447	mg/L	0.00193591	4.67%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.3	0.0055227	mg/L	0.00357614	0.0055227	mg/L	0.00357614	64.75%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	1.9	-0.0064436	mg/L	0.00011932	-0.0064436	mg/L	0.00011932	1.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-3.5	-0.0006539	mg/L	0.00001091	-0.0006539	mg/L	0.00001091	1.67%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	5.8	-0.0078977	mg/L	0.00035215	-0.0078977	mg/L	0.00035215	4.46%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	0.0	0.0043696	mg/L	0.00093382	0.0043696	mg/L	0.00093382	21.37%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.7	0.0018637	mg/L	0.00094220	0.0018637	mg/L	0.00094220	50.56%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-1.7	0.0090622	mg/L	0.00035735	0.0090622	mg/L	0.00035735	3.94%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-0.9	-0.0129322	mg/L	0.00070248	-0.0129322	mg/L	0.00070248	5.43%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.7	-0.135882	mg/L	0.0028748	-0.135882	mg/L	0.0028748	2.12%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-11.8	2.73224	mg/L	0.136632	2.73224	mg/L	0.136632	5.00%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	1.8	0.0718536	mg/L	0.00042065	0.0718536	mg/L	0.00042065	0.59%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	0.1	-0.0055293	mg/L	0.00005743	-0.0055293	mg/L	0.00005743	1.04%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.6	0.0016438	mg/L	0.00086119	0.0016438	mg/L	0.00086119	52.39%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-3.3	0.461226	mg/L	0.0777253	0.461226	mg/L	0.0777253	16.85%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	3.1	0.0017010	mg/L	0.00122495	0.0017010	mg/L	0.00122495	72.01%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.9	-0.0030901	mg/L	0.00749037	-0.0030901	mg/L	0.00749037	242.40%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.7	0.0235954	mg/L	0.00549137	0.0235954	mg/L	0.00549137	23.27%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-2.5	-0.0119324	mg/L	0.00968962	-0.0119324	mg/L	0.00968962	81.20%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.7	0.0012212	mg/L	0.00212175	0.0012212	mg/L	0.00212175	173.75%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	2.4	-0.0064885	mg/L	0.00015732	-0.0064885	mg/L	0.00015732	2.42%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.4	-0.0020077	mg/L	0.01340763	-0.0020077	mg/L	0.01340763	667.81%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-3.9	-0.0185775	mg/L	0.00040742	-0.0185775	mg/L	0.00040742	2.19%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	1.0	0.0034382	mg/L	0.00016433	0.0034382	mg/L	0.00016433	4.78%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	8.1	-0.0043658	mg/L	0.00094884	-0.0043658	mg/L	0.00094884	21.73%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	1.4	-0.0402901	mg/L	0.00127791	-0.0402901	mg/L	0.00127791	3.17%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 25 **Autosampler Location: 48**
Sample ID: AD19163-001 **Date Collected: 9/16/2020 2:57:36 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD19163-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34405.1	91.9	%	3.23				3.52%
Y 371.029	10337.9	87.7	%	2.80				3.19%
Ag 328.068†	-3.0	0.0013506	mg/L	0.00041366	0.0013506	mg/L	0.00041366	30.63%
Al 308.215†	946.7	0.971270	mg/L	0.0349211	0.971270	mg/L	0.0349211	3.60%
As 188.979†	0.3	0.0061454	mg/L	0.00979506	0.0061454	mg/L	0.00979506	159.39%
Ba 233.527†	1242.7	0.202357	mg/L	0.0045259	0.202357	mg/L	0.0045259	2.24%
Be 313.107†	-38.9	-0.0008752	mg/L	0.00010222	-0.0008752	mg/L	0.00010222	11.68%
Ca 315.887†	11632.4	5.73124	mg/L	0.017111	5.73124	mg/L	0.017111	0.30%
Cd 228.802†	0.8	0.0048247	mg/L	0.00062365	0.0048247	mg/L	0.00062365	12.93%
Co 228.616†	2.9	0.0033876	mg/L	0.00036311	0.0033876	mg/L	0.00036311	10.72%
Cr 267.716†	10.5	0.0120139	mg/L	0.00052364	0.0120139	mg/L	0.00052364	4.36%
Cu 327.393†	-1.9	-0.0129804	mg/L	0.00121529	-0.0129804	mg/L	0.00121529	9.36%
Fe 273.955†	358.0	1.03588	mg/L	0.029763	1.03588	mg/L	0.029763	2.87%
K 404.721†	4.6	-8.80835	mg/L	0.852059	-8.80835	mg/L	0.852059	9.67%
Mg 279.077†	692.3	1.19985	mg/L	0.033449	1.19985	mg/L	0.033449	2.79%
Mn 257.610†	7310.9	0.433116	mg/L	0.0014199	0.433116	mg/L	0.0014199	0.33%
Mo 202.031†	1.9	0.0046025	mg/L	0.00233434	0.0046025	mg/L	0.00233434	50.72%
Na 330.237†	52888.1	1624.94	mg/L	22.678	1624.94	mg/L	22.678	1.40%
Ni 231.604†	8.9	0.0050135	mg/L	0.00137799	0.0050135	mg/L	0.00137799	27.49%
Pb 220.353†	0.2	0.0004667	mg/L	0.00184362	0.0004667	mg/L	0.00184362	395.03%
Sb 206.836†	1.4	0.0104927	mg/L	0.00174630	0.0104927	mg/L	0.00174630	16.64%
Se 196.026†	0.2	0.0082673	mg/L	0.00709599	0.0082673	mg/L	0.00709599	85.83%
Sn 189.927†	1.8	0.0052361	mg/L	0.00373621	0.0052361	mg/L	0.00373621	71.35%
Ti 334.940†	241.3	0.0081808	mg/L	0.00066010	0.0081808	mg/L	0.00066010	8.07%
Tl 190.801†	1.3	0.0072598	mg/L	0.00496242	0.0072598	mg/L	0.00496242	68.35%
V 290.880†	14.9	-0.0126677	mg/L	0.00056863	-0.0126677	mg/L	0.00056863	4.49%
Zn 206.200†	183.7	0.0993208	mg/L	0.00212510	0.0993208	mg/L	0.00212510	2.14%
B 249.772	254.8	0.0470678	mg/L	0.00120315	0.0470678	mg/L	0.00120315	2.56%
Si 251.611	1269.0	1.06991	mg/L	0.009706	1.06991	mg/L	0.009706	0.91%

Sequence No.: 26
Sample ID: AD19167-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 49
Date Collected: 9/16/2020 3:01:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19167-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34972.7	93.4	%	1.36				1.46%
Y 371.029	10727.0	91.0	%	1.34				1.47%
Ag 328.068†	1.6	0.0022283	mg/L	0.00028312	0.0022283	mg/L	0.00028312	12.71%
Al 308.215†	1739.8	1.81717	mg/L	0.025587	1.81717	mg/L	0.025587	1.41%
As 188.979†	1.2	0.0209813	mg/L	0.03142949	0.0209813	mg/L	0.03142949	149.80%
Ba 233.527†	2254.9	0.372682	mg/L	0.0054583	0.372682	mg/L	0.0054583	1.46%
Be 313.107†	-61.4	-0.0010164	mg/L	0.00003037	-0.0010164	mg/L	0.00003037	2.99%
Ca 315.887†	121148.0	59.7905	mg/L	0.32153	59.7905	mg/L	0.32153	0.54%
Cd 228.802†	0.5	0.0046316	mg/L	0.00036185	0.0046316	mg/L	0.00036185	7.81%
Co 228.616†	7.5	0.0066616	mg/L	0.00049944	0.0066616	mg/L	0.00049944	7.50%
Cr 267.716†	22.8	0.0152335	mg/L	0.00052658	0.0152335	mg/L	0.00052658	3.46%
Cu 327.393†	107.1	0.0044416	mg/L	0.00033054	0.0044416	mg/L	0.00033054	7.44%
Fe 273.955†	805.7	2.49405	mg/L	0.032158	2.49405	mg/L	0.032158	1.29%
K 404.721†	321.9	-3.49715	mg/L	0.859945	-3.49715	mg/L	0.859945	24.59%
Mg 279.077†	24090.8	39.4235	mg/L	0.15354	39.4235	mg/L	0.15354	0.39%
Mn 257.610†	10519.8	0.625646	mg/L	0.0018147	0.625646	mg/L	0.0018147	0.29%
Mo 202.031†	4.0	0.0071202	mg/L	0.00143691	0.0071202	mg/L	0.00143691	20.18%
Na 330.237†	20601.8	633.313	mg/L	3.0800	633.313	mg/L	3.0800	0.49%
Ni 231.604†	40.2	0.0230240	mg/L	0.00266458	0.0230240	mg/L	0.00266458	11.57%
Pb 220.353†	1.8	0.0051283	mg/L	0.00051477	0.0051283	mg/L	0.00051477	10.04%
Sb 206.836†	-0.0	-0.0032357	mg/L	0.00930282	-0.0032357	mg/L	0.00930282	287.50%
Se 196.026†	0.0	0.0139546	mg/L	0.00566685	0.0139546	mg/L	0.00566685	40.61%
Sn 189.927†	-4.6	-0.0181036	mg/L	0.00341170	-0.0181036	mg/L	0.00341170	18.85%
Ti 334.940†	146.4	0.0066317	mg/L	0.00067305	0.0066317	mg/L	0.00067305	10.15%
Tl 190.801†	-1.4	-0.0197133	mg/L	0.02021846	-0.0197133	mg/L	0.02021846	102.56%
V 290.880†	198.6	0.0468945	mg/L	0.00173759	0.0468945	mg/L	0.00173759	3.71%
Zn 206.200†	312.9	0.167116	mg/L	0.0029727	0.167116	mg/L	0.0029727	1.78%
B 249.772	2841.7	0.770822	mg/L	0.0070156	0.770822	mg/L	0.0070156	0.91%
Si 251.611	14798.1	12.1495	mg/L	0.21908	12.1495	mg/L	0.21908	1.80%

Sequence No.: 27
Sample ID: AD19172-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 50
Date Collected: 9/16/2020 3:05:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19172-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34163.9	91.2	%	0.45				0.49%
Y 371.029	10886.9	92.4	%	0.52				0.57%
Ag 328.068†	-18.3	0.0005669	mg/L	0.00066298	0.0005669	mg/L	0.00066298	116.95%
Al 308.215†	233.6	0.214353	mg/L	0.0023865	0.214353	mg/L	0.0023865	1.11%
As 188.979†	0.1	0.0038996	mg/L	0.00990588	0.0038996	mg/L	0.00990588	254.02%
Ba 233.527†	2767.3	0.458908	mg/L	0.0047477	0.458908	mg/L	0.0047477	1.03%
Be 313.107†	61.9	-0.0002447	mg/L	0.00006655	-0.0002447	mg/L	0.00006655	27.19%
Ca 315.887†	56099.0	27.6810	mg/L	0.10710	27.6810	mg/L	0.10710	0.39%
Cd 228.802†	2.4	0.0058104	mg/L	0.00104125	0.0058104	mg/L	0.00104125	17.92%
Co 228.616†	34.7	0.0257475	mg/L	0.00061414	0.0257475	mg/L	0.00061414	2.39%
Cr 267.716†	5.4	0.0108675	mg/L	0.00062734	0.0108675	mg/L	0.00062734	5.77%
Cu 327.393†	315.9	0.0385238	mg/L	0.00041759	0.0385238	mg/L	0.00041759	1.08%
Fe 273.955†	3856.6	12.4315	mg/L	0.17327	12.4315	mg/L	0.17327	1.39%
K 404.721†	4.2	-131.581	mg/L	1.8841	-131.581	mg/L	1.8841	1.43%
Mg 279.077†	5834.8	9.60062	mg/L	0.067841	9.60062	mg/L	0.067841	0.71%
Mn 257.610†	129907.7	7.78886	mg/L	0.028046	7.78886	mg/L	0.028046	0.36%
Mo 202.031†	1.1	0.0037071	mg/L	0.00251956	0.0037071	mg/L	0.00251956	67.97%
Na 330.237†	49556.5	1522.61	mg/L	3.705	1522.61	mg/L	3.705	0.24%
Ni 231.604†	37.7	0.0216088	mg/L	0.00129085	0.0216088	mg/L	0.00129085	5.97%
Pb 220.353†	4.0	0.0115185	mg/L	0.00529590	0.0115185	mg/L	0.00529590	45.98%
Sb 206.836†	0.9	0.0054216	mg/L	0.02012242	0.0054216	mg/L	0.02012242	371.16%
Se 196.026†	1.1	0.0240135	mg/L	0.02234139	0.0240135	mg/L	0.02234139	93.04%
Sn 189.927†	-0.9	-0.0047497	mg/L	0.00290435	-0.0047497	mg/L	0.00290435	61.15%
Ti 334.940†	131.6	0.0033100	mg/L	0.00040097	0.0033100	mg/L	0.00040097	12.11%
Tl 190.801†	-3.1	-0.0064116	mg/L	0.00705176	-0.0064116	mg/L	0.00705176	109.98%
V 290.880†	69.6	0.0045017	mg/L	0.00152433	0.0045017	mg/L	0.00152433	33.86%
Zn 206.200†	249.4	0.133821	mg/L	0.0027505	0.133821	mg/L	0.0027505	2.06%
B 249.772	592.0	0.123559	mg/L	0.0017170	0.123559	mg/L	0.0017170	1.39%
Si 251.611	3300.5	2.91221	mg/L	0.020176	2.91221	mg/L	0.020176	0.69%

Sequence No.: 28
Sample ID: AD19195-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 51
Date Collected: 9/16/2020 3:09:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19195-002

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	35069.5	93.7	%	1.31				1.40%
Y 371.029	10740.3	91.1	%	1.18				1.29%
Ag 328.068†	2.5	0.0019337	mg/L	0.00026023	0.0019337	mg/L	0.00026023	13.46%
Al 308.215†	720.5	0.731250	mg/L	0.0118727	0.731250	mg/L	0.0118727	1.62%
As 188.979†	0.9	0.0164877	mg/L	0.02167136	0.0164877	mg/L	0.02167136	131.44%
Ba 233.527†	2027.5	0.334414	mg/L	0.0030402	0.334414	mg/L	0.0030402	0.91%
Be 313.107†	32.9	-0.0004264	mg/L	0.00003905	-0.0004264	mg/L	0.00003905	9.16%
Ca 315.887†	63876.6	31.5201	mg/L	0.12344	31.5201	mg/L	0.12344	0.39%
Cd 228.802†	15.1	0.0135542	mg/L	0.00031592	0.0135542	mg/L	0.00031592	2.33%
Co 228.616†	12.5	0.0101427	mg/L	0.00158088	0.0101427	mg/L	0.00158088	15.59%
Cr 267.716†	9.2	0.0117344	mg/L	0.00067438	0.0117344	mg/L	0.00067438	5.75%
Cu 327.393†	53.7	-0.0042112	mg/L	0.00072407	-0.0042112	mg/L	0.00072407	17.19%
Fe 273.955†	207.3	0.545157	mg/L	0.0094588	0.545157	mg/L	0.0094588	1.74%
K 404.721†	17.1	-2.69059	mg/L	0.239956	-2.69059	mg/L	0.239956	8.92%
Mg 279.077†	2215.6	3.68832	mg/L	0.034446	3.68832	mg/L	0.034446	0.93%
Mn 257.610†	4231.8	0.248371	mg/L	0.0011573	0.248371	mg/L	0.0011573	0.47%
Mo 202.031†	1.1	0.0036771	mg/L	0.00053103	0.0036771	mg/L	0.00053103	14.44%
Na 330.237†	54430.8	1672.32	mg/L	14.560	1672.32	mg/L	14.560	0.87%
Ni 231.604†	118.7	0.0681983	mg/L	0.00051819	0.0681983	mg/L	0.00051819	0.76%
Pb 220.353†	20.0	0.0592453	mg/L	0.00108697	0.0592453	mg/L	0.00108697	1.83%
Sb 206.836†	0.3	-0.0004725	mg/L	0.00865981	-0.0004725	mg/L	0.00865981	>999.9%
Se 196.026†	1.2	0.0172196	mg/L	0.00780286	0.0172196	mg/L	0.00780286	45.31%
Sn 189.927†	-1.3	-0.0060375	mg/L	0.00157818	-0.0060375	mg/L	0.00157818	26.14%
Ti 334.940†	257.6	0.0111090	mg/L	0.00038108	0.0111090	mg/L	0.00038108	3.43%
Tl 190.801†	0.8	0.0000399	mg/L	0.00183977	0.0000399	mg/L	0.00183977	>999.9%
V 290.880†	31.6	-0.0072905	mg/L	0.00126020	-0.0072905	mg/L	0.00126020	17.29%
Zn 206.200†	418.0	0.222295	mg/L	0.0034569	0.222295	mg/L	0.0034569	1.56%
B 249.772	373.6	0.0829593	mg/L	0.00132631	0.0829593	mg/L	0.00132631	1.60%
Si 251.611	2734.3	2.27664	mg/L	0.019914	2.27664	mg/L	0.019914	0.87%

Sequence No.: 29
Sample ID: AD19188-005
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 52
Date Collected: 9/16/2020 3:13:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19188-005

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34631.3	92.5	%	0.40				0.44%
Y 371.029	10749.9	91.2	%	0.41				0.45%
Ag 328.068†	2.3	0.0018404	mg/L	0.00035806	0.0018404	mg/L	0.00035806	19.46%
Al 308.215†	296.0	0.279795	mg/L	0.0032321	0.279795	mg/L	0.0032321	1.16%
As 188.979†	-0.1	-0.0002884	mg/L	0.02455873	-0.0002884	mg/L	0.02455873	>999.9%
Ba 233.527†	1408.5	0.230252	mg/L	0.0016347	0.230252	mg/L	0.0016347	0.71%
Be 313.107†	-16.9	-0.0007375	mg/L	0.00003223	-0.0007375	mg/L	0.00003223	4.37%
Ca 315.887†	28535.3	14.0749	mg/L	0.09596	14.0749	mg/L	0.09596	0.68%
Cd 228.802†	0.8	0.0048222	mg/L	0.00024507	0.0048222	mg/L	0.00024507	5.08%
Co 228.616†	3.5	0.0038512	mg/L	0.00069120	0.0038512	mg/L	0.00069120	17.95%
Cr 267.716†	11.3	0.0122195	mg/L	0.00077361	0.0122195	mg/L	0.00077361	6.33%
Cu 327.393†	3.7	-0.0122037	mg/L	0.00066168	-0.0122037	mg/L	0.00066168	5.42%
Fe 273.955†	9.8	-0.0983609	mg/L	0.00635121	-0.0983609	mg/L	0.00635121	6.46%
K 404.721†	27.8	4.94479	mg/L	0.463998	4.94479	mg/L	0.463998	9.38%
Mg 279.077†	816.0	1.40178	mg/L	0.008345	1.40178	mg/L	0.008345	0.60%
Mn 257.610†	2615.4	0.151388	mg/L	0.0007080	0.151388	mg/L	0.0007080	0.47%
Mo 202.031†	0.8	0.0032761	mg/L	0.00282519	0.0032761	mg/L	0.00282519	86.24%
Na 330.237†	58863.9	1808.47	mg/L	17.806	1808.47	mg/L	17.806	0.98%
Ni 231.604†	13.3	0.0075832	mg/L	0.00150588	0.0075832	mg/L	0.00150588	19.86%
Pb 220.353†	-0.8	-0.0026675	mg/L	0.00517677	-0.0026675	mg/L	0.00517677	194.07%
Sb 206.836†	2.0	0.0164903	mg/L	0.02161653	0.0164903	mg/L	0.02161653	131.09%
Se 196.026†	-0.4	0.0040836	mg/L	0.00262928	0.0040836	mg/L	0.00262928	64.39%
Sn 189.927†	0.7	0.0011395	mg/L	0.00313909	0.0011395	mg/L	0.00313909	275.48%
Ti 334.940†	7.7	-0.0051046	mg/L	0.00007876	-0.0051046	mg/L	0.00007876	1.54%
Tl 190.801†	2.6	0.0164312	mg/L	0.01386710	0.0164312	mg/L	0.01386710	84.40%
V 290.880†	13.8	-0.0129799	mg/L	0.00037619	-0.0129799	mg/L	0.00037619	2.90%
Zn 206.200†	20.7	0.0137452	mg/L	0.00047120	0.0137452	mg/L	0.00047120	3.43%
B 249.772	43.1	-0.0094377	mg/L	0.00007136	-0.0094377	mg/L	0.00007136	0.76%
Si 251.611	1210.8	1.01982	mg/L	0.005185	1.01982	mg/L	0.005185	0.51%

Sequence No.: 30
Sample ID: AD19214-015
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 54
Date Collected: 9/16/2020 3:17:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19214-015

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34299.9	91.6	%	1.38				1.50%
Y 371.029	10298.9	87.4	%	1.51				1.72%
Ag 328.068†	22.9	0.0040971	mg/L	0.00117850	0.0040971	mg/L	0.00117850	28.76%
Al 308.215†	408.8	0.400439	mg/L	0.0038427	0.400439	mg/L	0.0038427	0.96%
As 188.979†	1.9	0.0331707	mg/L	0.01205877	0.0331707	mg/L	0.01205877	36.35%
Ba 233.527†	4427.5	0.738275	mg/L	0.0012275	0.738275	mg/L	0.0012275	0.17%
Be 313.107†	-45.9	-0.0009191	mg/L	0.00002483	-0.0009191	mg/L	0.00002483	2.70%
Ca 315.887†	314153.8	155.062	mg/L	1.1998	155.062	mg/L	1.1998	0.77%
Cd 228.802†	7.7	0.0090531	mg/L	0.00045990	0.0090531	mg/L	0.00045990	5.08%
Co 228.616†	18.5	0.0143574	mg/L	0.00067799	0.0143574	mg/L	0.00067799	4.72%
Cr 267.716†	5.6	0.0109178	mg/L	0.00072886	0.0109178	mg/L	0.00072886	6.68%
Cu 327.393†	356.8	0.0437674	mg/L	0.00022603	0.0437674	mg/L	0.00022603	0.52%
Fe 273.955†	60.7	0.0674000	mg/L	0.01169797	0.0674000	mg/L	0.01169797	17.36%
K 404.721†	18.9	2.57031	mg/L	1.091436	2.57031	mg/L	1.091436	42.46%
Mg 279.077†	5413.6	8.91240	mg/L	0.047835	8.91240	mg/L	0.047835	0.54%
Mn 257.610†	9744.3	0.579116	mg/L	0.0008895	0.579116	mg/L	0.0008895	0.15%
Mo 202.031†	0.9	0.0034596	mg/L	0.00232351	0.0034596	mg/L	0.00232351	67.16%
Na 330.237†	56946.7	1749.59	mg/L	3.285	1749.59	mg/L	3.285	0.19%
Ni 231.604†	35.7	0.0204681	mg/L	0.00227026	0.0204681	mg/L	0.00227026	11.09%
Pb 220.353†	73.5	0.218502	mg/L	0.0076561	0.218502	mg/L	0.0076561	3.50%
Sb 206.836†	2.5	0.0210439	mg/L	0.00598837	0.0210439	mg/L	0.00598837	28.46%
Se 196.026†	-0.9	0.0122304	mg/L	0.00407917	0.0122304	mg/L	0.00407917	33.35%
Sn 189.927†	-4.8	-0.0190081	mg/L	0.00219468	-0.0190081	mg/L	0.00219468	11.55%
Ti 334.940†	83.5	0.0101295	mg/L	0.00040240	0.0101295	mg/L	0.00040240	3.97%
Tl 190.801†	0.4	-0.0108691	mg/L	0.00416509	-0.0108691	mg/L	0.00416509	38.32%
V 290.880†	63.3	0.0029190	mg/L	0.00019800	0.0029190	mg/L	0.00019800	6.78%
Zn 206.200†	2756.2	1.44952	mg/L	0.010977	1.44952	mg/L	0.010977	0.76%
B 249.772	267.7	0.0623215	mg/L	0.00123003	0.0623215	mg/L	0.00123003	1.97%
Si 251.611	2806.5	2.39175	mg/L	0.041981	2.39175	mg/L	0.041981	1.76%

Sequence No.: 31
Sample ID: AD19214-025
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 55
Date Collected: 9/16/2020 3:21:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19214-025

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	35412.1	94.6	%	0.42				0.44%
Y 371.029	10751.4	91.2	%	0.33				0.36%
Ag 328.068†	1.1	0.0017990	mg/L	0.00077223	0.0017990	mg/L	0.00077223	42.93%
Al 308.215†	1040.0	1.07071	mg/L	0.015309	1.07071	mg/L	0.015309	1.43%
As 188.979†	0.5	0.0089652	mg/L	0.01258829	0.0089652	mg/L	0.01258829	140.41%
Ba 233.527†	4111.7	0.685134	mg/L	0.0022246	0.685134	mg/L	0.0022246	0.32%
Be 313.107†	-54.0	-0.0009700	mg/L	0.00000585	-0.0009700	mg/L	0.00000585	0.60%
Ca 315.887†	64234.8	31.6970	mg/L	0.06269	31.6970	mg/L	0.06269	0.20%
Cd 228.802†	3.5	0.0065153	mg/L	0.00105019	0.0065153	mg/L	0.00105019	16.12%
Co 228.616†	7.6	0.0066977	mg/L	0.00093603	0.0066977	mg/L	0.00093603	13.98%
Cr 267.716†	10.1	0.0119468	mg/L	0.00039839	0.0119468	mg/L	0.00039839	3.33%
Cu 327.393†	102.8	0.0035931	mg/L	0.00043595	0.0035931	mg/L	0.00043595	12.13%
Fe 273.955†	286.9	0.804384	mg/L	0.0053710	0.804384	mg/L	0.0053710	0.67%
K 404.721†	11.7	-5.84586	mg/L	0.505429	-5.84586	mg/L	0.505429	8.65%
Mg 279.077†	2189.5	3.64557	mg/L	0.031881	3.64557	mg/L	0.031881	0.87%
Mn 257.610†	3324.3	0.193922	mg/L	0.0009436	0.193922	mg/L	0.0009436	0.49%
Mo 202.031†	2.1	0.0048726	mg/L	0.00181004	0.0048726	mg/L	0.00181004	37.15%
Na 330.237†	50085.7	1538.87	mg/L	3.246	1538.87	mg/L	3.246	0.21%
Ni 231.604†	14.5	0.0082712	mg/L	0.00081593	0.0082712	mg/L	0.00081593	9.86%
Pb 220.353†	85.6	0.254708	mg/L	0.0028946	0.254708	mg/L	0.0028946	1.14%
Sb 206.836†	1.2	0.0084554	mg/L	0.00850950	0.0084554	mg/L	0.00850950	100.64%
Se 196.026†	1.7	0.0215972	mg/L	0.02200075	0.0215972	mg/L	0.02200075	101.87%
Sn 189.927†	-0.5	-0.0032863	mg/L	0.00127421	-0.0032863	mg/L	0.00127421	38.77%
Ti 334.940†	267.7	0.0117286	mg/L	0.00010245	0.0117286	mg/L	0.00010245	0.87%
Tl 190.801†	0.5	-0.0035042	mg/L	0.01387059	-0.0035042	mg/L	0.01387059	395.83%
V 290.880†	32.1	-0.0071407	mg/L	0.00115785	-0.0071407	mg/L	0.00115785	16.21%
Zn 206.200†	2081.8	1.09556	mg/L	0.010798	1.09556	mg/L	0.010798	0.99%
B 249.772	271.8	0.0600763	mg/L	0.00055747	0.0600763	mg/L	0.00055747	0.93%
Si 251.611	2470.2	2.06940	mg/L	0.008866	2.06940	mg/L	0.008866	0.43%

Sequence No.: 32
Sample ID: EF-V-334696
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 56
Date Collected: 9/16/2020 3:25:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF-V-334696

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	35988.7	96.1	%	0.32				0.33%
Y 371.029	10772.0	91.4	%	0.72				0.78%
Ag 328.068†	0.5	0.0016351	mg/L	0.00026835	0.0016351	mg/L	0.00026835	16.41%
Al 308.215†	8.0	-0.0266243	mg/L	0.00381784	-0.0266243	mg/L	0.00381784	14.34%
As 188.979†	-0.6	-0.0092237	mg/L	0.00995367	-0.0092237	mg/L	0.00995367	107.91%
Ba 233.527†	54.2	0.0023491	mg/L	0.00037589	0.0023491	mg/L	0.00037589	16.00%
Be 313.107†	-51.4	-0.0009533	mg/L	0.00002321	-0.0009533	mg/L	0.00002321	2.43%
Ca 315.887†	113.2	0.0451611	mg/L	0.00246187	0.0451611	mg/L	0.00246187	5.45%
Cd 228.802†	-0.7	0.0039510	mg/L	0.00102557	0.0039510	mg/L	0.00102557	25.96%
Co 228.616†	1.2	0.0021860	mg/L	0.00119818	0.0021860	mg/L	0.00119818	54.81%
Cr 267.716†	4.7	0.0106202	mg/L	0.00038189	0.0106202	mg/L	0.00038189	3.60%
Cu 327.393†	-16.2	-0.0153513	mg/L	0.00022231	-0.0153513	mg/L	0.00022231	1.45%
Fe 273.955†	5.6	-0.112091	mg/L	0.0036803	-0.112091	mg/L	0.0036803	3.28%
K 404.721†	-1.0	3.18967	mg/L	0.694698	3.18967	mg/L	0.694698	21.78%
Mg 279.077†	15.1	0.0934982	mg/L	0.00557423	0.0934982	mg/L	0.00557423	5.96%
Mn 257.610†	11.8	-0.0048271	mg/L	0.00024673	-0.0048271	mg/L	0.00024673	5.11%
Mo 202.031†	5.5	0.0088949	mg/L	0.00076982	0.0088949	mg/L	0.00076982	8.65%
Na 330.237†	57642.0	1770.95	mg/L	9.985	1770.95	mg/L	9.985	0.56%
Ni 231.604†	3.6	0.0019986	mg/L	0.00129572	0.0019986	mg/L	0.00129572	64.83%
Pb 220.353†	-0.8	-0.0027527	mg/L	0.00532761	-0.0027527	mg/L	0.00532761	193.54%
Sb 206.836†	1.2	0.0083813	mg/L	0.00493114	0.0083813	mg/L	0.00493114	58.84%
Se 196.026†	-0.0	0.0058702	mg/L	0.00655398	0.0058702	mg/L	0.00655398	111.65%
Sn 189.927†	2.8	0.0089228	mg/L	0.00638984	0.0089228	mg/L	0.00638984	71.61%
Ti 334.940†	9.1	-0.0060896	mg/L	0.00011460	-0.0060896	mg/L	0.00011460	1.88%
Tl 190.801†	0.8	0.0018852	mg/L	0.01192693	0.0018852	mg/L	0.01192693	632.66%
V 290.880†	4.6	-0.0159333	mg/L	0.00156562	-0.0159333	mg/L	0.00156562	9.83%
Zn 206.200†	13.2	0.0098378	mg/L	0.00075570	0.0098378	mg/L	0.00075570	7.68%
B 249.772	37.4	-0.0131903	mg/L	0.00077543	-0.0131903	mg/L	0.00077543	5.88%
Si 251.611	37.8	0.0493989	mg/L	0.00307486	0.0493989	mg/L	0.00307486	6.22%

Sequence No.: 33 **Autosampler Location: 6**
Sample ID: CCV V-334775 **Date Collected: 9/16/2020 3:29:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCV V-334775

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	38980.3	104	%	0.54				0.52%
Y 371.029	11487.5	97.5	%	0.76				0.78%
Ag 328.068†	907.2	0.100379	mg/L	0.0012358	0.100379	mg/L	0.0012358	1.23%
QC value within limits for Ag 328.068 Recovery = 100.38%								
Al 308.215†	4508.2	4.77326	mg/L	0.032112	4.77326	mg/L	0.032112	0.67%
QC value within limits for Al 308.215 Recovery = 95.47%								
As 188.979†	31.0	0.502034	mg/L	0.0392232	0.502034	mg/L	0.0392232	7.81%
QC value within limits for As 188.979 Recovery = 100.41%								
Ba 233.527†	2843.3	0.471703	mg/L	0.0019860	0.471703	mg/L	0.0019860	0.42%
QC value within limits for Ba 233.527 Recovery = 94.34%								
Be 313.107†	77885.1	0.486556	mg/L	0.0002587	0.486556	mg/L	0.0002587	0.05%
QC value within limits for Be 313.107 Recovery = 97.31%								
Ca 315.887†	98344.3	48.5342	mg/L	0.07906	48.5342	mg/L	0.07906	0.16%
QC value within limits for Ca 315.887 Recovery = 97.07%								
Cd 228.802†	750.4	0.462052	mg/L	0.0051842	0.462052	mg/L	0.0051842	1.12%
QC value within limits for Cd 228.802 Recovery = 92.41%								
Co 228.616†	682.4	0.480781	mg/L	0.0010704	0.480781	mg/L	0.0010704	0.22%
QC value within limits for Co 228.616 Recovery = 96.16%								
Cr 267.716†	1899.1	0.466794	mg/L	0.0032145	0.466794	mg/L	0.0032145	0.69%
QC value within limits for Cr 267.716 Recovery = 93.36%								
Cu 327.393†	3330.0	0.515401	mg/L	0.0034781	0.515401	mg/L	0.0034781	0.67%
QC value within limits for Cu 327.393 Recovery = 103.08%								
Fe 273.955†	1532.0	4.85977	mg/L	0.040233	4.85977	mg/L	0.040233	0.83%
QC value within limits for Fe 273.955 Recovery = 97.20%								
K 404.721†	678.9	-5.33844	mg/L	0.301994	-5.33844	mg/L	0.301994	5.66%
QC value less than the lower limit for K 404.721 Recovery = -10.68%								
Mg 279.077†	29635.9	48.4820	mg/L	0.11544	48.4820	mg/L	0.11544	0.24%
QC value within limits for Mg 279.077 Recovery = 96.96%								
Mn 257.610†	8038.7	0.476782	mg/L	0.0012703	0.476782	mg/L	0.0012703	0.27%
QC value within limits for Mn 257.610 Recovery = 95.36%								
Mo 202.031†	392.6	0.470924	mg/L	0.0034512	0.470924	mg/L	0.0034512	0.73%
QC value within limits for Mo 202.031 Recovery = 94.18%								
Na 330.237†	1595.7	49.5702	mg/L	0.12776	49.5702	mg/L	0.12776	0.26%
QC value within limits for Na 330.237 Recovery = 99.14%								
Ni 231.604†	815.5	0.470431	mg/L	0.0028088	0.470431	mg/L	0.0028088	0.60%
QC value within limits for Ni 231.604 Recovery = 94.09%								
Pb 220.353†	163.3	0.486955	mg/L	0.0039109	0.486955	mg/L	0.0039109	0.80%
QC value within limits for Pb 220.353 Recovery = 97.39%								
Sb 206.836†	49.6	0.494324	mg/L	0.0112617	0.494324	mg/L	0.0112617	2.28%
QC value within limits for Sb 206.836 Recovery = 98.86%								
Se 196.026†	69.1	0.505528	mg/L	0.0126657	0.505528	mg/L	0.0126657	2.51%
QC value within limits for Se 196.026 Recovery = 101.11%								
Sn 189.927†	129.9	0.471988	mg/L	0.0057232	0.471988	mg/L	0.0057232	1.21%
QC value within limits for Sn 189.927 Recovery = 94.40%								
Ti 334.940†	7921.0	0.469001	mg/L	0.0006730	0.469001	mg/L	0.0006730	0.14%
QC value within limits for Ti 334.940 Recovery = 93.80%								
Tl 190.801†	55.3	0.467014	mg/L	0.0127527	0.467014	mg/L	0.0127527	2.73%
QC value within limits for Tl 190.801 Recovery = 93.40%								
V 290.880†	1747.0	0.531075	mg/L	0.0041820	0.531075	mg/L	0.0041820	0.79%
QC value within limits for V 290.880 Recovery = 106.21%								
Zn 206.200†	924.3	0.488052	mg/L	0.0015012	0.488052	mg/L	0.0015012	0.31%
QC value within limits for Zn 206.200 Recovery = 97.61%								
B 249.772	2015.5	0.549295	mg/L	0.0013870	0.549295	mg/L	0.0013870	0.25%
QC value within limits for B 249.772 Recovery = 109.86%								
Si 251.611	6439.2	5.32961	mg/L	0.038375	5.32961	mg/L	0.038375	0.72%
QC value within limits for Si 251.611 Recovery = 106.59%								

QC Failed. Continue with analysis.

Sequence No.: 34 **Autosampler Location: 2**
Sample ID: CCB V-333667 **Date Collected: 9/16/2020 3:33:43 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	41624.2	111	%	0.94				0.85%
Y 371.029	12584.3	107	%	1.26				1.18%
Ag 328.068†	1.4	0.0017036	mg/L	0.00057801	0.0017036	mg/L	0.00057801	33.93%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-12.0	-0.0478581	mg/L	0.00257338	-0.0478581	mg/L	0.00257338	5.38%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.5	0.0090614	mg/L	0.00671166	0.0090614	mg/L	0.00671166	74.07%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	1.0	-0.0065985	mg/L	0.00020317	-0.0065985	mg/L	0.00020317	3.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	15.0	-0.0005381	mg/L	0.00004227	-0.0005381	mg/L	0.00004227	7.85%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	25.8	0.0019939	mg/L	0.00094038	0.0019939	mg/L	0.00094038	47.16%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-1.1	0.0036533	mg/L	0.00136797	0.0036533	mg/L	0.00136797	37.44%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.6	0.0017664	mg/L	0.00092284	0.0017664	mg/L	0.00092284	52.24%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-2.9	0.0087843	mg/L	0.00052813	0.0087843	mg/L	0.00052813	6.01%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-6.9	-0.0138867	mg/L	0.00058148	-0.0138867	mg/L	0.00058148	4.19%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.7	-0.135888	mg/L	0.0058573	-0.135888	mg/L	0.0058573	4.31%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-10.3	2.83047	mg/L	0.404847	2.83047	mg/L	0.404847	14.30%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	3.8	0.0750397	mg/L	0.00442392	0.0750397	mg/L	0.00442392	5.90%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-1.8	-0.0056420	mg/L	0.00001611	-0.0056420	mg/L	0.00001611	0.29%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.2	0.0020555	mg/L	0.00057395	0.0020555	mg/L	0.00057395	27.92%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	2.9	0.649101	mg/L	0.0022744	0.649101	mg/L	0.0022744	0.35%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-4.1	-0.0024577	mg/L	0.00133323	-0.0024577	mg/L	0.00133323	54.25%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.1	-0.0035594	mg/L	0.00381348	-0.0035594	mg/L	0.00381348	107.14%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.1	0.0077752	mg/L	0.00364607	0.0077752	mg/L	0.00364607	46.89%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.3	-0.0030946	mg/L	0.01245022	-0.0030946	mg/L	0.01245022	402.33%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.7	0.0049714	mg/L	0.00147682	0.0049714	mg/L	0.00147682	29.71%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	1.7	-0.0065284	mg/L	0.00020023	-0.0065284	mg/L	0.00020023	3.07%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.5	-0.0006490	mg/L	0.00329168	-0.0006490	mg/L	0.00329168	507.21%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-9.4	-0.0202992	mg/L	0.00047596	-0.0202992	mg/L	0.00047596	2.34%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-0.0	0.0028966	mg/L	0.00023386	0.0028966	mg/L	0.00023386	8.07%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	2.7	-0.0057860	mg/L	0.00095215	-0.0057860	mg/L	0.00095215	16.46%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	3.6	-0.0384451	mg/L	0.00121204	-0.0384451	mg/L	0.00121204	3.15%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 35
Sample ID: MB 85281 (1)
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 57
Date Collected: 9/16/2020 3:37:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: MB 85281 (1)

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	41738.8	111	%	0.63				0.57%
Y 371.029	12541.9	106	%	0.87				0.82%
Ag 328.068†	3.0	0.0018756	mg/L	0.00030603	0.0018756	mg/L	0.00030603	16.32%
Al 308.215†	-8.7	-0.0444288	mg/L	0.00539591	-0.0444288	mg/L	0.00539591	12.15%
As 188.979†	0.2	0.0048565	mg/L	0.01275347	0.0048565	mg/L	0.01275347	262.60%
Ba 233.527†	1.6	-0.0065050	mg/L	0.00004722	-0.0065050	mg/L	0.00004722	0.73%
Be 313.107†	15.6	-0.0005344	mg/L	0.00003217	-0.0005344	mg/L	0.00003217	6.02%
Ca 315.887†	88.2	0.0327936	mg/L	0.00184017	0.0327936	mg/L	0.00184017	5.61%
Cd 228.802†	-1.3	0.0035599	mg/L	0.00075843	0.0035599	mg/L	0.00075843	21.30%
Co 228.616†	1.1	0.0021467	mg/L	0.00058743	0.0021467	mg/L	0.00058743	27.36%
Cr 267.716†	-1.8	0.0090393	mg/L	0.00045051	0.0090393	mg/L	0.00045051	4.98%
Cu 327.393†	9.6	-0.0112691	mg/L	0.00019757	-0.0112691	mg/L	0.00019757	1.75%
Fe 273.955†	4.7	-0.114748	mg/L	0.0032097	-0.114748	mg/L	0.0032097	2.80%
K 404.721†	-8.1	2.74444	mg/L	0.697367	2.74444	mg/L	0.697367	25.41%
Mg 279.077†	4.9	0.0768054	mg/L	0.00129002	0.0768054	mg/L	0.00129002	1.68%
Mn 257.610†	8.5	-0.0050226	mg/L	0.00003731	-0.0050226	mg/L	0.00003731	0.74%
Mo 202.031†	0.3	0.0026392	mg/L	0.00052189	0.0026392	mg/L	0.00052189	19.77%
Na 330.237†	-1.7	0.509516	mg/L	0.1814386	0.509516	mg/L	0.1814386	35.61%
Ni 231.604†	-3.1	-0.0018860	mg/L	0.00151957	-0.0018860	mg/L	0.00151957	80.57%
Pb 220.353†	-0.3	-0.0012046	mg/L	0.00246516	-0.0012046	mg/L	0.00246516	204.64%
Sb 206.836†	0.3	-0.0004495	mg/L	0.01015871	-0.0004495	mg/L	0.01015871	>999.9%
Se 196.026†	-1.1	-0.0015631	mg/L	0.00961745	-0.0015631	mg/L	0.00961745	615.30%
Sn 189.927†	1.3	0.0032537	mg/L	0.00210006	0.0032537	mg/L	0.00210006	64.54%
Ti 334.940†	2.0	-0.0065109	mg/L	0.00029706	-0.0065109	mg/L	0.00029706	4.56%
Tl 190.801†	-0.1	-0.0058361	mg/L	0.00769263	-0.0058361	mg/L	0.00769263	131.81%
V 290.880†	-7.9	-0.0198366	mg/L	0.00062350	-0.0198366	mg/L	0.00062350	3.14%
Zn 206.200†	3.5	0.0047156	mg/L	0.00009245	0.0047156	mg/L	0.00009245	1.96%
B 249.772	-1.4	-0.0069071	mg/L	0.00032246	-0.0069071	mg/L	0.00032246	4.67%
Si 251.611	20.6	-0.0243831	mg/L	0.00080547	-0.0243831	mg/L	0.00080547	3.30%

Sequence No.: 36
Sample ID: LCSW 85281
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 58
Date Collected: 9/16/2020 3:41:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LCSW 85281

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	38835.0	104	%	0.48				0.46%
Y 371.029	11617.2	98.6	%	0.35				0.36%
Ag 328.068†	850.0	0.0942913	mg/L	0.00080136	0.0942913	mg/L	0.00080136	0.85%
Al 308.215†	4429.4	4.68897	mg/L	0.018097	4.68897	mg/L	0.018097	0.39%
As 188.979†	27.7	0.445433	mg/L	0.0098427	0.445433	mg/L	0.0098427	2.21%
Ba 233.527†	2852.8	0.473293	mg/L	0.0010703	0.473293	mg/L	0.0010703	0.23%
Be 313.107†	76834.7	0.479986	mg/L	0.0011600	0.479986	mg/L	0.0011600	0.24%
Ca 315.887†	95363.6	47.0628	mg/L	0.14903	47.0628	mg/L	0.14903	0.32%
Cd 228.802†	729.0	0.448994	mg/L	0.0053319	0.448994	mg/L	0.0053319	1.19%
Co 228.616†	676.4	0.476600	mg/L	0.0006139	0.476600	mg/L	0.0006139	0.13%
Cr 267.716†	1855.4	0.456298	mg/L	0.0020990	0.456298	mg/L	0.0020990	0.46%
Cu 327.393†	3284.5	0.508178	mg/L	0.0034044	0.508178	mg/L	0.0034044	0.67%
Fe 273.955†	1525.1	4.83745	mg/L	0.067104	4.83745	mg/L	0.067104	1.39%
K 404.721†	235.0	-34.4992	mg/L	0.78956	-34.4992	mg/L	0.78956	2.29%
Mg 279.077†	28808.7	47.1306	mg/L	0.10811	47.1306	mg/L	0.10811	0.23%
Mn 257.610†	7938.1	0.470745	mg/L	0.0005212	0.470745	mg/L	0.0005212	0.11%
Mo 202.031†	390.7	0.468696	mg/L	0.0024991	0.468696	mg/L	0.0024991	0.53%
Na 330.237†	1512.6	47.0181	mg/L	0.30541	47.0181	mg/L	0.30541	0.65%
Ni 231.604†	796.7	0.459621	mg/L	0.0042998	0.459621	mg/L	0.0042998	0.94%
Pb 220.353†	158.3	0.471897	mg/L	0.0103780	0.471897	mg/L	0.0103780	2.20%
Sb 206.836†	48.5	0.483492	mg/L	0.0078417	0.483492	mg/L	0.0078417	1.62%
Se 196.026†	64.8	0.475114	mg/L	0.0041682	0.475114	mg/L	0.0041682	0.88%
Sn 189.927†	125.3	0.454972	mg/L	0.0031798	0.454972	mg/L	0.0031798	0.70%
Ti 334.940†	7802.2	0.461808	mg/L	0.0023899	0.461808	mg/L	0.0023899	0.52%
Tl 190.801†	54.4	0.459606	mg/L	0.0099500	0.459606	mg/L	0.0099500	2.16%
V 290.880†	1711.2	0.519810	mg/L	0.0031596	0.519810	mg/L	0.0031596	0.61%
Zn 206.200†	892.8	0.471521	mg/L	0.0031306	0.471521	mg/L	0.0031306	0.66%
B 249.772	1924.0	0.517571	mg/L	0.0011323	0.517571	mg/L	0.0011323	0.22%
Si 251.611	724.5	0.651653	mg/L	0.0042000	0.651653	mg/L	0.0042000	0.64%

Sequence No.: 37
Sample ID: LCSW MR 85281
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 59
Date Collected: 9/16/2020 3:45:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LCSW MR 85281

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	38765.9	104	%	0.28				0.27%
Y 371.029	11532.2	97.8	%	0.70				0.72%
Ag 328.068†	847.1	0.0939577	mg/L	0.00105648	0.0939577	mg/L	0.00105648	1.12%
Al 308.215†	4398.5	4.65612	mg/L	0.007931	4.65612	mg/L	0.007931	0.17%
As 188.979†	26.0	0.417997	mg/L	0.0090986	0.417997	mg/L	0.0090986	2.18%
Ba 233.527†	2835.6	0.470399	mg/L	0.0015649	0.470399	mg/L	0.0015649	0.33%
Be 313.107†	76257.8	0.476377	mg/L	0.0015495	0.476377	mg/L	0.0015495	0.33%
Ca 315.887†	94467.5	46.6205	mg/L	0.32860	46.6205	mg/L	0.32860	0.70%
Cd 228.802†	722.5	0.445014	mg/L	0.0026970	0.445014	mg/L	0.0026970	0.61%
Co 228.616†	669.4	0.471696	mg/L	0.0036112	0.471696	mg/L	0.0036112	0.77%
Cr 267.716†	1850.7	0.455155	mg/L	0.0035483	0.455155	mg/L	0.0035483	0.78%
Cu 327.393†	3249.1	0.502554	mg/L	0.0027376	0.502554	mg/L	0.0027376	0.54%
Fe 273.955†	1474.8	4.67352	mg/L	0.028499	4.67352	mg/L	0.028499	0.61%
K 404.721†	229.0	-33.1316	mg/L	0.26627	-33.1316	mg/L	0.26627	0.80%
Mg 279.077†	28582.1	46.7604	mg/L	0.21426	46.7604	mg/L	0.21426	0.46%
Mn 257.610†	7860.5	0.466089	mg/L	0.0038884	0.466089	mg/L	0.0038884	0.83%
Mo 202.031†	386.6	0.463796	mg/L	0.0049532	0.463796	mg/L	0.0049532	1.07%
Na 330.237†	1488.1	46.2673	mg/L	0.03794	46.2673	mg/L	0.03794	0.08%
Ni 231.604†	789.2	0.455285	mg/L	0.0012518	0.455285	mg/L	0.0012518	0.27%
Pb 220.353†	159.3	0.474971	mg/L	0.0008964	0.474971	mg/L	0.0008964	0.19%
Sb 206.836†	49.1	0.488945	mg/L	0.0192868	0.488945	mg/L	0.0192868	3.94%
Se 196.026†	64.6	0.473516	mg/L	0.0181212	0.473516	mg/L	0.0181212	3.83%
Sn 189.927†	126.0	0.457766	mg/L	0.0092811	0.457766	mg/L	0.0092811	2.03%
Ti 334.940†	7734.1	0.457716	mg/L	0.0043667	0.457716	mg/L	0.0043667	0.95%
Tl 190.801†	55.7	0.470568	mg/L	0.0076563	0.470568	mg/L	0.0076563	1.63%
V 290.880†	1700.3	0.516400	mg/L	0.0026693	0.516400	mg/L	0.0026693	0.52%
Zn 206.200†	889.6	0.469800	mg/L	0.0037027	0.469800	mg/L	0.0037027	0.79%
B 249.772	1901.4	0.511839	mg/L	0.0023004	0.511839	mg/L	0.0023004	0.45%
Si 251.611	672.5	0.608020	mg/L	0.0019837	0.608020	mg/L	0.0019837	0.33%

Sequence No.: 38
Sample ID: AD19178-001
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 60
Date Collected: 9/16/2020 3:49:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	35798.6	95.6	%	0.26				0.27%
Y 371.029	10594.9	89.9	%	0.80				0.89%
Ag 328.068†	40.6	0.0062499	mg/L	0.00040787	0.0062499	mg/L	0.00040787	6.53%
Al 308.215†	38.1	0.0095848	mg/L	0.00161881	0.0095848	mg/L	0.00161881	16.89%
As 188.979†	1.3	0.0226448	mg/L	0.01525485	0.0226448	mg/L	0.01525485	67.37%
Ba 233.527†	2740.8	0.454445	mg/L	0.0010176	0.454445	mg/L	0.0010176	0.22%
Be 313.107†	-45.4	-0.0009160	mg/L	0.00005426	-0.0009160	mg/L	0.00005426	5.92%
Ca 315.887†	528501.0	260.869	mg/L	1.2598	260.869	mg/L	1.2598	0.48%
Cd 228.802†	2.7	0.0059831	mg/L	0.00035688	0.0059831	mg/L	0.00035688	5.96%
Co 228.616†	1.7	0.0025875	mg/L	0.00124641	0.0025875	mg/L	0.00124641	48.17%
Cr 267.716†	6.9	0.0115034	mg/L	0.00198176	0.0115034	mg/L	0.00198176	17.23%
Cu 327.393†	3.2	-0.0122878	mg/L	0.00095136	-0.0122878	mg/L	0.00095136	7.74%
Fe 273.955†	15.1	-0.0810962	mg/L	0.00624054	-0.0810962	mg/L	0.00624054	7.70%
K 404.721†	28.2	4.78682	mg/L	0.433021	4.78682	mg/L	0.433021	9.05%
Mg 279.077†	42505.1	69.5051	mg/L	0.20920	69.5051	mg/L	0.20920	0.30%
Mn 257.610†	10120.0	0.601661	mg/L	0.0008787	0.601661	mg/L	0.0008787	0.15%
Mo 202.031†	2.6	0.0053937	mg/L	0.00114894	0.0053937	mg/L	0.00114894	21.30%
Na 330.237†	52336.3	1607.99	mg/L	11.448	1607.99	mg/L	11.448	0.71%
Ni 231.604†	14.6	0.0083277	mg/L	0.00098484	0.0083277	mg/L	0.00098484	11.83%
Pb 220.353†	0.5	0.0011024	mg/L	0.00581584	0.0011024	mg/L	0.00581584	527.57%
Sb 206.836†	0.3	-0.0001178	mg/L	0.00497850	-0.0001178	mg/L	0.00497850	>999.9%
Se 196.026†	1.8	0.0418495	mg/L	0.00826520	0.0418495	mg/L	0.00826520	19.75%
Sn 189.927†	-8.6	-0.0329539	mg/L	0.00417968	-0.0329539	mg/L	0.00417968	12.68%
Ti 334.940†	-66.7	0.0092180	mg/L	0.00039623	0.0092180	mg/L	0.00039623	4.30%
Tl 190.801†	0.1	-0.0189030	mg/L	0.01203921	-0.0189030	mg/L	0.01203921	63.69%
V 290.880†	249.2	0.0645380	mg/L	0.00278683	0.0645380	mg/L	0.00278683	4.32%
Zn 206.200†	97.0	0.0538364	mg/L	0.00041779	0.0538364	mg/L	0.00041779	0.78%
B 249.772	420.1	0.0988873	mg/L	0.00101410	0.0988873	mg/L	0.00101410	1.03%
Si 251.611	2617.6	2.24563	mg/L	0.013682	2.24563	mg/L	0.013682	0.61%

Sequence No.: 39
Sample ID: AD19178-001 MR
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 61
Date Collected: 9/16/2020 3:53:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-001 MR

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	35446.3	94.7	%	0.34				0.36%
Y 371.029	10456.8	88.7	%	0.18				0.21%
Ag 328.068†	41.3	0.0063252	mg/L	0.00018395	0.0063252	mg/L	0.00018395	2.91%
Al 308.215†	45.3	0.0172659	mg/L	0.00257663	0.0172659	mg/L	0.00257663	14.92%
As 188.979†	-0.1	-0.0026654	mg/L	0.01239284	-0.0026654	mg/L	0.01239284	464.95%
Ba 233.527†	2791.9	0.463040	mg/L	0.0006202	0.463040	mg/L	0.0006202	0.13%
Be 313.107†	-46.6	-0.0009233	mg/L	0.00004198	-0.0009233	mg/L	0.00004198	4.55%
Ca 315.887†	538239.8	265.676	mg/L	0.3074	265.676	mg/L	0.3074	0.12%
Cd 228.802†	1.8	0.0054753	mg/L	0.00041339	0.0054753	mg/L	0.00041339	7.55%
Co 228.616†	0.6	0.0017936	mg/L	0.00057527	0.0017936	mg/L	0.00057527	32.07%
Cr 267.716†	6.9	0.0114954	mg/L	0.00092979	0.0114954	mg/L	0.00092979	8.09%
Cu 327.393†	4.1	-0.0121464	mg/L	0.00028719	-0.0121464	mg/L	0.00028719	2.36%
Fe 273.955†	12.1	-0.0908705	mg/L	0.00646783	-0.0908705	mg/L	0.00646783	7.12%
K 404.721†	29.3	4.96702	mg/L	0.541438	4.96702	mg/L	0.541438	10.90%
Mg 279.077†	43492.7	71.1184	mg/L	0.16624	71.1184	mg/L	0.16624	0.23%
Mn 257.610†	10314.0	0.613302	mg/L	0.0009530	0.613302	mg/L	0.0009530	0.16%
Mo 202.031†	1.8	0.0044586	mg/L	0.00069715	0.0044586	mg/L	0.00069715	15.64%
Na 330.237†	52966.8	1627.35	mg/L	7.800	1627.35	mg/L	7.800	0.48%
Ni 231.604†	16.4	0.0093710	mg/L	0.00071604	0.0093710	mg/L	0.00071604	7.64%
Pb 220.353†	2.4	0.0067643	mg/L	0.00204868	0.0067643	mg/L	0.00204868	30.29%
Sb 206.836†	0.8	0.0047796	mg/L	0.02552349	0.0047796	mg/L	0.02552349	534.01%
Se 196.026†	0.1	0.0303879	mg/L	0.00804760	0.0303879	mg/L	0.00804760	26.48%
Sn 189.927†	-6.9	-0.0266696	mg/L	0.00133937	-0.0266696	mg/L	0.00133937	5.02%
Ti 334.940†	-72.8	0.0092201	mg/L	0.00007086	0.0092201	mg/L	0.00007086	0.77%
Tl 190.801†	0.6	-0.0152739	mg/L	0.01493727	-0.0152739	mg/L	0.01493727	97.80%
V 290.880†	252.4	0.0656047	mg/L	0.00257531	0.0656047	mg/L	0.00257531	3.93%
Zn 206.200†	96.9	0.0537527	mg/L	0.00079033	0.0537527	mg/L	0.00079033	1.47%
B 249.772	419.0	0.0984440	mg/L	0.00057625	0.0984440	mg/L	0.00057625	0.59%
Si 251.611	2622.7	2.25190	mg/L	0.012037	2.25190	mg/L	0.012037	0.53%

Sequence No.: 40
Sample ID: AD19178-001 MS1
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 62
Date Collected: 9/16/2020 3:58:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-001 MS1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	35025.1	93.5	%	0.48				0.51%
Y 371.029	10261.2	87.1	%	0.72				0.82%
Ag 328.068†	936.0	0.103448	mg/L	0.0002920	0.103448	mg/L	0.0002920	0.28%
Al 308.215†	4387.2	4.64595	mg/L	0.002250	4.64595	mg/L	0.002250	0.05%
As 188.979†	29.0	0.468091	mg/L	0.0124244	0.468091	mg/L	0.0124244	2.65%
Ba 233.527†	5364.5	0.895962	mg/L	0.0025868	0.895962	mg/L	0.0025868	0.29%
Be 313.107†	72439.5	0.452493	mg/L	0.0036627	0.452493	mg/L	0.0036627	0.81%
Ca 315.887†	631851.6	311.885	mg/L	2.3762	311.885	mg/L	2.3762	0.76%
Cd 228.802†	738.5	0.454753	mg/L	0.0010615	0.454753	mg/L	0.0010615	0.23%
Co 228.616†	624.4	0.440039	mg/L	0.0018577	0.440039	mg/L	0.0018577	0.42%
Cr 267.716†	1782.4	0.438920	mg/L	0.0011118	0.438920	mg/L	0.0011118	0.25%
Cu 327.393†	3333.9	0.515963	mg/L	0.0008970	0.515963	mg/L	0.0008970	0.17%
Fe 273.955†	1351.0	4.27022	mg/L	0.037736	4.27022	mg/L	0.037736	0.88%
K 404.721†	368.2	-19.5639	mg/L	0.54442	-19.5639	mg/L	0.54442	2.78%
Mg 279.077†	68973.9	112.744	mg/L	0.8610	112.744	mg/L	0.8610	0.76%
Mn 257.610†	18733.2	1.11845	mg/L	0.003368	1.11845	mg/L	0.003368	0.30%
Mo 202.031†	375.7	0.450775	mg/L	0.0023635	0.450775	mg/L	0.0023635	0.52%
Na 330.237†	58322.8	1791.86	mg/L	7.075	1791.86	mg/L	7.075	0.39%
Ni 231.604†	748.3	0.431742	mg/L	0.0025133	0.431742	mg/L	0.0025133	0.58%
Pb 220.353†	145.9	0.435018	mg/L	0.0087268	0.435018	mg/L	0.0087268	2.01%
Sb 206.836†	51.4	0.511725	mg/L	0.0026759	0.511725	mg/L	0.0026759	0.52%
Se 196.026†	76.7	0.582981	mg/L	0.0103328	0.582981	mg/L	0.0103328	1.77%
Sn 189.927†	108.7	0.394470	mg/L	0.0049237	0.394470	mg/L	0.0049237	1.25%
Ti 334.940†	7332.7	0.453961	mg/L	0.0022430	0.453961	mg/L	0.0022430	0.49%
Tl 190.801†	49.1	0.399182	mg/L	0.0156608	0.399182	mg/L	0.0156608	3.92%
V 290.880†	1789.8	0.548199	mg/L	0.0026025	0.548199	mg/L	0.0026025	0.47%
Zn 206.200†	965.5	0.509681	mg/L	0.0015779	0.509681	mg/L	0.0015779	0.31%
B 249.772	2184.2	0.579873	mg/L	0.0025576	0.579873	mg/L	0.0025576	0.44%
Si 251.611	3146.3	2.78102	mg/L	0.039368	2.78102	mg/L	0.039368	1.42%

Sequence No.: 41
Sample ID: AD19178-001 PS
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 63
Date Collected: 9/16/2020 4:02:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-001 PS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34739.7	92.8	%	0.15				0.16%
Y 371.029	10185.9	86.4	%	0.53				0.61%
Ag 328.068†	920.3	0.101800	mg/L	0.0004678	0.101800	mg/L	0.0004678	0.46%
Al 308.215†	4362.0	4.61909	mg/L	0.018914	4.61909	mg/L	0.018914	0.41%
As 188.979†	28.7	0.462661	mg/L	0.0151527	0.462661	mg/L	0.0151527	3.28%
Ba 233.527†	5122.4	0.855223	mg/L	0.0039654	0.855223	mg/L	0.0039654	0.46%
Be 313.107†	72919.6	0.455496	mg/L	0.0024920	0.455496	mg/L	0.0024920	0.55%
Ca 315.887†	589298.3	290.880	mg/L	0.9804	290.880	mg/L	0.9804	0.34%
Cd 228.802†	733.5	0.451725	mg/L	0.0038091	0.451725	mg/L	0.0038091	0.84%
Co 228.616†	623.3	0.439290	mg/L	0.0048047	0.439290	mg/L	0.0048047	1.09%
Cr 267.716†	1773.9	0.436897	mg/L	0.0036062	0.436897	mg/L	0.0036062	0.83%
Cu 327.393†	3318.8	0.513569	mg/L	0.0030356	0.513569	mg/L	0.0030356	0.59%
Fe 273.955†	1351.8	4.27301	mg/L	0.044625	4.27301	mg/L	0.044625	1.04%
K 404.721†	355.5	-20.4394	mg/L	0.53709	-20.4394	mg/L	0.53709	2.63%
Mg 279.077†	65908.0	107.736	mg/L	0.3292	107.736	mg/L	0.3292	0.31%
Mn 257.610†	17697.7	1.05632	mg/L	0.002986	1.05632	mg/L	0.002986	0.28%
Mo 202.031†	380.5	0.456539	mg/L	0.0022406	0.456539	mg/L	0.0022406	0.49%
Na 330.237†	53266.5	1636.56	mg/L	2.941	1636.56	mg/L	2.941	0.18%
Ni 231.604†	742.2	0.428221	mg/L	0.0030782	0.428221	mg/L	0.0030782	0.72%
Pb 220.353†	146.8	0.437437	mg/L	0.0090242	0.437437	mg/L	0.0090242	2.06%
Sb 206.836†	50.7	0.504170	mg/L	0.0033738	0.504170	mg/L	0.0033738	0.67%
Se 196.026†	75.4	0.571355	mg/L	0.0084982	0.571355	mg/L	0.0084982	1.49%
Sn 189.927†	108.7	0.394416	mg/L	0.0044793	0.394416	mg/L	0.0044793	1.14%
Ti 334.940†	7347.0	0.453219	mg/L	0.0018790	0.453219	mg/L	0.0018790	0.41%
Tl 190.801†	48.0	0.391033	mg/L	0.0119358	0.391033	mg/L	0.0119358	3.05%
V 290.880†	1796.0	0.549850	mg/L	0.0043134	0.549850	mg/L	0.0043134	0.78%
Zn 206.200†	954.1	0.503669	mg/L	0.0038265	0.503669	mg/L	0.0038265	0.76%
B 249.772	2074.1	0.550761	mg/L	0.0048365	0.550761	mg/L	0.0048365	0.88%
Si 251.611	2866.0	2.53825	mg/L	0.017138	2.53825	mg/L	0.017138	0.68%

Sequence No.: 42
Sample ID: AD19178-001 SD
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 64
Date Collected: 9/16/2020 4:06:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-001 SD

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	37713.0	101	%	0.66				0.65%
Y 371.029	11273.5	95.7	%	0.97				1.02%
Ag 328.068†	10.5	0.0028104	mg/L	0.00008312	0.0028104	mg/L	0.00008312	2.96%
Al 308.215†	1.9	-0.0316350	mg/L	0.00345184	-0.0316350	mg/L	0.00345184	10.91%
As 188.979†	0.8	0.0136838	mg/L	0.01955482	0.0136838	mg/L	0.01955482	142.90%
Ba 233.527†	553.3	0.0863458	mg/L	0.00120809	0.0863458	mg/L	0.00120809	1.40%
Be 313.107†	-24.5	-0.0007850	mg/L	0.00004596	-0.0007850	mg/L	0.00004596	5.85%
Ca 315.887†	108660.7	53.6266	mg/L	0.09922	53.6266	mg/L	0.09922	0.19%
Cd 228.802†	0.1	0.0044323	mg/L	0.00029718	0.0044323	mg/L	0.00029718	6.70%
Co 228.616†	-1.1	0.0005952	mg/L	0.00099423	0.0005952	mg/L	0.00099423	167.04%
Cr 267.716†	0.8	0.0097858	mg/L	0.00062518	0.0097858	mg/L	0.00062518	6.39%
Cu 327.393†	-25.8	-0.0168850	mg/L	0.00065705	-0.0168850	mg/L	0.00065705	3.89%
Fe 273.955†	4.3	-0.116224	mg/L	0.0091486	-0.116224	mg/L	0.0091486	7.87%
K 404.721†	-3.8	3.04571	mg/L	0.200495	3.04571	mg/L	0.200495	6.58%
Mg 279.077†	8747.6	14.3589	mg/L	0.03346	14.3589	mg/L	0.03346	0.23%
Mn 257.610†	2327.9	0.134137	mg/L	0.0011501	0.134137	mg/L	0.0011501	0.86%
Mo 202.031†	0.6	0.0030780	mg/L	0.00114762	0.0030780	mg/L	0.00114762	37.28%
Na 330.237†	8779.4	270.207	mg/L	0.2991	270.207	mg/L	0.2991	0.11%
Ni 231.604†	1.9	0.0009845	mg/L	0.00086732	0.0009845	mg/L	0.00086732	88.10%
Pb 220.353†	-1.5	-0.0047484	mg/L	0.00153889	-0.0047484	mg/L	0.00153889	32.41%
Sb 206.836†	1.4	0.0099674	mg/L	0.00851532	0.0099674	mg/L	0.00851532	85.43%
Se 196.026†	0.0	0.0108441	mg/L	0.01566898	0.0108441	mg/L	0.01566898	144.49%
Sn 189.927†	-4.1	-0.0165010	mg/L	0.00626423	-0.0165010	mg/L	0.00626423	37.96%
Ti 334.940†	-13.6	-0.0033684	mg/L	0.00019647	-0.0033684	mg/L	0.00019647	5.83%
Tl 190.801†	0.5	-0.0040491	mg/L	0.00168333	-0.0040491	mg/L	0.00168333	41.57%
V 290.880†	80.7	0.0086970	mg/L	0.00039078	0.0086970	mg/L	0.00039078	4.49%
Zn 206.200†	25.2	0.0161194	mg/L	0.00067515	0.0161194	mg/L	0.00067515	4.19%
B 249.772	100.7	0.0196805	mg/L	0.00091129	0.0196805	mg/L	0.00091129	4.63%
Si 251.611	536.1	0.425575	mg/L	0.0035768	0.425575	mg/L	0.0035768	0.84%

Sequence No.: 43
Sample ID: EF-V-334696
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 77
Date Collected: 9/16/2020 4:10:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF-V-334696

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	36321.1	97.0	%	1.00				1.03%
Y 371.029	10575.1	89.7	%	1.01				1.12%
Ag 328.068†	1.5	0.0017276	mg/L	0.00033963	0.0017276	mg/L	0.00033963	19.66%
Al 308.215†	4.6	-0.0302638	mg/L	0.00295003	-0.0302638	mg/L	0.00295003	9.75%
As 188.979†	1.2	0.0221147	mg/L	0.00440223	0.0221147	mg/L	0.00440223	19.91%
Ba 233.527†	56.6	0.0027622	mg/L	0.00017251	0.0027622	mg/L	0.00017251	6.25%
Be 313.107†	-26.1	-0.0007953	mg/L	0.00003516	-0.0007953	mg/L	0.00003516	4.42%
Ca 315.887†	153.6	0.0650763	mg/L	0.00185322	0.0650763	mg/L	0.00185322	2.85%
Cd 228.802†	-1.2	0.0036199	mg/L	0.00019298	0.0036199	mg/L	0.00019298	5.33%
Co 228.616†	-0.1	0.0013202	mg/L	0.00151483	0.0013202	mg/L	0.00151483	114.74%
Cr 267.716†	6.0	0.0109297	mg/L	0.00097066	0.0109297	mg/L	0.00097066	8.88%
Cu 327.393†	-12.2	-0.0147263	mg/L	0.00012397	-0.0147263	mg/L	0.00012397	0.84%
Fe 273.955†	4.9	-0.114188	mg/L	0.0034983	-0.114188	mg/L	0.0034983	3.06%
K 404.721†	-1.9	3.14866	mg/L	0.444560	3.14866	mg/L	0.444560	14.12%
Mg 279.077†	19.2	0.100208	mg/L	0.0016216	0.100208	mg/L	0.0016216	1.62%
Mn 257.610†	15.9	-0.0045815	mg/L	0.00005999	-0.0045815	mg/L	0.00005999	1.31%
Mo 202.031†	5.1	0.0083820	mg/L	0.00219592	0.0083820	mg/L	0.00219592	26.20%
Na 330.237†	54945.4	1688.12	mg/L	2.387	1688.12	mg/L	2.387	0.14%
Ni 231.604†	1.5	0.0007766	mg/L	0.00190518	0.0007766	mg/L	0.00190518	245.31%
Pb 220.353†	-1.3	-0.0043743	mg/L	0.00476871	-0.0043743	mg/L	0.00476871	109.02%
Sb 206.836†	0.5	0.0021268	mg/L	0.01338428	0.0021268	mg/L	0.01338428	629.32%
Se 196.026†	-2.0	-0.0084158	mg/L	0.00627682	-0.0084158	mg/L	0.00627682	74.58%
Sn 189.927†	1.8	0.0050842	mg/L	0.00239091	0.0050842	mg/L	0.00239091	47.03%
Ti 334.940†	7.4	-0.0061892	mg/L	0.00018409	-0.0061892	mg/L	0.00018409	2.97%
Tl 190.801†	0.0	-0.0051711	mg/L	0.01047643	-0.0051711	mg/L	0.01047643	202.60%
V 290.880†	0.7	-0.0171490	mg/L	0.00070199	-0.0171490	mg/L	0.00070199	4.09%
Zn 206.200†	16.1	0.0113349	mg/L	0.00013052	0.0113349	mg/L	0.00013052	1.15%
B 249.772	42.2	-0.0112086	mg/L	0.00101560	-0.0112086	mg/L	0.00101560	9.06%
Si 251.611	31.2	0.0409157	mg/L	0.00575009	0.0409157	mg/L	0.00575009	14.05%

Sequence No.: 44
Sample ID: CCV V-334775
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/16/2020 4:14:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-334775

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	35740.9	95.4	%	0.54				0.56%
Y 371.029	10326.2	87.6	%	0.24				0.27%
Ag 328.068†	872.7	0.0966450	mg/L	0.00141214	0.0966450	mg/L	0.00141214	1.46%
QC value within limits for Ag 328.068 Recovery = 96.65%								
Al 308.215†	4418.7	4.67763	mg/L	0.014016	4.67763	mg/L	0.014016	0.30%
QC value within limits for Al 308.215 Recovery = 93.55%								
As 188.979†	28.1	0.453132	mg/L	0.0225481	0.453132	mg/L	0.0225481	4.98%
QC value within limits for As 188.979 Recovery = 90.63%								
Ba 233.527†	2815.0	0.466937	mg/L	0.0010314	0.466937	mg/L	0.0010314	0.22%
QC value within limits for Ba 233.527 Recovery = 93.39%								
Be 313.107†	76539.1	0.478137	mg/L	0.0011079	0.478137	mg/L	0.0011079	0.23%
QC value within limits for Be 313.107 Recovery = 95.63%								
Ca 315.887†	95786.5	47.2716	mg/L	0.22945	47.2716	mg/L	0.22945	0.49%
QC value within limits for Ca 315.887 Recovery = 94.54%								
Cd 228.802†	757.9	0.466592	mg/L	0.0045256	0.466592	mg/L	0.0045256	0.97%
QC value within limits for Cd 228.802 Recovery = 93.32%								
Co 228.616†	666.2	0.469389	mg/L	0.0029439	0.469389	mg/L	0.0029439	0.63%
QC value within limits for Co 228.616 Recovery = 93.88%								
Cr 267.716†	1985.0	0.487303	mg/L	0.0035863	0.487303	mg/L	0.0035863	0.74%
QC value within limits for Cr 267.716 Recovery = 97.46%								
Cu 327.393†	3216.4	0.497359	mg/L	0.0032878	0.497359	mg/L	0.0032878	0.66%
QC value within limits for Cu 327.393 Recovery = 99.47%								
Fe 273.955†	1433.9	4.54024	mg/L	0.051335	4.54024	mg/L	0.051335	1.13%
QC value within limits for Fe 273.955 Recovery = 90.80%								
K 404.721†	672.1	-2.34441	mg/L	0.802316	-2.34441	mg/L	0.802316	34.22%
QC value less than the lower limit for K 404.721 Recovery = -4.69%								
Mg 279.077†	28942.2	47.3486	mg/L	0.13879	47.3486	mg/L	0.13879	0.29%
QC value within limits for Mg 279.077 Recovery = 94.70%								
Mn 257.610†	7861.5	0.466149	mg/L	0.0013856	0.466149	mg/L	0.0013856	0.30%
QC value within limits for Mn 257.610 Recovery = 93.23%								
Mo 202.031†	384.0	0.460636	mg/L	0.0059135	0.460636	mg/L	0.0059135	1.28%
QC value within limits for Mo 202.031 Recovery = 92.13%								
Na 330.237†	1534.6	47.6942	mg/L	0.55645	47.6942	mg/L	0.55645	1.17%
QC value within limits for Na 330.237 Recovery = 95.39%								
Ni 231.604†	824.0	0.475314	mg/L	0.0038138	0.475314	mg/L	0.0038138	0.80%
QC value within limits for Ni 231.604 Recovery = 95.06%								
Pb 220.353†	156.9	0.467639	mg/L	0.0072679	0.467639	mg/L	0.0072679	1.55%
QC value within limits for Pb 220.353 Recovery = 93.53%								
Sb 206.836†	47.5	0.473462	mg/L	0.0127283	0.473462	mg/L	0.0127283	2.69%
QC value within limits for Sb 206.836 Recovery = 94.69%								
Se 196.026†	64.0	0.469362	mg/L	0.0329744	0.469362	mg/L	0.0329744	7.03%
QC value within limits for Se 196.026 Recovery = 93.87%								
Sn 189.927†	123.7	0.449459	mg/L	0.0069328	0.449459	mg/L	0.0069328	1.54%
QC value less than the lower limit for Sn 189.927 Recovery = 89.89%								
Ti 334.940†	7675.3	0.454264	mg/L	0.0029955	0.454264	mg/L	0.0029955	0.66%
QC value within limits for Ti 334.940 Recovery = 90.85%								
Tl 190.801†	54.2	0.457553	mg/L	0.0127300	0.457553	mg/L	0.0127300	2.78%
QC value within limits for Tl 190.801 Recovery = 91.51%								
V 290.880†	1697.8	0.515645	mg/L	0.0036808	0.515645	mg/L	0.0036808	0.71%
QC value within limits for V 290.880 Recovery = 103.13%								
Zn 206.200†	903.2	0.476941	mg/L	0.0028981	0.476941	mg/L	0.0028981	0.61%
QC value within limits for Zn 206.200 Recovery = 95.39%								
B 249.772	1771.3	0.482662	mg/L	0.0018211	0.482662	mg/L	0.0018211	0.38%
QC value within limits for B 249.772 Recovery = 96.53%								
Si 251.611	5682.0	4.70563	mg/L	0.029002	4.70563	mg/L	0.029002	0.62%
QC value within limits for Si 251.611 Recovery = 94.11%								

QC Failed. Continue with analysis.

Sequence No.: 45
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 9/16/2020 4:18:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	37623.1	100	%	1.03				1.03%
Y 371.029	11235.5	95.3	%	0.79				0.83%
Ag 328.068†	3.7	0.0019518	mg/L	0.00056781	0.0019518	mg/L	0.00056781	29.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-9.7	-0.0454521	mg/L	0.00102737	-0.0454521	mg/L	0.00102737	2.26%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.3	-0.0042600	mg/L	0.01501527	-0.0042600	mg/L	0.01501527	352.47%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	2.8	-0.0062922	mg/L	0.00038214	-0.0062922	mg/L	0.00038214	6.07%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	5.9	-0.0005953	mg/L	0.00006218	-0.0005953	mg/L	0.00006218	10.45%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	17.5	-0.0021117	mg/L	0.00103176	-0.0021117	mg/L	0.00103176	48.86%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-1.7	0.0033137	mg/L	0.00060685	0.0033137	mg/L	0.00060685	18.31%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.0	0.0013885	mg/L	0.00099789	0.0013885	mg/L	0.00099789	71.87%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-0.9	0.0092586	mg/L	0.00027092	0.0092586	mg/L	0.00027092	2.93%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-14.1	-0.0150333	mg/L	0.00158221	-0.0150333	mg/L	0.00158221	10.52%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.7	-0.135878	mg/L	0.0090256	-0.135878	mg/L	0.0090256	6.64%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-12.6	2.67913	mg/L	0.419988	2.67913	mg/L	0.419988	15.68%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	1.8	0.0718012	mg/L	0.00451365	0.0718012	mg/L	0.00451365	6.29%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	2.2	-0.0054023	mg/L	0.00017221	-0.0054023	mg/L	0.00017221	3.19%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.2	0.0021596	mg/L	0.00117882	0.0021596	mg/L	0.00117882	54.58%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	4.5	0.699050	mg/L	0.1205166	0.699050	mg/L	0.1205166	17.24%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	0.3	0.0000961	mg/L	0.00124193	0.0000961	mg/L	0.00124193	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-2.2	-0.0068369	mg/L	0.00365626	-0.0068369	mg/L	0.00365626	53.48%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.6	0.0029867	mg/L	0.00620691	0.0029867	mg/L	0.00620691	207.82%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.1	0.0049650	mg/L	0.00814842	0.0049650	mg/L	0.00814842	164.12%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.0	-0.0014734	mg/L	0.00090494	-0.0014734	mg/L	0.00090494	61.42%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	7.5	-0.0061886	mg/L	0.00009215	-0.0061886	mg/L	0.00009215	1.49%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-0.6	-0.0099373	mg/L	0.00679589	-0.0099373	mg/L	0.00679589	68.39%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-8.7	-0.0200784	mg/L	0.00060218	-0.0200784	mg/L	0.00060218	3.00%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	1.9	0.0039268	mg/L	0.00055960	0.0039268	mg/L	0.00055960	14.25%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	3.4	-0.0055373	mg/L	0.00065725	-0.0055373	mg/L	0.00065725	11.87%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	5.1	-0.0370498	mg/L	0.00115908	-0.0370498	mg/L	0.00115908	3.13%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 46
Sample ID: AD19178-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 65
Date Collected: 9/16/2020 4:22:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34027.0	90.9	%	2.14				2.35%
Y 371.029	10007.2	84.9	%	1.58				1.85%
Ag 328.068†	88.0	0.0109664	mg/L	0.00030930	0.0109664	mg/L	0.00030930	2.82%
Al 308.215†	18.1	-0.0147702	mg/L	0.00137834	-0.0147702	mg/L	0.00137834	9.33%
As 188.979†	2.0	0.0342700	mg/L	0.00718241	0.0342700	mg/L	0.00718241	20.96%
Ba 233.527†	1980.3	0.326480	mg/L	0.0047590	0.326480	mg/L	0.0047590	1.46%
Be 313.107†	-63.2	-0.0010273	mg/L	0.00005511	-0.0010273	mg/L	0.00005511	5.36%
Ca 315.887†	1222515.5	603.450	mg/L	7.4631	603.450	mg/L	7.4631	1.24%
Cd 228.802†	0.5	0.0046678	mg/L	0.00035443	0.0046678	mg/L	0.00035443	7.59%
Co 228.616†	1.1	0.0021449	mg/L	0.00185702	0.0021449	mg/L	0.00185702	86.58%
Cr 267.716†	2.3	0.0101349	mg/L	0.00032612	0.0101349	mg/L	0.00032612	3.22%
Cu 327.393†	-17.6	-0.0155757	mg/L	0.00090434	-0.0155757	mg/L	0.00090434	5.81%
Fe 273.955†	12.3	-0.0901767	mg/L	0.00299521	-0.0901767	mg/L	0.00299521	3.32%
K 404.721†	2.4	3.17512	mg/L	0.122599	3.17512	mg/L	0.122599	3.86%
Mg 279.077†	6302.6	10.3647	mg/L	0.05002	10.3647	mg/L	0.05002	0.48%
Mn 257.610†	564.3	0.0283213	mg/L	0.00073396	0.0283213	mg/L	0.00073396	2.59%
Mo 202.031†	3.2	0.0061420	mg/L	0.00130290	0.0061420	mg/L	0.00130290	21.21%
Na 330.237†	50776.2	1560.07	mg/L	3.635	1560.07	mg/L	3.635	0.23%
Ni 231.604†	39.0	0.0223343	mg/L	0.00061448	0.0223343	mg/L	0.00061448	2.75%
Pb 220.353†	-1.2	-0.0039400	mg/L	0.00263464	-0.0039400	mg/L	0.00263464	66.87%
Sb 206.836†	0.5	0.0017238	mg/L	0.00933782	0.0017238	mg/L	0.00933782	541.69%
Se 196.026†	-0.6	0.0501659	mg/L	0.03756599	0.0501659	mg/L	0.03756599	74.88%
Sn 189.927†	-7.0	-0.0270564	mg/L	0.00292508	-0.0270564	mg/L	0.00292508	10.81%
Ti 334.940†	-195.2	0.0275991	mg/L	0.00064984	0.0275991	mg/L	0.00064984	2.35%
Tl 190.801†	-0.4	-0.0454321	mg/L	0.00988903	-0.0454321	mg/L	0.00988903	21.77%
V 290.880†	66.2	0.0039059	mg/L	0.00146031	0.0039059	mg/L	0.00146031	37.39%
Zn 206.200†	27.1	0.0171511	mg/L	0.00143488	0.0171511	mg/L	0.00143488	8.37%
B 249.772	191.4	0.0336188	mg/L	0.00054278	0.0336188	mg/L	0.00054278	1.61%
Si 251.611	1549.9	1.42742	mg/L	0.012606	1.42742	mg/L	0.012606	0.88%

Sequence No.: 47
Sample ID: AD19178-003
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 66
Date Collected: 9/16/2020 4:26:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-003

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34108.7	91.1	%	2.94				3.23%
Y 371.029	9987.5	84.7	%	2.37				2.80%
Ag 328.068†	37.3	0.0058095	mg/L	0.00038878	0.0058095	mg/L	0.00038878	6.69%
Al 308.215†	51.4	0.0227406	mg/L	0.00605754	0.0227406	mg/L	0.00605754	26.64%
As 188.979†	0.8	0.0139949	mg/L	0.01487967	0.0139949	mg/L	0.01487967	106.32%
Ba 233.527†	5539.8	0.925464	mg/L	0.0045801	0.925464	mg/L	0.0045801	0.49%
Be 313.107†	-67.7	-0.0010553	mg/L	0.00007837	-0.0010553	mg/L	0.00007837	7.43%
Ca 315.887†	504145.7	248.847	mg/L	2.9575	248.847	mg/L	2.9575	1.19%
Cd 228.802†	25.9	0.0201408	mg/L	0.00015270	0.0201408	mg/L	0.00015270	0.76%
Co 228.616†	0.2	0.0015347	mg/L	0.00039003	0.0015347	mg/L	0.00039003	25.41%
Cr 267.716†	3.1	0.0105049	mg/L	0.00085896	0.0105049	mg/L	0.00085896	8.18%
Cu 327.393†	102.1	0.0033909	mg/L	0.00066834	0.0033909	mg/L	0.00066834	19.71%
Fe 273.955†	23.9	-0.0524088	mg/L	0.00737669	-0.0524088	mg/L	0.00737669	14.08%
K 404.721†	30.2	4.61469	mg/L	0.416487	4.61469	mg/L	0.416487	9.03%
Mg 279.077†	22943.1	37.5485	mg/L	0.11507	37.5485	mg/L	0.11507	0.31%
Mn 257.610†	6159.8	0.364052	mg/L	0.0010070	0.364052	mg/L	0.0010070	0.28%
Mo 202.031†	0.9	0.0034534	mg/L	0.00173510	0.0034534	mg/L	0.00173510	50.24%
Na 330.237†	56091.2	1723.31	mg/L	22.919	1723.31	mg/L	22.919	1.33%
Ni 231.604†	17.5	0.0099760	mg/L	0.00200017	0.0099760	mg/L	0.00200017	20.05%
Pb 220.353†	4.5	0.0130137	mg/L	0.00189966	0.0130137	mg/L	0.00189966	14.60%
Sb 206.836†	0.7	0.0037047	mg/L	0.01620297	0.0037047	mg/L	0.01620297	437.36%
Se 196.026†	-2.6	0.0085296	mg/L	0.00864515	0.0085296	mg/L	0.00864515	101.35%
Sn 189.927†	-6.7	-0.0258099	mg/L	0.00404048	-0.0258099	mg/L	0.00404048	15.65%
Ti 334.940†	-55.7	0.0089612	mg/L	0.00064448	0.0089612	mg/L	0.00064448	7.19%
Tl 190.801†	-0.8	-0.0278854	mg/L	0.00858164	-0.0278854	mg/L	0.00858164	30.77%
V 290.880†	190.5	0.0443395	mg/L	0.00086650	0.0443395	mg/L	0.00086650	1.95%
Zn 206.200†	235.9	0.126746	mg/L	0.0006390	0.126746	mg/L	0.0006390	0.50%
B 249.772	547.9	0.134777	mg/L	0.0023845	0.134777	mg/L	0.0023845	1.77%
Si 251.611	3650.0	3.08962	mg/L	0.107154	3.08962	mg/L	0.107154	3.47%

Sequence No.: 48
Sample ID: AD19178-004
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 67
Date Collected: 9/16/2020 4:30:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34589.2	92.4	%	4.93				5.34%
Y 371.029	10184.1	86.4	%	3.83				4.43%
Ag 328.068†	83.8	0.0105204	mg/L	0.00061362	0.0105204	mg/L	0.00061362	5.83%
Al 308.215†	186.5	0.164148	mg/L	0.0071224	0.164148	mg/L	0.0071224	4.34%
As 188.979†	0.5	0.0090615	mg/L	0.01759872	0.0090615	mg/L	0.01759872	194.21%
Ba 233.527†	5912.3	0.988142	mg/L	0.0020768	0.988142	mg/L	0.0020768	0.21%
Be 313.107†	-68.8	-0.0010624	mg/L	0.00008251	-0.0010624	mg/L	0.00008251	7.77%
Ca 315.887†	1210465.1	597.501	mg/L	13.5764	597.501	mg/L	13.5764	2.27%
Cd 228.802†	3.4	0.0064303	mg/L	0.00047893	0.0064303	mg/L	0.00047893	7.45%
Co 228.616†	-1.2	0.0005019	mg/L	0.00124151	0.0005019	mg/L	0.00124151	247.34%
Cr 267.716†	4.5	0.0106446	mg/L	0.00038755	0.0106446	mg/L	0.00038755	3.64%
Cu 327.393†	6.5	-0.0117520	mg/L	0.00066303	-0.0117520	mg/L	0.00066303	5.64%
Fe 273.955†	51.4	0.0372691	mg/L	0.00462040	0.0372691	mg/L	0.00462040	12.40%
K 404.721†	19.2	2.91614	mg/L	0.328965	2.91614	mg/L	0.328965	11.28%
Mg 279.077†	5849.8	9.62499	mg/L	0.053582	9.62499	mg/L	0.053582	0.56%
Mn 257.610†	3019.7	0.175644	mg/L	0.0005123	0.175644	mg/L	0.0005123	0.29%
Mo 202.031†	2.7	0.0055949	mg/L	0.00242811	0.0055949	mg/L	0.00242811	43.40%
Na 330.237†	50471.9	1550.73	mg/L	23.798	1550.73	mg/L	23.798	1.53%
Ni 231.604†	12.4	0.0070271	mg/L	0.00221377	0.0070271	mg/L	0.00221377	31.50%
Pb 220.353†	0.4	0.0008692	mg/L	0.01072946	0.0008692	mg/L	0.01072946	>999.9%
Sb 206.836†	1.3	0.0093806	mg/L	0.01701014	0.0093806	mg/L	0.01701014	181.33%
Se 196.026†	-1.5	0.0432275	mg/L	0.00579608	0.0432275	mg/L	0.00579608	13.41%
Sn 189.927†	-7.8	-0.0296958	mg/L	0.00769699	-0.0296958	mg/L	0.00769699	25.92%
Ti 334.940†	-73.3	0.0344095	mg/L	0.00118064	0.0344095	mg/L	0.00118064	3.43%
Tl 190.801†	1.3	-0.0315511	mg/L	0.00669101	-0.0315511	mg/L	0.00669101	21.21%
V 290.880†	62.3	0.0026422	mg/L	0.00057747	0.0026422	mg/L	0.00057747	21.86%
Zn 206.200†	42.3	0.0250896	mg/L	0.00106284	0.0250896	mg/L	0.00106284	4.24%
B 249.772	208.0	0.0426017	mg/L	0.00331554	0.0426017	mg/L	0.00331554	7.78%
Si 251.611	3245.9	2.82458	mg/L	0.150202	2.82458	mg/L	0.150202	5.32%

Sequence No.: 49
Sample ID: AD19178-005
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 68
Date Collected: 9/16/2020 4:35:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-005

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	34037.6	90.9	%	2.05				2.26%
Y 371.029	10061.4	85.4	%	1.71				2.00%
Ag 328.068†	97.7	0.0121111	mg/L	0.00069233	0.0121111	mg/L	0.00069233	5.72%
Al 308.215†	25.4	-0.0057057	mg/L	0.00040473	-0.0057057	mg/L	0.00040473	7.09%
As 188.979†	0.3	0.0060819	mg/L	0.00369119	0.0060819	mg/L	0.00369119	60.69%
Ba 233.527†	4283.3	0.714010	mg/L	0.0022285	0.714010	mg/L	0.0022285	0.31%
Be 313.107†	-92.8	-0.0012126	mg/L	0.00008371	-0.0012126	mg/L	0.00008371	6.90%
Ca 315.887†	1282744.6	633.180	mg/L	4.0153	633.180	mg/L	4.0153	0.63%
Cd 228.802†	-0.4	0.0041348	mg/L	0.00129533	0.0041348	mg/L	0.00129533	31.33%
Co 228.616†	0.1	0.0014073	mg/L	0.00297027	0.0014073	mg/L	0.00297027	211.06%
Cr 267.716†	3.3	0.0104951	mg/L	0.00021711	0.0104951	mg/L	0.00021711	2.07%
Cu 327.393†	14.1	-0.0105575	mg/L	0.00086889	-0.0105575	mg/L	0.00086889	8.23%
Fe 273.955†	14.1	-0.0842515	mg/L	0.00914160	-0.0842515	mg/L	0.00914160	10.85%
K 404.721†	25.9	4.67000	mg/L	0.304921	4.67000	mg/L	0.304921	6.53%
Mg 279.077†	14828.6	24.2928	mg/L	0.08586	24.2928	mg/L	0.08586	0.35%
Mn 257.610†	502.8	0.0246349	mg/L	0.00048107	0.0246349	mg/L	0.00048107	1.95%
Mo 202.031†	3.7	0.0067030	mg/L	0.00197835	0.0067030	mg/L	0.00197835	29.51%
Na 330.237†	55314.4	1699.46	mg/L	4.128	1699.46	mg/L	4.128	0.24%
Ni 231.604†	6.2	0.0035085	mg/L	0.00228890	0.0035085	mg/L	0.00228890	65.24%
Pb 220.353†	-2.5	-0.0079347	mg/L	0.00644629	-0.0079347	mg/L	0.00644629	81.24%
Sb 206.836†	1.3	0.0092582	mg/L	0.01564641	0.0092582	mg/L	0.01564641	169.00%
Se 196.026†	-1.6	0.0461140	mg/L	0.00617278	0.0461140	mg/L	0.00617278	13.39%
Sn 189.927†	-7.5	-0.0285875	mg/L	0.00449344	-0.0285875	mg/L	0.00449344	15.72%
Ti 334.940†	-196.2	0.0298005	mg/L	0.00019983	0.0298005	mg/L	0.00019983	0.67%
Tl 190.801†	-0.6	-0.0500725	mg/L	0.00833440	-0.0500725	mg/L	0.00833440	16.64%
V 290.880†	144.5	0.0291933	mg/L	0.00073665	0.0291933	mg/L	0.00073665	2.52%
Zn 206.200†	45.7	0.0269050	mg/L	0.00159231	0.0269050	mg/L	0.00159231	5.92%
B 249.772	285.6	0.0599449	mg/L	0.00046016	0.0599449	mg/L	0.00046016	0.77%
Si 251.611	2056.8	1.86096	mg/L	0.004104	1.86096	mg/L	0.004104	0.22%

Sequence No.: 50
Sample ID: AD19178-006
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 69
Date Collected: 9/16/2020 4:39:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-006

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	36203.8	96.7	%	0.11				0.12%
Y 371.029	10762.7	91.3	%	0.31				0.34%
Ag 328.068†	31.6	0.0050698	mg/L	0.00054926	0.0050698	mg/L	0.00054926	10.83%
Al 308.215†	57.2	0.0273199	mg/L	0.00434693	0.0273199	mg/L	0.00434693	15.91%
As 188.979†	0.5	0.0097860	mg/L	0.02980622	0.0097860	mg/L	0.02980622	304.58%
Ba 233.527†	18127.0	3.04361	mg/L	0.005485	3.04361	mg/L	0.005485	0.18%
Be 313.107†	-43.1	-0.0009016	mg/L	0.00006092	-0.0009016	mg/L	0.00006092	6.76%
Ca 315.887†	460768.2	227.435	mg/L	0.9115	227.435	mg/L	0.9115	0.40%
Cd 228.802†	-1.3	0.0035824	mg/L	0.00030523	0.0035824	mg/L	0.00030523	8.52%
Co 228.616†	7.5	0.0066463	mg/L	0.00118559	0.0066463	mg/L	0.00118559	17.84%
Cr 267.716†	3.5	0.0104646	mg/L	0.00088140	0.0104646	mg/L	0.00088140	8.42%
Cu 327.393†	3971.5	0.616559	mg/L	0.0044363	0.616559	mg/L	0.0044363	0.72%
Fe 273.955†	29.3	-0.0347248	mg/L	0.00263914	-0.0347248	mg/L	0.00263914	7.60%
K 404.721†	1.9	2.54964	mg/L	0.216810	2.54964	mg/L	0.216810	8.50%
Mg 279.077†	10033.9	16.4602	mg/L	0.06500	16.4602	mg/L	0.06500	0.39%
Mn 257.610†	2917.0	0.169485	mg/L	0.0016365	0.169485	mg/L	0.0016365	0.97%
Mo 202.031†	2.5	0.0053622	mg/L	0.00095733	0.0053622	mg/L	0.00095733	17.85%
Na 330.237†	53367.1	1639.65	mg/L	3.534	1639.65	mg/L	3.534	0.22%
Ni 231.604†	22.1	0.0126253	mg/L	0.00042560	0.0126253	mg/L	0.00042560	3.37%
Pb 220.353†	97.7	0.288828	mg/L	0.0061798	0.288828	mg/L	0.0061798	2.14%
Sb 206.836†	2.8	0.0240820	mg/L	0.00551099	0.0240820	mg/L	0.00551099	22.88%
Se 196.026†	-1.7	0.0129652	mg/L	0.01924446	0.0129652	mg/L	0.01924446	148.43%
Sn 189.927†	-6.2	-0.0239158	mg/L	0.00636243	-0.0239158	mg/L	0.00636243	26.60%
Ti 334.940†	-53.9	0.0074389	mg/L	0.00039585	0.0074389	mg/L	0.00039585	5.32%
Tl 190.801†	0.6	-0.0205786	mg/L	0.01330424	-0.0205786	mg/L	0.01330424	64.65%
V 290.880†	96.9	0.0138547	mg/L	0.00036793	0.0138547	mg/L	0.00036793	2.66%
Zn 206.200†	86.0	0.0480340	mg/L	0.00066398	0.0480340	mg/L	0.00066398	1.38%
B 249.772	246.7	0.0639906	mg/L	0.00114337	0.0639906	mg/L	0.00114337	1.79%
Si 251.611	6146.4	5.15005	mg/L	0.025981	5.15005	mg/L	0.025981	0.50%

Sequence No.: 51 **Autosampler Location: 70**
Sample ID: AD19178-007 **Date Collected: 9/16/2020 4:43:41 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD19178-007

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	36148.9	96.5	%	0.60				0.62%
Y 371.029	10726.0	91.0	%	0.46				0.51%
Ag 328.068†	26.7	0.0044898	mg/L	0.00043079	0.0044898	mg/L	0.00043079	9.59%
Al 308.215†	198.7	0.177068	mg/L	0.0040062	0.177068	mg/L	0.0040062	2.26%
As 188.979†	0.4	0.0084203	mg/L	0.01795994	0.0084203	mg/L	0.01795994	213.29%
Ba 233.527†	6545.5	1.09469	mg/L	0.002157	1.09469	mg/L	0.002157	0.20%
Be 313.107†	-23.0	-0.0007759	mg/L	0.00001577	-0.0007759	mg/L	0.00001577	2.03%
Ca 315.887†	381556.6	188.334	mg/L	1.6476	188.334	mg/L	1.6476	0.87%
Cd 228.802†	127.5	0.0821215	mg/L	0.00052713	0.0821215	mg/L	0.00052713	0.64%
Co 228.616†	482.2	0.340149	mg/L	0.0017988	0.340149	mg/L	0.0017988	0.53%
Cr 267.716†	5.7	0.0109276	mg/L	0.00066755	0.0109276	mg/L	0.00066755	6.11%
Cu 327.393†	1190.9	0.175930	mg/L	0.0015067	0.175930	mg/L	0.0015067	0.86%
Fe 273.955†	19.5	-0.0666503	mg/L	0.01502984	-0.0666503	mg/L	0.01502984	22.55%
K 404.721†	14.6	3.73186	mg/L	0.745566	3.73186	mg/L	0.745566	19.98%
Mg 279.077†	5159.4	8.49721	mg/L	0.030420	8.49721	mg/L	0.030420	0.36%
Mn 257.610†	12082.6	0.719416	mg/L	0.0005822	0.719416	mg/L	0.0005822	0.08%
Mo 202.031†	1.7	0.0044132	mg/L	0.00028068	0.0044132	mg/L	0.00028068	6.36%
Na 330.237†	44627.9	1371.24	mg/L	2.170	1371.24	mg/L	2.170	0.16%
Ni 231.604†	292.6	0.168248	mg/L	0.0014556	0.168248	mg/L	0.0014556	0.87%
Pb 220.353†	175.7	0.522511	mg/L	0.0053386	0.522511	mg/L	0.0053386	1.02%
Sb 206.836†	0.8	0.0044473	mg/L	0.00481035	0.0044473	mg/L	0.00481035	108.16%
Se 196.026†	0.8	0.0271818	mg/L	0.00848257	0.0271818	mg/L	0.00848257	31.21%
Sn 189.927†	-5.3	-0.0206348	mg/L	0.00385848	-0.0206348	mg/L	0.00385848	18.70%
Ti 334.940†	-35.8	0.0055492	mg/L	0.00021165	0.0055492	mg/L	0.00021165	3.81%
Tl 190.801†	-0.2	-0.0181884	mg/L	0.01657667	-0.0181884	mg/L	0.01657667	91.14%
V 290.880†	59.9	0.0018307	mg/L	0.00044498	0.0018307	mg/L	0.00044498	24.31%
Zn 206.200†	886.5	0.468220	mg/L	0.0012509	0.468220	mg/L	0.0012509	0.27%
B 249.772	489.7	0.133476	mg/L	0.0005608	0.133476	mg/L	0.0005608	0.42%
Si 251.611	10278.6	8.50020	mg/L	0.091124	8.50020	mg/L	0.091124	1.07%

Sequence No.: 52
Sample ID: CCV V-334775
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/16/2020 4:47:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-334775

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	38844.9	104	%	0.40				0.38%
Y 371.029	11318.5	96.0	%	0.88				0.91%
Ag 328.068†	928.8	0.102786	mg/L	0.0009749	0.102786	mg/L	0.0009749	0.95%
QC value within limits for Ag 328.068 Recovery = 102.79%								
Al 308.215†	4678.8	4.95529	mg/L	0.019255	4.95529	mg/L	0.019255	0.39%
QC value within limits for Al 308.215 Recovery = 99.11%								
As 188.979†	31.5	0.508825	mg/L	0.0158375	0.508825	mg/L	0.0158375	3.11%
QC value within limits for As 188.979 Recovery = 101.76%								
Ba 233.527†	2983.8	0.495348	mg/L	0.0025861	0.495348	mg/L	0.0025861	0.52%
QC value within limits for Ba 233.527 Recovery = 99.07%								
Be 313.107†	81284.9	0.507823	mg/L	0.0013368	0.507823	mg/L	0.0013368	0.26%
QC value within limits for Be 313.107 Recovery = 101.56%								
Ca 315.887†	102978.7	50.8218	mg/L	0.10698	50.8218	mg/L	0.10698	0.21%
QC value within limits for Ca 315.887 Recovery = 101.64%								
Cd 228.802†	819.0	0.503876	mg/L	0.0043205	0.503876	mg/L	0.0043205	0.86%
QC value within limits for Cd 228.802 Recovery = 100.78%								
Co 228.616†	710.9	0.500825	mg/L	0.0027964	0.500825	mg/L	0.0027964	0.56%
QC value within limits for Co 228.616 Recovery = 100.17%								
Cr 267.716†	2096.0	0.514071	mg/L	0.0023797	0.514071	mg/L	0.0023797	0.46%
QC value within limits for Cr 267.716 Recovery = 102.81%								
Cu 327.393†	3468.3	0.537336	mg/L	0.0008010	0.537336	mg/L	0.0008010	0.15%
QC value within limits for Cu 327.393 Recovery = 107.47%								
Fe 273.955†	1593.2	5.05919	mg/L	0.034649	5.05919	mg/L	0.034649	0.68%
QC value within limits for Fe 273.955 Recovery = 101.18%								
K 404.721†	715.2	-5.08233	mg/L	0.974759	-5.08233	mg/L	0.974759	19.18%
QC value less than the lower limit for K 404.721 Recovery = -10.16%								
Mg 279.077†	30887.2	50.5261	mg/L	0.15931	50.5261	mg/L	0.15931	0.32%
QC value within limits for Mg 279.077 Recovery = 101.05%								
Mn 257.610†	8374.2	0.496910	mg/L	0.0019160	0.496910	mg/L	0.0019160	0.39%
QC value within limits for Mn 257.610 Recovery = 99.38%								
Mo 202.031†	409.7	0.491340	mg/L	0.0043757	0.491340	mg/L	0.0043757	0.89%
QC value within limits for Mo 202.031 Recovery = 98.27%								
Na 330.237†	1672.6	51.9315	mg/L	0.49990	51.9315	mg/L	0.49990	0.96%
QC value within limits for Na 330.237 Recovery = 103.86%								
Ni 231.604†	883.3	0.509511	mg/L	0.0030460	0.509511	mg/L	0.0030460	0.60%
QC value within limits for Ni 231.604 Recovery = 101.90%								
Pb 220.353†	172.1	0.512979	mg/L	0.0029269	0.512979	mg/L	0.0029269	0.57%
QC value within limits for Pb 220.353 Recovery = 102.60%								
Sb 206.836†	52.2	0.519946	mg/L	0.0083051	0.519946	mg/L	0.0083051	1.60%
QC value within limits for Sb 206.836 Recovery = 103.99%								
Se 196.026†	71.3	0.522013	mg/L	0.0193725	0.522013	mg/L	0.0193725	3.71%
QC value within limits for Se 196.026 Recovery = 104.40%								
Sn 189.927†	133.2	0.483775	mg/L	0.0051602	0.483775	mg/L	0.0051602	1.07%
QC value within limits for Sn 189.927 Recovery = 96.75%								
Ti 334.940†	8260.0	0.489372	mg/L	0.0002038	0.489372	mg/L	0.0002038	0.04%
QC value within limits for Ti 334.940 Recovery = 97.87%								
Tl 190.801†	58.1	0.491450	mg/L	0.0146948	0.491450	mg/L	0.0146948	2.99%
QC value within limits for Tl 190.801 Recovery = 98.29%								
V 290.880†	1821.3	0.554396	mg/L	0.0022370	0.554396	mg/L	0.0022370	0.40%
QC value greater than the upper limit for V 290.880 Recovery = 110.88%								
Zn 206.200†	962.7	0.508193	mg/L	0.0007581	0.508193	mg/L	0.0007581	0.15%
QC value within limits for Zn 206.200 Recovery = 101.64%								
B 249.772	2094.0	0.570964	mg/L	0.0018895	0.570964	mg/L	0.0018895	0.33%
QC value greater than the upper limit for B 249.772 Recovery = 114.19%								
Si 251.611	6674.8	5.52679	mg/L	0.028506	5.52679	mg/L	0.028506	0.52%
QC value greater than the upper limit for Si 251.611 Recovery = 110.54%								

QC Failed. Continue with analysis.

Sequence No.: 53 **Autosampler Location: 2**
Sample ID: CCB V-333667 **Date Collected: 9/16/2020 4:51:54 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	41409.9	111	%	0.42				0.38%
Y 371.029	12513.2	106	%	0.30				0.29%
Ag 328.068†	4.8	0.0020684	mg/L	0.00027015	0.0020684	mg/L	0.00027015	13.06%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-8.6	-0.0441671	mg/L	0.00249787	-0.0441671	mg/L	0.00249787	5.66%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.8	0.0145114	mg/L	0.00495839	0.0145114	mg/L	0.00495839	34.17%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	1.6	-0.0064966	mg/L	0.00011279	-0.0064966	mg/L	0.00011279	1.74%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-0.5	-0.0006353	mg/L	0.00002691	-0.0006353	mg/L	0.00002691	4.24%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	19.4	-0.0011870	mg/L	0.00049797	-0.0011870	mg/L	0.00049797	41.95%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.1	0.0042662	mg/L	0.00107324	0.0042662	mg/L	0.00107324	25.16%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-0.1	0.0013036	mg/L	0.00039915	0.0013036	mg/L	0.00039915	30.62%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-0.6	0.0093358	mg/L	0.00019860	0.0093358	mg/L	0.00019860	2.13%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-5.6	-0.0136727	mg/L	0.00062295	-0.0136727	mg/L	0.00062295	4.56%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-0.6	-0.132169	mg/L	0.0043759	-0.132169	mg/L	0.0043759	3.31%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-8.0	2.93866	mg/L	0.371582	2.93866	mg/L	0.371582	12.64%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	2.2	0.0723834	mg/L	0.00377403	0.0723834	mg/L	0.00377403	5.21%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-0.0	-0.0055362	mg/L	0.00010141	-0.0055362	mg/L	0.00010141	1.83%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.3	0.0019922	mg/L	0.00157393	0.0019922	mg/L	0.00157393	79.00%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	5.3	0.722789	mg/L	0.0213614	0.722789	mg/L	0.0213614	2.96%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-2.9	-0.0017420	mg/L	0.00060880	-0.0017420	mg/L	0.00060880	34.95%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.3	-0.0013913	mg/L	0.00567517	-0.0013913	mg/L	0.00567517	407.92%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.7	0.0033890	mg/L	0.00859231	0.0033890	mg/L	0.00859231	253.53%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.9	-0.0077146	mg/L	0.01409967	-0.0077146	mg/L	0.01409967	182.77%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.2	0.0032216	mg/L	0.00125719	0.0032216	mg/L	0.00125719	39.02%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-0.3	-0.0066533	mg/L	0.00003467	-0.0066533	mg/L	0.00003467	0.52%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-0.0	-0.0054132	mg/L	0.00224500	-0.0054132	mg/L	0.00224500	41.47%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-4.8	-0.0188652	mg/L	0.00032311	-0.0188652	mg/L	0.00032311	1.71%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	0.8	0.0033265	mg/L	0.00033654	0.0033265	mg/L	0.00033654	10.12%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	3.2	-0.0056854	mg/L	0.00034005	-0.0056854	mg/L	0.00034005	5.98%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	4.3	-0.0379101	mg/L	0.00047327	-0.0379101	mg/L	0.00047327	1.25%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 54
Sample ID: AD19178-008
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 71
Date Collected: 9/16/2020 4:55:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-008

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34324.9	91.7	%	0.12				0.13%
Y 371.029	10518.4	89.2	%	0.54				0.60%
Ag 328.068†	11.7	0.0028798	mg/L	0.00044016	0.0028798	mg/L	0.00044016	15.28%
Al 308.215†	135.5	0.109666	mg/L	0.0045430	0.109666	mg/L	0.0045430	4.14%
As 188.979†	-0.1	-0.0015751	mg/L	0.01703634	-0.0015751	mg/L	0.01703634	>999.9%
Ba 233.527†	6804.8	1.13833	mg/L	0.005202	1.13833	mg/L	0.005202	0.46%
Be 313.107†	-34.3	-0.0008469	mg/L	0.00001926	-0.0008469	mg/L	0.00001926	2.27%
Ca 315.887†	221191.7	109.174	mg/L	0.8205	109.174	mg/L	0.8205	0.75%
Cd 228.802†	82.9	0.0549422	mg/L	0.00080943	0.0549422	mg/L	0.00080943	1.47%
Co 228.616†	134.5	0.0958737	mg/L	0.00127275	0.0958737	mg/L	0.00127275	1.33%
Cr 267.716†	9.2	0.0117530	mg/L	0.00092761	0.0117530	mg/L	0.00092761	7.89%
Cu 327.393†	6262.4	0.979594	mg/L	0.0009156	0.979594	mg/L	0.0009156	0.09%
Fe 273.955†	28.0	-0.0390184	mg/L	0.00967010	-0.0390184	mg/L	0.00967010	24.78%
K 404.721†	11.7	3.24307	mg/L	0.726270	3.24307	mg/L	0.726270	22.39%
Mg 279.077†	3652.1	6.03483	mg/L	0.026239	6.03483	mg/L	0.026239	0.43%
Mn 257.610†	6211.6	0.367157	mg/L	0.0005738	0.367157	mg/L	0.0005738	0.16%
Mo 202.031†	2.4	0.0051851	mg/L	0.00088077	0.0051851	mg/L	0.00088077	16.99%
Na 330.237†	49155.7	1510.30	mg/L	5.357	1510.30	mg/L	5.357	0.35%
Ni 231.604†	337.7	0.194232	mg/L	0.0018079	0.194232	mg/L	0.0018079	0.93%
Pb 220.353†	101.9	0.300128	mg/L	0.0053265	0.300128	mg/L	0.0053265	1.77%
Sb 206.836†	0.2	-0.0016705	mg/L	0.00513197	-0.0016705	mg/L	0.00513197	307.21%
Se 196.026†	0.6	0.0193014	mg/L	0.00746383	0.0193014	mg/L	0.00746383	38.67%
Sn 189.927†	-4.7	-0.0186642	mg/L	0.00263835	-0.0186642	mg/L	0.00263835	14.14%
Ti 334.940†	-22.3	0.0003331	mg/L	0.00017166	0.0003331	mg/L	0.00017166	51.54%
Tl 190.801†	1.1	-0.0034477	mg/L	0.01849477	-0.0034477	mg/L	0.01849477	536.44%
V 290.880†	44.7	-0.0030381	mg/L	0.00157508	-0.0030381	mg/L	0.00157508	51.84%
Zn 206.200†	869.3	0.459169	mg/L	0.0026831	0.459169	mg/L	0.0026831	0.58%
B 249.772	960.6	0.258489	mg/L	0.0021461	0.258489	mg/L	0.0021461	0.83%
Si 251.611	9714.5	8.03289	mg/L	0.040376	8.03289	mg/L	0.040376	0.50%

Sequence No.: 55 **Autosampler Location: 72**
Sample ID: AD19178-009 **Date Collected: 9/16/2020 4:59:51 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD19178-009

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	35228.7	94.1	%	1.08				1.15%
Y 371.029	10546.5	89.5	%	0.93				1.04%
Ag 328.068†	65.8	0.0085868	mg/L	0.00022142	0.0085868	mg/L	0.00022142	2.58%
Al 308.215†	93.2	0.0646209	mg/L	0.00090015	0.0646209	mg/L	0.00090015	1.39%
As 188.979†	1.2	0.0207075	mg/L	0.02920907	0.0207075	mg/L	0.02920907	141.06%
Ba 233.527†	3679.8	0.612454	mg/L	0.0018945	0.612454	mg/L	0.0018945	0.31%
Be 313.107†	-37.5	-0.0008665	mg/L	0.00005528	-0.0008665	mg/L	0.00005528	6.38%
Ca 315.887†	878571.3	433.671	mg/L	4.6515	433.671	mg/L	4.6515	1.07%
Cd 228.802†	-1.0	0.0037701	mg/L	0.00021986	0.0037701	mg/L	0.00021986	5.83%
Co 228.616†	497.1	0.350602	mg/L	0.0010146	0.350602	mg/L	0.0010146	0.29%
Cr 267.716†	5.8	0.0109447	mg/L	0.00075608	0.0109447	mg/L	0.00075608	6.91%
Cu 327.393†	227.4	0.0232470	mg/L	0.00030421	0.0232470	mg/L	0.00030421	1.31%
Fe 273.955†	12.2	-0.0903304	mg/L	0.00338762	-0.0903304	mg/L	0.00338762	3.75%
K 404.721†	14.2	3.96173	mg/L	0.762373	3.96173	mg/L	0.762373	19.24%
Mg 279.077†	3960.1	6.53807	mg/L	0.020197	6.53807	mg/L	0.020197	0.31%
Mn 257.610†	14378.0	0.857135	mg/L	0.0013565	0.857135	mg/L	0.0013565	0.16%
Mo 202.031†	3.5	0.0065755	mg/L	0.00069803	0.0065755	mg/L	0.00069803	10.62%
Na 330.237†	54733.8	1681.63	mg/L	14.991	1681.63	mg/L	14.991	0.89%
Ni 231.604†	104.5	0.0600593	mg/L	0.00014452	0.0600593	mg/L	0.00014452	0.24%
Pb 220.353†	16.0	0.0471366	mg/L	0.01101840	0.0471366	mg/L	0.01101840	23.38%
Sb 206.836†	1.6	0.0122483	mg/L	0.01199140	0.0122483	mg/L	0.01199140	97.90%
Se 196.026†	-1.7	0.0287311	mg/L	0.00667710	0.0287311	mg/L	0.00667710	23.24%
Sn 189.927†	-4.8	-0.0187203	mg/L	0.00302624	-0.0187203	mg/L	0.00302624	16.17%
Ti 334.940†	-119.9	0.0191848	mg/L	0.00061306	0.0191848	mg/L	0.00061306	3.20%
Tl 190.801†	0.5	-0.0249948	mg/L	0.02215207	-0.0249948	mg/L	0.02215207	88.63%
V 290.880†	43.3	-0.0034421	mg/L	0.00052710	-0.0034421	mg/L	0.00052710	15.31%
Zn 206.200†	216.5	0.116544	mg/L	0.0021284	0.116544	mg/L	0.0021284	1.83%
B 249.772	259.3	0.0548562	mg/L	0.00145193	0.0548562	mg/L	0.00145193	2.65%
Si 251.611	1727.2	1.55865	mg/L	0.013180	1.55865	mg/L	0.013180	0.85%

Sequence No.: 56 **Autosampler Location: 73**
Sample ID: AD19178-010 **Date Collected: 9/16/2020 5:04:06 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD19178-010

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	33200.4	88.7	%	1.94				2.19%
Y 371.029	9940.1	84.3	%	2.27				2.70%
Ag 328.068†	52.6	0.0073569	mg/L	0.00064836	0.0073569	mg/L	0.00064836	8.81%
Al 308.215†	195.6	0.175250	mg/L	0.0109115	0.175250	mg/L	0.0109115	6.23%
As 188.979†	0.1	0.0016750	mg/L	0.00706746	0.0016750	mg/L	0.00706746	421.95%
Ba 233.527†	3389.2	0.563562	mg/L	0.0025115	0.563562	mg/L	0.0025115	0.45%
Be 313.107†	-55.4	-0.0009786	mg/L	0.00002053	-0.0009786	mg/L	0.00002053	2.10%
Ca 315.887†	696572.7	343.833	mg/L	17.3491	343.833	mg/L	17.3491	5.05%
Cd 228.802†	1.0	0.0049811	mg/L	0.00034496	0.0049811	mg/L	0.00034496	6.93%
Co 228.616†	2.9	0.0034150	mg/L	0.00195850	0.0034150	mg/L	0.00195850	57.35%
Cr 267.716†	4.2	0.0107058	mg/L	0.00104100	0.0107058	mg/L	0.00104100	9.72%
Cu 327.393†	65.1	-0.0024632	mg/L	0.00143857	-0.0024632	mg/L	0.00143857	58.40%
Fe 273.955†	52.0	0.0392681	mg/L	0.01403754	0.0392681	mg/L	0.01403754	35.75%
K 404.721†	15.8	2.66879	mg/L	0.579710	2.66879	mg/L	0.579710	21.72%
Mg 279.077†	15353.6	25.1504	mg/L	0.15191	25.1504	mg/L	0.15191	0.60%
Mn 257.610†	10846.0	0.645219	mg/L	0.0064257	0.645219	mg/L	0.0064257	1.00%
Mo 202.031†	2.8	0.0057014	mg/L	0.00146360	0.0057014	mg/L	0.00146360	25.67%
Na 330.237†	54501.8	1674.50	mg/L	10.546	1674.50	mg/L	10.546	0.63%
Ni 231.604†	53.5	0.0306745	mg/L	0.00028169	0.0306745	mg/L	0.00028169	0.92%
Pb 220.353†	1.2	0.0031307	mg/L	0.00631904	0.0031307	mg/L	0.00631904	201.84%
Sb 206.836†	1.2	0.0083662	mg/L	0.00300446	0.0083662	mg/L	0.00300446	35.91%
Se 196.026†	0.5	0.0380996	mg/L	0.02112326	0.0380996	mg/L	0.02112326	55.44%
Sn 189.927†	-8.7	-0.0331041	mg/L	0.00867749	-0.0331041	mg/L	0.00867749	26.21%
Ti 334.940†	-7.8	0.0190343	mg/L	0.00148087	0.0190343	mg/L	0.00148087	7.78%
Tl 190.801†	1.0	-0.0162186	mg/L	0.01791318	-0.0162186	mg/L	0.01791318	110.45%
V 290.880†	145.1	0.0294250	mg/L	0.00069276	0.0294250	mg/L	0.00069276	2.35%
Zn 206.200†	142.5	0.0777003	mg/L	0.00302101	0.0777003	mg/L	0.00302101	3.89%
B 249.772	196.6	0.0380817	mg/L	0.00252653	0.0380817	mg/L	0.00252653	6.63%
Si 251.611	2963.1	2.54560	mg/L	0.070130	2.54560	mg/L	0.070130	2.75%

Sequence No.: 57
Sample ID: AD19178-011
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 74
Date Collected: 9/16/2020 5:08:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-011

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34350.2	91.7	%	0.39				0.42%
Y 371.029	10483.9	89.0	%	0.50				0.56%
Ag 328.068†	107.9	0.0130544	mg/L	0.00073107	0.0130544	mg/L	0.00073107	5.60%
Al 308.215†	123.3	0.0967260	mg/L	0.00332981	0.0967260	mg/L	0.00332981	3.44%
As 188.979†	1.7	0.0301254	mg/L	0.01520685	0.0301254	mg/L	0.01520685	50.48%
Ba 233.527†	4193.4	0.698882	mg/L	0.0015138	0.698882	mg/L	0.0015138	0.22%
Be 313.107†	-88.4	-0.0011849	mg/L	0.00005596	-0.0011849	mg/L	0.00005596	4.72%
Ca 315.887†	1316473.5	649.829	mg/L	4.6520	649.829	mg/L	4.6520	0.72%
Cd 228.802†	1.6	0.0053314	mg/L	0.00135096	0.0053314	mg/L	0.00135096	25.34%
Co 228.616†	78.9	0.0567724	mg/L	0.00110595	0.0567724	mg/L	0.00110595	1.95%
Cr 267.716†	1.8	0.0099911	mg/L	0.00039717	0.0099911	mg/L	0.00039717	3.98%
Cu 327.393†	-19.8	-0.0159179	mg/L	0.00089481	-0.0159179	mg/L	0.00089481	5.62%
Fe 273.955†	40.9	0.0028870	mg/L	0.01005987	0.0028870	mg/L	0.01005987	348.45%
K 404.721†	25.9	3.73326	mg/L	1.072009	3.73326	mg/L	1.072009	28.72%
Mg 279.077†	3614.5	5.97353	mg/L	0.042405	5.97353	mg/L	0.042405	0.71%
Mn 257.610†	72837.4	4.36467	mg/L	0.012196	4.36467	mg/L	0.012196	0.28%
Mo 202.031†	5.1	0.0084257	mg/L	0.00105701	0.0084257	mg/L	0.00105701	12.55%
Na 330.237†	54424.3	1672.12	mg/L	6.984	1672.12	mg/L	6.984	0.42%
Ni 231.604†	18.0	0.0102504	mg/L	0.00215044	0.0102504	mg/L	0.00215044	20.98%
Pb 220.353†	1.4	0.0038570	mg/L	0.00869316	0.0038570	mg/L	0.00869316	225.39%
Sb 206.836†	0.2	-0.0016778	mg/L	0.01309691	-0.0016778	mg/L	0.01309691	780.60%
Se 196.026†	-2.1	0.0435006	mg/L	0.01967432	0.0435006	mg/L	0.01967432	45.23%
Sn 189.927†	-8.0	-0.0304908	mg/L	0.00120593	-0.0304908	mg/L	0.00120593	3.96%
Ti 334.940†	-137.9	0.0345387	mg/L	0.00035315	0.0345387	mg/L	0.00035315	1.02%
Tl 190.801†	-1.2	-0.0406845	mg/L	0.00329400	-0.0406845	mg/L	0.00329400	8.10%
V 290.880†	51.9	-0.0007905	mg/L	0.00221752	-0.0007905	mg/L	0.00221752	280.52%
Zn 206.200†	130.1	0.0712147	mg/L	0.00114152	0.0712147	mg/L	0.00114152	1.60%
B 249.772	175.0	0.0427754	mg/L	0.00169605	0.0427754	mg/L	0.00169605	3.97%
Si 251.611	3430.9	3.07005	mg/L	0.009280	3.07005	mg/L	0.009280	0.30%

Sequence No.: 58
Sample ID: AD19178-012
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 75
Date Collected: 9/16/2020 5:12:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-012

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34447.5	92.0	%	0.50				0.55%
Y 371.029	10486.7	89.0	%	1.29				1.45%
Ag 328.068†	102.6	0.0124877	mg/L	0.00018027	0.0124877	mg/L	0.00018027	1.44%
Al 308.215†	87.4	0.0585629	mg/L	0.00301346	0.0585629	mg/L	0.00301346	5.15%
As 188.979†	1.4	0.0244314	mg/L	0.01037626	0.0244314	mg/L	0.01037626	42.47%
Ba 233.527†	5257.6	0.877964	mg/L	0.0029828	0.877964	mg/L	0.0029828	0.34%
Be 313.107†	-92.0	-0.0012076	mg/L	0.00005558	-0.0012076	mg/L	0.00005558	4.60%
Ca 315.887†	1251041.7	617.531	mg/L	4.9359	617.531	mg/L	4.9359	0.80%
Cd 228.802†	4.0	0.0067729	mg/L	0.00033776	0.0067729	mg/L	0.00033776	4.99%
Co 228.616†	5.0	0.0048633	mg/L	0.00153469	0.0048633	mg/L	0.00153469	31.56%
Cr 267.716†	-0.2	0.0095051	mg/L	0.00048176	0.0095051	mg/L	0.00048176	5.07%
Cu 327.393†	-24.2	-0.0166089	mg/L	0.00065731	-0.0166089	mg/L	0.00065731	3.96%
Fe 273.955†	33.2	-0.0219091	mg/L	0.00798999	-0.0219091	mg/L	0.00798999	36.47%
K 404.721†	13.5	3.17934	mg/L	0.376624	3.17934	mg/L	0.376624	11.85%
Mg 279.077†	3930.8	6.49021	mg/L	0.030694	6.49021	mg/L	0.030694	0.47%
Mn 257.610†	58270.8	3.49068	mg/L	0.011521	3.49068	mg/L	0.011521	0.33%
Mo 202.031†	6.0	0.0094674	mg/L	0.00251250	0.0094674	mg/L	0.00251250	26.54%
Na 330.237†	53868.8	1655.06	mg/L	7.155	1655.06	mg/L	7.155	0.43%
Ni 231.604†	11.4	0.0064950	mg/L	0.00262038	0.0064950	mg/L	0.00262038	40.34%
Pb 220.353†	1.4	0.0036968	mg/L	0.00929464	0.0036968	mg/L	0.00929464	251.43%
Sb 206.836†	0.2	-0.0009106	mg/L	0.00456296	-0.0009106	mg/L	0.00456296	501.11%
Se 196.026†	1.8	0.0686126	mg/L	0.05062388	0.0686126	mg/L	0.05062388	73.78%
Sn 189.927†	-5.8	-0.0225750	mg/L	0.00352474	-0.0225750	mg/L	0.00352474	15.61%
Ti 334.940†	-150.5	0.0313354	mg/L	0.00049601	0.0313354	mg/L	0.00049601	1.58%
Tl 190.801†	0.9	-0.0238731	mg/L	0.01715369	-0.0238731	mg/L	0.01715369	71.85%
V 290.880†	48.6	-0.0017934	mg/L	0.00103834	-0.0017934	mg/L	0.00103834	57.90%
Zn 206.200†	43.1	0.0255482	mg/L	0.00056781	0.0255482	mg/L	0.00056781	2.22%
B 249.772	176.1	0.0394421	mg/L	0.00102555	0.0394421	mg/L	0.00102555	2.60%
Si 251.611	1369.7	1.36078	mg/L	0.009555	1.36078	mg/L	0.009555	0.70%

Sequence No.: 59
Sample ID: AD19178-013
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 76
Date Collected: 9/16/2020 5:16:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-013

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	35972.3	96.1	%	0.80				0.84%
Y 371.029	10787.0	91.5	%	1.03				1.13%
Ag 328.068†	72.8	0.0093675	mg/L	0.00019356	0.0093675	mg/L	0.00019356	2.07%
Al 308.215†	24.6	-0.0079672	mg/L	0.00432729	-0.0079672	mg/L	0.00432729	54.31%
As 188.979†	0.7	0.0117736	mg/L	0.02477458	0.0117736	mg/L	0.02477458	210.43%
Ba 233.527†	5852.2	0.978032	mg/L	0.0034359	0.978032	mg/L	0.0034359	0.35%
Be 313.107†	-63.5	-0.0010294	mg/L	0.00005565	-0.0010294	mg/L	0.00005565	5.41%
Ca 315.887†	963992.5	475.837	mg/L	4.8223	475.837	mg/L	4.8223	1.01%
Cd 228.802†	2.1	0.0056369	mg/L	0.00146541	0.0056369	mg/L	0.00146541	26.00%
Co 228.616†	15.5	0.0122646	mg/L	0.00170605	0.0122646	mg/L	0.00170605	13.91%
Cr 267.716†	4.7	0.0107163	mg/L	0.00052158	0.0107163	mg/L	0.00052158	4.87%
Cu 327.393†	0.1	-0.0127618	mg/L	0.00236317	-0.0127618	mg/L	0.00236317	18.52%
Fe 273.955†	41.9	0.0063910	mg/L	0.00723021	0.0063910	mg/L	0.00723021	113.13%
K 404.721†	13.9	2.89584	mg/L	0.414045	2.89584	mg/L	0.414045	14.30%
Mg 279.077†	6091.9	10.0206	mg/L	0.02019	10.0206	mg/L	0.02019	0.20%
Mn 257.610†	18123.5	1.08187	mg/L	0.002307	1.08187	mg/L	0.002307	0.21%
Mo 202.031†	4.9	0.0081620	mg/L	0.00301749	0.0081620	mg/L	0.00301749	36.97%
Na 330.237†	51880.4	1593.99	mg/L	6.055	1593.99	mg/L	6.055	0.38%
Ni 231.604†	47.1	0.0270097	mg/L	0.00114961	0.0270097	mg/L	0.00114961	4.26%
Pb 220.353†	2.8	0.0078289	mg/L	0.00219465	0.0078289	mg/L	0.00219465	28.03%
Sb 206.836†	1.0	0.0069553	mg/L	0.00971389	0.0069553	mg/L	0.00971389	139.66%
Se 196.026†	-1.2	0.0357866	mg/L	0.00513258	0.0357866	mg/L	0.00513258	14.34%
Sn 189.927†	-5.4	-0.0209763	mg/L	0.00355587	-0.0209763	mg/L	0.00355587	16.95%
Ti 334.940†	-149.3	0.0206327	mg/L	0.00030950	0.0206327	mg/L	0.00030950	1.50%
Tl 190.801†	0.4	-0.0282807	mg/L	0.00519556	-0.0282807	mg/L	0.00519556	18.37%
V 290.880†	65.4	0.0036436	mg/L	0.00045551	0.0036436	mg/L	0.00045551	12.50%
Zn 206.200†	83.6	0.0467652	mg/L	0.00046357	0.0467652	mg/L	0.00046357	0.99%
B 249.772	304.3	0.0680825	mg/L	0.00050461	0.0680825	mg/L	0.00050461	0.74%
Si 251.611	710.4	0.741890	mg/L	0.0080812	0.741890	mg/L	0.0080812	1.09%

Sequence No.: 60
Sample ID: CCV V-334775
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/16/2020 5:21:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-334775

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	39305.9	105	%	0.71				0.68%
Y 371.029	11619.7	98.6	%	1.74				1.76%
Ag 328.068†	890.4	0.0986276	mg/L	0.00068713	0.0986276	mg/L	0.00068713	0.70%
Al 308.215†	4445.1	4.70636	mg/L	0.021542	4.70636	mg/L	0.021542	0.46%
As 188.979†	31.7	0.513705	mg/L	0.0175052	0.513705	mg/L	0.0175052	3.41%
Ba 233.527†	2856.2	0.473865	mg/L	0.0013196	0.473865	mg/L	0.0013196	0.28%
Be 313.107†	77794.1	0.485987	mg/L	0.0014091	0.485987	mg/L	0.0014091	0.29%
Ca 315.887†	99306.5	49.0091	mg/L	0.31701	49.0091	mg/L	0.31701	0.65%
Cd 228.802†	791.7	0.487234	mg/L	0.0048953	0.487234	mg/L	0.0048953	1.00%
Co 228.616†	684.1	0.482022	mg/L	0.0034326	0.482022	mg/L	0.0034326	0.71%
Cr 267.716†	2016.6	0.494942	mg/L	0.0038584	0.494942	mg/L	0.0038584	0.78%
Cu 327.393†	3305.1	0.511460	mg/L	0.0040001	0.511460	mg/L	0.0040001	0.78%
Fe 273.955†	1551.3	4.92262	mg/L	0.041182	4.92262	mg/L	0.041182	0.84%
K 404.721†	680.7	-5.89458	mg/L	0.448227	-5.89458	mg/L	0.448227	7.60%
Mg 279.077†	29688.4	48.5677	mg/L	0.22233	48.5677	mg/L	0.22233	0.46%
Mn 257.610†	8073.9	0.478897	mg/L	0.0019425	0.478897	mg/L	0.0019425	0.41%
Mo 202.031†	392.8	0.471140	mg/L	0.0014315	0.471140	mg/L	0.0014315	0.30%
Na 330.237†	1590.3	49.4041	mg/L	0.30475	49.4041	mg/L	0.30475	0.62%
Ni 231.604†	860.6	0.496391	mg/L	0.0033215	0.496391	mg/L	0.0033215	0.67%
Pb 220.353†	164.7	0.490866	mg/L	0.0054505	0.490866	mg/L	0.0054505	1.11%
Sb 206.836†	48.6	0.484261	mg/L	0.0082988	0.484261	mg/L	0.0082988	1.71%
Se 196.026†	65.9	0.483121	mg/L	0.0162353	0.483121	mg/L	0.0162353	3.36%
Sn 189.927†	129.0	0.468794	mg/L	0.0034881	0.468794	mg/L	0.0034881	0.74%
Ti 334.940†	7926.3	0.469352	mg/L	0.0036977	0.469352	mg/L	0.0036977	0.79%
Tl 190.801†	56.0	0.473170	mg/L	0.0078193	0.473170	mg/L	0.0078193	1.65%
V 290.880†	1754.1	0.533300	mg/L	0.0048314	0.533300	mg/L	0.0048314	0.91%
Zn 206.200†	930.8	0.491435	mg/L	0.0017626	0.491435	mg/L	0.0017626	0.36%
B 249.772	2025.1	0.551684	mg/L	0.0011318	0.551684	mg/L	0.0011318	0.21%
Si 251.611	6478.9	5.36238	mg/L	0.036583	5.36238	mg/L	0.036583	0.68%

Sequence No.: 61
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 9/16/2020 5:25:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	41811.5	112	%	0.35				0.31%
Y 371.029	12742.3	108	%	0.15				0.14%
Ag 328.068†	1.2	0.0016800	mg/L	0.00065738	0.0016800	mg/L	0.00065738	39.13%
Al 308.215†	-11.9	-0.0477949	mg/L	0.00231633	-0.0477949	mg/L	0.00231633	4.85%
As 188.979†	0.8	0.0144108	mg/L	0.00997710	0.0144108	mg/L	0.00997710	69.23%
Ba 233.527†	1.0	-0.0066016	mg/L	0.00013385	-0.0066016	mg/L	0.00013385	2.03%
Be 313.107†	7.9	-0.0005828	mg/L	0.00005053	-0.0005828	mg/L	0.00005053	8.67%
Ca 315.887†	29.0	0.0035710	mg/L	0.00106941	0.0035710	mg/L	0.00106941	29.95%
Cd 228.802†	-2.1	0.0030468	mg/L	0.00075302	0.0030468	mg/L	0.00075302	24.71%
Co 228.616†	0.7	0.0018696	mg/L	0.00108204	0.0018696	mg/L	0.00108204	57.88%
Cr 267.716†	-1.0	0.0092294	mg/L	0.00053019	0.0092294	mg/L	0.00053019	5.74%
Cu 327.393†	-1.7	-0.0130647	mg/L	0.00067410	-0.0130647	mg/L	0.00067410	5.16%
Fe 273.955†	-0.8	-0.132890	mg/L	0.0024549	-0.132890	mg/L	0.0024549	1.85%
K 404.721†	-9.6	2.84276	mg/L	0.286455	2.84276	mg/L	0.286455	10.08%
Mg 279.077†	5.0	0.0769560	mg/L	0.00136322	0.0769560	mg/L	0.00136322	1.77%
Mn 257.610†	0.1	-0.0055272	mg/L	0.00017215	-0.0055272	mg/L	0.00017215	3.11%
Mo 202.031†	-0.8	0.0014417	mg/L	0.00030662	0.0014417	mg/L	0.00030662	21.27%
Na 330.237†	6.2	0.751208	mg/L	0.0345325	0.751208	mg/L	0.0345325	4.60%
Ni 231.604†	-2.9	-0.0017744	mg/L	0.00027756	-0.0017744	mg/L	0.00027756	15.64%
Pb 220.353†	-0.2	-0.0009221	mg/L	0.00309067	-0.0009221	mg/L	0.00309067	335.19%
Sb 206.836†	0.1	-0.0020769	mg/L	0.00929056	-0.0020769	mg/L	0.00929056	447.32%
Se 196.026†	-1.5	-0.0049099	mg/L	0.00959719	-0.0049099	mg/L	0.00959719	195.46%
Sn 189.927†	0.5	0.0003348	mg/L	0.00266022	0.0003348	mg/L	0.00266022	794.50%
Ti 334.940†	1.5	-0.0065402	mg/L	0.00017579	-0.0065402	mg/L	0.00017579	2.69%
Tl 190.801†	0.4	-0.0019625	mg/L	0.00798710	-0.0019625	mg/L	0.00798710	406.98%
V 290.880†	-8.3	-0.0199652	mg/L	0.00060143	-0.0199652	mg/L	0.00060143	3.01%
Zn 206.200†	1.5	0.0036929	mg/L	0.00024313	0.0036929	mg/L	0.00024313	6.58%
B 249.772	2.4	-0.0058865	mg/L	0.00051557	-0.0058865	mg/L	0.00051557	8.76%
Si 251.611	5.9	-0.0365213	mg/L	0.00139515	-0.0365213	mg/L	0.00139515	3.82%

Sequence No.: 62
Sample ID: AD19178-002 2D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 78
Date Collected: 9/16/2020 5:29:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-002 2D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	37627.7	100	%	1.20				1.19%
Y 371.029	11332.3	96.2	%	1.71				1.78%
Ag 328.068†	47.7	0.0066622	mg/L	0.00017872	0.0066622	mg/L	0.00017872	2.68%
Al 308.215†	11.6	-0.0222176	mg/L	0.00390883	-0.0222176	mg/L	0.00390883	17.59%
As 188.979†	1.8	0.0309140	mg/L	0.01006090	0.0309140	mg/L	0.01006090	32.54%
Ba 233.527†	957.5	0.154353	mg/L	0.0024614	0.154353	mg/L	0.0024614	1.59%
Be 313.107†	-55.8	-0.0009808	mg/L	0.00004812	-0.0009808	mg/L	0.00004812	4.91%
Ca 315.887†	636674.1	314.266	mg/L	1.2703	314.266	mg/L	1.2703	0.40%
Cd 228.802†	0.2	0.0044580	mg/L	0.00063211	0.0044580	mg/L	0.00063211	14.18%
Co 228.616†	0.8	0.0019532	mg/L	0.00165909	0.0019532	mg/L	0.00165909	84.94%
Cr 267.716†	-0.4	0.0094332	mg/L	0.00043116	0.0094332	mg/L	0.00043116	4.57%
Cu 327.393†	-15.7	-0.0152871	mg/L	0.00180974	-0.0152871	mg/L	0.00180974	11.84%
Fe 273.955†	3.7	-0.118170	mg/L	0.0043332	-0.118170	mg/L	0.0043332	3.67%
K 404.721†	8.5	3.88093	mg/L	0.353452	3.88093	mg/L	0.353452	9.11%
Mg 279.077†	3172.0	5.25063	mg/L	0.011011	5.25063	mg/L	0.011011	0.21%
Mn 257.610†	281.0	0.0113228	mg/L	0.00022025	0.0113228	mg/L	0.00022025	1.95%
Mo 202.031†	1.4	0.0040344	mg/L	0.00060453	0.0040344	mg/L	0.00060453	14.98%
Na 330.237†	23732.9	729.482	mg/L	1.4445	729.482	mg/L	1.4445	0.20%
Ni 231.604†	16.9	0.0096184	mg/L	0.00074882	0.0096184	mg/L	0.00074882	7.79%
Pb 220.353†	-1.3	-0.0042853	mg/L	0.00658128	-0.0042853	mg/L	0.00658128	153.58%
Sb 206.836†	0.3	-0.0005403	mg/L	0.01173784	-0.0005403	mg/L	0.01173784	>999.9%
Se 196.026†	0.7	0.0362458	mg/L	0.00163578	0.0362458	mg/L	0.00163578	4.51%
Sn 189.927†	-5.2	-0.0203136	mg/L	0.00096344	-0.0203136	mg/L	0.00096344	4.74%
Ti 334.940†	-92.1	0.0117625	mg/L	0.00020684	0.0117625	mg/L	0.00020684	1.76%
Tl 190.801†	1.5	-0.0114916	mg/L	0.01494052	-0.0114916	mg/L	0.01494052	130.01%
V 290.880†	32.4	-0.0069216	mg/L	0.00075008	-0.0069216	mg/L	0.00075008	10.84%
Zn 206.200†	13.2	0.0098128	mg/L	0.00060696	0.0098128	mg/L	0.00060696	6.19%
B 249.772	106.3	0.0170385	mg/L	0.00057838	0.0170385	mg/L	0.00057838	3.39%
Si 251.611	829.4	0.738927	mg/L	0.0025234	0.738927	mg/L	0.0025234	0.34%

Sequence No.: 63 **Autosampler Location: 79**
Sample ID: AD19178-004 2D **Date Collected: 9/16/2020 5:33:14 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: AD19178-004 2D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	37330.6	99.7	%	1.01				1.01%
Y 371.029	11105.8	94.2	%	1.51				1.60%
Ag 328.068†	40.4	0.0058875	mg/L	0.00058322	0.0058875	mg/L	0.00058322	9.91%
Al 308.215†	89.6	0.0607348	mg/L	0.00100860	0.0607348	mg/L	0.00100860	1.66%
As 188.979†	0.5	0.0103165	mg/L	0.01554239	0.0103165	mg/L	0.01554239	150.66%
Ba 233.527†	2870.4	0.476254	mg/L	0.0008235	0.476254	mg/L	0.0008235	0.17%
Be 313.107†	-49.7	-0.0009428	mg/L	0.00002512	-0.0009428	mg/L	0.00002512	2.66%
Ca 315.887†	571576.3	282.132	mg/L	0.7604	282.132	mg/L	0.7604	0.27%
Cd 228.802†	0.8	0.0048711	mg/L	0.00047234	0.0048711	mg/L	0.00047234	9.70%
Co 228.616†	-0.9	0.0007322	mg/L	0.00177566	0.0007322	mg/L	0.00177566	242.51%
Cr 267.716†	3.7	0.0104274	mg/L	0.00096085	0.0104274	mg/L	0.00096085	9.21%
Cu 327.393†	-5.5	-0.0136624	mg/L	0.00129469	-0.0136624	mg/L	0.00129469	9.48%
Fe 273.955†	25.6	-0.0468420	mg/L	0.00544326	-0.0468420	mg/L	0.00544326	11.62%
K 404.721†	7.0	3.01403	mg/L	0.526805	3.01403	mg/L	0.526805	17.48%
Mg 279.077†	2916.4	4.83306	mg/L	0.015804	4.83306	mg/L	0.015804	0.33%
Mn 257.610†	1602.7	0.0906257	mg/L	0.00147670	0.0906257	mg/L	0.00147670	1.63%
Mo 202.031†	0.7	0.0032072	mg/L	0.00301118	0.0032072	mg/L	0.00301118	93.89%
Na 330.237†	23194.5	712.944	mg/L	3.0316	712.944	mg/L	3.0316	0.43%
Ni 231.604†	4.0	0.0022313	mg/L	0.00166970	0.0022313	mg/L	0.00166970	74.83%
Pb 220.353†	-0.9	-0.0030759	mg/L	0.00083913	-0.0030759	mg/L	0.00083913	27.28%
Sb 206.836†	0.6	0.0027355	mg/L	0.01127777	0.0027355	mg/L	0.01127777	412.28%
Se 196.026†	-0.5	0.0254569	mg/L	0.01628329	0.0254569	mg/L	0.01628329	63.96%
Sn 189.927†	-5.1	-0.0201600	mg/L	0.00133992	-0.0201600	mg/L	0.00133992	6.65%
Ti 334.940†	-31.5	0.0129328	mg/L	0.00029919	0.0129328	mg/L	0.00029919	2.31%
Tl 190.801†	-1.8	-0.0380324	mg/L	0.00833630	-0.0380324	mg/L	0.00833630	21.92%
V 290.880†	31.4	-0.0072619	mg/L	0.00071614	-0.0072619	mg/L	0.00071614	9.86%
Zn 206.200†	18.8	0.0127550	mg/L	0.00090661	0.0127550	mg/L	0.00090661	7.11%
B 249.772	107.2	0.0197320	mg/L	0.00168503	0.0197320	mg/L	0.00168503	8.54%
Si 251.611	1831.5	1.55630	mg/L	0.021183	1.55630	mg/L	0.021183	1.36%

Sequence No.: 64
Sample ID: AD19178-005 2D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 80
Date Collected: 9/16/2020 5:37:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-005 2D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	37515.1	100	%	0.79				0.79%
Y 371.029	11240.2	95.4	%	0.84				0.88%
Ag 328.068†	50.4	0.0070162	mg/L	0.00029682	0.0070162	mg/L	0.00029682	4.23%
Al 308.215†	13.4	-0.0195916	mg/L	0.00366932	-0.0195916	mg/L	0.00366932	18.73%
As 188.979†	0.5	0.0100058	mg/L	0.01829894	0.0100058	mg/L	0.01829894	182.88%
Ba 233.527†	2334.2	0.386020	mg/L	0.0040470	0.386020	mg/L	0.0040470	1.05%
Be 313.107†	-57.5	-0.0009915	mg/L	0.00007009	-0.0009915	mg/L	0.00007009	7.07%
Ca 315.887†	632779.7	312.343	mg/L	2.3351	312.343	mg/L	2.3351	0.75%
Cd 228.802†	-0.6	0.0039931	mg/L	0.00103198	0.0039931	mg/L	0.00103198	25.84%
Co 228.616†	1.6	0.0025153	mg/L	0.00208999	0.0025153	mg/L	0.00208999	83.09%
Cr 267.716†	0.7	0.0097743	mg/L	0.00050311	0.0097743	mg/L	0.00050311	5.15%
Cu 327.393†	7.1	-0.0116717	mg/L	0.00082905	-0.0116717	mg/L	0.00082905	7.10%
Fe 273.955†	1.5	-0.125162	mg/L	0.0012704	-0.125162	mg/L	0.0012704	1.02%
K 404.721†	4.3	3.68271	mg/L	0.154145	3.68271	mg/L	0.154145	4.19%
Mg 279.077†	7447.2	12.2346	mg/L	0.02483	12.2346	mg/L	0.02483	0.20%
Mn 257.610†	247.9	0.0093371	mg/L	0.00016954	0.0093371	mg/L	0.00016954	1.82%
Mo 202.031†	3.3	0.0063296	mg/L	0.00020457	0.0063296	mg/L	0.00020457	3.23%
Na 330.237†	25892.6	795.812	mg/L	4.9803	795.812	mg/L	4.9803	0.63%
Ni 231.604†	0.3	0.0001118	mg/L	0.00143698	0.0001118	mg/L	0.00143698	>999.9%
Pb 220.353†	-0.1	-0.0005532	mg/L	0.00209664	-0.0005532	mg/L	0.00209664	378.97%
Sb 206.836†	-0.0	-0.0034806	mg/L	0.01471051	-0.0034806	mg/L	0.01471051	422.64%
Se 196.026†	1.2	0.0399087	mg/L	0.00898576	0.0399087	mg/L	0.00898576	22.52%
Sn 189.927†	-6.2	-0.0238474	mg/L	0.00390512	-0.0238474	mg/L	0.00390512	16.38%
Ti 334.940†	-94.5	0.0114770	mg/L	0.00005031	0.0114770	mg/L	0.00005031	0.44%
Tl 190.801†	0.2	-0.0231874	mg/L	0.00712215	-0.0231874	mg/L	0.00712215	30.72%
V 290.880†	76.8	0.0073306	mg/L	0.00019677	0.0073306	mg/L	0.00019677	2.68%
Zn 206.200†	21.1	0.0139902	mg/L	0.00078316	0.0139902	mg/L	0.00078316	5.60%
B 249.772	152.5	0.0302277	mg/L	0.00063894	0.0302277	mg/L	0.00063894	2.11%
Si 251.611	1081.3	0.950972	mg/L	0.0019403	0.950972	mg/L	0.0019403	0.20%

Sequence No.: 65
Sample ID: AD19178-011 2D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 81
Date Collected: 9/16/2020 5:41:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-011 2D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	37530.6	100	%	0.02				0.02%
Y 371.029	11273.2	95.6	%	0.39				0.40%
Ag 328.068†	51.1	0.0071067	mg/L	0.00035939	0.0071067	mg/L	0.00035939	5.06%
Al 308.215†	69.9	0.0396589	mg/L	0.00042135	0.0396589	mg/L	0.00042135	1.06%
As 188.979†	1.4	0.0250679	mg/L	0.03337738	0.0250679	mg/L	0.03337738	133.15%
Ba 233.527†	2267.6	0.374822	mg/L	0.0017014	0.374822	mg/L	0.0017014	0.45%
Be 313.107†	-62.1	-0.0010204	mg/L	0.00004953	-0.0010204	mg/L	0.00004953	4.85%
Ca 315.887†	677602.9	334.469	mg/L	2.1581	334.469	mg/L	2.1581	0.65%
Cd 228.802†	1.0	0.0049541	mg/L	0.00032387	0.0049541	mg/L	0.00032387	6.54%
Co 228.616†	41.4	0.0304702	mg/L	0.00084159	0.0304702	mg/L	0.00084159	2.76%
Cr 267.716†	763.3	0.192320	mg/L	0.0127776	0.192320	mg/L	0.0127776	6.64%
Cu 327.393†	298.8	0.0346999	mg/L	0.00067995	0.0346999	mg/L	0.00067995	1.96%
Fe 273.955†	448.3	1.33004	mg/L	0.061362	1.33004	mg/L	0.061362	4.61%
K 404.721†	9.1	-11.6742	mg/L	0.96696	-11.6742	mg/L	0.96696	8.28%
Mg 279.077†	1973.2	3.29225	mg/L	0.001407	3.29225	mg/L	0.001407	0.04%
Mn 257.610†	35998.7	2.15437	mg/L	0.013030	2.15437	mg/L	0.013030	0.60%
Mo 202.031†	2.2	0.0049672	mg/L	0.00117319	0.0049672	mg/L	0.00117319	23.62%
Na 330.237†	25962.8	797.967	mg/L	5.2208	797.967	mg/L	5.2208	0.65%
Ni 231.604†	26.0	0.0148926	mg/L	0.00118475	0.0148926	mg/L	0.00118475	7.96%
Pb 220.353†	0.3	0.0002559	mg/L	0.00591934	0.0002559	mg/L	0.00591934	>999.9%
Sb 206.836†	-0.2	-0.0056694	mg/L	0.01015736	-0.0056694	mg/L	0.01015736	179.16%
Se 196.026†	-2.1	0.0188541	mg/L	0.01546757	0.0188541	mg/L	0.01546757	82.04%
Sn 189.927†	-4.9	-0.0191637	mg/L	0.00190130	-0.0191637	mg/L	0.00190130	9.92%
Ti 334.940†	-49.5	0.0158380	mg/L	0.00038800	0.0158380	mg/L	0.00038800	2.45%
Tl 190.801†	0.4	-0.0150707	mg/L	0.00501541	-0.0150707	mg/L	0.00501541	33.28%
V 290.880†	29.4	-0.0080439	mg/L	0.00038600	-0.0080439	mg/L	0.00038600	4.80%
Zn 206.200†	115.0	0.0632717	mg/L	0.00037926	0.0632717	mg/L	0.00037926	0.60%
B 249.772	115.6	0.0218768	mg/L	0.00071644	0.0218768	mg/L	0.00071644	3.27%
Si 251.611	2021.3	1.77004	mg/L	0.008521	1.77004	mg/L	0.008521	0.48%

Sequence No.: 66
Sample ID: CCV V-334775
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/16/2020 5:45:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-334775

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	40289.7	108	%	0.45				0.42%
Y 371.029	11906.7	101	%	0.84				0.83%
Ag 328.068†	887.9	0.0983267	mg/L	0.00073427	0.0983267	mg/L	0.00073427	0.75%
QC value within limits for Ag 328.068 Recovery = 98.33%								
Al 308.215†	4430.7	4.69075	mg/L	0.007432	4.69075	mg/L	0.007432	0.16%
QC value within limits for Al 308.215 Recovery = 93.82%								
As 188.979†	30.6	0.495543	mg/L	0.0117444	0.495543	mg/L	0.0117444	2.37%
QC value within limits for As 188.979 Recovery = 99.11%								
Ba 233.527†	2829.4	0.469355	mg/L	0.0016246	0.469355	mg/L	0.0016246	0.35%
QC value within limits for Ba 233.527 Recovery = 93.87%								
Be 313.107†	76827.1	0.479938	mg/L	0.0005355	0.479938	mg/L	0.0005355	0.11%
QC value within limits for Be 313.107 Recovery = 95.99%								
Ca 315.887†	97814.9	48.2728	mg/L	0.15007	48.2728	mg/L	0.15007	0.31%
QC value within limits for Ca 315.887 Recovery = 96.55%								
Cd 228.802†	785.3	0.483332	mg/L	0.0046177	0.483332	mg/L	0.0046177	0.96%
QC value within limits for Cd 228.802 Recovery = 96.67%								
Co 228.616†	674.6	0.475321	mg/L	0.0037709	0.475321	mg/L	0.0037709	0.79%
QC value within limits for Co 228.616 Recovery = 95.06%								
Cr 267.716†	1997.6	0.490375	mg/L	0.0031099	0.490375	mg/L	0.0031099	0.63%
QC value within limits for Cr 267.716 Recovery = 98.08%								
Cu 327.393†	3295.4	0.509910	mg/L	0.0018404	0.509910	mg/L	0.0018404	0.36%
QC value within limits for Cu 327.393 Recovery = 101.98%								
Fe 273.955†	1531.9	4.85967	mg/L	0.041257	4.85967	mg/L	0.041257	0.85%
QC value within limits for Fe 273.955 Recovery = 97.19%								
K 404.721†	670.2	-5.91384	mg/L	0.266970	-5.91384	mg/L	0.266970	4.51%
QC value less than the lower limit for K 404.721 Recovery = -11.83%								
Mg 279.077†	29339.9	47.9984	mg/L	0.07073	47.9984	mg/L	0.07073	0.15%
QC value within limits for Mg 279.077 Recovery = 96.00%								
Mn 257.610†	7988.3	0.473759	mg/L	0.0017773	0.473759	mg/L	0.0017773	0.38%
QC value within limits for Mn 257.610 Recovery = 94.75%								
Mo 202.031†	388.7	0.466286	mg/L	0.0009404	0.466286	mg/L	0.0009404	0.20%
QC value within limits for Mo 202.031 Recovery = 93.26%								
Na 330.237†	1579.3	49.0684	mg/L	0.27097	49.0684	mg/L	0.27097	0.55%
QC value within limits for Na 330.237 Recovery = 98.14%								
Ni 231.604†	844.6	0.487167	mg/L	0.0027427	0.487167	mg/L	0.0027427	0.56%
QC value within limits for Ni 231.604 Recovery = 97.43%								
Pb 220.353†	159.6	0.475854	mg/L	0.0042334	0.475854	mg/L	0.0042334	0.89%
QC value within limits for Pb 220.353 Recovery = 95.17%								
Sb 206.836†	48.9	0.487067	mg/L	0.0276963	0.487067	mg/L	0.0276963	5.69%
QC value within limits for Sb 206.836 Recovery = 97.41%								
Se 196.026†	63.5	0.465763	mg/L	0.0236791	0.465763	mg/L	0.0236791	5.08%
QC value within limits for Se 196.026 Recovery = 93.15%								
Sn 189.927†	128.0	0.465070	mg/L	0.0113099	0.465070	mg/L	0.0113099	2.43%
QC value within limits for Sn 189.927 Recovery = 93.01%								
Ti 334.940†	7864.8	0.465630	mg/L	0.0022959	0.465630	mg/L	0.0022959	0.49%
QC value within limits for Ti 334.940 Recovery = 93.13%								
Tl 190.801†	54.6	0.461203	mg/L	0.0057018	0.461203	mg/L	0.0057018	1.24%
QC value within limits for Tl 190.801 Recovery = 92.24%								
V 290.880†	1733.2	0.526742	mg/L	0.0015871	0.526742	mg/L	0.0015871	0.30%
QC value within limits for V 290.880 Recovery = 105.35%								
Zn 206.200†	922.2	0.486940	mg/L	0.0016803	0.486940	mg/L	0.0016803	0.35%
QC value within limits for Zn 206.200 Recovery = 97.39%								
B 249.772	2069.5	0.563806	mg/L	0.0021379	0.563806	mg/L	0.0021379	0.38%
QC value greater than the upper limit for B 249.772 Recovery = 112.76%								
Si 251.611	6608.4	5.46731	mg/L	0.019026	5.46731	mg/L	0.019026	0.35%
QC value within limits for Si 251.611 Recovery = 109.35%								

QC Failed. Continue with analysis.

Sequence No.: 67 **Autosampler Location: 1**
Sample ID: CCB V-333667 **Date Collected: 9/16/2020 5:49:56 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	42538.1	114	%	0.83				0.73%
Y 371.029	12911.2	110	%	1.31				1.19%
Ag 328.068†	1.9	0.0017550	mg/L	0.00011966	0.0017550	mg/L	0.00011966	6.82%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-3.3	-0.0386492	mg/L	0.00228559	-0.0386492	mg/L	0.00228559	5.91%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.3	0.0056625	mg/L	0.01335281	0.0056625	mg/L	0.01335281	235.81%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	2.0	-0.0064310	mg/L	0.00019687	-0.0064310	mg/L	0.00019687	3.06%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	8.9	-0.0005762	mg/L	0.00002110	-0.0005762	mg/L	0.00002110	3.66%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	42.9	0.0104605	mg/L	0.00188367	0.0104605	mg/L	0.00188367	18.01%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.9	0.0038106	mg/L	0.00053822	0.0038106	mg/L	0.00053822	14.12%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.6	0.0017694	mg/L	0.00070757	0.0017694	mg/L	0.00070757	39.99%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-2.8	0.0088143	mg/L	0.00025412	0.0088143	mg/L	0.00025412	2.88%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-6.0	-0.0137407	mg/L	0.00027375	-0.0137407	mg/L	0.00027375	1.99%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-0.8	-0.132765	mg/L	0.0038299	-0.132765	mg/L	0.0038299	2.88%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-10.8	2.75898	mg/L	0.457282	2.75898	mg/L	0.457282	16.57%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	3.0	0.0737522	mg/L	0.00388875	0.0737522	mg/L	0.00388875	5.27%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	2.7	-0.0053723	mg/L	0.00010436	-0.0053723	mg/L	0.00010436	1.94%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.3	0.0019641	mg/L	0.00073393	0.0019641	mg/L	0.00073393	37.37%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-1.6	0.512270	mg/L	0.0765713	0.512270	mg/L	0.0765713	14.95%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-4.0	-0.0023894	mg/L	0.00122064	-0.0023894	mg/L	0.00122064	51.09%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.3	-0.0012413	mg/L	0.00253238	-0.0012413	mg/L	0.00253238	204.01%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.0	-0.0034032	mg/L	0.01005497	-0.0034032	mg/L	0.01005497	295.45%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-2.0	-0.0085556	mg/L	0.00265136	-0.0085556	mg/L	0.00265136	30.99%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.8	0.0015184	mg/L	0.00279722	0.0015184	mg/L	0.00279722	184.22%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	1.7	-0.0065293	mg/L	0.00015616	-0.0065293	mg/L	0.00015616	2.39%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-0.5	-0.0094618	mg/L	0.01252931	-0.0094618	mg/L	0.01252931	132.42%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-8.1	-0.0198916	mg/L	0.00053679	-0.0198916	mg/L	0.00053679	2.70%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	0.9	0.0033850	mg/L	0.00022817	0.0033850	mg/L	0.00022817	6.74%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	1.5	-0.0061646	mg/L	0.00104117	-0.0061646	mg/L	0.00104117	16.89%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	9.4	-0.0337377	mg/L	0.00263051	-0.0337377	mg/L	0.00263051	7.80%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Method: PE 4 8300DV LEACH AX | Page 1 | Date: 9/17/2020 5:15:47 PM

T26234B4 | 26234 / 26223

Analysis Begun

TLP 9/17/2020

Start Time: 9/17/2020 5:12:52 PM
Logged In Analyst: usermet
Spectrometer: Optima 8300 , S/N 078S1410156

Plasma On Time: 9/17/2020 10:19:07 AM
Technique: ICP Continuous
Autosampler: S10

Sample Information File: C:\Users\Public\PerkinElmer\ICP\Data\Sample Information\09.17.20.sif
Batch ID: ICP4
Results Data Set: T26234B4
Results Library: C:\Users\Public\PerkinElmer\ICP\Data\Results\Results.mdb

9 lines

Sequence No.: 1
Sample ID: CALBLK V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 9/17/2020 5:12:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALBLK V-333667

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	37527.1	390.47	1.04%	100	%
Y 371.029	12084.7	159.10	1.32%	100	%
Ag 328.068†	-9.6	4.98	51.94%	[0.00]	mg/L
Al 308.215†	87.9	4.06	4.61%	[0.00]	mg/L
As 188.979†	-1.2	1.81	151.85%	[0.00]	mg/L
Ba 233.527†	-1.1	0.66	61.35%	[0.00]	mg/L
Be 313.107†	-404.3	2.85	0.70%	[0.00]	mg/L
Ca 315.887†	-238.8	2.48	1.04%	[0.00]	mg/L
Cd 228.802†	14.0	0.31	2.21%	[0.00]	mg/L
Co 228.616†	-1.9	1.11	57.30%	[0.00]	mg/L
Cr 267.716†	5.9	1.59	26.99%	[0.00]	mg/L
Cu 327.393†	-191.1	3.01	1.58%	[0.00]	mg/L
Fe 273.955†	0.2	1.52	700.59%	[0.00]	mg/L
K 404.721†	-37.7	3.72	9.86%	[0.00]	mg/L
Mg 279.077†	-3.9	1.33	34.63%	[0.00]	mg/L
Mn 257.610†	14.5	2.56	17.70%	[0.00]	mg/L
Mo 202.031†	3.1	0.35	11.19%	[0.00]	mg/L
Na 330.237†	22.1	4.71	21.29%	[0.00]	mg/L
Ni 231.604†	46.0	0.80	1.73%	[0.00]	mg/L
Pb 220.353†	1.2	0.32	27.62%	[0.00]	mg/L
Sb 206.836†	2.0	1.14	57.72%	[0.00]	mg/L
Se 196.026†	4.3	3.66	84.43%	[0.00]	mg/L
Sn 189.927†	0.8	1.23	146.03%	[0.00]	mg/L
Ti 334.940†	20.8	2.74	13.15%	[0.00]	mg/L
Tl 190.801†	-1.2	2.42	209.18%	[0.00]	mg/L
V 290.880†	50.4	2.88	5.72%	[0.00]	mg/L
Zn 206.200†	1.2	0.84	71.46%	[0.00]	mg/L
B 249.772	12.6	3.56	28.21%	[0.00]	mg/L
Si 251.611	28.9	2.86	9.91%	[0.00]	mg/L

26223 | SD 281

19178-012
(2D) Se
Reported

Sequence No.: 2
Sample ID: CALST2 V-333672
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 5
Date Collected: 9/17/2020 5:16:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST2 V-333672

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	36957.5	10.49	0.03%	98.5	%
Y 371.029	11645.6	27.32	0.23%	96.4	%
Ag 328.068†	406.1	1.30	0.32%	[0.05]	mg/L
Al 308.215†	951.8	3.97	0.42%	[1]	mg/L
As 188.979†	5.2	0.28	5.34%	[0.1]	mg/L
Ba 233.527†	1460.4	4.56	0.31%	[0.25]	mg/L
Be 313.107†	1753.5	12.30	0.70%	[0.012]	mg/L
Ca 315.887†	8994.4	22.02	0.24%	[5]	mg/L
Cd 228.802†	73.8	1.30	1.76%	[0.05]	mg/L
Co 228.616†	129.2	1.85	1.43%	[0.1]	mg/L
Cr 267.716†	353.8	4.45	1.26%	[0.1]	mg/L
Cu 327.393†	621.3	1.72	0.28%	[0.1]	mg/L
Fe 273.955†	317.8	3.42	1.08%	[1]	mg/L
K 404.721†	22.5	7.62	33.88%	[5]	mg/L
Mg 279.077†	2792.8	5.07	0.18%	[5]	mg/L
Mn 257.610†	1724.3	7.58	0.44%	[0.1]	mg/L
Mo 202.031†	74.2	1.53	2.06%	[0.1]	mg/L
Na 330.237†	689.1	8.13	1.18%	[25]	mg/L
Ni 231.604†	165.2	2.98	1.80%	[0.1]	mg/L
Pb 220.353†	13.9	1.79	12.93%	[0.05]	mg/L
Sb 206.836†	7.8	1.03	13.16%	[0.07]	mg/L
Se 196.026†	11.3	0.61	5.38%	[0.1]	mg/L
Sn 189.927†	25.5	1.65	6.47%	[0.1]	mg/L
Ti 334.940†	1825.2	9.26	0.51%	[0.1]	mg/L
Tl 190.801†	9.6	0.70	7.25%	[0.1]	mg/L
V 290.880†	319.1	1.08	0.34%	[0.1]	mg/L
Zn 206.200†	165.9	1.42	0.86%	[0.1]	mg/L
B 249.772	681.8	2.40	0.35%	[0.2]	mg/L
Si 251.611	153.8	2.47	1.60%	[0.1]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-334773
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 3
Date Collected: 9/17/2020 5:20:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST3 V-334773

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	34668.3	27.20	0.08%	92.4	%
Y 371.029	10829.0	67.81	0.63%	89.6	%
Ag 328.068†	834.0	3.86	0.46%	[0.10]	mg/L
Al 308.215†	4366.9	17.55	0.40%	[5.0]	mg/L
As 188.979†	26.5	0.78	2.95%	[0.50]	mg/L
Ba 233.527†	3036.8	11.75	0.39%	[0.50]	mg/L
Be 313.107†	74202.5	62.84	0.08%	[0.50]	mg/L
Ca 315.887†	95454.0	190.14	0.20%	[50]	mg/L
Cd 228.802†	740.9	3.81	0.51%	[0.50]	mg/L
Co 228.616†	645.8	5.95	0.92%	[0.50]	mg/L
Cr 267.716†	1802.5	5.72	0.32%	[0.50]	mg/L
Cu 327.393†	3157.3	6.05	0.19%	[0.50]	mg/L
Fe 273.955†	1626.7	6.17	0.38%	[5.0]	mg/L
K 404.721†	688.0	4.60	0.67%	[50]	mg/L
Mg 279.077†	28054.7	54.48	0.19%	[50]	mg/L
Mn 257.610†	7935.4	19.71	0.25%	[0.50]	mg/L
Mo 202.031†	376.7	2.63	0.70%	[0.50]	mg/L
Na 330.237†	1568.5	9.63	0.61%	[50]	mg/L
Ni 231.604†	820.6	4.60	0.56%	[0.50]	mg/L
Pb 220.353†	155.9	2.12	1.36%	[0.50]	mg/L
Sb 206.836†	45.7	0.67	1.47%	[0.50]	mg/L
Se 196.026†	65.6	2.06	3.14%	[0.50]	mg/L
Sn 189.927†	127.0	1.49	1.17%	[0.50]	mg/L
Ti 334.940†	8184.8	33.81	0.41%	[0.50]	mg/L
Tl 190.801†	54.1	0.62	1.15%	[0.50]	mg/L
V 290.880†	1736.8	5.64	0.32%	[0.50]	mg/L
Zn 206.200†	852.9	5.26	0.62%	[0.50]	mg/L
B 249.772	1689.3	13.79	0.82%	[0.50]	mg/L
Si 251.611	5497.5	13.91	0.25%	[5]	mg/L

Sequence No.: 4
Sample ID: CALST4 V-334774
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 4
Date Collected: 9/17/2020 5:24:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CALST4 V-334774

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	33634.5	162.36	0.48%	89.6	%
Y 371.029	10435.3	72.40	0.69%	86.4	%
Ag 328.068†	1803.1	9.96	0.55%	[0.20]	mg/L
Al 308.215†	9055.0	13.47	0.15%	[10]	mg/L
As 188.979†	56.6	1.16	2.04%	[1.00]	mg/L
Ba 233.527†	5718.4	9.09	0.16%	[1.00]	mg/L
Be 313.107†	152452.6	46.63	0.03%	[1.00]	mg/L
Ca 315.887†	196784.1	346.64	0.18%	[100]	mg/L
Cd 228.802†	1590.2	9.04	0.57%	[1.00]	mg/L
Co 228.616†	1346.7	11.15	0.83%	[1.00]	mg/L
Cr 267.716†	3783.4	29.35	0.78%	[1.00]	mg/L
Cu 327.393†	5975.7	6.07	0.10%	[1.00]	mg/L
Fe 273.955†	3081.2	26.77	0.87%	[10.0]	mg/L
K 404.721†	1451.5	4.67	0.32%	[100]	mg/L
Mg 279.077†	58598.9	25.17	0.04%	[100]	mg/L
Mn 257.610†	16267.1	3.62	0.02%	[1.00]	mg/L
Mo 202.031†	790.7	10.43	1.32%	[1.00]	mg/L
Na 330.237†	3163.4	5.74	0.18%	[100]	mg/L
Ni 231.604†	1701.2	12.44	0.73%	[1.00]	mg/L
Pb 220.353†	322.9	2.92	0.90%	[1.00]	mg/L
Sb 206.836†	95.7	1.75	1.82%	[1.00]	mg/L
Se 196.026†	132.1	0.61	0.46%	[1.00]	mg/L
Sn 189.927†	265.4	1.48	0.56%	[1.00]	mg/L
Ti 334.940†	16806.2	47.74	0.28%	[1.00]	mg/L
Tl 190.801†	109.9	3.07	2.79%	[1.00]	mg/L
V 290.880†	3129.6	18.89	0.60%	[1.00]	mg/L
Zn 206.200†	1804.6	15.34	0.85%	[1.00]	mg/L
B 249.772	3400.7	13.31	0.39%	[1.00]	mg/L
Si 251.611	11412.5	51.94	0.46%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-31.4	9054	0.00000	0.999058	
Al 308.215	3	Lin, Calc Int	-9.3	900.7	0.00000	0.999769	
As 188.979	3	Lin, Calc Int	-0.5	56.55	0.00000	0.999476	
Ba 233.527	3	Lin, Calc Int	47.8	5728	0.00000	0.999399	
Be 313.107	3	Lin, Calc Int	-402.9	152100	0.00000	0.999907	
Ca 315.887	3	Lin, Calc Int	-918.7	1967	0.00000	0.999886	
Cd 228.802	3	Lin, Calc Int	-12.5	1584	0.00000	0.999374	
Co 228.616	3	Lin, Calc Int	-7.5	1345	0.00000	0.999771	
Cr 267.716	3	Lin, Calc Int	-27.4	3781	0.00000	0.999700	
Cu 327.393	3	Lin, Calc Int	42.0	5992	0.00000	0.999556	
Fe 273.955	3	Lin, Calc Int	20.2	309.0	0.00000	0.999564	
K 404.721	3	Lin, Calc Int	-29.5	14.71	0.00000	0.999376	
Mg 279.077	3	Lin, Calc Int	-289.7	584.6	0.00000	0.999758	
Mn 257.610	3	Lin, Calc Int	6.5	16190	0.00000	0.999870	
Mo 202.031	3	Lin, Calc Int	-5.6	790.0	0.00000	0.999698	
Na 330.237	3	Lin, Calc Int	-43.4	31.97	0.00000	0.999408	
Ni 231.604	3	Lin, Calc Int	-7.7	1699	0.00000	0.999828	
Pb 220.353	3	Lin, Calc Int	-2.0	323.1	0.00000	0.999849	
Sb 206.836	3	Lin, Calc Int	0.1	94.80	0.00000	0.999545	
Se 196.026	3	Lin, Calc Int	-0.9	133.0	0.00000	0.999907	
Sn 189.927	3	Lin, Calc Int	-1.5	265.0	0.00000	0.999745	
Ti 334.940	3	Lin, Calc Int	23.6	16700	0.00000	0.999826	
Tl 190.801	3	Lin, Calc Int	-0.8	110.5	0.00000	0.999919	
V 290.880	3	Lin, Calc Int	34.6	3154	0.00000	0.998279	
Zn 206.200	3	Lin, Calc Int	-15.6	1804	0.00000	0.999597	

B 249.772	3	Lin, Calc Int	-1.4	3399	0.00000	0.999992
Si 251.611	3	Lin, Calc Int	-20.0	1135	0.00000	0.999797

Sequence No.: 5
Sample ID: ICV V-334775
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 85

Autosampler Location: 6
Date Collected: 9/17/2020 5:29:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICV V-334775

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	34721.6	92.5	%	0.42				0.46%
Y 371.029	10852.1	89.8	%	0.34				0.38%
Ag 328.068†	830.4	0.0982153	mg/L	0.00053528	0.0982153	mg/L	0.00053528	0.55%
QC value within limits for Ag 328.068 Recovery = 98.22%								
Al 308.215†	4319.5	4.82251	mg/L	0.015736	4.82251	mg/L	0.015736	0.33%
QC value within limits for Al 308.215 Recovery = 96.45%								
As 188.979†	27.4	0.469477	mg/L	0.0117176	0.469477	mg/L	0.0117176	2.50%
QC value within limits for As 188.979 Recovery = 93.90%								
Ba 233.527†	3019.7	0.518819	mg/L	0.0025322	0.518819	mg/L	0.0025322	0.49%
QC value within limits for Ba 233.527 Recovery = 103.76%								
Be 313.107†	73599.7	0.486444	mg/L	0.0010341	0.486444	mg/L	0.0010341	0.21%
QC value within limits for Be 313.107 Recovery = 97.29%								
Ca 315.887†	95105.2	48.8139	mg/L	0.19779	48.8139	mg/L	0.19779	0.41%
QC value within limits for Ca 315.887 Recovery = 97.63%								
Cd 228.802†	733.0	0.470720	mg/L	0.0024137	0.470720	mg/L	0.0024137	0.51%
QC value within limits for Cd 228.802 Recovery = 94.14%								
Co 228.616†	640.8	0.482070	mg/L	0.0011617	0.482070	mg/L	0.0011617	0.24%
QC value within limits for Co 228.616 Recovery = 96.41%								
Cr 267.716†	1782.1	0.481089	mg/L	0.0014052	0.481089	mg/L	0.0014052	0.29%
QC value within limits for Cr 267.716 Recovery = 96.22%								
Cu 327.393†	3121.5	0.514495	mg/L	0.0025527	0.514495	mg/L	0.0025527	0.50%
QC value within limits for Cu 327.393 Recovery = 102.90%								
Fe 273.955†	1621.3	5.18070	mg/L	0.010443	5.18070	mg/L	0.010443	0.20%
QC value within limits for Fe 273.955 Recovery = 103.61%								
K 404.721†	686.0	-7.16318	mg/L	0.442483	-7.16318	mg/L	0.442483	6.18%
QC value less than the lower limit for K 404.721 Recovery = -14.33%								
Mg 279.077†	27897.4	48.2202	mg/L	0.09328	48.2202	mg/L	0.09328	0.19%
QC value within limits for Mg 279.077 Recovery = 96.44%								
Mn 257.610†	7884.1	0.486634	mg/L	0.0015795	0.486634	mg/L	0.0015795	0.32%
QC value within limits for Mn 257.610 Recovery = 97.33%								
Mo 202.031†	372.7	0.478891	mg/L	0.0027035	0.478891	mg/L	0.0027035	0.56%
QC value within limits for Mo 202.031 Recovery = 95.78%								
Na 330.237†	1553.6	49.9539	mg/L	0.26338	49.9539	mg/L	0.26338	0.53%
QC value within limits for Na 330.237 Recovery = 99.91%								
Ni 231.604†	812.3	0.484050	mg/L	0.0035156	0.484050	mg/L	0.0035156	0.73%
QC value within limits for Ni 231.604 Recovery = 96.81%								
Pb 220.353†	153.2	0.481039	mg/L	0.0054004	0.481039	mg/L	0.0054004	1.12%
QC value within limits for Pb 220.353 Recovery = 96.21%								
Sb 206.836†	46.5	0.500611	mg/L	0.0108039	0.500611	mg/L	0.0108039	2.16%
QC value within limits for Sb 206.836 Recovery = 100.12%								
Se 196.026†	64.8	0.503253	mg/L	0.0271866	0.503253	mg/L	0.0271866	5.40%
QC value within limits for Se 196.026 Recovery = 100.65%								
Sn 189.927†	125.9	0.479114	mg/L	0.0118623	0.479114	mg/L	0.0118623	2.48%
QC value within limits for Sn 189.927 Recovery = 95.82%								
Ti 334.940†	8088.9	0.486627	mg/L	0.0032287	0.486627	mg/L	0.0032287	0.66%
QC value within limits for Ti 334.940 Recovery = 97.33%								
Tl 190.801†	52.6	0.479090	mg/L	0.0163527	0.479090	mg/L	0.0163527	3.41%
QC value within limits for Tl 190.801 Recovery = 95.82%								
V 290.880†	1725.7	0.538713	mg/L	0.0036585	0.538713	mg/L	0.0036585	0.68%
QC value within limits for V 290.880 Recovery = 107.74%								
Zn 206.200†	851.2	0.480549	mg/L	0.0034933	0.480549	mg/L	0.0034933	0.73%
QC value within limits for Zn 206.200 Recovery = 96.11%								
B 249.772	1700.7	0.508630	mg/L	0.0007367	0.508630	mg/L	0.0007367	0.14%
QC value within limits for B 249.772 Recovery = 101.73%								
Si 251.611	5517.7	4.98040	mg/L	0.015095	4.98040	mg/L	0.015095	0.30%
QC value within limits for Si 251.611 Recovery = 99.61%								

QC Failed. Continue with analysis.

Sequence No.: 6
Sample ID: ICB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 1
Date Collected: 9/17/2020 5:33:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	36493.4	97.2	%	0.83				0.86%
Y 371.029	11761.0	97.3	%	1.43				1.47%
Ag 328.068†	0.6	0.0034793	mg/L	0.00003773	0.0034793	mg/L	0.00003773	1.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	4.1	0.0142264	mg/L	0.00158965	0.0142264	mg/L	0.00158965	11.17%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.2	0.0128980	mg/L	0.00725435	0.0128980	mg/L	0.00725435	56.24%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.1	-0.0083592	mg/L	0.00009895	-0.0083592	mg/L	0.00009895	1.18%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	3.1	0.0026687	mg/L	0.00008176	0.0026687	mg/L	0.00008176	3.06%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-1.1	0.466480	mg/L	0.0024795	0.466480	mg/L	0.0024795	0.53%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	-0.1	0.0078147	mg/L	0.00051411	0.0078147	mg/L	0.00051411	6.58%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-0.6	0.0051238	mg/L	0.00002528	0.0051238	mg/L	0.00002528	0.49%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-2.9	0.0064438	mg/L	0.00073411	0.0064438	mg/L	0.00073411	11.39%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-2.3	-0.0073862	mg/L	0.00087279	-0.0073862	mg/L	0.00087279	11.82%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	0.1	-0.0652127	mg/L	0.00720934	-0.0652127	mg/L	0.00720934	11.06%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-5.5	2.33586	mg/L	0.351827	2.33586	mg/L	0.351827	15.06%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	-0.3	0.495177	mg/L	0.0039137	0.495177	mg/L	0.0039137	0.79%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	1.0	-0.0003435	mg/L	0.00005161	-0.0003435	mg/L	0.00005161	15.03%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-1.7	0.0049329	mg/L	0.00208456	0.0049329	mg/L	0.00208456	42.26%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-1.5	1.30992	mg/L	0.050216	1.30992	mg/L	0.050216	3.83%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	2.0	0.0057144	mg/L	0.00114333	0.0057144	mg/L	0.00114333	20.01%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-2.8	-0.0024385	mg/L	0.00323736	-0.0024385	mg/L	0.00323736	132.76%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.6	0.0059447	mg/L	0.00966062	0.0059447	mg/L	0.00966062	162.51%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.9	-0.0073785	mg/L	0.00767670	-0.0073785	mg/L	0.00767670	104.04%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.2	0.0048265	mg/L	0.00244210	0.0048265	mg/L	0.00244210	50.60%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	3.9	-0.0011442	mg/L	0.00017938	-0.0011442	mg/L	0.00017938	15.68%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.1	0.0080103	mg/L	0.00387740	0.0080103	mg/L	0.00387740	48.40%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	3.7	-0.0097854	mg/L	0.00068585	-0.0097854	mg/L	0.00068585	7.01%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	1.3	0.0093633	mg/L	0.00054646	0.0093633	mg/L	0.00054646	5.84%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	10.6	0.0037562	mg/L	0.00076638	0.0037562	mg/L	0.00076638	20.40%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	2.4	0.0195197	mg/L	0.00009668	0.0195197	mg/L	0.00009668	0.50%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: LRS V-333660
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 13
Date Collected: 9/17/2020 5:37:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: LRS V-333660

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	29404.5	78.4	%	0.53				0.68%
Y 371.029	9158.8	75.8	%	0.84				1.11%
Ag 328.068†	8940.9	1.05190	mg/L	0.003347	1.05190	mg/L	0.003347	0.32%
QC value within limits for Ag 328.068 Recovery = 105.19%								
Al 308.215†	491824.2	546.333	mg/L	6.0301	546.333	mg/L	6.0301	1.10%
QC value within limits for Al 308.215 Recovery = 109.27%								
As 188.979†	614.2	10.4011	mg/L	0.10595	10.4011	mg/L	0.10595	1.02%
QC value within limits for As 188.979 Recovery = 104.01%								
Ba 233.527†	58950.3	10.2829	mg/L	0.04556	10.2829	mg/L	0.04556	0.44%
QC value within limits for Ba 233.527 Recovery = 102.83%								
Be 313.107†	762292.0	5.01345	mg/L	0.050541	5.01345	mg/L	0.050541	1.01%
QC value within limits for Be 313.107 Recovery = 100.27%								
Ca 315.887†	979478.3	498.386	mg/L	4.0343	498.386	mg/L	4.0343	0.81%
QC value within limits for Ca 315.887 Recovery = 99.68%								
Cd 228.802†	8350.1	5.28002	mg/L	0.005763	5.28002	mg/L	0.005763	0.11%
QC value within limits for Cd 228.802 Recovery = 105.60%								
Co 228.616†	6788.9	5.05346	mg/L	0.037576	5.05346	mg/L	0.037576	0.74%
QC value within limits for Co 228.616 Recovery = 101.07%								
Cr 267.716†	35356.7	9.40267	mg/L	0.021370	9.40267	mg/L	0.021370	0.23%
QC value within limits for Cr 267.716 Recovery = 94.03%								
Cu 327.393†	67637.9	11.3021	mg/L	0.03864	11.3021	mg/L	0.03864	0.34%
QC value greater than the upper limit for Cu 327.393 Recovery = 113.02%								
Fe 273.955†	62549.3	202.330	mg/L	1.1413	202.330	mg/L	1.1413	0.56%
QC value within limits for Fe 273.955 Recovery = 101.17%								
K 404.721†	2143.2	-2031.73	mg/L	11.098	-2031.73	mg/L	11.098	0.55%
QC value less than the lower limit for K 404.721 Recovery = -1015.86%								
Mg 279.077†	302008.4	517.146	mg/L	4.9559	517.146	mg/L	4.9559	0.96%
QC value within limits for Mg 279.077 Recovery = 103.43%								
Mn 257.610†	160473.5	9.91274	mg/L	0.095987	9.91274	mg/L	0.095987	0.97%
QC value within limits for Mn 257.610 Recovery = 99.13%								
Mo 202.031†	7664.5	9.70905	mg/L	0.038794	9.70905	mg/L	0.038794	0.40%
QC value within limits for Mo 202.031 Recovery = 97.09%								
Na 330.237†	43274.6	1355.05	mg/L	5.948	1355.05	mg/L	5.948	0.44%
QC value greater than the upper limit for Na 330.237 Recovery = 135.51%								
Ni 231.604†	15634.5	9.23514	mg/L	0.048973	9.23514	mg/L	0.048973	0.53%
QC value within limits for Ni 231.604 Recovery = 92.35%								
Pb 220.353†	3183.5	9.92188	mg/L	0.059520	9.92188	mg/L	0.059520	0.60%
QC value within limits for Pb 220.353 Recovery = 99.22%								
Sb 206.836†	526.3	5.77973	mg/L	0.065311	5.77973	mg/L	0.065311	1.13%
QC value greater than the upper limit for Sb 206.836 Recovery = 115.59%								
Se 196.026†	696.6	5.42570	mg/L	0.095857	5.42570	mg/L	0.095857	1.77%
QC value within limits for Se 196.026 Recovery = 108.51%								
Sn 189.927†	2739.4	10.3077	mg/L	0.11961	10.3077	mg/L	0.11961	1.16%
QC value within limits for Sn 189.927 Recovery = 103.08%								
Ti 334.940†	170205.1	10.2277	mg/L	0.07386	10.2277	mg/L	0.07386	0.72%
QC value within limits for Ti 334.940 Recovery = 102.28%								
Tl 190.801†	500.4	4.50438	mg/L	0.030497	4.50438	mg/L	0.030497	0.68%
QC value within limits for Tl 190.801 Recovery = 90.09%								
V 290.880†	29970.6	9.51324	mg/L	0.032115	9.51324	mg/L	0.032115	0.34%
QC value within limits for V 290.880 Recovery = 95.13%								
Zn 206.200†	16699.0	9.26677	mg/L	0.024894	9.26677	mg/L	0.024894	0.27%
QC value within limits for Zn 206.200 Recovery = 92.67%								
B 249.772	7246.4	1.78675	mg/L	0.016402	1.78675	mg/L	0.016402	0.92%
QC value less than the lower limit for B 249.772 Recovery = 35.73%								
Si 251.611	8531.5	9.53396	mg/L	0.030397	9.53396	mg/L	0.030397	0.32%
QC value less than the lower limit for Si 251.611 Recovery = 38.14%								

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICS3 V-333666
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 85

Autosampler Location: 3
Date Collected: 9/17/2020 5:41:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: ICS3 V-333666

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34735.8	92.6	%	0.90				0.97%
Y 371.029	10886.7	90.1	%	1.39				1.55%
Ag 328.068†	843.0	0.0996545	mg/L	0.00130060	0.0996545	mg/L	0.00130060	1.31%
QC value within limits for Ag 328.068 Recovery = 99.65%								
Al 308.215†	4404.7	4.91723	mg/L	0.022685	4.91723	mg/L	0.022685	0.46%
QC value within limits for Al 308.215 Recovery = 98.34%								
As 188.979†	28.6	0.490807	mg/L	0.0076185	0.490807	mg/L	0.0076185	1.55%
QC value within limits for As 188.979 Recovery = 98.16%								
Ba 233.527†	3059.7	0.525804	mg/L	0.0065240	0.525804	mg/L	0.0065240	1.24%
QC value within limits for Ba 233.527 Recovery = 105.16%								
Be 313.107†	74644.9	0.493314	mg/L	0.0014793	0.493314	mg/L	0.0014793	0.30%
QC value within limits for Be 313.107 Recovery = 98.66%								
Ca 315.887†	96329.5	49.4362	mg/L	0.24824	49.4362	mg/L	0.24824	0.50%
QC value within limits for Ca 315.887 Recovery = 98.87%								
Cd 228.802†	747.2	0.479643	mg/L	0.0084101	0.479643	mg/L	0.0084101	1.75%
QC value within limits for Cd 228.802 Recovery = 95.93%								
Co 228.616†	649.8	0.488737	mg/L	0.0051428	0.488737	mg/L	0.0051428	1.05%
QC value within limits for Co 228.616 Recovery = 97.75%								
Cr 267.716†	1813.3	0.489365	mg/L	0.0062381	0.489365	mg/L	0.0062381	1.27%
QC value within limits for Cr 267.716 Recovery = 97.87%								
Cu 327.393†	3174.4	0.523338	mg/L	0.0074834	0.523338	mg/L	0.0074834	1.43%
QC value within limits for Cu 327.393 Recovery = 104.67%								
Fe 273.955†	1649.2	5.27092	mg/L	0.066577	5.27092	mg/L	0.066577	1.26%
QC value within limits for Fe 273.955 Recovery = 105.42%								
K 404.721†	689.2	-7.91580	mg/L	0.668981	-7.91580	mg/L	0.668981	8.45%
QC value less than the lower limit for K 404.721 Recovery = -15.83%								
Mg 279.077†	28398.5	49.0774	mg/L	0.18303	49.0774	mg/L	0.18303	0.37%
QC value within limits for Mg 279.077 Recovery = 98.15%								
Mn 257.610†	7975.0	0.492245	mg/L	0.0016472	0.492245	mg/L	0.0016472	0.33%
QC value within limits for Mn 257.610 Recovery = 98.45%								
Mo 202.031†	381.7	0.490226	mg/L	0.0092616	0.490226	mg/L	0.0092616	1.89%
QC value within limits for Mo 202.031 Recovery = 98.05%								
Na 330.237†	1572.5	50.5456	mg/L	0.55501	50.5456	mg/L	0.55501	1.10%
QC value within limits for Na 330.237 Recovery = 101.09%								
Ni 231.604†	821.1	0.489297	mg/L	0.0068081	0.489297	mg/L	0.0068081	1.39%
QC value within limits for Ni 231.604 Recovery = 97.86%								
Pb 220.353†	159.7	0.501382	mg/L	0.0089470	0.501382	mg/L	0.0089470	1.78%
QC value within limits for Pb 220.353 Recovery = 100.28%								
Sb 206.836†	46.7	0.503942	mg/L	0.0126772	0.503942	mg/L	0.0126772	2.52%
QC value within limits for Sb 206.836 Recovery = 100.79%								
Se 196.026†	63.5	0.493725	mg/L	0.0205455	0.493725	mg/L	0.0205455	4.16%
QC value within limits for Se 196.026 Recovery = 98.74%								
Sn 189.927†	127.9	0.486739	mg/L	0.0066098	0.486739	mg/L	0.0066098	1.36%
QC value within limits for Sn 189.927 Recovery = 97.35%								
Ti 334.940†	8199.7	0.493310	mg/L	0.0030929	0.493310	mg/L	0.0030929	0.63%
QC value within limits for Ti 334.940 Recovery = 98.66%								
Tl 190.801†	53.9	0.491013	mg/L	0.0059068	0.491013	mg/L	0.0059068	1.20%
QC value within limits for Tl 190.801 Recovery = 98.20%								
V 290.880†	1747.9	0.545818	mg/L	0.0089217	0.545818	mg/L	0.0089217	1.63%
QC value within limits for V 290.880 Recovery = 109.16%								
Zn 206.200†	864.6	0.488018	mg/L	0.0068765	0.488018	mg/L	0.0068765	1.41%
QC value within limits for Zn 206.200 Recovery = 97.60%								
B 249.772	1723.8	0.515308	mg/L	0.0020335	0.515308	mg/L	0.0020335	0.39%
QC value within limits for B 249.772 Recovery = 103.06%								
Si 251.611	5545.7	5.00615	mg/L	0.047519	5.00615	mg/L	0.047519	0.95%
QC value within limits for Si 251.611 Recovery = 100.12%								

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: RINSE
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 14
Date Collected: 9/17/2020 5:45:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: RINSE

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	80207.2	214	%	11.18				5.23%
Saturated within auto integration window (code 4)								
Y 371.029	25606.1	212	%	15.81				7.46%
Ag 328.068†	4.3	0.0038268	mg/L	0.00012216	0.0038268	mg/L	0.00012216	3.19%
Al 308.215†	-60.9	-0.0585808	mg/L	0.00335618	-0.0585808	mg/L	0.00335618	5.73%
As 188.979†	0.7	0.0218358	mg/L	0.00205066	0.0218358	mg/L	0.00205066	9.39%
Ba 233.527†	0.1	-0.0083359	mg/L	0.00008533	-0.0083359	mg/L	0.00008533	1.02%
Be 313.107†	288.6	0.0045450	mg/L	0.00006447	0.0045450	mg/L	0.00006447	1.42%
Ca 315.887†	171.8	0.554370	mg/L	0.0018882	0.554370	mg/L	0.0018882	0.34%
Cd 228.802†	-5.9	0.0041534	mg/L	0.00041272	0.0041534	mg/L	0.00041272	9.94%
Co 228.616†	1.4	0.0066457	mg/L	0.00007923	0.0066457	mg/L	0.00007923	1.19%
Cr 267.716†	-2.2	0.0065711	mg/L	0.00038673	0.0065711	mg/L	0.00038673	5.89%
Cu 327.393†	41.0	-0.0001686	mg/L	0.00164968	-0.0001686	mg/L	0.00164968	978.49%
Fe 273.955†	-1.0	-0.0686098	mg/L	0.00114314	-0.0686098	mg/L	0.00114314	1.67%
K 404.721†	0.5	2.77575	mg/L	0.105119	2.77575	mg/L	0.105119	3.79%
Mg 279.077†	3.7	0.502050	mg/L	0.0016906	0.502050	mg/L	0.0016906	0.34%
Mn 257.610†	-6.7	-0.0008193	mg/L	0.00004349	-0.0008193	mg/L	0.00004349	5.31%
Mo 202.031†	-2.2	0.0043632	mg/L	0.00051189	0.0043632	mg/L	0.00051189	11.73%
Na 330.237†	-13.0	0.949811	mg/L	0.0165280	0.949811	mg/L	0.0165280	1.74%
Ni 231.604†	-23.8	-0.0094578	mg/L	0.00074277	-0.0094578	mg/L	0.00074277	7.85%
Pb 220.353†	-1.1	0.0027621	mg/L	0.00008143	0.0027621	mg/L	0.00008143	2.95%
Sb 206.836†	-0.5	-0.0060393	mg/L	0.00638479	-0.0060393	mg/L	0.00638479	105.72%
Se 196.026†	-1.8	-0.0064765	mg/L	0.00355492	-0.0064765	mg/L	0.00355492	54.89%
Sn 189.927†	0.5	0.0077049	mg/L	0.00025583	0.0077049	mg/L	0.00025583	3.32%
Ti 334.940†	-9.2	-0.0019238	mg/L	0.00006864	-0.0019238	mg/L	0.00006864	3.57%
Tl 190.801†	0.7	0.0138012	mg/L	0.00556664	0.0138012	mg/L	0.00556664	40.33%
V 290.880†	-35.4	-0.0221822	mg/L	0.00046026	-0.0221822	mg/L	0.00046026	2.07%
Zn 206.200†	-0.0	0.0086376	mg/L	0.00012451	0.0086376	mg/L	0.00012451	1.44%
B 249.772	12.8	0.0043009	mg/L	0.00033897	0.0043009	mg/L	0.00033897	7.88%
Si 251.611	-2.8	0.0146790	mg/L	0.00111109	0.0146790	mg/L	0.00111109	7.57%

Sequence No.: 10 **Autosampler Location: 5**
Sample ID: LLICV V-333672 **Date Collected: 9/17/2020 5:49:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: LLICV V-333672

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	36959.9	98.5	%	0.55				0.56%
Y 371.029	11692.9	96.8	%	0.80				0.83%
Ag 328.068†	413.0	0.0496143	mg/L	0.00025190	0.0496143	mg/L	0.00025190	0.51%
QC value within limits for Ag 328.068 Recovery = 99.23%								
Al 308.215†	972.1	1.09179	mg/L	0.001804	1.09179	mg/L	0.001804	0.17%
QC value within limits for Al 308.215 Recovery = 109.18%								
As 188.979†	4.9	0.0909402	mg/L	0.00432531	0.0909402	mg/L	0.00432531	4.76%
QC value within limits for As 188.979 Recovery = 90.94%								
Ba 233.527†	1492.1	0.252139	mg/L	0.0002043	0.252139	mg/L	0.0002043	0.08%
QC value within limits for Ba 233.527 Recovery = 100.86%								
Be 313.107†	1800.6	0.0144843	mg/L	0.00013558	0.0144843	mg/L	0.00013558	0.94%
QC value greater than the upper limit for Be 313.107 Recovery = 120.70%								
Ca 315.887†	9197.1	5.14239	mg/L	0.013491	5.14239	mg/L	0.013491	0.26%
QC value within limits for Ca 315.887 Recovery = 102.85%								
Cd 228.802†	75.4	0.0554726	mg/L	0.00057083	0.0554726	mg/L	0.00057083	1.03%
QC value within limits for Cd 228.802 Recovery = 110.95%								
Co 228.616†	132.5	0.104092	mg/L	0.0002032	0.104092	mg/L	0.0002032	0.20%
QC value within limits for Co 228.616 Recovery = 104.09%								
Cr 267.716†	359.9	0.102870	mg/L	0.0013172	0.102870	mg/L	0.0013172	1.28%
QC value within limits for Cr 267.716 Recovery = 102.87%								
Cu 327.393†	631.3	0.0984687	mg/L	0.00073442	0.0984687	mg/L	0.00073442	0.75%
QC value within limits for Cu 327.393 Recovery = 98.47%								
Fe 273.955†	330.3	1.00316	mg/L	0.003705	1.00316	mg/L	0.003705	0.37%
QC value within limits for Fe 273.955 Recovery = 100.32%								
K 404.721†	27.8	-6.90902	mg/L	0.281773	-6.90902	mg/L	0.281773	4.08%
QC value less than the lower limit for K 404.721 Recovery = -138.18%								
Mg 279.077†	2869.2	5.40410	mg/L	0.012544	5.40410	mg/L	0.012544	0.23%
QC value within limits for Mg 279.077 Recovery = 108.08%								
Mn 257.610†	1760.8	0.108371	mg/L	0.0003993	0.108371	mg/L	0.0003993	0.37%
QC value within limits for Mn 257.610 Recovery = 108.37%								
Mo 202.031†	77.1	0.104662	mg/L	0.0011552	0.104662	mg/L	0.0011552	1.10%
QC value within limits for Mo 202.031 Recovery = 104.66%								
Na 330.237†	703.3	23.3557	mg/L	0.20642	23.3557	mg/L	0.20642	0.88%
QC value within limits for Na 330.237 Recovery = 93.42%								
Ni 231.604†	165.7	0.102358	mg/L	0.0020398	0.102358	mg/L	0.0020398	1.99%
QC value within limits for Ni 231.604 Recovery = 102.36%								
Pb 220.353†	15.9	0.0557882	mg/L	0.00152715	0.0557882	mg/L	0.00152715	2.74%
QC value within limits for Pb 220.353 Recovery = 111.58%								
Sb 206.836†	7.1	0.0768443	mg/L	0.00250823	0.0768443	mg/L	0.00250823	3.26%
QC value within limits for Sb 206.836 Recovery = 109.78%								
Se 196.026†	11.5	0.0947253	mg/L	0.00659969	0.0947253	mg/L	0.00659969	6.97%
QC value within limits for Se 196.026 Recovery = 94.73%								
Sn 189.927†	27.9	0.110468	mg/L	0.0038282	0.110468	mg/L	0.0038282	3.47%
QC value within limits for Sn 189.927 Recovery = 110.47%								
Ti 334.940†	1864.1	0.110590	mg/L	0.0006666	0.110590	mg/L	0.0006666	0.60%
QC value within limits for Ti 334.940 Recovery = 110.59%								
Tl 190.801†	11.1	0.107153	mg/L	0.0029587	0.107153	mg/L	0.0029587	2.76%
QC value within limits for Tl 190.801 Recovery = 107.15%								
V 290.880†	325.2	0.0923959	mg/L	0.00058944	0.0923959	mg/L	0.00058944	0.64%
QC value within limits for V 290.880 Recovery = 92.40%								
Zn 206.200†	172.3	0.104205	mg/L	0.0009718	0.104205	mg/L	0.0009718	0.93%
QC value within limits for Zn 206.200 Recovery = 104.20%								
B 249.772	708.5	0.210026	mg/L	0.0004232	0.210026	mg/L	0.0004232	0.20%
QC value within limits for B 249.772 Recovery = 105.01%								
Si 251.611	163.0	0.184962	mg/L	0.0066987	0.184962	mg/L	0.0066987	3.62%
QC value greater than the upper limit for Si 251.611 Recovery = 184.96%								

QC Failed. Continue with analysis.

Sequence No.: 11 **Autosampler Location: 7**
Sample ID: ICSA V-333668 **Date Collected: 9/17/2020 5:53:56 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: ICSA V-333668

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	31214.6	83.2	%	1.44				1.73%
Y 371.029	9940.8	82.3	%	1.87				2.27%
Ag 328.068†	-356.0	-0.0229824	mg/L	0.00112722	-0.0229824	mg/L	0.00112722	4.90%
Al 308.215†	482078.5	535.262	mg/L	7.5098	535.262	mg/L	7.5098	1.40%
QC value within limits for Al 308.215 Recovery = 107.05%								
As 188.979†	-1.1	-0.0163967	mg/L	0.01497998	-0.0163967	mg/L	0.01497998	91.36%
Ba 233.527†	31.2	-0.0029023	mg/L	0.00022478	-0.0029023	mg/L	0.00022478	7.74%
Be 313.107†	-77.6	0.0021379	mg/L	0.00008738	0.0021379	mg/L	0.00008738	4.09%
Ca 315.887†	970881.7	494.016	mg/L	7.3396	494.016	mg/L	7.3396	1.49%
QC value within limits for Ca 315.887 Recovery = 98.80%								
Cd 228.802†	3.2	0.0099109	mg/L	0.00084170	0.0099109	mg/L	0.00084170	8.49%
Co 228.616†	-1.1	0.0047929	mg/L	0.00087450	0.0047929	mg/L	0.00087450	18.25%
Cr 267.716†	-9.0	0.0055939	mg/L	0.00012782	0.0055939	mg/L	0.00012782	2.29%
Cu 327.393†	-92.9	-0.0038889	mg/L	0.00053950	-0.0038889	mg/L	0.00053950	13.87%
Fe 273.955†	57580.9	186.254	mg/L	3.1154	186.254	mg/L	3.1154	1.67%
QC value within limits for Fe 273.955 Recovery = 93.13%								
K 404.721†	-9.2	-2004.88	mg/L	32.816	-2004.88	mg/L	32.816	1.64%
Mg 279.077†	303719.6	520.073	mg/L	7.7932	520.073	mg/L	7.7932	1.50%
QC value within limits for Mg 279.077 Recovery = 104.01%								
Mn 257.610†	-170.6	-0.0109396	mg/L	0.00090655	-0.0109396	mg/L	0.00090655	8.29%
Mo 202.031†	-2.3	0.0042170	mg/L	0.00353667	0.0042170	mg/L	0.00353667	83.87%
Na 330.237†	-18.1	0.790435	mg/L	0.0688134	0.790435	mg/L	0.0688134	8.71%
Ni 231.604†	6.7	0.0085085	mg/L	0.00327358	0.0085085	mg/L	0.00327358	38.47%
Pb 220.353†	-13.1	0.0268371	mg/L	0.01161240	0.0268371	mg/L	0.01161240	43.27%
Sb 206.836†	0.6	0.0059431	mg/L	0.02055299	0.0059431	mg/L	0.02055299	345.83%
Se 196.026†	-19.3	0.0318992	mg/L	0.01309404	0.0318992	mg/L	0.01309404	41.05%
Sn 189.927†	-13.3	-0.0443344	mg/L	0.00275701	-0.0443344	mg/L	0.00275701	6.22%
Ti 334.940†	-132.3	0.0282120	mg/L	0.00038501	0.0282120	mg/L	0.00038501	1.36%
Tl 190.801†	-1.2	-0.0192899	mg/L	0.02534052	-0.0192899	mg/L	0.02534052	131.37%
V 290.880†	514.6	0.175817	mg/L	0.0040975	0.175817	mg/L	0.0040975	2.33%
Zn 206.200†	15.3	0.0171373	mg/L	0.00044984	0.0171373	mg/L	0.00044984	2.62%
B 249.772	2432.1	0.0817646	mg/L	0.00475366	0.0817646	mg/L	0.00475366	5.81%
Si 251.611	7.7	0.819952	mg/L	0.0142202	0.819952	mg/L	0.0142202	1.73%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCV V-334775
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 85

Autosampler Location: 6
Date Collected: 9/17/2020 5:58:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-334775

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	35522.0	94.7	%	1.23				1.30%
Y 371.029	11168.3	92.4	%	1.40				1.51%
Ag 328.068†	813.2	0.0962967	mg/L	0.00121384	0.0962967	mg/L	0.00121384	1.26%
QC value within limits for Ag 328.068 Recovery = 96.30%								
Al 308.215†	4283.4	4.78238	mg/L	0.027403	4.78238	mg/L	0.027403	0.57%
QC value within limits for Al 308.215 Recovery = 95.65%								
As 188.979†	26.8	0.459567	mg/L	0.0281999	0.459567	mg/L	0.0281999	6.14%
QC value within limits for As 188.979 Recovery = 91.91%								
Ba 233.527†	2973.4	0.510742	mg/L	0.0071287	0.510742	mg/L	0.0071287	1.40%
QC value within limits for Ba 233.527 Recovery = 102.15%								
Be 313.107†	72390.7	0.478497	mg/L	0.0004238	0.478497	mg/L	0.0004238	0.09%
QC value within limits for Be 313.107 Recovery = 95.70%								
Ca 315.887†	93923.9	48.2134	mg/L	0.05900	48.2134	mg/L	0.05900	0.12%
QC value within limits for Ca 315.887 Recovery = 96.43%								
Cd 228.802†	725.3	0.465853	mg/L	0.0074902	0.465853	mg/L	0.0074902	1.61%
QC value within limits for Cd 228.802 Recovery = 93.17%								
Co 228.616†	628.4	0.472834	mg/L	0.0074552	0.472834	mg/L	0.0074552	1.58%
QC value within limits for Co 228.616 Recovery = 94.57%								
Cr 267.716†	1749.0	0.472306	mg/L	0.0069138	0.472306	mg/L	0.0069138	1.46%
QC value within limits for Cr 267.716 Recovery = 94.46%								
Cu 327.393†	3083.3	0.508128	mg/L	0.0055475	0.508128	mg/L	0.0055475	1.09%
QC value within limits for Cu 327.393 Recovery = 101.63%								
Fe 273.955†	1623.6	5.18806	mg/L	0.082440	5.18806	mg/L	0.082440	1.59%
QC value within limits for Fe 273.955 Recovery = 103.76%								
K 404.721†	672.3	-8.17616	mg/L	0.732276	-8.17616	mg/L	0.732276	8.96%
QC value less than the lower limit for K 404.721 Recovery = -16.35%								
Mg 279.077†	27571.7	47.6630	mg/L	0.12721	47.6630	mg/L	0.12721	0.27%
QC value within limits for Mg 279.077 Recovery = 95.33%								
Mn 257.610†	7776.4	0.479982	mg/L	0.0004438	0.479982	mg/L	0.0004438	0.09%
QC value within limits for Mn 257.610 Recovery = 96.00%								
Mo 202.031†	366.4	0.470957	mg/L	0.0073203	0.470957	mg/L	0.0073203	1.55%
QC value within limits for Mo 202.031 Recovery = 94.19%								
Na 330.237†	1530.9	49.2458	mg/L	0.46192	49.2458	mg/L	0.46192	0.94%
QC value within limits for Na 330.237 Recovery = 98.49%								
Ni 231.604†	800.3	0.476947	mg/L	0.0068034	0.476947	mg/L	0.0068034	1.43%
QC value within limits for Ni 231.604 Recovery = 95.39%								
Pb 220.353†	150.4	0.472527	mg/L	0.0005445	0.472527	mg/L	0.0005445	0.12%
QC value within limits for Pb 220.353 Recovery = 94.51%								
Sb 206.836†	47.2	0.507793	mg/L	0.0087259	0.507793	mg/L	0.0087259	1.72%
QC value within limits for Sb 206.836 Recovery = 101.56%								
Se 196.026†	61.1	0.475022	mg/L	0.0118147	0.475022	mg/L	0.0118147	2.49%
QC value within limits for Se 196.026 Recovery = 95.00%								
Sn 189.927†	123.1	0.468784	mg/L	0.0067870	0.468784	mg/L	0.0067870	1.45%
QC value within limits for Sn 189.927 Recovery = 93.76%								
Ti 334.940†	8031.5	0.483144	mg/L	0.0007333	0.483144	mg/L	0.0007333	0.15%
QC value within limits for Ti 334.940 Recovery = 96.63%								
Tl 190.801†	52.4	0.477426	mg/L	0.0235534	0.477426	mg/L	0.0235534	4.93%
QC value within limits for Tl 190.801 Recovery = 95.49%								
V 290.880†	1708.6	0.533273	mg/L	0.0088298	0.533273	mg/L	0.0088298	1.66%
QC value within limits for V 290.880 Recovery = 106.65%								
Zn 206.200†	831.7	0.469748	mg/L	0.0101949	0.469748	mg/L	0.0101949	2.17%
QC value within limits for Zn 206.200 Recovery = 93.95%								
B 249.772	1699.2	0.507793	mg/L	0.0029520	0.507793	mg/L	0.0029520	0.58%
QC value within limits for B 249.772 Recovery = 101.56%								
Si 251.611	5580.7	5.03433	mg/L	0.052684	5.03433	mg/L	0.052684	1.05%
QC value within limits for Si 251.611 Recovery = 100.69%								

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 2
Date Collected: 9/17/2020 6:02:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	37335.4	99.5	%	0.66				0.66%
Y 371.029	12140.5	100	%	1.31				1.30%
Ag 328.068†	-2.4	0.0031514	mg/L	0.00018134	0.0031514	mg/L	0.00018134	5.75%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	16.2	0.0276061	mg/L	0.00580545	0.0276061	mg/L	0.00580545	21.03%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.2	0.0061140	mg/L	0.01860173	0.0061140	mg/L	0.01860173	304.25%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.1	-0.0083377	mg/L	0.00045265	-0.0083377	mg/L	0.00045265	5.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	5.6	0.0026848	mg/L	0.00002510	0.0026848	mg/L	0.00002510	0.93%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	12.9	0.473612	mg/L	0.0035588	0.473612	mg/L	0.0035588	0.75%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	0.4	0.0081156	mg/L	0.00057627	0.0081156	mg/L	0.00057627	7.10%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-0.6	0.0051777	mg/L	0.00149879	0.0051777	mg/L	0.00149879	28.95%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.6	0.0073586	mg/L	0.00070932	0.0073586	mg/L	0.00070932	9.64%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	7.7	-0.0057191	mg/L	0.00055196	-0.0057191	mg/L	0.00055196	9.65%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-0.2	-0.0661295	mg/L	0.00861651	-0.0661295	mg/L	0.00861651	13.03%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-2.2	2.56872	mg/L	0.764833	2.56872	mg/L	0.764833	29.77%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	2.7	0.500368	mg/L	0.0038933	0.500368	mg/L	0.0038933	0.78%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	2.4	-0.0002561	mg/L	0.00003602	-0.0002561	mg/L	0.00003602	14.06%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-1.5	0.0051707	mg/L	0.00114057	0.0051707	mg/L	0.00114057	22.06%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-2.0	1.29298	mg/L	0.122849	1.29298	mg/L	0.122849	9.50%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-2.3	0.0032189	mg/L	0.00052717	0.0032189	mg/L	0.00052717	16.38%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.6	0.0044783	mg/L	0.00521899	0.0044783	mg/L	0.00521899	116.54%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.9	0.0090975	mg/L	0.00765090	0.0090975	mg/L	0.00765090	84.10%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.6	-0.0046463	mg/L	0.00724536	-0.0046463	mg/L	0.00724536	155.94%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.4	0.0072871	mg/L	0.00162512	0.0072871	mg/L	0.00162512	22.30%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	2.6	-0.0012248	mg/L	0.00005828	-0.0012248	mg/L	0.00005828	4.76%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.0	0.0162531	mg/L	0.00722805	0.0162531	mg/L	0.00722805	44.47%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	2.4	-0.0101790	mg/L	0.00036246	-0.0101790	mg/L	0.00036246	3.56%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	7.9	0.0130380	mg/L	0.00153005	0.0130380	mg/L	0.00153005	11.74%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	10.9	0.0038862	mg/L	0.00032905	0.0038862	mg/L	0.00032905	8.47%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	4.6	0.0215714	mg/L	0.00266489	0.0215714	mg/L	0.00266489	12.35%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: EF-V-334696
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 53
Date Collected: 9/17/2020 6:06:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: EF-V-334696

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34100.5	90.9	%	3.35				3.69%
Y 371.029	10852.6	89.8	%	3.05				3.40%
Ag 328.068†	-6.3	0.0027272	mg/L	0.00063593	0.0027272	mg/L	0.00063593	23.32%
Al 308.215†	29.7	0.0425069	mg/L	0.00074018	0.0425069	mg/L	0.00074018	1.74%
As 188.979†	0.4	0.0172055	mg/L	0.00938771	0.0172055	mg/L	0.00938771	54.56%
Ba 233.527†	46.3	-0.0002567	mg/L	0.00007132	-0.0002567	mg/L	0.00007132	27.79%
Be 313.107†	-38.1	0.0023977	mg/L	0.00006054	0.0023977	mg/L	0.00006054	2.52%
Ca 315.887†	112.4	0.524160	mg/L	0.0027458	0.524160	mg/L	0.0027458	0.52%
Cd 228.802†	1.9	0.0090961	mg/L	0.00058804	0.0090961	mg/L	0.00058804	6.46%
Co 228.616†	1.3	0.0065948	mg/L	0.00127945	0.0065948	mg/L	0.00127945	19.40%
Cr 267.716†	5.0	0.0085522	mg/L	0.00089007	0.0085522	mg/L	0.00089007	10.41%
Cu 327.393†	2.2	-0.0066389	mg/L	0.00149977	-0.0066389	mg/L	0.00149977	22.59%
Fe 273.955†	2.4	-0.0577555	mg/L	0.00493008	-0.0577555	mg/L	0.00493008	8.54%
K 404.721†	4.3	2.91980	mg/L	0.168687	2.91980	mg/L	0.168687	5.78%
Mg 279.077†	21.2	0.531957	mg/L	0.0051077	0.531957	mg/L	0.0051077	0.96%
Mn 257.610†	12.2	0.0003539	mg/L	0.00008334	0.0003539	mg/L	0.00008334	23.55%
Mo 202.031†	3.4	0.0114444	mg/L	0.00096408	0.0114444	mg/L	0.00096408	8.42%
Na 330.237†	55669.0	1742.77	mg/L	12.220	1742.77	mg/L	12.220	0.70%
Ni 231.604†	1.8	0.0056382	mg/L	0.00085597	0.0056382	mg/L	0.00085597	15.18%
Pb 220.353†	-2.3	-0.0006552	mg/L	0.00169089	-0.0006552	mg/L	0.00169089	258.07%
Sb 206.836†	0.9	0.0087684	mg/L	0.01615714	0.0087684	mg/L	0.01615714	184.27%
Se 196.026†	-2.8	-0.0139429	mg/L	0.02243139	-0.0139429	mg/L	0.02243139	160.88%
Sn 189.927†	0.4	0.0074464	mg/L	0.00535329	0.0074464	mg/L	0.00535329	71.89%
Ti 334.940†	7.6	-0.0009209	mg/L	0.00018260	-0.0009209	mg/L	0.00018260	19.83%
Tl 190.801†	0.4	0.0103618	mg/L	0.00360877	0.0103618	mg/L	0.00360877	34.83%
V 290.880†	9.9	-0.0078218	mg/L	0.00091322	-0.0078218	mg/L	0.00091322	11.68%
Zn 206.200†	14.6	0.0167384	mg/L	0.00074359	0.0167384	mg/L	0.00074359	4.44%
B 249.772	58.9	0.0013222	mg/L	0.00076129	0.0013222	mg/L	0.00076129	57.58%
Si 251.611	23.1	0.0962727	mg/L	0.00278996	0.0962727	mg/L	0.00278996	2.90%

Sequence No.: 15
Sample ID: AD19224-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 48
Date Collected: 9/17/2020 6:10:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19224-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	36321.0	96.8	%	0.51				0.52%
Y 371.029	11767.4	97.4	%	0.61				0.63%
Ag 328.068†	-4.2	0.0029792	mg/L	0.00034493	0.0029792	mg/L	0.00034493	11.58%
Al 308.215†	574.1	0.647211	mg/L	0.0022642	0.647211	mg/L	0.0022642	0.35%
As 188.979†	0.6	0.0201464	mg/L	0.01026079	0.0201464	mg/L	0.01026079	50.93%
Ba 233.527†	938.7	0.155526	mg/L	0.0000714	0.155526	mg/L	0.0000714	0.05%
Be 313.107†	-1.0	0.0026418	mg/L	0.00004575	0.0026418	mg/L	0.00004575	1.73%
Ca 315.887†	5657.9	3.34322	mg/L	0.009526	3.34322	mg/L	0.009526	0.28%
Cd 228.802†	0.6	0.0082492	mg/L	0.00073313	0.0082492	mg/L	0.00073313	8.89%
Co 228.616†	3.5	0.0082061	mg/L	0.00182095	0.0082061	mg/L	0.00182095	22.19%
Cr 267.716†	4.0	0.0082734	mg/L	0.00039068	0.0082734	mg/L	0.00039068	4.72%
Cu 327.393†	28.8	-0.0021947	mg/L	0.00067370	-0.0021947	mg/L	0.00067370	30.70%
Fe 273.955†	43.5	0.0750862	mg/L	0.00310448	0.0750862	mg/L	0.00310448	4.13%
K 404.721†	19.5	2.52173	mg/L	0.663273	2.52173	mg/L	0.663273	26.30%
Mg 279.077†	178.6	0.801152	mg/L	0.0058742	0.801152	mg/L	0.0058742	0.73%
Mn 257.610†	2041.5	0.125709	mg/L	0.0002660	0.125709	mg/L	0.0002660	0.21%
Mo 202.031†	0.2	0.0073488	mg/L	0.00260597	0.0073488	mg/L	0.00260597	35.46%
Na 330.237†	53497.5	1674.84	mg/L	2.770	1674.84	mg/L	2.770	0.17%
Ni 231.604†	3.4	0.0065561	mg/L	0.00069516	0.0065561	mg/L	0.00069516	10.60%
Pb 220.353†	22.2	0.0750410	mg/L	0.00753452	0.0750410	mg/L	0.00753452	10.04%
Sb 206.836†	-0.3	-0.0035094	mg/L	0.02016908	-0.0035094	mg/L	0.02016908	574.72%
Se 196.026†	1.1	0.0160595	mg/L	0.02060450	0.0160595	mg/L	0.02060450	128.30%
Sn 189.927†	0.0	0.0057823	mg/L	0.00157751	0.0057823	mg/L	0.00157751	27.28%
Ti 334.940†	29.6	0.0006145	mg/L	0.00029395	0.0006145	mg/L	0.00029395	47.83%
Tl 190.801†	1.6	0.0214727	mg/L	0.01241464	0.0214727	mg/L	0.01241464	57.82%
V 290.880†	14.3	-0.0063947	mg/L	0.00090562	-0.0063947	mg/L	0.00090562	14.16%
Zn 206.200†	152.1	0.0929935	mg/L	0.00094104	0.0929935	mg/L	0.00094104	1.01%
B 249.772	226.7	0.0532741	mg/L	0.00097239	0.0532741	mg/L	0.00097239	1.83%
Si 251.611	792.3	0.779800	mg/L	0.0062554	0.779800	mg/L	0.0062554	0.80%

Sequence No.: 16
Sample ID: AD19180-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 49
Date Collected: 9/17/2020 6:14:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19180-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	33808.0	90.1	%	0.17				0.19%
Y 371.029	11160.6	92.4	%	0.71				0.77%
Ag 328.068†	106.3	0.0152175	mg/L	0.00028319	0.0152175	mg/L	0.00028319	1.86%
Al 308.215†	493.7	0.557959	mg/L	0.0047470	0.557959	mg/L	0.0047470	0.85%
As 188.979†	-1.6	-0.0202624	mg/L	0.01343745	-0.0202624	mg/L	0.01343745	66.32%
Ba 233.527†	512.7	0.0811609	mg/L	0.00092270	0.0811609	mg/L	0.00092270	1.14%
Be 313.107†	-450.4	-0.0003124	mg/L	0.00006877	-0.0003124	mg/L	0.00006877	22.01%
Ca 315.887†	1474955.0	750.262	mg/L	3.4917	750.262	mg/L	3.4917	0.47%
Cd 228.802†	0.3	0.0080532	mg/L	0.00058474	0.0080532	mg/L	0.00058474	7.26%
Co 228.616†	-2.4	0.0038024	mg/L	0.00063814	0.0038024	mg/L	0.00063814	16.78%
Cr 267.716†	80316.4	21.2500	mg/L	0.01183	21.2500	mg/L	0.01183	0.06%
Cu 327.393†	-28.0	-0.0116863	mg/L	0.00033834	-0.0116863	mg/L	0.00033834	2.90%
Fe 273.955†	-25.8	-0.148937	mg/L	0.0057419	-0.148937	mg/L	0.0057419	3.86%
K 404.721†	115.3	11.4449	mg/L	0.70507	11.4449	mg/L	0.70507	6.16%
Mg 279.077†	608.7	1.53703	mg/L	0.003098	1.53703	mg/L	0.003098	0.20%
Mn 257.610†	-18.0	-0.0015160	mg/L	0.00009311	-0.0015160	mg/L	0.00009311	6.14%
Mo 202.031†	14.2	0.0250939	mg/L	0.00058893	0.0250939	mg/L	0.00058893	2.35%
Na 330.237†	56528.5	1769.65	mg/L	6.081	1769.65	mg/L	6.081	0.34%
Ni 231.604†	-1.1	0.0039586	mg/L	0.00045725	0.0039586	mg/L	0.00045725	11.55%
Pb 220.353†	-6.8	-0.0144082	mg/L	0.00741598	-0.0144082	mg/L	0.00741598	51.47%
Sb 206.836†	23.7	0.249938	mg/L	0.0065113	0.249938	mg/L	0.0065113	2.61%
Se 196.026†	-0.9	0.0606382	mg/L	0.01690973	0.0606382	mg/L	0.01690973	27.89%
Sn 189.927†	-7.0	-0.0207714	mg/L	0.00923315	-0.0207714	mg/L	0.00923315	44.45%
Ti 334.940†	-207.6	0.0431759	mg/L	0.00053049	0.0431759	mg/L	0.00053049	1.23%
Tl 190.801†	0.8	-0.0310703	mg/L	0.01552586	-0.0310703	mg/L	0.01552586	49.97%
V 290.880†	45.2	0.0034453	mg/L	0.00151883	0.0034453	mg/L	0.00151883	44.08%
Zn 206.200†	-33.1	-0.0097185	mg/L	0.00082138	-0.0097185	mg/L	0.00082138	8.45%
B 249.772	219.9	0.0649719	mg/L	0.00053219	0.0649719	mg/L	0.00053219	0.82%
Si 251.611	13057.1	11.7543	mg/L	0.05068	11.7543	mg/L	0.05068	0.43%

Sequence No.: 17
Sample ID: AD19233-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 50
Date Collected: 9/17/2020 6:18:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19233-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	87025.3	232	%	18.87				8.14%
Y 371.029	28276.2	234	%	19.59				8.37%
Ag 328.068†	5.1	0.0039191	mg/L	0.00014198	0.0039191	mg/L	0.00014198	3.62%
Al 308.215†	-60.8	-0.0584838	mg/L	0.00331801	-0.0584838	mg/L	0.00331801	5.67%
As 188.979†	0.8	0.0243043	mg/L	0.00378500	0.0243043	mg/L	0.00378500	15.57%
Ba 233.527†	3.5	-0.0077449	mg/L	0.00075197	-0.0077449	mg/L	0.00075197	9.71%
Be 313.107†	273.7	0.0044471	mg/L	0.00007734	0.0044471	mg/L	0.00007734	1.74%
Ca 315.887†	1595.0	1.27785	mg/L	1.160992	1.27785	mg/L	1.160992	90.86%
Cd 228.802†	-5.5	0.0043856	mg/L	0.00038062	0.0043856	mg/L	0.00038062	8.68%
Co 228.616†	1.3	0.0065775	mg/L	0.00049168	0.0065775	mg/L	0.00049168	7.48%
Cr 267.716†	13.6	0.0107454	mg/L	0.00120543	0.0107454	mg/L	0.00120543	11.22%
Cu 327.393†	29.1	-0.0021513	mg/L	0.00142047	-0.0021513	mg/L	0.00142047	66.03%
Fe 273.955†	-0.1	-0.0657274	mg/L	0.00179580	-0.0657274	mg/L	0.00179580	2.73%
K 404.721†	-1.2	2.63470	mg/L	0.281502	2.63470	mg/L	0.281502	10.68%
Mg 279.077†	7.3	0.508212	mg/L	0.0116198	0.508212	mg/L	0.0116198	2.29%
Mn 257.610†	407.1	0.0247461	mg/L	0.04251696	0.0247461	mg/L	0.04251696	171.81%
Mo 202.031†	-2.3	0.0041953	mg/L	0.00034294	0.0041953	mg/L	0.00034294	8.17%
Na 330.237†	313.4	11.1598	mg/L	16.78793	11.1598	mg/L	16.78793	150.43%
Ni 231.604†	-26.2	-0.0108618	mg/L	0.00091254	-0.0108618	mg/L	0.00091254	8.40%
Pb 220.353†	-0.9	0.0035446	mg/L	0.00157137	0.0035446	mg/L	0.00157137	44.33%
Sb 206.836†	-0.8	-0.0090372	mg/L	0.00120225	-0.0090372	mg/L	0.00120225	13.30%
Se 196.026†	-2.0	-0.0075155	mg/L	0.00388010	-0.0075155	mg/L	0.00388010	51.63%
Sn 189.927†	-0.8	0.0026333	mg/L	0.00037512	0.0026333	mg/L	0.00037512	14.25%
Ti 334.940†	-10.2	-0.0019259	mg/L	0.00015180	-0.0019259	mg/L	0.00015180	7.88%
Tl 190.801†	0.7	0.0131141	mg/L	0.00331526	0.0131141	mg/L	0.00331526	25.28%
V 290.880†	-34.0	-0.0217388	mg/L	0.00078128	-0.0217388	mg/L	0.00078128	3.59%
Zn 206.200†	-0.5	0.0083555	mg/L	0.00008437	0.0083555	mg/L	0.00008437	1.01%
B 249.772	11.4	0.0038361	mg/L	0.00240480	0.0038361	mg/L	0.00240480	62.69%
Si 251.611	5.0	0.0224734	mg/L	0.00649559	0.0224734	mg/L	0.00649559	28.90%

Sequence No.: 18
Sample ID: AD19180-002 4D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 67
Date Collected: 9/17/2020 6:22:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19180-002 4D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	38897.2	104	%	0.22				0.22%
Y 371.029	12555.8	104	%	1.06				1.02%
Ag 328.068†	17.5	0.0053734	mg/L	0.00013211	0.0053734	mg/L	0.00013211	2.46%
Al 308.215†	127.5	0.151345	mg/L	0.0033060	0.151345	mg/L	0.0033060	2.18%
As 188.979†	-1.3	-0.0140247	mg/L	0.01186100	-0.0140247	mg/L	0.01186100	84.57%
Ba 233.527†	122.3	0.0129965	mg/L	0.00036994	0.0129965	mg/L	0.00036994	2.85%
Be 313.107†	-94.4	0.0020274	mg/L	0.00006435	0.0020274	mg/L	0.00006435	3.17%
Ca 315.887†	382238.0	194.778	mg/L	0.9768	194.778	mg/L	0.9768	0.50%
Cd 228.802†	-0.1	0.0078147	mg/L	0.00074304	0.0078147	mg/L	0.00074304	9.51%
Co 228.616†	1.2	0.0064807	mg/L	0.00058675	0.0064807	mg/L	0.00058675	9.05%
Cr 267.716†	19040.5	5.04323	mg/L	0.017849	5.04323	mg/L	0.017849	0.35%
Cu 327.393†	-11.2	-0.0088729	mg/L	0.00097076	-0.0088729	mg/L	0.00097076	10.94%
Fe 273.955†	-6.9	-0.0877393	mg/L	0.00451635	-0.0877393	mg/L	0.00451635	5.15%
K 404.721†	22.4	4.47054	mg/L	0.914045	4.47054	mg/L	0.914045	20.45%
Mg 279.077†	155.1	0.761031	mg/L	0.0085888	0.761031	mg/L	0.0085888	1.13%
Mn 257.610†	1.4	-0.0003157	mg/L	0.00008828	-0.0003157	mg/L	0.00008828	27.96%
Mo 202.031†	1.0	0.0083823	mg/L	0.00063277	0.0083823	mg/L	0.00063277	7.55%
Na 330.237†	12175.9	382.236	mg/L	2.7793	382.236	mg/L	2.7793	0.73%
Ni 231.604†	-2.6	0.0030480	mg/L	0.00103150	0.0030480	mg/L	0.00103150	33.84%
Pb 220.353†	-1.9	0.0004672	mg/L	0.00181683	0.0004672	mg/L	0.00181683	388.86%
Sb 206.836†	5.7	0.0591695	mg/L	0.01603045	0.0591695	mg/L	0.01603045	27.09%
Se 196.026†	-0.3	0.0204052	mg/L	0.01102964	0.0204052	mg/L	0.01102964	54.05%
Sn 189.927†	-4.2	-0.0102221	mg/L	0.00403931	-0.0102221	mg/L	0.00403931	39.52%
Ti 334.940†	-50.0	0.0103964	mg/L	0.00010903	0.0103964	mg/L	0.00010903	1.05%
Tl 190.801†	1.5	0.0086194	mg/L	0.00583132	0.0086194	mg/L	0.00583132	67.65%
V 290.880†	17.8	-0.0052981	mg/L	0.00013550	-0.0052981	mg/L	0.00013550	2.56%
Zn 206.200†	12.0	0.0152919	mg/L	0.00151597	0.0152919	mg/L	0.00151597	9.91%
B 249.772	60.6	0.0192807	mg/L	0.00030354	0.0192807	mg/L	0.00030354	1.57%
Si 251.611	3464.4	3.12765	mg/L	0.008596	3.12765	mg/L	0.008596	0.27%

Sequence No.: 19
Sample ID: AD19178-012 2D
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 68
Date Collected: 9/17/2020 6:26:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19178-012 2D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	34428.6	91.7	%	1.67				1.82%
Y 371.029	11228.6	92.9	%	1.15				1.24%
Ag 328.068†	42.1	0.0081225	mg/L	0.00049263	0.0081225	mg/L	0.00049263	6.07%
Al 308.215†	145.7	0.171775	mg/L	0.0031094	0.171775	mg/L	0.0031094	1.81%
As 188.979†	-0.8	-0.0045411	mg/L	0.02479160	-0.0045411	mg/L	0.02479160	545.94%
Ba 233.527†	2904.4	0.498690	mg/L	0.0119138	0.498690	mg/L	0.0119138	2.39%
Be 313.107†	-56.6	0.0022761	mg/L	0.00006356	0.0022761	mg/L	0.00006356	2.79%
Ca 315.887†	696505.2	354.536	mg/L	3.9293	354.536	mg/L	3.9293	1.11%
Cd 228.802†	2.6	0.0095435	mg/L	0.00020111	0.0095435	mg/L	0.00020111	2.11%
Co 228.616†	2.3	0.0072974	mg/L	0.00033743	0.0072974	mg/L	0.00033743	4.62%
Cr 267.716†	10.9	0.0101391	mg/L	0.00069328	0.0101391	mg/L	0.00069328	6.84%
Cu 327.393†	-6.4	-0.0080783	mg/L	0.00155523	-0.0080783	mg/L	0.00155523	19.25%
Fe 273.955†	20.0	-0.0008116	mg/L	0.00585890	-0.0008116	mg/L	0.00585890	721.89%
K 404.721†	17.4	3.19541	mg/L	0.322633	3.19541	mg/L	0.322633	10.10%
Mg 279.077†	2213.6	4.28245	mg/L	0.083956	4.28245	mg/L	0.083956	1.96%
Mn 257.610†	29956.1	1.85012	mg/L	0.003569	1.85012	mg/L	0.003569	0.19%
Mo 202.031†	2.8	0.0107065	mg/L	0.00162716	0.0107065	mg/L	0.00162716	15.20%
Na 330.237†	28052.6	878.884	mg/L	2.9401	878.884	mg/L	2.9401	0.33%
Ni 231.604†	5.2	0.0076565	mg/L	0.00080098	0.0076565	mg/L	0.00080098	10.46%
Pb 220.353†	1.2	0.0100667	mg/L	0.00060621	0.0100667	mg/L	0.00060621	6.02%
Sb 206.836†	0.2	0.0013823	mg/L	0.00435997	0.0013823	mg/L	0.00435997	315.42%
Se 196.026†	-1.3	0.0256398	mg/L	0.00177448	0.0256398	mg/L	0.00177448	6.92%
Sn 189.927†	-8.0	-0.0245715	mg/L	0.00534286	-0.0245715	mg/L	0.00534286	21.74%
Ti 334.940†	-73.5	0.0211292	mg/L	0.00043882	0.0211292	mg/L	0.00043882	2.08%
Tl 190.801†	-0.4	-0.0127982	mg/L	0.00104301	-0.0127982	mg/L	0.00104301	8.15%
V 290.880†	34.9	0.0003181	mg/L	0.00105446	0.0003181	mg/L	0.00105446	331.43%
Zn 206.200†	21.5	0.0205562	mg/L	0.00088404	0.0205562	mg/L	0.00088404	4.30%
B 249.772	88.5	0.0257288	mg/L	0.00051152	0.0257288	mg/L	0.00051152	1.99%
Si 251.611	680.1	0.772108	mg/L	0.0205935	0.772108	mg/L	0.0205935	2.67%

Sequence No.: 20
Sample ID: CCV V-334775
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/17/2020 6:31:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-334775

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	38942.1	104	%	0.48				0.46%
Y 371.029	12523.9	104	%	0.60				0.58%
Ag 328.068†	799.9	0.0948129	mg/L	0.00024662	0.0948129	mg/L	0.00024662	0.26%
QC value within limits for Ag 328.068 Recovery = 94.81%								
Al 308.215†	4161.4	4.64680	mg/L	0.007094	4.64680	mg/L	0.007094	0.15%
QC value within limits for Al 308.215 Recovery = 92.94%								
As 188.979†	27.7	0.476835	mg/L	0.0152652	0.476835	mg/L	0.0152652	3.20%
QC value within limits for As 188.979 Recovery = 95.37%								
Ba 233.527†	2925.3	0.502335	mg/L	0.0018660	0.502335	mg/L	0.0018660	0.37%
QC value within limits for Ba 233.527 Recovery = 100.47%								
Be 313.107†	71201.6	0.470681	mg/L	0.0010429	0.470681	mg/L	0.0010429	0.22%
QC value within limits for Be 313.107 Recovery = 94.14%								
Ca 315.887†	93459.6	47.9773	mg/L	0.11153	47.9773	mg/L	0.11153	0.23%
QC value within limits for Ca 315.887 Recovery = 95.95%								
Cd 228.802†	724.0	0.464986	mg/L	0.0026935	0.464986	mg/L	0.0026935	0.58%
QC value within limits for Cd 228.802 Recovery = 93.00%								
Co 228.616†	622.8	0.468710	mg/L	0.0021873	0.468710	mg/L	0.0021873	0.47%
QC value within limits for Co 228.616 Recovery = 93.74%								
Cr 267.716†	1725.3	0.466021	mg/L	0.0018184	0.466021	mg/L	0.0018184	0.39%
QC value within limits for Cr 267.716 Recovery = 93.20%								
Cu 327.393†	3042.8	0.501374	mg/L	0.0015018	0.501374	mg/L	0.0015018	0.30%
QC value within limits for Cu 327.393 Recovery = 100.27%								
Fe 273.955†	1673.5	5.34965	mg/L	0.006292	5.34965	mg/L	0.006292	0.12%
QC value within limits for Fe 273.955 Recovery = 106.99%								
K 404.721†	653.7	-11.1783	mg/L	0.38432	-11.1783	mg/L	0.38432	3.44%
QC value less than the lower limit for K 404.721 Recovery = -22.36%								
Mg 279.077†	27323.1	47.2377	mg/L	0.06545	47.2377	mg/L	0.06545	0.14%
QC value within limits for Mg 279.077 Recovery = 94.48%								
Mn 257.610†	7690.5	0.474671	mg/L	0.0011603	0.474671	mg/L	0.0011603	0.24%
QC value within limits for Mn 257.610 Recovery = 94.93%								
Mo 202.031†	360.2	0.462999	mg/L	0.0028713	0.462999	mg/L	0.0028713	0.62%
QC value within limits for Mo 202.031 Recovery = 92.60%								
Na 330.237†	1527.4	49.1360	mg/L	0.07548	49.1360	mg/L	0.07548	0.15%
QC value within limits for Na 330.237 Recovery = 98.27%								
Ni 231.604†	804.1	0.479182	mg/L	0.0018782	0.479182	mg/L	0.0018782	0.39%
QC value within limits for Ni 231.604 Recovery = 95.84%								
Pb 220.353†	150.1	0.471514	mg/L	0.0091654	0.471514	mg/L	0.0091654	1.94%
QC value within limits for Pb 220.353 Recovery = 94.30%								
Sb 206.836†	43.3	0.466510	mg/L	0.0091523	0.466510	mg/L	0.0091523	1.96%
QC value within limits for Sb 206.836 Recovery = 93.30%								
Se 196.026†	59.5	0.463417	mg/L	0.0011560	0.463417	mg/L	0.0011560	0.25%
QC value within limits for Se 196.026 Recovery = 92.68%								
Sn 189.927†	125.1	0.476082	mg/L	0.0027171	0.476082	mg/L	0.0027171	0.57%
QC value within limits for Sn 189.927 Recovery = 95.22%								
Ti 334.940†	8009.2	0.481795	mg/L	0.0023987	0.481795	mg/L	0.0023987	0.50%
QC value within limits for Ti 334.940 Recovery = 96.36%								
Tl 190.801†	51.7	0.470921	mg/L	0.0051766	0.470921	mg/L	0.0051766	1.10%
QC value within limits for Tl 190.801 Recovery = 94.18%								
V 290.880†	1692.1	0.528002	mg/L	0.0004783	0.528002	mg/L	0.0004783	0.09%
QC value within limits for V 290.880 Recovery = 105.60%								
Zn 206.200†	832.9	0.470429	mg/L	0.0029394	0.470429	mg/L	0.0029394	0.62%
QC value within limits for Zn 206.200 Recovery = 94.09%								
B 249.772	1856.7	0.554073	mg/L	0.0013550	0.554073	mg/L	0.0013550	0.24%
QC value greater than the upper limit for B 249.772 Recovery = 110.81%								
Si 251.611	6105.0	5.49696	mg/L	0.011587	5.49696	mg/L	0.011587	0.21%
QC value within limits for Si 251.611 Recovery = 109.94%								

QC Failed. Continue with analysis.

Sequence No.: 21
Sample ID: CCB V-333667
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 1
Date Collected: 9/17/2020 6:35:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	41207.3	110	%	0.15				0.13%
Y 371.029	13676.3	113	%	0.77				0.68%
Ag 328.068†	-5.7	0.0027790	mg/L	0.00023359	0.0027790	mg/L	0.00023359	8.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	7.1	0.0174697	mg/L	0.00131714	0.0174697	mg/L	0.00131714	7.54%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.4	0.0334538	mg/L	0.00610480	0.0334538	mg/L	0.00610480	18.25%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-1.3	-0.0085670	mg/L	0.00025693	-0.0085670	mg/L	0.00025693	3.00%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	13.1	0.0027341	mg/L	0.00007832	0.0027341	mg/L	0.00007832	2.86%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	1.5	0.467789	mg/L	0.0019574	0.467789	mg/L	0.0019574	0.42%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 228.802†	0.1	0.0079467	mg/L	0.00053672	0.0079467	mg/L	0.00053672	6.75%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.5	0.0060034	mg/L	0.00103926	0.0060034	mg/L	0.00103926	17.31%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.1	0.0072267	mg/L	0.00039220	0.0072267	mg/L	0.00039220	5.43%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	14.1	-0.0046603	mg/L	0.00051225	-0.0046603	mg/L	0.00051225	10.99%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-1.9	-0.0716549	mg/L	0.00413655	-0.0716549	mg/L	0.00413655	5.77%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 404.721†	-1.9	2.65102	mg/L	0.179468	2.65102	mg/L	0.179468	6.77%
QC value within limits for K 404.721 Recovery = Not calculated								
Mg 279.077†	0.7	0.496824	mg/L	0.0034151	0.496824	mg/L	0.0034151	0.69%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	0.2	-0.0003904	mg/L	0.00006894	-0.0003904	mg/L	0.00006894	17.66%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.7	0.0062674	mg/L	0.00090324	0.0062674	mg/L	0.00090324	14.41%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 330.237†	-3.8	1.23822	mg/L	0.044726	1.23822	mg/L	0.044726	3.61%
QC value within limits for Na 330.237 Recovery = Not calculated								
Ni 231.604†	-5.0	0.0016068	mg/L	0.00023554	0.0016068	mg/L	0.00023554	14.66%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.3	0.0024571	mg/L	0.00254874	0.0024571	mg/L	0.00254874	103.73%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.3	0.0018660	mg/L	0.00180868	0.0018660	mg/L	0.00180868	96.93%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.2	0.0088965	mg/L	0.00522386	0.0088965	mg/L	0.00522386	58.72%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.3	0.0067099	mg/L	0.00637510	0.0067099	mg/L	0.00637510	95.01%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-1.0	-0.0014379	mg/L	0.00016854	-0.0014379	mg/L	0.00016854	11.72%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-0.7	0.0004928	mg/L	0.00751305	0.0004928	mg/L	0.00751305	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	2.2	-0.0102400	mg/L	0.00035830	-0.0102400	mg/L	0.00035830	3.50%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	0.8	0.0091126	mg/L	0.00044833	0.0091126	mg/L	0.00044833	4.92%
QC value within limits for Zn 206.200 Recovery = Not calculated								
B 249.772	1.7	0.0012741	mg/L	0.00075609	0.0012741	mg/L	0.00075609	59.34%
QC value within limits for B 249.772 Recovery = Not calculated								
Si 251.611	3.1	0.0204084	mg/L	0.00123346	0.0204084	mg/L	0.00123346	6.04%
QC value within limits for Si 251.611 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 22
Sample ID: AD19233-002
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 50
Date Collected: 9/17/2020 6:39:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: AD19233-002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	35251.8	93.9	%	0.23				0.24%
Y 371.029	11778.2	97.5	%	0.12				0.13%
Ag 328.068†	5.4	0.0042564	mg/L	0.00058165	0.0042564	mg/L	0.00058165	13.67%
Al 308.215†	233.4	0.270654	mg/L	0.0047465	0.270654	mg/L	0.0047465	1.75%
As 188.979†	41.0	0.734608	mg/L	0.0145405	0.734608	mg/L	0.0145405	1.98%
Ba 233.527†	3155.9	0.542587	mg/L	0.0029330	0.542587	mg/L	0.0029330	0.54%
Be 313.107†	-60.6	0.0022497	mg/L	0.00003915	0.0022497	mg/L	0.00003915	1.74%
Ca 315.887†	171216.2	87.5050	mg/L	0.14775	87.5050	mg/L	0.14775	0.17%
Cd 228.802†	40.8	0.0336429	mg/L	0.00030741	0.0336429	mg/L	0.00030741	0.91%
Co 228.616†	5.8	0.0099429	mg/L	0.00164638	0.0099429	mg/L	0.00164638	16.56%
Cr 267.716†	6.9	0.0092085	mg/L	0.00042638	0.0092085	mg/L	0.00042638	4.63%
Cu 327.393†	36.5	-0.0008416	mg/L	0.00080848	-0.0008416	mg/L	0.00080848	96.06%
Fe 273.955†	255.4	0.760854	mg/L	0.0102787	0.760854	mg/L	0.0102787	1.35%
K 404.721†	9.9	-5.51672	mg/L	0.467637	-5.51672	mg/L	0.467637	8.48%
Mg 279.077†	4484.1	8.16672	mg/L	0.026356	8.16672	mg/L	0.026356	0.32%
Mn 257.610†	49236.0	3.04112	mg/L	0.005315	3.04112	mg/L	0.005315	0.17%
Mo 202.031†	3.0	0.0109349	mg/L	0.00126568	0.0109349	mg/L	0.00126568	11.57%
Na 330.237†	49763.0	1558.02	mg/L	6.787	1558.02	mg/L	6.787	0.44%
Ni 231.604†	12.5	0.0119556	mg/L	0.00212348	0.0119556	mg/L	0.00212348	17.76%
Pb 220.353†	2.7	0.0146469	mg/L	0.00791127	0.0146469	mg/L	0.00791127	54.01%
Sb 206.836†	1.6	0.0158772	mg/L	0.00543953	0.0158772	mg/L	0.00543953	34.26%
Se 196.026†	-1.1	0.0069205	mg/L	0.01139922	0.0069205	mg/L	0.01139922	164.72%
Sn 189.927†	-4.4	-0.0109137	mg/L	0.00390239	-0.0109137	mg/L	0.00390239	35.76%
Ti 334.940†	63.0	0.0090059	mg/L	0.00027145	0.0090059	mg/L	0.00027145	3.01%
Tl 190.801†	-1.2	0.0009704	mg/L	0.00397309	0.0009704	mg/L	0.00397309	409.43%
V 290.880†	125.7	0.0293237	mg/L	0.00073275	0.0293237	mg/L	0.00073275	2.50%
Zn 206.200†	175.4	0.105898	mg/L	0.0019047	0.105898	mg/L	0.0019047	1.80%
B 249.772	1287.3	0.374615	mg/L	0.0023613	0.374615	mg/L	0.0023613	0.63%
Si 251.611	1828.0	1.77918	mg/L	0.020261	1.77918	mg/L	0.020261	1.14%

Sequence No.: 23
Sample ID: CCV V-334775
Analyst:
Initial Sample Wt:
Dilution:
Wash Time: 55

Autosampler Location: 6
Date Collected: 9/17/2020 6:43:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:
Auto Dilution Factor: 1

Mean Data: CCV V-334775

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	36432.4	97.1	%	0.59				0.61%
Y 371.029	11807.3	97.7	%	0.42				0.43%
Ag 328.068†	787.8	0.0934197	mg/L	0.00042451	0.0934197	mg/L	0.00042451	0.45%
Al 308.215†	4123.5	4.60428	mg/L	0.024134	4.60428	mg/L	0.024134	0.52%
As 188.979†	26.8	0.459773	mg/L	0.0081902	0.459773	mg/L	0.0081902	1.78%
Ba 233.527†	2867.4	0.492226	mg/L	0.0029466	0.492226	mg/L	0.0029466	0.60%
Be 313.107†	69976.6	0.462628	mg/L	0.0007425	0.462628	mg/L	0.0007425	0.16%
Ca 315.887†	91878.5	47.1736	mg/L	0.26559	47.1736	mg/L	0.26559	0.56%
Cd 228.802†	712.5	0.457746	mg/L	0.0026491	0.457746	mg/L	0.0026491	0.58%
Co 228.616†	605.7	0.456001	mg/L	0.0008555	0.456001	mg/L	0.0008555	0.19%
Cr 267.716†	1686.9	0.455826	mg/L	0.0018619	0.455826	mg/L	0.0018619	0.41%
Cu 327.393†	2976.8	0.490351	mg/L	0.0032527	0.490351	mg/L	0.0032527	0.66%
Fe 273.955†	1650.1	5.27389	mg/L	0.071909	5.27389	mg/L	0.071909	1.36%
K 404.721†	639.1	-11.3528	mg/L	0.53606	-11.3528	mg/L	0.53606	4.72%
Mg 279.077†	26777.6	46.3045	mg/L	0.14631	46.3045	mg/L	0.14631	0.32%
Mn 257.610†	7598.8	0.469008	mg/L	0.0010635	0.469008	mg/L	0.0010635	0.23%
Mo 202.031†	357.8	0.460018	mg/L	0.0020148	0.460018	mg/L	0.0020148	0.44%
Na 330.237†	1516.4	48.7905	mg/L	0.55540	48.7905	mg/L	0.55540	1.14%
Ni 231.604†	790.0	0.470863	mg/L	0.0035455	0.470863	mg/L	0.0035455	0.75%
Pb 220.353†	149.4	0.469277	mg/L	0.0087729	0.469277	mg/L	0.0087729	1.87%
Sb 206.836†	44.5	0.479070	mg/L	0.0087829	0.479070	mg/L	0.0087829	1.83%
Se 196.026†	57.0	0.444363	mg/L	0.0246336	0.444363	mg/L	0.0246336	5.54%
Sn 189.927†	124.3	0.473187	mg/L	0.0138505	0.473187	mg/L	0.0138505	2.93%
Ti 334.940†	7938.0	0.477471	mg/L	0.0032294	0.477471	mg/L	0.0032294	0.68%
Tl 190.801†	50.6	0.461307	mg/L	0.0285105	0.461307	mg/L	0.0285105	6.18%
V 290.880†	1662.0	0.518402	mg/L	0.0047365	0.518402	mg/L	0.0047365	0.91%
Zn 206.200†	806.5	0.455802	mg/L	0.0045842	0.455802	mg/L	0.0045842	1.01%
B 249.772	1706.4	0.509145	mg/L	0.0018550	0.509145	mg/L	0.0018550	0.36%
Si 251.611	5616.5	5.06393	mg/L	0.026955	5.06393	mg/L	0.026955	0.53%

Sequence No.: 24 **Autosampler Location: 1**
Sample ID: CCB V-333667 **Date Collected: 9/17/2020 6:47:04 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time: 55 **Auto Dilution Factor: 1**

Mean Data: CCB V-333667

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	38781.4	103	%	0.25				0.24%
Y 371.029	12928.3	107	%	0.86				0.80%
Ag 328.068†	-3.0	0.0030894	mg/L	0.00035213	0.0030894	mg/L	0.00035213	11.40%
Al 308.215†	13.1	0.0241610	mg/L	0.00327650	0.0241610	mg/L	0.00327650	13.56%
As 188.979†	0.1	0.0109264	mg/L	0.00509158	0.0109264	mg/L	0.00509158	46.60%
Ba 233.527†	-0.6	-0.0084458	mg/L	0.00000828	-0.0084458	mg/L	0.00000828	0.10%
Be 313.107†	-7.2	0.0026007	mg/L	0.00004435	0.0026007	mg/L	0.00004435	1.71%
Ca 315.887†	-12.4	0.460744	mg/L	0.0022671	0.460744	mg/L	0.0022671	0.49%
Cd 228.802†	-0.4	0.0076591	mg/L	0.00071743	0.0076591	mg/L	0.00071743	9.37%
Co 228.616†	0.2	0.0057586	mg/L	0.00051419	0.0057586	mg/L	0.00051419	8.93%
Cr 267.716†	0.4	0.0073153	mg/L	0.00036060	0.0073153	mg/L	0.00036060	4.93%
Cu 327.393†	12.3	-0.0049487	mg/L	0.00016979	-0.0049487	mg/L	0.00016979	3.43%
Fe 273.955†	-1.4	-0.0699306	mg/L	0.00325770	-0.0699306	mg/L	0.00325770	4.66%
K 404.721†	-0.0	2.75735	mg/L	0.548168	2.75735	mg/L	0.548168	19.88%
Mg 279.077†	1.7	0.498619	mg/L	0.0036162	0.498619	mg/L	0.0036162	0.73%
Mn 257.610†	0.6	-0.0003654	mg/L	0.00006134	-0.0003654	mg/L	0.00006134	16.79%
Mo 202.031†	-0.4	0.0065836	mg/L	0.00038602	0.0065836	mg/L	0.00038602	5.86%
Na 330.237†	-1.0	1.32420	mg/L	0.099386	1.32420	mg/L	0.099386	7.51%
Ni 231.604†	-3.5	0.0025084	mg/L	0.00129624	0.0025084	mg/L	0.00129624	51.68%
Pb 220.353†	-1.0	0.0032216	mg/L	0.00361083	0.0032216	mg/L	0.00361083	112.08%
Sb 206.836†	0.5	0.0049784	mg/L	0.00288972	0.0049784	mg/L	0.00288972	58.05%
Se 196.026†	-0.2	0.0058456	mg/L	0.01843701	0.0058456	mg/L	0.01843701	315.40%
Sn 189.927†	0.4	0.0071859	mg/L	0.00378256	0.0071859	mg/L	0.00378256	52.64%
Ti 334.940†	2.0	-0.0012607	mg/L	0.00021150	-0.0012607	mg/L	0.00021150	16.78%
Tl 190.801†	-0.1	0.0064814	mg/L	0.00739744	0.0064814	mg/L	0.00739744	114.13%
V 290.880†	4.8	-0.0094390	mg/L	0.00030997	-0.0094390	mg/L	0.00030997	3.28%
Zn 206.200†	0.0	0.0086585	mg/L	0.00031774	0.0086585	mg/L	0.00031774	3.67%
B 249.772	3.6	0.0018030	mg/L	0.00019107	0.0018030	mg/L	0.00019107	10.60%
Si 251.611	2.2	0.0195334	mg/L	0.00277630	0.0195334	mg/L	0.00277630	14.21%

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13343

Description
sulfuric acid

ApprovedBy: jessica
ApproveDate: 09/21/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	A510-P212	3119021	06/24/20	08/30/22	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334800

Prepared By: Ransaw, Brianna | Department: Metals | ApprovedBy: shiamala
Description: Hg Intermediate Standard -WARNING | BatchNumber: B-29679 | ApproveDate: 09/25/20
Prep Date: 9/15/2020 | Concentration: .25 ppm | Checked: Yes
Expiration Date: 9/15/2020 | Final Volume: 500 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13311	MERCURY 1000 PPM	.125 ml	1000 ug/ml	
13421	nitric acid	12.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334801

Prepared By: Ransaw, Brianna | Department: Metals | ApprovedBy: shiamala
Description: Hg intermediate Control -WARNING | BatchNumber: B-29679 | ApproveDate: 09/25/20
Prep Date: 9/15/2020 | Concentration: 1.0 ppm | Checked: Yes
Expiration Date: 9/15/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334857

Prepared By: Aliano, Carmela | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ ICV 20 ppb | BatchNumber: B-29684 | ApproveDate: 09/25/20
Prep Date: 9/15/2020 | Concentration: 20 ppb | Checked: Yes
Expiration Date: 9/15/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334801	Hg intermediate Control -WARNING	.5 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334858

Prepared By: Aliano, Carmela | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ CCV 10 ppb | BatchNumber: B-29684 | ApproveDate: 09/25/20
Prep Date: 9/15/2020 | Concentration: 10 ppb | Checked: Yes
Expiration Date: 9/15/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334801	Hg intermediate Control -WARNING	.25 ml	1.0 ppm	
13084	DI H20			

Veritech Lot Number: V-334859

Prepared By: Aliano, Carmela | Department: Metals | ApprovedBy: shiamala
Description: Hg AQ standard blk | BatchNumber: B-29684 | ApproveDate: 09/25/20
Prep Date: 9/15/2020 | Concentration: 0 ppb | Checked: Yes
Expiration Date: 9/15/2020 | Final Volume: 25 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334860

Prepared By: Aliano, Carmela
Description: Hg AQ standard .2 ppb
Prep Date: 9/15/2020
Expiration Date: 9/15/2020
Department: Metals
BatchNumber: B-29684
Concentration: .2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334800	Hg Intermediate Standard -WARNING	.02 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334861

Prepared By: Aliano, Carmela
Description: Hg AQ standard .5 ppb
Prep Date: 9/15/2020
Expiration Date: 9/15/2020
Department: Metals
BatchNumber: B-29684
Concentration: .5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334800	Hg Intermediate Standard -WARNING	.05 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334862

Prepared By: Aliano, Carmela
Description: Hg AQ standard 1 ppb
Prep Date: 9/15/2020
Expiration Date: 9/15/2020
Department: Metals
BatchNumber: B-29684
Concentration: 1 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334800	Hg Intermediate Standard -WARNING	.1 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334863

Prepared By: Aliano, Carmela
Description: Hg AQ standard 2 ppb
Prep Date: 9/15/2020
Expiration Date: 9/15/2020
Department: Metals
BatchNumber: B-29684
Concentration: 2 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334800	Hg Intermediate Standard -WARNING	.2 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334864

Prepared By: Aliano, Carmela
Description: Hg AQ standard 5 ppb
Prep Date: 9/15/2020
Expiration Date: 9/15/2020
Department: Metals
BatchNumber: B-29684
Concentration: 5 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334800	Hg Intermediate Standard -WARNING	.5 ml	.25 ppm	
13084	DI H20			

Veritech Lot Number: V-334865

Prepared By: Aliano, Carmela
Description: Hg AQ standard 10 ppb
Prep Date: 9/15/2020
Expiration Date: 9/15/2020
Department: Metals
BatchNumber: B-29684
Concentration: 10 ppb
Final Volume: 25 ml
ApprovedBy: shiamala
ApproveDate: 09/25/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334800	Hg Intermediate Standard -WARNING	1 ml	.25 ppm	
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334866

Prepared By:	Aliano, Carmela	Department: Metals	ApprovedBy: shiamala
Description:	Hg AQ standard 25 ppb	BatchNumber: B-29684	ApproveDate: 09/25/20
Prep Date:	9/15/2020	Concentration: 25 ppb	Checked: Yes
Expiration Date:	9/15/2020	Final Volume: 25 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334800	Hg Intermediate Standard -WARNING	2.5 ml	.25 ppm	
13084	DI H20			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13311

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP	140-051-801	S200130001	06/04/20	12/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-317822

Prepared By: Aliano, Carmela
Department: Metals
ApprovedBy: shiamala
Description: Hydroxylamine Hydrochloride WARNIN
BatchNumber:
ApproveDate: 12/16/19
Prep Date: 12/13/2019
Concentration: reagent reage
Checked: Yes
Expiration Date: 1/8/2020
Final Volume: 10 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12651	DI H2O			
12218	Sodium Chloride	1200 g	neat neat	
12619	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-327154

Prepared By: Cousineau, Paul
Department: Metals
ApprovedBy: shiamala
Description: 5% Potassium Persulfate WARNING
BatchNumber:
ApproveDate: 05/07/20
Prep Date: 5/7/2020
Concentration: reagent reage
Checked: Yes
Expiration Date: 11/6/2020
Final Volume: 12620 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12620	POTASSIUM PERSULFATE	500 g	NEAT neat	

Veritech Lot Number: V-331286

Prepared By: Lucca, Daniela
Department: Metals
ApprovedBy: shiamala
Description: 5% Potassium Permanganate WARNIN
BatchNumber:
ApproveDate: 07/16/20
Prep Date: 7/13/2020
Concentration: reagent reage
Checked: Yes
Expiration Date: 2/13/2021
Final Volume: 20 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13084	DI H20			
12621	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-334801

Prepared By: Ransaw, Brianna
Department: Metals
ApprovedBy: shiamala
Description: Hg intermediate Control -WARNING
BatchNumber: B-29679
ApproveDate: 09/25/20
Prep Date: 9/15/2020
Concentration: 1.0 ppm
Checked: Yes
Expiration Date: 9/15/2020
Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13294	MERCURY 1000 PPM	.1 ul	1000 ug/ml	
13421	nitric acid	2.5 ml	neat neat	
13084	DI H20			

Veritech Lot Number: V-334877

Prepared By: Ransaw, Brianna
Department: WetChem
ApprovedBy: shiamala
Description: 3% HCL WARNING
BatchNumber:
ApproveDate: 09/25/20
Prep Date: 9/16/2020
Concentration: 3 %
Checked: Yes
Expiration Date: 9/23/2020
Final Volume: 20 l

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13130	hydrochloric acid	600 ml	neat neat	3%
13084	DI H20			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334878

Prepared By:	Ransaw, Brianna	Department: Metals	ApprovedBy: shiamala
Description:	SnCl2 "WARNING:"	BatchNumber:	ApproveDate: 09/25/20
Prep Date:	9/16/2020	Concentration: reagent I	Checked: Yes
Expiration Date:	9/16/2020	Final Volume: 2 l	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334877	3% HCL WARNING	2000 ml	3 %	
13089	STANNOUS CHOLORIDE	26.4 g		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12218

Description
Sodium Chloride

ApprovedBy: akmal
ApproveDate: 12/31/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	SX0420-5	17F145203	12/27/18	12/26/23	Lopez, Jose	1	12kg	neat	neat

Veritech Control/Receipt Number: 12619

Description
HYDROXYLAMINE HYDROCHLORIDE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LAB SALES	LS-1580015	190318-4C	06/25/19	06/24/23	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12620

Description
POTASSIUM PERSULFATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LAB SALES	LC-4445NG	170106-A	06/25/19	08/09/21	Balashanthan, Shi	1	2.5K	NEAT	NEAT

Veritech Control/Receipt Number: 12621

Description
POTASSIUM PERMANGANATE

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LAB SALES	LC-T10208	190318-3C	06/25/19	06/24/29	Balashanthan, Shi	1	2.5 K	NEAT	NEAT

Veritech Control/Receipt Number: 12651

Description
DI H2O

ApprovedBy: janee
ApproveDate: 10/10/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	07/08/19	07/07/20	Cousineau, Paul	1			

Veritech Control/Receipt Number: 13084

Description
DI H20

ApprovedBy: jessica
ApproveDate: 02/26/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EVOQUA	1	1	02/26/20	02/25/21	Trivedi, Beena	1			

Veritech Control/Receipt Number: 13089

Description
STANNOUS CHOLORIDE

ApprovedBy: CARMELA
ApproveDate: 04/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LAB CHEM	LC-P33805	190620-3C	02/15/20	02/14/23	Aliano, Carmela	1	1Gal		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13130

Description
hydrochloric acid

ApprovedBy: jean
ApproveDate: 04/07/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	251602	03/24/20	01/15/25	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 13294

Description
MERCURY 1000 PPM

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLHG4-2Y	24-115HGY	06/04/20	06/30/21	Cousineau, Paul	1	125 M	1000	UG/ML

Veritech Control/Receipt Number: 13421

Description
nitric acid

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.BAKER	9598-34	252932	07/28/20	02/03/25	Burwell, John	4	2.5L	neat	neat

==========

Analysis Begun

Logged In Analyst: usermet
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-90

H26223T
SnCl2V-33487&
9/16/20
BR

Sample Information File: C:\data-AA\johns\Sample Information\H26223T.sif
Batch ID: H26223T
Results Data Set: H26223T
Results Library: C:\data-AA\johns\Results\Results.mdb

==========

Method Loaded
Method Name: HGCV3 TCLP (7470A)
Method Last Saved: 3/2/2020 12:35:25 PM
Method Description: HgCV3 TCLP (7470A)

9/17/20

==========

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calibration Blank
Date Collected: 9/16/2020 12:01:33 PM
Analyst:
Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0002	0.0008	0.0002	12:02:19	Yes
2		[0.00]	0.0002	0.0011	0.0002	12:02:52	Yes
Mean:		[0.00]	0.0002				
SD:		0.00	0.0000				
%RSD:		0.00	7.05				

Auto-zero performed.

==========

Sequence No.: 2
Autosampler Location: 2
Sample ID: .2 PPB
Date Collected: 9/16/2020 12:02:53 PM
Analyst:
Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0011	0.0065	0.0013	12:03:39	Yes
2		[0.2]	0.0011	0.0061	0.0013	12:04:11	Yes
Mean:		[0.2]	0.0011				
SD:		0.0	0.0000				
%RSD:		0.0	3.18				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00549 Intercept: 0.00000

==========

Sequence No.: 3
Autosampler Location: 3
Sample ID: .5 PPB
Date Collected: 9/16/2020 12:04:12 PM
Analyst:
Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0026	0.0133	0.0028	12:04:58	Yes
2		[0.5]	0.0026	0.0133	0.0029	12:05:31	Yes
Mean:		[0.5]	0.0026				
SD:		0.0	0.0000				
%RSD:		0.0	0.19				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999799 Slope: 0.00525 Intercept: 0.00002

==========

Sequence No.: 4
Autosampler Location: 4
Sample ID: 1 PPB
Date Collected: 9/16/2020 12:05:32 PM
Analyst:
Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[1]	0.0053	0.0257	0.0056	12:06:18	Yes
2	[1]	0.0053	0.0255	0.0056	12:06:51	Yes
Mean:	[1]	0.0053				
SD:	0	0.0000				
%RSD:	0	0.00				

Standard number 3 applied. [1]
Correlation Coef.: 0.999927 Slope: 0.00532 Intercept: 0.00000

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: 2 PPB **Date Collected: 9/16/2020 12:06:52 PM**
Analyst: **Data Type: Original**

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0110	0.0516	0.0112	12:07:37	Yes
2		[2]	0.0110	0.0511	0.0112	12:08:10	Yes
Mean:		[2]	0.0110				
SD:		0	0.0000				
%RSD:		0	0.16				

Standard number 4 applied. [2]
Correlation Coef.: 0.999866 Slope: 0.00548 Intercept: -0.00005

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: 5 PPB **Date Collected: 9/16/2020 12:08:11 PM**
Analyst: **Data Type: Original**

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0272	0.1260	0.0274	12:08:57	Yes
2		[5]	0.0270	0.1240	0.0272	12:09:30	Yes
Mean:		[5]	0.0271				
SD:		0	0.0002				
%RSD:		0	0.57				

Standard number 5 applied. [5]
Correlation Coef.: 0.999973 Slope: 0.00543 Intercept: -0.00002

Sequence No.: 7 **Autosampler Location: 7**
Sample ID: 10 PPB **Date Collected: 9/16/2020 12:09:31 PM**
Analyst: **Data Type: Original**

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0559	0.2567	0.0561	12:10:17	Yes
2		[10]	0.0555	0.2527	0.0557	12:10:49	Yes
Mean:		[10]	0.0557				
SD:		0	0.0002				
%RSD:		0	0.41				

Standard number 6 applied. [10]
Correlation Coef.: 0.999918 Slope: 0.00556 Intercept: -0.00016

Sequence No.: 8 **Autosampler Location: 8**
Sample ID: 25 PPB **Date Collected: 9/16/2020 12:11:15 PM**
Analyst: **Data Type: Original**

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[25]	0.1357	0.6282	0.1359	12:12:05	Yes
2		[25]	0.1354	0.6215	0.1356	12:12:37	Yes
Mean:		[25]	0.1355				
SD:		0	0.0003				
%RSD:		0	0.19				

Standard number 7 applied. [25]
Correlation Coef.: 0.999939 Slope: 0.00543 Intercept: 0.00011

Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.020	0.00	7.0
.2 PPB	0.0011	0.2	0.182	0.00	3.2
.5 PPB	0.0026	0.5	0.464	0.00	0.2
1 PPB	0.0053	1.0	0.963	0.00	0.0
2 PPB	0.0110	2.0	1.999	0.00	0.2
5 PPB	0.0271	5.0	4.966	0.00	0.6
10 PPB	0.0557	10.0	10.227	0.00	0.4
25 PPB	0.1355	25.0	24.918	0.00	0.2

Correlation Coef.: 0.999939 Slope: 0.00543 Intercept: 0.00011

Sequence No.: 9 Autosampler Location: 10
Sample ID: ICV (2) Date Collected: 9/16/2020 12:13:04 PM
Analyst: Data Type: Original

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	19.57	19.57	0.1065	0.4876	0.1067	12:13:51	Yes
2	19.47	19.47	0.1059	0.4824	0.1062	12:14:23	Yes
Mean:	19.52	19.52	0.1062				
SD:	0.072	0.072	0.0004				
%RSD:	0.367	0.367	0.37				

QC value within limits for Hg 253.7 Recovery = 97.62%
All analyte(s) passed QC.

Sequence No.: 10 Autosampler Location: 1
Sample ID: ICB Date Collected: 9/16/2020 12:14:46 PM
Analyst: Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.044	-0.044	-0.0001	-0.0005	0.0001	12:15:32	Yes
2	-0.038	-0.038	-0.0001	0.0003	0.0001	12:16:05	Yes
Mean:	-0.041	-0.041	-0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	11.43	11.43	22.03				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 11
Sample ID: MB 85281 (1) Date Collected: 9/16/2020 12:16:06 PM
Analyst: Data Type: Original

Replicate Data: MB 85281 (1)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	0.0000	0.0008	0.0003	12:16:53	Yes
2	-0.020	-0.020	-0.0000	0.0007	0.0002	12:17:26	Yes
Mean:	-0.017	-0.017	0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	29.58	29.58	163.25				

Sequence No.: 12 Autosampler Location: 12
Sample ID: LCS 85281 Date Collected: 9/16/2020 12:17:27 PM
Analyst: Data Type: Original

Replicate Data: LCS 85281

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.848	9.848	0.0536	0.2451	0.0539	12:18:12	Yes
2	9.934	9.934	0.0541	0.2452	0.0543	12:18:45	Yes
Mean:	9.891	9.891	0.0539				

SD:	0.061	0.061	0.0003
%RSD:	0.615	0.615	0.61

Sequence No.: 13 Autosampler Location: 13
Sample ID: LCS 85281 MR Date Collected: 9/16/2020 12:19:08 PM
Analyst: Data Type: Original

Replicate Data: LCS 85281 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.00	10.00	0.0545	0.2477	0.0547	12:19:56	Yes
2	9.957	9.957	0.0542	0.2451	0.0544	12:20:29	Yes
Mean:	9.981	9.981	0.0544				
SD:	0.033	0.033	0.0002				
%RSD:	0.331	0.331	0.33				

Sequence No.: 14 Autosampler Location: 14
Sample ID: AD19178-001 Date Collected: 9/16/2020 12:20:53 PM
Analyst: Data Type: Original

Replicate Data: AD19178-001

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.026	0.026	0.0002	0.0017	0.0005	12:21:41	Yes
2	0.008	0.008	0.0002	0.0015	0.0004	12:22:13	Yes
Mean:	0.017	0.017	0.0002				
SD:	0.013	0.013	0.0001				
%RSD:	74.97	74.97	34.55				

Sequence No.: 15 Autosampler Location: 15
Sample ID: AD19178-001 MR Date Collected: 9/16/2020 12:22:14 PM
Analyst: Data Type: Original

Replicate Data: AD19178-001 MR

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.026	0.026	0.0002	0.0022	0.0005	12:23:00	Yes
2	0.025	0.025	0.0002	0.0022	0.0005	12:23:32	Yes
Mean:	0.026	0.026	0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	1.541	1.541	0.87				

Sequence No.: 16 Autosampler Location: 16
Sample ID: AD19178-001 MS 1 Date Collected: 9/16/2020 12:23:33 PM
Analyst: Data Type: Original

Replicate Data: AD19178-001 MS 1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.687	9.687	0.0528	0.2406	0.0530	12:24:19	Yes
2	10.17	10.17	0.0554	0.2495	0.0556	12:24:51	Yes
Mean:	9.929	9.929	0.0541				
SD:	0.342	0.342	0.0019				
%RSD:	3.444	3.444	3.44				

Sequence No.: 17 Autosampler Location: 17
Sample ID: AD19178-002 Date Collected: 9/16/2020 12:25:16 PM
Analyst: Data Type: Original

Replicate Data: AD19178-002

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0016	0.0004	12:26:06	Yes
2	0.003	0.003	0.0001	0.0015	0.0003	12:26:38	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.002	0.002	0.0000				

%RSD: 40.69 40.69 7.79

==========

Sequence No.: 18 Autosampler Location: 18
Sample ID: AD19178-003 Date Collected: 9/16/2020 12:26:40 PM
Analyst: Data Type: Original

Replicate Data: AD19178-003

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.049	0.049	0.0004	0.0026	0.0006	12:27:25	Yes
2	0.031	0.031	0.0003	0.0022	0.0005	12:27:58	Yes
Mean:	0.040	0.040	0.0003				
SD:	0.013	0.013	0.0001				
%RSD:	31.50	31.50	21.11				

==========

Sequence No.: 19 Autosampler Location: 19
Sample ID: AD19178-004 Date Collected: 9/16/2020 12:27:59 PM
Analyst: Data Type: Original

Replicate Data: AD19178-004

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.026	0.026	0.0003	0.0021	0.0005	12:28:48	Yes
2	0.007	0.007	0.0001	0.0016	0.0004	12:29:20	Yes
Mean:	0.017	0.017	0.0002				
SD:	0.013	0.013	0.0001				
%RSD:	79.67	79.67	36.74				

==========

Sequence No.: 20 Autosampler Location: 20
Sample ID: AD19178-005 Date Collected: 9/16/2020 12:29:22 PM
Analyst: Data Type: Original

Replicate Data: AD19178-005

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.060	0.060	0.0004	0.0033	0.0007	12:30:07	Yes
2	0.052	0.052	0.0004	0.0030	0.0006	12:30:39	Yes
Mean:	0.056	0.056	0.0004				
SD:	0.006	0.006	0.0000				
%RSD:	10.21	10.21	7.55				

==========

Sequence No.: 21 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/16/2020 12:30:41 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.04	10.04	0.0547	0.2459	0.0549	12:31:27	Yes
2	10.01	10.01	0.0545	0.2438	0.0547	12:31:59	Yes
Mean:	10.02	10.02	0.0546				
SD:	0.016	0.016	0.0001				
%RSD:	0.160	0.160	0.16				

QC value within limits for Hg 253.7 Recovery = 100.25%
All analyte(s) passed QC.

==========

Sequence No.: 22 Autosampler Location: 1
Sample ID: CCB Date Collected: 9/16/2020 12:32:22 PM
Analyst: Data Type: Original
User canceled analysis.

==========

Analysis Begun

Logged In Analyst: usermet Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550 Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26223T.sif
Batch ID: H26223T
Results Data Set: H26223T
Results Library: C:\data-AA\johns\Results\Results.mdb

Sequence No.: 22 Autosampler Location: 1
Sample ID: CCB Date Collected: 9/16/2020 12:32:57 PM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.033	-0.033	-0.0001	0.0001	0.0001	12:33:44	Yes
2	-0.032	-0.032	-0.0001	0.0003	0.0002	12:34:17	Yes
Mean:	-0.032	-0.032	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.015	3.015	7.73				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 23 Autosampler Location: 21
Sample ID: AD19178-006 Date Collected: 9/16/2020 12:34:18 PM
Analyst: Data Type: Original

Replicate Data: AD19178-006

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.025	0.025	0.0002	0.0016	0.0005	12:35:05	Yes
2	-0.008	-0.008	-0.0001	0.0009	0.0003	12:35:37	Yes
Mean:	0.008	0.008	0.0002				
SD:	0.024	0.024	0.0001				
%RSD:	282.7	282.7	84.48				

BR 9/16/20

Sequence No.: 24 Autosampler Location: 22
Sample ID: AD19178-006 Date Collected: 9/16/2020 12:35:39 PM
Analyst: Data Type: Original
User canceled analysis.

Analysis Begun

Logged In Analyst: usermet Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550 Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26223T.sif
Batch ID: H26223T
Results Data Set: H26223T
Results Library: C:\data-AA\johns\Results\Results.mdb

Sequence No.: 23 Autosampler Location: 21
Sample ID: AD19178-006 Date Collected: 9/16/2020 12:36:01 PM
Analyst: Data Type: Original
User canceled analysis.

Analysis Begun

Logged In Analyst: usermet Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550 Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H26223T.sif
Batch ID: H26223T
Results Data Set: H26223T
Results Library: C:\data-AA\johns\Results\Results.mdb

Sequence No.: 25 Autosampler Location: 23
Sample ID: AD19178-007 Date Collected: 9/16/2020 12:36:38 PM
Analyst: Data Type: Original

Analysis Begun

Logged In Analyst: usermet
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-90

H26223TB
SnCl2v-34878
9/16/20
BR

Sample Information File: C:\data-AA\johns\Sample Information\H26223TB.sif
Batch ID: H26223TB
Results Data Set: H26223TB
Results Library: C:\data-AA\johns\Results\Results.mdb

Method Loaded
Method Name: HGCV3 TCLP (7470A)
Method Last Saved: 3/2/2020 12:35:25 PM
Method Description: HgCV3 TCLP (7470A)

9/17/20

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calibration Blank
Date Collected: 9/16/2020 12:42:14 PM
Analyst:
Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0005	0.0001	12:43:01	Yes
2		[0.00]	0.0001	-0.0002	0.0001	12:43:33	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0001				
%RSD:		0.00	54.81				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 2
Sample ID: .2 PPB
Date Collected: 9/16/2020 12:43:35 PM
Analyst:
Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0012	0.0062	0.0013	12:44:20	Yes
2		[0.2]	0.0012	0.0062	0.0014	12:44:53	Yes
Mean:		[0.2]	0.0012				
SD:		0.0	0.0000				
%RSD:		0.0	0.13				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00623 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 3
Sample ID: .5 PPB
Date Collected: 9/16/2020 12:44:54 PM
Analyst:
Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0029	0.0137	0.0030	12:45:40	Yes
2		[0.5]	0.0029	0.0137	0.0030	12:46:13	Yes
Mean:		[0.5]	0.0029				
SD:		0.0	0.0000				
%RSD:		0.0	0.12				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999289 Slope: 0.00573 Intercept: 0.00004

Sequence No.: 4
Autosampler Location: 4
Sample ID: 1 PPB
Date Collected: 9/16/2020 12:46:14 PM
Analyst:
Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[1]	0.0057	0.0264	0.0058	12:47:00	Yes
2	[1]	0.0057	0.0256	0.0058	12:47:33	Yes
Mean:	[1]	0.0057				
SD:	0	0.0001				
%RSD:	0	0.95				

Standard number 3 applied. [1]
Correlation Coef.: 0.999816 Slope: 0.00566 Intercept: 0.00005

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: 2 PPB **Date Collected: 9/16/2020 12:47:34 PM**
Analyst: **Data Type: Original**

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0113	0.0511	0.0114	12:48:20	Yes
2		[2]	0.0113	0.0506	0.0114	12:48:52	Yes
Mean:		[2]	0.0113				
SD:		0	0.0000				
%RSD:		0	0.25				

Standard number 4 applied. [2]
Correlation Coef.: 0.999954 Slope: 0.00563 Intercept: 0.00006

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: 5 PPB **Date Collected: 9/16/2020 12:48:53 PM**
Analyst: **Data Type: Original**

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0278	0.1251	0.0279	12:49:39	Yes
2		[5]	0.0279	0.1247	0.0280	12:50:11	Yes
Mean:		[5]	0.0279				
SD:		0	0.0000				
%RSD:		0	0.09				

Standard number 5 applied. [5]
Correlation Coef.: 0.999979 Slope: 0.00556 Intercept: 0.00011

Sequence No.: 7 **Autosampler Location: 7**
Sample ID: 10 PPB **Date Collected: 9/16/2020 12:50:12 PM**
Analyst: **Data Type: Original**

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0571	0.2572	0.0572	12:50:58	Yes
2		[10]	0.0571	0.2554	0.0572	12:51:31	Yes
Mean:		[10]	0.0571				
SD:		0	0.0000				
%RSD:		0	0.02				

Standard number 6 applied. [10]
Correlation Coef.: 0.999924 Slope: 0.00569 Intercept: -0.00004

Sequence No.: 8 **Autosampler Location: 8**
Sample ID: 25 PPB **Date Collected: 9/16/2020 12:51:56 PM**
Analyst: **Data Type: Original**

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[25]	0.1360	0.6204	0.1361	12:52:46	Yes
2		[25]	0.1367	0.6187	0.1369	12:53:19	Yes
Mean:		[25]	0.1364				
SD:		0	0.0005				
%RSD:		0	0.40				

Standard number 7 applied. [25]
Correlation Coef.: 0.999841 Slope: 0.00547 Intercept: 0.00043

Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.079	0.00	54.8
.2 PPB	0.0012	0.2	0.149	0.00	0.1
.5 PPB	0.0029	0.5	0.447	0.00	0.1
1 PPB	0.0057	1.0	0.963	0.00	0.9
2 PPB	0.0113	2.0	1.989	0.00	0.3
5 PPB	0.0279	5.0	5.014	0.00	0.1
10 PPB	0.0571	10.0	10.361	0.00	0.0
25 PPB	0.1364	25.0	24.857	0.00	0.4

Correlation Coef.: 0.999841 Slope: 0.00547 Intercept: 0.00043

Sequence No.: 9 **Autosampler Location: 10**
Sample ID: ICV (2) **Date Collected: 9/16/2020 12:53:45 PM**
Analyst: **Data Type: Original**

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	19.67	19.67	0.1080	0.4894	0.1081	12:54:32	Yes
2	19.62	19.62	0.1078	0.4827	0.1079	12:55:04	Yes
Mean:	19.65	19.65	0.1079				
SD:	0.034	0.034	0.0002				
%RSD:	0.173	0.173	0.17				

QC value within limits for Hg 253.7 Recovery = 98.24%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 9/16/2020 12:55:27 PM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0001	-0.0006	-0.0000	12:56:14	Yes
2	-0.093	-0.093	-0.0001	-0.0002	0.0000	12:56:46	Yes
Mean:	-0.096	-0.096	-0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	4.269	4.269	24.06				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 21**
Sample ID: AD19178-006 **Date Collected: 9/16/2020 12:56:48 PM**
Analyst: **Data Type: Original**

Replicate Data: AD19178-006

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	0.0002	0.0010	0.0003	12:57:35	Yes
2	-0.028	-0.028	0.0003	0.0014	0.0004	12:58:07	Yes
Mean:	-0.037	-0.037	0.0002				
SD:	0.012	0.012	0.0001				
%RSD:	33.77	33.77	29.22				

Sequence No.: 12 **Autosampler Location: 22**
Sample ID: AD19178-007 **Date Collected: 9/16/2020 12:58:09 PM**
Analyst: **Data Type: Original**

Replicate Data: AD19178-007

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	0.0002	0.0010	0.0003	12:58:54	Yes
2	-0.037	-0.037	0.0002	0.0013	0.0003	12:59:26	Yes
Mean:	-0.038	-0.038	0.0002				

SD:	0.001	0.001	0.0000
%RSD:	2.726	2.726	2.54

Sequence No.: 13 Autosampler Location: 23
Sample ID: AD19178-008 Date Collected: 9/16/2020 12:59:28 PM
Analyst: Data Type: Original

Replicate Data: AD19178-008

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.048	-0.048	0.0002	0.0009	0.0003	13:00:13	Yes
2	-0.027	-0.027	0.0003	0.0013	0.0004	13:00:46	Yes
Mean:	-0.038	-0.038	0.0002				
SD:	0.015	0.015	0.0001				
%RSD:	39.99	39.99	35.99				

Sequence No.: 14 Autosampler Location: 24
Sample ID: AD19178-009 Date Collected: 9/16/2020 1:00:47 PM
Analyst: Data Type: Original

Replicate Data: AD19178-009

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.027	-0.027	0.0003	0.0015	0.0004	13:01:32	Yes
2	-0.043	-0.043	0.0002	0.0011	0.0003	13:02:05	Yes
Mean:	-0.035	-0.035	0.0002				
SD:	0.011	0.011	0.0001				
%RSD:	31.75	31.75	25.59				

Sequence No.: 15 Autosampler Location: 25
Sample ID: AD19178-010 Date Collected: 9/16/2020 1:02:06 PM
Analyst: Data Type: Original

Replicate Data: AD19178-010

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	0.0003	0.0018	0.0005	13:02:51	Yes
2	-0.026	-0.026	0.0003	0.0015	0.0004	13:03:24	Yes
Mean:	-0.021	-0.021	0.0003				
SD:	0.007	0.007	0.0000				
%RSD:	34.56	34.56	12.17				

Sequence No.: 16 Autosampler Location: 26
Sample ID: AD19178-011 Date Collected: 9/16/2020 1:03:25 PM
Analyst: Data Type: Original

Replicate Data: AD19178-011

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0004	0.0016	0.0005	13:04:11	Yes
2	-0.019	-0.019	0.0003	0.0016	0.0004	13:04:43	Yes
Mean:	-0.015	-0.015	0.0004				
SD:	0.006	0.006	0.0000				
%RSD:	39.18	39.18	9.23				

Sequence No.: 17 Autosampler Location: 27
Sample ID: AD19178-012 Date Collected: 9/16/2020 1:04:44 PM
Analyst: Data Type: Original

Replicate Data: AD19178-012

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0004	0.0017	0.0005	13:05:30	Yes
2	-0.036	-0.036	0.0002	0.0016	0.0003	13:06:02	Yes
Mean:	-0.024	-0.024	0.0003				
SD:	0.018	0.018	0.0001				

%RSD: 76.49 76.49 32.35

Sequence No.: 18 Autosampler Location: 28
Sample ID: AD19178-013 Date Collected: 9/16/2020 1:06:04 PM
Analyst: Data Type: Original

Replicate Data: AD19178-013

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0004	0.0022	0.0005	13:06:53	Yes
2	-0.034	-0.034	0.0002	0.0016	0.0004	13:07:25	Yes
Mean:	-0.016	-0.016	0.0003				
SD:	0.024	0.024	0.0001				
%RSD:	150.5	150.5	38.94				

Sequence No.: 19 Autosampler Location: 29
Sample ID: EF V-334696 Date Collected: 9/16/2020 1:07:26 PM
Analyst: Data Type: Original

Replicate Data: EF V-334696

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.029	-0.029	0.0003	0.0016	0.0004	13:08:12	Yes
2	-0.014	-0.014	0.0004	0.0021	0.0005	13:08:45	Yes
Mean:	-0.021	-0.021	0.0003				
SD:	0.010	0.010	0.0001				
%RSD:	47.95	47.95	17.83				

Sequence No.: 20 Autosampler Location: 9
Sample ID: CCV Date Collected: 9/16/2020 1:08:46 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.00	10.00	0.0551	0.2454	0.0552	13:09:33	Yes
2	9.926	9.926	0.0547	0.2426	0.0548	13:10:05	Yes
Mean:	9.965	9.965	0.0549				
SD:	0.055	0.055	0.0003				
%RSD:	0.549	0.549	0.54				

QC value within limits for Hg 253.7 Recovery = 99.65%
All analyte(s) passed QC.

Sequence No.: 21 Autosampler Location: 1
Sample ID: CCB Date Collected: 9/16/2020 1:10:27 PM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0001	-0.0001	0.0000	13:11:14	Yes
2	-0.086	-0.086	-0.0000	0.0003	0.0001	13:11:46	Yes
Mean:	-0.088	-0.088	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	2.735	2.735	28.12				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

TCLP
Metal Data
Digestion Logbook Data

0091101 0826

Hampton-Clarke, Inc.

LEACHATE PREPARATION LOG
(TCLP, SPLP)

Start Date: 9/14/20 TIME: 13:14 Finish Date: 9/15/20

**TCLP Ext. Fluid #1 pH: 4.91 (criteria: 4.93 ± 0.05)
**TCLP Ext. Fluid #2 pH: 2.88 (criteria: 2.88 ± 0.05)
**SPLP Ext. Fluid #3 pH: 4.15 (criteria: 4.20 ± 0.05)

Sample #	pH (units)	pH in HCL (units)	Final pH (units)	Ext. Fluid (number)	Wt./Vol of Sample (g or mL)	Start Time	Finish Time	Filter Time	Analyst (s)	Ext. Type*	Comments
19178 - 001	8.43	1.77	5.43	334692 (A)	100g/2L	19:00	11:05	13:50	EF	T	Balance ID: 037 MET
- 002	9.17	1.73	6.43					13:55			pH Meter ID: B - 38168
- 003	8.44	1.68	6.41					14:05			Pipette ID: 155
- 004	9.41	1.82	6.42					14:10			
- 005	8.72	1.79	5.20					14:15			
- 006	8.42	1.68	5.18					14:20			
- 007	9.89	1.71	5.15					14:25			
- 008	8.57	1.65	5.05					14:35			
- 009	9.78	1.76	5.57					14:40			
- 010	9.23	1.67	5.44					14:45			
- 011	9.44	1.95	6.38					14:50			
- 012	9.13	1.82	6.36					14:55			
- 013	9.08	1.70	5.85					15:00			
19164 - 001	5.34	1.63	4.86	334696 (B)				11:40			
19163 - 001	6.30	1.61	4.94					11:50			
19172 - 001	8.70	1.78	4.96					11:55			
19195 - 002	6.55	1.71	4.92					12:00			
19198 - 001	8.50	2.03	5.10					12:10			
19180 - 001	12.15	6.36	10.30	326719	150g/3L			12:20			MET + ORG
19188 - 005	7.77	1.68	4.92	334692 (B)				12:30			
19214 - 015	8.93	1.66	5.11		100g/2L			12:40			MET
- 025	8.08	1.59	4.93					12:45			
19167 - 001	8.24	1.97	5.09		150g/3L			12:55			75% liquid, 25% solid MET + ORG
EFIA 334696	4.91	—	4.89		3L			13:35			

*Ext. Type: TCLP = T (Method 1311) LAMP=L (Methods 1311 / ANSI/NEMA C78.LL 1256-2003)
SPLP = P (Method 1312) MEP=M (Method 1320)
ZHE = Z (Method 1311/1312)

** The pH of the extraction fluid must be checked prior to use and must be within limits specified above

0032

Leachate prep log 2017]

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 26223 Analyst: OM

QC Number: 80281 Prep Date: 9/15/2020

Matrix: TCLP Reviewed By: OA

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ML	50ML				--	
LCS						--	
LCSD						--	
1. 19178-001					V-334696 A 9/15	19178 001	Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR							
MS							Balance used: N/A
~~MSD~~							Pipettes used: 149
2. 19178-002							
3. -003							Hot Block used: 9
4. -004							
5. -005							
6. -006							
7. -007							
8. -008							
9. -009							
10. -010							
11. -011							
12. -012							
13. -013							
14. V-334696 (A)							9/15
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 91.7 C (90-95° C) Start Time: 14:00 End Time: 19:00.

	Volume mL	Lot #
LCS, LCSD	0.25	V-13177 13178
LLLCS, LLLCSD		V- 331982
MS, MSD	0.25	V-13177 13178
LLMS, LLMSD		V- 331982

Acid	Vol mL	Lot#
HNO_3	3	V-13440
HCl		V-
H_2O_2		V-

Acid	Vol mL	Lot#
1:1 HNO_3		V-
1:1 HCl	5	V-331024

Relinquished By OM Date 9/15/2020

Received By OA Date 09/15/2020.

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2018 DOD.DOC

HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 (7470A) 7471B OTHER_____

Batch No.:* 26223

QC Number: 89281

Matrix: TCLP

Analyst: CM

Prep Date: 9/15/2020

Review By: BR

LAB ID#	MERCURY		COMMENTS	STANDARDS
	INITIAL	FINAL		
Method blank	25mL	25mL		CAL CURVE BLK 0ppb V-334854
LCS				
LCSD				STD 0.2 ppb V-334860
1 19178-001				STD 0.5 ppb V- 861
MR				STD 1.0 ppb V- 862
MS				STD 2.0 ppb V- 863
MSD				STD 5.0 ppb V- 864
2 19178-002				STD 10.0 ppb V- 865
3 -003				STD 25.0 ppb V- 866
4 -004				ICV 10.0 ppb V-334857
5 -005				CCV 20.0 ppb V-334858
6 -006				
7 -007				
8 -008				Balance used: N/A
9 -009				Pipettes used: 159, 143
10 -010				
11 -011				Hot Block used: 7
12 -012				
13 -013				
14 V-334796 (A)	↓	↓	9/15	
15				
16				
17				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 331280	3.75mL	HNO3	0.025	V- 13421
$K_2S_2O_8$: V- 327154	2mL	HCl		V-
NH_2OH: V- 317822	1.5mL	H2SO4	1.25	V- 13343
		Aqua Regia		V-

**Digest Temp.:	95 °C
Time in Block:	17:00
Time out of Block:	19:00

Spike Volume & Lot #

☐ LCS V-334801 0.15x/0.25 ml (2)

☐ MS V-334801 0.250 ml

☐ Standards/Control Batch B- 29684

Start time 17:00 End Time: 19:00

**Temperature
245.1 / 7470A: 90-95C
7471B : 92-98C

Relinquished By: CM

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

HG PREP 2016

Hampton-Clarke
Analytical & Field Services

Last Page of Report

Hampton-Clarke
Analytical & Field Services

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2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
FAX: 973-244-9787
WWW.HCVLAB.COM

Project: Duofold- 7 Spruce St.

Client PO: HER1500.P2

Report To: HRP Associates. Inc.
1 Fairchild Square
Suite 110
Clifton Park, NY 12065
Attn: Stefan Truex

Received Date: 9/24/2020

Report Date: 10/14/2020

Deliverables: NYDOH-CatB

Lab ID: AD19444

Lab Project No: 0092507

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

Sean Berls - Quality Assurance Officer OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

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SDG Narrative

HC Case Narrative

Client: HRP Associates, Inc. **HC Project:** 0092507
Project: Duofold - 7 Spruce St.

Hampton-Clarke (HC) received the following samples on 9/24/2020:

Client ID	HC Sample ID	Matrix	Analysis
DF-MW-2	AD19444-001	Aqueous	Volatile Organics (8260C)
DF-MW-7	AD19444-002	Aqueous	Volatile Organics (8260C)
DF-MW-8	AD19444-003	Aqueous	Volatile Organics (8260C)
DF-MW-9	AD19444-004	Aqueous	Volatile Organics (8260C)
DF-MW-10	AD19444-005	Aqueous	Volatile Organics (8260C)
DF-MW-10 MS	AD19444-006	Aqueous	Volatile Organics (8260C)
DF-MW-10 MSD	AD19444-007	Aqueous	Volatile Organics (8260C)
HRP-MW-1	AD19444-008	Aqueous	Volatile Organics (8260C)
HRP-MW-2	AD19444-009	Aqueous	Volatile Organics (8260C)
HRP-MW-3	AD19444-010	Aqueous	Volatile Organics (8260C)
TMW-1	AD19444-011	Aqueous	Volatile Organics (8260C)
TMW-2	AD19444-012	Aqueous	Volatile Organics (8260C)
DUP	AD19444-013	Aqueous	Volatile Organics (8260C)
TB-092320	AD19444-014	Aqueous	Volatile Organics (8260C)
EB-092320	AD19444-015	Aqueous	Volatile Organics (8260C)
FB-092320	AD19444-016	Aqueous	Volatile Organics (8260C)

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Volatile Organic Analysis:

Methylene chloride was recovered in sample AD19444-015 due to possible laboratory contamination.

Acetone was recovered in sample AD19444-014 due to possible laboratory contamination.

The Method Blank Spike for batches 89372, 89382, 89395, 89398, 89414 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batches 89372, 89395, 89414 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD, Matrix Spike and/or Matrix Spike Duplicate for batch 89398 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

2-Chloroethylvinylether did not recover in the Matrix Spike and/or Matrix Spike Duplicate in batches 89372, 89395 due to acid preservation of sample. 2-Chloroethylvinylether readily decomposes under acidic conditions. The recovery of 2-Chloroethylvinylether is within QC limits in the Laboratory Control Sample. Please refer to the applicable Form 3 for the recoveries.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Sean Berls
Quality Assurance Officer

Or

Jean Revolus
Laboratory Director

10/15/2020
Date

Reporting Limit Definitions

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

LCS = Laboratory Control Spike

MBS = Method Blank Spike

MS = Matrix Spike

MSD = Matrix Spike Duplicate

MDL = Method Detection Limit

NA = Not Applicable

ND = Not Detected

PS = Post Digestion Spike

RL* = Reporting Limit

RT = Retention Time

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Data Package Summary Forms

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0092507

Sample ID: DF-MW-2
Lab#: AD19444-001
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.64	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	2.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**4.1**
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND

Sample ID: DF-MW-2 **Collection Date:** 9/22/2020
Lab#: AD19444-001 **Receipt Date:** 9/24/2020
Matrix: Aqueous

t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	**1**	**ug/l**	**1.0**	**5.7**
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**2.0**
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	**1**	**ug/l**	**1.0**	**6.3**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: DF-MW-7 **Collection Date:** 9/22/2020
Lab#: AD19444-002 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.64	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	2.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	**1**	**ug/l**	**1.0**	**5.2**
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: DF-MW-7 **Collection Date:** 9/22/2020
Lab#: AD19444-002 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**1.2**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: DF-MW-8
Lab#: AD19444-003
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	5	ug/l	5.0	ND
1,1,2,2-Tetrachloroethane	5	ug/l	5.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ug/l	5.0	ND
1,1,2-Trichloroethane	5	ug/l	5.0	ND
1,1-Dichloroethane	5	ug/l	5.0	ND
1,1-Dichloroethene	5	ug/l	5.0	ND
1,2,3-Trichloropropane	5	ug/l	5.0	ND
1,2,4-Trimethylbenzene	5	ug/l	5.0	ND
1,2-Dichlorobenzene	5	ug/l	5.0	ND
1,2-Dichloroethane	5	ug/l	3.2	ND
1,2-Dichloropropane	5	ug/l	5.0	ND
1,3,5-Trimethylbenzene	5	ug/l	5.0	ND
1,3-Dichlorobenzene	5	ug/l	5.0	ND
1,3-Dichloropropane	5	ug/l	5.0	ND
1,4-Dichlorobenzene	5	ug/l	5.0	ND
1,4-Dioxane	5	ug/l	250	ND
2-Butanone	5	ug/l	5.0	ND
2-Chloroethylvinylether	5	ug/l	5.0	ND
2-Hexanone	5	ug/l	5.0	ND
4-Isopropyltoluene	5	ug/l	5.0	ND
4-Methyl-2-pentanone	5	ug/l	5.0	ND
Acetone	5	ug/l	25	ND
Acrolein	5	ug/l	25	ND
Acrylonitrile	5	ug/l	5.0	ND
Benzene	5	ug/l	2.5	ND
Bromodichloromethane	5	ug/l	5.0	ND
Bromoform	5	ug/l	5.0	ND
Bromomethane	5	ug/l	5.0	ND
Carbon disulfide	5	ug/l	5.0	ND
Carbon tetrachloride	5	ug/l	5.0	ND
Chlorobenzene	5	ug/l	5.0	ND
Chloroethane	5	ug/l	5.0	ND
Chloroform	5	ug/l	9.8	ND
Chloromethane	5	ug/l	5.0	ND
cis-1,2-Dichloroethene	**5**	**ug/l**	**5.0**	**370**
cis-1,3-Dichloropropene	5	ug/l	5.0	ND
Dibromochloromethane	5	ug/l	5.0	ND
Dichlorodifluoromethane	5	ug/l	5.0	ND
Ethylbenzene	5	ug/l	5.0	ND
Isopropylbenzene	5	ug/l	5.0	ND
m&p-Xylenes	5	ug/l	5.0	ND
Methylene chloride	5	ug/l	5.0	ND
Methyl-t-butyl ether	5	ug/l	2.5	ND
n-Butylbenzene	5	ug/l	5.0	ND
n-Propylbenzene	5	ug/l	5.0	ND
o-Xylene	5	ug/l	5.0	ND
sec-Butylbenzene	5	ug/l	5.0	ND
Styrene	5	ug/l	5.0	ND
t-Butyl Alcohol	5	ug/l	25	ND
t-Butylbenzene	5	ug/l	5.0	ND
Tetrachloroethene	5	ug/l	5.0	ND
Toluene	5	ug/l	5.0	ND
trans-1,2-Dichloroethene	**5**	**ug/l**	**5.0**	**11**
trans-1,3-Dichloropropene	5	ug/l	5.0	ND

Sample ID: DF-MW-8 **Collection Date:** 9/22/2020
Lab#: AD19444-003 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	5	ug/l	5.0	ND
Trichlorofluoromethane	5	ug/l	5.0	ND
Vinyl chloride	**5**	**ug/l**	**5.0**	**15**
Xylenes (Total)	5	ug/l	5.0	ND

Sample ID: DF-MW-9 **Collection Date:** 9/23/2020
Lab#: AD19444-004 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**1.2**
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**1.1**
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: DF-MW-9 **Collection Date:** 9/23/2020
Lab#: AD19444-004 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**5.2**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: DF-MW-10
Lab#: AD19444-005
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.64	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	2.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**22**
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	**1**	**ug/l**	**1.0**	**2.0**
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**3.9**
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: DF-MW-10 **Collection Date:** 9/22/2020
Lab#: AD19444-005 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**14**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	**1**	**ug/l**	**1.0**	**1.7**
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: DF-MW-10 MS
Lab#: AD19444-006
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	21
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	22
1,1,2-Trichloroethane	1	ug/l	1.0	19
1,1-Dichloroethane	1	ug/l	1.0	20
1,1-Dichloroethene	1	ug/l	1.0	22
1,2,3-Trichloropropane	1	ug/l	1.0	20
1,2,4-Trimethylbenzene	1	ug/l	1.0	19
1,2-Dichlorobenzene	1	ug/l	1.0	19
1,2-Dichloroethane	1	ug/l	0.64	19
1,2-Dichloropropane	1	ug/l	1.0	20
1,3,5-Trimethylbenzene	1	ug/l	1.0	20
1,3-Dichlorobenzene	1	ug/l	1.0	19
1,3-Dichloropropane	1	ug/l	1.0	19
1,4-Dichlorobenzene	1	ug/l	1.0	19
1,4-Dioxane	1	ug/l	50	1600
2-Butanone	1	ug/l	1.0	19
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	19
4-Isopropyltoluene	1	ug/l	1.0	20
4-Methyl-2-pentanone	1	ug/l	1.0	19
Acetone	1	ug/l	5.0	91
Acrolein	1	ug/l	5.0	100
Acrylonitrile	1	ug/l	1.0	21
Benzene	1	ug/l	0.50	21
Bromodichloromethane	1	ug/l	1.0	21
Bromoform	1	ug/l	1.0	20
Bromomethane	1	ug/l	1.0	22
Carbon disulfide	1	ug/l	1.0	23
Carbon tetrachloride	1	ug/l	1.0	22
Chlorobenzene	1	ug/l	1.0	19
Chloroethane	1	ug/l	1.0	23
Chloroform	1	ug/l	2.0	21
Chloromethane	1	ug/l	1.0	20
cis-1,2-Dichloroethene	1	ug/l	1.0	44
cis-1,3-Dichloropropene	1	ug/l	1.0	20
Dibromochloromethane	1	ug/l	1.0	21
Dichlorodifluoromethane	1	ug/l	1.0	17
Ethylbenzene	1	ug/l	1.0	20
Isopropylbenzene	1	ug/l	1.0	21
m&p-Xylenes	1	ug/l	1.0	41
Methylene chloride	1	ug/l	1.0	20
Methyl-t-butyl ether	1	ug/l	0.50	21
n-Butylbenzene	1	ug/l	1.0	21
n-Propylbenzene	1	ug/l	1.0	21
o-Xylene	1	ug/l	1.0	20
sec-Butylbenzene	1	ug/l	1.0	20
Styrene	1	ug/l	1.0	20
t-Butyl Alcohol	1	ug/l	5.0	130
t-Butylbenzene	1	ug/l	1.0	20
Tetrachloroethene	1	ug/l	1.0	22
Toluene	1	ug/l	1.0	20
trans-1,2-Dichloroethene	1	ug/l	1.0	25
trans-1,3-Dichloropropene	1	ug/l	1.0	20

Sample ID: DF-MW-10 MS
Lab#: AD19444-006
Matrix: Aqueous
Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Trichloroethene	1	ug/l	1.0	35
Trichlorofluoromethane	1	ug/l	1.0	24
Vinyl chloride	1	ug/l	1.0	25
Xylenes (Total)	1	ug/l	1.0	61

Sample ID: DF-MW-10 MSD
Lab#: AD19444-007
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	19
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	18
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	28
1,1,2-Trichloroethane	1	ug/l	1.0	18
1,1-Dichloroethane	1	ug/l	1.0	19
1,1-Dichloroethene	1	ug/l	1.0	23
1,2,3-Trichloropropane	1	ug/l	1.0	18
1,2,4-Trimethylbenzene	1	ug/l	1.0	18
1,2-Dichlorobenzene	1	ug/l	1.0	18
1,2-Dichloroethane	1	ug/l	0.64	18
1,2-Dichloropropane	1	ug/l	1.0	20
1,3,5-Trimethylbenzene	1	ug/l	1.0	18
1,3-Dichlorobenzene	1	ug/l	1.0	18
1,3-Dichloropropane	1	ug/l	1.0	18
1,4-Dichlorobenzene	1	ug/l	1.0	18
1,4-Dioxane	1	ug/l	50	1400
2-Butanone	1	ug/l	1.0	20
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	17
4-Isopropyltoluene	1	ug/l	1.0	19
4-Methyl-2-pentanone	1	ug/l	1.0	18
Acetone	1	ug/l	5.0	96
Acrolein	1	ug/l	5.0	110
Acrylonitrile	1	ug/l	1.0	22
Benzene	1	ug/l	0.50	19
Bromodichloromethane	1	ug/l	1.0	20
Bromoform	1	ug/l	1.0	20
Bromomethane	1	ug/l	1.0	21
Carbon disulfide	1	ug/l	1.0	25
Carbon tetrachloride	1	ug/l	1.0	21
Chlorobenzene	1	ug/l	1.0	18
Chloroethane	1	ug/l	1.0	22
Chloroform	1	ug/l	2.0	20
Chloromethane	1	ug/l	1.0	18
cis-1,2-Dichloroethene	1	ug/l	1.0	41
cis-1,3-Dichloropropene	1	ug/l	1.0	19
Dibromochloromethane	1	ug/l	1.0	19
Dichlorodifluoromethane	1	ug/l	1.0	16
Ethylbenzene	1	ug/l	1.0	19
Isopropylbenzene	1	ug/l	1.0	20
m&p-Xylenes	1	ug/l	1.0	37
Methylene chloride	1	ug/l	1.0	22
Methyl-t-butyl ether	1	ug/l	0.50	22
n-Butylbenzene	1	ug/l	1.0	20
n-Propylbenzene	1	ug/l	1.0	19
o-Xylene	1	ug/l	1.0	19
sec-Butylbenzene	1	ug/l	1.0	19
Styrene	1	ug/l	1.0	19
t-Butyl Alcohol	1	ug/l	5.0	140
t-Butylbenzene	1	ug/l	1.0	19
Tetrachloroethene	1	ug/l	1.0	21
Toluene	1	ug/l	1.0	18
trans-1,2-Dichloroethene	1	ug/l	1.0	29
trans-1,3-Dichloropropene	1	ug/l	1.0	19

Sample ID: DF-MW-10 MSD
Lab#: AD19444-007
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Trichloroethene	1	ug/l	1.0	33
Trichlorofluoromethane	1	ug/l	1.0	23
Vinyl chloride	1	ug/l	1.0	22
Xylenes (Total)	1	ug/l	1.0	56

Sample ID: HRP-MW-1
Lab#: AD19444-008
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	**1**	**ug/l**	**1.0**	**14**
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	**1**	**ug/l**	**0.50**	**0.77**
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**300**
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	**1**	**ug/l**	**1.0**	**1.9**
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**11**
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: HRP-MW-1 **Collection Date:** 9/22/2020
Lab#: AD19444-008 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**210**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	**1**	**ug/l**	**1.0**	**13**
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: HRP-MW-2
Lab#: AD19444-009
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: HRP-MW-2 **Collection Date:** 9/22/2020
Lab#: AD19444-009 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**11**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: HRP-MW-3
Lab#: AD19444-010
Matrix: Aqueous

Collection Date: 9/23/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.64	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	2.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**3.8**
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	**1**	**ug/l**	**1.0**	**4.9**
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: HRP-MW-3 **Collection Date:** 9/23/2020
Lab#: AD19444-010 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**38**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: TMW-1
Lab#: AD19444-011
Matrix: Aqueous

Collection Date: 9/21/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.64	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	**1**	**ug/l**	**0.50**	**0.95**
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	2.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**130**
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**13**
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: TMW-1 **Collection Date:** 9/21/2020
Lab#: AD19444-011 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**7.9**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	**1**	**ug/l**	**1.0**	**38**
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: TMW-2 **Collection Date:** 9/21/2020
Lab#: AD19444-012 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**35**
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	**1**	**ug/l**	**1.0**	**1.9**
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**2.7**
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: TMW-2 **Collection Date: 9/21/2020**
Lab#: AD19444-012 **Receipt Date: 9/24/2020**
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**9.2**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	**1**	**ug/l**	**1.0**	**1.7**
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: DUP
Lab#: AD19444-013
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	**1**	**ug/l**	**1.0**	**14**
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	**1**	**ug/l**	**0.50**	**0.79**
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**290**
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	**1**	**ug/l**	**1.0**	**1.5**
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**11**
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: DUP
Lab#: AD19444-013
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Trichloroethene	**1**	**ug/l**	**1.0**	**200**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	**1**	**ug/l**	**1.0**	**12**
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: TB-092320 **Collection Date:** 9/23/2020
Lab#: AD19444-014 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.64	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	**1**	**ug/l**	**5.0**	**12**
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	2.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: TB-092320 **Collection Date:** 9/23/2020
Lab#: AD19444-014 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: EB-092320
Lab#: AD19444-015
Matrix: Aqueous

Collection Date: 9/23/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.64	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	2.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	**1**	**ug/l**	**1.0**	**7.8**
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: EB-092320 **Collection Date:** 9/23/2020
Lab#: AD19444-015 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: FB-092320
Lab#: AD19444-016
Matrix: Aqueous

Collection Date: 9/23/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.64	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	2.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: FB-092320 **Collection Date:** 9/23/2020
Lab#: AD19444-016 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-001
Client Id: DF-MW-2
Data File: 11M83292.D
Analysis Date: 09/28/20 18:40
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**4.1**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**5.7**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**2.0**
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**6.3**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-002
Client Id: DF-MW-7
Data File: 11M83293.D
Analysis Date: 09/28/20 18:59
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**5.2**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**1.2**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-003(5X)
Client Id: DF-MW-8
Data File: 2M142544.D
Analysis Date: 09/30/20 20:06
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 5.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	5.0	U	56-23-5	Carbon Tetrachloride	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	108-90-7	Chlorobenzene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	5.0	U	75-00-3	Chloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U	67-66-3	Chloroform	9.8	U
75-34-3	1,1-Dichloroethane	5.0	U	74-87-3	Chloromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**5.0**	**370**
96-18-4	1,2,3-Trichloropropane	5.0	U	10061-01-5	cis-1,3-Dichloropropene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U	124-48-1	Dibromochloromethane	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U	75-71-8	Dichlorodifluoromethane	5.0	U
107-06-2	1,2-Dichloroethane	3.2	U	100-41-4	Ethylbenzene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U	98-82-8	Isopropylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U	79601-23-1	m&p-Xylenes	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U	75-09-2	Methylene Chloride	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U	1634-04-4	Methyl-t-butyl ether	2.5	U
106-46-7	1,4-Dichlorobenzene	5.0	U	104-51-8	n-Butylbenzene	5.0	U
123-91-1	1,4-Dioxane	250	U	103-65-1	n-Propylbenzene	5.0	U
78-93-3	2-Butanone	5.0	U	95-47-6	o-Xylene	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	U	135-98-8	sec-Butylbenzene	5.0	U
591-78-6	2-Hexanone	5.0	U	100-42-5	Styrene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U	75-65-0	t-Butyl Alcohol	25	U
108-10-1	4-Methyl-2-Pentanone	5.0	U	98-06-6	t-Butylbenzene	5.0	U
67-64-1	Acetone	25	U	127-18-4	Tetrachloroethene	5.0	U
107-02-8	Acrolein	25	U	108-88-3	Toluene	5.0	U
107-13-1	Acrylonitrile	5.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**5.0**	**11**
71-43-2	Benzene	2.5	U	10061-02-6	trans-1,3-Dichloropropene	5.0	U
75-27-4	Bromodichloromethane	5.0	U	79-01-6	Trichloroethene	5.0	U
75-25-2	Bromoform	5.0	U	75-69-4	Trichlorofluoromethane	5.0	U
74-83-9	Bromomethane	5.0	U	**75-01-4**	**Vinyl Chloride**	**5.0**	**15**
75-15-0	Carbon Disulfide	5.0	U	1330-20-7	Xylenes (Total)	5.0	U

Worksheet #: 568732 *Total Target Concentration* 400 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-004
Client Id: DF-MW-9
Data File: 2M142588.D
Analysis Date: 10/01/20 12:42
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**1.2**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**1.1**
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**5.2**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 568735 *Total Target Concentration* 7.5 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-005
Client Id: DF-MW-10
Data File: 11M83275.D
Analysis Date: 09/28/20 13:23
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**22**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**2.0**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**3.9**
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**14**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	**75-01-4**	**Vinyl Chloride**	**1.0**	**1.7**
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-006(MS:AD19
Client Id: DF-MW-10 MS
Data File: 11M83277.D
Analysis Date: 09/28/20 14:00
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	21	56-23-5	Carbon Tetrachloride	1.0	22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	20	108-90-7	Chlorobenzene	1.0	19
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	22	75-00-3	Chloroethane	1.0	23
79-00-5	1,1,2-Trichloroethane	1.0	19	67-66-3	Chloroform	2.0	21
75-34-3	1,1-Dichloroethane	1.0	20	74-87-3	Chloromethane	1.0	20
75-35-4	1,1-Dichloroethene	1.0	22	156-59-2	cis-1,2-Dichloroethene	1.0	44
96-18-4	1,2,3-Trichloropropane	1.0	20	10061-01-5	cis-1,3-Dichloropropene	1.0	20
95-63-6	1,2,4-Trimethylbenzene	1.0	19	124-48-1	Dibromochloromethane	1.0	21
95-50-1	1,2-Dichlorobenzene	1.0	19	75-71-8	Dichlorodifluoromethane	1.0	17
107-06-2	1,2-Dichloroethane	0.64	19	100-41-4	Ethylbenzene	1.0	20
78-87-5	1,2-Dichloropropane	1.0	20	98-82-8	Isopropylbenzene	1.0	21
108-67-8	1,3,5-Trimethylbenzene	1.0	20	79601-23-1	m&p-Xylenes	1.0	41
541-73-1	1,3-Dichlorobenzene	1.0	19	75-09-2	Methylene Chloride	1.0	20
142-28-9	1,3-Dichloropropane	1.0	19	1634-04-4	Methyl-t-butyl ether	0.50	21
106-46-7	1,4-Dichlorobenzene	1.0	19	104-51-8	n-Butylbenzene	1.0	21
123-91-1	1,4-Dioxane	50	1600	103-65-1	n-Propylbenzene	1.0	21
78-93-3	2-Butanone	1.0	19	95-47-6	o-Xylene	1.0	20
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	20
591-78-6	2-Hexanone	1.0	19	100-42-5	Styrene	1.0	20
99-87-6	4-Isopropyltoluene	1.0	20	75-65-0	t-Butyl Alcohol	5.0	130
108-10-1	4-Methyl-2-Pentanone	1.0	19	98-06-6	t-Butylbenzene	1.0	20
67-64-1	Acetone	5.0	91	127-18-4	Tetrachloroethene	1.0	22
107-02-8	Acrolein	5.0	100	108-88-3	Toluene	1.0	20
107-13-1	Acrylonitrile	1.0	21	156-60-5	trans-1,2-Dichloroethene	1.0	25
71-43-2	Benzene	0.50	21	10061-02-6	trans-1,3-Dichloropropene	1.0	20
75-27-4	Bromodichloromethane	1.0	21	79-01-6	Trichloroethene	1.0	35
75-25-2	Bromoform	1.0	20	75-69-4	Trichlorofluoromethane	1.0	24
74-83-9	Bromomethane	1.0	22	75-01-4	Vinyl Chloride	1.0	25
75-15-0	Carbon Disulfide	1.0	23	1330-20-7	Xylenes (Total)	1.0	61

Worksheet #: 568732

Total Target Concentration 3000

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-007(MSD:AD
Client Id: DF-MW-10 MSD
Data File: 11M83278.D
Analysis Date: 09/28/20 14:18
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	19	56-23-5	Carbon Tetrachloride	1.0	21
79-34-5	1,1,2,2-Tetrachloroethane	1.0	18	108-90-7	Chlorobenzene	1.0	18
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	26	75-00-3	Chloroethane	1.0	22
79-00-5	1,1,2-Trichloroethane	1.0	18	67-66-3	Chloroform	2.0	20
75-34-3	1,1-Dichloroethane	1.0	19	74-87-3	Chloromethane	1.0	18
75-35-4	1,1-Dichloroethene	1.0	23	156-59-2	cis-1,2-Dichloroethene	1.0	41
96-18-4	1,2,3-Trichloropropane	1.0	18	10061-01-5	cis-1,3-Dichloropropene	1.0	19
95-63-6	1,2,4-Trimethylbenzene	1.0	18	124-48-1	Dibromochloromethane	1.0	19
95-50-1	1,2-Dichlorobenzene	1.0	18	75-71-8	Dichlorodifluoromethane	1.0	16
107-06-2	1,2-Dichloroethane	0.64	18	100-41-4	Ethylbenzene	1.0	19
78-87-5	1,2-Dichloropropane	1.0	20	98-82-8	Isopropylbenzene	1.0	20
108-67-8	1,3,5-Trimethylbenzene	1.0	18	79601-23-1	m&p-Xylenes	1.0	37
541-73-1	1,3-Dichlorobenzene	1.0	18	75-09-2	Methylene Chloride	1.0	22
142-28-9	1,3-Dichloropropane	1.0	18	1634-04-4	Methyl-t-butyl ether	0.50	22
106-46-7	1,4-Dichlorobenzene	1.0	18	104-51-8	n-Butylbenzene	1.0	20
123-91-1	1,4-Dioxane	50	1400	103-65-1	n-Propylbenzene	1.0	19
78-93-3	2-Butanone	1.0	20	95-47-6	o-Xylene	1.0	19
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	19
591-78-6	2-Hexanone	1.0	17	100-42-5	Styrene	1.0	19
99-87-6	4-Isopropyltoluene	1.0	19	75-65-0	t-Butyl Alcohol	5.0	140
108-10-1	4-Methyl-2-Pentanone	1.0	18	98-06-6	t-Butylbenzene	1.0	19
67-64-1	Acetone	5.0	96	127-18-4	Tetrachloroethene	1.0	21
107-02-8	Acrolein	5.0	110	108-88-3	Toluene	1.0	18
107-13-1	Acrylonitrile	1.0	22	156-60-5	trans-1,2-Dichloroethene	1.0	29
71-43-2	Benzene	0.50	19	10061-02-6	trans-1,3-Dichloropropene	1.0	19
75-27-4	Bromodichloromethane	1.0	20	79-01-6	Trichloroethene	1.0	33
75-25-2	Bromoform	1.0	20	75-69-4	Trichlorofluoromethane	1.0	23
74-83-9	Bromomethane	1.0	21	75-01-4	Vinyl Chloride	1.0	22
75-15-0	Carbon Disulfide	1.0	25	1330-20-7	Xylenes (Total)	1.0	56

Worksheet #: 568732

Total Target Concentration 2800

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-008
Client Id: HRP-MW-1
Data File: 2M142589.D
Analysis Date: 10/01/20 13:02
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	**1,1-Dichloroethene**	**1.0**	**14**	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**300**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**1.9**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**11**
71-43-2	**Benzene**	**0.50**	**0.77**	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**210**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	**75-01-4**	**Vinyl Chloride**	**1.0**	**13**
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-009
Client Id: HRP-MW-2
Data File: 2M142645.D
Analysis Date: 10/02/20 15:11
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**11**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 568736 *Total Target Concentration* 11 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-010
Client Id: HRP-MW-3
Data File: 11M83298.D
Analysis Date: 09/28/20 20:31
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**3.8**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**4.9**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**38**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-011
Client Id: TMW-1
Data File: 2M142542.D
Analysis Date: 09/30/20 19:26
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**130**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**13**
71-43-2	**Benzene**	**0.50**	**0.95**	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**7.9**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	**75-01-4**	**Vinyl Chloride**	**1.0**	**38**
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-012
Client Id: TMW-2
Data File: 2M142646.D
Analysis Date: 10/02/20 15:31
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**35**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**1.9**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**2.7**
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**9.2**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	**75-01-4**	**Vinyl Chloride**	**1.0**	**1.7**
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-013
Client Id: DUP
Data File: 2M142647.D
Analysis Date: 10/02/20 15:50
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	**1,1-Dichloroethene**	**1.0**	**14**	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**290**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**1.5**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**11**
71-43-2	**Benzene**	**0.50**	**0.79**	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**200**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	**75-01-4**	**Vinyl Chloride**	**1.0**	**12**
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-014
Client Id: TB-092320
Data File: 11M83273.D
Analysis Date: 09/28/20 12:46
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	**Acetone**	**5.0**	**12**	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-015
Client Id: EB-092320
Data File: 2M142455.D
Analysis Date: 09/29/20 02:32
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	**75-09-2**	**Methylene Chloride**	**1.0**	**7.8**
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 568732

Total Target Concentration 7.8

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-016
Client Id: FB-092320
Data File: 2M142454.D
Analysis Date: 09/29/20 02:12
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 568732

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Chain of Custody Forms

0092507 0055

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992
A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 0092507

Page 1 of 2

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: HRP ASSOCIATES, INC
Address: 1 FAIRCHILD SQUARE, CLIFTON PARK, NY 12065
1b) Email/Cell/Fax/Ph: STEFAN.TRUEX@HRPASSOCIATES.COM
1c) Send Invoice to: STEFAN TRUEX
1d) Send Report to: STEFAN TRUEX

Project Information

2a) Project: DUFFY
17 SPRUCE STREET
2b) Project Mgr: STEFAN TRUEX
2c) Project Location (City/State): ILION, NEW YORK
2d) Quote/PO # (If Applicable): HERI500 P2 TASK C

FOR LAB USE ONLY ↓

Batch # AD19444

Matrix Codes

DW - Drinking Water; GW - Ground Water; WW - Waste Water; S - Soil; SL - Sludge; OL - Oil; A - Air; OT - Other (please specify under item 9, Comments)

===> Check If Contingent ===>

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	7) Analysis: VOCs EPA 8260C	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001	DF-MW-2	GW	9/22/20	1035		X	X					3				
002	DF-MW-7	GW	9/22/20	1233		X	X					3				
003	DF-MW-8	GW	9/22/20	0856		X	X					3				
004	DF-MW-9	GW	9/20/20	1250		X	X					3				
005 (1/06/00)	DF-MW-10	GW	9/21/20	1457		X	X					3				RUN MS/MSD
006 (008)	HRP-MW-1	GW	9/22/20	1552		X	X					3				
007 (009)	HRP-MW-2	GW	9/22/20	1405		X	X					3				
008 (010)	HRP-MW-3	GW	9/23/20	1115		X	X					3				
009 (011)	TMW-1	GW	9/21/20	1648		X	X					3				
010 (012)	TMW-2	GW	9/21/20	1300		X	X					3				

10) Relinquished by:	Accepted by:	Date	Time
		9/23	10:00
		9/24/20	15:40

11) Sampler (print name): STEFAN TRUEX Date: 9/23/20

Additional Notes
2 CAT B REPORT
STANDARD TAT

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2-9

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 092507

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Customer Information

1a) Customer: HRP Associates, Inc.
Address: 1 Fairchild Square
Clifton Park, NY 12065
1b) Email/Cell/Fax/Ph: stefan.truex@hrpassociates.com
1c) Send Invoice to: Stefan Truex
1d) Send Report to: Stefan Truex

Project Information

2a) Project: Dicfold
7 Spruce St
2b) Project Mgr: Stefan Truex
2c) Project Location (City/State): Ilion, NY
2d) Quote/PO # (If Applicable): HRP1520, P3 Task 6

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY

Batch # AN9444

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water; GW - Ground Water; WW - Waste Water; S - Soil; SL - Sludge; OL - Oil; A - Air; OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	VOC 8260	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
013	DUP	GW	9/22/20				X					3				
014	TB-092320	W	9/23/20				X					3				
015	EB-092320	GW	9/23/20				X					3				
016	FB-092320	GW	9/23/20				X					3				

10) Relinquished by:	Accepted by:	Date	Time
		9/24/20	10:00
		9/24/20	15:40

11) Sampler (print name): STEFAN TRUEX / KRISTEN AMORD Date: 9/25/20

Additional Notes: + CAT B REPORT
STANDARD TAT

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2-0

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

CONDITION UPON RECEIPT

Batch Number AD19444 Entered By: maxwell

Date Entered 9/25/2020 10:22:00 AM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	No	Are the COC seals intact?
4	T0054	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.9
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	No	Is there enough sample sent for the analyses listed on the COC? If no, specify: Only three vials received for MW-10, MW-10 MS/MSD. Not enough sample volume. PH was taken from one of the three vials received.
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	Yes	Other comments ...Specify (TB date, sample matrix, any missing info, etc.)
14	NA	Corrective actions (Specify item number and corrective action taken).
15	No	Were any samples for ortho-phosphate or dissolved ferrous iron field filtered?

PRESERVATION DOCUMENT

Batch Number AD19444

Entered By: maxwell

Date Entered 9/25/2020 10:27:00 AM

Lab#:	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD19444-001	40ML	G	VO	HCL	320554	1	HC32998
AD19444-002	40ML	G	VO	HCL	320554	1	HC32998
AD19444-003	40ML	G	VO	HCL	320554	1	HC32998
AD19444-004	40ML	G	VO	HCL	320554	1	HC32998
AD19444-005	40ML	G	VO	HCL	320554	1	HC32998
AD19444-006	NA	NA	NA	NA	NA	NA	NA
AD19444-007	NA	NA	NA	NA	NA	NA	NA
AD19444-008	40ML	G	VO	HCL	320554	1	HC32998
AD19444-009	40ML	G	VO	HCL	320554	1	HC32998
AD19444-010	40ML	G	VO	HCL	320554	1	HC32998
AD19444-011	40ML	G	VO	HCL	320554	1	HC32998
AD19444-012	40ML	G	VO	HCL	320554	1	HC32998
AD19444-013	40ML	G	VO	HCL	320554	1	HC32998
AD19444-014	40ML	G	VO	HCL	320554	1	HC32998
AD19444-015	40ML	G	VO	HCL	320554	1	HC32998
AD19444-016	40ML	G	VO	HCL	320554	1	HC32998

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD19444-001	09/24/20 15:40	MAXW	0	M	Received
AD19444-001	09/25/20 09:56	MAXW	0	M	Login
AD19444-001	09/25/20 11:33	R31	1	A	NONE
AD19444-001	09/25/20 11:33	R31	2	A	NONE
AD19444-001	09/28/20 12:28	WP	2	A	VOA
AD19444-001	09/25/20 11:31	R31	3	A	PH/CHECK
AD19444-002	09/24/20 15:40	MAXW	0	M	Received
AD19444-002	09/25/20 09:56	MAXW	0	M	Login
AD19444-002	09/25/20 11:33	R31	1	A	NONE
AD19444-002	09/25/20 11:33	R31	2	A	NONE
AD19444-002	09/28/20 12:28	WP	2	A	VOA
AD19444-002	09/25/20 11:31	R31	3	A	PH/CHECK
AD19444-003	09/24/20 15:40	MAXW	0	M	Received
AD19444-003	09/25/20 09:56	MAXW	0	M	Login
AD19444-003	09/25/20 11:33	R31	1	A	NONE
AD19444-003	09/29/20 10:32	RL	1	A	VOA
AD19444-003	09/30/20 12:20	WP	1	A	VOA
AD19444-003	09/25/20 11:33	R31	2	A	NONE
AD19444-003	09/28/20 12:28	WP	2	A	VOA
AD19444-003	09/25/20 11:31	R31	3	A	PH/CHECK
AD19444-004	09/24/20 15:40	MAXW	0	M	Received
AD19444-004	09/25/20 09:56	MAXW	0	M	Login
AD19444-004	09/25/20 11:33	R31	1	A	NONE
AD19444-004	09/25/20 11:33	R31	2	A	NONE
AD19444-004	09/28/20 12:28	WP	2	A	VOA
AD19444-004	09/29/20 13:38	WP	2	A	VOA
AD19444-004	09/25/20 11:31	R31	3	A	PH/CHECK
AD19444-005	09/24/20 15:40	MAXW	0	M	Received
AD19444-005	09/25/20 09:56	MAXW	0	M	Login
AD19444-005	09/25/20 11:33	R31	1	A	NONE
AD19444-005	09/28/20 12:28	WP	1	A	VOA
AD19444-006	09/24/20 15:40	MAXW	0	M	Received
AD19444-006	09/25/20 09:56	MAXW	0	M	Login
AD19444-006	09/25/20 11:33	R31	1	A	NONE
AD19444-006	09/28/20 12:28	WP	1	A	VOA
AD19444-007	09/24/20 15:40	MAXW	0	M	Received
AD19444-007	09/25/20 09:56	MAXW	0	M	Login
AD19444-007	09/25/20 11:31	R31	1	A	PH/CHECK
AD19444-007	09/28/20 12:28	WP	1	A	VOA
AD19444-008	09/24/20 15:40	MAXW	0	M	Received
AD19444-008	09/25/20 09:56	MAXW	0	M	Login
AD19444-008	09/25/20 11:33	R31	1	A	NONE
AD19444-008	09/25/20 11:33	R31	2	A	NONE
AD19444-008	09/28/20 12:28	WP	2	A	VOA
AD19444-008	09/29/20 13:38	WP	2	A	VOA
AD19444-008	09/25/20 11:31	R31	3	A	PH/CHECK
AD19444-009	09/24/20 15:40	MAXW	0	M	Received
AD19444-009	09/25/20 09:56	MAXW	0	M	Login
AD19444-009	09/25/20 11:33	R31	1	A	NONE
AD19444-009	09/25/20 11:33	R31	2	A	NONE
AD19444-009	09/28/20 12:28	WP	2	A	VOA
AD19444-009	09/29/20 13:38	WP	2	A	VOA
AD19444-009	10/02/20 11:06	RL	2	A	VOA
AD19444-009	09/25/20 11:31	R31	3	A	PH/CHECK
AD19444-010	09/24/20 15:40	MAXW	0	M	Received
AD19444-010	09/25/20 09:56	MAXW	0	M	Login
AD19444-010	09/25/20 11:33	R31	1	A	NONE
AD19444-010	09/25/20 11:33	R31	2	A	NONE
AD19444-010	09/28/20 12:28	WP	2	A	VOA
AD19444-010	09/25/20 11:31	R31	3	A	PH/CHECK
AD19444-011	09/24/20 15:40	MAXW	0	M	Received
AD19444-011	09/25/20 09:56	MAXW	0	M	Login
AD19444-011	09/25/20 11:33	R31	1	A	NONE
AD19444-011	09/29/20 10:32	RL	1	A	VOA
AD19444-011	09/30/20 12:20	WP	1	A	VOA
AD19444-011	09/25/20 11:33	R31	2	A	NONE
AD19444-011	09/28/20 12:28	WP	2	A	VOA
AD19444-011	09/25/20 11:31	R31	3	A	PH/CHECK
AD19444-012	09/24/20 15:40	MAXW	0	M	Received
AD19444-012	09/25/20 09:56	MAXW	0	M	Login
AD19444-012	09/25/20 11:33	R31	1	A	NONE
AD19444-012	09/25/20 11:33	R31	2	A	NONE
AD19444-012	09/28/20 12:28	WP	2	A	VOA
AD19444-012	09/29/20 13:38	WP	2	A	VOA
AD19444-012	10/02/20 11:06	RL	2	A	VOA
AD19444-012	09/25/20 11:31	R31	3	A	PH/CHECK
AD19444-013	09/24/20 15:40	MAXW	0	M	Received
AD19444-013	09/25/20 09:56	MAXW	0	M	Login
AD19444-013	09/25/20 11:33	R31	1	A	NONE
AD19444-013	09/25/20 11:33	R31	2	A	NONE
AD19444-013	09/28/20 12:28	WP	2	A	VOA
AD19444-013	09/29/20 13:38	WP	2	A	VOA
AD19444-013	10/02/20 11:06	RL	2	A	VOA
AD19444-013	09/25/20 11:31	R31	3	A	PH/CHECK
AD19444-014	09/24/20 15:40	MAXW	0	M	Received
AD19444-014	09/25/20 09:56	MAXW	0	M	Login
AD19444-014	09/25/20 11:33	R31	1	A	NONE
AD19444-014	09/25/20 11:31	R31	2	A	PH/CHECK
AD19444-014	09/25/20 11:33	R31	3	A	NONE
AD19444-014	09/28/20 12:28	WP	3	A	VOA
AD19444-015	09/24/20 15:40	MAXW	0	M	Received
AD19444-015	09/25/20 09:56	MAXW	0	M	Login
AD19444-015	09/25/20 11:33	R31	1	A	NONE
AD19444-015	09/25/20 11:31	R31	2	A	PH/CHECK
AD19444-015	09/25/20 11:33	R31	3	A	NONE
AD19444-015	09/28/20 12:28	WP	3	A	VOA
AD19444-016	09/24/20 15:40	MAXW	0	M	Received
AD19444-016	09/25/20 09:56	MAXW	0	M	Login
AD19444-016	09/25/20 11:33	R31	1	A	NONE
AD19444-016	09/25/20 11:33	R31	2	A	NONE
AD19444-016	09/28/20 12:28	WP	2	A	VOA
AD19444-016	09/25/20 11:31	R31	3	A	PH/CHECK

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

GC/MS Volatile Data

GC/MS Volatile Data
QC Summary

FORM2

Surrogate Recovery

Method: EPA 8260C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
11M83272.D	DAILY BLANK	A	09/28/20 12:28	1		102	98	94	104		
2M142444.D	DAILY BLANK	A	09/28/20 22:57	1		102	102	101	103		
2M142522.D	DAILY BLANK	A	09/30/20 12:54	1		102	101	101	102		
2M142565.D	DAILY BLANK	A	10/01/20 02:58	1		98	99	99	105		
2M142632.D	DAILY BLANK	A	10/02/20 10:57	1		98	101	101	102		
11M83292.D	AD19444-001	A	09/28/20 18:40	1		103	97	96	105		
11M83293.D	AD19444-002	A	09/28/20 18:59	1		107	96	96	105		
2M142544.D	AD19444-003(5X)	A	09/30/20 20:06	1		99	99	101	105		
2M142588.D	AD19444-004	A	10/01/20 12:42	1		101	101	100	106		
11M83275.D	AD19444-005	A	09/28/20 13:23	1		100	97	97	108		
11M83277.D	AD19444-006(MS:AD19	A	09/28/20 14:00	1		104	96	97	103		
11M83278.D	AD19444-007(MSD:AD1	A	09/28/20 14:18	1		103	98	97	104		
2M142589.D	AD19444-008	A	10/01/20 13:02	1		101	103	99	105		
2M142645.D	AD19444-009	A	10/02/20 15:11	1		98	103	99	107		
11M83298.D	AD19444-010	A	09/28/20 20:31	1		105	95	93	108		
2M142542.D	AD19444-011	A	09/30/20 19:26	1		101	101	99	105		
2M142646.D	AD19444-012	A	10/02/20 15:31	1		100	100	99	103		
2M142647.D	AD19444-013	A	10/02/20 15:50	1		98	98	99	103		
11M83273.D	AD19444-014	A	09/28/20 12:46	1		115	99	95	106		
2M142455.D	AD19444-015	A	09/29/20 02:32	1		106	105	101	104		
2M142454.D	AD19444-016	A	09/29/20 02:12	1		107	109	101	102		
11M83276.D	MBS89372	A	09/28/20 13:42	1		103	100	98	102		
2M142446.D	MBS89382	A	09/28/20 23:36	1		105	104	102	103		
2M142523.D	AD19412-005	A	09/30/20 13:14	1		102	102	101	104		
2M142524.D	AD19412-007	A	09/30/20 13:33	1		100	98	100	107		
2M142525.D	MBS89395	A	09/30/20 13:53	1		99	99	100	102		
2M142526.D	AD19412-005(MS)	A	09/30/20 14:13	1		99	101	100	103		
2M142527.D	AD19412-005(MSD)	A	09/30/20 14:32	1		98	99	103	102		
2M142568.D	MBS89398	A	10/01/20 03:57	1		103	101	101	104		
2M142569.D	AD19412-007(MS)	A	10/01/20 04:16	1		98	97	103	105		
2M142570.D	AD19412-007(MSD)	A	10/01/20 04:35	1		100	98	101	103		
2M142639.D	AD19408-001(T)	A	10/02/20 13:14	1		103	103	98	105		
2M142640.D	MBS89414	A	10/02/20 13:34	1		98	100	100	104		
2M142641.D	AD19408-001(T)(MS)	A	10/02/20 13:53	1		99	103	102	103		
2M142642.D	AD19408-001(T)(MSD)	A	10/02/20 14:12	1		100	99	100	104		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8260C

Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	73-131
S2=1,2-Dichloroethane-d4	30	78-128
S3=Toluene-d8	30	79-111
S4=Bromofluorobenzene	30	82-112

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

Data File	Sample ID:	Analysis Date
Spike or Dup: 11M83276.D	MBS89372	9/28/2020 1:42:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	16.7239	0	20	84	50	150
Dichlorodifluoromethane	1	16.8309	0	20	84	50	150
Chloromethane	1	19.4905	0	20	97	50	150
Bromomethane	1	18.047	0	20	90	50	150
Vinyl Chloride	1	21.7838	0	20	109	50	150
Chloroethane	1	23.0167	0	20	115	50	150
Trichlorofluoromethane	1	23.1014	0	20	116	50	150
Ethyl ether	1	21.1358	0	20	106	50	150
Furan	1	19.4369	0	20	97	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.0944	0	20	110	50	150
Methylene Chloride	1	18.8603	0	20	94	70	130
Acrolein	1	96.4327	0	100	96	50	150
Acrylonitrile	1	19.3077	0	20	97	50	150
Iodomethane	1	16.0231	0	20	80	50	150
Acetone	1	87.9823	0	100	88	50	150
Carbon Disulfide	1	21.2878	0	20	106	50	150
t-Butyl Alcohol	1	121.4151	0	100	121	50	150
n-Hexane	1	21.3033	0	20	107	70	130
Di-isopropyl-ether	1	18.8261	0	20	94	70	130
1,1-Dichloroethene	1	21.1618	0	20	106	70	130
Methyl Acetate	1	20.324	0	20	102	50	150
Methyl-t-butyl ether	1	19.4124	0	20	97	70	130
1,1-Dichloroethane	1	19.5842	0	20	98	70	130
trans-1,2-Dichloroethene	1	20.7427	0	20	104	70	130
Ethyl-t-butyl ether	1	19.1862	0	20	96	70	130
cis-1,2-Dichloroethene	1	19.621	0	20	98	70	130
Bromochloromethane	1	19.9071	0	20	100	70	130
2,2-Dichloropropane	1	22.1969	0	20	111	70	130
Ethyl acetate	1	18.6158	0	20	93	50	150
1,4-Dioxane	1	1435.601	0	1000	144	50	150
1,1-Dichloropropene	1	20.0513	0	20	100	70	130
Chloroform	1	19.8294	0	20	99	70	130
Cyclohexane	1	20.9171	0	20	105	70	130
1,2-Dichloroethane	1	17.9013	0	20	90	70	130
2-Butanone	1	17.0293	0	20	85	50	150
1,1,1-Trichloroethane	1	19.9642	0	20	100	70	130
Carbon Tetrachloride	1	20.7932	0	20	104	50	150
Vinyl Acetate	1	18.3689	0	20	92	50	150
Bromodichloromethane	1	19.2677	0	20	96	70	130
Methylcyclohexane	1	21.4543	0	20	107	70	130
Dibromomethane	1	18.957	0	20	95	70	130
1,2-Dichloropropane	1	19.3091	0	20	97	70	130
Trichloroethene	1	19.8876	0	20	99	70	130
Benzene	1	19.4298	0	20	97	70	130
tert-Amyl methyl ether	1	19.5099	0	20	98	70	130
Iso-propylacetate	1	18.1075	0	20	91	70	130
Methyl methacrylate	1	16.6378	0	20	83	70	130
Dibromochloromethane	1	18.8715	0	20	94	70	130
2-Chloroethylvinylether	1	10.0228	0	20	50*	70	130
cis-1,3-Dichloropropene	1	19.3299	0	20	97	70	130
trans-1,3-Dichloropropene	1	18.2178	0	20	91	70	130
Ethyl methacrylate	1	18.5101	0	20	93	70	130
1,1,2-Trichloroethane	1	18.0546	0	20	90	70	130
1,2-Dibromoethane	1	18.1309	0	20	91	70	130
1,3-Dichloropropane	1	18.2206	0	20	91	70	130
4-Methyl-2-Pentanone	1	18.1593	0	20	91	50	150
2-Hexanone	1	17.9455	0	20	90	50	150
Tetrachloroethene	1	18.2107	0	20	91	50	150
Toluene	1	18.1547	0	20	91	70	130
1,1,1,2-Tetrachloroethane	1	17.6008	0	20	88	70	130
Chlorobenzene	1	17.7823	0	20	89	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

Method: 8260C | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	17.8304	0	20	89	70	130
n-Amyl acetate	1	19.0341	0	20	95	70	130
Bromoform	**1**	**18.745**	**0**	**20**	**94**	**70**	**130**
Ethylbenzene	**1**	**17.8931**	**0**	**20**	**89**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**17.8468**	**0**	**20**	**89**	**70**	**130**
Styrene	**1**	**18.2158**	**0**	**20**	**91**	**70**	**130**
m&p-Xylenes	**1**	**36.5777**	**0**	**40**	**91**	**70**	**130**
o-Xylene	**1**	**18.3418**	**0**	**20**	**92**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	18.1082	0	20	91	50	150
1,3-Dichlorobenzene	**1**	**17.3242**	**0**	**20**	**87**	**70**	**130**
1,4-Dichlorobenzene	**1**	**16.9196**	**0**	**20**	**85**	**70**	**130**
1,2-Dichlorobenzene	**1**	**17.0922**	**0**	**20**	**85**	**70**	**130**
Isopropylbenzene	**1**	**18.7422**	**0**	**20**	**94**	**70**	**130**
Cyclohexanone	1	118.4458	0	100	118	50	150
Camphene	1	19.1827	0	20	96	70	130
1,2,3-Trichloropropane	**1**	**17.7874**	**0**	**20**	**89**	**70**	**130**
2-Chlorotoluene	1	17.5863	0	20	88	70	130
p-Ethyltoluene	1	18.9292	0	20	95	70	130
4-Chlorotoluene	1	18.0977	0	20	90	70	130
n-Propylbenzene	**1**	**18.8345**	**0**	**20**	**94**	**70**	**130**
Bromobenzene	1	17.9898	0	20	90	70	130
1,3,5-Trimethylbenzene	**1**	**17.9119**	**0**	**20**	**90**	**70**	**130**
Butyl methacrylate	1	18.1242	0	20	91	70	130
t-Butylbenzene	**1**	**17.4802**	**0**	**20**	**87**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**17.6383**	**0**	**20**	**88**	**70**	**130**
sec-Butylbenzene	**1**	**18.349**	**0**	**20**	**92**	**70**	**130**
4-Isopropyltoluene	**1**	**18.0323**	**0**	**20**	**90**	**70**	**130**
n-Butylbenzene	**1**	**18.1011**	**0**	**20**	**91**	**70**	**130**
p-Diethylbenzene	1	18.2293	0	20	91	70	130
1,2,4,5-Tetramethylbenzene	1	17.4364	0	20	87	70	130
1,2-Dibromo-3-Chloropropane	1	17.8236	0	20	89	50	150
Camphor	1	143.8813	0	200	72	20	150
Hexachlorobutadiene	1	17.7031	0	20	89	50	150
1,2,4-Trichlorobenzene	1	15.6901	0	20	78	70	130
1,2,3-Trichlorobenzene	1	14.8971	0	20	74	70	130
Naphthalene	1	15.0944	0	20	75	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89382

Data File	Sample ID:	Analysis Date
Spike or Dup: 2M142446.D	MBS89382	9/28/2020 11:36:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	14.7546	0	20	74	50	150
Dichlorodifluoromethane	1	12.1261	0	20	61	50	150
Chloromethane	1	18.2113	0	20	91	50	150
Bromomethane	1	10.0279	0	20	50	50	150
Vinyl Chloride	1	20.8278	0	20	104	50	150
Chloroethane	1	20.5507	0	20	103	50	150
Trichlorofluoromethane	1	20.7969	0	20	104	50	150
Ethyl ether	1	20.6484	0	20	103	50	150
Furan	1	19.6656	0	20	98	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.5111	0	20	98	50	150
Methylene Chloride	1	19.7886	0	20	99	70	130
Acrolein	1	101.1429	0	100	101	50	150
Acrylonitrile	1	20.3663	0	20	102	50	150
Iodomethane	1	9.3326	0	20	47*	50	150
Acetone	1	98.4744	0	100	98	50	150
Carbon Disulfide	1	20.498	0	20	102	50	150
t-Butyl Alcohol	1	96.2427	0	100	96	50	150
n-Hexane	1	19.4081	0	20	97	70	130
Di-isopropyl-ether	1	20.0253	0	20	100	70	130
1,1-Dichloroethene	1	20.9533	0	20	105	70	130
Methyl Acetate	1	20.1652	0	20	101	50	150
Methyl-t-butyl ether	1	20.2267	0	20	101	70	130
1,1-Dichloroethane	1	20.3152	0	20	102	70	130
trans-1,2-Dichloroethene	1	20.0752	0	20	100	70	130
Ethyl-t-butyl ether	1	19.1778	0	20	96	70	130
cis-1,2-Dichloroethene	1	19.8971	0	20	99	70	130
Bromochloromethane	1	20.5232	0	20	103	70	130
2,2-Dichloropropane	1	18.3287	0	20	92	70	130
Ethyl acetate	1	19.2966	0	20	96	50	150
1,4-Dioxane	1	985.9296	0	1000	99	50	150
1,1-Dichloropropene	1	21.1723	0	20	106	70	130
Chloroform	1	20.259	0	20	101	70	130
Cyclohexane	1	21.6972	0	20	108	70	130
1,2-Dichloroethane	1	18.5116	0	20	93	70	130
2-Butanone	1	20.2856	0	20	101	50	150
1,1,1-Trichloroethane	1	21.2332	0	20	106	70	130
Carbon Tetrachloride	1	18.8786	0	20	94	50	150
Vinyl Acetate	1	18.0553	0	20	90	50	150
Bromodichloromethane	1	19.7551	0	20	99	70	130
Methylcyclohexane	1	20.4176	0	20	102	70	130
Dibromomethane	1	18.711	0	20	94	70	130
1,2-Dichloropropane	1	19.8684	0	20	99	70	130
Trichloroethene	1	19.9833	0	20	100	70	130
Benzene	1	19.607	0	20	98	70	130
tert-Amyl methyl ether	1	18.748	0	20	94	70	130
Iso-propylacetate	1	16.4857	0	20	82	70	130
Methyl methacrylate	1	18.3495	0	20	92	70	130
Dibromochloromethane	1	17.8292	0	20	89	70	130
2-Chloroethylvinylether	1	13.8834	0	20	69*	70	130
cis-1,3-Dichloropropene	1	17.4749	0	20	87	70	130
trans-1,3-Dichloropropene	1	16.0556	0	20	80	70	130
Ethyl methacrylate	1	16.9175	0	20	85	70	130
1,1,2-Trichloroethane	1	18.7177	0	20	94	70	130
1,2-Dibromoethane	1	18.3494	0	20	92	70	130
1,3-Dichloropropane	1	18.1451	0	20	91	70	130
4-Methyl-2-Pentanone	1	19.3197	0	20	97	50	150
2-Hexanone	1	17.7893	0	20	89	50	150
Tetrachloroethene	1	18.2121	0	20	91	50	150
Toluene	1	18.6562	0	20	93	70	130
1,1,1,2-Tetrachloroethane	1	16.8835	0	20	84	70	130
Chlorobenzene	1	18.3707	0	20	92	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89382

Method: 8260C | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	20.0506	0	20	100	70	130
n-Amyl acetate	1	15.8326	0	20	79	70	130
Bromoform	**1**	**18.0655**	**0**	**20**	**90**	**70**	**130**
Ethylbenzene	**1**	**20.6146**	**0**	**20**	**103**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**22.28**	**0**	**20**	**111**	**70**	**130**
Styrene	**1**	**21.7775**	**0**	**20**	**109**	**70**	**130**
m&p-Xylenes	**1**	**43.2925**	**0**	**40**	**108**	**70**	**130**
o-Xylene	**1**	**21.1539**	**0**	**20**	**106**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	12.3105	0	20	62	50	150
1,3-Dichlorobenzene	**1**	**20.7307**	**0**	**20**	**104**	**70**	**130**
1,4-Dichlorobenzene	**1**	**19.6923**	**0**	**20**	**98**	**70**	**130**
1,2-Dichlorobenzene	**1**	**20.4344**	**0**	**20**	**102**	**70**	**130**
Isopropylbenzene	**1**	**22.2565**	**0**	**20**	**111**	**70**	**130**
Cyclohexanone	1	100.909	0	100	101	50	150
Camphene	1	32.3117	0	20	162*	70	130
1,2,3-Trichloropropane	**1**	**16.5492**	**0**	**20**	**83**	**70**	**130**
2-Chlorotoluene	1	19.4239	0	20	97	70	130
p-Ethyltoluene	1	22.9089	0	20	115	70	130
4-Chlorotoluene	1	20.9308	0	20	105	70	130
n-Propylbenzene	**1**	**22.7502**	**0**	**20**	**114**	**70**	**130**
Bromobenzene	1	19.9096	0	20	100	70	130
1,3,5-Trimethylbenzene	**1**	**22.5433**	**0**	**20**	**113**	**70**	**130**
Butyl methacrylate	1	19.8026	0	20	99	70	130
t-Butylbenzene	**1**	**15.5451**	**0**	**20**	**78**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**17.4949**	**0**	**20**	**87**	**70**	**130**
sec-Butylbenzene	**1**	**21.8566**	**0**	**20**	**109**	**70**	**130**
4-Isopropyltoluene	**1**	**20.9803**	**0**	**20**	**105**	**70**	**130**
n-Butylbenzene	**1**	**21.6047**	**0**	**20**	**108**	**70**	**130**
p-Diethylbenzene	1	22.8016	0	20	114	70	130
1,2,4,5-Tetramethylbenzene	1	21.2804	0	20	106	70	130
1,2-Dibromo-3-Chloropropane	1	20.2544	0	20	101	50	150
Camphor	1	202.3994	0	200	101	20	150
Hexachlorobutadiene	1	21.6975	0	20	108	50	150
1,2,4-Trichlorobenzene	1	19.1257	0	20	96	70	130
1,2,3-Trichlorobenzene	1	19.8563	0	20	99	70	130
Naphthalene	1	20.5066	0	20	103	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

Data File	Sample ID:	Analysis Date
Spike or Dup: 2M142525.D	MBS89395	9/30/2020 1:53:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.7274	0	20	94	50	150
Dichlorodifluoromethane	1	20.031	0	20	100	50	150
Chloromethane	1	20.705	0	20	104	50	150
Bromomethane	1	16.1692	0	20	81	50	150
Vinyl Chloride	1	19.7477	0	20	99	50	150
Chloroethane	1	18.7372	0	20	94	50	150
Trichlorofluoromethane	1	19.2148	0	20	96	50	150
Ethyl ether	1	19.529	0	20	98	50	150
Furan	1	19.2189	0	20	96	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	18.8343	0	20	94	50	150
Methylene Chloride	1	19.261	0	20	96	70	130
Acrolein	1	100.9203	0	100	101	50	150
Acrylonitrile	1	20.2923	0	20	101	50	150
Iodomethane	1	15.7513	0	20	79	50	150
Acetone	1	95.1145	0	100	95	50	150
Carbon Disulfide	1	18.774	0	20	94	50	150
t-Butyl Alcohol	1	104.0682	0	100	104	50	150
n-Hexane	1	18.9467	0	20	95	70	130
Di-isopropyl-ether	1	19.5575	0	20	98	70	130
1,1-Dichloroethene	1	19.4753	0	20	97	70	130
Methyl Acetate	1	25.5889	0	20	128	50	150
Methyl-t-butyl ether	1	17.8001	0	20	89	70	130
1,1-Dichloroethane	1	19.7472	0	20	99	70	130
trans-1,2-Dichloroethene	1	19.2214	0	20	96	70	130
Ethyl-t-butyl ether	1	19.9351	0	20	100	70	130
cis-1,2-Dichloroethene	1	19.2156	0	20	96	70	130
Bromochloromethane	1	20.2653	0	20	101	70	130
2,2-Dichloropropane	1	19.6807	0	20	98	70	130
Ethyl acetate	1	29.8633	0	20	149	50	150
1,4-Dioxane	1	1060.741	0	1000	106	50	150
1,1-Dichloropropene	1	19.0852	0	20	95	70	130
Chloroform	1	19.8197	0	20	99	70	130
Cyclohexane	1	18.0004	0	20	90	70	130
1,2-Dichloroethane	1	18.3385	0	20	92	70	130
2-Butanone	1	0	0	20	0*	50	150
1,1,1-Trichloroethane	1	19.5974	0	20	98	70	130
Carbon Tetrachloride	1	19.0922	0	20	95	50	150
Vinyl Acetate	1	15.2693	0	20	76	50	150
Bromodichloromethane	1	17.6664	0	20	88	70	130
Methylcyclohexane	1	17.6259	0	20	88	70	130
Dibromomethane	1	19.8669	0	20	99	70	130
1,2-Dichloropropane	1	19.4982	0	20	97	70	130
Trichloroethene	1	19.5119	0	20	98	70	130
Benzene	1	19.2373	0	20	96	70	130
tert-Amyl methyl ether	1	18.8446	0	20	94	70	130
Iso-propylacetate	1	19.4369	0	20	97	70	130
Methyl methacrylate	1	20.4616	0	20	102	70	130
Dibromochloromethane	1	20.69	0	20	103	70	130
2-Chloroethylvinylether	1	62.4567	0	20	312*	70	130
cis-1,3-Dichloropropene	1	20.0082	0	20	100	70	130
trans-1,3-Dichloropropene	1	20.3367	0	20	102	70	130
Ethyl methacrylate	1	19.8935	0	20	99	70	130
1,1,2-Trichloroethane	1	20.3337	0	20	102	70	130
1,2-Dibromoethane	1	20.5023	0	20	103	70	130
1,3-Dichloropropane	1	20.0365	0	20	100	70	130
4-Methyl-2-Pentanone	1	20.1296	0	20	101	50	150
2-Hexanone	1	20.3617	0	20	102	50	150
Tetrachloroethene	1	19.301	0	20	97	50	150
Toluene	1	20.0793	0	20	100	70	130
1,1,1,2-Tetrachloroethane	1	19.3021	0	20	97	70	130
Chlorobenzene	1	20.066	0	20	100	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

Method: 8260C | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	21.7162	0	20	109	70	130
n-Amyl acetate	1	20.5926	0	20	103	70	130
Bromoform	1	21.3416	0	20	107	70	130
Ethylbenzene	1	21.2407	0	20	106	70	130
1,1,2,2-Tetrachloroethane	1	20.1347	0	20	101	70	130
Styrene	1	21.2864	0	20	106	70	130
m&p-Xylenes	1	40.8395	0	40	102	70	130
o-Xylene	1	21.0006	0	20	105	70	130
trans-1,4-Dichloro-2-butene	1	19.3387	0	20	97	50	150
1,3-Dichlorobenzene	1	20.1363	0	20	101	70	130
1,4-Dichlorobenzene	1	19.7503	0	20	99	70	130
1,2-Dichlorobenzene	1	20.1243	0	20	101	70	130
Isopropylbenzene	1	21.2081	0	20	106	70	130
Cyclohexanone	1	106.5419	0	100	107	50	150
Camphene	1	17.6465	0	20	88	70	130
1,2,3-Trichloropropane	1	19.4225	0	20	97	70	130
2-Chlorotoluene	1	22.0488	0	20	110	70	130
p-Ethyltoluene	1	20.2162	0	20	101	70	130
4-Chlorotoluene	1	22.4362	0	20	112	70	130
n-Propylbenzene	1	20.6353	0	20	103	70	130
Bromobenzene	1	19.4347	0	20	97	70	130
1,3,5-Trimethylbenzene	1	20.7427	0	20	104	70	130
Butyl methacrylate	1	19.8037	0	20	99	70	130
t-Butylbenzene	1	21.1158	0	20	106	70	130
1,2,4-Trimethylbenzene	1	21.163	0	20	106	70	130
sec-Butylbenzene	1	20.6038	0	20	103	70	130
4-Isopropyltoluene	1	20.7704	0	20	104	70	130
n-Butylbenzene	1	20.9758	0	20	105	70	130
p-Diethylbenzene	1	20.0323	0	20	100	70	130
1,2,4,5-Tetramethylbenzene	1	19.4977	0	20	97	70	130
1,2-Dibromo-3-Chloropropane	1	21.283	0	20	106	50	150
Camphor	1	200.6025	0	200	100	20	150
Hexachlorobutadiene	1	18.2103	0	20	91	50	150
1,2,4-Trichlorobenzene	1	18.9733	0	20	95	70	130
1,2,3-Trichlorobenzene	1	20.0421	0	20	100	70	130
Naphthalene	1	20.0352	0	20	100	50	150

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89398

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142568.D	MBS89398	10/1/2020 3:57:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: ~~Not~~ d 8260D 10/14/20 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	16.9067	0	20	85	50	150
Dichlorodifluoromethane	1	19.1885	0	20	96	50	150
Chloromethane	1	16.3938	0	20	82	50	150
Bromomethane	1	17.0339	0	20	85	50	150
Vinyl Chloride	1	18.8474	0	20	94	50	150
Chloroethane	1	17.1603	0	20	86	50	150
Trichlorofluoromethane	1	18.0517	0	20	90	50	150
Ethyl ether	1	16.9701	0	20	85	50	150
Furan	1	17.0247	0	20	85	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.2	0	20	96	50	150
Methylene Chloride	1	16.3138	0	20	82	70	130
Acrolein	1	70.7435	0	100	71	50	150
Acrylonitrile	1	16.7535	0	20	84	50	150
Iodomethane	1	15.5652	0	20	78	50	150
Acetone	1	78.1588	0	100	78	50	150
Carbon Disulfide	1	17.6912	0	20	88	50	150
t-Butyl Alcohol	1	82.5733	0	100	83	50	150
n-Hexane	1	17.2069	0	20	86	70	130
Di-isopropyl-ether	1	17.3552	0	20	87	70	130
1,1-Dichloroethene	1	18.1641	0	20	91	70	130
Methyl Acetate	1	21.5583	0	20	108	50	150
Methyl-t-butyl ether	1	15.5914	0	20	78	70	130
1,1-Dichloroethane	1	17.52	0	20	88	70	130
trans-1,2-Dichloroethene	1	17.3224	0	20	87	70	130
Ethyl-t-butyl ether	1	17.4475	0	20	87	70	130
cis-1,2-Dichloroethene	1	16.6095	0	20	83	70	130
Bromochloromethane	1	17.751	0	20	89	70	130
2,2-Dichloropropane	1	13.3899	0	20	67*	70	130
Ethyl acetate	1	16.2812	0	20	81	50	150
1,4-Dioxane	1	832.3859	0	1000	83	50	150
1,1-Dichloropropene	1	17.5171	0	20	88	70	130
Chloroform	1	17.6757	0	20	88	70	130
Cyclohexane	1	18.3288	0	20	92	70	130
1,2-Dichloroethane	1	15.9012	0	20	80	70	130
2-Butanone	1	15.6321	0	20	78	50	150
1,1,1-Trichloroethane	1	18.0853	0	20	90	70	130
Carbon Tetrachloride	1	17.2547	0	20	86	50	150
Vinyl Acetate	1	12.1779	0	20	61	50	150
Bromodichloromethane	1	15.4928	0	20	77	70	130
Methylcyclohexane	1	17.7821	0	20	89	70	130
Dibromomethane	1	16.3021	0	20	82	70	130
1,2-Dichloropropane	1	17.4932	0	20	87	70	130
Trichloroethene	1	17.37	0	20	87	70	130
Benzene	1	17.0208	0	20	85	70	130
tert-Amyl methyl ether	1	16.5462	0	20	83	70	130
Iso-propylacetate	1	15.8372	0	20	79	70	130
Methyl methacrylate	1	16.7983	0	20	84	70	130
Dibromochloromethane	1	17.7718	0	20	89	70	130
2-Chloroethylvinylether	1	55.8944	0	20	279*	70	130
cis-1,3-Dichloropropene	1	16.3886	0	20	82	70	130
trans-1,3-Dichloropropene	1	16.2052	0	20	81	70	130
Ethyl methacrylate	1	15.8171	0	20	79	70	130
1,1,2-Trichloroethane	1	16.638	0	20	83	70	130
1,2-Dibromoethane	1	17.2732	0	20	86	70	130
1,3-Dichloropropane	1	16.6699	0	20	83	70	130
4-Methyl-2-Pentanone	1	16.405	0	20	82	50	150
2-Hexanone	1	15.3674	0	20	77	50	150
Tetrachloroethene	1	17.1189	0	20	86	50	150
Toluene	1	17.1393	0	20	86	70	130
1,1,1,2-Tetrachloroethane	1	16.6255	0	20	83	70	130
Chlorobenzene	1	16.7529	0	20	84	70	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89398

Method: ~~NotFd~~ 8260D 10/14/20 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	17.6221	0	20	88	70	130
n-Amyl acetate	1	16.5143	0	20	83	70	130
Bromoform	**1**	**17.2965**	**0**	**20**	**86**	**70**	**130**
Ethylbenzene	**1**	**17.7434**	**0**	**20**	**89**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**16.0453**	**0**	**20**	**80**	**70**	**130**
Styrene	**1**	**18.1096**	**0**	**20**	**91**	**70**	**130**
m&p-Xylenes	**1**	**34.6187**	**0**	**40**	**87**	**70**	**130**
o-Xylene	**1**	**18.3557**	**0**	**20**	**92**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	15.178	0	20	76	50	150
1,3-Dichlorobenzene	**1**	**16.9231**	**0**	**20**	**85**	**70**	**130**
1,4-Dichlorobenzene	**1**	**16.4798**	**0**	**20**	**82**	**70**	**130**
1,2-Dichlorobenzene	**1**	**16.4782**	**0**	**20**	**82**	**70**	**130**
Isopropylbenzene	**1**	**18.9525**	**0**	**20**	**95**	**70**	**130**
Cyclohexanone	1	76.0325	0	100	76	50	150
Camphene	1	16.8219	0	20	84	70	130
1,2,3-Trichloropropane	**1**	**15.0584**	**0**	**20**	**75**	**70**	**130**
2-Chlorotoluene	1	17.843	0	20	89	70	130
p-Ethyltoluene	1	17.9157	0	20	90	70	130
4-Chlorotoluene	1	18.431	0	20	92	70	130
n-Propylbenzene	**1**	**18.5825**	**0**	**20**	**93**	**70**	**130**
Bromobenzene	1	16.6335	0	20	83	70	130
1,3,5-Trimethylbenzene	**1**	**18.239**	**0**	**20**	**91**	**70**	**130**
Butyl methacrylate	1	16.196	0	20	81	70	130
t-Butylbenzene	**1**	**18.498**	**0**	**20**	**92**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**18.0403**	**0**	**20**	**90**	**70**	**130**
sec-Butylbenzene	**1**	**18.8188**	**0**	**20**	**94**	**70**	**130**
4-Isopropyltoluene	**1**	**18.4908**	**0**	**20**	**92**	**70**	**130**
n-Butylbenzene	**1**	**18.1964**	**0**	**20**	**91**	**70**	**130**
p-Diethylbenzene	1	17.4812	0	20	87	70	130
1,2,4,5-Tetramethylbenzene	1	16.5814	0	20	83	70	130
1,2-Dibromo-3-Chloropropane	1	16.7835	0	20	84	50	150
Camphor	1	175.3736	0	200	88	20	150
Hexachlorobutadiene	1	16.0227	0	20	80	50	150
1,2,4-Trichlorobenzene	1	16.4586	0	20	82	70	130
1,2,3-Trichlorobenzene	1	16.726	0	20	84	70	130
Naphthalene	1	18.3293	0	20	92	50	150

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

Data File: Spike or Dup: 2M142640.D
Sample ID: MBS89414
Analysis Date: 10/2/2020 1:34:00 PM
Non Spike(If applicable):
Inst Blank(If applicable):
Method: ~~Not~~ d 8260D 10/14/20 JC
Matrix: Aqueous
QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	13.902	0	20	70	50	150
Dichlorodifluoromethane	1	0	0	20	0*	50	150
Chloromethane	1	3.7894	0	20	19*	50	150
Bromomethane	1	7.8592	0	20	39*	50	150
Vinyl Chloride	1	5.4193	0	20	27*	50	150
Chloroethane	1	10.0671	0	20	50	50	150
Trichlorofluoromethane	1	11.847	0	20	59	50	150
Ethyl ether	1	16.3458	0	20	82	50	150
Furan	1	15.405	0	20	77	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	16.5393	0	20	83	50	150
Methylene Chloride	1	15.8018	0	20	79	70	130
Acrolein	1	52.0799	0	100	52	50	150
Acrylonitrile	1	16.5982	0	20	83	50	150
Iodomethane	1	8.1946	0	20	41*	50	150
Acetone	1	78.8766	0	100	79	50	150
Carbon Disulfide	1	12.976	0	20	65	50	150
t-Butyl Alcohol	1	84.4388	0	100	84	50	150
n-Hexane	1	15.9263	0	20	80	70	130
Di-isopropyl-ether	1	15.9728	0	20	80	70	130
1,1-Dichloroethene	1	15.2964	0	20	76	70	130
Methyl Acetate	1	23.5294	0	20	118	50	150
Methyl-t-butyl ether	1	14.624	0	20	73	70	130
1,1-Dichloroethane	1	16.1133	0	20	81	70	130
trans-1,2-Dichloroethene	1	15.6648	0	20	78	70	130
Ethyl-t-butyl ether	1	18.0354	0	20	90	70	130
cis-1,2-Dichloroethene	1	16.4007	0	20	82	70	130
Bromochloromethane	1	17.7674	0	20	89	70	130
2,2-Dichloropropane	1	16.7374	0	20	84	70	130
Ethyl acetate	1	17.178	0	20	86	50	150
1,4-Dioxane	1	689.93	0	1000	69	50	150
1,1-Dichloropropene	1	16.5414	0	20	83	70	130
Chloroform	1	16.7645	0	20	84	70	130
Cyclohexane	1	15.8245	0	20	79	70	130
1,2-Dichloroethane	1	15.74	0	20	79	70	130
2-Butanone	1	16.277	0	20	81	50	150
1,1,1-Trichloroethane	1	16.4921	0	20	82	70	130
Carbon Tetrachloride	1	16.7237	0	20	84	50	150
Vinyl Acetate	1	12.5264	0	20	63	50	150
Bromodichloromethane	1	15.6788	0	20	78	70	130
Methylcyclohexane	1	15.7813	0	20	79	70	130
Dibromomethane	1	16.9108	0	20	85	70	130
1,2-Dichloropropane	1	16.6943	0	20	83	70	130
Trichloroethene	1	16.1154	0	20	81	70	130
Benzene	1	15.8931	0	20	79	70	130
tert-Amyl methyl ether	1	16.2669	0	20	81	70	130
Iso-propylacetate	1	17.2823	0	20	86	70	130
Methyl methacrylate	1	17.6084	0	20	88	70	130
Dibromochloromethane	1	17.8667	0	20	89	70	130
2-Chloroethylvinylether	1	71.0422	0	20	355*	70	130
cis-1,3-Dichloropropene	1	16.2355	0	20	81	70	130
trans-1,3-Dichloropropene	1	17.1064	0	20	86	70	130
Ethyl methacrylate	1	16.479	0	20	82	70	130
1,1,2-Trichloroethane	1	17.6332	0	20	88	70	130
1,2-Dibromoethane	1	17.0472	0	20	85	70	130
1,3-Dichloropropane	1	16.9794	0	20	85	70	130
4-Methyl-2-Pentanone	1	18.889	0	20	94	50	150
2-Hexanone	1	18.4763	0	20	92	50	150
Tetrachloroethene	1	16.3531	0	20	82	50	150
Toluene	1	16.5487	0	20	83	70	130
1,1,1,2-Tetrachloroethane	1	16.9017	0	20	85	70	130
Chlorobenzene	1	16.5043	0	20	83	70	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

Method: ~~NotFd~~ 8260D 10/14/20 JL Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	19.4454	0	20	97	70	130
n-Amyl acetate	1	19.8476	0	20	99	70	130
Bromoform	1	18.781	0	20	94	70	130
Ethylbenzene	1	18.1317	0	20	91	70	130
1,1,2,2-Tetrachloroethane	1	17.3632	0	20	87	70	130
Styrene	1	17.8072	0	20	89	70	130
m&p-Xylenes	1	34.3629	0	40	86	70	130
o-Xylene	1	17.6318	0	20	88	70	130
trans-1,4-Dichloro-2-butene	1	15.8404	0	20	79	50	150
1,3-Dichlorobenzene	1	16.5411	0	20	83	70	130
1,4-Dichlorobenzene	1	16.1292	0	20	81	70	130
1,2-Dichlorobenzene	1	16.8318	0	20	84	70	130
Isopropylbenzene	1	18.2195	0	20	91	70	130
Cyclohexanone	1	144.3645	0	100	144	50	150
Camphene	1	15.8752	0	20	79	70	130
1,2,3-Trichloropropane	1	16.6581	0	20	83	70	130
2-Chlorotoluene	1	18.293	0	20	91	70	130
p-Ethyltoluene	1	16.7489	0	20	84	70	130
4-Chlorotoluene	1	18.9244	0	20	95	70	130
n-Propylbenzene	1	17.8364	0	20	89	70	130
Bromobenzene	1	16.5862	0	20	83	70	130
1,3,5-Trimethylbenzene	1	18.1374	0	20	91	70	130
Butyl methacrylate	1	16.5609	0	20	83	70	130
t-Butylbenzene	1	18.1429	0	20	91	70	130
1,2,4-Trimethylbenzene	1	17.3528	0	20	87	70	130
sec-Butylbenzene	1	18.1581	0	20	91	70	130
4-Isopropyltoluene	1	17.5357	0	20	88	70	130
n-Butylbenzene	1	17.6812	0	20	88	70	130
p-Diethylbenzene	1	16.7852	0	20	84	70	130
1,2,4,5-Tetramethylbenzene	1	15.7619	0	20	79	70	130
1,2-Dibromo-3-Chloropropane	1	18.8113	0	20	94	50	150
Camphor	1	359.4415	0	200	180*	20	150
Hexachlorobutadiene	1	16.2116	0	20	81	50	150
1,2,4-Trichlorobenzene	1	15.875	0	20	79	70	130
1,2,3-Trichlorobenzene	1	16.5588	0	20	83	70	130
Naphthalene	1	17.6416	0	20	88	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M83277.D	AD19444-006(MS:AD19444-005	9/28/2020 2:00:00 PM
Non Spike(If applicable):	11M83275.D	AD19444-005	9/28/2020 1:23:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	17.7876	0	20	89	50	150
Dichlorodifluoromethane	**1**	**17.4028**	**0**	**20**	**87**	**50**	**150**
Chloromethane	**1**	**20.2743**	**0**	**20**	**101**	**50**	**150**
Bromomethane	**1**	**21.5621**	**0**	**20**	**108**	**50**	**150**
Vinyl Chloride	**1**	**24.8567**	**1.7444**	**20**	**116**	**50**	**150**
Chloroethane	**1**	**23.4261**	**0**	**20**	**117**	**50**	**150**
Trichlorofluoromethane	**1**	**23.9721**	**0**	**20**	**120**	**50**	**150**
Ethyl ether	1	20.8081	0	20	104	50	150
Furan	1	19.3463	0	20	97	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**22.3824**	**0**	**20**	**112**	**50**	**150**
Methylene Chloride	**1**	**19.5976**	**0**	**20**	**98**	**70**	**130**
Acrolein	**1**	**104.7156**	**0**	**100**	**105**	**50**	**150**
Acrylonitrile	**1**	**20.6733**	**0**	**20**	**103**	**50**	**150**
Iodomethane	1	19.936	0	20	100	50	150
Acetone	**1**	**91.1837**	**0**	**100**	**91**	**50**	**150**
Carbon Disulfide	**1**	**23.2062**	**0**	**20**	**116**	**50**	**150**
t-Butyl Alcohol	**1**	**132.1803**	**0**	**100**	**132**	**50**	**150**
n-Hexane	1	22.8418	0	20	114	70	130
Di-isopropyl-ether	1	19.9274	0	20	100	70	130
1,1-Dichloroethene	**1**	**22.0424**	**0**	**20**	**110**	**70**	**130**
Methyl Acetate	1	21.1922	0	20	106	50	150
Methyl-t-butyl ether	**1**	**20.679**	**0**	**20**	**103**	**70**	**130**
1,1-Dichloroethane	**1**	**20.1569**	**0**	**20**	**101**	**70**	**130**
trans-1,2-Dichloroethene	**1**	**25.4973**	**3.9**	**20**	**108**	**70**	**130**
Ethyl-t-butyl ether	1	19.7556	0	20	99	70	130
cis-1,2-Dichloroethene	**1**	**43.612**	**22.1821**	**20**	**107**	**70**	**130**
Bromochloromethane	1	20.578	0	20	103	70	130
2,2-Dichloropropane	1	23.4365	0	20	117	70	130
Ethyl acetate	1	20.2099	0	20	101	50	150
1,4-Dioxane	**1**	**1565.411**	**0**	**1000**	**157***	**50**	**150**
1,1-Dichloropropene	1	21.0418	0	20	105	70	130
Chloroform	**1**	**20.6245**	**0**	**20**	**103**	**70**	**130**
Cyclohexane	1	21.8072	0	20	109	70	130
1,2-Dichloroethane	**1**	**19.2524**	**0**	**20**	**96**	**70**	**130**
2-Butanone	**1**	**18.7391**	**0**	**20**	**94**	**50**	**150**
1,1,1-Trichloroethane	**1**	**21.3523**	**0**	**20**	**107**	**70**	**130**
Carbon Tetrachloride	**1**	**22.2655**	**0**	**20**	**111**	**50**	**150**
Vinyl Acetate	1	20.2779	0	20	101	50	150
Bromodichloromethane	**1**	**20.5372**	**0**	**20**	**103**	**70**	**130**
Methylcyclohexane	1	22.7907	0	20	114	70	130
Dibromomethane	1	20.5197	0	20	103	70	130
1,2-Dichloropropane	**1**	**20.4779**	**0**	**20**	**102**	**70**	**130**
Trichloroethene	**1**	**35.2046**	**13.7964**	**20**	**107**	**70**	**130**
Benzene	**1**	**20.9878**	**0**	**20**	**105**	**70**	**130**
tert-Amyl methyl ether	1	21.6003	0	20	108	70	130
Iso-propylacetate	1	20.0521	0	20	100	70	130
Methyl methacrylate	1	18.5848	0	20	93	70	130
Dibromochloromethane	**1**	**20.5864**	**0**	**20**	**103**	**70**	**130**
2-Chloroethylvinylether	**1**	**0**	**0**	**20**	**0***	**70**	**130**
cis-1,3-Dichloropropene	**1**	**20.4173**	**0**	**20**	**102**	**70**	**130**
trans-1,3-Dichloropropene	**1**	**20.2921**	**0**	**20**	**101**	**70**	**130**
Ethyl methacrylate	1	19.8567	0	20	99	70	130
1,1,2-Trichloroethane	**1**	**18.8234**	**0**	**20**	**94**	**70**	**130**
1,2-Dibromoethane	1	19.2695	0	20	96	70	130
1,3-Dichloropropane	**1**	**19.2176**	**0**	**20**	**96**	**70**	**130**
4-Methyl-2-Pentanone	**1**	**19.343**	**0**	**20**	**97**	**50**	**150**
2-Hexanone	**1**	**19.3555**	**0**	**20**	**97**	**50**	**150**
Tetrachloroethene	**1**	**21.8122**	**1.9776**	**20**	**99**	**50**	**150**
Toluene	**1**	**19.9721**	**0**	**20**	**100**	**70**	**130**
1,1,1,2-Tetrachloroethane	1	19.5644	0	20	98	70	130
Chlorobenzene	**1**	**19.4903**	**0**	**20**	**97**	**70**	**130**

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

Method: 8260C | Matrix: Aqueous | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	20.288	0	20	101	70	130
n-Amyl acetate	1	21.6876	0	20	108	70	130
Bromoform	1	20.0425	0	20	100	70	130
Ethylbenzene	1	19.6959	0	20	98	70	130
1,1,2,2-Tetrachloroethane	1	19.6263	0	20	98	70	130
Styrene	1	19.9901	0	20	100	70	130
m&p-Xylenes	1	41.1553	0	40	103	70	130
o-Xylene	1	20.0574	0	20	100	70	130
trans-1,4-Dichloro-2-butene	1	19.228	0	20	96	50	150
1,3-Dichlorobenzene	1	19.2697	0	20	96	70	130
1,4-Dichlorobenzene	1	19.1821	0	20	96	70	130
1,2-Dichlorobenzene	1	18.9743	0	20	95	70	130
Isopropylbenzene	1	20.5698	0	20	103	70	130
Cyclohexanone	1	136.6914	0	100	137	50	150
Camphene	1	18.9126	0	20	95	70	130
1,2,3-Trichloropropane	1	20.0781	0	20	100	70	130
2-Chlorotoluene	1	19.3567	0	20	97	70	130
p-Ethyltoluene	1	20.7709	0	20	104	70	130
4-Chlorotoluene	1	19.0566	0	20	95	70	130
n-Propylbenzene	1	20.5565	0	20	103	70	130
Bromobenzene	1	19.4734	0	20	97	70	130
1,3,5-Trimethylbenzene	1	19.7257	0	20	99	70	130
Butyl methacrylate	1	20.1034	0	20	101	70	130
t-Butylbenzene	1	19.9421	0	20	100	70	130
1,2,4-Trimethylbenzene	1	19.3258	0	20	97	70	130
sec-Butylbenzene	1	20.232	0	20	101	70	130
4-Isopropyltoluene	1	20.2029	0	20	101	70	130
n-Butylbenzene	1	20.5646	0	20	103	70	130
p-Diethylbenzene	1	20.8262	0	20	104	70	130
1,2,4,5-Tetramethylbenzene	1	19.9076	0	20	100	70	130
1,2-Dibromo-3-Chloropropane	1	20.4065	0	20	102	50	150
Camphor	1	199.5934	0	200	100	20	150
Hexachlorobutadiene	1	22.2233	0	20	111	50	150
1,2,4-Trichlorobenzene	1	20.2396	0	20	101	70	130
1,2,3-Trichlorobenzene	1	22.2651	0	20	111	70	130
Naphthalene	1	22.6727	0	20	113	50	150

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M83278.D	AD19444-007(MSD:AD19444-0	9/28/2020 2:18:00 PM
Non Spike(If applicable):	11M83275.D	AD19444-005	9/28/2020 1:23:00 PM
Inst Blank(If applicable):			

Method: 8260C | Matrix: Aqueous | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	16.6997	0	20	83	50	150
Dichlorodifluoromethane	1	16.0171	0	20	80	50	150
Chloromethane	1	18.4928	0	20	92	50	150
Bromomethane	1	20.7411	0	20	104	50	150
Vinyl Chloride	1	22.3415	1.7444	20	103	50	150
Chloroethane	1	22.0282	0	20	110	50	150
Trichlorofluoromethane	1	23.1221	0	20	116	50	150
Ethyl ether	1	23.3321	0	20	117	50	150
Furan	1	21.2538	0	20	106	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	25.5872	0	20	128	50	150
Methylene Chloride	1	21.9511	0	20	110	70	130
Acrolein	1	111.6828	0	100	112	50	150
Acrylonitrile	1	21.5573	0	20	108	50	150
Iodomethane	1	26.647	0	20	133	50	150
Acetone	1	95.5081	0	100	96	50	150
Carbon Disulfide	1	24.5145	0	20	123	50	150
t-Butyl Alcohol	1	142.9745	0	100	143	50	150
n-Hexane	1	24.5437	0	20	123	70	130
Di-isopropyl-ether	1	18.8909	0	20	94	70	130
1,1-Dichloroethene	1	23.4656	0	20	117	70	130
Methyl Acetate	1	21.1563	0	20	106	50	150
Methyl-t-butyl ether	1	22.4132	0	20	112	70	130
1,1-Dichloroethane	1	19.4707	0	20	97	70	130
trans-1,2-Dichloroethene	1	28.6604	3.9	20	124	70	130
Ethyl-t-butyl ether	1	19.0134	0	20	95	70	130
cis-1,2-Dichloroethene	1	40.9691	22.1821	20	94	70	130
Bromochloromethane	1	3.4395	0	20	17*	70	130
2,2-Dichloropropane	1	22.1609	0	20	111	70	130
Ethyl acetate	1	17.1424	0	20	86	50	150
1,4-Dioxane	1	1363.209	0	1000	136	50	150
1,1-Dichloropropene	1	19.0611	0	20	95	70	130
Chloroform	1	19.5334	0	20	98	70	130
Cyclohexane	1	20.3105	0	20	102	70	130
1,2-Dichloroethane	1	18.372	0	20	92	70	130
2-Butanone	1	19.8447	0	20	99	50	150
1,1,1-Trichloroethane	1	19.4913	0	20	97	70	130
Carbon Tetrachloride	1	20.7677	0	20	104	50	150
Vinyl Acetate	1	19.4125	0	20	97	50	150
Bromodichloromethane	1	19.6323	0	20	98	70	130
Methylcyclohexane	1	22.2347	0	20	111	70	130
Dibromomethane	1	20.4772	0	20	102	70	130
1,2-Dichloropropane	1	19.9068	0	20	100	70	130
Trichloroethene	1	32.5663	13.7964	20	94	70	130
Benzene	1	19.3378	0	20	97	70	130
tert-Amyl methyl ether	1	19.7101	0	20	99	70	130
Iso-propylacetate	1	18.1645	0	20	91	70	130
Methyl methacrylate	1	16.3491	0	20	82	70	130
Dibromochloromethane	1	19.1673	0	20	96	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	19.0334	0	20	95	70	130
trans-1,3-Dichloropropene	1	18.5218	0	20	93	70	130
Ethyl methacrylate	1	18.7698	0	20	94	70	130
1,1,2-Trichloroethane	1	17.9516	0	20	90	70	130
1,2-Dibromoethane	1	18.033	0	20	90	70	130
1,3-Dichloropropane	1	17.6984	0	20	88	70	130
4-Methyl-2-Pentanone	1	18.1429	0	20	91	50	150
2-Hexanone	1	17.4855	0	20	87	50	150
Tetrachloroethene	1	20.6112	1.9776	20	93	50	150
Toluene	1	18.3254	0	20	92	70	130
1,1,1,2-Tetrachloroethane	1	17.7769	0	20	89	70	130
Chlorobenzene	1	17.8473	0	20	89	70	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

Method: 8260C | Matrix: Aqueous | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	19.3405	0	20	97	70	130
n-Amyl acetate	1	19.7381	0	20	99	70	130
Bromoform	**1**	**19.5851**	**0**	**20**	**98**	**70**	**130**
Ethylbenzene	**1**	**18.549**	**0**	**20**	**93**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**18.2032**	**0**	**20**	**91**	**70**	**130**
Styrene	**1**	**18.7567**	**0**	**20**	**94**	**70**	**130**
m&p-Xylenes	**1**	**36.5981**	**0**	**40**	**91**	**70**	**130**
o-Xylene	**1**	**18.7739**	**0**	**20**	**94**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	16.1787	0	20	81	50	150
1,3-Dichlorobenzene	**1**	**17.991**	**0**	**20**	**90**	**70**	**130**
1,4-Dichlorobenzene	**1**	**17.608**	**0**	**20**	**88**	**70**	**130**
1,2-Dichlorobenzene	**1**	**18.2837**	**0**	**20**	**91**	**70**	**130**
Isopropylbenzene	**1**	**19.6117**	**0**	**20**	**98**	**70**	**130**
Cyclohexanone	1	128.642	0	100	129	50	150
Camphene	1	12.9062	0	20	65*	70	130
1,2,3-Trichloropropane	**1**	**18.3521**	**0**	**20**	**92**	**70**	**130**
2-Chlorotoluene	1	18.8607	0	20	94	70	130
p-Ethyltoluene	1	18.89	0	20	94	70	130
4-Chlorotoluene	1	18.3543	0	20	92	70	130
n-Propylbenzene	**1**	**19.2631**	**0**	**20**	**96**	**70**	**130**
Bromobenzene	1	18.0172	0	20	90	70	130
1,3,5-Trimethylbenzene	**1**	**18.0977**	**0**	**20**	**90**	**70**	**130**
Butyl methacrylate	1	19.0226	0	20	95	70	130
t-Butylbenzene	**1**	**18.6775**	**0**	**20**	**93**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**17.9974**	**0**	**20**	**90**	**70**	**130**
sec-Butylbenzene	**1**	**19.417**	**0**	**20**	**97**	**70**	**130**
4-Isopropyltoluene	**1**	**19.2238**	**0**	**20**	**96**	**70**	**130**
n-Butylbenzene	**1**	**19.8657**	**0**	**20**	**99**	**70**	**130**
p-Diethylbenzene	1	20.109	0	20	101	70	130
1,2,4,5-Tetramethylbenzene	1	19.4461	0	20	97	70	130
1,2-Dibromo-3-Chloropropane	1	19.9792	0	20	100	50	150
Camphor	1	200.6323	0	200	100	20	150
Hexachlorobutadiene	1	22.0267	0	20	110	50	150
1,2,4-Trichlorobenzene	1	20.2752	0	20	101	70	130
1,2,3-Trichlorobenzene	1	22.9264	0	20	115	70	130
Naphthalene	1	22.8694	0	20	114	50	150

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Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch:MBS89372

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M83278.D	AD19444-007(MSD:AD19444-0	9/28/2020 2:18:00 PM
Duplicate(If applicable):	11M83277.D	AD19444-006(MS:AD19444-005	9/28/2020 2:00:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	16.6997	17.7876	6.3	30
Dichlorodifluoromethane	1	16.0171	17.4028	8.3	30
Chloromethane	1	18.4928	20.2743	9.2	30
Bromomethane	1	20.7411	21.5621	3.9	30
Vinyl Chloride	1	22.3415	24.8567	11	40
Chloroethane	1	22.0282	23.4261	6.2	30
Trichlorofluoromethane	1	23.1221	23.9721	3.6	30
Ethyl ether	1	23.3321	20.8081	11	30
Furan	1	21.2538	19.3463	9.4	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	25.5872	22.3824	13	30
Methylene Chloride	1	21.9511	19.5976	11	30
Acrolein	1	111.6828	104.7156	6.4	30
Acrylonitrile	1	21.5573	20.6733	4.2	30
Iodomethane	1	26.647	19.936	29	30
Acetone	1	95.5081	91.1837	4.6	30
Carbon Disulfide	1	24.5145	23.2062	5.5	30
t-Butyl Alcohol	1	142.9745	132.1803	7.8	30
n-Hexane	1	24.5437	22.8418	7.2	30
Di-isopropyl-ether	1	18.8909	19.9274	5.3	30
1,1-Dichloroethene	1	23.4656	22.0424	6.3	40
Methyl Acetate	1	21.1563	21.1922	0.17	30
Methyl-t-butyl ether	1	22.4132	20.679	8	30
1,1-Dichloroethane	1	19.4707	20.1569	3.5	40
trans-1,2-Dichloroethene	1	28.6604	25.4973	12	30
Ethyl-t-butyl ether	1	19.0134	19.7556	3.8	30
cis-1,2-Dichloroethene	1	40.9691	43.612	6.2	30
Bromochloromethane	1	3.4395	20.578	143*	30
2,2-Dichloropropane	1	22.1609	23.4365	5.6	30
Ethyl acetate	1	17.1424	20.2099	16	30
1,4-Dioxane	1	1363.209	1565.411	14	30
1,1-Dichloropropene	1	19.0611	21.0418	9.9	30
Chloroform	1	19.5334	20.6245	5.4	40
Cyclohexane	1	20.3105	21.8072	7.1	30
1,2-Dichloroethane	1	18.372	19.2524	4.7	40
2-Butanone	1	19.8447	18.7391	5.7	40
1,1,1-Trichloroethane	1	19.4913	21.3523	9.1	30
Carbon Tetrachloride	1	20.7677	22.2655	7	40
Vinyl Acetate	1	19.4125	20.2779	4.4	30
Bromodichloromethane	1	19.6323	20.5372	4.5	30
Methylcyclohexane	1	22.2347	22.7907	2.5	30
Dibromomethane	1	20.4772	20.5197	0.21	30
1,2-Dichloropropane	1	19.9068	20.4779	2.8	30
Trichloroethene	1	32.5663	35.2046	7.8	40
Benzene	1	19.3378	20.9878	8.2	40
tert-Amyl methyl ether	1	19.7101	21.6003	9.2	30
Iso-propylacetate	1	18.1645	20.0521	9.9	30
Methyl methacrylate	1	16.3491	18.5848	13	30
Dibromochloromethane	1	19.1673	20.5864	7.1	30
2-Chloroethylvinylether	1	0	0	NA	30
cis-1,3-Dichloropropene	1	19.0334	20.4173	7	30
trans-1,3-Dichloropropene	1	18.5218	20.2921	9.1	30
Ethyl methacrylate	1	18.7698	19.8567	5.6	30
1,1,2-Trichloroethane	1	17.9516	18.8234	4.7	30
1,2-Dibromoethane	1	18.033	19.2695	6.6	30
1,3-Dichloropropane	1	17.6984	19.2176	8.2	30
4-Methyl-2-Pentanone	1	18.1429	19.343	6.4	30
2-Hexanone	1	17.4855	19.3555	10	30
Tetrachloroethene	1	20.6112	21.8122	5.7	40
Toluene	1	18.3254	19.9721	8.6	40
1,1,1,2-Tetrachloroethane	1	17.7769	19.5644	9.6	30
Chlorobenzene	1	17.8473	19.4903	8.8	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89372

Method: 8260C | Matrix: Aqueous | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	19.3405	20.288	4.8	30
n-Amyl acetate	1	19.7381	21.6876	9.4	30
Bromoform	1	19.5851	20.0425	2.3	30
Ethylbenzene	1	18.549	19.6959	6	30
1,1,2,2-Tetrachloroethane	1	18.2032	19.6263	7.5	30
Styrene	1	18.7567	19.9901	6.4	30
m&p-Xylenes	1	36.5981	41.1553	12	30
o-Xylene	1	18.7739	20.0574	6.6	30
trans-1,4-Dichloro-2-butene	1	16.1787	19.228	17	30
1,3-Dichlorobenzene	1	17.991	19.2697	6.9	30
1,4-Dichlorobenzene	1	17.608	19.1821	8.6	40
1,2-Dichlorobenzene	1	18.2837	18.9743	3.7	40
Isopropylbenzene	1	19.6117	20.5698	4.8	30
Cyclohexanone	1	128.642	136.6914	6.1	30
Camphene	1	12.9062	18.9126	38*	30
1,2,3-Trichloropropane	1	18.3521	20.0781	9	30
2-Chlorotoluene	1	18.8607	19.3567	2.6	30
p-Ethyltoluene	1	18.89	20.7709	9.5	30
4-Chlorotoluene	1	18.3543	19.0566	3.8	30
n-Propylbenzene	1	19.2631	20.5565	6.5	40
Bromobenzene	1	18.0172	19.4734	7.8	30
1,3,5-Trimethylbenzene	1	18.0977	19.7257	8.6	30
Butyl methacrylate	1	19.0226	20.1034	5.5	30
t-Butylbenzene	1	18.6775	19.9421	6.5	30
1,2,4-Trimethylbenzene	1	17.9974	19.3258	7.1	30
sec-Butylbenzene	1	19.417	20.232	4.1	40
4-Isopropyltoluene	1	19.2238	20.2029	5	30
n-Butylbenzene	1	19.8657	20.5646	3.5	30
p-Diethylbenzene	1	20.109	20.8262	3.5	30
1,2,4,5-Tetramethylbenzene	1	19.4461	19.9076	2.3	30
1,2-Dibromo-3-Chloropropane	1	19.9792	20.4065	2.1	30
Camphor	1	200.6323	199.5934	0.52	30
Hexachlorobutadiene	1	22.0267	22.2233	0.89	30
1,2,4-Trichlorobenzene	1	20.2752	20.2396	0.18	30
1,2,3-Trichlorobenzene	1	22.9264	22.2651	2.9	30
Naphthalene	1	22.8694	22.6727	0.86	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142526.D	AD19412-005(MS)	9/30/2020 2:13:00 PM
Non Spike(If applicable):	2M142523.D	AD19412-005	9/30/2020 1:14:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.9092	0	20	95	50	150
Dichlorodifluoromethane	1	22.387	0	20	112	50	150
Chloromethane	1	21.9678	0	20	110	50	150
Bromomethane	1	18.9269	0	20	95	50	150
Vinyl Chloride	1	21.9015	0	20	110	50	150
Chloroethane	1	20.0248	0	20	100	50	150
Trichlorofluoromethane	1	20.9784	0	20	105	50	150
Ethyl ether	1	19.546	0	20	98	50	150
Furan	1	19.6338	0	20	98	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	21.7427	0	20	109	50	150
Methylene Chloride	1	19.4772	0	20	97	70	130
Acrolein	1	101.4078	0	100	101	50	150
Acrylonitrile	1	19.715	0	20	99	50	150
Iodomethane	1	18.1766	0	20	91	50	150
Acetone	1	93.5307	0	100	94	50	150
Carbon Disulfide	1	20.9535	0	20	105	50	150
t-Butyl Alcohol	1	104.6948	0	100	105	50	150
n-Hexane	1	22.577	0	20	113	70	130
Di-isopropyl-ether	1	19.3214	0	20	97	70	130
1,1-Dichloroethene	1	20.6494	0	20	103	70	130
Methyl Acetate	1	24.6047	0	20	123	50	150
Methyl-t-butyl ether	1	17.5015	0	20	88	70	130
1,1-Dichloroethane	1	20.0523	0	20	100	70	130
trans-1,2-Dichloroethene	1	19.8491	0	20	99	70	130
Ethyl-t-butyl ether	1	19.5335	0	20	98	70	130
cis-1,2-Dichloroethene	1	19.3429	0	20	97	70	130
Bromochloromethane	1	20.7813	0	20	104	70	130
2,2-Dichloropropane	1	21.5017	0	20	108	70	130
Ethyl acetate	1	28.6578	0	20	143	50	150
1,4-Dioxane	1	1152.722	0	1000	115	50	150
1,1-Dichloropropene	1	19.9791	0	20	100	70	130
Chloroform	1	19.8224	0	20	99	70	130
Cyclohexane	1	21.0253	0	20	105	70	130
1,2-Dichloroethane	1	17.993	0	20	90	70	130
2-Butanone	1	0	0	20	0*	50	150
1,1,1-Trichloroethane	1	20.4601	0	20	102	70	130
Carbon Tetrachloride	1	20.15	0	20	101	50	150
Vinyl Acetate	1	14.8458	0	20	74	50	150
Bromodichloromethane	1	17.2441	0	20	86	70	130
Methylcyclohexane	1	20.8033	0	20	104	70	130
Dibromomethane	1	20.1331	0	20	101	70	130
1,2-Dichloropropane	1	19.5228	0	20	98	70	130
Trichloroethene	1	20.3166	0	20	102	70	130
Benzene	1	19.3481	0	20	97	70	130
tert-Amyl methyl ether	1	18.976	0	20	95	70	130
Iso-propylacetate	1	18.6119	0	20	93	70	130
Methyl methacrylate	1	20.003	0	20	100	70	130
Dibromochloromethane	1	20.416	0	20	102	70	130
2-Chloroethylvinylether	1	1.0003	0	20	5*	70	130
cis-1,3-Dichloropropene	1	20.051	0	20	100	70	130
trans-1,3-Dichloropropene	1	20.0867	0	20	100	70	130
Ethyl methacrylate	1	18.7265	0	20	94	70	130
1,1,2-Trichloroethane	1	19.8231	0	20	99	70	130
1,2-Dibromoethane	1	19.9049	0	20	100	70	130
1,3-Dichloropropane	1	19.5082	0	20	98	70	130
4-Methyl-2-Pentanone	1	18.8443	0	20	94	50	150
2-Hexanone	1	18.8557	0	20	94	50	150
Tetrachloroethene	1	20.9347	0	20	105	50	150
Toluene	1	19.732	0	20	99	70	130
1,1,1,2-Tetrachloroethane	1	19.461	0	20	97	70	130
Chlorobenzene	1	20.0529	0	20	100	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

Method: 8260C | Matrix: Aqueous | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	21.1328	0	20	106	70	130
n-Amyl acetate	1	19.4403	0	20	97	70	130
Bromoform	**1**	**20.2796**	**0**	**20**	**101**	**70**	**130**
Ethylbenzene	**1**	**21.9037**	**0**	**20**	**110**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**19.4586**	**0**	**20**	**97**	**70**	**130**
Styrene	**1**	**21.1508**	**0**	**20**	**106**	**70**	**130**
m&p-Xylenes	**1**	**40.7292**	**0**	**40**	**102**	**70**	**130**
o-Xylene	**1**	**20.8992**	**0**	**20**	**104**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	15.0155	0	20	75	50	150
1,3-Dichlorobenzene	**1**	**20.0679**	**0**	**20**	**100**	**70**	**130**
1,4-Dichlorobenzene	**1**	**19.65**	**0**	**20**	**98**	**70**	**130**
1,2-Dichlorobenzene	**1**	**19.5486**	**0**	**20**	**98**	**70**	**130**
Isopropylbenzene	**1**	**22.2675**	**0**	**20**	**111**	**70**	**130**
Cyclohexanone	1	105.1977	0	100	105	50	150
Camphene	1	12.6593	0	20	63*	70	130
1,2,3-Trichloropropane	**1**	**18.4782**	**0**	**20**	**92**	**70**	**130**
2-Chlorotoluene	1	21.6522	0	20	108	70	130
p-Ethyltoluene	1	21.0295	0	20	105	70	130
4-Chlorotoluene	1	21.5179	0	20	108	70	130
n-Propylbenzene	**1**	**21.837**	**0**	**20**	**109**	**70**	**130**
Bromobenzene	1	18.3976	0	20	92	70	130
1,3,5-Trimethylbenzene	**1**	**21.6159**	**0**	**20**	**108**	**70**	**130**
Butyl methacrylate	1	19.4885	0	20	97	70	130
t-Butylbenzene	**1**	**22.0927**	**0**	**20**	**110**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**21.2178**	**0**	**20**	**106**	**70**	**130**
sec-Butylbenzene	**1**	**22.3646**	**0**	**20**	**112**	**70**	**130**
4-Isopropyltoluene	**1**	**22.2072**	**0**	**20**	**111**	**70**	**130**
n-Butylbenzene	**1**	**22.8765**	**0**	**20**	**114**	**70**	**130**
p-Diethylbenzene	1	21.5147	0	20	108	70	130
1,2,4,5-Tetramethylbenzene	1	20.0938	0	20	100	70	130
1,2-Dibromo-3-Chloropropane	1	20.7031	0	20	104	50	150
Camphor	1	211.0259	0	200	106	20	150
Hexachlorobutadiene	1	22.5481	0	20	113	50	150
1,2,4-Trichlorobenzene	1	20.552	0	20	103	70	130
1,2,3-Trichlorobenzene	1	20.8821	0	20	104	70	130
Naphthalene	1	20.3281	0	20	102	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142527.D	AD19412-005(MSD)	9/30/2020 2:32:00 PM
Non Spike(If applicable):	2M142523.D	AD19412-005	9/30/2020 1:14:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	17.3269	0	20	87	50	150
Dichlorodifluoromethane	1	21.0833	0	20	105	50	150
Chloromethane	1	20.2306	0	20	101	50	150
Bromomethane	1	17.6911	0	20	88	50	150
Vinyl Chloride	1	19.696	0	20	98	50	150
Chloroethane	1	18.1032	0	20	91	50	150
Trichlorofluoromethane	1	19.2821	0	20	96	50	150
Ethyl ether	1	18.2342	0	20	91	50	150
Furan	1	18.2837	0	20	91	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	20.2478	0	20	101	50	150
Methylene Chloride	1	18.0216	0	20	90	70	130
Acrolein	1	96.3667	0	100	96	50	150
Acrylonitrile	1	18.0137	0	20	90	50	150
Iodomethane	1	17.4911	0	20	87	50	150
Acetone	1	88.6992	0	100	89	50	150
Carbon Disulfide	1	17.9654	0	20	90	50	150
t-Butyl Alcohol	1	95.6928	0	100	96	50	150
n-Hexane	1	22.3073	0	20	112	70	130
Di-isopropyl-ether	1	18.3384	0	20	92	70	130
1,1-Dichloroethene	1	19.5345	0	20	98	70	130
Methyl Acetate	1	22.3966	0	20	112	50	150
Methyl-t-butyl ether	1	16.6359	0	20	83	70	130
1,1-Dichloroethane	1	18.7125	0	20	94	70	130
trans-1,2-Dichloroethene	1	18.304	0	20	92	70	130
Ethyl-t-butyl ether	1	18.619	0	20	93	70	130
cis-1,2-Dichloroethene	1	17.844	0	20	89	70	130
Bromochloromethane	1	18.9488	0	20	95	70	130
2,2-Dichloropropane	1	19.5826	0	20	98	70	130
Ethyl acetate	1	26.4613	0	20	132	50	150
1,4-Dioxane	1	1034.549	0	1000	103	50	150
1,1-Dichloropropene	1	18.205	0	20	91	70	130
Chloroform	1	18.5333	0	20	93	70	130
Cyclohexane	1	19.6338	0	20	98	70	130
1,2-Dichloroethane	1	16.9878	0	20	85	70	130
2-Butanone	1	0	0	20	0*	50	150
1,1,1-Trichloroethane	1	19.1211	0	20	96	70	130
Carbon Tetrachloride	1	18.4577	0	20	92	50	150
Vinyl Acetate	1	14.1216	0	20	71	50	150
Bromodichloromethane	1	16.1595	0	20	81	70	130
Methylcyclohexane	1	20.4891	0	20	102	70	130
Dibromomethane	1	17.8563	0	20	89	70	130
1,2-Dichloropropane	1	18.2929	0	20	91	70	130
Trichloroethene	1	17.9419	0	20	90	70	130
Benzene	1	17.9015	0	20	90	70	130
tert-Amyl methyl ether	1	17.4898	0	20	87	70	130
Iso-propylacetate	1	17.7375	0	20	89	70	130
Methyl methacrylate	1	18.1255	0	20	91	70	130
Dibromochloromethane	1	18.8408	0	20	94	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	18.9269	0	20	95	70	130
trans-1,3-Dichloropropene	1	18.6808	0	20	93	70	130
Ethyl methacrylate	1	18.144	0	20	91	70	130
1,1,2-Trichloroethane	1	18.4468	0	20	92	70	130
1,2-Dibromoethane	1	18.8856	0	20	94	70	130
1,3-Dichloropropane	1	18.2194	0	20	91	70	130
4-Methyl-2-Pentanone	1	17.9422	0	20	90	50	150
2-Hexanone	1	17.5928	0	20	88	50	150
Tetrachloroethene	1	19.4964	0	20	97	50	150
Toluene	1	18.6725	0	20	93	70	130
1,1,1,2-Tetrachloroethane	1	18.0006	0	20	90	70	130
Chlorobenzene	1	18.6502	0	20	93	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

Method: 8260C | Matrix: Aqueous | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	19.104	0	20	96	70	130
n-Amyl acetate	1	17.8914	0	20	89	70	130
Bromoform	1	19.2441	0	20	96	70	130
Ethylbenzene	1	19.6127	0	20	98	70	130
1,1,2,2-Tetrachloroethane	1	17.5383	0	20	88	70	130
Styrene	1	19.2999	0	20	96	70	130
m&p-Xylenes	1	38.0148	0	40	95	70	130
o-Xylene	1	19.4594	0	20	97	70	130
trans-1,4-Dichloro-2-butene	1	12.2891	0	20	61	50	150
1,3-Dichlorobenzene	1	18.8176	0	20	94	70	130
1,4-Dichlorobenzene	1	18.4431	0	20	92	70	130
1,2-Dichlorobenzene	1	18.5868	0	20	93	70	130
Isopropylbenzene	1	20.9591	0	20	105	70	130
Cyclohexanone	1	99.3882	0	100	99	50	150
Camphene	1	9.4234	0	20	47*	70	130
1,2,3-Trichloropropane	1	16.5814	0	20	83	70	130
2-Chlorotoluene	1	20.116	0	20	101	70	130
p-Ethyltoluene	1	19.5579	0	20	98	70	130
4-Chlorotoluene	1	20.9621	0	20	105	70	130
n-Propylbenzene	1	20.5224	0	20	103	70	130
Bromobenzene	1	17.0742	0	20	85	70	130
1,3,5-Trimethylbenzene	1	20.4385	0	20	102	70	130
Butyl methacrylate	1	17.7911	0	20	89	70	130
t-Butylbenzene	1	21.3241	0	20	107	70	130
1,2,4-Trimethylbenzene	1	20.1	0	20	100	70	130
sec-Butylbenzene	1	21.83	0	20	109	70	130
4-Isopropyltoluene	1	21.3896	0	20	107	70	130
n-Butylbenzene	1	21.8928	0	20	109	70	130
p-Diethylbenzene	1	20.6983	0	20	103	70	130
1,2,4,5-Tetramethylbenzene	1	19.2919	0	20	96	70	130
1,2-Dibromo-3-Chloropropane	1	18.7092	0	20	94	50	150
Camphor	1	196.9847	0	200	98	20	150
Hexachlorobutadiene	1	20.3292	0	20	102	50	150
1,2,4-Trichlorobenzene	1	19.5469	0	20	98	70	130
1,2,3-Trichlorobenzene	1	20.2692	0	20	101	70	130
Naphthalene	1	19.299	0	20	96	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89395

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142527.D	AD19412-005(MSD)	9/30/2020 2:32:00 PM
Duplicate(If applicable):	2M142526.D	AD19412-005(MS)	9/30/2020 2:13:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	17.3269	18.9092	8.7	30
Dichlorodifluoromethane	**1**	**21.0833**	**22.387**	**6**	**30**
Chloromethane	**1**	**20.2306**	**21.9678**	**8.2**	**30**
Bromomethane	**1**	**17.6911**	**18.9269**	**6.7**	**30**
Vinyl Chloride	**1**	**19.696**	**21.9015**	**11**	**40**
Chloroethane	**1**	**18.1032**	**20.0248**	**10**	**30**
Trichlorofluoromethane	**1**	**19.2821**	**20.9784**	**8.4**	**30**
Ethyl ether	1	18.2342	19.546	6.9	30
Furan	1	18.2837	19.6338	7.1	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**20.2478**	**21.7427**	**7.1**	**30**
Methylene Chloride	**1**	**18.0216**	**19.4772**	**7.8**	**30**
Acrolein	**1**	**96.3667**	**101.4078**	**5.1**	**30**
Acrylonitrile	**1**	**18.0137**	**19.715**	**9**	**30**
Iodomethane	1	17.4911	18.1766	3.8	30
Acetone	**1**	**88.6992**	**93.5307**	**5.3**	**30**
Carbon Disulfide	**1**	**17.9654**	**20.9535**	**15**	**30**
t-Butyl Alcohol	**1**	**95.6928**	**104.6948**	**9**	**30**
n-Hexane	1	22.3073	22.577	1.2	30
Di-isopropyl-ether	1	18.3384	19.3214	5.2	30
1,1-Dichloroethene	**1**	**19.5345**	**20.6494**	**5.5**	**40**
Methyl Acetate	1	22.3966	24.6047	9.4	30
Methyl-t-butyl ether	**1**	**16.6359**	**17.5015**	**5.1**	**30**
1,1-Dichloroethane	**1**	**18.7125**	**20.0523**	**6.9**	**40**
trans-1,2-Dichloroethene	**1**	**18.304**	**19.8491**	**8.1**	**30**
Ethyl-t-butyl ether	1	18.619	19.5335	4.8	30
cis-1,2-Dichloroethene	**1**	**17.844**	**19.3429**	**8.1**	**30**
Bromochloromethane	1	18.9488	20.7813	9.2	30
2,2-Dichloropropane	1	19.5826	21.5017	9.3	30
Ethyl acetate	1	26.4613	28.6578	8	30
1,4-Dioxane	**1**	**1034.549**	**1152.722**	**11**	**30**
1,1-Dichloropropene	1	18.205	19.9791	9.3	30
Chloroform	**1**	**18.5333**	**19.8224**	**6.7**	**40**
Cyclohexane	1	19.6338	21.0253	6.8	30
1,2-Dichloroethane	**1**	**16.9878**	**17.993**	**5.7**	**40**
2-Butanone	**1**	**0**	**0**	**NA**	**40**
1,1,1-Trichloroethane	**1**	**19.1211**	**20.4601**	**6.8**	**30**
Carbon Tetrachloride	**1**	**18.4577**	**20.15**	**8.8**	**40**
Vinyl Acetate	1	14.1216	14.8458	5	30
Bromodichloromethane	**1**	**16.1595**	**17.2441**	**6.5**	**30**
Methylcyclohexane	1	20.4891	20.8033	1.5	30
Dibromomethane	1	17.8563	20.1331	12	30
1,2-Dichloropropane	**1**	**18.2929**	**19.5228**	**6.5**	**30**
Trichloroethene	**1**	**17.9419**	**20.3166**	**12**	**40**
Benzene	**1**	**17.9015**	**19.3481**	**7.8**	**40**
tert-Amyl methyl ether	1	17.4898	18.976	8.2	30
Iso-propylacetate	1	17.7375	18.6119	4.8	30
Methyl methacrylate	1	18.1255	20.003	9.8	30
Dibromochloromethane	**1**	**18.8408**	**20.416**	**8**	**30**
2-Chloroethylvinylether	**1**	**0**	**1.0003**	**200***	**30**
cis-1,3-Dichloropropene	**1**	**18.9269**	**20.051**	**5.8**	**30**
trans-1,3-Dichloropropene	**1**	**18.6808**	**20.0867**	**7.3**	**30**
Ethyl methacrylate	1	18.144	18.7265	3.2	30
1,1,2-Trichloroethane	**1**	**18.4468**	**19.8231**	**7.2**	**30**
1,2-Dibromoethane	1	18.8856	19.9049	5.3	30
1,3-Dichloropropane	**1**	**18.2194**	**19.5082**	**6.8**	**30**
4-Methyl-2-Pentanone	**1**	**17.9422**	**18.8443**	**4.9**	**30**
2-Hexanone	**1**	**17.5928**	**18.8557**	**6.9**	**30**
Tetrachloroethene	**1**	**19.4964**	**20.9347**	**7.1**	**40**
Toluene	**1**	**18.6725**	**19.732**	**5.5**	**40**
1,1,1,2-Tetrachloroethane	1	18.0006	19.461	7.8	30
Chlorobenzene	**1**	**18.6502**	**20.0529**	**7.2**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89395

Method: 8260C | Matrix: Aqueous | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	19.104	21.1328	10	30
n-Amyl acetate	1	17.8914	19.4403	8.3	30
Bromoform	**1**	**19.2441**	**20.2796**	**5.2**	**30**
Ethylbenzene	**1**	**19.6127**	**21.9037**	**11**	**30**
1,1,2,2-Tetrachloroethane	**1**	**17.5383**	**19.4586**	**10**	**30**
Styrene	**1**	**19.2999**	**21.1508**	**9.2**	**30**
m&p-Xylenes	**1**	**38.0148**	**40.7292**	**6.9**	**30**
o-Xylene	**1**	**19.4594**	**20.8992**	**7.1**	**30**
trans-1,4-Dichloro-2-butene	1	12.2891	15.0155	20	30
1,3-Dichlorobenzene	**1**	**18.8176**	**20.0679**	**6.4**	**30**
1,4-Dichlorobenzene	**1**	**18.4431**	**19.65**	**6.3**	**40**
1,2-Dichlorobenzene	**1**	**18.5868**	**19.5486**	**5**	**40**
Isopropylbenzene	**1**	**20.9591**	**22.2675**	**6.1**	**30**
Cyclohexanone	1	99.3882	105.1977	5.7	30
Camphene	1	9.4234	12.6593	29	30
1,2,3-Trichloropropane	**1**	**16.5814**	**18.4782**	**11**	**30**
2-Chlorotoluene	1	20.116	21.6522	7.4	30
p-Ethyltoluene	1	19.5579	21.0295	7.3	30
4-Chlorotoluene	1	20.9621	21.5179	2.6	30
n-Propylbenzene	**1**	**20.5224**	**21.837**	**6.2**	**40**
Bromobenzene	1	17.0742	18.3976	7.5	30
1,3,5-Trimethylbenzene	**1**	**20.4385**	**21.6159**	**5.6**	**30**
Butyl methacrylate	1	17.7911	19.4885	9.1	30
t-Butylbenzene	**1**	**21.3241**	**22.0927**	**3.5**	**30**
1,2,4-Trimethylbenzene	**1**	**20.1**	**21.2178**	**5.4**	**30**
sec-Butylbenzene	**1**	**21.83**	**22.3646**	**2.4**	**40**
4-Isopropyltoluene	**1**	**21.3896**	**22.2072**	**3.8**	**30**
n-Butylbenzene	**1**	**21.8928**	**22.8765**	**4.4**	**30**
p-Diethylbenzene	1	20.6983	21.5147	3.9	30
1,2,4,5-Tetramethylbenzene	1	19.2919	20.0938	4.1	30
1,2-Dibromo-3-Chloropropane	1	18.7092	20.7031	10	30
Camphor	1	196.9847	211.0259	6.9	30
Hexachlorobutadiene	1	20.3292	22.5481	10	30
1,2,4-Trichlorobenzene	1	19.5469	20.552	5	30
1,2,3-Trichlorobenzene	1	20.2692	20.8821	3	30
Naphthalene	1	19.299	20.3281	5.2	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89398

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142569.D	AD19412-007(MS)	10/1/2020 4:16:00 AM
Non Spike(If applicable):	2M142524.D	AD19412-007	9/30/2020 1:33:00 PM
Inst Blank(If applicable):			

Method: ~~Not~~d 8260D 10/14/20 jc Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.1272	0	20	106	50	150
Dichlorodifluoromethane	1	21.444	0	20	107	50	150
Chloromethane	1	22.5714	0	20	113	50	150
Bromomethane	1	21.2713	0	20	106	50	150
Vinyl Chloride	1	21.7269	0	20	109	50	150
Chloroethane	1	20.6165	0	20	103	50	150
Trichlorofluoromethane	1	19.49	0	20	97	50	150
Ethyl ether	1	21.0465	0	20	105	50	150
Furan	1	20.0388	0	20	100	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.2349	0	20	96	50	150
Methylene Chloride	1	20.2889	0	20	101	70	130
Acrolein	1	95.6807	0	100	96	50	150
Acrylonitrile	1	19.6782	0	20	98	50	150
Iodomethane	1	19.8711	0	20	99	50	150
Acetone	1	101.0144	0	100	101	50	150
Carbon Disulfide	1	19.7183	0	20	99	50	150
t-Butyl Alcohol	1	110.8219	0	100	111	50	150
n-Hexane	1	18.2891	0	20	91	70	130
Di-isopropyl-ether	1	19.9951	0	20	100	70	130
1,1-Dichloroethene	1	19.8318	0	20	99	70	130
Methyl Acetate	1	21.7827	0	20	109	50	150
Methyl-t-butyl ether	1	18.7173	0	20	94	70	130
1,1-Dichloroethane	1	20.2094	0	20	101	70	130
trans-1,2-Dichloroethene	1	19.1596	0	20	96	70	130
Ethyl-t-butyl ether	1	20.2903	0	20	101	70	130
cis-1,2-Dichloroethene	1	18.9019	0	20	95	70	130
Bromochloromethane	1	20.5941	0	20	103	70	130
2,2-Dichloropropane	1	14.6212	0	20	73	70	130
Ethyl acetate	1	17.5371	0	20	88	50	150
1,4-Dioxane	1	1154.521	0	1000	115	50	150
1,1-Dichloropropene	1	18.6822	0	20	93	70	130
Chloroform	1	19.9125	0	20	100	70	130
Cyclohexane	1	18.7986	0	20	94	70	130
1,2-Dichloroethane	1	18.5181	0	20	93	70	130
2-Butanone	1	18.6971	0	20	93	50	150
1,1,1-Trichloroethane	1	19.5431	0	20	98	70	130
Carbon Tetrachloride	1	18.3013	0	20	92	50	150
Vinyl Acetate	1	14.2866	0	20	71	50	150
Bromodichloromethane	1	17.8127	0	20	89	70	130
Methylcyclohexane	1	18.2548	0	20	91	70	130
Dibromomethane	1	20.2263	0	20	101	70	130
1,2-Dichloropropane	1	19.7314	0	20	99	70	130
Trichloroethene	1	18.862	0	20	94	70	130
Benzene	1	18.8981	0	20	94	70	130
tert-Amyl methyl ether	1	19.2442	0	20	96	70	130
Iso-propylacetate	1	18.0143	0	20	90	70	130
Methyl methacrylate	1	21.3036	0	20	107	70	130
Dibromochloromethane	1	21.4127	0	20	107	70	130
2-Chloroethylvinylether	1	1.0757	0	20	5.4*	70	130
cis-1,3-Dichloropropene	1	19.5184	0	20	98	70	130
trans-1,3-Dichloropropene	1	19.8693	0	20	99	70	130
Ethyl methacrylate	1	20.1805	0	20	101	70	130
1,1,2-Trichloroethane	1	20.6335	0	20	103	70	130
1,2-Dibromoethane	1	21.0167	0	20	105	70	130
1,3-Dichloropropane	1	20.4992	0	20	102	70	130
4-Methyl-2-Pentanone	1	20.9962	0	20	105	50	150
2-Hexanone	1	20.2741	0	20	101	50	150
Tetrachloroethene	1	18.5794	0	20	93	50	150
Toluene	1	18.9078	0	20	95	70	130
1,1,1,2-Tetrachloroethane	1	19.1715	0	20	96	70	130
Chlorobenzene	1	19.3222	0	20	97	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3

Recovery Data Laboratory Limits

QC Batch: MBS89398

Method: ~~NotFd~~ 8260D 10/14/20 yc Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	22.3944	0	20	112	70	130
n-Amyl acetate	1	17.9172	0	20	90	70	130
Bromoform	1	21.8001	0	20	109	70	130
Ethylbenzene	1	20.3479	0	20	102	70	130
1,1,2,2-Tetrachloroethane	1	20.3474	0	20	102	70	130
Styrene	1	20.9192	0	20	105	70	130
m&p-Xylenes	1	39.7252	0	40	99	70	130
o-Xylene	1	21.116	0	20	106	70	130
trans-1,4-Dichloro-2-butene	1	9.5824	0	20	48*	50	150
1,3-Dichlorobenzene	1	19.2588	0	20	96	70	130
1,4-Dichlorobenzene	1	18.8851	0	20	94	70	130
1,2-Dichlorobenzene	1	19.3968	0	20	97	70	130
Isopropylbenzene	1	20.8604	0	20	104	70	130
Cyclohexanone	1	114.1622	0	100	114	50	150
Camphene	1	3.0288	0	20	15*	70	130
1,2,3-Trichloropropane	1	18.792	0	20	94	70	130
2-Chlorotoluene	1	21.1025	0	20	106	70	130
p-Ethyltoluene	1	19.8229	0	20	99	70	130
4-Chlorotoluene	1	21.3208	0	20	107	70	130
n-Propylbenzene	1	20.6312	0	20	103	70	130
Bromobenzene	1	17.3861	0	20	87	70	130
1,3,5-Trimethylbenzene	1	20.7129	0	20	104	70	130
Butyl methacrylate	1	20.2795	0	20	101	70	130
t-Butylbenzene	1	20.7124	0	20	104	70	130
1,2,4-Trimethylbenzene	1	20.3579	0	20	102	70	130
sec-Butylbenzene	1	20.8261	0	20	104	70	130
4-Isopropyltoluene	1	20.7762	0	20	104	70	130
n-Butylbenzene	1	20.9532	0	20	105	70	130
p-Diethylbenzene	1	19.8003	0	20	99	70	130
1,2,4,5-Tetramethylbenzene	1	19.1516	0	20	96	70	130
1,2-Dibromo-3-Chloropropane	1	21.8224	0	20	109	50	150
Camphor	1	249.4297	0	200	125	20	150
Hexachlorobutadiene	1	20.6128	0	20	103	50	150
1,2,4-Trichlorobenzene	1	19.1718	0	20	96	70	130
1,2,3-Trichlorobenzene	1	20.4302	0	20	102	70	130
Naphthalene	1	21.6023	0	20	108	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89398

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142570.D	AD19412-007(MSD)	10/1/2020 4:35:00 AM
Non Spike(If applicable):	2M142524.D	AD19412-007	9/30/2020 1:33:00 PM
Inst Blank(If applicable):			

Method: ~~Not~~d 8260D 10/14/20 JC Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.917	0	20	95	50	150
Dichlorodifluoromethane	1	18.836	0	20	94	50	150
Chloromethane	1	19.8778	0	20	99	50	150
Bromomethane	1	19.0374	0	20	95	50	150
Vinyl Chloride	1	19.2342	0	20	96	50	150
Chloroethane	1	19.012	0	20	95	50	150
Trichlorofluoromethane	1	17.195	0	20	86	50	150
Ethyl ether	1	19.5884	0	20	98	50	150
Furan	1	18.267	0	20	91	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	17.5604	0	20	88	50	150
Methylene Chloride	1	18.4698	0	20	92	70	130
Acrolein	1	88.8461	0	100	89	50	150
Acrylonitrile	1	18.9626	0	20	95	50	150
Iodomethane	1	18.9217	0	20	95	50	150
Acetone	1	91.6273	0	100	92	50	150
Carbon Disulfide	1	16.7294	0	20	84	50	150
t-Butyl Alcohol	1	99.9221	0	100	100	50	150
n-Hexane	1	17.5254	0	20	88	70	130
Di-isopropyl-ether	1	18.8078	0	20	94	70	130
1,1-Dichloroethene	1	17.7489	0	20	89	70	130
Methyl Acetate	1	20.2976	0	20	101	50	150
Methyl-t-butyl ether	1	17.4006	0	20	87	70	130
1,1-Dichloroethane	1	18.7547	0	20	94	70	130
trans-1,2-Dichloroethene	1	17.2356	0	20	86	70	130
Ethyl-t-butyl ether	1	19.1709	0	20	96	70	130
cis-1,2-Dichloroethene	1	17.015	0	20	85	70	130
Bromochloromethane	1	19.4832	0	20	97	70	130
2,2-Dichloropropane	1	13.2897	0	20	66*	70	130
Ethyl acetate	1	16.3804	0	20	82	50	150
1,4-Dioxane	1	1079.111	0	1000	108	50	150
1,1-Dichloropropene	1	16.7179	0	20	84	70	130
Chloroform	1	18.4309	0	20	92	70	130
Cyclohexane	1	17.2144	0	20	86	70	130
1,2-Dichloroethane	1	17.0618	0	20	85	70	130
2-Butanone	1	17.0165	0	20	85	50	150
1,1,1-Trichloroethane	1	17.69	0	20	88	70	130
Carbon Tetrachloride	1	16.9556	0	20	85	50	150
Vinyl Acetate	1	13.3984	0	20	67	50	150
Bromodichloromethane	1	16.5817	0	20	83	70	130
Methylcyclohexane	1	17.5889	0	20	88	70	130
Dibromomethane	1	18.3663	0	20	92	70	130
1,2-Dichloropropane	1	18.1078	0	20	91	70	130
Trichloroethene	1	16.6943	0	20	83	70	130
Benzene	1	17.2472	0	20	86	70	130
tert-Amyl methyl ether	1	18.5899	0	20	93	70	130
Iso-propylacetate	1	16.3968	0	20	82	70	130
Methyl methacrylate	1	18.6996	0	20	93	70	130
Dibromochloromethane	1	19.579	0	20	98	70	130
2-Chloroethylvinylether	1	1.3446	0	20	6.7*	70	130
cis-1,3-Dichloropropene	1	17.4277	0	20	87	70	130
trans-1,3-Dichloropropene	1	17.5776	0	20	88	70	130
Ethyl methacrylate	1	18.568	0	20	93	70	130
1,1,2-Trichloroethane	1	19.3571	0	20	97	70	130
1,2-Dibromoethane	1	19.1254	0	20	96	70	130
1,3-Dichloropropane	1	18.6857	0	20	93	70	130
4-Methyl-2-Pentanone	1	18.9012	0	20	95	50	150
2-Hexanone	1	18.6406	0	20	93	50	150
Tetrachloroethene	1	16.8747	0	20	84	50	150
Toluene	1	17.2531	0	20	86	70	130
1,1,1,2-Tetrachloroethane	1	18.1587	0	20	91	70	130
Chlorobenzene	1	17.3476	0	20	87	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89398

Method: ~~Nat~~ Fd 8260D 10/14/20 gc Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	20.7629	0	20	104	70	130
n-Amyl acetate	1	16.6963	0	20	83	70	130
Bromoform	1	19.8432	0	20	99	70	130
Ethylbenzene	1	18.6061	0	20	93	70	130
1,1,2,2-Tetrachloroethane	1	19.1972	0	20	96	70	130
Styrene	1	18.6059	0	20	93	70	130
m&p-Xylenes	1	35.7292	0	40	89	70	130
o-Xylene	1	19.0072	0	20	95	70	130
trans-1,4-Dichloro-2-butene	1	8.7745	0	20	44*	50	150
1,3-Dichlorobenzene	1	17.5445	0	20	88	70	130
1,4-Dichlorobenzene	1	17.2057	0	20	86	70	130
1,2-Dichlorobenzene	1	18.2868	0	20	91	70	130
Isopropylbenzene	1	19.2982	0	20	96	70	130
Cyclohexanone	1	108.5117	0	100	109	50	150
Camphene	1	3.0498	0	20	15*	70	130
1,2,3-Trichloropropane	1	17.5907	0	20	88	70	130
2-Chlorotoluene	1	19.1469	0	20	96	70	130
p-Ethyltoluene	1	18.0598	0	20	90	70	130
4-Chlorotoluene	1	19.0026	0	20	95	70	130
n-Propylbenzene	1	18.8911	0	20	94	70	130
Bromobenzene	1	16.1549	0	20	81	70	130
1,3,5-Trimethylbenzene	1	19.1798	0	20	96	70	130
Butyl methacrylate	1	18.1431	0	20	91	70	130
t-Butylbenzene	1	19.7548	0	20	99	70	130
1,2,4-Trimethylbenzene	1	18.9544	0	20	95	70	130
sec-Butylbenzene	1	19.9884	0	20	100	70	130
4-Isopropyltoluene	1	19.2988	0	20	96	70	130
n-Butylbenzene	1	19.6261	0	20	98	70	130
p-Diethylbenzene	1	18.5163	0	20	93	70	130
1,2,4,5-Tetramethylbenzene	1	17.7962	0	20	89	70	130
1,2-Dibromo-3-Chloropropane	1	19.4988	0	20	97	50	150
Camphor	1	218.1596	0	200	109	20	150
Hexachlorobutadiene	1	17.6638	0	20	88	50	150
1,2,4-Trichlorobenzene	1	17.8364	0	20	89	70	130
1,2,3-Trichlorobenzene	1	19.2516	0	20	96	70	130
Naphthalene	1	19.92	0	20	100	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89398

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142570.D	AD19412-007(MSD)	10/1/2020 4:35:00 AM
Duplicate(If applicable):	2M142569.D	AD19412-007(MS)	10/1/2020 4:16:00 AM
Inst Blank(If applicable):			

Method: ~~Not~~ 8260 D 10/14/20 Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	18.917	21.1272	11	30
Dichlorodifluoromethane	**1**	**18.836**	**21.444**	**13**	**30**
Chloromethane	**1**	**19.8778**	**22.5714**	**13**	**30**
Bromomethane	**1**	**19.0374**	**21.2713**	**11**	**30**
Vinyl Chloride	**1**	**19.2342**	**21.7269**	**12**	**40**
Chloroethane	**1**	**19.012**	**20.6165**	**8.1**	**30**
Trichlorofluoromethane	**1**	**17.195**	**19.49**	**13**	**30**
Ethyl ether	1	19.5884	21.0465	7.2	30
Furan	1	18.267	20.0388	9.3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**17.5604**	**19.2349**	**9.1**	**30**
Methylene Chloride	**1**	**18.4698**	**20.2889**	**9.4**	**30**
Acrolein	**1**	**88.8461**	**95.6807**	**7.4**	**30**
Acrylonitrile	**1**	**18.9626**	**19.6782**	**3.7**	**30**
Iodomethane	1	18.9217	19.8711	4.9	30
Acetone	**1**	**91.6273**	**101.0144**	**9.7**	**30**
Carbon Disulfide	**1**	**16.7294**	**19.7183**	**16**	**30**
t-Butyl Alcohol	**1**	**99.9221**	**110.8219**	**10**	**30**
n-Hexane	1	17.5254	18.2891	4.3	30
Di-isopropyl-ether	1	18.8078	19.9951	6.1	30
1,1-Dichloroethene	**1**	**17.7489**	**19.8318**	**11**	**40**
Methyl Acetate	1	20.2976	21.7827	7.1	30
Methyl-t-butyl ether	**1**	**17.4006**	**18.7173**	**7.3**	**30**
1,1-Dichloroethane	**1**	**18.7547**	**20.2094**	**7.5**	**40**
trans-1,2-Dichloroethene	**1**	**17.2356**	**19.1596**	**11**	**30**
Ethyl-t-butyl ether	1	19.1709	20.2903	5.7	30
cis-1,2-Dichloroethene	**1**	**17.015**	**18.9019**	**11**	**30**
Bromochloromethane	1	19.4832	20.5941	5.5	30
2,2-Dichloropropane	1	13.2897	14.6212	9.5	30
Ethyl acetate	1	16.3804	17.5371	6.8	30
1,4-Dioxane	**1**	**1079.111**	**1154.521**	**6.8**	**30**
1,1-Dichloropropene	1	16.7179	18.6822	11	30
Chloroform	**1**	**18.4309**	**19.9125**	**7.7**	**40**
Cyclohexane	1	17.2144	18.7986	8.8	30
1,2-Dichloroethane	**1**	**17.0618**	**18.5181**	**8.2**	**40**
2-Butanone	**1**	**17.0165**	**18.6971**	**9.4**	**40**
1,1,1-Trichloroethane	**1**	**17.69**	**19.5431**	**10**	**30**
Carbon Tetrachloride	**1**	**16.9556**	**18.3013**	**7.6**	**40**
Vinyl Acetate	1	13.3984	14.2866	6.4	30
Bromodichloromethane	**1**	**16.5817**	**17.8127**	**7.2**	**30**
Methylcyclohexane	1	17.5889	18.2548	3.7	30
Dibromomethane	1	18.3663	20.2263	9.6	30
1,2-Dichloropropane	**1**	**18.1078**	**19.7314**	**8.6**	**30**
Trichloroethene	**1**	**16.6943**	**18.862**	**12**	**40**
Benzene	**1**	**17.2472**	**18.8981**	**9.1**	**40**
tert-Amyl methyl ether	1	18.5899	19.2442	3.5	30
Iso-propylacetate	1	16.3968	18.0143	9.4	30
Methyl methacrylate	1	18.6996	21.3036	13	30
Dibromochloromethane	**1**	**19.579**	**21.4127**	**8.9**	**30**
2-Chloroethylvinylether	**1**	**1.3446**	**1.0757**	**22**	**30**
cis-1,3-Dichloropropene	**1**	**17.4277**	**19.5184**	**11**	**30**
trans-1,3-Dichloropropene	**1**	**17.5776**	**19.8693**	**12**	**30**
Ethyl methacrylate	1	18.568	20.1805	8.3	30
1,1,2-Trichloroethane	**1**	**19.3571**	**20.6335**	**6.4**	**30**
1,2-Dibromoethane	1	19.1254	21.0167	9.4	30
1,3-Dichloropropane	**1**	**18.6857**	**20.4992**	**9.3**	**30**
4-Methyl-2-Pentanone	**1**	**18.9012**	**20.9962**	**11**	**30**
2-Hexanone	**1**	**18.6406**	**20.2741**	**8.4**	**30**
Tetrachloroethene	**1**	**16.8747**	**18.5794**	**9.6**	**40**
Toluene	**1**	**17.2531**	**18.9078**	**9.2**	**40**
1,1,1,2-Tetrachloroethane	1	18.1587	19.1715	5.4	30
Chlorobenzene	**1**	**17.3476**	**19.3222**	**11**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89398

Method: ~~NotFd~~ 8260 D (14/14) Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	20.7629	22.3944	7.6	30
n-Amyl acetate	1	16.6963	17.9172	7.1	30
Bromoform	**1**	**19.8432**	**21.8001**	**9.4**	**30**
Ethylbenzene	**1**	**18.6061**	**20.3479**	**8.9**	**30**
1,1,2,2-Tetrachloroethane	**1**	**19.1972**	**20.3474**	**5.8**	**30**
Styrene	**1**	**18.6059**	**20.9192**	**12**	**30**
m&p-Xylenes	**1**	**35.7292**	**39.7252**	**11**	**30**
o-Xylene	**1**	**19.0072**	**21.116**	**11**	**30**
trans-1,4-Dichloro-2-butene	1	8.7745	9.5824	8.8	30
1,3-Dichlorobenzene	**1**	**17.5445**	**19.2588**	**9.3**	**30**
1,4-Dichlorobenzene	**1**	**17.2057**	**18.8851**	**9.3**	**40**
1,2-Dichlorobenzene	**1**	**18.2868**	**19.3968**	**5.9**	**40**
Isopropylbenzene	**1**	**19.2982**	**20.8604**	**7.8**	**30**
Cyclohexanone	1	108.5117	114.1622	5.1	30
Camphene	1	3.0498	3.0288	0.69	30
1,2,3-Trichloropropane	**1**	**17.5907**	**18.792**	**6.6**	**30**
2-Chlorotoluene	1	19.1469	21.1025	9.7	30
p-Ethyltoluene	1	18.0598	19.8229	9.3	30
4-Chlorotoluene	1	19.0026	21.3208	11	30
n-Propylbenzene	**1**	**18.8911**	**20.6312**	**8.8**	**40**
Bromobenzene	1	16.1549	17.3861	7.3	30
1,3,5-Trimethylbenzene	**1**	**19.1798**	**20.7129**	**7.7**	**30**
Butyl methacrylate	1	18.1431	20.2795	11	30
t-Butylbenzene	**1**	**19.7548**	**20.7124**	**4.7**	**30**
1,2,4-Trimethylbenzene	**1**	**18.9544**	**20.3579**	**7.1**	**30**
sec-Butylbenzene	**1**	**19.9884**	**20.8261**	**4.1**	**40**
4-Isopropyltoluene	**1**	**19.2988**	**20.7762**	**7.4**	**30**
n-Butylbenzene	**1**	**19.6261**	**20.9532**	**6.5**	**30**
p-Diethylbenzene	1	18.5163	19.8003	6.7	30
1,2,4,5-Tetramethylbenzene	1	17.7962	19.1516	7.3	30
1,2-Dibromo-3-Chloropropane	1	19.4988	21.8224	11	30
Camphor	1	218.1596	249.4297	13	30
Hexachlorobutadiene	1	17.6638	20.6128	15	30
1,2,4-Trichlorobenzene	1	17.8364	19.1718	7.2	30
1,2,3-Trichlorobenzene	1	19.2516	20.4302	5.9	30
Naphthalene	1	19.92	21.6023	8.1	30

* - Indicates outside of limits . NA - Both concentrations=0... no result can be calculated
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142641.D	AD19408-001(T)(MS)	10/2/2020 1:53:00 PM
Non Spike(If applicable):	2M142639.D	AD19408-001(T)	10/2/2020 1:14:00 PM
Inst Blank(If applicable):			

Method: ~~NotFd~~ 8260D 10/14/20 JC Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	12.7571	0	20	64	50	150
Dichlorodifluoromethane	1	1.243	0	20	6.2*	50	150
Chloromethane	1	11.2098	0	20	56	50	150
Bromomethane	1	12.9273	0	20	65	50	150
Vinyl Chloride	1	12.746	0	20	64	50	150
Chloroethane	1	21.4079	0	20	107	50	150
Trichlorofluoromethane	1	23.0482	0	20	115	50	150
Ethyl ether	1	38.2491	8.8608	20	147	50	150
Furan	1	24.7417	0	20	124	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	28.885	0	20	144	50	150
Methylene Chloride	1	60.119	34.0613	20	130	70	130
Acrolein	1	111.1657	0	100	111	50	150
Acrylonitrile	1	28.3484	0	20	142	50	150
Iodomethane	1	12.6769	0	20	63	50	150
Acetone	1	174.1899	29.2285	100	145	50	150
Carbon Disulfide	1	24.568	0	20	123	50	150
t-Butyl Alcohol	1	169.8562	0	100	170*	50	150
n-Hexane	1	30.2837	0	20	151*	70	130
Di-isopropyl-ether	1	26.9067	0	20	135*	70	130
1,1-Dichloroethene	1	27.2938	0	20	136*	70	130
Methyl Acetate	1	127.1463	77.5595	20	248*	50	150
Methyl-t-butyl ether	1	28.0112	0	20	140*	70	130
1,1-Dichloroethane	1	27.6981	0	20	138*	70	130
trans-1,2-Dichloroethene	1	27.521	0	20	138*	70	130
Ethyl-t-butyl ether	1	29.0992	0	20	145*	70	130
cis-1,2-Dichloroethene	1	28.4612	0	20	142*	70	130
Bromochloromethane	1	29.0728	0	20	145*	70	130
2,2-Dichloropropane	1	29.8602	0	20	149*	70	130
Ethyl acetate	1	46.7245	1.7774	20	225*	50	150
1,4-Dioxane	1	1591.617	0	1000	159*	50	150
1,1-Dichloropropene	1	28.9849	0	20	145*	70	130
Chloroform	1	28.2537	0	20	141*	70	130
Cyclohexane	1	30.0473	0	20	150*	70	130
1,2-Dichloroethane	1	25.8101	0	20	129	70	130
2-Butanone	1	0	0	20	0*	50	150
1,1,1-Trichloroethane	1	28.27	0	20	141*	70	130
Carbon Tetrachloride	1	26.6603	0	20	133	50	150
Vinyl Acetate	1	19.9146	0	20	100	50	150
Bromodichloromethane	1	28.727	0	20	144*	70	130
Methylcyclohexane	1	29.1973	0	20	146*	70	130
Dibromomethane	1	26.6551	0	20	133*	70	130
1,2-Dichloropropane	1	28.2758	0	20	141*	70	130
Trichloroethene	1	28.0632	0	20	140*	70	130
Benzene	1	27.1015	0	20	136*	70	130
tert-Amyl methyl ether	1	25.6362	0	20	128	70	130
Iso-propylacetate	1	26.8328	0	20	134*	70	130
Methyl methacrylate	1	27.5687	0	20	138*	70	130
Dibromochloromethane	1	25.3286	0	20	127	70	130
2-Chloroethylvinylether	1	51.2472	0	20	256*	70	130
cis-1,3-Dichloropropene	1	24.7213	0	20	124	70	130
trans-1,3-Dichloropropene	1	23.1865	0	20	116	70	130
Ethyl methacrylate	1	25.7256	0	20	129	70	130
1,1,2-Trichloroethane	1	25.7967	0	20	129	70	130
1,2-Dibromoethane	1	26.0446	0	20	130	70	130
1,3-Dichloropropane	1	25.8464	0	20	129	70	130
4-Methyl-2-Pentanone	1	34.9454	0	20	175*	50	150
2-Hexanone	1	32.4953	0	20	162*	50	150
Tetrachloroethene	1	24.5669	0	20	123	50	150
Toluene	1	26.7016	1.0641	20	128	70	130
1,1,1,2-Tetrachloroethane	1	23.452	0	20	117	70	130
Chlorobenzene	1	25.46	0	20	127	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

Method: ~~NotFd~~ 8260D 10/14/20 JC Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	31.2972	0	20	156*	70	130
n-Amyl acetate	1	27.571	0	20	138*	70	130
Bromoform	**1**	**26.8947**	**0**	**20**	**134***	**70**	**130**
Ethylbenzene	**1**	**30.0224**	**0**	**20**	**150***	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**31.7139**	**0**	**20**	**159***	**70**	**130**
Styrene	**1**	**29.1513**	**0**	**20**	**146***	**70**	**130**
m&p-Xylenes	**1**	**60.2499**	**1.0381**	**40**	**148***	**70**	**130**
o-Xylene	**1**	**29.4656**	**0**	**20**	**147***	**70**	**130**
trans-1,4-Dichloro-2-butene	1	18.2853	0	20	91	50	150
1,3-Dichlorobenzene	**1**	**27.4507**	**0**	**20**	**137***	**70**	**130**
1,4-Dichlorobenzene	**1**	**26.4823**	**0**	**20**	**132***	**70**	**130**
1,2-Dichlorobenzene	**1**	**26.4447**	**0**	**20**	**132***	**70**	**130**
Isopropylbenzene	**1**	**30.2013**	**0**	**20**	**151***	**70**	**130**
Cyclohexanone	1	151.3461	0	100	151*	50	150
Camphene	1	42.7576	0	20	214*	70	130
1,2,3-Trichloropropane	**1**	**24.5733**	**0**	**20**	**123**	**70**	**130**
2-Chlorotoluene	1	25.4797	0	20	127	70	130
p-Ethyltoluene	1	29.9297	0	20	150*	70	130
4-Chlorotoluene	1	28.9395	0	20	145*	70	130
n-Propylbenzene	**1**	**31.0573**	**0**	**20**	**155***	**70**	**130**
Bromobenzene	1	27.5019	0	20	138*	70	130
1,3,5-Trimethylbenzene	**1**	**30.4917**	**0**	**20**	**152***	**70**	**130**
Butyl methacrylate	1	28.2456	0	20	141*	70	130
t-Butylbenzene	**1**	**21.0655**	**0**	**20**	**105**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**24.7997**	**1.0812**	**20**	**119**	**70**	**130**
sec-Butylbenzene	**1**	**29.3335**	**0**	**20**	**147***	**70**	**130**
4-Isopropyltoluene	**1**	**27.5652**	**0**	**20**	**138***	**70**	**130**
n-Butylbenzene	**1**	**29.4767**	**0**	**20**	**147***	**70**	**130**
p-Diethylbenzene	1	29.3555	0	20	147*	70	130
1,2,4,5-Tetramethylbenzene	1	27.9288	0	20	140*	70	130
1,2-Dibromo-3-Chloropropane	1	32.982	0	20	165*	50	150
Camphor	1	1113.977	0	200	557*	20	150
Hexachlorobutadiene	1	30.3623	0	20	152*	50	150
1,2,4-Trichlorobenzene	1	27.1123	0	20	136*	70	130
1,2,3-Trichlorobenzene	1	29.2385	0	20	146*	70	130
Naphthalene	1	33.2301	0	20	166*	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142642.D	AD19408-001(T)(MSD)	10/2/2020 2:12:00 PM
Non Spike(If applicable):	2M142639.D	AD19408-001(T)	10/2/2020 1:14:00 PM
Inst Blank(If applicable):			

Method: ~~NotFd~~ 8260 D 10/14/20 Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	10.4162	0	20	52	50	150
Dichlorodifluoromethane	1	0	0	20	0*	50	150
Chloromethane	1	5.263	0	20	26*	50	150
Bromomethane	1	11.4194	0	20	57	50	150
Vinyl Chloride	1	7.0077	0	20	35*	50	150
Chloroethane	1	12.7413	0	20	64	50	150
Trichlorofluoromethane	1	14.6781	0	20	73	50	150
Ethyl ether	1	27.1019	8.8608	20	91	50	150
Furan	1	19.672	0	20	98	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	21.4733	0	20	107	50	150
Methylene Chloride	1	45.1447	34.0613	20	55*	70	130
Acrolein	1	67.0107	0	100	67	50	150
Acrylonitrile	1	21.1146	0	20	106	50	150
Iodomethane	1	13.1163	0	20	66	50	150
Acetone	1	127.7656	29.2285	100	99	50	150
Carbon Disulfide	1	16.2445	0	20	81	50	150
t-Butyl Alcohol	1	132.1295	0	100	132	50	150
n-Hexane	1	23.0084	0	20	115	70	130
Di-isopropyl-ether	1	20.0664	0	20	100	70	130
1,1-Dichloroethene	1	19.4256	0	20	97	70	130
Methyl Acetate	1	94.7619	77.5595	20	86	50	150
Methyl-t-butyl ether	1	18.6197	0	20	93	70	130
1,1-Dichloroethane	1	20.8895	0	20	104	70	130
trans-1,2-Dichloroethene	1	19.7523	0	20	99	70	130
Ethyl-t-butyl ether	1	22.9711	0	20	115	70	130
cis-1,2-Dichloroethene	1	20.7857	0	20	104	70	130
Bromochloromethane	1	21.3175	0	20	107	70	130
2,2-Dichloropropane	1	22.1927	0	20	111	70	130
Ethyl acetate	1	35.9287	1.7774	20	171*	50	150
1,4-Dioxane	1	1269.607	0	1000	127	50	150
1,1-Dichloropropene	1	20.4052	0	20	102	70	130
Chloroform	1	21.0832	0	20	105	70	130
Cyclohexane	1	21.3341	0	20	107	70	130
1,2-Dichloroethane	1	19.4233	0	20	97	70	130
2-Butanone	1	0	0	20	0*	50	150
1,1,1-Trichloroethane	1	21.3127	0	20	107	70	130
Carbon Tetrachloride	1	21.4694	0	20	107	50	150
Vinyl Acetate	1	16.726	0	20	84	50	150
Bromodichloromethane	1	19.9158	0	20	100	70	130
Methylcyclohexane	1	22.0046	0	20	110	70	130
Dibromomethane	1	20.9495	0	20	105	70	130
1,2-Dichloropropane	1	20.9489	0	20	105	70	130
Trichloroethene	1	20.6467	0	20	103	70	130
Benzene	1	20.2292	0	20	101	70	130
tert-Amyl methyl ether	1	20.5109	0	20	103	70	130
Iso-propylacetate	1	24.1258	0	20	121	70	130
Methyl methacrylate	1	22.3909	0	20	112	70	130
Dibromochloromethane	1	22.4446	0	20	112	70	130
2-Chloroethylvinylether	1	89.3861	0	20	447*	70	130
cis-1,3-Dichloropropene	1	21.2323	0	20	106	70	130
trans-1,3-Dichloropropene	1	21.6984	0	20	108	70	130
Ethyl methacrylate	1	21.7508	0	20	109	70	130
1,1,2-Trichloroethane	1	21.8084	0	20	109	70	130
1,2-Dibromoethane	1	22.1757	0	20	111	70	130
1,3-Dichloropropane	1	21.5538	0	20	108	70	130
4-Methyl-2-Pentanone	1	28.0354	0	20	140	50	150
2-Hexanone	1	27.2805	0	20	136	50	150
Tetrachloroethene	1	21.981	0	20	110	50	150
Toluene	1	21.7106	1.0641	20	103	70	130
1,1,1,2-Tetrachloroethane	1	21.0978	0	20	105	70	130
Chlorobenzene	1	21.2287	0	20	106	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

Method: ~~NotFd~~ 8260D 10/14/20 JE Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	26.4461	0	20	132*	70	130
n-Amyl acetate	1	27.5594	0	20	138*	70	130
Bromoform	1	24.248	0	20	121	70	130
Ethylbenzene	1	24.0186	0	20	120	70	130
1,1,2,2-Tetrachloroethane	1	22.1863	0	20	111	70	130
Styrene	1	23.2882	0	20	116	70	130
m&p-Xylenes	1	46.0626	1.0381	40	113	70	130
o-Xylene	1	23.5839	0	20	118	70	130
trans-1,4-Dichloro-2-butene	1	23.7232	0	20	119	50	150
1,3-Dichlorobenzene	1	21.9193	0	20	110	70	130
1,4-Dichlorobenzene	1	20.9946	0	20	105	70	130
1,2-Dichlorobenzene	1	21.8946	0	20	109	70	130
Isopropylbenzene	1	24.8014	0	20	124	70	130
Cyclohexanone	1	132.2719	0	100	132	50	150
Camphene	1	22.2821	0	20	111	70	130
1,2,3-Trichloropropane	1	22.5145	0	20	113	70	130
2-Chlorotoluene	1	23.7845	0	20	119	70	130
p-Ethyltoluene	1	23.0222	0	20	115	70	130
4-Chlorotoluene	1	24.4856	0	20	122	70	130
n-Propylbenzene	1	24.1501	0	20	121	70	130
Bromobenzene	1	21.9023	0	20	110	70	130
1,3,5-Trimethylbenzene	1	24.4928	0	20	122	70	130
Butyl methacrylate	1	22.3152	0	20	112	70	130
t-Butylbenzene	1	24.6131	0	20	123	70	130
1,2,4-Trimethylbenzene	1	24.2729	1.0812	20	116	70	130
sec-Butylbenzene	1	24.9265	0	20	125	70	130
4-Isopropyltoluene	1	24.0957	0	20	120	70	130
n-Butylbenzene	1	25.2547	0	20	126	70	130
p-Diethylbenzene	1	23.7474	0	20	119	70	130
1,2,4,5-Tetramethylbenzene	1	22.4415	0	20	112	70	130
1,2-Dibromo-3-Chloropropane	1	25.6392	0	20	128	50	150
Camphor	1	963.7448	0	200	482*	20	150
Hexachlorobutadiene	1	23.3523	0	20	117	50	150
1,2,4-Trichlorobenzene	1	22.9502	0	20	115	70	130
1,2,3-Trichlorobenzene	1	23.7063	0	20	119	70	130
Naphthalene	1	25.7826	0	20	129	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits

QC Batch: MBS89414

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142642.D	AD19408-001(T)(MSD)	10/2/2020 2:12:00 PM
Duplicate(If applicable):	2M142641.D	AD19408-001(T)(MS)	10/2/2020 1:53:00 PM
Inst Blank(If applicable):			

Method: ~~NotFd~~ 8260D 10/14/20 Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	10.4162	12.7571	20	30
Dichlorodifluoromethane	1	0	1.243	200*	30
Chloromethane	1	5.263	11.2098	72*	30
Bromomethane	1	11.4194	12.9273	12	30
Vinyl Chloride	1	7.0077	12.746	58*	40
Chloroethane	1	12.7413	21.4079	51*	30
Trichlorofluoromethane	1	14.6781	23.0482	44*	30
Ethyl ether	1	27.1019	38.2491	34*	30
Furan	1	19.672	24.7417	23	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	21.4733	28.885	29	30
Methylene Chloride	1	45.1447	60.119	28	30
Acrolein	1	67.0107	111.1657	50*	30
Acrylonitrile	1	21.1146	28.3484	29	30
Iodomethane	1	13.1163	12.6769	3.4	30
Acetone	1	127.7656	174.1899	31*	30
Carbon Disulfide	1	16.2445	24.568	41*	30
t-Butyl Alcohol	1	132.1295	169.8562	25	30
n-Hexane	1	23.0084	30.2837	27	30
Di-isopropyl-ether	1	20.0664	26.9067	29	30
1,1-Dichloroethene	1	19.4256	27.2938	34	40
Methyl Acetate	1	94.7619	127.1463	29	30
Methyl-t-butyl ether	1	18.6197	28.0112	40*	30
1,1-Dichloroethane	1	20.8895	27.6981	28	40
trans-1,2-Dichloroethene	1	19.7523	27.521	33*	30
Ethyl-t-butyl ether	1	22.9711	29.0992	24	30
cis-1,2-Dichloroethene	1	20.7857	28.4612	31*	30
Bromochloromethane	1	21.3175	29.0728	31*	30
2,2-Dichloropropane	1	22.1927	29.8602	29	30
Ethyl acetate	1	35.9287	46.7245	26	30
1,4-Dioxane	1	1269.607	1591.617	23	30
1,1-Dichloropropene	1	20.4052	28.9849	35*	30
Chloroform	1	21.0832	28.2537	29	40
Cyclohexane	1	21.3341	30.0473	34*	30
1,2-Dichloroethane	1	19.4233	25.8101	28	40
2-Butanone	1	0	0	NA	40
1,1,1-Trichloroethane	1	21.3127	28.27	28	30
Carbon Tetrachloride	1	21.4694	26.6603	22	40
Vinyl Acetate	1	16.726	19.9146	17	30
Bromodichloromethane	1	19.9158	28.727	36*	30
Methylcyclohexane	1	22.0046	29.1973	28	30
Dibromomethane	1	20.9495	26.6551	24	30
1,2-Dichloropropane	1	20.9489	28.2758	30	30
Trichloroethene	1	20.6467	28.0632	30	40
Benzene	1	20.2292	27.1015	29	40
tert-Amyl methyl ether	1	20.5109	25.6362	22	30
Iso-propylacetate	1	24.1258	26.8328	11	30
Methyl methacrylate	1	22.3909	27.5687	21	30
Dibromochloromethane	1	22.4446	25.3286	12	30
2-Chloroethylvinylether	1	89.3861	51.2472	54*	30
cis-1,3-Dichloropropene	1	21.2323	24.7213	15	30
trans-1,3-Dichloropropene	1	21.6984	23.1865	6.6	30
Ethyl methacrylate	1	21.7508	25.7256	17	30
1,1,2-Trichloroethane	1	21.8084	25.7967	17	30
1,2-Dibromoethane	1	22.1757	26.0446	16	30
1,3-Dichloropropane	1	21.5538	25.8464	18	30
4-Methyl-2-Pentanone	1	28.0354	34.9454	22	30
2-Hexanone	1	27.2805	32.4953	17	30
Tetrachloroethene	1	21.981	24.5669	11	40
Toluene	1	21.7106	26.7016	21	40
1,1,1,2-Tetrachloroethane	1	21.0978	23.452	11	30
Chlorobenzene	1	21.2287	25.46	18	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89414

Method: ~~NotFd~~ 8260D 10/14/21 Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	26.4461	31.2972	17	30
n-Amyl acetate	1	27.5594	27.571	0.04	30
Bromoform	**1**	**24.248**	**26.8947**	**10**	**30**
Ethylbenzene	**1**	**24.0186**	**30.0224**	**22**	**30**
1,1,2,2-Tetrachloroethane	**1**	**22.1863**	**31.7139**	**35***	**30**
Styrene	**1**	**23.2882**	**29.1513**	**22**	**30**
m&p-Xylenes	**1**	**46.0626**	**60.2499**	**27**	**30**
o-Xylene	**1**	**23.5839**	**29.4656**	**22**	**30**
trans-1,4-Dichloro-2-butene	1	23.7232	18.2853	26	30
1,3-Dichlorobenzene	**1**	**21.9193**	**27.4507**	**22**	**30**
1,4-Dichlorobenzene	**1**	**20.9946**	**26.4823**	**23**	**40**
1,2-Dichlorobenzene	**1**	**21.8946**	**26.4447**	**19**	**40**
Isopropylbenzene	**1**	**24.8014**	**30.2013**	**20**	**30**
Cyclohexanone	1	132.2719	151.3461	13	30
Camphene	1	22.2821	42.7576	63*	30
1,2,3-Trichloropropane	**1**	**22.5145**	**24.5733**	**8.7**	**30**
2-Chlorotoluene	1	23.7845	25.4797	6.9	30
p-Ethyltoluene	1	23.0222	29.9297	26	30
4-Chlorotoluene	1	24.4856	28.9395	17	30
n-Propylbenzene	**1**	**24.1501**	**31.0573**	**25**	**40**
Bromobenzene	1	21.9023	27.5019	23	30
1,3,5-Trimethylbenzene	**1**	**24.4928**	**30.4917**	**22**	**30**
Butyl methacrylate	1	22.3152	28.2456	23	30
t-Butylbenzene	**1**	**24.6131**	**21.0655**	**16**	**30**
1,2,4-Trimethylbenzene	**1**	**24.2729**	**24.7997**	**2.1**	**30**
sec-Butylbenzene	**1**	**24.9265**	**29.3335**	**16**	**40**
4-Isopropyltoluene	**1**	**24.0957**	**27.5652**	**13**	**30**
n-Butylbenzene	**1**	**25.2547**	**29.4767**	**15**	**30**
p-Diethylbenzene	1	23.7474	29.3555	21	30
1,2,4,5-Tetramethylbenzene	1	22.4415	27.9288	22	30
1,2-Dibromo-3-Chloropropane	1	25.6392	32.982	25	30
Camphor	1	963.7448	1113.977	14	30
Hexachlorobutadiene	1	23.3523	30.3623	26	30
1,2,4-Trichlorobenzene	1	22.9502	27.1123	17	30
1,2,3-Trichlorobenzene	1	23.7063	29.2385	21	30
Naphthalene	1	25.7826	33.2301	25	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 11M83272.D
Matrix: Aqueous

Blank Analysis Date: 09/28/20 12:28
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD19444-001	11M83292.D	09/28/20 18:40
AD19444-002	11M83293.D	09/28/20 18:59
AD19444-005	11M83275.D	09/28/20 13:23
AD19444-006(MS:	11M83277.D	09/28/20 14:00
AD19444-007(MSD	11M83278.D	09/28/20 14:18
AD19444-010	11M83298.D	09/28/20 20:31
AD19444-014	11M83273.D	09/28/20 12:46
MBS89372	11M83276.D	09/28/20 13:42

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 2M142444.D
Matrix: Aqueous

Blank Analysis Date: 09/28/20 22:57
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD19444-015	2M142455.D	09/29/20 02:32
AD19444-016	2M142454.D	09/29/20 02:12
MBS89382	2M142446.D	09/28/20 23:36

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 2M142522.D
Matrix: Aqueous

Blank Analysis Date: 09/30/20 12:54
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD19444-003(5X)	2M142544.D	09/30/20 20:06
AD19444-011	2M142542.D	09/30/20 19:26
AD19412-007	2M142524.D	09/30/20 13:33
MBS89395	2M142525.D	09/30/20 13:53
AD19412-005(MS)	2M142526.D	09/30/20 14:13
AD19412-005	2M142523.D	09/30/20 13:14
AD19412-005(MSD	2M142527.D	09/30/20 14:32

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 2M142565.D
Matrix: Aqueous

Blank Analysis Date: 10/01/20 02:58
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD19444-004	2M142588.D	10/01/20 12:42
AD19444-008	2M142589.D	10/01/20 13:02
AD19412-007(MSD	2M142570.D	10/01/20 04:35
MBS89398	2M142568.D	10/01/20 03:57
AD19412-007(MS)	2M142569.D	10/01/20 04:16

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 2M142632.D
Matrix: Aqueous

Blank Analysis Date: 10/02/20 10:57
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD19444-009	2M142645.D	10/02/20 15:11
AD19444-012	2M142646.D	10/02/20 15:31
AD19444-013	2M142647.D	10/02/20 15:50
AD19408-001(T)	2M142639.D	10/02/20 13:14
AD19408-001(T)(M	2M142642.D	10/02/20 14:12
AD19408-001(T)(M	2M142641.D	10/02/20 13:53
MBS89414	2M142640.D	10/02/20 13:34

Form 5

Tune Name: BFB TUNE **Data File:** 2M141735.D
Instrument: GCMS 2 **Analysis Date:** 09/09/20 18:31
Method: EPA 8260C
Tune Scan/Time Range: Average of 7.336 to 7.379 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.4	3010	PASS
75	95	30	60	51.2	7955	PASS
95	95	100	100	100.0	15539	PASS
96	95	5	9	7.3	1132	PASS
173	174	0.00	2	0.4	55	PASS
174	95	50	100	91.8	14265	PASS
175	174	5	9	7.8	1106	PASS
176	174	95	101	96.1	13703	PASS
177	176	5	9	6.4	871	PASS

Data File	Sample Number	Analysis Date:
2M141736.D	BLK	09/09/20 18:47
2M141739.D	CAL @ 0.5 PPB	09/09/20 19:46
2M141740.D	CAL @ 1 PPB	09/09/20 20:05
2M141741.D	CAL @ 5 PPB	09/09/20 20:25
2M141742.D	CAL @ 10 PPB	09/09/20 20:44
2M141743.D	CAL @ 20 PPB	09/09/20 21:04
2M141745.D	CAL @ 50 PPB	09/09/20 21:43
2M141746.D	BLK	09/09/20 22:02
2M141747.D	CAL @ 500 PPB	09/09/20 22:22
2M141750.D	CAL @ 250 PPB	09/09/20 23:21
2M141753.D	CAL @100 PPB	09/10/20 00:19
2M141754.D	BLK	09/10/20 00:39
2M141758.D	STD	09/10/20 01:57
2M141759.D	ICV	09/10/20 02:16
2M141760.D	BLK	09/10/20 02:36
2M141762.D	DAILY BLANK	09/10/20 03:15
2M141763.D	DAILY BLANK	09/10/20 03:34
2M141764.D	MDL @ 1 PPB	09/10/20 03:54
2M141765.D	MDL @ 1 PPB	09/10/20 04:13
2M141766.D	MDL @ 1 PPB	09/10/20 04:32
2M141767.D	MDL @ 1 PPB	09/10/20 04:52
2M141768.D	BLK	09/10/20 05:11

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 11
Data File: 11M82667.D
Analysis Date: 09/11/20 18:54
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.164 to 7.167 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.5	5002	PASS
75	95	30	60	51.5	16609	PASS
95	95	100	100	100.0	32280	PASS
96	95	5	9	7.5	2425	PASS
173	174	0.00	2	1.4	376	PASS
174	95	50	100	82.9	26756	PASS
175	174	5	9	8.1	2157	PASS
176	174	95	101	99.1	26512	PASS
177	176	5	9	7.8	2078	PASS

Data File	Sample Number	Analysis Date:
11M82669.D	BLK	09/11/20 19:26
11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21
11M82673.D	CAL @ 1 PPB	09/11/20 20:40
11M82674.D	CAL @ 5 PPB	09/11/20 20:58
11M82675.D	CAL @ 10 PPB	09/11/20 21:17
11M82676.D	CAL @ 20 PPB	09/11/20 21:35
11M82678.D	CAL @ 50 PPB	09/11/20 22:12
11M82680.D	500 PPB	09/11/20 22:48
11M82683.D	250 PPB	09/11/20 23:44
11M82686.D	CAL @ 100 PPB	09/12/20 00:39
11M82690.D	BLK	09/12/20 01:52
11M82691.D	ICV	09/12/20 02:11
11M82693.D	BLK	09/12/20 02:47
11M82696.D	DAILY BLANK	09/12/20 03:43
11M82699.D	BLK	09/14/20 14:43

Form 5

Tune Name: BFB TUNE **Data File:** 11M83266.D
Instrument: GCMS 11 **Analysis Date:** 09/28/20 10:43
Method: EPA 8260C
Tune Scan/Time Range: Average of 7.170 to 7.170 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	17.9	4047	PASS
75	95	30	60	46.2	10426	PASS
95	95	100	100	100.0	22568	PASS
96	95	5	9	7.7	1740	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	95.4	21520	PASS
175	174	5	9	7.3	1566	PASS
176	174	95	101	95.1	20464	PASS
177	176	5	9	5.3	1082	PASS

Data File	Sample Number	Analysis Date:
11M83267.D	20 PPB	09/28/20 10:56
11M83268.D	CAL @ 20 PPB	09/28/20 11:14
11M83269.D	BLK	09/28/20 11:33
11M83270.D	BLK	09/28/20 11:51
11M83271.D	DAILY BLANK	09/28/20 12:09
11M83272.D	DAILY BLANK	09/28/20 12:28
11M83273.D	AD19444-014	09/28/20 12:46
11M83274.D	AD19415-005	09/28/20 13:05
11M83275.D	AD19444-005	09/28/20 13:23
11M83276.D	MBS89372	09/28/20 13:42
11M83277.D	AD19444-006(MS:	09/28/20 14:00
11M83278.D	AD19444-007(MSD	09/28/20 14:18
11M83279.D	MBS89373	09/28/20 14:36
11M83280.D	BLK	09/28/20 14:59
11M83281.D	BLK	09/28/20 15:18
11M83282.D	AD19452-013	09/28/20 15:36
11M83283.D	AD19386-009	09/28/20 15:55
11M83284.D	AD19386-010	09/28/20 16:13
11M83285.D	AD19452-008	09/28/20 16:31
11M83286.D	AD19452-004	09/28/20 16:50
11M83287.D	AD19401-013	09/28/20 17:08
11M83288.D	AD19401-012	09/28/20 17:27
11M83289.D	AD19452-007	09/28/20 17:45
11M83290.D	AD19452-015(20X)	09/28/20 18:04
11M83291.D	AD19446-004	09/28/20 18:22
11M83292.D	AD19444-001	09/28/20 18:40
11M83293.D	AD19444-002	09/28/20 18:59
11M83294.D	AD19444-003	09/28/20 19:17
11M83295.D	AD19476-004	09/28/20 19:36
11M83296.D	AD19476-005	09/28/20 19:54
11M83297.D	AD19457-002	09/28/20 20:13
11M83298.D	AD19444-010	09/28/20 20:31
11M83299.D	AD19444-011	09/28/20 20:49
11M83300.D	AD19356-002(400u	09/28/20 21:08
11M83301.D	AD19475-004	09/28/20 21:26
11M83302.D	AD19446-004(MS)	09/28/20 21:45
11M83303.D	AD19446-004(MSD	09/28/20 22:03
11M83304.D	BLK	09/28/20 22:21
11M83305.D	BLK	09/28/20 22:39
11M83306.D	BLK	09/28/20 22:58
11M83307.D	BLK	09/28/20 23:16
11M83308.D	BLK	09/28/20 23:35

Form 5

Tune Name: BFB TUNE **Data File:** 2M142439.D
Instrument: GCMS 2 **Analysis Date:** 09/28/20 21:19
Method: EPA 8260C
Tune Scan/Time Range: Average of 7.354 to 7.367 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	20.3	19629	PASS
75	95	30	60	52.8	51012	PASS
95	95	100	100	100.0	96680	PASS
96	95	5	9	6.9	6686	PASS
173	174	0.00	2	0.7	524	PASS
174	95	50	100	82.6	79883	PASS
175	174	5	9	7.7	6179	PASS
176	174	95	101	97.0	77508	PASS
177	176	5	9	6.2	4782	PASS

Data File	Sample Number	Analysis Date:
2M142440.D	CAL @ 20 PPB	09/28/20 21:38
2M142441.D	20 PPB	09/28/20 21:57
2M142442.D	BLK	09/28/20 22:17
2M142443.D	BLK	09/28/20 22:37
2M142444.D	DAILY BLANK	09/28/20 22:57
2M142445.D	BLK	09/28/20 23:17
2M142446.D	MBS89382	09/28/20 23:36
2M142447.D	AD19421-002(MS)	09/28/20 23:55
2M142448.D	AD19421-002(MSD	09/29/20 00:15
2M142449.D	BLK	09/29/20 00:34
2M142450.D	BLK	09/29/20 00:54
2M142451.D	AD19451-008	09/29/20 01:14
2M142452.D	AD19438-008	09/29/20 01:33
2M142453.D	AD19438-009	09/29/20 01:53
2M142454.D	AD19444-016	09/29/20 02:12
2M142455.D	AD19444-015	09/29/20 02:32
2M142456.D	AD19456-001	09/29/20 02:52
2M142457.D	AD19456-002	09/29/20 03:11
2M142458.D	AD19456-003	09/29/20 03:31
2M142459.D	AD19438-003	09/29/20 03:50
2M142460.D	AD19438-004	09/29/20 04:10
2M142461.D	AD19438-006	09/29/20 04:29
2M142462.D	AD19438-007	09/29/20 04:49
2M142463.D	AD19438-001	09/29/20 05:09
2M142464.D	AD19438-005(10X)	09/29/20 05:28
2M142465.D	AD19438-002(100X	09/29/20 05:48
2M142466.D	AD19438-002(100X	09/29/20 06:07
2M142467.D	BLK	09/29/20 06:27
2M142469.D	BLK	09/29/20 08:46
2M142472.D	5 PPB	09/29/20 10:24
2M142473.D	500 PPB	09/29/20 10:43

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 2
Data File: 2M142484.D
Analysis Date: 09/29/20 14:14
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.336 to 7.379 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.6	3176	PASS
75	95	30	60	48.8	8328	PASS
95	95	100	100	100.0	17082	PASS
96	95	5	9	6.7	1137	PASS
173	174	0.00	2	1.2	175	PASS
174	95	50	100	87.8	15005	PASS
175	174	5	9	7.3	1088	PASS
176	174	95	101	97.0	14548	PASS
177	176	5	9	5.8	850	PASS

Data File	Sample Number	Analysis Date:
2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09
2M142488.D	CAL @ 1 PPB	09/29/20 15:28
2M142489.D	CAL @ 5 PPB	09/29/20 15:48
2M142490.D	CAL @ 10 PPB	09/29/20 16:08
2M142492.D	CAL @ 20 PPB	09/29/20 16:47
2M142494.D	CAL @ 50 PPB	09/29/20 17:26
2M142496.D	CAL @ 100 PPB	09/29/20 18:05
2M142499.D	CAL @ 250 PPB	09/29/20 19:04
2M142502.D	CAL @ 500 PPB	09/29/20 20:03
2M142508.D	ICV	09/29/20 22:00

Form 5

Tune Name: BFB TUNE **Data File:** 2M142516.D
Instrument: GCMS 2 **Analysis Date:** 09/30/20 11:01
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.336 to 7.379 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.8	2966	PASS
75	95	30	60	54.8	8223	PASS
95	95	100	100	100.0	14999	PASS
96	95	5	9	6.8	1013	PASS
173	174	0.00	2	0.3	43	PASS
174	95	50	100	89.9	13485	PASS
175	174	5	9	8.5	1143	PASS
176	174	95	101	97.2	13110	PASS
177	176	5	9	6.9	906	PASS

Data File	Sample Number	Analysis Date:
2M142518.D	CAL @ 20 PPB	09/30/20 11:36
2M142520.D	BLK	09/30/20 12:15
2M142521.D	BLK	09/30/20 12:34
2M142522.D	DAILY BLANK	09/30/20 12:54
2M142523.D	AD19412-005	09/30/20 13:14
2M142524.D	AD19412-007	09/30/20 13:33
2M142525.D	MBS89395	09/30/20 13:53
2M142526.D	AD19412-005(MS)	09/30/20 14:13
2M142527.D	AD19412-005(MSD	09/30/20 14:32
2M142528.D	BLK	09/30/20 14:52
2M142529.D	BLK	09/30/20 15:11
2M142530.D	AD19486-009	09/30/20 15:31
2M142531.D	AD19486-010	09/30/20 15:50
2M142532.D	AD19216-025	09/30/20 16:10
2M142533.D	BLK	09/30/20 16:30
2M142534.D	BLK	09/30/20 16:49
2M142535.D	AD19216-025(5uL)	09/30/20 17:09
2M142536.D	BLK	09/30/20 17:29
2M142537.D	BLK	09/30/20 17:48
2M142538.D	AD19412-002	09/30/20 18:08
2M142539.D	AD19412-003	09/30/20 18:27
2M142540.D	AD19412-004	09/30/20 18:47
2M142541.D	AD19438-007	09/30/20 19:07
2M142542.D	AD19444-011	09/30/20 19:26
2M142543.D	AD19438-006(5X)	09/30/20 19:46
2M142544.D	AD19444-003(5X)	09/30/20 20:06
2M142545.D	BLK	09/30/20 20:26
2M142546.D	AD19499-007	09/30/20 20:45
2M142547.D	AD19499-010	09/30/20 21:05
2M142548.D	AD19497-008	09/30/20 21:25
2M142549.D	AD19497-009	09/30/20 21:44
2M142550.D	AD19497-007	09/30/20 22:04
2M142551.D	AD19497-001(5X)	09/30/20 22:24
2M142552.D	AD19497-001	09/30/20 22:43
2M142553.D	STD	09/30/20 23:03
2M142554.D	BLK	09/30/20 23:22
2M142555.D	BLK	09/30/20 23:42
2M142556.D	BLK	10/01/20 00:01
2M142557.D	BLK	10/01/20 00:21
2M142558.D	BLK	10/01/20 00:41

Form 5

Tune Name: BFB TUNE **Data File:** 2M142560.D
Instrument: GCMS 2 **Analysis Date:** 10/01/20 01:20
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.367 to 7.373 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.4	15484	PASS
75	95	30	60	50.6	42672	PASS
95	95	100	100	100.0	84324	PASS
96	95	5	9	5.8	4861	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	98.8	83336	PASS
175	174	5	9	7.7	6424	PASS
176	174	95	101	97.1	80924	PASS
177	176	5	9	6.9	5608	PASS

Data File	Sample Number	Analysis Date:
2M142561.D	CAL @ 20 PPB	10/01/20 01:40
2M142562.D	20 PPB	10/01/20 01:59
2M142563.D	BLK	10/01/20 02:18
2M142564.D	BLK	10/01/20 02:38
2M142565.D	DAILY BLANK	10/01/20 02:58
2M142566.D	AD19441-001	10/01/20 03:17
2M142567.D	AD19442-001	10/01/20 03:37
2M142568.D	MBS89398	10/01/20 03:57
2M142569.D	AD19412-007(MS)	10/01/20 04:16
2M142570.D	AD19412-007(MSD	10/01/20 04:35
2M142571.D	BLK	10/01/20 04:55
2M142572.D	BLK	10/01/20 05:14
2M142573.D	AD19486-001	10/01/20 05:34
2M142574.D	AD19486-002	10/01/20 05:54
2M142575.D	AD19486-003	10/01/20 06:13
2M142576.D	AD19486-004	10/01/20 06:33
2M142577.D	AD19486-005	10/01/20 06:53
2M142578.D	AD19486-006	10/01/20 07:12
2M142579.D	AD19486-007	10/01/20 09:45
2M142580.D	AD19486-008	10/01/20 10:05
2M142581.D	AD19499-001	10/01/20 10:25
2M142582.D	AD19499-003	10/01/20 10:44
2M142583.D	AD19499-005	10/01/20 11:04
2M142584.D	AD19499-008	10/01/20 11:24
2M142585.D	AD19477-001	10/01/20 11:43
2M142586.D	AD19477-002	10/01/20 12:03
2M142587.D	BLK	10/01/20 12:22
2M142588.D	AD19444-004	10/01/20 12:42
2M142589.D	AD19444-008	10/01/20 13:02
2M142590.D	MBS89408	10/01/20 13:19
2M142591.D	STD	10/01/20 13:39
2M142592.D	BLK	10/01/20 13:59
2M142593.D	BLK	10/01/20 14:18
2M142594.D	AD19549-001	10/01/20 14:38
2M142595.D	AD19549-003	10/01/20 14:58

Form 5

Tune Name: BFB TUNE **Data File:** 2M142627.D
Instrument: GCMS 2 **Analysis Date:** 10/02/20 09:24
Method: EPA 8260C
Tune Scan/Time Range: Average of 7.342 to 7.373 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	20.2	4883	PASS
75	95	30	60	53.3	12871	PASS
95	95	100	100	100.0	24133	PASS
96	95	5	9	7.0	1683	PASS
173	174	0.00	2	1.0	219	PASS
174	95	50	100	89.7	21646	PASS
175	174	5	9	7.5	1632	PASS
176	174	95	101	97.1	21014	PASS
177	176	5	9	6.6	1385	PASS

Data File	Sample Number	Analysis Date:
2M142629.D	CAL @ 20 PPB	10/02/20 09:58
2M142630.D	20 PPB	10/02/20 10:18
2M142631.D	BLK	10/02/20 10:37
2M142632.D	DAILY BLANK	10/02/20 10:57
2M142633.D	DAILY BLANK	10/02/20 11:16
2M142634.D	BLK	10/02/20 11:36
2M142635.D	AD19528-001	10/02/20 11:56
2M142636.D	AD19528-002	10/02/20 12:15
2M142637.D	AD19528-003	10/02/20 12:35
2M142638.D	AD19564-013	10/02/20 12:55
2M142639.D	AD19408-001(T)	10/02/20 13:14
2M142640.D	MBS89414	10/02/20 13:34
2M142641.D	AD19408-001(T)(M	10/02/20 13:53
2M142642.D	AD19408-001(T)(M	10/02/20 14:12
2M142643.D	BLK	10/02/20 14:32
2M142644.D	BLK	10/02/20 14:51
2M142645.D	AD19444-009	10/02/20 15:11
2M142646.D	AD19444-012	10/02/20 15:31
2M142647.D	AD19444-013	10/02/20 15:50
2M142648.D	AD19516-005	10/02/20 16:10
2M142649.D	AD19457-001(T)	10/02/20 16:30
2M142650.D	EF-1-V-335534(100	10/02/20 16:49
2M142651.D	MBS89419	10/02/20 17:09
2M142652.D	BLK	10/02/20 17:28
2M142653.D	AD19516-007	10/02/20 17:48
2M142654.D	AD19516-011	10/02/20 18:07
2M142655.D	AD19516-013	10/02/20 18:27
2M142656.D	AD19516-015	10/02/20 18:46
2M142657.D	AD19544-001	10/02/20 19:06
2M142658.D	AD19544-003	10/02/20 19:26
2M142659.D	AD19544-005	10/02/20 19:45
2M142660.D	AD19544-011	10/02/20 20:05
2M142661.D	AD19544-007(10X)	10/02/20 20:25
2M142662.D	AD19544-009(20X)	10/02/20 20:45
2M142663.D	AD19516-009(5X)	10/02/20 21:05
2M142664.D	STD	10/02/20 21:25
2M142665.D	BLK	10/02/20 21:44
2M142666.D	BLK	10/02/20 22:04
2M142667.D	BLK	10/02/20 22:24
2M142668.D	BLK	10/02/20 22:43
2M142669.D	BLK	10/02/20 23:03
2M142670.D	BLK	10/02/20 23:23
2M142671.D	BLK	10/02/20 23:42
2M142672.D	BLK	10/03/20 00:02
2M142673.D	BLK	10/03/20 00:21
2M142674.D	BLK	10/03/20 00:41
2M142675.D	BLK	10/03/20 01:00
2M142676.D	BLK	10/03/20 01:20
2M142677.D	BLK	10/03/20 01:39
2M142678.D	BLK	10/03/20 01:59
2M142679.D	BLK	10/03/20 02:19

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FORM8

Internal Standard Areas

Evaluation Std Data File: 2M141743.D Method: EPA 8260D

Analysis Date/Time: 09/09/20 21:04

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	252428	5.10	215771	6.73	128311	8.02								
Eval File Area Limit:	126214-504856		107886-431542		64156-256622									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									

Data File	Sample#													
2M141736.D	BLK	225563	5.10	197887	6.73	114115	8.02							
2M141739.D	CAL @ 0.5 PPB	244552	5.10	214662	6.73	122037	8.02							
2M141740.D	CAL @ 1 PPB	216660	5.10	188902	6.73	107874	8.02							
2M141741.D	CAL @ 5 PPB	243580	5.10	212572	6.73	123989	8.02							
2M141742.D	CAL @ 10 PPB	242757	5.10	209649	6.73	124159	8.02							
2M141743.D	CAL @ 20 PPB	252428	5.10	215771	6.73	128311	8.02							
2M141745.D	CAL @ 50 PPB	226851	5.10	197475	6.73	114683	8.02							
2M141746.D	BLK	232080	5.10	195520	6.73	110601	8.02							
2M141747.D	CAL @ 500 PPB	284475	5.10	239116	6.73	128908	8.03							
2M141750.D	CAL @ 250 PPB	249858	5.10	223416	6.73	184893	8.02							
2M141753.D	CAL @100 PPB	256412	5.10	218667	6.73	129025	8.02							
2M141754.D	BLK	237527	5.10	201441	6.73	111584	8.02							
2M141758.D	STD	213336	5.10	176098	6.73	102917	8.02							
2M141759.D	ICV	237641	5.10	200165	6.73	114523	8.02							
2M141760.D	BLK	234981	5.10	196657	6.73	106889	8.02							
2M141762.D	DAILY BLANK	220736	5.10	183523	6.73	102966	8.02							
2M141763.D	DAILY BLANK	244594	5.10	202511	6.73	111846	8.02							
2M141764.D	MDL @ 1 PPB	207564	5.10	174160	6.73	96983	8.02							
2M141765.D	MDL @ 1 PPB	229029	5.10	194099	6.73	106937	8.02							
2M141766.D	MDL @ 1 PPB	209555	5.10	171207	6.73	92852	8.02							
2M141767.D	MDL @ 1 PPB	230845	5.10	188846	6.73	105687	8.02							
2M141768.D	BLK	229915	5.10	187572	6.73	99717	8.02							

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 11M82676.D Method: EPA 8260D

Analysis Date/Time: 09/11/20 21:35

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	261943	4.96	208671	6.55	104916	7.82								
Eval File Area Limit:	130972-523886		104336-417342		52458-209832									
Eval File Rt Limit:	4.46-5.46		6.05-7.05		7.32-8.32									

Data File	Sample#						
11M82669.D	BLK	262775	4.96	214512	6.55	96478	7.82
11M82672.D	CAL @ 0.5 PPB	247668	4.96	205853	6.55	94226	7.82
11M82673.D	CAL @ 1 PPB	247374	4.96	200307	6.55	93440	7.82
11M82674.D	CAL @ 5 PPB	254008	4.96	208903	6.55	98904	7.82
11M82675.D	CAL @ 10 PPB	258924	4.96	207537	6.55	102207	7.82
11M82676.D	CAL @ 20 PPB	261943	4.96	208671	6.55	104916	7.82
11M82678.D	CAL @ 50 PPB	280039	4.96	221229	6.55	113051	7.82
11M82680.D	500 PPB	480832	4.96	290123	6.55	253143A	7.82
11M82683.D	250 PPB	347579	4.96	265725	6.55	275627A	7.82
11M82686.D	CAL @ 100 PPB	304276	4.96	249762	6.55	158606	7.82
11M82690.D	BLK	244800	4.96	189212	6.55	90042	7.82
11M82691.D	ICV	252706	4.96	213750	6.55	106066	7.82
11M82693.D	BLK	265912	4.96	210579	6.55	99482	7.82
11M82696.D	DAILY BLANK	257744	4.96	211880	6.55	94190	7.82
11M82699.D	BLK	324497	4.96	273049	6.55	149394	7.82

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0092507 0112

FORM8

Internal Standard Areas

Evaluation Std Data File: 11M83268.D Method: EPA 8260D

Analysis Date/Time: 09/28/20 11:14

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	272483	4.96	219205	6.55	111772	7.82								
Eval File Area Limit:	136242-544966		109602-438410		55886-223544									
Eval File Rt Limit:	4.46-5.46		6.05-7.05		7.32-8.32									

Data File	Sample#													
11M83267.D	20 PPB	306980	4.96	255866	6.55	134801	7.82							
11M83269.D	BLK	260916	4.96	215669	6.55	97620	7.82							
11M83270.D	BLK	303600	4.96	255544	6.55	126282	7.82							
11M83271.D	DAILY BLANK	259920	4.96	215407	6.55	103820	7.82							
11M83272.D	DAILY BLANK	250189	4.96	207497	6.55	94982	7.82							
11M83273.D	AD19444-014	240273	4.96	198815	6.55	89098	7.82							
11M83274.D	AD19415-005	240113	4.96	197636	6.55	92649	7.82							
11M83275.D	AD19444-005	242536	4.96	196054	6.55	88261	7.82							
11M83276.D	MBS89372	242780	4.96	198377	6.55	101304	7.82							
11M83277.D	AD19444-006(MS:AD	249397	4.96	200720	6.55	101064	7.82							
11M83278.D	AD19444-007(MSD:A	264010	4.96	217404	6.55	108771	7.82							
11M83279.D	MBS89373	256026	4.96	214913	6.55	116650	7.82							
11M83280.D	BLK	250285	4.96	210996	6.55	99368	7.82							
11M83281.D	BLK	251514	4.96	206542	6.55	94304	7.82							
11M83282.D	AD19452-013	285909	4.96	192697	6.55	89210	7.82							
11M83283.D	AD19386-009	245539	4.96	204158	6.55	92570	7.82							
11M83284.D	AD19386-010	234379	4.96	194303	6.55	89251	7.82							
11M83285.D	AD19452-008	233273	4.96	193292	6.55	86813	7.82							
11M83286.D	AD19452-004	221812	4.96	189295	6.55	91471	7.82							
11M83289.D	AD19452-007	216559	4.96	175659	6.55	81268	7.82							
11M83290.D	AD19452-015(20X)	227231	4.96	183636	6.55	88245	7.82							
11M83291.D	AD19446-004	270802	4.95	231843	6.55	115747	7.82							
11M83292.D	AD19444-001	269320	4.96	225380	6.55	106861	7.82							
11M83293.D	AD19444-002	237760	4.96	200287	6.55	92522	7.82							
11M83294.D	AD19444-003	239913	4.96	192746	6.55	88749	7.82							
11M83295.D	AD19476-004	245786	4.96	205139	6.55	96057	7.82							
11M83296.D	AD19476-005	229960	4.96	187925	6.55	85430	7.82							
11M83297.D	AD19457-002	223458	4.96	184460	6.55	88140	7.82							
11M83298.D	AD19444-010	230244	4.96	194075	6.55	88294	7.82							
11M83299.D	AD19444-011	236006	4.96	194582	6.55	88020	7.82							
11M83300.D	AD19356-002(400uL)	223123	4.96	188331	6.55	94073	7.82							
11M83301.D	AD19475-004	257459	4.96	221962	6.55	111293	7.82							

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0092507 0113

FORM8

Internal Standard Areas

Evaluation Std Data File: 11M83268.D Method: EPA 8260D

Analysis Date/Time: 09/28/20 11:14

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	272483	4.96	219205	6.55	111772	7.82								
Eval File Area Limit:	136242-544966		109602-438410		55886-223544									
Eval File Rt Limit:	4.46-5.46		6.05-7.05		7.32-8.32									
Data File	Sample#													
11M83302.D	AD19446-004(MS)	255903	4.95	216671	6.55	116943	7.82							
11M83303.D	AD19446-004(MSD)	277480	4.95	236909	6.55	128166	7.82							
11M83304.D	BLK	276312	4.96	229735	6.55	110907	7.82							
11M83305.D	BLK	269923	4.96	228483	6.55	106560	7.82							
11M83306.D	BLK	260288	4.96	222974	6.55	104287	7.82							
11M83307.D	BLK	259853	4.96	221955	6.55	103701	7.82							
11M83308.D	BLK	256095	4.96	213587	6.55	100634	7.82							

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0092507 0114

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M142401.D Method: EPA 8260D

Analysis Date/Time: 09/28/20 07:14

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	351019	5.10	299761	6.73	163034	8.02								
Eval File Area Limit:	175510-702038		149880-599522		81517-326068									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									

Data File	Sample#													
2M142402.D	20 PPB	354870	5.10	304959	6.73	165862	8.02							
2M142403.D	BLK	360167	5.10	311569	6.73	162162	8.02							
2M142404.D	BLK	352478	5.10	306299	6.73	157341	8.02							
2M142405.D	DAILY BLANK	351255	5.10	313964	6.73	159842	8.02							
2M142406.D	MBS89370	351258	5.10	308032	6.73	166649	8.02							
2M142407.D	AD19421-008(MS)	325074	5.10	285913	6.73	153210	8.02							
2M142408.D	AD19421-008(MSD)	351072	5.10	301295	6.73	163357	8.02							
2M142409.D	BLK	351748	5.10	307442	6.73	159330	8.02							
2M142410.D	BLK	355041	5.10	308069	6.73	157551	8.02							
2M142411.D	AD19421-008	357837	5.10	314108	6.73	163073	8.02							
2M142412.D	BLK	359125	5.10	315350	6.73	159275	8.02							
2M142413.D	AD19455-003	358435	5.10	310672	6.73	158368	8.02							
2M142414.D	AD19455-004	349164	5.10	307070	6.73	151203	8.02							
2M142415.D	AD19421-007	384896	5.10	343043	6.73	177023	8.02							
2M142416.D	AD19421-009	338272	5.10	298323	6.73	153205	8.02							
2M142417.D	AD19456-004	332230	5.10	297209	6.73	154318	8.02							
2M142418.D	AD19460-003	366206	5.10	328066	6.73	163071	8.02							
2M142419.D	AD19287-002(10X)	336494	5.10	304029	6.73	169332	8.02							
2M142420.D	AD19387-006(5X)	375786	5.10	336517	6.73	171687	8.02							
2M142421.D	BLK	371368	5.10	329120	6.73	172153	8.02							
2M142422.D	AD19421-001	388803	5.10	348645	6.73	178939	8.02							
2M142423.D	AD19421-002	364500	5.10	321325	6.73	168565	8.02							
2M142424.D	AD19421-003	357335	5.10	312204	6.73	157885	8.02							
2M142425.D	AD19421-004	346282	5.10	312776	6.73	161021	8.02							
2M142426.D	AD19421-005	352139	5.10	311284	6.73	158943	8.02							
2M142427.D	AD19421-006	345971	5.10	305305	6.73	157166	8.02							
2M142428.D	AD19476-001	341913	5.10	303587	6.73	153201	8.02							
2M142429.D	AD19476-002	368873	5.10	331503	6.73	171396	8.02							
2M142430.D	AD19476-003	348984	5.10	310741	6.73	158361	8.02							
2M142431.D	AD19476-004	341305	5.10	307828	6.73	156977	8.02							
2M142432.D	AD19476-005	339558	5.10	302092	6.73	151273	8.02							
2M142433.D	AD19457-002	338937	5.10	305403	6.73	152632	8.02							

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0092507 0115

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M142401.D Method: EPA 8260D

Analysis Date/Time: 09/28/20 07:14

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	351019	5.10	299761	6.73	163034	8.02								
Eval File Area Limit:	175510-702038		149880-599522		81517-326068									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									
Data File Sample#														
2M142434.D 19452-015(10X)	340420	5.10	305335	6.73	161680	8.02								
2M142435.D BLK	353386	5.10	320815	6.73	163878	8.02								
2M142436.D BLK	338688	5.10	299509	6.73	149449	8.02								
2M142437.D BLK	333701	5.10	295464	6.73	148724	8.02								
2M142438.D BLK	332975	5.10	294365	6.73	154042	8.02								

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0092507 0116

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M142440.D Method: EPA 8260D

Analysis Date/Time: 09/28/20 21:38

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	309404	5.10	274493	6.73	146410	8.02								
Eval File Area Limit:	154702-618808		137246-548986		73205-292820									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									
Data File Sample#														
2M142441.D 20 PPB	339085	5.10	299505	6.73	159318	8.02								
2M142442.D BLK	341685	5.10	303021	6.73	156249	8.02								
2M142443.D BLK	341346	5.10	306322	6.73	153565	8.02								
2M142444.D DAILY BLANK	378833	5.10	334163	6.73	171247	8.02								
2M142445.D BLK	380073	5.10	342641	6.73	169600	8.02								
2M142446.D MBS89382	334784	5.10	298964	6.73	160945	8.02								
2M142447.D AD19421-002(MS)	311367	5.10	275061	6.73	148280	8.02								
2M142448.D AD19421-002(MSD)	333929	5.10	295657	6.73	154122	8.02								
2M142449.D BLK	349133	5.10	310249	6.73	157858	8.02								
2M142450.D BLK	338829	5.10	301758	6.73	151135	8.02								
2M142451.D AD19451-008	378178	5.10	339479	6.73	173469	8.02								
2M142452.D AD19438-008	338414	5.10	303200	6.73	153777	8.02								
2M142453.D AD19438-009	333940	5.10	298441	6.73	152116	8.02								
2M142454.D AD19444-016	332995	5.10	302262	6.73	156304	8.02								
2M142455.D AD19444-015	340783	5.10	304941	6.73	152907	8.02								
2M142456.D AD19456-001	367117	5.10	328803	6.73	168632	8.02								
2M142457.D AD19456-002	325653	5.10	296729	6.73	149827	8.02								
2M142458.D AD19456-003	330716	5.10	299819	6.73	153683	8.02								
2M142459.D AD19438-003	335697	5.10	301446	6.73	149909	8.02								
2M142460.D AD19438-004	331512	5.10	301092	6.73	152523	8.02								
2M142461.D AD19438-006	333149	5.10	298145	6.73	148153	8.02								
2M142462.D AD19438-007	366925	5.10	334051	6.73	171549	8.02								
2M142463.D AD19438-001	322647	5.10	293542	6.73	150019	8.02								
2M142464.D AD19438-005(10X)	339399	5.10	304411	6.73	155609	8.02								
2M142465.D AD19438-002(100X)	301917	5.10	268854	6.73	136222	8.02								
2M142466.D AD19438-002(100X)	328728	5.10	291897	6.73	150324	8.02								
2M142467.D BLK	299402	5.10	268693	6.73	139260	8.02								
2M142469.D BLK	322038	5.10	294465	6.73	148844	8.02								
2M142472.D 5 PPB	332749	5.10	294134	6.73	150938	8.02								
2M142473.D 500 PPB	329821	5.10	324318	6.73	171185	8.03								

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0092507 0117

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M142492.D Method: EPA 8260D

Analysis Date/Time: 09/29/20 16:47

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	359594	5.10	324303	6.73	173285	8.02								
Eval File Area Limit:	179797-719188		162152-648606		86642-346570									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									

Data File	Sample#													
2M142487.D	CAL @ 0.5 PPB	346417	5.10	307168	6.73	160675	8.02							
2M142488.D	CAL @ 1 PPB	387579	5.10	349135	6.73	180533	8.02							
2M142489.D	CAL @ 5 PPB	340498	5.10	303983	6.73	159994	8.02							
2M142490.D	CAL @ 10 PPB	387191	5.10	348044	6.73	187417	8.02							
2M142492.D	CAL @ 20 PPB	359594	5.10	324303	6.73	173285	8.02							
2M142494.D	CAL @ 50 PPB	341318	5.10	313870	6.73	172876	8.02							
2M142496.D	CAL @ 100 PPB	347100	5.10	321317	6.73	178964	8.02							
2M142499.D	CAL @ 250 PPB	354579	5.10	343475	6.73	250266	8.02							
2M142502.D	CAL @ 500 PPB	378988	5.10	368525	6.73	177011	8.03							
2M142508.D	ICV	379486	5.10	341026	6.73	179492	8.02							

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0092507 0118

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M142518.D Method: EPA 8260D

Analysis Date/Time: 09/30/20 11:36

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	328263	5.10	294391	6.73	157270	8.02								
Eval File Area Limit:	164132-656526		147196-588782		78635-314540									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									

Data File	Sample#													
2M142520.D	BLK	401662	5.10	364536	6.73	186133	8.02							
2M142521.D	BLK	358036	5.10	324163	6.73	167740	8.02							
2M142522.D	DAILY BLANK	353373	5.10	316979	6.73	163092	8.02							
2M142523.D	AD19412-005	351219	5.10	315079	6.73	161711	8.02							
2M142524.D	AD19412-007	345414	5.10	307514	6.73	155147	8.02							
2M142525.D	MBS89395	356690	5.10	318454	6.73	172757	8.02							
2M142526.D	AD19412-005(MS)	330090	5.10	295843	6.73	159151	8.02							
2M142527.D	AD19412-005(MSD)	359589	5.10	318585	6.73	175542	8.02							
2M142528.D	BLK	380135	5.10	337888	6.73	171512	8.02							
2M142529.D	BLK	356177	5.10	320582	6.73	160956	8.02							
2M142530.D	AD19486-009	348553	5.10	314914	6.73	161592	8.02							
2M142531.D	AD19486-010	352751	5.10	317355	6.73	157452	8.02							
2M142532.D	AD19216-025	350034	5.10	306595	6.73	161468	8.02							
2M142533.D	BLK	337441	5.10	302684	6.73	154057	8.02							
2M142534.D	BLK	346019	5.10	313579	6.73	157417	8.02							
2M142535.D	AD19216-025(5uL)	387997	5.10	354445	6.73	182116	8.02							
2M142536.D	BLK	351217	5.10	312663	6.73	160920	8.02							
2M142537.D	BLK	355869	5.10	322610	6.73	158491	8.02							
2M142538.D	AD19412-002	338063	5.10	308597	6.73	155578	8.02							
2M142539.D	AD19412-003	340839	5.10	307815	6.73	153907	8.02							
2M142540.D	AD19412-004	338256	5.10	307083	6.73	158981	8.02							
2M142541.D	AD19438-007	335913	5.10	301920	6.73	150801	8.02							
2M142542.D	AD19444-011	342481	5.10	308625	6.73	159018	8.02							
2M142543.D	AD19438-006(5X)	382995	5.10	346903	6.73	172774	8.02							
2M142544.D	AD19444-003(5X)	342967	5.10	307344	6.73	153857	8.02							
2M142545.D	BLK	334589	5.10	299510	6.73	150921	8.02							
2M142546.D	AD19499-007	367478	5.10	325705	6.73	162169	8.02							
2M142547.D	AD19499-010	347348	5.10	313375	6.73	155392	8.02							
2M142553.D	STD	335972	5.10	301930	6.73	163455	8.02							
2M142554.D	BLK	381801	5.10	341670	6.73	170237	8.02							
2M142555.D	BLK	349197	5.10	312593	6.73	159259	8.02							
2M142556.D	BLK	331606	5.10	298856	6.73	153836	8.02							

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0092507 0119

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M142518.D Method: EPA 8260D

Analysis Date/Time: 09/30/20 11:36

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	328263	5.10	294391	6.73	157270	8.02								
Eval File Area Limit:	164132-656526		147196-588782		78635-314540									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									
Data File Sample#														
2M142557.D BLK	346220	5.10	312836	6.73	156578	8.02								
2M142558.D BLK	379297	5.10	340233	6.73	168396	8.02								

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0092507 0120

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M142561.D Method: EPA 8260D

Analysis Date/Time: 10/01/20 01:40

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	319206	5.10	283823	6.73	146669	8.02								
Eval File Area Limit:	159603-638412		141912-567646		73334-293338									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									

Data File	Sample#													
2M142562.D	20 PPB	355706	5.10	322920	6.73	176175	8.02							
2M142563.D	BLK	357234	5.10	323448	6.73	167157	8.02							
2M142564.D	BLK	339330	5.10	307294	6.73	157029	8.02							
2M142565.D	DAILY BLANK	341037	5.10	310263	6.73	153990	8.02							
2M142566.D	AD19441-001	342411	5.10	307511	6.73	156940	8.02							
2M142567.D	AD19442-001	350875	5.10	316226	6.73	164478	8.02							
2M142568.D	MBS89398	358966	5.10	329928	6.73	177050	8.02							
2M142569.D	AD19412-007(MS)	331979	5.10	291094	6.73	153002	8.02							
2M142570.D	AD19412-007(MSD)	366878	5.10	326946	6.73	170914	8.02							
2M142571.D	BLK	351905	5.10	315229	6.73	160593	8.02							
2M142572.D	BLK	356727	5.10	324693	6.73	162468	8.02							
2M142573.D	AD19486-001	380019	5.10	345119	6.73	173913	8.02							
2M142574.D	AD19486-002	348939	5.10	318250	6.73	162612	8.02							
2M142575.D	AD19486-003	393560	5.10	359633	6.73	183662	8.02							
2M142576.D	AD19486-004	353329	5.10	320848	6.73	158848	8.02							
2M142577.D	AD19486-005	342331	5.10	307997	6.73	160086	8.02							
2M142578.D	AD19486-006	340796	5.10	313345	6.73	160050	8.02							
2M142579.D	AD19486-007	340324	5.10	309669	6.73	158927	8.02							
2M142580.D	AD19486-008	360813	5.10	327459	6.73	163803	8.02							
2M142581.D	AD19499-001	337965	5.10	300057	6.73	154167	8.02							
2M142582.D	AD19499-003	333997	5.10	303417	6.73	160273	8.02							
2M142583.D	AD19499-005	339314	5.10	307124	6.73	156290	8.02							
2M142584.D	AD19499-008	341662	5.10	309138	6.73	157782	8.02							
2M142585.D	AD19477-001	340956	5.10	313804	6.73	158719	8.02							
2M142586.D	AD19477-002	339010	5.10	308011	6.73	155360	8.02							
2M142587.D	BLK	341982	5.10	307394	6.73	158989	8.02							
2M142588.D	AD19444-004	339532	5.10	305664	6.73	153234	8.02							
2M142589.D	AD19444-008	335502	5.10	307426	6.73	158052	8.02							
2M142590.D	MBS89408	340030	5.10	311110	6.73	163978	8.02							
2M142591.D	STD	348550	5.10	321118	6.73	169887	8.02							
2M142592.D	BLK	338384	5.10	310146	6.73	158300	8.02							
2M142593.D	BLK	341360	5.10	308778	6.73	156840	8.02							

I1 =	Fluorobenzene	I4 =		I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =			624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =			524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0092507 0121

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M142629.D Method: EPA 8260D

Analysis Date/Time: 10/02/20 09:58

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	340272	5.10	303585	6.73	163340	8.02								
Eval File Area Limit:	170136-680544		151792-607170		81670-326680									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									

Data File	Sample#													
2M142630.D	20 PPB	372031	5.10	331819	6.73	177396	8.02							
2M142631.D	BLK	364998	5.10	329175	6.73	168786	8.02							
2M142632.D	DAILY BLANK	356443	5.10	324613	6.73	166853	8.02							
2M142633.D	DAILY BLANK	383339	5.10	352819	6.73	184986	8.02							
2M142634.D	BLK	356891	5.10	330959	6.73	165946	8.02							
2M142635.D	AD19528-001	380910	5.10	347044	6.73	177183	8.02							
2M142636.D	AD19528-002	358731	5.10	331000	6.73	170180	8.02							
2M142637.D	AD19528-003	367365	5.10	336665	6.73	174381	8.02							
2M142638.D	AD19564-013	371751	5.10	331465	6.73	172689	8.02							
2M142639.D	AD19408-001(T)	366251	5.10	338507	6.73	172125	8.02							
2M142640.D	MBS89414	399723	5.10	362205	6.73	192446	8.02							
2M142641.D	AD19408-001(T)(MS)	337596	5.10	307733	6.73	166174	8.02							
2M142642.D	AD19408-001(T)(MSD	369999	5.10	334259	6.73	176105	8.02							
2M142643.D	BLK	362340	5.10	331944	6.73	166846	8.02							
2M142644.D	BLK	369671	5.10	336792	6.73	175220	8.02							
2M142645.D	AD19444-009	368992	5.10	339228	6.73	167527	8.02							
2M142646.D	AD19444-012	363124	5.10	331871	6.73	174133	8.02							
2M142647.D	AD19444-013	364460	5.10	329995	6.73	173985	8.02							
2M142648.D	AD19516-005	367447	5.10	330934	6.73	170666	8.02							
2M142649.D	AD19457-001(T)	379287	5.10	344235	6.73	178024	8.02							
2M142650.D	EF-1-V-335534(10022	364846	5.10	330486	6.73	168421	8.02							
2M142651.D	MBS89419	362498	5.10	329555	6.73	173601	8.02							
2M142652.D	BLK	381407	5.10	351089	6.73	179228	8.02							
2M142653.D	AD19516-007	383976	5.10	355823	6.73	183214	8.02							
2M142654.D	AD19516-011	380350	5.10	348468	6.73	181680	8.02							
2M142655.D	AD19516-013	417760	5.10	383486	6.73	193877	8.02							
2M142656.D	AD19516-015	363539	5.10	329989	6.73	166800	8.02							
2M142657.D	AD19544-001	364370	5.10	330869	6.73	172266	8.02							
2M142658.D	AD19544-003	360145	5.10	325821	6.73	163625	8.02							
2M142659.D	AD19544-005	355433	5.10	324970	6.73	167104	8.02							
2M142660.D	AD19544-011	380957	5.10	354955	6.73	189477	8.02							
2M142661.D	AD19544-007(10X)	365740	5.10	337442	6.73	175356	8.02							

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0092507 0122

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M142629.D Method: EPA 8260D

Analysis Date/Time: 10/02/20 09:58

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	340272	5.10	303585	6.73	163340	8.02								
Eval File Area Limit:	170136-680544		151792-607170		81670-326680									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									

Data File	Sample#													
2M142662.D	AD19544-009(20X)	360923	5.10	328034	6.73	168096	8.02							
2M142663.D	AD19516-009(5X)	372344	5.10	342515	6.73	181171	8.02							
2M142664.D	STD	373457	5.10	338175	6.73	181448	8.02							
2M142665.D	BLK	386464	5.10	349783	6.73	173281	8.02							
2M142666.D	BLK	372550	5.10	339160	6.73	174081	8.02							
2M142667.D	BLK	369609	5.10	332168	6.73	174153	8.02							
2M142668.D	BLK	376504	5.10	338557	6.73	171221	8.02							
2M142669.D	BLK	364809	5.10	332058	6.73	172684	8.02							
2M142670.D	BLK	392999	5.10	359591	6.73	186923	8.02							
2M142671.D	BLK	359291	5.10	327413	6.73	170512	8.02							
2M142672.D	BLK	364821	5.10	330342	6.73	166983	8.02							
2M142673.D	BLK	365030	5.10	336205	6.73	169069	8.02							
2M142674.D	BLK	364931	5.10	335729	6.73	170585	8.02							
2M142675.D	BLK	359330	5.10	327571	6.73	165599	8.02							
2M142676.D	BLK	353395	5.10	322748	6.73	157566	8.02							
2M142677.D	BLK	353849	5.10	322767	6.73	163566	8.02							
2M142678.D	BLK	352531	5.10	321569	6.73	163042	8.02							
2M142679.D	BLK	361305	5.10	325256	6.73	164113	8.02							

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

GC/MS Volatile Data
Sample Data

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-001
Client Id: DF-MW-2
Data File: 11M83292.D
Analysis Date: 09/28/20 18:40
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**4.1**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**5.7**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**2.0**
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**6.3**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

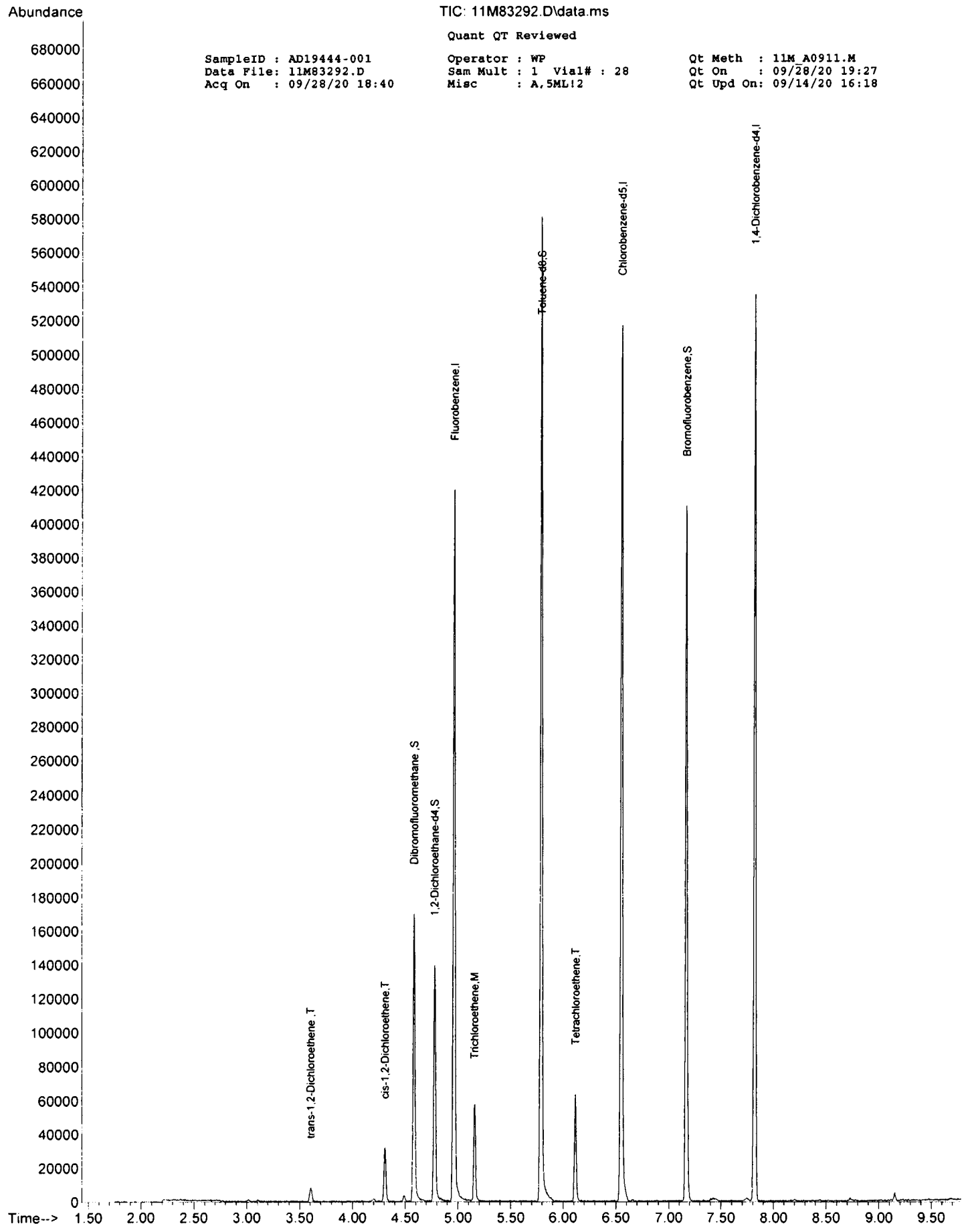
Quantitation Report (QT Reviewed)

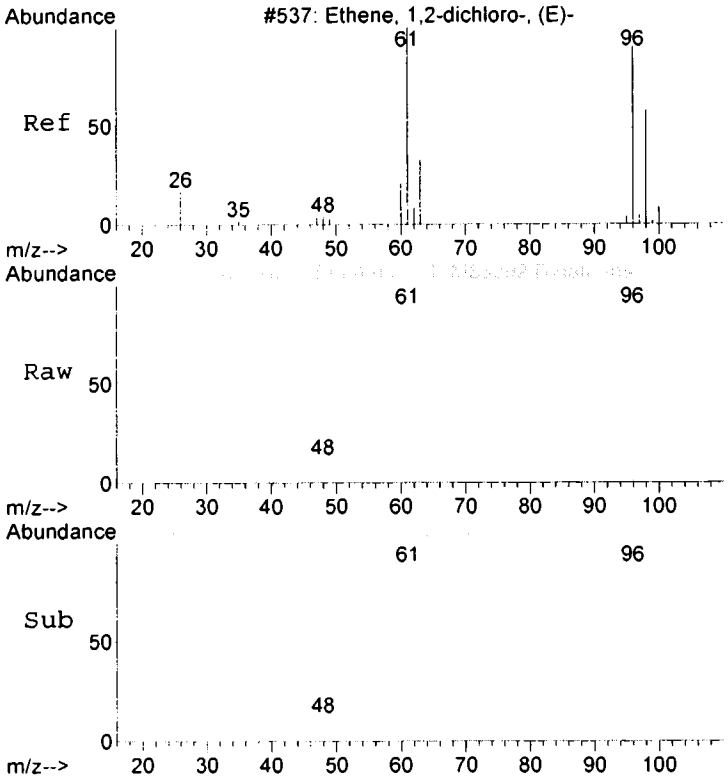
SampleID : AD19444-001 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83292.D Sam Mult : 1 Vial# : 28 Qt On : 09/28/20 19:27
Acq On : 09/28/20 18:40 Misc : A,5ML!2 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	269320	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.550	117	225380	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	106861	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	69469	30.94	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.13%			
39) 1,2-Dichloroethane-d4	4.778	67	34273	29.10	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.00%			
66) Toluene-d8	5.788	98	284192	28.83	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.10%			
76) Bromofluorobenzene	7.167	174	85202	31.63	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.43%			
Target Compounds						Qvalue
28) trans-1,2-Dichloroethene	3.604	96	3615	1.9697	ug/l	61
30) cis-1,2-Dichloroethene	4.308	61	12256	4.0575	ug/l	52
49) Trichloroethene	5.154	130	13337	6.2532	ug/l	93
65) Tetrachloroethene	6.115	164	10042	5.7050	ug/l	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

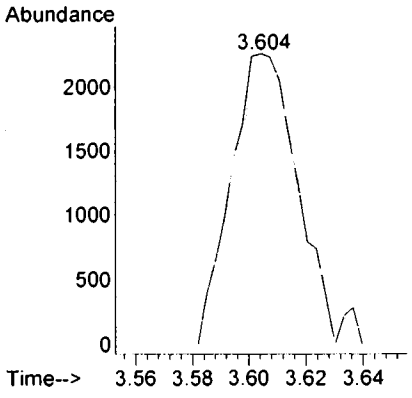

Abundance
TIC: 11M83292.D\data.ms
Quant QT Reviewed
SampleID : AD19444-001
Data File: 11M83292.D
Acq On : 09/28/20 18:40
Operator : WP
Sam Mult : 1 Vial# : 28
Misc : A,5ML!2
Qt Meth : 11M_A0911.M
Qt On : 09/28/20 19:27
Qt Upd On: 09/14/20 16:18
trans-1,2-Dichloroethene,T
cis-1,2-Dichloroethene,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

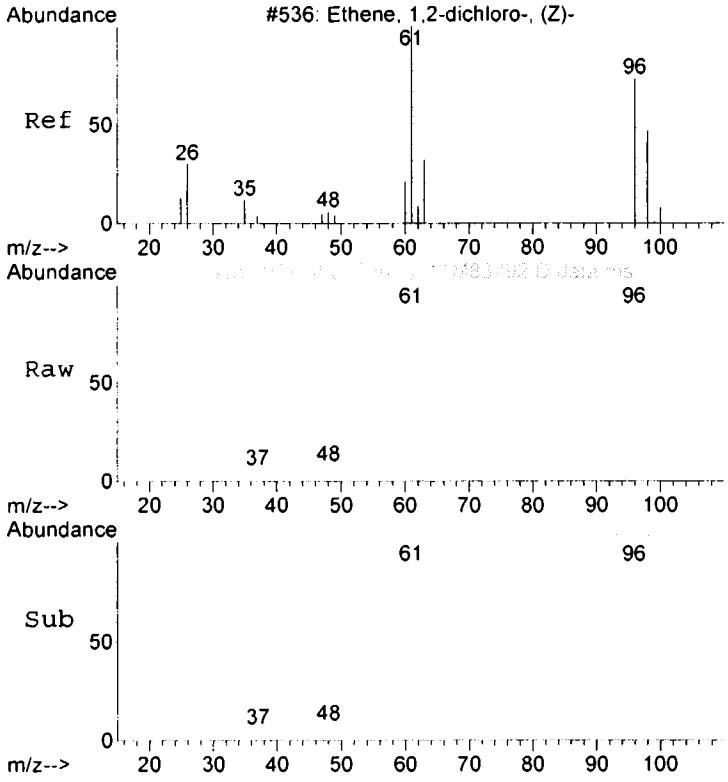


#28
trans-1,2-Dichloroethene
Concen: 1.97 ug/l
RT: 3.604 min Scan# 682
Delta R.T. 0.007 min
Lab File: 11M83292.D
Acq: 28 Sep 2020 18:40

Tgt Ion: 96 Resp: 3615

Ion	Ratio	Lower	Upper
96	100		
61	98.1	94.3	244.3
98	62.8	21.2	101.2

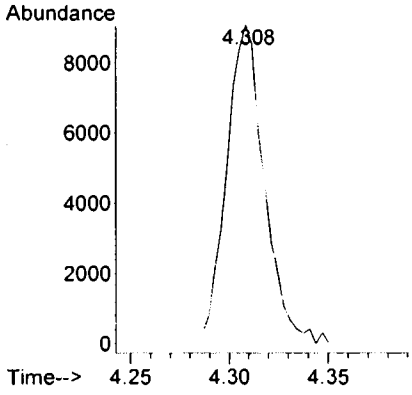


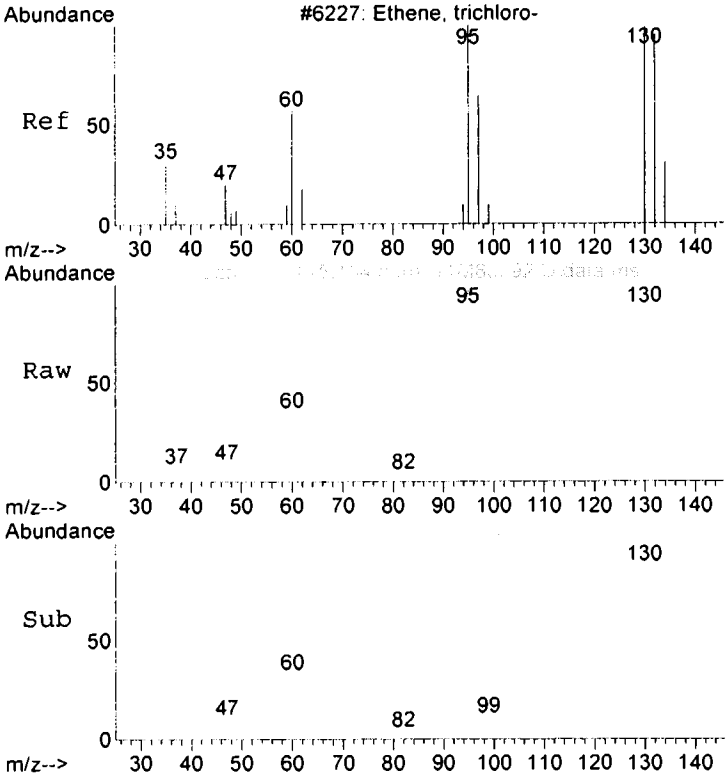


#30
cis-1,2-Dichloroethene
Concen: 4.06 ug/l
RT: 4.308 min Scan# 901
Delta R.T. 0.003 min
Lab File: 11M83292.D
Acq: 28 Sep 2020 18:40

Tgt Ion: 61 Resp: 12256

Ion	Ratio	Lower	Upper
61	100		
96	92.3	14.0	94.0
98	57.4	0.0	74.3

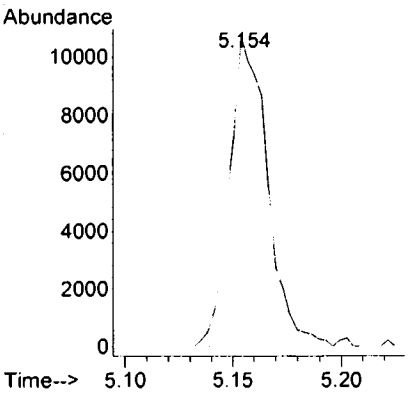


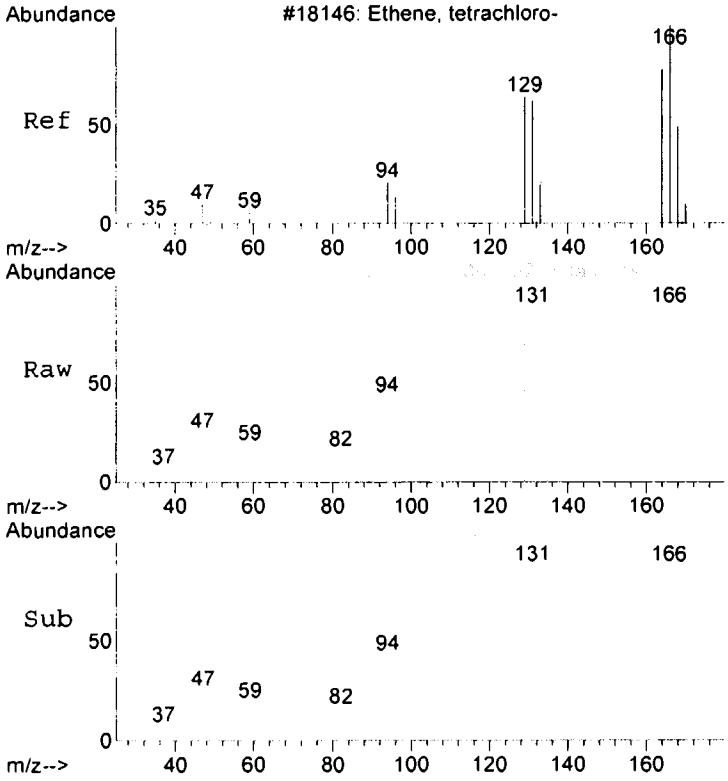


#49
Trichloroethene
Concen: 6.25 ug/l
RT: 5.154 min Scan# 1164
Delta R.T. -0.003 min
Lab File: 11M83292.D
Acq: 28 Sep 2020 18:40

Tgt Ion:130 Resp: 13337

Ion	Ratio	Lower	Upper
130	100		
132	91.0	61.6	141.6
95	102.6	49.9	149.9

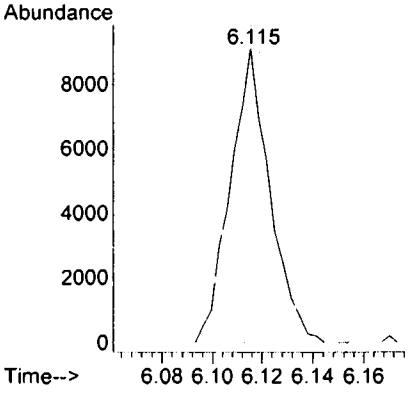




#65
Tetrachloroethene
Concen: 5.71 ug/l
RT: 6.115 min Scan# 1463
Delta R.T. 0.000 min
Lab File: 11M83292.D
Acq: 28 Sep 2020 18:40

Tgt Ion:164 Resp: 10042

Ion	Ratio	Lower	Upper
164	100		
166	108.0	60.8	200.8



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-002
Client Id: DF-MW-7
Data File: 11M83293.D
Analysis Date: 09/28/20 18:59
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**5.2**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**1.2**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

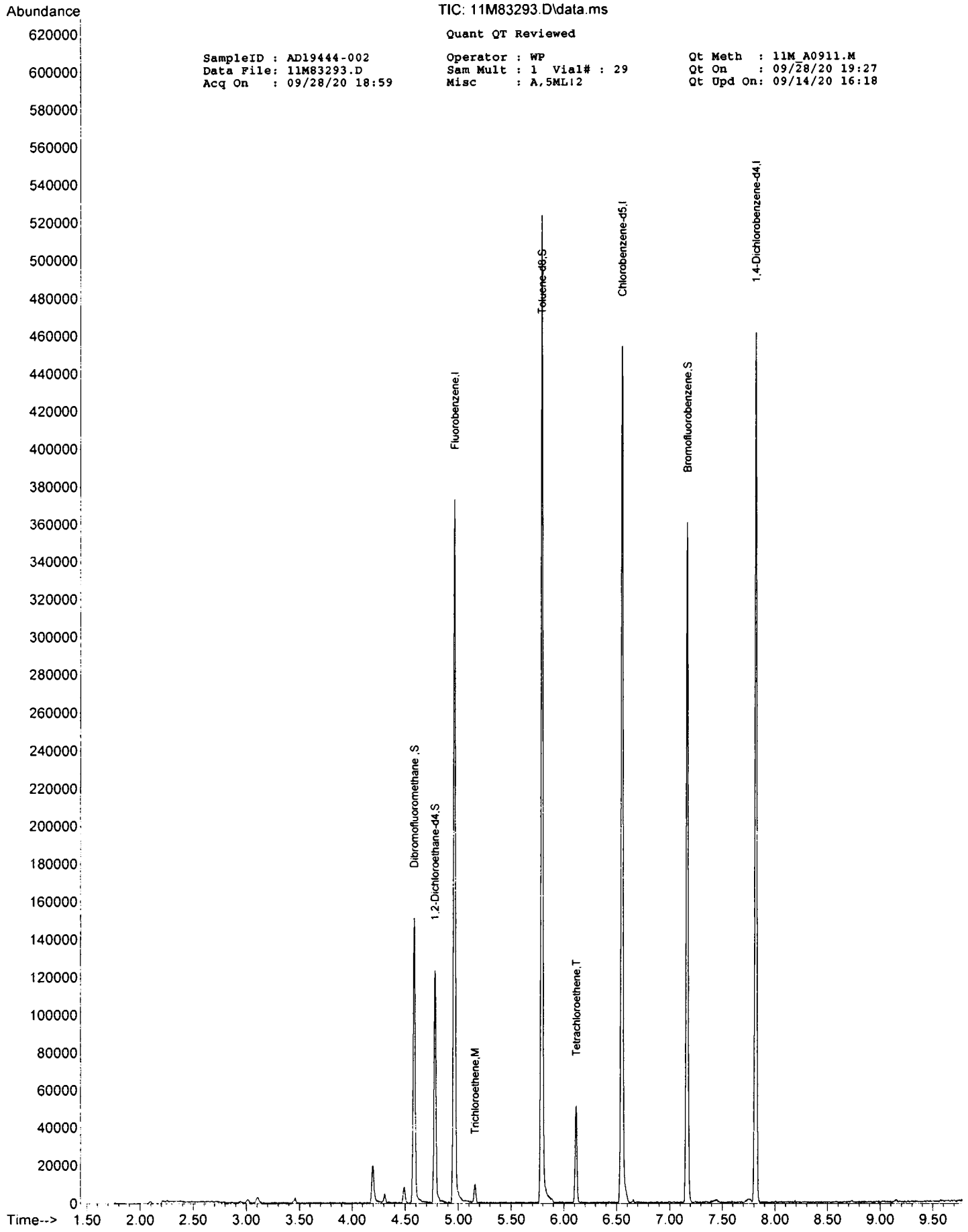
Quantitation Report (QT Reviewed)

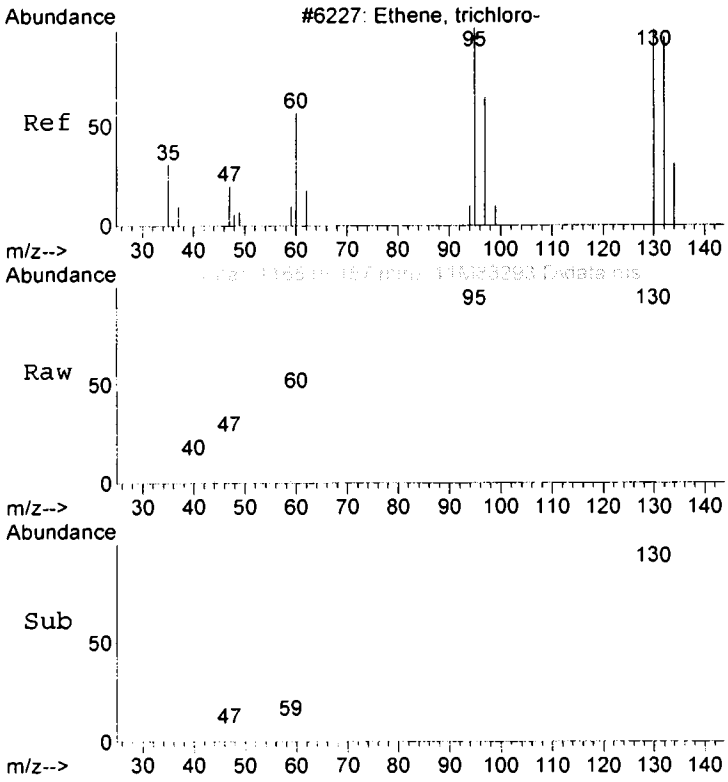
SampleID : AD19444-002 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83293.D Sam Mult : 1 Vial# : 29 Qt On : 09/28/20 19:27
Acq On : 09/28/20 18:59 Misc : A,5ML!2 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	237760	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.549	117	200287	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	92522	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	63596	32.09	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.97%			
39) 1,2-Dichloroethane-d4	4.778	67	29895	28.75	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.83%			
66) Toluene-d8	5.787	98	251272	28.69	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.63%			
76) Bromofluorobenzene	7.167	174	73496	31.51	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.03%			
Target Compounds						Qvalue
49) Trichloroethene	5.157	130	2234	1.1865	ug/l	92
65) Tetrachloroethene	6.115	164	8181	5.2301	ug/l	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

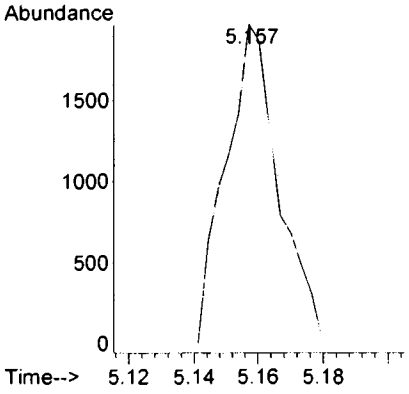

Abundance
TIC: 11M83293.D\data.ms
Quant QT Reviewed
SampleID : AD19444-002
Data File: 11M83293.D
Acq On : 09/28/20 18:59
Operator : WP
Sam Mult : 1 Vial# : 29
Misc : A,5ML;2
Qt Meth : 11M_A0911.M
Qt On : 09/28/20 19:27
Qt Upd On: 09/14/20 16:18
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

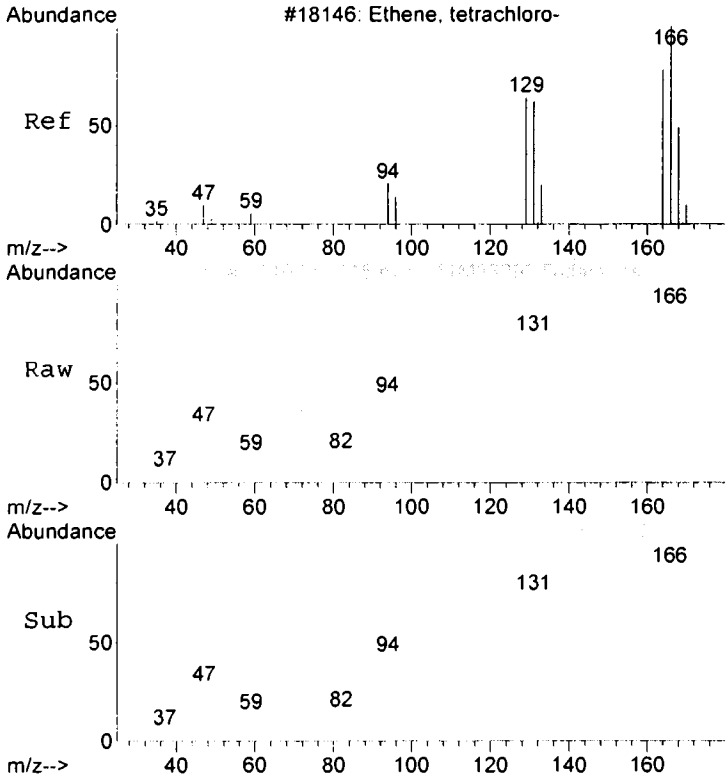


#49
Trichloroethene
Concen: 1.19 ug/l
RT: 5.157 min Scan# 1165
Delta R.T. 0.000 min
Lab File: 11M83293.D
Acq: 28 Sep 2020 18:59

Tgt Ion:130 Resp: 2234

Ion	Ratio	Lower	Upper
130	100		
132	91.1	61.6	141.6
95	93.7	49.9	149.9

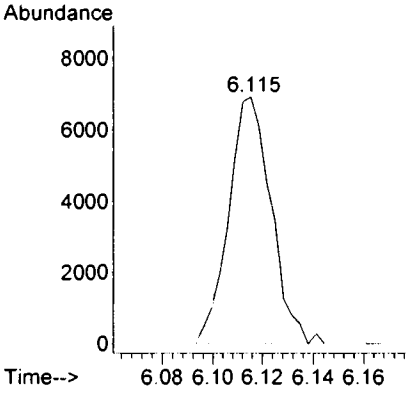




#65
Tetrachloroethene
Concen: 5.23 ug/l
RT: 6.115 min Scan# 1463
Delta R.T. 0.000 min
Lab File: 11M83293.D
Acq: 28 Sep 2020 18:59

Tgt Ion:164 Resp: 8181

Ion	Ratio	Lower	Upper
164	100		
166	126.4	60.8	200.8



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-003(5X)
Client Id: DF-MW-8
Data File: 2M142544.D
Analysis Date: 09/30/20 20:06
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 5.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	5.0	U	56-23-5	Carbon Tetrachloride	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	108-90-7	Chlorobenzene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	5.0	U	75-00-3	Chloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U	67-66-3	Chloroform	9.8	U
75-34-3	1,1-Dichloroethane	5.0	U	74-87-3	Chloromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**5.0**	**370**
96-18-4	1,2,3-Trichloropropane	5.0	U	10061-01-5	cis-1,3-Dichloropropene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U	124-48-1	Dibromochloromethane	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U	75-71-8	Dichlorodifluoromethane	5.0	U
107-06-2	1,2-Dichloroethane	3.2	U	100-41-4	Ethylbenzene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U	98-82-8	Isopropylbenzene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U	79601-23-1	m&p-Xylenes	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U	75-09-2	Methylene Chloride	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U	1634-04-4	Methyl-t-butyl ether	2.5	U
106-46-7	1,4-Dichlorobenzene	5.0	U	104-51-8	n-Butylbenzene	5.0	U
123-91-1	1,4-Dioxane	250	U	103-65-1	n-Propylbenzene	5.0	U
78-93-3	2-Butanone	5.0	U	95-47-6	o-Xylene	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	U	135-98-8	sec-Butylbenzene	5.0	U
591-78-6	2-Hexanone	5.0	U	100-42-5	Styrene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U	75-65-0	t-Butyl Alcohol	25	U
108-10-1	4-Methyl-2-Pentanone	5.0	U	98-06-6	t-Butylbenzene	5.0	U
67-64-1	Acetone	25	U	127-18-4	Tetrachloroethene	5.0	U
107-02-8	Acrolein	25	U	108-88-3	Toluene	5.0	U
107-13-1	Acrylonitrile	5.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**5.0**	**11**
71-43-2	Benzene	2.5	U	10061-02-6	trans-1,3-Dichloropropene	5.0	U
75-27-4	Bromodichloromethane	5.0	U	79-01-6	Trichloroethene	5.0	U
75-25-2	Bromoform	5.0	U	75-69-4	Trichlorofluoromethane	5.0	U
74-83-9	Bromomethane	5.0	U	**75-01-4**	**Vinyl Chloride**	**5.0**	**15**
75-15-0	Carbon Disulfide	5.0	U	1330-20-7	Xylenes (Total)	5.0	U

Worksheet #: 568732 *Total Target Concentration* 400 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

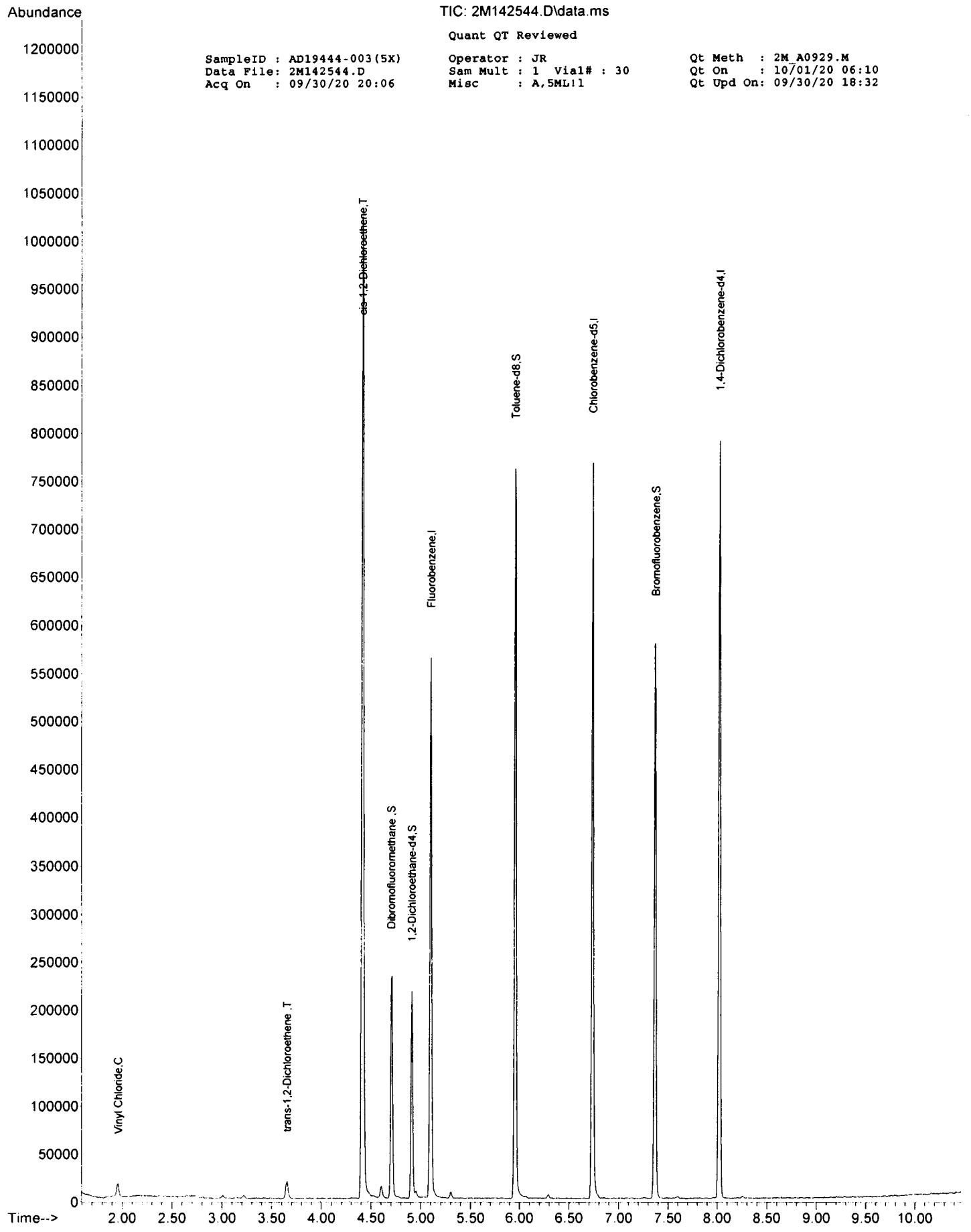
Quantitation Report (QT Reviewed)

SampleID : AD19444-003(5X) Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142544.D Sam Mult : 1 Vial# : 30 Qt On : 10/01/20 06:10
Acq On : 09/30/20 20:06 Misc : A,5ML!1 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	342967	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	307344	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	153857	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.703	111	97881	29.79	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.30%			
39) 1,2-Dichloroethane-d4	4.910	67	50266	29.63	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.77%			
66) Toluene-d8	5.952	98	364236	30.29	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.97%			
76) Bromofluorobenzene	7.367	174	127494	31.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.17%			
Target Compounds						Qvalue
9) Vinyl Chloride	1.959	62	12402	2.9113	ug/l	96
28) trans-1,2-Dichloroethene	3.654	96	6881	2.1155	ug/l	92
30) cis-1,2-Dichloroethene	4.410	61	408675	74.7553	ug/l	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M142544.D\data.ms
Quant QT Reviewed
SampleID : AD19444-003(5X)
Data File: 2M142544.D
Acq On : 09/30/20 20:06
Operator : JR
Sam Mult : 1 Vial# : 30
Misc : A,5ML!1
Qt Meth : 2M_A0929.M
Qt On : 10/01/20 06:10
Qt Upd On: 09/30/20 18:32
1200000
1150000
1100000
1050000
1000000
950000
900000
850000
800000
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
Vinyl Chloride,C
trans-1,2-Dichloroethene,T
cis-1,2-Dichloroethene,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->
2.00
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
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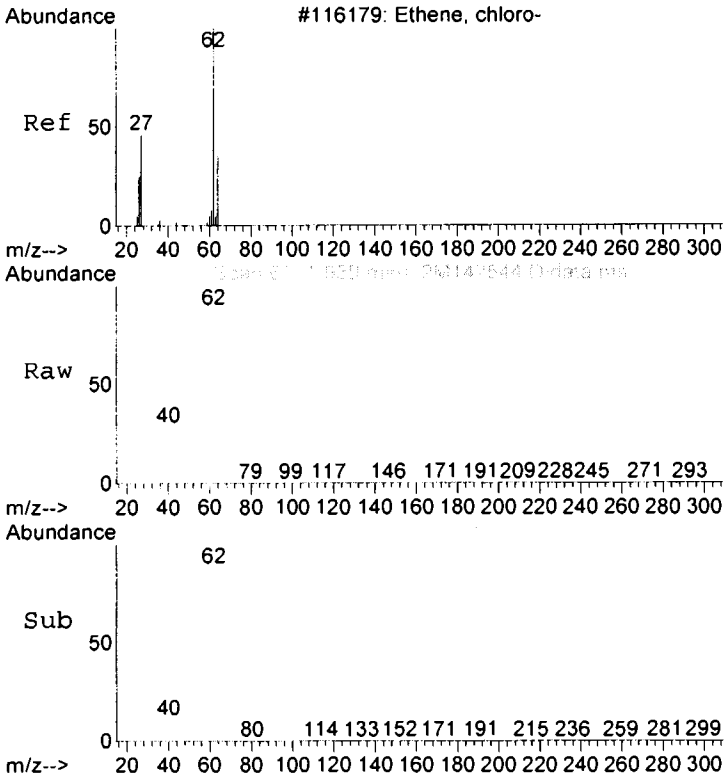
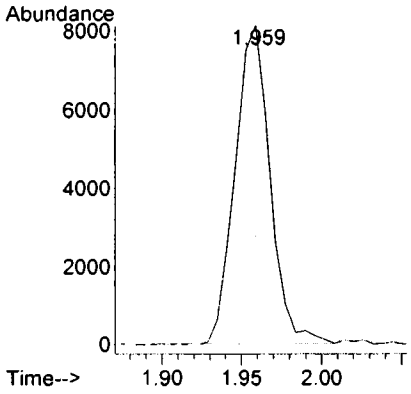
9.00
9.50
10.00

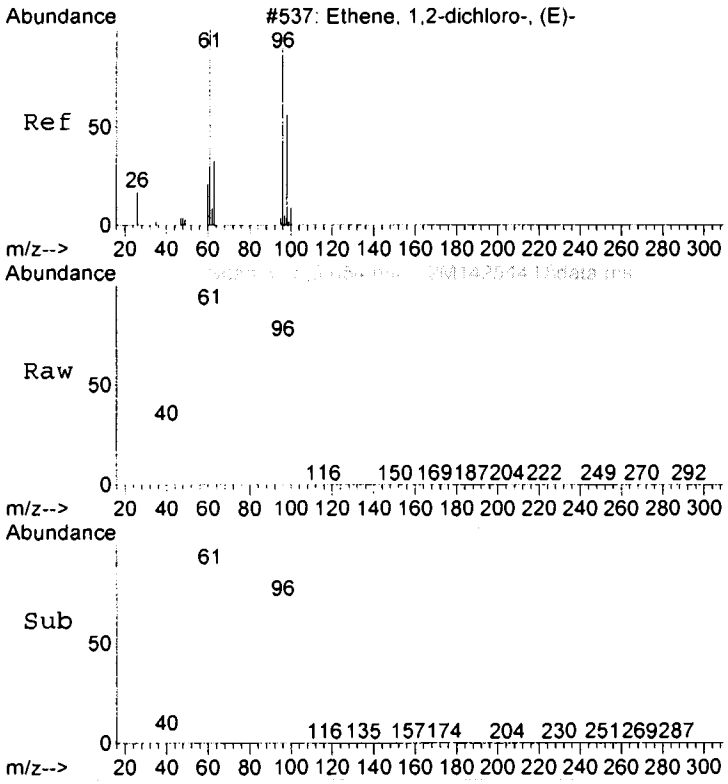


#9
Vinyl Chloride
Concen: 2.91 ug/l
RT: 1.959 min Scan# 61
Delta R.T. 0.006 min
Lab File: 2M142544.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 62 Resp: 12402

Ion	Ratio	Lower	Upper
62	100		
64	33.6	0.0	71.2

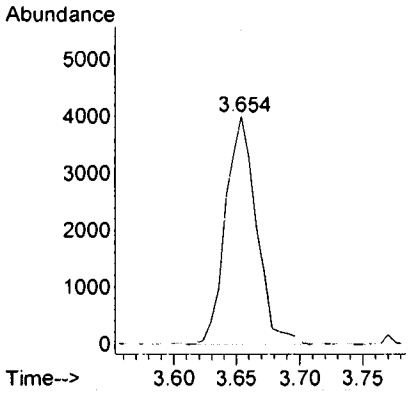


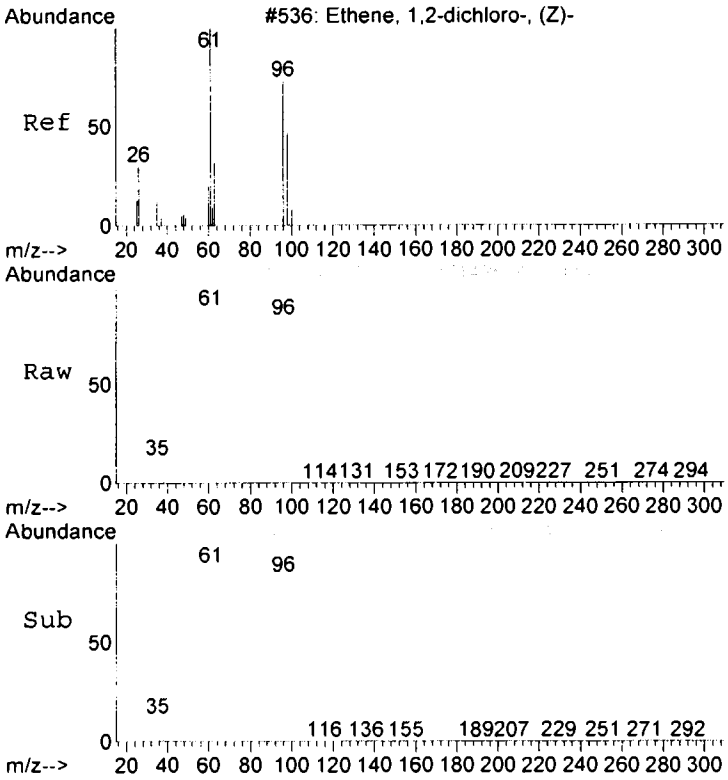


#28
trans-1,2-Dichloroethene
Concen: 2.12 ug/l
RT: 3.654 min Scan# 339
Delta R.T. 0.000 min
Lab File: 2M142544.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 96 Resp: 6881

Ion	Ratio	Lower	Upper
96	100		
61	138.9	51.5	201.5
98	62.1	23.0	103.0

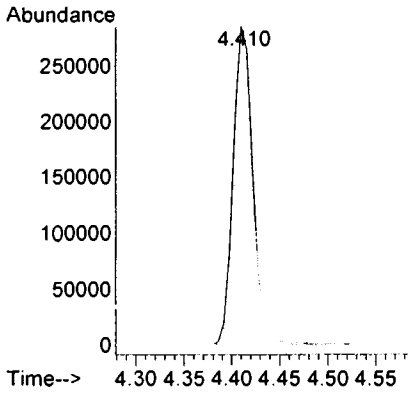




#30
cis-1,2-Dichloroethene
Concen: 74.76 ug/l
RT: 4.410 min Scan# 463
Delta R.T. 0.000 min
Lab File: 2M142544.D
Acq: 30 Sep 2020 20:06

Tgt Ion: 61 Resp: 408675

Ion	Ratio	Lower	Upper
61	100		
96	82.8	38.2	118.2
98	53.5	7.8	87.8



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-004
Client Id: DF-MW-9
Data File: 2M142588.D
Analysis Date: 10/01/20 12:42
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**1.2**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**1.1**
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**5.2**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 568735 *Total Target Concentration* 7.5 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

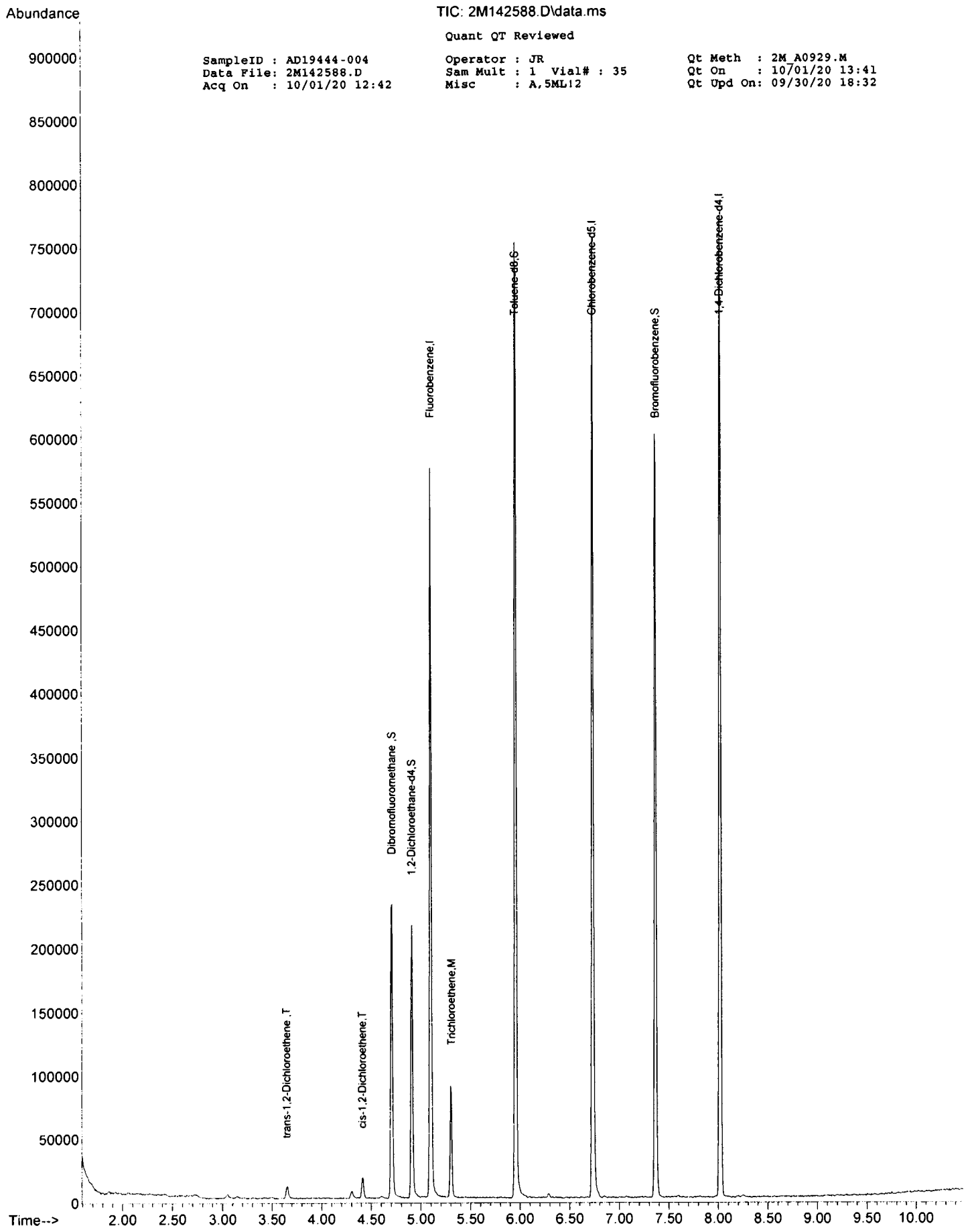
Quantitation Report (QT Reviewed)

SampleID : AD19444-004 Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142588.D Sam Mult : 1 Vial# : 35 Qt On : 10/01/20 13:41
Acq On : 10/01/20 12:42 Misc : A,5ML!2 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-3020\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	339532	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	305664	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	153234	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	98341	30.23	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.77%			
39) 1,2-Dichloroethane-d4	4.910	67	50710	30.19	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.63%			
66) Toluene-d8	5.952	98	359920	30.09	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.30%			
76) Bromofluorobenzene	7.367	174	128519	31.93	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.43%			
Target Compounds						Qvalue
28) trans-1,2-Dichloroethene	3.648	96	3649	1.1332	ug/l	89
30) cis-1,2-Dichloroethene	4.410	61	6689	1.2359	ug/l	90
49) Trichloroethene	5.306	130	18693	5.2071	ug/l	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M142588.D\data.ms
Quant QT Reviewed
SampleID : AD19444-004
Data File: 2M142588.D
Acq On : 10/01/20 12:42
Operator : JR
Sam Mult : 1 Vial# : 35
Misc : A,5ML12
Qt Meth : 2M_A0929.M
Qt On : 10/01/20 13:41
Qt Upd On: 09/30/20 18:32
900000
850000
800000
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
trans-1,2-Dichloroethene,T
cis-1,2-Dichloroethene,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->
2.00
2.50
3.00
3.50
4.00
4.50
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5.50
6.00
6.50
7.00
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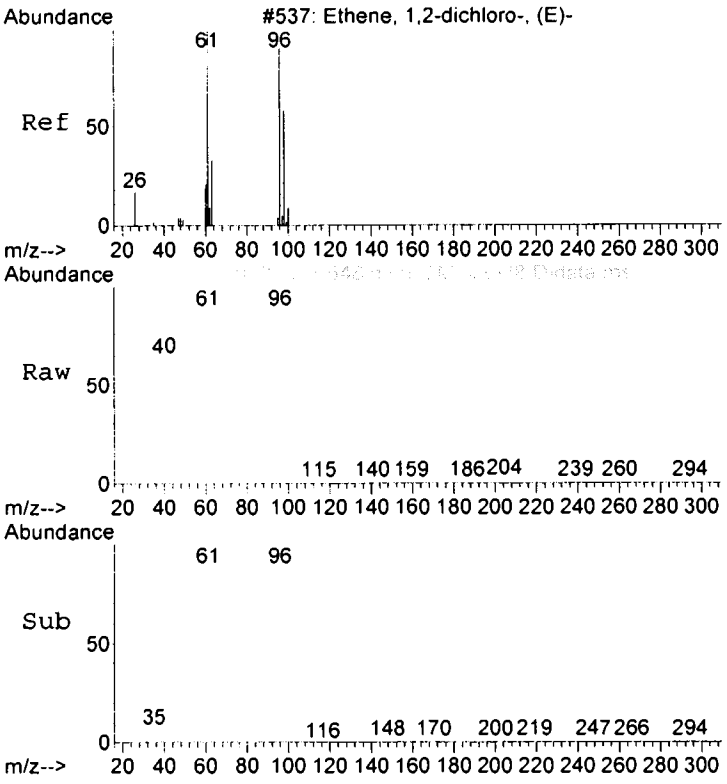
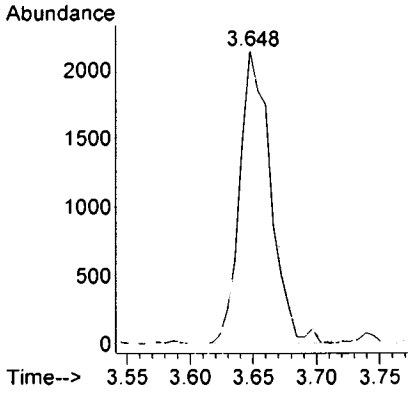
8.00
8.50
9.00
9.50
10.00

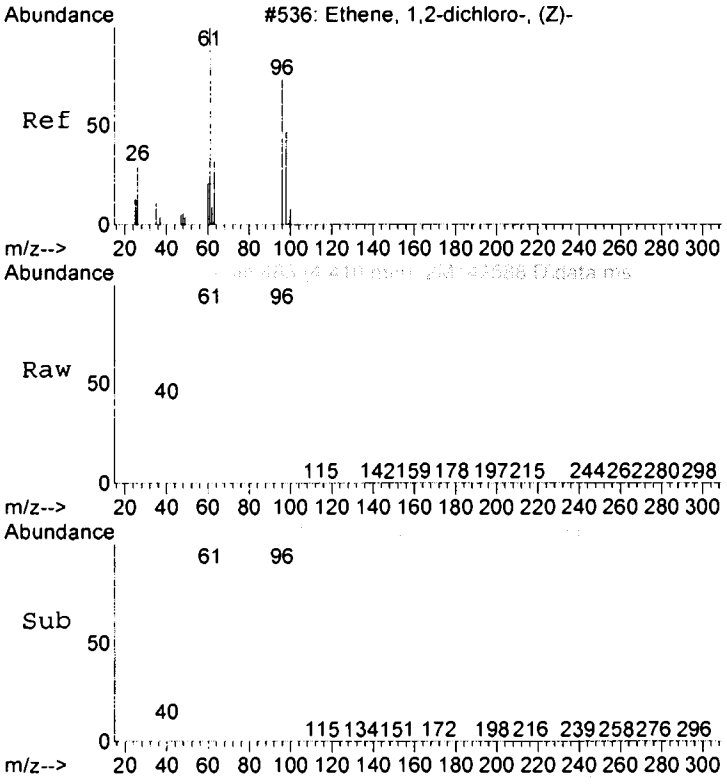


#28
trans-1,2-Dichloroethene
Concen: 1.13 ug/l
RT: 3.648 min Scan# 338
Delta R.T. -0.006 min
Lab File: 2M142588.D
Acq: 01 Oct 2020 12:42

Tgt Ion: 96 Resp: 3649

Ion	Ratio	Lower	Upper
96	100		
61	108.4	51.5	201.5
98	62.9	23.0	103.0

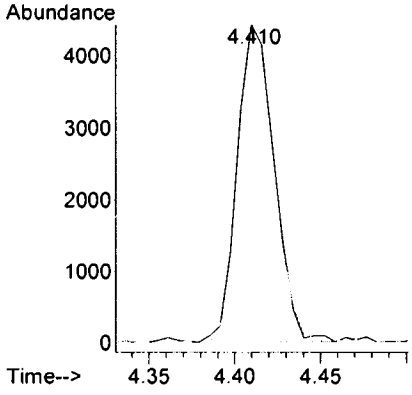


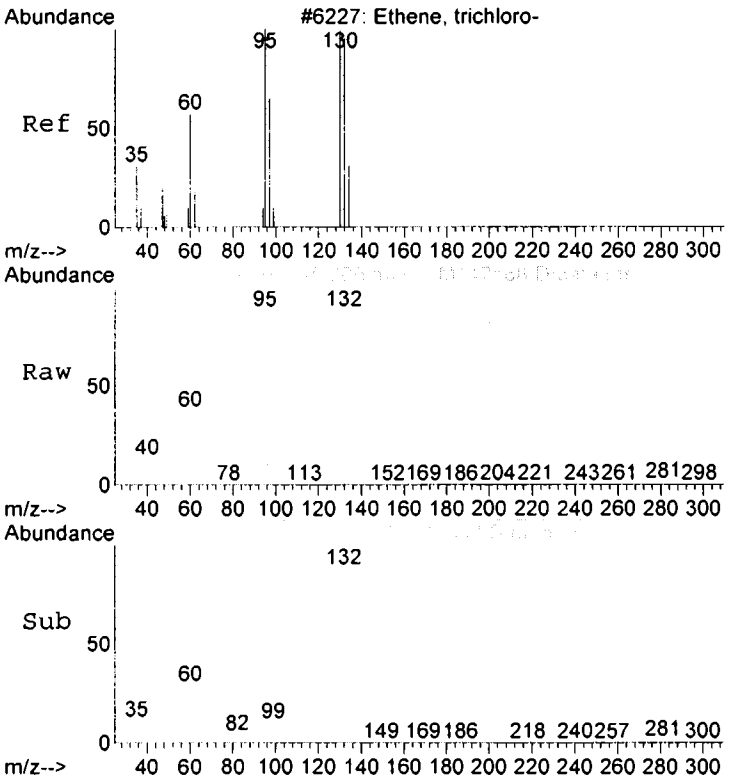


#30
cis-1,2-Dichloroethene
Concen: 1.24 ug/l
RT: 4.410 min Scan# 463
Delta R.T. -0.000 min
Lab File: 2M142588.D
Acq: 01 Oct 2020 12:42

Tgt Ion: 61 Resp: 6689

Ion	Ratio	Lower	Upper
61	100		
96	91.4	38.2	118.2
98	48.4	7.8	87.8

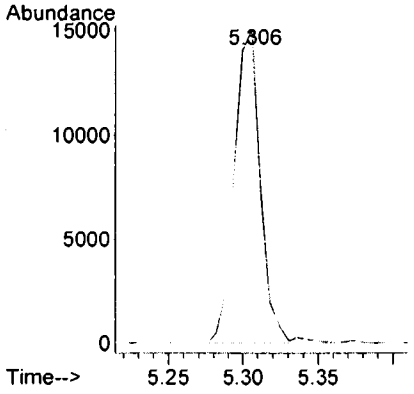




#49
Trichloroethene
Concen: 5.21 ug/l
RT: 5.306 min Scan# 610
Delta R.T. 0.006 min
Lab File: 2M142588.D
Acq: 01 Oct 2020 12:42

Tgt Ion:130 Resp: 18693

Ion	Ratio	Lower	Upper
130	100		
132	101.5	56.0	136.0
95	89.2	39.3	139.3



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-005
Client Id: DF-MW-10
Data File: 11M83275.D
Analysis Date: 09/28/20 13:23
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**22**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**2.0**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**3.9**
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**14**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	**75-01-4**	**Vinyl Chloride**	**1.0**	**1.7**
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

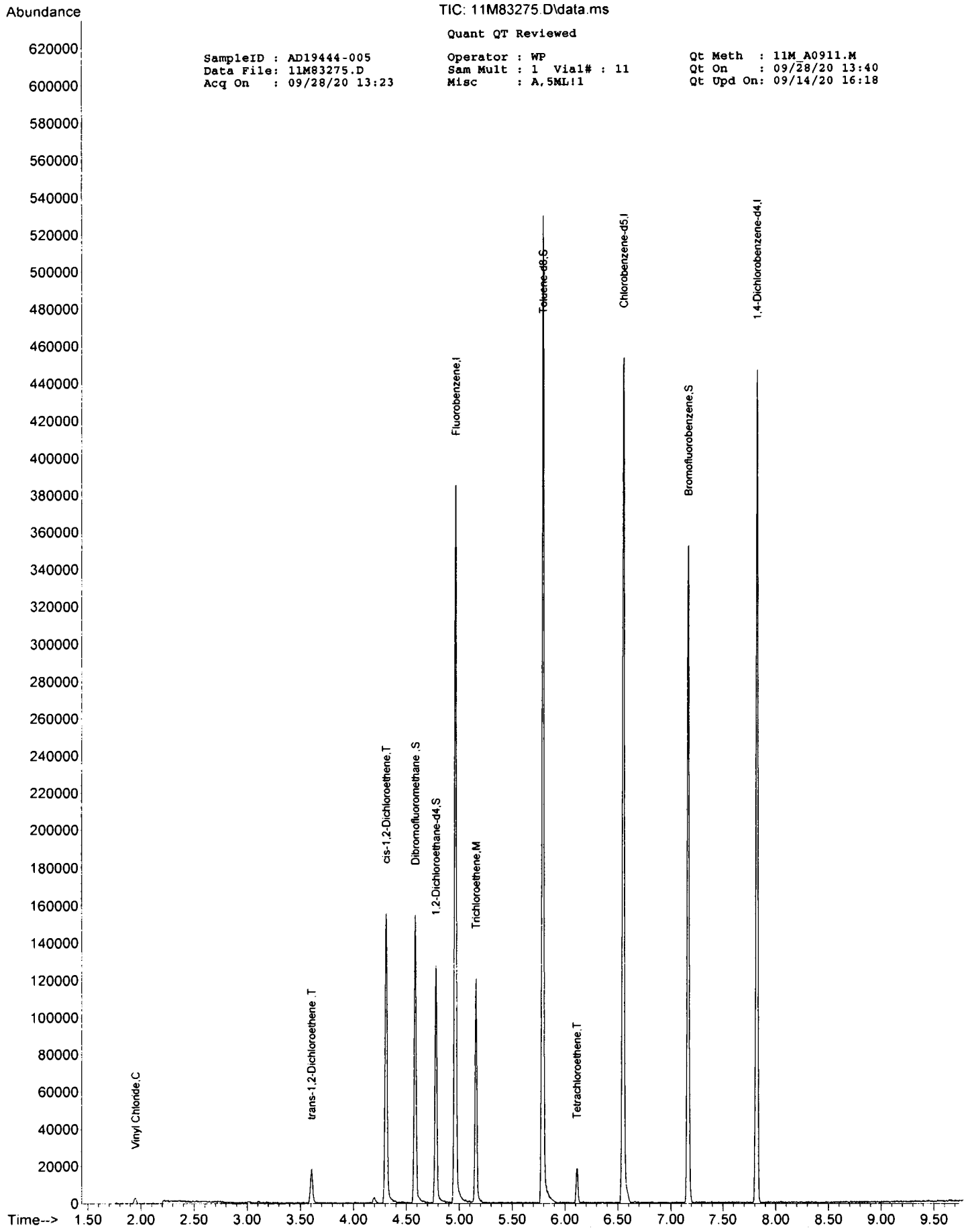
Quantitation Report (QT Reviewed)

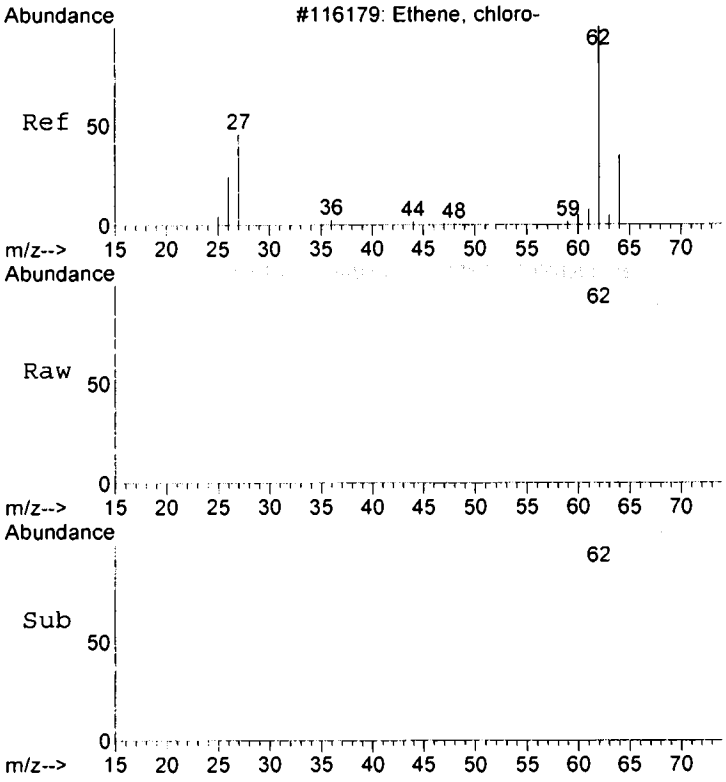
SampleID : AD19444-005 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83275.D Sam Mult : 1 Vial# : 11 Qt On : 09/28/20 13:40
Acq On : 09/28/20 13:23 Misc : A,5ML!1 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	242536	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.549	117	196054	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	88261	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	60720	30.03	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.10%			
39) 1,2-Dichloroethane-d4	4.778	67	30800	29.04	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.80%			
66) Toluene-d8	5.787	98	248335	28.96	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.53%			
76) Bromofluorobenzene	7.167	174	71904	32.32	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.73%			
Target Compounds						Qvalue
9) Vinyl Chloride	1.949	62	3076	1.7444	ug/l	83
28) trans-1,2-Dichloroethene	3.604	96	6446	3.9000	ug/l	70
30) cis-1,2-Dichloroethene	4.308	61	60339	22.1821	ug/l	52
49) Trichloroethene	5.157	130	26499	13.7964	ug/l	97
65) Tetrachloroethene	6.112	164	3028	1.9776	ug/l	73

(#) = qualifier out of range (m) = manual integration (+) = signals summed

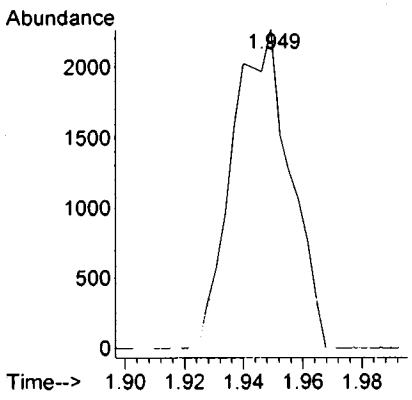

Abundance
TIC: 11M83275.D\data.ms
Quant QT Reviewed
SampleID : AD19444-005
Data File: 11M83275.D
Acq On : 09/28/20 13:23
Operator : WP
Sam Mult : 1 Vial# : 11
Misc : A,5ML;1
Qt Meth : 11M_A0911.M
Qt On : 09/28/20 13:40
Qt Upd On: 09/14/20 16:18
Vinyl Chloride,C
trans-1,2-Dichloroethene,T
cis-1,2-Dichloroethene,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

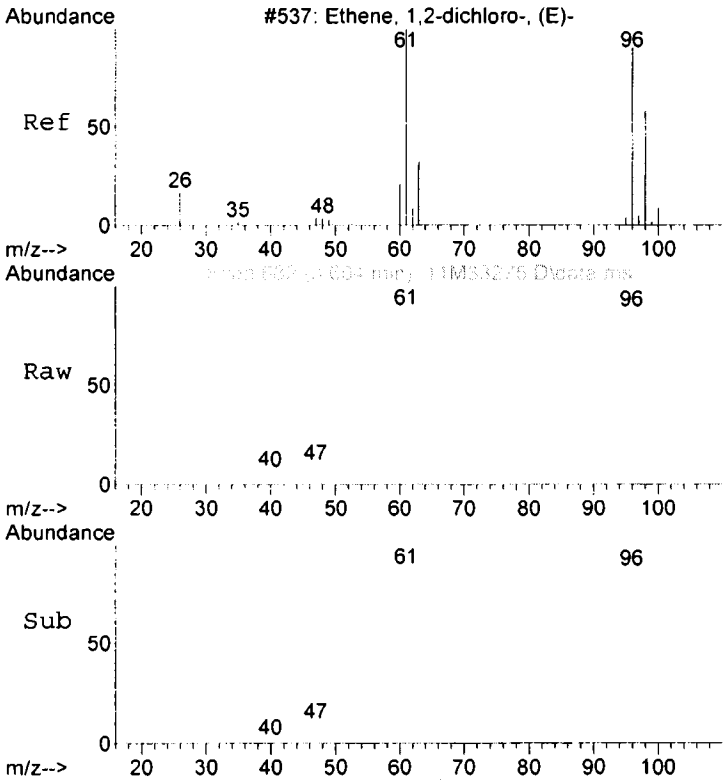


#9
Vinyl Chloride
Concen: 1.74 ug/l
RT: 1.949 min Scan# 166
Delta R.T. 0.012 min
Lab File: 11M83275.D
Acq: 28 Sep 2020 13:23

Tgt Ion: 62 Resp: 3076

Ion	Ratio	Lower	Upper
62	100		
64	18.8	0.0	68.0

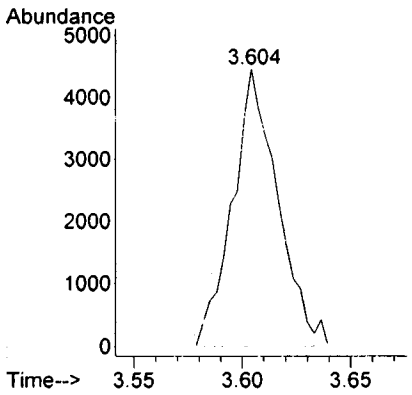


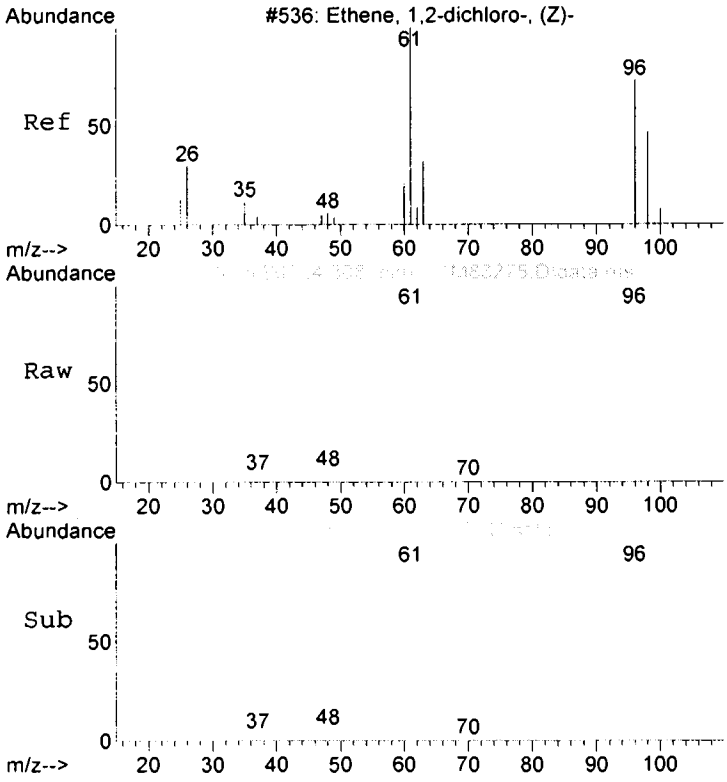


#28
trans-1,2-Dichloroethene
Concen: 3.90 ug/l
RT: 3.604 min Scan# 682
Delta R.T. 0.006 min
Lab File: 11M83275.D
Acq: 28 Sep 2020 13:23

Tgt Ion: 96 Resp: 6446

Ion	Ratio	Lower	Upper
96	100		
61	114.6	94.3	244.3
98	58.7	21.2	101.2

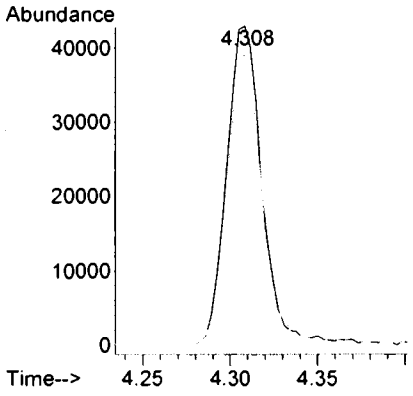


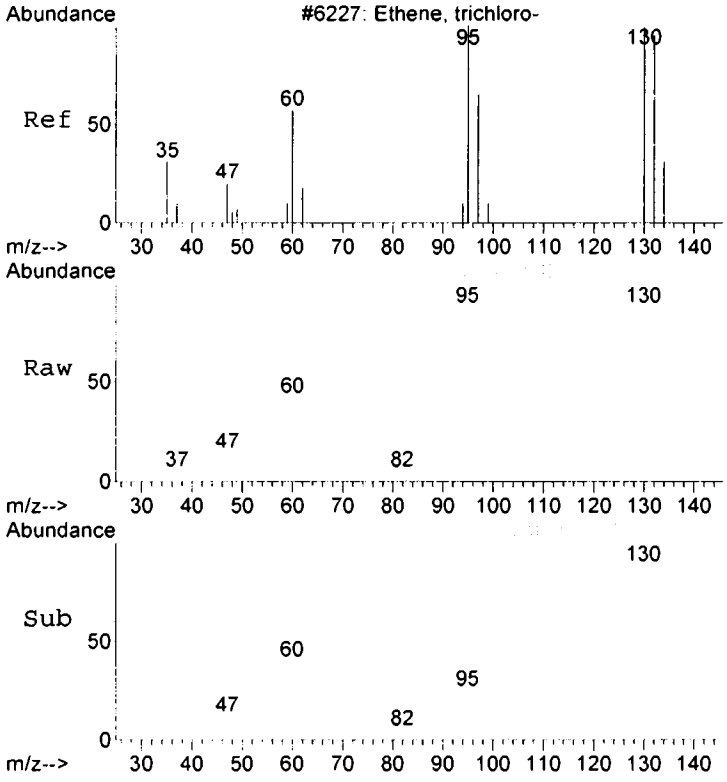


#30
cis-1,2-Dichloroethene
Concen: 22.18 ug/l
RT: 4.308 min Scan# 901
Delta R.T. 0.003 min
Lab File: 11M83275.D
Acq: 28 Sep 2020 13:23

Tgt Ion: 61 Resp: 60339

Ion	Ratio	Lower	Upper
61	100		
96	91.5	14.0	94.0
98	58.4	0.0	74.3

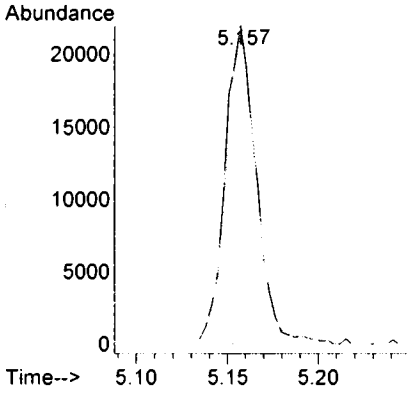


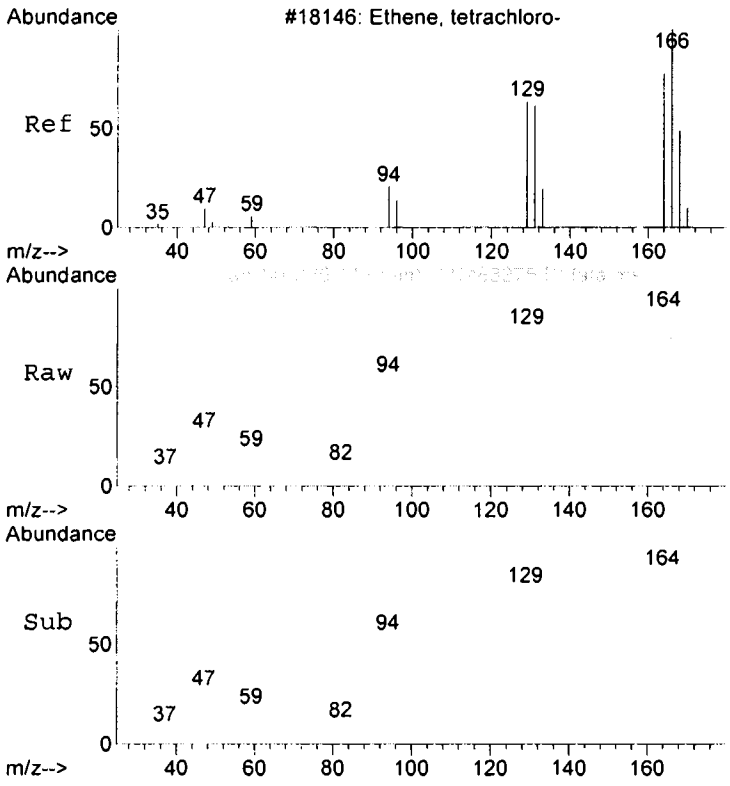


#49
Trichloroethene
Concen: 13.80 ug/l
RT: 5.157 min Scan# 1165
Delta R.T. 0.000 min
Lab File: 11M83275.D
Acq: 28 Sep 2020 13:23

Tgt Ion:130 Resp: 26499

Ion	Ratio	Lower	Upper
130	100		
132	97.2	61.6	141.6
95	99.2	49.9	149.9

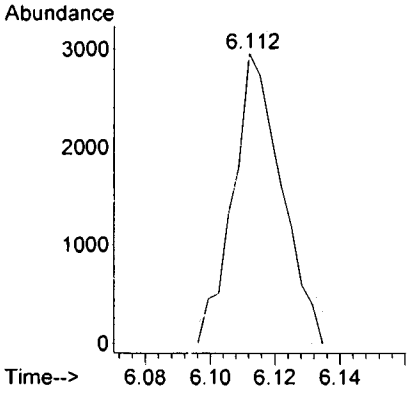




#65
Tetrachloroethene
Concen: 1.98 ug/l
RT: 6.112 min Scan# 1462
Delta R.T. -0.003 min
Lab File: 11M83275.D
Acq: 28 Sep 2020 13:23

Tgt Ion:164 Resp: 3028

Ion	Ratio	Lower	Upper
164	100		
166	99.1	60.8	200.8



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-006(MS:AD19
Client Id: DF-MW-10 MS
Data File: 11M83277.D
Analysis Date: 09/28/20 14:00
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	21	56-23-5	Carbon Tetrachloride	1.0	22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	20	108-90-7	Chlorobenzene	1.0	19
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	22	75-00-3	Chloroethane	1.0	23
79-00-5	1,1,2-Trichloroethane	1.0	19	67-66-3	Chloroform	2.0	21
75-34-3	1,1-Dichloroethane	1.0	20	74-87-3	Chloromethane	1.0	20
75-35-4	1,1-Dichloroethene	1.0	22	156-59-2	cis-1,2-Dichloroethene	1.0	44
96-18-4	1,2,3-Trichloropropane	1.0	20	10061-01-5	cis-1,3-Dichloropropene	1.0	20
95-63-6	1,2,4-Trimethylbenzene	1.0	19	124-48-1	Dibromochloromethane	1.0	21
95-50-1	1,2-Dichlorobenzene	1.0	19	75-71-8	Dichlorodifluoromethane	1.0	17
107-06-2	1,2-Dichloroethane	0.64	19	100-41-4	Ethylbenzene	1.0	20
78-87-5	1,2-Dichloropropane	1.0	20	98-82-8	Isopropylbenzene	1.0	21
108-67-8	1,3,5-Trimethylbenzene	1.0	20	79601-23-1	m&p-Xylenes	1.0	41
541-73-1	1,3-Dichlorobenzene	1.0	19	75-09-2	Methylene Chloride	1.0	20
142-28-9	1,3-Dichloropropane	1.0	19	1634-04-4	Methyl-t-butyl ether	0.50	21
106-46-7	1,4-Dichlorobenzene	1.0	19	104-51-8	n-Butylbenzene	1.0	21
123-91-1	1,4-Dioxane	50	1600	103-65-1	n-Propylbenzene	1.0	21
78-93-3	2-Butanone	1.0	19	95-47-6	o-Xylene	1.0	20
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	20
591-78-6	2-Hexanone	1.0	19	100-42-5	Styrene	1.0	20
99-87-6	4-Isopropyltoluene	1.0	20	75-65-0	t-Butyl Alcohol	5.0	130
108-10-1	4-Methyl-2-Pentanone	1.0	19	98-06-6	t-Butylbenzene	1.0	20
67-64-1	Acetone	5.0	91	127-18-4	Tetrachloroethene	1.0	22
107-02-8	Acrolein	5.0	100	108-88-3	Toluene	1.0	20
107-13-1	Acrylonitrile	1.0	21	156-60-5	trans-1,2-Dichloroethene	1.0	25
71-43-2	Benzene	0.50	21	10061-02-6	trans-1,3-Dichloropropene	1.0	20
75-27-4	Bromodichloromethane	1.0	21	79-01-6	Trichloroethene	1.0	35
75-25-2	Bromoform	1.0	20	75-69-4	Trichlorofluoromethane	1.0	24
74-83-9	Bromomethane	1.0	22	75-01-4	Vinyl Chloride	1.0	25
75-15-0	Carbon Disulfide	1.0	23	1330-20-7	Xylenes (Total)	1.0	61

Worksheet #: 568732

Total Target Concentration 3000

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AD19444-006(MS:AD19 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83277.D Sam Mult : 1 Vial# : 13 Qt On : 09/28/20 14:25
Acq On : 09/28/20 14:00 Misc : A,5ML!1 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	249397	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.549	117	200720	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	101064	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	64750	31.14	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.80%			
39) 1,2-Dichloroethane-d4	4.778	67	31317	28.71	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.70%			
66) Toluene-d8	5.787	98	256117	29.18	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.27%			
76) Bromofluorobenzene	7.167	174	78795	30.93	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.10%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	39659	17.7876	ug/l	54
6) Dichlorodifluoromethane	1.672	85	23308	17.4028	ug/l	99
7) Chloromethane	1.844	50	28583	20.2743	ug/l	99
8) Bromomethane	2.241	94	31496	21.5621	ug/l	97
9) Vinyl Chloride	1.943	62	45072	24.8567	ug/l	91
10) Chloroethane	2.328	64	28844	23.4261	ug/l	97
11) Trichlorofluoromethane	2.550	101	71854	23.9721	ug/l	99
12) Ethyl ether	2.781	59	21337	20.8081	ug/l	60
13) Furan	2.820	39	36774m	19.3463	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.974	101	27088	22.3824	ug/l	96
15) Methylene Chloride	3.373	84	35327	19.5976	ug/l	51
16) Acrolein	2.887	56	22476	104.7156	ug/l	92
17) Acrylonitrile	3.572	53	11201	20.6733	ug/l	79
18) Iodomethane	3.119	142	33936	19.9360	ug/l	88
19) Acetone	3.009	43	39137	91.1837	ug/l	93
20) Carbon Disulfide	3.186	76	95179	23.2062	ug/l	100
21) t-Butyl Alcohol	3.434	59	13741	132.1803	ug/l	99
22) n-Hexane	3.813	57	29142	22.8418	ug/l	88
23) Di-isopropyl-ether	3.955	45	70421	19.9274	ug/l	57
24) 1,1-Dichloroethene	2.984	61	48668	22.0424	ug/l	69
25) Methyl Acetate	3.280	43	19046	21.1922	ug/l	100
26) Methyl-t-butyl ether	3.595	73	78870	20.6790	ug/l	83
27) 1,1-Dichloroethane	3.926	63	57764	20.1569	ug/l	100
28) trans-1,2-Dichloroethene	3.607	96	43334	25.4973	ug/l	69
29) Ethyl-t-butyl ether	4.196	59	76609	19.7556	ug/l	86
30) cis-1,2-Dichloroethene	4.308	61	121988	43.6120	ug/l	60
31) Bromochloromethane	4.456	49	24387	20.5780	ug/l	32
32) 2,2-Dichloropropane	4.315	77	53065	23.4365	ug/l	90
33) Ethyl acetate	4.328	43	28360m	20.2099	ug/l	
34) 1,4-Dioxane	5.334	88	24148	1565.4106	ug/l	69
35) 1,1-Dichloropropene	4.701	75	52300	21.0418	ug/l	95
36) Chloroform	4.492	83	65265	20.6245	ug/l	97
38) Cyclohexane	4.652	56	45592m	21.8072	ug/l	
40) 1,2-Dichloroethane	4.820	62	47014	19.2524	ug/l	91
41) 2-Butanone	4.302	43	11235	18.7391	ug/l	59
42) 1,1,1-Trichloroethane	4.614	97	61037	21.3523	ug/l	95
43) Carbon Tetrachloride	4.707	117	53486	22.2655	ug/l	99
44) Vinyl Acetate	3.945	43	84543	20.2779	ug/l	100
45) Bromodichloromethane	5.411	83	49018	20.5372	ug/l	99
46) Methylcyclohexane	5.267	83	45016	22.7907	ug/l	70
47) Dibromomethane	5.344	174	23652	20.5197	ug/l	97
48) 1,2-Dichloropropane	5.279	63	33851	20.4779	ug/l	97
49) Trichloroethene	5.157	130	69531	35.2046	ug/l	95
50) Benzene	4.820	78	148123	20.9878	ug/l	100
51) tert-Amyl methyl ether	4.855	73	83543	21.6003	ug/l	94
53) Iso-propylacetate	4.813	43	44598	20.0521	ug/l	78
54) Methyl methacrylate	5.299	41	24971m	18.5848	ug/l	
55) Dibromochloromethane	6.238	129	38435	20.5864	ug/l	100
57) cis-1,3-Dichloropropene	5.640	75	54218	20.4173	ug/l	95
58) trans-1,3-Dichloropropene	5.916	75	51189	20.2921	ug/l	97
59) Ethyl methacrylate	5.932	41	23114m	19.8567	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	33437	18.8234	ug/l	85
61) 1,2-Dibromoethane	6.315	107	36120	19.2695	ug/l	94
62) 1,3-Dichloropropane	6.112	76	56399	19.2176	ug/l	99
63) 4-Methyl-2-Pentanone	5.701	43	26194	19.3430	ug/l	87
64) 2-Hexanone	6.125	43	18584	19.3555	ug/l	90
65) Tetrachloroethene	6.112	164	34193	21.8122	ug/l	94
67) Toluene	5.823	92	97534	19.9721	ug/l	95
68) 1,1,1,2-Tetrachloroethane	6.598	133	35620	19.5644	ug/l	100

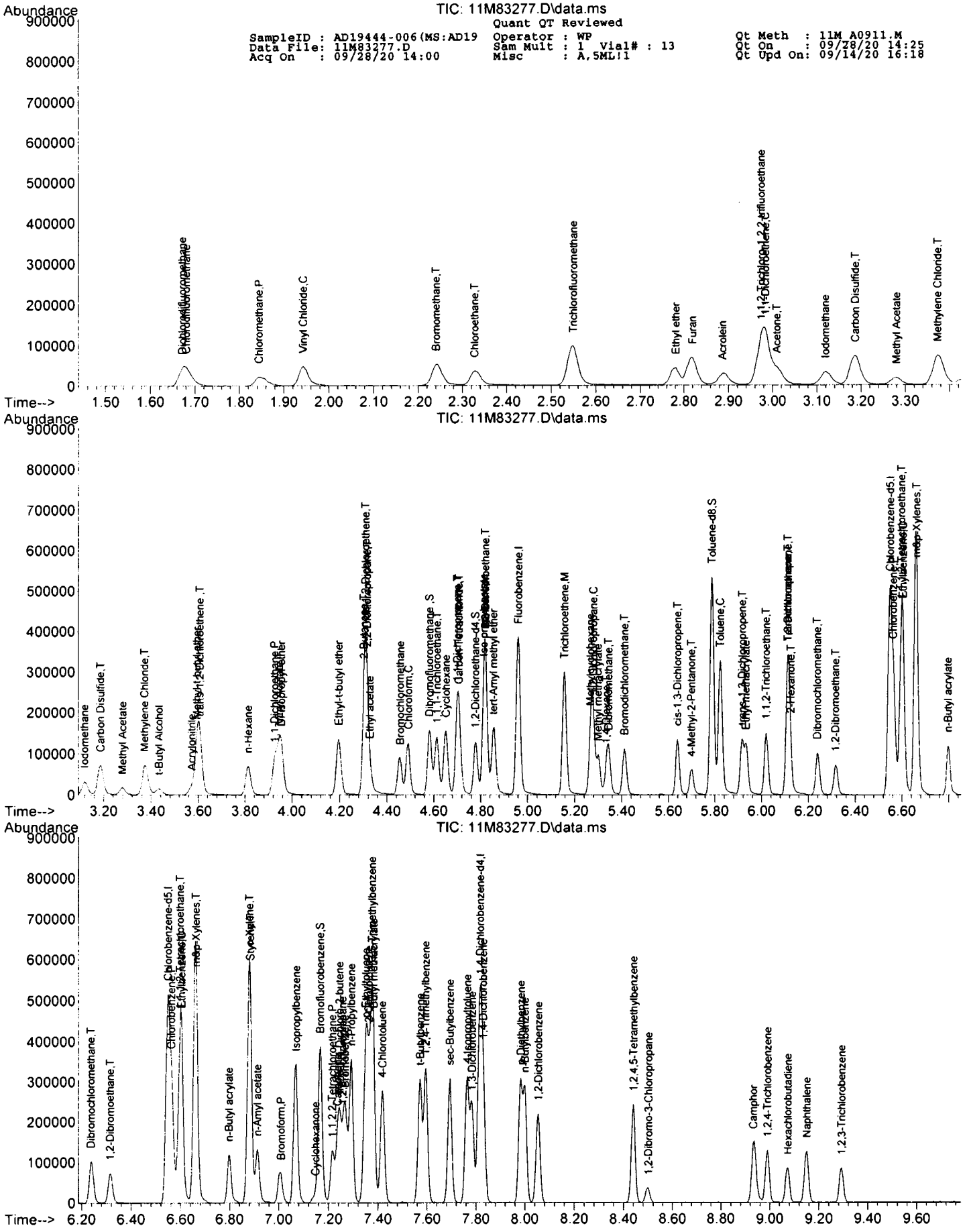
Quantitation Report (QT Reviewed)

SampleID : AD19444-006(MS:AD19 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83277.D Sam Mult : 1 Vial# : 13 Qt On : 09/28/20 14:25
Acq On : 09/28/20 14:00 Misc : A,5ML!1 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69)	Chlorobenzene	6.562	112	108393	19.4903	ug/l	99
71)	n-Butyl acrylate	6.797	55	54136	20.2880	ug/l	89
72)	n-Amyl acetate	6.913	43	43154	21.6876	ug/l	76
73)	Bromoform	7.009	173	24297	20.0425	ug/l	91
74)	Ethylbenzene	6.604	106	48872	19.6959	ug/l	97
75)	1,1,2,2-Tetrachloroethane	7.215	83	46606	19.6263	ug/l	96
77)	Styrene	6.884	104	115501	19.9901	ug/l	96
78)	m&p-Xylenes	6.662	106	142159	41.1553	ug/l	96
79)	o-Xylene	6.881	106	67690	20.0574	ug/l	100
80)	trans-1,4-Dichloro-2-b...	7.244	53	12963	19.2280	ug/l	75
81)	1,3-Dichlorobenzene	7.784	146	77276	19.2697	ug/l	98
82)	1,4-Dichlorobenzene	7.829	146	79685	19.1821	ug/l	99
83)	1,2-Dichlorobenzene	8.054	146	69263	18.9743	ug/l	98
84)	Isopropylbenzene	7.070	105	169844	20.5698	ug/l	98
85)	Cyclohexanone	7.148	55	5551	136.6914	ug/l	83
86)	Camphene	7.238	93	36969	18.9126	ug/l	94
87)	1,2,3-Trichloropropane	7.257	75	54732	20.0781	ug/l	93
88)	2-Chlorotoluene	7.363	91	103200	19.3567	ug/l	98
89)	p-Ethyltoluene	7.350	105	171020	20.7709	ug/l	98
90)	4-Chlorotoluene	7.418	91	104704	19.0566	ug/l	97
91)	n-Propylbenzene	7.292	91	199174	20.5565	ug/l	97
92)	Bromobenzene	7.266	77	95742	19.4734	ug/l	89
93)	1,3,5-Trimethylbenzene	7.376	105	136521	19.7257	ug/l	96
94)	Butyl methacrylate	7.382	41	35169m	20.1034	ug/l	
95)	t-Butylbenzene	7.572	119	128229	19.9421	ug/l	99
96)	1,2,4-Trimethylbenzene	7.594	105	138487	19.3258	ug/l	99
97)	sec-Butylbenzene	7.694	105	155864	20.2320	ug/l	98
98)	4-Isopropyltoluene	7.765	119	132037	20.2029	ug/l	99
99)	n-Butylbenzene	8.000	91	136207	20.5646	ug/l	98
100)	p-Diethylbenzene	7.984	119	72709	20.8262	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.440	119	96336	19.9076	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.501	157	8209	20.4065	ug/l	100
103)	Camphor	8.932	95	31265	199.5934	ug/l	94
104)	Hexachlorobutadiene	9.073	225	11538	22.2233	ug/l	98
105)	1,2,4-Trichlorobenzene	8.990	180	28546	20.2396	ug/l	98
106)	1,2,3-Trichlorobenzene	9.292	180	20578	22.2651	ug/l	96
107)	Naphthalene	9.151	128	78707	22.6727	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 11M83277.D\data.ms
Quant QT Reviewed
SampleID : AD19444-006(MS:AD19
Data File: 11M83277.D
Acq On : 09/28/20 14:00
Operator : WP
Sam Mult : 1 Vial# : 13
Misc : A,5ML;1
Qt Meth : 11M_A0911.M
Qt On : 09/28/20 14:25
Qt Upd On: 09/14/20 16:18
Abundance
Time-->
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
TIC: 11M83277.D\data.ms
Abundance
Time-->
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Dibromofluoromethane,S
1,1,1-Trichloroethane,I
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
TIC: 11M83277.D\data.ms
Abundance
Time-->
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
sec-Butylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-007(MSD:AD
Client Id: DF-MW-10 MSD
Data File: 11M83278.D
Analysis Date: 09/28/20 14:18
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	19	56-23-5	Carbon Tetrachloride	1.0	21
79-34-5	1,1,2,2-Tetrachloroethane	1.0	18	108-90-7	Chlorobenzene	1.0	18
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	26	75-00-3	Chloroethane	1.0	22
79-00-5	1,1,2-Trichloroethane	1.0	18	67-66-3	Chloroform	2.0	20
75-34-3	1,1-Dichloroethane	1.0	19	74-87-3	Chloromethane	1.0	18
75-35-4	1,1-Dichloroethene	1.0	23	156-59-2	cis-1,2-Dichloroethene	1.0	41
96-18-4	1,2,3-Trichloropropane	1.0	18	10061-01-5	cis-1,3-Dichloropropene	1.0	19
95-63-6	1,2,4-Trimethylbenzene	1.0	18	124-48-1	Dibromochloromethane	1.0	19
95-50-1	1,2-Dichlorobenzene	1.0	18	75-71-8	Dichlorodifluoromethane	1.0	16
107-06-2	1,2-Dichloroethane	0.64	18	100-41-4	Ethylbenzene	1.0	19
78-87-5	1,2-Dichloropropane	1.0	20	98-82-8	Isopropylbenzene	1.0	20
108-67-8	1,3,5-Trimethylbenzene	1.0	18	79601-23-1	m&p-Xylenes	1.0	37
541-73-1	1,3-Dichlorobenzene	1.0	18	75-09-2	Methylene Chloride	1.0	22
142-28-9	1,3-Dichloropropane	1.0	18	1634-04-4	Methyl-t-butyl ether	0.50	22
106-46-7	1,4-Dichlorobenzene	1.0	18	104-51-8	n-Butylbenzene	1.0	20
123-91-1	1,4-Dioxane	50	1400	103-65-1	n-Propylbenzene	1.0	19
78-93-3	2-Butanone	1.0	20	95-47-6	o-Xylene	1.0	19
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	19
591-78-6	2-Hexanone	1.0	17	100-42-5	Styrene	1.0	19
99-87-6	4-Isopropyltoluene	1.0	19	75-65-0	t-Butyl Alcohol	5.0	140
108-10-1	4-Methyl-2-Pentanone	1.0	18	98-06-6	t-Butylbenzene	1.0	19
67-64-1	Acetone	5.0	96	127-18-4	Tetrachloroethene	1.0	21
107-02-8	Acrolein	5.0	110	108-88-3	Toluene	1.0	18
107-13-1	Acrylonitrile	1.0	22	156-60-5	trans-1,2-Dichloroethene	1.0	29
71-43-2	Benzene	0.50	19	10061-02-6	trans-1,3-Dichloropropene	1.0	19
75-27-4	Bromodichloromethane	1.0	20	79-01-6	Trichloroethene	1.0	33
75-25-2	Bromoform	1.0	20	75-69-4	Trichlorofluoromethane	1.0	23
74-83-9	Bromomethane	1.0	21	75-01-4	Vinyl Chloride	1.0	22
75-15-0	Carbon Disulfide	1.0	25	1330-20-7	Xylenes (Total)	1.0	56

Worksheet #: 568732

Total Target Concentration 2800

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AD19444-007(MSD:AD1 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83278.D Sam Mult : 1 Vial# : 14 Qt On : 09/28/20 14:37
Acq On : 09/28/20 14:18 Misc : A,5ML!1 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	264010	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	217404	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	108771	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	68299	31.03	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.43%			
39) 1,2-Dichloroethane-d4	4.778	67	33897	29.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.87%			
66) Toluene-d8	5.788	98	275708	29.00	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.67%			
76) Bromofluorobenzene	7.167	174	85706	31.26	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.20%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	39415	16.6997	ug/l	55
6) Dichlorodifluoromethane	1.669	85	22709	16.0171	ug/l	96
7) Chloromethane	1.848	50	27599	18.4928	ug/l	96
8) Bromomethane	2.241	94	32072m	20.7411	ug/l	
9) Vinyl Chloride	1.943	62	42885	22.3415	ug/l	93
10) Chloroethane	2.328	64	28712	22.0282	ug/l	83
11) Trichlorofluoromethane	2.550	101	73367	23.1221	ug/l	98
12) Ethyl ether	2.778	59	25327	23.3321	ug/l	56
13) Furan	2.820	39	42767m	21.2538	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.977	101	32781	25.5872	ug/l	96
15) Methylene Chloride	3.376	84	41888	21.9511	ug/l	57
16) Acrolein	2.891	56	25376	111.6828	ug/l	94
17) Acrylonitrile	3.566	53	12375	21.5573	ug/l	92
18) Iodomethane	3.119	142	48618	26.6470	ug/l	98
19) Acetone	3.010	43	43395	95.5081	ug/l	91
20) Carbon Disulfide	3.186	76	106436	24.5145	ug/l	100
21) t-Butyl Alcohol	3.434	59	15734	142.9745	ug/l	92
22) n-Hexane	3.813	57	33148	24.5437	ug/l	85
23) Di-isopropyl-ether	3.955	45	70670	18.8909	ug/l	62
24) 1,1-Dichloroethene	2.984	61	54846	23.4656	ug/l	62
25) Methyl Acetate	3.276	43	20127	21.1563	ug/l	100
26) Methyl-t-butyl ether	3.598	73	90493	22.4132	ug/l	81
27) 1,1-Dichloroethane	3.929	63	59067	19.4707	ug/l	95
28) trans-1,2-Dichloroethene	3.608	96	51564	28.6604	ug/l	64
29) Ethyl-t-butyl ether	4.196	59	78051	19.0134	ug/l	84
30) cis-1,2-Dichloroethene	4.309	61	121310	40.9691	ug/l	63
31) Bromochloromethane	4.489	49	4315	3.4395	ug/l	49
32) 2,2-Dichloropropane	4.315	77	53117	22.1609	ug/l	94
33) Ethyl acetate	4.331	43	25465	17.1424	ug/l	99
34) 1,4-Dioxane	5.334	88	22261	1363.2095	ug/l	67
35) 1,1-Dichloropropene	4.701	75	50153	19.0611	ug/l	99
36) Chloroform	4.489	83	65434	19.5334	ug/l	97
38) Cyclohexane	4.653	56	44951m	20.3105	ug/l	
40) 1,2-Dichloroethane	4.820	62	47493	18.3720	ug/l	99
41) 2-Butanone	4.305	43	12595m	19.8447	ug/l	
42) 1,1,1-Trichloroethane	4.614	97	58982	19.4913	ug/l	92
43) Carbon Tetrachloride	4.707	117	52811	20.7677	ug/l	99
44) Vinyl Acetate	3.945	43	85677	19.4125	ug/l	100
45) Bromodichloromethane	5.411	83	49604	19.6323	ug/l	99
46) Methylcyclohexane	5.270	83	46491	22.2347	ug/l	69
47) Dibromomethane	5.344	174	24986	20.4772	ug/l	96
48) 1,2-Dichloropropane	5.280	63	34835	19.9068	ug/l	97
49) Trichloroethene	5.157	130	68089	32.5663	ug/l	96
50) Benzene	4.820	78	144475	19.3378	ug/l	100
51) tert-Amyl methyl ether	4.855	73	80699	19.7101	ug/l	95
53) Iso-propylacetate	4.813	43	43758	18.1645	ug/l	80
54) Methyl methacrylate	5.302	41	23793m	16.3491	ug/l	
55) Dibromochloromethane	6.238	129	38760	19.1673	ug/l	100
57) cis-1,3-Dichloropropene	5.640	75	54744	19.0334	ug/l	96
58) trans-1,3-Dichloropropene	5.916	75	50607	18.5218	ug/l	97
59) Ethyl methacrylate	5.935	41	23665m	18.7698	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	34539	17.9516	ug/l	83
61) 1,2-Dibromoethane	6.315	107	36612	18.0330	ug/l	99
62) 1,3-Dichloropropane	6.112	76	56258	17.6984	ug/l	97
63) 4-Methyl-2-Pentanone	5.704	43	26611	18.1429	ug/l	84
64) 2-Hexanone	6.122	43	18184	17.4855	ug/l	84
65) Tetrachloroethene	6.115	164	34996	20.6112	ug/l	94
67) Toluene	5.823	92	96931	18.3254	ug/l	99
68) 1,1,1,2-Tetrachloroethane	6.595	133	35056	17.7769	ug/l	96

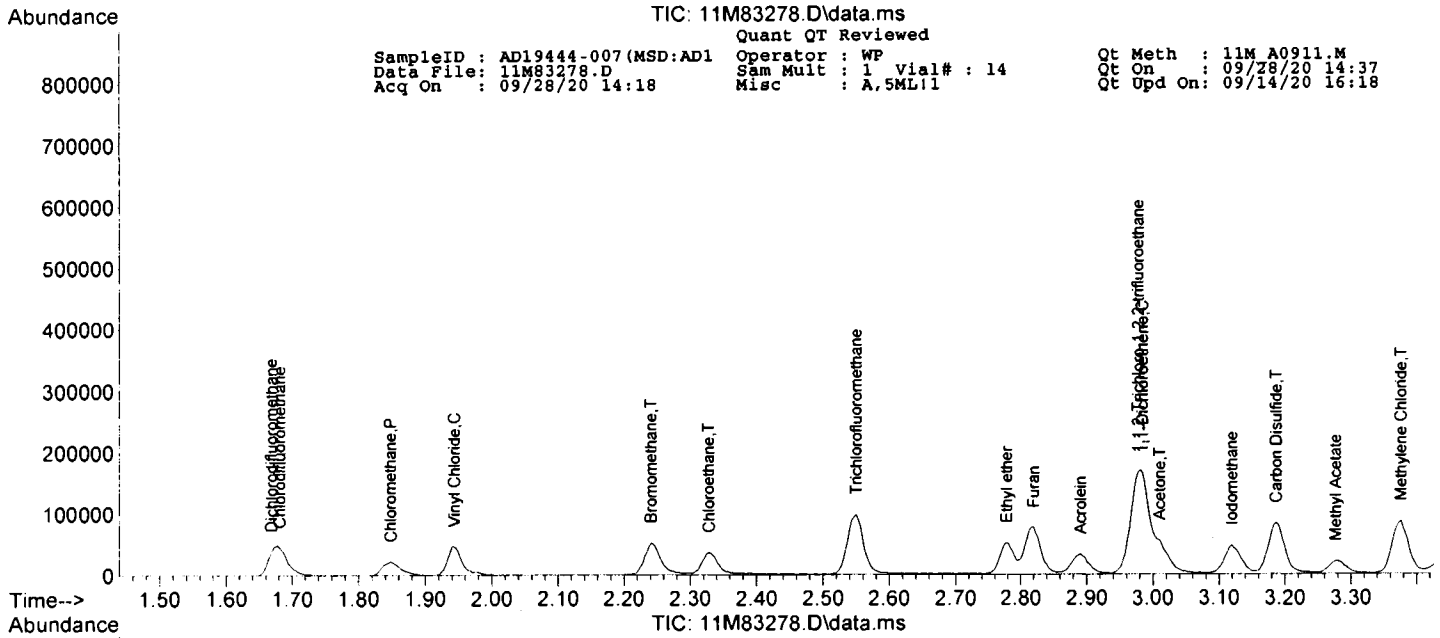
Quantitation Report (QT Reviewed)

SampleID : AD19444-007(MSD:AD1 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83278.D Sam Mult : 1 Vial# : 14 Qt On : 09/28/20 14:37
Acq On : 09/28/20 14:18 Misc : A,5ML!1 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69)	Chlorobenzene	6.566	112	107506	17.8473	ug/l	96
71)	n-Butyl acrylate	6.797	55	55543	19.3405	ug/l	88
72)	n-Amyl acetate	6.913	43	42270	19.7381	ug/l	73
73)	Bromoform	7.006	173	25553	19.5851	ug/l	93
74)	Ethylbenzene	6.604	106	49536	18.5490	ug/l	94
75)	1,1,2,2-Tetrachloroethane	7.215	83	46523	18.2032	ug/l	96
77)	Styrene	6.884	104	116639	18.7567	ug/l	89
78)	m&p-Xylenes	6.659	106	136058	36.5981	ug/l	95
79)	o-Xylene	6.878	106	68190	18.7739	ug/l	96
80)	trans-1,4-Dichloro-2-b...	7.244	53	11739	16.1787	ug/l	67
81)	1,3-Dichlorobenzene	7.784	146	77650	17.9910	ug/l	99
82)	1,4-Dichlorobenzene	7.829	146	78724	17.6080	ug/l	99
83)	1,2-Dichlorobenzene	8.054	146	71832	18.2837	ug/l	99
84)	Isopropylbenzene	7.067	105	174281	19.6117	ug/l	98
85)	Cyclohexanone	7.141	55	5631	128.6420	ug/l	84
86)	Camphene	7.238	93	27152	12.9062	ug/l	99
87)	1,2,3-Trichloropropane	7.257	75	53842	18.3521	ug/l	91
88)	2-Chlorotoluene	7.363	91	108224	18.8607	ug/l	96
89)	p-Ethyltoluene	7.350	105	167394	18.8900	ug/l	100
90)	4-Chlorotoluene	7.418	91	108536	18.3543	ug/l	99
91)	n-Propylbenzene	7.292	91	200875	19.2631	ug/l	98
92)	Bromobenzene	7.270	77	95338	18.0172	ug/l	88
93)	1,3,5-Trimethylbenzene	7.376	105	134805	18.0977	ug/l	99
94)	Butyl methacrylate	7.379	41	35816m	19.0226	ug/l	
95)	t-Butylbenzene	7.572	119	129256	18.6775	ug/l	99
96)	1,2,4-Trimethylbenzene	7.595	105	138803	17.9974	ug/l	99
97)	sec-Butylbenzene	7.694	105	160993	19.4170	ug/l	99
98)	4-Isopropyltoluene	7.765	119	135219	19.2238	ug/l	100
99)	n-Butylbenzene	8.000	91	141612	19.8657	ug/l	98
100)	p-Diethylbenzene	7.984	119	75559	20.1090	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.440	119	101279	19.4461	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.498	157	8650	19.9792	ug/l	94
103)	Camphor	8.935	95	33820	200.6323	ug/l	99
104)	Hexachlorobutadiene	9.070	225	12308	22.0267	ug/l	99
105)	1,2,4-Trichlorobenzene	8.990	180	30777	20.2752	ug/l	98
106)	1,2,3-Trichlorobenzene	9.292	180	22805	22.9264	ug/l	97
107)	Naphthalene	9.151	128	85444	22.8694	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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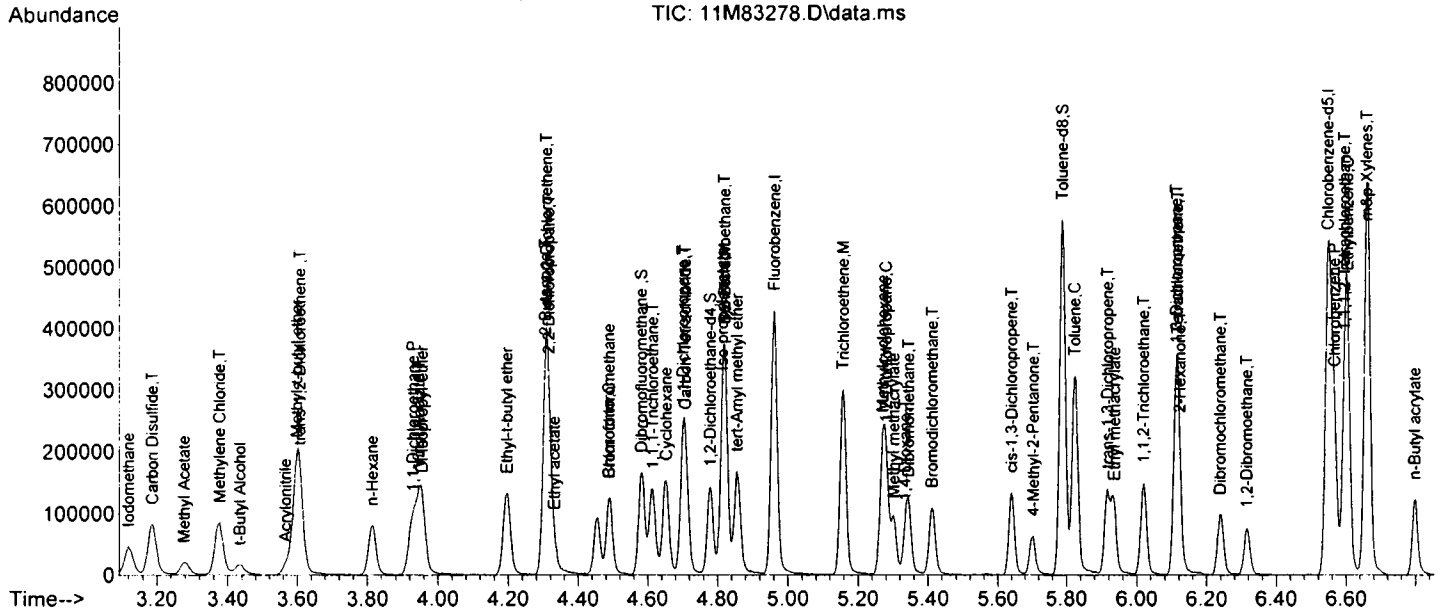
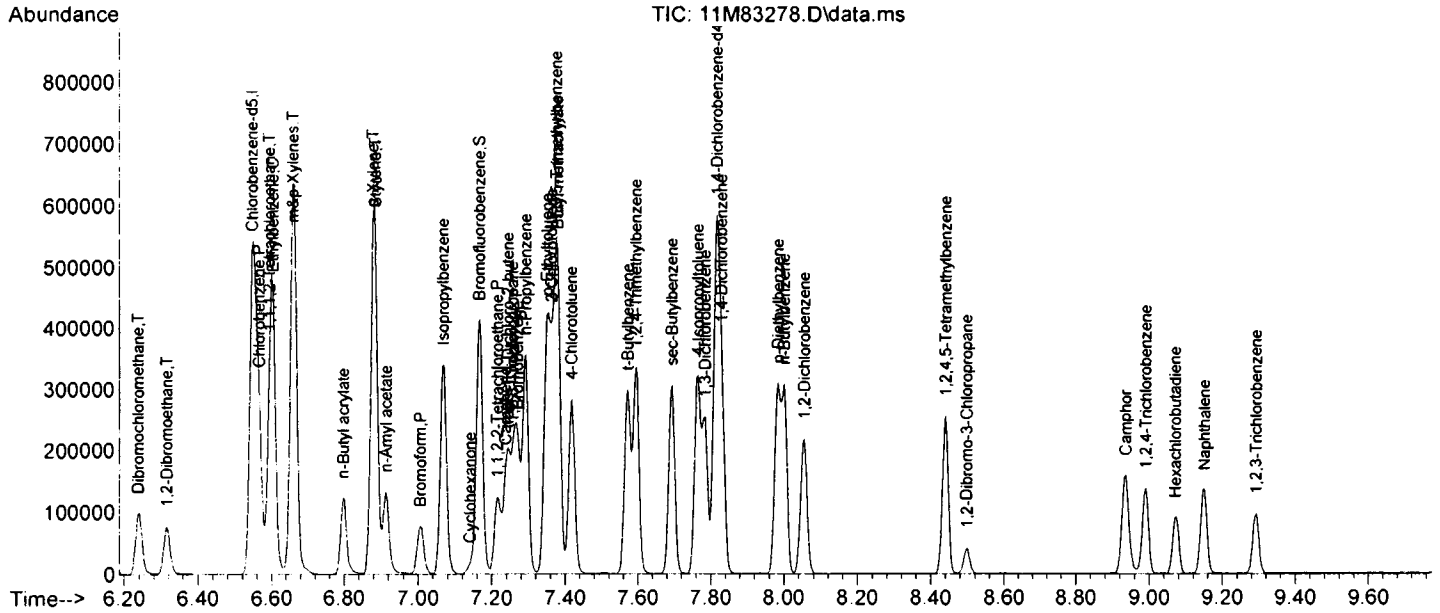
Quant QT Reviewed
SampleID : AD19444-007(MSD:AD1
Data File: 11M83278.D
Acq On : 09/28/20 14:18
Operator : WP
Sam Mult : 1 Vial# : 14
Misc : A,5ML;1
Qt Meth : 11M_A0911.M
Qt On : 09/28/20 14:37
Qt Upd On: 09/14/20 16:18
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->


Abundance
TIC: 11M83278.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Toluene,C
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
Time-->


Abundance
TIC: 11M83278.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-008
Client Id: HRP-MW-1
Data File: 2M142589.D
Analysis Date: 10/01/20 13:02
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	**1,1-Dichloroethene**	**1.0**	**14**	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**300**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**1.9**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**11**
71-43-2	**Benzene**	**0.50**	**0.77**	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**210**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	**75-01-4**	**Vinyl Chloride**	**1.0**	**13**
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

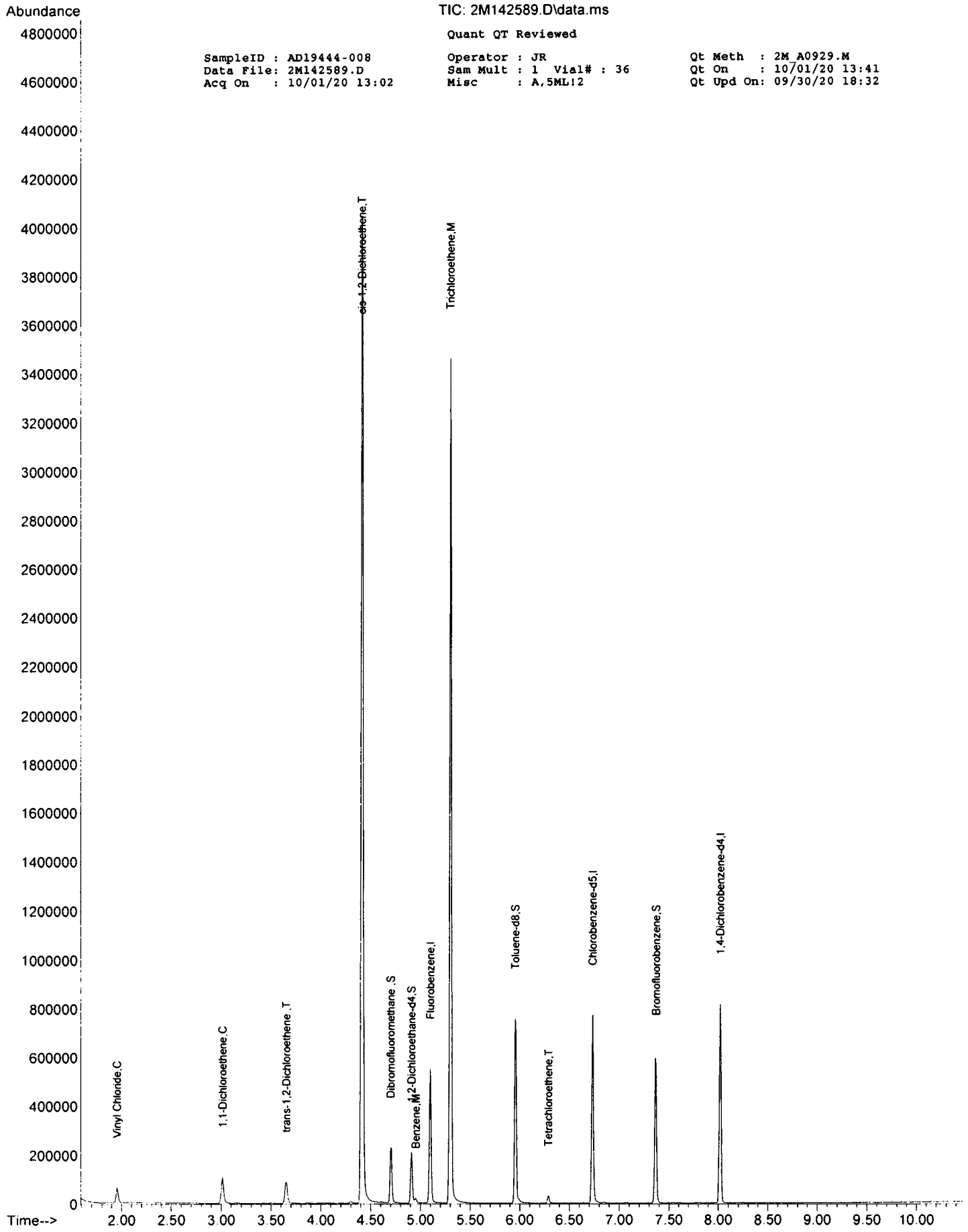
Quantitation Report (QT Reviewed)

SampleID : AD19444-008 Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142589.D Sam Mult : 1 Vial# : 36 Qt On : 10/01/20 13:41
Acq On : 10/01/20 13:02 Misc : A,5ML!2 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-3020\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	335502	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	307426	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	158052	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	97379	30.30	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.00%			
39) 1,2-Dichloroethane-d4	4.910	67	51092	30.79	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.63%			
66) Toluene-d8	5.952	98	357236	29.70	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.00%			
76) Bromofluorobenzene	7.367	174	131336	31.64	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.47%			
Target Compounds						Qvalue
9) Vinyl Chloride	1.953	62	54454	13.0674	ug/l	98
24) 1,1-Dichloroethene	3.014	61	59557	13.8031	ug/l	98
28) trans-1,2-Dichloroethene	3.654	96	33745	10.6055	ug/l	94
30) cis-1,2-Dichloroethene	4.410	61	1603034	299.7533	ug/l	96
49) Trichloroethene	5.300	130	744712	209.9368	ug/l	96
50) Benzene	4.952	78	9631	0.7668	ug/l	100
65) Tetrachloroethene	6.288	164	5134	1.8553	ug/l	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
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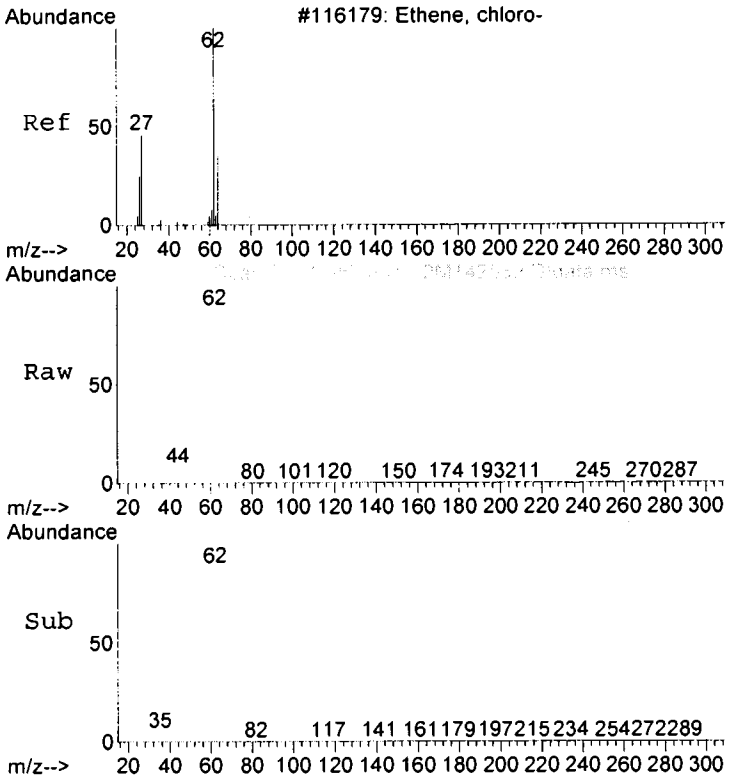
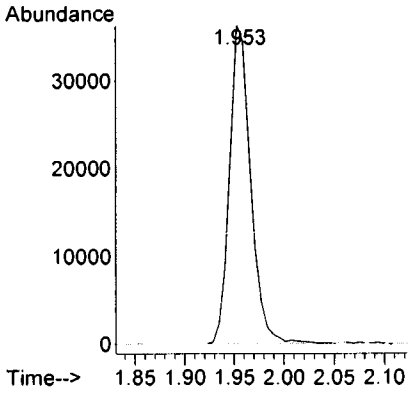
Quant QT Reviewed
SampleID : AD19444-008
Data File: 2M142589.D
Acq On : 10/01/20 13:02
Operator : JR
Sam Mult : 1 Vial# : 36
Misc : A,5ML!2
Qt Meth : 2M_A0929.M
Qt On : 10/01/20 13:41
Qt Upd On: 09/30/20 18:32
Vinyl Chloride,C
1,1-Dichloroethene,C
trans-1,2-Dichloroethene ,T
cis-1,2-Dichloroethene,T
Dibromofluoromethane ,S
Benzene,M
2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

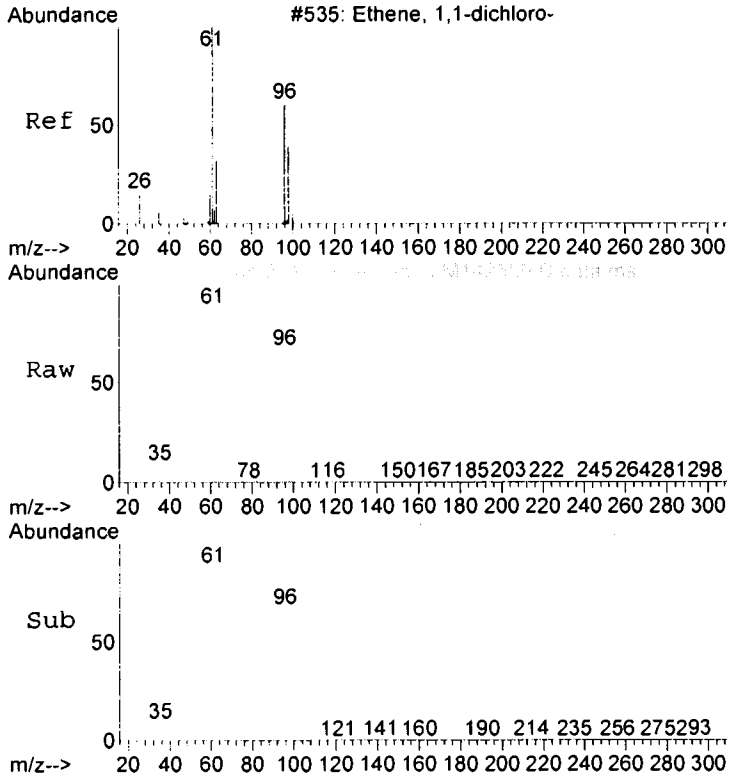


#9
Vinyl Chloride
Concen: 13.07 ug/l
RT: 1.953 min Scan# 60
Delta R.T. 0.000 min
Lab File: 2M142589.D
Acq: 01 Oct 2020 13:02

Tgt Ion: 62 Resp: 54454

Ion	Ratio	Lower	Upper
62	100		
64	32.5	0.0	71.2

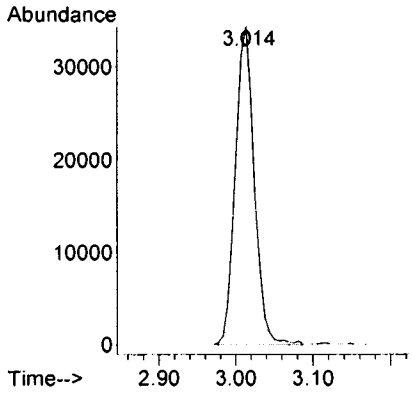


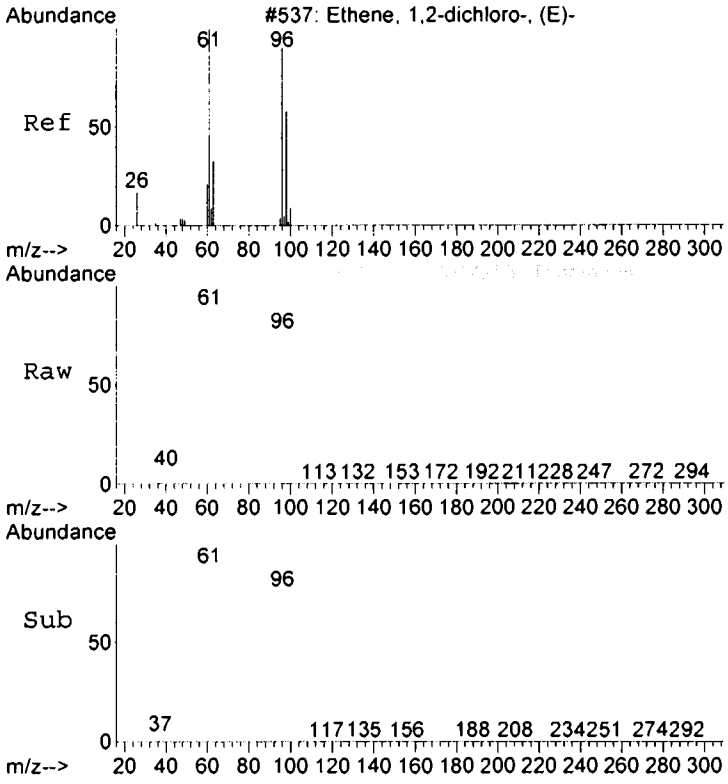


#24
1,1-Dichloroethene
Concen: 13.80 ug/l
RT: 3.014 min Scan# 234
Delta R.T. 0.006 min
Lab File: 2M142589.D
Acq: 01 Oct 2020 13:02

Tgt Ion: 61 Resp: 59557

Ion	Ratio	Lower	Upper
61	100		
96	67.2	27.5	107.5
98	42.1	4.6	84.6

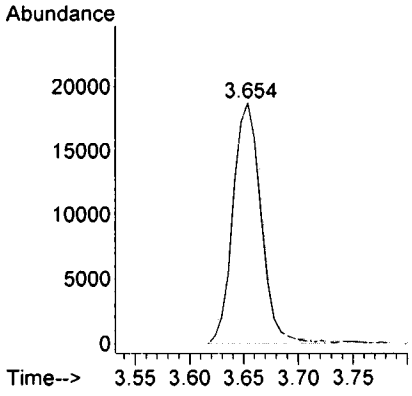


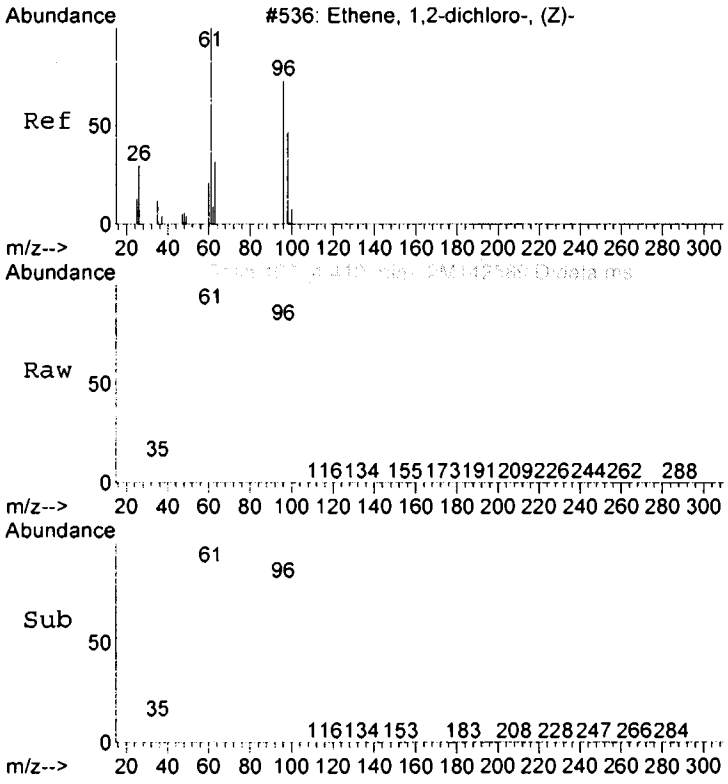


#28
trans-1,2-Dichloroethene
Concen: 10.61 ug/l
RT: 3.654 min Scan# 339
Delta R.T. 0.000 min
Lab File: 2M142589.D
Acq: 01 Oct 2020 13:02

Tgt Ion: 96 Resp: 33745

Ion	Ratio	Lower	Upper
96	100		
61	131.4	51.5	201.5
98	69.7	23.0	103.0

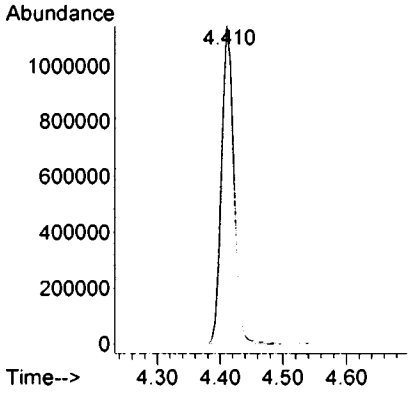


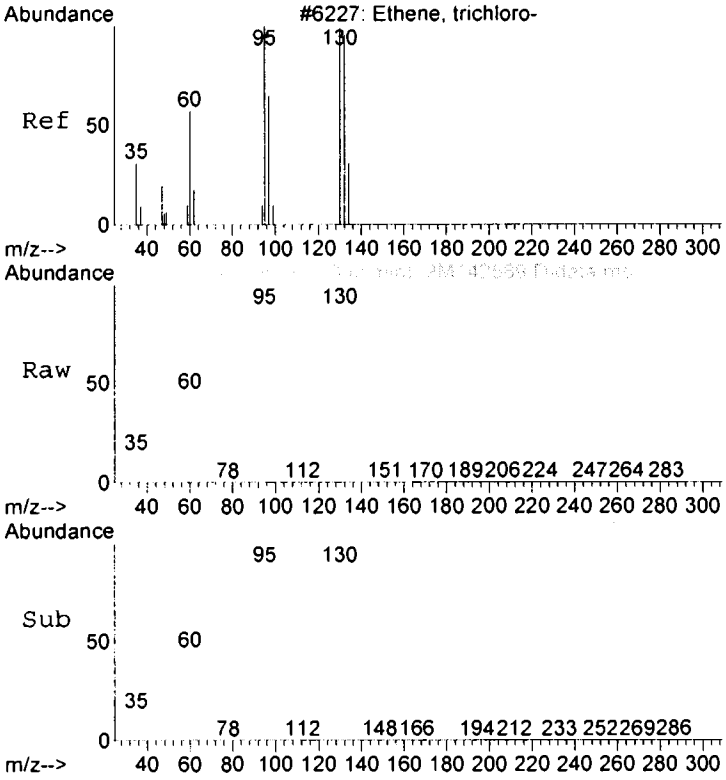


#30
cis-1,2-Dichloroethene
Concen: 299.75 ug/l
RT: 4.410 min Scan# 463
Delta R.T. 0.000 min
Lab File: 2M142589.D
Acq: 01 Oct 2020 13:02

Tgt Ion: 61 Resp: 1603034

Ion	Ratio	Lower	Upper
61	100		
96	80.0	38.2	118.2
98	52.8	7.8	87.8

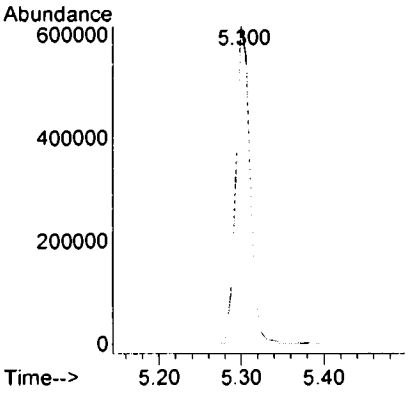


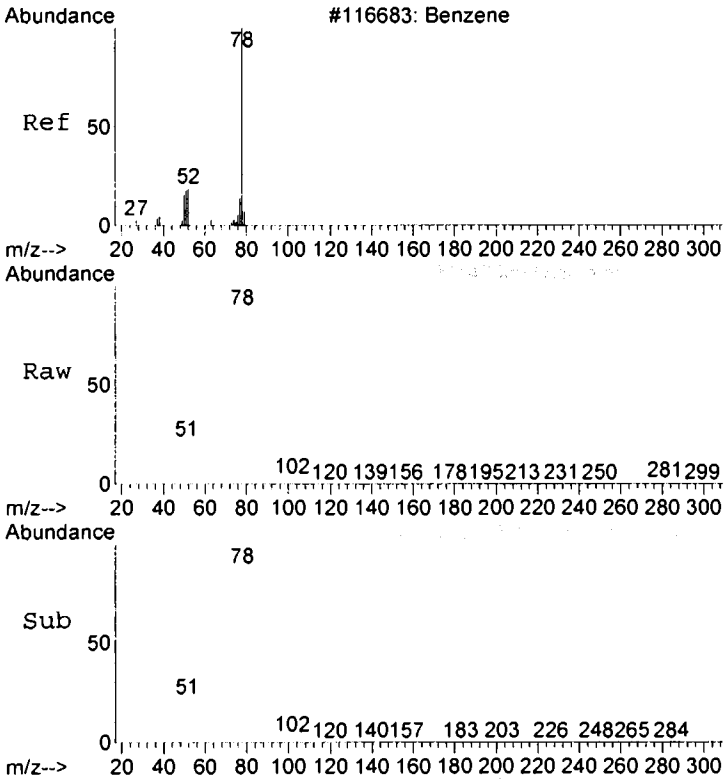


#49
Trichloroethene
Concen: 209.94 ug/l
RT: 5.300 min Scan# 609
Delta R.T. 0.000 min
Lab File: 2M142589.D
Acq: 01 Oct 2020 13:02

Tgt Ion:130 Resp: 744712

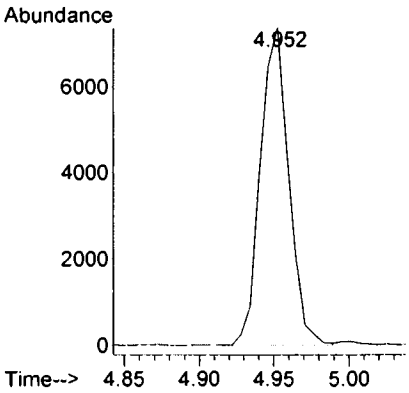
Ion	Ratio	Lower	Upper
130	100		
132	95.8	56.0	136.0
95	96.1	39.3	139.3

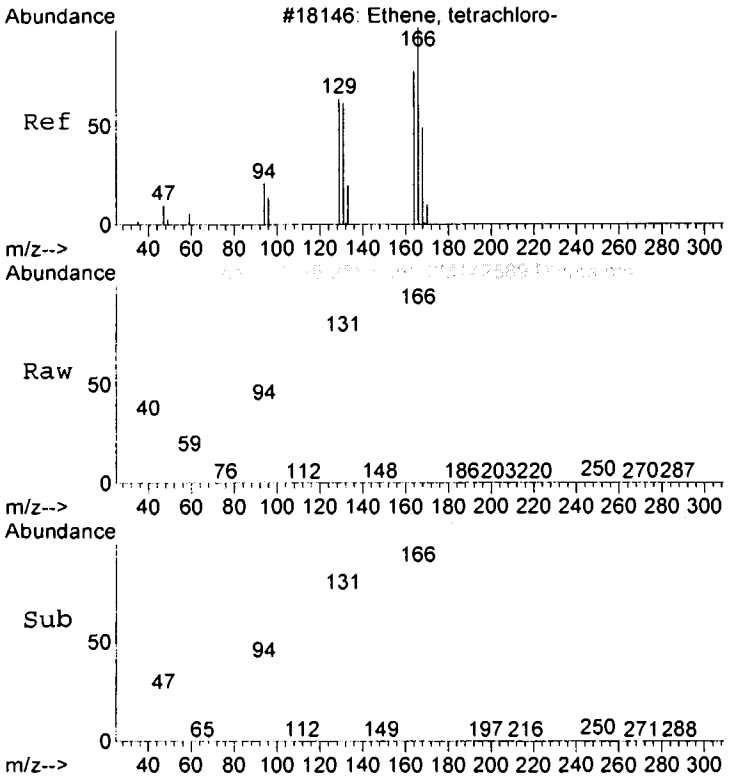




#50
Benzene
Concen: 0.77 ug/l
RT: 4.952 min Scan# 552
Delta R.T. 0.000 min
Lab File: 2M142589.D
Acq: 01 Oct 2020 13:02

Tgt Ion: 78 Resp: 9631

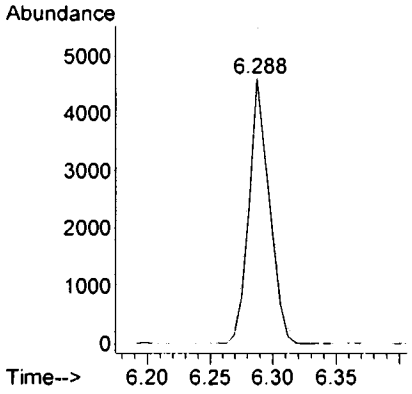




#65
Tetrachloroethene
Concen: 1.86 ug/l
RT: 6.288 min Scan# 771
Delta R.T. 0.001 min
Lab File: 2M142589.D
Acq: 01 Oct 2020 13:02

Tgt Ion:164 Resp: 5134

Ion	Ratio	Lower	Upper
164	100		
166	120.0	56.0	196.0



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-009
Client Id: HRP-MW-2
Data File: 2M142645.D
Analysis Date: 10/02/20 15:11
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**11**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

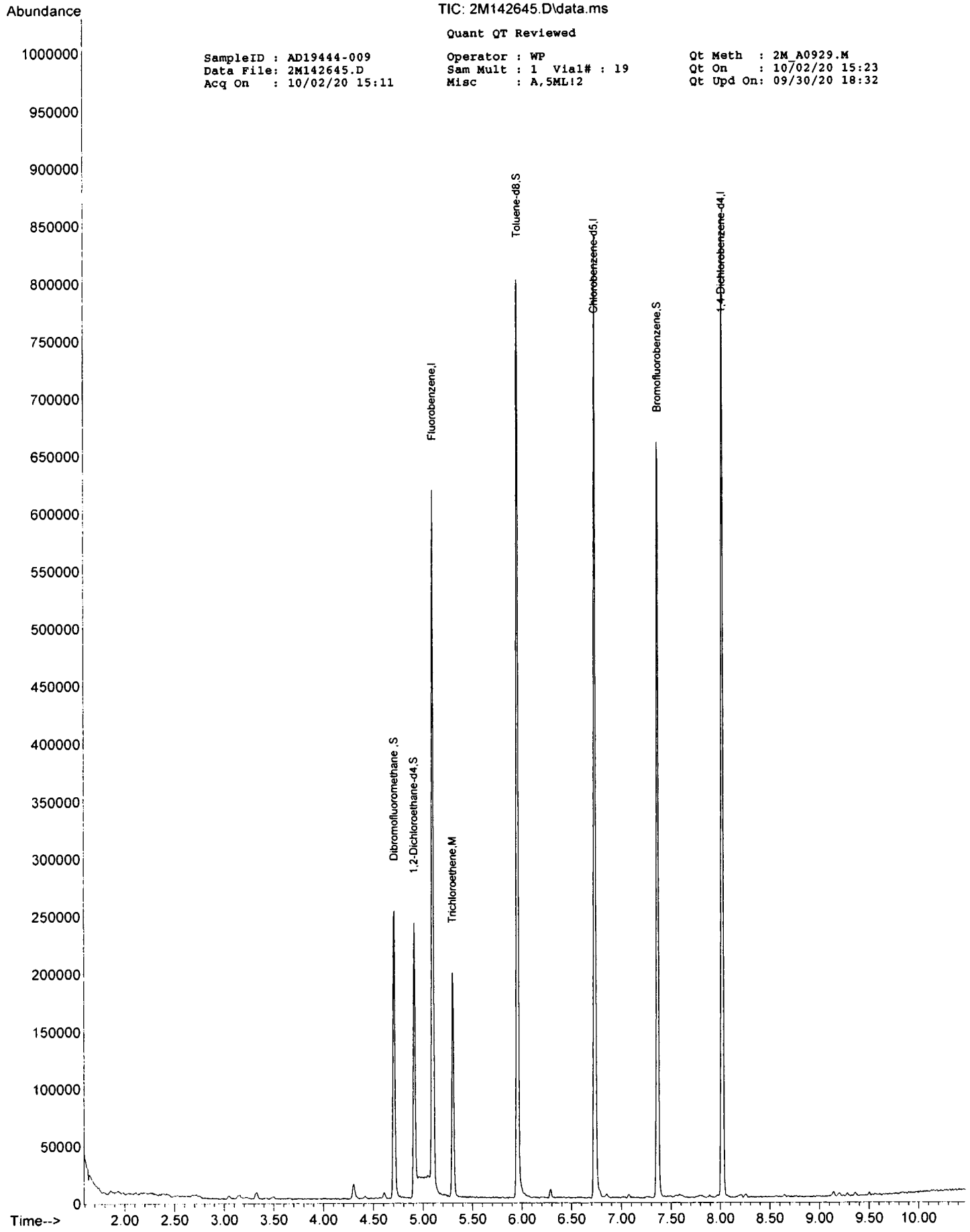
Quantitation Report (QT Reviewed)

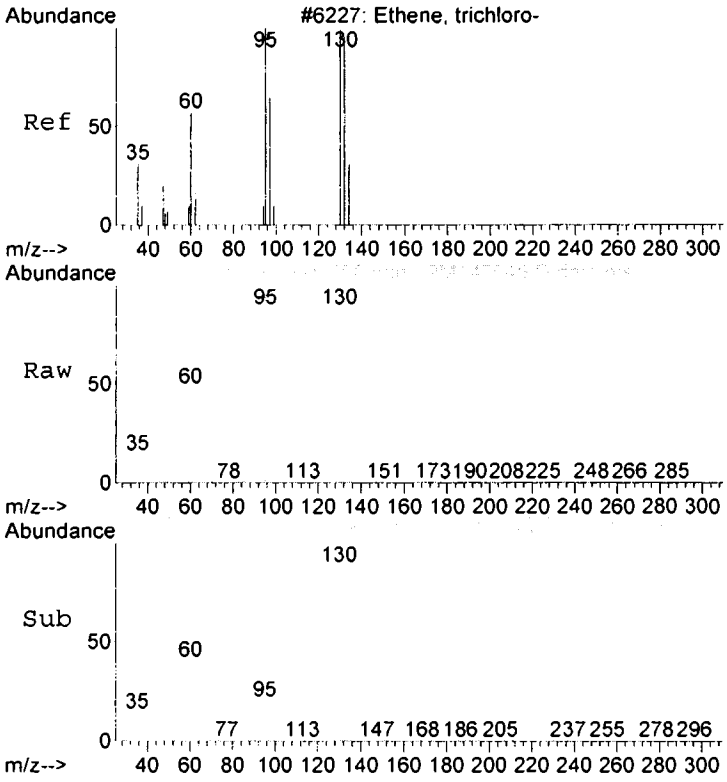
SampleID : AD19444-009 Operator : WP Qt Meth : 2M_A0929.M
Data File: 2M142645.D Sam Mult : 1 Vial# : 19 Qt On : 10/02/20 15:23
Acq On : 10/02/20 15:11 Misc : A,5ML!2 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.098	96	368992	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	339228	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	167527	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	103682	29.33	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.77%			
39) 1,2-Dichloroethane-d4	4.910	67	56150	30.76	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.53%			
66) Toluene-d8	5.958	98	392335	29.56	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.53%			
76) Bromofluorobenzene	7.366	174	141386	32.13	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.10%			
Target Compounds						Qvalue
49) Trichloroethene	5.300	130	44426	11.3872	ug/l	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

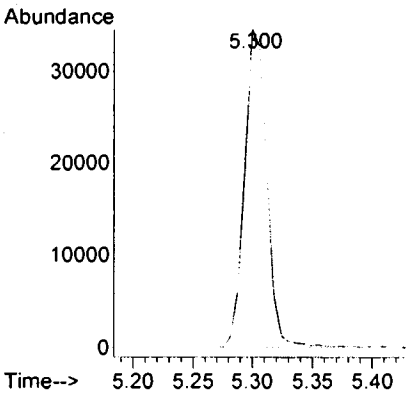

Abundance
TIC: 2M142645.D\data.ms
Quant QT Reviewed
SampleID : AD19444-009
Data File: 2M142645.D
Acq On : 10/02/20 15:11
Operator : WP
Sam Mult : 1 Vial# : 19
Misc : A,5ML!2
Qt Meth : 2M_A0929.M
Qt On : 10/02/20 15:23
Qt Upd On: 09/30/20 18:32
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->



#49
Trichloroethene
Concen: 11.39 ug/l
RT: 5.300 min Scan# 609
Delta R.T. -0.000 min
Lab File: 2M142645.D
Acq: 02 Oct 2020 15:11

Tgt Ion:130 Resp: 44426

Ion	Ratio	Lower	Upper
130	100		
132	95.8	56.0	136.0
95	96.8	39.3	139.3



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-010
Client Id: HRP-MW-3
Data File: 11M83298.D
Analysis Date: 09/28/20 20:31
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**3.8**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**4.9**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**38**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

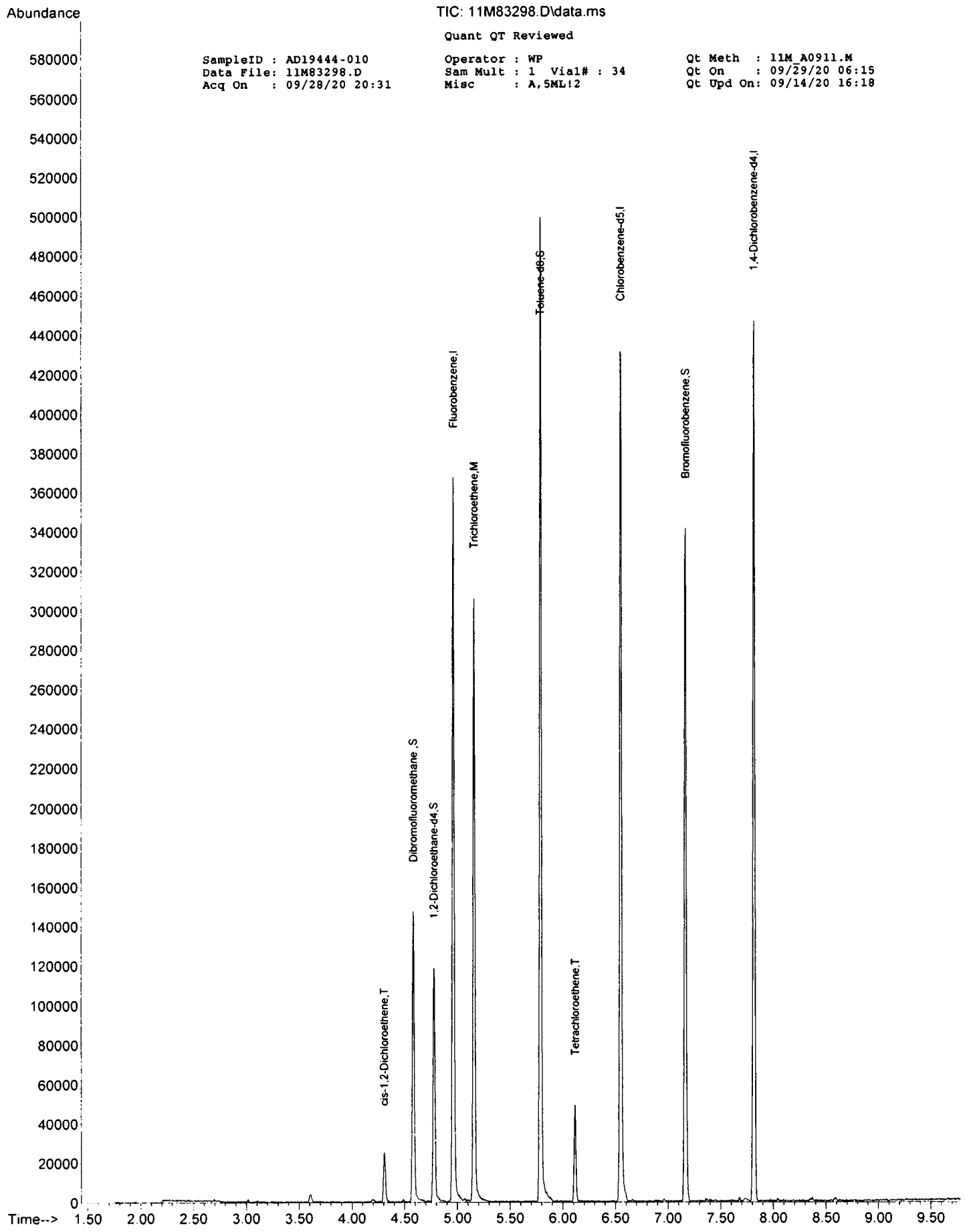
Quantitation Report (QT Reviewed)

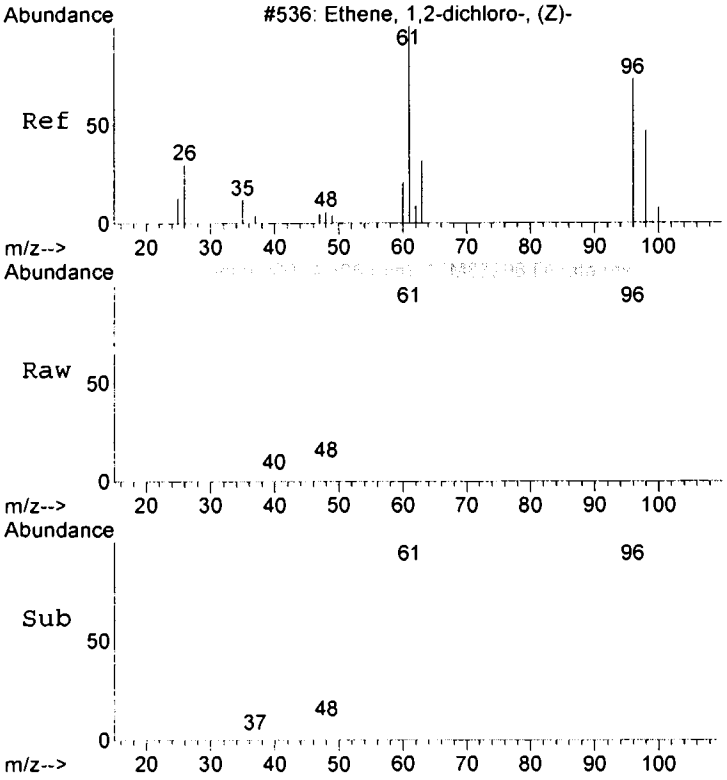
SampleID : AD19444-010 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83298.D Sam Mult : 1 Vial# : 34 Qt On : 09/29/20 06:15
Acq On : 09/28/20 20:31 Misc : A,5ML!2 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	230244	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	194075	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	88294	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	60471	31.51	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.03%			
39) 1,2-Dichloroethane-d4	4.778	67	28605	28.41	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.70%			
66) Toluene-d8	5.787	98	237799	28.02	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.40%			
76) Bromofluorobenzene	7.167	174	71973	32.34	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.80%			
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	4.305	61	9940	3.8493	ug/l	57
49) Trichloroethene	5.157	130	68959	37.8194	ug/l	91
65) Tetrachloroethene	6.115	164	7362	4.8571	ug/l	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

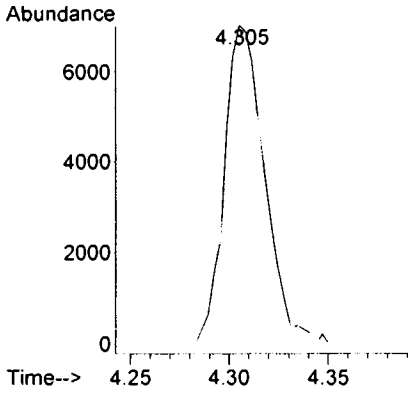

Abundance
TIC: 11M83298.D\data.ms
Quant QT Reviewed
SampleID : AD19444-010
Data File: 11M83298.D
Acq On : 09/28/20 20:31
Operator : WP
Sam Mult : 1 Vial# : 34
Misc : A,5ML!2
Qt Meth : 11M_A0911.M
Qt On : 09/29/20 06:15
Qt Upd On: 09/14/20 16:18
cis-1,2-Dichloroethene,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

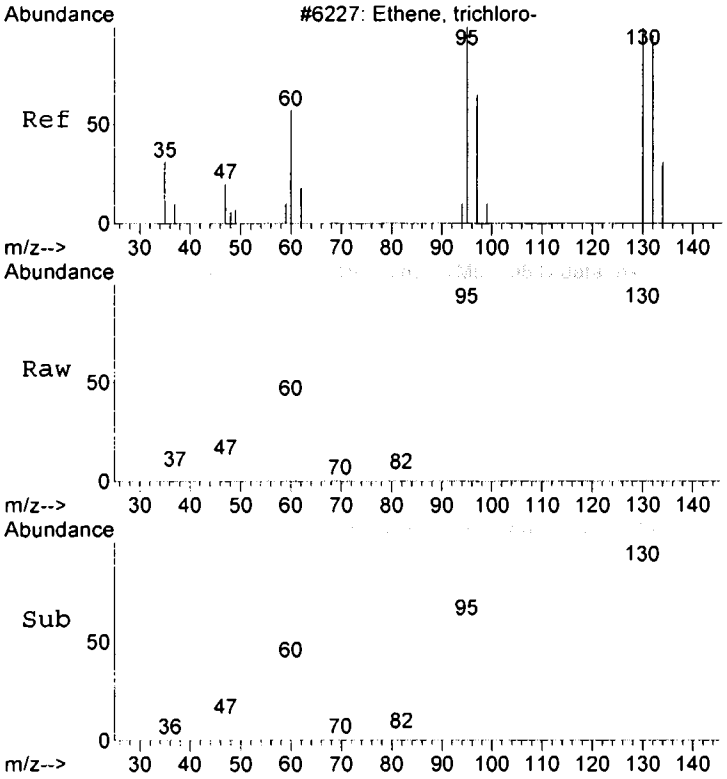


#30
cis-1,2-Dichloroethene
Concen: 3.85 ug/l
RT: 4.305 min Scan# 900
Delta R.T. 0.000 min
Lab File: 11M83298.D
Acq: 28 Sep 2020 20:31

Tgt Ion: 61 Resp: 9940

Ion	Ratio	Lower	Upper
61	100		
96	89.6	14.0	94.0
98	53.5	0.0	74.3

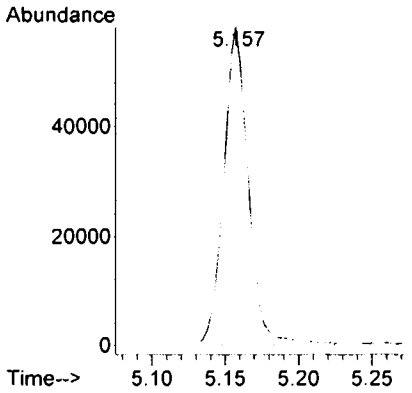


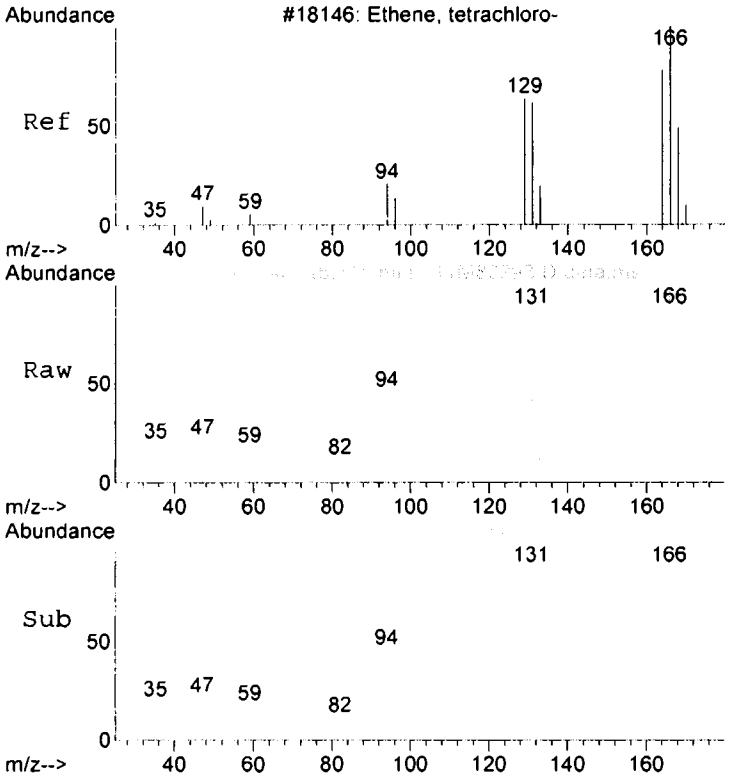


#49
Trichloroethene
Concen: 37.82 ug/l
RT: 5.157 min Scan# 1165
Delta R.T. 0.000 min
Lab File: 11M83298.D
Acq: 28 Sep 2020 20:31

Tgt Ion:130 Resp: 68959

Ion	Ratio	Lower	Upper
130	100		
132	93.3	61.6	141.6
95	89.8	49.9	149.9

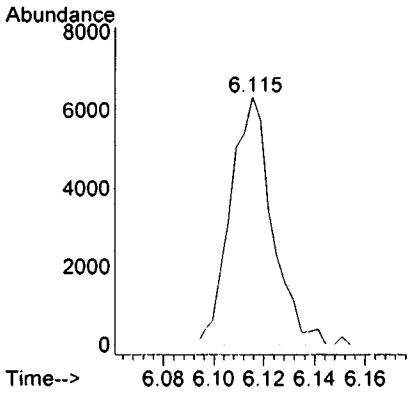




#65
Tetrachloroethene
Concen: 4.86 ug/l
RT: 6.115 min Scan# 1463
Delta R.T. 0.000 min
Lab File: 11M83298.D
Acq: 28 Sep 2020 20:31

Tgt Ion:164 Resp: 7362

Ion	Ratio	Lower	Upper
164	100		
166	124.2	60.8	200.8



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-011
Client Id: TMW-1
Data File: 2M142542.D
Analysis Date: 09/30/20 19:26
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**130**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**13**
71-43-2	**Benzene**	**0.50**	**0.95**	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**7.9**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	**75-01-4**	**Vinyl Chloride**	**1.0**	**38**
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

SampleID : AD19444-011 Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142542.D Sam Mult : 1 Vial# : 28 Qt On : 10/01/20 06:10
Acq On : 09/30/20 19:26 Misc : A,5ML!1 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	342481	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	308625	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	159018	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	99714	30.39	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.30%			
39) 1,2-Dichloroethane-d4	4.910	67	51534	30.42	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.40%			
66) Toluene-d8	5.952	98	358978	29.73	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.10%			
76) Bromofluorobenzene	7.367	174	131245	31.42	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.73%			
Target Compounds						Qvalue
9) Vinyl Chloride	1.959	62	160400	37.7070	ug/l	98
28) trans-1,2-Dichloroethene	3.654	96	41682	12.8330	ug/l	93
30) cis-1,2-Dichloroethene	4.410	61	704917	129.1273	ug/l	93
49) Trichloroethene	5.300	130	28719	7.9310	ug/l	98
50) Benzene	4.952	78	12179	0.9499	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

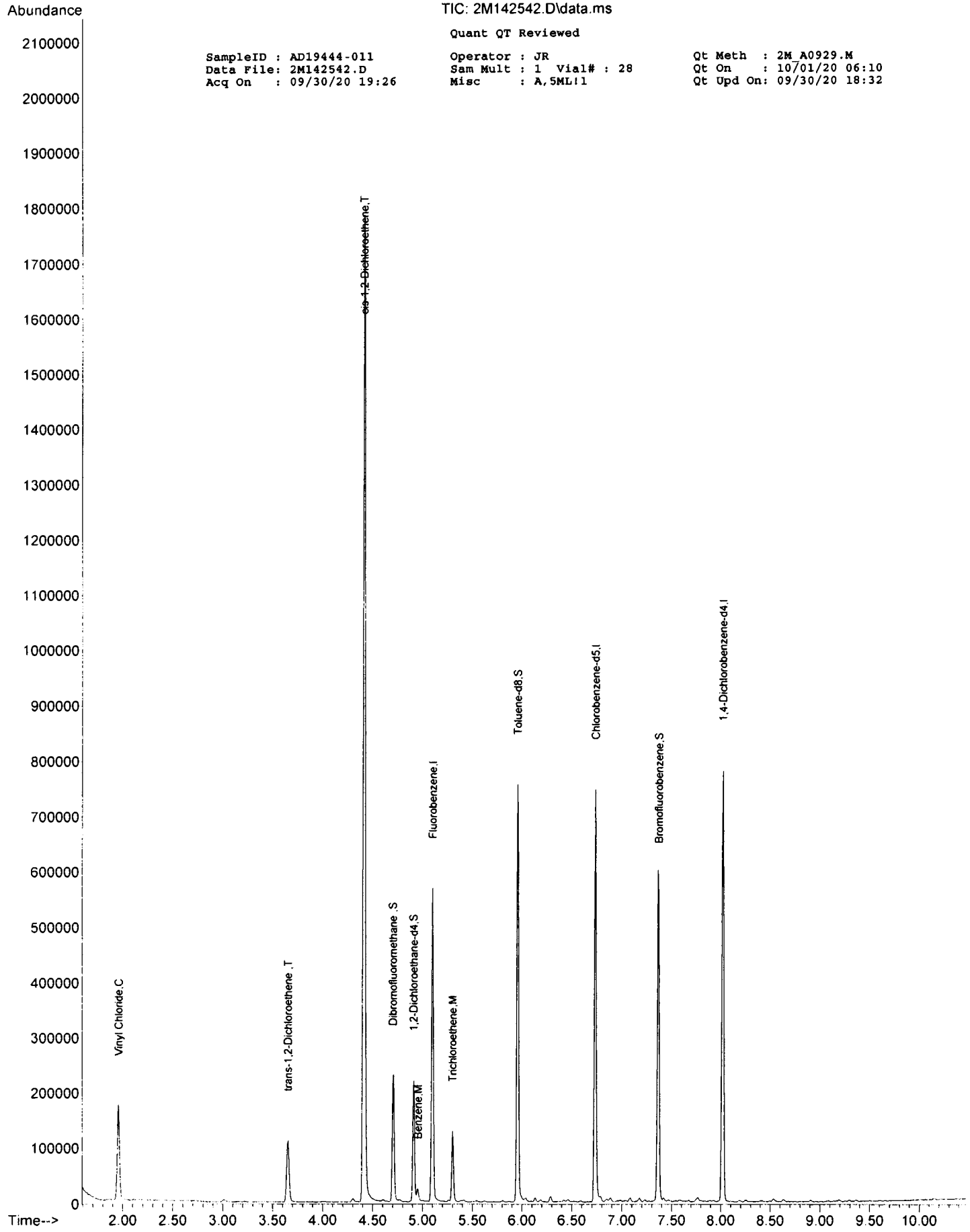
TIC: 2M142542.D\data.ms

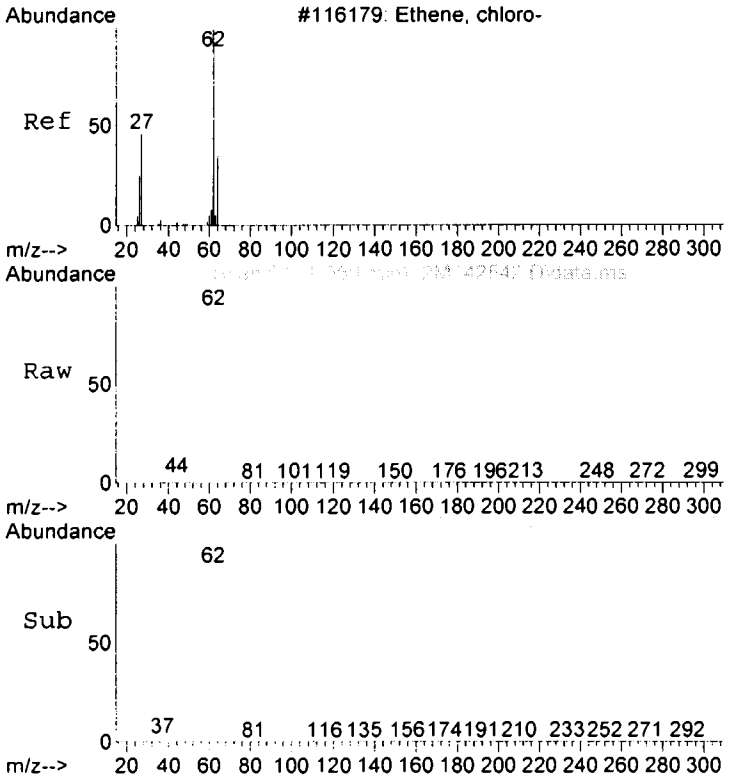
Quant QT Reviewed

SampleID : AD19444-011
Data File: 2M142542.D
Acq On : 09/30/20 19:26

Operator : JR
Sam Mult : 1 Vial# : 28
Misc : A,5ML!1

Qt Meth : 2M_A0929.M
Qt On : 10/01/20 06:10
Qt Upd On: 09/30/20 18:32

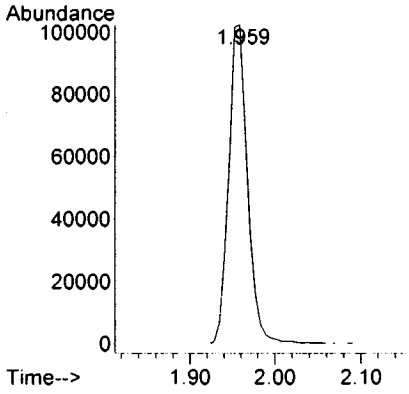


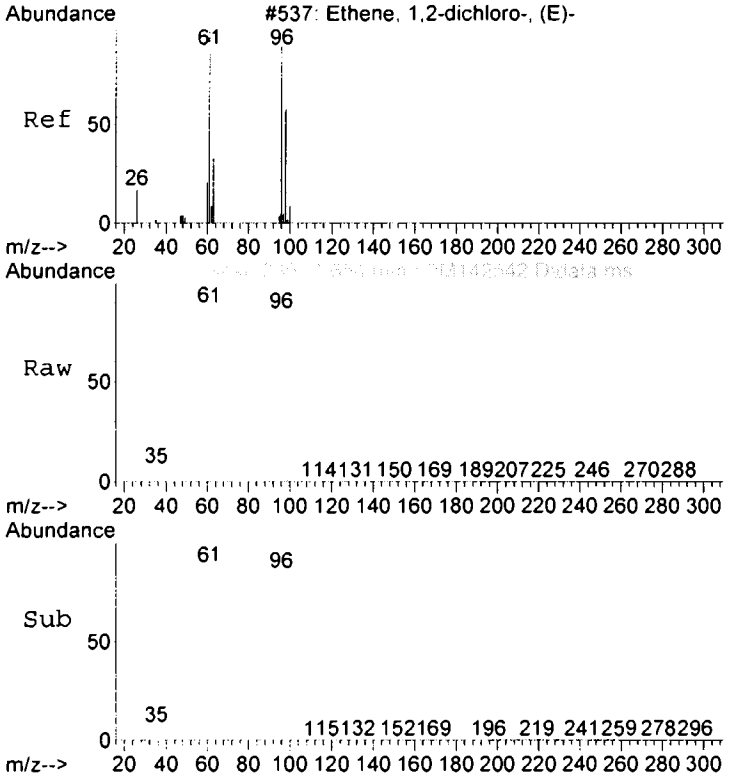


#9
Vinyl Chloride
Concen: 37.71 ug/l
RT: 1.959 min Scan# 61
Delta R.T. 0.006 min
Lab File: 2M142542.D
Acq: 30 Sep 2020 19:26

Tgt Ion: 62 Resp: 160400

Ion	Ratio	Lower	Upper
62	100		
64	32.5	0.0	71.2

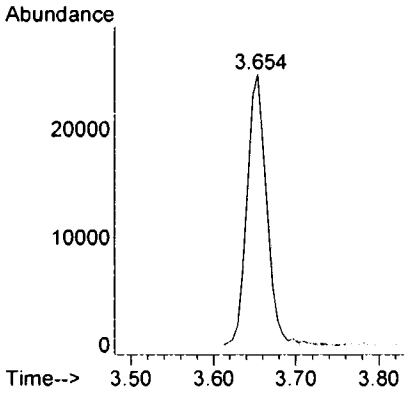


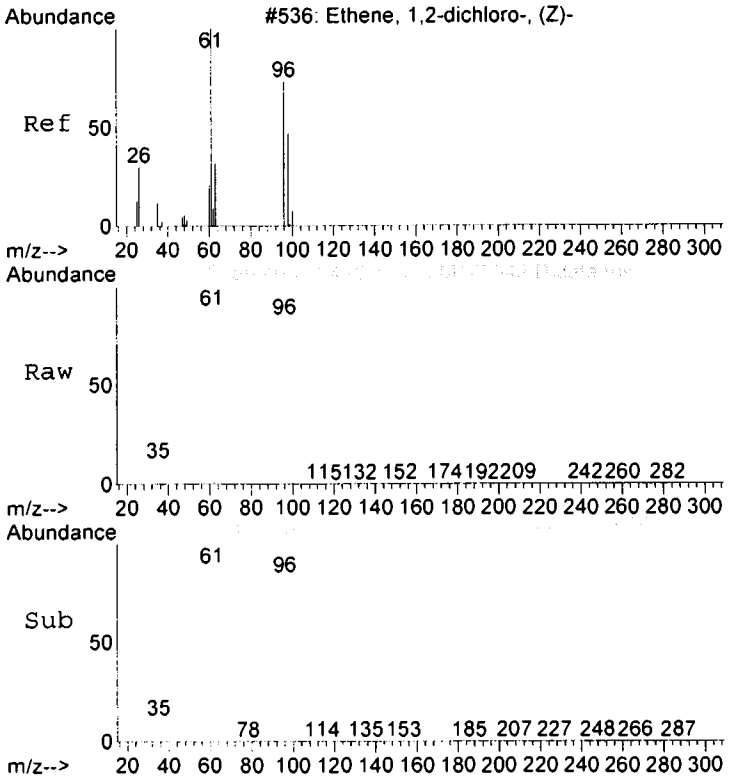


#28
trans-1,2-Dichloroethene
Concen: 12.83 ug/l
RT: 3.654 min Scan# 339
Delta R.T. -0.000 min
Lab File: 2M142542.D
Acq: 30 Sep 2020 19:26

Tgt Ion: 96 Resp: 41682

Ion	Ratio	Lower	Upper
96	100		
61	117.3	51.5	201.5
98	66.0	23.0	103.0

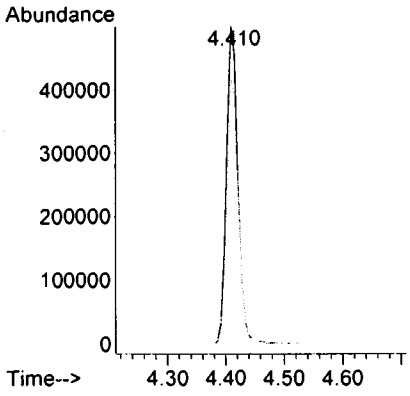


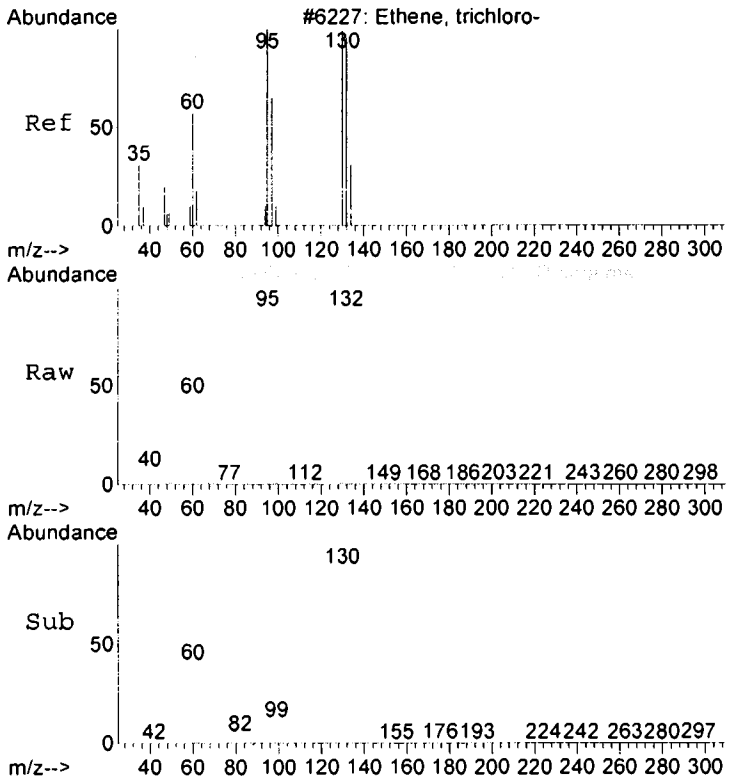


#30
cis-1,2-Dichloroethene
Concen: 129.13 ug/l
RT: 4.410 min Scan# 463
Delta R.T. -0.000 min
Lab File: 2M142542.D
Acq: 30 Sep 2020 19:26

Tgt Ion: 61 Resp: 704917

Ion	Ratio	Lower	Upper
61	100		
96	83.4	38.2	118.2
98	53.1	7.8	87.8

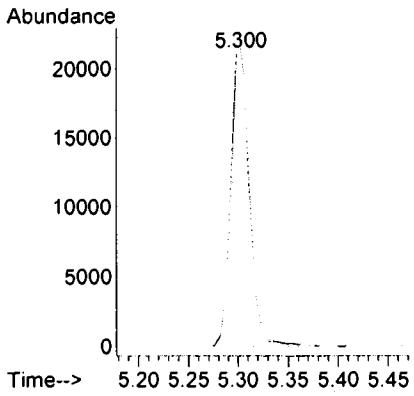


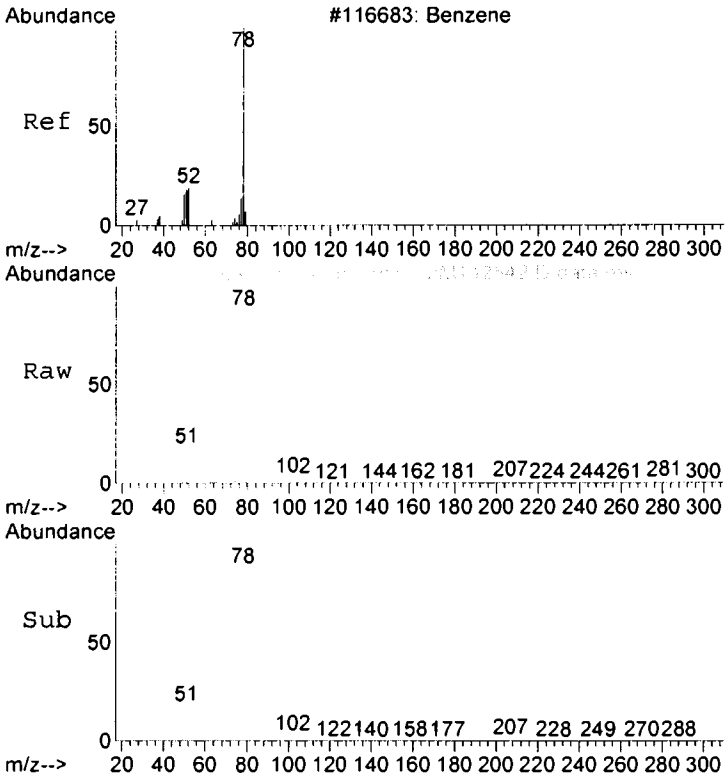


#49
Trichloroethene
Concen: 7.93 ug/l
RT: 5.300 min Scan# 609
Delta R.T. -0.000 min
Lab File: 2M142542.D
Acq: 30 Sep 2020 19:26

Tgt Ion:130 Resp: 28719

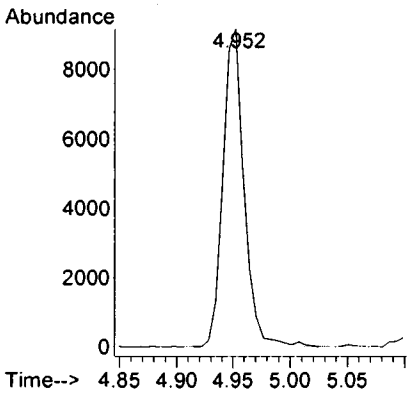
Ion	Ratio	Lower	Upper
130	100		
132	99.9	56.0	136.0
95	90.0	39.3	139.3





#50
Benzene
Concen: 0.95 ug/l
RT: 4.952 min Scan# 552
Delta R.T. -0.000 min
Lab File: 2M142542.D
Acq: 30 Sep 2020 19:26

Tgt Ion: 78 Resp: 12179



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-012
Client Id: TMW-2
Data File: 2M142646.D
Analysis Date: 10/02/20 15:31
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**35**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**1.9**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**2.7**
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**9.2**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	**75-01-4**	**Vinyl Chloride**	**1.0**	**1.7**
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

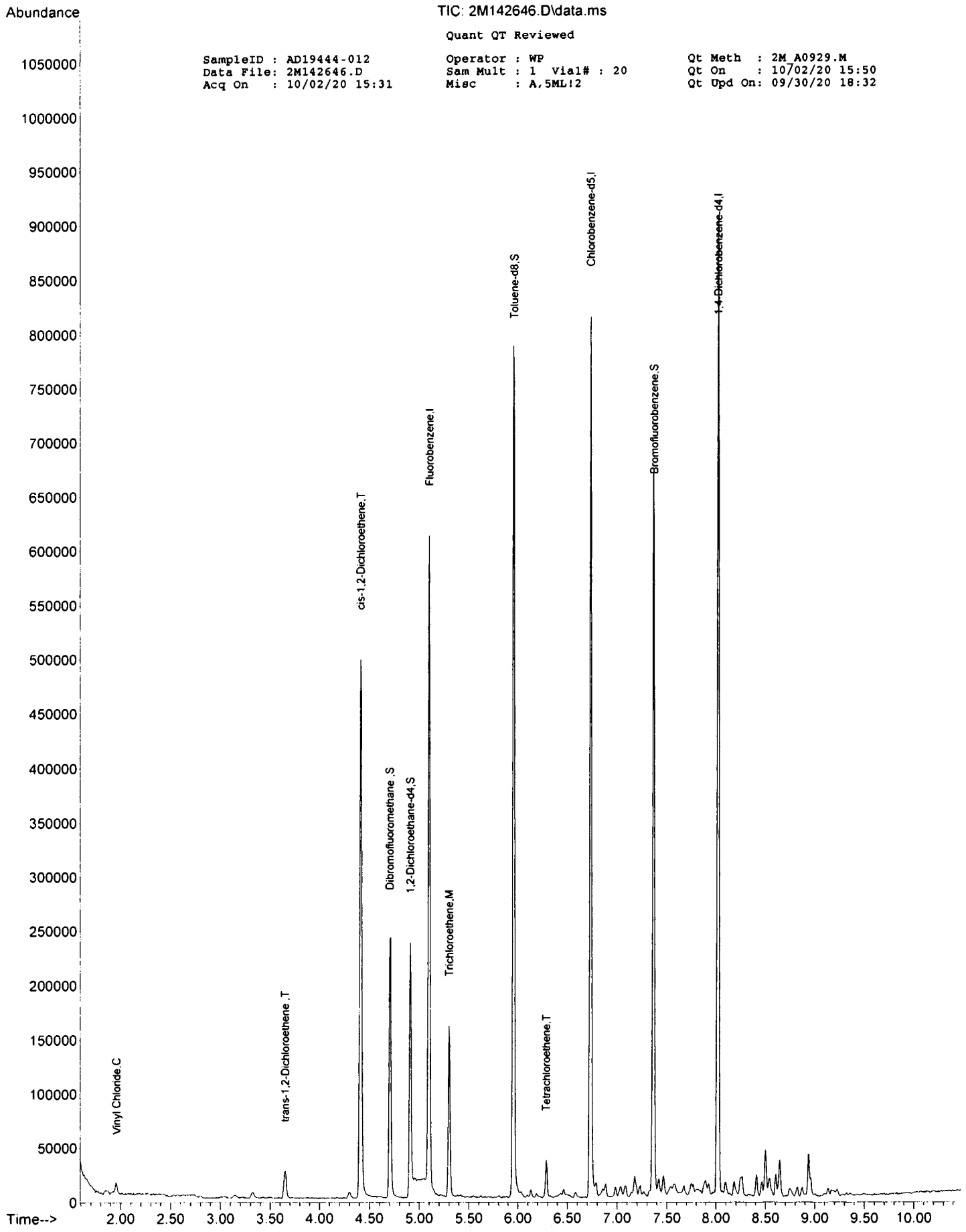
Quantitation Report (QT Reviewed)

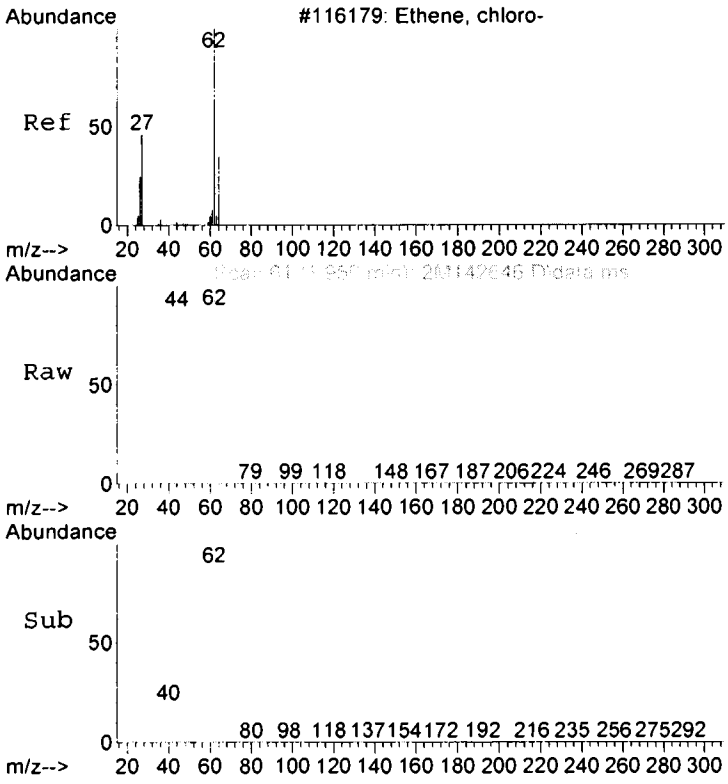
SampleID : AD19444-012 Operator : WP Qt Meth : 2M_A0929.M
Data File: 2M142646.D Sam Mult : 1 Vial# : 20 Qt On : 10/02/20 15:50
Acq On : 10/02/20 15:31 Misc : A,5ML!2 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	363124	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	331871	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	174133	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	104463	30.03	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.10%			
39) 1,2-Dichloroethane-d4	4.910	67	53813	29.96	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.87%			
66) Toluene-d8	5.958	98	384984	29.65	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.83%			
76) Bromofluorobenzene	7.367	174	141077	30.84	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.80%			
Target Compounds						Qvalue
9) Vinyl Chloride	1.959	62	7808	1.7312	ug/l	95
28) trans-1,2-Dichloroethene	3.654	96	9428	2.7377	ug/l	88
30) cis-1,2-Dichloroethene	4.410	61	202159	34.9265	ug/l	92
49) Trichloroethene	5.300	130	35334	9.2031	ug/l	94
65) Tetrachloroethene	6.288	164	5669	1.8978	ug/l	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

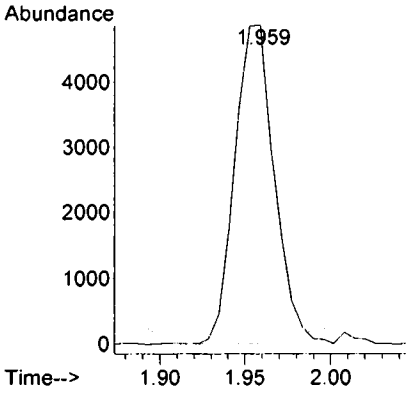

Abundance
TIC: 2M142646.D\data.ms
Quant QT Reviewed
SampleID : AD19444-012
Data File: 2M142646.D
Acq On : 10/02/20 15:31
Operator : WP
Sam Mult : 1 Vial# : 20
Misc : A,5ML!2
Qt Meth : 2M_A0929.M
Qt On : 10/02/20 15:50
Qt Upd On: 09/30/20 18:32
Vinyl Chloride,C
trans-1,2-Dichloroethene,T
cis-1,2-Dichloroethene,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

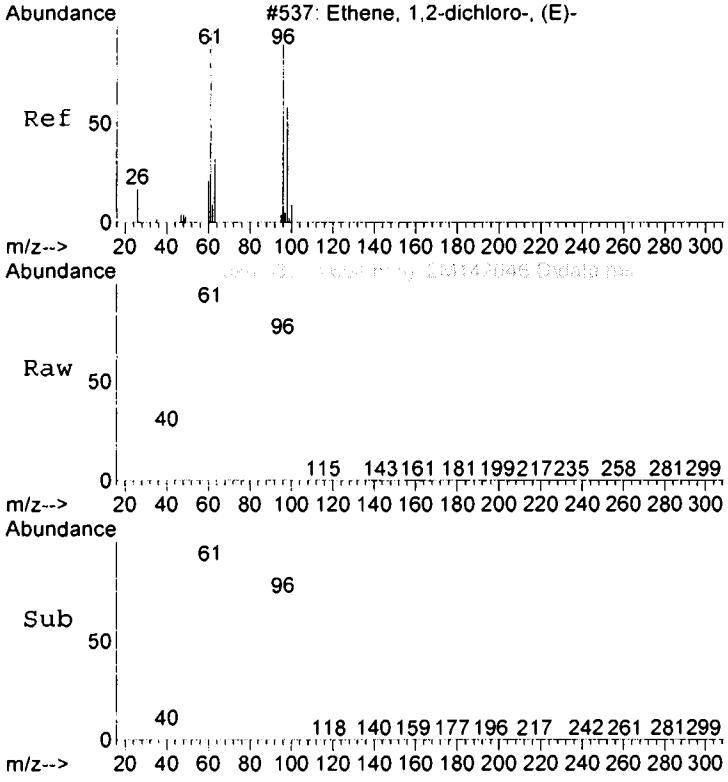


#9
Vinyl Chloride
Concen: 1.73 ug/l
RT: 1.959 min Scan# 61
Delta R.T. 0.006 min
Lab File: 2M142646.D
Acq: 02 Oct 2020 15:31

Tgt Ion: 62 Resp: 7808

Ion	Ratio	Lower	Upper
62	100		
64	28.6	0.0	71.2

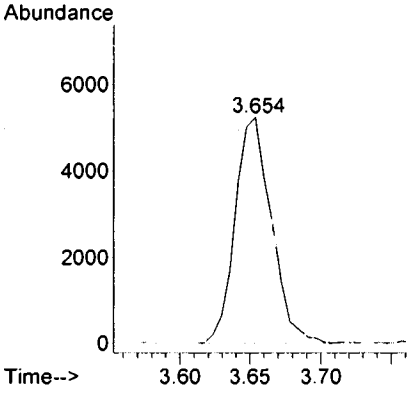


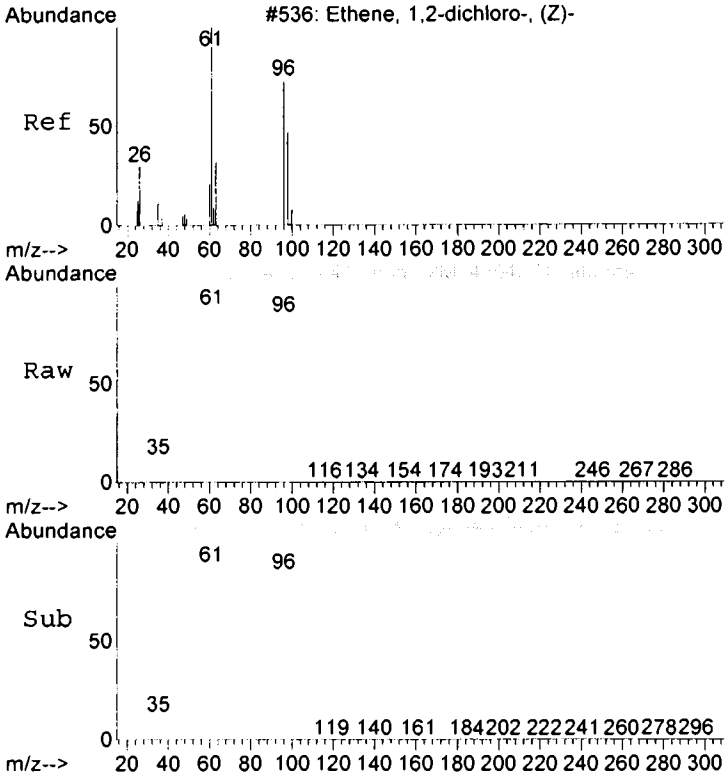


#28
trans-1,2-Dichloroethene
Concen: 2.74 ug/l
RT: 3.654 min Scan# 339
Delta R.T. -0.000 min
Lab File: 2M142646.D
Acq: 02 Oct 2020 15:31

Tgt Ion: 96 Resp: 9428

Ion	Ratio	Lower	Upper
96	100		
61	138.8	51.5	201.5
98	73.8	23.0	103.0

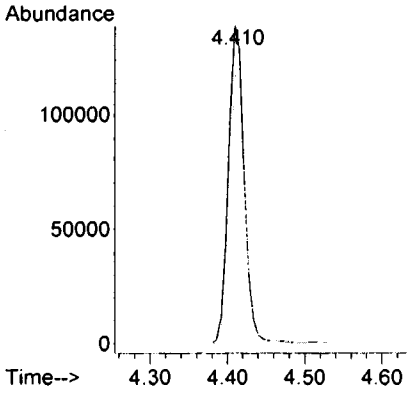


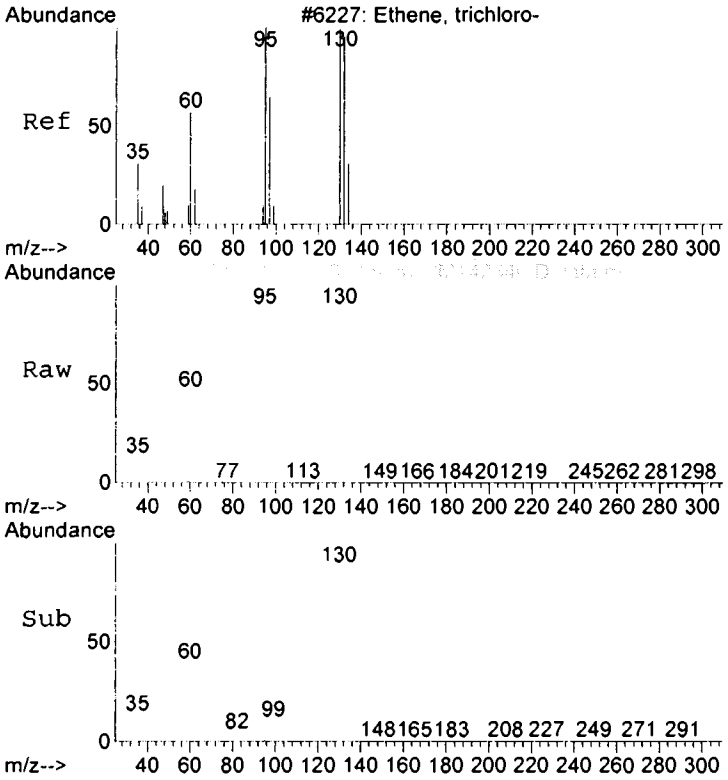


#30
cis-1,2-Dichloroethene
Concen: 34.93 ug/l
RT: 4.410 min Scan# 463
Delta R.T. -0.000 min
Lab File: 2M142646.D
Acq: 02 Oct 2020 15:31

Tgt Ion: 61 Resp: 202159

Ion	Ratio	Lower	Upper
61	100		
96	84.2	38.2	118.2
98	54.6	7.8	87.8

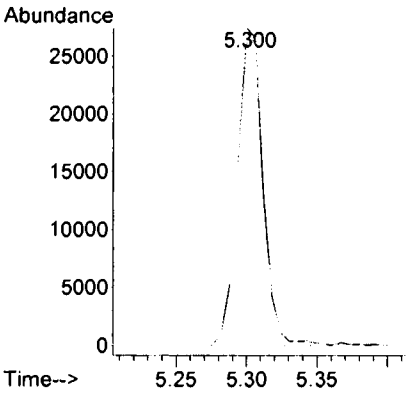


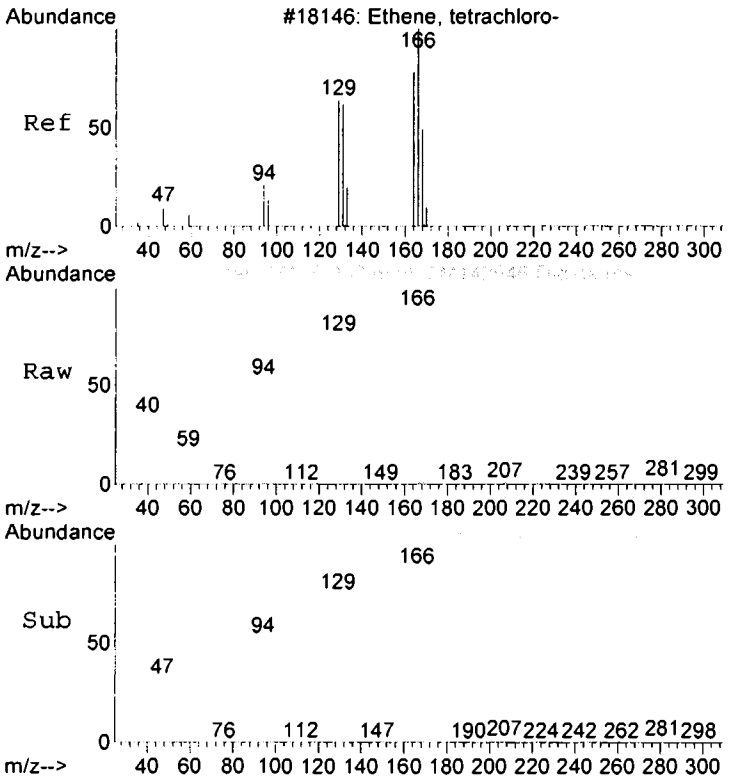


#49
Trichloroethene
Concen: 9.20 ug/l
RT: 5.300 min Scan# 609
Delta R.T. -0.000 min
Lab File: 2M142646.D
Acq: 02 Oct 2020 15:31

Tgt Ion:130 Resp: 35334

Ion	Ratio	Lower	Upper
130	100		
132	95.1	56.0	136.0
95	99.9	39.3	139.3

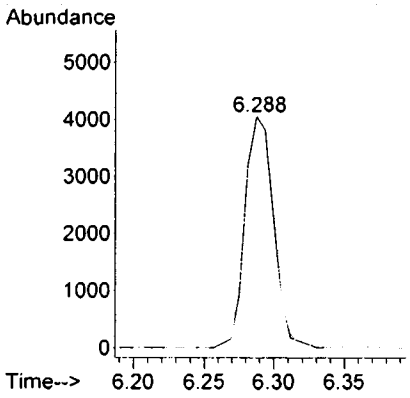




#65
Tetrachloroethene
Concen: 1.90 ug/l
RT: 6.288 min Scan# 771
Delta R.T. 0.001 min
Lab File: 2M142646.D
Acq: 02 Oct 2020 15:31

Tgt Ion:164 Resp: 5669

Ion	Ratio	Lower	Upper
164	100		
166	137.6	56.0	196.0



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-013
Client Id: DUP
Data File: 2M142647.D
Analysis Date: 10/02/20 15:50
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	**1,1-Dichloroethene**	**1.0**	**14**	**156-59-2**	**cis-1,2-Dichloroethene**	**1.0**	**290**
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	**127-18-4**	**Tetrachloroethene**	**1.0**	**1.5**
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	**156-60-5**	**trans-1,2-Dichloroethene**	**1.0**	**11**
71-43-2	**Benzene**	**0.50**	**0.79**	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	**79-01-6**	**Trichloroethene**	**1.0**	**200**
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	**75-01-4**	**Vinyl Chloride**	**1.0**	**12**
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

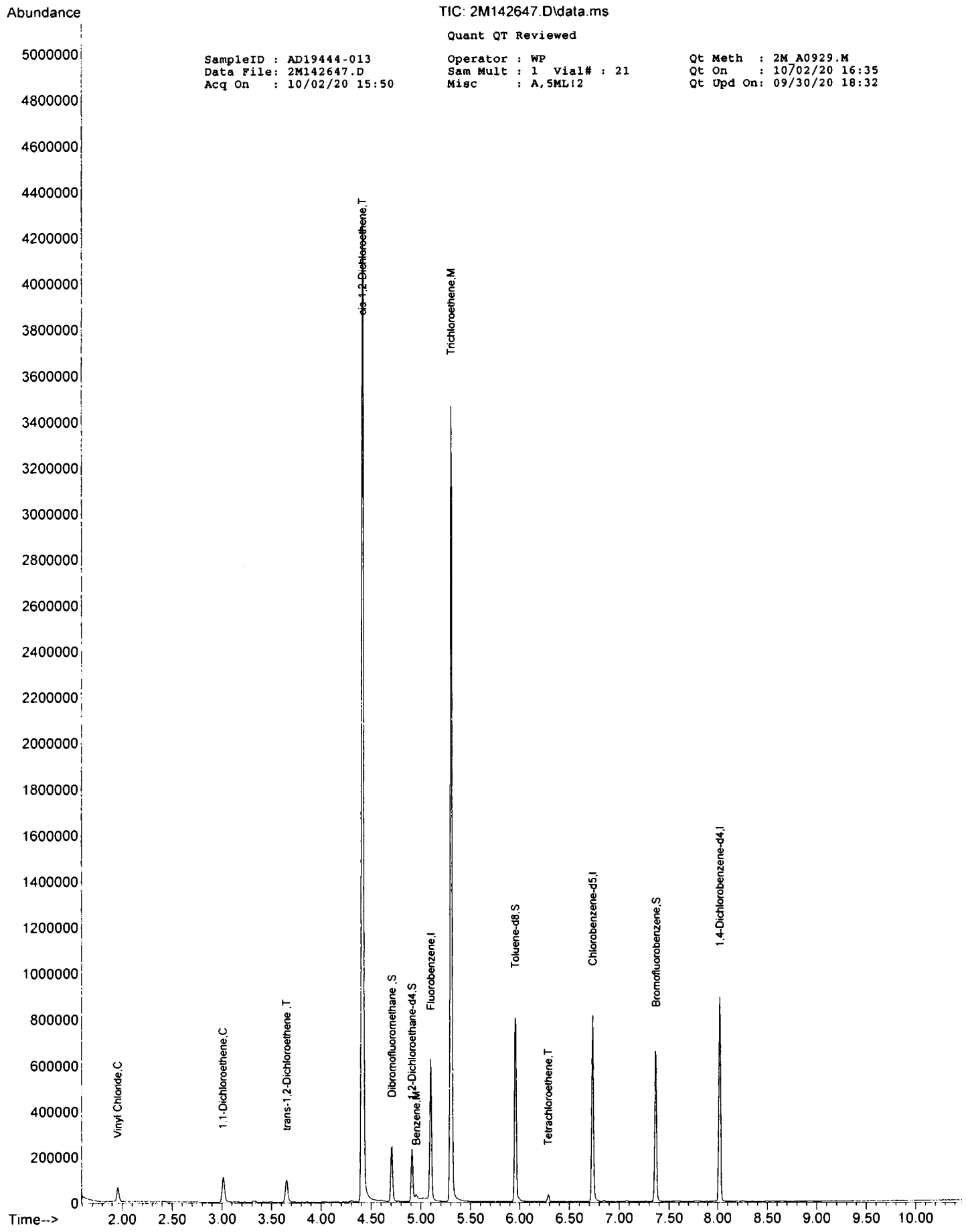
Quantitation Report (QT Reviewed)

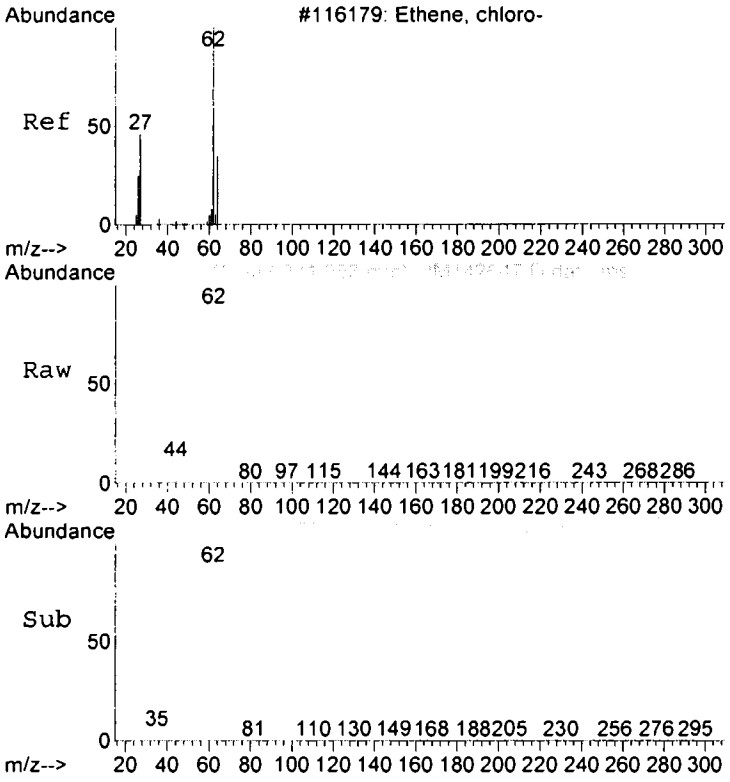
SampleID : AD19444-013 Operator : WP Qt Meth : 2M_A0929.M
Data File: 2M142647.D Sam Mult : 1 Vial# : 21 Qt On : 10/02/20 16:35
Acq On : 10/02/20 15:50 Misc : A,5ML!2 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	364460	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	329995	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	173985	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.709	111	102446	29.34	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.80%			
39) 1,2-Dichloroethane-d4	4.910	67	53007	29.40	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.00%			
66) Toluene-d8	5.952	98	384759	29.80	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.33%			
76) Bromofluorobenzene	7.367	174	141097	30.87	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.90%			
Target Compounds						Qvalue
9) Vinyl Chloride	1.953	62	55968	12.3636	ug/l	99
24) 1,1-Dichloroethene	3.008	61	64788	13.8224	ug/l	92
28) trans-1,2-Dichloroethene	3.654	96	36686	10.6137	ug/l	96
30) cis-1,2-Dichloroethene	4.410	61	1702304	293.0243	ug/l	94
49) Trichloroethene	5.300	130	761497	197.6121	ug/l	95
50) Benzene	4.952	78	10814	0.7925	ug/l	100
65) Tetrachloroethene	6.288	164	4597	1.5477	ug/l	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

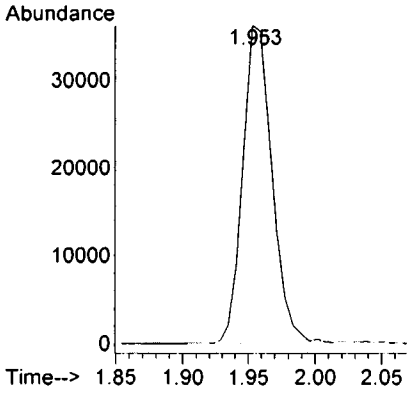

Abundance
TIC: 2M142647.D\data.ms
Quant QT Reviewed
SampleID : AD19444-013
Data File: 2M142647.D
Acq On : 10/02/20 15:50
Operator : WP
Sam Mult : 1 Vial# : 21
Misc : A,5ML!2
Qt Meth : 2M_A0929.M
Qt On : 10/02/20 16:35
Qt Upd On: 09/30/20 18:32
Vinyl Chloride,C
1,1-Dichloroethene,C
trans-1,2-Dichloroethene,T
cis-1,2-Dichloroethene,T
Dibromofluoromethane,S
Benzene,M
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

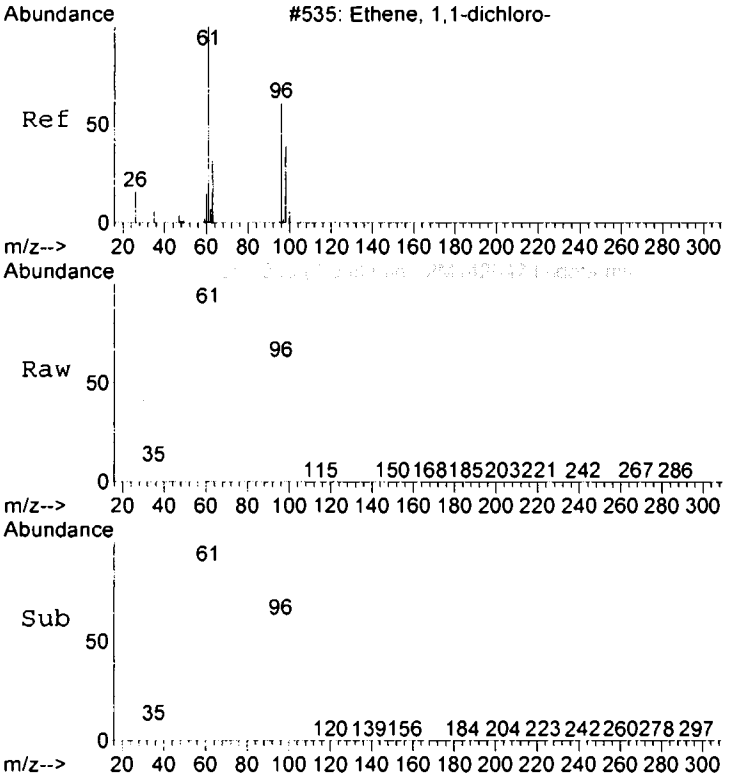


#9
Vinyl Chloride
Concen: 12.36 ug/l
RT: 1.953 min Scan# 60
Delta R.T. -0.000 min
Lab File: 2M142647.D
Acq: 02 Oct 2020 15:50

Tgt Ion: 62 Resp: 55968

Ion	Ratio	Lower	Upper
62	100		
64	31.6	0.0	71.2

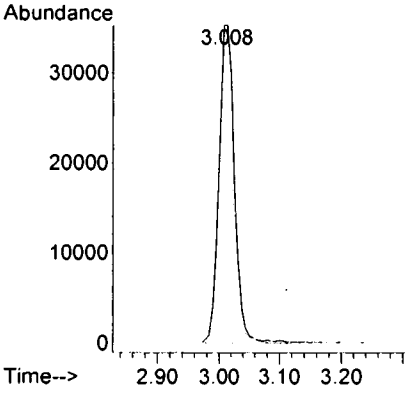


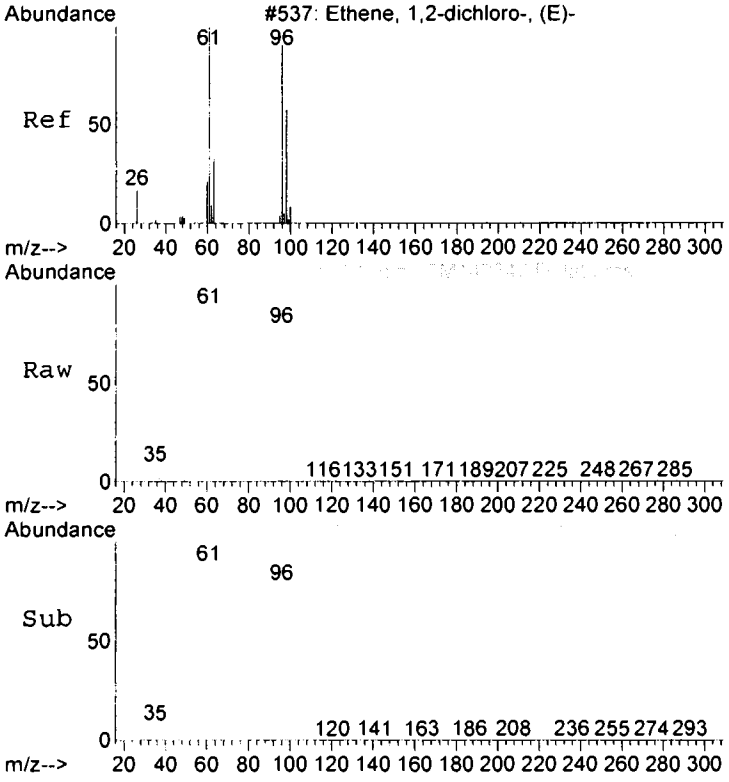


#24
1,1-Dichloroethene
Concen: 13.82 ug/l
RT: 3.008 min Scan# 233
Delta R.T. -0.000 min
Lab File: 2M142647.D
Acq: 02 Oct 2020 15:50

Tgt Ion: 61 Resp: 64788

Ion	Ratio	Lower	Upper
61	100		
96	61.5	27.5	107.5
98	38.6	4.6	84.6

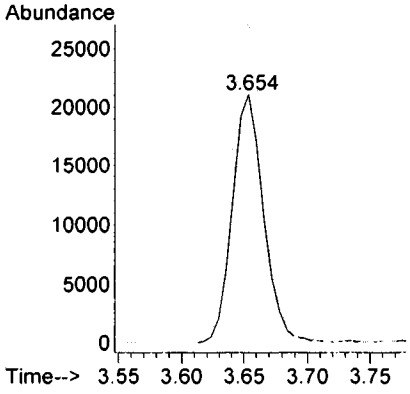


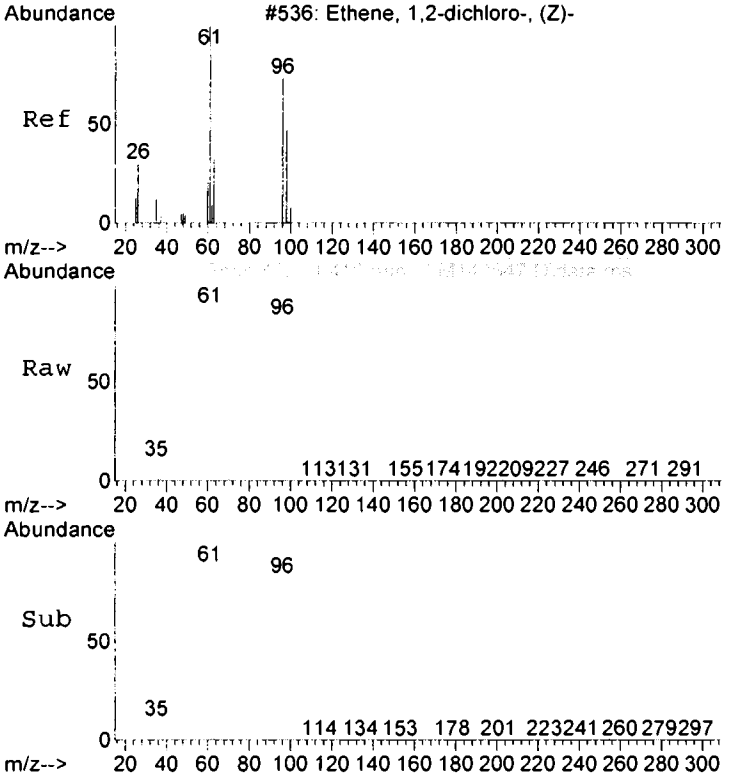


#28
trans-1,2-Dichloroethene
Concen: 10.61 ug/l
RT: 3.654 min Scan# 339
Delta R.T. -0.000 min
Lab File: 2M142647.D
Acq: 02 Oct 2020 15:50

Tgt Ion: 96 Resp: 36686

Ion	Ratio	Lower	Upper
96	100		
61	128.5	51.5	201.5
98	68.6	23.0	103.0

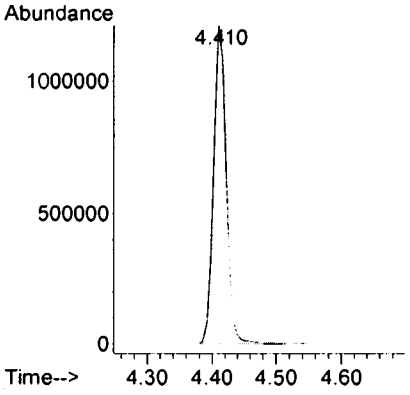


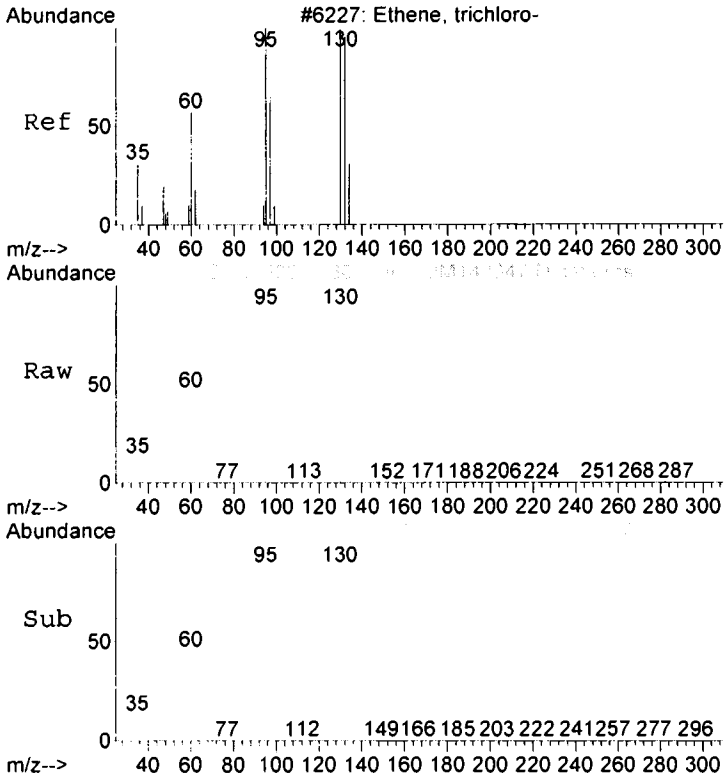


#30
cis-1,2-Dichloroethene
Concen: 293.02 ug/l
RT: 4.410 min Scan# 463
Delta R.T. -0.000 min
Lab File: 2M142647.D
Acq: 02 Oct 2020 15:50

Tgt Ion: 61 Resp: 1702304

Ion	Ratio	Lower	Upper
61	100		
96	81.8	38.2	118.2
98	54.3	7.8	87.8

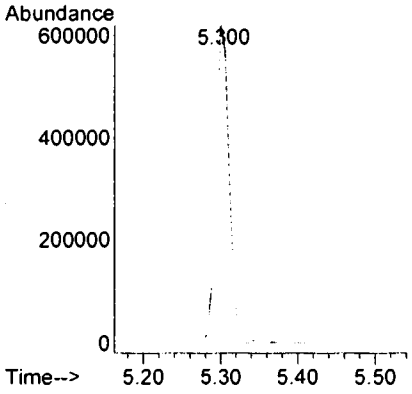


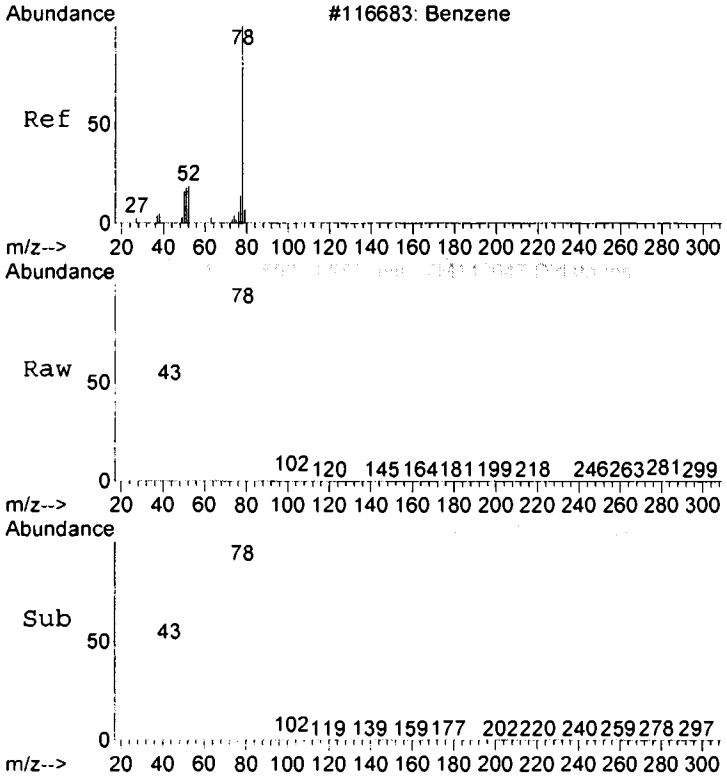


#49
Trichloroethene
Concen: 197.61 ug/l
RT: 5.300 min Scan# 609
Delta R.T. -0.000 min
Lab File: 2M142647.D
Acq: 02 Oct 2020 15:50

Tgt Ion:130 Resp: 761497

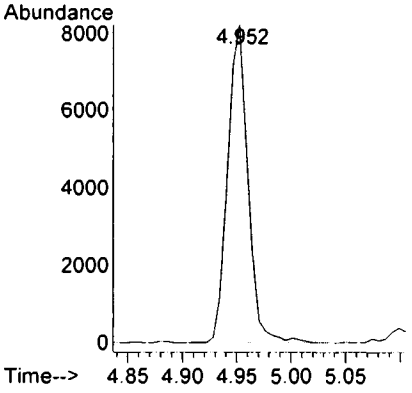
Ion	Ratio	Lower	Upper
130	100		
132	94.6	56.0	136.0
95	97.4	39.3	139.3

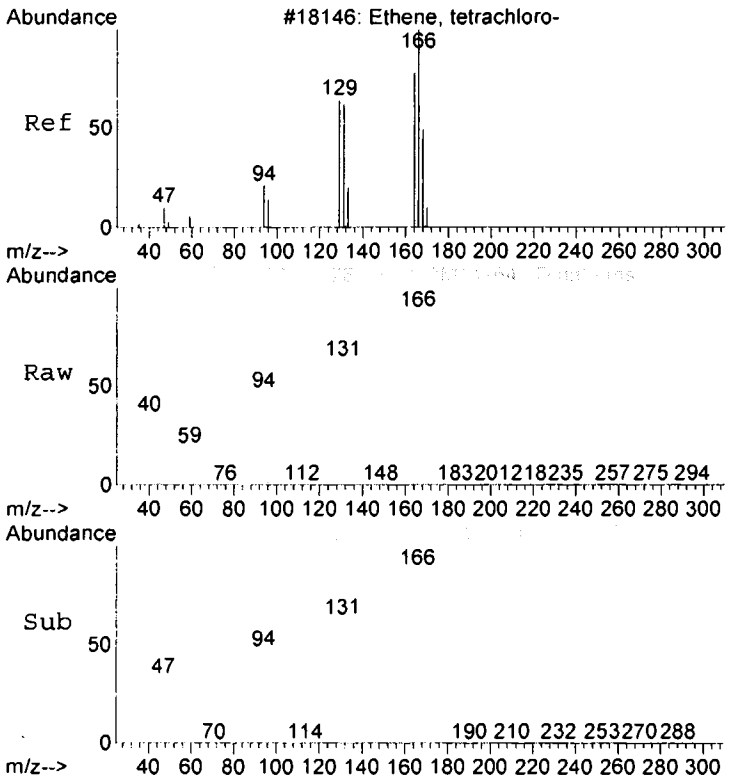




#50
Benzene
Concen: 0.79 ug/l
RT: 4.952 min Scan# 552
Delta R.T. -0.000 min
Lab File: 2M142647.D
Acq: 02 Oct 2020 15:50

Tgt Ion: 78 Resp: 10814

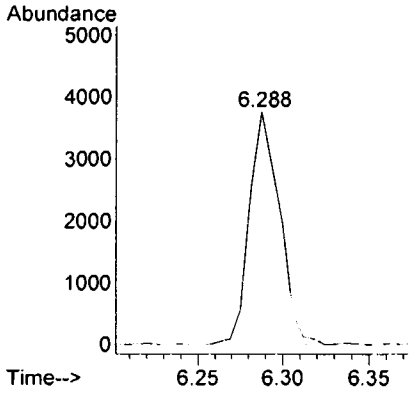




#65
Tetrachloroethene
Concen: 1.55 ug/l
RT: 6.288 min Scan# 771
Delta R.T. 0.001 min
Lab File: 2M142647.D
Acq: 02 Oct 2020 15:50

Tgt Ion:164 Resp: 4597

Ion	Ratio	Lower	Upper
164	100		
166	136.8	56.0	196.0



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-014
Client Id: TB-092320
Data File: 11M83273.D
Analysis Date: 09/28/20 12:46
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	**Acetone**	**5.0**	**12**	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

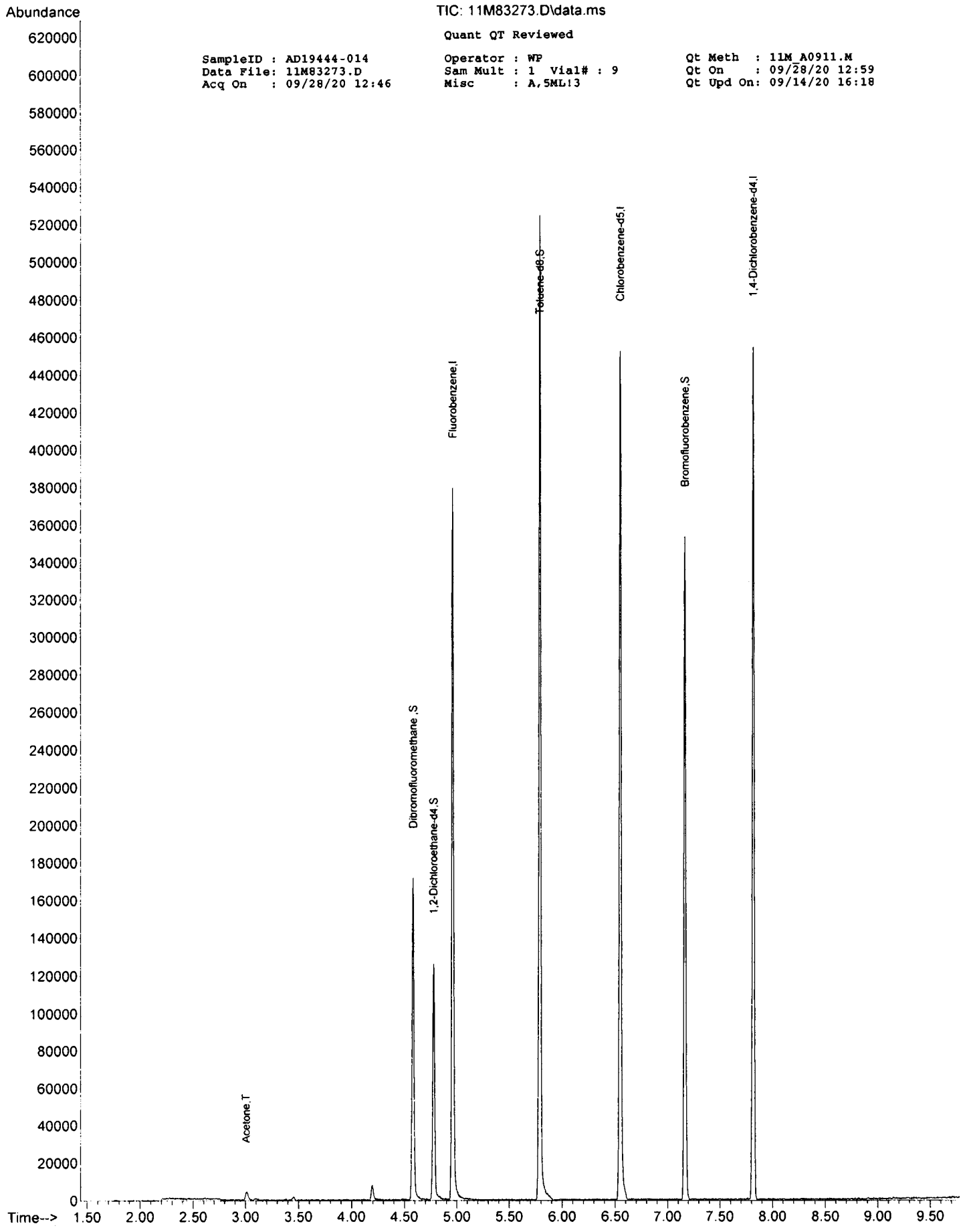
Quantitation Report (QT Reviewed)

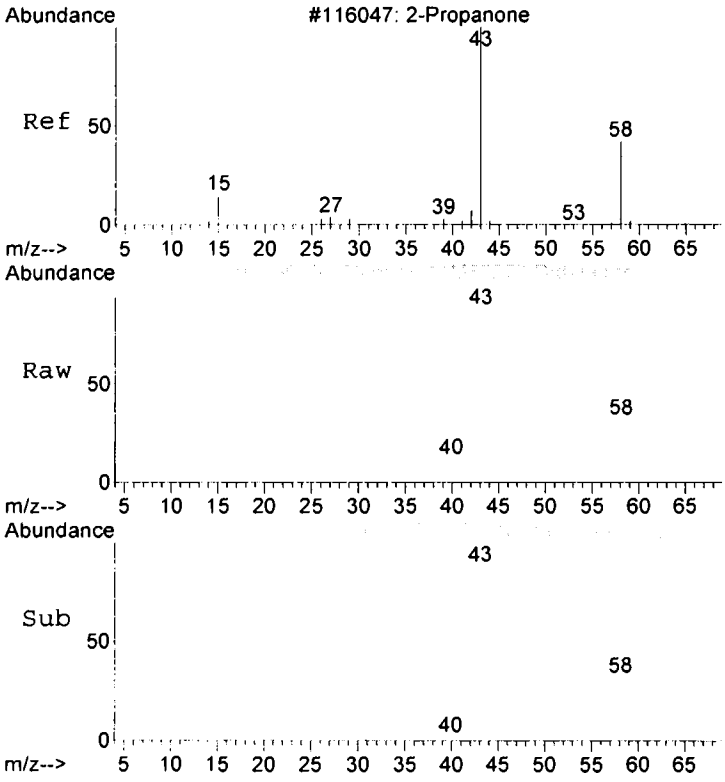
SampleID : AD19444-014 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83273.D Sam Mult : 1 Vial# : 9 Qt On : 09/28/20 12:59
Acq On : 09/28/20 12:46 Misc : A,5ML!3 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	240273	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.549	117	198815	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	89098	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.581	111	68916	34.41	ug/l	0.00
Spiked Amount 30.000			Recovery = 114.70%			
39) 1,2-Dichloroethane-d4	4.778	67	31191	29.68	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.93%			
66) Toluene-d8	5.787	98	248717	28.60	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.33%			
76) Bromofluorobenzene	7.167	174	71597	31.88	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.27%			
Target Compounds						Qvalue
19) Acetone	3.006	43	5071m	12.2634	ug/l	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

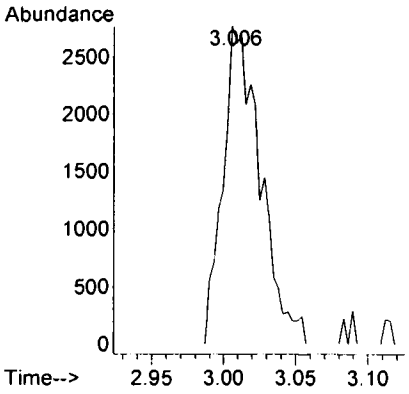

Abundance
TIC: 11M83273.D\data.ms
Quant QT Reviewed
SampleID : AD19444-014
Data File: 11M83273.D
Acq On : 09/28/20 12:46
Operator : WP
Sam Mult : 1 Vial# : 9
Misc : A,5ML!3
Qt Meth : 11M_A0911.M
Qt On : 09/28/20 12:59
Qt Upd On: 09/14/20 16:18
620000
600000
580000
560000
540000
520000
500000
480000
460000
440000
420000
400000
380000
360000
340000
320000
300000
280000
260000
240000
220000
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
Acetone,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->
1.50
2.00
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50



#19
Acetone
Concen: 12.26 ug/l m
RT: 3.006 min Scan# 496
Delta R.T. -0.003 min
Lab File: 11M83273.D
Acq: 28 Sep 2020 12:46

Tgt Ion: 43 Resp: 5071

Ion	Ratio	Lower	Upper
43	100		
58	31.7	0.0	71.7



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-015
Client Id: EB-092320
Data File: 2M142455.D
Analysis Date: 09/29/20 02:32
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	**75-09-2**	**Methylene Chloride**	**1.0**	**7.8**
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 568732

Total Target Concentration 7.8

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

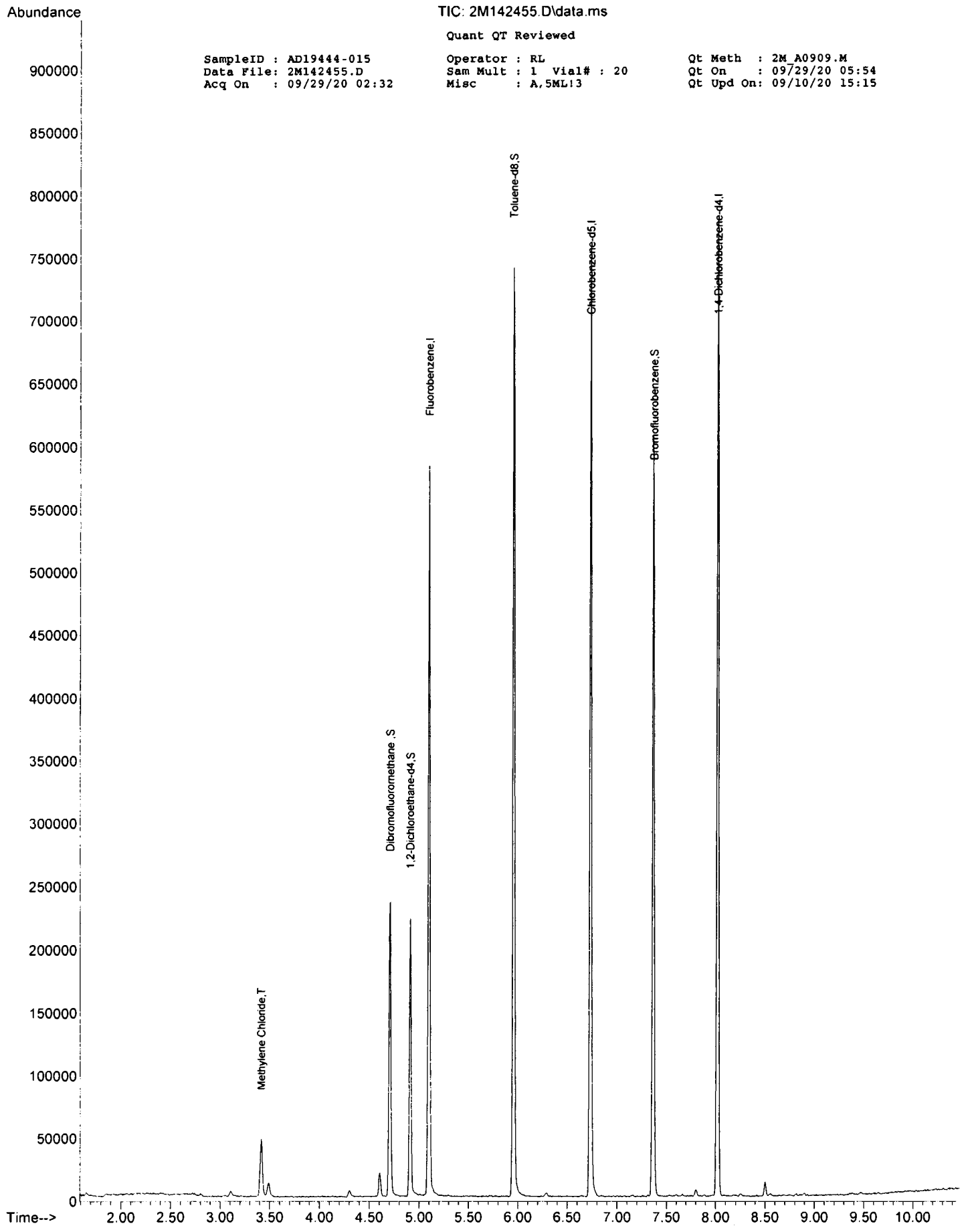
Quantitation Report (QT Reviewed)

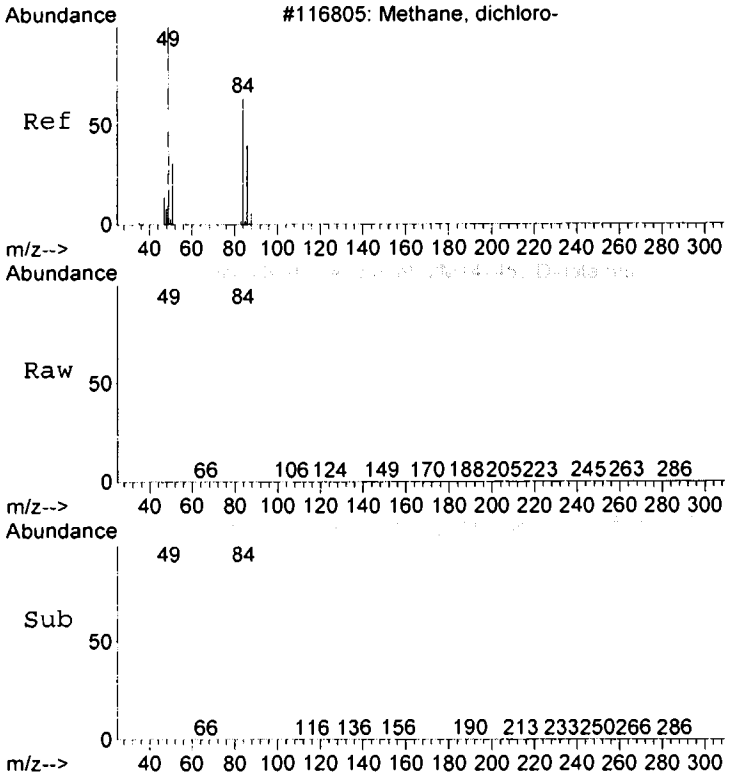
SampleID : AD19444-015 Operator : RL Qt Meth : 2M_A0909.M
Data File: 2M142455.D Sam Mult : 1 Vial# : 20 Qt On : 09/29/20 05:54
Acq On : 09/29/20 02:32 Misc : A,5ML!3 Qt Upd On: 09/10/20 15:15

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-2820\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	340783	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	304941	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	152907	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.709	111	99320	31.67	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.57%			
39) 1,2-Dichloroethane-d4	4.910	67	50879	31.43	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.77%			
66) Toluene-d8	5.952	98	360465	30.31	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.03%			
76) Bromofluorobenzene	7.367	174	128014	31.30	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.33%			
Target Compounds						Qvalue
15) Methylene Chloride	3.416	84	20062	7.8351	ug/l	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

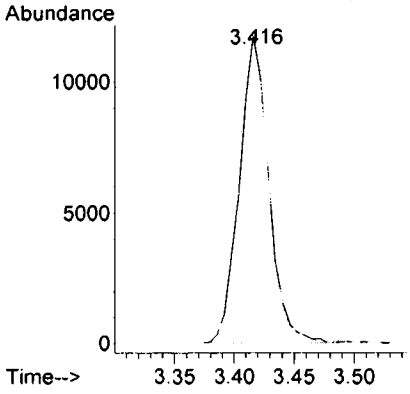

Abundance
TIC: 2M142455.D\data.ms
Quant QT Reviewed
SampleID : AD19444-015
Data File: 2M142455.D
Acq On : 09/29/20 02:32
Operator : RL
Sam Mult : 1 Vial# : 20
Misc : A,5ML!3
Qt Meth : 2M_A0909.M
Qt On : 09/29/20 05:54
Qt Upd On: 09/10/20 15:15
Methylene Chloride,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->



#15
Methylene Chloride
Concen: 7.84 ug/l
RT: 3.416 min Scan# 300
Delta R.T. 0.000 min
Lab File: 2M142455.D
Acq: 29 Sep 2020 02:32

Tgt Ion: 84 Resp: 20062

Ion	Ratio	Lower	Upper
84	100		
49	103.6	44.6	178.2
86	61.7	26.0	104.2



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD19444-016
Client Id: FB-092320
Data File: 2M142454.D
Analysis Date: 09/29/20 02:12
Date Rec/Extracted: 09/24/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U	1330-20-7	Xylenes (Total)	1.0	U

Worksheet #: 568732

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

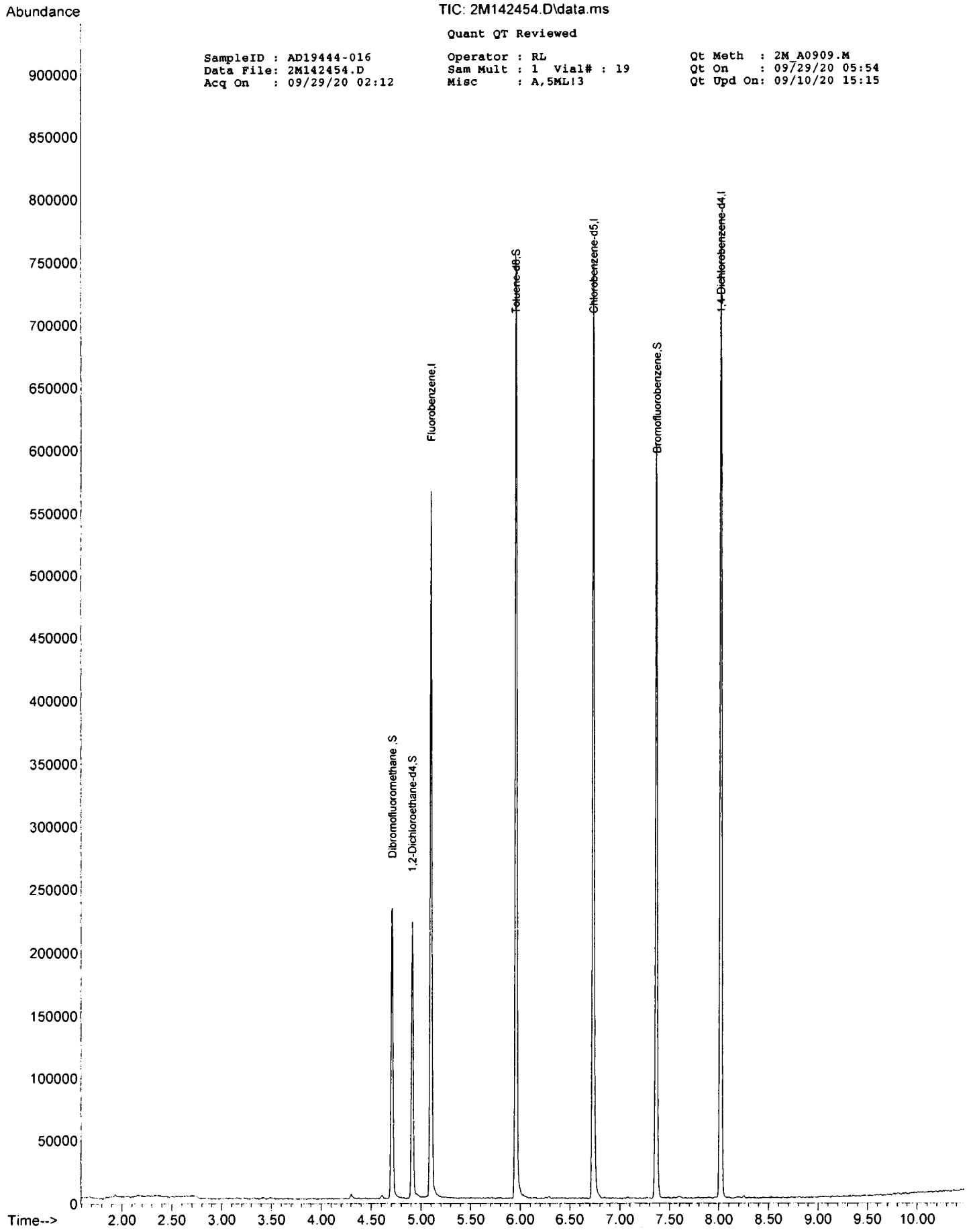
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AD19444-016 Operator : RL Qt Meth : 2M_A0909.M
Data File: 2M142454.D Sam Mult : 1 Vial# : 19 Qt On : 09/29/20 05:54
Acq On : 09/29/20 02:12 Misc : A,5ML!3 Qt Upd On: 09/10/20 15:15

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-2820\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	332995	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	302262	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	156304	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.709	111	98668	32.20	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.33%			
39) 1,2-Dichloroethane-d4	4.910	67	51537	32.59	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.63%			
66) Toluene-d8	5.952	98	355802	30.18	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.60%			
76) Bromofluorobenzene	7.367	174	127776	30.56	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.87%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : AD19444-016
Data File: 2M142454.D
Acq On : 09/29/20 02:12
Operator : RL
Sam Mult : 1 Vial# : 19
Misc : A,5ML!3
Qt Meth : 2M_A0909.M
Qt On : 09/29/20 05:54
Qt Upd On: 09/10/20 15:15
900000
850000
800000
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->
2.00
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50
10.00

GC/MS Volatile Data
Standards Data

0092507 0204

Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_2

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time
1	2M141743.D	CAL @ 20 PPB	09/09/20 21:04	2	2M141741.D	CAL @ 5 PPB	09/09/20 20:25
3	2M141742.D	CAL @ 10 PPB	09/09/20 20:44	4	2M141745.D	CAL @ 50 PPB	09/09/20 21:43
5	2M141753.D	CAL @100 PPB	09/10/20 00:19	6	2M141750.D	CAL @ 250 PPB	09/09/20 23:21
7	2M141747.D	CAL @ 500 PPB	09/09/20 22:22	8	2M141740.D	CAL @ 1 PPB	09/09/20 20:05
9	2M141739.D	CAL @ 0.5 PPB	09/09/20 19:46				

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.2401	0.2466	0.2725	0.2628	0.2555	0.2782	0.2384	0.3014	-----	0.262	1.69	0.994	0.999	8.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dichlorodifluorometha	1	0	Avg	0.1600	0.1375	0.1699	0.1705	0.1770	0.1870	0.1574	0.1665	-----	0.166	1.68	0.993	0.999	8.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloromethane	1	0	Avg	0.1568	0.1693	0.1835	0.1824	0.1863	0.1955	0.1629	0.2245	-----	0.183	1.85	0.992	0.999	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromomethane	1	0	Qua	0.1171	0.1325	0.1368	0.1127	0.1498	0.1877	0.2004	0.2261	-----	0.158	2.25	0.997	0.999	26	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Chloride	1	0	Avg	0.2123	0.1949	0.2198	0.2275	0.2246	0.2343	0.1985	0.2643	-----	0.222	1.95	0.993	0.999	9.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroethane	1	0	Avg	0.1480	0.1425	0.1668	0.1626	0.1535	0.1628	0.1658	0.1786	-----	0.160	2.34	1.00	1.00	7.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichlorofluoromethan	1	0	Avg	0.3529	0.3344	0.4053	0.3904	0.3957	0.4314	0.3856	0.3902	-----	0.386	2.57	0.997	0.999	7.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl ether	1	0	Avg	0.1512	0.1535	0.1522	0.1574	0.1552	0.1644	0.1506	0.1435	-----	0.154	2.80	0.998	1.00	3.9	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Furan	1	0	Avg	0.2606	0.2576	0.2724	0.2748	0.2722	0.2918	0.2695	0.3206	-----	0.278	2.84	0.998	1.00	7.3	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1346	0.1382	0.1706	0.1621	0.1633	0.1758	0.1626	0.1653	-----	0.159	3.00	0.998	0.999	9.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methylene Chloride	1	0	Avg	0.2238	0.2263	0.2215	0.2294	0.2197	0.2298	0.2010	0.2514	-----	0.225	3.42	0.996	0.999	6.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acrolein	1	0	Avg	0.0277	0.0256	0.0273	0.0281	0.0275	0.0302	0.0292	0.0290	-----	0.0281	2.92	1.00	1.00	5.0		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Acrylonitrile	1	0	Avg	0.0721	0.0726	0.0669	0.0772	0.0772	0.0797	0.0725	0.0970	-----	0.0769	3.62	0.998	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iodomethane	1	0	Avg	0.2255	0.1542	0.1969	0.2754	0.2514	0.2682	0.2467	0.2133	-----	0.229	3.15	0.997	0.998	18		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acetone	1	0	Avg	0.0589	0.0572	0.0594	0.0600	0.0607	0.0630	0.0576	0.0730	-----	0.0613	3.04	0.998	1.00	8.3	0.10 a	100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Carbon Disulfide	1	0	Avg	0.5669	0.5477	0.5990	0.5907	0.5931	0.6217	0.5445	0.6422	-----	0.588	3.21	0.996	0.999	5.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butyl Alcohol	1	0	Avg	0.0203	0.0215	0.0199	0.0214	0.0216	0.0216	0.0190	0.0280	-----	0.0217	3.48	0.996	1.00	13		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
n-Hexane	1	0	Avg	0.1483	0.1606	0.1913	0.1824	0.1868	0.2019	0.1746	0.2137	-----	0.183	3.87	0.995	0.999	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Di-isopropyl-ether	1	0	Avg	0.5228	0.4902	0.5279	0.5554	0.5427	0.5947	0.5413	0.5704	-----	0.543	4.03	0.998	0.999	5.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethene	1	0	Avg	0.2812	0.2731	0.3032	0.3040	0.3060	0.3250	0.3052	0.3183	-----	0.302	3.01	0.999	1.00	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl Acetate	1	0	Avg	0.1346	0.1532	0.1302	0.1373	0.1374	0.1396	0.1192	0.1579	-----	0.139	3.32	0.994	1.00	8.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl-t-butyl ether	1	0	Avg	0.5671	0.5427	0.5617	0.6065	0.6051	0.6523	0.5907	0.5742	0.4389	0.571	3.64	0.998	0.999	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.3571	0.3525	0.3645	0.3805	0.3743	0.3956	0.3557	0.4126	-----	0.374	4.00	0.997	1.00	5.7	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2174	0.2112	0.2247	0.2324	0.2271	0.2489	0.2244	0.2443	-----	0.229	3.65	0.997	0.999	5.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl-t-butyl ether	1	0	Avg	0.5941	0.5723	0.5908	0.6279	0.6189	0.6589	0.6006	0.6386	-----	0.613	4.29	0.998	1.00	4.6	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.3598	0.3543	0.3764	0.3839	0.3699	0.4099	0.3811	0.3691	-----	0.376	4.41	0.999	0.999	4.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromochloromethane	1	0	Avg	0.1753	0.1725	0.1745	0.1844	0.1755	0.1641	0.1468	0.1962	-----	0.174	4.57	0.996	1.00	8.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2,2-Dichloropropane	1	0	Avg	0.3227	0.3142	0.3453	0.3492	0.3211	0.3662	0.3488	0.3600	-----	0.341	4.42	0.999	0.999	5.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl acetate	1	0	Avg	0.1900	0.1940	0.1908	0.1981	0.1957	0.2058	0.1846	0.2193	-----	0.197	4.43	0.997	1.00	5.5		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dioxane	1	0	Avg	0.0029	0.0028	0.0029	0.0030	0.0028	0.0030	0.0028	0.0031	-----	0.00296	5.50	0.999	1.00	3.8		1000.	250.0	500.0	2500.	5000.	12500	25000	50.00	
1,1-Dichloropropene	1	0	Avg	0.2919	0.2780	0.3059	0.3144	0.3166	0.3466	0.3225	0.3064	-----	0.310	4.82	0.999	0.999	6.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroform	1	0	Avg	0.4013	0.3759	0.4225	0.4258	0.4135	0.4271	0.3851	0.4433	-----	0.412	4.60	0.997	1.00	5.5	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromofluoromethan	1	0	Avg	0.2803	0.2820	0.2835	0.2746	0.2783	0.2798	0.2425	0.2830	0.2802	0.276	4.70	-1	-1	4.7		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.2264	0.2288	0.2779	0.2679	0.2800	0.3059	0.2684	0.2752	-----	0.266	4.77	0.996	0.999	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1466	0.1450	0.1425	0.1420	0.1449	0.1409	0.1286	0.1463	0.1452	0.142	4.91	-1	-1	3.9		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3259	0.3036	0.3258	0.3431	0.3390	0.3805	0.4010	0.3796	0.3383	0.349	4.95	0.999	1.00	9.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
2-Butanone	1	0	Avg	0.0875	0.0815	0.0893	0.0977	0.1011	0.1097	0.1023	0.0889	-----	0.0948	4.40	0.999	0.999	10	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1-Trichloroethane	1	0	Avg	0.3502	0.3331	0.3655	0.3792	0.3713	0.3960	0.3584	0.3893	-----	0.368	4.73	0.998	0.999	5.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Carbon Tetrachloride	1	0	Avg	0.3124	0.2955	0.3335	0.3407	0.3377	0.3741	0.3442	0.3350	-----	0.334	4.83	0.998	0.999	6.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Acetate	1	0	Avg	0.6616	0.6114	0.6443	0.6828	0.6752	0.7214	0.6841	0.6938	-----	0.672	4.02	0.999	1.00	4.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromodichloromethan	1	0	Avg	0.3274	0.3123	0.3378	0.3455	0.3368	0.3498	0.3321	0.3503	-----	0.337	5.57	0.999	1.00	3.8	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.30

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0092507 0205

Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_2

Level #	Data File:	Cal Identifier:	Analysis Date/Time	Level #	Data File:	Cal Identifier:	Analysis Date/Time
1	2M141743.D	CAL @ 20 PPB	09/09/20 21:04	2	2M141741.D	CAL @ 5 PPB	09/09/20 20:25
3	2M141742.D	CAL @ 10 PPB	09/09/20 20:44	4	2M141745.D	CAL @ 50 PPB	09/09/20 21:43
5	2M141753.D	CAL @100 PPB	09/10/20 00:19	6	2M141750.D	CAL @ 250 PPB	09/09/20 23:21
7	2M141747.D	CAL @ 500 PPB	09/09/20 22:22	8	2M141740.D	CAL @ 1 PPB	09/09/20 20:05
9	2M141739.D	CAL @ 0.5 PPB	09/09/20 19:46				

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.2137	0.2295	0.2739	0.2604	0.2734	0.3036	0.2720	0.2841	-----	0.264	5.42	0.997	0.999	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromomethane	1	0	Avg	0.1777	0.1594	0.1765	0.1810	0.1789	0.1950	0.1812	0.1761	-----	0.178	5.50	0.999	0.999	5.5		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloropropane	1	0	Avg	0.2177	0.2144	0.2221	0.2260	0.2235	0.2434	0.2260	0.2362	-----	0.226	5.43	0.999	0.999	4.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichloroethene	1	0	Avg	0.2481	0.2391	0.2590	0.2665	0.2602	0.2832	0.2587	0.2560	-----	0.259	5.30	0.998	0.999	5.0	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Benzene	1	0	Avg	0.8614	0.8227	0.8795	0.9271	0.9039	1.0074	1.0258	0.9568	0.6455	0.892	4.95	0.999	1.00	13	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.6116	0.5863	0.5827	0.6367	0.6411	0.6968	0.8845	0.5861	-----	0.653	4.99	0.989	1.00	15		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iso-propylacetate	1	0	Avg	0.4312	0.4107	0.4296	0.4453	0.4702	0.4885	0.5346	0.6616	-----	0.484	4.95	0.998	1.00	17	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl methacrylate	1	0	Avg	0.2147	0.1916	0.2141	0.2179	0.2230	0.2301	0.2245	0.1912	-----	0.213	5.45	1.00	1.00	6.8	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromochloromethan	1	0	Avg	0.3223	0.2959	0.3177	0.3397	0.3352	0.3403	0.3585	0.3538	-----	0.333	6.42	0.999	1.00	6.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chloroethylvinylethe	1	0	Avg	0.0688	0.0647	0.0713	0.0713	0.0706	0.0705	0.0674	0.0749	-----	0.0700	5.71	0.999	1.00	4.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.4358	0.4029	0.4395	0.4533	0.4463	0.4633	0.4578	0.4589	-----	0.445	5.81	1.00	1.00	4.4	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,3-Dichloroprop	1	0	Avg	0.4311	0.4046	0.4272	0.4465	0.4421	0.4704	0.5639	0.4723	-----	0.457	6.09	0.993	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl methacrylate	1	0	Avg	0.2156	0.2000	0.2080	0.2238	0.2301	0.2495	0.3442	0.2070	-----	0.235	6.10	0.982	1.00	20	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2525	0.2408	0.2589	0.2604	0.2609	0.2668	0.3344	0.2793	-----	0.269	6.20	0.990	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromoethane	1	0	Avg	0.2743	0.2634	0.2814	0.2845	0.2812	0.2848	0.2844	0.2850	-----	0.280	6.49	1.00	1.00	2.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.4309	0.4038	0.4313	0.4476	0.4525	0.4865	0.5621	0.4475	-----	0.458	6.29	0.995	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.2294	0.2171	0.2256	0.2387	0.2367	0.2411	0.2385	0.2242	-----	0.231	5.87	1.00	1.00	3.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Hexanone	1	0	Avg	0.1631	0.1482	0.1596	0.1710	0.1743	0.1820	0.2302	0.2244	-----	0.182	6.30	0.990	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Tetrachloroethene	1	0	Avg	0.2240	0.2227	0.2437	0.2388	0.2467	0.2677	0.3026	0.2609	-----	0.251	6.29	0.996	1.00	10	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Toluene-d8	1	0	Avg	1.1986	1.1768	1.1872	1.1779	1.1841	1.1467	1.1087	1.1798	1.1693	1.17	5.95	-1	-1	2.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.6586	0.6261	0.6738	0.6871	0.6901	0.7320	0.8238	0.6627	-----	0.694	5.99	0.997	1.00	8.7	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2753	0.2654	0.2729	0.2899	0.2928	0.3271	0.3964	0.3066	-----	0.303	6.78	0.992	1.00	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chlorobenzene	1	0	Avg	0.7479	0.6970	0.7536	0.7788	0.7882	0.8222	0.8385	0.7885	-----	0.777	6.75	1.00	1.00	5.7	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butyl acrylate	1	0	Avg	0.8465	0.7875	0.8071	0.9179	0.9366	0.9508	0.9329	0.8373	-----	0.877	6.99	1.00	1.00	7.4	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Amyl acetate	1	0	Qua	0.7129	0.6256	0.6711	0.7692	0.8215	0.5634	0.1774	0.7044	-----	0.631	7.11	0.531	0.998	32	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromoform	1	0	Avg	0.3989	0.3679	0.3972	0.4192	0.4178	0.4887	0.3640	0.4363	-----	0.411	7.20	0.977	0.995	9.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethylbenzene	1	0	Avg	0.5370	0.5153	0.5569	0.6152	0.6163	0.4951	-----	0.6321	-----	0.567	6.79	0.990	1.00	9.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.5753	0.5682	0.5856	0.6288	0.6121	0.4942	-----	0.6037	-----	0.581	7.42	0.990	1.00	7.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromofluorobenzene	1	0	Avg	0.8033	0.8144	0.7952	0.8097	0.7976	0.7476	0.8079	0.8187	0.8269	0.802	7.37	-1	-1	2.8		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.3993	1.2942	1.3891	1.5309	1.5753	1.5718	0.9163	1.4631	-----	1.39	7.07	0.909	0.995	16	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
m&p-Xylenes	1	0	Avg	0.8111	0.7589	0.8213	0.8808	0.9011	0.9190	0.7419	0.8528	0.6664	0.817	6.85	0.988	0.999	10	0.10	40.00	10.00	20.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	0.7858	0.7400	0.7902	0.8644	0.8908	0.8947	0.6580	0.8420	-----	0.808	7.07	0.973	0.998	10	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.2116	0.2034	0.2205	0.2344	0.2430	0.2247	0.2717	0.2458	-----	0.232	7.44	0.993	0.999	9.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichlorobenzene	1	0	Avg	0.9510	0.9020	0.9631	1.0172	1.0482	1.0562	0.9395	1.0759	-----	0.994	7.99	0.997	1.00	6.4	0.60	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dichlorobenzene	1	0	Avg	0.9607	0.9064	1.0074	1.0191	1.0386	1.0252	1.1190	1.0815	-----	1.02	8.04	0.998	1.00	6.5	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichlorobenzene	1	0	Avg	0.8851	0.8498	0.8976	0.9325	0.9544	1.0655	0.9374	0.9794	-----	0.938	8.26	0.996	0.999	7.0	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Isopropylbenzene	1	0	Avg	1.8888	1.8403	2.0419	2.1242	2.1609	2.3515	1.3523	2.1285	-----	1.99	7.26	0.907	0.991	15	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Qua	0.0169	0.0209	0.0170	0.0164	0.0162	0.0170	0.0112	0.0388	-----	0.0193	7.34	0.951	0.996	43		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Camphene	1	0	Qua	0.4399	0.4595	0.5386	0.5225	0.5658	0.5173	0.8104	0.4947	-----	0.544	7.43	0.970	0.997	21		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichloropropane	1	0	Avg	0.7324	0.6985	0.7201	0.7763	0.7958	0.7963	1.0363	0.7889	-----	0.793	7.46	0.988	0.999	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chlorotoluene	1	0	Qua	1.2151	1.1162	1.1718	1.2917	1.3768	0.9897	0.6025	1.3791	-----	1.14	7.56	0.898	0.998	22		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.30

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0092507 0206

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2M141743.D	CAL @ 20 PPB	09/09/20 21:04	2	2M141741.D	CAL @ 5 PPB	09/09/20 20:25
3	2M141742.D	CAL @ 10 PPB	09/09/20 20:44	4	2M141745.D	CAL @ 50 PPB	09/09/20 21:43
5	2M141753.D	CAL @100 PPB	09/10/20 00:19	6	2M141750.D	CAL @ 250 PPB	09/09/20 23:21
7	2M141747.D	CAL @ 500 PPB	09/09/20 22:22	8	2M141740.D	CAL @ 1 PPB	09/09/20 20:05
9	2M141739.D	CAL @ 0.5 PPB	09/09/20 19:46				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	1.8893	1.8336	1.9757	2.0889	2.1601	1.9968	1.0643	2.1466	-----	1.89	7.55	0.869	0.996	19		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Chlorotoluene	1	0	Avg	1.2013	1.1342	1.2146	1.2965	1.3779	-----	-----	1.3201	-----	1.26	7.62	0.999	1.00	7.1		20.00	5.00	10.00	50.00	100.0			1.00	
n-Propylbenzene	1	0	Avg	2.1805	2.1170	2.3624	2.4352	2.5243	2.5743	1.4007	2.5874	-----	2.27	7.49	0.884	0.992	17		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.1935	1.1403	1.2294	1.2875	1.3312	1.3938	1.5453	1.2987	-----	1.30	7.46	0.998	1.00	9.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3,5-Trimethylbenzen	1	0	Avg	1.4486	1.4238	1.5404	1.6681	1.7662	0.8970	-----	1.7559	-----	1.50	7.57	0.874	0.994	20		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Butyl methacrylate	1	0	Avg	0.5787	0.5598	0.5723	0.6487	0.6978	-----	-----	0.4928	-----	0.592	7.58	0.998	1.00	12	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
t-Butylbenzene	1	0	Qua	1.4300	1.4308	1.5428	1.5864	1.6478	1.5556	0.6761	1.5993	-----	1.43	7.78	0.770	0.991	22		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Qua	1.5848	1.5107	1.6425	1.7235	1.7966	1.3162	0.5711	1.6533	-----	1.47	7.80	0.734	0.999	27		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	1.7135	1.7013	1.8961	1.9013	1.9891	2.1322	-----	1.9914	-----	1.90	7.90	0.999	1.00	8.2		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
4-Isopropyltoluene	1	0	Avg	1.4625	1.4710	1.6028	1.6441	1.7145	1.8732	-----	1.7462	-----	1.64	7.96	0.999	1.00	9.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
n-Butylbenzene	1	0	Avg	1.4995	1.4696	1.6480	1.6742	1.7364	1.8444	-----	1.7692	-----	1.66	8.20	0.999	1.00	8.3		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
p-Diethylbenzene	1	0	Avg	0.8164	0.7792	0.8654	0.9071	0.9352	1.0553	0.5224	0.9561	-----	0.855	8.19	0.846	0.984	19		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	1.2197	1.1412	1.2474	1.3115	1.3398	1.0527	1.1680	1.3777	-----	1.23	8.65	0.996	0.997	8.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1326	0.1305	0.1288	0.1413	0.1376	0.1057	0.1638	0.1435	-----	0.136	8.71	0.971	0.994	12	0.05	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Camphor	1	0	Qua	0.0559	0.0491	0.0521	0.0597	0.0627	0.0494	0.1061	0.0581	0.0428	0.0596	9.15	0.934	0.993	31		200.0	50.00	100.0	500.0	1000.	2500.	5000.	10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.1772	0.1748	0.2093	0.1895	0.1994	0.1453	-----	0.2439	-----	0.191	9.28	0.979	0.999	16		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.4561	0.4342	0.4689	0.4980	0.4888	0.3671	0.6940	0.5940	-----	0.500	9.20	0.948	0.992	20	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.4034	0.3780	0.3980	0.4094	0.4101	0.2988	-----	0.4713	-----	0.396	9.50	0.978	0.999	13		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Naphthalene	1	0	Avg	1.3422	1.1413	1.2726	1.3945	1.4249	1.0640	-----	1.3159	-----	1.28	9.36	0.981	0.999	10		20.00	5.00	10.00	50.00	100.0	250.0		1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.30

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141743.D Sam Mult : 1 Vial# : 11 Qt On : 09/10/20 14:35
Acq On : 09/09/20 21:04 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	252428	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	215771	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	128311	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	70768	29.50	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.33%			
39) 1,2-Dichloroethane-d4	4.910	67	37006	33.53	ug/l	0.00
Spiked Amount 30.000			Recovery = 111.77%			
66) Toluene-d8	5.952	98	258633	30.29	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.97%			
76) Bromofluorobenzene	7.367	174	103080	29.67	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.90%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	40406	25.2053	ug/l	70
6) Dichlorodifluoromethane	1.685	85	26936	16.5980	ug/l	95
7) Chloromethane	1.855	50	26389	27.9951	ug/l	99
8) Bromomethane	2.258	94	19719	20.1141	ug/l	87
9) Vinyl Chloride	1.959	62	35742	22.3957	ug/l	95
10) Chloroethane	2.343	64	24919	20.6847	ug/l	98
11) Trichlorofluoromethane	2.569	101	59388	18.6878	ug/l	96
12) Ethyl ether	2.800	59	25453	24.3629	ug/l	96
13) Furan	2.843	39	43871	28.5727	ug/l	95
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	22662	16.1446	ug/l	97
15) Methylene Chloride	3.416	84	37675	20.6644	ug/l	96
16) Acrolein	2.916	56	23357	107.3124	ug/l	100
17) Acrylonitrile	3.623	53	12147	22.5430	ug/l	86
18) Iodomethane	3.154	142	37956	26.2542	ug/l	93
19) Acetone	3.044	43	49637	134.8221	ug/l	97
20) Carbon Disulfide	3.221	76	95405	20.0568	ug/l	100
21) t-Butyl Alcohol	3.477	59	17145	109.3736	ug/l	95
22) n-Hexane	3.873	57	24968	18.9730	ug/l	96
23) Di-isopropyl-ether	4.032	45	87992	28.0033	ug/l	96
24) 1,1-Dichloroethene	3.014	61	47330	21.9601	ug/l	94
25) Methyl Acetate	3.318	43	22652	26.5257	ug/l	100
26) Methyl-t-butyl ether	3.642	73	95439	21.4359	ug/l	98
27) 1,1-Dichloroethane	4.001	63	60095	22.2617	ug/l	95
28) trans-1,2-Dichloroethene	3.654	96	36593	19.3726	ug/l	98
29) Ethyl-t-butyl ether	4.294	59	99987	23.7503	ug/l	99
30) cis-1,2-Dichloroethene	4.410	61	60551	22.7578	ug/l	96
31) Bromochloromethane	4.568	49	29502	26.8317	ug/l	99
32) 2,2-Dichloropropane	4.416	77	54321	20.9251	ug/l	100
33) Ethyl acetate	4.440	43	31989m	26.4003	ug/l	
34) 1,4-Dioxane	5.495	88	24787	1005.4645	ug/l	98
35) 1,1-Dichloropropene	4.824	75	49130	20.0981	ug/l	96
36) Chloroform	4.605	83	67540	20.1643	ug/l	99
38) Cyclohexane	4.769	56	38103	20.2204	ug/l	98
40) 1,2-Dichloroethane	4.952	62	54851	22.1377	ug/l	99
41) 2-Butanone	4.410	43	14736m	23.3998	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	58943	18.4864	ug/l	97
43) Carbon Tetrachloride	4.837	117	52588	19.7204	ug/l	93
44) Vinyl Acetate	4.026	43	111349	27.9329	ug/l	100
45) Bromodichloromethane	5.568	83	55098	20.5547	ug/l	99
46) Methylcyclohexane	5.416	83	35966	16.5925	ug/l	100
47) Dibromomethane	5.501	174	29906	18.6390	ug/l	100
48) 1,2-Dichloropropane	5.428	63	36648	22.8312	ug/l	100
49) Trichloroethene	5.300	130	41764	16.7809	ug/l	95
50) Benzene	4.952	78	144976	19.7907	ug/l	100
51) tert-Amyl methyl ether	4.989	73	102926	21.7058	ug/l	97
53) Iso-propylacetate	4.946	43	62030	27.8709	ug/l	99
54) Methyl methacrylate	5.452	41	30894	29.7659	ug/l	99
55) Dibromochloromethane	6.422	129	46366	18.9169	ug/l	98
56) 2-Chloroethylvinylether	5.708	63	9909	26.0002	ug/l	97
57) cis-1,3-Dichloropropene	5.806	75	62691	22.2957	ug/l	100
58) trans-1,3-Dichloropropene	6.092	75	62015	22.1130	ug/l	100
59) Ethyl methacrylate	6.111	41	31027	29.8072	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	36335	19.9749	ug/l	97
61) 1,2-Dibromoethane	6.495	107	39466	18.8149	ug/l	100
62) 1,3-Dichloropropane	6.287	76	61993	21.2800	ug/l	99
63) 4-Methyl-2-Pentanone	5.867	43	33005	27.7043	ug/l	97
64) 2-Hexanone	6.300	43	23471	27.8728	ug/l	99
65) Tetrachloroethene	6.287	164	32222	17.3607	ug/l	96
67) Toluene	5.989	92	94740	19.3666	ug/l	100

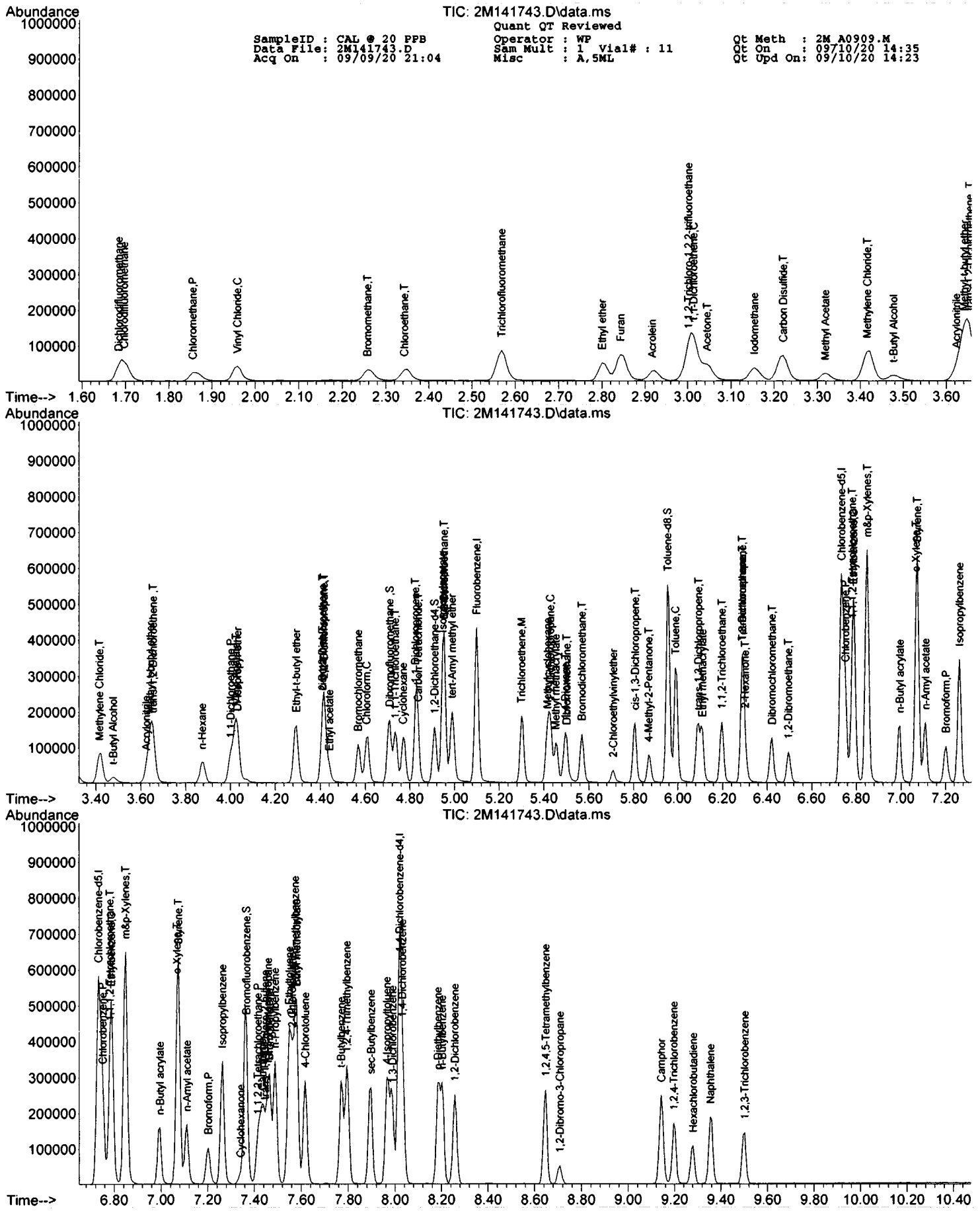
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141743.D Sam Mult : 1 Vial# : 11 Qt On : 09/10/20 14:35
Acq On : 09/09/20 21:04 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	39606	17.6782	ug/l	93
69)	Chlorobenzene	6.751	112	107597	17.9642	ug/l	99
71)	n-Butyl acrylate	6.995	55	72418	23.9872	ug/l	100
72)	n-Amyl acetate	7.111	43	60987	27.3162	ug/l	99
73)	Bromoform	7.202	173	34125	16.2734	ug/l	97
74)	Ethylbenzene	6.787	106	45937	18.3781	ug/l	91
75)	1,1,2,2-Tetrachloroethane	7.415	83	49215	18.9198	ug/l	96
77)	Styrene	7.074	104	119697	17.6958	ug/l	96
78)	m&p-Xylenes	6.848	106	138778	35.0417	ug/l	97
79)	o-Xylene	7.068	106	67221	16.9211	ug/l	95
80)	trans-1,4-Dichloro-2-b...	7.446	53	18100	23.5315	ug/l	98
81)	1,3-Dichlorobenzene	7.988	146	81349	15.5825	ug/l	99
82)	1,4-Dichlorobenzene	8.031	146	82181	15.6378	ug/l	98
83)	1,2-Dichlorobenzene	8.257	146	75720	15.3761	ug/l	98
84)	Isopropylbenzene	7.263	105	161571	17.6096	ug/l	99
85)	Cyclohexanone	7.342	55	7241	110.1104	ug/l	94
86)	Camphene	7.434	93	37635	16.4366	ug/l	97
87)	1,2,3-Trichloropropane	7.458	75	62651	20.6916	ug/l	96
88)	2-Chlorotoluene	7.562	91	103942	19.0146	ug/l	98
89)	p-Ethyltoluene	7.549	105	161618	17.7699	ug/l	100
90)	4-Chlorotoluene	7.617	91	102761	17.7681	ug/l	97
91)	n-Propylbenzene	7.488	91	186521	18.3856	ug/l	98
92)	Bromobenzene	7.464	77	102097	20.0270	ug/l	96
93)	1,3,5-Trimethylbenzene	7.574	105	123921	16.4698	ug/l	97
94)	Butyl methacrylate	7.580	41	49509	26.7888	ug/l	98
95)	t-Butylbenzene	7.769	119	122326	15.6654	ug/l	98
96)	1,2,4-Trimethylbenzene	7.793	105	135566	16.6358	ug/l	100
97)	sec-Butylbenzene	7.897	105	146578	16.8606	ug/l	99
98)	4-Isopropyltoluene	7.964	119	125107	16.0672	ug/l	99
99)	n-Butylbenzene	8.202	91	128276	17.7303	ug/l	97
100)	p-Diethylbenzene	8.183	119	69838	16.5929	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	104335	18.3486	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.708	157	11344	16.5415	ug/l	84
103)	Camphor	9.141	95	47865	171.6645	ug/l	99
104)	Hexachlorobutadiene	9.281	225	15163	15.0674	ug/l	97
105)	1,2,4-Trichlorobenzene	9.195	180	39015	15.9431	ug/l	99
106)	1,2,3-Trichlorobenzene	9.500	180	34507	15.5564	ug/l	99
107)	Naphthalene	9.354	128	114818	17.1973	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 2M141743.D
Acq On : 09/09/20 21:04
Operator : WP
Sam Mult : 1 Vial# : 11
Misc : A,5ML
Qt Meth : 2M_A0909.M
Qt On : 09/10/20 14:35
Qt Upd On: 09/10/20 14:23
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141741.D Sam Mult : 1 Vial# : 9 Qt On : 09/10/20 14:37
Acq On : 09/09/20 20:25 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	243580	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	212572	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	123989	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.709	111	68712	29.68	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.93%			
39) 1,2-Dichloroethane-d4	4.910	67	35334	33.18	ug/l	0.00
Spiked Amount 30.000			Recovery = 110.60%			
66) Toluene-d8	5.952	98	250171	29.74	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.13%			
76) Bromofluorobenzene	7.367	174	100985	30.08	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.27%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	10013	6.4730	ug/l	59
6) Dichlorodifluoromethane	1.685	85	5583	3.5652	ug/l	98
7) Chloromethane	1.861	50	6874	7.5573	ug/l	92
8) Bromomethane	2.258	94	5379	5.6861	ug/l	98
9) Vinyl Chloride	1.953	62	7913	5.1383	ug/l	94
10) Chloroethane	2.349	64	5788	4.9790	ug/l	89
11) Trichlorofluoromethane	2.569	101	13576	4.4272	ug/l	93
12) Ethyl ether	2.800	59	6233	6.1828	ug/l	97
13) Furan	2.843	39	10459	7.0593	ug/l	96
14) 1,1,2-Trichloro-1,2,2-...	3.008	101	5613	4.1440	ug/l	96
15) Methylene Chloride	3.416	84	9188	5.2226	ug/l	94
16) Acrolein	2.922	56	5198	24.7494	ug/l	96
17) Acrylonitrile	3.623	53	2948	5.6698	ug/l	87
18) Iodomethane	3.154	142	6260	4.4873	ug/l	95
19) Acetone	3.044	43	11621	32.7111	ug/l	98
20) Carbon Disulfide	3.221	76	22236	4.8444	ug/l	100
21) t-Butyl Alcohol	3.477	59	4380	28.9564	ug/l	98
22) n-Hexane	3.873	57	6522	5.1360	ug/l	98
23) Di-isopropyl-ether	4.026	45	19904	6.5645	ug/l	90
24) 1,1-Dichloroethene	3.014	61	11090	5.3324	ug/l	99
25) Methyl Acetate	3.319	43	6223	7.5519	ug/l	100
26) Methyl-t-butyl ether	3.636	73	22033	5.1284	ug/l	98
27) 1,1-Dichloroethane	4.001	63	14313	5.4947	ug/l	97
28) trans-1,2-Dichloroethene	3.654	96	8576	4.7051	ug/l	97
29) Ethyl-t-butyl ether	4.294	59	23234	5.7193	ug/l	99
30) cis-1,2-Dichloroethene	4.416	61	14387	5.6037	ug/l	92
31) Bromochloromethane	4.568	49	7005	6.6024	ug/l	90
32) 2,2-Dichloropropane	4.416	77	12757	5.0926	ug/l	94
33) Ethyl acetate	4.440	43	7877m	6.7370	ug/l	
34) 1,4-Dioxane	5.495	88	5727	240.7498	ug/l	93
35) 1,1-Dichloropropene	4.824	75	11286	4.7846	ug/l	98
36) Chloroform	4.605	83	15261	4.7217	ug/l	98
38) Cyclohexane	4.769	56	9289	5.1085	ug/l	98
40) 1,2-Dichloroethane	4.952	62	12327	5.1559	ug/l	99
41) 2-Butanone	4.410	43	3309m	5.4453	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	13526	4.3963	ug/l	98
43) Carbon Tetrachloride	4.830	117	11998	4.6627	ug/l	96
44) Vinyl Acetate	4.026	43	24823	6.4533	ug/l	100
45) Bromodichloromethane	5.568	83	12681	4.9026	ug/l	96
46) Methylcyclohexane	5.416	83	9317	4.4544	ug/l	98
47) Dibromomethane	5.501	174	6473	4.1809	ug/l	98
48) 1,2-Dichloropropane	5.428	63	8706	5.6207	ug/l	97
49) Trichloroethene	5.300	130	9707	4.0420	ug/l	89
50) Benzene	4.952	78	33399	4.7249	ug/l	100
51) tert-Amyl methyl ether	4.989	73	23803	5.2021	ug/l	96
53) Iso-propylacetate	4.946	43	14552	6.6368	ug/l	97
54) Methyl methacrylate	5.458	41	6788	6.6386	ug/l	95
55) Dibromochloromethane	6.422	129	10486	4.3426	ug/l	90
56) 2-Chloroethylvinylether	5.708	63	2293	6.1071	ug/l	94
57) cis-1,3-Dichloropropene	5.806	75	14275	5.1532	ug/l	94
58) trans-1,3-Dichloropropene	6.092	75	14336	5.1888	ug/l	98
59) Ethyl methacrylate	6.111	41	7089	6.9128	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	8533	4.7615	ug/l	97
61) 1,2-Dibromoethane	6.495	107	9333	4.5164	ug/l	90
62) 1,3-Dichloropropane	6.287	76	14306	4.9846	ug/l	95
63) 4-Methyl-2-Pentanone	5.867	43	7692	6.5538	ug/l	91
64) 2-Hexanone	6.306	43	5252	6.3308	ug/l	96
65) Tetrachloroethene	6.287	164	7893	4.3166	ug/l	96
67) Toluene	5.989	92	22182	4.6026	ug/l	94

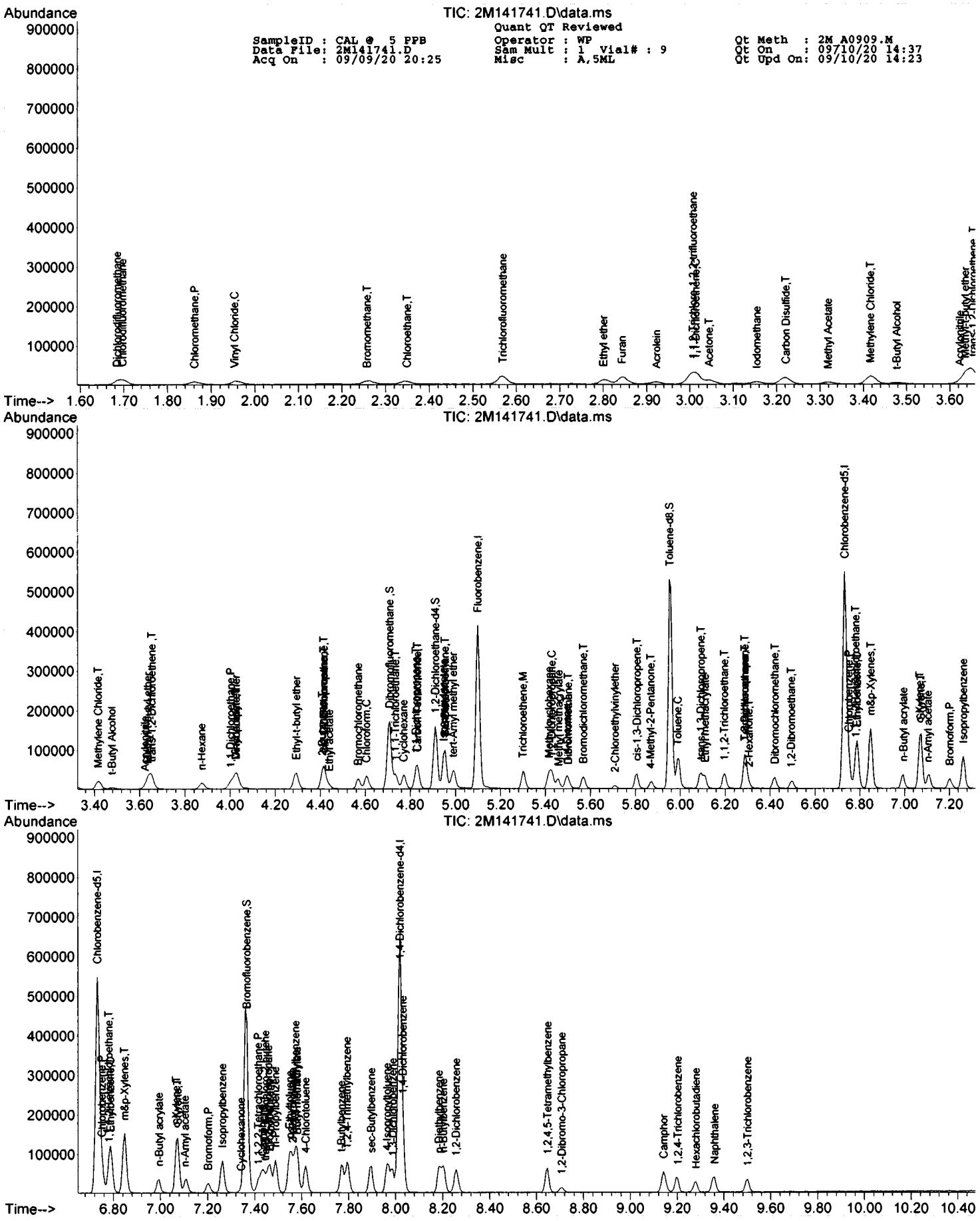
Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141741.D Sam Mult : 1 Vial# : 9 Qt On : 09/10/20 14:37
Acq On : 09/09/20 20:25 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	9405	4.2611	ug/l	89
69)	Chlorobenzene	6.751	112	24695	4.1851	ug/l	97
71)	n-Butyl acrylate	6.995	55	16275	5.5787	ug/l	96
72)	n-Amyl acetate	7.104	43	12928	5.9923	ug/l	99
73)	Bromoform	7.202	173	7604	3.7526	ug/l	97
74)	Ethylbenzene	6.787	106	10649	4.4089	ug/l	91
75)	1,1,2,2-Tetrachloroethane	7.415	83	11743	4.6717	ug/l	99
77)	Styrene	7.074	104	26746	4.0919	ug/l	90
78)	m&p-Xylenes	6.848	106	31369	8.1968	ug/l	92
79)	o-Xylene	7.068	106	15293	3.9838	ug/l	99
80)	trans-1,4-Dichloro-2-b...	7.446	53	4205	5.6574	ug/l	95
81)	1,3-Dichlorobenzene	7.988	146	18640	3.6950	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	18732	3.6887	ug/l	93
83)	1,2-Dichlorobenzene	8.257	146	17562	3.6905	ug/l	98
84)	Isopropylbenzene	7.263	105	38031	4.2895	ug/l	99
85)	Cyclohexanone	7.342	55	2169	34.1326	ug/l	82
86)	Camphene	7.434	93	9497	4.2923	ug/l	98
87)	1,2,3-Trichloropropane	7.458	75	14435	4.9336	ug/l	97
88)	2-Chlorotoluene	7.562	91	23067	4.3668	ug/l	98
89)	p-Ethyltoluene	7.549	105	37893	4.3116	ug/l	99
90)	4-Chlorotoluene	7.617	91	23439	4.1940	ug/l	98
91)	n-Propylbenzene	7.489	91	43749	4.4627	ug/l	98
92)	Bromobenzene	7.464	77	23566	4.7838	ug/l	95
93)	1,3,5-Trimethylbenzene	7.574	105	29423	4.0468	ug/l	98
94)	Butyl methacrylate	7.580	41	11570	6.4786	ug/l	89
95)	t-Butylbenzene	7.769	119	29569	3.9187	ug/l	99
96)	1,2,4-Trimethylbenzene	7.793	105	31220	3.9647	ug/l	98
97)	sec-Butylbenzene	7.897	105	35157	4.1850	ug/l	99
98)	4-Isopropyltoluene	7.964	119	30399	4.0401	ug/l	98
99)	n-Butylbenzene	8.202	91	30371	4.3442	ug/l	97
100)	p-Diethylbenzene	8.184	119	16104	3.9595	ug/l	93
101)	1,2,4,5-Tetramethylben...	8.647	119	23583	4.2919	ug/l	97
102)	1,2-Dibromo-3-Chloropr...	8.708	157	2698	4.0713	ug/l	85
103)	Camphor	9.141	95	10157	37.6972	ug/l	100
104)	Hexachlorobutadiene	9.281	225	3614	3.7164	ug/l	92
105)	1,2,4-Trichlorobenzene	9.202	180	8974	3.7950	ug/l	98
106)	1,2,3-Trichlorobenzene	9.500	180	7813	3.6450	ug/l	96
107)	Naphthalene	9.360	128	23586	3.6558	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M141741.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 5 PPB
Data File: 2M141741.D
Acq On : 09/09/20 20:25
Operator : WP
Sam Mult : 1 Vial# : 9
Misc : A,5ML
Qt Meth : 2M_A0909.M
Qt On : 09/10/20 14:37
Qt Upd On: 09/10/20 14:23
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->

Abundance
TIC: 2M141741.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 2M141741.D\data.ms
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141742.D Sam Mult : 1 Vial# : 10 Qt On : 09/10/20 14:36
Acq On : 09/09/20 20:44 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	242757	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	209649	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	124159	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.709	111	68843	29.84	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.47%			
39) 1,2-Dichloroethane-d4	4.910	67	34607	32.61	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.70%			
66) Toluene-d8	5.952	98	248905	30.00	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.00%			
76) Bromofluorobenzene	7.367	174	98734	29.37	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.90%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	22053	14.3047	ug/l	65
6) Dichlorodifluoromethane	1.685	85	13750	8.8103	ug/l	88
7) Chloromethane	1.862	50	14852	16.3836	ug/l	97
8) Bromomethane	2.258	94	11072	11.7438	ug/l	99
9) Vinyl Chloride	1.959	62	17793	11.5931	ug/l	94
10) Chloroethane	2.343	64	13497	11.6499	ug/l	93
11) Trichlorofluoromethane	2.569	101	32798	10.7318	ug/l	100
12) Ethyl ether	2.801	59	12322	12.2641	ug/l	99
13) Furan	2.843	39	22045	14.9296	ug/l	97
14) 1,1,2-Trichloro-1,2,2-...	3.008	101	13806	10.2273	ug/l	95
15) Methylene Chloride	3.416	84	17929	10.2257	ug/l	96
16) Acrolein	2.922	56	11064	52.8580	ug/l	90
17) Acrylonitrile	3.624	53	5419	10.4575	ug/l	100
18) Iodomethane	3.154	142	15939	11.4642	ug/l	89
19) Acetone	3.044	43	24046	67.9147	ug/l	97
20) Carbon Disulfide	3.221	76	48478	10.5975	ug/l	100
21) t-Butyl Alcohol	3.477	59	8082	53.6117	ug/l	97
22) n-Hexane	3.873	57	15482	12.2333	ug/l	96
23) Di-isopropyl-ether	4.032	45	42723	14.1382	ug/l	98
24) 1,1-Dichloroethene	3.008	61	24541	11.8401	ug/l	93
25) Methyl Acetate	3.319	43	10537	12.8305	ug/l	100
26) Methyl-t-butyl ether	3.642	73	45452	10.6153	ug/l	98
27) 1,1-Dichloroethane	4.002	63	29495	11.3614	ug/l	99
28) trans-1,2-Dichloroethene	3.654	96	18183	10.0097	ug/l	93
29) Ethyl-t-butyl ether	4.294	59	47814	11.8099	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	30461	11.9047	ug/l	97
31) Bromochloromethane	4.568	49	14120	13.3536	ug/l	94
32) 2,2-Dichloropropane	4.416	77	27947	11.1944	ug/l	97
33) Ethyl acetate	4.434	43	15444m	13.2536	ug/l	
34) 1,4-Dioxane	5.495	88	12018	506.9215	ug/l	99
35) 1,1-Dichloropropene	4.825	75	24757	10.5311	ug/l	98
36) Chloroform	4.605	83	34194	10.6154	ug/l	90
38) Cyclohexane	4.770	56	22489	12.4098	ug/l	98
40) 1,2-Dichloroethane	4.953	62	26369	11.0664	ug/l	98
41) 2-Butanone	4.416	43	7230m	11.9381	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	29577	9.6458	ug/l	100
43) Carbon Tetrachloride	4.837	117	26989	10.5240	ug/l	95
44) Vinyl Acetate	4.026	43	52140	13.6009	ug/l	100
45) Bromodichloromethane	5.568	83	27340	10.6057	ug/l	98
46) Methylcyclohexane	5.416	83	22167	10.6339	ug/l	96
47) Dibromomethane	5.495	174	14288	9.2598	ug/l	91
48) 1,2-Dichloropropane	5.428	63	17977	11.6456	ug/l	96
49) Trichloroethene	5.300	130	20959	8.7569	ug/l	96
50) Benzene	4.953	78	71175	10.1032	ug/l	100
51) tert-Amyl methyl ether	4.989	73	47152	10.3399	ug/l	99
53) Iso-propylacetate	4.946	43	30028	13.8860	ug/l	99
54) Methyl methacrylate	5.452	41	14967	14.8416	ug/l	97
55) Dibromochloromethane	6.422	129	22205	9.3240	ug/l	96
56) 2-Chloroethylvinylether	5.709	63	4986	13.4648	ug/l	90
57) cis-1,3-Dichloropropene	5.806	75	30716	11.2430	ug/l	96
58) trans-1,3-Dichloropropene	6.093	75	29855	10.9564	ug/l	99
59) Ethyl methacrylate	6.111	41	14536	14.3723	ug/l	95
60) 1,1,2-Trichloroethane	6.196	97	18096	10.2386	ug/l	95
61) 1,2-Dibromoethane	6.495	107	19667	9.6498	ug/l	93
62) 1,3-Dichloropropane	6.288	76	30147	10.6506	ug/l	97
63) 4-Methyl-2-Pentanone	5.867	43	15766	13.6204	ug/l	94
64) 2-Hexanone	6.306	43	11153	13.6314	ug/l	89
65) Tetrachloroethene	6.288	164	17033	9.4451	ug/l	93
67) Toluene	5.989	92	47092	9.9076	ug/l	97

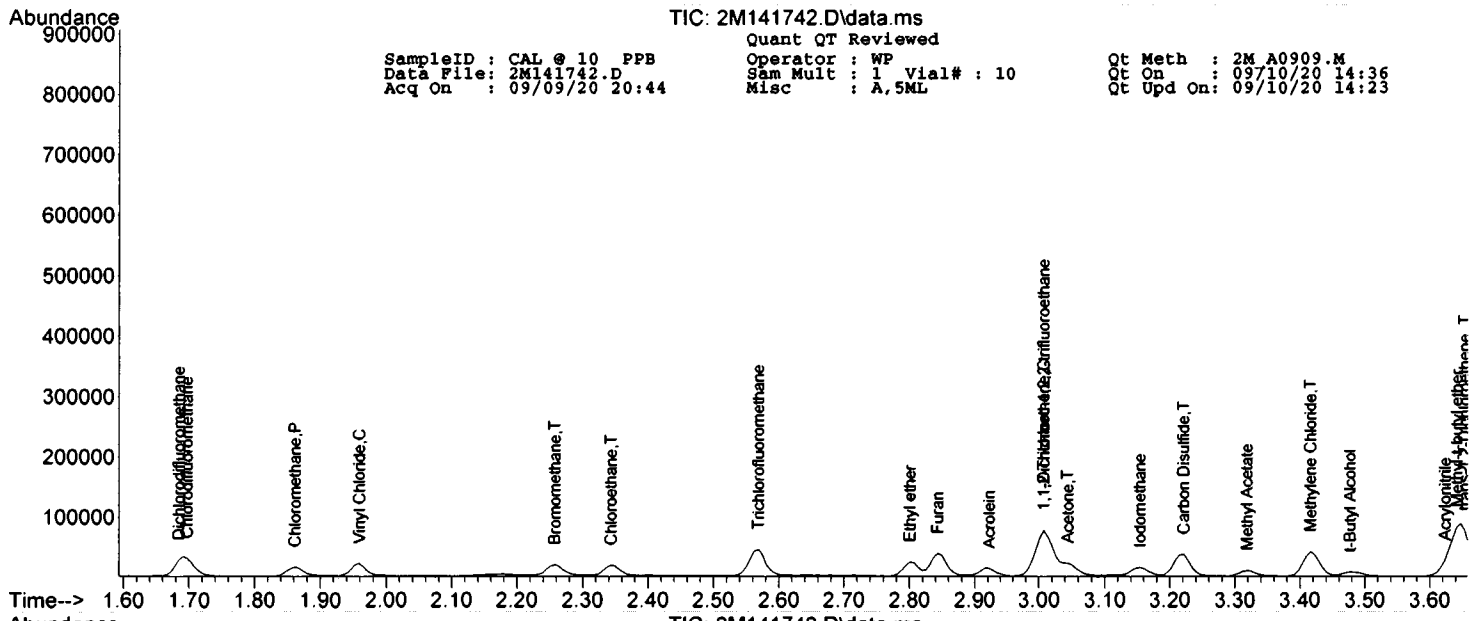
Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141742.D Sam Mult : 1 Vial# : 10 Qt On : 09/10/20 14:36
Acq On : 09/09/20 20:44 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.782	133	19073	8.7618	ug/l	93
69)	Chlorobenzene	6.751	112	52666	9.0498	ug/l	97
71)	n-Butyl acrylate	6.989	55	33403	11.4342	ug/l	99
72)	n-Amyl acetate	7.111	43	27778	12.8579	ug/l	99
73)	Bromoform	7.202	173	16442	8.1030	ug/l	98
74)	Ethylbenzene	6.788	106	23051	9.5304	ug/l	85
75)	1,1,2,2-Tetrachloroethane	7.416	83	24237	9.6291	ug/l	94
77)	Styrene	7.074	104	57490	8.7834	ug/l	97
78)	m&p-Xylenes	6.849	106	67981	17.7393	ug/l	93
79)	o-Xylene	7.068	106	32705	8.5079	ug/l	92
80)	trans-1,4-Dichloro-2-b...	7.446	53	9127	12.2627	ug/l	100
81)	1,3-Dichlorobenzene	7.989	146	39859	7.8904	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	41695	8.1992	ug/l	96
83)	1,2-Dichlorobenzene	8.257	146	37150	7.7961	ug/l	97
84)	Isopropylbenzene	7.263	105	84507	9.5184	ug/l	99
85)	Cyclohexanone	7.342	55	3529	55.4584	ug/l	95
86)	Camphene	7.434	93	22292	10.0613	ug/l	100
87)	1,2,3-Trichloropropane	7.458	75	29804	10.1725	ug/l	95
88)	2-Chlorotoluene	7.562	91	48497	9.1685	ug/l	99
89)	p-Ethyltoluene	7.550	105	81768	9.2911	ug/l	99
90)	4-Chlorotoluene	7.617	91	50271	8.9829	ug/l	99
91)	n-Propylbenzene	7.489	91	97772	9.9598	ug/l	98
92)	Bromobenzene	7.464	77	50883	10.3148	ug/l	96
93)	1,3,5-Trimethylbenzene	7.574	105	63755	8.7568	ug/l	98
94)	Butyl methacrylate	7.580	41	23689	13.2465	ug/l	97
95)	t-Butylbenzene	7.775	119	63852	8.4505	ug/l	100
96)	1,2,4-Trimethylbenzene	7.793	105	67978	8.6208	ug/l	100
97)	sec-Butylbenzene	7.897	105	78475	9.3287	ug/l	99
98)	4-Isopropyltoluene	7.964	119	66334	8.8040	ug/l	99
99)	n-Butylbenzene	8.202	91	68208	9.7430	ug/l	96
100)	p-Diethylbenzene	8.184	119	35819	8.7949	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	51626	9.3827	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.708	157	5332	8.0350	ug/l	86
103)	Camphor	9.141	95	21600	80.0575	ug/l	97
104)	Hexachlorobutadiene	9.281	225	8664	8.8973	ug/l	95
105)	1,2,4-Trichlorobenzene	9.196	180	19407	8.1957	ug/l	98
106)	1,2,3-Trichlorobenzene	9.501	180	16473	7.6747	ug/l	97
107)	Naphthalene	9.354	128	52671	8.1528	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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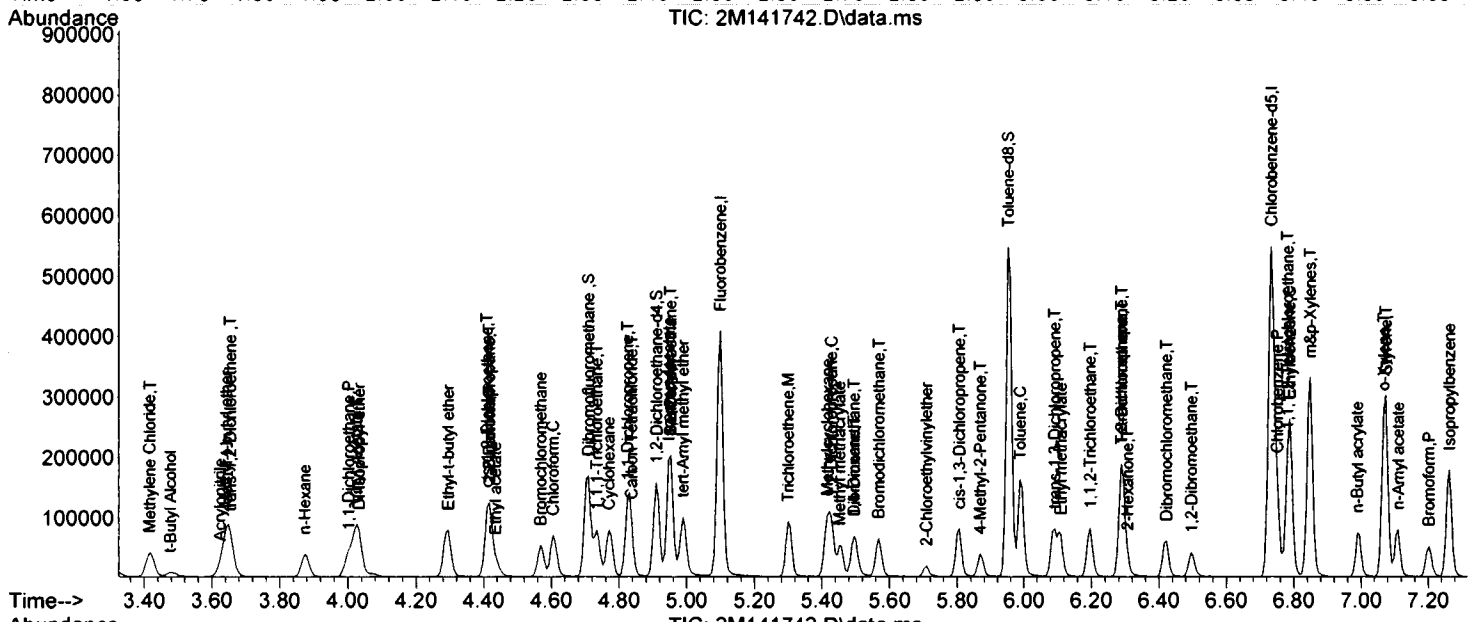
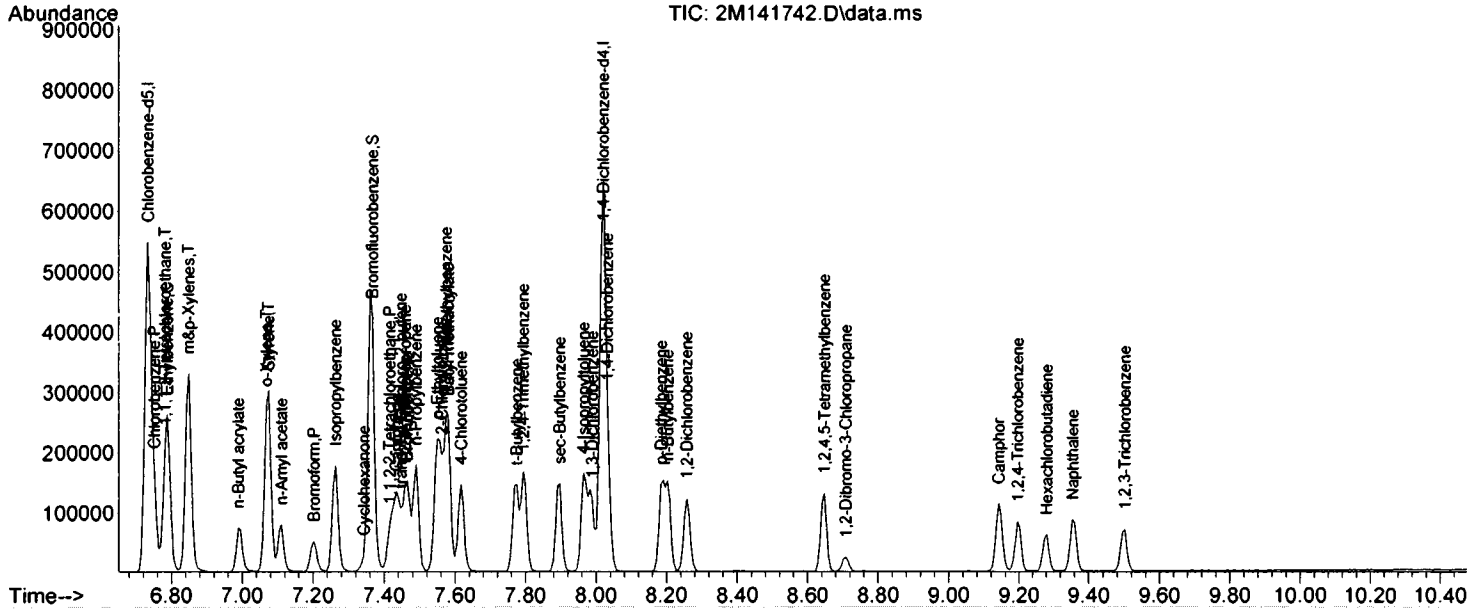
Abundance
Quant QT Reviewed
SampleID : CAL @ 10 PPB
Data File: 2M141742.D
Acq On : 09/09/20 20:44
Operator : WP
Sam Mult : 1 Vial# : 10
Misc : A,5ML
Qt Meth : 2M_A0909.M
Qt On : 09/10/20 14:36
Qt Upd On: 09/10/20 14:23
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->


TIC: 2M141742.D\data.ms
Abundance
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


TIC: 2M141742.D\data.ms
Abundance
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141745.D Sam Mult : 1 Vial# : 13 Qt On : 09/10/20 14:34
Acq On : 09/09/20 21:43 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	226851	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	197475	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	114683	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	62305	28.90	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.33%			
39) 1,2-Dichloroethane-d4	4.910	67	32224	32.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.30%			
66) Toluene-d8	5.952	98	232621	29.77	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.23%			
76) Bromofluorobenzene	7.366	174	92859	29.91	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.70%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	99359	68.9684	ug/l	68
6) Dichlorodifluoromethane	1.685	85	64496	44.2234	ug/l	99
7) Chloromethane	1.861	50	68983	81.4326	ug/l	98
8) Bromomethane	2.258	94	42629	48.3858	ug/l	96
9) Vinyl Chloride	1.959	62	86046	59.9948	ug/l	99
10) Chloroethane	2.343	64	61494	56.8000	ug/l	97
11) Trichlorofluoromethane	2.569	101	147619	51.6890	ug/l	99
12) Ethyl ether	2.800	59	59533	63.4081	ug/l	99
13) Furan	2.843	39	103924	75.3159	ug/l	95
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	61305	48.5984	ug/l	95
15) Methylene Chloride	3.416	84	86740	52.9402	ug/l	99
16) Acrolein	2.922	56	53187	271.9164	ug/l	97
17) Acrylonitrile	3.623	53	29191	60.2820	ug/l	97
18) Iodomethane	3.154	142	104160	80.1707	ug/l	93
19) Acetone	3.044	43	113473	342.9610	ug/l	99
20) Carbon Disulfide	3.221	76	223333	52.2446	ug/l	100
21) t-Butyl Alcohol	3.477	59	40523	287.6559	ug/l	97
22) n-Hexane	3.873	57	68991	58.3366	ug/l	97
23) Di-isopropyl-ether	4.032	45	210007	74.3698	ug/l	99
24) 1,1-Dichloroethene	3.014	61	114958	59.3519	ug/l	97
25) Methyl Acetate	3.318	43	51914	67.6460	ug/l	100
26) Methyl-t-butyl ether	3.642	73	229343	57.3189	ug/l	100
27) 1,1-Dichloroethane	4.001	63	143875	59.3064	ug/l	97
28) trans-1,2-Dichloroethene	3.654	96	87884	51.7721	ug/l	97
29) Ethyl-t-butyl ether	4.294	59	237431	62.7565	ug/l	99
30) cis-1,2-Dichloroethene	4.416	61	145166	60.7116	ug/l	97
31) Bromochloromethane	4.568	49	69727	70.5658	ug/l	99
32) 2,2-Dichloropropane	4.416	77	132055	56.6045	ug/l	97
33) Ethyl acetate	4.434	43	74910m	68.7930	ug/l	
34) 1,4-Dioxane	5.489	88	56684	2558.5865	ug/l	100
35) 1,1-Dichloropropene	4.824	75	118894	54.1209	ug/l	96
36) Chloroform	4.611	83	160998	53.4858	ug/l	99
38) Cyclohexane	4.769	56	101295	59.8157	ug/l	99
40) 1,2-Dichloroethane	4.952	62	129734	58.2637	ug/l	99
41) 2-Butanone	4.410	43	36965m	65.3161	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	143370	50.0352	ug/l	98
43) Carbon Tetrachloride	4.836	117	128821	53.7543	ug/l	95
44) Vinyl Acetate	4.026	43	258188	72.0714	ug/l	100
45) Bromodichloromethane	5.568	83	130655	54.2373	ug/l	99
46) Methylcyclohexane	5.416	83	98466	50.5478	ug/l	99
47) Dibromomethane	5.495	174	68446	47.4689	ug/l	100
48) 1,2-Dichloropropane	5.428	63	85456	59.2404	ug/l	100
49) Trichloroethene	5.300	130	100795	45.0660	ug/l	96
50) Benzene	4.952	78	350553	53.2494	ug/l	100
51) tert-Amyl methyl ether	4.989	73	240729	56.4907	ug/l	98
53) Iso-propylacetate	4.946	43	146583	71.9637	ug/l	97
54) Methyl methacrylate	5.452	41	71746	75.5307	ug/l	95
55) Dibromochloromethane	6.422	129	111834	49.8546	ug/l	100
56) 2-Chloroethylvinylether	5.708	63	23470	67.2884	ug/l	98
57) cis-1,3-Dichloropropene	5.806	75	149218	57.9853	ug/l	98
58) trans-1,3-Dichloropropene	6.092	75	146953	57.2547	ug/l	99
59) Ethyl methacrylate	6.111	41	73682	77.3435	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	85726	51.4935	ug/l	95
61) 1,2-Dibromoethane	6.495	107	93666	48.7913	ug/l	97
62) 1,3-Dichloropropane	6.287	76	147346	55.2648	ug/l	100
63) 4-Methyl-2-Pentanone	5.867	43	78579	72.0702	ug/l	98
64) 2-Hexanone	6.306	43	56288	73.0374	ug/l	97
65) Tetrachloroethene	6.287	164	78617	46.2819	ug/l	97
67) Toluene	5.989	92	226171	50.5169	ug/l	99

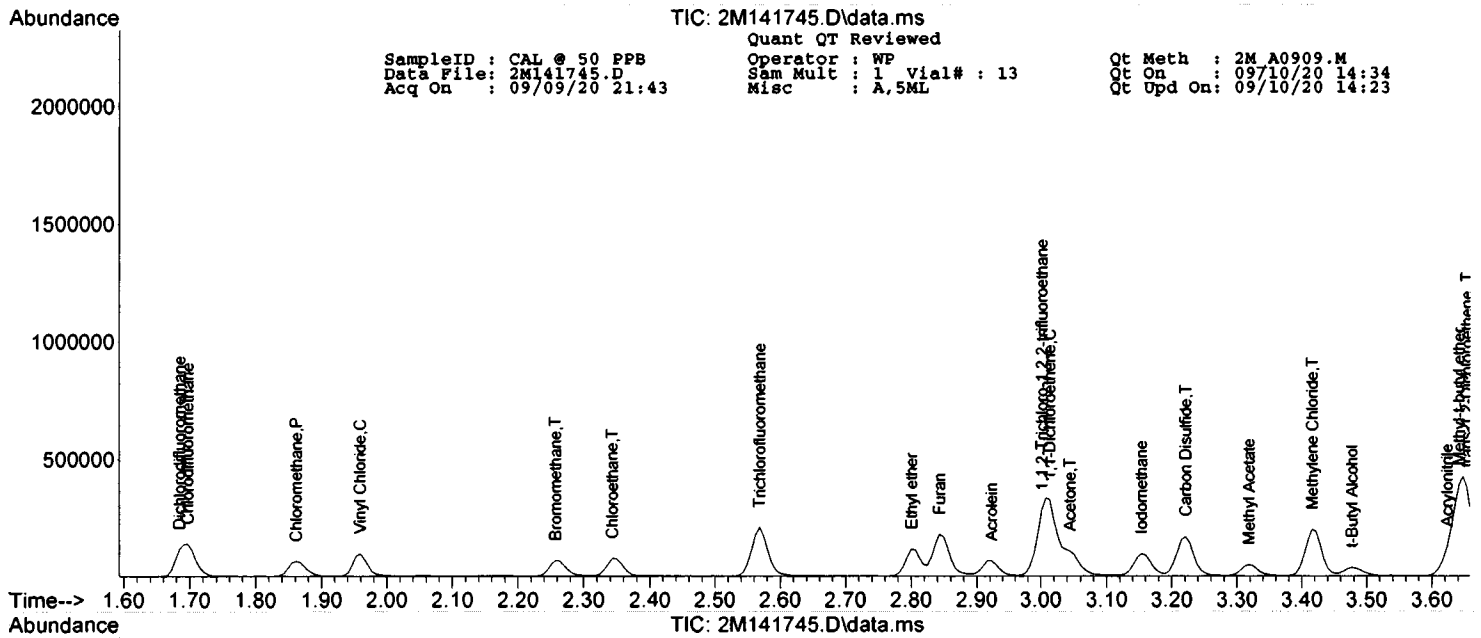
Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141745.D Sam Mult : 1 Vial# : 13 Qt On : 09/10/20 14:34
Acq On : 09/09/20 21:43 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	95417	46.5353	ug/l	98
69)	Chlorobenzene	6.751	112	256346	46.7644	ug/l	99
71)	n-Butyl acrylate	6.995	55	175461	65.0247	ug/l	99
72)	n-Amyl acetate	7.110	43	147040	73.6857	ug/l	99
73)	Bromoform	7.202	173	80134	42.7550	ug/l	99
74)	Ethylbenzene	6.787	106	117599	52.6388	ug/l	97
75)	1,1,2,2-Tetrachloroethane	7.415	83	120199	51.6993	ug/l	99
77)	Styrene	7.074	104	292615	48.4003	ug/l	97
78)	m&p-Xylenes	6.848	106	336737	95.1305	ug/l	97
79)	o-Xylene	7.068	106	165226	46.5336	ug/l	94
80)	trans-1,4-Dichloro-2-b...	7.440	53	44807	65.1752	ug/l	99
81)	1,3-Dichlorobenzene	7.988	146	194425	41.6681	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	194796	41.4714	ug/l	99
83)	1,2-Dichlorobenzene	8.257	146	178236	40.4944	ug/l	99
84)	Isopropylbenzene	7.263	105	406020	49.5105	ug/l	99
85)	Cyclohexanone	7.342	55	15701	267.1295	ug/l	98
86)	Camphene	7.434	93	99869	48.7995	ug/l	99
87)	1,2,3-Trichloropropane	7.458	75	148391	54.8325	ug/l	95
88)	2-Chlorotoluene	7.562	91	246911	50.5360	ug/l	97
89)	p-Ethyltoluene	7.549	105	399270	49.1166	ug/l	99
90)	4-Chlorotoluene	7.616	91	247817	47.9412	ug/l	97
91)	n-Propylbenzene	7.488	91	465475	51.3346	ug/l	98
92)	Bromobenzene	7.464	77	246105	54.0117	ug/l	96
93)	1,3,5-Trimethylbenzene	7.574	105	318845	47.4120	ug/l	98
94)	Butyl methacrylate	7.580	41	124008	75.0730	ug/l	98
95)	t-Butylbenzene	7.769	119	303240	43.4485	ug/l	100
96)	1,2,4-Trimethylbenzene	7.793	105	329427	45.2290	ug/l	99
97)	sec-Butylbenzene	7.897	105	363429	46.7722	ug/l	100
98)	4-Isopropyltoluene	7.964	119	314264	45.1562	ug/l	99
99)	n-Butylbenzene	8.202	91	320004	49.4871	ug/l	97
100)	p-Diethylbenzene	8.183	119	173396	46.0930	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	250692	49.3263	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.708	157	27024	44.0883	ug/l	86
103)	Camphor	9.141	95	114112	457.8872	ug/l	98
104)	Hexachlorobutadiene	9.281	225	36230	40.2796	ug/l	95
105)	1,2,4-Trichlorobenzene	9.195	180	95190	43.5209	ug/l	97
106)	1,2,3-Trichlorobenzene	9.500	180	78257	39.4721	ug/l	98
107)	Naphthalene	9.360	128	266554	44.6684	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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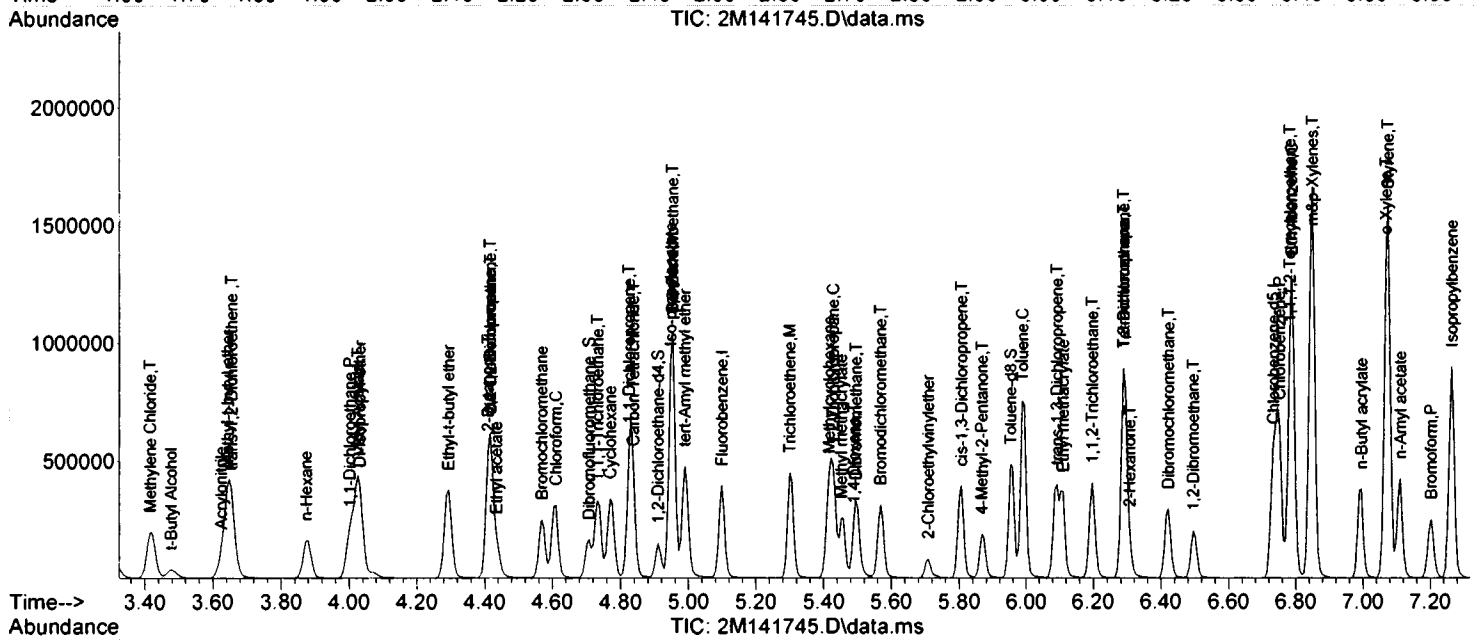
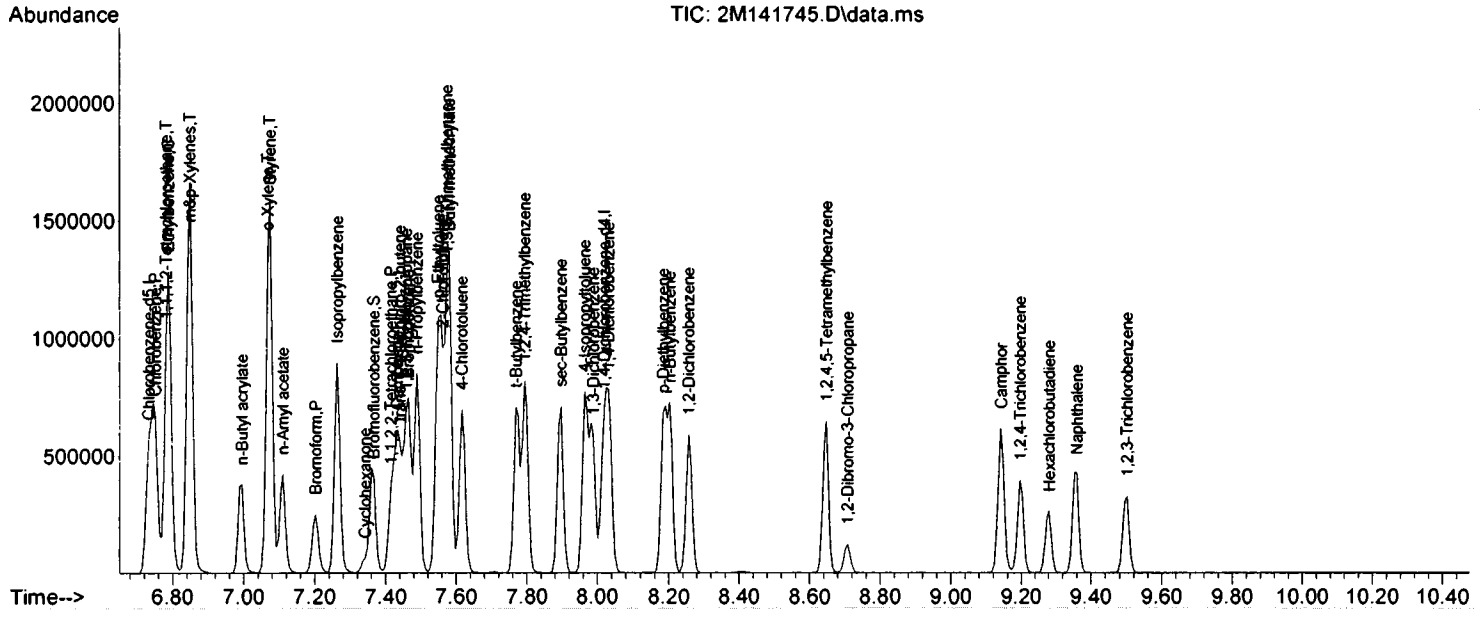
Quant QT Reviewed
SampleID : CAL @ 50 PPB
Data File: 2M141745.D
Acq On : 09/09/20 21:43
Operator : WP
Sam Mult : 1 Vial# : 13
Misc : A,5ML
Qt Meth : 2M_A0909.M
Qt On : 09/10/20 14:34
Qt Upd On: 09/10/20 14:23
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 2M141745.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
Carbon Tetrachloride,T
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M141745.D\data.ms
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @100 PPB
Data File: 2M141753.D
Acq On : 09/10/20 00:19

Operator : WP
Sam Mult : 1 Vial# : 21
Misc : A,5ML

Qt Meth : 2M_A0909.M
Qt On : 09/10/20 14:33
Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	256412	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	218667	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	129025	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	71365	29.29	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.63%			
39) 1,2-Dichloroethane-d4	4.910	67	37160	33.15	ug/l	0.00
Spiked Amount 30.000			Recovery = 110.50%			
66) Toluene-d8	5.952	98	258935	29.92	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.73%			
76) Bromofluorobenzene	7.367	174	102922	29.46	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.20%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	218380	134.1090	ug/l	72
6) Dichlorodifluoromethane	1.685	85	151336	91.8046	ug/l	100
7) Chloromethane	1.861	50	159311	166.3812	ug/l	96
8) Bromomethane	2.258	94	128066	128.6023	ug/l	84
9) Vinyl Chloride	1.959	62	192001	118.4373	ug/l	97
10) Chloroethane	2.343	64	131199	107.2133	ug/l	98
11) Trichlorofluoromethane	2.569	101	338275	104.7920	ug/l	98
12) Ethyl ether	2.800	59	132658	125.0037	ug/l	98
13) Furan	2.843	39	232706	149.2040	ug/l	95
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	139585	97.8965	ug/l	97
15) Methylene Chloride	3.416	84	187824	101.4192	ug/l	100
16) Acrolein	2.922	56	117575	531.7986	ug/l	96
17) Acrylonitrile	3.623	53	66031	120.6394	ug/l	100
18) Iodomethane	3.154	142	214947	146.3688	ug/l	98
19) Acetone	3.044	43	259704	694.4376	ug/l	100
20) Carbon Disulfide	3.221	76	506982	104.9260	ug/l	100
21) t-Butyl Alcohol	3.477	59	92592	581.4970	ug/l	95
22) n-Hexane	3.873	57	159692	119.4631	ug/l	96
23) Di-isopropyl-ether	4.032	45	463856	145.3276	ug/l	98
24) 1,1-Dichloroethene	3.014	61	261549	119.4678	ug/l	96
25) Methyl Acetate	3.318	43	117517	135.4756	ug/l	100
26) Methyl-t-butyl ether	3.642	73	517234	114.3672	ug/l	99
27) 1,1-Dichloroethane	4.001	63	319928	116.6732	ug/l	98
28) trans-1,2-Dichloroethene	3.654	96	194129	101.1763	ug/l	99
29) Ethyl-t-butyl ether	4.294	59	528994	123.7014	ug/l	99
30) cis-1,2-Dichloroethene	4.416	61	316193	116.9934	ug/l	99
31) Bromochloromethane	4.568	49	150079	134.3741	ug/l	98
32) 2,2-Dichloropropane	4.416	77	274510	104.1014	ug/l	99
33) Ethyl acetate	4.434	43	167321m	135.9431	ug/l	
34) 1,4-Dioxane	5.495	88	122700	4899.8922	ug/l	99
35) 1,1-Dichloropropene	4.824	75	270628	108.9885	ug/l	97
36) Chloroform	4.605	83	353478	103.8921	ug/l	99
38) Cyclohexane	4.769	56	239324	125.0304	ug/l	100
40) 1,2-Dichloroethane	4.952	62	289824	115.1544	ug/l	98
41) 2-Butanone	4.410	43	86489m	135.2049	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	317401	98.0004	ug/l	98
43) Carbon Tetrachloride	4.830	117	288709	106.5833	ug/l	98
44) Vinyl Acetate	4.026	43	577153	142.5346	ug/l	100
45) Bromodichloromethane	5.568	83	287927	105.7443	ug/l	100
46) Methylcyclohexane	5.416	83	233694	106.1367	ug/l	99
47) Dibromomethane	5.501	174	152904	93.8171	ug/l	99
48) 1,2-Dichloropropane	5.428	63	191055	117.1754	ug/l	99
49) Trichloroethene	5.300	130	222428	87.9836	ug/l	95
50) Benzene	4.952	78	772574	103.8255	ug/l	100
51) tert-Amyl methyl ether	4.989	73	548013	113.7736	ug/l	98
53) Iso-propylacetate	4.946	43	342758	151.9660	ug/l	100
54) Methyl methacrylate	5.452	41	162566	154.5554	ug/l	95
55) Dibromochloromethane	6.422	129	244368	98.3796	ug/l	100
56) 2-Chloroethylvinylether	5.708	63	51470	133.2632	ug/l	94
57) cis-1,3-Dichloropropene	5.806	75	325371	114.1838	ug/l	99
58) trans-1,3-Dichloropropene	6.092	75	322254	113.3862	ug/l	100
59) Ethyl methacrylate	6.111	41	167772	159.0416	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	190204	103.1783	ug/l	97
61) 1,2-Dibromoethane	6.495	107	204962	96.4191	ug/l	99
62) 1,3-Dichloropropane	6.287	76	329863	111.7307	ug/l	98
63) 4-Methyl-2-Pentanone	5.867	43	172594	142.9564	ug/l	98
64) 2-Hexanone	6.306	43	127082	148.9163	ug/l	98
65) Tetrachloroethene	6.287	164	179879	95.6322	ug/l	97
67) Toluene	5.995	92	503020	101.4645	ug/l	98

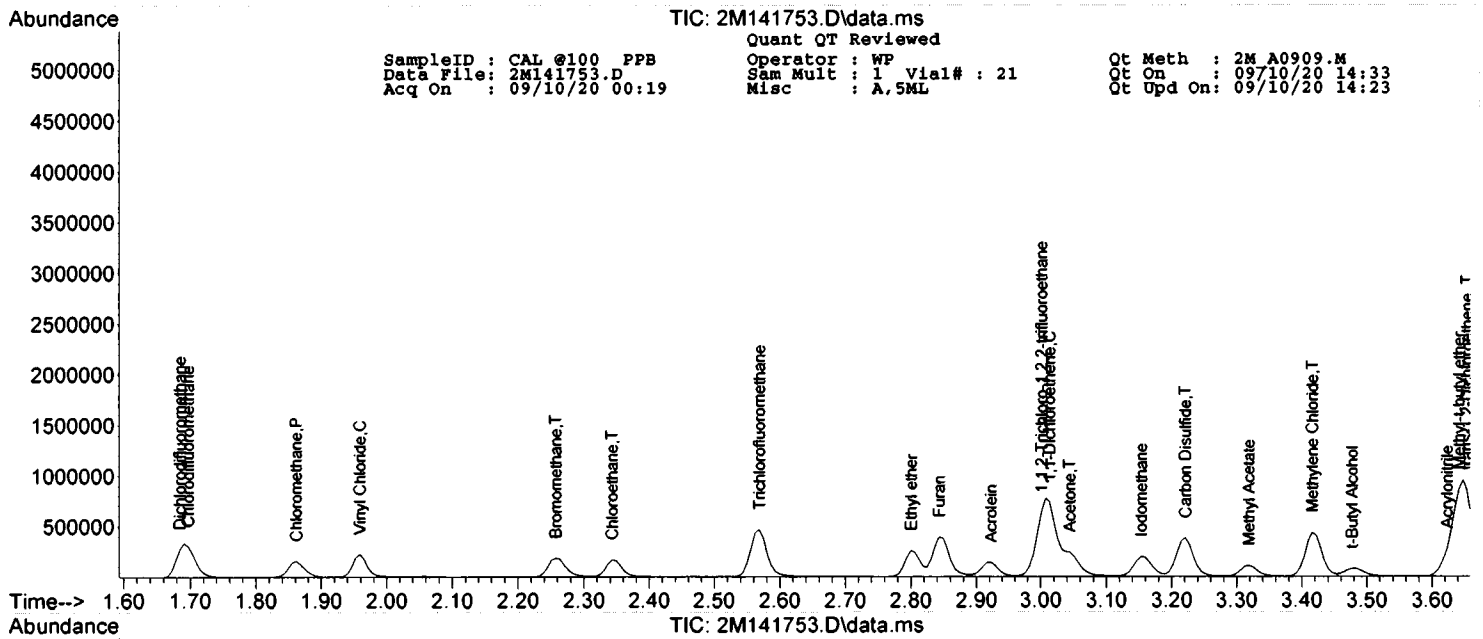
Quantitation Report (QT Reviewed)

SampleID : CAL @100 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141753.D Sam Mult : 1 Vial# : 21 Qt On : 09/10/20 14:33
Acq On : 09/10/20 00:19 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	213429	94.0025	ug/l	96
69)	Chlorobenzene	6.751	112	574571	94.6589	ug/l	100
71)	n-Butyl acrylate	6.995	55	402825	132.6904	ug/l	99
72)	n-Amyl acetate	7.110	43	353328	157.3804	ug/l	99
73)	Bromoform	7.202	173	179726	85.2327	ug/l	98
74)	Ethylbenzene	6.787	106	265068	105.4593	ug/l	94
75)	1,1,2,2-Tetrachloroethane	7.415	83	263286	100.6553	ug/l	98
77)	Styrene	7.074	104	677530	99.6105	ug/l	96
78)	m&p-Xylenes	6.848	106	775119	194.6356	ug/l	98
79)	o-Xylene	7.074	106	383145	95.9128	ug/l	100
80)	trans-1,4-Dichloro-2-b...	7.446	53	104530	135.1458	ug/l	100
81)	1,3-Dichlorobenzene	7.988	146	450848	85.8829	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	446714	84.5324	ug/l	99
83)	1,2-Dichlorobenzene	8.257	146	410481	82.8929	ug/l	98
84)	Isopropylbenzene	7.263	105	929365	100.7306	ug/l	99
85)	Cyclohexanone	7.342	55	34887	527.5739	ug/l	97
86)	Camphene	7.434	93	243378	105.7040	ug/l	98
87)	1,2,3-Trichloropropane	7.458	75	342279	112.4179	ug/l	95
88)	2-Chlorotoluene	7.562	91	592167	107.7283	ug/l	98
89)	p-Ethyltoluene	7.549	105	929044	101.5834	ug/l	98
90)	4-Chlorotoluene	7.616	91	592645	101.9054	ug/l	98
91)	n-Propylbenzene	7.488	91	1085666	106.4229	ug/l	99
92)	Bromobenzene	7.464	77	572531	111.6842	ug/l	95
93)	1,3,5-Trimethylbenzene	7.574	105	759653	100.4035	ug/l	99
94)	Butyl methacrylate	7.580	41	300139	161.5034	ug/l	97
95)	t-Butylbenzene	7.775	119	708715	90.2579	ug/l	99
96)	1,2,4-Trimethylbenzene	7.793	105	772694	94.2954	ug/l	99
97)	sec-Butylbenzene	7.897	105	855505	97.8624	ug/l	100
98)	4-Isopropyltoluene	7.964	119	737380	94.1757	ug/l	99
99)	n-Butylbenzene	8.202	91	746816	102.6539	ug/l	97
100)	p-Diethylbenzene	8.183	119	402236	95.0390	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	576226	100.7758	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.708	157	59192	85.8345	ug/l	84
103)	Camphor	9.141	95	269923	962.7029	ug/l	98
104)	Hexachlorobutadiene	9.281	225	85793	84.7801	ug/l	96
105)	1,2,4-Trichlorobenzene	9.195	180	210231	85.4335	ug/l	98
106)	1,2,3-Trichlorobenzene	9.500	180	176398	79.0835	ug/l	97
107)	Naphthalene	9.360	128	612855	91.2847	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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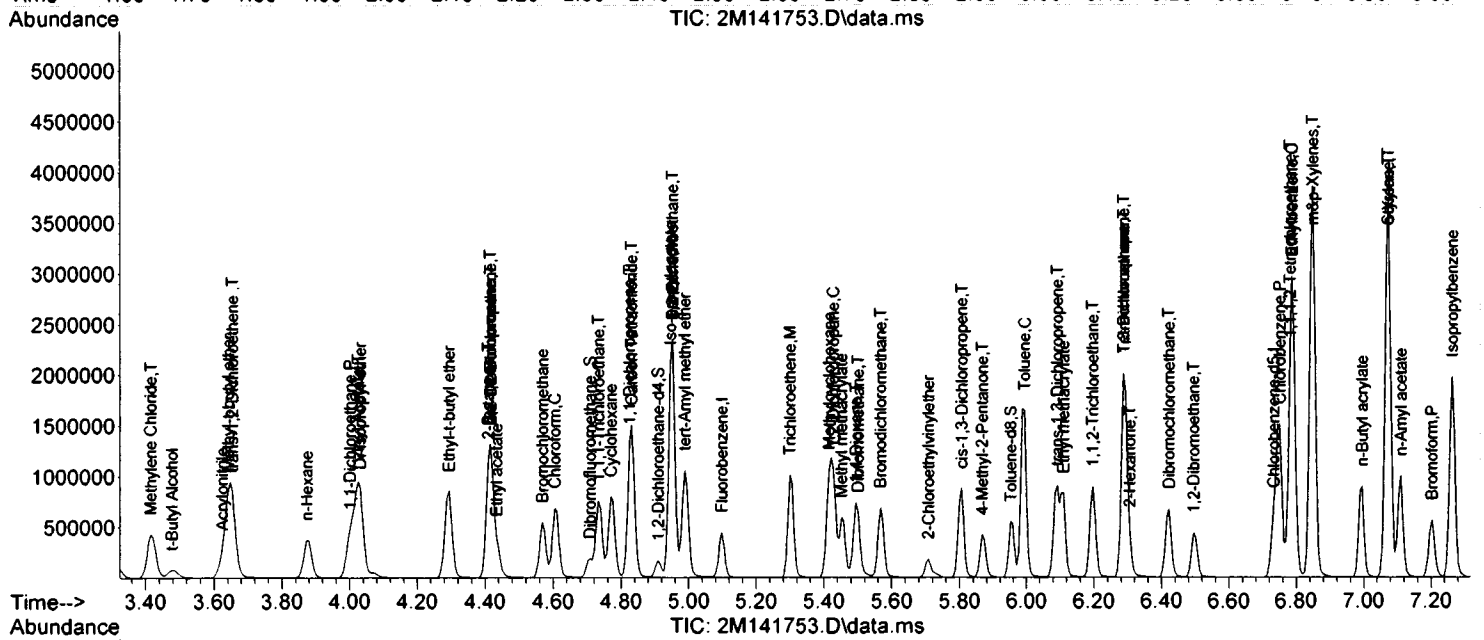
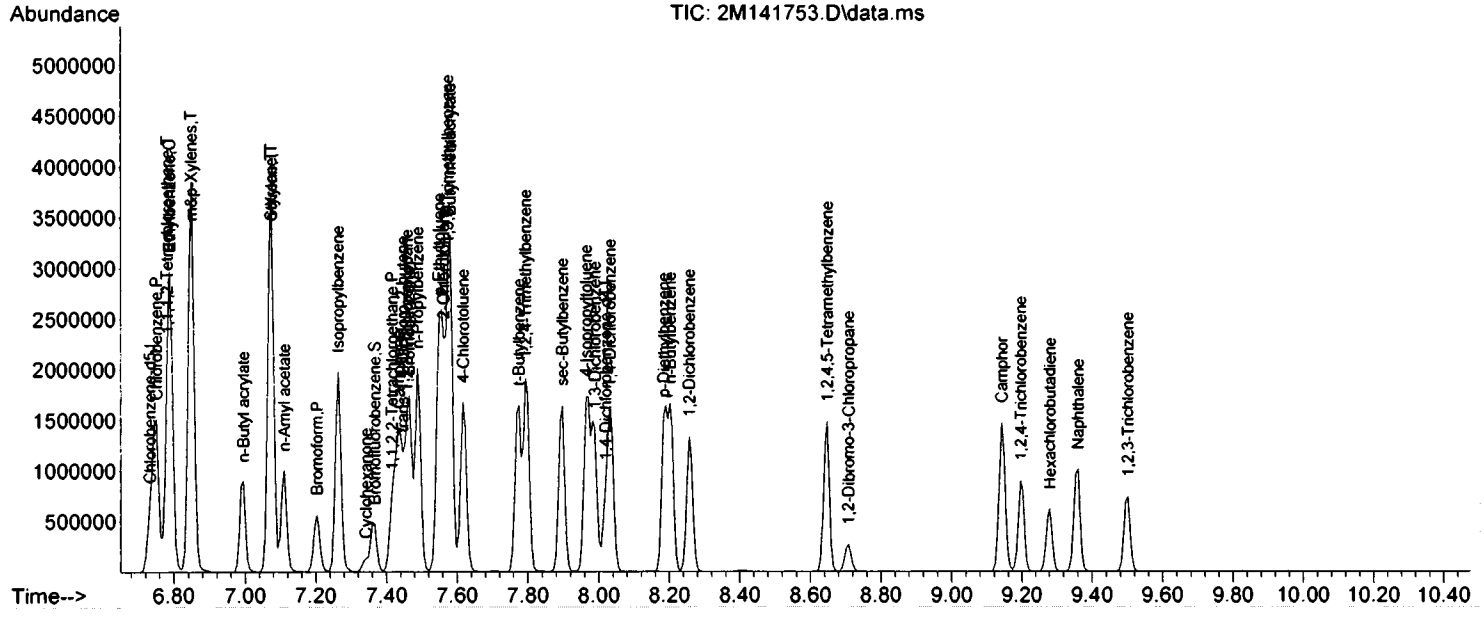
Quant QT Reviewed
SampleID : CAL @100 PPB
Data File: 2M141753.D
Acq On : 09/10/20 00:19
Operator : WP
Sam Mult : 1 Vial# : 21
Misc : A,5ML
Qt Meth : 2M_A0909.M
Qt On : 09/10/20 14:33
Qt Upd On: 09/10/20 14:23
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->


Abundance
TIC: 2M141753.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M141753.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone,S
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 250 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141750.D Sam Mult : 1 Vial# : 18 Qt On : 09/10/20 14:31
Acq On : 09/09/20 23:21 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	249858	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	223416	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	184893	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.709	111	69910	29.44	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.13%			
39) 1,2-Dichloroethane-d4	4.910	67	35211	32.24	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.47%			
66) Toluene-d8	5.958	98	256204	28.98	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.60%			
76) Bromofluorobenzene	7.367	174	138229	27.61	ug/l	0.00
Spiked Amount 30.000			Recovery = 92.03%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	579259	365.0590	ug/l	70
6) Dichlorodifluoromethane	1.685	85	389470	242.4606	ug/l	99
7) Chloromethane	1.862	50	407057	436.2735	ug/l	99
8) Bromomethane	2.252	94	391017	402.9542	ug/l	99
9) Vinyl Chloride	1.959	62	488029	308.9411	ug/l	98
10) Chloroethane	2.343	64	339077	284.3555	ug/l	98
11) Trichlorofluoromethane	2.563	101	898253	285.5630	ug/l	98
12) Ethyl ether	2.801	59	342407	331.1137	ug/l	100
13) Furan	2.843	39	607746	399.8896	ug/l	95
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	366049	263.4588	ug/l	96
15) Methylene Chloride	3.416	84	478518	265.1626	ug/l	99
16) Acrolein	2.922	56	315112	1462.6562	ug/l	97
17) Acrylonitrile	3.624	53	165958	311.1605	ug/l	98
18) Iodomethane	3.154	142	558606	390.3624	ug/l	98
19) Acetone	3.044	43	656297	1800.9435	ug/l	99
20) Carbon Disulfide	3.221	76	1294560	274.9527	ug/l	100
21) t-Butyl Alcohol	3.483	59	225456	1453.0511	ug/l	99
22) n-Hexane	3.873	57	420581	322.8832	ug/l	97
23) Di-isopropyl-ether	4.032	45	1238408	398.1748	ug/l	98
24) 1,1-Dichloroethene	3.008	61	676880	317.2887	ug/l	97
25) Methyl Acetate	3.319	43	290818	344.0540	ug/l	100
26) Methyl-t-butyl ether	3.642	73	1358293	308.2145	ug/l	99
27) 1,1-Dichloroethane	4.002	63	823744	308.2876	ug/l	98
28) trans-1,2-Dichloroethene	3.654	96	518245	277.1844	ug/l	98
29) Ethyl-t-butyl ether	4.294	59	1372002	329.2484	ug/l	99
30) cis-1,2-Dichloroethene	4.410	61	853560	324.1068	ug/l	97
31) Bromochloromethane	4.568	49	341687	313.9562	ug/l	99
32) 2,2-Dichloropropane	4.416	77	762534	296.7581	ug/l	99
33) Ethyl acetate	4.434	43	428515m	357.2875	ug/l	
34) 1,4-Dioxane	5.495	88	315062	12911.6895	ug/l	98
35) 1,1-Dichloropropene	4.825	75	721776	298.3014	ug/l	97
36) Chloroform	4.605	83	889472	268.2858	ug/l	99
38) Cyclohexane	4.770	56	636953	341.4931	ug/l	99
40) 1,2-Dichloroethane	4.953	62	792273	323.0474	ug/l	99
41) 2-Butanone	4.410	43	228604m	366.7419	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	824726	261.3210	ug/l	100
43) Carbon Tetrachloride	4.831	117	779006	295.1309	ug/l	97
44) Vinyl Acetate	4.026	43	1502147	380.7034	ug/l	100
45) Bromodichloromethane	5.568	83	728352	274.5117	ug/l	99
46) Methylcyclohexane	5.416	83	632248	294.6799	ug/l	100
47) Dibromomethane	5.501	174	406204	255.7717	ug/l	98
48) 1,2-Dichloropropane	5.428	63	506803	318.9792	ug/l	100
49) Trichloroethene	5.300	130	589832	239.4339	ug/l	97
50) Benzene	4.953	78	2097740	289.3081	ug/l	100
51) tert-Amyl methyl ether	4.989	73	1450989	309.1433	ug/l	98
53) Iso-propylacetate	4.946	43	909539	394.6838	ug/l	98
54) Methyl methacrylate	5.452	41	428472	398.6997	ug/l	97
55) Dibromochloromethane	6.422	129	633599	249.6571	ug/l	100
56) 2-Chloroethylvinylether	5.709	63	131414	333.0172	ug/l	99
57) cis-1,3-Dichloropropene	5.806	75	862585	296.2760	ug/l	98
58) trans-1,3-Dichloropropene	6.093	75	875942	301.6519	ug/l	97
59) Ethyl methacrylate	6.111	41	464680	431.1359	ug/l	98
60) 1,1,2-Trichloroethane	6.196	97	496868	263.8024	ug/l	96
61) 1,2-Dibromoethane	6.495	107	530280	244.1540	ug/l	99
62) 1,3-Dichloropropane	6.288	76	905906	300.3248	ug/l	100
63) 4-Methyl-2-Pentanone	5.867	43	448897	363.9097	ug/l	98
64) 2-Hexanone	6.306	43	339017	388.8200	ug/l	96
65) Tetrachloroethene	6.288	164	498417	259.3497	ug/l	100
67) Toluene	5.989	92	1363003	269.0883	ug/l	100

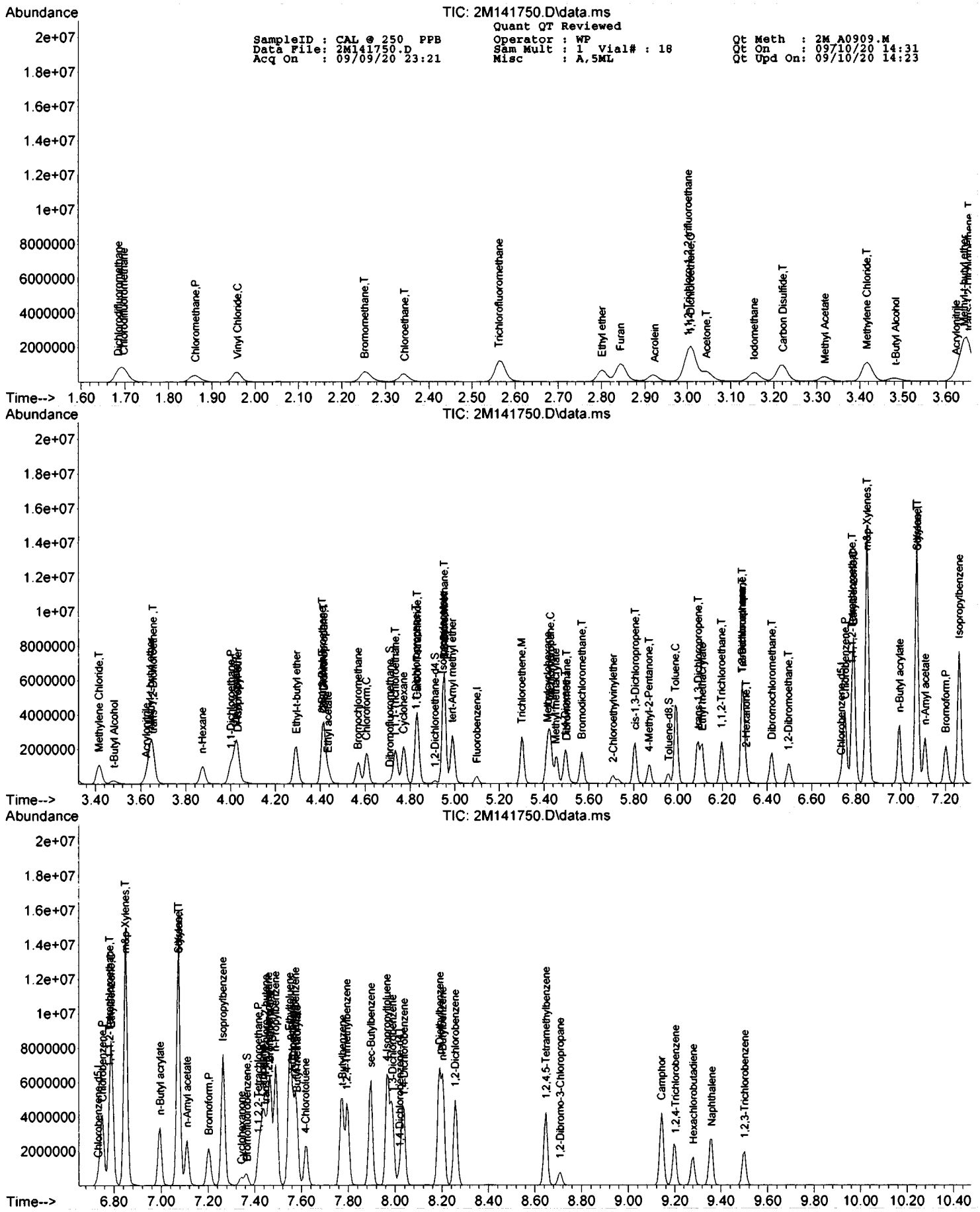
Quantitation Report (QT Reviewed)

SampleID : CAL @ 250 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141750.D Sam Mult : 1 Vial# : 18 Qt On : 09/10/20 14:31
Acq On : 09/09/20 23:21 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	609073	262.5574	ug/l	97
69)	Chlorobenzene	6.751	112	1530881	246.8471	ug/l	99
71)	n-Butyl acrylate	6.995	55	1465070	336.7711	ug/l	99
72)	n-Amyl acetate	7.111	43	868112	269.8372	ug/l	91
73)	Bromoform	7.202	173	753094	249.2286	ug/l	98
74)	Ethylbenzene	6.788	106	762976	211.8322	ug/l	100
75)	1,1,2,2-Tetrachloroethane	7.416	83	761542	203.1685	ug/l	97
77)	Styrene	7.074	104	2421867	248.4736	ug/l	100
78)	m&p-Xylenes	6.849	106	2832177	496.2811	ug/l	94
79)	o-Xylene	7.074	106	1378674	240.8398	ug/l	92
80)	trans-1,4-Dichloro-2-b...	7.446	53	346230	312.3775	ug/l	96
81)	1,3-Dichlorobenzene	7.989	146	1627378	216.3307	ug/l	98
82)	1,4-Dichlorobenzene	8.037	146	1579738	208.6085	ug/l	98
83)	1,2-Dichlorobenzene	8.257	146	1641809	231.3664	ug/l	99
84)	Isopropylbenzene	7.263	105	3623223	274.0459	ug/l	99
85)	Cyclohexanone	7.342	55	131518	1387.9003	ug/l	96
86)	Camphene	7.434	93	797174	241.6109	ug/l	96
87)	1,2,3-Trichloropropane	7.458	75	1227005	281.2258	ug/l	96
88)	2-Chlorotoluene	7.562	91	1525016	193.6036	ug/l	95
89)	p-Ethyltoluene	7.550	105	3076747m	234.7641	ug/l	
90)	4-Chlorotoluene	7.617	91	875216	105.0198	ug/l	93
91)	n-Propylbenzene	7.489	91	3966512	271.3321	ug/l	99
92)	Bromobenzene	7.464	77	2147670	292.3570	ug/l	96
93)	1,3,5-Trimethylbenzene	7.574	105	1382205m	127.4851	ug/l	
94)	Butyl methacrylate	7.580	41	314682	118.1638	ug/l	69
95)	t-Butylbenzene	7.775	119	2396959	213.0236	ug/l	94
96)	1,2,4-Trimethylbenzene	7.793	105	2028054	172.7093	ug/l	92
97)	sec-Butylbenzene	7.897	105	3285358	262.2585	ug/l	98
98)	4-Isopropyltoluene	7.964	119	2886183	257.2318	ug/l	99
99)	n-Butylbenzene	8.202	91	2841923	272.6010	ug/l	98
100)	p-Diethylbenzene	8.190	119	1626051	268.1071	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	1622010	197.9567	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.708	157	162906	164.8501	ug/l	84
103)	Camphor	9.141	95	761109	1894.3170	ug/l	98
104)	Hexachlorobutadiene	9.281	225	223951	154.4360	ug/l	96
105)	1,2,4-Trichlorobenzene	9.202	180	565691	160.4221	ug/l	99
106)	1,2,3-Trichlorobenzene	9.501	180	460422	144.0461	ug/l	98
107)	Naphthalene	9.360	128	1639403	170.4038	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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SampleID : CAL @ 250 PPB
Data File: 2M141750.D
Acq On : 09/09/20 23:21
Operator : WP
Sam Mult : 1 Vial# : 18
Misc : A,5ML
Qt Meth : 2M_A0909.M
Qt On : 09/10/20 14:31
Qt Upd On: 09/10/20 14:23
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 2M141750.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
m&p-Xylenes,T
Time-->

Abundance
TIC: 2M141750.D\data.ms
Chlorobenzene-d5,I
1,1,1,2-Tetrachloroethane,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone,S
4-Chlorotoluene
sec-Butylbenzene
1,4-Dichlorobenzene
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141747.D Sam Mult : 1 Vial# : 15 Qt On : 09/10/20 14:23
Acq On : 09/09/20 22:22 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	284475	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	239116	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.025	152	128908	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.709	111	69006	25.52	ug/l	0.00
Spiked Amount 30.000			Recovery = 85.07%			
39) 1,2-Dichloroethane-d4	4.910	67	36605	29.43	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.10%			
66) Toluene-d8	5.958	98	265114	28.02	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.40%			
76) Bromofluorobenzene	7.367	174	104154	29.84	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.47%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	1130427	625.7228	ug/l	69
6) Dichlorodifluoromethane	1.685	85	746684	408.2753	ug/l	98
7) Chloromethane	1.855	50	772796	727.4743	ug/l	99
8) Bromomethane	2.246	94	950427	860.2565	ug/l	100
9) Vinyl Chloride	1.953	62	941237	523.3331	ug/l	97
10) Chloroethane	2.331	64	786531	579.3330	ug/l	97
11) Trichlorofluoromethane	2.563	101	1828664	510.6065	ug/l	99
12) Ethyl ether	2.800	59	714389	606.7622	ug/l	99
13) Furan	2.837	39	1278014	738.5888	ug/l	96
14) 1,1,2-Trichloro-1,2,2-...	2.996	101	771343	487.6073	ug/l	96
15) Methylene Chloride	3.416	84	953262	463.9545	ug/l	97
16) Acrolein	2.916	56	692963	2825.1174	ug/l	98
17) Acrylonitrile	3.623	53	343885	566.3028	ug/l	98
18) Iodomethane	3.148	142	1169893	718.0549	ug/l	97
19) Acetone	3.044	43	1366203	3292.7903	ug/l	99
20) Carbon Disulfide	3.215	76	2581940	481.6494	ug/l	100
21) t-Butyl Alcohol	3.483	59	450472	2549.9758	ug/l	99
22) n-Hexane	3.873	57	827836	558.1992	ug/l	97
23) Di-isopropyl-ether	4.032	45	2566700	724.8270	ug/l	97
24) 1,1-Dichloroethene	3.008	61	1447294	595.8663	ug/l	96
25) Methyl Acetate	3.319	43	565494	587.6009	ug/l	100
26) Methyl-t-butyl ether	3.642	73	2801012	558.2435	ug/l	99
27) 1,1-Dichloroethane	4.001	63	1686852	554.4852	ug/l	98
28) trans-1,2-Dichloroethene	3.648	96	1064237	499.9437	ug/l	99
29) Ethyl-t-butyl ether	4.294	59	2847988	600.2833	ug/l	99
30) cis-1,2-Dichloroethene	4.410	61	1806998	602.6442	ug/l	98
31) Bromochloromethane	4.568	49	696249	561.8940	ug/l	99
32) 2,2-Dichloropropane	4.416	77	1653975	565.3553	ug/l	99
33) Ethyl acetate	4.434	43	875247m	640.9609	ug/l	
34) 1,4-Dioxane	5.495	88	674199	24267.4589	ug/l	98
35) 1,1-Dichloropropene	4.824	75	1529375	555.1573	ug/l	99
36) Chloroform	4.605	83	1826160	483.7861	ug/l	100
38) Cyclohexane	4.770	56	1272748	599.3301	ug/l	100
40) 1,2-Dichloroethane	4.952	62	1901674	681.0463	ug/l	98
41) 2-Butanone	4.410	43	485077m	683.4969	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	1699404	472.9447	ug/l	98
43) Carbon Tetrachloride	4.831	117	1632345	543.1690	ug/l	95
44) Vinyl Acetate	4.020	43	3243522	722.0052	ug/l	100
45) Bromodichloromethane	5.568	83	1574898	521.3400	ug/l	99
46) Methylcyclohexane	5.416	83	1289916	528.0483	ug/l	100
47) Dibromomethane	5.501	174	859393	475.2796	ug/l	99
48) 1,2-Dichloropropane	5.428	63	1071631	592.4035	ug/l	100
49) Trichloroethene	5.300	130	1226664	437.3530	ug/l	96
50) Benzene	4.952	78	4863990	589.1837	ug/l	100
51) tert-Amyl methyl ether	4.989	73	4193806	784.7895	ug/l	99
53) Iso-propylacetate	4.946	43	2130795	863.9234	ug/l	96
54) Methyl methacrylate	5.458	41	894974	778.1073	ug/l	96
55) Dibromochloromethane	6.422	129	1428933	526.0742	ug/l	99
56) 2-Chloroethylvinylether	5.708	63	268660	636.1121	ug/l	97
57) cis-1,3-Dichloropropene	5.806	75	1824457	585.5093	ug/l	99
58) trans-1,3-Dichloropropene	6.093	75	2247637	723.2068	ug/l	98
59) Ethyl methacrylate	6.111	41	1371958	1189.3417	ug/l	93
60) 1,1,2-Trichloroethane	6.196	97	1332738	661.1319	ug/l	96
61) 1,2-Dibromoethane	6.501	107	1133638	487.6842	ug/l	100
62) 1,3-Dichloropropane	6.294	76	2240277	693.9296	ug/l	100
63) 4-Methyl-2-Pentanone	5.873	43	950670	720.0826	ug/l	98
64) 2-Hexanone	6.306	43	917627	983.3293	ug/l	96
65) Tetrachloroethene	6.294	164	1206096	586.3816	ug/l	99
67) Toluene	5.995	92	3283086	605.6001	ug/l	94

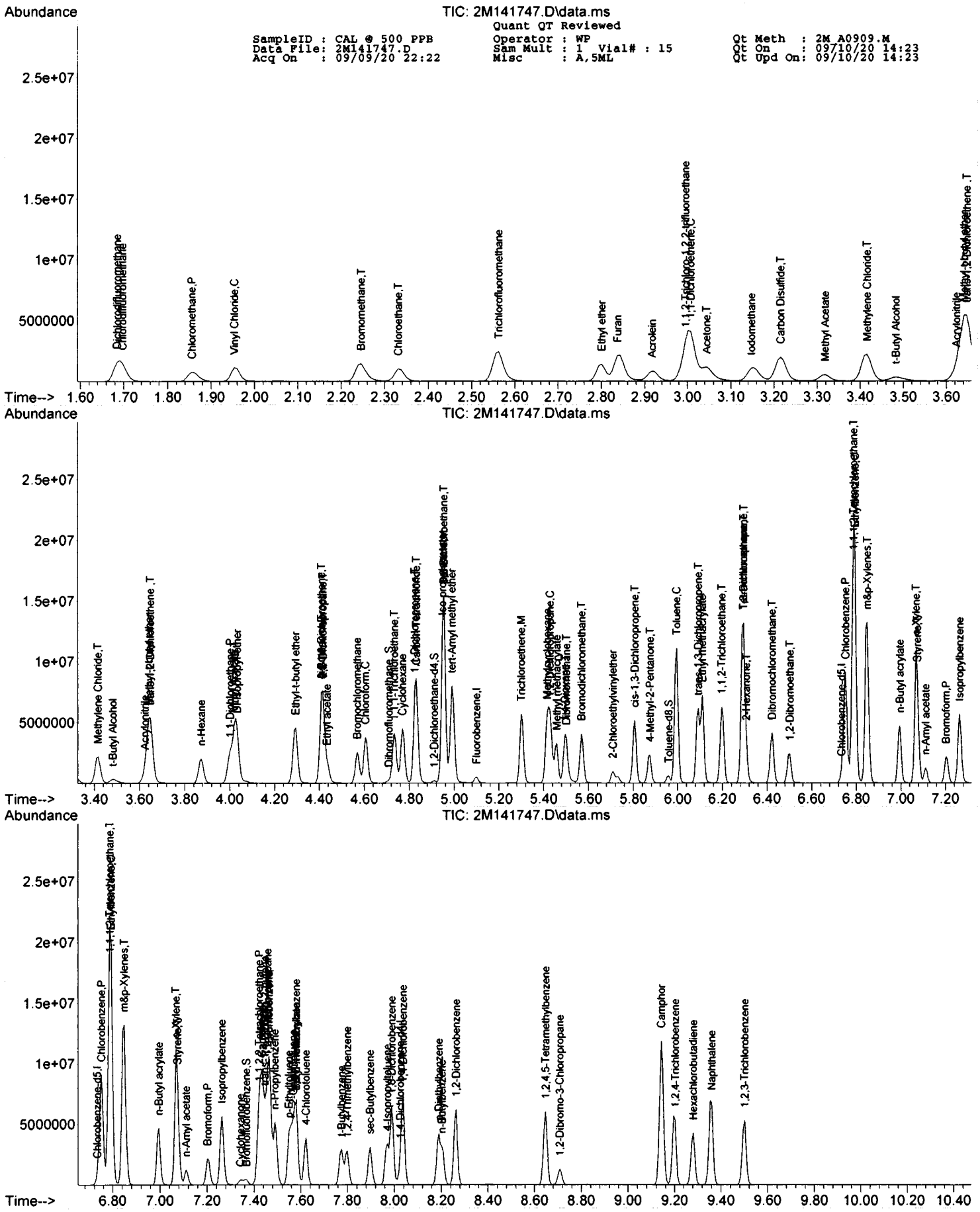
Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141747.D Sam Mult : 1 Vial# : 15 Qt On : 09/10/20 14:23
Acq On : 09/09/20 22:22 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.788	133	1579890	636.3374	ug/l	96
69)	Chlorobenzene	6.751	112	3341897	503.4835	ug/l	98
71)	n-Butyl acrylate	6.995	55	2004337	660.8269	ug/l	94
72)	n-Amyl acetate	7.111	43	381303	169.9953	ug/l	83
73)	Bromoform	7.202	173	782240	371.3037	ug/l	99
74)	Ethylbenzene	6.794	106	2381082	948.1914	ug/l	76
75)	1,1,2,2-Tetrachloroethane	7.422	83	2047631	783.5284	ug/l	97
77)	Styrene	7.074	104	1968650	289.6937	ug/l	90
78)	m&p-Xylenes	6.848	106	3188281	801.3174	ug/l	83
79)	o-Xylene	7.068	106	1413824	354.2441	ug/l	88
80)	trans-1,4-Dichloro-2-b...	7.446	53	583812	755.4899	ug/l	78
81)	1,3-Dichlorobenzene	7.989	146	2018629	384.8813	ug/l	96
82)	1,4-Dichlorobenzene	8.037	146	2404249	455.3728	ug/l	98
83)	1,2-Dichlorobenzene	8.263	146	2014161	407.1107	ug/l	97
84)	Isopropylbenzene	7.263	105	2905528	315.2056	ug/l	95
85)	Cyclohexanone	7.342	55	121327	1836.4162	ug/l	86
86)	Camphene	7.434	93	1741118	756.8891	ug/l	97
87)	1,2,3-Trichloropropane	7.458	75	2226498	731.9336	ug/l	96
88)	2-Chlorotoluene	7.568	91	1294652	235.7396	ug/l	91
89)	p-Ethyltoluene	7.550	105	2286771	250.2668	ug/l	97
90)	4-Chlorotoluene	7.623	91	1460531	251.3666	ug/l	91
91)	n-Propylbenzene	7.489	91	3009519	295.2773	ug/l	93
92)	Bromobenzene	7.464	77	3320065	648.2360	ug/l	92
93)	1,3,5-Trimethylbenzene	7.580	105	1581345	209.1965	ug/l	77
94)	Butyl methacrylate	7.580	41	380668m	205.0216	ug/l	
95)	t-Butylbenzene	7.775	119	1452766	185.1839	ug/l	87
96)	1,2,4-Trimethylbenzene	7.800	105	1227136	149.8889	ug/l	87
97)	sec-Butylbenzene	7.897	105	1699289	194.5605	ug/l	91
98)	4-Isopropyltoluene	7.970	119	1694807	216.6515	ug/l	94
99)	n-Butylbenzene	8.202	91	1435105	197.4419	ug/l	86
100)	p-Diethylbenzene	8.190	119	1122498	265.4608	ug/l	95
101)	1,2,4,5-Tetramethylben...	8.647	119	2509427	439.2703	ug/l	97
102)	1,2-Dibromo-3-Chloropr...	8.708	157	352019	510.9271	ug/l	94
103)	Camphor	9.141	95	2281466	8144.4246	ug/l	98
104)	Hexachlorobutadiene	9.281	225	646112	639.0634	ug/l	96
105)	1,2,4-Trichlorobenzene	9.202	180	1491075	606.4919	ug/l	99
106)	1,2,3-Trichlorobenzene	9.500	180	1328541	596.1575	ug/l	97
107)	Naphthalene	9.360	128	4389959	654.4775	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M141747.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 500 PPB
Data File: 2M141747.D
Acq On : 09/09/20 22:22
Operator : WP
Sam Mult : 1 Vial# : 15
Misc : A,5ML
Qt Meth : 2M_A0909.M
Qt On : 09/10/20 14:23
Qt Upd On: 09/10/20 14:23
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->

Abundance
TIC: 2M141747.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Chlorobenzene,P
m&p-Xylenes,T
n-Butyl acrylate
Styrene,T
o-Xylene,T
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 2M141747.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
m&p-Xylenes,T
n-Butyl acrylate
Styrene,T
o-Xylene,T
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone,S
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB
Data File: 2M141740.D
Acq On : 09/09/20 20:05

Operator : WP
Sam Mult : 1 Vial# : 8
Misc : A,5ML

Qt Meth : 2M_A0909.M
Qt On : 09/10/20 14:37
Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	216660	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	188902	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	107874	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	61319	29.78	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.27%			
39) 1,2-Dichloroethane-d4	4.910	67	31713	33.48	ug/l	0.00
Spiked Amount 30.000			Recovery = 111.60%			
66) Toluene-d8	5.952	98	222869	29.81	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.37%			
76) Bromofluorobenzene	7.367	174	88317	30.24	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.80%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	2177	1.5822	ug/l	58
6) Dichlorodifluoromethane	1.691	85	1203	0.8637	ug/l	81
7) Chloromethane	1.855	50	1622	2.0048	ug/l	96
8) Bromomethane	2.264	94	1633	1.9407	ug/l	87
9) Vinyl Chloride	1.959	62	1909	1.3936	ug/l	94
10) Chloroethane	2.349	64	1290	1.2476	ug/l	89
11) Trichlorofluoromethane	2.569	101	2818	1.0331	ug/l	90
12) Ethyl ether	2.806	59	1037	1.1565	ug/l	60
13) Furan	2.843	39	2316	1.7574	ug/l	100
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	1194	0.9910	ug/l	99
15) Methylene Chloride	3.422	84	1816	1.1605	ug/l	93
16) Acrolein	2.922	56	1048	5.6099	ug/l	64
17) Acrylonitrile	3.629	53	701	1.5157	ug/l	80
18) Iodomethane	3.154	142	1541	1.2419	ug/l	81
19) Acetone	3.044	43	2637	8.3450	ug/l	71
20) Carbon Disulfide	3.221	76	4638	1.1360	ug/l	100
21) t-Butyl Alcohol	3.477	59	1011	7.5142	ug/l	84
22) n-Hexane	3.873	57	1544	1.3670	ug/l	91
23) Di-isopropyl-ether	4.026	45	4120	1.5276	ug/l	81
24) 1,1-Dichloroethene	3.014	61	2299	1.2428	ug/l	89
25) Methyl Acetate	3.318	43	1141	1.5567	ug/l	100
26) Methyl-t-butyl ether	3.635	73	4147	1.0852	ug/l	89
27) 1,1-Dichloroethane	4.007	63	2980	1.2862	ug/l	97
28) trans-1,2-Dichloroethene	3.654	96	1765	1.0887	ug/l	94
29) Ethyl-t-butyl ether	4.294	59	4612	1.2764	ug/l	92
30) cis-1,2-Dichloroethene	4.410	61	2666	1.1674	ug/l	86
31) Bromochloromethane	4.568	49	1417	1.5015	ug/l	82
32) 2,2-Dichloropropane	4.422	77	2600	1.1669	ug/l	91
33) Ethyl acetate	4.440	43	1584m	1.5231	ug/l	
34) 1,4-Dioxane	5.495	88	1144	54.0664	ug/l	94
35) 1,1-Dichloropropene	4.830	75	2213	1.0547	ug/l	93
36) Chloroform	4.605	83	3202	1.1138	ug/l	91
38) Cyclohexane	4.776	56	1988	1.2292	ug/l	93
40) 1,2-Dichloroethane	4.952	62	2742	1.2894	ug/l	97
41) 2-Butanone	4.416	43	642m	1.1878	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	2812	1.0275	ug/l	98
43) Carbon Tetrachloride	4.836	117	2420	1.0573	ug/l	86
44) Vinyl Acetate	4.026	43	5011	1.4646	ug/l	100
45) Bromodichloromethane	5.568	83	2530	1.0997	ug/l	97
46) Methylcyclohexane	5.416	83	2052	1.1029	ug/l	98
47) Dibromomethane	5.495	174	1272	0.9237	ug/l	97
48) 1,2-Dichloropropane	5.428	63	1706	1.2383	ug/l	90
49) Trichloroethene	5.300	130	1849	0.8656	ug/l	84
50) Benzene	4.952	78	6910	1.0990	ug/l	100
51) tert-Amyl methyl ether	4.989	73	4233	1.0401	ug/l	96
53) Iso-propylacetate	4.946	43	4166	2.1381	ug/l	87
54) Methyl methacrylate	5.458	41	1204	1.3250	ug/l	78
55) Dibromochloromethane	6.422	129	2228	1.0383	ug/l	96
56) 2-Chloroethylvinylether	5.714	63	472	1.4146	ug/l	84
57) cis-1,3-Dichloropropene	5.806	75	2890	1.1740	ug/l	97
58) trans-1,3-Dichloropropene	6.092	75	2974	1.2113	ug/l	91
59) Ethyl methacrylate	6.111	41	1304	1.4309	ug/l	93
60) 1,1,2-Trichloroethane	6.196	97	1759	1.1045	ug/l	91
61) 1,2-Dibromoethane	6.501	107	1795	0.9775	ug/l	94
62) 1,3-Dichloropropane	6.287	76	2818	1.1049	ug/l	100
63) 4-Methyl-2-Pentanone	5.873	43	1412	1.3538	ug/l	95
64) 2-Hexanone	6.306	43	1413	1.9167	ug/l	81
65) Tetrachloroethene	6.287	164	1643	1.0111	ug/l	79
67) Toluene	5.989	92	4173	0.9744	ug/l	92

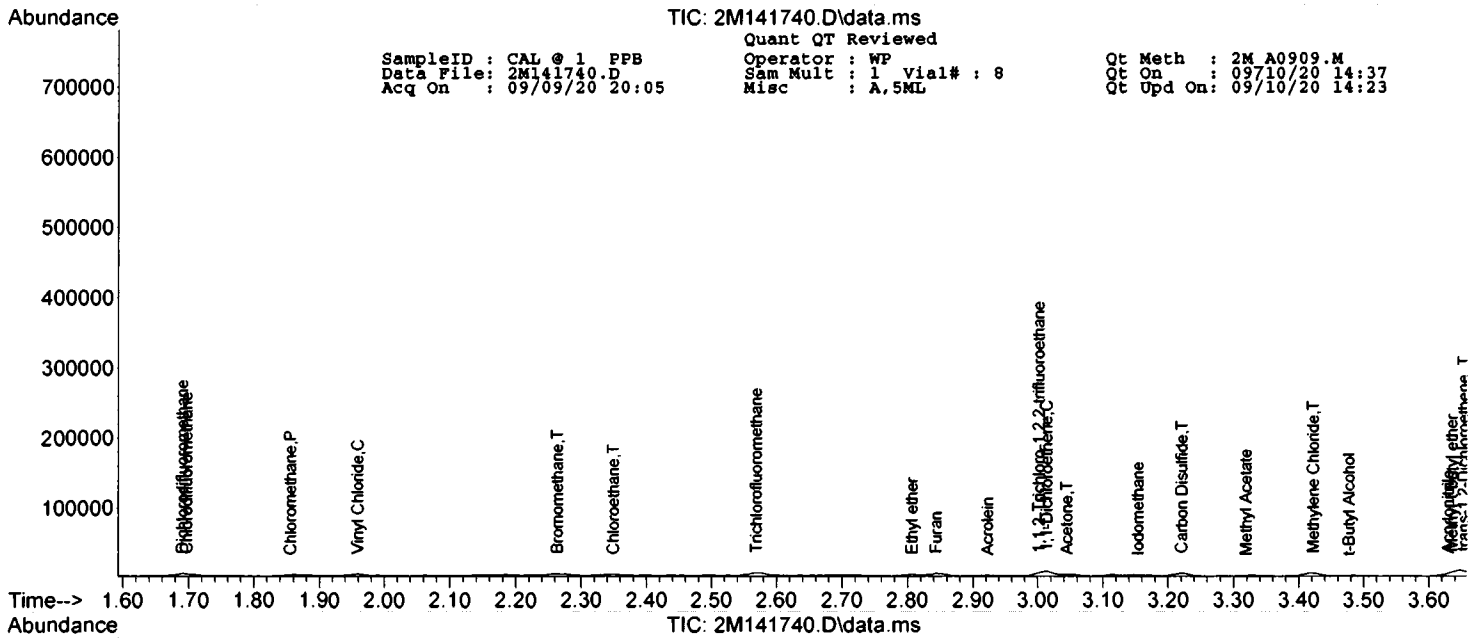
Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB
Data File: 2M141740.D
Acq On : 09/09/20 20:05
Operator : WP
Sam Mult : 1 Vial# : 8
Misc : A,5ML
Qt Meth : 2M_A0909.M
Qt On : 09/10/20 14:37
Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	1931	0.9845	ug/l	87
69)	Chlorobenzene	6.751	112	4965	0.9469	ug/l	98
71)	n-Butyl acrylate	6.995	55	3011	1.1863	ug/l	98
72)	n-Amyl acetate	7.110	43	2533	1.3495	ug/l	96
73)	Bromoform	7.208	173	1569	0.8900	ug/l	78
74)	Ethylbenzene	6.793	106	2273	1.0816	ug/l	84
75)	1,1,2,2-Tetrachloroethane	7.415	83	2171	0.9927	ug/l	81
77)	Styrene	7.074	104	5261	0.9251	ug/l	94
78)	m&p-Xylenes	6.848	106	6133	1.8420	ug/l	84
79)	o-Xylene	7.074	106	3028	0.9066	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.446	53	884	1.3670	ug/l	97
81)	1,3-Dichlorobenzene	7.988	146	3869m	0.8815	ug/l	
82)	1,4-Dichlorobenzene	8.037	146	3889	0.8802	ug/l	75
83)	1,2-Dichlorobenzene	8.263	146	3522	0.8507	ug/l	93
84)	Isopropylbenzene	7.263	105	7654	0.9922	ug/l	99
85)	Cyclohexanone	7.354	55	698	12.6250	ug/l	64
86)	Camphene	7.434	93	1779	0.9242	ug/l	89
87)	1,2,3-Trichloropropane	7.458	75	2837	1.1145	ug/l	97
88)	2-Chlorotoluene	7.562	91	4959	1.0790	ug/l	97
89)	p-Ethyltoluene	7.549	105	7719	1.0095	ug/l	95
90)	4-Chlorotoluene	7.616	91	4747	0.9763	ug/l	97
91)	n-Propylbenzene	7.488	91	9304	1.0909	ug/l	98
92)	Bromobenzene	7.464	77	4670	1.0896	ug/l	96
93)	1,3,5-Trimethylbenzene	7.574	105	6314	0.9981	ug/l	98
94)	Butyl methacrylate	7.586	41	1772	1.1405	ug/l	84
95)	t-Butylbenzene	7.775	119	5751	0.8760	ug/l	91
96)	1,2,4-Trimethylbenzene	7.799	105	5945	0.8677	ug/l	90
97)	sec-Butylbenzene	7.897	105	7161	0.9798	ug/l	98
98)	4-Isopropyltoluene	7.964	119	6279	0.9592	ug/l	99
99)	n-Butylbenzene	8.202	91	6362	1.0460	ug/l	96
100)	p-Diethylbenzene	8.190	119	3438	0.9716	ug/l	96
101)	1,2,4,5-Tetramethylben...	8.647	119	4954	1.0363	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.708	157	516	0.8950	ug/l	51
103)	Camphor	9.141	95	2090	8.9157	ug/l	94
104)	Hexachlorobutadiene	9.281	225	877	1.0366	ug/l	83
105)	1,2,4-Trichlorobenzene	9.202	180	2136	1.0382	ug/l	88
106)	1,2,3-Trichlorobenzene	9.500	180	1695	0.9089	ug/l	92
107)	Naphthalene	9.360	128	4732	0.8430	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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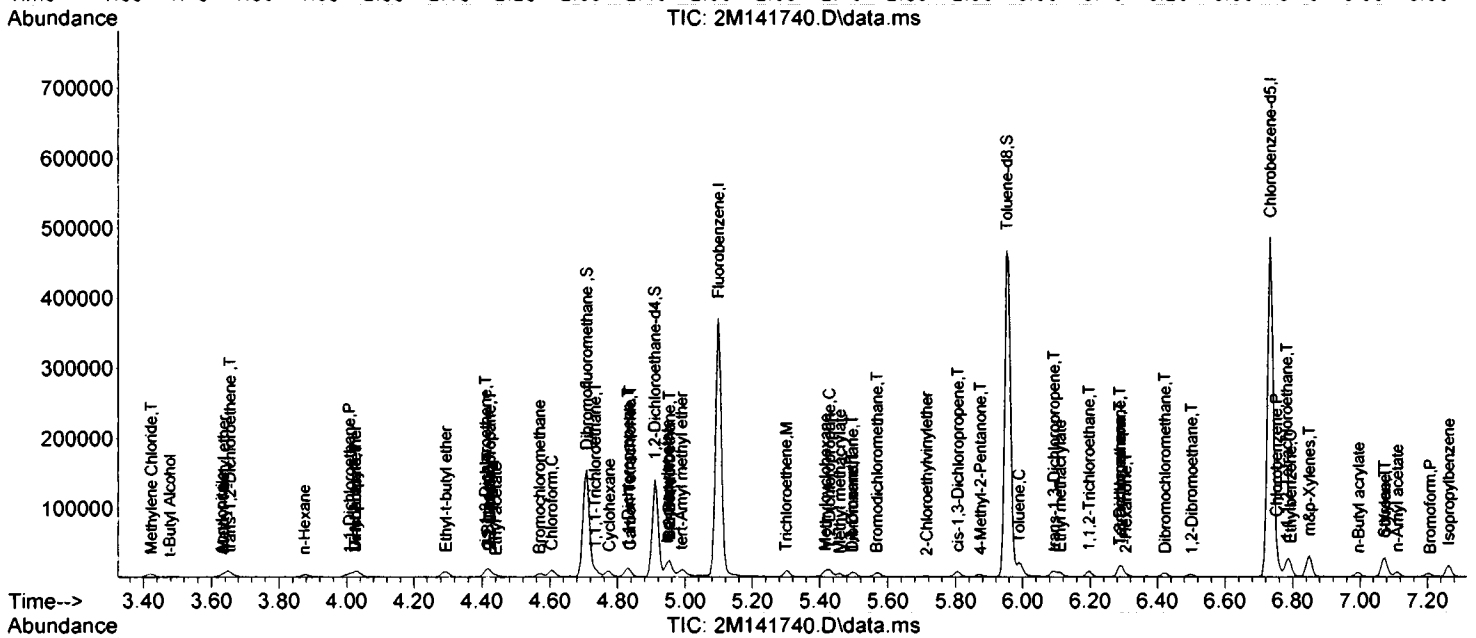
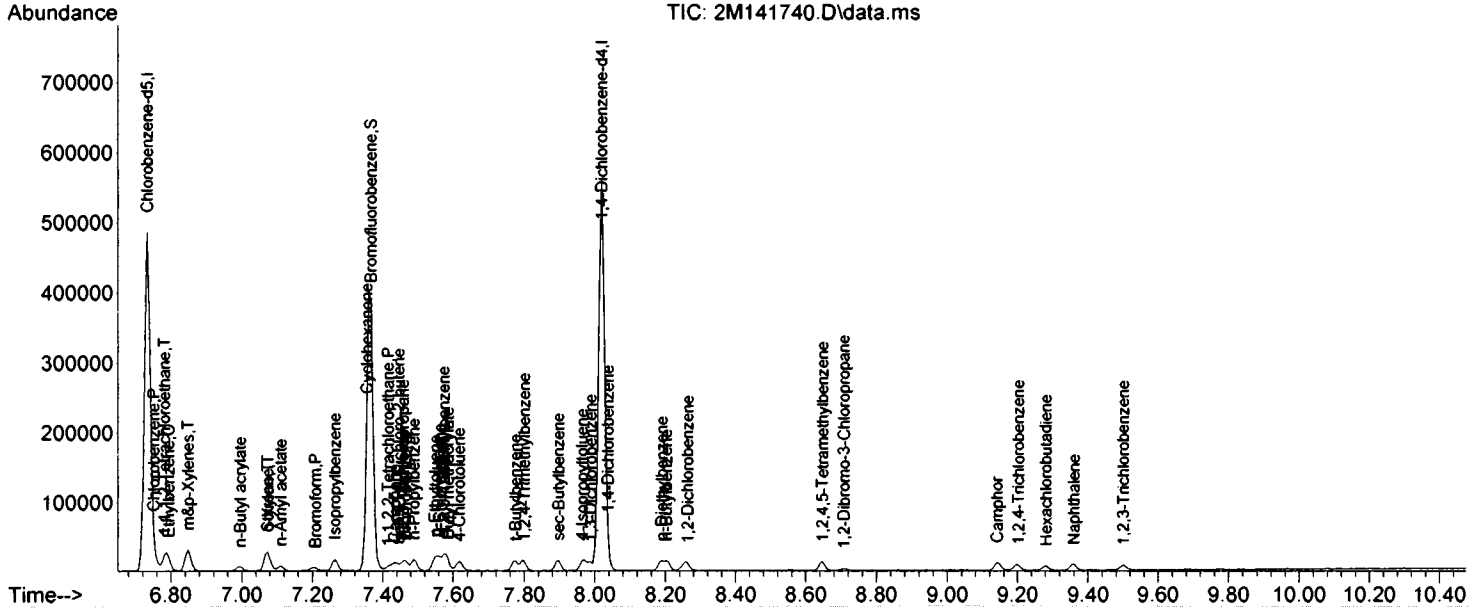
Quant QT Reviewed
SampleID : CAL @ 1 PPB
Data File: 2M141740.D
Acq On : 09/09/20 20:05
Operator : WP
Sam Mult : 1 Vial# : 8
Misc : A,5ML
Qt Meth : 2M_A0909.M
Qt On : 09710/20 14:37
Qt Upd On: 09/10/20 14:23
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->


Abundance
TIC: 2M141740.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Dibromofluoromethane,S
Cyclohexane
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,P
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M141740.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,P
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
1,1,2,2-Tetrachloroethane,P
n-Propylbenzene
4-Chlorotoluene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,4-Dichlorobenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141739.D Sam Mult : 1 Vial# : 7 Qt On : 09/10/20 14:39
Acq On : 09/09/20 19:46 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	244552	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	214662	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	122037	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.709	111	68531	29.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.30%			
39) 1,2-Dichloroethane-d4	4.910	67	35517	33.22	ug/l	0.00
Spiked Amount 30.000			Recovery = 110.73%			
66) Toluene-d8	5.952	98	251014	29.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.50%			
76) Bromofluorobenzene	7.367	174	100916	30.54	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.80%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	0.000		0	N.D.	d	
6) Dichlorodifluoromethane	0.000		0	N.D.	d	
7) Chloromethane	0.000		0	N.D.	d	
8) Bromomethane	0.000		0	N.D.	d	
9) Vinyl Chloride	0.000		0	N.D.	d	
10) Chloroethane	0.000		0	N.D.		
11) Trichlorofluoromethane	0.000		0	N.D.	d	
12) Ethyl ether	0.000		0	N.D.	d	
13) Furan	0.000		0	N.D.	d	
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D.	d	
15) Methylene Chloride	0.000		0	N.D.	d	
16) Acrolein	0.000		0	N.D.	d	
17) Acrylonitrile	0.000		0	N.D.	d	
18) Iodomethane	0.000		0	N.D.	d	
19) Acetone	0.000		0	N.D.	d	
20) Carbon Disulfide	0.000		0	N.D.	d	
21) t-Butyl Alcohol	0.000		0	N.D.	d	
22) n-Hexane	0.000		0	N.D.	d	
23) Di-isopropyl-ether	0.000		0	N.D.	d	
24) 1,1-Dichloroethene	0.000		0	N.D.	d	
25) Methyl Acetate	0.000		0	N.D.	d	
26) Methyl-t-butyl ether	3.642	73	1789	0.4148	ug/l	88
27) 1,1-Dichloroethane	0.000		0	N.D.	d	
28) trans-1,2-Dichloroethene	0.000		0	N.D.	d	
29) Ethyl-t-butyl ether	0.000		0	N.D.	d	
30) cis-1,2-Dichloroethene	0.000		0	N.D.	d	
31) Bromochloromethane	0.000		0	N.D.	d	
32) 2,2-Dichloropropane	0.000		0	N.D.	d	
33) Ethyl acetate	0.000		0	N.D.	d	
34) 1,4-Dioxane	0.000		0	N.D.	d	
35) 1,1-Dichloropropene	0.000		0	N.D.	d	
36) Chloroform	0.000		0	N.D.	d	
38) Cyclohexane	0.000		0	N.D.	d	
40) 1,2-Dichloroethane	4.952	62	1379m	0.5745	ug/l	
41) 2-Butanone	0.000		0	N.D.	d	
42) 1,1,1-Trichloroethane	0.000		0	N.D.	d	
43) Carbon Tetrachloride	0.000		0	N.D.	d	
44) Vinyl Acetate	0.000		0	N.D.	d	
45) Bromodichloromethane	0.000		0	N.D.	d	
46) Methylcyclohexane	0.000		0	N.D.	d	
47) Dibromomethane	0.000		0	N.D.	d	
48) 1,2-Dichloropropane	0.000		0	N.D.	d	
49) Trichloroethene	0.000		0	N.D.	d	
50) Benzene	4.952	78	2631m	0.3707	ug/l	
51) tert-Amyl methyl ether	0.000		0	N.D.	d	
53) Iso-propylacetate	0.000		0	N.D.	d	
54) Methyl methacrylate	0.000		0	N.D.	d	
55) Dibromochloromethane	0.000		0	N.D.	d	
56) 2-Chloroethylvinylether	0.000		0	N.D.	d	
57) cis-1,3-Dichloropropene	0.000		0	N.D.	d	
58) trans-1,3-Dichloropropene	0.000		0	N.D.	d	
59) Ethyl methacrylate	0.000		0	N.D.	d	
60) 1,1,2-Trichloroethane	0.000		0	N.D.	d	
61) 1,2-Dibromoethane	0.000		0	N.D.	d	
62) 1,3-Dichloropropane	0.000		0	N.D.	d	
63) 4-Methyl-2-Pentanone	0.000		0	N.D.	d	
64) 2-Hexanone	0.000		0	N.D.	d	
65) Tetrachloroethene	0.000		0	N.D.	d	
67) Toluene	0.000		0	N.D.	d	

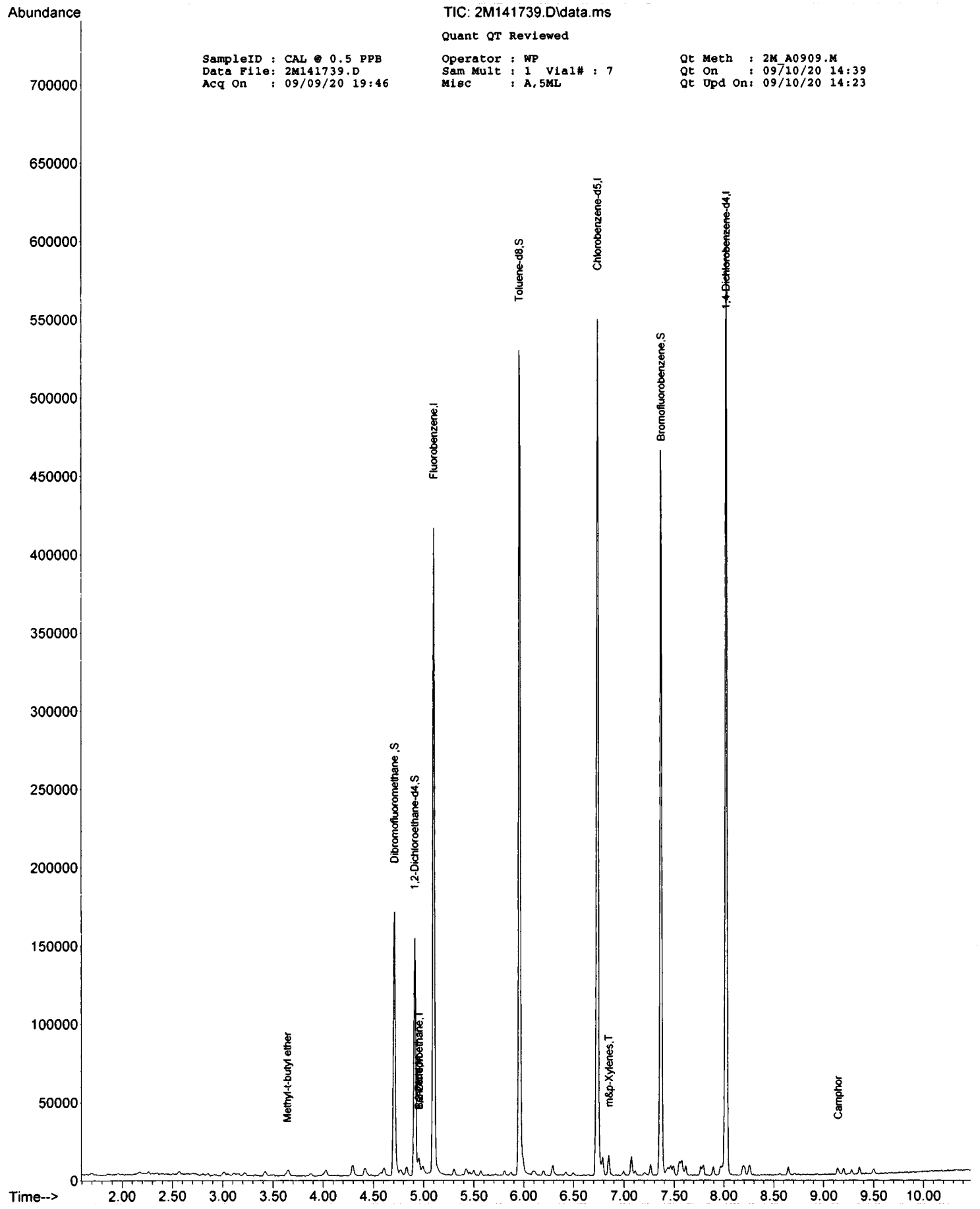
Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : WP Qt Meth : 2M_A0909.M
Data File: 2M141739.D Sam Mult : 1 Vial# : 7 Qt On : 09/10/20 14:39
Acq On : 09/09/20 19:46 Misc : A,5ML Qt Upd On: 09/10/20 14:23

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	0.000		0	N.D. d		
69)	Chlorobenzene	0.000		0	N.D. d		
71)	n-Butyl acrylate	0.000		0	N.D. d		
72)	n-Amyl acetate	0.000		0	N.D. d		
73)	Bromoform	0.000		0	N.D. d		
74)	Ethylbenzene	0.000		0	N.D. d		
75)	1,1,2,2-Tetrachloroethane	0.000		0	N.D. d		
77)	Styrene	0.000		0	N.D. d		
78)	m&p-Xylenes	6.848	106	2711	0.7197	ug/l	92
79)	o-Xylene	0.000		0	N.D. d		
80)	trans-1,4-Dichloro-2-b...	0.000		0	N.D. d		
81)	1,3-Dichlorobenzene	0.000		0	N.D. d		
82)	1,4-Dichlorobenzene	0.000		0	N.D. d		
83)	1,2-Dichlorobenzene	0.000		0	N.D. d		
84)	Isopropylbenzene	0.000		0	N.D. d		
85)	Cyclohexanone	0.000		0	N.D. d		
86)	Camphene	0.000		0	N.D. d		
87)	1,2,3-Trichloropropane	0.000		0	N.D. d		
88)	2-Chlorotoluene	0.000		0	N.D. d		
89)	p-Ethyltoluene	0.000		0	N.D. d		
90)	4-Chlorotoluene	0.000		0	N.D. d		
91)	n-Propylbenzene	0.000		0	N.D. d		
92)	Bromobenzene	0.000		0	N.D. d		
93)	1,3,5-Trimethylbenzene	0.000		0	N.D. d		
94)	Butyl methacrylate	0.000		0	N.D. d		
95)	t-Butylbenzene	0.000		0	N.D. d		
96)	1,2,4-Trimethylbenzene	0.000		0	N.D. d		
97)	sec-Butylbenzene	0.000		0	N.D. d		
98)	4-Isopropyltoluene	0.000		0	N.D. d		
99)	n-Butylbenzene	0.000		0	N.D. d		
100)	p-Diethylbenzene	0.000		0	N.D. d		
101)	1,2,4,5-Tetramethylben...	0.000		0	N.D. d		
102)	1,2-Dibromo-3-Chloropr...	0.000		0	N.D. d		
103)	Camphor	9.141	95	871m	3.2844	ug/l	
104)	Hexachlorobutadiene	0.000		0	N.D. d		
105)	1,2,4-Trichlorobenzene	0.000		0	N.D. d		
106)	1,2,3-Trichlorobenzene	0.000		0	N.D. d		
107)	Naphthalene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M141739.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 0.5 PPB
Data File: 2M141739.D
Acq On : 09/09/20 19:46
Operator : WP
Sam Mult : 1 Vial# : 7
Misc : A,5ML
Qt Meth : 2M_A0909.M
Qt On : 09/10/20 14:39
Qt Upd On: 09/10/20 14:23
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
Methyl-t-butyl ether
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
m&p-Xylenes,T
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Camphor
Time-->
2.00
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50
10.00

0092507 0234

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M82676.D	CAL @ 20 PPB	09/11/20 21:35	2	11M82674.D	CAL @ 5 PPB	09/11/20 20:58
3	11M82675.D	CAL @ 10 PPB	09/11/20 21:17	4	11M82678.D	CAL @ 50 PPB	09/11/20 22:12
5	11M82686.D	CAL @ 100 PPB	09/12/20 00:39	6	11M82673.D	CAL @ 1 PPB	09/11/20 20:40
7	11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.2849	0.2543	0.2697	0.2583	0.2729	-----	-----	0.2688	-----	0.268	1.67	0.999	0.999	4.1	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Dichlorodifluorometha	1	0	Avg	0.1652	0.1623	0.1768	0.1567	0.1792	-----	-----	0.1262	-----	0.161	1.66	0.996	0.999	12	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Chloromethane	1	0	Avg	0.1864	0.1709	0.1771	0.1593	0.1727	-----	-----	0.1509	-----	0.170	1.84	0.998	0.999	7.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Bromomethane	1	0	Avg	0.1678	0.1752	0.1819	0.1509	0.2001	-----	-----	0.1780	-----	0.176	2.20	0.984	0.998	9.2	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Vinyl Chloride	1	0	Avg	0.2293	0.2252	0.2299	0.2035	0.2235	-----	-----	0.1971	-----	0.218	1.94	0.998	0.999	6.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Chloroethane	1	0	Avg	0.1563	0.1492	0.1551	0.1430	0.1502	-----	-----	0.1347	-----	0.148	2.29	0.999	0.999	5.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Trichlorofluoromethan	1	0	Avg	0.3507	0.3630	0.3868	0.3366	0.3986	-----	-----	0.3274	-----	0.361	2.53	0.994	0.999	7.8	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl ether	1	0	Avg	0.1311	0.1351	0.1292	0.1140	0.1292	-----	-----	0.1012	-----	0.123	2.77	0.996	0.999	11	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Furan	1	0	Avg	0.2290	0.2257	0.2205	0.1996	0.2322	-----	-----	0.2647	-----	0.229	2.81	0.995	0.999	9.2	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1279	0.1562	0.1583	0.1347	0.1586	-----	-----	0.1375	-----	0.146	2.96	0.993	0.999	9.4	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Methylene Chloride	1	0	Avg	0.2144	0.2100	0.2183	0.1914	0.2125	-----	-----	0.2541	-----	0.217	3.37	0.997	0.999	9.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Acrolein	1	0	Avg	0.0282	0.0251	0.0274	0.0263	0.0280	-----	-----	0.0196	-----	0.0258	2.88	0.999	1.00	12		100.0	25.00	50.00	250.0	500.0			5.00	
Acrylonitrile	1	0	Qua	0.0702	0.0686	0.0710	0.0651	0.0703	-----	-----	0.0342	-----	0.0633	3.57	0.999	0.999	23		20.00	5.00	10.00	50.00	100.0			1.00	
Iodomethane	1	0	Qua	0.2073	0.1238	0.1658	0.2196	0.2349	-----	-----	0.0853	-----	0.173	3.11	0.999	1.00	34		20.00	5.00	10.00	50.00	100.0			1.00	
Acetone	1	0	Avg	0.0498	0.0555	0.0528	0.0447	0.0481	-----	-----	0.0585	-----	0.0516	3.01	0.998	0.999	9.8	0.10 a	100.0	25.00	50.00	250.0	500.0			5.00	
Carbon Disulfide	1	0	Avg	0.4902	0.4578	0.4764	0.4811	0.5579	-----	-----	0.4966	-----	0.493	3.18	0.995	1.00	7.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
t-Butyl Alcohol	1	0	Avg	0.0121	0.0124	0.0129	0.0113	0.0147	-----	-----	0.0114	-----	0.0125	3.45	0.986	0.999	10		100.0	25.00	50.00	250.0	500.0			5.00	
n-Hexane	1	0	Avg	0.1310	0.1577	0.1706	0.1550	0.1720	-----	-----	0.1342	-----	0.153	3.81	0.996	0.999	11		20.00	5.00	10.00	50.00	100.0			1.00	
Di-isopropyl-ether	1	0	Avg	0.4549	0.4061	0.4359	0.4100	0.4564	-----	-----	0.3869	-----	0.425	3.95	0.997	0.999	6.7		20.00	5.00	10.00	50.00	100.0			1.00	
1,1-Dichloroethene	1	0	Avg	0.2777	0.2625	0.2787	0.2601	0.2908	-----	-----	0.2233	-----	0.266	2.97	0.997	0.999	8.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Methyl Acetate	1	0	Qua	0.1169	0.1273	0.1241	0.1076	0.1179	-----	-----	0.0838	0.0678	0.107	3.27	0.998	0.999	21	0.10 a	20.00	5.00	10.00	50.00	100.0			1.00	0.50
Methyl-t-butyl ether	1	0	Avg	0.4805	0.4390	0.4723	0.4599	0.5188	-----	-----	0.3892	0.4515	0.459	3.59	0.997	1.00	8.7	0.10	20.00	5.00	10.00	50.00	100.0			1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.3622	0.3363	0.3484	0.3383	0.3624	-----	-----	0.3205	-----	0.345	3.92	0.999	1.00	4.7	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2133	0.1927	0.2075	0.1906	0.2270	-----	-----	0.1952	-----	0.204	3.60	0.994	0.999	6.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl-t-butyl ether	1	0	Avg	0.4877	0.4457	0.4641	0.4690	0.5253	-----	-----	0.4067	-----	0.466	4.20	0.997	1.00	8.5	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.3598	0.3226	0.3449	0.3264	0.3625	-----	-----	0.3024	-----	0.336	4.31	0.997	0.999	7.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Bromochloromethane	1	0	Avg	0.1496	0.1398	0.1503	0.1428	0.1470	-----	-----	0.1256	-----	0.143	4.45	1.00	1.00	6.5		20.00	5.00	10.00	50.00	100.0			1.00	
2,2-Dichloropropane	1	0	Avg	0.2893	0.2602	0.2884	0.2790	0.3039	-----	-----	0.2132	-----	0.272	4.31	0.998	1.00	12		20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl acetate	1	0	Avg	0.1793	0.1699	0.1938	0.1684	0.1707	-----	-----	0.1304	-----	0.169	4.33	1.00	1.00	12		20.00	5.00	10.00	50.00	100.0			1.00	
1,4-Dioxane	1	0	Avg	0.0018	0.0018	0.0017	0.0014	0.0022	-----	-----	0.0019	-----	0.00186	5.34	0.968	0.996	14		1000.	250.0	500.0	2500.	5000.			50.00	
1,1-Dichloropropene	1	0	Avg	0.3004	0.2872	0.3188	0.3044	0.3302	-----	-----	0.2527	-----	0.299	4.70	0.998	1.00	9.1		20.00	5.00	10.00	50.00	100.0			1.00	
Chloroform	1	0	Avg	0.4134	0.3707	0.3997	0.3667	0.4075	-----	-----	0.3257	-----	0.381	4.49	0.997	0.999	8.7	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
Dibromofluoromethan	1	0	Avg	0.2448	0.2509	0.2569	0.2539	0.2487	-----	-----	0.2500	0.2451	0.250	4.58	-1	-1	1.8		30.00	30.00	30.00	30.00	30.00			30.00	30.00
Cyclohexane	1	0	Avg	0.2329	0.2472	0.2792	0.2487	0.2800	-----	-----	0.2206	-----	0.251	4.65	0.996	1.00	9.6	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1274	0.1335	0.1327	0.1258	0.1251	-----	-----	0.1364	0.1373	0.131	4.78	-1	-1	3.8		30.00	30.00	30.00	30.00	30.00			30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3035	0.2906	0.3030	0.2755	0.3044	-----	-----	0.2807	0.2982	0.294	4.82	0.998	0.999	4.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	0.50
2-Butanone	1	0	Avg	0.0736	0.0767	0.0624	0.0568	0.0736	-----	-----	0.0893	-----	0.0721	4.30	0.986	0.996	16	0.10 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,1-Trichloroethane	1	0	Avg	0.3554	0.3228	0.3601	0.3479	0.3767	-----	-----	0.3000	-----	0.344	4.61	0.999	1.00	8.1	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Carbon Tetrachloride	1	0	Avg	0.2863	0.2649	0.3111	0.3045	0.3450	-----	-----	0.2216	-----	0.289	4.71	0.997	1.00	15	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Vinyl Acetate	1	0	Avg	0.5220	0.4593	0.5144	0.5106	0.5596	-----	-----	0.4428	-----	0.502	3.94	0.998	1.00	8.6		20.00	5.00	10.00	50.00	100.0			1.00	
Bromodichloromethan	1	0	Avg	0.3038	0.2680	0.2754	0.2972	0.3190	-----	-----	0.2589	-----	0.287	5.41	0.999	1.00	8.1	0.20	20.00	5.00	10.00	50.00	100.0			1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.934

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0092507 0235

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M82676.D	CAL @ 20 PPB	09/11/20 21:35	2	11M82674.D	CAL @ 5 PPB	09/11/20 20:58
3	11M82675.D	CAL @ 10 PPB	09/11/20 21:17	4	11M82678.D	CAL @ 50 PPB	09/11/20 22:12
5	11M82686.D	CAL @ 100 PPB	09/12/20 00:39	6	11M82673.D	CAL @ 1 PPB	09/11/20 20:40
7	11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.2076	0.2345	0.2602	0.2536	0.2871	-----	-----	0.1822	-----	0.238	5.27	0.995	0.999	16	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Dibromomethane	1	0	Avg	0.1444	0.1243	0.1395	0.1468	0.1582	-----	-----	0.1184	-----	0.139	5.34	0.999	1.00	11		20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dichloropropane	1	0	Avg	0.2080	0.1854	0.2103	0.2052	0.2151	-----	-----	0.1686	-----	0.199	5.28	1.00	1.00	9.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Trichloroethene	1	0	Avg	0.2436	0.2121	0.2417	0.2474	0.2589	-----	-----	0.2216	-----	0.238	5.16	1.00	1.00	7.3	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
Benzene	1	0	Avg	0.8920	0.8280	0.8776	0.8380	0.9406	-----	-----	0.7773	0.7888	0.849	4.82	0.997	0.999	6.9	0.50	20.00	5.00	10.00	50.00	100.0			1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.4955	0.4209	0.4673	0.4796	0.5378	-----	-----	0.3901	-----	0.465	4.86	0.997	1.00	11		20.00	5.00	10.00	50.00	100.0			1.00	
Iso-propylacetate	1	0	Avg	0.3560	0.3043	0.3342	0.3407	0.3657	-----	-----	0.2934	-----	0.332	4.81	0.999	1.00	8.6	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Methyl methacrylate	1	0	Avg	0.2018	0.1753	0.2080	0.1967	0.2106	-----	-----	0.2122	-----	0.201	5.30	0.999	1.00	6.9	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Dibromochloromethan	1	0	Avg	0.2913	0.2471	0.2825	0.3106	0.3419	-----	-----	0.2006	-----	0.279	6.24	0.998	1.00	18	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
2-Chloroethylvinylethe	1	0	Qua	0.0611	0.0538	0.0591	0.0598	0.0657	-----	-----	0.0196	-----	0.0532	5.54	0.998	1.00	32		20.00	5.00	10.00	50.00	100.0			1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.4230	0.3453	0.3827	0.4215	0.4627	-----	-----	0.3458	-----	0.397	5.64	0.998	1.00	12	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,3-Dichloroprop	1	0	Avg	0.4012	0.3231	0.3787	0.4178	0.4384	-----	-----	0.3028	-----	0.377	5.92	1.00	1.00	14	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl methacrylate	1	0	Avg	0.1877	0.1675	0.1819	0.1924	0.1887	-----	-----	0.1255	-----	0.174	5.94	1.00	1.00	15	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2747	0.2470	0.2710	0.2666	0.2793	-----	-----	0.2541	-----	0.266	6.02	1.00	1.00	4.7	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dibromoethane	1	0	Avg	0.2881	0.2595	0.2784	0.2966	0.3138	-----	-----	0.2442	-----	0.280	6.32	0.999	1.00	9.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,3-Dichloropropane	1	0	Avg	0.4608	0.4136	0.4499	0.4556	0.4724	-----	-----	0.3793	-----	0.439	6.11	1.00	1.00	8.0		20.00	5.00	10.00	50.00	100.0			1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.2162	0.1945	0.2087	0.2049	0.2116	-----	-----	0.1782	-----	0.202	5.70	1.00	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
2-Hexanone	1	0	Avg	0.1495	0.1317	0.1504	0.1513	0.1501	-----	-----	0.1277	-----	0.144	6.12	1.00	1.00	7.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Tetrachloroethene	1	0	Avg	0.2311	0.2198	0.2365	0.2408	0.2696	-----	-----	0.2077	-----	0.234	6.12	0.997	1.00	9.0	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
Toluene-d8	1	0	Avg	1.3023	1.3148	1.3301	1.3118	1.3066	-----	-----	1.3226	1.2958	1.31	5.79	-1	-1	0.90		30.00	30.00	30.00	30.00	30.00			30.00	30.00
Toluene	1	0	Avg	0.7591	0.7075	0.7430	0.7481	0.7909	-----	-----	0.6306	-----	0.730	5.82	0.999	1.00	7.6	0.40	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2775	0.2509	0.2660	0.2834	0.3169	-----	-----	0.2378	-----	0.272	6.60	0.997	1.00	10		20.00	5.00	10.00	50.00	100.0			1.00	
Chlorobenzene	1	0	Avg	0.8562	0.7970	0.8173	0.8529	0.8937	-----	-----	0.7699	-----	0.831	6.57	1.00	1.00	5.4	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
n-Butyl acrylate	1	0	Avg	0.8706	0.7492	0.8164	0.8889	0.7549	-----	-----	0.6723	-----	0.792	6.80	0.992	0.999	10	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
n-Amyl acetate	1	0	Avg	0.6632	0.5614	0.6209	0.6819	0.5717	-----	-----	0.4446	-----	0.591	6.92	0.991	0.999	15	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Bromoform	1	0	Avg	0.3742	0.3331	0.3672	0.4134	0.3910	-----	-----	0.2799	-----	0.360	7.01	0.999	0.999	13	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethylbenzene	1	0	Avg	0.7694	0.6929	0.7983	0.7710	0.6700	-----	-----	0.7175	-----	0.737	6.60	0.994	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.7453	0.7551	0.7604	0.7208	0.5827	-----	-----	0.6649	-----	0.705	7.22	0.986	1.00	9.8	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Bromofluorobenzene	1	0	Avg	0.7376	0.7797	0.7749	0.7765	0.6549	-----	-----	0.7752	0.7946	0.756	7.17	-1	-1	6.3		30.00	30.00	30.00	30.00	30.00			30.00	30.00
Styrene	1	0	Avg	1.8522	1.7057	1.8098	1.8199	1.6052	-----	-----	1.4977	-----	1.72	6.88	0.995	1.00	8.2	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
m&p-Xylenes	1	0	Avg	1.1174	0.9808	1.0693	1.0978	0.9491	-----	-----	0.9392	1.0236	1.03	6.66	0.994	1.00	7.0	0.10	40.00	10.00	20.00	100.0	200.0			2.00	1.00
o-Xylene	1	0	Avg	1.0660	1.0121	1.0798	1.0419	0.9268	-----	-----	0.8838	-----	1.00	6.88	0.996	1.00	7.9	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.2074	0.2068	0.2187	0.2249	0.1867	-----	-----	0.1560	-----	0.200	7.25	0.990	0.999	13		20.00	5.00	10.00	50.00	100.0			1.00	
1,3-Dichlorobenzene	1	0	Avg	1.2717	1.1255	1.1842	1.2022	1.2497	-----	-----	1.1089	-----	1.19	7.79	1.00	1.00	5.5	0.60	20.00	5.00	10.00	50.00	100.0			1.00	
1,4-Dichlorobenzene	1	0	Avg	1.3104	1.1744	1.2393	1.2155	1.2915	-----	-----	1.1673	-----	1.23	7.83	0.999	1.00	4.8	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dichlorobenzene	1	0	Avg	1.1496	1.0407	1.1216	1.1110	1.0748	-----	-----	1.0036	-----	1.08	8.05	1.00	1.00	5.0	0.40	20.00	5.00	10.00	50.00	100.0			1.00	
Isopropylbenzene	1	0	Avg	2.5256	2.5399	2.6457	2.6197	2.2687	-----	-----	2.1061	-----	2.45	7.07	0.994	0.999	8.8	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Cyclohexanone	1	0	Qua	0.0143	0.0180	0.0145	0.0109	0.0113	-----	-----	0.0064	-----	0.0126	7.15	0.996	0.996	31		100.0	25.00	50.00	250.0	500.0			5.00	
Camphene	1	0	Avg	0.5471	0.6067	0.6482	0.6311	0.5550	-----	-----	0.4931	-----	0.580	7.24	0.995	0.998	10		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,3-Trichloropropane	1	0	Avg	0.8533	0.8384	0.8598	0.8562	0.7279	-----	-----	0.7191	-----	0.809	7.26	0.992	1.00	8.2		20.00	5.00	10.00	50.00	100.0			1.00	
2-Chlorotoluene	1	0	Avg	1.7204	1.4928	1.6160	1.6270	1.4192	-----	-----	1.6200	-----	1.58	7.37	0.994	1.00	6.8		20.00	5.00	10.00	50.00	100.0			1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.934

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0092507 0236

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M82676.D	CAL @ 20 PPB	09/11/20 21:35	2	11M82674.D	CAL @ 5 PPB	09/11/20 20:58
3	11M82675.D	CAL @ 10 PPB	09/11/20 21:17	4	11M82678.D	CAL @ 50 PPB	09/11/20 22:12
5	11M82686.D	CAL @ 100 PPB	09/12/20 00:39	6	11M82673.D	CAL @ 1 PPB	09/11/20 20:40
7	11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.6334	2.4583	2.6118	2.5423	2.3046	-----	-----	2.1138	-----	2.44	7.35	0.997	1.00	8.2		20.00	5.00	10.00	50.00	100.0			1.00	
4-Chlorotoluene	1	0	Avg	1.7200	1.6136	1.6089	1.6243	1.9152	-----	-----	1.3035	-----	1.63	7.42	0.995	0.999	12		20.00	5.00	10.00	50.00	100.0			1.00	
n-Propylbenzene	1	0	Avg	2.9830	2.9422	3.1393	3.0074	2.5773	-----	-----	2.6073	-----	2.88	7.30	0.993	1.00	8.0		20.00	5.00	10.00	50.00	100.0			1.00	
Bromobenzene	1	0	Avg	1.5309	1.4415	1.5463	1.4918	1.2516	-----	-----	1.4942	-----	1.46	7.27	0.991	1.00	7.4		20.00	5.00	10.00	50.00	100.0			1.00	
1,3,5-Trimethylbenzen	1	0	Avg	2.1546	1.9933	2.1405	2.1419	2.1661	-----	-----	1.7298	-----	2.05	7.38	1.00	1.00	8.3		20.00	5.00	10.00	50.00	100.0			1.00	
Butyl methacrylate	1	0	Avg	0.5809	0.5075	0.5530	0.5523	0.5954	-----	-----	0.3265	-----	0.519	7.38	0.999	1.00	19	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
t-Butylbenzene	1	0	Avg	1.9963	1.8770	1.9920	1.9740	1.9741	-----	-----	1.6387	-----	1.91	7.58	1.00	1.00	7.3		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trimethylbenzen	1	0	Avg	2.2826	2.0873	2.2635	2.1643	2.1917	-----	-----	1.7732	-----	2.13	7.60	1.00	1.00	8.8		20.00	5.00	10.00	50.00	100.0			1.00	
sec-Butylbenzene	1	0	Avg	2.3761	2.2051	2.4308	2.3868	2.2927	-----	-----	2.0291	-----	2.29	7.69	1.00	1.00	6.5		20.00	5.00	10.00	50.00	100.0			1.00	
4-Isopropyltoluene	1	0	Avg	2.0289	1.8411	2.0392	2.0511	2.0062	-----	-----	1.6733	-----	1.94	7.76	1.00	1.00	7.8		20.00	5.00	10.00	50.00	100.0			1.00	
n-Butylbenzene	1	0	Avg	2.0925	1.9360	2.1396	2.0538	1.8438	-----	-----	1.7305	-----	1.97	8.00	0.997	1.00	8.0		20.00	5.00	10.00	50.00	100.0			1.00	
p-Diethylbenzene	1	0	Avg	1.1186	1.0023	1.0900	1.1229	1.0377	-----	-----	0.8463	-----	1.04	7.98	0.998	1.00	10		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	1.6032	1.3177	1.4945	1.5829	1.3941	-----	-----	1.2261	-----	1.44	8.44	0.995	1.00	10		20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1391	0.1175	0.1340	0.1299	0.1186	-----	-----	0.0770	-----	0.119	8.50	0.997	1.00	19	0.05	20.00	5.00	10.00	50.00	100.0			1.00	
Camphor	1	0	Qua	0.0478	0.0374	0.0455	0.0447	0.0418	-----	-----	0.0325	0.0125	0.0375	8.93	0.998	1.00	32		200.0	50.00	100.0	500.0	1000.			10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.1729	0.1364	0.1646	0.1669	0.1511	-----	-----	0.1326	-----	0.154	9.07	0.997	1.00	11		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.4681	0.3988	0.4367	0.4282	0.3802	-----	-----	0.3997	-----	0.419	8.99	0.995	1.00	7.6	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.3022	0.2680	0.2842	0.2766	0.2385	-----	-----	0.2764	-----	0.274	9.29	0.993	1.00	7.7		20.00	5.00	10.00	50.00	100.0			1.00	
Naphthalene	1	0	Avg	1.1787	0.9410	1.1497	1.0755	0.9384	-----	-----	0.8992	-----	1.03	9.15	0.993	1.00	12		20.00	5.00	10.00	50.00	100.0			1.00	

Avg Rsd: 9.934

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82676.D Sam Mult : 1 Vial# : 24 Qt On : 09/14/20 14:56
Acq On : 09/11/20 21:35 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	261943	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	208671	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	104916	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	64127	27.39	ug/l	0.00
Spiked Amount 30.000			Recovery = 91.30%			
39) 1,2-Dichloroethane-d4	4.778	67	33382	32.41	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.03%			
66) Toluene-d8	5.787	98	271772	33.69	ug/l	0.00
Spiked Amount 30.000			Recovery = 112.30%			
76) Bromofluorobenzene	7.167	174	77390	28.91	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.37%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.678	51	49752	18.4346	ug/l	55
6) Dichlorodifluoromethane	1.665	85	28851	14.5491	ug/l	96
7) Chloromethane	1.847	50	32554	17.1810	ug/l	99
8) Bromomethane	2.241	94	29319	15.1816	ug/l	95
9) Vinyl Chloride	1.943	62	40049	17.0602	ug/l	93
10) Chloroethane	2.328	64	27298	18.0062	ug/l	96
11) Trichlorofluoromethane	2.546	101	61253	17.4484	ug/l	98
12) Ethyl ether	2.775	59	22895	14.6215	ug/l	65
13) Furan	2.817	39	40004	15.1155	ug/l	48
14) 1,1,2-Trichloro-1,2,2-...	2.977	101	22336	13.1569	ug/l	85
15) Methylene Chloride	3.373	84	37442	16.6159	ug/l	54
16) Acrolein	2.890	56	24683	78.8142	ug/l	94
17) Acrylonitrile	3.566	53	12273	16.8875	ug/l	98
18) Iodomethane	3.119	142	36213	13.7113	ug/l	94
19) Acetone	3.009	43	43536	78.0588	ug/l	93
20) Carbon Disulfide	3.186	76	85610	15.2914	ug/l	100
21) t-Butyl Alcohol	3.437	59	10572	60.1255	ug/l	99
22) n-Hexane	3.813	57	22885	12.0849	ug/l	91
23) Di-isopropyl-ether	3.952	45	79442	16.6558	ug/l	61
24) 1,1-Dichloroethene	2.981	61	48506	17.0901	ug/l	82
25) Methyl Acetate	3.276	43	20421	16.1252	ug/l	100
26) Methyl-t-butyl ether	3.595	73	83911	15.7412	ug/l	85
27) 1,1-Dichloroethane	3.926	63	63253	17.4445	ug/l	92
28) trans-1,2-Dichloroethene	3.604	96	37258	16.1764	ug/l	84
29) Ethyl-t-butyl ether	4.196	59	85172	15.0724	ug/l	86
30) cis-1,2-Dichloroethene	4.308	61	62840	17.9345	ug/l	80
31) Bromochloromethane	4.453	49	26124	17.7347	ug/l	36
32) 2,2-Dichloropropane	4.315	77	50520	17.0450	ug/l	92
33) Ethyl acetate	4.328	43	31324	16.0531	ug/l	98
34) 1,4-Dioxane	5.337	88	15698	507.1279	ug/l	74
35) 1,1-Dichloropropene	4.701	75	52465	16.7585	ug/l	97
36) Chloroform	4.488	83	72191	18.1350	ug/l	92
38) Cyclohexane	4.652	56	40687m	14.1984	ug/l	
40) 1,2-Dichloroethane	4.820	62	53015	17.9991	ug/l	98
41) 2-Butanone	4.308	43	12853	16.6852	ug/l	77
42) 1,1,1-Trichloroethane	4.614	97	62070	17.1915	ug/l	98
43) Carbon Tetrachloride	4.710	117	50003	15.2959	ug/l	99
44) Vinyl Acetate	3.942	43	91164	16.4139	ug/l	100
45) Bromodichloromethane	5.411	83	53061	18.1338	ug/l	96
46) Methylcyclohexane	5.270	83	36261	12.3852	ug/l	69
47) Dibromomethane	5.344	174	25231	13.5154	ug/l	94
48) 1,2-Dichloropropane	5.279	63	36331	17.3133	ug/l	97
49) Trichloroethene	5.157	130	42549	14.9121	ug/l	94
50) Benzene	4.820	78	155782	17.0944	ug/l	100
51) tert-Amyl methyl ether	4.855	73	86540	14.6430	ug/l	96
53) Iso-propylacetate	4.813	43	49525	18.4262	ug/l	79
54) Methyl methacrylate	5.302	41	28085m	19.1965	ug/l	
55) Dibromochloromethane	6.238	129	40526	18.1695	ug/l	93
56) 2-Chloroethylvinylether	5.543	63	8502	23.3820	ug/l	79
57) cis-1,3-Dichloropropene	5.640	75	58851	20.8755	ug/l	96
58) trans-1,3-Dichloropropene	5.916	75	55823	20.9422	ug/l	100
59) Ethyl methacrylate	5.935	41	26116m	19.2136	ug/l	
60) 1,1,2-Trichloroethane	6.022	97	38223	20.0962	ug/l	83
61) 1,2-Dibromoethane	6.318	107	40086	20.3516	ug/l	96
62) 1,3-Dichloropropane	6.109	76	64105	20.6131	ug/l	100
63) 4-Methyl-2-Pentanone	5.701	43	30084	20.5341	ug/l	88
64) 2-Hexanone	6.125	43	20808	18.1988	ug/l	87
65) Tetrachloroethene	6.112	164	32152	16.1263	ug/l	88
67) Toluene	5.823	92	105601	20.1974	ug/l	96

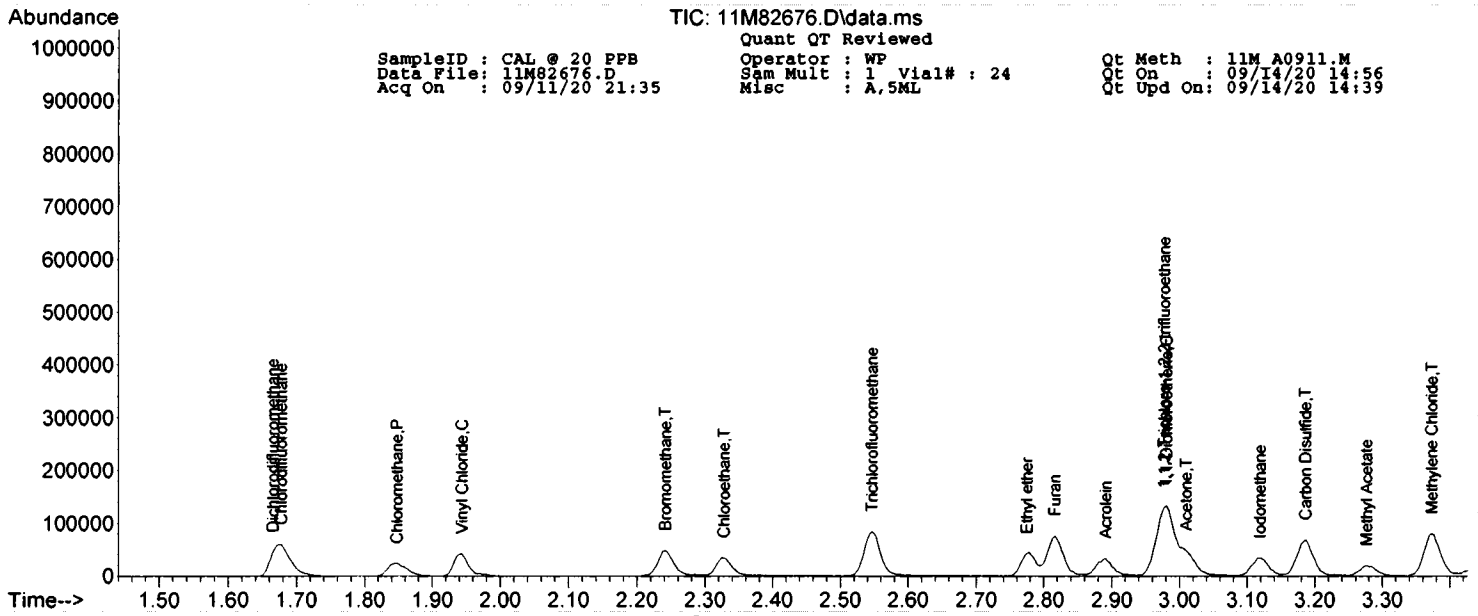
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82676.D Sam Mult : 1 Vial# : 24 Qt On : 09/14/20 14:56
Acq On : 09/11/20 21:35 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.598	133	38608	18.6381	ug/l	98
69)	Chlorobenzene	6.562	112	119112	19.9880	ug/l	100
71)	n-Butyl acrylate	6.797	55	60897	23.8919	ug/l	87
72)	n-Amyl acetate	6.913	43	46387	22.2446	ug/l	77
73)	Bromoform	7.006	173	26174	20.7911	ug/l	98
74)	Ethylbenzene	6.601	106	53816	24.5052	ug/l	98
75)	1,1,2,2-Tetrachloroethane	7.215	83	52132	25.8881	ug/l	93
77)	Styrene	6.881	104	129553	25.0556	ug/l	95
78)	m&p-Xylenes	6.659	106	156313	50.2937	ug/l	94
79)	o-Xylene	6.881	106	74560	24.9181	ug/l	98
80)	trans-1,4-Dichloro-2-b...	7.244	53	14511	21.7008	ug/l	76
81)	1,3-Dichlorobenzene	7.784	146	88951	22.6864	ug/l	98
82)	1,4-Dichlorobenzene	7.829	146	91660	22.3271	ug/l	100
83)	1,2-Dichlorobenzene	8.051	146	80408	22.5913	ug/l	98
84)	Isopropylbenzene	7.067	105	176656	24.5677	ug/l	98
85)	Cyclohexanone	7.144	55	5025	90.4366	ug/l	80
86)	Camphene	7.241	93	38273	17.5770	ug/l	93
87)	1,2,3-Trichloropropane	7.254	75	59689	24.2435	ug/l	89
88)	2-Chlorotoluene	7.363	91	120336	26.5363	ug/l	98
89)	p-Ethyltoluene	7.350	105	184197	22.2333	ug/l	100
90)	4-Chlorotoluene	7.418	91	120304	25.9930	ug/l	98
91)	n-Propylbenzene	7.292	91	208644	24.1904	ug/l	97
92)	Bromobenzene	7.266	77	107079	24.7677	ug/l	88
93)	1,3,5-Trimethylbenzene	7.376	105	150707	24.4849	ug/l	97
94)	Butyl methacrylate	7.382	41	40633m	27.5673	ug/l	
95)	t-Butylbenzene	7.569	119	139634	22.1994	ug/l	97
96)	1,2,4-Trimethylbenzene	7.594	105	159659	24.1761	ug/l	97
97)	sec-Butylbenzene	7.694	105	166199	22.1881	ug/l	98
98)	4-Isopropyltoluene	7.765	119	141915	21.8271	ug/l	99
99)	n-Butylbenzene	8.000	91	146362	23.2714	ug/l	86
100)	p-Diethylbenzene	7.980	119	78240	21.0407	ug/l	81
101)	1,2,4,5-Tetramethylben...	8.440	119	112139	20.3814	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.498	157	9731	25.4995	ug/l	95
103)	Camphor	8.935	95	33466	207.0262	ug/l	98
104)	Hexachlorobutadiene	9.073	225	12097	17.7256	ug/l	96
105)	1,2,4-Trichlorobenzene	8.990	180	32746	21.6155	ug/l	97
106)	1,2,3-Trichlorobenzene	9.292	180	21138	19.8601	ug/l	97
107)	Naphthalene	9.147	128	82446	25.1111	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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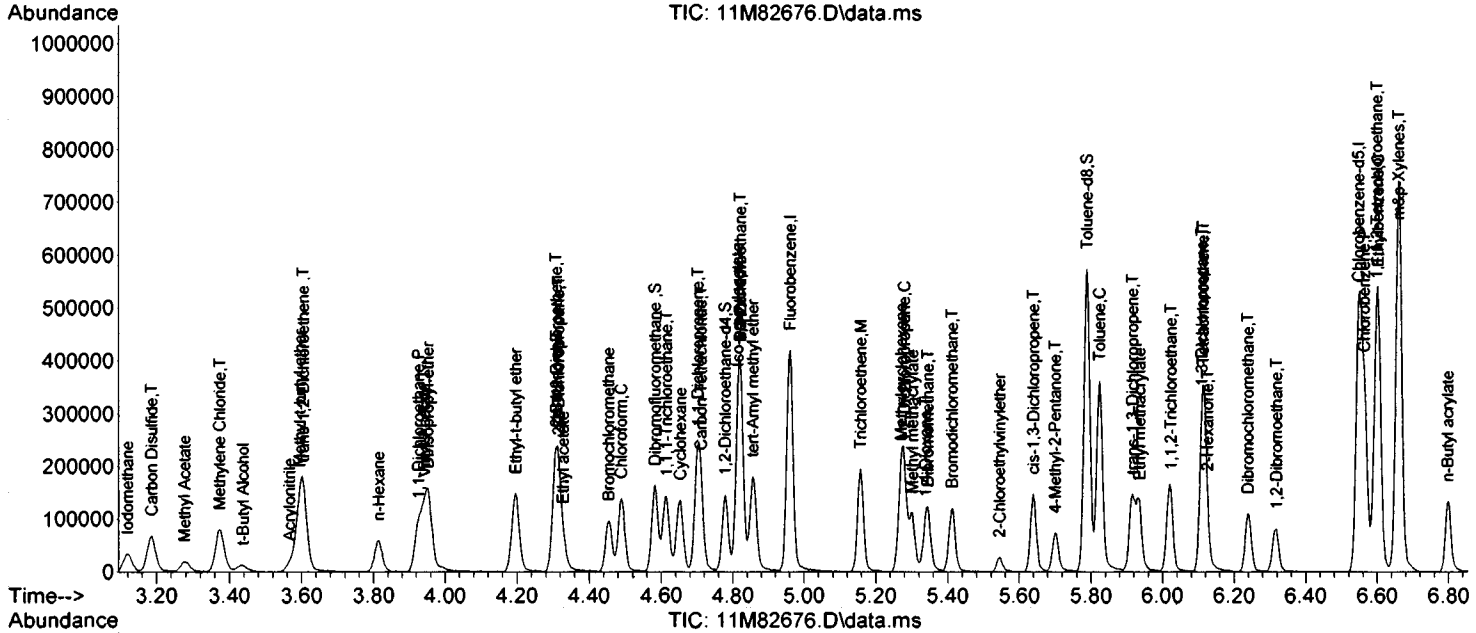
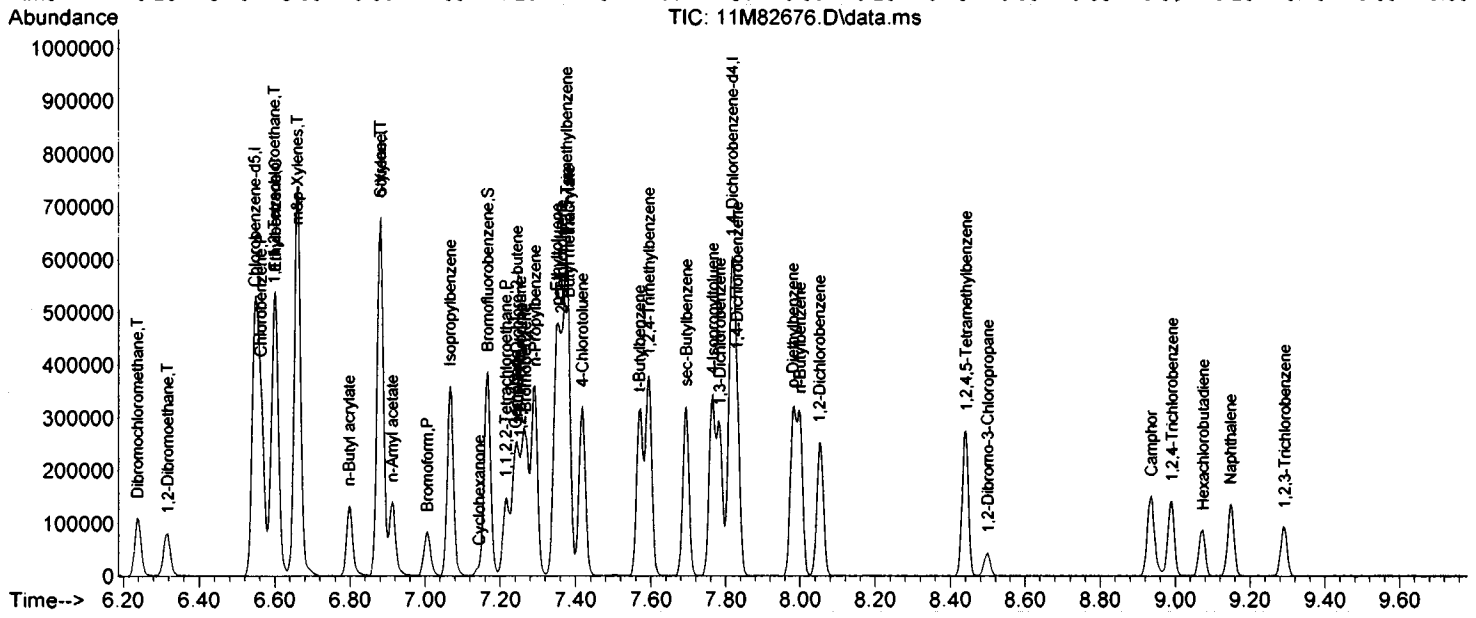
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 11M82676.D
Acq On : 09/11/20 21:35
Operator : WP
Sam Mult : 1 Vial# : 24
Misc : A,5ML
Qt Meth : 11M A0911.M
Qt On : 09/14/20 14:56
Qt Upd On: 09/14/20 14:39
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->


Abundance
TIC: 11M82676.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
Time-->


Abundance
TIC: 11M82676.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82674.D Sam Mult : 1 Vial# : 22 Qt On : 09/14/20 15:00
Acq On : 09/11/20 20:58 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	254008	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	208903	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	98904	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	63749	28.08	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.60%			
39) 1,2-Dichloroethane-d4	4.778	67	33923	33.96	ug/l	0.00
Spiked Amount 30.000			Recovery = 113.20%			
66) Toluene-d8	5.787	98	274667	34.01	ug/l	0.00
Spiked Amount 30.000			Recovery = 113.37%			
76) Bromofluorobenzene	7.167	174	77117	30.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.83%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	10767m	4.1141	ug/l	
6) Dichlorodifluoromethane	1.665	85	6873	3.5742	ug/l	94
7) Chloromethane	1.854	50	7235	3.9377	ug/l	98
8) Bromomethane	2.238	94	7420	3.9621	ug/l	100
9) Vinyl Chloride	1.940	62	9534	4.1882	ug/l	92
10) Chloroethane	2.328	64	6317	4.2970	ug/l	84
11) Trichlorofluoromethane	2.546	101	15371	4.5153	ug/l	92
12) Ethyl ether	2.778	59	5723	3.7691	ug/l	65
13) Furan	2.817	39	9558m	3.7243	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.974	101	6614	4.0176	ug/l	94
15) Methylene Chloride	3.379	84	8894	4.0703	ug/l	51
16) Acrolein	2.887	56	5326	17.5375	ug/l	97
17) Acrylonitrile	3.566	53	2906m	4.1235	ug/l	
18) Iodomethane	3.119	142	5241	2.0464	ug/l	87
19) Acetone	3.009	43	11765	21.7533	ug/l	96
20) Carbon Disulfide	3.186	76	19381	3.5699	ug/l	100
21) t-Butyl Alcohol	3.437	59	2636	15.4599	ug/l	95
22) n-Hexane	3.813	57	6678	3.6366	ug/l	86
23) Di-isopropyl-ether	3.955	45	17196	3.7179	ug/l	79
24) 1,1-Dichloroethene	2.981	61	11116	4.0388	ug/l	83
25) Methyl Acetate	3.276	43	5391	4.3899	ug/l	100
26) Methyl-t-butyl ether	3.595	73	18588	3.5959	ug/l	86
27) 1,1-Dichloroethane	3.929	63	14241	4.0502	ug/l	100
28) trans-1,2-Dichloroethene	3.608	96	8161	3.6540	ug/l	76
29) Ethyl-t-butyl ether	4.196	59	18872	3.4440	ug/l	87
30) cis-1,2-Dichloroethene	4.308	61	13658	4.0198	ug/l	66
31) Bromochloromethane	4.456	49	5920	4.1444	ug/l	34
32) 2,2-Dichloropropane	4.318	77	11017	3.8332	ug/l	98
33) Ethyl acetate	4.328	43	7194m	3.8020	ug/l	
34) 1,4-Dioxane	5.337	88	3948	131.5254	ug/l	63
35) 1,1-Dichloropropene	4.701	75	12160	4.0055	ug/l	97
36) Chloroform	4.489	83	15696	4.0661	ug/l	93
38) Cyclohexane	4.649	56	10469m	3.7675	ug/l	
40) 1,2-Dichloroethane	4.820	62	12305	4.3082	ug/l	96
41) 2-Butanone	4.315	43	3249m	4.3495	ug/l	
42) 1,1,1-Trichloroethane	4.614	97	13666	3.9033	ug/l	89
43) Carbon Tetrachloride	4.710	117	11217	3.5385	ug/l	95
44) Vinyl Acetate	3.948	43	19448	3.6110	ug/l	100
45) Bromodichloromethane	5.415	83	11349	3.9997	ug/l	100
46) Methylcyclohexane	5.270	83	9931	3.4980	ug/l	69
47) Dibromomethane	5.341	174	5262	2.9067	ug/l	91
48) 1,2-Dichloropropane	5.276	63	7852	3.8587	ug/l	95
49) Trichloroethene	5.154	130	8979	3.2452	ug/l	96
50) Benzene	4.820	78	35055	3.9669	ug/l	100
51) tert-Amyl methyl ether	4.858	73	17820	3.1094	ug/l	97
53) Iso-propylacetate	4.813	43	10596	3.9380	ug/l	74
54) Methyl methacrylate	5.302	41	6104	4.1675	ug/l	53
55) Dibromochloromethane	6.241	129	8606	3.8542	ug/l	100
56) 2-Chloroethylvinylether	5.540	63	1873	5.1454	ug/l	79
57) cis-1,3-Dichloropropene	5.643	75	12025	4.2607	ug/l	93
58) trans-1,3-Dichloropropene	5.916	75	11251	4.2162	ug/l	100
59) Ethyl methacrylate	5.932	41	5832m	4.2858	ug/l	
60) 1,1,2-Trichloroethane	6.022	97	8603	4.5181	ug/l	87
61) 1,2-Dibromoethane	6.318	107	9038	4.5835	ug/l	90
62) 1,3-Dichloropropane	6.109	76	14401	4.6255	ug/l	98
63) 4-Methyl-2-Pentanone	5.704	43	6772	4.6172	ug/l	88
64) 2-Hexanone	6.122	43	4588	4.0082	ug/l	76
65) Tetrachloroethene	6.112	164	7656	3.8357	ug/l	98
67) Toluene	5.823	92	24633	4.7061	ug/l	95

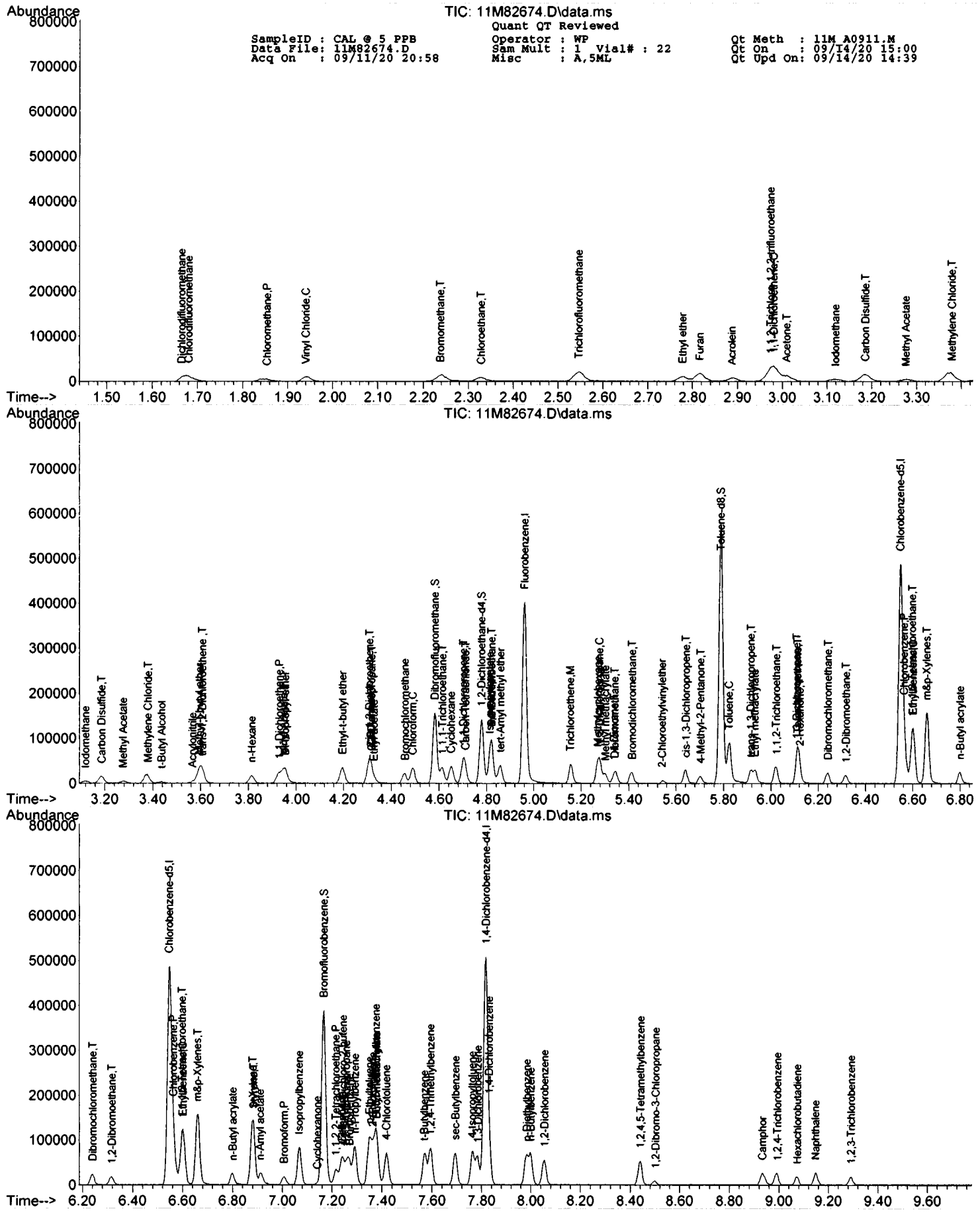
Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82674.D Sam Mult : 1 Vial# : 22 Qt On : 09/14/20 15:00
Acq On : 09/11/20 20:58 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.598	133	8737	4.2131	ug/l	92
69)	Chlorobenzene	6.562	112	27752	4.6518	ug/l	92
71)	n-Butyl acrylate	6.800	55	12351	5.1403	ug/l	89
72)	n-Amyl acetate	6.910	43	9255	4.7080	ug/l	76
73)	Bromoform	7.006	173	5492	4.6277	ug/l	88
74)	Ethylbenzene	6.601	106	11422	5.5172	ug/l	90
75)	1,1,2,2-Tetrachloroethane	7.215	83	12448	6.5573	ug/l	91
77)	Styrene	6.884	104	28118	5.7686	ug/l	96
78)	m&p-Xylenes	6.659	106	32337	11.0369	ug/l	88
79)	o-Xylene	6.881	106	16685	5.9151	ug/l	92
80)	trans-1,4-Dichloro-2-b...	7.244	53	3409	5.4080	ug/l	99
81)	1,3-Dichlorobenzene	7.784	146	18553	5.0195	ug/l	97
82)	1,4-Dichlorobenzene	7.829	146	19360	5.0025	ug/l	96
83)	1,2-Dichlorobenzene	8.054	146	17156	5.1131	ug/l	98
84)	Isopropylbenzene	7.067	105	41869	6.1767	ug/l	98
85)	Cyclohexanone	7.141	55	1488	28.4079	ug/l	75
86)	Camphene	7.241	93	10001	4.8722	ug/l	94
87)	1,2,3-Trichloropropane	7.257	75	13821	5.9548	ug/l	89
88)	2-Chlorotoluene	7.363	91	24608	5.7564	ug/l	95
89)	p-Ethyltoluene	7.350	105	40523	5.1886	ug/l	99
90)	4-Chlorotoluene	7.418	91	26600	6.0966	ug/l	98
91)	n-Propylbenzene	7.292	91	48500	5.9650	ug/l	96
92)	Bromobenzene	7.270	77	23763	5.8306	ug/l	89
93)	1,3,5-Trimethylbenzene	7.376	105	32859	5.6630	ug/l	97
94)	Butyl methacrylate	7.379	41	8366m	6.0209	ug/l	
95)	t-Butylbenzene	7.569	119	30941	5.2181	ug/l	96
96)	1,2,4-Trimethylbenzene	7.595	105	34407	5.5267	ug/l	96
97)	sec-Butylbenzene	7.694	105	36350	5.1478	ug/l	99
98)	4-Isopropyltoluene	7.762	119	30350	4.9517	ug/l	95
99)	n-Butylbenzene	8.000	91	31914	5.3827	ug/l	93
100)	p-Diethylbenzene	7.984	119	16522	4.7133	ug/l	92
101)	1,2,4,5-Tetramethylben...	8.440	119	21721	4.1878	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.501	157	1938	5.3871	ug/l	97
103)	Camphor	8.932	95	6169	40.4822	ug/l	98
104)	Hexachlorobutadiene	9.074	225	2249	3.4957	ug/l	89
105)	1,2,4-Trichlorobenzene	8.993	180	6575	4.6039	ug/l	95
106)	1,2,3-Trichlorobenzene	9.292	180	4418	4.4032	ug/l	94
107)	Naphthalene	9.147	128	15512	5.0118	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 5 PPB
Data File: 11M82674.D
Acq On : 09/11/20 20:58
Operator : WP
Sam Mult : 1 Vial# : 22
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 15:00
Qt Upd On: 09/14/20 14:39
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82675.D Sam Mult : 1 Vial# : 23 Qt On : 09/14/20 14:57
Acq On : 09/11/20 21:17 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.958	96	258924	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.549	117	207537	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	102207	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	66522	28.74	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.80%			
39) 1,2-Dichloroethane-d4	4.778	67	34373	33.76	ug/l	0.00
Spiked Amount 30.000			Recovery = 112.53%			
66) Toluene-d8	5.787	98	276061	34.41	ug/l	0.00
Spiked Amount 30.000			Recovery = 114.70%			
76) Bromofluorobenzene	7.167	174	79205	30.37	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.23%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.684	51	23283m	8.7276	ug/l	
6) Dichlorodifluoromethane	1.668	85	15260	7.7851	ug/l	93
7) Chloromethane	1.844	50	15288	8.1626	ug/l	94
8) Bromomethane	2.241	94	15705	8.2270	ug/l	85
9) Vinyl Chloride	1.940	62	19844	8.5518	ug/l	95
10) Chloroethane	2.321	64	13391	8.9359	ug/l	97
11) Trichlorofluoromethane	2.546	101	33385	9.6209	ug/l	94
12) Ethyl ether	2.778	59	11152	7.2051	ug/l	65
13) Furan	2.816	39	19031	7.2747	ug/l	47
14) 1,1,2-Trichloro-1,2,2-...	2.974	101	13670	8.1461	ug/l	91
15) Methylene Chloride	3.369	84	18844	8.4601	ug/l	45
16) Acrolein	2.887	56	11855	38.2950	ug/l	96
17) Acrylonitrile	3.569	53	6132	8.5359	ug/l	99
18) Iodomethane	3.119	142	14315	5.4833	ug/l	93
19) Acetone	3.009	43	22815	41.3836	ug/l	99
20) Carbon Disulfide	3.186	76	41125	7.4313	ug/l	100
21) t-Butyl Alcohol	3.434	59	5582	32.1163	ug/l	94
22) n-Hexane	3.810	57	14728	7.8681	ug/l	89
23) Di-isopropyl-ether	3.951	45	37629	7.9813	ug/l	61
24) 1,1-Dichloroethene	2.980	61	24061	8.5763	ug/l	80
25) Methyl Acetate	3.279	43	10713	8.5580	ug/l	100
26) Methyl-t-butyl ether	3.595	73	40763	7.7360	ug/l	85
27) 1,1-Dichloroethane	3.926	63	30071	8.3900	ug/l	95
28) trans-1,2-Dichloroethene	3.601	96	17916	7.8693	ug/l	76
29) Ethyl-t-butyl ether	4.193	59	40060	7.1718	ug/l	86
30) cis-1,2-Dichloroethene	4.308	61	29768	8.5948	ug/l	64
31) Bromochloromethane	4.456	49	12978	8.9130	ug/l	43
32) 2,2-Dichloropropane	4.315	77	24899	8.4986	ug/l	95
33) Ethyl acetate	4.328	43	16728m	8.6728	ug/l	
34) 1,4-Dioxane	5.337	88	7503	245.2125	ug/l	75
35) 1,1-Dichloropropene	4.701	75	27518	8.8924	ug/l	93
36) Chloroform	4.488	83	34499	8.7675	ug/l	96
38) Cyclohexane	4.652	56	24101m	8.5085	ug/l	
40) 1,2-Dichloroethane	4.820	62	26152	8.9824	ug/l	95
41) 2-Butanone	4.305	43	5392	7.0813	ug/l	59
42) 1,1,1-Trichloroethane	4.611	97	31084	8.7097	ug/l	94
43) Carbon Tetrachloride	4.710	117	26858	8.3116	ug/l	94
44) Vinyl Acetate	3.945	43	44404	8.0881	ug/l	100
45) Bromodichloromethane	5.411	83	23775	8.2199	ug/l	96
46) Methylcyclohexane	5.270	83	22462	7.7615	ug/l	67
47) Dibromomethane	5.347	174	12045	6.5273	ug/l	98
48) 1,2-Dichloropropane	5.276	63	18158	8.7539	ug/l	94
49) Trichloroethene	5.157	130	20862	7.3967	ug/l	91
50) Benzene	4.820	78	75751	8.4093	ug/l	100
51) tert-Amyl methyl ether	4.855	73	40337	6.9048	ug/l	99
53) Iso-propylacetate	4.813	43	23122	8.6498	ug/l	79
54) Methyl methacrylate	5.302	41	14393m	9.8916	ug/l	
55) Dibromochloromethane	6.238	129	19544	8.8103	ug/l	98
56) 2-Chloroethylvinylether	5.543	63	4089	11.3069	ug/l	78
57) cis-1,3-Dichloropropene	5.640	75	26480	9.4442	ug/l	94
58) trans-1,3-Dichloropropene	5.913	75	26198	9.8820	ug/l	92
59) Ethyl methacrylate	5.932	41	12586m	9.3101	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	18751	9.9125	ug/l	92
61) 1,2-Dibromoethane	6.315	107	19264	9.8338	ug/l	93
62) 1,3-Dichloropropane	6.112	76	31125	10.0630	ug/l	98
63) 4-Methyl-2-Pentanone	5.704	43	14444	9.9127	ug/l	97
64) 2-Hexanone	6.125	43	10408	9.1527	ug/l	87
65) Tetrachloroethene	6.112	164	16366	8.2534	ug/l	98
67) Toluene	5.823	92	51401	9.8848	ug/l	93

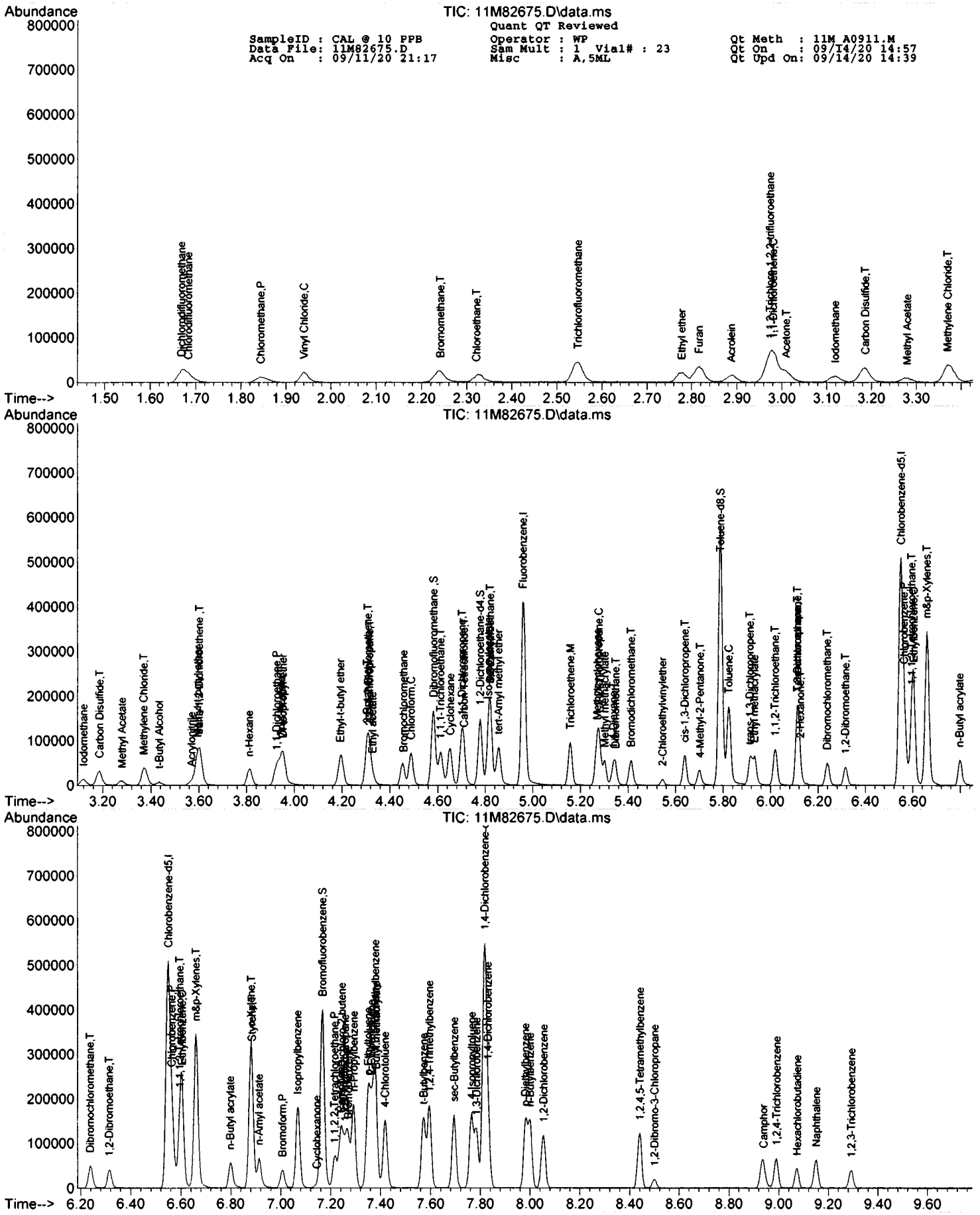
Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82675.D Sam Mult : 1 Vial# : 23 Qt On : 09/14/20 14:57
Acq On : 09/11/20 21:17 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.594	133	18406	8.9341	ug/l	97
69)	Chlorobenzene	6.562	112	56546	9.5407	ug/l	98
71)	n-Butyl acrylate	6.797	55	27814	11.2016	ug/l	89
72)	n-Amyl acetate	6.913	43	21156	10.4141	ug/l	74
73)	Bromoform	7.006	173	12510	10.2006	ug/l	96
74)	Ethylbenzene	6.604	106	27200	12.7139	ug/l	99
75)	1,1,2,2-Tetrachloroethane	7.215	83	25908	13.2066	ug/l	89
77)	Styrene	6.884	104	61658	12.2407	ug/l	91
78)	m&p-Xylenes	6.659	106	72860	24.0640	ug/l	99
79)	o-Xylene	6.881	106	36790	12.6212	ug/l	98
80)	trans-1,4-Dichloro-2-b...	7.244	53	7452	11.4397	ug/l	92
81)	1,3-Dichlorobenzene	7.784	146	40347	10.5630	ug/l	97
82)	1,4-Dichlorobenzene	7.829	146	42222	10.5573	ug/l	97
83)	1,2-Dichlorobenzene	8.054	146	38212	11.0205	ug/l	98
84)	Isopropylbenzene	7.067	105	90137	12.8677	ug/l	98
85)	Cyclohexanone	7.144	55	2482m	45.8533	ug/l	
86)	Camphene	7.241	93	22085	10.4114	ug/l	98
87)	1,2,3-Trichloropropane	7.257	75	29295	12.2139	ug/l	87
88)	2-Chlorotoluene	7.363	91	55056	12.4626	ug/l	97
89)	p-Ethyltoluene	7.350	105	88984	11.0254	ug/l	94
90)	4-Chlorotoluene	7.418	91	54816	12.1575	ug/l	97
91)	n-Propylbenzene	7.292	91	106953	12.7289	ug/l	97
92)	Bromobenzene	7.270	77	52684	12.5089	ug/l	92
93)	1,3,5-Trimethylbenzene	7.379	105	72925	12.1619	ug/l	97
94)	Butyl methacrylate	7.382	41	18841m	13.1214	ug/l	
95)	t-Butylbenzene	7.572	119	67866	11.0755	ug/l	96
96)	1,2,4-Trimethylbenzene	7.594	105	77117	11.9868	ug/l	97
97)	sec-Butylbenzene	7.694	105	82817	11.3494	ug/l	97
98)	4-Isopropyltoluene	7.765	119	69474	10.9686	ug/l	99
99)	n-Butylbenzene	8.000	91	72897	11.8978	ug/l	97
100)	p-Diethylbenzene	7.980	119	37138	10.2520	ug/l	96
101)	1,2,4,5-Tetramethylben...	8.440	119	50919	9.4999	ug/l	97
102)	1,2-Dibromo-3-Chloropr...	8.498	157	4568	12.2874	ug/l	94
103)	Camphor	8.938	95	15503	98.4461	ug/l	96
104)	Hexachlorobutadiene	9.073	225	5608	8.4351	ug/l	97
105)	1,2,4-Trichlorobenzene	8.990	180	14879	10.0819	ug/l	96
106)	1,2,3-Trichlorobenzene	9.292	180	9685	9.3407	ug/l	97
107)	Naphthalene	9.151	128	39171	12.2468	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 10 PPB
Data File: 11M82675.D
Acq On : 09/11/20 21:17
Operator : WP
Sam Mult : 1 Vial# : 23
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 14:57
Qt Upd On: 09/14/20 14:39
Abundance
Time-->
Dichlorodifluoromethane
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Iodomethane
Carbon Disulfide
Methyl Acetate
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
1,1,1-Trichloroethane,T
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
1,4-Dichlorobenzene-d4,I
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82678.D Sam Mult : 1 Vial# : 26 Qt On : 09/14/20 14:54
Acq On : 09/11/20 22:12 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	280039	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.550	117	221229	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	113051	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.585	111	71102	28.41	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.70%			
39) 1,2-Dichloroethane-d4	4.778	67	35242	32.00	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.67%			
66) Toluene-d8	5.788	98	290222	33.94	ug/l	0.00
Spiked Amount 30.000			Recovery = 113.13%			
76) Bromofluorobenzene	7.167	174	87794	30.43	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.43%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	120576m	41.7899	ug/l	
6) Dichlorodifluoromethane	1.668	85	73159	34.5089	ug/l	97
7) Chloromethane	1.848	50	74354	36.7060	ug/l	95
8) Bromomethane	2.241	94	70466	34.1299	ug/l	99
9) Vinyl Chloride	1.940	62	94984	37.8470	ug/l	91
10) Chloroethane	2.328	64	66741	41.1786	ug/l	87
11) Trichlorofluoromethane	2.547	101	157114	41.8631	ug/l	98
12) Ethyl ether	2.778	59	53249	31.8091	ug/l	64
13) Furan	2.817	39	93165	32.9276	ug/l	43
14) 1,1,2-Trichloro-1,2,2-...	2.974	101	62907	34.6604	ug/l	94
15) Methylene Chloride	3.373	84	89348	37.0885	ug/l	58
16) Acrolein	2.887	56	61416	183.4325	ug/l	97
17) Acrylonitrile	3.569	53	30424	39.1579	ug/l	99
18) Iodomethane	3.122	142	102504	36.3030	ug/l	93
19) Acetone	3.006	43	104317	174.9512	ug/l	99
20) Carbon Disulfide	3.186	76	224546	37.5160	ug/l	100
21) t-Butyl Alcohol	3.434	59	26441	140.6590	ug/l	95
22) n-Hexane	3.813	57	72358	35.7412	ug/l	88
23) Di-isopropyl-ether	3.955	45	191371	37.5302	ug/l	61
24) 1,1-Dichloroethene	2.981	61	121436	40.0208	ug/l	78
25) Methyl Acetate	3.276	43	50234	37.1033	ug/l	100
26) Methyl-t-butyl ether	3.595	73	214672	37.6688	ug/l	83
27) 1,1-Dichloroethane	3.926	63	157908	40.7352	ug/l	100
28) trans-1,2-Dichloroethene	3.604	96	88988	36.1395	ug/l	80
29) Ethyl-t-butyl ether	4.196	59	218924	36.2382	ug/l	86
30) cis-1,2-Dichloroethene	4.308	61	152367	40.6754	ug/l	69
31) Bromochloromethane	4.453	49	66649	42.3220	ug/l	44
32) 2,2-Dichloropropane	4.315	77	130232	41.0998	ug/l	97
33) Ethyl acetate	4.328	43	78627	37.6913	ug/l	99
34) 1,4-Dioxane	5.337	88	34436	1040.5769	ug/l	73
35) 1,1-Dichloropropene	4.701	75	142098	42.4563	ug/l	99
36) Chloroform	4.489	83	171159	40.2182	ug/l	97
38) Cyclohexane	4.653	56	116100m	37.8970	ug/l	
40) 1,2-Dichloroethane	4.820	62	128591	40.8366	ug/l	100
41) 2-Butanone	4.302	43	26553	32.2424	ug/l	59
42) 1,1,1-Trichloroethane	4.614	97	162401	42.0736	ug/l	95
43) Carbon Tetrachloride	4.707	117	142151	40.6740	ug/l	97
44) Vinyl Acetate	3.942	43	238344	40.1403	ug/l	100
45) Bromodichloromethane	5.411	83	138754	44.3555	ug/l	97
46) Methylcyclohexane	5.270	83	118405m	37.8287	ug/l	
47) Dibromomethane	5.344	174	68560	34.3522	ug/l	98
48) 1,2-Dichloropropane	5.280	63	95813	42.7085	ug/l	96
49) Trichloroethene	5.157	130	115473	37.8546	ug/l	97
50) Benzene	4.820	78	391160	40.1495	ug/l	100
51) tert-Amyl methyl ether	4.858	73	223856	35.4300	ug/l	94
53) Iso-propylacetate	4.813	43	125643	44.0931	ug/l	81
54) Methyl methacrylate	5.302	41	72548m	46.7728	ug/l	
55) Dibromochloromethane	6.241	129	114525	48.4318	ug/l	97
56) 2-Chloroethylvinylether	5.546	63	22076	57.2667	ug/l	75
57) cis-1,3-Dichloropropene	5.640	75	155437	52.0064	ug/l	97
58) trans-1,3-Dichloropropene	5.916	75	154070	54.5189	ug/l	97
59) Ethyl methacrylate	5.932	41	70950m	49.2350	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	98307	48.7523	ug/l	88
61) 1,2-Dibromoethane	6.315	107	109362	52.3713	ug/l	99
62) 1,3-Dichloropropane	6.112	76	168007	50.9565	ug/l	99
63) 4-Methyl-2-Pentanone	5.701	43	75583	48.6614	ug/l	89
64) 2-Hexanone	6.125	43	55787	46.0221	ug/l	81
65) Tetrachloroethene	6.115	164	88809	42.0149	ug/l	91
67) Toluene	5.823	92	275843	49.7634	ug/l	99

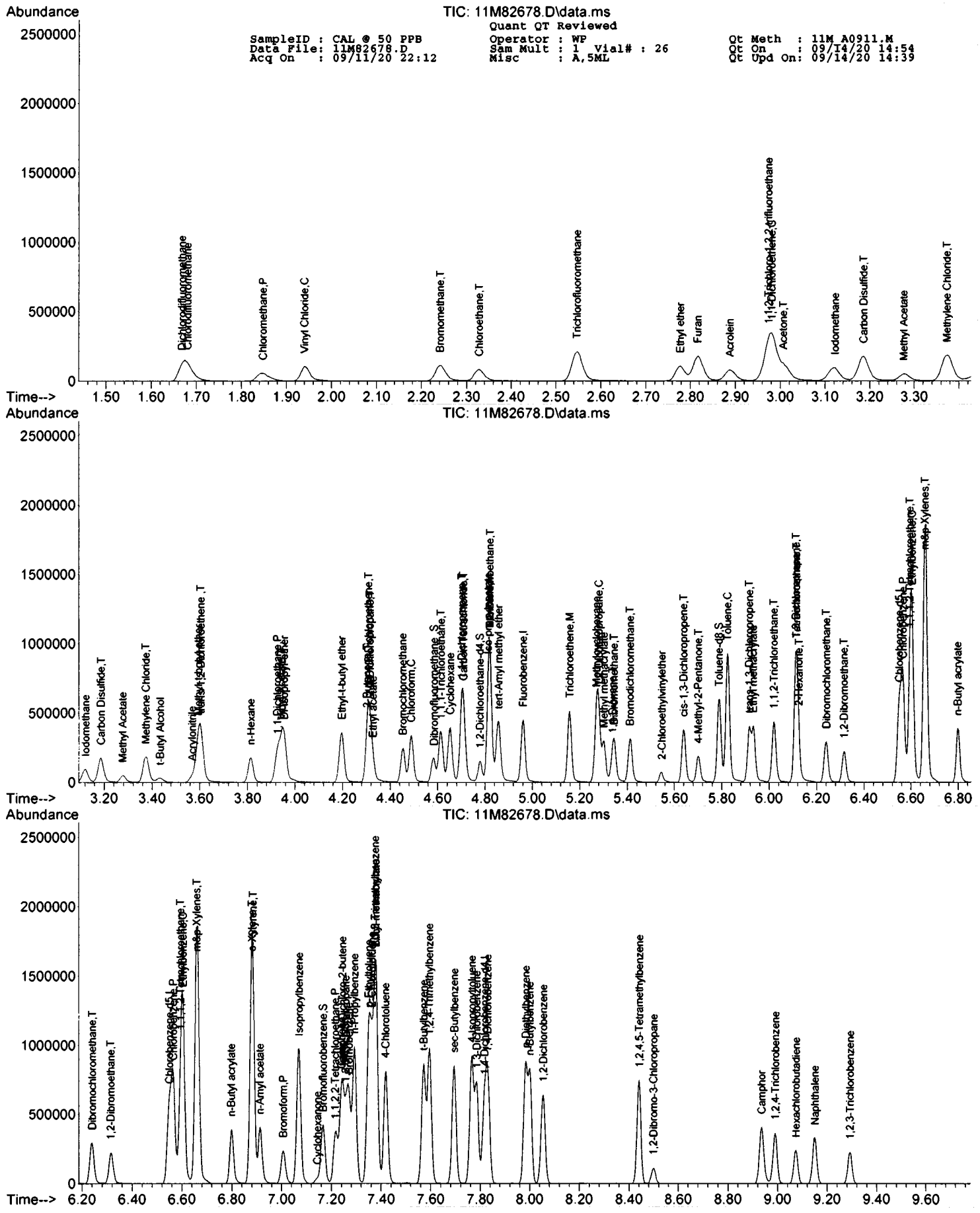
Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82678.D Sam Mult : 1 Vial# : 26 Qt On : 09/14/20 14:54
Acq On : 09/11/20 22:12 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.595	133	104511	47.5890	ug/l	98
69)	Chlorobenzene	6.566	112	314484	49.7774	ug/l	99
71)	n-Butyl acrylate	6.797	55	167495	60.9852	ug/l	88
72)	n-Amyl acetate	6.913	43	128487	57.1815	ug/l	74
73)	Bromoform	7.006	173	77909	57.4331	ug/l	97
74)	Ethylbenzene	6.604	106	145280	61.3933	ug/l	97
75)	1,1,2,2-Tetrachloroethane	7.215	83	135815	62.5908	ug/l	96
77)	Styrene	6.884	104	342916	61.5478	ug/l	95
78)	m&p-Xylenes	6.659	106	413703	123.5305	ug/l	100
79)	o-Xylene	6.881	106	196318	60.8886	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.244	53	42378	58.8148	ug/l	72
81)	1,3-Dichlorobenzene	7.784	146	226516	53.6143	ug/l	98
82)	1,4-Dichlorobenzene	7.829	146	229024	51.7726	ug/l	98
83)	1,2-Dichlorobenzene	8.054	146	209335	54.5822	ug/l	98
84)	Isopropylbenzene	7.070	105	493603	63.7062	ug/l	98
85)	Cyclohexanone	7.144	55	10321	172.3841	ug/l	81
86)	Camphene	7.241	93	118919	50.6839	ug/l	97
87)	1,2,3-Trichloropropane	7.257	75	161323	60.8086	ug/l	91
88)	2-Chlorotoluene	7.363	91	306560	62.7375	ug/l	96
89)	p-Ethyltoluene	7.350	105	479015	53.6584	ug/l	99
90)	4-Chlorotoluene	7.418	91	306048	61.3668	ug/l	99
91)	n-Propylbenzene	7.292	91	566657	60.9712	ug/l	98
92)	Bromobenzene	7.270	77	281098	60.3401	ug/l	92
93)	1,3,5-Trimethylbenzene	7.376	105	403583	60.8506	ug/l	98
94)	Butyl methacrylate	7.379	41	104078m	65.5302	ug/l	
95)	t-Butylbenzene	7.572	119	371941	54.8771	ug/l	98
96)	1,2,4-Trimethylbenzene	7.595	105	407807	57.3079	ug/l	98
97)	sec-Butylbenzene	7.694	105	449733	55.7202	ug/l	100
98)	4-Isopropyltoluene	7.765	119	386465	55.1625	ug/l	99
99)	n-Butylbenzene	8.000	91	386984	57.1025	ug/l	98
100)	p-Diethylbenzene	7.984	119	211586	52.8062	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.440	119	298263	50.3088	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.498	157	24489	59.5542	ug/l	95
103)	Camphor	8.935	95	84293	483.9275	ug/l	99
104)	Hexachlorobutadiene	9.074	225	31457	42.7767	ug/l	98
105)	1,2,4-Trichlorobenzene	8.990	180	80694	49.4328	ug/l	99
106)	1,2,3-Trichlorobenzene	9.292	180	52118	45.4435	ug/l	97
107)	Naphthalene	9.151	128	202659	57.2835	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 50 PPB
Data File: 11M82678.D
Acq On : 09/11/20 22:12
Operator : WP
Sam Mult : 1 Vial# : 26
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 14:54
Qt Upd On: 09/14/20 14:39
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->

Abundance
TIC: 11M82678.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
Ethyl methacrylate
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Ethylbenzene,C
m&p-Xylenes,T
n-Butyl acrylate
Time-->

Abundance
TIC: 11M82678.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Chlorobenzene,C
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone,S
Bromofluorobenzene,S
1,1,2,2-Tetrachloroethane,P
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82686.D Sam Mult : 1 Vial# : 34 Qt On : 09/14/20 14:53
Acq On : 09/12/20 00:39 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	304276	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.549	117	249762	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	158606	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	75684	27.83	ug/l	0.00
Spiked Amount 30.000			Recovery = 92.77%			
39) 1,2-Dichloroethane-d4	4.778	67	38078	31.82	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.07%			
66) Toluene-d8	5.787	98	326349	33.80	ug/l	0.00
Spiked Amount 30.000			Recovery = 112.67%			
76) Bromofluorobenzene	7.167	174	103879	25.67	ug/l	0.00
Spiked Amount 30.000			Recovery = 85.57%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	276869m	88.3152	ug/l	
6) Dichlorodifluoromethane	1.668	85	181835	78.9390	ug/l	99
7) Chloromethane	1.847	50	175239	79.6185	ug/l	99
8) Bromomethane	2.238	94	202973	90.4783	ug/l	95
9) Vinyl Chloride	1.940	62	226737	83.1484	ug/l	92
10) Chloroethane	2.328	64	152382	86.5293	ug/l	89
11) Trichlorofluoromethane	2.546	101	404308	99.1470	ug/l	98
12) Ethyl ether	2.778	59	131071	72.0605	ug/l	60
13) Furan	2.817	39	235510m	76.6068	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	160910	81.5960	ug/l	96
15) Methylene Chloride	3.373	84	215600	82.3671	ug/l	54
16) Acrolein	2.887	56	141991	390.3070	ug/l	100
17) Acrylonitrile	3.569	53	71397	84.5735	ug/l	95
18) Iodomethane	3.122	142	238263	77.6621	ug/l	94
19) Acetone	3.009	43	244391	377.2228	ug/l	91
20) Carbon Disulfide	3.186	76	565873	87.0123	ug/l	100
21) t-Butyl Alcohol	3.431	59	74826	366.3474	ug/l	94
22) n-Hexane	3.813	57	174543	79.3479	ug/l	87
23) Di-isopropyl-ether	3.955	45	462951	83.5584	ug/l	55
24) 1,1-Dichloroethene	2.981	61	295005	89.4784	ug/l	72
25) Methyl Acetate	3.276	43	119614	81.3107	ug/l	100
26) Methyl-t-butyl ether	3.595	73	526228	84.9827	ug/l	81
27) 1,1-Dichloroethane	3.926	63	367602	87.2760	ug/l	98
28) trans-1,2-Dichloroethene	3.604	96	230250	86.0600	ug/l	76
29) Ethyl-t-butyl ether	4.196	59	532803	81.1692	ug/l	84
30) cis-1,2-Dichloroethene	4.308	61	367676	90.3353	ug/l	60
31) Bromochloromethane	4.453	49	149190m	87.1892	ug/l	
32) 2,2-Dichloropropane	4.312	77	308248	89.5309	ug/l	94
33) Ethyl acetate	4.328	43	173157	76.3942	ug/l	99
34) 1,4-Dioxane	5.337	88	115969	3225.1819	ug/l	68
35) 1,1-Dichloropropene	4.701	75	334923	92.0980	ug/l	99
36) Chloroform	4.488	83	413373	89.3955	ug/l	96
38) Cyclohexane	4.652	56	284053m	85.3341	ug/l	
40) 1,2-Dichloroethane	4.820	62	308829	90.2627	ug/l	95
41) 2-Butanone	4.302	43	74676	83.4538	ug/l	61
42) 1,1,1-Trichloroethane	4.614	97	382130	91.1135	ug/l	96
43) Carbon Tetrachloride	4.707	117	349932	92.1512	ug/l	100
44) Vinyl Acetate	3.945	43	567593	87.9759	ug/l	100
45) Bromodichloromethane	5.411	83	323592	95.2030	ug/l	99
46) Methylcyclohexane	5.270	83	291221m	85.6299	ug/l	
47) Dibromomethane	5.344	174	160454	73.9920	ug/l	94
48) 1,2-Dichloropropane	5.279	63	218256	89.5379	ug/l	98
49) Trichloroethene	5.157	130	262606	79.2308	ug/l	94
50) Benzene	4.820	78	954066	90.1270	ug/l	100
51) tert-Amyl methyl ether	4.858	73	545507	79.4608	ug/l	92
53) Iso-propylacetate	4.813	43	304534	94.6638	ug/l	79
54) Methyl methacrylate	5.276	41	175406	100.1678	ug/l	60
55) Dibromochloromethane	6.241	129	284711	106.6474	ug/l	99
56) 2-Chloroethylvinylether	5.543	63	54748	125.7956	ug/l	81
57) cis-1,3-Dichloropropene	5.640	75	385291	114.1845	ug/l	96
58) trans-1,3-Dichloropropene	5.916	75	364982	114.3974	ug/l	99
59) Ethyl methacrylate	5.932	41	157167m	96.6047	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	232527	102.1408	ug/l	88
61) 1,2-Dibromoethane	6.315	107	261323	110.8461	ug/l	99
62) 1,3-Dichloropropane	6.112	76	393325	105.6670	ug/l	98
63) 4-Methyl-2-Pentanone	5.701	43	176192	100.4759	ug/l	94
64) 2-Hexanone	6.122	43	125023	91.3564	ug/l	79
65) Tetrachloroethene	6.115	164	224462	94.0599	ug/l	96
67) Toluene	5.823	92	658530	105.2300	ug/l	94

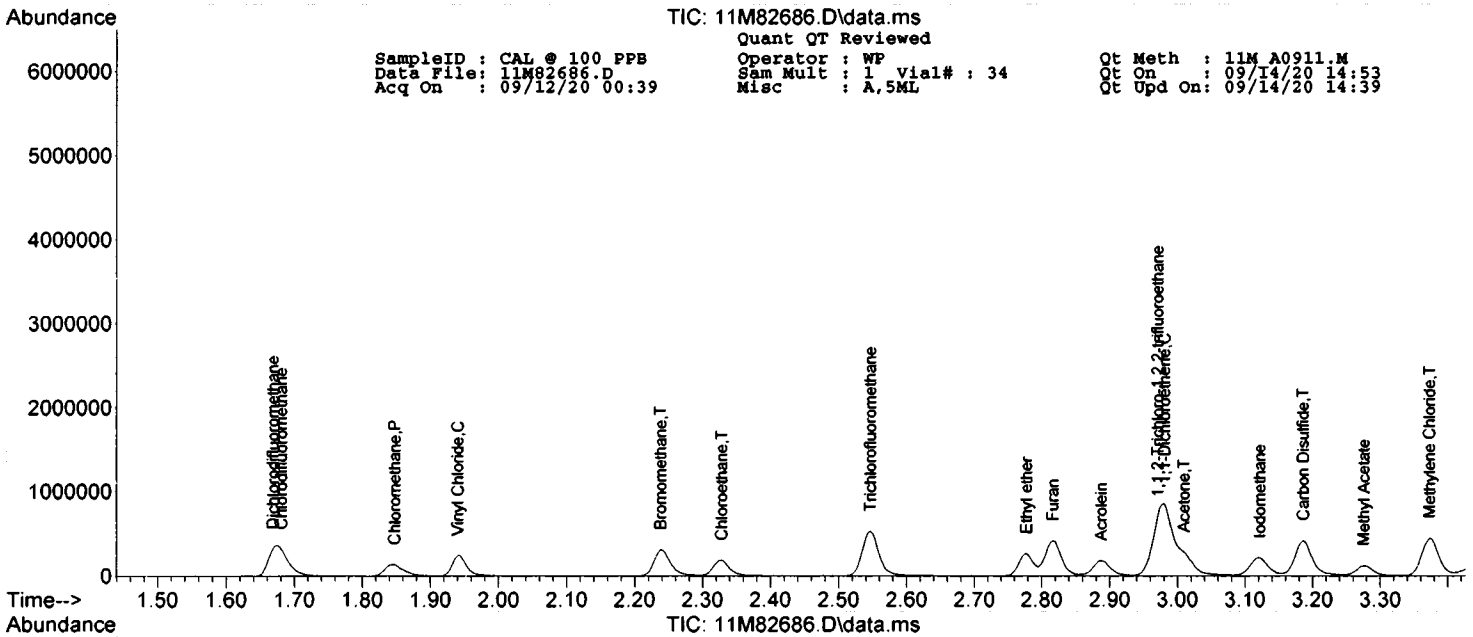
SampleID : CAL @ 100 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82686.D Sam Mult : 1 Vial# : 34 Qt On : 09/14/20 14:53
Acq On : 09/12/20 00:39 Misc : A,5ML Qt Upd On: 09/14/20 14:53

A092507 0250

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.598	133	263834	106.4120	ug/l	97
69)	Chlorobenzene	6.566	112	744063	104.3179	ug/l	98
71)	n-Butyl acrylate	6.797	55	399113	103.5794	ug/l	88
72)	n-Amyl acetate	6.913	43	302253	95.8785	ug/l	73
73)	Bromoform	7.006	173	206760	108.6416	ug/l	98
74)	Ethylbenzene	6.604	106	354240	106.7007	ug/l	97
75)	1,1,2,2-Tetrachloroethane	7.215	83	308080	101.2001	ug/l	97
77)	Styrene	6.884	104	848653	108.5699	ug/l	93
78)	m&p-Xylenes	6.659	106	1003651	213.6107	ug/l	99
79)	o-Xylene	6.881	106	490009	108.3266	ug/l	98
80)	trans-1,4-Dichloro-2-b...	7.241	53	98747	97.6844	ug/l	67
81)	1,3-Dichlorobenzene	7.784	146	660726	111.4701	ug/l	96
82)	1,4-Dichlorobenzene	7.829	146	682827	110.0233	ug/l	96
83)	1,2-Dichlorobenzene	8.054	146	568259	105.6112	ug/l	96
84)	Isopropylbenzene	7.067	105	1199465	110.3434	ug/l	100
85)	Cyclohexanone	7.144	55	29914	356.1268	ug/l	76
86)	Camphene	7.241	93	293432	89.1418	ug/l	99
87)	1,2,3-Trichloropropane	7.257	75	384880	103.4067	ug/l	92
88)	2-Chlorotoluene	7.363	91	750336	109.4517	ug/l	95
89)	p-Ethyltoluene	7.350	105	1218434	97.2850	ug/l	99
90)	4-Chlorotoluene	7.418	91	1012590	144.7212	ug/l	96
91)	n-Propylbenzene	7.292	91	1362628	104.5049	ug/l	100
92)	Bromobenzene	7.270	77	661722	101.2461	ug/l	88
93)	1,3,5-Trimethylbenzene	7.379	105	1145217	123.0764	ug/l	98
94)	Butyl methacrylate	7.382	41	314782m	141.2692	ug/l	
95)	t-Butylbenzene	7.572	119	1043695	109.7605	ug/l	95
96)	1,2,4-Trimethylbenzene	7.594	105	1158751	116.0659	ug/l	99
97)	sec-Butylbenzene	7.694	105	1212145	107.0453	ug/l	97
98)	4-Isopropyltoluene	7.765	119	1060691	107.9140	ug/l	98
99)	n-Butylbenzene	8.000	91	974838	102.5296	ug/l	99
100)	p-Diethylbenzene	7.984	119	548662	97.6017	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.440	119	737055	88.6134	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.498	157	62738	108.7494	ug/l	87
103)	Camphor	8.932	95	221351	905.7849	ug/l	97
104)	Hexachlorobutadiene	9.073	225	79909	77.4533	ug/l	98
105)	1,2,4-Trichlorobenzene	8.990	180	201024	87.7762	ug/l	98
106)	1,2,3-Trichlorobenzene	9.292	180	126114	78.3794	ug/l	98
107)	Naphthalene	9.151	128	496131	99.9573	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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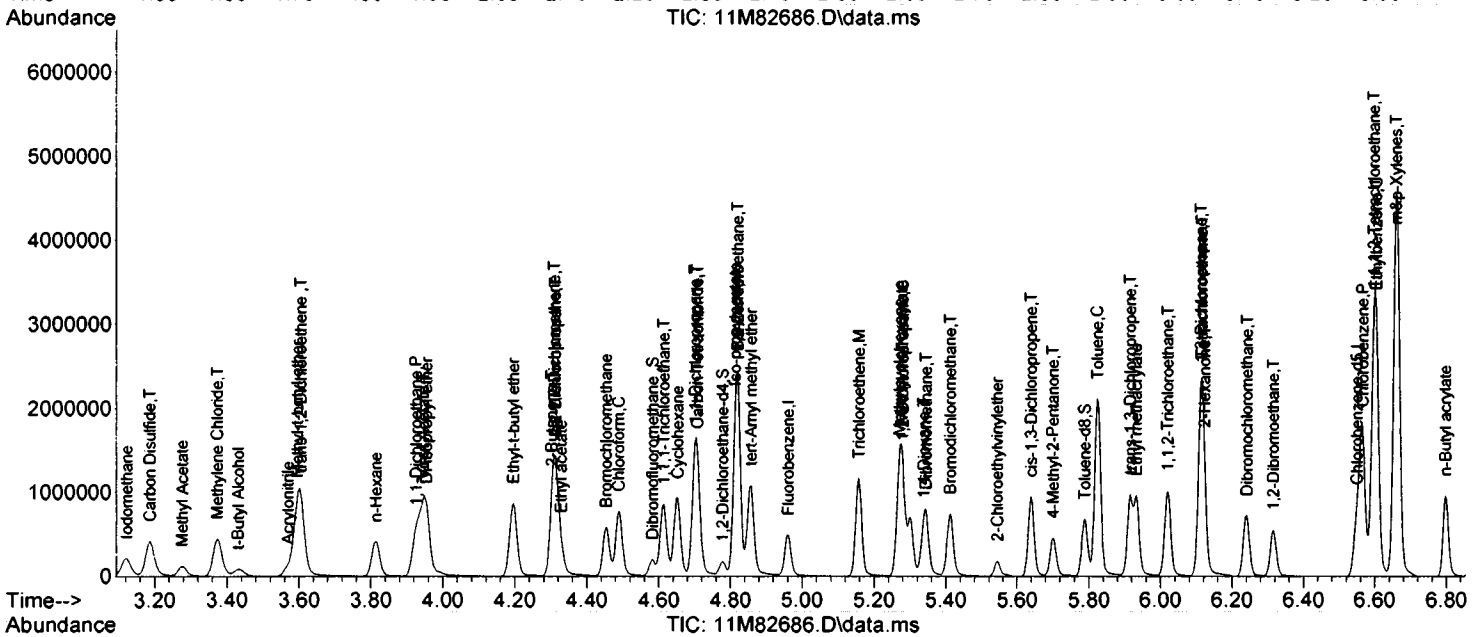
SampleID : CAL @ 100 PPB
Data File: 11M82686.D
Acq On : 09/12/20 00:39
Operator : WP
Sam Mult : 1 Vial# : 34
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 14:53
Qt Upd On: 09/14/20 14:39
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->


Abundance
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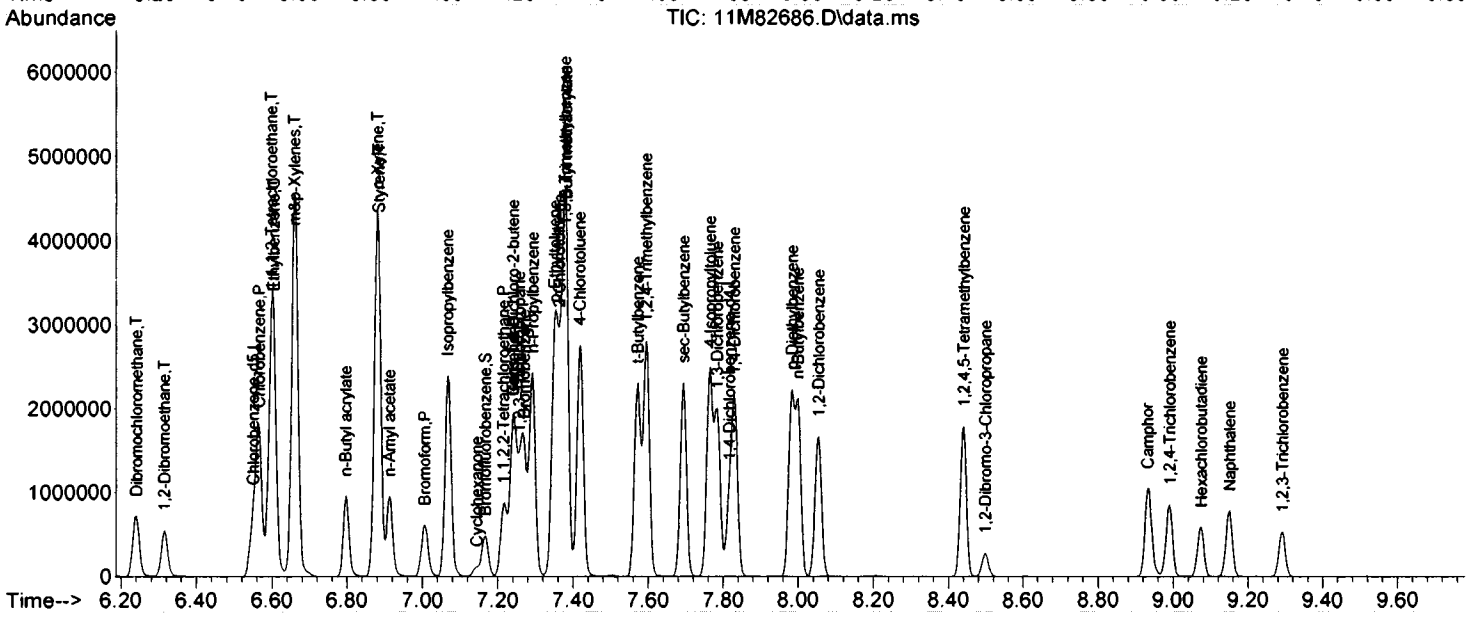
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
Time-->


Abundance
TIC: 11M82686.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromobenzene,S
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

Sample ID : CAL @ 1 PPB
Data File: 11M82673.D
Acq On : 09/11/20 20:40

Operator : WP
Sam Mult : 1 Vial# : 21
Misc : A,5ML

Qt Meth : 11M_A0911.M
Qt On : 09/14/20 15:02
Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	247374	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	200307	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	93440	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	61864	27.98	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.27%			
39) 1,2-Dichloroethane-d4	4.778	67	33741	34.69	ug/l	0.00
Spiked Amount 30.000			Recovery = 115.63%			
66) Toluene-d8	5.787	98	264927	34.21	ug/l	0.00
Spiked Amount 30.000			Recovery = 114.03%			
76) Bromofluorobenzene	7.167	174	72441	30.38	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.27%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	2217	0.8698	ug/l	64
6) Dichlorodifluoromethane	1.668	85	1041	0.5559	ug/l	85
7) Chloromethane	1.841	50	1245m	0.6958	ug/l	
8) Bromomethane	2.241	94	1468	0.8049	ug/l	90
9) Vinyl Chloride	1.943	62	1626	0.7334	ug/l	94
10) Chloroethane	2.325	64	1111	0.7760	ug/l	92
11) Trichlorofluoromethane	2.546	101	2700	0.8144	ug/l	83
12) Ethyl ether	2.778	59	835	0.5647	ug/l	82
13) Furan	2.817	39	2183	0.8734	ug/l	91
14) 1,1,2-Trichloro-1,2,2-...	2.977	101	1134m	0.7073	ug/l	
15) Methylene Chloride	3.386	84	2096m	0.9849	ug/l	
16) Acrolein	2.881	56	812m	2.7455	ug/l	
17) Acrylonitrile	3.572	53	282m	0.4109	ug/l	
18) Iodomethane	3.116	142	704m	0.2823	ug/l	
19) Acetone	3.003	43	2415	4.5850	ug/l	79
20) Carbon Disulfide	3.186	76	4095	0.7745	ug/l	100
21) t-Butyl Alcohol	3.437	59	472	2.8425	ug/l	63
22) n-Hexane	3.820	57	1107m	0.6190	ug/l	
23) Di-isopropyl-ether	3.951	45	3191	0.7084	ug/l	71
24) 1,1-Dichloroethene	2.990	61	1842	0.6872	ug/l	88
25) Methyl Acetate	3.276	43	691	0.5778	ug/l	100
26) Methyl-t-butyl ether	3.598	73	3210	0.6376	ug/l	77
27) 1,1-Dichloroethane	3.929	63	2643	0.7718	ug/l	85
28) trans-1,2-Dichloroethene	3.598	96	1610m	0.7402	ug/l	
29) Ethyl-t-butyl ether	4.202	59	3354	0.6285	ug/l	87
30) cis-1,2-Dichloroethene	4.308	61	2494	0.7537	ug/l	89
31) Bromochloromethane	4.450	49	1036	0.7447	ug/l	50
32) 2,2-Dichloropropane	4.315	77	1758	0.6281	ug/l	90
33) Ethyl acetate	4.328	43	1076m	0.5839	ug/l	
34) 1,4-Dioxane	5.341	88	812m	27.7768	ug/l	
35) 1,1-Dichloropropene	4.694	75	2084	0.7049	ug/l	83
36) Chloroform	4.495	83	2686	0.7145	ug/l	82
38) Cyclohexane	4.652	56	1819	0.6722	ug/l	62
40) 1,2-Dichloroethane	4.820	62	2315	0.8323	ug/l	86
41) 2-Butanone	4.308	43	737	1.0131	ug/l	58
42) 1,1,1-Trichloroethane	4.611	97	2474	0.7256	ug/l	67
43) Carbon Tetrachloride	4.704	117	1828	0.5921	ug/l	99
44) Vinyl Acetate	3.945	43	3652	0.6963	ug/l	100
45) Bromodichloromethane	5.414	83	2135	0.7726	ug/l	83
46) Methylcyclohexane	5.270	83	1503	0.5436	ug/l	75
47) Dibromomethane	5.350	174	977m	0.5542	ug/l	
48) 1,2-Dichloropropane	5.283	63	1391	0.7019	ug/l	89
49) Trichloroethene	5.154	130	1828m	0.6784	ug/l	
50) Benzene	4.820	78	6410	0.7448	ug/l	100
51) tert-Amyl methyl ether	4.852	73	3217	0.5764	ug/l	95
53) Iso-propylacetate	4.816	43	1959m	0.7593	ug/l	
54) Methyl methacrylate	5.295	41	1417m	1.0090	ug/l	
55) Dibromochloromethane	6.241	129	1340	0.6259	ug/l	90
56) 2-Chloroethylvinylether	5.540	63	131m	0.3753	ug/l	
57) cis-1,3-Dichloropropene	5.636	75	2309	0.8532	ug/l	96
58) trans-1,3-Dichloropropene	5.913	75	2022	0.7902	ug/l	73
59) Ethyl methacrylate	5.935	41	838m	0.6423	ug/l	
60) 1,1,2-Trichloroethane	6.022	97	1697	0.9295	ug/l	84
61) 1,2-Dibromoethane	6.315	107	1631	0.8626	ug/l	84
62) 1,3-Dichloropropane	6.112	76	2533	0.8485	ug/l	96
63) 4-Methyl-2-Pentanone	5.701	43	1190	0.8462	ug/l	99
64) 2-Hexanone	6.125	43	853	0.7772	ug/l	90
65) Tetrachloroethene	6.112	164	1387	0.7247	ug/l	53
67) Toluene	5.823	92	4211	0.8390	ug/l	85

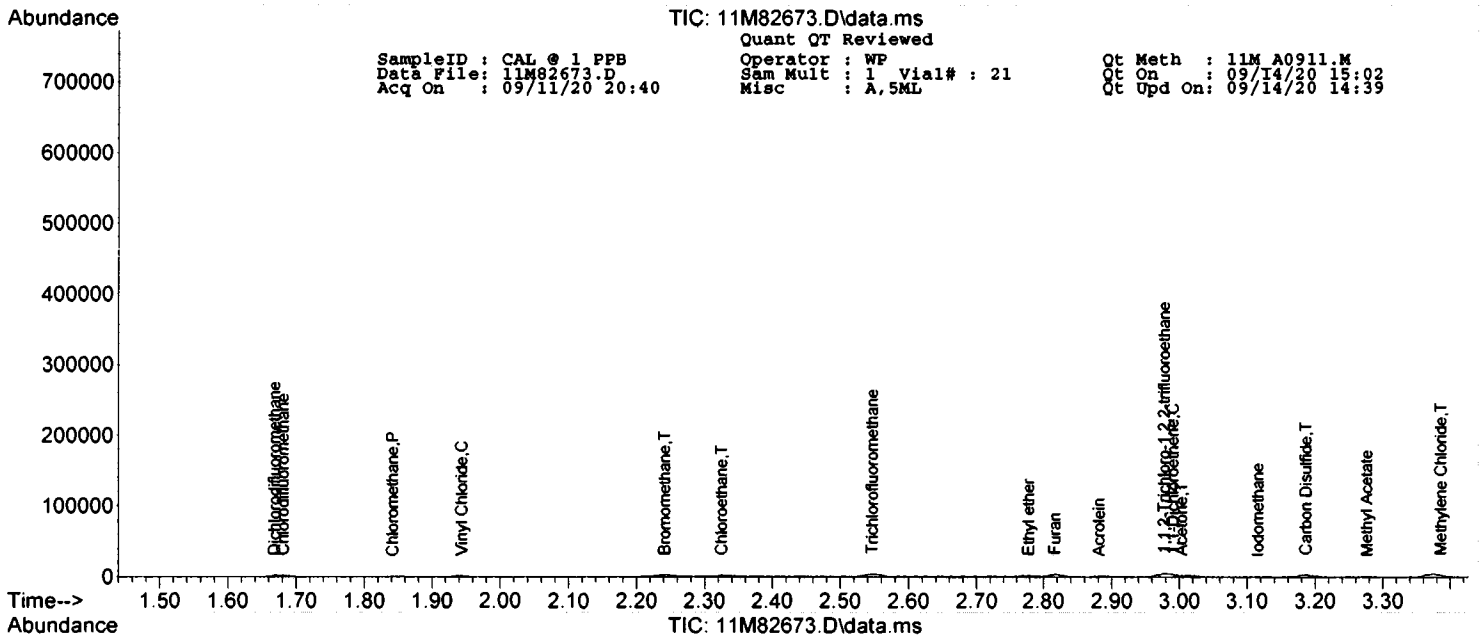
Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82673.D Sam Mult : 1 Vial# : 21 Qt On : 09/14/20 15:02
Acq On : 09/11/20 20:40 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.598	133	1588	0.7986	ug/l	96
69)	Chlorobenzene	6.562	112	5141	0.8987	ug/l	92
71)	n-Butyl acrylate	6.797	55	2094	0.9224	ug/l	78
72)	n-Amyl acetate	6.910	43	1385	0.7457	ug/l	70
73)	Bromoform	7.003	173	872	0.7777	ug/l	75
74)	Ethylbenzene	6.604	106	2235	1.1427	ug/l	77
75)	1,1,2,2-Tetrachloroethane	7.215	83	2071	1.1547	ug/l	88
77)	Styrene	6.881	104	4665	1.0130	ug/l	91
78)	m&p-Xylenes	6.659	106	5851	2.1138	ug/l	86
79)	o-Xylene	6.881	106	2753	1.0331	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.247	53	486	0.8161	ug/l	100
81)	1,3-Dichlorobenzene	7.784	146	3454	0.9891	ug/l	98
82)	1,4-Dichlorobenzene	7.829	146	3636	0.9945	ug/l	66
83)	1,2-Dichlorobenzene	8.057	146	3126	0.9861	ug/l	98
84)	Isopropylbenzene	7.067	105	6560	1.0244	ug/l	96
85)	Cyclohexanone	7.135	55	101m	2.0410	ug/l	
86)	Camphene	7.241	93	1536	0.7920	ug/l	96
87)	1,2,3-Trichloropropane	7.254	75	2240	1.0215	ug/l	84
88)	2-Chlorotoluene	7.363	91	5046	1.2494	ug/l	95
89)	p-Ethyltoluene	7.353	105	6584	0.8923	ug/l	95
90)	4-Chlorotoluene	7.418	91	4060	0.9849	ug/l	89
91)	n-Propylbenzene	7.292	91	8121	1.0572	ug/l	96
92)	Bromobenzene	7.266	77	4654	1.2087	ug/l	95
93)	1,3,5-Trimethylbenzene	7.376	105	5388	0.9829	ug/l	96
94)	Butyl methacrylate	7.382	41	1017m	0.7747	ug/l	
95)	t-Butylbenzene	7.572	119	5104	0.9111	ug/l	97
96)	1,2,4-Trimethylbenzene	7.598	105	5523	0.9390	ug/l	99
97)	sec-Butylbenzene	7.694	105	6320	0.9474	ug/l	100
98)	4-Isopropyltoluene	7.762	119	5212	0.9001	ug/l	95
99)	n-Butylbenzene	8.000	91	5390	0.9623	ug/l	90
100)	p-Diethylbenzene	7.980	119	2636	0.7959	ug/l	79
101)	1,2,4,5-Tetramethylben...	8.437	119	3819	0.7794	ug/l	93
102)	1,2-Dibromo-3-Chloropr...	8.498	157	240	0.7061	ug/l	66
103)	Camphor	8.929	95	1015m	7.0501	ug/l	
104)	Hexachlorobutadiene	9.077	225	413m	0.6795	ug/l	
105)	1,2,4-Trichlorobenzene	8.990	180	1245m	0.9228	ug/l	
106)	1,2,3-Trichlorobenzene	9.292	180	861m	0.9083	ug/l	
107)	Naphthalene	9.151	128	2801	0.9579	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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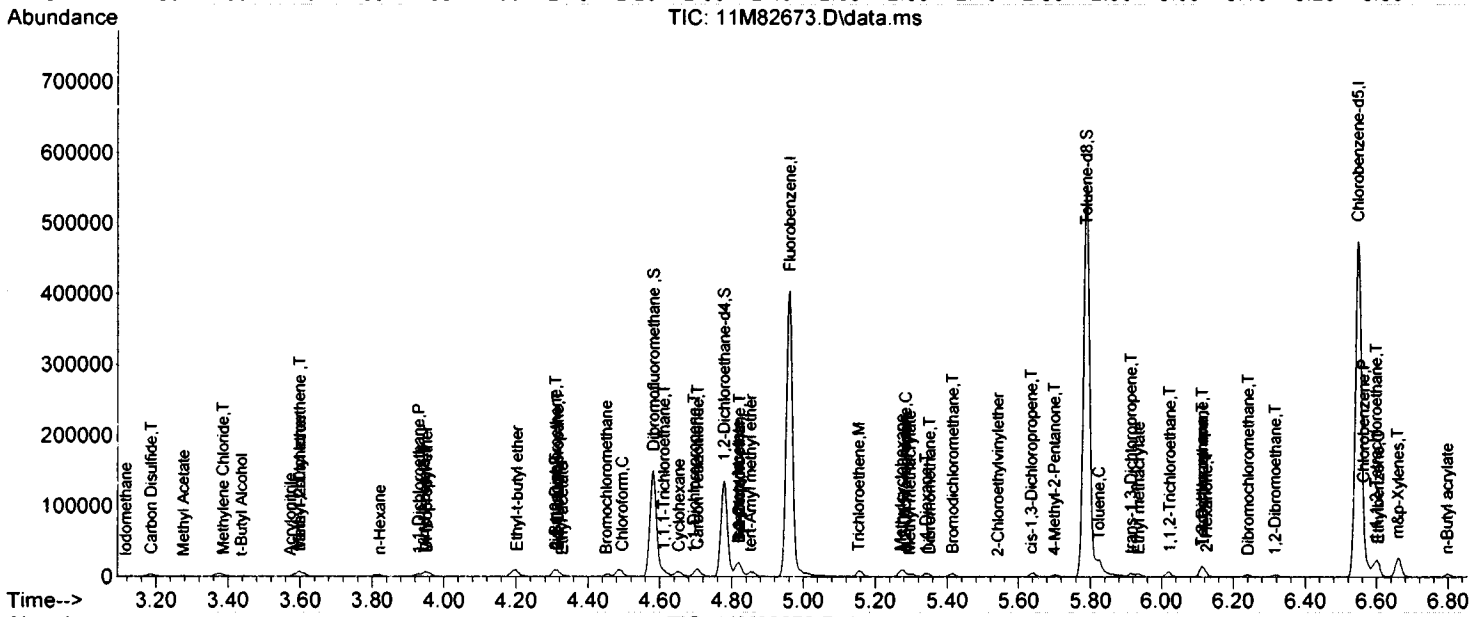
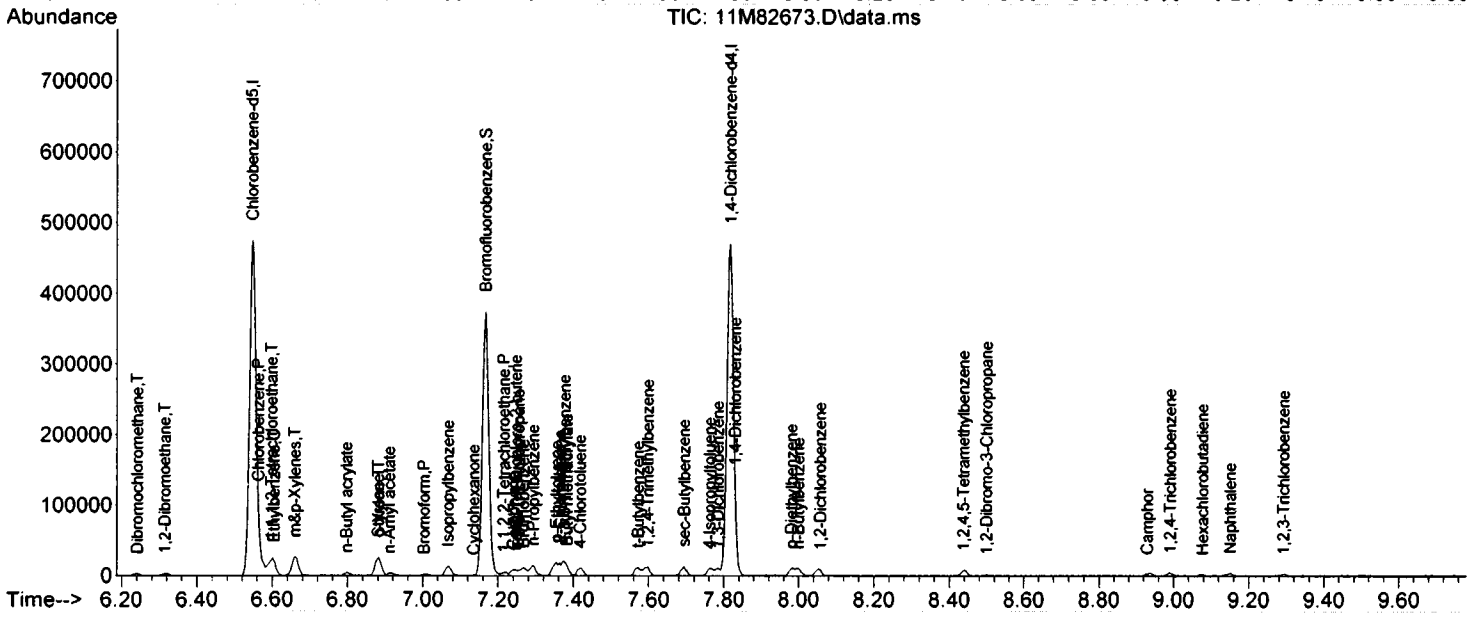
Quant QT Reviewed
SampleID : CAL @ 1 PPB
Data File: 11M82673.D
Acq On : 09/11/20 20:40
Operator : WP
Sam Mult : 1 Vial# : 21
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 15:02
Qt Upd On: 09/14/20 14:39
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->


Abundance
TIC: 11M82673.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
n-Butyl acrylate
Time-->


Abundance
TIC: 11M82673.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
n-Butyl acrylate
Bromoform,P
Isopropylbenzene
Cyclohexanone
4-Chlorotoluene
sec-Butylbenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82672.D Sam Mult : 1 Vial# : 20 Qt On : 09/14/20 15:07
Acq On : 09/11/20 20:21 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	247668	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.550	117	205853	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	94226	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	60723	27.43	ug/l	0.00
Spiked Amount 30.000			Recovery = 91.43%			
39) 1,2-Dichloroethane-d4	4.778	67	34006	34.92	ug/l	0.00
Spiked Amount 30.000			Recovery = 116.40%			
66) Toluene-d8	5.787	98	266759	33.52	ug/l	0.00
Spiked Amount 30.000			Recovery = 111.73%			
76) Bromofluorobenzene	7.167	174	74874	31.14	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.80%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	0.000		0	N.D.	d	
6) Dichlorodifluoromethane	0.000		0	N.D.	d	
7) Chloromethane	0.000		0	N.D.	d	
8) Bromomethane	0.000		0	N.D.	d	
9) Vinyl Chloride	0.000		0	N.D.	d	
10) Chloroethane	0.000		0	N.D.	d	
11) Trichlorofluoromethane	0.000		0	N.D.	d	
12) Ethyl ether	0.000		0	N.D.	d	
13) Furan	0.000		0	N.D.	d	
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D.	d	
15) Methylene Chloride	0.000		0	N.D.	d	
16) Acrolein	0.000		0	N.D.	d	
17) Acrylonitrile	0.000		0	N.D.		
18) Iodomethane	0.000		0	N.D.	d	
19) Acetone	0.000		0	N.D.	d	
20) Carbon Disulfide	0.000		0	N.D.	d	
21) t-Butyl Alcohol	0.000		0	N.D.	d	
22) n-Hexane	0.000		0	N.D.	d	
23) Di-isopropyl-ether	0.000		0	N.D.	d	
24) 1,1-Dichloroethene	0.000		0	N.D.	d	
25) Methyl Acetate	3.283	43	280	0.2338	ug/l	100
26) Methyl-t-butyl ether	3.595	73	1864m	0.3698	ug/l	
27) 1,1-Dichloroethane	0.000		0	N.D.	d	
28) trans-1,2-Dichloroethene	0.000		0	N.D.	d	
29) Ethyl-t-butyl ether	0.000		0	N.D.	d	
30) cis-1,2-Dichloroethene	0.000		0	N.D.	d	
31) Bromochloromethane	0.000		0	N.D.	d	
32) 2,2-Dichloropropane	0.000		0	N.D.	d	
33) Ethyl acetate	0.000		0	N.D.	d	
34) 1,4-Dioxane	0.000		0	N.D.		
35) 1,1-Dichloropropene	0.000		0	N.D.	d	
36) Chloroform	0.000		0	N.D.	d	
38) Cyclohexane	0.000		0	N.D.	d	
40) 1,2-Dichloroethane	4.820	62	1231	0.4420	ug/l	95
41) 2-Butanone	0.000		0	N.D.	d	
42) 1,1,1-Trichloroethane	0.000		0	N.D.	d	
43) Carbon Tetrachloride	0.000		0	N.D.	d	
44) Vinyl Acetate	0.000		0	N.D.	d	
45) Bromodichloromethane	0.000		0	N.D.	d	
46) Methylcyclohexane	0.000		0	N.D.	d	
47) Dibromomethane	0.000		0	N.D.	d	
48) 1,2-Dichloropropane	0.000		0	N.D.	d	
49) Trichloroethene	0.000		0	N.D.	d	
50) Benzene	4.816	78	3256	0.3779	ug/l	100
51) tert-Amyl methyl ether	0.000		0	N.D.	d	
53) Iso-propylacetate	0.000		0	N.D.	d	
54) Methyl methacrylate	0.000		0	N.D.	d	
55) Dibromochloromethane	0.000		0	N.D.	d	
56) 2-Chloroethylvinylether	0.000		0	N.D.		
57) cis-1,3-Dichloropropene	0.000		0	N.D.	d	
58) trans-1,3-Dichloropropene	0.000		0	N.D.	d	
59) Ethyl methacrylate	0.000		0	N.D.	d	
60) 1,1,2-Trichloroethane	0.000		0	N.D.	d	
61) 1,2-Dibromoethane	0.000		0	N.D.	d	
62) 1,3-Dichloropropane	0.000		0	N.D.	d	
63) 4-Methyl-2-Pentanone	0.000		0	N.D.	d	
64) 2-Hexanone	0.000		0	N.D.	d	
65) Tetrachloroethene	0.000		0	N.D.	d	
67) Toluene	0.000		0	N.D.	d	

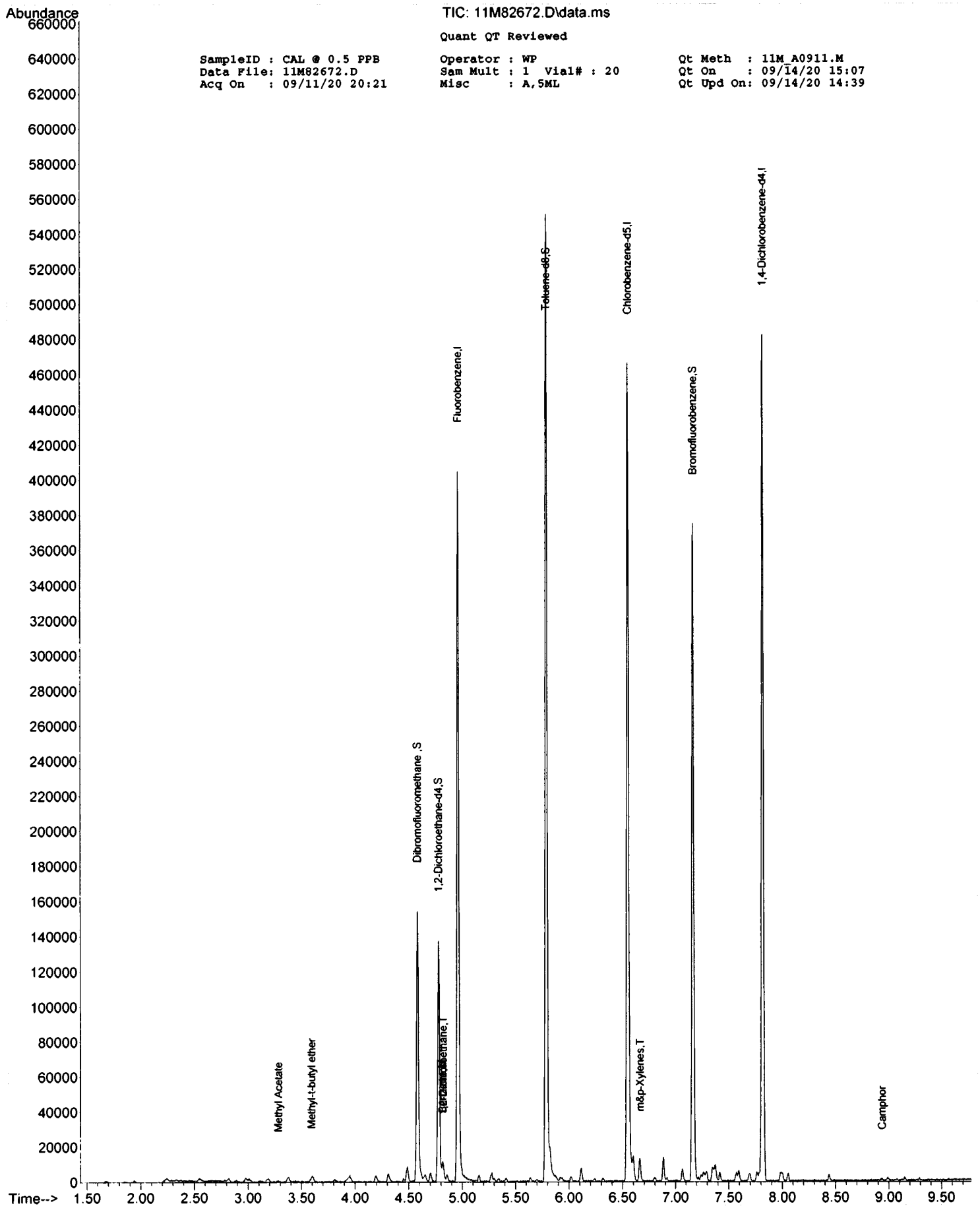
Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M82672.D Sam Mult : 1 Vial# : 20 Qt On : 09/14/20 15:07
Acq On : 09/11/20 20:21 Misc : A,5ML Qt Upd On: 09/14/20 14:39

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	0.000		0	N.D. d		
69)	Chlorobenzene	0.000		0	N.D. d		
71)	n-Butyl acrylate	0.000		0	N.D. d		
72)	n-Amyl acetate	0.000		0	N.D. d		
73)	Bromoform	0.000		0	N.D. d		
74)	Ethylbenzene	0.000		0	N.D. d		
75)	1,1,2,2-Tetrachloroethane	0.000		0	N.D. d		
77)	Styrene	0.000		0	N.D. d		
78)	m&p-Xylenes	6.662	106	3215	1.1518	ug/l	62
79)	o-Xylene	0.000		0	N.D. d		
80)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
81)	1,3-Dichlorobenzene	0.000		0	N.D. d		
82)	1,4-Dichlorobenzene	0.000		0	N.D. d		
83)	1,2-Dichlorobenzene	0.000		0	N.D. d		
84)	Isopropylbenzene	0.000		0	N.D. d		
85)	Cyclohexanone	0.000		0	N.D. d		
86)	Camphene	0.000		0	N.D. d		
87)	1,2,3-Trichloropropane	0.000		0	N.D. d		
88)	2-Chlorotoluene	0.000		0	N.D. d		
89)	p-Ethyltoluene	0.000		0	N.D. d		
90)	4-Chlorotoluene	0.000		0	N.D. d		
91)	n-Propylbenzene	0.000		0	N.D. d		
92)	Bromobenzene	0.000		0	N.D. d		
93)	1,3,5-Trimethylbenzene	0.000		0	N.D. d		
94)	Butyl methacrylate	0.000		0	N.D. d		
95)	t-Butylbenzene	0.000		0	N.D. d		
96)	1,2,4-Trimethylbenzene	0.000		0	N.D. d		
97)	sec-Butylbenzene	0.000		0	N.D. d		
98)	4-Isopropyltoluene	0.000		0	N.D. d		
99)	n-Butylbenzene	0.000		0	N.D. d		
100)	p-Diethylbenzene	0.000		0	N.D. d		
101)	1,2,4,5-Tetramethylben...	0.000		0	N.D. d		
102)	1,2-Dibromo-3-Chloropr...	0.000		0	N.D.		
103)	Camphor	8.935	95	197	1.3569	ug/l #	44
104)	Hexachlorobutadiene	0.000		0	N.D.		
105)	1,2,4-Trichlorobenzene	0.000		0	N.D. d		
106)	1,2,3-Trichlorobenzene	0.000		0	N.D. d		
107)	Naphthalene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 11M82672.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 0.5 PPB
Data File: 11M82672.D
Acq On : 09/11/20 20:21
Operator : WP
Sam Mult : 1 Vial# : 20
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/14/20 15:07
Qt Upd On: 09/14/20 14:39
Methyl Acetate
Methyl-t-butyl ether
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
m&p-Xylenes,T
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Camphor
Time-->

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Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_2

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time
1	2M142492.D	CAL @ 20 PPB	09/29/20 16:47	2	2M142489.D	CAL @ 5 PPB	09/29/20 15:48
3	2M142490.D	CAL @ 10 PPB	09/29/20 16:08	4	2M142494.D	CAL @ 50 PPB	09/29/20 17:26
5	2M142496.D	CAL @ 100 PPB	09/29/20 18:05	6	2M142499.D	CAL @ 250 PPB	09/29/20 19:04
7	2M142502.D	CAL @ 500 PPB	09/29/20 20:03	8	2M142488.D	CAL @ 1 PPB	09/29/20 15:28
9	2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09				

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.3084	0.3044	0.2719	0.3264	0.3317	0.3264	0.3218	0.2561	-----	0.306	1.69	1.00	1.00	9.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dichlorodifluorometha	1	0	Avg	0.3267	0.3071	0.2716	0.3305	0.3409	0.3349	0.3272	0.2258	-----	0.308	1.68	1.00	1.00	13	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloromethane	1	0	Avg	0.3208	0.3455	0.3030	0.3431	0.3602	0.3483	0.3434	0.3809	-----	0.343	1.85	1.00	1.00	6.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromomethane	1	0	Avg	0.1427	0.1504	0.1402	0.1526	0.1877	0.2192	-----	0.1737	-----	0.167	2.25	0.995	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Vinyl Chloride	1	0	Avg	0.3712	0.3975	0.3370	0.3874	0.4038	0.3891	0.3690	0.3256	-----	0.373	1.95	0.999	1.00	7.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroethane	1	0	Avg	0.2427	0.2454	0.2330	0.2520	0.2602	0.2632	0.2708	0.2210	-----	0.249	2.34	1.00	1.00	6.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichlorofluoromethan	1	0	Avg	0.5649	0.5937	0.5441	0.5973	0.6141	0.6010	0.5927	0.4597	-----	0.571	2.57	1.00	1.00	8.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl ether	1	0	Avg	0.1834	0.2015	0.1816	0.1983	0.2124	0.2081	0.2124	0.1881	-----	0.198	2.80	1.00	1.00	6.4	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Furan	1	0	Avg	0.3176	0.3432	0.3104	0.3268	0.3519	0.3501	0.3537	0.3281	-----	0.335	2.84	1.00	1.00	5.0	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1928	0.2050	0.1789	0.2064	0.2137	0.2108	0.2197	0.1739	-----	0.200	3.00	1.00	1.00	8.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methylene Chloride	1	0	Avg	0.2692	0.2961	0.2518	0.2796	0.2975	0.2895	0.2877	0.2943	-----	0.283	3.42	1.00	1.00	5.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acrolein	1	0	Avg	0.0436	0.0448	0.0416	0.0449	0.0472	0.0477	0.0495	0.0427	-----	0.0453	2.92	1.00	1.00	6.0		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Acrylonitrile	1	0	Avg	0.0909	0.1026	0.0899	0.0973	0.1005	0.1059	0.1059	0.0931	-----	0.0983	3.62	1.00	1.00	6.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iodomethane	1	0	Qua	0.1842	0.1649	0.1597	0.2148	0.2704	0.2893	-----	0.1873	-----	0.210	3.15	0.985	0.996	24		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Acetone	1	0	Avg	0.0724	0.0805	0.0736	0.0819	0.0811	0.0803	0.0782	0.0973	-----	0.0807	3.04	1.00	1.00	9.4	0.10 a	100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Carbon Disulfide	1	0	Avg	0.7173	0.8037	0.6973	0.7494	0.7799	0.7709	0.7692	0.8299	-----	0.765	3.21	1.00	1.00	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butyl Alcohol	1	0	Avg	0.0240	0.0260	0.0247	0.0264	0.0274	0.0284	0.0273	0.0236	-----	0.0260	3.48	1.00	1.00	6.6		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
n-Hexane	1	0	Avg	0.2239	0.2349	0.2319	0.2427	0.2551	0.2505	0.2547	0.2015	-----	0.237	3.87	1.00	1.00	7.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Di-isopropyl-ether	1	0	Avg	0.6484	0.6639	0.6085	0.6783	0.7334	0.7412	0.7590	0.5936	-----	0.678	4.03	1.00	1.00	9.1		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethene	1	0	Avg	0.3732	0.3939	0.3528	0.3913	0.4108	0.4089	0.4224	0.3327	-----	0.386	3.01	1.00	1.00	8.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl Acetate	1	0	Avg	0.1654	0.1951	0.1782	0.1758	0.1829	0.1831	0.1793	0.1966	-----	0.182	3.32	1.00	1.00	5.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl-t-butyl ether	1	0	LinF	0.6903	0.7095	0.6580	0.7318	0.7958	0.7997	0.8090	0.6631	0.6760	0.726	3.64	1.00	1.00	8.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.4511	0.4789	0.4094	0.4701	0.4999	0.4976	0.5042	0.4522	-----	0.470	4.00	1.00	1.00	6.8	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2717	0.2935	0.2517	0.2806	0.2979	0.3025	0.3091	0.2687	-----	0.285	3.65	1.00	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl-t-butyl ether	1	0	Avg	0.7025	0.7205	0.6735	0.7352	0.7971	0.7992	0.8129	0.6313	-----	0.734	4.29	1.00	1.00	8.9	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.4472	0.4819	0.4211	0.4700	0.4999	0.5089	0.5261	0.4699	-----	0.478	4.41	1.00	1.00	7.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromochloromethane	1	0	Avg	0.2157	0.2288	0.2019	0.2157	0.2198	0.1993	0.2032	0.2145	-----	0.212	4.57	1.00	1.00	4.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2,2-Dichloropropane	1	0	Avg	0.4060	0.4388	0.3852	0.4197	0.4452	0.4418	0.4433	0.3919	-----	0.422	4.42	1.00	1.00	5.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl acetate	1	0	Avg	0.2318	0.2533	0.2229	0.2446	0.2531	0.2523	0.2546	0.2435	-----	0.245	4.43	1.00	1.00	4.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dioxane	1	0	Avg	0.0032	0.0032	0.0034	0.0035	0.0036	0.0038	0.0039	0.0026	-----	0.00344	5.50	1.00	1.00	12		1000.	250.0	500.0	2500.	5000.	12500	25000	50.00	
1,1-Dichloropropene	1	0	Avg	0.3798	0.4031	0.3497	0.3978	0.4190	0.4300	0.4551	0.3564	-----	0.399	4.82	0.999	1.00	9.1		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroform	1	0	Avg	0.5013	0.5330	0.4704	0.5194	0.5417	0.5271	0.5376	0.4676	-----	0.512	4.60	1.00	1.00	5.8	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromofluoromethan	1	0	Avg	0.2832	0.2901	0.2899	0.2896	0.2919	0.2861	0.2726	0.2918	0.2911	0.287	4.70	-1	-1	2.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.3426	0.3485	0.3316	0.3563	0.3747	0.3794	0.3957	0.2989	-----	0.354	4.77	1.00	1.00	8.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1495	0.1453	0.1515	0.1499	0.1544	0.1467	0.1430	0.1463	0.1486	0.148	4.91	-1	-1	2.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3888	0.4296	0.3712	0.4102	0.4423	0.4534	0.4858	0.3889	0.5360	0.434	4.95	0.999	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
2-Butanone	1	0	Avg	0.1134	0.1161	0.1032	0.1334	0.1389	0.1533	0.1562	0.0868	-----	0.125	4.40	1.00	1.00	20	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1-Trichloroethane	1	0	Avg	0.4457	0.4577	0.4112	0.4660	0.4886	0.4816	0.4928	0.3898	-----	0.454	4.73	1.00	1.00	8.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Carbon Tetrachloride	1	0	Avg	0.3753	0.3704	0.3392	0.3899	0.4128	0.4227	0.4417	0.3237	-----	0.385	4.83	1.00	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Acetate	1	0	Avg	0.7428	0.7848	0.7015	0.7561	0.8298	0.7989	0.7759	0.6959	-----	0.761	4.02	1.00	1.00	6.1		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromodichloromethan	1	0	LinF	0.3920	0.4190	0.3781	0.4240	0.4488	0.4432	0.4635	0.3515	-----	0.415	5.57	1.00	1.00	9.2	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Avg Rsd: 10.08

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2M142492.D	CAL @ 20 PPB	09/29/20 16:47	2	2M142489.D	CAL @ 5 PPB	09/29/20 15:48
3	2M142490.D	CAL @ 10 PPB	09/29/20 16:08	4	2M142494.D	CAL @ 50 PPB	09/29/20 17:26
5	2M142496.D	CAL @ 100 PPB	09/29/20 18:05	6	2M142499.D	CAL @ 250 PPB	09/29/20 19:04
7	2M142502.D	CAL @ 500 PPB	09/29/20 20:03	8	2M142488.D	CAL @ 1 PPB	09/29/20 15:28
9	2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.3212	0.3500	0.3057	0.3390	0.3640	0.3671	0.3909	0.3040	-----	0.343	5.42	0.999	1.00	9.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromomethane	1	0	Avg	0.1971	0.2030	0.1811	0.2042	0.2169	0.2219	0.2320	0.1896	-----	0.206	5.50	1.00	1.00	8.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloropropane	1	0	Avg	0.2630	0.2805	0.2534	0.2766	0.2987	0.3061	0.3250	0.2532	-----	0.282	5.43	0.999	1.00	9.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichloroethene	1	0	Avg	0.3015	0.3095	0.2835	0.3148	0.3301	0.3354	0.3542	0.3081	-----	0.317	5.30	0.999	1.00	6.9	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Benzene	1	0	Avg	1.0566	1.1138	1.0147	1.1109	1.2035	1.2372	1.2892	1.0142	1.0677	1.12	4.95	1.00	1.00	8.8	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.7223	0.7775	0.6761	0.7784	0.8586	0.8567	0.9875	0.6615	-----	0.790	4.99	0.996	1.00	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iso-propylacetate	1	0	Avg	0.4767	0.4834	0.4634	0.5264	0.5658	0.5730	0.6223	0.4683	-----	0.522	4.95	0.999	1.00	11	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl methacrylate	1	0	Avg	0.2432	0.2604	0.2316	0.2544	0.2694	0.2609	0.2713	0.2225	-----	0.252	5.45	1.00	1.00	7.0	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromochloromethan	1	0	Avg	0.3365	0.3563	0.3267	0.3584	0.3898	0.3725	0.3978	0.2746	-----	0.352	6.42	0.999	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chloroethylvinylethe	1	0	Avg	0.0366	0.0366	0.0303	0.0412	0.0451	0.0436	0.0460	0.0276	-----	0.0384	5.71	0.999	1.00	18		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.4659	0.4908	0.4463	0.4725	0.5119	0.4931	0.5049	0.4587	-----	0.481	5.81	1.00	1.00	4.8	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,3-Dichloroprop	1	0	Avg	0.4268	0.4649	0.4115	0.4484	0.4908	0.4751	0.5129	0.4299	-----	0.458	6.09	0.999	1.00	7.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl methacrylate	1	0	Avg	0.2412	0.2608	0.2334	0.2628	0.2845	0.2806	0.3345	0.2182	-----	0.265	6.10	0.994	1.00	14	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2825	0.2949	0.2767	0.2959	0.3139	0.3048	0.3393	0.2668	-----	0.297	6.20	0.998	1.00	7.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromoethane	1	0	Avg	0.3028	0.3235	0.2770	0.3146	0.3357	0.3159	0.3307	0.3040	-----	0.313	6.49	1.00	1.00	6.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.4818	0.5241	0.4653	0.5076	0.5566	0.5574	0.6126	0.4463	-----	0.519	6.29	0.998	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.2679	0.2873	0.2564	0.2800	0.2930	0.2921	0.3042	0.2595	-----	0.280	5.87	1.00	1.00	6.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Hexanone	1	0	Avg	0.1896	0.2087	0.1802	0.2084	0.2158	0.2206	0.2480	0.1963	-----	0.208	6.30	0.997	1.00	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Tetrachloroethene	1	0	Avg	0.2589	0.2738	0.2401	0.2683	0.2882	0.2869	0.3127	0.2312	-----	0.270	6.29	0.998	1.00	9.9	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Toluene-d8	1	0	Avg	1.1861	1.1986	1.1924	1.1932	1.1755	1.1297	1.1090	1.1941	1.1851	1.17	5.95	-1	-1	2.7		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.7568	0.8301	0.6967	0.7850	0.8350	0.8184	0.8811	0.7363	-----	0.792	5.99	0.999	1.00	7.6	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2858	0.3239	0.2828	0.3050	0.3414	0.3426	0.3885	0.2699	-----	0.318	6.78	0.997	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chlorobenzene	1	0	Avg	0.8546	0.9026	0.7999	0.8728	0.9417	0.9215	0.9383	0.8425	-----	0.884	6.75	1.00	1.00	5.7	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butyl acrylate	1	0	Avg	1.0368	1.0495	0.9831	1.1125	1.2049	0.9964	0.8195	0.8936	-----	1.01	6.99	0.985	0.999	12	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Amyl acetate	1	0	Avg	0.8680	0.8958	0.8281	0.9223	1.0274	0.9167	-----	0.7816	-----	0.891	7.11	0.997	0.999	8.8	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromoform	1	0	Avg	0.4460	0.4727	0.4144	0.4635	0.4951	0.4802	0.4182	0.3913	-----	0.448	7.20	0.995	1.00	8.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethylbenzene	1	0	Avg	0.7215	0.7124	0.6496	0.7088	0.7993	0.6198	-----	0.5676	-----	0.683	6.79	0.987	0.998	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.7637	0.8266	0.7271	0.7848	0.8123	0.6413	1.1360	0.7313	-----	0.803	7.42	0.956	0.994	18	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromofluorobenzene	1	0	Avg	0.8056	0.8174	0.8159	0.8012	0.7872	0.6645	0.7653	0.8229	0.8116	0.788	7.37	-1	-1	6.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.7747	1.8889	1.6569	1.8301	2.0008	1.8243	1.0632	1.6717	-----	1.71	7.07	0.905	0.997	17	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
m&p-Xylenes	1	0	Avg	1.0340	1.0939	0.9659	1.0408	1.1392	0.9889	0.8696	1.0283	1.1927	1.04	6.85	0.994	1.00	9.2	0.10	40.00	10.00	20.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	1.0041	1.0710	0.9276	1.0414	1.1310	1.0054	0.7052	0.9830	-----	0.984	7.07	0.960	0.999	13	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.1883	0.1749	0.1528	0.2071	0.2387	0.2032	-----	0.1616	-----	0.190	7.44	0.995	0.998	16		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,3-Dichlorobenzene	1	0	Avg	1.1796	1.2835	1.1410	1.2034	1.2969	1.2282	1.2308	1.1999	-----	1.22	7.99	1.00	1.00	4.2	0.60	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dichlorobenzene	1	0	Avg	1.1768	1.2810	1.1266	1.2036	1.3079	1.2265	1.3834	1.2848	-----	1.25	8.04	0.997	0.999	6.5	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichlorobenzene	1	0	Avg	1.0779	1.1950	1.0384	1.0979	1.2106	1.1601	1.2217	1.2032	-----	1.15	8.26	0.999	1.00	6.1	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Isopropylbenzene	1	0	Avg	2.5331	2.7095	2.3666	2.5515	2.7377	2.3923	1.5864	2.3166	-----	2.40	7.26	0.945	0.999	15	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Avg	0.0216	0.0272	0.0214	0.0218	0.0213	0.0189	0.0142	0.0191	-----	0.0207	7.34	0.975	1.00	17		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Camphene	1	0	Avg	0.6702	0.7217	0.6523	0.6872	0.7358	0.5838	0.9876	0.6258	-----	0.708	7.43	0.961	0.994	17		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichloropropane	1	0	Avg	0.7874	0.8061	0.7283	0.8437	0.9464	0.8308	1.2755	0.7426	-----	0.870	7.46	0.972	0.997	20		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chlorotoluene	1	0	Avg	1.4787	1.6277	1.4300	1.5536	1.6953	1.4416	0.9231	1.3925	-----	1.44	7.56	0.933	0.999	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.08
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0092507 0260

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_2

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time
1	2M142492.D	CAL @ 20 PPB	09/29/20 16:47	2	2M142489.D	CAL @ 5 PPB	09/29/20 15:48
3	2M142490.D	CAL @ 10 PPB	09/29/20 16:08	4	2M142494.D	CAL @ 50 PPB	09/29/20 17:26
5	2M142496.D	CAL @ 100 PPB	09/29/20 18:05	6	2M142499.D	CAL @ 250 PPB	09/29/20 19:04
7	2M142502.D	CAL @ 500 PPB	09/29/20 20:03	8	2M142488.D	CAL @ 1 PPB	09/29/20 15:28
9	2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09				

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.4062	2.6874	2.3407	2.4997	2.7248	2.7429	1.6090	2.3031	-----	2.41	7.55	0.912	0.994	15		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Chlorotoluene	1	0	Avg	1.4959	1.6231	1.4308	1.5804	1.7572	0.9110	-----	1.4889	-----	1.47	7.62	0.885	0.992	18		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
n-Propylbenzene	1	0	Avg	2.9227	3.1237	2.8066	3.0040	3.2240	2.9041	2.1478	2.9683	-----	2.89	7.49	0.972	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.4792	1.6627	1.4345	1.5518	1.7064	1.4734	2.0297	1.5105	-----	1.61	7.46	0.983	0.997	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3,5-Trimethylbenzen	1	0	Avg	1.9328	2.0335	1.8301	2.0046	2.2028	1.1981	-----	1.8900	-----	1.87	7.57	0.904	0.994	17		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Butyl methacrylate	1	0	Avg	0.7041	0.7555	0.6700	0.7514	0.8501	-----	-----	0.6534	-----	0.731	7.58	0.996	1.00	9.8	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
t-Butylbenzene	1	0	Avg	1.8937	2.0928	1.8163	1.9202	2.0934	1.8489	1.0676	1.8633	-----	1.82	7.78	0.899	0.998	18		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Avg	2.0056	2.1723	1.9204	2.0775	2.2364	1.7137	-----	1.9768	-----	2.01	7.80	0.986	0.999	8.6		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
sec-Butylbenzene	1	0	Avg	2.3365	2.5682	2.2416	2.3901	2.5814	2.3469	1.2902	2.2855	-----	2.26	7.90	0.882	0.997	18		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	1.9862	2.0940	1.8405	2.0175	2.1777	2.0361	1.3000	1.8688	-----	1.92	7.96	0.937	0.998	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	2.0370	2.1798	1.9305	2.1144	2.2571	2.0506	1.2200	2.0605	-----	1.98	8.20	0.912	0.998	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	1.0661	1.1629	1.0199	1.1076	1.1892	1.0958	0.9058	1.1145	-----	1.08	8.19	0.989	1.00	8.2		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	1.5303	1.6348	1.4365	1.5927	1.7098	1.2843	2.1031	1.3747	-----	1.58	8.65	0.965	0.993	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1708	0.1749	0.1496	0.1703	0.1822	0.1421	-----	0.1520	-----	0.163	8.71	0.988	0.999	9.2	0.05	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Camphor	1	0	Avg	0.0627	0.0604	0.0591	0.0714	0.0773	0.0654	-----	0.0566	0.0620	0.0644	9.15	0.995	0.999	11		200.0	50.00	100.0	500.0	1000.	2500.		10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.2327	0.2736	0.2236	0.2390	0.2424	0.1645	0.3030	0.3077	-----	0.248	9.28	0.951	0.990	19		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.5644	0.5925	0.5389	0.5732	0.6091	0.4389	0.8041	0.6075	-----	0.591	9.20	0.952	0.992	17	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.4534	0.5003	0.4542	0.4852	0.5073	0.3617	0.6368	0.5236	-----	0.490	9.50	0.956	0.992	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Naphthalene	1	0	Avg	1.5393	1.5307	1.4269	1.6731	1.8176	1.3629	2.3710	1.4483	-----	1.65	9.36	0.958	0.993	20		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags	*Note:* Avg Rsd: 10.08
a - failed the min rf criteria	*Corr 1 = Correlation Coefficient for linear Eq.*
c - failed the minimum correlation coeff criteria(if applicable)	*Corr 2 = Correlation Coefficient for quad Eq.*
	Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142492.D Sam Mult : 1 Vial# : 8 Qt On : 09/30/20 10:13
Acq On : 09/29/20 16:47 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	359594	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	324303	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	173285	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	101841	30.78	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.60%			
39) 1,2-Dichloroethane-d4	4.910	67	53771	31.48	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.93%			
66) Toluene-d8	5.952	98	384679	30.42	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.40%			
76) Bromofluorobenzene	7.367	174	139610	30.12	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.40%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	73950	23.5515	ug/l	90
6) Dichlorodifluoromethane	1.685	85	78335	39.4206	ug/l	99
7) Chloromethane	1.855	50	76916	35.1225	ug/l	99
8) Bromomethane	2.258	94	34221	18.0772	ug/l	94
9) Vinyl Chloride	1.959	62	88997	33.4327	ug/l	97
10) Chloroethane	2.343	64	58189	30.3184	ug/l	95
11) Trichlorofluoromethane	2.569	101	135435	29.2896	ug/l	99
12) Ethyl ether	2.800	59	43967	23.8875	ug/l	98
13) Furan	2.843	39	76150	22.8935	ug/l	95
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	46223	24.2376	ug/l	94
15) Methylene Chloride	3.416	84	64555	23.8929	ug/l	99
16) Acrolein	2.916	56	52268	155.1246	ug/l	98
17) Acrylonitrile	3.623	53	21803	23.6410	ug/l	86
18) Iodomethane	3.154	142	44177	16.0933	ug/l	94
19) Acetone	3.044	43	86895	118.3174	ug/l	100
20) Carbon Disulfide	3.221	76	171980	24.3901	ug/l	100
21) t-Butyl Alcohol	3.477	59	28783	110.6024	ug/l	95
22) n-Hexane	3.873	57	53681	24.5387	ug/l	99
23) Di-isopropyl-ether	4.026	45	155446	23.8726	ug/l	97
24) 1,1-Dichloroethene	3.014	61	89480	24.7143	ug/l	98
25) Methyl Acetate	3.318	43	39667	23.8543	ug/l	100
26) Methyl-t-butyl ether	3.642	73	165485	24.1759	ug/l	100
27) 1,1-Dichloroethane	4.001	63	108147	24.1157	ug/l	96
28) trans-1,2-Dichloroethene	3.654	96	65145	23.7496	ug/l	96
29) Ethyl-t-butyl ether	4.294	59	168416	22.9280	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	107220	23.8159	ug/l	96
31) Bromochloromethane	4.568	49	51731	24.8475	ug/l	93
32) 2,2-Dichloropropane	4.416	77	97337	23.8146	ug/l	98
33) Ethyl acetate	4.440	43	55588m	23.5021	ug/l	
34) 1,4-Dioxane	5.495	88	39171	1105.6363	ug/l	98
35) 1,1-Dichloropropene	4.824	75	91053	24.4782	ug/l	94
36) Chloroform	4.605	83	120181	24.3437	ug/l	97
38) Cyclohexane	4.769	56	82131	25.7267	ug/l	98
40) 1,2-Dichloroethane	4.952	62	93223	22.3111	ug/l	99
41) 2-Butanone	4.410	43	27195m	23.9332	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	106870	24.2329	ug/l	97
43) Carbon Tetrachloride	4.830	117	89989	22.4644	ug/l	91
44) Vinyl Acetate	4.020	43	178090	22.1135	ug/l	100
45) Bromodichloromethane	5.568	83	93975	23.2956	ug/l	99
46) Methylcyclohexane	5.416	83	77013	24.3502	ug/l	100
47) Dibromomethane	5.495	174	47266	22.1201	ug/l	99
48) 1,2-Dichloropropane	5.428	63	63058	23.2573	ug/l	99
49) Trichloroethene	5.300	130	72300	23.2984	ug/l	95
50) Benzene	4.952	78	253309	23.6841	ug/l	100
51) tert-Amyl methyl ether	4.989	73	173172	22.1158	ug/l	98
53) Iso-propylacetate	4.946	43	103073	19.6998	ug/l	99
54) Methyl methacrylate	5.452	41	52580	22.7890	ug/l	95
55) Dibromochloromethane	6.422	129	72757	20.2131	ug/l	98
56) 2-Chloroethylvinylether	5.708	63	7930	10.4827	ug/l	98
57) cis-1,3-Dichloropropene	5.806	75	100732	20.9511	ug/l	99
58) trans-1,3-Dichloropropene	6.086	75	92287	18.6687	ug/l	96
59) Ethyl methacrylate	6.111	41	52151	20.5423	ug/l	98
60) 1,1,2-Trichloroethane	6.196	97	61088	20.9836	ug/l	95
61) 1,2-Dibromoethane	6.495	107	65481	21.6398	ug/l	98
62) 1,3-Dichloropropane	6.287	76	104186	21.0511	ug/l	99
63) 4-Methyl-2-Pentanone	5.867	43	57939	23.1571	ug/l	95
64) 2-Hexanone	6.306	43	41012	20.8866	ug/l	98
65) Tetrachloroethene	6.287	164	55981	20.6375	ug/l	97
67) Toluene	5.989	92	163627	21.8006	ug/l	97

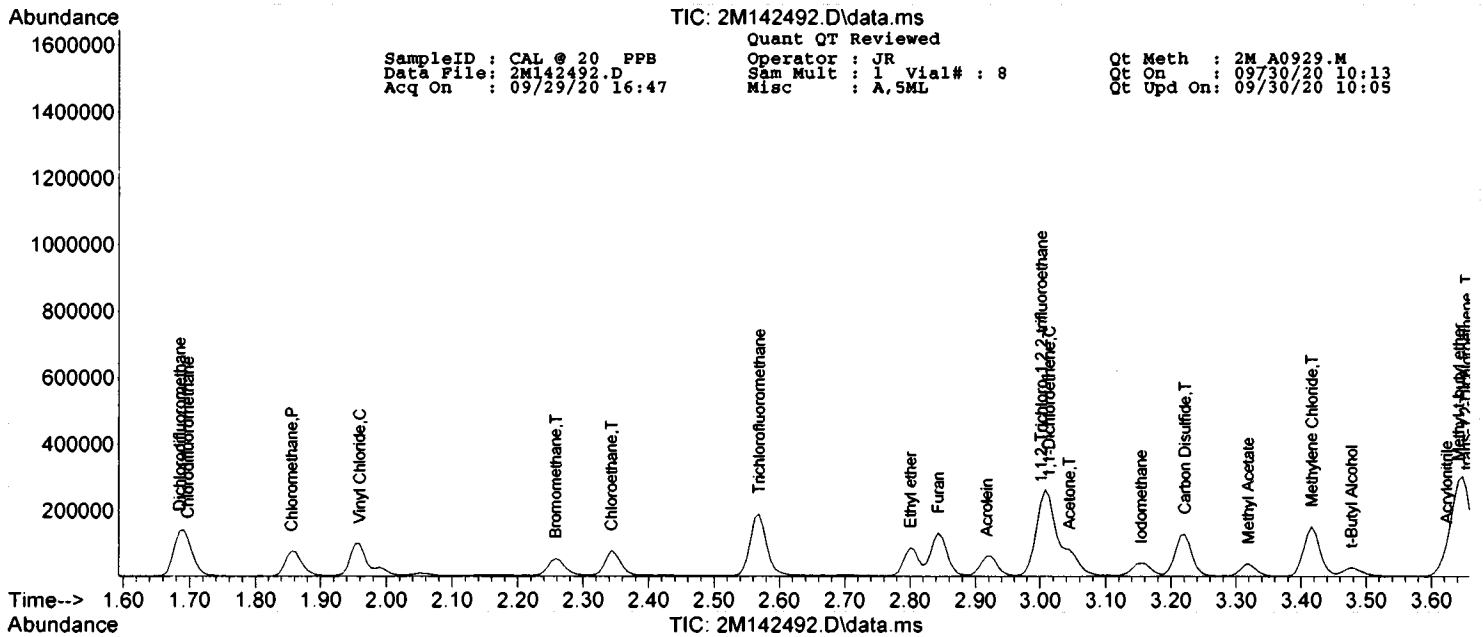
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142492.D Sam Mult : 1 Vial# : 8 Qt On : 09/30/20 10:13
Acq On : 09/29/20 16:47 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.781	133	61800	18.8467	ug/l	94
69) Chlorobenzene	6.751	112	184775	22.0015	ug/l	100
71) n-Butyl acrylate	6.995	55	119785	23.6429	ug/l	97
72) n-Amyl acetate	7.111	43	100277	27.5241	ug/l	99
73) Bromoform	7.202	173	51534	21.6910	ug/l	98
74) Ethylbenzene	6.787	106	83358	25.4573	ug/l	96
75) 1,1,2,2-Tetrachloroethane	7.415	83	88229	26.2820	ug/l	99
77) Styrene	7.074	104	205029	25.4902	ug/l	98
78) m&p-Xylenes	6.848	106	238916	50.6218	ug/l	92
79) o-Xylene	7.068	106	115998	24.8451	ug/l	97
80) trans-1,4-Dichloro-2-b...	7.440	53	21754	16.2390	ug/l	77
81) 1,3-Dichlorobenzene	7.988	146	136278	23.7316	ug/l	97
82) 1,4-Dichlorobenzene	8.031	146	135958	23.0809	ug/l	99
83) 1,2-Dichlorobenzene	8.257	146	124533	22.9906	ug/l	97
84) Isopropylbenzene	7.263	105	292634	25.5085	ug/l	99
85) Cyclohexanone	7.342	55	12490	111.7359	ug/l	93
86) Camphene	7.434	93	77427	24.6573	ug/l	95
87) 1,2,3-Trichloropropane	7.458	75	90969	19.8571	ug/l	96
88) 2-Chlorotoluene	7.562	91	170834	25.8774	ug/l	98
89) p-Ethyltoluene	7.549	105	277978	25.4029	ug/l	99
90) 4-Chlorotoluene	7.617	91	172811	23.7919	ug/l	98
91) n-Propylbenzene	7.488	91	337645	25.7196	ug/l	97
92) Bromobenzene	7.464	77	170884	22.7132	ug/l	96
93) 1,3,5-Trimethylbenzene	7.574	105	223292	25.7706	ug/l	99
94) Butyl methacrylate	7.580	41	81345	23.7987	ug/l	98
95) t-Butylbenzene	7.775	119	218767	26.4176	ug/l	99
96) 1,2,4-Trimethylbenzene	7.793	105	231701	27.1978	ug/l	99
97) sec-Butylbenzene	7.897	105	269929	24.5488	ug/l	100
98) 4-Isopropyltoluene	7.964	119	229459	24.1501	ug/l	98
99) n-Butylbenzene	8.202	91	235330	24.4972	ug/l	96
100) p-Diethylbenzene	8.183	119	123160	24.9470	ug/l	98
101) 1,2,4,5-Tetramethylben...	8.647	119	176795	24.8384	ug/l	94
102) 1,2-Dibromo-3-Chloropr...	8.708	157	19733	25.2100	ug/l	85
103) Camphor	9.141	95	72514	233.5062	ug/l	97
104) Hexachlorobutadiene	9.281	225	26883	24.3168	ug/l	96
105) 1,2,4-Trichlorobenzene	9.202	180	65206	22.5702	ug/l	97
106) 1,2,3-Trichlorobenzene	9.500	180	52380	22.9221	ug/l	97
107) Naphthalene	9.360	128	177828	24.0632	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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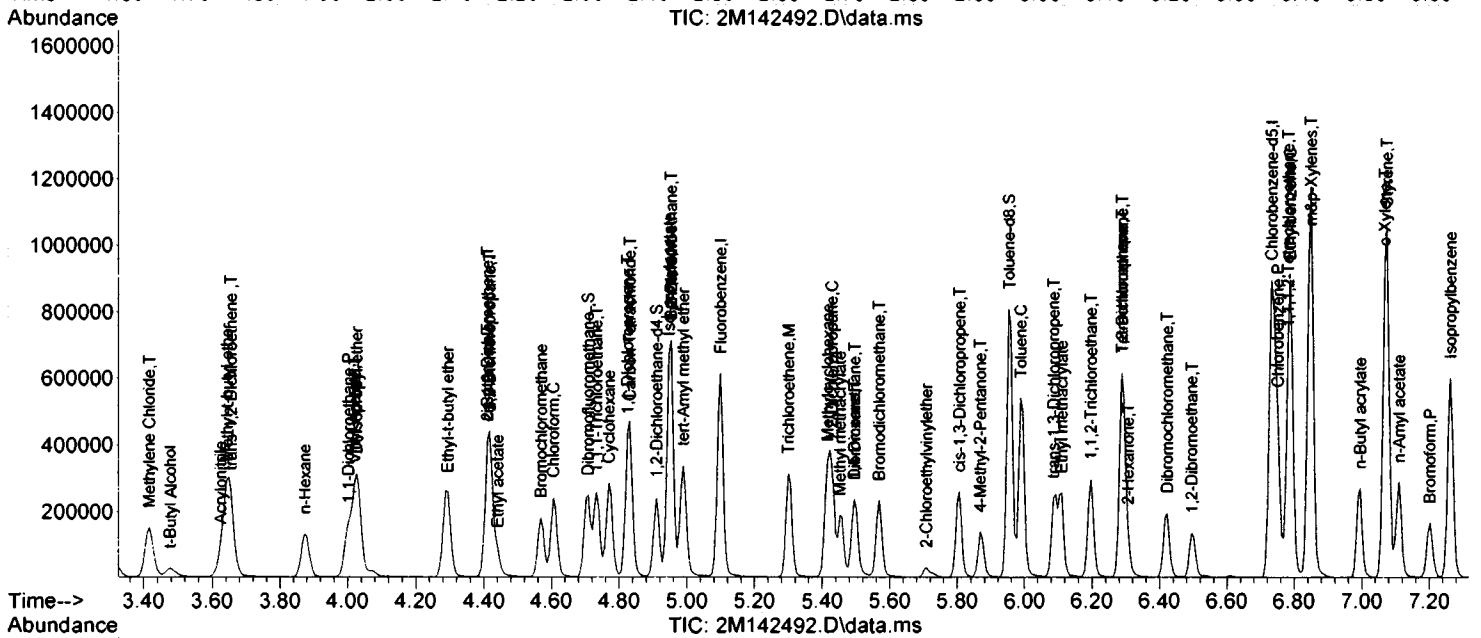
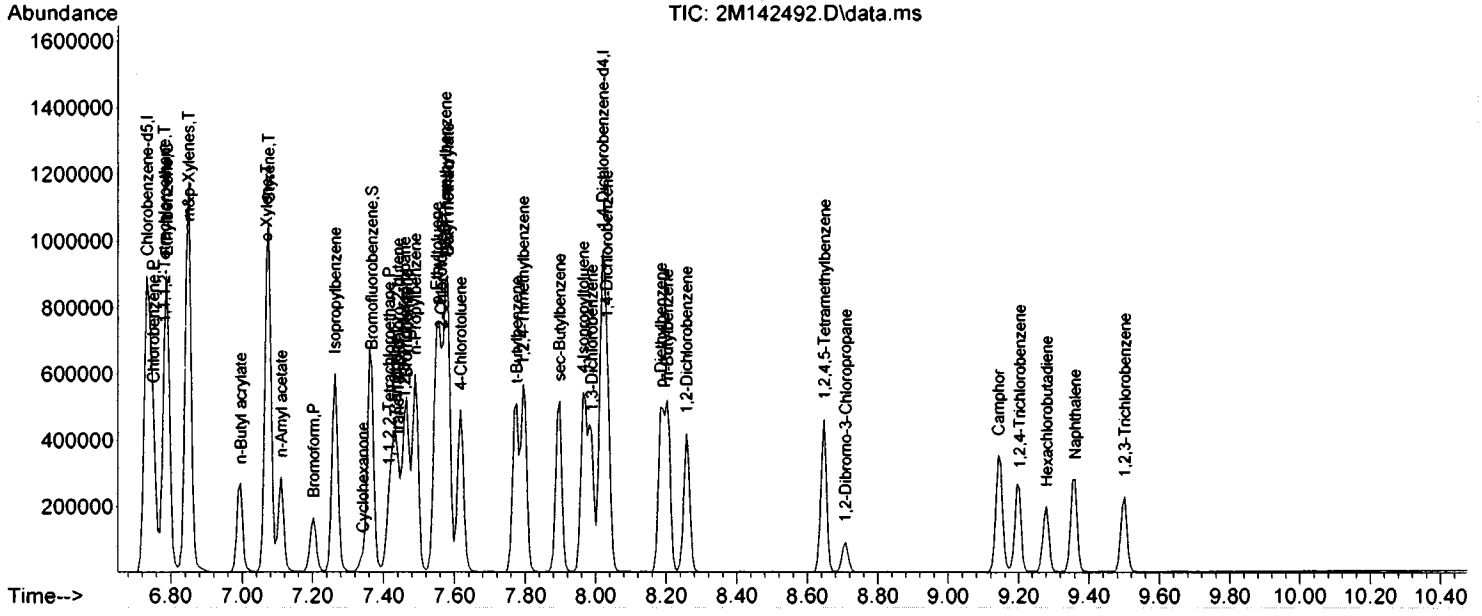
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 2M142492.D
Acq On : 09/29/20 16:47
Operator : JR
Sam Mult : 1 Vial# : 8
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 09730/20 10:13
Qt Upd On: 09/30/20 10:05
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->


Abundance
TIC: 2M142492.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Ethyl acetate
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M142492.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142489.D Sam Mult : 1 Vial# : 5 Qt On : 09/30/20 10:14
Acq On : 09/29/20 15:48 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	340498	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	303983	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	159994	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.709	111	98787	31.53	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.10%			
39) 1,2-Dichloroethane-d4	4.910	67	49482	30.60	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.00%			
66) Toluene-d8	5.952	98	364382	30.74	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.47%			
76) Bromofluorobenzene	7.367	174	130785	30.56	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.87%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	17276	5.8106	ug/l	95
6) Dichlorodifluoromethane	1.685	85	17432	9.2643	ug/l	94
7) Chloromethane	1.855	50	19611	9.4573	ug/l	92
8) Bromomethane	2.258	94	8536	4.7620	ug/l	95
9) Vinyl Chloride	1.953	62	22559	8.9498	ug/l	74
10) Chloroethane	2.343	64	13927	7.6634	ug/l	88
11) Trichlorofluoromethane	2.569	101	33697	7.6961	ug/l	98
12) Ethyl ether	2.806	59	11438	6.5629	ug/l	99
13) Furan	2.843	39	19477	6.1839	ug/l	95
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	11634	6.4426	ug/l	98
15) Methylene Chloride	3.416	84	16808	6.5698	ug/l	94
16) Acrolein	2.916	56	12738	39.9249	ug/l	98
17) Acrylonitrile	3.629	53	5826	6.6714	ug/l	82
18) Iodomethane	3.154	142	9362	3.6018	ug/l	99
19) Acetone	3.044	43	22848	32.8549	ug/l	97
20) Carbon Disulfide	3.221	76	45613	6.8316	ug/l	100
21) t-Butyl Alcohol	3.477	59	7400	30.0302	ug/l	89
22) n-Hexane	3.873	57	13335	6.4376	ug/l	98
23) Di-isopropyl-ether	4.032	45	37681	6.1114	ug/l	95
24) 1,1-Dichloroethene	3.014	61	22358	6.5216	ug/l	97
25) Methyl Acetate	3.319	43	11072	7.0317	ug/l	100
26) Methyl-t-butyl ether	3.642	73	40267	6.2126	ug/l	99
27) 1,1-Dichloroethane	4.001	63	27181	6.4010	ug/l	96
28) trans-1,2-Dichloroethene	3.654	96	16659	6.4139	ug/l	96
29) Ethyl-t-butyl ether	4.288	59	40891	5.8791	ug/l	99
30) cis-1,2-Dichloroethene	4.416	61	27351	6.4160	ug/l	95
31) Bromochloromethane	4.568	49	12985	6.5868	ug/l	93
32) 2,2-Dichloropropane	4.416	77	24907	6.4355	ug/l	98
33) Ethyl acetate	4.440	43	14378m	6.4198	ug/l	
34) 1,4-Dioxane	5.495	88	9249	275.7022	ug/l	98
35) 1,1-Dichloropropene	4.824	75	22880	6.4959	ug/l	97
36) Chloroform	4.605	83	30251	6.4713	ug/l	95
38) Cyclohexane	4.769	56	19780	6.5434	ug/l	99
40) 1,2-Dichloroethane	4.952	62	24385	6.1634	ug/l	95
41) 2-Butanone	4.410	43	6589m	6.1239	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	25976	6.2204	ug/l	84
43) Carbon Tetrachloride	4.830	117	21022	5.5421	ug/l	98
44) Vinyl Acetate	4.020	43	44538	5.8405	ug/l	100
45) Bromodichloromethane	5.568	83	23779	6.2252	ug/l	95
46) Methylcyclohexane	5.416	83	19865	6.6332	ug/l	92
47) Dibromomethane	5.495	174	11521	5.6941	ug/l	90
48) 1,2-Dichloropropane	5.428	63	15921	6.2014	ug/l	100
49) Trichloroethene	5.300	130	17567	5.9784	ug/l	88
50) Benzene	4.952	78	63211	6.2416	ug/l	100
51) tert-Amyl methyl ether	4.989	73	44123	5.9510	ug/l	98
53) Iso-propylacetate	4.946	43	24491	4.9937	ug/l	96
54) Methyl methacrylate	5.452	41	13194	6.1007	ug/l	94
55) Dibromochloromethane	6.422	129	18053	5.3507	ug/l	93
56) 2-Chloroethylvinylether	5.708	63	1856	2.6175	ug/l	96
57) cis-1,3-Dichloropropene	5.806	75	24869	5.5182	ug/l	99
58) trans-1,3-Dichloropropene	6.092	75	23554	5.0832	ug/l	98
59) Ethyl methacrylate	6.105	41	13213	5.5525	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	14944	5.4764	ug/l	92
61) 1,2-Dibromoethane	6.495	107	16390	5.7785	ug/l	96
62) 1,3-Dichloropropane	6.288	76	26556	5.7244	ug/l	99
63) 4-Methyl-2-Pentanone	5.873	43	14558	6.2075	ug/l	96
64) 2-Hexanone	6.306	43	10575	5.7457	ug/l	90
65) Tetrachloroethene	6.288	164	13873	5.4562	ug/l	95
67) Toluene	5.989	92	42059	5.9783	ug/l	100

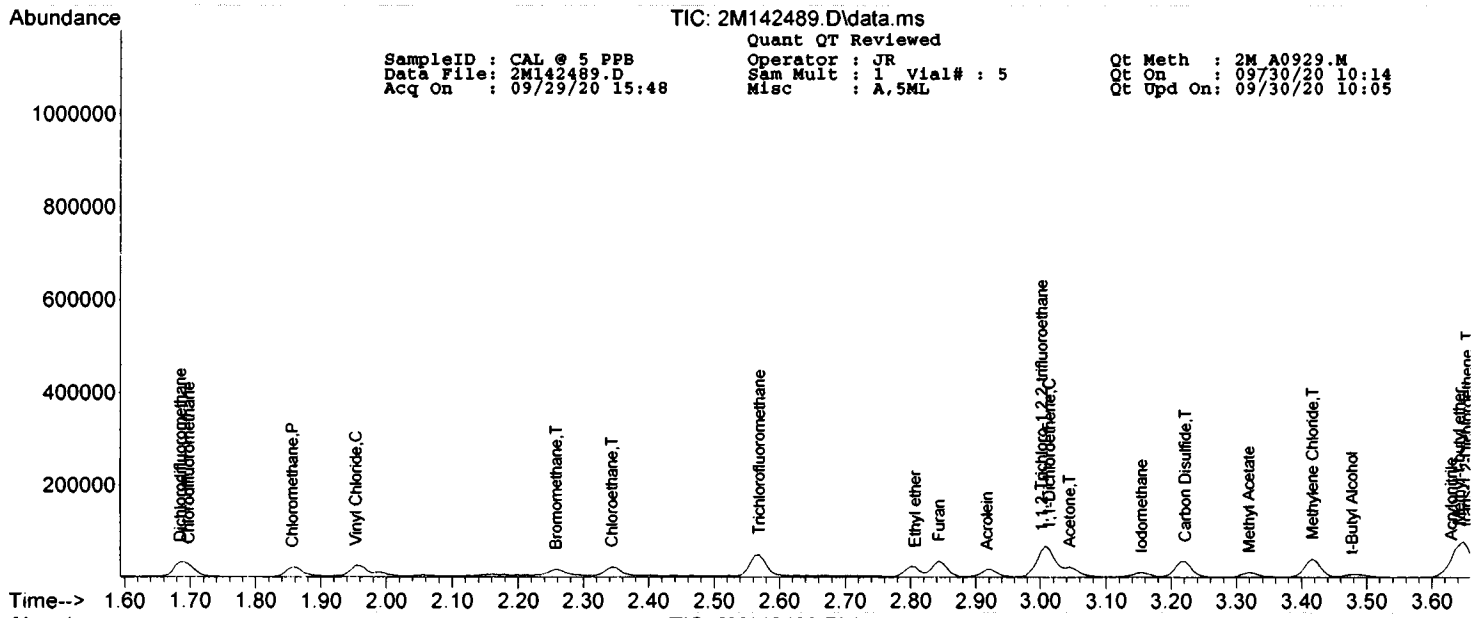
Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142489.D Sam Mult : 1 Vial# : 5 Qt On : 09/30/20 10:14
Acq On : 09/29/20 15:48 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	16413	5.3399	ug/l	91
69)	Chlorobenzene	6.751	112	45732	5.8094	ug/l	97
71)	n-Butyl acrylate	6.995	55	27987	5.9829	ug/l	96
72)	n-Amyl acetate	7.111	43	23887	7.1012	ug/l	99
73)	Bromoform	7.202	173	12607	5.7472	ug/l	97
74)	Ethylbenzene	6.794	106	18998	6.2839	ug/l	97
75)	1,1,2,2-Tetrachloroethane	7.415	83	22044	7.1121	ug/l	98
77)	Styrene	7.074	104	50371	6.7826	ug/l	91
78)	m&p-Xylenes	6.848	106	58343	13.3887	ug/l	91
79)	o-Xylene	7.068	106	28561	6.6255	ug/l	100
80)	trans-1,4-Dichloro-2-b...	7.440	53	4666	3.7724	ug/l	73
81)	1,3-Dichlorobenzene	7.988	146	34226	6.4553	ug/l	97
82)	1,4-Dichlorobenzene	8.031	146	34159	6.2807	ug/l	97
83)	1,2-Dichlorobenzene	8.257	146	31866	6.3716	ug/l	97
84)	Isopropylbenzene	7.263	105	72251	6.8212	ug/l	99
85)	Cyclohexanone	7.342	55	3626	35.1330	ug/l	83
86)	Camphene	7.434	93	19245	6.6379	ug/l	95
87)	1,2,3-Trichloropropane	7.458	75	21496	5.0820	ug/l	93
88)	2-Chlorotoluene	7.562	91	43406	7.1212	ug/l	97
89)	p-Ethyltoluene	7.549	105	71662	7.0928	ug/l	98
90)	4-Chlorotoluene	7.617	91	43281	6.4538	ug/l	97
91)	n-Propylbenzene	7.489	91	83298	6.8722	ug/l	98
92)	Bromobenzene	7.464	77	44337	6.3826	ug/l	96
93)	1,3,5-Trimethylbenzene	7.574	105	54226	6.7782	ug/l	99
94)	Butyl methacrylate	7.580	41	20147	6.3840	ug/l	96
95)	t-Butylbenzene	7.775	119	55807	7.2989	ug/l	99
96)	1,2,4-Trimethylbenzene	7.793	105	57926	7.3644	ug/l	99
97)	sec-Butylbenzene	7.897	105	68483	6.7456	ug/l	100
98)	4-Isopropyltoluene	7.964	119	55839	6.3652	ug/l	98
99)	n-Butylbenzene	8.202	91	58127	6.5535	ug/l	95
100)	p-Diethylbenzene	8.190	119	31012	6.8036	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	43594	6.6334	ug/l	95
102)	1,2-Dibromo-3-Chloropr...	8.708	157	4665	6.4549	ug/l	80
103)	Camphor	9.141	95	16118	56.2141	ug/l	96
104)	Hexachlorobutadiene	9.281	225	7296	7.1478	ug/l	99
105)	1,2,4-Trichlorobenzene	9.202	180	15801	5.9237	ug/l	98
106)	1,2,3-Trichlorobenzene	9.500	180	13341	6.3232	ug/l	96
107)	Naphthalene	9.360	128	40818	5.9822	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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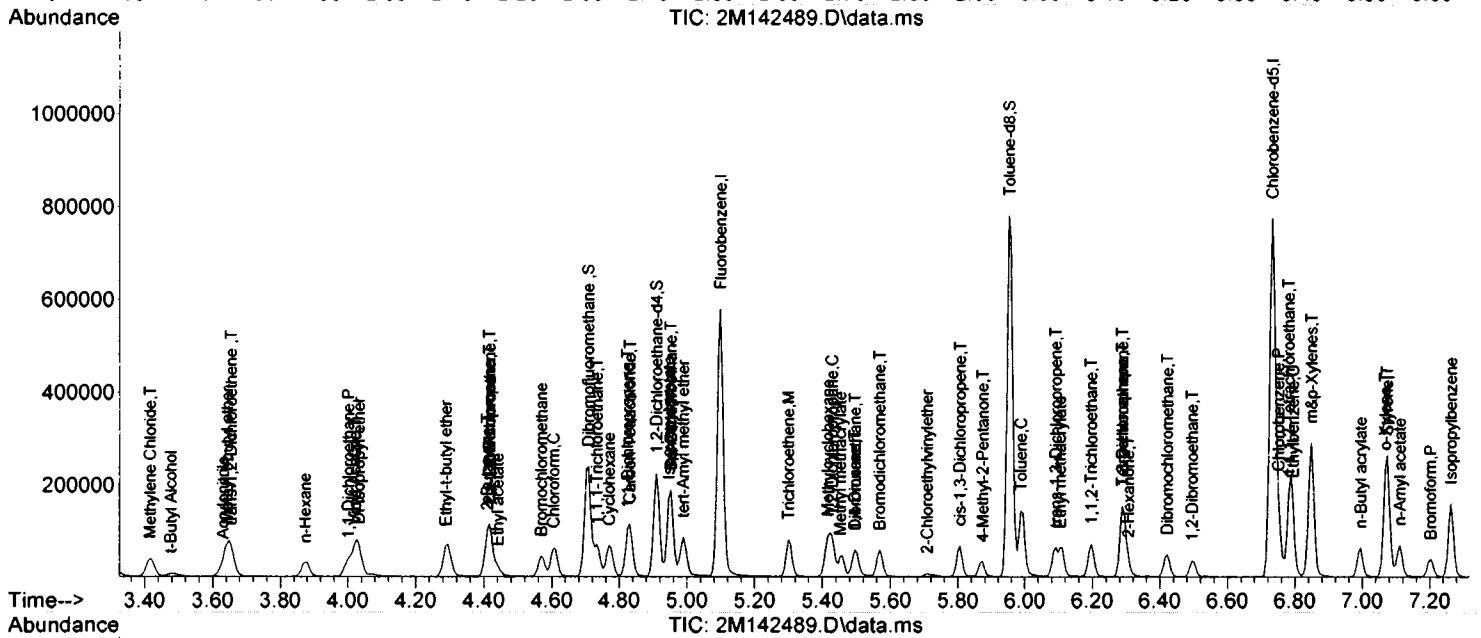
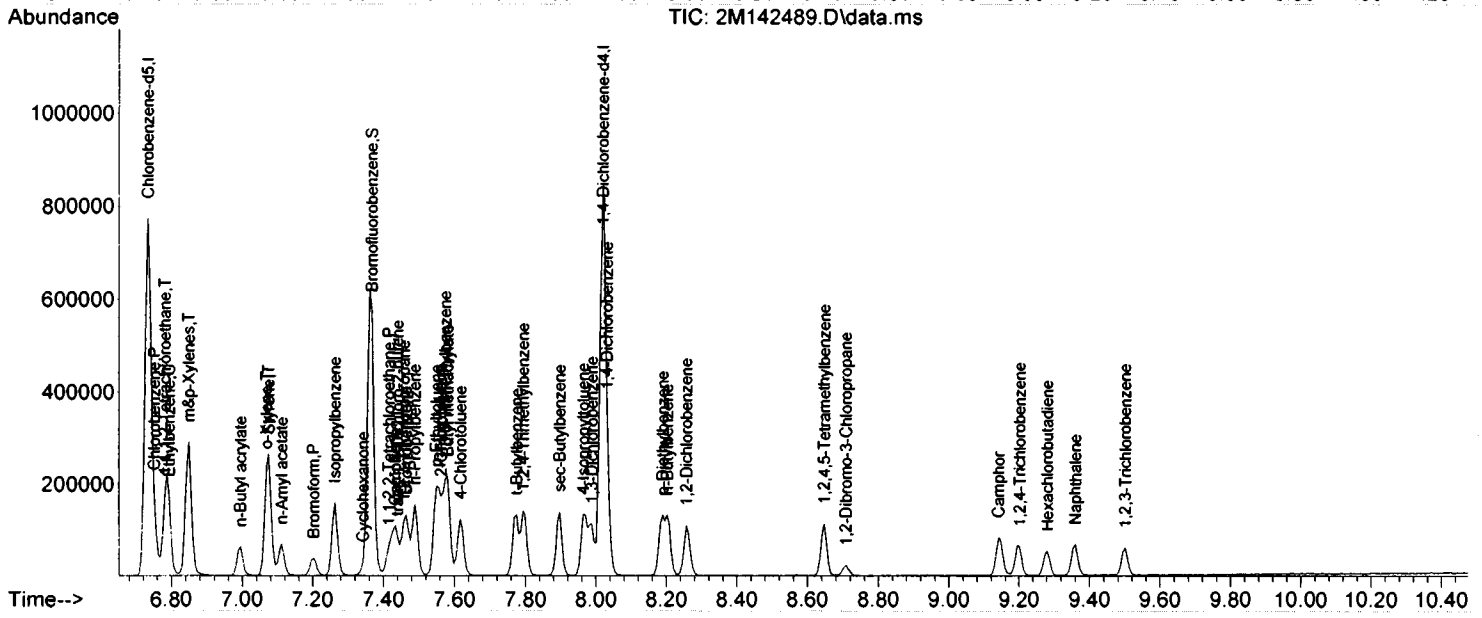
SampleID : CAL @ 5 PPB
Data File: 2M142489.D
Acq On : 09/29/20 15:48
Operator : JR
Sam Mult : 1 Vial# : 5
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 09/30/20 10:14
Qt Upd On: 09/30/20 10:05
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->


Abundance
TIC: 2M142489.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M142489.D\data.ms
Chlorobenzene-d5,I
Chloroethane,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142490.D Sam Mult : 1 Vial# : 6 Qt On : 09/30/20 10:14
Acq On : 09/29/20 16:08 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	387191	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	348044	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	187417	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	112259	31.51	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.03%			
39) 1,2-Dichloroethane-d4	4.910	67	58660	31.90	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.33%			
66) Toluene-d8	5.952	98	415010	30.58	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.93%			
76) Bromofluorobenzene	7.367	174	152925	30.51	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.70%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	35094	10.3801	ug/l	96
6) Dichlorodifluoromethane	1.685	85	35063	16.3872	ug/l	100
7) Chloromethane	1.855	50	39108	16.5852	ug/l	99
8) Bromomethane	2.258	94	18100	8.8798	ug/l	98
9) Vinyl Chloride	1.953	62	43504	15.1779	ug/l	92
10) Chloroethane	2.343	64	30079	14.5551	ug/l	98
11) Trichlorofluoromethane	2.563	101	70233	14.1062	ug/l	95
12) Ethyl ether	2.800	59	23444	11.8294	ug/l	99
13) Furan	2.843	39	40069	11.1876	ug/l	93
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	23090	11.2446	ug/l	98
15) Methylene Chloride	3.416	84	32499	11.1711	ug/l	97
16) Acrolein	2.916	56	26877	74.0820	ug/l	98
17) Acrylonitrile	3.623	53	11608	11.6895	ug/l	97
18) Iodomethane	3.154	142	20613	6.9739	ug/l	99
19) Acetone	3.044	43	47540	60.1174	ug/l	95
20) Carbon Disulfide	3.215	76	90000	11.8540	ug/l	100
21) t-Butyl Alcohol	3.477	59	15988	57.0571	ug/l	95
22) n-Hexane	3.873	57	29932	12.7073	ug/l	93
23) Di-isopropyl-ether	4.032	45	78544	11.2026	ug/l	100
24) 1,1-Dichloroethene	3.008	61	45545	11.6829	ug/l	96
25) Methyl Acetate	3.319	43	23003	12.8472	ug/l	100
26) Methyl-t-butyl ether	3.642	73	84924	11.5224	ug/l	100
27) 1,1-Dichloroethane	4.001	63	52845	10.9440	ug/l	95
28) trans-1,2-Dichloroethene	3.648	96	32495	11.0022	ug/l	98
29) Ethyl-t-butyl ether	4.294	59	86928	10.9908	ug/l	97
30) cis-1,2-Dichloroethene	4.410	61	54356	11.2131	ug/l	96
31) Bromochloromethane	4.568	49	26069	11.6290	ug/l	96
32) 2,2-Dichloropropane	4.416	77	49726	11.2989	ug/l	98
33) Ethyl acetate	4.434	43	28776m	11.2991	ug/l	
34) 1,4-Dioxane	5.495	88	22069	578.5188	ug/l	97
35) 1,1-Dichloropropene	4.824	75	45140	11.2703	ug/l	98
36) Chloroform	4.605	83	60715	11.4218	ug/l	97
38) Cyclohexane	4.770	56	42809	12.4537	ug/l	94
40) 1,2-Dichloroethane	4.952	62	47909	10.6488	ug/l	97
41) 2-Butanone	4.422	43	13328m	10.8934	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	53078	11.1777	ug/l	89
43) Carbon Tetrachloride	4.831	117	43784	10.1510	ug/l	88
44) Vinyl Acetate	4.020	43	90548	10.4420	ug/l	100
45) Bromodichloromethane	5.568	83	48811	11.2374	ug/l	97
46) Methylcyclohexane	5.416	83	39461	11.5876	ug/l	99
47) Dibromomethane	5.495	174	23385	10.1640	ug/l	94
48) 1,2-Dichloropropane	5.428	63	32713	11.2054	ug/l	95
49) Trichloroethene	5.300	130	36595	10.9521	ug/l	93
50) Benzene	4.952	78	130966	11.3724	ug/l	100
51) tert-Amyl methyl ether	4.989	73	87271	10.3510	ug/l	98
53) Iso-propylacetate	4.946	43	53765	9.5749	ug/l	98
54) Methyl methacrylate	5.452	41	26872	10.8523	ug/l	96
55) Dibromochloromethane	6.422	129	37903	9.8118	ug/l	98
56) 2-Chloroethylvinylether	5.708	63	3519	4.3345	ug/l	86
57) cis-1,3-Dichloropropene	5.806	75	51787	10.0364	ug/l	98
58) trans-1,3-Dichloropropene	6.092	75	47740	8.9986	ug/l	98
59) Ethyl methacrylate	6.111	41	27086	9.9414	ug/l	99
60) 1,1,2-Trichloroethane	6.196	97	32108	10.2767	ug/l	92
61) 1,2-Dibromoethane	6.495	107	32137	9.8960	ug/l	100
62) 1,3-Dichloropropane	6.288	76	53991	10.1649	ug/l	100
63) 4-Methyl-2-Pentanone	5.867	43	29748	11.0787	ug/l	95
64) 2-Hexanone	6.306	43	20911	9.9231	ug/l	97
65) Tetrachloroethene	6.288	164	27858	9.5694	ug/l	99
67) Toluene	5.989	92	80833	10.0351	ug/l	99

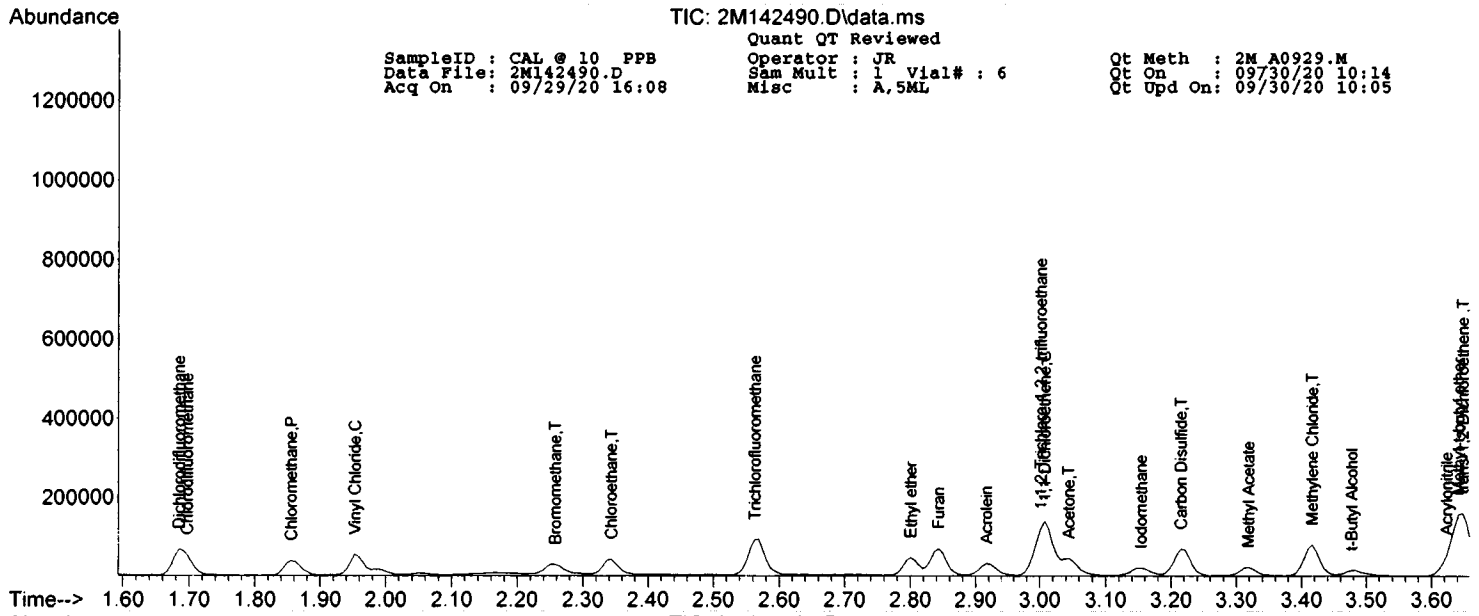
Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142490.D Sam Mult : 1 Vial# : 6 Qt On : 09/30/20 10:14
Acq On : 09/29/20 16:08 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	32817	9.3253	ug/l	98
69)	Chlorobenzene	6.751	112	92802	10.2964	ug/l	98
71)	n-Butyl acrylate	6.995	55	61420	11.2088	ug/l	100
72)	n-Amyl acetate	7.111	43	51736	13.1297	ug/l	98
73)	Bromoform	7.202	173	25891	10.0759	ug/l	96
74)	Ethylbenzene	6.787	106	40584	11.4597	ug/l	91
75)	1,1,2,2-Tetrachloroethane	7.415	83	45426	12.5113	ug/l	95
77)	Styrene	7.074	104	103512	11.8987	ug/l	99
78)	m&p-Xylenes	6.848	106	120694	23.6445	ug/l	95
79)	o-Xylene	7.074	106	57955	11.4771	ug/l	98
80)	trans-1,4-Dichloro-2-b...	7.440	53	9549	6.5907	ug/l	83
81)	1,3-Dichlorobenzene	7.988	146	71285	11.4776	ug/l	97
82)	1,4-Dichlorobenzene	8.031	146	70384	11.0478	ug/l	97
83)	1,2-Dichlorobenzene	8.257	146	64873	11.0734	ug/l	97
84)	Isopropylbenzene	7.263	105	147851	11.9162	ug/l	100
85)	Cyclohexanone	7.342	55	6703	55.4436	ug/l	93
86)	Camphene	7.434	93	40756	12.0004	ug/l	94
87)	1,2,3-Trichloropropane	7.458	75	45502	9.1834	ug/l	98
88)	2-Chlorotoluene	7.562	91	89336	12.5120	ug/l	97
89)	p-Ethyltoluene	7.550	105	146231	12.3556	ug/l	97
90)	4-Chlorotoluene	7.617	91	89390	11.3789	ug/l	99
91)	n-Propylbenzene	7.489	91	175338	12.3490	ug/l	96
92)	Bromobenzene	7.464	77	89622	11.0140	ug/l	95
93)	1,3,5-Trimethylbenzene	7.574	105	114336	12.2007	ug/l	98
94)	Butyl methacrylate	7.580	41	41860	11.3233	ug/l	98
95)	t-Butylbenzene	7.769	119	113469	12.6690	ug/l	99
96)	1,2,4-Trimethylbenzene	7.793	105	119977	13.0214	ug/l	98
97)	sec-Butylbenzene	7.897	105	140042	11.7758	ug/l	100
98)	4-Isopropyltoluene	7.964	119	114985	11.1894	ug/l	98
99)	n-Butylbenzene	8.202	91	120607	11.6082	ug/l	96
100)	p-Diethylbenzene	8.184	119	63719	11.9336	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	89742	11.6574	ug/l	95
102)	1,2-Dibromo-3-Chloropr...	8.708	157	9349	11.0433	ug/l	77
103)	Camphor	9.141	95	36937	109.9740	ug/l	99
104)	Hexachlorobutadiene	9.281	225	13971	11.6845	ug/l	98
105)	1,2,4-Trichlorobenzene	9.202	180	33672	10.7763	ug/l	96
106)	1,2,3-Trichlorobenzene	9.500	180	28378	11.4821	ug/l	98
107)	Naphthalene	9.360	128	89145	11.1533	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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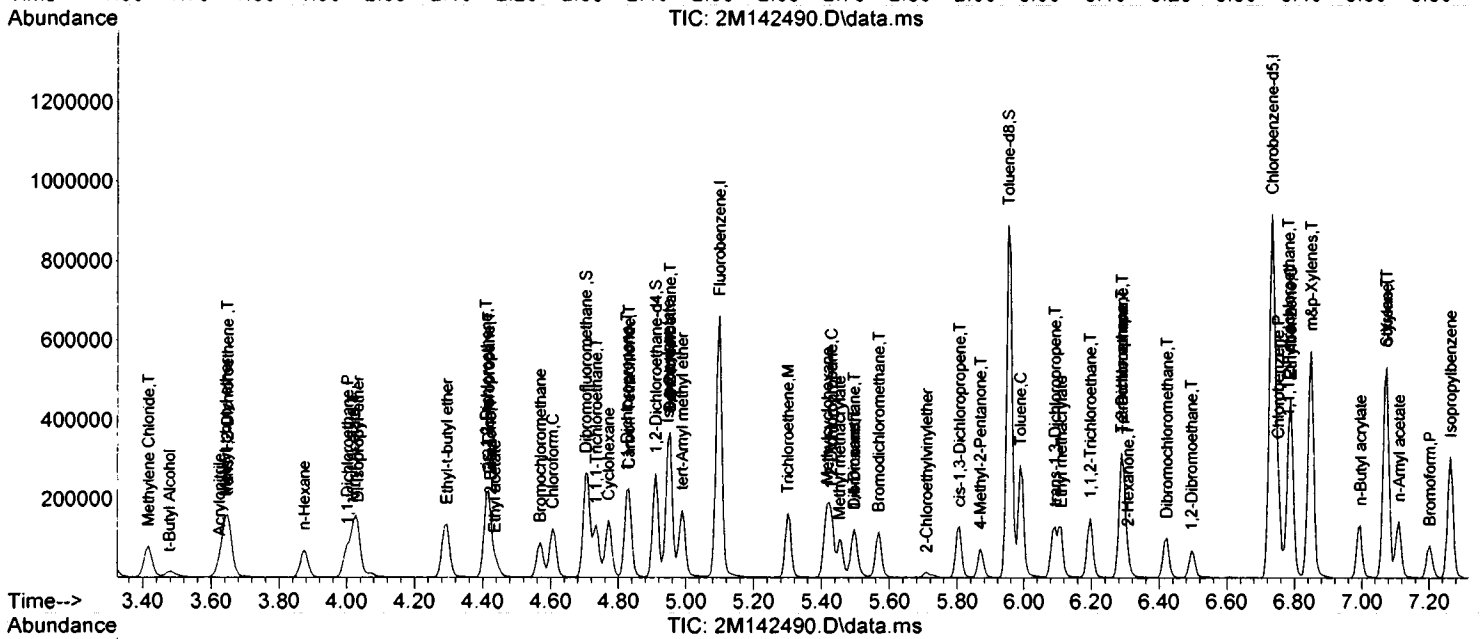
SampleID : CAL @ 10 PPB
Data File: 2M142490.D
Acq On : 09/29/20 16:08
Operator : JR
Sam Mult : 1 Vial# : 6
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 09730/20 10:14
Qt Upd On: 09/30/20 10:05
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->


Abundance
TIC: 2M142490.D\data.ms
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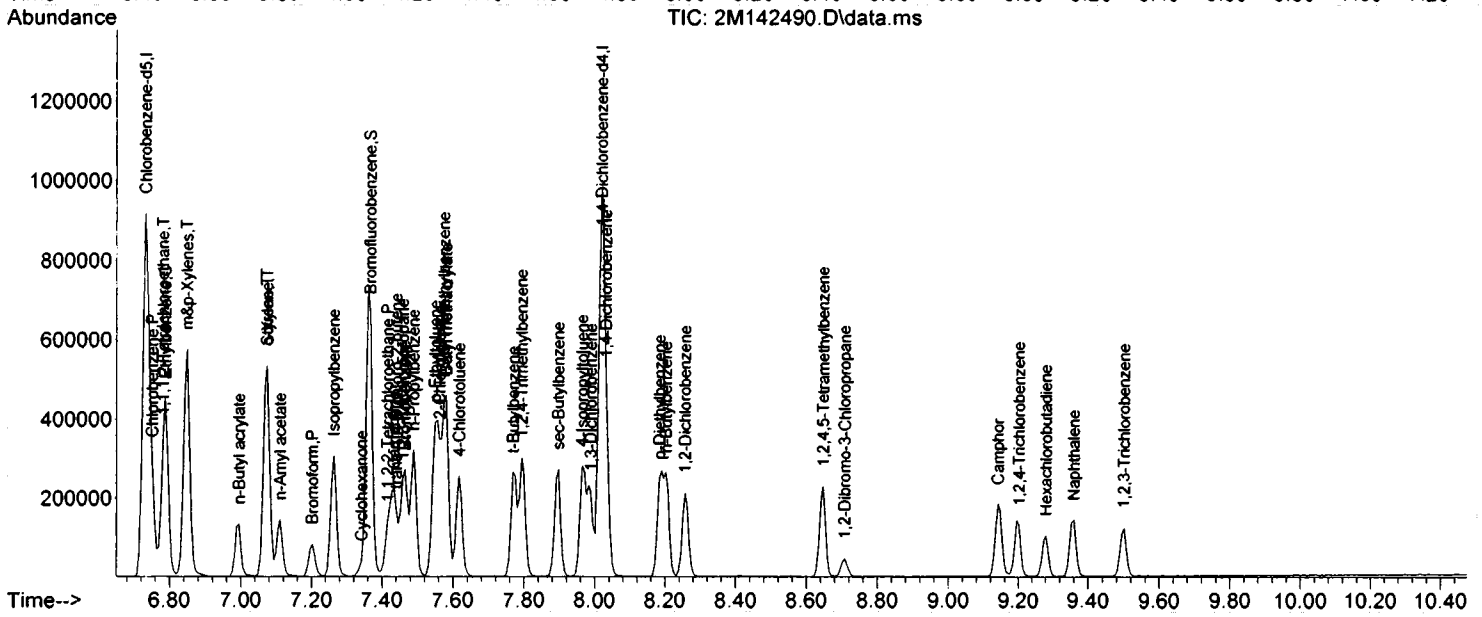
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
Bromodichloromethane,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M142490.D\data.ms
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142494.D Sam Mult : 1 Vial# : 10 Qt On : 09/30/20 10:09
Acq On : 09/29/20 17:26 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	341318	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	313870	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	172876	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.709	111	98845	31.47	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.90%			
39) 1,2-Dichloroethane-d4	4.910	67	51190	31.58	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.27%			
66) Toluene-d8	5.958	98	374538	30.60	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.00%			
76) Bromofluorobenzene	7.367	174	138511	29.96	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.87%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	185728	62.3177	ug/l	95
6) Dichlorodifluoromethane	1.685	85	188011	99.6790	ug/l	97
7) Chloromethane	1.855	50	195212	93.9135	ug/l	97
8) Bromomethane	2.258	94	86842	48.3305	ug/l	96
9) Vinyl Chloride	1.953	62	220417	87.2356	ug/l	99
10) Chloroethane	2.343	64	143386	78.7091	ug/l	95
11) Trichlorofluoromethane	2.569	101	339826	77.4270	ug/l	100
12) Ethyl ether	2.800	59	112812	64.5733	ug/l	100
13) Furan	2.843	39	185941	58.8940	ug/l	90
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	117423	64.8691	ug/l	94
15) Methylene Chloride	3.416	84	159100	62.0386	ug/l	98
16) Acrolein	2.916	56	127839	399.7252	ug/l	98
17) Acrylonitrile	3.623	53	55348	63.2274	ug/l	100
18) Iodomethane	3.154	142	122224	46.9092	ug/l	94
19) Acetone	3.044	43	232993	334.2336	ug/l	95
20) Carbon Disulfide	3.221	76	426321	63.6980	ug/l	100
21) t-Butyl Alcohol	3.477	59	75284	304.7786	ug/l	97
22) n-Hexane	3.873	57	138117	66.5169	ug/l	97
23) Di-isopropyl-ether	4.032	45	385864	62.4319	ug/l	100
24) 1,1-Dichloroethene	3.014	61	222641	64.7860	ug/l	96
25) Methyl Acetate	3.319	43	100004	63.3589	ug/l	100
26) Methyl-t-butyl ether	3.642	73	416327	64.0785	ug/l	99
27) 1,1-Dichloroethane	4.001	63	267458	62.8339	ug/l	99
28) trans-1,2-Dichloroethene	3.654	96	159650	61.3192	ug/l	99
29) Ethyl-t-butyl ether	4.294	59	418282	59.9937	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	267401	62.5759	ug/l	97
31) Bromochloromethane	4.568	49	122743	62.1129	ug/l	97
32) 2,2-Dichloropropane	4.416	77	238775	61.5471	ug/l	100
33) Ethyl acetate	4.434	43	139174m	61.9921	ug/l	
34) 1,4-Dioxane	5.495	88	100483	2988.0887	ug/l	99
35) 1,1-Dichloropropene	4.824	75	226298	64.0944	ug/l	95
36) Chloroform	4.605	83	295519	63.0652	ug/l	100
38) Cyclohexane	4.770	56	202740	66.9067	ug/l	99
40) 1,2-Dichloroethane	4.952	62	233377	58.8449	ug/l	98
41) 2-Butanone	4.410	43	75909m	70.3814	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	265098	63.3300	ug/l	98
43) Carbon Tetrachloride	4.830	117	221811	58.3367	ug/l	97
44) Vinyl Acetate	4.026	43	430163	56.2737	ug/l	100
45) Bromodichloromethane	5.568	83	241214	62.9967	ug/l	96
46) Methylcyclohexane	5.416	83	192885	64.2526	ug/l	99
47) Dibromomethane	5.501	174	116168	57.2767	ug/l	97
48) 1,2-Dichloropropane	5.428	63	157391	61.1578	ug/l	97
49) Trichloroethene	5.300	130	179130	60.8147	ug/l	95
50) Benzene	4.952	78	631964	62.2518	ug/l	100
51) tert-Amyl methyl ether	4.989	73	442802	59.5782	ug/l	97
53) Iso-propylacetate	4.946	43	275407	54.3867	ug/l	99
54) Methyl methacrylate	5.452	41	133090	59.6007	ug/l	96
55) Dibromochloromethane	6.422	129	187508	53.8244	ug/l	98
56) 2-Chloroethylvinylether	5.708	63	21568	29.4585	ug/l	97
57) cis-1,3-Dichloropropene	5.806	75	247207	53.1253	ug/l	99
58) trans-1,3-Dichloropropene	6.092	75	234565	49.0273	ug/l	98
59) Ethyl methacrylate	6.111	41	137492	55.9583	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	154830	54.9516	ug/l	96
61) 1,2-Dibromoethane	6.495	107	164603	56.2052	ug/l	96
62) 1,3-Dichloropropane	6.288	76	265540	55.4366	ug/l	99
63) 4-Methyl-2-Pentanone	5.867	43	146503	60.5007	ug/l	98
64) 2-Hexanone	6.306	43	109028	57.3716	ug/l	97
65) Tetrachloroethene	6.288	164	140374	53.4692	ug/l	99
67) Toluene	5.995	92	410691	56.5367	ug/l	100

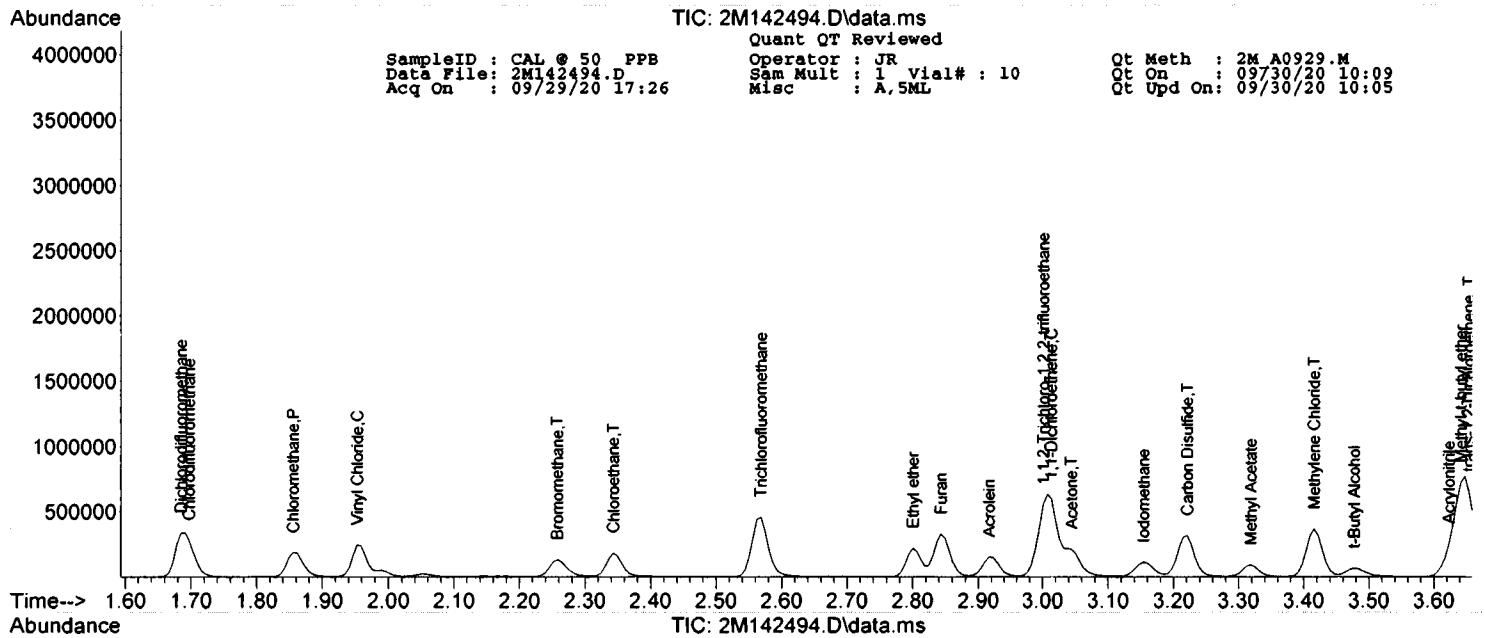
Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142494.D Sam Mult : 1 Vial# : 10 Qt On : 09/30/20 10:09
Acq On : 09/29/20 17:26 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	159596	50.2885	ug/l	99
69)	Chlorobenzene	6.751	112	456601	56.1756	ug/l	99
71)	n-Butyl acrylate	6.995	55	320552	63.4195	ug/l	99
72)	n-Amyl acetate	7.111	43	265741	73.1132	ug/l	99
73)	Bromoform	7.202	173	133556	56.3475	ug/l	99
74)	Ethylbenzene	6.787	106	204237	62.5209	ug/l	94
75)	1,1,2,2-Tetrachloroethane	7.415	83	226143	67.5238	ug/l	98
77)	Styrene	7.074	104	527306	65.7123	ug/l	95
78)	m&p-Xylenes	6.848	106	599788	127.3845	ug/l	96
79)	o-Xylene	7.074	106	300070	64.4227	ug/l	99
80)	trans-1,4-Dichloro-2-b...	7.440	53	59690	44.6630	ug/l	86
81)	1,3-Dichlorobenzene	7.988	146	346731	60.5229	ug/l	98
82)	1,4-Dichlorobenzene	8.037	146	346788	59.0118	ug/l	99
83)	1,2-Dichlorobenzene	8.257	146	316333	58.5377	ug/l	97
84)	Isopropylbenzene	7.263	105	735171	64.2355	ug/l	99
85)	Cyclohexanone	7.342	55	31524	282.6819	ug/l	94
86)	Camphene	7.434	93	198008	63.2065	ug/l	96
87)	1,2,3-Trichloropropane	7.458	75	243116	53.1941	ug/l	99
88)	2-Chlorotoluene	7.562	91	447633	67.9666	ug/l	98
89)	p-Ethyltoluene	7.550	105	720240	65.9744	ug/l	99
90)	4-Chlorotoluene	7.617	91	455359	62.8403	ug/l	98
91)	n-Propylbenzene	7.489	91	865542	66.0874	ug/l	98
92)	Bromobenzene	7.464	77	447123	59.5704	ug/l	95
93)	1,3,5-Trimethylbenzene	7.574	105	577605	66.8203	ug/l	99
94)	Butyl methacrylate	7.580	41	216518	63.4954	ug/l	97
95)	t-Butylbenzene	7.775	119	553285	66.9711	ug/l	98
96)	1,2,4-Trimethylbenzene	7.793	105	598600	70.4318	ug/l	98
97)	sec-Butylbenzene	7.897	105	688676	62.7801	ug/l	99
98)	4-Isopropyltoluene	7.964	119	581311	61.3266	ug/l	99
99)	n-Butylbenzene	8.202	91	609227	63.5689	ug/l	96
100)	p-Diethylbenzene	8.190	119	319134	64.7961	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	458916	64.6269	ug/l	95
102)	1,2-Dibromo-3-Chloropr...	8.708	157	49074	62.8432	ug/l	78
103)	Camphor	9.141	95	205815	664.3238	ug/l	98
104)	Hexachlorobutadiene	9.281	225	68877	62.4497	ug/l	98
105)	1,2,4-Trichlorobenzene	9.202	180	165173	57.3078	ug/l	98
106)	1,2,3-Trichlorobenzene	9.500	180	139810	61.3273	ug/l	97
107)	Naphthalene	9.360	128	482081	65.3883	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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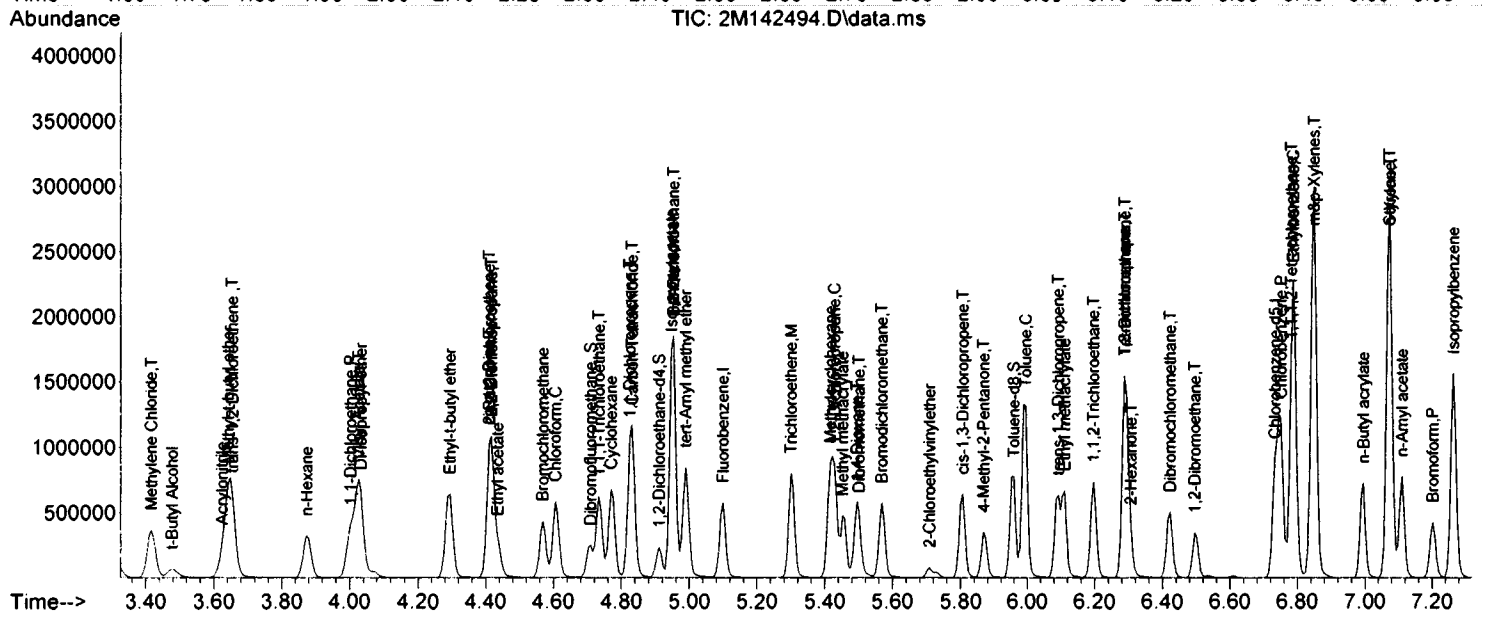
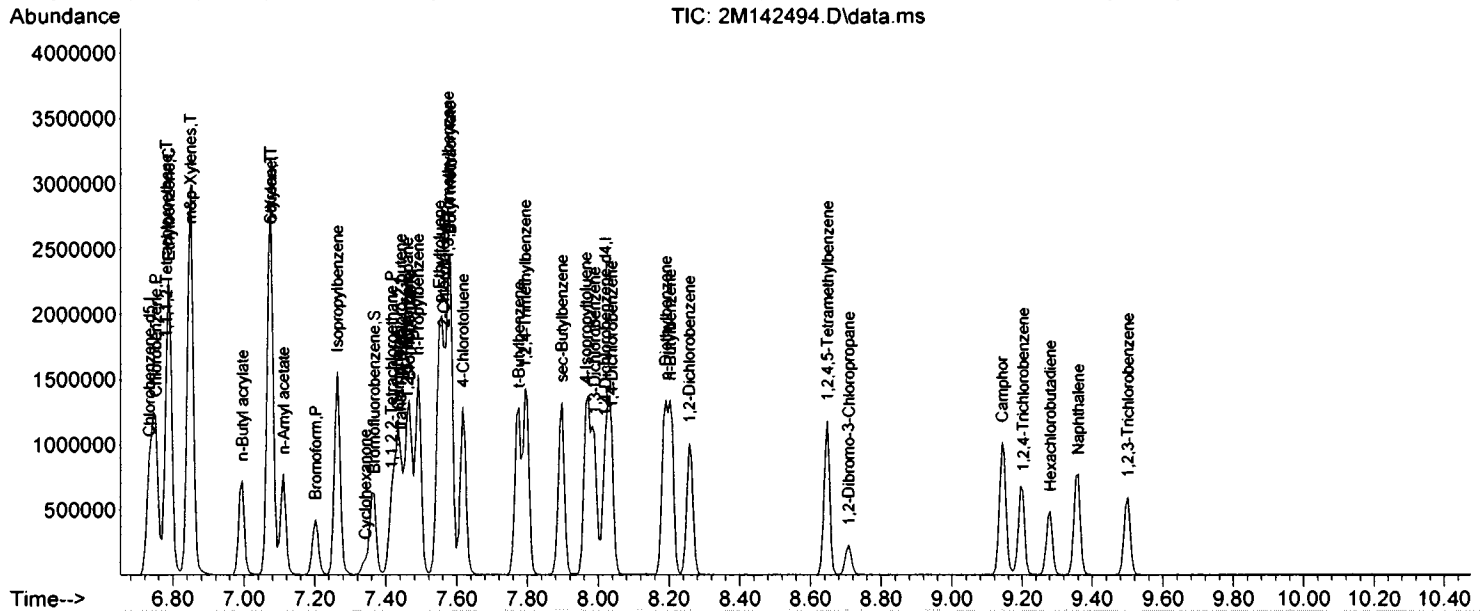
Operator : JR
Sam Mult : 1 Vial# : 10
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 09730/20 10:09
Qt Upd On: 09/30/20 10:05
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 2M142494.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M142494.D\data.ms
Chlorobenzene-d5,I
1,1,1,2-Tetrachloroethane,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone,S
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB
Data File: 2M142496.D
Acq On : 09/29/20 18:05

Operator : JR
Sam Mult : 1 Vial# : 12
Misc : A,5ML

Qt Meth : 2M_A0929.M
Qt On : 09/30/20 10:08
Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	347100	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	321317	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	178964	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.703	111	101328	31.72	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.73%			
39) 1,2-Dichloroethane-d4	4.910	67	53596	32.51	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.37%			
66) Toluene-d8	5.952	98	377732	30.14	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.47%			
76) Bromofluorobenzene	7.367	174	140884	29.43	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.10%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	383778	126.6248	ug/l	93
6) Dichlorodifluoromethane	1.685	85	394520	205.6809	ug/l	95
7) Chloromethane	1.855	50	416841	197.1952	ug/l	99
8) Bromomethane	2.258	94	217186	118.8578	ug/l	97
9) Vinyl Chloride	1.953	62	467250	181.8455	ug/l	99
10) Chloroethane	2.343	64	301150	162.5570	ug/l	98
11) Trichlorofluoromethane	2.569	101	710605	159.2094	ug/l	98
12) Ethyl ether	2.800	59	245800	138.3516	ug/l	100
13) Furan	2.843	39	407202	126.8267	ug/l	94
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	247283	134.3333	ug/l	93
15) Methylene Chloride	3.416	84	344316	132.0241	ug/l	99
16) Acrolein	2.916	56	273487	840.8904	ug/l	98
17) Acrylonitrile	3.623	53	116337	130.6850	ug/l	97
18) Iodomethane	3.154	142	312925	118.0990	ug/l	99
19) Acetone	3.044	43	469428	662.1872	ug/l	99
20) Carbon Disulfide	3.221	76	902343	132.5760	ug/l	100
21) t-Butyl Alcohol	3.477	59	158933	632.7038	ug/l	98
22) n-Hexane	3.873	57	295167	139.7839	ug/l	97
23) Di-isopropyl-ether	4.032	45	848651	135.0225	ug/l	100
24) 1,1-Dichloroethene	3.014	61	475368	136.0224	ug/l	98
25) Methyl Acetate	3.319	43	211624	131.8438	ug/l	100
26) Methyl-t-butyl ether	3.642	73	920788	139.3612	ug/l	99
27) 1,1-Dichloroethane	4.001	63	578413	133.6229	ug/l	99
28) trans-1,2-Dichloroethene	3.654	96	344727	130.1990	ug/l	99
29) Ethyl-t-butyl ether	4.294	59	922279	130.0779	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	578475	133.1170	ug/l	97
31) Bromochloromethane	4.568	49	254345	126.5648	ug/l	98
32) 2,2-Dichloropropane	4.416	77	515114	130.5650	ug/l	99
33) Ethyl acetate	4.434	43	292920m	128.3015	ug/l	
34) 1,4-Dioxane	5.495	88	210468	6154.4825	ug/l	98
35) 1,1-Dichloropropene	4.824	75	484812	135.0260	ug/l	97
36) Chloroform	4.605	83	626820	131.5381	ug/l	100
38) Cyclohexane	4.770	56	433573	140.7010	ug/l	99
40) 1,2-Dichloroethane	4.952	62	511746	126.8848	ug/l	100
41) 2-Butanone	4.410	43	160785m	146.5935	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	565323	132.8020	ug/l	99
43) Carbon Tetrachloride	4.831	117	477679	123.5377	ug/l	95
44) Vinyl Acetate	4.020	43	960172	123.5167	ug/l	100
45) Bromodichloromethane	5.568	83	519326	133.3706	ug/l	99
46) Methylcyclohexane	5.416	83	421197	137.9692	ug/l	100
47) Dibromomethane	5.495	174	250986	121.6874	ug/l	98
48) 1,2-Dichloropropane	5.428	63	345672	132.0811	ug/l	99
49) Trichloroethene	5.300	130	381998	127.5281	ug/l	95
50) Benzene	4.952	78	1392530	134.8866	ug/l	100
51) tert-Amyl methyl ether	4.989	73	993496	131.4463	ug/l	97
53) Iso-propylacetate	4.946	43	606044	116.9062	ug/l	98
54) Methyl methacrylate	5.452	41	288627	126.2580	ug/l	96
55) Dibromochloromethane	6.422	129	417534	117.0758	ug/l	100
56) 2-Chloroethylvinylether	5.708	63	48300	64.4412	ug/l	95
57) cis-1,3-Dichloropropene	5.806	75	548283	115.0964	ug/l	99
58) trans-1,3-Dichloropropene	6.093	75	525720	107.3360	ug/l	100
59) Ethyl methacrylate	6.111	41	304739	121.1522	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	336210	116.5606	ug/l	97
61) 1,2-Dibromoethane	6.495	107	359626	119.9516	ug/l	98
62) 1,3-Dichloropropane	6.288	76	596149	121.5730	ug/l	99
63) 4-Methyl-2-Pentanone	5.867	43	313888	126.6206	ug/l	100
64) 2-Hexanone	6.300	43	231133	118.8056	ug/l	98
65) Tetrachloroethene	6.288	164	308683	114.8539	ug/l	98
67) Toluene	5.989	92	894350	120.2649	ug/l	99

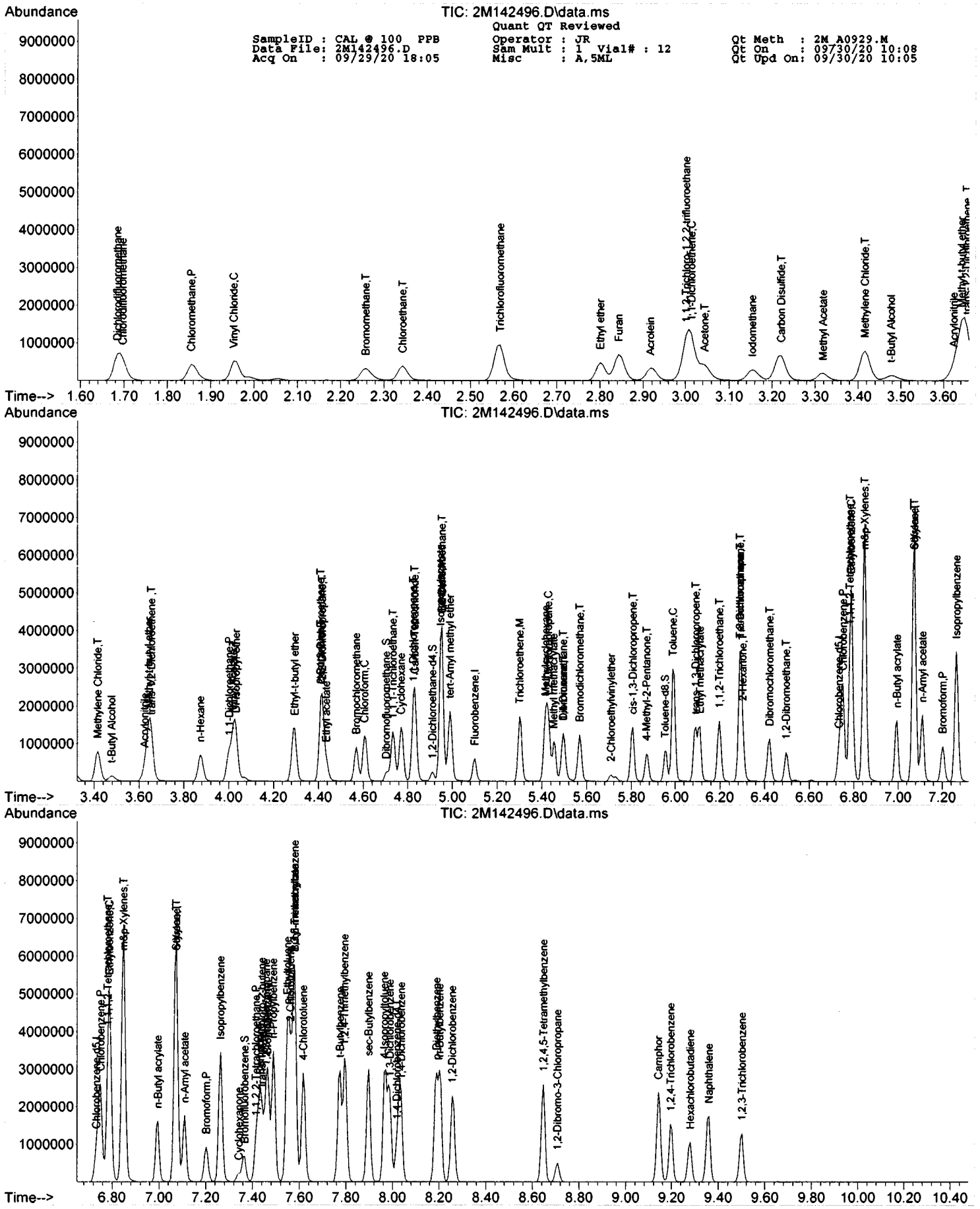
Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142496.D Sam Mult : 1 Vial# : 12 Qt On : 09/30/20 10:08
Acq On : 09/29/20 18:05 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	365735	112.5718	ug/l	98
69)	Chlorobenzene	6.751	112	1008712	121.2255	ug/l	100
71)	n-Butyl acrylate	6.995	55	718783	137.3698	ug/l	99
72)	n-Amyl acetate	7.111	43	612929	162.8983	ug/l	98
73)	Bromoform	7.202	173	295375	120.3799	ug/l	99
74)	Ethylbenzene	6.788	106	476863	141.0112	ug/l	97
75)	1,1,2,2-Tetrachloroethane	7.415	83	484595	139.7725	ug/l	98
77)	Styrene	7.074	104	1193568	143.6813	ug/l	96
78)	m&p-Xylenes	6.848	106	1359193	278.8488	ug/l	98
79)	o-Xylene	7.074	106	674717	139.9288	ug/l	100
80)	trans-1,4-Dichloro-2-b...	7.440	53	142393	102.9210	ug/l	88
81)	1,3-Dichlorobenzene	7.989	146	773662	130.4510	ug/l	98
82)	1,4-Dichlorobenzene	8.037	146	780246	128.2554	ug/l	99
83)	1,2-Dichlorobenzene	8.257	146	722231	129.1031	ug/l	98
84)	Isopropylbenzene	7.263	105	1633217	137.8478	ug/l	99
85)	Cyclohexanone	7.342	55	63527	550.2805	ug/l	97
86)	Camphene	7.434	93	438946	135.3503	ug/l	97
87)	1,2,3-Trichloropropane	7.458	75	564622	119.3374	ug/l	99
88)	2-Chlorotoluene	7.562	91	1011371	148.3381	ug/l	98
89)	p-Ethyltoluene	7.550	105	1625526	143.8340	ug/l	98
90)	4-Chlorotoluene	7.617	91	1048292	139.7449	ug/l	97
91)	n-Propylbenzene	7.489	91	1923280	141.8541	ug/l	97
92)	Bromobenzene	7.464	77	1017960	131.0095	ug/l	94
93)	1,3,5-Trimethylbenzene	7.580	105	1314111	146.8515	ug/l	99
94)	Butyl methacrylate	7.580	41	507173	143.6725	ug/l	97
95)	t-Butylbenzene	7.775	119	1248841	146.0207	ug/l	99
96)	1,2,4-Trimethylbenzene	7.793	105	1334130	151.6350	ug/l	99
97)	sec-Butylbenzene	7.897	105	1539969	135.6088	ug/l	99
98)	4-Isopropyltoluene	7.964	119	1299117	132.3908	ug/l	99
99)	n-Butylbenzene	8.202	91	1346486	135.7176	ug/l	96
100)	p-Diethylbenzene	8.190	119	709438	139.1423	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	1020017	138.7576	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.708	157	108735	134.5071	ug/l	81
103)	Camphor	9.141	95	461474	1438.8617	ug/l	98
104)	Hexachlorobutadiene	9.281	225	144628	126.6710	ug/l	96
105)	1,2,4-Trichlorobenzene	9.196	180	363370	121.7847	ug/l	98
106)	1,2,3-Trichlorobenzene	9.500	180	302649	128.2401	ug/l	97
107)	Naphthalene	9.360	128	1084320	142.0713	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M142496.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 100 PPB
Data File: 2M142496.D
Acq On : 09/29/20 18:05
Operator : JR
Sam Mult : 1 Vial# : 12
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 09/30/20 10:08
Qt Upd On: 09/30/20 10:05
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->

Abundance
TIC: 2M142496.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 2M142496.D\data.ms
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 250 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142499.D Sam Mult : 1 Vial# : 15 Qt On : 09/30/20 10:07
Acq On : 09/29/20 19:04 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	354579	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	343475	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	250266	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.703	111	101448	31.09	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.63%			
39) 1,2-Dichloroethane-d4	4.910	67	52022	30.89	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.97%			
66) Toluene-d8	5.958	98	388039	28.97	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.57%			
76) Bromofluorobenzene	7.367	174	166306	24.84	ug/l	0.00
Spiked Amount 30.000			Recovery = 82.80%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	964623	311.5573	ug/l	93
6) Dichlorodifluoromethane	1.679	85	989743	505.1136	ug/l	97
7) Chloromethane	1.855	50	1029212	476.6201	ug/l	99
8) Bromomethane	2.252	94	647873	347.0784	ug/l	93
9) Vinyl Chloride	1.953	62	1149730	438.0168	ug/l	98
10) Chloroethane	2.337	64	777739	410.9588	ug/l	97
11) Trichlorofluoromethane	2.563	101	1775955	389.5058	ug/l	98
12) Ethyl ether	2.800	59	615068	338.8966	ug/l	100
13) Furan	2.843	39	1034763	315.4882	ug/l	94
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	622991	331.2935	ug/l	94
15) Methylene Chloride	3.416	84	855643	321.1666	ug/l	99
16) Acrolein	2.916	56	705981	2124.8942	ug/l	98
17) Acrylonitrile	3.617	53	312982	344.1667	ug/l	96
18) Iodomethane	3.154	142	854966	315.8612	ug/l	96
19) Acetone	3.044	43	1187707	1640.0712	ug/l	97
20) Carbon Disulfide	3.215	76	2278040	327.6396	ug/l	100
21) t-Butyl Alcohol	3.477	59	419844	1636.1229	ug/l	99
22) n-Hexane	3.873	57	740282	343.1848	ug/l	97
23) Di-isopropyl-ether	4.026	45	2190214	341.1185	ug/l	99
24) 1,1-Dichloroethene	3.008	61	1208337	338.4621	ug/l	95
25) Methyl Acetate	3.313	43	541165	330.0395	ug/l	100
26) Methyl-t-butyl ether	3.642	73	2363246	350.1327	ug/l	99
27) 1,1-Dichloroethane	4.001	63	1470326	332.5048	ug/l	98
28) trans-1,2-Dichloroethene	3.648	96	893971	330.5197	ug/l	100
29) Ethyl-t-butyl ether	4.288	59	2361544	326.0459	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	1503917	338.7773	ug/l	98
31) Bromochloromethane	4.568	49	588989	286.9052	ug/l	98
32) 2,2-Dichloropropane	4.416	77	1305624	323.9539	ug/l	99
33) Ethyl acetate	4.434	43	745542m	319.6659	ug/l	
34) 1,4-Dioxane	5.495	88	571108	16348.0259	ug/l	100
35) 1,1-Dichloropropene	4.824	75	1270615	346.4172	ug/l	98
36) Chloroform	4.605	83	1557620	319.9719	ug/l	100
38) Cyclohexane	4.770	56	1121176	356.1643	ug/l	99
40) 1,2-Dichloroethane	4.952	62	1339940	325.2236	ug/l	98
41) 2-Butanone	4.410	43	453024m	404.3263	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	1423268	327.2926	ug/l	99
43) Carbon Tetrachloride	4.831	117	1249221	316.2599	ug/l	96
44) Vinyl Acetate	4.020	43	2360719	297.2779	ug/l	100
45) Bromodichloromethane	5.568	83	1309813	329.2843	ug/l	99
46) Methylcyclohexane	5.416	83	1084708	347.8174	ug/l	99
47) Dibromomethane	5.495	174	655952	311.3221	ug/l	99
48) 1,2-Dichloropropane	5.428	63	904550	338.3379	ug/l	98
49) Trichloroethene	5.300	130	991232	323.9378	ug/l	95
50) Benzene	4.952	78	3655880	346.6553	ug/l	100
51) tert-Amyl methyl ether	4.989	73	2531435	327.8616	ug/l	98
53) Iso-propylacetate	4.946	43	1640351	296.0117	ug/l	99
54) Methyl methacrylate	5.452	41	746887	305.6437	ug/l	95
55) Dibromochloromethane	6.422	129	1066192	279.6722	ug/l	98
56) 2-Chloroethylvinylether	5.708	63	124946	155.9470	ug/l	99
57) cis-1,3-Dichloropropene	5.806	75	1411392	277.1681	ug/l	100
58) trans-1,3-Dichloropropene	6.093	75	1360140	259.7843	ug/l	97
59) Ethyl methacrylate	6.111	41	803424	298.8041	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	872560	282.9925	ug/l	96
61) 1,2-Dibromoethane	6.495	107	904388	282.1943	ug/l	98
62) 1,3-Dichloropropane	6.288	76	1595513	304.3836	ug/l	100
63) 4-Methyl-2-Pentanone	5.867	43	836318	315.6020	ug/l	98
64) 2-Hexanone	6.306	43	631631	303.7224	ug/l	95
65) Tetrachloroethene	6.288	164	821210	285.8418	ug/l	99
67) Toluene	5.989	92	2342560	294.6869	ug/l	97

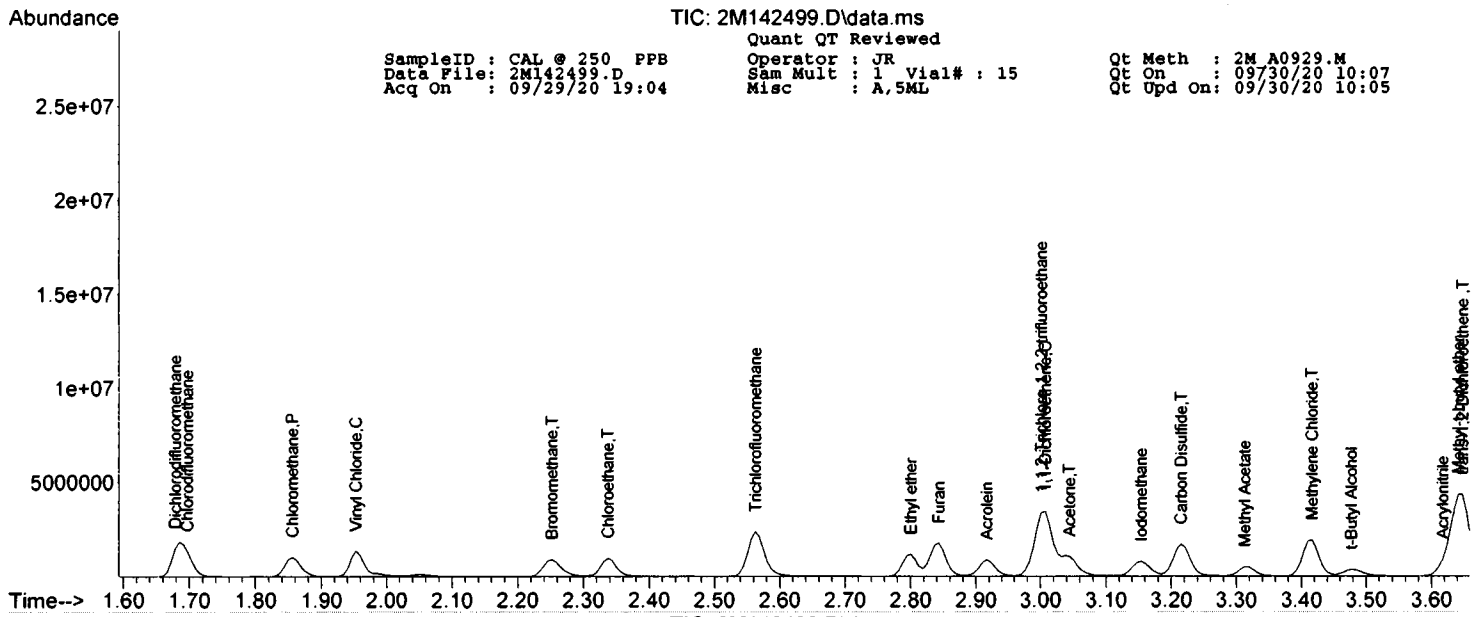
Quantitation Report (QT Reviewed)

SampleID : CAL @ 250 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142499.D Sam Mult : 1 Vial# : 15 Qt On : 09/30/20 10:07
Acq On : 09/29/20 19:04 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	980753	282.3978	ug/l	95
69)	Chlorobenzene	6.751	112	2637813	296.5577	ug/l	99
71)	n-Butyl acrylate	6.995	55	2078171	284.0132	ug/l	99
72)	n-Amyl acetate	7.111	43	1911966	363.3711	ug/l	94
73)	Bromoform	7.202	173	1001629	291.9114	ug/l	99
74)	Ethylbenzene	6.788	106	1292662	273.3435	ug/l	98
75)	1,1,2,2-Tetrachloroethane	7.422	83	1337479	275.8630	ug/l	98
77)	Styrene	7.074	104	3804675	327.5175	ug/l	95
78)	m&p-Xylenes	6.848	106	4125026	605.1711	ug/l	93
79)	o-Xylene	7.074	106	2096974	310.9870	ug/l	95
80)	trans-1,4-Dichloro-2-b...	7.446	53	423851	219.0748	ug/l	96
81)	1,3-Dichlorobenzene	7.989	146	2561668	308.8751	ug/l	99
82)	1,4-Dichlorobenzene	8.037	146	2558099	300.6943	ug/l	99
83)	1,2-Dichlorobenzene	8.257	146	2419618	309.2937	ug/l	99
84)	Isopropylbenzene	7.263	105	4989442	301.1424	ug/l	99
85)	Cyclohexanone	7.342	55	198057	1226.8170	ug/l	95
86)	Camphene	7.434	93	1217661	268.4962	ug/l	97
87)	1,2,3-Trichloropropane	7.458	75	1732796	261.8966	ug/l	97
88)	2-Chlorotoluene	7.562	91	3006528	315.3344	ug/l	98
89)	p-Ethyltoluene	7.550	105	5720524	361.9655	ug/l	95
90)	4-Chlorotoluene	7.617	91	1899973	181.1194	ug/l	96
91)	n-Propylbenzene	7.489	91	6056799	319.4526	ug/l	99
92)	Bromobenzene	7.464	77	3072859	282.7995	ug/l	94
93)	1,3,5-Trimethylbenzene	7.574	105	2498871	199.6889	ug/l	79
94)	Butyl methacrylate	7.580	41	800810	162.2224	ug/l	74
95)	t-Butylbenzene	7.775	119	3856021	322.4115	ug/l	96
96)	1,2,4-Trimethylbenzene	7.800	105	3574160	290.4954	ug/l	95
97)	sec-Butylbenzene	7.897	105	4894663	308.2212	ug/l	98
98)	4-Isopropyltoluene	7.970	119	4246462	309.4572	ug/l	99
99)	n-Butylbenzene	8.202	91	4276739	308.2556	ug/l	96
100)	p-Diethylbenzene	8.190	119	2285453	320.5389	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	2678506	260.5588	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.708	157	296423	262.2114	ug/l	81
103)	Camphor	9.141	95	1364234	3041.7570	ug/l	96
104)	Hexachlorobutadiene	9.281	225	343173	214.9323	ug/l	95
105)	1,2,4-Trichlorobenzene	9.202	180	915404	219.3917	ug/l	99
106)	1,2,3-Trichlorobenzene	9.500	180	754443	228.5993	ug/l	97
107)	Naphthalene	9.360	128	2842515	266.3271	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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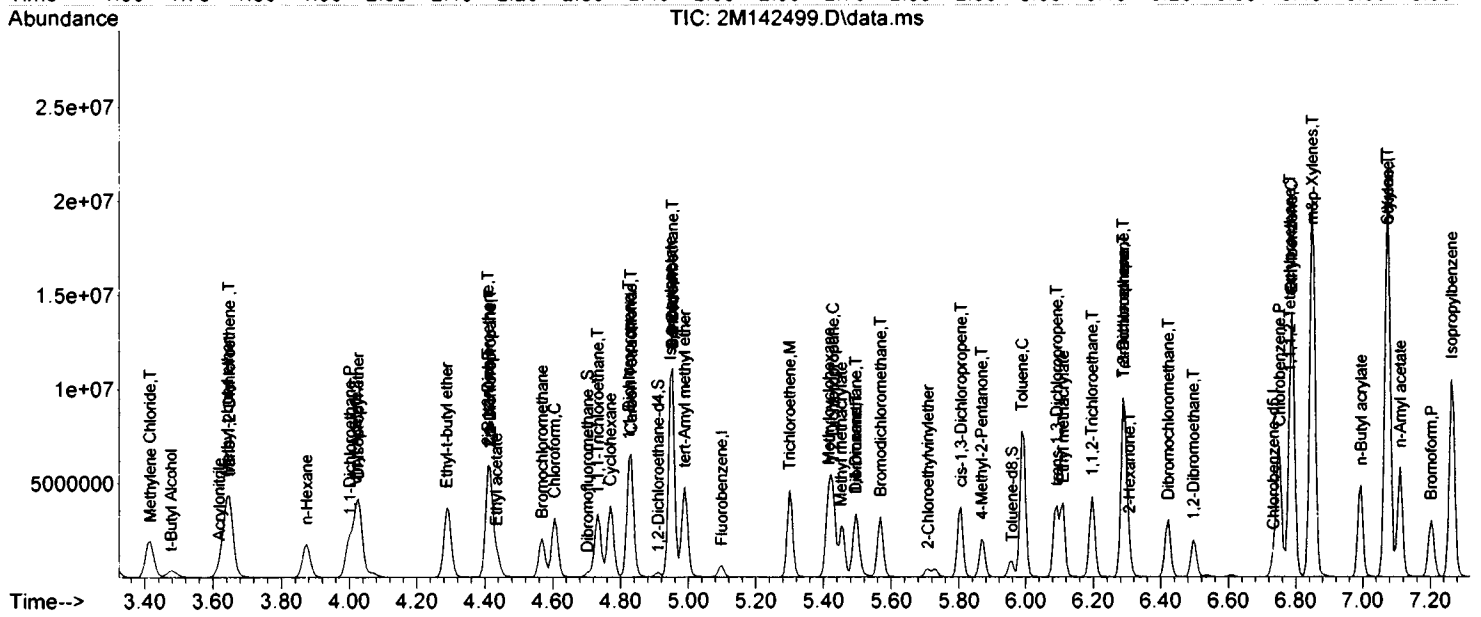
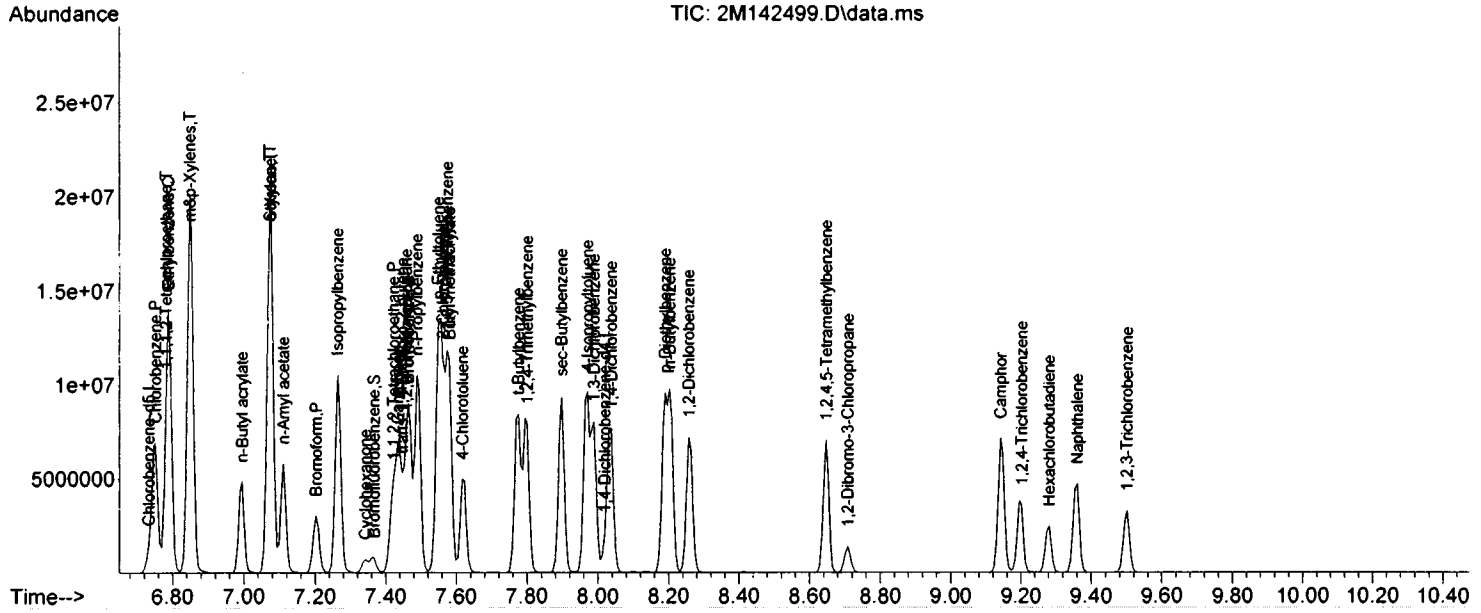
Quant QT Reviewed
SampleID : CAL @ 250 PPB
Data File: 2M142499.D
Acq On : 09/29/20 19:04
Operator : JR
Sam Mult : 1 Vial# : 15
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 09/30/20 10:07
Qt Upd On: 09/30/20 10:05
2.5e+07
2e+07
1.5e+07
1e+07
5000000
Dichlorodifluoromethane
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->
1.60 1.70 1.80 1.90 2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80 2.90 3.00 3.10 3.20 3.30 3.40 3.50 3.60


Abundance
TIC: 2M142499.D\data.ms
2.5e+07
2e+07
1.5e+07
1e+07
5000000
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->
3.40 3.60 3.80 4.00 4.20 4.40 4.60 4.80 5.00 5.20 5.40 5.60 5.80 6.00 6.20 6.40 6.60 6.80 7.00 7.20


Abundance
TIC: 2M142499.D\data.ms
2.5e+07
2e+07
1.5e+07
1e+07
5000000
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone,S
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->
6.80 7.00 7.20 7.40 7.60 7.80 8.00 8.20 8.40 8.60 8.80 9.00 9.20 9.40 9.60 9.80 10.00 10.20 10.40

Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142502.D Sam Mult : 1 Vial# : 18 Qt On : 09/30/20 10:05
Acq On : 09/29/20 20:03 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	378988	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	368525	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.025	152	177011	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	103343	29.63	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.77%			
39) 1,2-Dichloroethane-d4	4.910	67	54198	30.11	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.37%			
66) Toluene-d8	5.958	98	408718	28.44	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.80%			
76) Bromofluorobenzene	7.367	174	135479	28.62	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.40%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.691	51	2032721	614.2506	ug/l	94
6) Dichlorodifluoromethane	1.679	85	2066905	986.9035	ug/l	98
7) Chloromethane	1.855	50	2169669	940.0449	ug/l	98
8) Bromomethane	2.246	94	1582832	793.3412	ug/l	99
9) Vinyl Chloride	1.953	62	2331278	830.9532	ug/l	98
10) Chloroethane	2.331	64	1710579	845.6587	ug/l	96
11) Trichlorofluoromethane	2.557	101	3743942	768.2431	ug/l	99
12) Ethyl ether	2.794	59	1342109	691.8618	ug/l	99
13) Furan	2.837	39	2234353	637.3553	ug/l	94
14) 1,1,2-Trichloro-1,2,2-...	2.995	101	1388202	690.6711	ug/l	94
15) Methylene Chloride	3.410	84	1817843	638.3835	ug/l	99
16) Acrolein	2.916	56	1566245	4410.5378	ug/l	98
17) Acrylonitrile	3.623	53	669396	688.6842	ug/l	99
18) Iodomethane	3.148	142	1940812	670.8392	ug/l	97
19) Acetone	3.044	43	2471410	3192.9031	ug/l	98
20) Carbon Disulfide	3.215	76	4859126	653.8539	ug/l	100
21) t-Butyl Alcohol	3.483	59	864734	3152.8120	ug/l	99
22) n-Hexane	3.873	57	1608917	697.8339	ug/l	96
23) Di-isopropyl-ether	4.026	45	4794756	698.6711	ug/l	98
24) 1,1-Dichloroethene	3.008	61	2668665	699.3645	ug/l	98
25) Methyl Acetate	3.312	43	1132657	646.2823	ug/l	100
26) Methyl-t-butyl ether	3.642	73	5110471	708.3897	ug/l	98
27) 1,1-Dichloroethane	4.001	63	3185309	673.9435	ug/l	97
28) trans-1,2-Dichloroethene	3.648	96	1952841	675.5046	ug/l	99
29) Ethyl-t-butyl ether	4.288	59	5135252	663.3337	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	3323623	700.4702	ug/l	97
31) Bromochloromethane	4.568	49	1283750	585.0585	ug/l	98
32) 2,2-Dichloropropane	4.416	77	2800225	650.0481	ug/l	99
33) Ethyl acetate	4.434	43	1608536m	645.2716	ug/l	
34) 1,4-Dioxane	5.495	88	1237530	33142.8889	ug/l	99
35) 1,1-Dichloropropene	4.824	75	2874787	733.2950	ug/l	98
36) Chloroform	4.605	83	3396259	652.7377	ug/l	99
38) Cyclohexane	4.770	56	2499745	742.9505	ug/l	98
40) 1,2-Dichloroethane	4.952	62	3068693	696.8473	ug/l	97
41) 2-Butanone	4.410	43	987200m	824.3345	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	3112977	669.7504	ug/l	98
43) Carbon Tetrachloride	4.830	117	2790238	660.8969	ug/l	97
44) Vinyl Acetate	4.020	43	4901020	577.4207	ug/l	100
45) Bromodichloromethane	5.568	83	2927851	688.6496	ug/l	100
46) Methylcyclohexane	5.416	83	2469633	740.8979	ug/l	98
47) Dibromomethane	5.495	174	1465504	650.7474	ug/l	99
48) 1,2-Dichloropropane	5.428	63	2053116	718.4873	ug/l	99
49) Trichloroethene	5.300	130	2237379	684.0903	ug/l	96
50) Benzene	4.952	78	8143380	722.4339	ug/l	100
51) tert-Amyl methyl ether	4.989	73	6237959	755.8818	ug/l	99
53) Iso-propylacetate	4.946	43	3822700	642.9400	ug/l	97
54) Methyl methacrylate	5.458	41	1666335	635.5519	ug/l	96
55) Dibromochloromethane	6.422	129	2443578	597.4041	ug/l	99
56) 2-Chloroethylvinylether	5.708	63	282965	329.1665	ug/l	99
57) cis-1,3-Dichloropropene	5.806	75	3101652	567.6974	ug/l	99
58) trans-1,3-Dichloropropene	6.092	75	3150708	560.8744	ug/l	97
59) Ethyl methacrylate	6.111	41	2054857	712.2812	ug/l	96
60) 1,1,2-Trichloroethane	6.196	97	2084532	630.1099	ug/l	95
61) 1,2-Dibromoethane	6.501	107	2031173	590.7021	ug/l	99
62) 1,3-Dichloropropane	6.288	76	3762915	669.0731	ug/l	99
63) 4-Methyl-2-Pentanone	5.867	43	1868627	657.2326	ug/l	98
64) 2-Hexanone	6.306	43	1523456	682.7654	ug/l	95
65) Tetrachloroethene	6.288	164	1920618	623.0755	ug/l	99
67) Toluene	5.995	92	5412015	634.5375	ug/l	88

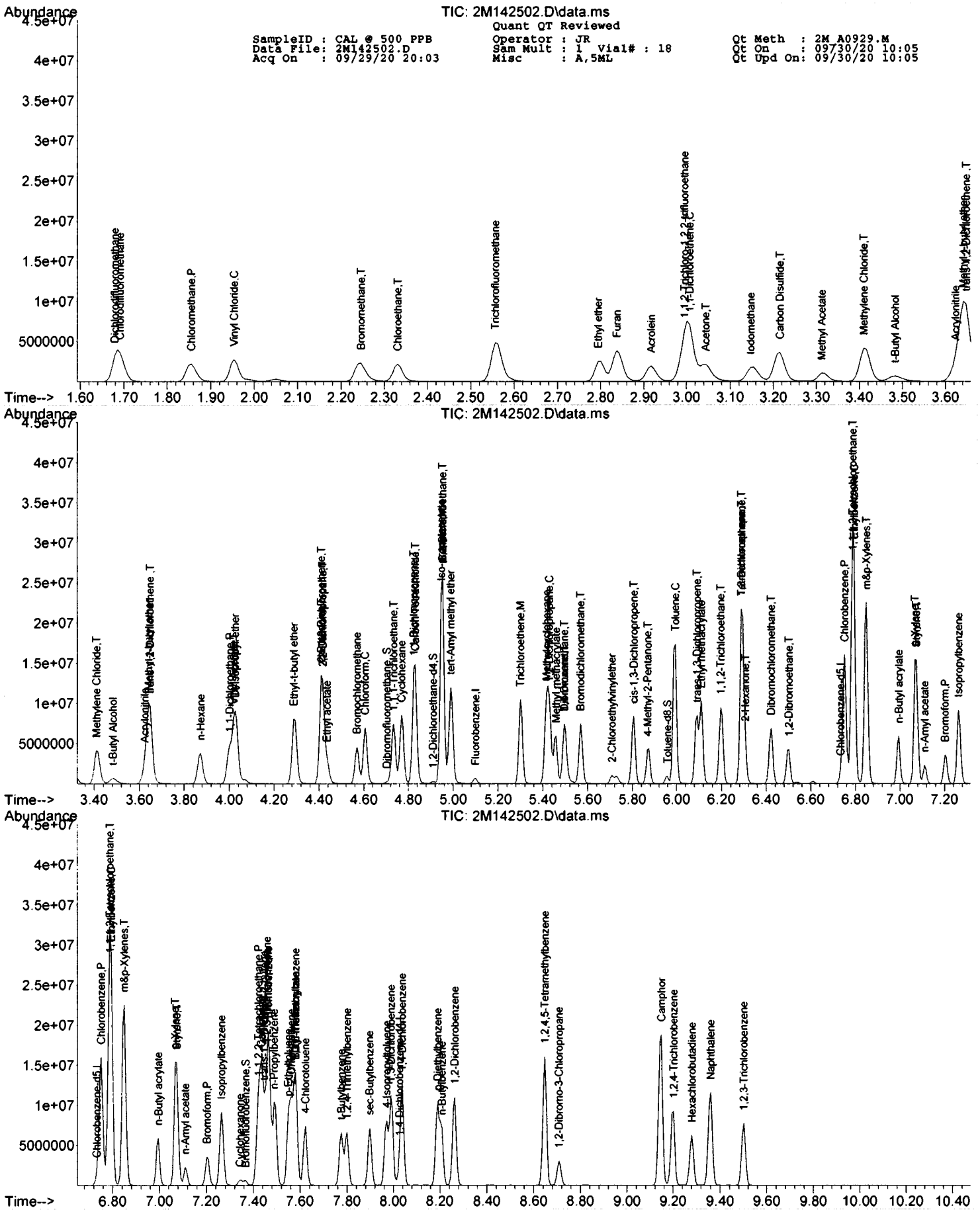
Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142502.D Sam Mult : 1 Vial# : 18 Qt On : 09/30/20 10:05
Acq On : 09/29/20 20:03 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.787	133	2386217	640.3830	ug/l	95
69)	Chlorobenzene	6.751	112	5763294	603.8989	ug/l	95
71)	n-Butyl acrylate	6.995	55	2417793	467.1733	ug/l	93
72)	n-Amyl acetate	7.111	43	694454	186.6016	ug/l	84
73)	Bromoform	7.202	173	1233779	508.3737	ug/l	100
74)	Ethylbenzene	6.794	106	3442858	1029.3061	ug/l	66
75)	1,1,2,2-Tetrachloroethane	7.422	83	3351413	977.3184	ug/l	97
77)	Styrene	7.074	104	3136857	381.7801	ug/l	92
78)	m&p-Xylenes	6.848	106	5130998	1064.2777	ug/l	80
79)	o-Xylene	7.068	106	2080635	436.2613	ug/l	89
80)	trans-1,4-Dichloro-2-b...	7.446	53	878433	641.9325	ug/l	90
81)	1,3-Dichlorobenzene	7.988	146	3631143	619.0204	ug/l	98
82)	1,4-Dichlorobenzene	8.037	146	4081352	678.2870	ug/l	100
83)	1,2-Dichlorobenzene	8.263	146	3604267	651.3927	ug/l	98
84)	Isopropylbenzene	7.263	105	4680261	399.3848	ug/l	95
85)	Cyclohexanone	7.342	55	210700	1845.2521	ug/l	87
86)	Camphene	7.434	93	2913831	908.4013	ug/l	99
87)	1,2,3-Trichloropropane	7.458	75	3763056	804.1272	ug/l	98
88)	2-Chlorotoluene	7.562	91	2723497	403.8635	ug/l	94
89)	p-Ethyltoluene	7.550	105	4747048	424.6749	ug/l	97
90)	4-Chlorotoluene	7.623	91	2772518	373.6745	ug/l	93
91)	n-Propylbenzene	7.489	91	6336613	472.5220	ug/l	94
92)	Bromobenzene	7.464	77	5988241	779.1784	ug/l	94
93)	1,3,5-Trimethylbenzene	7.580	105	3193834	360.8478	ug/l	80
94)	Butyl methacrylate	7.580	41	817578	234.1596	ug/l	60
95)	t-Butylbenzene	7.775	119	3149834	372.3578	ug/l	90
96)	1,2,4-Trimethylbenzene	7.799	105	2798280	321.5570	ug/l	90
97)	sec-Butylbenzene	7.897	105	3806383	338.8862	ug/l	92
98)	4-Isopropyltoluene	7.970	119	3835518	395.1836	ug/l	95
99)	n-Butylbenzene	8.208	91	3599315	366.7919	ug/l	90
100)	p-Diethylbenzene	8.190	119	2672372	529.9159	ug/l	95
101)	1,2,4,5-Tetramethylben...	8.647	119	6204631	853.3570	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.708	157	759442	949.8081	ug/l	93
103)	Camphor	9.147	95	3830332	12074.6253	ug/l	96
104)	Hexachlorobutadiene	9.281	225	894010	791.6490	ug/l	95
105)	1,2,4-Trichlorobenzene	9.202	180	2372232	803.8335	ug/l	99
106)	1,2,3-Trichlorobenzene	9.500	180	1878929	804.9343	ug/l	97
107)	Naphthalene	9.360	128	6995080	926.6312	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : CAL @ 500 PPB
Data File: 2M142502.D
Acq On : 09/29/20 20:03
Operator : JR
Sam Mult : 1 Vial# : 18
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 09/30/20 10:05
Qt Upd On: 09/30/20 10:05
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB
Data File: 2M142488.D
Acq On : 09/29/20 15:28

Operator : JR
Sam Mult : 1 Vial# : 4
Misc : A,5ML

Qt Meth : 2M_A0929.M
Qt On : 09/30/20 10:16
Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	387579	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	349135	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	180533	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	113097	31.71	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.70%			
39) 1,2-Dichloroethane-d4	4.910	67	56732	30.82	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.73%			
66) Toluene-d8	5.958	98	416933	30.62	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.07%			
76) Bromofluorobenzene	7.367	174	148566	30.77	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.57%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.691	51	3309	0.9778	ug/l	92
6) Dichlorodifluoromethane	1.679	85	2918	1.3624	ug/l	93
7) Chloromethane	1.861	50	4921	2.0848	ug/l	89
8) Bromomethane	2.264	94	2245	1.1003	ug/l	74
9) Vinyl Chloride	1.959	62	4207	1.4663	ug/l	98
10) Chloroethane	2.343	64	2856	1.3806	ug/l	99
11) Trichlorofluoromethane	2.563	101	5939	1.1916	ug/l	95
12) Ethyl ether	2.806	59	2431	1.2254	ug/l	81
13) Furan	2.843	39	4240	1.1827	ug/l	100
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	2247	1.0932	ug/l	90
15) Methylene Chloride	3.416	84	3803	1.3059	ug/l	82
16) Acrolein	2.922	56	2758	7.5944	ug/l	98
17) Acrylonitrile	3.629	53	1203	1.2102	ug/l	92
18) Iodomethane	3.154	142	2420	0.8179	ug/l	79
19) Acetone	3.044	43	6289	7.9449	ug/l	94
20) Carbon Disulfide	3.221	76	10722	1.4108	ug/l	100
21) t-Butyl Alcohol	3.477	59	1530	5.4547	ug/l	94
22) n-Hexane	3.873	57	2604	1.1044	ug/l	92
23) Di-isopropyl-ether	4.032	45	7670	1.0929	ug/l	96
24) 1,1-Dichloroethene	3.014	61	4299	1.1016	ug/l	94
25) Methyl Acetate	3.325	43	2541	1.4177	ug/l	100
26) Methyl-t-butyl ether	3.642	73	8568	1.1613	ug/l	94
27) 1,1-Dichloroethane	4.001	63	5843	1.2089	ug/l	88
28) trans-1,2-Dichloroethene	3.660	96	3472	1.1744	ug/l	87
29) Ethyl-t-butyl ether	4.294	59	8157	1.0303	ug/l	97
30) cis-1,2-Dichloroethene	4.410	61	6072	1.2513	ug/l	92
31) Bromochloromethane	4.568	49	2772	1.2353	ug/l	93
32) 2,2-Dichloropropane	4.422	77	5064	1.1495	ug/l	98
33) Ethyl acetate	4.440	43	3147m	1.2345	ug/l	
34) 1,4-Dioxane	5.501	88	1682	44.0480	ug/l	92
35) 1,1-Dichloropropene	4.824	75	4605	1.1486	ug/l	87
36) Chloroform	4.611	83	6042	1.1355	ug/l	95
38) Cyclohexane	4.769	56	3862	1.1224	ug/l	96
40) 1,2-Dichloroethane	4.952	62	5025	1.1158	ug/l	97
41) 2-Butanone	4.416	43	1122m	0.9161	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	5036	1.0595	ug/l	94
43) Carbon Tetrachloride	4.837	117	4182	0.9686	ug/l	80
44) Vinyl Acetate	4.026	43	8991	1.0358	ug/l	100
45) Bromodichloromethane	5.568	83	4542	1.0446	ug/l	82
46) Methylcyclohexane	5.416	83	3928	1.1523	ug/l	96
47) Dibromomethane	5.501	174	2450	1.0638	ug/l	90
48) 1,2-Dichloropropane	5.434	63	3272	1.1197	ug/l	98
49) Trichloroethene	5.306	130	3981	1.1902	ug/l	96
50) Benzene	4.952	78	13103	1.1367	ug/l	100
51) tert-Amyl methyl ether	4.989	73	8547	1.0127	ug/l	100
53) Iso-propylacetate	4.946	43	5450	0.9675	ug/l	97
54) Methyl methacrylate	5.458	41	2590	1.0427	ug/l	92
55) Dibromochloromethane	6.422	129	3196	0.8248	ug/l	98
56) 2-Chloroethylvinylether	5.708	63	322m	0.3954	ug/l	
57) cis-1,3-Dichloropropene	5.806	75	5339	1.0315	ug/l	95
58) trans-1,3-Dichloropropene	6.092	75	5004	0.9403	ug/l	95
59) Ethyl methacrylate	6.111	41	2540	0.9293	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	3105	0.9907	ug/l	89
61) 1,2-Dibromoethane	6.495	107	3539	1.0864	ug/l	86
62) 1,3-Dichloropropane	6.287	76	5195	0.9750	ug/l	86
63) 4-Methyl-2-Pentanone	5.873	43	3020	1.1212	ug/l	99
64) 2-Hexanone	6.306	43	2285	1.0809	ug/l	84
65) Tetrachloroethene	6.294	164	2691	0.9215	ug/l	90
67) Toluene	5.995	92	8569	1.0605	ug/l	86

Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB
Data File: 2M142488.D
Acq On : 09/29/20 15:28

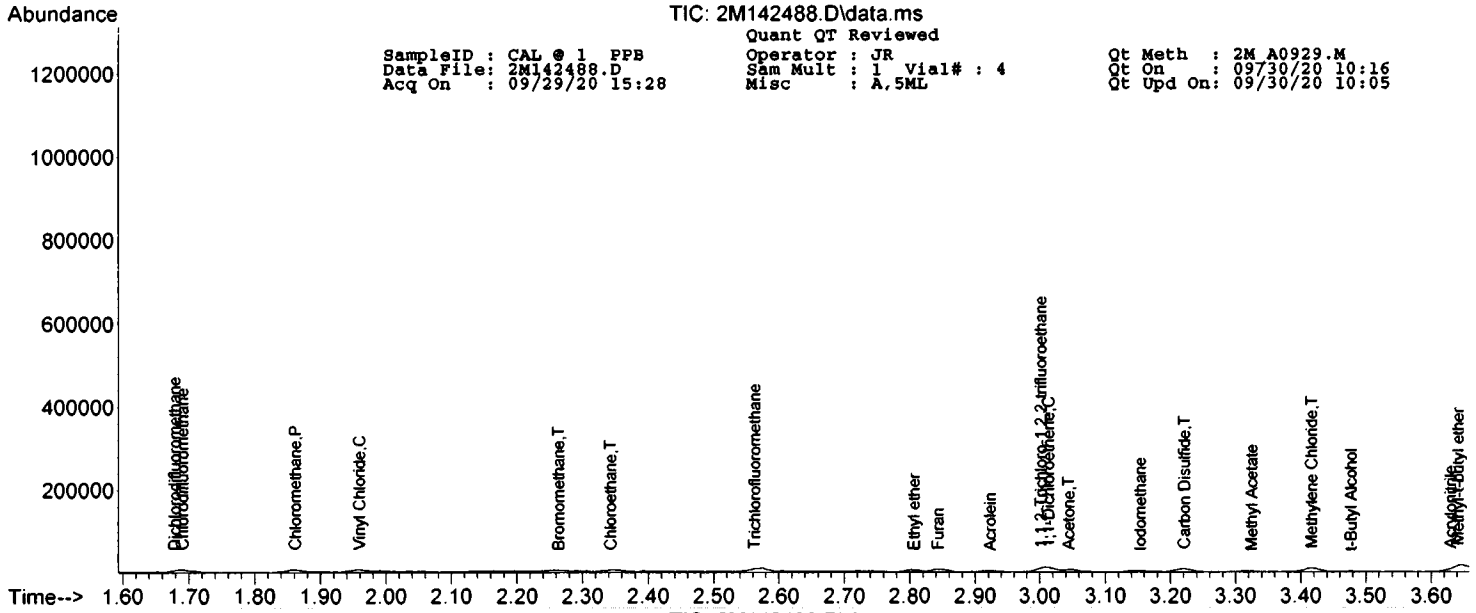
Operator : JR
Sam Mult : 1 Vial# : 4
Misc : A,5ML

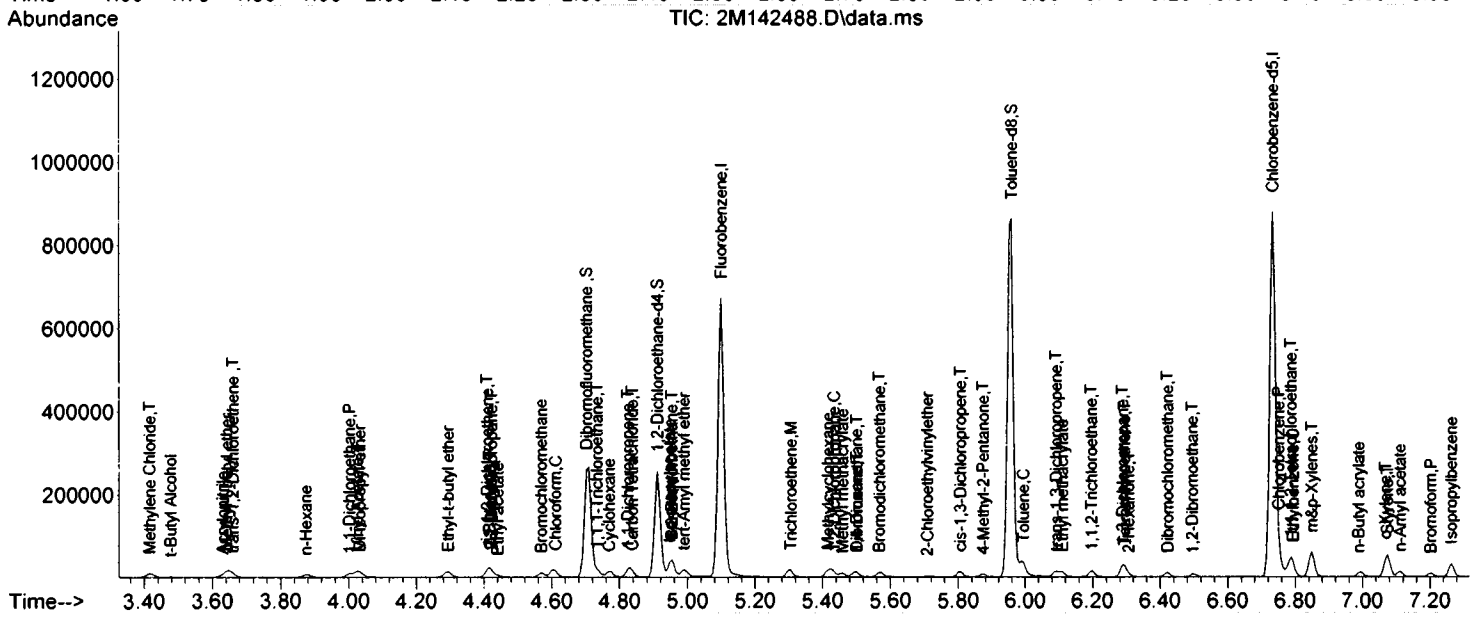
Qt Meth : 2M_A0929.M
Qt On : 09/30/20 10:16
Qt Upd On: 09/30/20 10:05

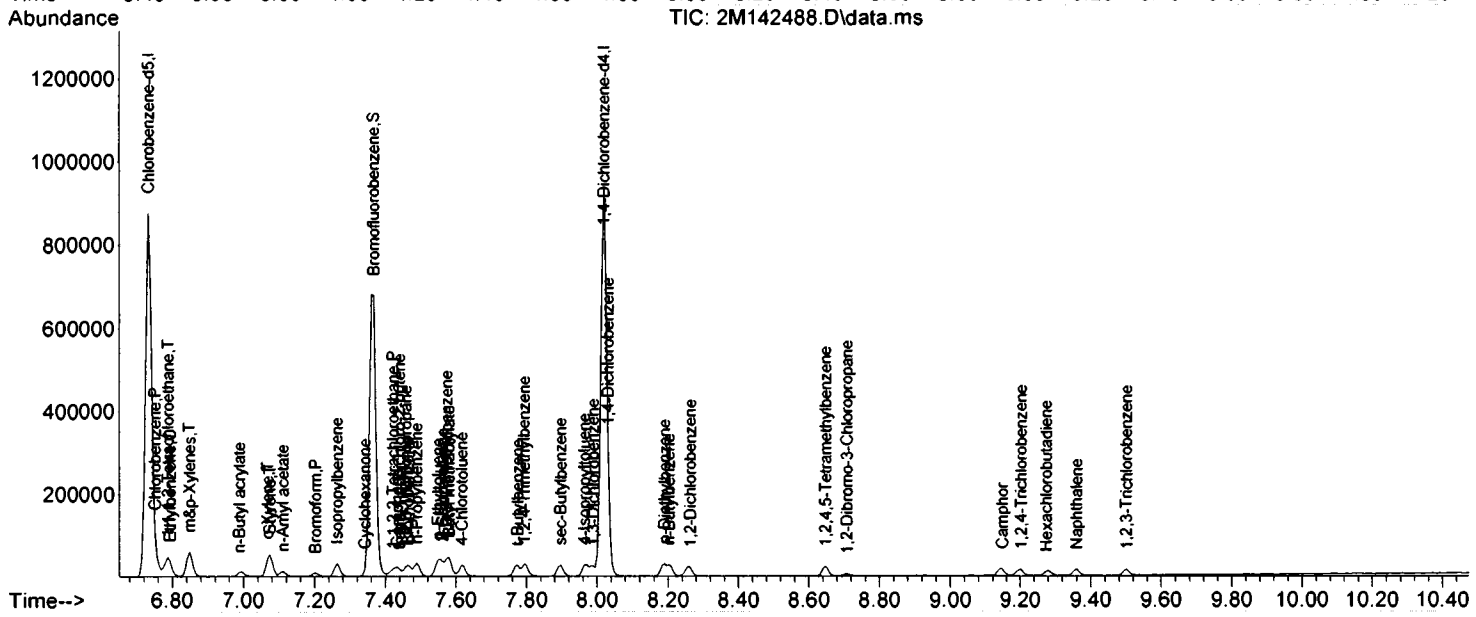
Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.787	133	3141	0.8898	ug/l	92
69)	Chlorobenzene	6.751	112	9805	1.0845	ug/l	96
71)	n-Butyl acrylate	6.989	55	5378	1.0189	ug/l	98
72)	n-Amyl acetate	7.110	43	4704	1.2393	ug/l	94
73)	Bromoform	7.202	173	2355	0.9514	ug/l	85
74)	Ethylbenzene	6.793	106	3416	1.0014	ug/l	85
75)	1,1,2,2-Tetrachloroethane	7.421	83	4401	1.2584	ug/l	96
77)	Styrene	7.074	104	10060	1.2005	ug/l	98
78)	m&p-Xylenes	6.848	106	12377	2.5172	ug/l	92
79)	o-Xylene	7.068	106	5916	1.2162	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.440	53	973m	0.6972	ug/l	
81)	1,3-Dichlorobenzene	7.988	146	7221	1.2070	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	7732	1.2599	ug/l	76
83)	1,2-Dichlorobenzene	8.263	146	7241	1.2831	ug/l	95
84)	Isopropylbenzene	7.263	105	13941	1.1664	ug/l	97
85)	Cyclohexanone	7.342	55	577	4.9546	ug/l	76
86)	Camphene	7.434	93	3766	1.1512	ug/l	93
87)	1,2,3-Trichloropropane	7.458	75	4469	0.9363	ug/l	95
88)	2-Chlorotoluene	7.562	91	8380	1.2184	ug/l	93
89)	p-Ethyltoluene	7.549	105	13860	1.2157	ug/l	99
90)	4-Chlorotoluene	7.617	91	8960	1.1841	ug/l	96
91)	n-Propylbenzene	7.488	91	17863	1.3061	ug/l	96
92)	Bromobenzene	7.464	77	9090	1.1597	ug/l	97
93)	1,3,5-Trimethylbenzene	7.574	105	11374	1.2600	ug/l	98
94)	Butyl methacrylate	7.580	41	3932	1.1042	ug/l	94
95)	t-Butylbenzene	7.775	119	11213	1.2997	ug/l	94
96)	1,2,4-Trimethylbenzene	7.793	105	11896	1.3403	ug/l	97
97)	sec-Butylbenzene	7.897	105	13754	1.2006	ug/l	99
98)	4-Isopropyltoluene	7.964	119	11246	1.1361	ug/l	97
99)	n-Butylbenzene	8.202	91	12400	1.2390	ug/l	98
100)	p-Diethylbenzene	8.190	119	6707	1.3040	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	8273	1.1156	ug/l	91
102)	1,2-Dibromo-3-Chloropr...	8.708	157	915	1.1220	ug/l	53
103)	Camphor	9.147	95	3408	10.5337	ug/l	100
104)	Hexachlorobutadiene	9.275	225	1852	1.6080	ug/l	90
105)	1,2,4-Trichlorobenzene	9.202	180	3656	1.2147	ug/l	96
106)	1,2,3-Trichlorobenzene	9.500	180	3151	1.3236	ug/l	95
107)	Naphthalene	9.360	128	8716	1.1321	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M142488.D\data.ms
Quant QT Reviewed
SampleID : CAL @ 1 PPB
Data File: 2M142488.D
Acq On : 09/29/20 15:28
Operator : JR
Sam Mult : 1 Vial# : 4
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 09730/20 10:16
Qt Upd On: 09/30/20 10:05
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->


Abundance
TIC: 2M142488.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Dibromofluoromethane,S
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M142488.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142487.D Sam Mult : 1 Vial# : 3 Qt On : 09/30/20 10:19
Acq On : 09/29/20 15:09 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	346417	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	307168	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	160675	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	100866	31.64	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.47%			
39) 1,2-Dichloroethane-d4	4.910	67	51505	31.30	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.33%			
66) Toluene-d8	5.952	98	364045	30.39	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.30%			
76) Bromofluorobenzene	7.367	174	130417	30.35	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.17%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	0.000		0	N.D.	d	
6) Dichlorodifluoromethane	0.000		0	N.D.	d	
7) Chloromethane	0.000		0	N.D.	d	
8) Bromomethane	0.000		0	N.D.	d	
9) Vinyl Chloride	0.000		0	N.D.	d	
10) Chloroethane	0.000		0	N.D.	d	
11) Trichlorofluoromethane	0.000		0	N.D.	d	
12) Ethyl ether	0.000		0	N.D.	d	
13) Furan	0.000		0	N.D.	d	
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D.	d	
15) Methylene Chloride	0.000		0	N.D.	d	
16) Acrolein	0.000		0	N.D.	d	
17) Acrylonitrile	0.000		0	N.D.	d	
18) Iodomethane	0.000		0	N.D.	d	
19) Acetone	0.000		0	N.D.	d	
20) Carbon Disulfide	0.000		0	N.D.	d	
21) t-Butyl Alcohol	0.000		0	N.D.	d	
22) n-Hexane	0.000		0	N.D.	d	
23) Di-isopropyl-ether	0.000		0	N.D.	d	
24) 1,1-Dichloroethene	0.000		0	N.D.	d	
25) Methyl Acetate	0.000		0	N.D.	d	
26) Methyl-t-butyl ether	3.635	73	3903	0.5919	ug/l	87
27) 1,1-Dichloroethane	0.000		0	N.D.	d	
28) trans-1,2-Dichloroethene	0.000		0	N.D.	d	
29) Ethyl-t-butyl ether	0.000		0	N.D.	d	
30) cis-1,2-Dichloroethene	0.000		0	N.D.	d	
31) Bromochloromethane	0.000		0	N.D.	d	
32) 2,2-Dichloropropane	0.000		0	N.D.	d	
33) Ethyl acetate	0.000		0	N.D.	d	
34) 1,4-Dioxane	0.000		0	N.D.	d	
35) 1,1-Dichloropropene	0.000		0	N.D.	d	
36) Chloroform	0.000		0	N.D.	d	
38) Cyclohexane	0.000		0	N.D.	d	
40) 1,2-Dichloroethane	4.958	62	3095	0.7689	ug/l	96
41) 2-Butanone	0.000		0	N.D.	d	
42) 1,1,1-Trichloroethane	0.000		0	N.D.	d	
43) Carbon Tetrachloride	0.000		0	N.D.	d	
44) Vinyl Acetate	0.000		0	N.D.	d	
45) Bromodichloromethane	0.000		0	N.D.	d	
46) Methylcyclohexane	0.000		0	N.D.	d	
47) Dibromomethane	0.000		0	N.D.	d	
48) 1,2-Dichloropropane	0.000		0	N.D.	d	
49) Trichloroethene	0.000		0	N.D.	d	
50) Benzene	4.952	78	6165	0.5983	ug/l	100
51) tert-Amyl methyl ether	0.000		0	N.D.	d	
53) Iso-propylacetate	0.000		0	N.D.	d	
54) Methyl methacrylate	0.000		0	N.D.	d	
55) Dibromochloromethane	0.000		0	N.D.	d	
56) 2-Chloroethylvinylether	0.000		0	N.D.	d	
57) cis-1,3-Dichloropropene	0.000		0	N.D.	d	
58) trans-1,3-Dichloropropene	0.000		0	N.D.	d	
59) Ethyl methacrylate	0.000		0	N.D.	d	
60) 1,1,2-Trichloroethane	0.000		0	N.D.	d	
61) 1,2-Dibromoethane	0.000		0	N.D.	d	
62) 1,3-Dichloropropane	0.000		0	N.D.	d	
63) 4-Methyl-2-Pentanone	0.000		0	N.D.	d	
64) 2-Hexanone	0.000		0	N.D.	d	
65) Tetrachloroethene	0.000		0	N.D.	d	
67) Toluene	0.000		0	N.D.	d	

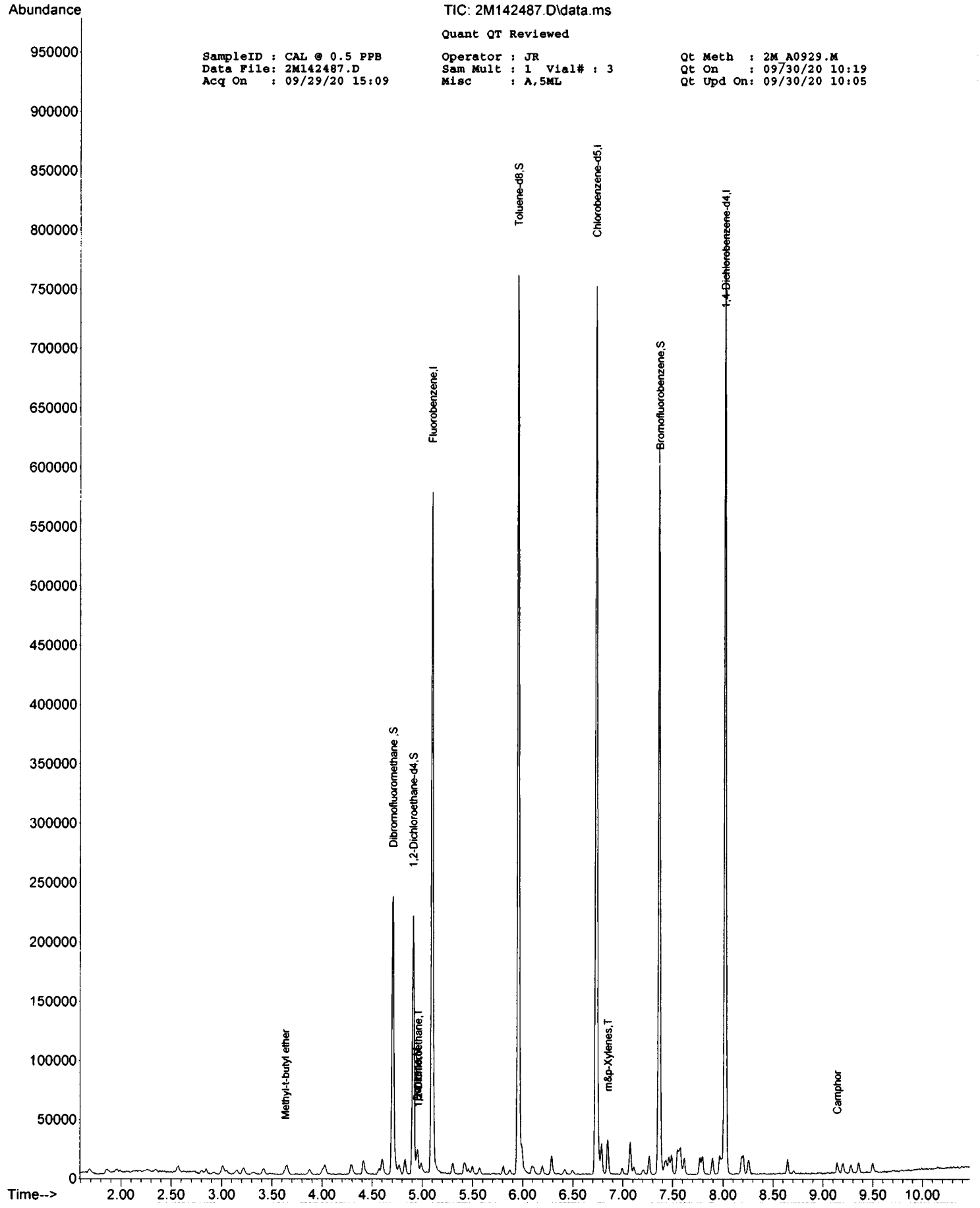
Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142487.D Sam Mult : 1 Vial# : 3 Qt On : 09/30/20 10:19
Acq On : 09/29/20 15:09 Misc : A,5ML Qt Upd On: 09/30/20 10:05

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	0.000		0	N.D. d		
69)	Chlorobenzene	0.000		0	N.D. d		
71)	n-Butyl acrylate	0.000		0	N.D. d		
72)	n-Amyl acetate	0.000		0	N.D. d		
73)	Bromoform	0.000		0	N.D. d		
74)	Ethylbenzene	0.000		0	N.D. d		
75)	1,1,2,2-Tetrachloroethane	0.000		0	N.D. d		
77)	Styrene	0.000		0	N.D. d		
78)	m&p-Xylenes	6.848	106	6388	1.4597	ug/l	88
79)	o-Xylene	0.000		0	N.D. d		
80)	trans-1,4-Dichloro-2-b...	0.000		0	N.D. d		
81)	1,3-Dichlorobenzene	0.000		0	N.D. d		
82)	1,4-Dichlorobenzene	0.000		0	N.D. d		
83)	1,2-Dichlorobenzene	0.000		0	N.D. d		
84)	Isopropylbenzene	0.000		0	N.D. d		
85)	Cyclohexanone	0.000		0	N.D. d		
86)	Camphene	0.000		0	N.D. d		
87)	1,2,3-Trichloropropane	0.000		0	N.D. d		
88)	2-Chlorotoluene	0.000		0	N.D. d		
89)	p-Ethyltoluene	0.000		0	N.D. d		
90)	4-Chlorotoluene	0.000		0	N.D. d		
91)	n-Propylbenzene	0.000		0	N.D. d		
92)	Bromobenzene	0.000		0	N.D. d		
93)	1,3,5-Trimethylbenzene	0.000		0	N.D. d		
94)	Butyl methacrylate	0.000		0	N.D. d		
95)	t-Butylbenzene	0.000		0	N.D. d		
96)	1,2,4-Trimethylbenzene	0.000		0	N.D. d		
97)	sec-Butylbenzene	0.000		0	N.D. d		
98)	4-Isopropyltoluene	0.000		0	N.D. d		
99)	n-Butylbenzene	0.000		0	N.D. d		
100)	p-Diethylbenzene	0.000		0	N.D. d		
101)	1,2,4,5-Tetramethylben...	0.000		0	N.D. d		
102)	1,2-Dibromo-3-Chloropr...	0.000		0	N.D. d		
103)	Camphor	9.141	95	1661m	5.7684	ug/l	
104)	Hexachlorobutadiene	0.000		0	N.D. d		
105)	1,2,4-Trichlorobenzene	0.000		0	N.D. d		
106)	1,2,3-Trichlorobenzene	0.000		0	N.D. d		
107)	Naphthalene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
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Quant QT Reviewed
SampleID : CAL @ 0.5 PPB
Data File: 2M142487.D
Acq On : 09/29/20 15:09
Operator : JR
Sam Mult : 1 Vial# : 3
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 09/30/20 10:19
Qt Upd On: 09/30/20 10:05
Methyl-t-butyl ether
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
m&p-Xylenes,T
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Camphor
Time-->

TxtDfile: 11M82691.D ICV FORM Date/Time: 09/12/20 02:11 0092507 0288

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
Chlorodifluoromethane	1	0		20.8727	20	104		70	130
Dichlorodifluoromethane	1	0		21.6227	20	108		50	150
Chloromethane	1	0		22.4799	20	112		70	130
Bromomethane	1	0		26.4031	20	132	*	70	130
Vinyl Chloride	1	0		21.3467	20	107		70	130
Chloroethane	1	0		22.4036	20	112		70	130
Trichlorofluoromethane	1	0		23.004	20	115		70	130
Ethyl ether	1	0		23.0525	20	115		70	130
Furan	1	0		20.7767	20	104		70	130
1.1.2-Trichloro-1.2.2-trifluoroethane	1	0		23.465	20	117		70	130
Methylene Chloride	1	0		21.0918	20	105		70	130
Acrolein	1	0		113.5428	100	114		50	150
Acrylonitrile	1	0		23.3597	20	117		50	150
Iodomethane	1	0		14.5338	20	73		70	130
Acetone	1	0		112.9465	100	113		50	150
Carbon Disulfide	1	0		22.3037	20	112		70	130
t-Butyl Alcohol	1	0		125.3041	100	125		50	150
n-Hexane	1	0		22.6108	20	113		70	130
Di-isopropyl-ether	1	0		22.3041	20	112		70	130
1.1-Dichloroethene	1	0		23.3258	20	117		70	130
Methyl Acetate	1	0		25.3838	20	127		70	130
Methyl-t-butyl ether	1	0		23.2102	20	116		70	130
1.1-Dichloroethane	1	0		21.6331	20	108		70	130
trans-1.2-Dichloroethene	1	0		22.1403	20	111		70	130
Ethyl-t-butyl ether	1	0		22.6125	20	113		70	130
cis-1.2-Dichloroethene	1	0		21.6052	20	108		70	130
Bromochloromethane	1	0		22.5745	20	113		70	130
2.2-Dichloropropane	1	0		20.6822	20	103		70	130
Ethyl acetate	1	0		22.5776	20	113		70	130
1.4-Dioxane	1	0		1185.235	1000	119		70	130
1.1-Dichloropropene	1	0		22.5593	20	113		70	130
Chloroform	1	0		21.8755	20	109		70	130
Cyclohexane	1	0		23.44	20	117		70	130
1.2-Dichloroethane	1	0		22.3857	20	112		70	130
2-Butanone	1	0		25.0007	20	125		70	130
1.1.1-Trichloroethane	1	0		21.7521	20	109		70	130
Carbon Tetrachloride	1	0		21.8544	20	109		70	130
Vinyl Acetate	1	0		21.3894	20	107		70	130
Bromodichloromethane	1	0		22.5226	20	113		70	130
Methylcyclohexane	1	0		24.1981	20	121		70	130
Dibromomethane	1	0		22.4095	20	112		70	130
1.2-Dichloropropane	1	0		23.3274	20	117		70	130
Trichloroethene	1	0		22.6702	20	113		70	130
Benzene	1	0		21.8993	20	109		70	130
Iso-propylacetate	1	0		21.4757	20	107		70	130
Methyl methacrylate	1	0		20.9617	20	105		70	130
Dibromochloromethane	1	0		22.136	20	111		70	130
2-Chloroethylvinylether	1	0		22.2217	20	111		70	130
cis-1.3-Dichloropropene	1	0		21.2768	20	106		70	130
trans-1.3-Dichloropropene	1	0		20.9469	20	105		70	130
Ethyl methacrylate	1	0		21.89	20	109		70	130
1.1.2-Trichloroethane	1	0		20.6612	20	103		70	130
1.2-Dibromoethane	1	0		21.6176	20	108		70	130
1.3-Dichloropropane	1	0		21.3924	20	107		70	130
4-Methyl-2-Pentanone	1	0		21.7746	20	109		70	130
2-Hexanone	1	0		21.9978	20	110		70	130
Tetrachloroethene	1	0		21.3541	20	107		70	130
Toluene	1	0		20.9236	20	105		70	130
1.1.1.2-Tetrachloroethane	1	0		21.4849	20	107		70	130
Chlorobenzene	1	0		21.2013	20	106		70	130
n-Butyl acrylate	1	0		22.9818	20	115		70	130
n-Amyl acetate	1	0		23.5433	20	118		70	130
Bromoform	1	0		24.0098	20	120		70	130
Ethylbenzene	1	0		21.836	20	109		70	130
1.1.2.2-Tetrachloroethane	1	0		23.2786	20	116		70	130
Styrene	1	0		22.6268	20	113		70	130
m&p-Xylenes	1	0		44.8713	40	112		70	130
o-Xylene	1	0		22.7125	20	114		70	130
trans-1.4-Dichloro-2-butene	1	0		23.5648	20	118		70	130
1.3-Dichlorobenzene	1	0		21.6814	20	108		70	130
1.4-Dichlorobenzene	1	0		21.1942	20	106		70	130
1.2-Dichlorobenzene	1	0		22.3561	20	112		70	130
Isopropylbenzene	1	0		23.3134	20	117		70	130
1.2.3-Trichloropropane	1	0		23.059	20	115		70	130
2-Chlorotoluene	1	0		21.3934	20	107		70	130
4-Chlorotoluene	1	0		21.2767	20	106		70	130
n-Propylbenzene	1	0		23.1118	20	116		70	130
Bromobenzene	1	0		22.8456	20	114		70	130
1.3.5-Trimethylbenzene	1	0		22.0748	20	110		70	130
Butyl methacrylate	1	0		23.3841	20	117		70	130
t-Butylbenzene	1	0		22.3711	20	112		70	130
1.2.4-Trimethylbenzene	1	0		22.638	20	113		70	130
sec-Butylbenzene	1	0		23.1813	20	116		70	130
4-Isopropyltoluene	1	0		22.8269	20	114		70	130
n-Butylbenzene	1	0		23.3433	20	117		70	130
1.2-Dibromo-3-Chloropropane	1	0		23.9801	20	120		70	130
Hexachlorobutadiene	1	0		24.187	20	121		70	130
1.2.4-Trichlorobenzene	1	0		22.692	20	113		70	130
1.2.3-Trichlorobenzene	1	0		22.6884	20	113		70	130
Naphthalene	1	0		23.3392	20	117		70	130

TxtDfile: 2M141759.D ICV FORM Date/Time: 09/10/20 02:16 0092507 0289

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
Chlorodifluoromethane	1	0		20.3152	20	102		70	130
Dichlorodifluoromethane	1	0		19.8358	20	99		50	150
Chloromethane	1	0		20.3263	20	102		70	130
Bromomethane	1	0		23.3991	20	117		70	130
Vinyl Chloride	1	0		20.0785	20	100		70	130
Chloroethane	1	0		21.4852	20	107		70	130
Trichlorofluoromethane	1	0		21.1973	20	106		70	130
Ethyl ether	1	0		21.2485	20	106		70	130
Furan	1	0		19.9678	20	100		70	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	0		20.8306	20	104		70	130
Methylene Chloride	1	0		20.6419	20	103		70	130
Acrolein	1	0		97.5654	100	98		50	150
Acrylonitrile	1	0		20.0942	20	100		50	150
Iodomethane	1	0		17.0222	20	85		70	130
Acetone	1	0		104.9387	100	105		50	150
Carbon Disulfide	1	0		20.1145	20	101		70	130
t-Butyl Alcohol	1	0		108.3201	100	108		50	150
n-Hexane	1	0		21.3413	20	107		70	130
Di-isopropyl-ether	1	0		20.4026	20	102		70	130
1,1-Dichloroethene	1	0		20.1827	20	101		70	130
Methyl Acetate	1	0		22.5837	20	113		70	130
Methyl-t-butyl ether	1	0		21.2107	20	106		70	130
1,1-Dichloroethane	1	0		20.2549	20	101		70	130
trans-1,2-Dichloroethene	1	0		19.4242	20	97		70	130
Ethyl-t-butyl ether	1	0		20.3183	20	102		70	130
cis-1,2-Dichloroethene	1	0		19.6567	20	98		70	130
Bromochloromethane	1	0		21.5922	20	108		70	130
2,2-Dichloropropane	1	0		18.1725	20	91		70	130
Ethyl acetate	1	0		20.4652	20	102		70	130
1,4-Dioxane	1	0		1107.622	1000	111		70	130
1,1-Dichloropropene	1	0		20.7312	20	104		70	130
Chloroform	1	0		20.7552	20	104		70	130
Cyclohexane	1	0		21.8035	20	109		70	130
1,2-Dichloroethane	1	0		19.1646	20	96		70	130
2-Butanone	1	0		20.797	20	104		70	130
1,1,1-Trichloroethane	1	0		20.7451	20	104		70	130
Carbon Tetrachloride	1	0		20.7796	20	104		70	130
Vinyl Acetate	1	0		19.3047	20	97		70	130
Bromodichloromethane	1	0		20.4538	20	102		70	130
Methylcyclohexane	1	0		22.2653	20	111		70	130
Dibromomethane	1	0		20.4849	20	102		70	130
1,2-Dichloropropane	1	0		20.3611	20	102		70	130
Trichloroethene	1	0		21.0153	20	105		70	130
Benzene	1	0		20.0246	20	100		70	130
Iso-propylacetate	1	0		18.5821	20	93		70	130
Methyl methacrylate	1	0		21.7524	20	109		70	130
Dibromochloromethane	1	0		20.8785	20	104		70	130
2-Chloroethylvinylether	1	0		20.9353	20	105		70	130
cis-1,3-Dichloropropene	1	0		20.2026	20	101		70	130
trans-1,3-Dichloropropene	1	0		19.1134	20	96		70	130
Ethyl methacrylate	1	0		19.8183	20	99		70	130
1,1,2-Trichloroethane	1	0		20.2331	20	101		70	130
1,2-Dibromoethane	1	0		20.9555	20	105		70	130
1,3-Dichloropropane	1	0		20.2244	20	101		70	130
4-Methyl-2-Pentanone	1	0		20.756	20	104		70	130
2-Hexanone	1	0		19.7494	20	99		70	130
Tetrachloroethene	1	0		20.39	20	102		70	130
Toluene	1	0		20.0281	20	100		70	130
1,1,1,2-Tetrachloroethane	1	0		19.32	20	97		70	130
Chlorobenzene	1	0		20.8025	20	104		70	130
n-Butyl acrylate	1	0		21.3101	20	107		70	130
n-Amyl acetate	1	0		16.4611	20	82		70	130
Bromoform	1	0		21.6187	20	108		70	130
Ethylbenzene	1	0		22.5124	20	113		70	130
1,1,2,2-Tetrachloroethane	1	0		23.2234	20	116		70	130
Styrene	1	0		23.0245	20	115		70	130
m&p-Xylenes	1	0		44.6003	40	112		70	130
o-Xylene	1	0		22.111	20	111		70	130
trans-1,4-Dichloro-2-butene	1	0		21.7362	20	109		70	130
1,3-Dichlorobenzene	1	0		21.7	20	109		70	130
1,4-Dichlorobenzene	1	0		21.8393	20	109		70	130
1,2-Dichlorobenzene	1	0		21.4491	20	107		70	130
Isopropylbenzene	1	0		22.9852	20	115		70	130
1,2,3-Trichloropropane	1	0		20.2179	20	101		70	130
2-Chlorotoluene	1	0		19.8503	20	99		70	130
4-Chlorotoluene	1	0		22.3227	20	112		70	130
n-Propylbenzene	1	0		23.5481	20	118		70	130
Bromobenzene	1	0		20.9162	20	105		70	130
1,3,5-Trimethylbenzene	1	0		23.8222	20	119		70	130
Butyl methacrylate	1	0		22.235	20	111		70	130
t-Butylbenzene	1	0		16.3333	20	82		70	130
1,2,4-Trimethylbenzene	1	0		18.7251	20	94		70	130
sec-Butylbenzene	1	0		23.1827	20	116		70	130
4-Isopropyltoluene	1	0		22.7267	20	114		70	130
n-Butylbenzene	1	0		23.1582	20	116		70	130
1,2-Dibromo-3-Chloropropane	1	0		22.124	20	111		70	130
Hexachlorobutadiene	1	0		23.3412	20	117		70	130
1,2,4-Trichlorobenzene	1	0		22.5402	20	113		70	130
1,2,3-Trichlorobenzene	1	0		24.8678	20	124		70	130
Naphthalene	1	0		24.6086	20	123		70	130

TxtDfile: 2M142508.D | ICV FORM | Date/Time: 09/29/20 22:00 | 0092507 0290

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
Chlorodifluoromethane	1	0		19.3405	20	97		70	130
Dichlorodifluoromethane	1	0		19.3762	20	97		50	150
Chloromethane	1	0		19.6117	20	98		70	130
Bromomethane	1	0		17.6527	20	88		70	130
Vinyl Chloride	1	0		19.0564	20	95		70	130
Chloroethane	1	0		17.8254	20	89		70	130
Trichlorofluoromethane	1	0		18.315	20	92		70	130
Ethyl ether	1	0		18.0146	20	90		70	130
Furan	1	0		17.4349	20	87		70	130
1.1.2-Trichloro-1.2.2-trifluoroethane	1	0		18.7779	20	94		70	130
Methylene Chloride	1	0		18.0878	20	90		70	130
Acrolein	1	0		86.3514	100	86		50	150
Acrylonitrile	1	0		17.4271	20	87		50	150
Iodomethane	1	0		14.7977	20	74		70	130
Acetone	1	0		85.2425	100	85		50	150
Carbon Disulfide	1	0		18.6713	20	93		70	130
t-Butyl Alcohol	1	0		91.0914	100	91		50	150
n-Hexane	1	0		18.1759	20	91		70	130
Di-isopropyl-ether	1	0		17.9094	20	90		70	130
1.1-Dichloroethene	1	0		18.1972	20	91		70	130
Methyl Acetate	1	0		23.0341	20	115		70	130
Methyl-t-butyl ether	1	0		17.9053	20	90		70	130
1.1-Dichloroethane	1	0		17.8546	20	89		70	130
trans-1.2-Dichloroethene	1	0		17.6316	20	88		70	130
Ethyl-t-butyl ether	1	0		17.7249	20	89		70	130
cis-1.2-Dichloroethene	1	0		17.1486	20	86		70	130
Bromochloromethane	1	0		19.2836	20	96		70	130
2.2-Dichloropropane	1	0		15.5656	20	78		70	130
Ethyl acetate	1	0		17.7365	20	89		70	130
1.4-Dioxane	1	0		910.8916	1000	91		70	130
1.1-Dichloropropene	1	0		17.9594	20	90		70	130
Chloroform	1	0		18.3447	20	92		70	130
Cyclohexane	1	0		18.2369	20	91		70	130
1.2-Dichloroethane	1	0		16.6034	20	83		70	130
2-Butanone	1	0		16.5396	20	83		70	130
1.1.1-Trichloroethane	1	0		18.326	20	92		70	130
Carbon Tetrachloride	1	0		18.0751	20	90		70	130
Vinyl Acetate	1	0		13.4376	20	67	*	70	130
Bromodichloromethane	1	0		17.7775	20	89		70	130
Methylcyclohexane	1	0		17.8641	20	89		70	130
Dibromomethane	1	0		17.7419	20	89		70	130
1.2-Dichloropropane	1	0		17.8015	20	89		70	130
Trichloroethene	1	0		17.9585	20	90		70	130
Benzene	1	0		17.7404	20	89		70	130
Iso-propylacetate	1	0		17.1804	20	86		70	130
Methyl methacrylate	1	0		18.2662	20	91		70	130
Dibromochloromethane	1	0		18.3553	20	92		70	130
2-Chloroethylvinylether	1	0		65.1873	20	326	*	70	130
cis-1.3-Dichloropropene	1	0		17.6306	20	88		70	130
trans-1.3-Dichloropropene	1	0		17.7122	20	89		70	130
Ethyl methacrylate	1	0		17.4665	20	87		70	130
1.1.2-Trichloroethane	1	0		18.1123	20	91		70	130
1.2-Dibromoethane	1	0		18.445	20	92		70	130
1.3-Dichloropropane	1	0		18.0144	20	90		70	130
4-Methyl-2-Pentanone	1	0		17.709	20	89		70	130
2-Hexanone	1	0		17.3056	20	87		70	130
Tetrachloroethene	1	0		18.68	20	93		70	130
Toluene	1	0		17.9655	20	90		70	130
1.1.1.2-Tetrachloroethane	1	0		17.5162	20	88		70	130
Chlorobenzene	1	0		18.295	20	91		70	130
n-Butyl acrylate	1	0		19.2583	20	96		70	130
n-Amyl acetate	1	0		18.3974	20	92		70	130
Bromoform	1	0		19.2839	20	96		70	130
Ethylbenzene	1	0		19.7688	20	99		70	130
1.1.2.2-Tetrachloroethane	1	0		18.1203	20	91		70	130
Styrene	1	0		19.5771	20	98		70	130
m&p-Xylenes	1	0		38.3428	40	96		70	130
o-Xylene	1	0		19.5571	20	98		70	130
trans-1.4-Dichloro-2-butene	1	0		19.8853	20	99		70	130
1.3-Dichlorobenzene	1	0		18.629	20	93		70	130
1.4-Dichlorobenzene	1	0		18.0565	20	90		70	130
1.2-Dichlorobenzene	1	0		18.3458	20	92		70	130
Isopropylbenzene	1	0		20.1662	20	101		70	130
1.2.3-Trichloropropane	1	0		17.8509	20	89		70	130
2-Chlorotoluene	1	0		20.006	20	100		70	130
4-Chlorotoluene	1	0		20.3553	20	102		70	130
n-Propylbenzene	1	0		19.5495	20	98		70	130
Bromobenzene	1	0		18.1483	20	91		70	130
1.3.5-Trimethylbenzene	1	0		20.1295	20	101		70	130
Butyl methacrylate	1	0		17.6445	20	88		70	130
t-Butylbenzene	1	0		19.9751	20	100		70	130
1.2.4-Trimethylbenzene	1	0		19.1597	20	96		70	130
sec-Butylbenzene	1	0		20.1992	20	101		70	130
4-Isopropyltoluene	1	0		19.7722	20	99		70	130
n-Butylbenzene	1	0		19.8508	20	99		70	130
1.2-Dibromo-3-Chloropropane	1	0		18.9152	20	95		70	130
Hexachlorobutadiene	1	0		19.1785	20	96		70	130
1.2.4-Trichlorobenzene	1	0		18.3004	20	92		70	130
1.2.3-Trichlorobenzene	1	0		19.0433	20	95		70	130
Naphthalene	1	0		18.461	20	92		70	130

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M83268.D **Instrument:** GCMS 11

Cont Calibration Date/Time 9/28/2020 11:14:00 **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.96	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.68	16.36	20	20	0.1	0.268	0.219	18.18	
Dichlorodifluoromethane	1	0		1.67	18.62	20	20	0.1	0.161	0.150	6.90	
Chloromethane	1	0		1.85	20.65	20	20	0.1	0.170	0.175	3.24	
Bromomethane	1	0		2.24	19.58	20	20	0.1	0.176	0.172	2.09	
Vinyl Chloride	1	0		1.95	21.39	20	20	0.1	0.218	0.233	6.96	
Chloroethane	1	0		2.33	22.52	20	20	0.1	0.148	0.167	12.59	
Trichlorofluoromethane	1	0		2.55	22.42	20	20	0.1	0.361	0.404	12.08	
Ethyl ether	1	0		2.78	23.95	20	20	0.5	0.123	0.148	19.75	
Furan	1	0		2.82	22.52	20	20	0.5	0.229	0.257	12.58	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.98	19.79	20	20	0.1	0.146	0.144	1.05	
Methylene Chloride	1	0		3.37	20.17	20	20	0.1	0.217	0.219	0.86	
Acrolein	1	0		2.89	126.30	100	20		0.026	0.033	26.30	C1
Acrylonitrile	1	0		3.57	22.51	20	20		0.063	0.073	12.53	
Iodomethane	1	0		3.12	18.52	20	20		0.173	0.189	7.42	
Acetone	1	0		3.01	101.93	100	20	0.1	0.052	0.053	1.93	
Carbon Disulfide	1	0		3.19	21.14	20	20	0.1	0.493	0.521	5.68	
t-Butyl Alcohol	1	0		3.44	138.22	100	20		0.013	0.017	38.22	C1
n-Hexane	1	0		3.81	20.47	20	20		0.153	0.157	2.36	
Di-isopropyl-ether	1	0		3.95	19.96	20	20		0.425	0.424	0.18	
1,1-Dichloroethene	1	0		2.98	20.30	20	20	0.1	0.266	0.270	1.51	
Methyl Acetate	1	0		3.28	22.27	20	20	0.1	0.107	0.121	11.36	
Methyl-t-butyl ether	1	0		3.60	21.70	20	20	0.1	0.459	0.498	8.52	
1,1-Dichloroethane	1	0		3.93	20.22	20	20	0.2	0.345	0.349	1.12	
trans-1,2-Dichloroethene	1	0		3.61	21.45	20	20	0.1	0.204	0.219	7.26	
Ethyl-t-butyl ether	1	0		4.20	20.82	20	20	0.5	0.466	0.485	4.08	
cis-1,2-Dichloroethene	1	0		4.31	20.00	20	20	0.1	0.336	0.336	0.00	
Bromochloromethane	1	0		4.45	21.42	20	20		0.143	0.153	7.12	
2,2-Dichloropropane	1	0		4.31	22.05	20	20		0.272	0.300	10.23	
Ethyl acetate	1	0		4.33	20.07	20	20		0.169	0.169	0.33	
1,4-Dioxane	1	0		5.33	1648.04	1000	20		0.002	0.003	64.80	C1
1,1-Dichloropropene	1	0		4.70	20.04	20	20		0.299	0.300	0.20	
Chloroform	1	0		4.49	20.30	20	20	0.2	0.381	0.386	1.50	
Dibromofluoromethane	1	0	S	4.58	30.83	30	**		0.250	0.257	2.75	
Cyclohexane	1	0		4.65	19.45	20	20	0.1	0.251	0.245	2.73	
1,2-Dichloroethane-d4	1	0	S	4.78	29.51	30	**		0.131	0.129	1.65	
1,2-Dichloroethane	1	0		4.82	19.62	20	20	0.1	0.294	0.288	1.92	
2-Butanone	1	0		4.30	20.56	20	20	0.1	0.072	0.074	2.80	
1,1,1-Trichloroethane	1	0		4.61	19.82	20	20	0.1	0.344	0.341	0.91	
Carbon Tetrachloride	1	0		4.71	20.27	20	20	0.1	0.289	0.293	1.36	
Vinyl Acetate	1	0		3.95	20.27	20	20		0.502	0.508	1.36	
Bromodichloromethane	1	0		5.41	20.78	20	20	0.2	0.287	0.298	3.89	
Methylcyclohexane	1	0		5.27	21.09	20	20	0.1	0.238	0.251	5.44	
Dibromomethane	1	0		5.34	21.72	20	20		0.139	0.151	8.62	
1,2-Dichloropropane	1	0		5.28	20.17	20	20	0.1	0.199	0.201	0.83	
Trichloroethene	1	0		5.16	21.18	20	20	0.2	0.238	0.252	5.92	
Benzene	1	0		4.82	20.53	20	20	0.5	0.849	0.872	2.66	
tert-Amyl methyl ether	1	0		4.85	21.44	20	20		0.465	0.499	7.18	
Chlorobenzene-d5	1	0	I	6.55	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.81	21.18	20	20	0.5	0.332	0.352	5.91	
Methyl methacrylate	1	0		5.30	19.10	20	20	0.5	0.201	0.192	4.48	
Dibromochloromethane	1	0		6.24	21.35	20	20	0.1	0.279	0.298	6.74	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M83268.D **Instrument:** GCMS 11

Cont Calibration Date/Time 9/28/2020 11:14:00 Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.54	12.93	20	20		0.053	0.037	35.35	C1
cis-1,3-Dichloropropene	1	0		5.64	20.07	20	20	0.2	0.397	0.398	0.33	
trans-1,3-Dichloropropene	1	0		5.92	19.85	20	20	0.1	0.377	0.374	0.76	
Ethyl methacrylate	1	0		5.93	20.72	20	20	0.5	0.174	0.180	3.61	
1,1,2-Trichloroethane	1	0		6.02	19.75	20	20	0.1	0.266	0.262	1.26	
1,2-Dibromoethane	1	0		6.31	20.35	20	20	0.1	0.280	0.285	1.75	
1,3-Dichloropropane	1	0		6.11	20.08	20	20		0.439	0.440	0.38	
4-Methyl-2-Pentanone	1	0		5.70	20.62	20	20	0.1	0.202	0.209	3.08	
2-Hexanone	1	0		6.12	20.82	20	20	0.1	0.144	0.149	4.10	
Tetrachloroethene	1	0		6.12	18.94	20	20	0.2	0.234	0.222	5.28	
Toluene-d8	1	0	S	5.79	29.54	30	**		1.312	1.292	1.55	
Toluene	1	0		5.83	19.26	20	20	0.4	0.730	0.703	3.72	
1,1,1,2-Tetrachloroethane	1	0		6.59	19.50	20	20		0.272	0.265	2.52	
Chlorobenzene	1	0		6.56	19.34	20	20	0.5	0.831	0.804	3.30	
1,4-Dichlorobenzene-d4	1	0	I	7.82	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.80	21.48	20	20	0.5	0.792	0.851	7.40	
n-Amyl acetate	1	0		6.91	22.38	20	20	0.5	0.591	0.661	11.90	
Bromoform	1	0		7.01	21.08	20	20	0.1	0.360	0.379	5.40	
Ethylbenzene	1	0		6.60	18.43	20	20	0.1	0.737	0.679	7.84	
1,1,2,2-Tetrachloroethane	1	0		7.21	19.51	20	20	0.1	0.705	0.688	2.46	
Bromofluorobenzene	1	0	S	7.17	31.50	30	**		0.756	0.794	5.00	
Styrene	1	0		6.88	19.57	20	20	0.3	1.715	1.678	2.14	
m&p-Xylenes	1	0		6.66	39.26	40	20	0.1	1.025	1.006	1.84	
o-Xylene	1	0		6.88	19.48	20	20	0.3	1.002	0.976	2.61	
trans-1,4-Dichloro-2-butene	1	0		7.24	20.39	20	20		0.200	0.204	1.95	
1,3-Dichlorobenzene	1	0		7.78	18.95	20	20	0.6	1.190	1.128	5.26	
1,4-Dichlorobenzene	1	0		7.83	18.60	20	20	0.5	1.233	1.147	6.98	
1,2-Dichlorobenzene	1	0		8.05	19.31	20	20	0.4	1.084	1.046	3.44	
Isopropylbenzene	1	0		7.07	19.62	20	20	0.1	2.451	2.405	1.88	
Cyclohexanone	1	0		7.14	189.65	100	20		0.013	0.023	89.65	C1
Camphene	1	0		7.24	19.89	20	20		0.580	0.577	0.56	
1,2,3-Trichloropropane	1	0		7.26	20.04	20	20		0.809	0.811	0.22	
2-Chlorotoluene	1	0		7.36	18.07	20	20		1.583	1.430	9.63	
p-Ethyltoluene	1	0		7.35	20.13	20	20		2.444	2.460	0.67	
4-Chlorotoluene	1	0		7.42	17.92	20	20		1.631	1.462	10.38	
n-Propylbenzene	1	0		7.29	19.55	20	20		2.876	2.812	2.24	
Bromobenzene	1	0		7.27	19.58	20	20		1.459	1.429	2.08	
1,3,5-Trimethylbenzene	1	0		7.38	18.89	20	20		2.054	1.941	5.53	
Butyl methacrylate	1	0		7.38	20.30	20	20	0.5	0.519	0.527	1.51	
t-Butylbenzene	1	0		7.57	18.94	20	20		1.909	1.808	5.29	
1,2,4-Trimethylbenzene	1	0		7.59	18.97	20	20		2.127	2.017	5.16	
sec-Butylbenzene	1	0		7.69	19.33	20	20		2.287	2.210	3.35	
4-Isopropyltoluene	1	0		7.76	19.30	20	20		1.940	1.873	3.48	
n-Butylbenzene	1	0		8.00	19.89	20	20		1.966	1.955	0.56	
p-Diethylbenzene	1	0		7.98	20.89	20	20		1.036	1.082	4.43	
1,2,4,5-Tetramethylbenzene	1	0		8.44	20.65	20	20		1.436	1.483	3.25	
1,2-Dibromo-3-Chloropropane	1	0		8.49	21.67	20	20	0.05	0.119	0.129	8.34	
Camphor	1	0		8.94	241.65	200	20		0.038	0.056	20.83	C1
Hexachlorobutadiene	1	0		9.07	21.44	20	20		0.154	0.165	7.19	
1,2,4-Trichlorobenzene	1	0		8.99	20.89	20	20	0.2	0.419	0.437	4.46	
1,2,3-Trichlorobenzene	1	0		9.29	23.02	20	20		0.274	0.316	15.09	
Naphthalene	1	0		9.15	23.66	20	20		1.030	1.219	18.28	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83268.D Sam Mult : 1 Vial# : 4 Qt On : 09/28/20 11:26
Acq On : 09/28/20 11:14 Misc : A,5ML Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	272483	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	219205	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	111772	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	70018	30.82	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.73%			
39) 1,2-Dichloroethane-d4	4.778	67	35162	29.51	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.37%			
66) Toluene-d8	5.787	98	283151	29.54	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.47%			
76) Bromofluorobenzene	7.167	174	88757	31.50	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.00%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.684	51	39864m	16.3647	ug/l	
6) Dichlorodifluoromethane	1.671	85	27246	18.6195	ug/l	99
7) Chloromethane	1.850	50	31804	20.6477	ug/l	98
8) Bromomethane	2.244	94	31252	19.5823	ug/l	97
9) Vinyl Chloride	1.946	62	42380	21.3919	ug/l	88
10) Chloroethane	2.331	64	30293	22.5185	ug/l	79
11) Trichlorofluoromethane	2.546	101	73409	22.4159	ug/l	100
12) Ethyl ether	2.778	59	26831m	23.9491	ug/l	
13) Furan	2.816	39	46759m	22.5151	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.977	101	26167	19.7895	ug/l	97
15) Methylene Chloride	3.373	84	39727	20.1713	ug/l	52
16) Acrolein	2.890	56	29618	126.2990	ug/l	87
17) Acrylonitrile	3.569	53	13346	22.5051	ug/l	97
18) Iodomethane	3.119	142	34345	18.5158	ug/l	97
19) Acetone	3.013	43	47797	101.9254	ug/l	91
20) Carbon Disulfide	3.186	76	94716	21.1368	ug/l	100
21) t-Butyl Alcohol	3.437	59	15699	138.2205	ug/l	90
22) n-Hexane	3.813	57	28536	20.4718	ug/l	85
23) Di-isopropyl-ether	3.955	45	77078	19.9632	ug/l	56
24) 1,1-Dichloroethene	2.984	61	48974	20.3017	ug/l	70
25) Methyl Acetate	3.279	43	21896	22.2726	ug/l	100
26) Methyl-t-butyl ether	3.598	73	90445	21.7047	ug/l	82
27) 1,1-Dichloroethane	3.926	63	63322	20.2242	ug/l	92
28) trans-1,2-Dichloroethene	3.607	96	39833	21.4516	ug/l	69
29) Ethyl-t-butyl ether	4.196	59	88191	20.8155	ug/l	84
30) cis-1,2-Dichloroethene	4.308	61	61124	20.0010	ug/l	63
31) Bromochloromethane	4.453	49	27739m	21.4233	ug/l	
32) 2,2-Dichloropropane	4.315	77	54538	22.0463	ug/l	90
33) Ethyl acetate	4.328	43	30766	20.0669	ug/l	97
34) 1,4-Dioxane	5.334	88	27776	1648.0433	ug/l	72
35) 1,1-Dichloropropene	4.701	75	54422	20.0404	ug/l	98
36) Chloroform	4.492	83	70183	20.2996	ug/l	94
38) Cyclohexane	4.652	56	44438m	19.4543	ug/l	
40) 1,2-Dichloroethane	4.820	62	52336	19.6159	ug/l	97
41) 2-Butanone	4.302	43	13468	20.5604	ug/l	71
42) 1,1,1-Trichloroethane	4.614	97	61895	19.8180	ug/l	93
43) Carbon Tetrachloride	4.710	117	53204	20.2717	ug/l	100
44) Vinyl Acetate	3.948	43	92341	20.2718	ug/l	100
45) Bromodichloromethane	5.414	83	54181	20.7770	ug/l	95
46) Methylcyclohexane	5.270	83	45510m	21.0887	ug/l	
47) Dibromomethane	5.344	174	27358	21.7239	ug/l	96
48) 1,2-Dichloropropane	5.276	63	36423	20.1670	ug/l	98
49) Trichloroethene	5.157	130	45711	21.1833	ug/l	91
50) Benzene	4.820	78	158321	20.5321	ug/l	100
51) tert-Amyl methyl ether	4.855	73	90585	21.4367	ug/l	95
53) Iso-propylacetate	4.810	43	51449	21.1817	ug/l	79
54) Methyl methacrylate	5.302	41	28032m	19.1036	ug/l	
55) Dibromochloromethane	6.238	129	43527	21.3478	ug/l	99
56) 2-Chloroethylvinylether	5.540	63	5401	12.9300	ug/l	89
57) cis-1,3-Dichloropropene	5.639	75	58193	20.0663	ug/l	96
58) trans-1,3-Dichloropropene	5.916	75	54678	19.8473	ug/l	99
59) Ethyl methacrylate	5.932	41	26344m	20.7230	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	38309	19.7475	ug/l	87
61) 1,2-Dibromoethane	6.315	107	41660	20.3508	ug/l	96
62) 1,3-Dichloropropane	6.112	76	64343	20.0756	ug/l	100
63) 4-Methyl-2-Pentanone	5.701	43	30489	20.6160	ug/l	95
64) 2-Hexanone	6.122	43	21832	20.8209	ug/l	91
65) Tetrachloroethene	6.115	164	32433	18.9448	ug/l	97
67) Toluene	5.826	92	102699	19.2563	ug/l	96

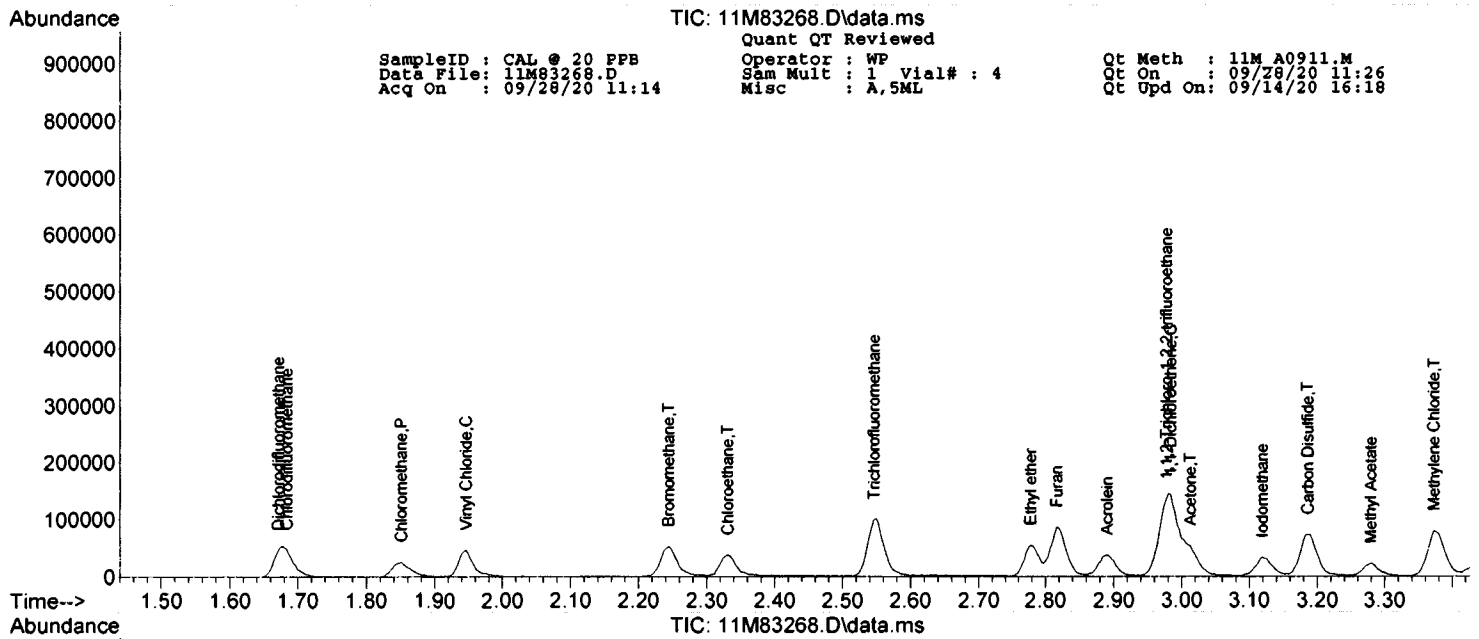
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83268.D Sam Mult : 1 Vial# : 4 Qt On : 09/28/20 11:26
Acq On : 09/28/20 11:14 Misc : A,5ML Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.594	133	38763	19.4953	ug/l	96
69)	Chlorobenzene	6.562	112	117457	19.3391	ug/l	100
71)	n-Butyl acrylate	6.797	55	63391	21.4805	ug/l	88
72)	n-Amyl acetate	6.913	43	49252	22.3809	ug/l	74
73)	Bromoform	7.006	173	28263	21.0805	ug/l	100
74)	Ethylbenzene	6.604	106	50584	18.4328	ug/l	92
75)	1,1,2,2-Tetrachloroethane	7.215	83	51233	19.5078	ug/l	95
77)	Styrene	6.881	104	125062	19.5712	ug/l	91
78)	m&p-Xylenes	6.662	106	149991	39.2627	ug/l	99
79)	o-Xylene	6.877	106	72701	19.4784	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.241	53	15203	20.3902	ug/l	79
81)	1,3-Dichlorobenzene	7.784	146	84040	18.9487	ug/l	98
82)	1,4-Dichlorobenzene	7.829	146	85469	18.6034	ug/l	99
83)	1,2-Dichlorobenzene	8.054	146	77967	19.3125	ug/l	99
84)	Isopropylbenzene	7.067	105	179202	19.6240	ug/l	99
85)	Cyclohexanone	7.138	55	8433	189.6524	ug/l	81
86)	Camphene	7.241	93	42996	19.8887	ug/l	97
87)	1,2,3-Trichloropropane	7.257	75	60430	20.0446	ug/l	91
88)	2-Chlorotoluene	7.363	91	106568	18.0735	ug/l	99
89)	p-Ethyltoluene	7.350	105	183338	20.1338	ug/l	99
90)	4-Chlorotoluene	7.418	91	108920	17.9247	ug/l	98
91)	n-Propylbenzene	7.292	91	209516	19.5523	ug/l	99
92)	Bromobenzene	7.270	77	106483	19.5832	ug/l	90
93)	1,3,5-Trimethylbenzene	7.376	105	144615	18.8934	ug/l	98
94)	Butyl methacrylate	7.379	41	39279m	20.3017	ug/l	
95)	t-Butylbenzene	7.572	119	134699	18.9414	ug/l	98
96)	1,2,4-Trimethylbenzene	7.594	105	150320	18.9674	ug/l	97
97)	sec-Butylbenzene	7.694	105	164700	19.3308	ug/l	99
98)	4-Isopropyltoluene	7.765	119	139535	19.3048	ug/l	99
99)	n-Butylbenzene	8.000	91	145689	19.8889	ug/l	96
100)	p-Diethylbenzene	7.983	119	80640	20.8850	ug/l	95
101)	1,2,4,5-Tetramethylben...	8.440	119	110516	20.6499	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.495	157	9640	21.6680	ug/l	98
103)	Camphor	8.935	95	41645	241.6518	ug/l	99
104)	Hexachlorobutadiene	9.073	225	12309	21.4370	ug/l	98
105)	1,2,4-Trichlorobenzene	8.990	180	32588	20.8919	ug/l	98
106)	1,2,3-Trichlorobenzene	9.292	180	23528	23.0182	ug/l	96
107)	Naphthalene	9.151	128	90825	23.6569	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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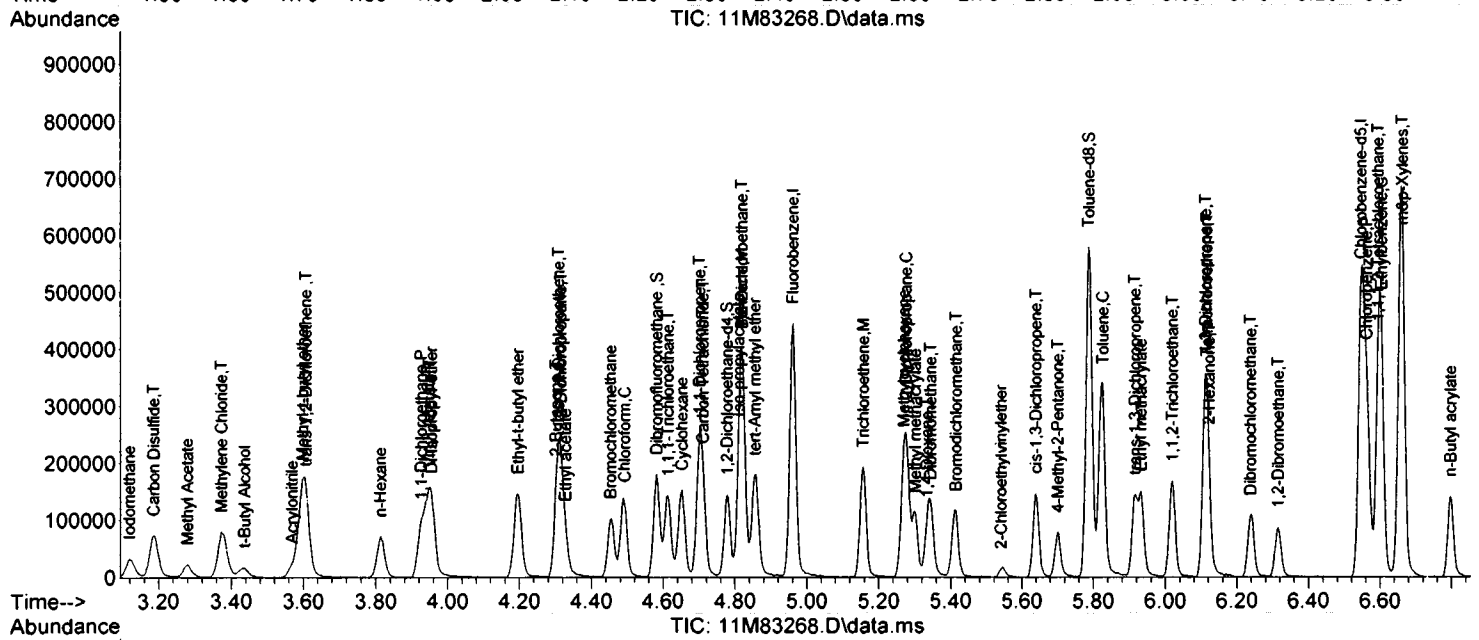
SampleID : CAL @ 20 PPB
Data File: 11M83268.D
Acq On : 09/28/20 11:14
Operator : WP
Sam Mult : 1 Vial# : 4
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/28/20 11:26
Qt Upd On: 09/14/20 16:18
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->


Abundance
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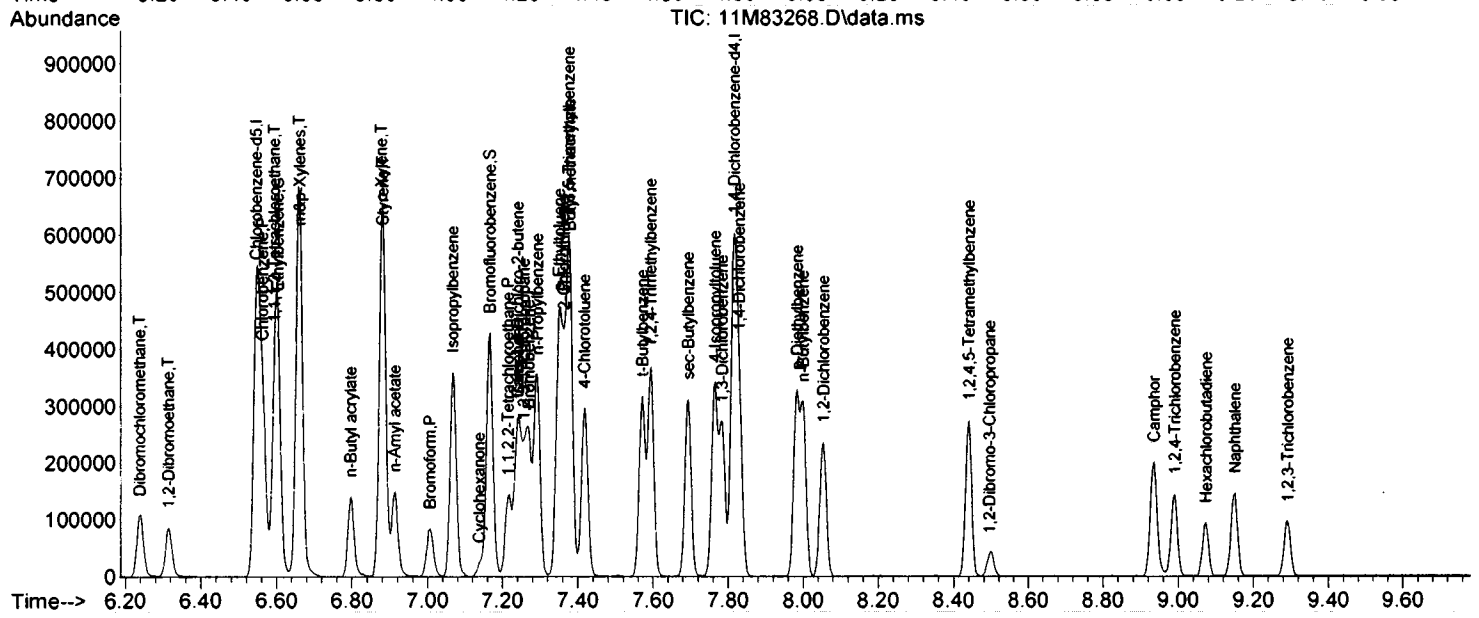
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
Time-->


Abundance
TIC: 11M83268.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142440.D **Instrument:** GCMS 2

Cont Calibration Date/Time 9/28/2020 9:38:00 P **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.10	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.70	17.34	20	20	0.1	0.262	0.227	13.32	
Dichlorodifluoromethane	1	0		1.68	16.99	20	20	0.1	0.166	0.141	15.04	
Chloromethane	1	0		1.86	21.20	20	20	0.1	0.183	0.194	6.00	
Bromomethane	1	0		2.26	10.38	20	20	0.1	0.158	0.082	48.10	C1
Vinyl Chloride	1	0		1.95	23.70	20	20	0.1	0.222	0.263	18.52	
Chloroethane	1	0		2.34	23.77	20	20	0.1	0.160	0.190	18.87	
Trichlorofluoromethane	1	0		2.57	23.04	20	20	0.1	0.386	0.444	15.18	
Ethyl ether	1	0		2.80	23.99	20	20	0.5	0.154	0.184	19.93	
Furan	1	0		2.84	21.94	20	20	0.5	0.278	0.304	9.69	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.00	20.96	20	20	0.1	0.159	0.167	4.79	
Methylene Chloride	1	0		3.42	22.24	20	20	0.1	0.225	0.251	11.19	
Acrolein	1	0		2.92	114.54	100	20		0.028	0.032	14.54	
Acrylonitrile	1	0		3.62	23.36	20	20		0.077	0.090	16.79	
Iodomethane	1	0		3.15	10.29	20	20		0.229	0.118	48.55	C1
Acetone	1	0		3.04	112.76	100	20	0.1	0.061	0.069	12.76	
Carbon Disulfide	1	0		3.22	22.67	20	20	0.1	0.588	0.667	13.37	
t-Butyl Alcohol	1	0		3.48	110.77	100	20		0.022	0.024	10.77	
n-Hexane	1	0		3.87	20.34	20	20		0.183	0.186	1.67	
Di-isopropyl-ether	1	0		4.03	22.16	20	20		0.543	0.602	10.81	
1,1-Dichloroethene	1	0		3.01	22.34	20	20	0.1	0.302	0.337	11.71	
Methyl Acetate	1	0		3.32	24.38	20	20	0.1	0.139	0.169	21.88	C1
Methyl-t-butyl ether	1	0		3.64	23.36	20	20	0.1	0.571	0.667	16.81	
1,1-Dichloroethane	1	0		4.00	22.64	20	20	0.2	0.374	0.424	13.22	
trans-1,2-Dichloroethene	1	0		3.65	22.10	20	20	0.1	0.229	0.253	10.50	
Ethyl-t-butyl ether	1	0		4.29	22.18	20	20	0.5	0.613	0.680	10.90	
cis-1,2-Dichloroethene	1	0		4.41	21.89	20	20	0.1	0.376	0.411	9.45	
Bromochloromethane	1	0		4.57	23.73	20	20		0.174	0.206	18.65	
2,2-Dichloropropane	1	0		4.42	18.82	20	20		0.341	0.321	5.89	
Ethyl acetate	1	0		4.43	22.84	20	20		0.197	0.225	14.21	
1,4-Dioxane	1	0		5.49	1190.58	1000	20		0.003	0.004	19.06	
1,1-Dichloropropene	1	0		4.82	22.30	20	20		0.310	0.346	11.49	
Chloroform	1	0		4.60	22.82	20	20	0.2	0.412	0.470	14.09	
Dibromofluoromethane	1	0	S	4.71	31.18	30	**		0.276	0.287	3.93	
Cyclohexane	1	0		4.77	21.49	20	20	0.1	0.266	0.286	7.44	
1,2-Dichloroethane-d4	1	0	S	4.91	31.26	30	**		0.142	0.148	4.20	
1,2-Dichloroethane	1	0		4.95	20.53	20	20	0.1	0.349	0.358	2.67	
2-Butanone	1	0		4.41	23.44	20	20	0.1	0.095	0.111	17.19	
1,1,1-Trichloroethane	1	0		4.73	22.44	20	20	0.1	0.368	0.413	12.19	
Carbon Tetrachloride	1	0		4.83	19.52	20	20	0.1	0.334	0.326	2.38	
Vinyl Acetate	1	0		4.03	18.42	20	20		0.672	0.619	7.88	
Bromodichloromethane	1	0		5.57	22.21	20	20	0.2	0.337	0.374	11.06	
Methylcyclohexane	1	0		5.42	21.00	20	20	0.1	0.264	0.277	5.01	
Dibromomethane	1	0		5.50	21.57	20	20		0.178	0.192	7.86	
1,2-Dichloropropane	1	0		5.43	22.72	20	20	0.1	0.226	0.257	13.58	
Trichloroethene	1	0		5.30	22.07	20	20	0.2	0.259	0.286	10.36	
Benzene	1	0		4.95	22.07	20	20	0.5	0.892	0.985	10.34	
tert-Amyl methyl ether	1	0		4.99	21.68	20	20		0.653	0.708	8.39	
Chlorobenzene-d5	1	0	I	6.73	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.95	20.35	20	20	0.5	0.484	0.492	1.74	
Methyl methacrylate	1	0		5.45	22.85	20	20	0.5	0.213	0.244	14.24	
Dibromochloromethane	1	0		6.42	20.79	20	20	0.1	0.333	0.346	3.95	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142440.D **Instrument:** GCMS 2

Cont Calibration Date/Time 9/28/2020 9:38:00 P Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.71	15.30	20	20		0.070	0.054	23.51	C1
cis-1,3-Dichloropropene	1	0		5.81	19.25	20	20	0.2	0.445	0.428	3.77	
trans-1,3-Dichloropropene	1	0		6.09	18.33	20	20	0.1	0.457	0.419	8.36	
Ethyl methacrylate	1	0		6.11	19.88	20	20	0.5	0.235	0.233	0.59	
1,1,2-Trichloroethane	1	0		6.20	21.21	20	20	0.1	0.269	0.286	6.04	
1,2-Dibromoethane	1	0		6.49	21.47	20	20	0.1	0.280	0.300	7.33	
1,3-Dichloropropane	1	0		6.29	21.19	20	20		0.458	0.485	5.97	
4-Methyl-2-Pentanone	1	0		5.87	23.32	20	20	0.1	0.231	0.270	16.60	
2-Hexanone	1	0		6.31	21.71	20	20	0.1	0.182	0.197	8.53	
Tetrachloroethene	1	0		6.29	19.20	20	20	0.2	0.251	0.241	4.01	
Toluene-d8	1	0	S	5.95	30.54	30	**		1.170	1.191	1.80	
Toluene	1	0		5.99	20.65	20	20	0.4	0.694	0.717	3.23	
1,1,1,2-Tetrachloroethane	1	0		6.78	19.02	20	20		0.303	0.288	4.92	
Chlorobenzene	1	0		6.75	21.01	20	20	0.5	0.777	0.816	5.05	
1,4-Dichlorobenzene-d4	1	0	I	8.02	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.99	22.80	20	20	0.5	0.877	1.000	14.00	
n-Amyl acetate	1	0		7.11	17.69	20	20	0.5	0.631	0.811	11.56	
Bromoform	1	0		7.20	21.33	20	20	0.1	0.411	0.439	6.63	
Ethylbenzene	1	0		6.79	23.60	20	20	0.1	0.567	0.669	18.00	
1,1,2,2-Tetrachloroethane	1	0		7.42	26.77	20	20	0.1	0.581	0.778	33.86	C1
Bromofluorobenzene	1	0	S	7.37	30.14	30	**		0.802	0.806	0.48	
Styrene	1	0		7.07	24.56	20	20	0.3	1.393	1.710	22.81	C1
m&p-Xylenes	1	0		6.85	48.39	40	20	0.1	0.817	0.988	20.97	C1
o-Xylene	1	0		7.07	23.86	20	20	0.3	0.808	0.964	19.30	
trans-1,4-Dichloro-2-butene	1	0		7.43	13.17	20	20		0.232	0.153	34.13	C1
1,3-Dichlorobenzene	1	0		7.99	23.40	20	20	0.6	0.994	1.163	16.98	
1,4-Dichlorobenzene	1	0		8.03	22.48	20	20	0.5	1.020	1.146	12.38	
1,2-Dichlorobenzene	1	0		8.26	22.96	20	20	0.4	0.938	1.076	14.79	
Isopropylbenzene	1	0		7.26	24.34	20	20	0.1	1.986	2.417	21.71	C1
Cyclohexanone	1	0		7.34	108.53	100	20		0.019	0.022	8.53	
Camphene	1	0		7.43	33.55	20	20		0.544	0.603	67.74	C1
1,2,3-Trichloropropane	1	0		7.46	19.80	20	20		0.793	0.785	1.01	
2-Chlorotoluene	1	0		7.56	20.60	20	20		1.143	1.433	2.98	
p-Ethyltoluene	1	0		7.55	26.00	20	20		1.894	2.463	29.99	C1
4-Chlorotoluene	1	0		7.62	23.75	20	20		1.257	1.493	18.73	
n-Propylbenzene	1	0		7.49	25.26	20	20		2.273	2.870	26.29	C1
Bromobenzene	1	0		7.46	22.69	20	20		1.303	1.477	13.43	
1,3,5-Trimethylbenzene	1	0		7.57	24.69	20	20		1.500	1.852	23.46	C1
Butyl methacrylate	1	0		7.58	22.93	20	20	0.5	0.592	0.678	14.64	
t-Butylbenzene	1	0		7.77	16.94	20	20		1.434	1.823	15.32	
1,2,4-Trimethylbenzene	1	0		7.79	20.09	20	20		1.475	1.995	0.44	
sec-Butylbenzene	1	0		7.90	23.48	20	20		1.904	2.235	17.41	
4-Isopropyltoluene	1	0		7.96	22.66	20	20		1.645	1.864	13.32	
n-Butylbenzene	1	0		8.20	23.81	20	20		1.663	1.980	19.07	
p-Diethylbenzene	1	0		8.18	24.79	20	20		0.855	1.059	23.94	C1
1,2,4,5-Tetramethylbenzene	1	0		8.65	25.10	20	20		1.232	1.547	25.51	C1
1,2-Dibromo-3-Chloropropane	1	0		8.71	24.58	20	20	0.05	0.136	0.167	22.92	C1
Camphor	1	0		9.14	265.86	200	20		0.060	0.071	32.93	C1
Hexachlorobutadiene	1	0		9.28	23.79	20	20		0.191	0.228	18.96	
1,2,4-Trichlorobenzene	1	0		9.20	21.84	20	20	0.2	0.500	0.546	9.21	
1,2,3-Trichlorobenzene	1	0		9.50	23.61	20	20		0.396	0.467	18.04	
Naphthalene	1	0		9.36	24.60	20	20		1.279	1.574	23.02	C1

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : RL Qt Meth : 2M_A0909.M
Data File: 2M142440.D Sam Mult : 1 Vial# : 5 Qt On : 09/29/20 05:42
Acq On : 09/28/20 21:38 Misc : A,5ML Qt Upd On: 09/10/20 15:15

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-2820\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	309404	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	274493	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	146410	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	88771	31.18	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.93%			
39) 1,2-Dichloroethane-d4	4.910	67	45937	31.26	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.20%			
66) Toluene-d8	5.952	98	326914	30.54	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.80%			
76) Bromofluorobenzene	7.366	174	118048	30.14	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.47%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	46838	17.3367	ug/l	65
6) Dichlorodifluoromethane	1.685	85	29053	16.9920	ug/l	93
7) Chloromethane	1.855	50	39946	21.1996	ug/l	94
8) Bromomethane	2.258	94	16964	10.3803	ug/l	98
9) Vinyl Chloride	1.953	62	54291	23.7034	ug/l	99
10) Chloroethane	2.343	64	39261	23.7746	ug/l	94
11) Trichlorofluoromethane	2.569	101	91648	23.0352	ug/l	97
12) Ethyl ether	2.800	59	37985	23.9852	ug/l	98
13) Furan	2.843	39	62785	21.9374	ug/l	93
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	34391	20.9586	ug/l	95
15) Methylene Chloride	3.416	84	51697	22.2377	ug/l	97
16) Acrolein	2.922	56	33206	114.5376	ug/l	96
17) Acrylonitrile	3.617	53	18536m	23.3589	ug/l	
18) Iodomethane	3.154	142	24302m	10.2891	ug/l	
19) Acetone	3.044	43	71254	112.7586	ug/l	98
20) Carbon Disulfide	3.221	76	137560	22.6733	ug/l	100
21) t-Butyl Alcohol	3.477	59	24803	110.7693	ug/l	92
22) n-Hexane	3.873	57	38276	20.3350	ug/l	93
23) Di-isopropyl-ether	4.032	45	124171	22.1629	ug/l	98
24) 1,1-Dichloroethene	3.014	61	69599	22.3415	ug/l	96
25) Methyl Acetate	3.318	43	34877m	24.3760	ug/l	
26) Methyl-t-butyl ether	3.642	73	137594	23.3620	ug/l	99
27) 1,1-Dichloroethane	4.001	63	87373	22.6438	ug/l	100
28) trans-1,2-Dichloroethene	3.654	96	52157	22.0990	ug/l	98
29) Ethyl-t-butyl ether	4.294	59	140179	22.1796	ug/l	99
30) cis-1,2-Dichloroethene	4.410	61	84793	21.8896	ug/l	96
31) Bromochloromethane	4.568	49	42509	23.7301	ug/l	96
32) 2,2-Dichloropropane	4.416	77	66191	18.8214	ug/l	94
33) Ethyl acetate	4.434	43	46486m	22.8420	ug/l	
34) 1,4-Dioxane	5.495	88	36293	1190.5757	ug/l	97
35) 1,1-Dichloropropene	4.824	75	71365	22.2976	ug/l	97
36) Chloroform	4.605	83	96926	22.8180	ug/l	100
38) Cyclohexane	4.769	56	59025	21.4882	ug/l	99
40) 1,2-Dichloroethane	4.952	62	73819	20.5330	ug/l	96
41) 2-Butanone	4.410	43	22915m	23.4378	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	85144	22.4383	ug/l	99
43) Carbon Tetrachloride	4.830	117	67293	19.5237	ug/l	98
44) Vinyl Acetate	4.026	43	127666	18.4239	ug/l	100
45) Bromodichloromethane	5.568	83	77099	22.2125	ug/l	95
46) Methylcyclohexane	5.416	83	57154	21.0026	ug/l	98
47) Dibromomethane	5.501	174	39662	21.5725	ug/l	97
48) 1,2-Dichloropropane	5.428	63	52993	22.7156	ug/l	95
49) Trichloroethene	5.300	130	58933	22.0715	ug/l	93
50) Benzene	4.952	78	203080	22.0679	ug/l	100
51) tert-Amyl methyl ether	4.989	73	146048	21.6774	ug/l	99
53) Iso-propylacetate	4.946	43	90113	20.3481	ug/l	98
54) Methyl methacrylate	5.452	41	44618	22.8473	ug/l	93
55) Dibromochloromethane	6.422	129	63338	20.7894	ug/l	100
56) 2-Chloroethylvinylether	5.708	63	9795	15.2976	ug/l	92
57) cis-1,3-Dichloropropene	5.806	75	78321	19.2459	ug/l	99
58) trans-1,3-Dichloropropene	6.092	75	76686	18.3278	ug/l	98
59) Ethyl methacrylate	6.111	41	42721	19.8814	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	52259	21.2082	ug/l	95
61) 1,2-Dibromoethane	6.495	107	54979	21.4661	ug/l	97
62) 1,3-Dichloropropane	6.287	76	88780	21.1934	ug/l	97
63) 4-Methyl-2-Pentanone	5.867	43	49386	23.3204	ug/l	97
64) 2-Hexanone	6.306	43	36074	21.7056	ug/l	99
65) Tetrachloroethene	6.287	164	44078	19.1981	ug/l	96
67) Toluene	5.989	92	131157	20.6455	ug/l	99

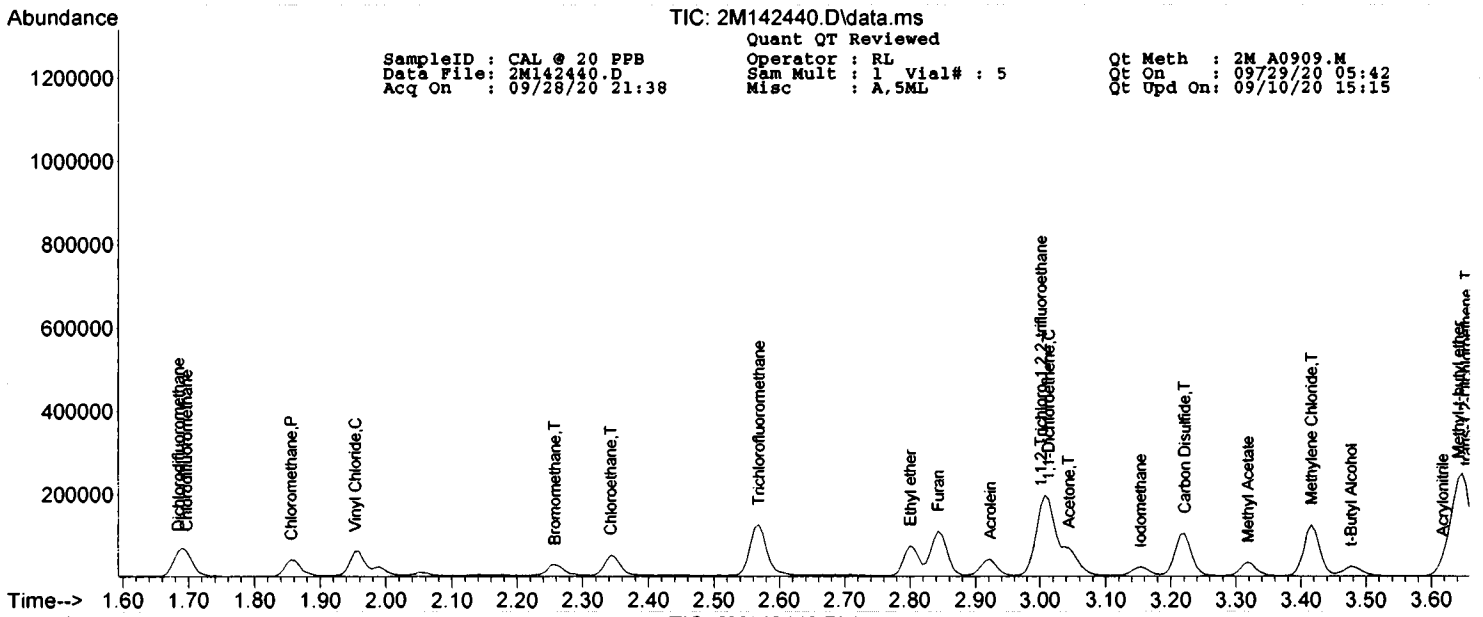
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : RL Qt Meth : 2M_A0909.M
Data File: 2M142440.D Sam Mult : 1 Vial# : 5 Qt On : 09/29/20 05:42
Acq On : 09/28/20 21:38 Misc : A,5ML Qt Upd On: 09/10/20 15:15

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-2820\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	52777	19.0156	ug/l	92
69)	Chlorobenzene	6.751	112	149341	21.0091	ug/l	99
71)	n-Butyl acrylate	6.995	55	97597	22.7995	ug/l	99
72)	n-Amyl acetate	7.110	43	79122	17.6880	ug/l	97
73)	Bromoform	7.202	173	42809	21.3260	ug/l	99
74)	Ethylbenzene	6.787	106	65290	23.5994	ug/l	92
75)	1,1,2,2-Tetrachloroethane	7.415	83	75937	26.7726	ug/l	97
77)	Styrene	7.074	104	166927	24.5626	ug/l	94
78)	m&p-Xylenes	6.848	106	192954	48.3879	ug/l	96
79)	o-Xylene	7.074	106	94123	23.8603	ug/l	96
80)	trans-1,4-Dichloro-2-b...	7.434	53	14911	13.1740	ug/l	76
81)	1,3-Dichlorobenzene	7.988	146	113516	23.3964	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	111864	22.4765	ug/l	98
83)	1,2-Dichlorobenzene	8.257	146	105073	22.9587	ug/l	98
84)	Isopropylbenzene	7.263	105	235947	24.3425	ug/l	99
85)	Cyclohexanone	7.342	55	10791	108.5281	ug/l	92
86)	Camphene	7.434	93	58850	33.5482	ug/l	96
87)	1,2,3-Trichloropropane	7.458	75	76630	19.7976	ug/l	96
88)	2-Chlorotoluene	7.562	91	139830	20.5963	ug/l	98
89)	p-Ethyltoluene	7.549	105	240365	25.9976	ug/l	97
90)	4-Chlorotoluene	7.616	91	145730	23.7464	ug/l	98
91)	n-Propylbenzene	7.488	91	280149	25.2571	ug/l	96
92)	Bromobenzene	7.464	77	144210	22.6862	ug/l	95
93)	1,3,5-Trimethylbenzene	7.574	105	180760	24.6913	ug/l	99
94)	Butyl methacrylate	7.580	41	66217	22.9288	ug/l	98
95)	t-Butylbenzene	7.769	119	177966	16.9366	ug/l	99
96)	1,2,4-Trimethylbenzene	7.793	105	194731	20.0883	ug/l	99
97)	sec-Butylbenzene	7.897	105	218146	23.4811	ug/l	100
98)	4-Isopropyltoluene	7.964	119	181943	22.6642	ug/l	99
99)	n-Butylbenzene	8.202	91	193282	23.8134	ug/l	96
100)	p-Diethylbenzene	8.183	119	103396	24.7881	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	150956	25.1012	ug/l	95
102)	1,2-Dibromo-3-Chloropr...	8.708	157	16259	24.5847	ug/l	83
103)	Camphor	9.141	95	69756	265.8571	ug/l	100
104)	Hexachlorobutadiene	9.281	225	22224	23.7926	ug/l	94
105)	1,2,4-Trichlorobenzene	9.195	180	53317	21.8426	ug/l	98
106)	1,2,3-Trichlorobenzene	9.500	180	45581	23.6082	ug/l	97
107)	Naphthalene	9.360	128	153623	24.6037	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
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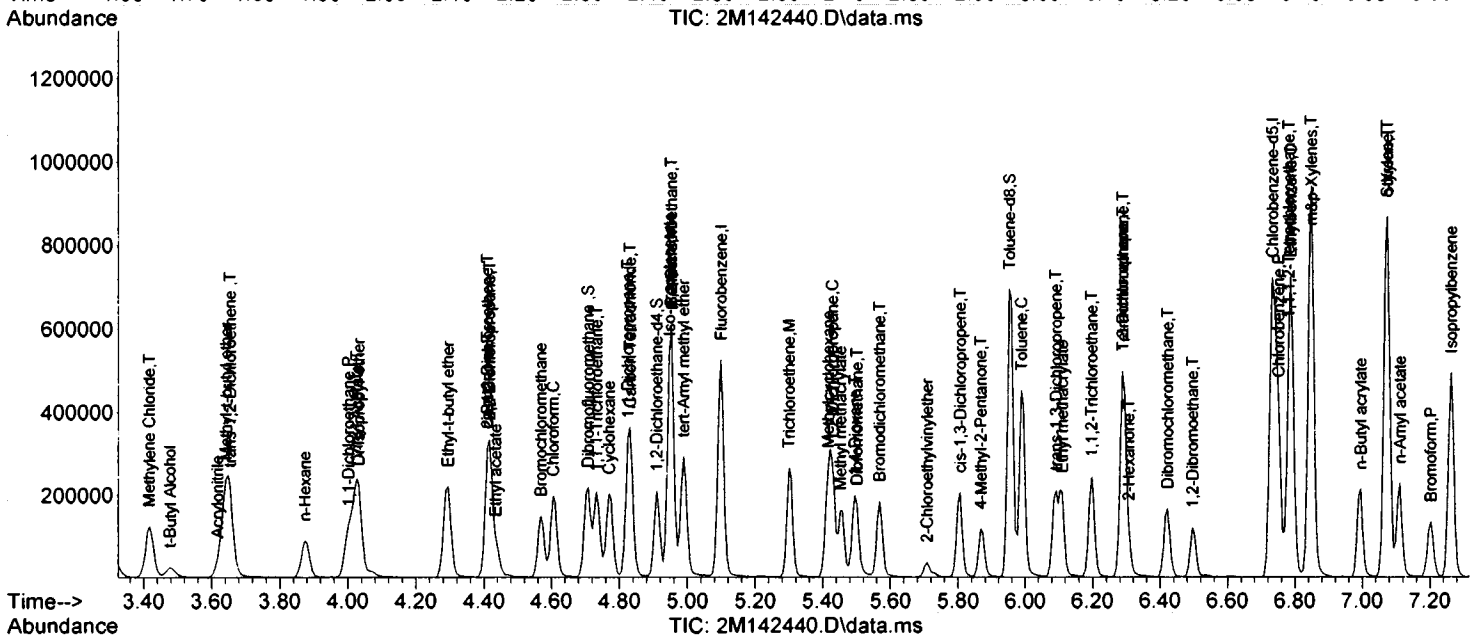
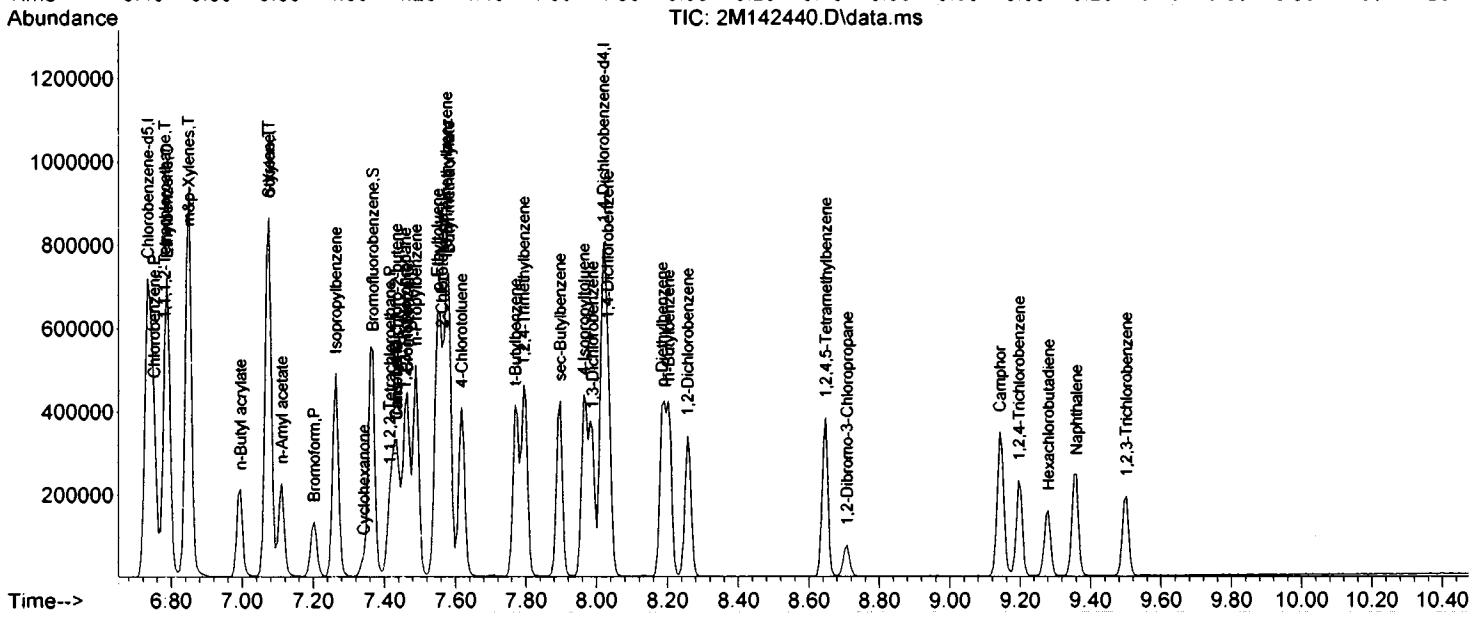
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 2M142440.D
Acq On : 09/28/20 21:38
Operator : RL
Sam Mult : 1 Vial# : 5
Misc : A,5ML
Qt Meth : 2M_A0909.M
Qt On : 09729/20 05:42
Qt Upd On: 09/10/20 15:15
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 2M142440.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Fluorobenzene,I
Trichloroethene,M
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M142440.D\data.ms
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142518.D **Instrument:** GCMS 2

Cont Calibration Date/Time 9/30/2020 11:36:00 **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.10	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.70	20.64	20	20	0.1	0.306	0.316	3.22	
Dichlorodifluoromethane	1	0		1.68	19.11	20	20	0.1	0.308	0.294	4.46	
Chloromethane	1	0		1.86	21.59	20	20	0.1	0.343	0.371	7.96	
Bromomethane	1	0		2.26	17.65	20	20	0.1	0.167	0.147	11.77	
Vinyl Chloride	1	0		1.96	21.23	20	20	0.1	0.373	0.395	6.13	
Chloroethane	1	0		2.35	20.37	20	20	0.1	0.249	0.253	1.86	
Trichlorofluoromethane	1	0		2.57	20.67	20	20	0.1	0.571	0.590	3.36	
Ethyl ether	1	0		2.80	20.65	20	20	0.5	0.198	0.205	3.23	
Furan	1	0		2.84	20.93	20	20	0.5	0.335	0.351	4.63	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.00	20.47	20	20	0.1	0.200	0.205	2.37	
Methylene Chloride	1	0		3.42	20.76	20	20	0.1	0.283	0.294	3.79	
Acrolein	1	0		2.92	106.07	100	20		0.045	0.048	6.07	
Acrylonitrile	1	0		3.62	20.64	20	20		0.098	0.101	3.21	
Iodomethane	1	0		3.15	16.09	20	20		0.210	0.172	19.53	
Acetone	1	0		3.04	106.24	100	20	0.1	0.081	0.086	6.24	
Carbon Disulfide	1	0		3.22	21.20	20	20	0.1	0.765	0.810	5.98	
t-Butyl Alcohol	1	0		3.48	105.87	100	20		0.026	0.028	5.87	
n-Hexane	1	0		3.87	21.46	20	20		0.237	0.254	7.30	
Di-isopropyl-ether	1	0		4.03	20.82	20	20		0.678	0.706	4.08	
1,1-Dichloroethene	1	0		3.01	20.89	20	20	0.1	0.386	0.403	4.44	
Methyl Acetate	1	0		3.31	19.19	20	20	0.1	0.182	0.175	4.07	
Methyl-t-butyl ether	1	0		3.64	20.56	20	20	0.1	0.726	0.746	2.81	
1,1-Dichloroethane	1	0		4.00	20.97	20	20	0.2	0.470	0.493	4.85	
trans-1,2-Dichloroethene	1	0		3.65	20.59	20	20	0.1	0.285	0.293	2.97	
Ethyl-t-butyl ether	1	0		4.29	21.05	20	20	0.5	0.734	0.772	5.23	
cis-1,2-Dichloroethene	1	0		4.41	20.77	20	20	0.1	0.478	0.496	3.83	
Bromochloromethane	1	0		4.57	21.87	20	20		0.212	0.232	9.36	
2,2-Dichloropropane	1	0		4.42	22.25	20	20		0.422	0.469	11.27	
Ethyl acetate	1	0		4.43	20.99	20	20		0.245	0.257	4.94	
1,4-Dioxane	1	0		5.49	1031.74	1000	20		0.003	0.004	3.17	
1,1-Dichloropropene	1	0		4.82	21.05	20	20		0.399	0.420	5.25	
Chloroform	1	0		4.60	21.08	20	20	0.2	0.512	0.540	5.38	
Dibromofluoromethane	1	0	S	4.71	29.34	30	**		0.287	0.281	2.20	
Cyclohexane	1	0		4.77	20.33	20	20	0.1	0.354	0.359	1.63	
1,2-Dichloroethane-d4	1	0	S	4.91	29.64	30	**		0.148	0.147	1.21	
1,2-Dichloroethane	1	0		4.95	19.42	20	20	0.1	0.434	0.421	2.91	
2-Butanone	1	0		4.41	20.51	20	20	0.1	0.125	0.128	2.55	
1,1,1-Trichloroethane	1	0		4.73	21.25	20	20	0.1	0.454	0.483	6.23	
Carbon Tetrachloride	1	0		4.83	21.07	20	20	0.1	0.385	0.405	5.37	
Vinyl Acetate	1	0		4.03	22.05	20	20		0.761	0.839	10.23	
Bromodichloromethane	1	0		5.57	21.54	20	20	0.2	0.415	0.447	7.72	
Methylcyclohexane	1	0		5.42	20.32	20	20	0.1	0.343	0.348	1.60	
Dibromomethane	1	0		5.50	20.85	20	20		0.206	0.215	4.27	
1,2-Dichloropropane	1	0		5.43	21.10	20	20	0.1	0.282	0.298	5.49	
Trichloroethene	1	0		5.30	20.91	20	20	0.2	0.317	0.332	4.55	
Benzene	1	0		4.95	20.43	20	20	0.5	1.123	1.147	2.17	
tert-Amyl methyl ether	1	0		4.99	19.97	20	20		0.790	0.789	0.15	
Chlorobenzene-d5	1	0	I	6.73	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.95	20.40	20	20	0.5	0.522	0.533	2.02	
Methyl methacrylate	1	0		5.45	21.55	20	20	0.5	0.252	0.271	7.77	
Dibromochloromethane	1	0		6.42	22.16	20	20	0.1	0.352	0.390	10.81	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142518.D **Instrument:** GCMS 2

Cont Calibration Date/Time 9/30/2020 11:36:00 **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.71	21.67	20	20		0.038	0.042	8.36	
cis-1,3-Dichloropropene	1	0		5.81	22.12	20	20	0.2	0.481	0.532	10.61	
trans-1,3-Dichloropropene	1	0		6.09	21.70	20	20	0.1	0.458	0.497	8.52	
Ethyl methacrylate	1	0		6.11	20.81	20	20	0.5	0.265	0.275	4.07	
1,1,2-Trichloroethane	1	0		6.20	21.64	20	20	0.1	0.297	0.321	8.21	
1,2-Dibromoethane	1	0		6.49	21.38	20	20	0.1	0.313	0.335	6.88	
1,3-Dichloropropane	1	0		6.29	21.00	20	20		0.519	0.545	5.00	
4-Methyl-2-Pentanone	1	0		5.87	21.64	20	20	0.1	0.280	0.303	8.20	
2-Hexanone	1	0		6.31	21.07	20	20	0.1	0.208	0.220	5.36	
Tetrachloroethene	1	0		6.29	21.64	20	20	0.2	0.270	0.292	8.19	
Toluene-d8	1	0	S	5.95	30.45	30	**		1.174	1.192	1.51	
Toluene	1	0		5.99	20.85	20	20	0.4	0.792	0.826	4.27	
1,1,1,2-Tetrachloroethane	1	0		6.78	21.47	20	20		0.318	0.341	7.37	
Chlorobenzene	1	0		6.75	21.16	20	20	0.5	0.884	0.935	5.78	
1,4-Dichlorobenzene-d4	1	0	I	8.02	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.99	23.63	20	20	0.5	1.012	1.196	18.15	
n-Amyl acetate	1	0		7.11	22.30	20	20	0.5	0.891	0.994	11.50	
Bromoform	1	0		7.20	23.12	20	20	0.1	0.448	0.518	15.61	
Ethylbenzene	1	0		6.79	22.58	20	20	0.1	0.683	0.771	12.92	
1,1,2,2-Tetrachloroethane	1	0		7.42	21.57	20	20	0.1	0.803	0.866	7.85	
Bromofluorobenzene	1	0	S	7.37	30.84	30	**		0.788	0.810	2.80	
Styrene	1	0		7.07	22.84	20	20	0.3	1.714	1.957	14.20	
m&p-Xylenes	1	0		6.85	44.25	40	20	0.1	1.039	1.150	10.64	
o-Xylene	1	0		7.07	23.03	20	20	0.3	0.984	1.133	15.13	
trans-1,4-Dichloro-2-butene	1	0		7.45	25.56	20	20		0.190	0.242	27.81	C1
1,3-Dichlorobenzene	1	0		7.99	21.47	20	20	0.6	1.220	1.310	7.36	
1,4-Dichlorobenzene	1	0		8.03	21.15	20	20	0.5	1.249	1.321	5.74	
1,2-Dichlorobenzene	1	0		8.26	21.74	20	20	0.4	1.151	1.251	8.69	
Isopropylbenzene	1	0		7.26	23.17	20	20	0.1	2.399	2.779	15.85	
Cyclohexanone	1	0		7.34	113.22	100	20		0.021	0.023	13.22	
Camphene	1	0		7.43	21.37	20	20		0.708	0.757	6.87	
1,2,3-Trichloropropane	1	0		7.46	21.77	20	20		0.870	0.947	8.83	
2-Chlorotoluene	1	0		7.56	22.62	20	20		1.443	1.632	13.12	
p-Ethyltoluene	1	0		7.55	22.95	20	20		2.414	2.771	14.77	
4-Chlorotoluene	1	0		7.62	23.19	20	20		1.470	1.704	15.94	
n-Propylbenzene	1	0		7.49	22.34	20	20		2.888	3.226	11.72	
Bromobenzene	1	0		7.46	21.44	20	20		1.606	1.722	7.20	
1,3,5-Trimethylbenzene	1	0		7.57	23.22	20	20		1.870	2.172	16.12	
Butyl methacrylate	1	0		7.58	21.64	20	20	0.5	0.731	0.791	8.18	
t-Butylbenzene	1	0		7.77	23.10	20	20		1.825	2.107	15.49	
1,2,4-Trimethylbenzene	1	0		7.79	22.19	20	20		2.015	2.236	10.97	
sec-Butylbenzene	1	0		7.90	23.23	20	20		2.255	2.619	16.14	
4-Isopropyltoluene	1	0		7.96	23.35	20	20		1.915	2.236	16.73	
n-Butylbenzene	1	0		8.20	23.82	20	20		1.981	2.359	19.08	
p-Diethylbenzene	1	0		8.18	22.41	20	20		1.083	1.213	12.05	
1,2,4,5-Tetramethylbenzene	1	0		8.65	22.15	20	20		1.583	1.754	10.76	
1,2-Dibromo-3-Chloropropane	1	0		8.71	22.94	20	20	0.05	0.163	0.187	14.70	
Camphor	1	0		9.14	218.50	200	20		0.064	0.070	9.25	
Hexachlorobutadiene	1	0		9.28	23.11	20	20		0.248	0.287	15.54	
1,2,4-Trichlorobenzene	1	0		9.20	21.26	20	20	0.2	0.591	0.628	6.30	
1,2,3-Trichlorobenzene	1	0		9.50	21.82	20	20		0.490	0.535	9.11	
Naphthalene	1	0		9.36	21.17	20	20		1.646	1.742	5.83	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142518.D Sam Mult : 1 Vial# : 4 Qt On : 09/30/20 11:58
Acq On : 09/30/20 11:36 Misc : A,5ML Qt Upd On: 09/30/20 10:40

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	328263	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	294391	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	157270	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	92265	29.34	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.80%			
39) 1,2-Dichloroethane-d4	4.910	67	48120	29.64	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.80%			
66) Toluene-d8	5.952	98	350779	30.45	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.50%			
76) Bromofluorobenzene	7.367	174	127398	30.84	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.80%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	69103	20.6434	ug/l	97
6) Dichlorodifluoromethane	1.685	85	64426	19.1077	ug/l	96
7) Chloromethane	1.855	50	81081	21.5911	ug/l	99
8) Bromomethane	2.258	94	32183	17.6451	ug/l	99
9) Vinyl Chloride	1.959	62	86540	21.2251	ug/l	98
10) Chloroethane	2.349	64	55413	20.3727	ug/l	98
11) Trichlorofluoromethane	2.569	101	129154	20.6718	ug/l	99
12) Ethyl ether	2.800	59	44793	20.6468	ug/l	97
13) Furan	2.843	39	76770	20.9258	ug/l	96
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	44845	20.4739	ug/l	93
15) Methylene Chloride	3.416	84	64344	20.7580	ug/l	94
16) Acrolein	2.916	56	52580	106.0652	ug/l	99
17) Acrylonitrile	3.623	53	22203	20.6420	ug/l	99
18) Iodomethane	3.154	142	37593	16.0947	ug/l	97
19) Acetone	3.044	43	93836	106.2418	ug/l	97
20) Carbon Disulfide	3.221	76	177369	21.1963	ug/l	100
21) t-Butyl Alcohol	3.477	59	30161	105.8672	ug/l	97
22) n-Hexane	3.873	57	55640	21.4607	ug/l	96
23) Di-isopropyl-ether	4.032	45	154508	20.8160	ug/l	98
24) 1,1-Dichloroethene	3.014	61	88186	20.8889	ug/l	93
25) Methyl Acetate	3.312	43	38226	19.1864	ug/l	100
26) Methyl-t-butyl ether	3.642	73	163338	20.5625	ug/l	99
27) 1,1-Dichloroethane	4.001	63	107952	20.9699	ug/l	94
28) trans-1,2-Dichloroethene	3.654	96	64114	20.5942	ug/l	97
29) Ethyl-t-butyl ether	4.288	59	169050	21.0461	ug/l	97
30) cis-1,2-Dichloroethene	4.410	61	108655	20.7656	ug/l	94
31) Bromochloromethane	4.568	49	50834	21.8710	ug/l	97
32) 2,2-Dichloropropane	4.416	77	102645	22.2535	ug/l	99
33) Ethyl acetate	4.434	43	56165m	20.9873	ug/l	
34) 1,4-Dioxane	5.495	88	38816	1031.7387	ug/l	94
35) 1,1-Dichloropropene	4.824	75	91880	21.0505	ug/l	96
36) Chloroform	4.605	83	118147	21.0756	ug/l	99
38) Cyclohexane	4.769	56	78622	20.3254	ug/l	99
40) 1,2-Dichloroethane	4.952	62	92230	19.4183	ug/l	97
41) 2-Butanone	4.410	43	28099m	20.5094	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	105595	21.2462	ug/l	98
43) Carbon Tetrachloride	4.830	117	88663	21.0736	ug/l	98
44) Vinyl Acetate	4.026	43	183518	22.0459	ug/l	100
45) Bromodichloromethane	5.568	83	97847	21.5445	ug/l	98
46) Methylcyclohexane	5.416	83	76213	20.3192	ug/l	99
47) Dibromomethane	5.501	174	46953	20.8537	ug/l	96
48) 1,2-Dichloropropane	5.428	63	65126	21.0973	ug/l	100
49) Trichloroethene	5.300	130	72575	20.9103	ug/l	95
50) Benzene	4.952	78	251112	20.4331	ug/l	100
51) tert-Amyl methyl ether	4.989	73	172597	19.9699	ug/l	98
53) Iso-propylacetate	4.946	43	104608	20.4038	ug/l	98
54) Methyl methacrylate	5.452	41	53244	21.5532	ug/l	95
55) Dibromochloromethane	6.422	129	76467	22.1627	ug/l	100
56) 2-Chloroethylvinylether	5.708	63	8171	21.6727	ug/l	97
57) cis-1,3-Dichloropropene	5.806	75	104321	22.1218	ug/l	99
58) trans-1,3-Dichloropropene	6.092	75	97459	21.7046	ug/l	100
59) Ethyl methacrylate	6.111	41	54034	20.8147	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	63051	21.6412	ug/l	96
61) 1,2-Dibromoethane	6.495	107	65671	21.3761	ug/l	100
62) 1,3-Dichloropropane	6.287	76	106957	21.0004	ug/l	96
63) 4-Methyl-2-Pentanone	5.867	43	59480	21.6400	ug/l	97
64) 2-Hexanone	6.306	43	43111	21.0715	ug/l	98
65) Tetrachloroethene	6.287	164	57339	21.6387	ug/l	99
67) Toluene	5.989	92	162170	20.8540	ug/l	96

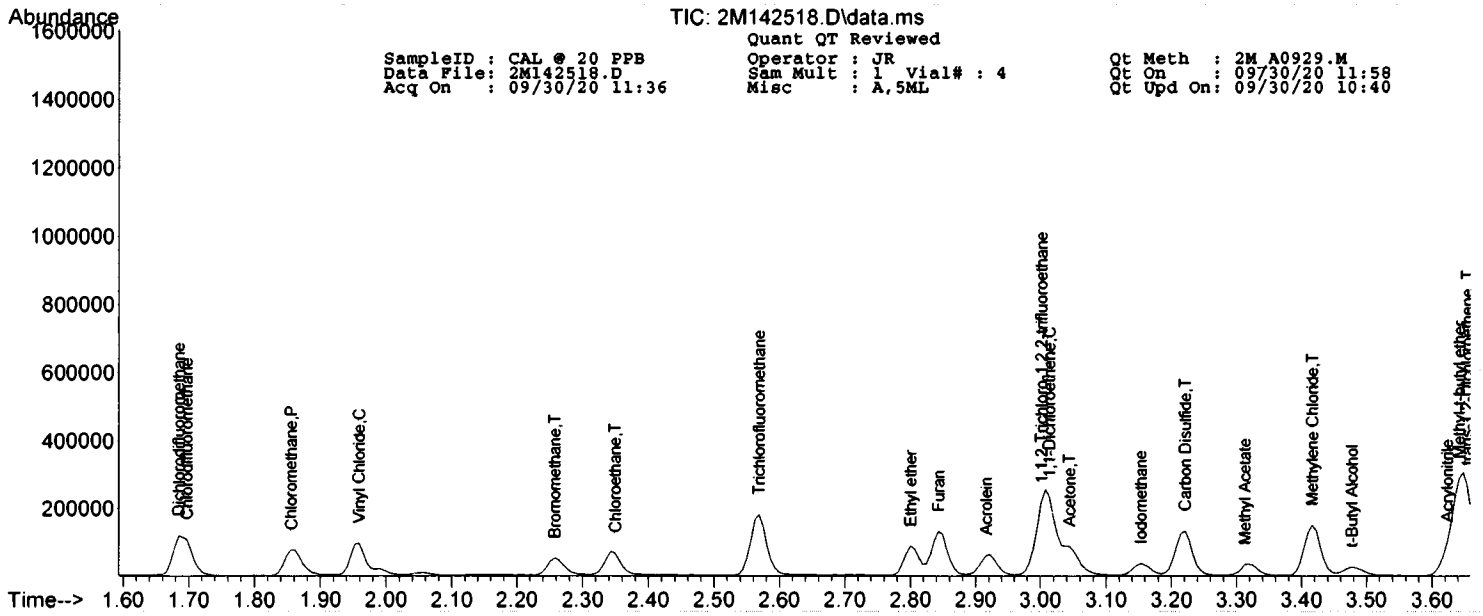
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142518.D Sam Mult : 1 Vial# : 4 Qt On : 09/30/20 11:58
Acq On : 09/30/20 11:36 Misc : A,5ML Qt Upd On: 09/30/20 10:40

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	66913	21.4742	ug/l	100
69)	Chlorobenzene	6.751	112	183585	21.1564	ug/l	99
71)	n-Butyl acrylate	6.995	55	125378	23.6307	ug/l	100
72)	n-Amyl acetate	7.110	43	104218	22.3007	ug/l	99
73)	Bromoform	7.202	173	54272	23.1228	ug/l	97
74)	Ethylbenzene	6.787	106	80836	22.5845	ug/l	94
75)	1,1,2,2-Tetrachloroethane	7.415	83	90794	21.5704	ug/l	98
77)	Styrene	7.074	104	205211	22.8402	ug/l	95
78)	m&p-Xylenes	6.848	106	241116	44.2547	ug/l	98
79)	o-Xylene	7.068	106	118741	23.0269	ug/l	99
80)	trans-1,4-Dichloro-2-b...	7.446	53	25402	25.5620	ug/l	89
81)	1,3-Dichlorobenzene	7.988	146	137382	21.4726	ug/l	97
82)	1,4-Dichlorobenzene	8.031	146	138456	21.1481	ug/l	98
83)	1,2-Dichlorobenzene	8.257	146	131124	21.7378	ug/l	98
84)	Isopropylbenzene	7.263	105	291421	23.1696	ug/l	99
85)	Cyclohexanone	7.342	55	12309	113.2164	ug/l	96
86)	Camphene	7.434	93	79338	21.3732	ug/l	96
87)	1,2,3-Trichloropropane	7.458	75	99287	21.7657	ug/l	99
88)	2-Chlorotoluene	7.562	91	171125	22.6238	ug/l	98
89)	p-Ethyltoluene	7.549	105	290508	22.9534	ug/l	97
90)	4-Chlorotoluene	7.616	91	178647	23.1878	ug/l	97
91)	n-Propylbenzene	7.488	91	338248	22.3438	ug/l	97
92)	Bromobenzene	7.464	77	180516	21.4402	ug/l	94
93)	1,3,5-Trimethylbenzene	7.574	105	227714	23.2243	ug/l	97
94)	Butyl methacrylate	7.580	41	82891	21.6364	ug/l	98
95)	t-Butylbenzene	7.775	119	220923	23.0971	ug/l	98
96)	1,2,4-Trimethylbenzene	7.793	105	234401	22.1932	ug/l	98
97)	sec-Butylbenzene	7.897	105	274603	23.2281	ug/l	99
98)	4-Isopropyltoluene	7.964	119	234399	23.3469	ug/l	98
99)	n-Butylbenzene	8.202	91	247369	23.8162	ug/l	95
100)	p-Diethylbenzene	8.183	119	127200	22.4093	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	183868	22.1520	ug/l	94
102)	1,2-Dibromo-3-Chloropr...	8.708	157	19623	22.9405	ug/l	83
103)	Camphor	9.141	95	73767	218.4994	ug/l	97
104)	Hexachlorobutadiene	9.281	225	30084	23.1074	ug/l	96
105)	1,2,4-Trichlorobenzene	9.202	180	65882	21.2603	ug/l	99
106)	1,2,3-Trichlorobenzene	9.500	180	56093	21.8212	ug/l	97
107)	Naphthalene	9.360	128	182674	21.1665	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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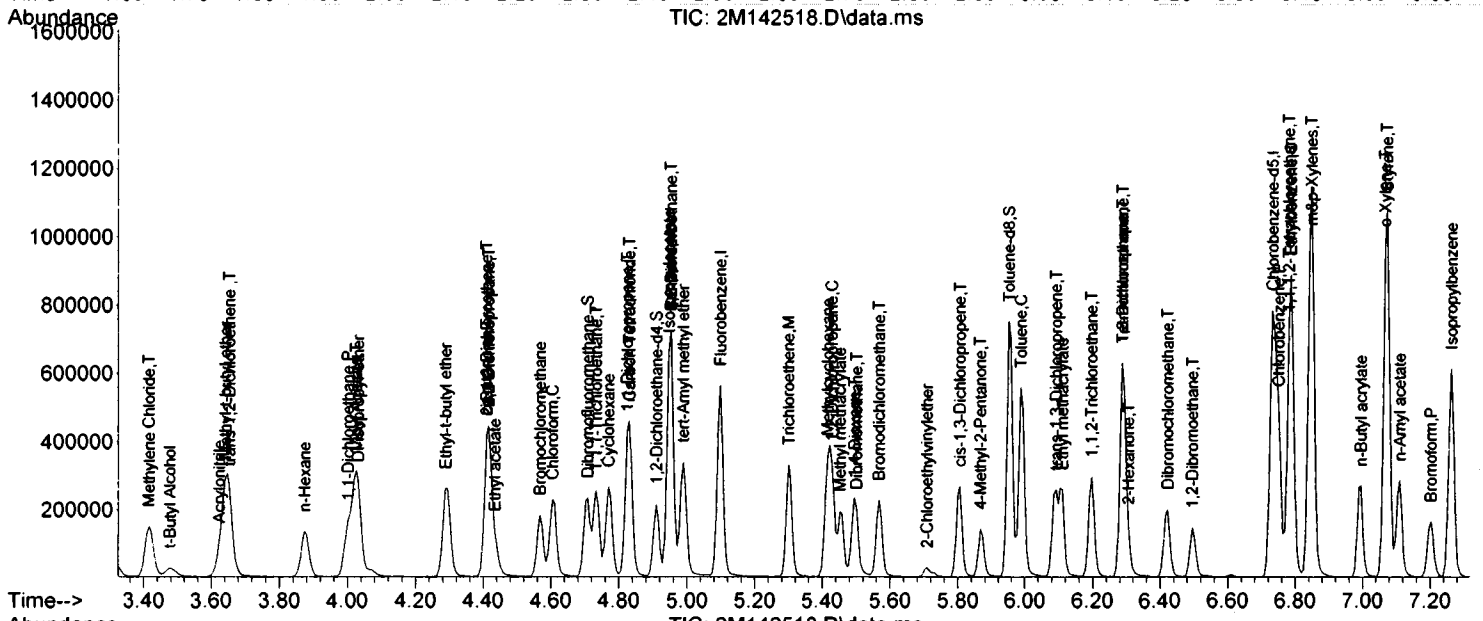
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 2M142518.D
Acq On : 09/30/20 11:36
Operator : JR
Sam Mult : 1 Vial# : 4
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 09/30/20 11:58
Qt Upd On: 09/30/20 10:40
Abundance
Time-->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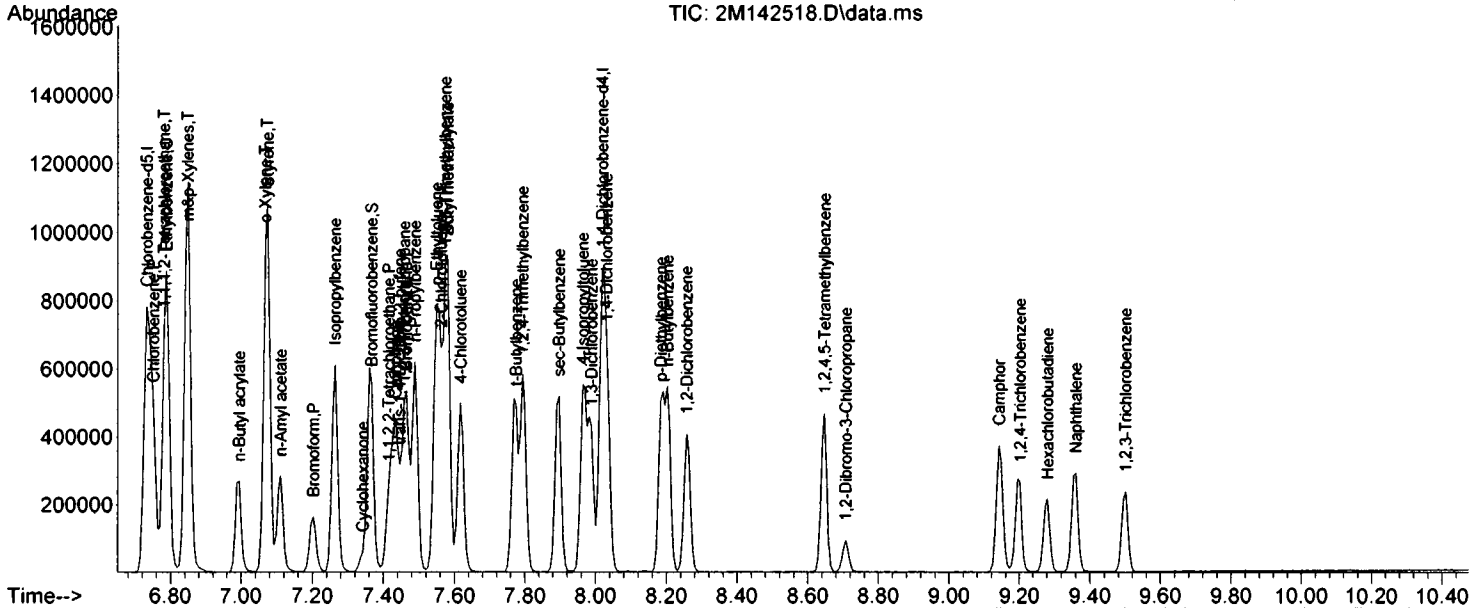
Abundance
Time-->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Abundance
Time-->

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142561.D **Instrument:** GCMS 2

Cont Calibration Date/Time 10/1/2020 1:40:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.10	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.70	19.46	20	20	0.1	0.306	0.298	2.70	
Dichlorodifluoromethane	1	0		1.68	18.42	20	20	0.1	0.308	0.284	7.88	
Chloromethane	1	0		1.86	20.01	20	20	0.1	0.343	0.343	0.07	
Bromomethane	1	0		2.26	18.21	20	20	0.1	0.167	0.152	8.95	
Vinyl Chloride	1	0		1.95	19.88	20	20	0.1	0.373	0.370	0.58	
Chloroethane	1	0		2.34	19.09	20	20	0.1	0.249	0.237	4.56	
Trichlorofluoromethane	1	0		2.57	19.61	20	20	0.1	0.571	0.560	1.95	
Ethyl ether	1	0		2.80	21.12	20	20	0.5	0.198	0.209	5.58	
Furan	1	0		2.84	20.24	20	20	0.5	0.335	0.339	1.22	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.00	18.92	20	20	0.1	0.200	0.189	5.39	
Methylene Chloride	1	0		3.42	20.39	20	20	0.1	0.283	0.289	1.97	
Acrolein	1	0		2.92	86.09	100	20		0.045	0.039	13.91	
Acrylonitrile	1	0		3.62	20.17	20	20		0.098	0.099	0.83	
Iodomethane	1	0		3.15	16.92	20	20		0.210	0.181	15.42	
Acetone	1	0		3.04	105.00	100	20	0.1	0.081	0.085	5.00	
Carbon Disulfide	1	0		3.22	19.34	20	20	0.1	0.765	0.740	3.28	
t-Butyl Alcohol	1	0		3.48	101.54	100	20		0.026	0.026	1.54	
n-Hexane	1	0		3.87	17.98	20	20		0.237	0.213	10.08	
Di-isopropyl-ether	1	0		4.03	20.04	20	20		0.678	0.680	0.21	
1,1-Dichloroethene	1	0		3.01	20.05	20	20	0.1	0.386	0.387	0.24	
Methyl Acetate	1	0		3.32	19.52	20	20	0.1	0.182	0.178	2.39	
Methyl-t-butyl ether	1	0		3.64	18.43	20	20	0.1	0.726	0.743	7.87	
1,1-Dichloroethane	1	0		4.00	20.42	20	20	0.2	0.470	0.480	2.08	
trans-1,2-Dichloroethene	1	0		3.65	19.69	20	20	0.1	0.285	0.280	1.56	
Ethyl-t-butyl ether	1	0		4.29	20.67	20	20	0.5	0.734	0.759	3.33	
cis-1,2-Dichloroethene	1	0		4.41	18.84	20	20	0.1	0.478	0.450	5.80	
Bromochloromethane	1	0		4.57	21.57	20	20		0.212	0.229	7.85	
2,2-Dichloropropane	1	0		4.42	15.54	20	20		0.422	0.328	22.31	C1
Ethyl acetate	1	0		4.43	20.61	20	20		0.245	0.252	3.04	
1,4-Dioxane	1	0		5.49	1056.67	1000	20		0.003	0.004	5.67	
1,1-Dichloropropene	1	0		4.82	19.60	20	20		0.399	0.391	2.02	
Chloroform	1	0		4.60	20.48	20	20	0.2	0.512	0.525	2.42	
Dibromofluoromethane	1	0	S	4.71	29.45	30	**		0.287	0.282	1.83	
Cyclohexane	1	0		4.77	18.77	20	20	0.1	0.354	0.332	6.13	
1,2-Dichloroethane-d4	1	0	S	4.91	28.67	30	**		0.148	0.142	4.45	
1,2-Dichloroethane	1	0		4.95	18.81	20	20	0.1	0.434	0.408	5.93	
2-Butanone	1	0		4.41	20.40	20	20	0.1	0.125	0.128	2.01	
1,1,1-Trichloroethane	1	0		4.73	20.47	20	20	0.1	0.454	0.465	2.37	
Carbon Tetrachloride	1	0		4.83	19.73	20	20	0.1	0.385	0.379	1.36	
Vinyl Acetate	1	0		4.03	16.85	20	20		0.761	0.641	15.74	
Bromodichloromethane	1	0		5.57	18.54	20	20	0.2	0.415	0.425	7.31	
Methylcyclohexane	1	0		5.42	18.71	20	20	0.1	0.343	0.321	6.44	
Dibromomethane	1	0		5.50	20.54	20	20		0.206	0.211	2.69	
1,2-Dichloropropane	1	0		5.43	19.97	20	20	0.1	0.282	0.282	0.14	
Trichloroethene	1	0		5.30	21.04	20	20	0.2	0.317	0.334	5.21	
Benzene	1	0		4.95	19.50	20	20	0.5	1.123	1.095	2.49	
tert-Amyl methyl ether	1	0		4.99	20.28	20	20		0.790	0.801	1.39	
Chlorobenzene-d5	1	0	I	6.73	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.95	20.34	20	20	0.5	0.522	0.531	1.67	
Methyl methacrylate	1	0		5.45	21.47	20	20	0.5	0.252	0.270	7.35	
Dibromochloromethane	1	0		6.42	21.50	20	20	0.1	0.352	0.378	7.52	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142561.D **Instrument:** GCMS 2

Cont Calibration Date/Time 10/1/2020 1:40:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.71	18.55	20	20		0.038	0.036	7.23	
cis-1,3-Dichloropropene	1	0		5.81	20.37	20	20	0.2	0.481	0.489	1.84	
trans-1,3-Dichloropropene	1	0		6.09	19.63	20	20	0.1	0.458	0.449	1.87	
Ethyl methacrylate	1	0		6.11	20.47	20	20	0.5	0.265	0.271	2.36	
1,1,2-Trichloroethane	1	0		6.20	20.99	20	20	0.1	0.297	0.312	4.95	
1,2-Dibromoethane	1	0		6.49	20.79	20	20	0.1	0.313	0.325	3.93	
1,3-Dichloropropane	1	0		6.29	20.94	20	20		0.519	0.543	4.70	
4-Methyl-2-Pentanone	1	0		5.87	21.01	20	20	0.1	0.280	0.294	5.05	
2-Hexanone	1	0		6.30	20.94	20	20	0.1	0.208	0.218	4.69	
Tetrachloroethene	1	0		6.29	20.06	20	20	0.2	0.270	0.271	0.32	
Toluene-d8	1	0	S	5.95	30.33	30	**		1.174	1.187	1.09	
Toluene	1	0		5.99	20.45	20	20	0.4	0.792	0.810	2.23	
1,1,1,2-Tetrachloroethane	1	0		6.78	19.94	20	20		0.318	0.317	0.29	
Chlorobenzene	1	0		6.75	20.77	20	20	0.5	0.884	0.919	3.87	
1,4-Dichlorobenzene-d4	1	0	I	8.02	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.99	23.28	20	20	0.5	1.012	1.178	16.38	
n-Amyl acetate	1	0		7.11	21.47	20	20	0.5	0.891	0.957	7.35	
Bromoform	1	0		7.20	23.17	20	20	0.1	0.448	0.519	15.87	
Ethylbenzene	1	0		6.79	22.88	20	20	0.1	0.683	0.781	14.38	
1,1,2,2-Tetrachloroethane	1	0		7.42	20.49	20	20	0.1	0.803	0.823	2.44	
Bromofluorobenzene	1	0	S	7.36	31.78	30	**		0.788	0.835	5.94	
Styrene	1	0		7.07	22.64	20	20	0.3	1.714	1.940	13.18	
m&p-Xylenes	1	0		6.85	42.95	40	20	0.1	1.039	1.116	7.38	
o-Xylene	1	0		7.07	22.52	20	20	0.3	0.984	1.108	12.61	
trans-1,4-Dichloro-2-butene	1	0		7.44	21.15	20	20		0.190	0.200	5.77	
1,3-Dichlorobenzene	1	0		7.99	21.03	20	20	0.6	1.220	1.283	5.13	
1,4-Dichlorobenzene	1	0		8.03	21.36	20	20	0.5	1.249	1.334	6.81	
1,2-Dichlorobenzene	1	0		8.26	21.08	20	20	0.4	1.151	1.213	5.38	
Isopropylbenzene	1	0		7.26	22.71	20	20	0.1	2.399	2.724	13.55	
Cyclohexanone	1	0		7.34	110.32	100	20		0.021	0.023	10.32	
Camphene	1	0		7.43	19.78	20	20		0.708	0.700	1.10	
1,2,3-Trichloropropane	1	0		7.46	20.70	20	20		0.870	0.900	3.49	
2-Chlorotoluene	1	0		7.56	22.91	20	20		1.443	1.653	14.55	
p-Ethyltoluene	1	0		7.55	22.45	20	20		2.414	2.710	12.26	
4-Chlorotoluene	1	0		7.62	22.78	20	20		1.470	1.674	13.88	
n-Propylbenzene	1	0		7.49	22.25	20	20		2.888	3.212	11.23	
Bromobenzene	1	0		7.46	20.94	20	20		1.606	1.682	4.70	
1,3,5-Trimethylbenzene	1	0		7.57	22.47	20	20		1.870	2.101	12.34	
Butyl methacrylate	1	0		7.58	21.61	20	20	0.5	0.731	0.789	8.03	
t-Butylbenzene	1	0		7.78	22.40	20	20		1.825	2.044	12.02	
1,2,4-Trimethylbenzene	1	0		7.79	22.00	20	20		2.015	2.216	10.01	
sec-Butylbenzene	1	0		7.90	22.57	20	20		2.255	2.545	12.87	
4-Isopropyltoluene	1	0		7.96	22.39	20	20		1.915	2.144	11.94	
n-Butylbenzene	1	0		8.20	22.41	20	20		1.981	2.220	12.05	
p-Diethylbenzene	1	0		8.18	21.86	20	20		1.083	1.183	9.28	
1,2,4,5-Tetramethylbenzene	1	0		8.65	21.51	20	20		1.583	1.703	7.53	
1,2-Dibromo-3-Chloropropane	1	0		8.71	22.79	20	20	0.05	0.163	0.186	13.94	
Camphor	1	0		9.14	213.24	200	20		0.064	0.069	6.62	
Hexachlorobutadiene	1	0		9.28	20.43	20	20		0.248	0.254	2.13	
1,2,4-Trichlorobenzene	1	0		9.20	20.57	20	20	0.2	0.591	0.608	2.83	
1,2,3-Trichlorobenzene	1	0		9.50	20.71	20	20		0.490	0.508	3.57	
Naphthalene	1	0		9.36	20.95	20	20		1.646	1.724	4.75	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

SampleID : CAL @ 20 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142561.D Sam Mult : 1 Vial# : 8 Qt On : 10/01/20 05:42
Acq On : 10/01/20 01:40 Misc : A,5ML Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-3020\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	319206	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	283823	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	146669	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.709	111	90062	29.45	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.17%			
39) 1,2-Dichloroethane-d4	4.910	67	45261	28.67	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.57%			
66) Toluene-d8	5.952	98	336788	30.33	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.10%			
76) Bromofluorobenzene	7.361	174	122441	31.78	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.93%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	63345	19.4602	ug/l	99
6) Dichlorodifluoromethane	1.685	85	60404	18.4231	ug/l	96
7) Chloromethane	1.855	50	73082	20.0132	ug/l	97
8) Bromomethane	2.258	94	32298	18.2106	ug/l	98
9) Vinyl Chloride	1.953	62	78835	19.8839	ug/l	96
10) Chloroethane	2.343	64	50488	19.0887	ug/l	98
11) Trichlorofluoromethane	2.569	101	119139	19.6099	ug/l	95
12) Ethyl ether	2.800	59	44548	21.1165	ug/l	96
13) Furan	2.843	39	72216	20.2430	ug/l	96
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	40303	18.9224	ug/l	93
15) Methylene Chloride	3.416	84	61473	20.3944	ug/l	96
16) Acrolein	2.922	56	41499	86.0876	ug/l	96
17) Acrylonitrile	3.623	53	21092	20.1655	ug/l	85
18) Iodomethane	3.154	142	38473	16.9166	ug/l	99
19) Acetone	3.044	43	90178	104.9971	ug/l	96
20) Carbon Disulfide	3.221	76	157396	19.3431	ug/l	100
21) t-Butyl Alcohol	3.477	59	28129	101.5362	ug/l	94
22) n-Hexane	3.873	57	45340	17.9841	ug/l	95
23) Di-isopropyl-ether	4.026	45	144663	20.0427	ug/l	100
24) 1,1-Dichloroethene	3.014	61	82303	20.0485	ug/l	95
25) Methyl Acetate	3.319	43	37820	19.5212	ug/l	100
26) Methyl-t-butyl ether	3.642	73	158046	18.4268	ug/l	99
27) 1,1-Dichloroethane	4.001	63	102202	20.4162	ug/l	96
28) trans-1,2-Dichloroethene	3.648	96	59602	19.6881	ug/l	96
29) Ethyl-t-butyl ether	4.288	59	161419	20.6663	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	95858	18.8397	ug/l	97
31) Bromochloromethane	4.568	49	48749	21.5690	ug/l	97
32) 2,2-Dichloropropane	4.416	77	69695	15.5387	ug/l	99
33) Ethyl acetate	4.434	43	53626m	20.6071	ug/l	
34) 1,4-Dioxane	5.495	88	38657	1056.6666	ug/l	96
35) 1,1-Dichloropropene	4.824	75	83169	19.5954	ug/l	99
36) Chloroform	4.605	83	111660	20.4836	ug/l	99
38) Cyclohexane	4.769	56	70616	18.7737	ug/l	99
40) 1,2-Dichloroethane	4.952	62	86890	18.8131	ug/l	99
41) 2-Butanone	4.410	43	27181m	20.4023	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	98950	20.4741	ug/l	95
43) Carbon Tetrachloride	4.830	117	80710	19.7276	ug/l	96
44) Vinyl Acetate	4.026	43	136414	16.8523	ug/l	100
45) Bromodichloromethane	5.568	83	90489	18.5376	ug/l	100
46) Methylcyclohexane	5.416	83	68252	18.7130	ug/l	98
47) Dibromomethane	5.501	174	44968	20.5387	ug/l	97
48) 1,2-Dichloropropane	5.428	63	59949	19.9712	ug/l	97
49) Trichloroethene	5.300	130	71015	21.0414	ug/l	96
50) Benzene	4.952	78	233066	19.5028	ug/l	100
51) tert-Amyl methyl ether	4.989	73	170427	20.2783	ug/l	98
53) Iso-propylacetate	4.946	43	100513	20.3350	ug/l	99
54) Methyl methacrylate	5.452	41	51134	21.4698	ug/l	95
55) Dibromochloromethane	6.422	129	71528	21.5031	ug/l	100
56) 2-Chloroethylvinylether	5.708	63	6744	18.5538	ug/l	90
57) cis-1,3-Dichloropropene	5.806	75	92606	20.3688	ug/l	99
58) trans-1,3-Dichloropropene	6.086	75	84966	19.6269	ug/l	97
59) Ethyl methacrylate	6.111	41	51239	20.4729	ug/l	98
60) 1,1,2-Trichloroethane	6.196	97	58958	20.9898	ug/l	94
61) 1,2-Dibromoethane	6.495	107	61565	20.7857	ug/l	98
62) 1,3-Dichloropropane	6.288	76	102819	20.9396	ug/l	100
63) 4-Methyl-2-Pentanone	5.867	43	55678	21.0110	ug/l	99
64) 2-Hexanone	6.300	43	41300	20.9380	ug/l	93
65) Tetrachloroethene	6.288	164	51256	20.0633	ug/l	94
67) Toluene	5.989	92	153293	20.4464	ug/l	99

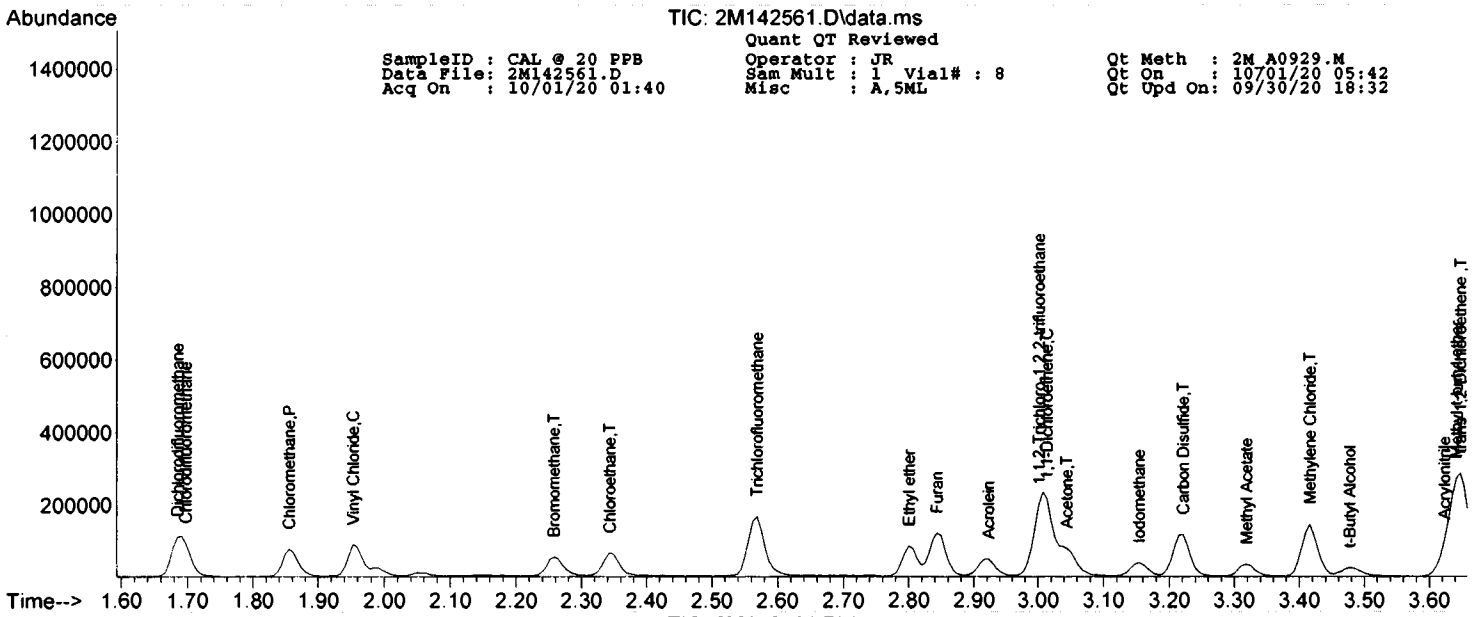
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142561.D Sam Mult : 1 Vial# : 8 Qt On : 10/01/20 05:42
Acq On : 10/01/20 01:40 Misc : A,5ML Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-3020\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	59907	19.9416	ug/l	100
69)	Chlorobenzene	6.751	112	173797	20.7742	ug/l	97
71)	n-Butyl acrylate	6.995	55	115168	23.2753	ug/l	99
72)	n-Amyl acetate	7.111	43	93570	21.4694	ug/l	96
73)	Bromoform	7.202	173	50727	23.1745	ug/l	98
74)	Ethylbenzene	6.787	106	76357	22.8750	ug/l	95
75)	1,1,2,2-Tetrachloroethane	7.415	83	80427	20.4885	ug/l	96
77)	Styrene	7.074	104	189670	22.6363	ug/l	96
78)	m&p-Xylenes	6.848	106	218244	42.9520	ug/l	94
79)	o-Xylene	7.068	106	108305	22.5212	ug/l	95
80)	trans-1,4-Dichloro-2-b...	7.440	53	19604	21.1534	ug/l	77
81)	1,3-Dichlorobenzene	7.988	146	125460	21.0265	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	130425	21.3613	ug/l	98
83)	1,2-Dichlorobenzene	8.257	146	118559	21.0754	ug/l	97
84)	Isopropylbenzene	7.263	105	266379	22.7094	ug/l	98
85)	Cyclohexanone	7.342	55	11186	110.3237	ug/l	96
86)	Camphene	7.434	93	68475	19.7800	ug/l	98
87)	1,2,3-Trichloropropane	7.458	75	88050	20.6974	ug/l	98
88)	2-Chlorotoluene	7.562	91	161615	22.9109	ug/l	98
89)	p-Ethyltoluene	7.550	105	265009	22.4521	ug/l	96
90)	4-Chlorotoluene	7.617	91	163639	22.7750	ug/l	97
91)	n-Propylbenzene	7.489	91	314055	22.2452	ug/l	97
92)	Bromobenzene	7.464	77	164417	20.9396	ug/l	95
93)	1,3,5-Trimethylbenzene	7.574	105	205441	22.4672	ug/l	98
94)	Butyl methacrylate	7.580	41	77196	21.6063	ug/l	96
95)	t-Butylbenzene	7.775	119	199847	22.4038	ug/l	98
96)	1,2,4-Trimethylbenzene	7.793	105	216709	22.0012	ug/l	99
97)	sec-Butylbenzene	7.897	105	248879	22.5738	ug/l	100
98)	4-Isopropyltoluene	7.964	119	209624	22.3883	ug/l	98
99)	n-Butylbenzene	8.202	91	217070	22.4096	ug/l	96
100)	p-Diethylbenzene	8.184	119	115695	21.8556	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	166477	21.5064	ug/l	95
102)	1,2-Dibromo-3-Chloropr...	8.708	157	18179	22.7884	ug/l	81
103)	Camphor	9.141	95	67139	213.2409	ug/l	95
104)	Hexachlorobutadiene	9.281	225	24800	20.4256	ug/l	94
105)	1,2,4-Trichlorobenzene	9.196	180	59436	20.5664	ug/l	100
106)	1,2,3-Trichlorobenzene	9.500	180	49657	20.7137	ug/l	95
107)	Naphthalene	9.360	128	168612	20.9492	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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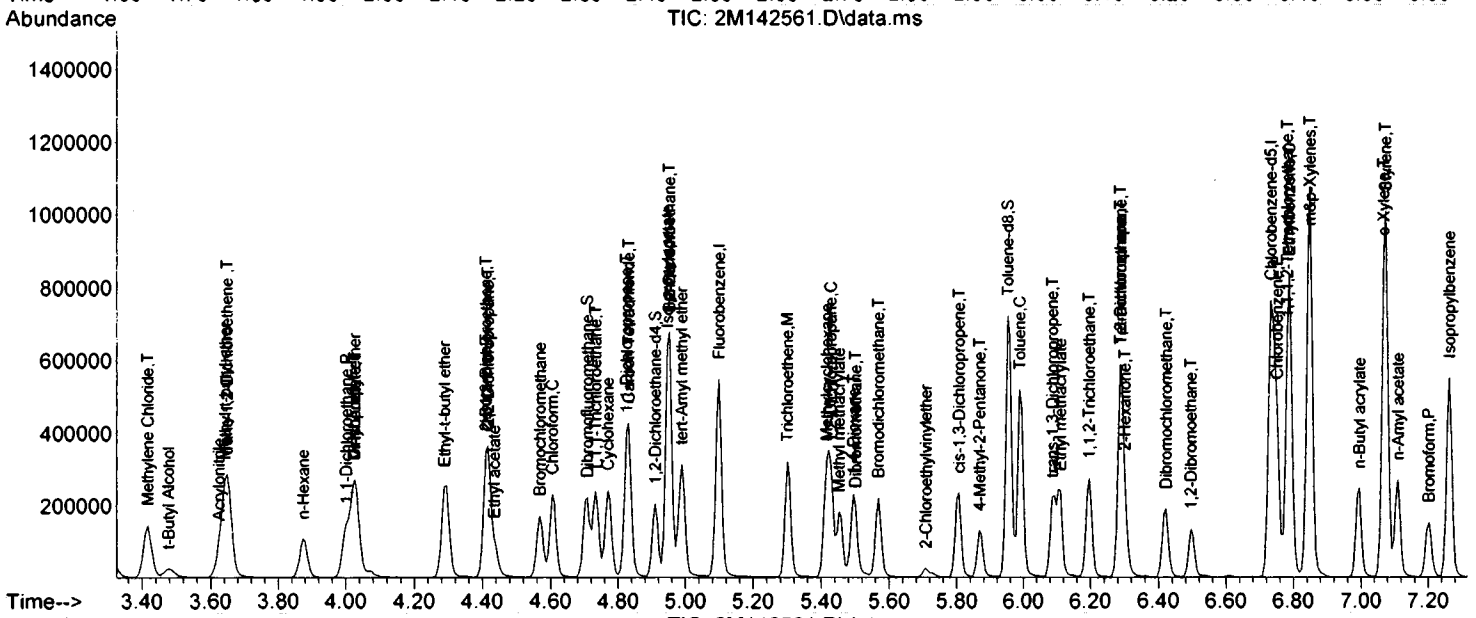
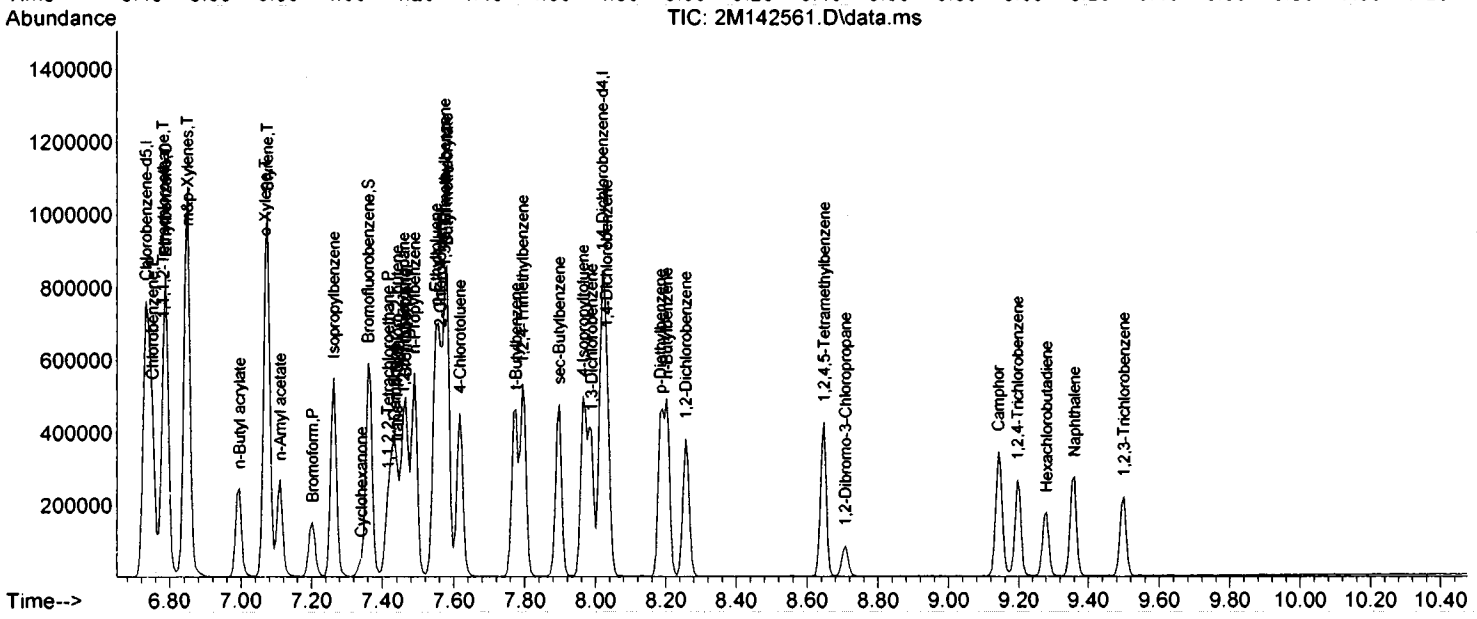
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 2M142561.D
Acq On : 10/01/20 01:40
Operator : JR
Sam Mult : 1 Vial# : 8
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 10/01/20 05:42
Qt Upd On: 09/30/20 18:32
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->


Abundance
TIC: 2M142561.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Dibromofluoromethane,S
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M142561.D\data.ms
Chlorobenzene-d5,I
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene-d4,I
p-Diethylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142629.D **Instrument:** GCMS 2

Cont Calibration Date/Time 10/2/2020 9:58:00 A Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.10	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.70	17.93	20	20	0.1	0.306	0.274	10.35	
Dichlorodifluoromethane	1	0		1.68	9.39	20	20	0.1	0.308	0.145	53.04	C1
Chloromethane	1	0		1.86	15.96	20	20	0.1	0.343	0.274	20.22	
Bromomethane	1	0		2.26	17.07	20	20	0.1	0.167	0.142	14.66	
Vinyl Chloride	1	0		1.96	15.67	20	20	0.1	0.373	0.292	21.66	C1
Chloroethane	1	0		2.34	16.20	20	20	0.1	0.249	0.201	19.02	
Trichlorofluoromethane	1	0		2.57	17.18	20	20	0.1	0.571	0.490	14.11	
Ethyl ether	1	0		2.80	20.89	20	20	0.5	0.198	0.207	4.46	
Furan	1	0		2.84	20.58	20	20	0.5	0.335	0.345	2.89	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.01	19.25	20	20	0.1	0.200	0.193	3.76	
Methylene Chloride	1	0		3.42	19.12	20	20	0.1	0.283	0.271	4.40	
Acrolein	1	0		2.92	56.41	100	20		0.045	0.026	43.59	C1
Acrylonitrile	1	0		3.62	19.57	20	20		0.098	0.096	2.13	
Iodomethane	1	0		3.15	11.91	20	20		0.210	0.126	40.43	C1
Acetone	1	0		3.04	97.10	100	20	0.1	0.081	0.078	2.90	
Carbon Disulfide	1	0		3.22	19.64	20	20	0.1	0.765	0.751	1.80	
t-Butyl Alcohol	1	0		3.48	106.90	100	20		0.026	0.028	6.90	
n-Hexane	1	0		3.87	17.66	20	20		0.237	0.209	11.68	
Di-isopropyl-ether	1	0		4.03	19.77	20	20		0.678	0.670	1.16	
1,1-Dichloroethene	1	0		3.01	19.42	20	20	0.1	0.386	0.375	2.92	
Methyl Acetate	1	0		3.32	22.37	20	20	0.1	0.182	0.204	11.84	
Methyl-t-butyl ether	1	0		3.64	18.27	20	20	0.1	0.726	0.737	8.63	
1,1-Dichloroethane	1	0		4.00	20.40	20	20	0.2	0.470	0.480	2.01	
trans-1,2-Dichloroethene	1	0		3.65	19.32	20	20	0.1	0.285	0.275	3.42	
Ethyl-t-butyl ether	1	0		4.29	20.39	20	20	0.5	0.734	0.748	1.96	
cis-1,2-Dichloroethene	1	0		4.41	18.69	20	20	0.1	0.478	0.447	6.55	
Bromochloromethane	1	0		4.57	21.15	20	20		0.212	0.225	5.73	
2,2-Dichloropropane	1	0		4.42	14.59	20	20		0.422	0.307	27.07	C1
Ethyl acetate	1	0		4.43	18.53	20	20		0.245	0.227	7.33	
1,4-Dioxane	1	0		5.49	1080.54	1000	20		0.003	0.004	8.05	
1,1-Dichloropropene	1	0		4.82	19.26	20	20		0.399	0.384	3.69	
Chloroform	1	0		4.60	20.06	20	20	0.2	0.512	0.514	0.31	
Dibromofluoromethane	1	0	S	4.70	29.79	30	**		0.287	0.285	0.71	
Cyclohexane	1	0		4.77	19.47	20	20	0.1	0.354	0.344	2.64	
1,2-Dichloroethane-d4	1	0	S	4.91	30.43	30	**		0.148	0.151	1.43	
1,2-Dichloroethane	1	0		4.95	18.76	20	20	0.1	0.434	0.407	6.21	
2-Butanone	1	0		4.41	19.56	20	20	0.1	0.125	0.122	2.21	
1,1,1-Trichloroethane	1	0		4.73	20.11	20	20	0.1	0.454	0.457	0.53	
Carbon Tetrachloride	1	0		4.83	20.08	20	20	0.1	0.385	0.386	0.40	
Vinyl Acetate	1	0		4.03	15.95	20	20		0.761	0.607	20.24	
Bromodichloromethane	1	0		5.57	17.60	20	20	0.2	0.415	0.404	12.00	
Methylcyclohexane	1	0		5.42	19.00	20	20	0.1	0.343	0.326	4.98	
Dibromomethane	1	0		5.50	19.92	20	20		0.206	0.205	0.42	
1,2-Dichloropropane	1	0		5.43	19.46	20	20	0.1	0.282	0.274	2.70	
Trichloroethene	1	0		5.30	19.59	20	20	0.2	0.317	0.311	2.03	
Benzene	1	0		4.95	19.22	20	20	0.5	1.123	1.079	3.90	
tert-Amyl methyl ether	1	0		4.99	19.57	20	20		0.790	0.773	2.14	
Chlorobenzene-d5	1	0	I	6.73	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.95	19.43	20	20	0.5	0.522	0.508	2.85	
Methyl methacrylate	1	0		5.45	22.18	20	20	0.5	0.252	0.279	10.92	
Dibromochloromethane	1	0		6.42	21.15	20	20	0.1	0.352	0.372	5.73	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142629.D **Instrument:** GCMS 2

Cont Calibration Date/Time 10/2/2020 9:58:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.71	30.86	20	20		0.038	0.059	54.30	C1
cis-1,3-Dichloropropene	1	0		5.81	19.38	20	20	0.2	0.481	0.466	3.11	
trans-1,3-Dichloropropene	1	0		6.09	20.12	20	20	0.1	0.458	0.460	0.59	
Ethyl methacrylate	1	0		6.11	18.70	20	20	0.5	0.265	0.247	6.51	
1,1,2-Trichloroethane	1	0		6.20	20.99	20	20	0.1	0.297	0.312	4.95	
1,2-Dibromoethane	1	0		6.49	20.44	20	20	0.1	0.313	0.320	2.18	
1,3-Dichloropropane	1	0		6.29	20.33	20	20		0.519	0.528	1.66	
4-Methyl-2-Pentanone	1	0		5.87	20.64	20	20	0.1	0.280	0.289	3.19	
2-Hexanone	1	0		6.30	20.34	20	20	0.1	0.208	0.212	1.72	
Tetrachloroethene	1	0		6.29	19.93	20	20	0.2	0.270	0.269	0.33	
Toluene-d8	1	0	S	5.95	30.43	30	**		1.174	1.191	1.43	
Toluene	1	0		5.99	19.82	20	20	0.4	0.792	0.785	0.91	
1,1,1,2-Tetrachloroethane	1	0		6.78	19.81	20	20		0.318	0.314	0.96	
Chlorobenzene	1	0		6.75	20.06	20	20	0.5	0.884	0.887	0.28	
1,4-Dichlorobenzene-d4	1	0	I	8.02	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.99	20.45	20	20	0.5	1.012	1.035	2.24	
n-Amyl acetate	1	0		7.11	19.79	20	20	0.5	0.891	0.882	1.05	
Bromoform	1	0		7.20	22.26	20	20	0.1	0.448	0.498	11.28	
Ethylbenzene	1	0		6.79	21.14	20	20	0.1	0.683	0.722	5.72	
1,1,2,2-Tetrachloroethane	1	0		7.42	20.12	20	20	0.1	0.803	0.808	0.60	
Bromofluorobenzene	1	0	S	7.37	30.74	30	**		0.788	0.807	2.45	
Styrene	1	0		7.07	21.18	20	20	0.3	1.714	1.815	5.89	
m&p-Xylenes	1	0		6.85	40.64	40	20	0.1	1.039	1.056	1.59	
o-Xylene	1	0		7.07	21.28	20	20	0.3	0.984	1.047	6.40	
trans-1,4-Dichloro-2-butene	1	0		7.44	22.90	20	20		0.190	0.217	14.49	
1,3-Dichlorobenzene	1	0		7.99	19.64	20	20	0.6	1.220	1.199	1.79	
1,4-Dichlorobenzene	1	0		8.03	19.38	20	20	0.5	1.249	1.210	3.08	
1,2-Dichlorobenzene	1	0		8.26	20.11	20	20	0.4	1.151	1.157	0.54	
Isopropylbenzene	1	0		7.26	21.77	20	20	0.1	2.399	2.612	8.87	
Cyclohexanone	1	0		7.34	107.16	100	20		0.021	0.022	7.16	
Camphene	1	0		7.43	20.40	20	20		0.708	0.722	2.02	
1,2,3-Trichloropropane	1	0		7.46	20.70	20	20		0.870	0.901	3.50	
2-Chlorotoluene	1	0		7.56	21.15	20	20		1.443	1.526	5.75	
p-Ethyltoluene	1	0		7.55	21.69	20	20		2.414	2.619	8.47	
4-Chlorotoluene	1	0		7.62	21.66	20	20		1.470	1.592	8.32	
n-Propylbenzene	1	0		7.49	21.17	20	20		2.888	3.057	5.85	
Bromobenzene	1	0		7.46	20.05	20	20		1.606	1.610	0.24	
1,3,5-Trimethylbenzene	1	0		7.57	21.58	20	20		1.870	2.018	7.90	
Butyl methacrylate	1	0		7.58	19.73	20	20	0.5	0.731	0.721	1.33	
t-Butylbenzene	1	0		7.77	21.66	20	20		1.825	1.976	8.32	
1,2,4-Trimethylbenzene	1	0		7.79	20.91	20	20		2.015	2.107	4.56	
sec-Butylbenzene	1	0		7.90	21.69	20	20		2.255	2.446	8.45	
4-Isopropyltoluene	1	0		7.96	21.30	20	20		1.915	2.040	6.51	
n-Butylbenzene	1	0		8.20	21.71	20	20		1.981	2.151	8.56	
p-Diethylbenzene	1	0		8.18	21.24	20	20		1.083	1.150	6.22	
1,2,4,5-Tetramethylbenzene	1	0		8.65	20.87	20	20		1.583	1.652	4.34	
1,2-Dibromo-3-Chloropropane	1	0		8.71	21.43	20	20	0.05	0.163	0.175	7.12	
Camphor	1	0		9.14	222.61	200	20		0.064	0.072	11.30	
Hexachlorobutadiene	1	0		9.28	20.35	20	20		0.248	0.253	1.74	
1,2,4-Trichlorobenzene	1	0		9.20	19.73	20	20	0.2	0.591	0.583	1.33	
1,2,3-Trichlorobenzene	1	0		9.50	20.07	20	20		0.490	0.492	0.36	
Naphthalene	1	0		9.36	20.00	20	20		1.646	1.646	0.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 2M_A0929.M
Data File: 2M142629.D Sam Mult : 1 Vial# : 3 Qt On : 10/02/20 10:21
Acq On : 10/02/20 09:58 Misc : A,5ML Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	340272	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	303585	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	163340	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	97100	29.79	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.30%			
39) 1,2-Dichloroethane-d4	4.910	67	51217	30.43	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.43%			
66) Toluene-d8	5.952	98	361431	30.43	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.43%			
76) Bromofluorobenzene	7.367	174	131871	30.74	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.47%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	62214	17.9295	ug/l	56
6) Dichlorodifluoromethane	1.685	85	32829	9.3929	ug/l	99
7) Chloromethane	1.855	50	62113	15.9563	ug/l	96
8) Bromomethane	2.258	94	32270	17.0684	ug/l	96
9) Vinyl Chloride	1.959	62	66216m	15.6672	ug/l	
10) Chloroethane	2.343	64	45662	16.1952	ug/l	100
11) Trichlorofluoromethane	2.569	101	111247	17.1773	ug/l	98
12) Ethyl ether	2.800	59	46981	20.8910	ug/l	97
13) Furan	2.843	39	78257	20.5783	ug/l	98
14) 1,1,2-Trichloro-1,2,2-...	3.008	101	43702	19.2480	ug/l	93
15) Methylene Chloride	3.416	84	61433	19.1194	ug/l	97
16) Acrolein	2.916	56	28989m	56.4133	ug/l	
17) Acrylonitrile	3.623	53	21824	19.5735	ug/l	99
18) Iodomethane	3.154	142	28654	11.9142	ug/l	95
19) Acetone	3.044	43	88899	97.0998	ug/l	98
20) Carbon Disulfide	3.221	76	170361	19.6403	ug/l	100
21) t-Butyl Alcohol	3.477	59	31570	106.9020	ug/l	99
22) n-Hexane	3.873	57	47472	17.6640	ug/l	94
23) Di-isopropyl-ether	4.026	45	152100	19.7684	ug/l	99
24) 1,1-Dichloroethene	3.014	61	84965	19.4157	ug/l	95
25) Methyl Acetate	3.318	43	46194	22.3674	ug/l	100
26) Methyl-t-butyl ether	3.642	73	167084	18.2745	ug/l	99
27) 1,1-Dichloroethane	4.001	63	108873	20.4024	ug/l	100
28) trans-1,2-Dichloroethene	3.654	96	62333	19.3155	ug/l	99
29) Ethyl-t-butyl ether	4.294	59	169790	20.3923	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	101369	18.6894	ug/l	98
31) Bromochloromethane	4.568	49	50949	21.1468	ug/l	99
32) 2,2-Dichloropropane	4.416	77	69741	14.5863	ug/l	99
33) Ethyl acetate	4.434	43	51414m	18.5340	ug/l	
34) 1,4-Dioxane	5.489	88	42139	1080.5351	ug/l	95
35) 1,1-Dichloropropene	4.824	75	87148	19.2617	ug/l	97
36) Chloroform	4.605	83	116573	20.0610	ug/l	99
38) Cyclohexane	4.769	56	78075	19.4717	ug/l	99
40) 1,2-Dichloroethane	4.952	62	92357	18.7588	ug/l	100
41) 2-Butanone	4.410	43	27776m	19.5582	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	103583	20.1058	ug/l	99
43) Carbon Tetrachloride	4.830	117	87577	20.0808	ug/l	91
44) Vinyl Acetate	4.026	43	137649	15.9521	ug/l	100
45) Bromodichloromethane	5.568	83	91586	17.6008	ug/l	98
46) Methylcyclohexane	5.416	83	73890	19.0046	ug/l	99
47) Dibromomethane	5.501	174	46481	19.9155	ug/l	98
48) 1,2-Dichloropropane	5.428	63	62268	19.4596	ug/l	93
49) Trichloroethene	5.300	130	70491	19.5931	ug/l	94
50) Benzene	4.952	78	244849	19.2203	ug/l	100
51) tert-Amyl methyl ether	4.989	73	175342	19.5715	ug/l	98
53) Iso-propylacetate	4.946	43	102722	19.4291	ug/l	99
54) Methyl methacrylate	5.452	41	56514	22.1841	ug/l	96
55) Dibromochloromethane	6.422	129	75240	21.1466	ug/l	96
56) 2-Chloroethylvinylether	5.708	63	11998	30.8597	ug/l	97
57) cis-1,3-Dichloropropene	5.806	75	94238	19.3785	ug/l	98
58) trans-1,3-Dichloropropene	6.086	75	93158	20.1184	ug/l	98
59) Ethyl methacrylate	6.111	41	50053	18.6972	ug/l	99
60) 1,1,2-Trichloroethane	6.196	97	63062	20.9894	ug/l	94
61) 1,2-Dibromoethane	6.495	107	64742	20.4355	ug/l	99
62) 1,3-Dichloropropane	6.287	76	106784	20.3315	ug/l	97
63) 4-Methyl-2-Pentanone	5.867	43	58496	20.6375	ug/l	98
64) 2-Hexanone	6.300	43	42921	20.3433	ug/l	98
65) Tetrachloroethene	6.287	164	54472	19.9342	ug/l	98
67) Toluene	5.989	92	158923	19.8175	ug/l	95

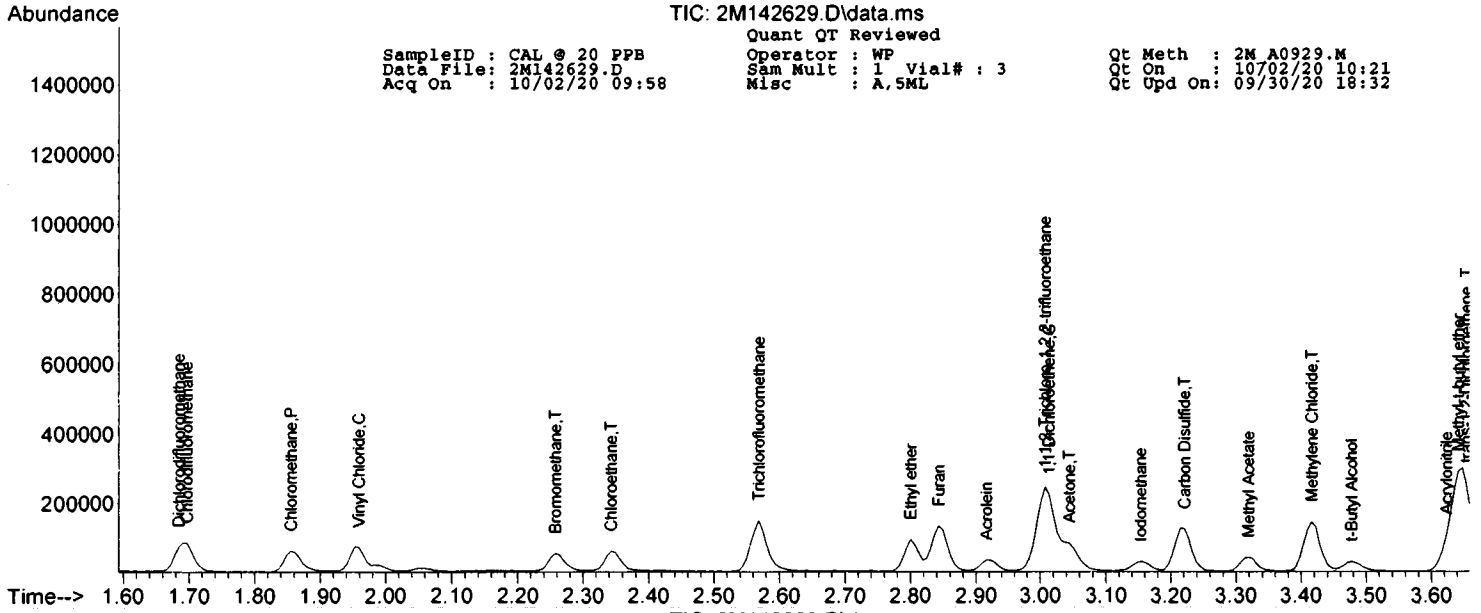
Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB Operator : WP Qt Meth : 2M_A0929.M
Data File: 2M142629.D Sam Mult : 1 Vial# : 3 Qt On : 10/02/20 10:21
Acq On : 10/02/20 09:58 Misc : A,5ML Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	63649	19.8081	ug/l	97
69)	Chlorobenzene	6.751	112	179471	20.0560	ug/l	100
71)	n-Butyl acrylate	6.989	55	112681	20.4484	ug/l	99
72)	n-Amyl acetate	7.110	43	96052	19.7895	ug/l	97
73)	Bromoform	7.202	173	54253	22.2557	ug/l	100
74)	Ethylbenzene	6.787	106	78604	21.1448	ug/l	93
75)	1,1,2,2-Tetrachloroethane	7.415	83	87956	20.1196	ug/l	99
77)	Styrene	7.074	104	197621	21.1780	ug/l	96
78)	m&p-Xylenes	6.848	106	229945	40.6360	ug/l	94
79)	o-Xylene	7.068	106	113965	21.2794	ug/l	93
80)	trans-1,4-Dichloro-2-b...	7.440	53	23632	22.8972	ug/l	82
81)	1,3-Dichlorobenzene	7.988	146	130515	19.6412	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	131808	19.3845	ug/l	98
83)	1,2-Dichlorobenzene	8.257	146	125969	20.1071	ug/l	98
84)	Isopropylbenzene	7.263	105	284426	21.7731	ug/l	99
85)	Cyclohexanone	7.342	55	12100	107.1581	ug/l	96
86)	Camphene	7.434	93	78663	20.4038	ug/l	94
87)	1,2,3-Trichloropropane	7.458	75	98067	20.6993	ug/l	99
88)	2-Chlorotoluene	7.562	91	166153	21.1502	ug/l	99
89)	p-Ethyltoluene	7.549	105	285158	21.6934	ug/l	99
90)	4-Chlorotoluene	7.616	91	173356	21.6649	ug/l	98
91)	n-Propylbenzene	7.488	91	332863	21.1710	ug/l	97
92)	Bromobenzene	7.464	77	175309	20.0480	ug/l	94
93)	1,3,5-Trimethylbenzene	7.574	105	219764	21.5806	ug/l	98
94)	Butyl methacrylate	7.580	41	78517	19.7331	ug/l	97
95)	t-Butylbenzene	7.775	119	215218	21.6645	ug/l	98
96)	1,2,4-Trimethylbenzene	7.793	105	229388	20.9115	ug/l	99
97)	sec-Butylbenzene	7.897	105	266308	21.6893	ug/l	98
98)	4-Isopropyltoluene	7.964	119	222128	21.3025	ug/l	99
99)	n-Butylbenzene	8.202	91	234222	21.7124	ug/l	97
100)	p-Diethylbenzene	8.183	119	125242	21.2444	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	179896	20.8680	ug/l	95
102)	1,2-Dibromo-3-Chloropr...	8.708	157	19034	21.4250	ug/l	83
103)	Camphor	9.141	95	78054	222.6059	ug/l	100
104)	Hexachlorobutadiene	9.281	225	27515	20.3487	ug/l	96
105)	1,2,4-Trichlorobenzene	9.195	180	63512	19.7338	ug/l	98
106)	1,2,3-Trichlorobenzene	9.500	180	53589	20.0724	ug/l	96
107)	Naphthalene	9.360	128	179268	19.9999	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
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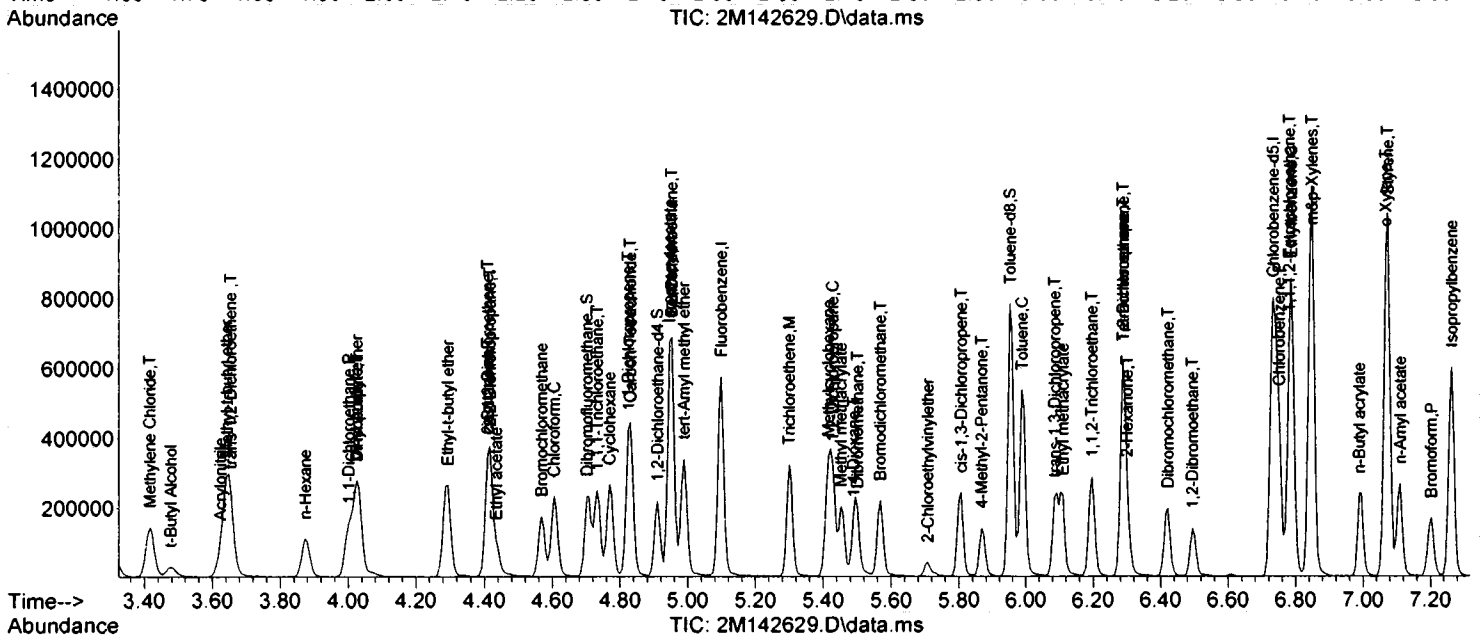
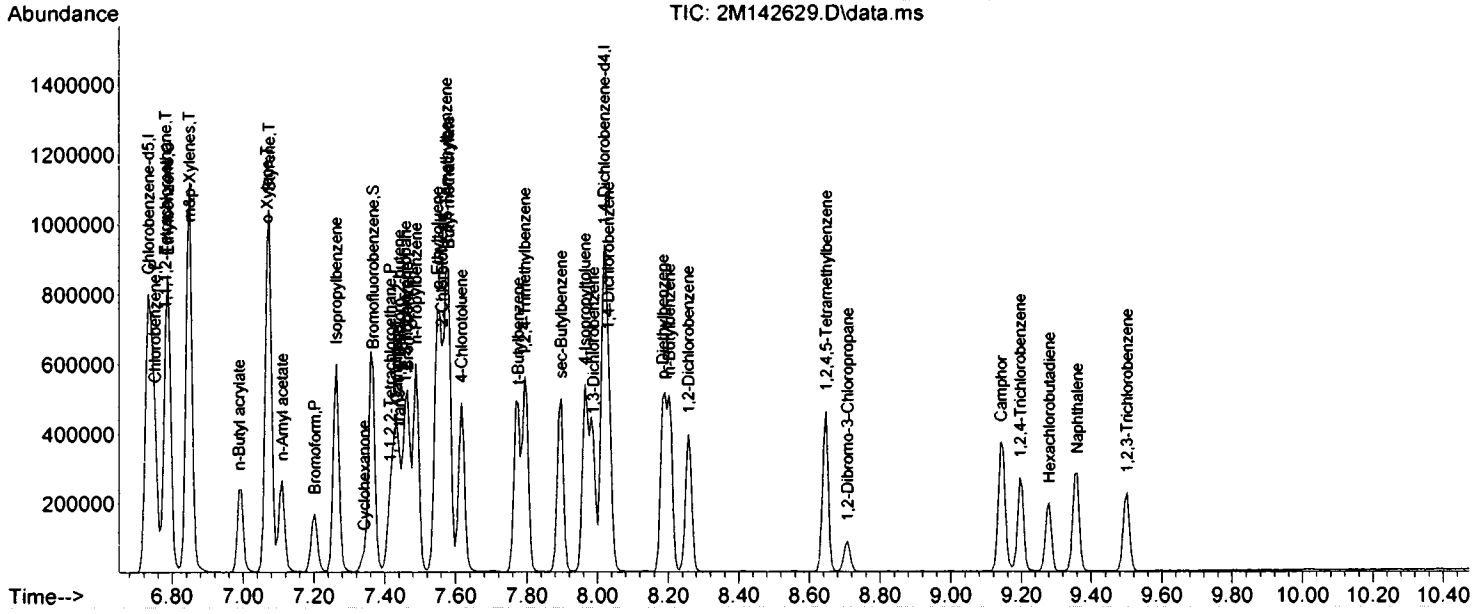
Quant QT Reviewed
SampleID : CAL @ 20 PPB
Data File: 2M142629.D
Acq On : 10/02/20 09:58
Operator : WP
Sam Mult : 1 Vial# : 3
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 10/02/20 10:21
Qt Upd On: 09/30/20 18:32
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
TIC: 2M142629.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Ethylbenzene,T
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M142629.D\data.ms
Chlorobenzene-d5,I
Ethylbenzene,T
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

GC/MS Volatile Data
Raw QC Data

Form 5

Tune Name: BFB TUNE **Data File:** 2M141735.D
Instrument: GCMS 2 **Analysis Date:** 09/09/20 18:31
Method: EPA 8260C
Tune Scan/Time Range: Average of 7.336 to 7.379 min

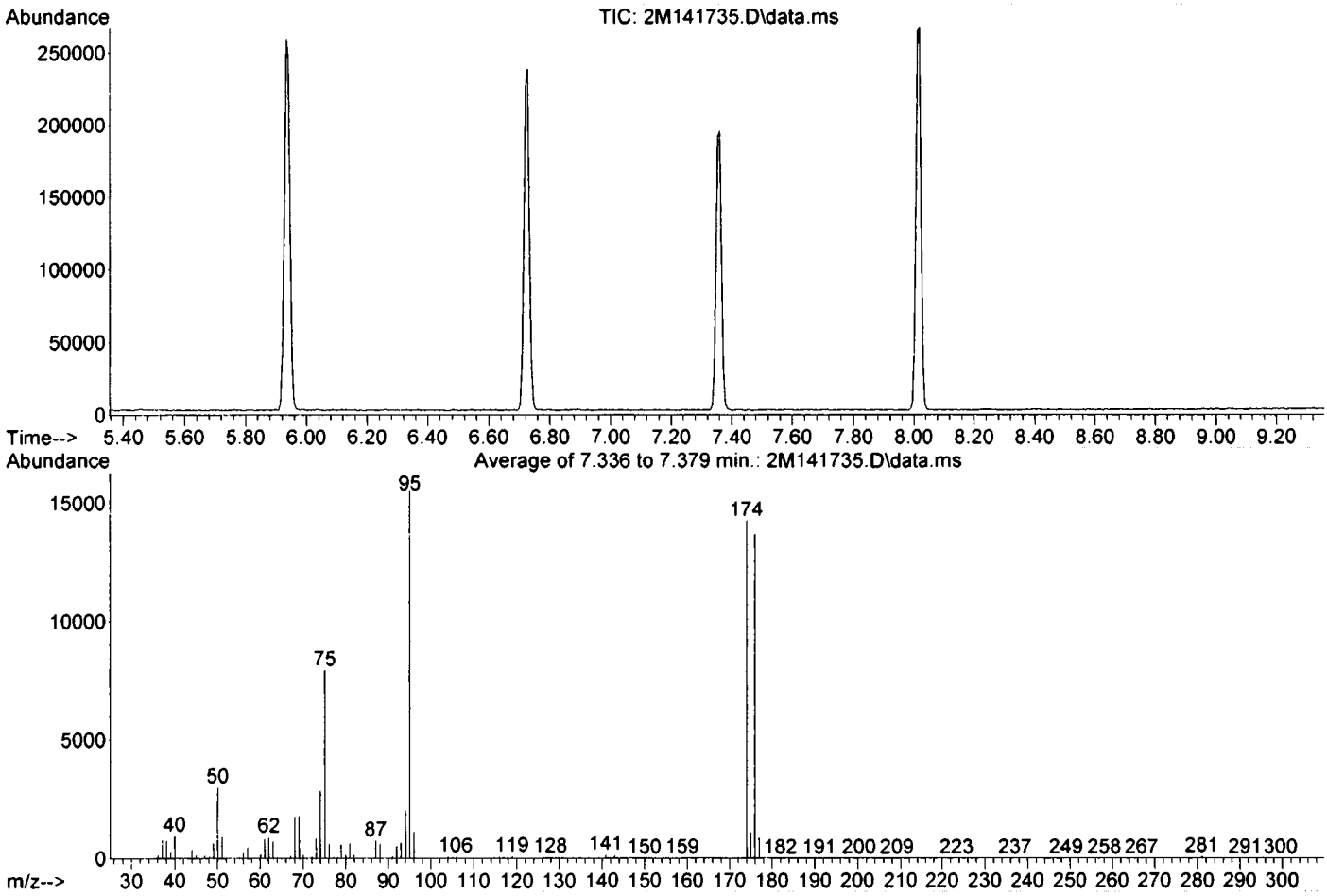
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.4	3010	PASS
75	95	30	60	51.2	7955	PASS
95	95	100	100	100.0	15539	PASS
96	95	5	9	7.3	1132	PASS
173	174	0.00	2	0.4	55	PASS
174	95	50	100	91.8	14265	PASS
175	174	5	9	7.8	1106	PASS
176	174	95	101	96.1	13703	PASS
177	176	5	9	6.4	871	PASS

Data File	Sample Number	Analysis Date:
2M141736.D	BLK	09/09/20 18:47
2M141739.D	CAL @ 0.5 PPB	09/09/20 19:46
2M141740.D	CAL @ 1 PPB	09/09/20 20:05
2M141741.D	CAL @ 5 PPB	09/09/20 20:25
2M141742.D	CAL @ 10 PPB	09/09/20 20:44
2M141743.D	CAL @ 20 PPB	09/09/20 21:04
2M141745.D	CAL @ 50 PPB	09/09/20 21:43
2M141746.D	BLK	09/09/20 22:02
2M141747.D	CAL @ 500 PPB	09/09/20 22:22
2M141750.D	CAL @ 250 PPB	09/09/20 23:21
2M141753.D	CAL @100 PPB	09/10/20 00:19
2M141754.D	BLK	09/10/20 00:39
2M141758.D	STD	09/10/20 01:57
2M141759.D	ICV	09/10/20 02:16
2M141760.D	BLK	09/10/20 02:36
2M141762.D	DAILY BLANK	09/10/20 03:15
2M141763.D	DAILY BLANK	09/10/20 03:34
2M141764.D	MDL @ 1 PPB	09/10/20 03:54
2M141765.D	MDL @ 1 PPB	09/10/20 04:13
2M141766.D	MDL @ 1 PPB	09/10/20 04:32
2M141767.D	MDL @ 1 PPB	09/10/20 04:52
2M141768.D	BLK	09/10/20 05:11

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-09-20\
Data File : 2M141735.D
Acq On : 09 Sep 2020 18:31
Operator : WP
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 3 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_2\METHODQT\2M_A0826.M
Title : @GCMS_2,ug,624,8260
Last Update : Thu Aug 27 07:28:02 2020



Spectrum Information: Average of 7.336 to 7.379 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	3010	PASS
75	95	30	60	51.2	7955	PASS
95	95	100	100	100.0	15539	PASS
96	95	5	9	7.3	1132	PASS
173	174	0.00	2	0.4	55	PASS
174	95	50	100	91.8	14265	PASS
175	174	5	9	7.8	1106	PASS
176	174	95	101	96.1	13703	PASS
177	176	5	9	6.4	871	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 11
Data File: 11M82667.D
Analysis Date: 09/11/20 18:54
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.164 to 7.167 min

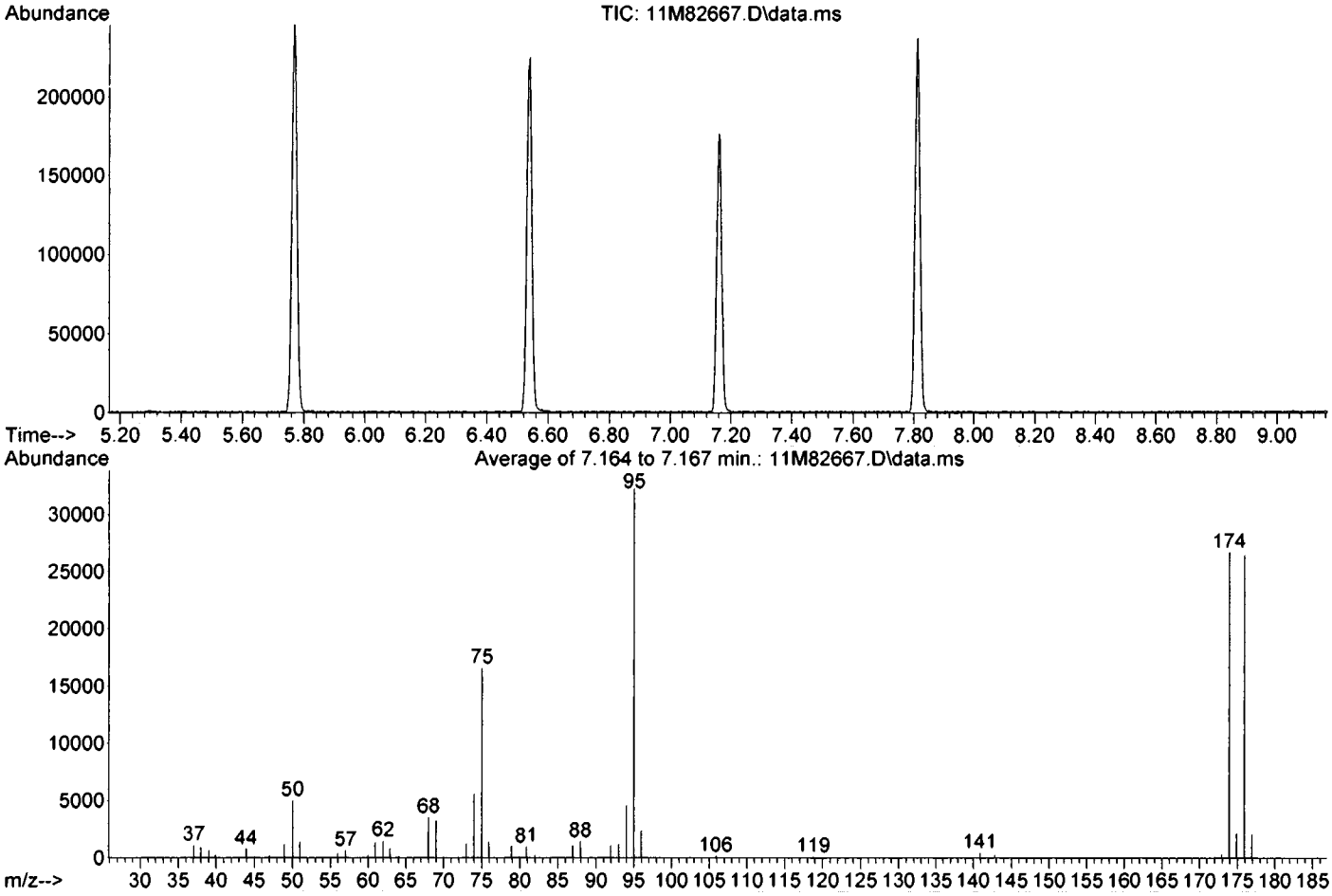
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.5	5002	PASS
75	95	30	60	51.5	16609	PASS
95	95	100	100	100.0	32280	PASS
96	95	5	9	7.5	2425	PASS
173	174	0.00	2	1.4	376	PASS
174	95	50	100	82.9	26756	PASS
175	174	5	9	8.1	2157	PASS
176	174	95	101	99.1	26512	PASS
177	176	5	9	7.8	2078	PASS

Data File	Sample Number	Analysis Date:
11M82669.D	BLK	09/11/20 19:26
11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21
11M82673.D	CAL @ 1 PPB	09/11/20 20:40
11M82674.D	CAL @ 5 PPB	09/11/20 20:58
11M82675.D	CAL @ 10 PPB	09/11/20 21:17
11M82676.D	CAL @ 20 PPB	09/11/20 21:35
11M82678.D	CAL @ 50 PPB	09/11/20 22:12
11M82680.D	500 PPB	09/11/20 22:48
11M82683.D	250 PPB	09/11/20 23:44
11M82686.D	CAL @ 100 PPB	09/12/20 00:39
11M82690.D	BLK	09/12/20 01:52
11M82691.D	ICV	09/12/20 02:11
11M82693.D	BLK	09/12/20 02:47
11M82696.D	DAILY BLANK	09/12/20 03:43
11M82699.D	BLK	09/14/20 14:43

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-11-20\
Data File : 11M82667.D
Acq On : 11 Sep 2020 18:54
Operator : WP
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 17 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS_11\MethodQt\11M_A0817.M
Title : @GCMS_11,ug,624,8260
Last Update : Tue Aug 18 07:37:22 2020



Spectrum Information: Average of 7.164 to 7.167 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.5	5002	PASS
75	95	30	60	51.5	16609	PASS
95	95	100	100	100.0	32280	PASS
96	95	5	9	7.5	2425	PASS
173	174	0.00	2	1.4	376	PASS
174	95	50	100	82.9	26756	PASS
175	174	5	9	8.1	2157	PASS
176	174	95	101	99.1	26512	PASS
177	176	5	9	7.8	2078	PASS

Form 5

Tune Name: BFB TUNE **Data File:** 11M83266.D
Instrument: GCMS 11 **Analysis Date:** 09/28/20 10:43
Method: EPA 8260C
Tune Scan/Time Range: Average of 7.170 to 7.170 min

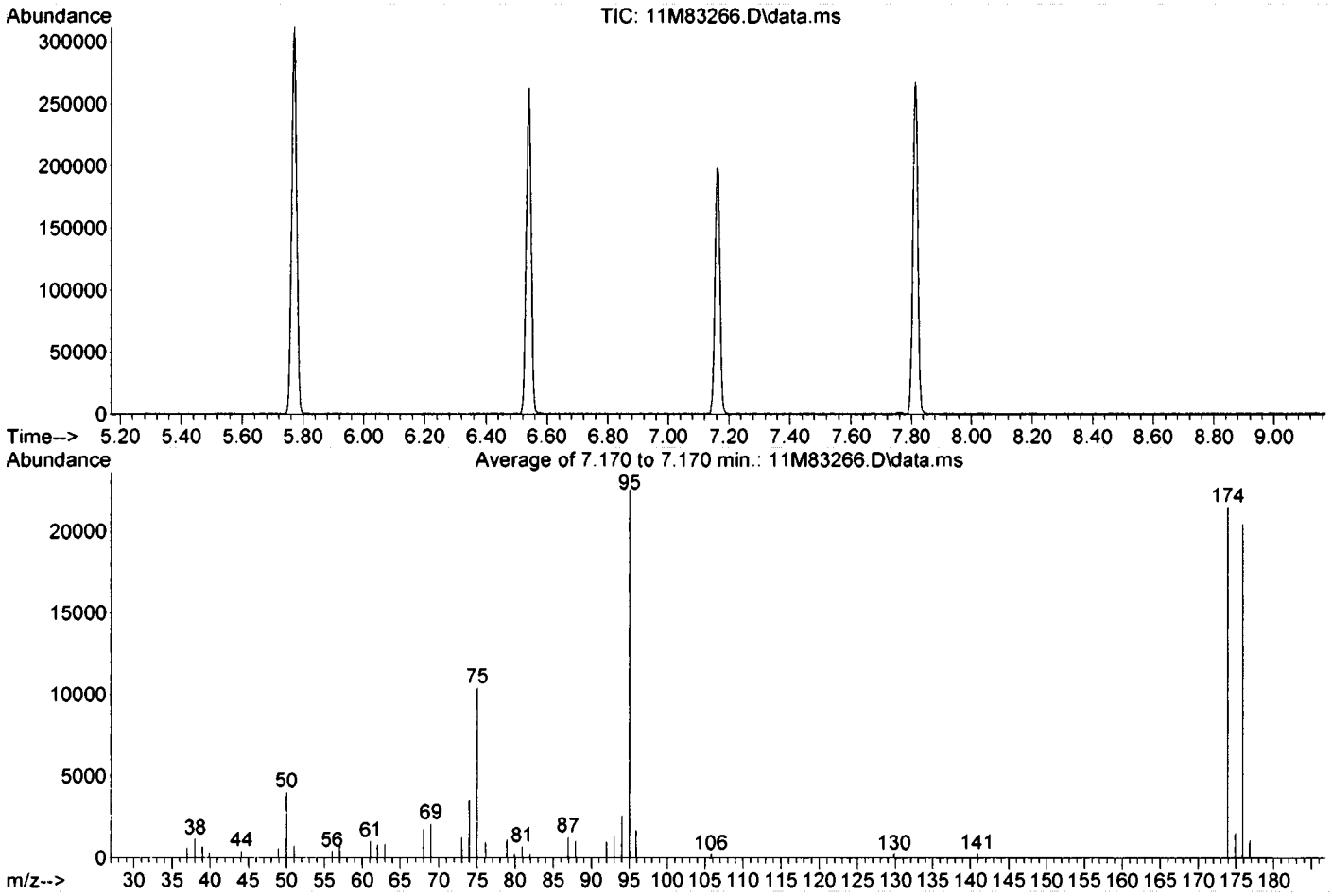
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	17.9	4047	PASS
75	95	30	60	46.2	10426	PASS
95	95	100	100	100.0	22568	PASS
96	95	5	9	7.7	1740	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	95.4	21520	PASS
175	174	5	9	7.3	1566	PASS
176	174	95	101	95.1	20464	PASS
177	176	5	9	5.3	1082	PASS

Data File	Sample Number	Analysis Date:
11M83267.D	20 PPB	09/28/20 10:56
11M83268.D	CAL @ 20 PPB	09/28/20 11:14
11M83269.D	BLK	09/28/20 11:33
11M83270.D	BLK	09/28/20 11:51
11M83271.D	DAILY BLANK	09/28/20 12:09
11M83272.D	DAILY BLANK	09/28/20 12:28
11M83273.D	AD19444-014	09/28/20 12:46
11M83274.D	AD19415-005	09/28/20 13:05
11M83275.D	AD19444-005	09/28/20 13:23
11M83276.D	MBS89372	09/28/20 13:42
11M83277.D	AD19444-006(MS:	09/28/20 14:00
11M83278.D	AD19444-007(MSD	09/28/20 14:18
11M83279.D	MBS89373	09/28/20 14:36
11M83280.D	BLK	09/28/20 14:59
11M83281.D	BLK	09/28/20 15:18
11M83282.D	AD19452-013	09/28/20 15:36
11M83283.D	AD19386-009	09/28/20 15:55
11M83284.D	AD19386-010	09/28/20 16:13
11M83285.D	AD19452-008	09/28/20 16:31
11M83286.D	AD19452-004	09/28/20 16:50
11M83287.D	AD19401-013	09/28/20 17:08
11M83288.D	AD19401-012	09/28/20 17:27
11M83289.D	AD19452-007	09/28/20 17:45
11M83290.D	AD19452-015(20X)	09/28/20 18:04
11M83291.D	AD19446-004	09/28/20 18:22
11M83292.D	AD19444-001	09/28/20 18:40
11M83293.D	AD19444-002	09/28/20 18:59
11M83294.D	AD19444-003	09/28/20 19:17
11M83295.D	AD19476-004	09/28/20 19:36
11M83296.D	AD19476-005	09/28/20 19:54
11M83297.D	AD19457-002	09/28/20 20:13
11M83298.D	AD19444-010	09/28/20 20:31
11M83299.D	AD19444-011	09/28/20 20:49
11M83300.D	AD19356-002(400u	09/28/20 21:08
11M83301.D	AD19475-004	09/28/20 21:26
11M83302.D	AD19446-004(MS)	09/28/20 21:45
11M83303.D	AD19446-004(MSD	09/28/20 22:03
11M83304.D	BLK	09/28/20 22:21
11M83305.D	BLK	09/28/20 22:39
11M83306.D	BLK	09/28/20 22:58
11M83307.D	BLK	09/28/20 23:16
11M83308.D	BLK	09/28/20 23:35

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Data File : 11M83266.D
Acq On : 28 Sep 2020 10:43
Operator : WP
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS_11\MethodQt\11M_A0911.M
Title : @GCMS_11,ug,624,8260
Last Update : Mon Sep 14 15:14:57 2020



Spectrum Information: Average of 7.170 to 7.170 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.9	4047	PASS
75	95	30	60	46.2	10426	PASS
95	95	100	100	100.0	22568	PASS
96	95	5	9	7.7	1740	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	95.4	21520	PASS
175	174	5	9	7.3	1566	PASS
176	174	95	101	95.1	20464	PASS
177	176	5	9	5.3	1082	PASS

Form 5

Tune Name: BFB TUNE **Data File:** 2M142439.D
Instrument: GCMS 2 **Analysis Date:** 09/28/20 21:19
Method: EPA 8260C
Tune Scan/Time Range: Average of 7.354 to 7.367 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	20.3	19629	PASS
75	95	30	60	52.8	51012	PASS
95	95	100	100	100.0	96680	PASS
96	95	5	9	6.9	6686	PASS
173	174	0.00	2	0.7	524	PASS
174	95	50	100	82.6	79883	PASS
175	174	5	9	7.7	6179	PASS
176	174	95	101	97.0	77508	PASS
177	176	5	9	6.2	4782	PASS

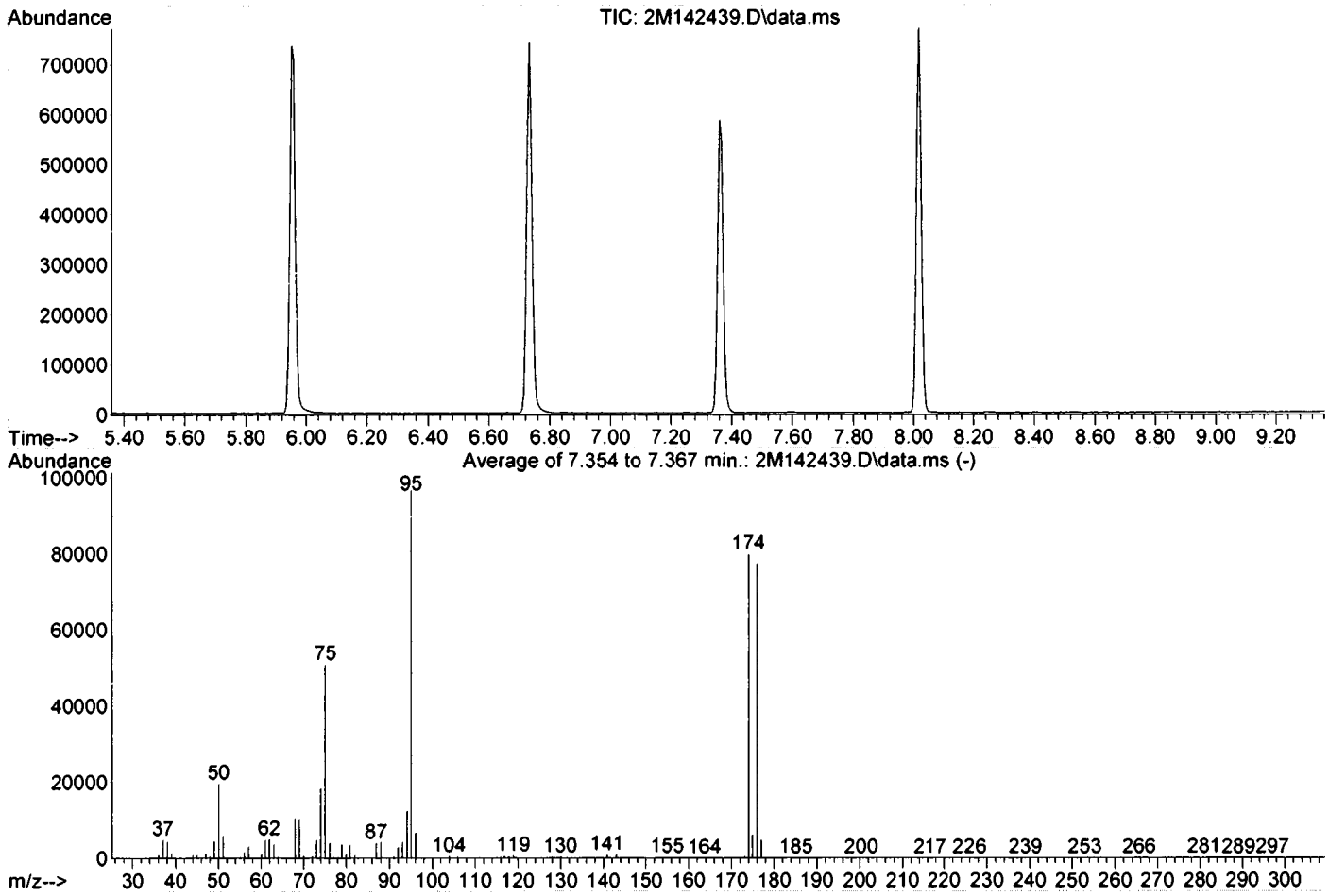
Data File	Sample Number	Analysis Date:
2M142440.D	CAL @ 20 PPB	09/28/20 21:38
2M142441.D	20 PPB	09/28/20 21:57
2M142442.D	BLK	09/28/20 22:17
2M142443.D	BLK	09/28/20 22:37
2M142444.D	DAILY BLANK	09/28/20 22:57
2M142445.D	BLK	09/28/20 23:17
2M142446.D	MBS89382	09/28/20 23:36
2M142447.D	AD19421-002(MS)	09/28/20 23:55
2M142448.D	AD19421-002(MSD	09/29/20 00:15
2M142449.D	BLK	09/29/20 00:34
2M142450.D	BLK	09/29/20 00:54
2M142451.D	AD19451-008	09/29/20 01:14
2M142452.D	AD19438-008	09/29/20 01:33
2M142453.D	AD19438-009	09/29/20 01:53
2M142454.D	AD19444-016	09/29/20 02:12
2M142455.D	AD19444-015	09/29/20 02:32
2M142456.D	AD19456-001	09/29/20 02:52
2M142457.D	AD19456-002	09/29/20 03:11
2M142458.D	AD19456-003	09/29/20 03:31
2M142459.D	AD19438-003	09/29/20 03:50
2M142460.D	AD19438-004	09/29/20 04:10
2M142461.D	AD19438-006	09/29/20 04:29
2M142462.D	AD19438-007	09/29/20 04:49
2M142463.D	AD19438-001	09/29/20 05:09
2M142464.D	AD19438-005(10X)	09/29/20 05:28
2M142465.D	AD19438-002(100X	09/29/20 05:48
2M142466.D	AD19438-002(100X	09/29/20 06:07
2M142467.D	BLK	09/29/20 06:27
2M142469.D	BLK	09/29/20 08:46
2M142472.D	5 PPB	09/29/20 10:24
2M142473.D	500 PPB	09/29/20 10:43

0092507 0324

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-2820\
Data File : 2M142439.D
Acq On : 28 Sep 2020 21:19
Operator : RL
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 4 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_2\METHODQT\2M_A0909.M
Title : @GCMS_2,ug,624,8260
Last Update : Thu Sep 10 14:44:02 2020



Spectrum Information: Average of 7.354 to 7.367 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.3	19629	PASS
75	95	30	60	52.8	51012	PASS
95	95	100	100	100.0	96680	PASS
96	95	5	9	6.9	6686	PASS
173	174	0.00	2	0.7	524	PASS
174	95	50	100	82.6	79883	PASS
175	174	5	9	7.7	6179	PASS
176	174	95	101	97.0	77508	PASS
177	176	5	9	6.2	4782	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 2
Data File: 2M142484.D
Analysis Date: 09/29/20 14:14
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.336 to 7.379 min

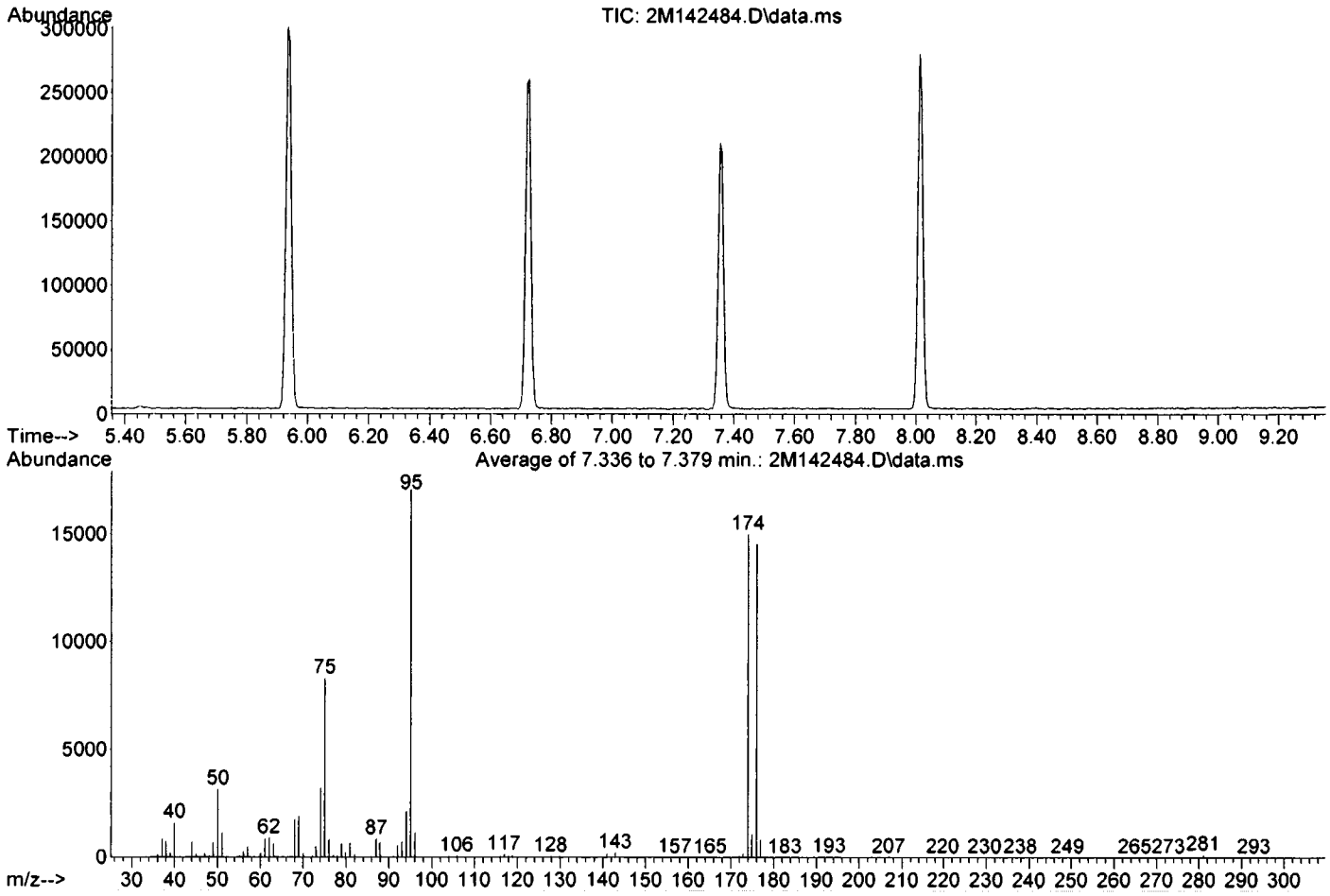
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.6	3176	PASS
75	95	30	60	48.8	8328	PASS
95	95	100	100	100.0	17082	PASS
96	95	5	9	6.7	1137	PASS
173	174	0.00	2	1.2	175	PASS
174	95	50	100	87.8	15005	PASS
175	174	5	9	7.3	1088	PASS
176	174	95	101	97.0	14548	PASS
177	176	5	9	5.8	850	PASS

Data File	Sample Number	Analysis Date:
2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09
2M142488.D	CAL @ 1 PPB	09/29/20 15:28
2M142489.D	CAL @ 5 PPB	09/29/20 15:48
2M142490.D	CAL @ 10 PPB	09/29/20 16:08
2M142492.D	CAL @ 20 PPB	09/29/20 16:47
2M142494.D	CAL @ 50 PPB	09/29/20 17:26
2M142496.D	CAL @ 100 PPB	09/29/20 18:05
2M142499.D	CAL @ 250 PPB	09/29/20 19:04
2M142502.D	CAL @ 500 PPB	09/29/20 20:03
2M142508.D	ICV	09/29/20 22:00

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-29-20\
Data File : 2M142484.D
Acq On : 29 Sep 2020 14:14
Operator : JR
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 6 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_2\METHODQT\2M_A0909.M
Title : @GCMS_2,ug,624,8260
Last Update : Thu Sep 10 14:44:02 2020



Spectrum Information: Average of 7.336 to 7.379 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	3176	PASS
75	95	30	60	48.8	8328	PASS
95	95	100	100	100.0	17082	PASS
96	95	5	9	6.7	1137	PASS
173	174	0.00	2	1.2	175	PASS
174	95	50	100	87.8	15005	PASS
175	174	5	9	7.3	1088	PASS
176	174	95	101	97.0	14548	PASS
177	176	5	9	5.8	850	PASS

Form 5

Tune Name: BFB TUNE **Data File:** 2M142516.D
Instrument: GCMS 2 **Analysis Date:** 09/30/20 11:01
Method: EPA 8260C
Tune Scan/Time Range: Average of 7.336 to 7.379 min

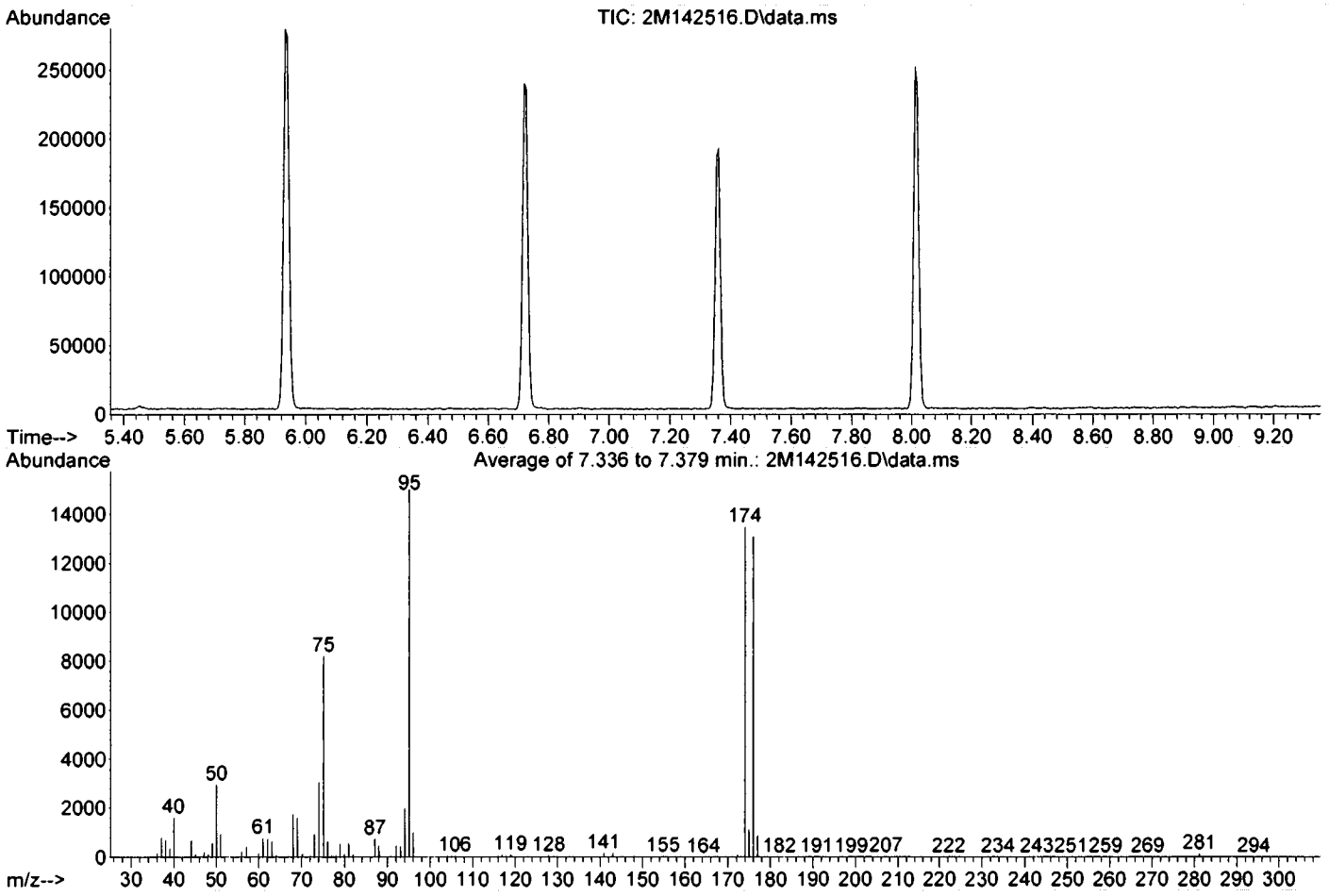
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.8	2966	PASS
75	95	30	60	54.8	8223	PASS
95	95	100	100	100.0	14999	PASS
96	95	5	9	6.8	1013	PASS
173	174	0.00	2	0.3	43	PASS
174	95	50	100	89.9	13485	PASS
175	174	5	9	8.5	1143	PASS
176	174	95	101	97.2	13110	PASS
177	176	5	9	6.9	906	PASS

Data File	Sample Number	Analysis Date:
2M142518.D	CAL @ 20 PPB	09/30/20 11:36
2M142520.D	BLK	09/30/20 12:15
2M142521.D	BLK	09/30/20 12:34
2M142522.D	DAILY BLANK	09/30/20 12:54
2M142523.D	AD19412-005	09/30/20 13:14
2M142524.D	AD19412-007	09/30/20 13:33
2M142525.D	MBS89395	09/30/20 13:53
2M142526.D	AD19412-005(MS)	09/30/20 14:13
2M142527.D	AD19412-005(MSD	09/30/20 14:32
2M142528.D	BLK	09/30/20 14:52
2M142529.D	BLK	09/30/20 15:11
2M142530.D	AD19486-009	09/30/20 15:31
2M142531.D	AD19486-010	09/30/20 15:50
2M142532.D	AD19216-025	09/30/20 16:10
2M142533.D	BLK	09/30/20 16:30
2M142534.D	BLK	09/30/20 16:49
2M142535.D	AD19216-025(5uL)	09/30/20 17:09
2M142536.D	BLK	09/30/20 17:29
2M142537.D	BLK	09/30/20 17:48
2M142538.D	AD19412-002	09/30/20 18:08
2M142539.D	AD19412-003	09/30/20 18:27
2M142540.D	AD19412-004	09/30/20 18:47
2M142541.D	AD19438-007	09/30/20 19:07
2M142542.D	AD19444-011	09/30/20 19:26
2M142543.D	AD19438-006(5X)	09/30/20 19:46
2M142544.D	AD19444-003(5X)	09/30/20 20:06
2M142545.D	BLK	09/30/20 20:26
2M142546.D	AD19499-007	09/30/20 20:45
2M142547.D	AD19499-010	09/30/20 21:05
2M142548.D	AD19497-008	09/30/20 21:25
2M142549.D	AD19497-009	09/30/20 21:44
2M142550.D	AD19497-007	09/30/20 22:04
2M142551.D	AD19497-001(5X)	09/30/20 22:24
2M142552.D	AD19497-001	09/30/20 22:43
2M142553.D	STD	09/30/20 23:03
2M142554.D	BLK	09/30/20 23:22
2M142555.D	BLK	09/30/20 23:42
2M142556.D	BLK	10/01/20 00:01
2M142557.D	BLK	10/01/20 00:21
2M142558.D	BLK	10/01/20 00:41

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Data File : 2M142516.D
Acq On : 30 Sep 2020 11:01
Operator : JR
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_2\METHODQT\2M_A0929.M
Title : @GCMS_2,ug,624,8260
Last Update : Wed Sep 30 10:28:52 2020



Spectrum Information: Average of 7.336 to 7.379 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.8	2966	PASS
75	95	30	60	54.8	8223	PASS
95	95	100	100	100.0	14999	PASS
96	95	5	9	6.8	1013	PASS
173	174	0.00	2	0.3	43	PASS
174	95	50	100	89.9	13485	PASS
175	174	5	9	8.5	1143	PASS
176	174	95	101	97.2	13110	PASS
177	176	5	9	6.9	906	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 2
Data File: 2M142560.D
Analysis Date: 10/01/20 01:20
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.367 to 7.373 min

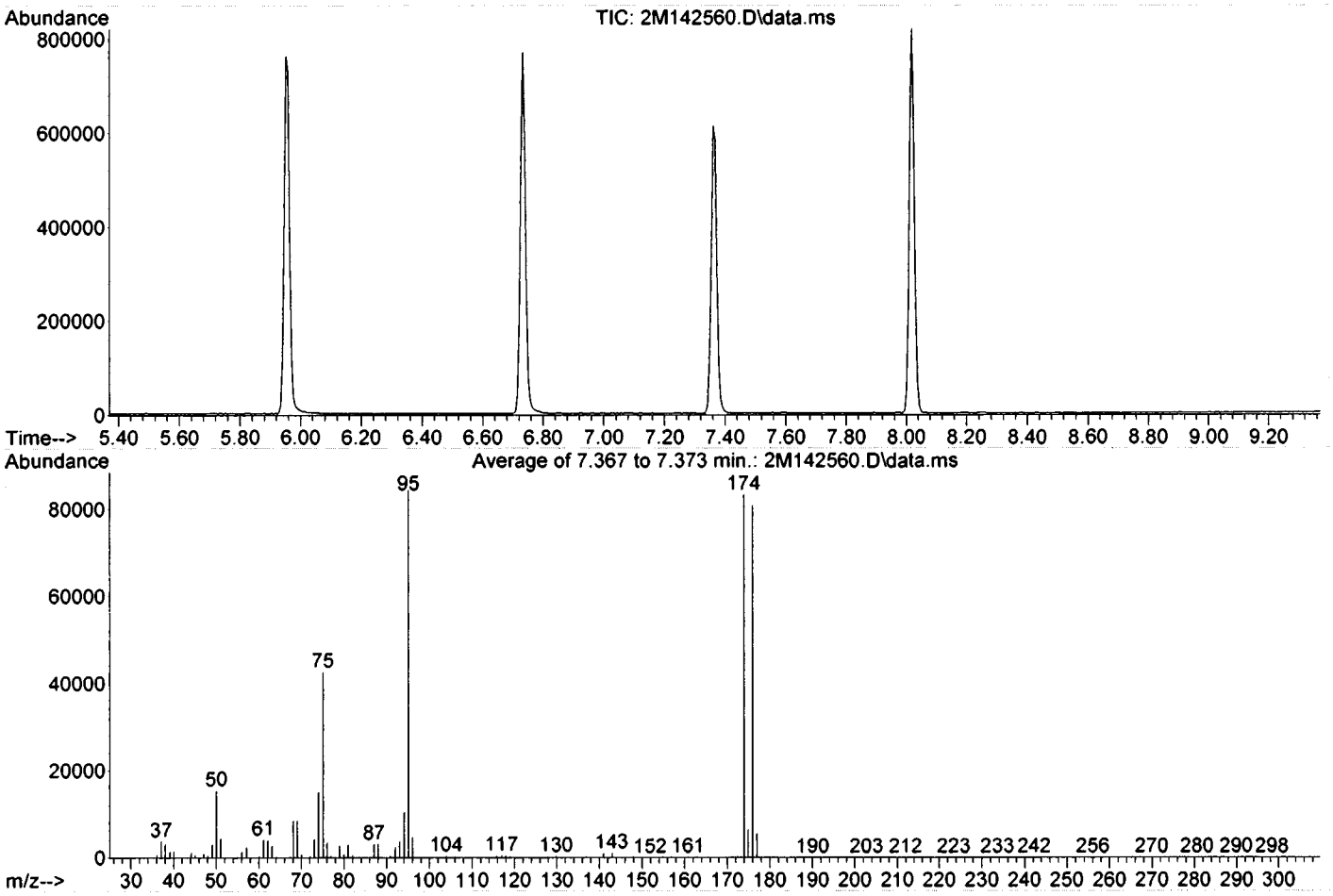
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.4	15484	PASS
75	95	30	60	50.6	42672	PASS
95	95	100	100	100.0	84324	PASS
96	95	5	9	5.8	4861	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	98.8	83336	PASS
175	174	5	9	7.7	6424	PASS
176	174	95	101	97.1	80924	PASS
177	176	5	9	6.9	5608	PASS

Data File	Sample Number	Analysis Date:
2M142561.D	CAL @ 20 PPB	10/01/20 01:40
2M142562.D	20 PPB	10/01/20 01:59
2M142563.D	BLK	10/01/20 02:18
2M142564.D	BLK	10/01/20 02:38
2M142565.D	DAILY BLANK	10/01/20 02:58
2M142566.D	AD19441-001	10/01/20 03:17
2M142567.D	AD19442-001	10/01/20 03:37
2M142568.D	MBS89398	10/01/20 03:57
2M142569.D	AD19412-007(MS)	10/01/20 04:16
2M142570.D	AD19412-007(MSD	10/01/20 04:35
2M142571.D	BLK	10/01/20 04:55
2M142572.D	BLK	10/01/20 05:14
2M142573.D	AD19486-001	10/01/20 05:34
2M142574.D	AD19486-002	10/01/20 05:54
2M142575.D	AD19486-003	10/01/20 06:13
2M142576.D	AD19486-004	10/01/20 06:33
2M142577.D	AD19486-005	10/01/20 06:53
2M142578.D	AD19486-006	10/01/20 07:12
2M142579.D	AD19486-007	10/01/20 09:45
2M142580.D	AD19486-008	10/01/20 10:05
2M142581.D	AD19499-001	10/01/20 10:25
2M142582.D	AD19499-003	10/01/20 10:44
2M142583.D	AD19499-005	10/01/20 11:04
2M142584.D	AD19499-008	10/01/20 11:24
2M142585.D	AD19477-001	10/01/20 11:43
2M142586.D	AD19477-002	10/01/20 12:03
2M142587.D	BLK	10/01/20 12:22
2M142588.D	AD19444-004	10/01/20 12:42
2M142589.D	AD19444-008	10/01/20 13:02
2M142590.D	MBS89408	10/01/20 13:19
2M142591.D	STD	10/01/20 13:39
2M142592.D	BLK	10/01/20 13:59
2M142593.D	BLK	10/01/20 14:18
2M142594.D	AD19549-001	10/01/20 14:38
2M142595.D	AD19549-003	10/01/20 14:58

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-3020\
Data File : 2M142560.D
Acq On : 01 Oct 2020 01:20
Operator : JR
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 7 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_2\METHODQT\2M_A0929.M
Title : @GCMS_2,ug,624,8260
Last Update : Wed Sep 30 10:28:52 2020



Spectrum Information: Average of 7.367 to 7.373 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.4	15484	PASS
75	95	30	60	50.6	42672	PASS
95	95	100	100	100.0	84324	PASS
96	95	5	9	5.8	4861	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	98.8	83336	PASS
175	174	5	9	7.7	6424	PASS
176	174	95	101	97.1	80924	PASS
177	176	5	9	6.9	5608	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 2
Data File: 2M142627.D
Analysis Date: 10/02/20 09:24
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.342 to 7.373 min

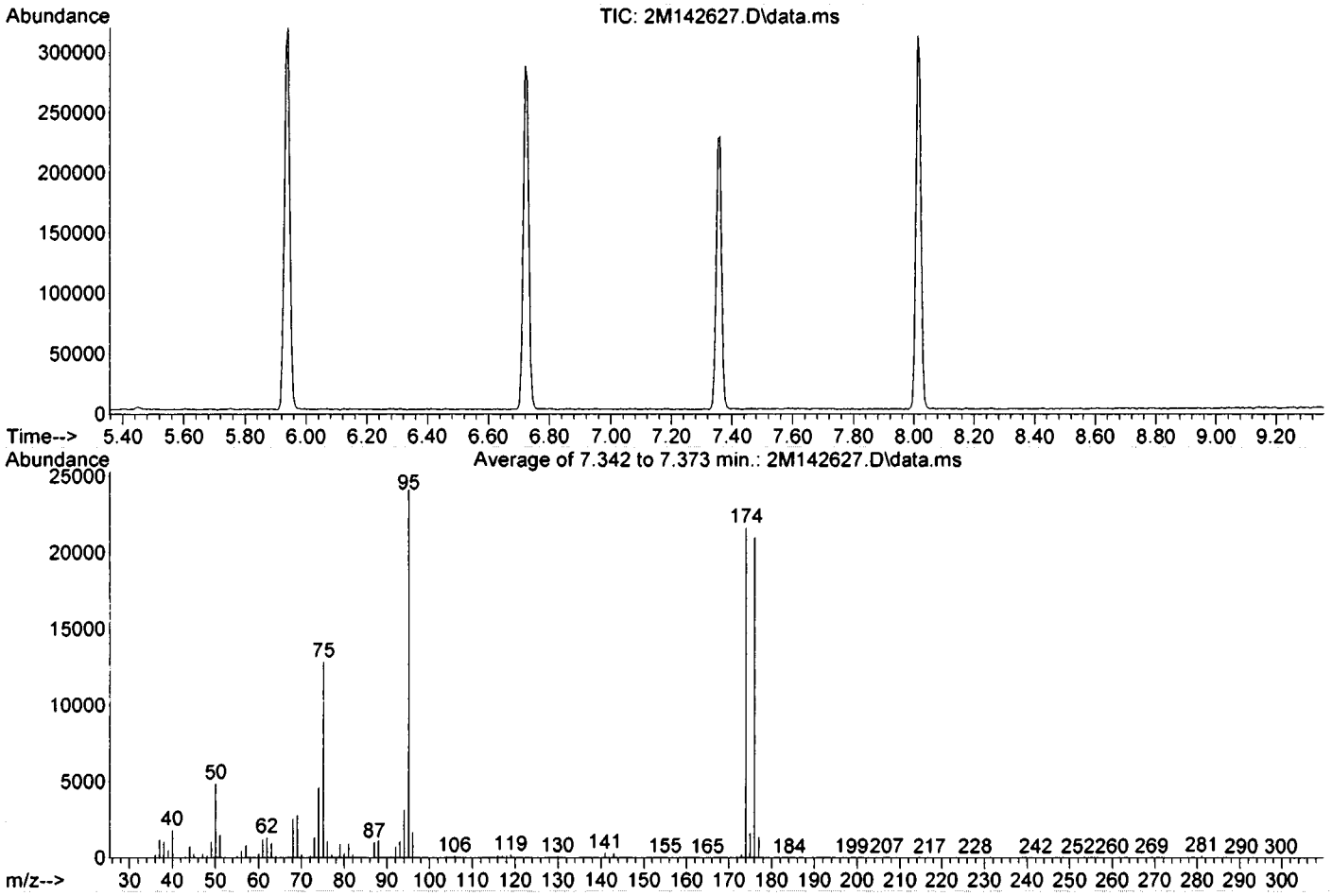
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	20.2	4883	PASS
75	95	30	60	53.3	12871	PASS
95	95	100	100	100.0	24133	PASS
96	95	5	9	7.0	1683	PASS
173	174	0.00	2	1.0	219	PASS
174	95	50	100	89.7	21646	PASS
175	174	5	9	7.5	1632	PASS
176	174	95	101	97.1	21014	PASS
177	176	5	9	6.6	1385	PASS

Data File	Sample Number	Analysis Date:
2M142629.D	CAL @ 20 PPB	10/02/20 09:58
2M142630.D	20 PPB	10/02/20 10:18
2M142631.D	BLK	10/02/20 10:37
2M142632.D	DAILY BLANK	10/02/20 10:57
2M142633.D	DAILY BLANK	10/02/20 11:16
2M142634.D	BLK	10/02/20 11:36
2M142635.D	AD19528-001	10/02/20 11:56
2M142636.D	AD19528-002	10/02/20 12:15
2M142637.D	AD19528-003	10/02/20 12:35
2M142638.D	AD19564-013	10/02/20 12:55
2M142639.D	AD19408-001(T)	10/02/20 13:14
2M142640.D	MBS89414	10/02/20 13:34
2M142641.D	AD19408-001(T)(M	10/02/20 13:53
2M142642.D	AD19408-001(T)(M	10/02/20 14:12
2M142643.D	BLK	10/02/20 14:32
2M142644.D	BLK	10/02/20 14:51
2M142645.D	AD19444-009	10/02/20 15:11
2M142646.D	AD19444-012	10/02/20 15:31
2M142647.D	AD19444-013	10/02/20 15:50
2M142648.D	AD19516-005	10/02/20 16:10
2M142649.D	AD19457-001(T)	10/02/20 16:30
2M142650.D	EF-1-V-335534(100	10/02/20 16:49
2M142651.D	MBS89419	10/02/20 17:09
2M142652.D	BLK	10/02/20 17:28
2M142653.D	AD19516-007	10/02/20 17:48
2M142654.D	AD19516-011	10/02/20 18:07
2M142655.D	AD19516-013	10/02/20 18:27
2M142656.D	AD19516-015	10/02/20 18:46
2M142657.D	AD19544-001	10/02/20 19:06
2M142658.D	AD19544-003	10/02/20 19:26
2M142659.D	AD19544-005	10/02/20 19:45
2M142660.D	AD19544-011	10/02/20 20:05
2M142661.D	AD19544-007(10X)	10/02/20 20:25
2M142662.D	AD19544-009(20X)	10/02/20 20:45
2M142663.D	AD19516-009(5X)	10/02/20 21:05
2M142664.D	STD	10/02/20 21:25
2M142665.D	BLK	10/02/20 21:44
2M142666.D	BLK	10/02/20 22:04
2M142667.D	BLK	10/02/20 22:24
2M142668.D	BLK	10/02/20 22:43
2M142669.D	BLK	10/02/20 23:03
2M142670.D	BLK	10/02/20 23:23
2M142671.D	BLK	10/02/20 23:42
2M142672.D	BLK	10/03/20 00:02
2M142673.D	BLK	10/03/20 00:21
2M142674.D	BLK	10/03/20 00:41
2M142675.D	BLK	10/03/20 01:00
2M142676.D	BLK	10/03/20 01:20
2M142677.D	BLK	10/03/20 01:39
2M142678.D	BLK	10/03/20 01:59
2M142679.D	BLK	10/03/20 02:19

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Data File : 2M142627.D
Acq On : 02 Oct 2020 09:24
Operator : WP
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_2\METHODQT\2M_A0929.M
Title : @GCMS_2,ug,624,8260
Last Update : Wed Sep 30 10:28:52 2020



Spectrum Information: Average of 7.342 to 7.373 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.2	4883	PASS
75	95	30	60	53.3	12871	PASS
95	95	100	100	100.0	24133	PASS
96	95	5	9	7.0	1683	PASS
173	174	0.00	2	1.0	219	PASS
174	95	50	100	89.7	21646	PASS
175	174	5	9	7.5	1632	PASS
176	174	95	101	97.1	21014	PASS
177	176	5	9	6.6	1385	PASS

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 2M142632.D
Analysis Date: 10/02/20 10:57
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U				

Worksheet #: 568736

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

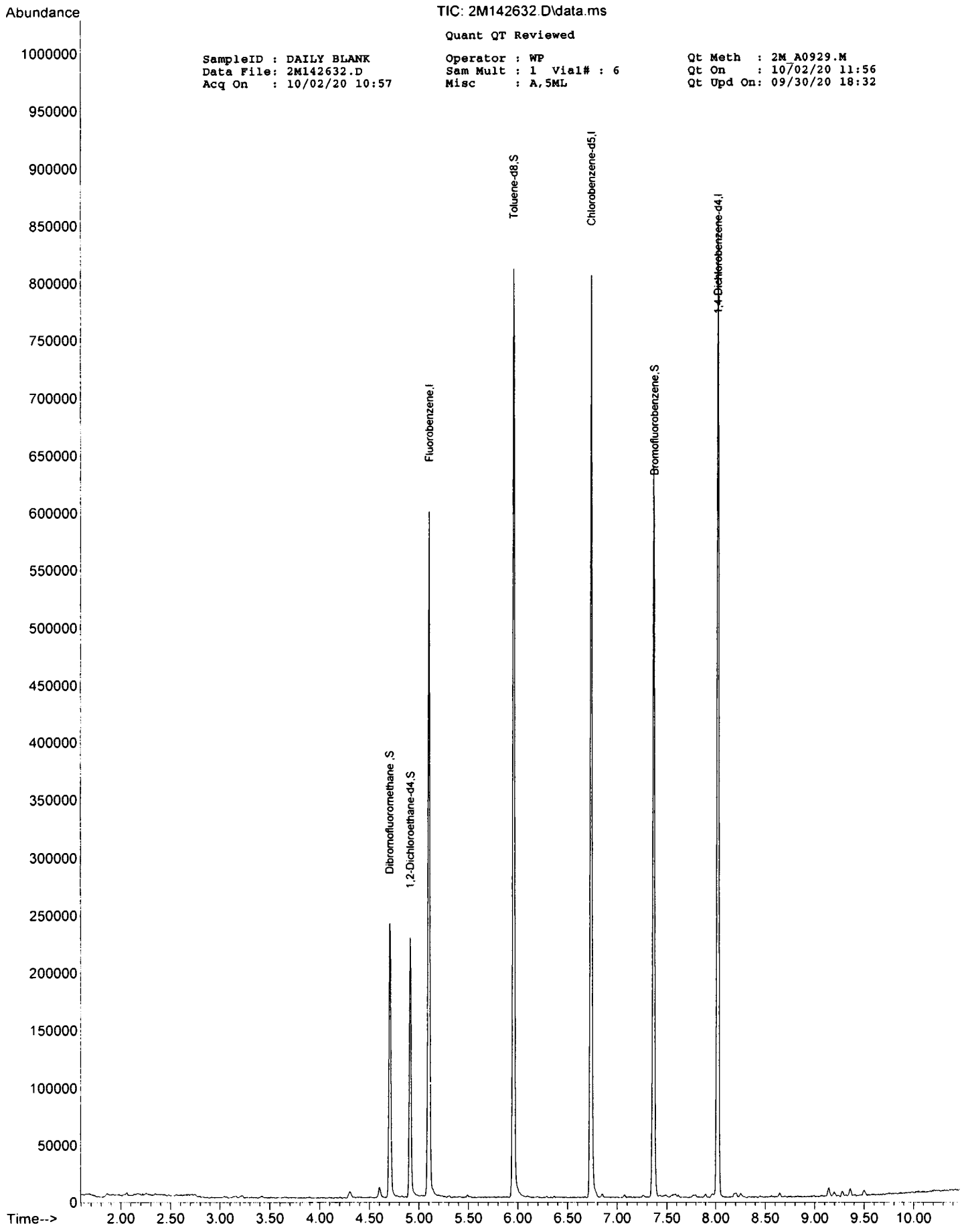
Quantitation Report (QT Reviewed)

SampleID : DAILY BLANK Operator : WP Qt Meth : 2M_A0929.M
Data File: 2M142632.D Sam Mult : 1 Vial# : 6 Qt On : 10/02/20 11:56
Acq On : 10/02/20 10:57 Misc : A,5ML Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	356443	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	324613	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	166853	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	100127	29.32	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.73%			
39) 1,2-Dichloroethane-d4	4.910	67	53502	30.35	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.17%			
66) Toluene-d8	5.952	98	383121	30.16	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.53%			
76) Bromofluorobenzene	7.366	174	134596	30.71	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.37%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 2M142632.D\data.ms
Quant QT Reviewed
SampleID : DAILY BLANK
Data File: 2M142632.D
Acq On : 10/02/20 10:57
Operator : WP
Sam Mult : 1 Vial# : 6
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 10/02/20 11:56
Qt Upd On: 09/30/20 18:32
Abundance
Time-->
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 2M142565.D
Analysis Date: 10/01/20 02:58
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U				

Worksheet #: 568735

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

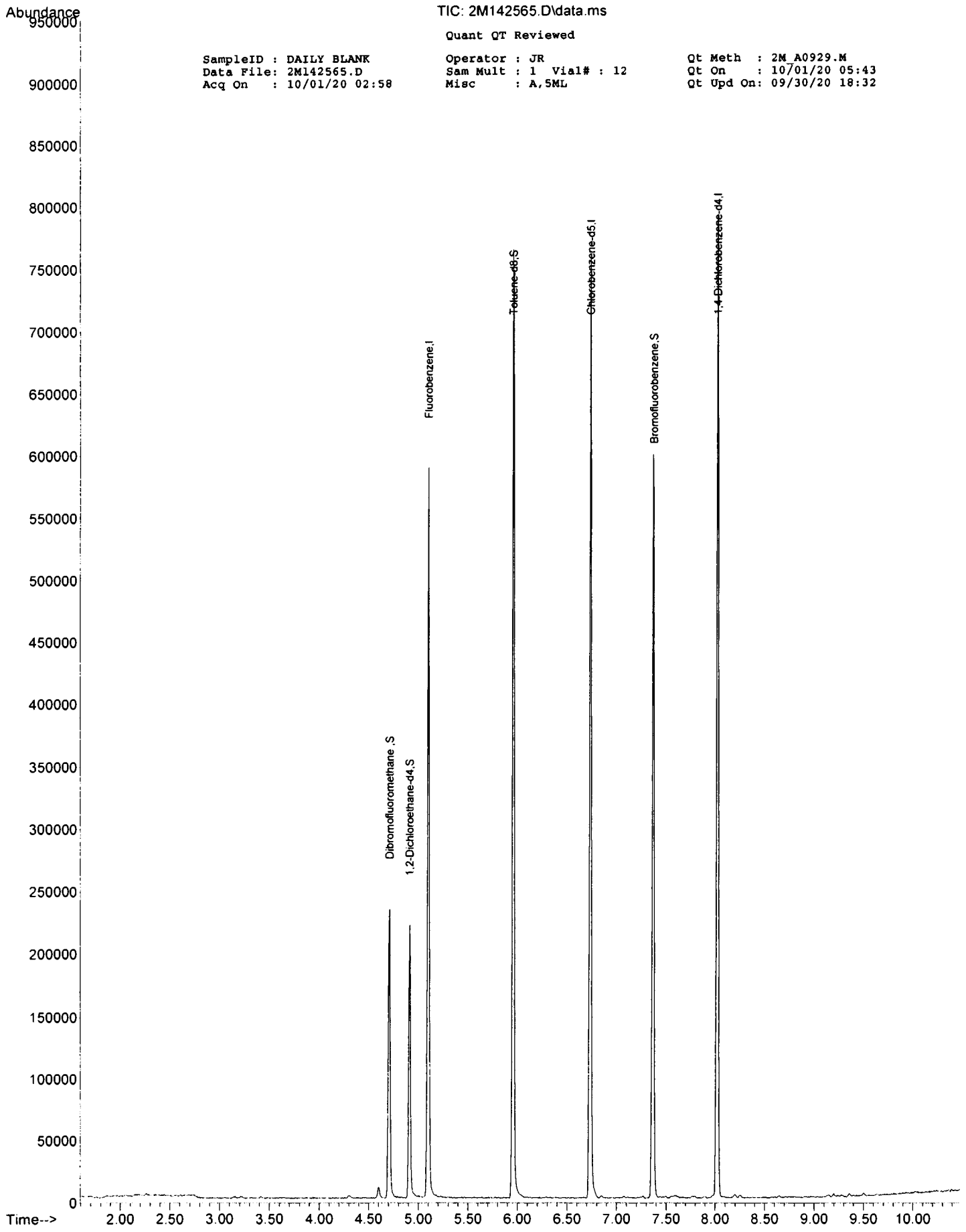
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : DAILY BLANK Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142565.D Sam Mult : 1 Vial# : 12 Qt On : 10/01/20 05:43
Acq On : 10/01/20 02:58 Misc : A,5ML Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-3020\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	341037	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	310263	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	153990	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	96356	29.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.30%			
39) 1,2-Dichloroethane-d4	4.910	67	50259	29.79	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.30%			
66) Toluene-d8	5.952	98	361927	29.81	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.37%			
76) Bromofluorobenzene	7.367	174	126807	31.35	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.50%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M142565.D\data.ms
Quant QT Reviewed
SampleID : DAILY BLANK
Data File: 2M142565.D
Acq On : 10/01/20 02:58
Operator : JR
Sam Mult : 1 Vial# : 12
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 10/01/20 05:43
Qt Upd On: 09/30/20 18:32
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 11M83272.D
Analysis Date: 09/28/20 12:28
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U				

Worksheet #: 568732

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

SampleID : DAILY BLANK Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83272.D Sam Mult : 1 Vial# : 8 Qt On : 09/28/20 12:57
Acq On : 09/28/20 12:28 Misc : A,5ML Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	250189	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	207497	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	94982	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	63779	30.58	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.93%			
39) 1,2-Dichloroethane-d4	4.778	67	32235	29.46	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.20%			
66) Toluene-d8	5.787	98	255605	28.17	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.90%			
76) Bromofluorobenzene	7.167	174	75059	31.35	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.50%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

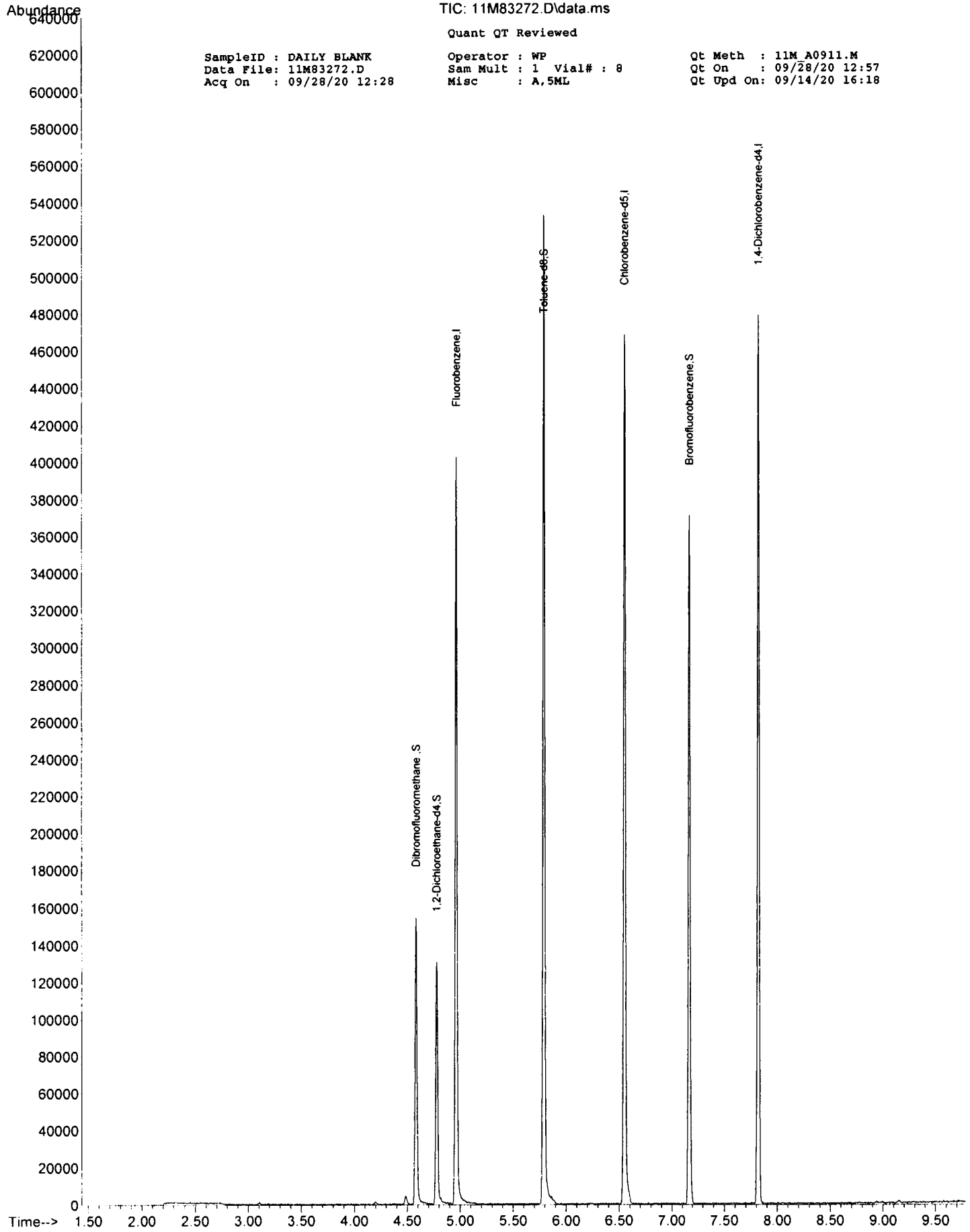
TIC: 11M83272.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK
Data File: 11M83272.D
Acq On : 09/28/20 12:28

Operator : WP
Sam Mult : 1 Vial# : 8
Misc : A,5ML

Qt Meth : 11M_A0911.M
Qt On : 09/28/20 12:57
Qt Upd On: 09/14/20 16:18



Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 2M142444.D
Analysis Date: 09/28/20 22:57
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U				

Worksheet #: 568732

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

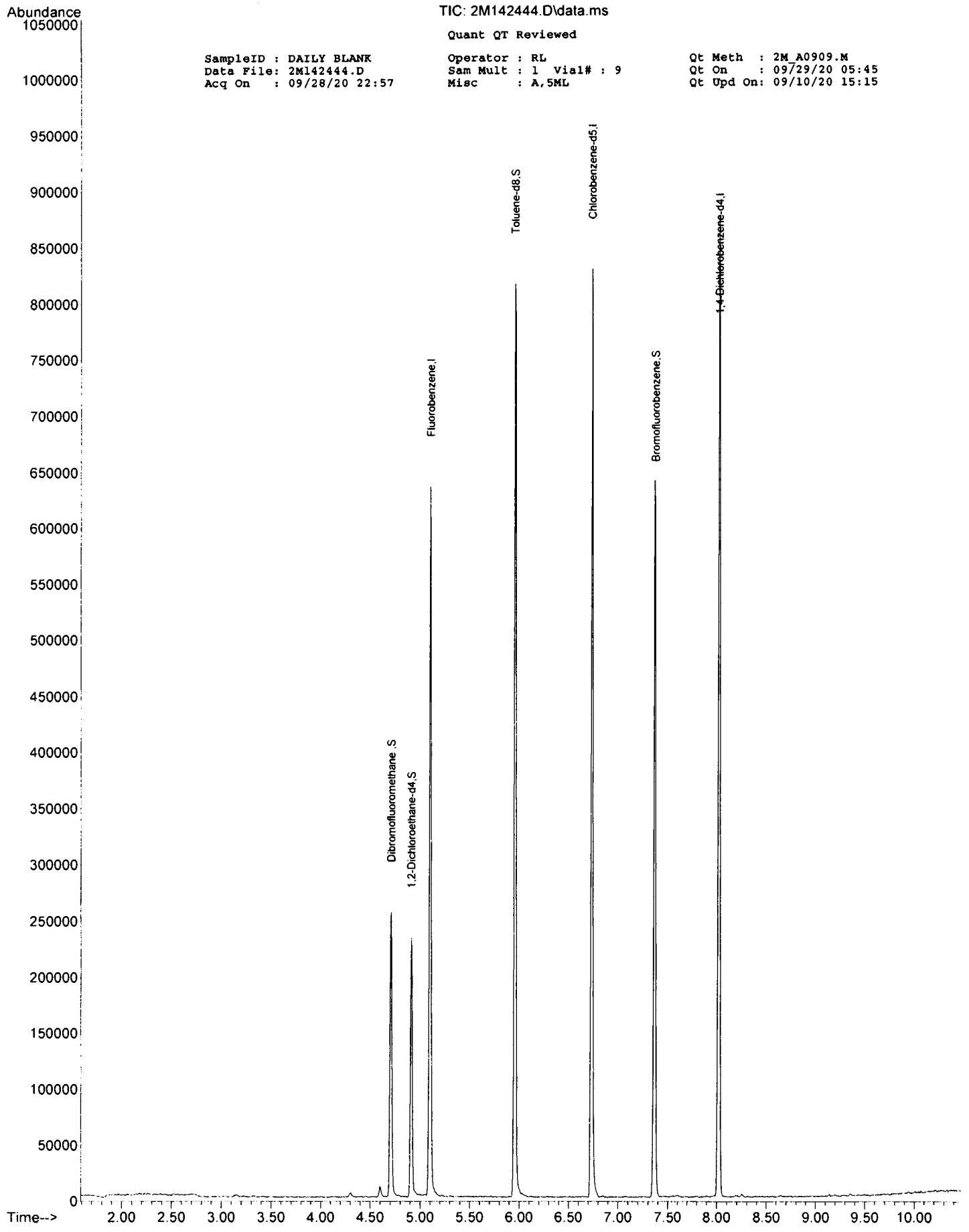
Quantitation Report (QT Reviewed)

SampleID : DAILY BLANK Operator : RL Qt Meth : 2M_A0909.M
Data File: 2M142444.D Sam Mult : 1 Vial# : 9 Qt On : 09/29/20 05:45
Acq On : 09/28/20 22:57 Misc : A,5ML Qt Upd On: 09/10/20 15:15

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-2820\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.098	96	378833	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	334163	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	171247	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	106624	30.59	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.97%			
39) 1,2-Dichloroethane-d4	4.909	67	54989	30.56	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.87%			
66) Toluene-d8	5.952	98	395919	30.38	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.27%			
76) Bromofluorobenzene	7.366	174	141919	30.98	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.27%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 2M142444.D\data.ms
Quant QT Reviewed
SampleID : DAILY BLANK
Data File: 2M142444.D
Acq On : 09/28/20 22:57
Operator : RL
Sam Mult : 1 Vial# : 9
Misc : A,5ML
Qt Meth : 2M_A0909.M
Qt On : 09/29/20 05:45
Qt Upd On: 09/10/20 15:15
Abundance
Time-->
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 2M142522.D
Analysis Date: 09/30/20 12:54
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	2.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U	124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
107-06-2	1,2-Dichloroethane	0.64	U	100-41-4	Ethylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	98-82-8	Isopropylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	75-09-2	Methylene Chloride	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
106-46-7	1,4-Dichlorobenzene	1.0	U	104-51-8	n-Butylbenzene	1.0	U
123-91-1	1,4-Dioxane	50	U	103-65-1	n-Propylbenzene	1.0	U
78-93-3	2-Butanone	1.0	U	95-47-6	o-Xylene	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U	135-98-8	sec-Butylbenzene	1.0	U
591-78-6	2-Hexanone	1.0	U	100-42-5	Styrene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U	75-65-0	t-Butyl Alcohol	5.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	98-06-6	t-Butylbenzene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
107-02-8	Acrolein	5.0	U	108-88-3	Toluene	1.0	U
107-13-1	Acrylonitrile	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
71-43-2	Benzene	0.50	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	79-01-6	Trichloroethene	1.0	U
75-25-2	Bromoform	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
74-83-9	Bromomethane	1.0	U	75-01-4	Vinyl Chloride	1.0	U
75-15-0	Carbon Disulfide	1.0	U				

Worksheet #: 568732

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

SampleID : DAILY BLANK
Data File: 2M142522.D
Acq On : 09/30/20 12:54

Operator : JR
Sam Mult : 1 Vial# : 8
Misc : A,5ML

Qt Meth : 2M_A0929.M
Qt On : 09/30/20 13:07
Qt Upd On: 09/30/20 10:40

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.098	96	353373	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	316979	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	163092	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	103098	30.46	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.53%			
39) 1,2-Dichloroethane-d4	4.910	67	52710	30.16	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.53%			
66) Toluene-d8	5.952	98	376547	30.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.20%			
76) Bromofluorobenzene	7.366	174	131377	30.67	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.23%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

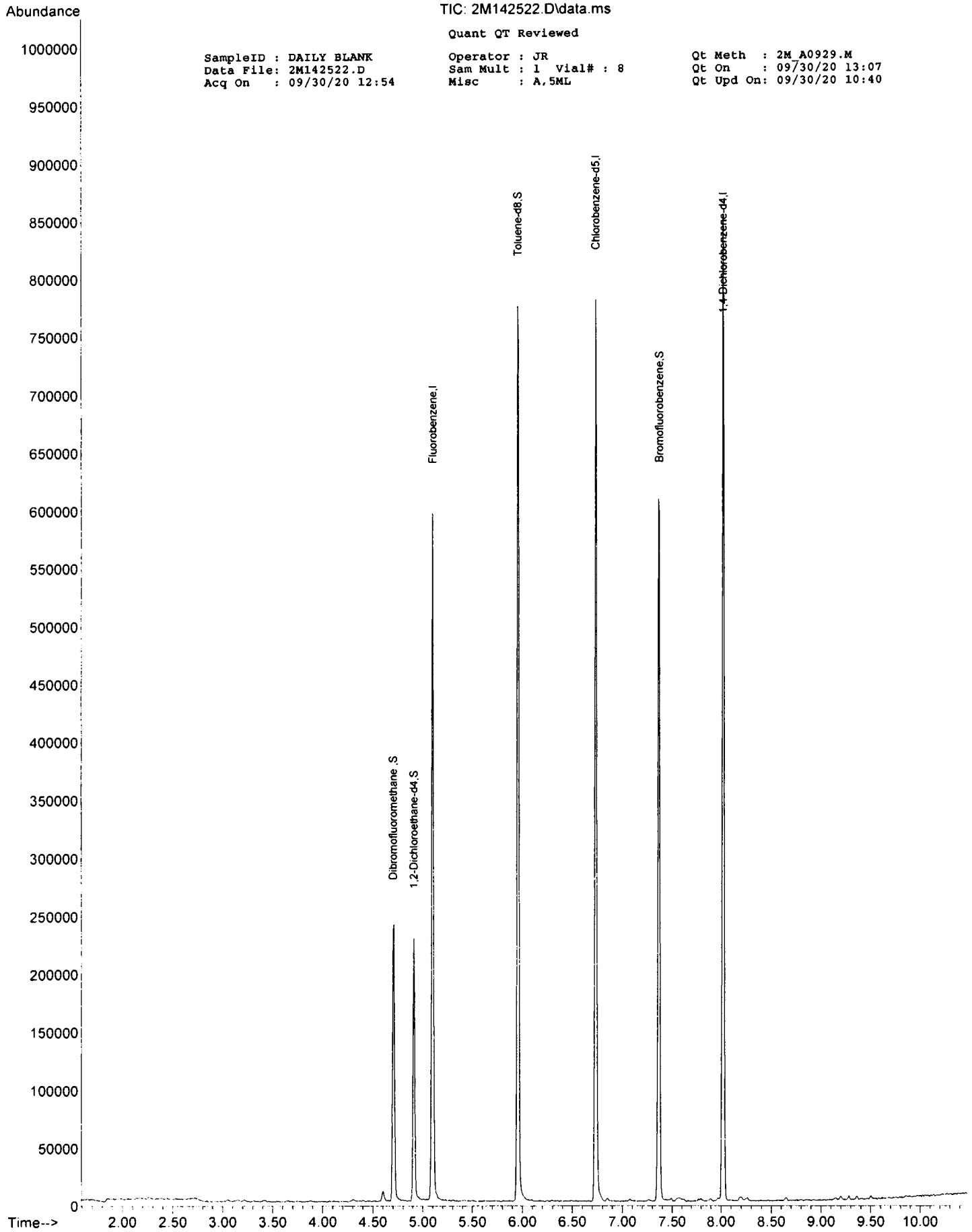
TIC: 2M142522.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK
Data File: 2M142522.D
Acq On : 09/30/20 12:54

Operator : JR
Sam Mult : 1 Vial# : 8
Misc : A,5ML

Qt Meth : 2M_A0929.M
Qt On : 09/30/20 13:07
Qt Upd On: 09/30/20 10:40



Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M83276.D	MBS89372	9/28/2020 1:42:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	16.7239	0	20	84	50	150
Dichlorodifluoromethane	1	16.8309	0	20	84	50	150
Chloromethane	1	19.4905	0	20	97	50	150
Bromomethane	1	18.047	0	20	90	50	150
Vinyl Chloride	1	21.7838	0	20	109	50	150
Chloroethane	1	23.0167	0	20	115	50	150
Trichlorofluoromethane	1	23.1014	0	20	116	50	150
Ethyl ether	1	21.1358	0	20	106	50	150
Furan	1	19.4369	0	20	97	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.0944	0	20	110	50	150
Methylene Chloride	1	18.8603	0	20	94	70	130
Acrolein	1	96.4327	0	100	96	50	150
Acrylonitrile	1	19.3077	0	20	97	50	150
Iodomethane	1	16.0231	0	20	80	50	150
Acetone	1	87.9823	0	100	88	50	150
Carbon Disulfide	1	21.2878	0	20	106	50	150
t-Butyl Alcohol	1	121.4151	0	100	121	50	150
n-Hexane	1	21.3033	0	20	107	70	130
Di-isopropyl-ether	1	18.8261	0	20	94	70	130
1,1-Dichloroethene	1	21.1618	0	20	106	70	130
Methyl Acetate	1	20.324	0	20	102	50	150
Methyl-t-butyl ether	1	19.4124	0	20	97	70	130
1,1-Dichloroethane	1	19.5842	0	20	98	70	130
trans-1,2-Dichloroethene	1	20.7427	0	20	104	70	130
Ethyl-t-butyl ether	1	19.1862	0	20	96	70	130
cis-1,2-Dichloroethene	1	19.621	0	20	98	70	130
Bromochloromethane	1	19.9071	0	20	100	70	130
2,2-Dichloropropane	1	22.1969	0	20	111	70	130
Ethyl acetate	1	18.6158	0	20	93	50	150
1,4-Dioxane	1	1435.601	0	1000	144	50	150
1,1-Dichloropropene	1	20.0513	0	20	100	70	130
Chloroform	1	19.8294	0	20	99	70	130
Cyclohexane	1	20.9171	0	20	105	70	130
1,2-Dichloroethane	1	17.9013	0	20	90	70	130
2-Butanone	1	17.0293	0	20	85	50	150
1,1,1-Trichloroethane	1	19.9642	0	20	100	70	130
Carbon Tetrachloride	1	20.7932	0	20	104	50	150
Vinyl Acetate	1	18.3689	0	20	92	50	150
Bromodichloromethane	1	19.2677	0	20	96	70	130
Methylcyclohexane	1	21.4543	0	20	107	70	130
Dibromomethane	1	18.957	0	20	95	70	130
1,2-Dichloropropane	1	19.3091	0	20	97	70	130
Trichloroethene	1	19.8876	0	20	99	70	130
Benzene	1	19.4298	0	20	97	70	130
tert-Amyl methyl ether	1	19.5099	0	20	98	70	130
Iso-propylacetate	1	18.1075	0	20	91	70	130
Methyl methacrylate	1	16.6378	0	20	83	70	130
Dibromochloromethane	1	18.8715	0	20	94	70	130
2-Chloroethylvinylether	1	10.0228	0	20	50*	70	130
cis-1,3-Dichloropropene	1	19.3299	0	20	97	70	130
trans-1,3-Dichloropropene	1	18.2178	0	20	91	70	130
Ethyl methacrylate	1	18.5101	0	20	93	70	130
1,1,2-Trichloroethane	1	18.0546	0	20	90	70	130
1,2-Dibromoethane	1	18.1309	0	20	91	70	130
1,3-Dichloropropane	1	18.2206	0	20	91	70	130
4-Methyl-2-Pentanone	1	18.1593	0	20	91	50	150
2-Hexanone	1	17.9455	0	20	90	50	150
Tetrachloroethene	1	18.2107	0	20	91	50	150
Toluene	1	18.1547	0	20	91	70	130
1,1,1,2-Tetrachloroethane	1	17.6008	0	20	88	70	130
Chlorobenzene	1	17.7823	0	20	89	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

Method: 8260C | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	17.8304	0	20	89	70	130
n-Amyl acetate	1	19.0341	0	20	95	70	130
Bromoform	**1**	**18.745**	**0**	**20**	**94**	**70**	**130**
Ethylbenzene	**1**	**17.8931**	**0**	**20**	**89**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**17.8468**	**0**	**20**	**89**	**70**	**130**
Styrene	**1**	**18.2158**	**0**	**20**	**91**	**70**	**130**
m&p-Xylenes	**1**	**36.5777**	**0**	**40**	**91**	**70**	**130**
o-Xylene	**1**	**18.3418**	**0**	**20**	**92**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	18.1082	0	20	91	50	150
1,3-Dichlorobenzene	**1**	**17.3242**	**0**	**20**	**87**	**70**	**130**
1,4-Dichlorobenzene	**1**	**16.9196**	**0**	**20**	**85**	**70**	**130**
1,2-Dichlorobenzene	**1**	**17.0922**	**0**	**20**	**85**	**70**	**130**
Isopropylbenzene	**1**	**18.7422**	**0**	**20**	**94**	**70**	**130**
Cyclohexanone	1	118.4458	0	100	118	50	150
Camphene	1	19.1827	0	20	96	70	130
1,2,3-Trichloropropane	**1**	**17.7874**	**0**	**20**	**89**	**70**	**130**
2-Chlorotoluene	1	17.5863	0	20	88	70	130
p-Ethyltoluene	1	18.9292	0	20	95	70	130
4-Chlorotoluene	1	18.0977	0	20	90	70	130
n-Propylbenzene	**1**	**18.8345**	**0**	**20**	**94**	**70**	**130**
Bromobenzene	1	17.9898	0	20	90	70	130
1,3,5-Trimethylbenzene	**1**	**17.9119**	**0**	**20**	**90**	**70**	**130**
Butyl methacrylate	1	18.1242	0	20	91	70	130
t-Butylbenzene	**1**	**17.4802**	**0**	**20**	**87**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**17.6383**	**0**	**20**	**88**	**70**	**130**
sec-Butylbenzene	**1**	**18.349**	**0**	**20**	**92**	**70**	**130**
4-Isopropyltoluene	**1**	**18.0323**	**0**	**20**	**90**	**70**	**130**
n-Butylbenzene	**1**	**18.1011**	**0**	**20**	**91**	**70**	**130**
p-Diethylbenzene	1	18.2293	0	20	91	70	130
1,2,4,5-Tetramethylbenzene	1	17.4364	0	20	87	70	130
1,2-Dibromo-3-Chloropropane	1	17.8236	0	20	89	50	150
Camphor	1	143.8813	0	200	72	20	150
Hexachlorobutadiene	1	17.7031	0	20	89	50	150
1,2,4-Trichlorobenzene	1	15.6901	0	20	78	70	130
1,2,3-Trichlorobenzene	1	14.8971	0	20	74	70	130
Naphthalene	1	15.0944	0	20	75	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Quantitation Report (QT Reviewed)

SampleID : MBS
Data File: 11M83276.D
Acq On : 09/28/20 13:42

Operator : WP
Sam Mult : 1 Vial# : 12
Misc : A,5ML

Qt Meth : 11M_A0911.M
Qt On : 09/28/20 14:23
Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	242780	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.549	117	198377	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	101304	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	62288	30.78	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.60%			
39) 1,2-Dichloroethane-d4	4.778	67	31729	29.88	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.60%			
66) Toluene-d8	5.787	98	254905	29.38	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.93%			
76) Bromofluorobenzene	7.167	174	78071	30.57	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.90%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	36298m	16.7239	ug/l	
6) Dichlorodifluoromethane	1.671	85	21944	16.8309	ug/l	97
7) Chloromethane	1.844	50	26749	19.4905	ug/l	96
8) Bromomethane	2.241	94	25662	18.0470	ug/l	91
9) Vinyl Chloride	1.946	62	38452	21.7838	ug/l	95
10) Chloroethane	2.328	64	27588	23.0167	ug/l	88
11) Trichlorofluoromethane	2.546	101	67407	23.1014	ug/l	96
12) Ethyl ether	2.778	59	21098	21.1358	ug/l	63
13) Furan	2.817	39	35966m	19.4369	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.974	101	26030	22.0944	ug/l	92
15) Methylene Chloride	3.373	84	33096	18.8603	ug/l	53
16) Acrolein	2.887	56	20149	96.4327	ug/l	95
17) Acrylonitrile	3.566	53	10170	19.3077	ug/l	97
18) Iodomethane	3.116	142	26358	16.0231	ug/l	95
19) Acetone	3.013	43	36761	87.9823	ug/l	94
20) Carbon Disulfide	3.186	76	84994	21.2878	ug/l	100
21) t-Butyl Alcohol	3.434	59	12287	121.4151	ug/l	93
22) n-Hexane	3.813	57	26458	21.3033	ug/l	88
23) Di-isopropyl-ether	3.951	45	64764	18.8261	ug/l	62
24) 1,1-Dichloroethene	2.984	61	45484	21.1618	ug/l	69
25) Methyl Acetate	3.276	43	17764	20.3240	ug/l	100
26) Methyl-t-butyl ether	3.595	73	72075	19.4124	ug/l	83
27) 1,1-Dichloroethane	3.926	63	54634	19.5842	ug/l	98
28) trans-1,2-Dichloroethene	3.601	96	34318	20.7427	ug/l	72
29) Ethyl-t-butyl ether	4.193	59	72427	19.1862	ug/l	86
30) cis-1,2-Dichloroethene	4.308	61	53426	19.6210	ug/l	64
31) Bromochloromethane	4.453	49	22966	19.9071	ug/l	32
32) 2,2-Dichloropropane	4.315	77	48925	22.1969	ug/l	92
33) Ethyl acetate	4.328	43	25430m	18.6158	ug/l	
34) 1,4-Dioxane	5.334	88	21558	1435.6014	ug/l	72
35) 1,1-Dichloropropene	4.701	75	48516	20.0513	ug/l	96
36) Chloroform	4.488	83	61084	19.8294	ug/l	96
38) Cyclohexane	4.652	56	42571m	20.9171	ug/l	
40) 1,2-Dichloroethane	4.820	62	42555	17.9013	ug/l	98
41) 2-Butanone	4.302	43	9939m	17.0293	ug/l	
42) 1,1,1-Trichloroethane	4.611	97	55555	19.9642	ug/l	95
43) Carbon Tetrachloride	4.710	117	48624	20.7932	ug/l	97
44) Vinyl Acetate	3.945	43	74552	18.3689	ug/l	100
45) Bromodichloromethane	5.411	83	44768	19.2677	ug/l	96
46) Methylcyclohexane	5.270	83	41252m	21.4543	ug/l	
47) Dibromomethane	5.344	174	21271	18.9570	ug/l	92
48) 1,2-Dichloropropane	5.276	63	31072	19.3091	ug/l	95
49) Trichloroethene	5.157	130	38237	19.8876	ug/l	94
50) Benzene	4.820	78	133489	19.4298	ug/l	100
51) tert-Amyl methyl ether	4.858	73	73456	19.5099	ug/l	95
53) Iso-propylacetate	4.810	43	39803	18.1075	ug/l	77
54) Methyl methacrylate	5.299	41	22094m	16.6378	ug/l	
55) Dibromochloromethane	6.238	129	34822	18.8715	ug/l	99
56) 2-Chloroethylvinylether	5.543	63	3770	10.0228	ug/l	65
57) cis-1,3-Dichloropropene	5.640	75	50731	19.3299	ug/l	97
58) trans-1,3-Dichloropropene	5.913	75	45420	18.2178	ug/l	100
59) Ethyl methacrylate	5.932	41	21295m	18.5101	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	31697	18.0546	ug/l	89
61) 1,2-Dibromoethane	6.315	107	33589	18.1309	ug/l	96
62) 1,3-Dichloropropane	6.112	76	52849	18.2206	ug/l	91
63) 4-Methyl-2-Pentanone	5.701	43	24304	18.1593	ug/l	96
64) 2-Hexanone	6.122	43	17029	17.9455	ug/l	86
65) Tetrachloroethene	6.112	164	28214	18.2107	ug/l	100
67) Toluene	5.823	92	87624	18.1547	ug/l	97

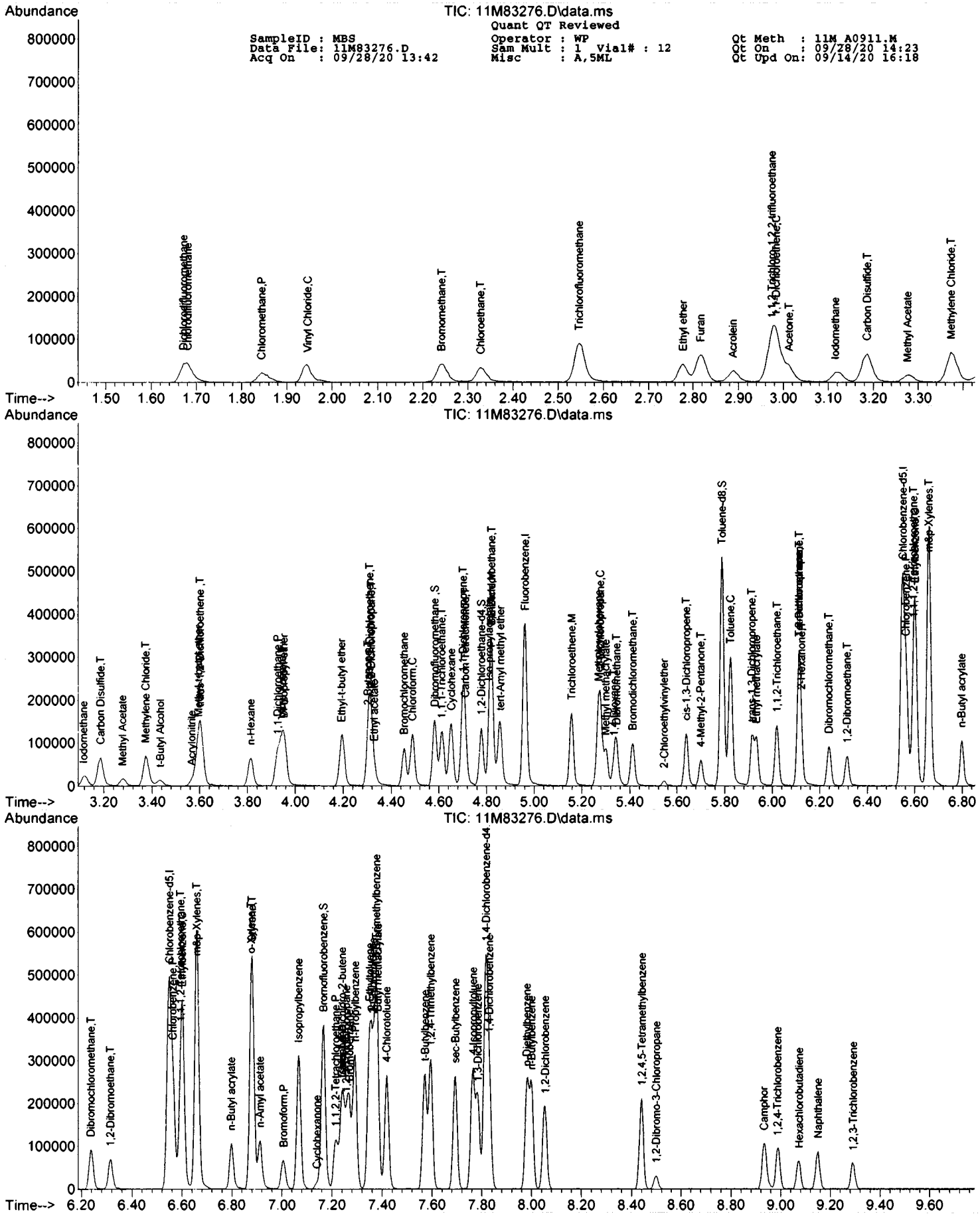
Quantitation Report (QT Reviewed)

SampleID : MBS Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83276.D Sam Mult : 1 Vial# : 12 Qt On : 09/28/20 14:23
Acq On : 09/28/20 13:42 Misc : A,5ML Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.594	133	31671	17.6008	ug/l	98
69)	Chlorobenzene	6.562	112	97740	17.7823	ug/l	99
71)	n-Butyl acrylate	6.797	55	47691	17.8304	ug/l	86
72)	n-Amyl acetate	6.913	43	37964	19.0341	ug/l	75
73)	Bromoform	7.006	173	22778	18.7450	ug/l	85
74)	Ethylbenzene	6.601	106	44504	17.8931	ug/l	95
75)	1,1,2,2-Tetrachloroethane	7.215	83	42481	17.8468	ug/l	97
77)	Styrene	6.881	104	105499	18.2158	ug/l	95
78)	m&p-Xylenes	6.659	106	126647	36.5777	ug/l	99
79)	o-Xylene	6.877	106	62047	18.3418	ug/l	95
80)	trans-1,4-Dichloro-2-b...	7.241	53	12237	18.1082	ug/l	82
81)	1,3-Dichlorobenzene	7.784	146	69639	17.3242	ug/l	99
82)	1,4-Dichlorobenzene	7.829	146	70453	16.9196	ug/l	98
83)	1,2-Dichlorobenzene	8.054	146	62541	17.0922	ug/l	98
84)	Isopropylbenzene	7.067	105	155121	18.7422	ug/l	98
85)	Cyclohexanone	7.141	55	4838	118.4458	ug/l	80
86)	Camphene	7.241	93	37586	19.1827	ug/l	97
87)	1,2,3-Trichloropropane	7.257	75	48603	17.7874	ug/l	90
88)	2-Chlorotoluene	7.363	91	93984	17.5863	ug/l	98
89)	p-Ethyltoluene	7.350	105	156226	18.9292	ug/l	100
90)	4-Chlorotoluene	7.418	91	99672	18.0977	ug/l	98
91)	n-Propylbenzene	7.292	91	182922	18.8345	ug/l	97
92)	Bromobenzene	7.270	77	88658	17.9898	ug/l	94
93)	1,3,5-Trimethylbenzene	7.376	105	124262	17.9119	ug/l	97
94)	Butyl methacrylate	7.382	41	31782m	18.1242	ug/l	
95)	t-Butylbenzene	7.572	119	112666	17.4802	ug/l	97
96)	1,2,4-Trimethylbenzene	7.594	105	126695	17.6383	ug/l	100
97)	sec-Butylbenzene	7.694	105	141694	18.3490	ug/l	99
98)	4-Isopropyltoluene	7.765	119	118131	18.0323	ug/l	99
99)	n-Butylbenzene	8.000	91	120175	18.1011	ug/l	97
100)	p-Diethylbenzene	7.980	119	63794	18.2293	ug/l	100
101)	1,2,4,5-Tetramethylben...	8.440	119	84578	17.4364	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.498	157	7187	17.8236	ug/l	93
103)	Camphor	8.932	95	22748	143.8813	ug/l	98
104)	Hexachlorobutadiene	9.073	225	9213	17.7031	ug/l	98
105)	1,2,4-Trichlorobenzene	8.987	180	22182	15.6901	ug/l	98
106)	1,2,3-Trichlorobenzene	9.292	180	13801	14.8971	ug/l	94
107)	Naphthalene	9.151	128	52524	15.0944	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 11M83276.D\data.ms
Quant QT Reviewed
SampleID : MBS
Data File: 11M83276.D
Acq On : 09/28/20 13:42
Operator : WP
Sam Mult : 1 Vial# : 12
Misc : A,5ML
Qt Meth : 11M_A0911.M
Qt On : 09/28/20 14:23
Qt Upd On: 09/14/20 16:18
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->

Abundance
TIC: 11M83276.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
Time-->

Abundance
TIC: 11M83276.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89382

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142446.D	MBS89382	9/28/2020 11:36:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	14.7546	0	20	74	50	150
Dichlorodifluoromethane	1	12.1261	0	20	61	50	150
Chloromethane	1	18.2113	0	20	91	50	150
Bromomethane	1	10.0279	0	20	50	50	150
Vinyl Chloride	1	20.8278	0	20	104	50	150
Chloroethane	1	20.5507	0	20	103	50	150
Trichlorofluoromethane	1	20.7969	0	20	104	50	150
Ethyl ether	1	20.6484	0	20	103	50	150
Furan	1	19.6656	0	20	98	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.5111	0	20	98	50	150
Methylene Chloride	1	19.7886	0	20	99	70	130
Acrolein	1	101.1429	0	100	101	50	150
Acrylonitrile	1	20.3663	0	20	102	50	150
Iodomethane	1	9.3326	0	20	47*	50	150
Acetone	1	98.4744	0	100	98	50	150
Carbon Disulfide	1	20.498	0	20	102	50	150
t-Butyl Alcohol	1	96.2427	0	100	96	50	150
n-Hexane	1	19.4081	0	20	97	70	130
Di-isopropyl-ether	1	20.0253	0	20	100	70	130
1,1-Dichloroethene	1	20.9533	0	20	105	70	130
Methyl Acetate	1	20.1652	0	20	101	50	150
Methyl-t-butyl ether	1	20.2267	0	20	101	70	130
1,1-Dichloroethane	1	20.3152	0	20	102	70	130
trans-1,2-Dichloroethene	1	20.0752	0	20	100	70	130
Ethyl-t-butyl ether	1	19.1778	0	20	96	70	130
cis-1,2-Dichloroethene	1	19.8971	0	20	99	70	130
Bromochloromethane	1	20.5232	0	20	103	70	130
2,2-Dichloropropane	1	18.3287	0	20	92	70	130
Ethyl acetate	1	19.2966	0	20	96	50	150
1,4-Dioxane	1	985.9296	0	1000	99	50	150
1,1-Dichloropropene	1	21.1723	0	20	106	70	130
Chloroform	1	20.259	0	20	101	70	130
Cyclohexane	1	21.6972	0	20	108	70	130
1,2-Dichloroethane	1	18.5116	0	20	93	70	130
2-Butanone	1	20.2856	0	20	101	50	150
1,1,1-Trichloroethane	1	21.2332	0	20	106	70	130
Carbon Tetrachloride	1	18.8786	0	20	94	50	150
Vinyl Acetate	1	18.0553	0	20	90	50	150
Bromodichloromethane	1	19.7551	0	20	99	70	130
Methylcyclohexane	1	20.4176	0	20	102	70	130
Dibromomethane	1	18.711	0	20	94	70	130
1,2-Dichloropropane	1	19.8684	0	20	99	70	130
Trichloroethene	1	19.9833	0	20	100	70	130
Benzene	1	19.607	0	20	98	70	130
tert-Amyl methyl ether	1	18.748	0	20	94	70	130
Iso-propylacetate	1	16.4857	0	20	82	70	130
Methyl methacrylate	1	18.3495	0	20	92	70	130
Dibromochloromethane	1	17.8292	0	20	89	70	130
2-Chloroethylvinylether	1	13.8834	0	20	69*	70	130
cis-1,3-Dichloropropene	1	17.4749	0	20	87	70	130
trans-1,3-Dichloropropene	1	16.0556	0	20	80	70	130
Ethyl methacrylate	1	16.9175	0	20	85	70	130
1,1,2-Trichloroethane	1	18.7177	0	20	94	70	130
1,2-Dibromoethane	1	18.3494	0	20	92	70	130
1,3-Dichloropropane	1	18.1451	0	20	91	70	130
4-Methyl-2-Pentanone	1	19.3197	0	20	97	50	150
2-Hexanone	1	17.7893	0	20	89	50	150
Tetrachloroethene	1	18.2121	0	20	91	50	150
Toluene	1	18.6562	0	20	93	70	130
1,1,1,2-Tetrachloroethane	1	16.8835	0	20	84	70	130
Chlorobenzene	1	18.3707	0	20	92	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89382

Method: 8260C		Matrix: Aqueous			QC Type: MBS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	20.0506	0	20	100	70	130
n-Amyl acetate	1	15.8326	0	20	79	70	130
Bromoform	1	18.0655	0	20	90	70	130
Ethylbenzene	1	20.6146	0	20	103	70	130
1,1,2,2-Tetrachloroethane	1	22.28	0	20	111	70	130
Styrene	1	21.7775	0	20	109	70	130
m&p-Xylenes	1	43.2925	0	40	108	70	130
o-Xylene	1	21.1539	0	20	106	70	130
trans-1,4-Dichloro-2-butene	1	12.3105	0	20	62	50	150
1,3-Dichlorobenzene	1	20.7307	0	20	104	70	130
1,4-Dichlorobenzene	1	19.6923	0	20	98	70	130
1,2-Dichlorobenzene	1	20.4344	0	20	102	70	130
Isopropylbenzene	1	22.2565	0	20	111	70	130
Cyclohexanone	1	100.909	0	100	101	50	150
Camphene	1	32.3117	0	20	162*	70	130
1,2,3-Trichloropropane	1	16.5492	0	20	83	70	130
2-Chlorotoluene	1	19.4239	0	20	97	70	130
p-Ethyltoluene	1	22.9089	0	20	115	70	130
4-Chlorotoluene	1	20.9308	0	20	105	70	130
n-Propylbenzene	1	22.7502	0	20	114	70	130
Bromobenzene	1	19.9096	0	20	100	70	130
1,3,5-Trimethylbenzene	1	22.5433	0	20	113	70	130
Butyl methacrylate	1	19.8026	0	20	99	70	130
t-Butylbenzene	1	15.5451	0	20	78	70	130
1,2,4-Trimethylbenzene	1	17.4949	0	20	87	70	130
sec-Butylbenzene	1	21.8566	0	20	109	70	130
4-Isopropyltoluene	1	20.9803	0	20	105	70	130
n-Butylbenzene	1	21.6047	0	20	108	70	130
p-Diethylbenzene	1	22.8016	0	20	114	70	130
1,2,4,5-Tetramethylbenzene	1	21.2804	0	20	106	70	130
1,2-Dibromo-3-Chloropropane	1	20.2544	0	20	101	50	150
Camphor	1	202.3994	0	200	101	20	150
Hexachlorobutadiene	1	21.6975	0	20	108	50	150
1,2,4-Trichlorobenzene	1	19.1257	0	20	96	70	130
1,2,3-Trichlorobenzene	1	19.8563	0	20	99	70	130
Naphthalene	1	20.5066	0	20	103	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Quantitation Report (QT Reviewed)

SampleID : MBS
Data File: 2M142446.D
Acq On : 09/28/20 23:36

Operator : RL
Sam Mult : 1 Vial# : 11
Misc : A,5ML

Qt Meth : 2M_A0909.M
Qt On : 09/29/20 05:54
Qt Upd On: 09/10/20 15:15

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-2820\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	334784	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	298964	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	160945	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	97354	31.60	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.33%			
39) 1,2-Dichloroethane-d4	4.910	67	49453	31.10	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.67%			
66) Toluene-d8	5.952	98	357782	30.69	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.30%			
76) Bromofluorobenzene	7.367	174	132725	30.83	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.77%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	43132	14.7546	ug/l	55
6) Dichlorodifluoromethane	1.685	85	22434	12.1261	ug/l	98
7) Chloromethane	1.861	50	37130	18.2113	ug/l	94
8) Bromomethane	2.258	94	17729	10.0279	ug/l	84
9) Vinyl Chloride	1.953	62	51618	20.8278	ug/l	97
10) Chloroethane	2.343	64	36721	20.5507	ug/l	92
11) Trichlorofluoromethane	2.569	101	89530	20.7969	ug/l	97
12) Ethyl ether	2.800	59	35383	20.6484	ug/l	97
13) Furan	2.843	39	60900	19.6656	ug/l	92
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	34642	19.5111	ug/l	93
15) Methylene Chloride	3.416	84	49777	19.7886	ug/l	98
16) Acrolein	2.922	56	31728	101.1429	ug/l	98
17) Acrylonitrile	3.623	53	17487	20.3663	ug/l	83
18) Iodomethane	3.154	142	23851	9.3326	ug/l	97
19) Acetone	3.044	43	67332	98.4744	ug/l	99
20) Carbon Disulfide	3.221	76	134564	20.4980	ug/l	100
21) t-Butyl Alcohol	3.483	59	23318	96.2427	ug/l	90
22) n-Hexane	3.873	57	39528	19.4081	ug/l	98
23) Di-isopropyl-ether	4.032	45	121398	20.0253	ug/l	99
24) 1,1-Dichloroethene	3.014	61	70629	20.9533	ug/l	96
25) Methyl Acetate	3.318	43	31219	20.1652	ug/l	100
26) Methyl-t-butyl ether	3.642	73	128900	20.2267	ug/l	99
27) 1,1-Dichloroethane	4.001	63	84818	20.3152	ug/l	97
28) trans-1,2-Dichloroethene	3.654	96	51267	20.0752	ug/l	98
29) Ethyl-t-butyl ether	4.288	59	131150	19.1778	ug/l	98
30) cis-1,2-Dichloroethene	4.416	61	83397	19.8971	ug/l	95
31) Bromochloromethane	4.568	49	39780	20.5232	ug/l	95
32) 2,2-Dichloropropane	4.416	77	69746	18.3287	ug/l	97
33) Ethyl acetate	4.434	43	42492m	19.2966	ug/l	
34) 1,4-Dioxane	5.495	88	32520	985.9296	ug/l	98
35) 1,1-Dichloropropene	4.824	75	73322	21.1723	ug/l	96
36) Chloroform	4.605	83	93115	20.2590	ug/l	99
38) Cyclohexane	4.769	56	64488	21.6972	ug/l	98
40) 1,2-Dichloroethane	4.952	62	72011	18.5116	ug/l	100
41) 2-Butanone	4.416	43	21460m	20.2856	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	87180	21.2332	ug/l	100
43) Carbon Tetrachloride	4.830	117	70407	18.8786	ug/l	95
44) Vinyl Acetate	4.026	43	135375	18.0553	ug/l	100
45) Bromodichloromethane	5.568	83	74194	19.7551	ug/l	96
46) Methylcyclohexane	5.416	83	60120	20.4176	ug/l	99
47) Dibromomethane	5.495	174	37223	18.7110	ug/l	97
48) 1,2-Dichloropropane	5.428	63	50153	19.8684	ug/l	100
49) Trichloroethene	5.300	130	57734	19.9833	ug/l	92
50) Benzene	4.952	78	195235	19.6070	ug/l	100
51) tert-Amyl methyl ether	4.989	73	136673	18.7480	ug/l	98
53) Iso-propylacetate	4.946	43	79517	16.4857	ug/l	99
54) Methyl methacrylate	5.452	41	39029	18.3495	ug/l	98
55) Dibromochloromethane	6.422	129	59162	17.8292	ug/l	99
56) 2-Chloroethylvinylether	5.708	63	9682	13.8834	ug/l	97
57) cis-1,3-Dichloropropene	5.806	75	77454	17.4749	ug/l	96
58) trans-1,3-Dichloropropene	6.092	75	73168	16.0556	ug/l	100
59) Ethyl methacrylate	6.111	41	39593	16.9175	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	50234	18.7177	ug/l	95
61) 1,2-Dibromoethane	6.495	107	51186	18.3494	ug/l	95
62) 1,3-Dichloropropane	6.287	76	82787	18.1451	ug/l	100
63) 4-Methyl-2-Pentanone	5.867	43	44561	19.3197	ug/l	99
64) 2-Hexanone	6.300	43	32201	17.7893	ug/l	94
65) Tetrachloroethene	6.287	164	45542	18.2121	ug/l	99
67) Toluene	5.995	92	129085	18.6562	ug/l	98

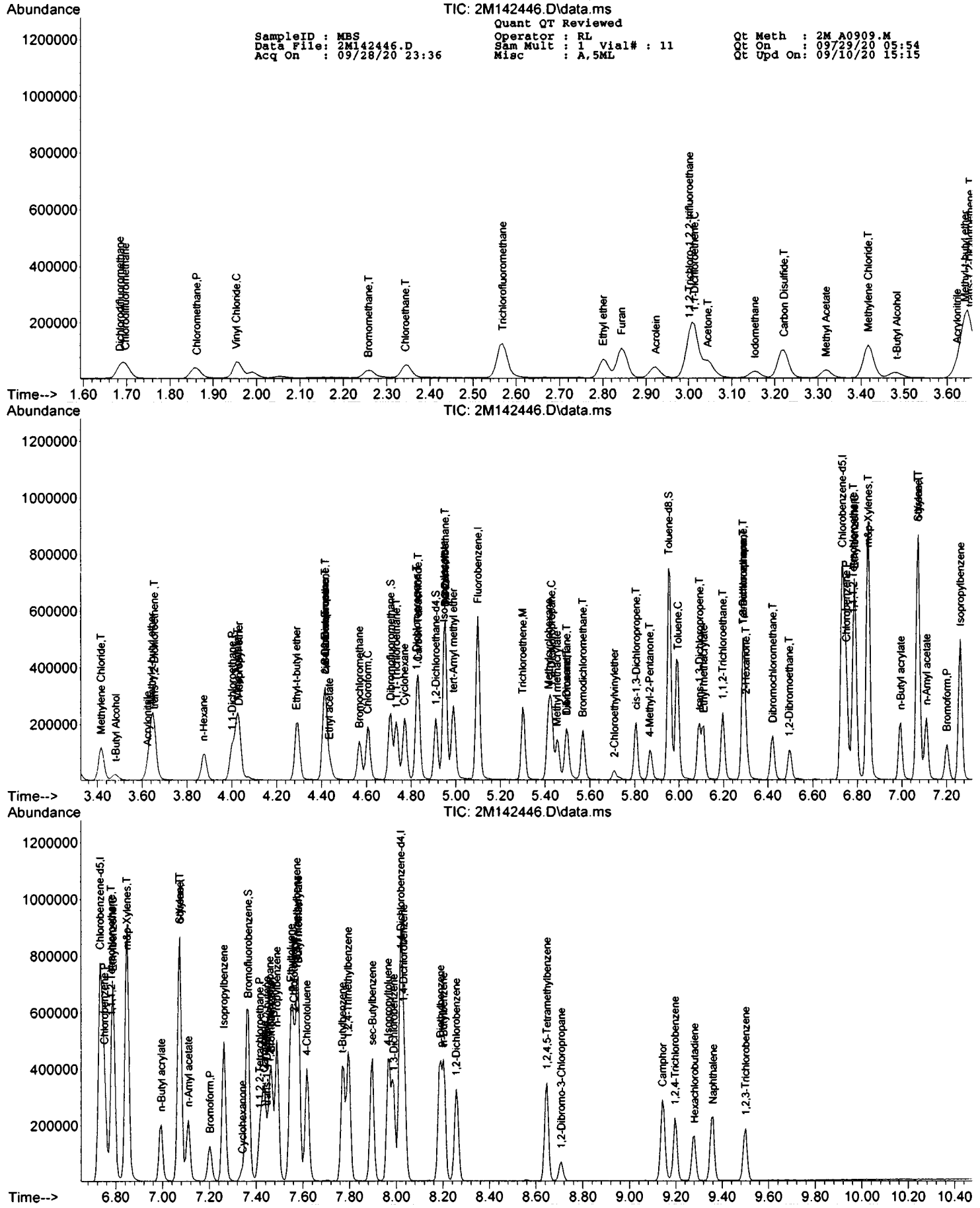
Quantitation Report (QT Reviewed)

SampleID : MBS Operator : RL Qt Meth : 2M_A0909.M
Data File: 2M142446.D Sam Mult : 1 Vial# : 11 Qt On : 09/29/20 05:54
Acq On : 09/28/20 23:36 Misc : A,5ML Qt Upd On: 09/10/20 15:15

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-2820\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	51037	16.8835	ug/l	97
69)	Chlorobenzene	6.751	112	142228	18.3707	ug/l	96
71)	n-Butyl acrylate	6.995	55	94351	20.0506	ug/l	99
72)	n-Amyl acetate	7.110	43	78095	15.8326	ug/l	99
73)	Bromoform	7.202	173	39864	18.0655	ug/l	99
74)	Ethylbenzene	6.787	106	62694	20.6146	ug/l	90
75)	1,1,2,2-Tetrachloroethane	7.415	83	69468	22.2800	ug/l	99
77)	Styrene	7.074	104	162692	21.7775	ug/l	99
78)	m&p-Xylenes	6.848	106	189774	43.2925	ug/l	96
79)	o-Xylene	7.074	106	91731	21.1539	ug/l	98
80)	trans-1,4-Dichloro-2-b...	7.446	53	15317	12.3105	ug/l	74
81)	1,3-Dichlorobenzene	7.988	146	110568	20.7307	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	107737	19.6923	ug/l	98
83)	1,2-Dichlorobenzene	8.257	146	102805	20.4344	ug/l	98
84)	Isopropylbenzene	7.263	105	237144	22.2565	ug/l	99
85)	Cyclohexanone	7.342	55	11045	100.9090	ug/l	89
86)	Camphene	7.434	93	62103	32.3117	ug/l	96
87)	1,2,3-Trichloropropane	7.458	75	70416	16.5492	ug/l	97
88)	2-Chlorotoluene	7.562	91	145164	19.4239	ug/l	98
89)	p-Ethyltoluene	7.549	105	232835	22.9089	ug/l	97
90)	4-Chlorotoluene	7.616	91	141203	20.9308	ug/l	99
91)	n-Propylbenzene	7.488	91	277394	22.7502	ug/l	97
92)	Bromobenzene	7.464	77	139124	19.9096	ug/l	94
93)	1,3,5-Trimethylbenzene	7.574	105	181419	22.5433	ug/l	99
94)	Butyl methacrylate	7.580	41	62866	19.8026	ug/l	97
95)	t-Butylbenzene	7.769	119	179913	15.5451	ug/l	99
96)	1,2,4-Trimethylbenzene	7.793	105	187145	17.4949	ug/l	99
97)	sec-Butylbenzene	7.897	105	223212	21.8566	ug/l	99
98)	4-Isopropyltoluene	7.964	119	185146	20.9803	ug/l	99
99)	n-Butylbenzene	8.202	91	192764	21.6047	ug/l	97
100)	p-Diethylbenzene	8.190	119	104552	22.8016	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	140683	21.2804	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.708	157	14725	20.2544	ug/l	88
103)	Camphor	9.141	95	58378	202.3994	ug/l	99
104)	Hexachlorobutadiene	9.281	225	22279	21.6975	ug/l	96
105)	1,2,4-Trichlorobenzene	9.195	180	51320	19.1257	ug/l	97
106)	1,2,3-Trichlorobenzene	9.500	180	42143	19.8563	ug/l	95
107)	Naphthalene	9.360	128	140753	20.5066	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M142446.D\data.ms
Quant QT Reviewed
SampleID : MBS
Data File: 2M142446.D
Acq On : 09/28/20 23:36
Operator : RL
Sam Mult : 1 Vial# : 11
Misc : A,5ML
Qt Meth : 2M_A0909.M
Qt On : 09/29/20 05:54
Qt Upd On: 09/10/20 15:15
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->

Abundance
TIC: 2M142446.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 2M142446.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

Data File	Sample ID:	Analysis Date
Spike or Dup: 2M142525.D	MBS89395	9/30/2020 1:53:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.7274	0	20	94	50	150
Dichlorodifluoromethane	1	20.031	0	20	100	50	150
Chloromethane	1	20.705	0	20	104	50	150
Bromomethane	1	16.1692	0	20	81	50	150
Vinyl Chloride	1	19.7477	0	20	99	50	150
Chloroethane	1	18.7372	0	20	94	50	150
Trichlorofluoromethane	1	19.2148	0	20	96	50	150
Ethyl ether	1	19.529	0	20	98	50	150
Furan	1	19.2189	0	20	96	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	18.8343	0	20	94	50	150
Methylene Chloride	1	19.261	0	20	96	70	130
Acrolein	1	100.9203	0	100	101	50	150
Acrylonitrile	1	20.2923	0	20	101	50	150
Iodomethane	1	15.7513	0	20	79	50	150
Acetone	1	95.1145	0	100	95	50	150
Carbon Disulfide	1	18.774	0	20	94	50	150
t-Butyl Alcohol	1	104.0682	0	100	104	50	150
n-Hexane	1	18.9467	0	20	95	70	130
Di-isopropyl-ether	1	19.5575	0	20	98	70	130
1,1-Dichloroethene	1	19.4753	0	20	97	70	130
Methyl Acetate	1	25.5889	0	20	128	50	150
Methyl-t-butyl ether	1	17.8001	0	20	89	70	130
1,1-Dichloroethane	1	19.7472	0	20	99	70	130
trans-1,2-Dichloroethene	1	19.2214	0	20	96	70	130
Ethyl-t-butyl ether	1	19.9351	0	20	100	70	130
cis-1,2-Dichloroethene	1	19.2156	0	20	96	70	130
Bromochloromethane	1	20.2653	0	20	101	70	130
2,2-Dichloropropane	1	19.6807	0	20	98	70	130
Ethyl acetate	1	29.8633	0	20	149	50	150
1,4-Dioxane	1	1060.741	0	1000	106	50	150
1,1-Dichloropropene	1	19.0852	0	20	95	70	130
Chloroform	1	19.8197	0	20	99	70	130
Cyclohexane	1	18.0004	0	20	90	70	130
1,2-Dichloroethane	1	18.3385	0	20	92	70	130
2-Butanone	1	0	0	20	0*	50	150
1,1,1-Trichloroethane	1	19.5974	0	20	98	70	130
Carbon Tetrachloride	1	19.0922	0	20	95	50	150
Vinyl Acetate	1	15.2693	0	20	76	50	150
Bromodichloromethane	1	17.6664	0	20	88	70	130
Methylcyclohexane	1	17.6259	0	20	88	70	130
Dibromomethane	1	19.8669	0	20	99	70	130
1,2-Dichloropropane	1	19.4982	0	20	97	70	130
Trichloroethene	1	19.5119	0	20	98	70	130
Benzene	1	19.2373	0	20	96	70	130
tert-Amyl methyl ether	1	18.8446	0	20	94	70	130
Iso-propylacetate	1	19.4369	0	20	97	70	130
Methyl methacrylate	1	20.4616	0	20	102	70	130
Dibromochloromethane	1	20.69	0	20	103	70	130
2-Chloroethylvinylether	1	62.4567	0	20	312*	70	130
cis-1,3-Dichloropropene	1	20.0082	0	20	100	70	130
trans-1,3-Dichloropropene	1	20.3367	0	20	102	70	130
Ethyl methacrylate	1	19.8935	0	20	99	70	130
1,1,2-Trichloroethane	1	20.3337	0	20	102	70	130
1,2-Dibromoethane	1	20.5023	0	20	103	70	130
1,3-Dichloropropane	1	20.0365	0	20	100	70	130
4-Methyl-2-Pentanone	1	20.1296	0	20	101	50	150
2-Hexanone	1	20.3617	0	20	102	50	150
Tetrachloroethene	1	19.301	0	20	97	50	150
Toluene	1	20.0793	0	20	100	70	130
1,1,1,2-Tetrachloroethane	1	19.3021	0	20	97	70	130
Chlorobenzene	1	20.066	0	20	100	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

Method: 8260C | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	21.7162	0	20	109	70	130
n-Amyl acetate	1	20.5926	0	20	103	70	130
Bromoform	1	21.3416	0	20	107	70	130
Ethylbenzene	1	21.2407	0	20	106	70	130
1,1,2,2-Tetrachloroethane	1	20.1347	0	20	101	70	130
Styrene	1	21.2864	0	20	106	70	130
m&p-Xylenes	1	40.8395	0	40	102	70	130
o-Xylene	1	21.0006	0	20	105	70	130
trans-1,4-Dichloro-2-butene	1	19.3387	0	20	97	50	150
1,3-Dichlorobenzene	1	20.1363	0	20	101	70	130
1,4-Dichlorobenzene	1	19.7503	0	20	99	70	130
1,2-Dichlorobenzene	1	20.1243	0	20	101	70	130
Isopropylbenzene	1	21.2081	0	20	106	70	130
Cyclohexanone	1	106.5419	0	100	107	50	150
Camphene	1	17.6465	0	20	88	70	130
1,2,3-Trichloropropane	1	19.4225	0	20	97	70	130
2-Chlorotoluene	1	22.0488	0	20	110	70	130
p-Ethyltoluene	1	20.2162	0	20	101	70	130
4-Chlorotoluene	1	22.4362	0	20	112	70	130
n-Propylbenzene	1	20.6353	0	20	103	70	130
Bromobenzene	1	19.4347	0	20	97	70	130
1,3,5-Trimethylbenzene	1	20.7427	0	20	104	70	130
Butyl methacrylate	1	19.8037	0	20	99	70	130
t-Butylbenzene	1	21.1158	0	20	106	70	130
1,2,4-Trimethylbenzene	1	21.163	0	20	106	70	130
sec-Butylbenzene	1	20.6038	0	20	103	70	130
4-Isopropyltoluene	1	20.7704	0	20	104	70	130
n-Butylbenzene	1	20.9758	0	20	105	70	130
p-Diethylbenzene	1	20.0323	0	20	100	70	130
1,2,4,5-Tetramethylbenzene	1	19.4977	0	20	97	70	130
1,2-Dibromo-3-Chloropropane	1	21.283	0	20	106	50	150
Camphor	1	200.6025	0	200	100	20	150
Hexachlorobutadiene	1	18.2103	0	20	91	50	150
1,2,4-Trichlorobenzene	1	18.9733	0	20	95	70	130
1,2,3-Trichlorobenzene	1	20.0421	0	20	100	70	130
Naphthalene	1	20.0352	0	20	100	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Quantitation Report (Not Reviewed)

SampleID : MBS
Data File: 2M142525.D
Acq On : 09/30/20 13:53

Operator : JR
Sam Mult : 1 Vial# : 11
Misc : A,5ML

Qt Meth : 2M_A0929.M
Qt On : 09/30/20 20:11
Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	356690	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	318454	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	172757	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.709	111	101690	29.76	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.20%			
39) 1,2-Dichloroethane-d4	4.910	67	52630	29.83	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.43%			
66) Toluene-d8	5.952	98	375638	30.15	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.50%			
76) Bromofluorobenzene	7.367	174	138900	30.61	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.03%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	68118	18.7274	ug/l	88
6) Dichlorodifluoromethane	1.685	85	73388	20.0310	ug/l	98
7) Chloromethane	1.855	50	84487	20.7050	ug/l	98
8) Bromomethane	2.258	94	32045	16.1692	ug/l	100
9) Vinyl Chloride	1.959	62	87489	19.7477	ug/l	100
10) Chloroethane	2.343	64	55378	18.7372	ug/l	93
11) Trichlorofluoromethane	2.569	101	130447	19.2148	ug/l	99
12) Ethyl ether	2.800	59	46037	19.5290	ug/l	97
13) Furan	2.843	39	76614	19.2189	ug/l	95
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	44826	18.8343	ug/l	95
15) Methylene Chloride	3.416	84	64874	19.2610	ug/l	98
16) Acrolein	2.916	56	54362	100.9203	ug/l	94
17) Acrylonitrile	3.623	53	23717	20.2923	ug/l	97
18) Iodomethane	3.154	142	39955	15.7513	ug/l	100
19) Acetone	3.044	43	91283	95.1145	ug/l	98
20) Carbon Disulfide	3.221	76	170704	18.7740	ug/l	100
21) t-Butyl Alcohol	3.483	59	32216	104.0682	ug/l	93
22) n-Hexane	3.873	57	53376	18.9467	ug/l	97
23) Di-isopropyl-ether	4.032	45	157738	19.5575	ug/l	99
24) 1,1-Dichloroethene	3.014	61	89338	19.4753	ug/l	93
25) Methyl Acetate	3.319	43	55397	25.5889	ug/l	100
26) Methyl-t-butyl ether	3.642	73	170599	17.8001	ug/l	99
27) 1,1-Dichloroethane	4.001	63	110461	19.7472	ug/l	96
28) trans-1,2-Dichloroethene	3.654	96	65022	19.2214	ug/l	100
29) Ethyl-t-butyl ether	4.288	59	173992	19.9351	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	109252	19.2156	ug/l	96
31) Bromochloromethane	4.568	49	51181	20.2653	ug/l	99
32) 2,2-Dichloropropane	4.416	77	98639	19.6807	ug/l	97
33) Ethyl acetate	4.434	43	86839	29.8633	ug/l	90
34) 1,4-Dioxane	5.489	88	43363	1060.7408	ug/l	99
35) 1,1-Dichloropropene	4.824	75	90516	19.0852	ug/l	98
36) Chloroform	4.605	83	120728	19.8197	ug/l	100
38) Cyclohexane	4.770	56	75658	18.0004	ug/l	100
40) 1,2-Dichloroethane	4.952	62	94644	18.3385	ug/l	100
42) 1,1,1-Trichloroethane	4.733	97	105835	19.5974	ug/l	96
43) Carbon Tetrachloride	4.831	117	87283	19.0922	ug/l	95
44) Vinyl Acetate	4.026	43	138114	15.2693	ug/l	100
45) Bromodichloromethane	5.568	83	96363	17.6664	ug/l	99
46) Methylcyclohexane	5.416	83	71836	17.6259	ug/l	98
47) Dibromomethane	5.501	174	48605	19.8669	ug/l	95
48) 1,2-Dichloropropane	5.428	63	65402	19.4982	ug/l	97
49) Trichloroethene	5.300	130	73586	19.5119	ug/l	94
50) Benzene	4.952	78	256890	19.2373	ug/l	100
51) tert-Amyl methyl ether	4.989	73	176976	18.8446	ug/l	99
53) Iso-propylacetate	4.946	43	107796	19.4369	ug/l	99
54) Methyl methacrylate	5.452	41	54679	20.4616	ug/l	95
55) Dibromochloromethane	6.422	129	77221	20.6900	ug/l	99
56) 2-Chloroethylvinylether	5.708	63	25472	62.4567	ug/l	97
57) cis-1,3-Dichloropropene	5.806	75	102066	20.0082	ug/l	100
58) trans-1,3-Dichloropropene	6.086	75	98781	20.3367	ug/l	100
59) Ethyl methacrylate	6.111	41	55864	19.8935	ug/l	99
60) 1,1,2-Trichloroethane	6.196	97	64084	20.3337	ug/l	92
61) 1,2-Dibromoethane	6.495	107	68135	20.5023	ug/l	100
62) 1,3-Dichloropropane	6.288	76	110389	20.0365	ug/l	100
63) 4-Methyl-2-Pentanone	5.867	43	59851	20.1296	ug/l	95
64) 2-Hexanone	6.306	43	45064	20.3617	ug/l	99
65) Tetrachloroethene	6.288	164	55325	19.3010	ug/l	98
67) Toluene	5.989	92	168909	20.0793	ug/l	96
68) 1,1,1,2-Tetrachloroethane	6.781	133	65061	19.3021	ug/l	95

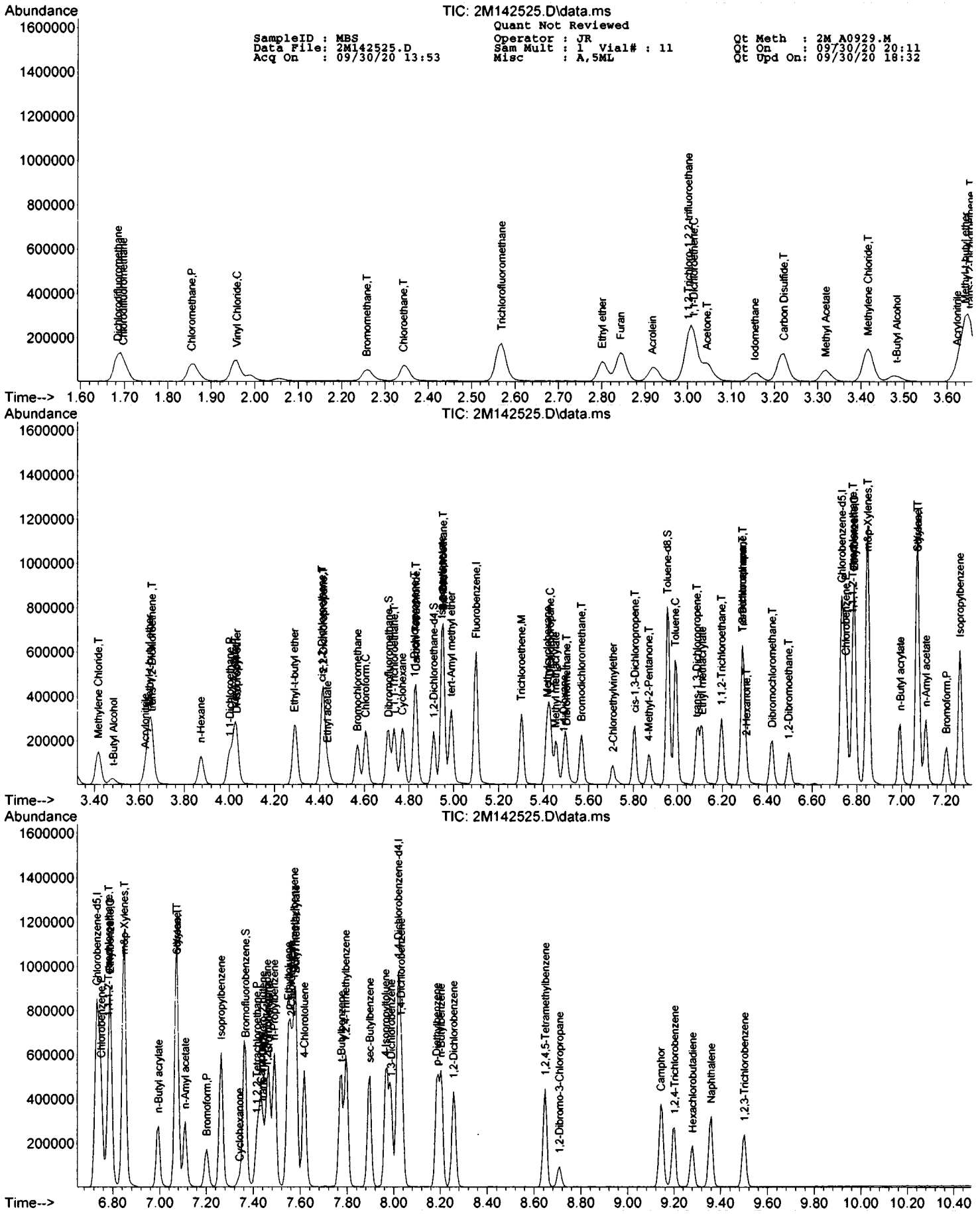
Quantitation Report (Not Reviewed)

SampleID : MBS Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142525.D Sam Mult : 1 Vial# : 11 Qt On : 09/30/20 20:11
Acq On : 09/30/20 13:53 Misc : A,5ML Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69)	Chlorobenzene	6.751	112	188355	20.0660	ug/l	100
71)	n-Butyl acrylate	6.995	55	126566	21.7162	ug/l	100
72)	n-Amyl acetate	7.111	43	105712	20.5926	ug/l	99
73)	Bromoform	7.202	173	55024	21.3416	ug/l	96
74)	Ethylbenzene	6.787	106	83513	21.2407	ug/l	94
75)	1,1,2,2-Tetrachloroethane	7.415	83	93097	20.1347	ug/l	97
77)	Styrene	7.074	104	210084	21.2864	ug/l	97
78)	m&p-Xylenes	6.848	106	244420	40.8395	ug/l	95
79)	o-Xylene	7.074	106	118956	21.0006	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.440	53	21110	19.3387	ug/l	83
81)	1,3-Dichlorobenzene	7.989	146	141519	20.1363	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	142038	19.7503	ug/l	98
83)	1,2-Dichlorobenzene	8.257	146	133345	20.1243	ug/l	98
84)	Isopropylbenzene	7.263	105	293017	21.2081	ug/l	99
85)	Cyclohexanone	7.342	55	12724	106.5419	ug/l	92
86)	Camphene	7.434	93	71955	17.6465	ug/l	95
87)	1,2,3-Trichloropropane	7.458	75	97323	19.4225	ug/l	98
88)	2-Chlorotoluene	7.562	91	183199	22.0488	ug/l	98
89)	p-Ethyltoluene	7.550	105	281061	20.2162	ug/l	99
90)	4-Chlorotoluene	7.617	91	189878	22.4362	ug/l	97
91)	n-Propylbenzene	7.489	91	343145	20.6353	ug/l	98
92)	Bromobenzene	7.464	77	179744	19.4347	ug/l	95
93)	1,3,5-Trimethylbenzene	7.574	105	223409	20.7427	ug/l	99
94)	Butyl methacrylate	7.580	41	83341	19.8037	ug/l	99
95)	t-Butylbenzene	7.775	119	221861	21.1158	ug/l	98
96)	1,2,4-Trimethylbenzene	7.793	105	245531	21.1630	ug/l	98
97)	sec-Butylbenzene	7.897	105	267564	20.6038	ug/l	100
98)	4-Isopropyltoluene	7.964	119	229067	20.7704	ug/l	98
99)	n-Butylbenzene	8.202	91	239321	20.9758	ug/l	95
100)	p-Diethylbenzene	8.184	119	124905	20.0323	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	177773	19.4977	ug/l	94
102)	1,2-Dibromo-3-Chloropr...	8.708	157	19998	21.2830	ug/l	81
103)	Camphor	9.141	95	74394	200.6025	ug/l	94
104)	Hexachlorobutadiene	9.281	225	26043	18.2103	ug/l	98
105)	1,2,4-Trichlorobenzene	9.202	180	64585	18.9733	ug/l	99
106)	1,2,3-Trichlorobenzene	9.500	180	56593	20.0421	ug/l	98
107)	Naphthalene	9.360	128	189938	20.0352	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M142525.D\data.ms
Quant Not Reviewed
SampleID : MBS
Data File: 2M142525.D
Acq On : 09/30/20 13:53
Operator : JR
Sam Mult : 1 Vial# : 11
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qct On : 09/30/20 20:11
Qt Upd On: 09/30/20 18:32
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 2M142525.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 2M142525.D\data.ms
Chlorobenzene-d5,I
Ethylbenzene,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4,I
p-Isopropyltoluene
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89398

Data File: Spike or Dup: 2M142568.D
Sample ID: MBS89398
Analysis Date: 10/1/2020 3:57:00 AM
Non Spike(If applicable):
Inst Blank(If applicable):
Method: ~~Not~~ 8260D 10/1/20 JC Matrix: Aqueous
QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	16.9067	0	20	85	50	150
Dichlorodifluoromethane	1	19.1885	0	20	96	50	150
Chloromethane	1	16.3938	0	20	82	50	150
Bromomethane	1	17.0339	0	20	85	50	150
Vinyl Chloride	1	18.8474	0	20	94	50	150
Chloroethane	1	17.1603	0	20	86	50	150
Trichlorofluoromethane	1	18.0517	0	20	90	50	150
Ethyl ether	1	16.9701	0	20	85	50	150
Furan	1	17.0247	0	20	85	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.2	0	20	96	50	150
Methylene Chloride	1	16.3138	0	20	82	70	130
Acrolein	1	70.7435	0	100	71	50	150
Acrylonitrile	1	16.7535	0	20	84	50	150
Iodomethane	1	15.5652	0	20	78	50	150
Acetone	1	78.1588	0	100	78	50	150
Carbon Disulfide	1	17.6912	0	20	88	50	150
t-Butyl Alcohol	1	82.5733	0	100	83	50	150
n-Hexane	1	17.2069	0	20	86	70	130
Di-isopropyl-ether	1	17.3552	0	20	87	70	130
1,1-Dichloroethene	1	18.1641	0	20	91	70	130
Methyl Acetate	1	21.5583	0	20	108	50	150
Methyl-t-butyl ether	1	15.5914	0	20	78	70	130
1,1-Dichloroethane	1	17.52	0	20	88	70	130
trans-1,2-Dichloroethene	1	17.3224	0	20	87	70	130
Ethyl-t-butyl ether	1	17.4475	0	20	87	70	130
cis-1,2-Dichloroethene	1	16.6095	0	20	83	70	130
Bromochloromethane	1	17.751	0	20	89	70	130
2,2-Dichloropropane	1	13.3899	0	20	67*	70	130
Ethyl acetate	1	16.2812	0	20	81	50	150
1,4-Dioxane	1	832.3859	0	1000	83	50	150
1,1-Dichloropropene	1	17.5171	0	20	88	70	130
Chloroform	1	17.6757	0	20	88	70	130
Cyclohexane	1	18.3288	0	20	92	70	130
1,2-Dichloroethane	1	15.9012	0	20	80	70	130
2-Butanone	1	15.6321	0	20	78	50	150
1,1,1-Trichloroethane	1	18.0853	0	20	90	70	130
Carbon Tetrachloride	1	17.2547	0	20	86	50	150
Vinyl Acetate	1	12.1779	0	20	61	50	150
Bromodichloromethane	1	15.4928	0	20	77	70	130
Methylcyclohexane	1	17.7821	0	20	89	70	130
Dibromomethane	1	16.3021	0	20	82	70	130
1,2-Dichloropropane	1	17.4932	0	20	87	70	130
Trichloroethene	1	17.37	0	20	87	70	130
Benzene	1	17.0208	0	20	85	70	130
tert-Amyl methyl ether	1	16.5462	0	20	83	70	130
Iso-propylacetate	1	15.8372	0	20	79	70	130
Methyl methacrylate	1	16.7983	0	20	84	70	130
Dibromochloromethane	1	17.7718	0	20	89	70	130
2-Chloroethylvinylether	1	55.8944	0	20	279*	70	130
cis-1,3-Dichloropropene	1	16.3886	0	20	82	70	130
trans-1,3-Dichloropropene	1	16.2052	0	20	81	70	130
Ethyl methacrylate	1	15.8171	0	20	79	70	130
1,1,2-Trichloroethane	1	16.638	0	20	83	70	130
1,2-Dibromoethane	1	17.2732	0	20	86	70	130
1,3-Dichloropropane	1	16.6699	0	20	83	70	130
4-Methyl-2-Pentanone	1	16.405	0	20	82	50	150
2-Hexanone	1	15.3674	0	20	77	50	150
Tetrachloroethene	1	17.1189	0	20	86	50	150
Toluene	1	17.1393	0	20	86	70	130
1,1,1,2-Tetrachloroethane	1	16.6255	0	20	83	70	130
Chlorobenzene	1	16.7529	0	20	84	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89398

Method: ~~Not~~ d 8260D 10/14/00 ft Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	17.6221	0	20	88	70	130
n-Amyl acetate	1	16.5143	0	20	83	70	130
Bromoform	1	17.2965	0	20	86	70	130
Ethylbenzene	1	17.7434	0	20	89	70	130
1,1,2,2-Tetrachloroethane	1	16.0453	0	20	80	70	130
Styrene	1	18.1096	0	20	91	70	130
m&p-Xylenes	1	34.6187	0	40	87	70	130
o-Xylene	1	18.3557	0	20	92	70	130
trans-1,4-Dichloro-2-butene	1	15.178	0	20	76	50	150
1,3-Dichlorobenzene	1	16.9231	0	20	85	70	130
1,4-Dichlorobenzene	1	16.4798	0	20	82	70	130
1,2-Dichlorobenzene	1	16.4782	0	20	82	70	130
Isopropylbenzene	1	18.9525	0	20	95	70	130
Cyclohexanone	1	76.0325	0	100	76	50	150
Camphene	1	16.8219	0	20	84	70	130
1,2,3-Trichloropropane	1	15.0584	0	20	75	70	130
2-Chlorotoluene	1	17.843	0	20	89	70	130
p-Ethyltoluene	1	17.9157	0	20	90	70	130
4-Chlorotoluene	1	18.431	0	20	92	70	130
n-Propylbenzene	1	18.5825	0	20	93	70	130
Bromobenzene	1	16.6335	0	20	83	70	130
1,3,5-Trimethylbenzene	1	18.239	0	20	91	70	130
Butyl methacrylate	1	16.196	0	20	81	70	130
t-Butylbenzene	1	18.498	0	20	92	70	130
1,2,4-Trimethylbenzene	1	18.0403	0	20	90	70	130
sec-Butylbenzene	1	18.8188	0	20	94	70	130
4-Isopropyltoluene	1	18.4908	0	20	92	70	130
n-Butylbenzene	1	18.1964	0	20	91	70	130
p-Diethylbenzene	1	17.4812	0	20	87	70	130
1,2,4,5-Tetramethylbenzene	1	16.5814	0	20	83	70	130
1,2-Dibromo-3-Chloropropane	1	16.7835	0	20	84	50	150
Camphor	1	175.3736	0	200	88	20	150
Hexachlorobutadiene	1	16.0227	0	20	80	50	150
1,2,4-Trichlorobenzene	1	16.4586	0	20	82	70	130
1,2,3-Trichlorobenzene	1	16.726	0	20	84	70	130
Naphthalene	1	18.3293	0	20	92	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Quantitation Report (QT Reviewed)

SampleID : MBS
Data File: 2M142568.D
Acq On : 10/01/20 03:57

Operator : JR
Sam Mult : 1 Vial# : 15
Misc : A,5ML

Qt Meth : 2M_A0929.M
Qt On : 10/01/20 05:43
Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-3020\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	358966	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	329928	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	177050	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	106200	30.88	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.93%			
39) 1,2-Dichloroethane-d4	4.910	67	53766	30.28	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.93%			
66) Toluene-d8	5.952	98	391856	30.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.20%			
76) Bromofluorobenzene	7.366	174	145123	31.21	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.03%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	61888	16.9067	ug/l	81
6) Dichlorodifluoromethane	1.685	85	70750	19.1885	ug/l	100
7) Chloromethane	1.855	50	67322	16.3938	ug/l	75
8) Bromomethane	2.258	94	33974	17.0339	ug/l	97
9) Vinyl Chloride	1.959	62	84033	18.8474	ug/l	97
10) Chloroethane	2.343	64	51041	17.1603	ug/l	96
11) Trichlorofluoromethane	2.569	101	123333	18.0517	ug/l	99
12) Ethyl ether	2.800	59	40260	16.9701	ug/l	99
13) Furan	2.843	39	68300	17.0247	ug/l	95
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	45988	19.2000	ug/l	92
15) Methylene Chloride	3.422	84	55298	16.3138	ug/l	99
16) Acrolein	2.922	56	38350	70.7435	ug/l	95
17) Acrylonitrile	3.623	53	19706	16.7535	ug/l	97
18) Iodomethane	3.154	142	39723	15.5652	ug/l	96
19) Acetone	3.044	43	75489	78.1588	ug/l	100
20) Carbon Disulfide	3.221	76	161885	17.6912	ug/l	100
21) t-Butyl Alcohol	3.477	59	25725	82.5733	ug/l	96
22) n-Hexane	3.873	57	48784	17.2069	ug/l	98
23) Di-isopropyl-ether	4.032	45	140869	17.3552	ug/l	100
24) 1,1-Dichloroethene	3.014	61	83855	18.1641	ug/l	96
25) Methyl Acetate	3.318	43	46969	21.5583	ug/l	100
26) Methyl-t-butyl ether	3.642	73	150384	15.5914	ug/l	99
27) 1,1-Dichloroethane	4.001	63	98628	17.5200	ug/l	98
28) trans-1,2-Dichloroethene	3.654	96	58972	17.3224	ug/l	98
29) Ethyl-t-butyl ether	4.288	59	153252	17.4475	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	95037	16.6095	ug/l	96
31) Bromochloromethane	4.568	49	45117	17.7510	ug/l	98
32) 2,2-Dichloropropane	4.416	77	68257m	13.5325	ug/l	
33) Ethyl acetate	4.440	43	47646m	16.2812	ug/l	
34) 1,4-Dioxane	5.489	88	34245	832.3859	ug/l	96
35) 1,1-Dichloropropene	4.824	75	83609	17.5171	ug/l	99
36) Chloroform	4.605	83	108355	17.6757	ug/l	99
38) Cyclohexane	4.769	56	77530	18.3288	ug/l	98
40) 1,2-Dichloroethane	4.952	62	82589	15.9012	ug/l	100
41) 2-Butanone	4.410	43	23420m	15.6321	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	98292	18.0853	ug/l	99
43) Carbon Tetrachloride	4.830	117	79386	17.2547	ug/l	96
44) Vinyl Acetate	4.026	43	110855	12.1779	ug/l	100
45) Bromodichloromethane	5.568	83	85046	15.4928	ug/l	99
46) Methylcyclohexane	5.416	83	72935	17.7821	ug/l	98
47) Dibromomethane	5.495	174	40138	16.3021	ug/l	96
48) 1,2-Dichloropropane	5.428	63	59051	17.4932	ug/l	97
49) Trichloroethene	5.300	130	65926	17.3700	ug/l	94
50) Benzene	4.952	78	228741	17.0208	ug/l	100
51) tert-Amyl methyl ether	4.989	73	156382	16.5462	ug/l	98
53) Iso-propylacetate	4.946	43	90997	15.8372	ug/l	97
54) Methyl methacrylate	5.452	41	46507	16.7983	ug/l	97
55) Dibromochloromethane	6.422	129	68719	17.7718	ug/l	99
56) 2-Chloroethylvinylether	5.708	63	22694m	53.7099	ug/l	
57) cis-1,3-Dichloropropene	5.806	75	86614	16.3886	ug/l	99
58) trans-1,3-Dichloropropene	6.086	75	81549	16.2052	ug/l	97
59) Ethyl methacrylate	6.111	41	46017	15.8171	ug/l	98
60) 1,1,2-Trichloroethane	6.196	97	54326	16.6380	ug/l	96
61) 1,2-Dibromoethane	6.495	107	59472	17.2732	ug/l	96
62) 1,3-Dichloropropane	6.287	76	95150	16.6699	ug/l	99
63) 4-Methyl-2-Pentanone	5.867	43	50534	16.4050	ug/l	99
64) 2-Hexanone	6.306	43	35236	15.3674	ug/l	96
65) Tetrachloroethene	6.287	164	50838	17.1189	ug/l	100
67) Toluene	5.989	92	149372	17.1393	ug/l	95

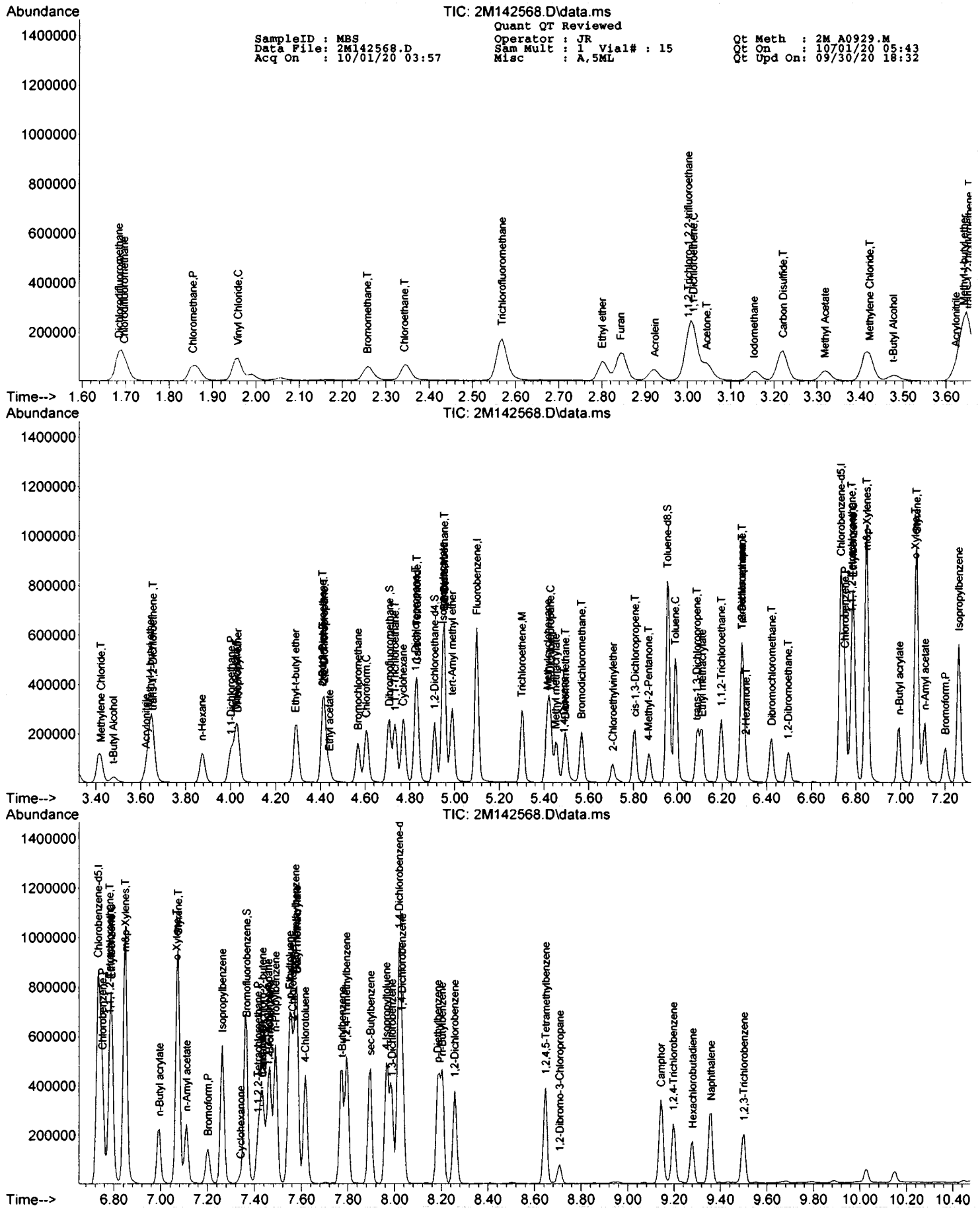
Quantitation Report (QT Reviewed)

SampleID : MBS Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142568.D Sam Mult : 1 Vial# : 15 Qt On : 10/01/20 05:43
Acq On : 10/01/20 03:57 Misc : A,5ML Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-3020\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	58058	16.6255	ug/l	100
69)	Chlorobenzene	6.751	112	162922	16.7529	ug/l	100
71)	n-Butyl acrylate	6.995	55	105257	17.6221	ug/l	100
72)	n-Amyl acetate	7.110	43	86883	16.5143	ug/l	97
73)	Bromoform	7.202	173	45703	17.2965	ug/l	98
74)	Ethylbenzene	6.787	106	71496	17.7434	ug/l	90
75)	1,1,2,2-Tetrachloroethane	7.415	83	76032	16.0453	ug/l	94
77)	Styrene	7.074	104	183172	18.1096	ug/l	97
78)	m&p-Xylenes	6.848	106	212338	34.6187	ug/l	96
79)	o-Xylene	7.068	106	106558	18.3557	ug/l	97
80)	trans-1,4-Dichloro-2-b...	7.434	53	16980	15.1780	ug/l	68
81)	1,3-Dichlorobenzene	7.988	146	121892	16.9231	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	121463	16.4798	ug/l	98
83)	1,2-Dichlorobenzene	8.257	146	111899	16.4782	ug/l	98
84)	Isopropylbenzene	7.263	105	268360	18.9525	ug/l	99
85)	Cyclohexanone	7.342	55	9306	76.0325	ug/l	93
86)	Camphene	7.434	93	70297	16.8219	ug/l	94
87)	1,2,3-Trichloropropane	7.458	75	77330	15.0584	ug/l	94
88)	2-Chlorotoluene	7.562	91	151938	17.8430	ug/l	99
89)	p-Ethyltoluene	7.549	105	255267	17.9157	ug/l	98
90)	4-Chlorotoluene	7.616	91	159858	18.4310	ug/l	97
91)	n-Propylbenzene	7.488	91	316688	18.5825	ug/l	96
92)	Bromobenzene	7.464	77	157659	16.6335	ug/l	95
93)	1,3,5-Trimethylbenzene	7.574	105	201325	18.2390	ug/l	99
94)	Butyl methacrylate	7.580	41	69852	16.1960	ug/l	97
95)	t-Butylbenzene	7.775	119	199186	18.4980	ug/l	99
96)	1,2,4-Trimethylbenzene	7.793	105	214503	18.0403	ug/l	99
97)	sec-Butylbenzene	7.897	105	250457	18.8188	ug/l	99
98)	4-Isopropyltoluene	7.964	119	208994	18.4908	ug/l	98
99)	n-Butylbenzene	8.202	91	212769	18.1964	ug/l	96
100)	p-Diethylbenzene	8.183	119	111707	17.4812	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.647	119	154940	16.5814	ug/l	95
102)	1,2-Dibromo-3-Chloropr...	8.708	157	16162	16.7835	ug/l	78
103)	Camphor	9.141	95	66654	175.3736	ug/l	96
104)	Hexachlorobutadiene	9.281	225	23484	16.0227	ug/l	95
105)	1,2,4-Trichlorobenzene	9.195	180	57417	16.4586	ug/l	97
106)	1,2,3-Trichlorobenzene	9.500	180	48403	16.7260	ug/l	96
107)	Naphthalene	9.360	128	178084	18.3293	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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TIC: 2M142568.D\data.ms
Quant QT Reviewed
SampleID : MBS
Data File: 2M142568.D
Acq On : 10/01/20 03:57
Operator : JR
Sam Mult : 1 Vial# : 15
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 10/01/20 05:43
Qt Upd On: 09/30/20 18:32
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

Data File: Spike or Dup: 2M142640.D
Sample ID: MBS89414
Analysis Date: 10/2/2020 1:34:00 PM
Non Spike(If applicable):
Inst Blank(If applicable):
Method: ~~Not~~ 8260D 10/14/20
Matrix: Aqueous
QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	13.902	0	20	70	50	150
Dichlorodifluoromethane	1	0	0	20	0*	50	150
Chloromethane	1	3.7894	0	20	19*	50	150
Bromomethane	1	7.8592	0	20	39*	50	150
Vinyl Chloride	1	5.4193	0	20	27*	50	150
Chloroethane	1	10.0671	0	20	50	50	150
Trichlorofluoromethane	1	11.847	0	20	59	50	150
Ethyl ether	1	16.3458	0	20	82	50	150
Furan	1	15.405	0	20	77	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	16.5393	0	20	83	50	150
Methylene Chloride	1	15.8018	0	20	79	70	130
Acrolein	1	52.0799	0	100	52	50	150
Acrylonitrile	1	16.5982	0	20	83	50	150
Iodomethane	1	8.1946	0	20	41*	50	150
Acetone	1	78.8766	0	100	79	50	150
Carbon Disulfide	1	12.976	0	20	65	50	150
t-Butyl Alcohol	1	84.4388	0	100	84	50	150
n-Hexane	1	15.9263	0	20	80	70	130
Di-isopropyl-ether	1	15.9728	0	20	80	70	130
1,1-Dichloroethene	1	15.2964	0	20	76	70	130
Methyl Acetate	1	23.5294	0	20	118	50	150
Methyl-t-butyl ether	1	14.624	0	20	73	70	130
1,1-Dichloroethane	1	16.1133	0	20	81	70	130
trans-1,2-Dichloroethene	1	15.6648	0	20	78	70	130
Ethyl-t-butyl ether	1	18.0354	0	20	90	70	130
cis-1,2-Dichloroethene	1	16.4007	0	20	82	70	130
Bromochloromethane	1	17.7674	0	20	89	70	130
2,2-Dichloropropane	1	16.7374	0	20	84	70	130
Ethyl acetate	1	17.178	0	20	86	50	150
1,4-Dioxane	1	689.93	0	1000	69	50	150
1,1-Dichloropropene	1	16.5414	0	20	83	70	130
Chloroform	1	16.7645	0	20	84	70	130
Cyclohexane	1	15.8245	0	20	79	70	130
1,2-Dichloroethane	1	15.74	0	20	79	70	130
2-Butanone	1	16.277	0	20	81	50	150
1,1,1-Trichloroethane	1	16.4921	0	20	82	70	130
Carbon Tetrachloride	1	16.7237	0	20	84	50	150
Vinyl Acetate	1	12.5264	0	20	63	50	150
Bromodichloromethane	1	15.6788	0	20	78	70	130
Methylcyclohexane	1	15.7813	0	20	79	70	130
Dibromomethane	1	16.9108	0	20	85	70	130
1,2-Dichloropropane	1	16.6943	0	20	83	70	130
Trichloroethene	1	16.1154	0	20	81	70	130
Benzene	1	15.8931	0	20	79	70	130
tert-Amyl methyl ether	1	16.2669	0	20	81	70	130
Iso-propylacetate	1	17.2823	0	20	86	70	130
Methyl methacrylate	1	17.6084	0	20	88	70	130
Dibromochloromethane	1	17.8667	0	20	89	70	130
2-Chloroethylvinylether	1	71.0422	0	20	355*	70	130
cis-1,3-Dichloropropene	1	16.2355	0	20	81	70	130
trans-1,3-Dichloropropene	1	17.1064	0	20	86	70	130
Ethyl methacrylate	1	16.479	0	20	82	70	130
1,1,2-Trichloroethane	1	17.6332	0	20	88	70	130
1,2-Dibromoethane	1	17.0472	0	20	85	70	130
1,3-Dichloropropane	1	16.9794	0	20	85	70	130
4-Methyl-2-Pentanone	1	18.889	0	20	94	50	150
2-Hexanone	1	18.4763	0	20	92	50	150
Tetrachloroethene	1	16.3531	0	20	82	50	150
Toluene	1	16.5487	0	20	83	70	130
1,1,1,2-Tetrachloroethane	1	16.9017	0	20	85	70	130
Chlorobenzene	1	16.5043	0	20	83	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

Method: ~~NotFd~~ 8260D 10/14/96 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	19.4454	0	20	97	70	130
n-Amyl acetate	1	19.8476	0	20	99	70	130
Bromoform	1	18.781	0	20	94	70	130
Ethylbenzene	1	18.1317	0	20	91	70	130
1,1,2,2-Tetrachloroethane	1	17.3632	0	20	87	70	130
Styrene	1	17.8072	0	20	89	70	130
m&p-Xylenes	1	34.3629	0	40	86	70	130
o-Xylene	1	17.6318	0	20	88	70	130
trans-1,4-Dichloro-2-butene	1	15.8404	0	20	79	50	150
1,3-Dichlorobenzene	1	16.5411	0	20	83	70	130
1,4-Dichlorobenzene	1	16.1292	0	20	81	70	130
1,2-Dichlorobenzene	1	16.8318	0	20	84	70	130
Isopropylbenzene	1	18.2195	0	20	91	70	130
Cyclohexanone	1	144.3645	0	100	144	50	150
Camphene	1	15.8752	0	20	79	70	130
1,2,3-Trichloropropane	1	16.6581	0	20	83	70	130
2-Chlorotoluene	1	18.293	0	20	91	70	130
p-Ethyltoluene	1	16.7489	0	20	84	70	130
4-Chlorotoluene	1	18.9244	0	20	95	70	130
n-Propylbenzene	1	17.8364	0	20	89	70	130
Bromobenzene	1	16.5862	0	20	83	70	130
1,3,5-Trimethylbenzene	1	18.1374	0	20	91	70	130
Butyl methacrylate	1	16.5609	0	20	83	70	130
t-Butylbenzene	1	18.1429	0	20	91	70	130
1,2,4-Trimethylbenzene	1	17.3528	0	20	87	70	130
sec-Butylbenzene	1	18.1581	0	20	91	70	130
4-Isopropyltoluene	1	17.5357	0	20	88	70	130
n-Butylbenzene	1	17.6812	0	20	88	70	130
p-Diethylbenzene	1	16.7852	0	20	84	70	130
1,2,4,5-Tetramethylbenzene	1	15.7619	0	20	79	70	130
1,2-Dibromo-3-Chloropropane	1	18.8113	0	20	94	50	150
Camphor	1	359.4415	0	200	180*	20	150
Hexachlorobutadiene	1	16.2116	0	20	81	50	150
1,2,4-Trichlorobenzene	1	15.875	0	20	79	70	130
1,2,3-Trichlorobenzene	1	16.5588	0	20	83	70	130
Naphthalene	1	17.6416	0	20	88	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Quantitation Report (QT Reviewed)

SampleID : MBS Operator : WP Qt Meth : 2M_A0929.M
Data File: 2M142640.D Sam Mult : 1 Vial# : 14 Qt On : 10/02/20 14:51
Acq On : 10/02/20 13:34 Misc : A,5ML Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	399723	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	362205	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	192446	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	112738	29.44	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.13%			
39) 1,2-Dichloroethane-d4	4.910	67	59032	29.86	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.53%			
66) Toluene-d8	5.952	98	425309	30.01	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.03%			
76) Bromofluorobenzene	7.367	174	158220	31.30	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.33%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	56667	13.9020	ug/l	7
6) Dichlorodifluoromethane	1.691	85	3094m	0.7536	ug/l	
7) Chloromethane	1.855	50	17958m	3.9271	ug/l	
8) Bromomethane	2.258	94	17455	7.8592	ug/l	96
9) Vinyl Chloride	1.953	62	26906	5.4193	ug/l	99
10) Chloroethane	2.343	64	33343	10.0671	ug/l	99
11) Trichlorofluoromethane	2.569	101	90131	11.8470	ug/l	98
12) Ethyl ether	2.800	59	43182	16.3458	ug/l	98
13) Furan	2.843	39	68819	15.4050	ug/l	94
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	44113	16.5393	ug/l	94
15) Methylene Chloride	3.416	84	59644	15.8018	ug/l	100
16) Acrolein	2.922	56	31438m	52.0799	ug/l	
17) Acrylonitrile	3.617	53	21740	16.5982	ug/l	98
18) Iodomethane	3.148	142	23013	8.1946	ug/l	98
19) Acetone	3.044	43	84832	78.8766	ug/l	97
20) Carbon Disulfide	3.221	76	132220	12.9760	ug/l	100
21) t-Butyl Alcohol	3.477	59	29293	84.4388	ug/l	98
22) n-Hexane	3.873	57	50280	15.9263	ug/l	97
23) Di-isopropyl-ether	4.026	45	144368	15.9728	ug/l	99
24) 1,1-Dichloroethene	3.008	61	78634	15.2964	ug/l	91
25) Methyl Acetate	3.318	43	57084	23.5294	ug/l	100
26) Methyl-t-butyl ether	3.635	73	157068	14.6240	ug/l	99
27) 1,1-Dichloroethane	4.001	63	101008	16.1133	ug/l	99
28) trans-1,2-Dichloroethene	3.654	96	59384	15.6648	ug/l	98
29) Ethyl-t-butyl ether	4.288	59	176403	18.0354	ug/l	97
30) cis-1,2-Dichloroethene	4.410	61	104497	16.4007	ug/l	94
31) Bromochloromethane	4.568	49	50286	17.7674	ug/l	93
32) 2,2-Dichloropropane	4.416	77	94008	16.7374	ug/l	99
33) Ethyl acetate	4.434	43	55978m	17.1780	ug/l	
34) 1,4-Dioxane	5.495	88	31607	689.9300	ug/l	94
35) 1,1-Dichloropropene	4.824	75	87916	16.5414	ug/l	96
36) Chloroform	4.605	83	114438	16.7645	ug/l	100
38) Cyclohexane	4.769	56	74537	15.8245	ug/l	99
40) 1,2-Dichloroethane	4.952	62	91034	15.7400	ug/l	99
41) 2-Butanone	4.410	43	27155m	16.2770	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	99810	16.4921	ug/l	99
43) Carbon Tetrachloride	4.830	117	85679	16.7237	ug/l	92
44) Vinyl Acetate	4.026	43	126974	12.5264	ug/l	100
45) Bromodichloromethane	5.568	83	95839	15.6788	ug/l	99
46) Methylcyclohexane	5.416	83	72078	15.7813	ug/l	98
47) Dibromomethane	5.495	174	46364	16.9108	ug/l	98
48) 1,2-Dichloropropane	5.428	63	62753	16.6943	ug/l	96
49) Trichloroethene	5.300	130	68109	16.1154	ug/l	92
50) Benzene	4.952	78	237837	15.8931	ug/l	100
51) tert-Amyl methyl ether	4.989	73	171198	16.2669	ug/l	98
53) Iso-propylacetate	4.946	43	109015	17.2823	ug/l	97
54) Methyl methacrylate	5.452	41	53519	17.6084	ug/l	94
55) Dibromochloromethane	6.422	129	75845	17.8667	ug/l	99
56) 2-Chloroethylvinylether	5.708	63	32954	71.0422	ug/l	94
57) cis-1,3-Dichloropropene	5.806	75	94199	16.2355	ug/l	98
58) trans-1,3-Dichloropropene	6.092	75	94506	17.1064	ug/l	98
59) Ethyl methacrylate	6.111	41	52633	16.4790	ug/l	98
60) 1,1,2-Trichloroethane	6.196	97	63208	17.6332	ug/l	95
61) 1,2-Dibromoethane	6.495	107	64436	17.0472	ug/l	99
62) 1,3-Dichloropropane	6.287	76	106398	16.9794	ug/l	98
63) 4-Methyl-2-Pentanone	5.867	43	63878	18.8890	ug/l	96
64) 2-Hexanone	6.306	43	46509	18.4763	ug/l	98
65) Tetrachloroethene	6.287	164	53315	16.3531	ug/l	96
67) Toluene	5.989	92	158334	16.5487	ug/l	100

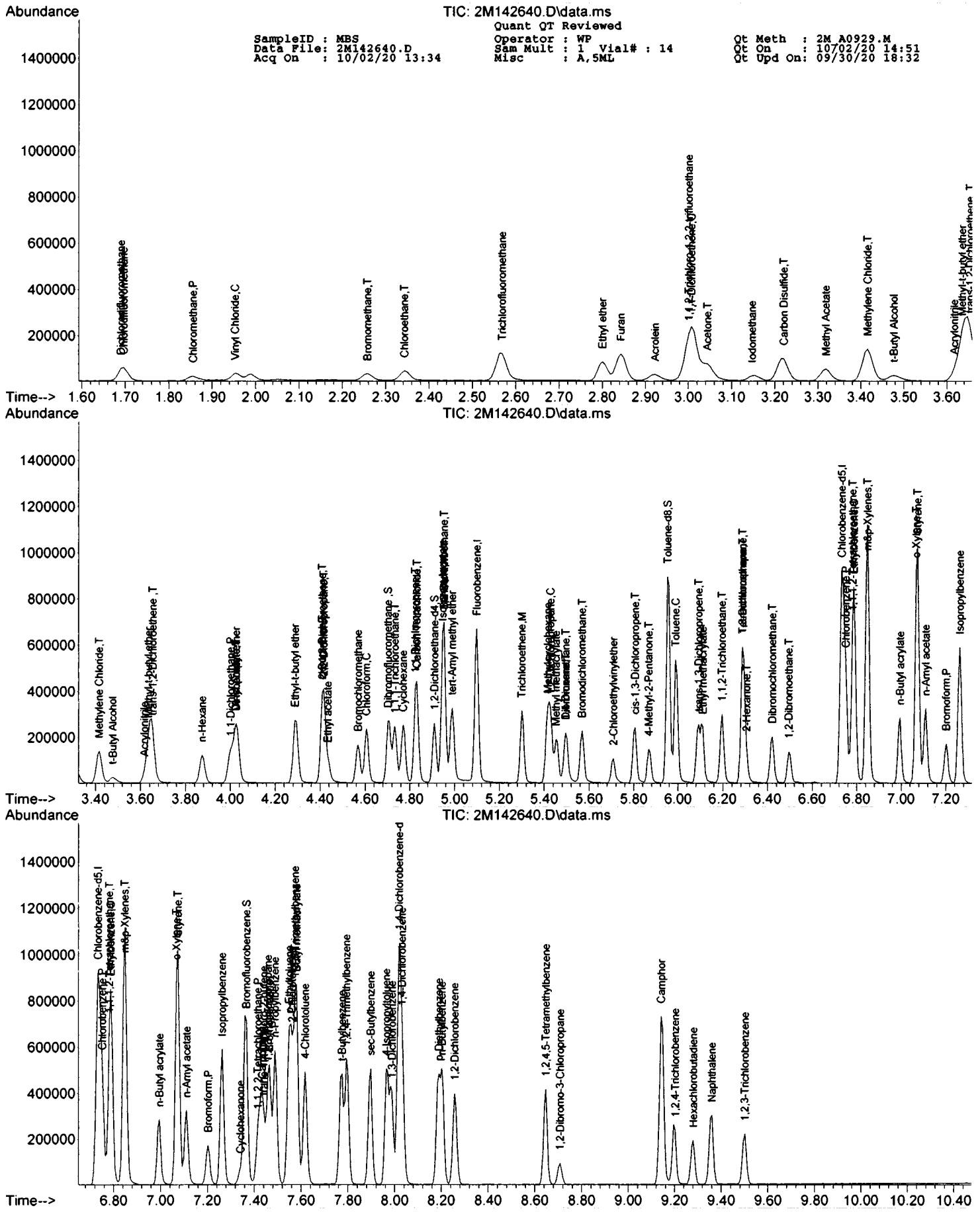
Quantitation Report (QT Reviewed)

SampleID : MBS
Data File: 2M142640.D
Acq On : 10/02/20 13:34
Operator : WP
Sam Mult : 1 Vial# : 14
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 10/02/20 14:51
Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	64797	16.9017	ug/l	100
69)	Chlorobenzene	6.751	112	176206	16.5043	ug/l	98
71)	n-Butyl acrylate	6.995	55	126248	19.4454	ug/l	100
72)	n-Amyl acetate	7.110	43	113500	19.8476	ug/l	98
73)	Bromoform	7.202	173	53941	18.7810	ug/l	98
74)	Ethylbenzene	6.787	106	79414	18.1317	ug/l	97
75)	1,1,2,2-Tetrachloroethane	7.415	83	89432	17.3632	ug/l	98
77)	Styrene	7.074	104	195776	17.8072	ug/l	96
78)	m&p-Xylenes	6.848	106	229097	34.3629	ug/l	93
79)	o-Xylene	7.068	106	111256	17.6318	ug/l	95
80)	trans-1,4-Dichloro-2-b...	7.440	53	19262	15.8404	ug/l	79
81)	1,3-Dichlorobenzene	7.988	146	129501	16.5411	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	129216	16.1292	ug/l	98
83)	1,2-Dichlorobenzene	8.257	146	124240	16.8318	ug/l	98
84)	Isopropylbenzene	7.263	105	280415	18.2195	ug/l	99
85)	Cyclohexanone	7.342	55	19206	144.3645	ug/l	94
86)	Camphene	7.434	93	72110	15.8752	ug/l	99
87)	1,2,3-Trichloropropane	7.458	75	92984	16.6581	ug/l	96
88)	2-Chlorotoluene	7.562	91	169315	18.2930	ug/l	98
89)	p-Ethyltoluene	7.549	105	259395	16.7489	ug/l	97
90)	4-Chlorotoluene	7.616	91	178411	18.9244	ug/l	96
91)	n-Propylbenzene	7.488	91	330406	17.8364	ug/l	96
92)	Bromobenzene	7.464	77	170882	16.5862	ug/l	94
93)	1,3,5-Trimethylbenzene	7.574	105	217613	18.1374	ug/l	97
94)	Butyl methacrylate	7.580	41	77637	16.5609	ug/l	98
95)	t-Butylbenzene	7.775	119	212350	18.1429	ug/l	99
96)	1,2,4-Trimethylbenzene	7.793	105	224270	17.3528	ug/l	97
97)	sec-Butylbenzene	7.897	105	262678	18.1581	ug/l	98
98)	4-Isopropyltoluene	7.964	119	215434	17.5357	ug/l	99
99)	n-Butylbenzene	8.202	91	224723	17.6812	ug/l	95
100)	p-Diethylbenzene	8.190	119	116587	16.7852	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	160090	15.7619	ug/l	95
102)	1,2-Dibromo-3-Chloropr...	8.708	157	19690	18.8113	ug/l	81
103)	Camphor	9.141	95	148492	359.4415	ug/l	98
104)	Hexachlorobutadiene	9.281	225	25827	16.2116	ug/l	94
105)	1,2,4-Trichlorobenzene	9.202	180	60197	15.8750	ug/l	97
106)	1,2,3-Trichlorobenzene	9.500	180	52086	16.5588	ug/l	97
107)	Naphthalene	9.360	128	186307	17.6416	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : MBS
Data File: 2M142640.D
Acq On : 10/02/20 13:34
Operator : WP
Sam Mult : 1 Vial# : 14
Misc : A,5ML
Qt Meth : 2M_A0929.M
Qt On : 10/02/20 14:51
Qt Upd On: 09/30/20 18:32
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->

Abundance
TIC: 2M142640.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 2M142640.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
m&p-Xylenes,T
n-Butyl acrylate
o-Xylene,T
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M83277.D	AD19444-006(MS:AD19444-005	9/28/2020 2:00:00 PM
Non Spike(If applicable):	11M83275.D	AD19444-005	9/28/2020 1:23:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	17.7876	0	20	89	50	150
Dichlorodifluoromethane	1	17.4028	0	20	87	50	150
Chloromethane	1	20.2743	0	20	101	50	150
Bromomethane	1	21.5621	0	20	108	50	150
Vinyl Chloride	1	24.8567	1.7444	20	116	50	150
Chloroethane	1	23.4261	0	20	117	50	150
Trichlorofluoromethane	1	23.9721	0	20	120	50	150
Ethyl ether	1	20.8081	0	20	104	50	150
Furan	1	19.3463	0	20	97	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.3824	0	20	112	50	150
Methylene Chloride	1	19.5976	0	20	98	70	130
Acrolein	1	104.7156	0	100	105	50	150
Acrylonitrile	1	20.6733	0	20	103	50	150
Iodomethane	1	19.936	0	20	100	50	150
Acetone	1	91.1837	0	100	91	50	150
Carbon Disulfide	1	23.2062	0	20	116	50	150
t-Butyl Alcohol	1	132.1803	0	100	132	50	150
n-Hexane	1	22.8418	0	20	114	70	130
Di-isopropyl-ether	1	19.9274	0	20	100	70	130
1,1-Dichloroethene	1	22.0424	0	20	110	70	130
Methyl Acetate	1	21.1922	0	20	106	50	150
Methyl-t-butyl ether	1	20.679	0	20	103	70	130
1,1-Dichloroethane	1	20.1569	0	20	101	70	130
trans-1,2-Dichloroethene	1	25.4973	3.9	20	108	70	130
Ethyl-t-butyl ether	1	19.7556	0	20	99	70	130
cis-1,2-Dichloroethene	1	43.612	22.1821	20	107	70	130
Bromochloromethane	1	20.578	0	20	103	70	130
2,2-Dichloropropane	1	23.4365	0	20	117	70	130
Ethyl acetate	1	20.2099	0	20	101	50	150
1,4-Dioxane	1	1565.411	0	1000	157*	50	150
1,1-Dichloropropene	1	21.0418	0	20	105	70	130
Chloroform	1	20.6245	0	20	103	70	130
Cyclohexane	1	21.8072	0	20	109	70	130
1,2-Dichloroethane	1	19.2524	0	20	96	70	130
2-Butanone	1	18.7391	0	20	94	50	150
1,1,1-Trichloroethane	1	21.3523	0	20	107	70	130
Carbon Tetrachloride	1	22.2655	0	20	111	50	150
Vinyl Acetate	1	20.2779	0	20	101	50	150
Bromodichloromethane	1	20.5372	0	20	103	70	130
Methylcyclohexane	1	22.7907	0	20	114	70	130
Dibromomethane	1	20.5197	0	20	103	70	130
1,2-Dichloropropane	1	20.4779	0	20	102	70	130
Trichloroethene	1	35.2046	13.7964	20	107	70	130
Benzene	1	20.9878	0	20	105	70	130
tert-Amyl methyl ether	1	21.6003	0	20	108	70	130
Iso-propylacetate	1	20.0521	0	20	100	70	130
Methyl methacrylate	1	18.5848	0	20	93	70	130
Dibromochloromethane	1	20.5864	0	20	103	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	20.4173	0	20	102	70	130
trans-1,3-Dichloropropene	1	20.2921	0	20	101	70	130
Ethyl methacrylate	1	19.8567	0	20	99	70	130
1,1,2-Trichloroethane	1	18.8234	0	20	94	70	130
1,2-Dibromoethane	1	19.2695	0	20	96	70	130
1,3-Dichloropropane	1	19.2176	0	20	96	70	130
4-Methyl-2-Pentanone	1	19.343	0	20	97	50	150
2-Hexanone	1	19.3555	0	20	97	50	150
Tetrachloroethene	1	21.8122	1.9776	20	99	50	150
Toluene	1	19.9721	0	20	100	70	130
1,1,1,2-Tetrachloroethane	1	19.5644	0	20	98	70	130
Chlorobenzene	1	19.4903	0	20	97	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

Method: 8260C | Matrix: Aqueous | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	20.288	0	20	101	70	130
n-Amyl acetate	1	21.6876	0	20	108	70	130
Bromoform	**1**	**20.0425**	**0**	**20**	**100**	**70**	**130**
Ethylbenzene	**1**	**19.6959**	**0**	**20**	**98**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**19.6263**	**0**	**20**	**98**	**70**	**130**
Styrene	**1**	**19.9901**	**0**	**20**	**100**	**70**	**130**
m&p-Xylenes	**1**	**41.1553**	**0**	**40**	**103**	**70**	**130**
o-Xylene	**1**	**20.0574**	**0**	**20**	**100**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	19.228	0	20	96	50	150
1,3-Dichlorobenzene	**1**	**19.2697**	**0**	**20**	**96**	**70**	**130**
1,4-Dichlorobenzene	**1**	**19.1821**	**0**	**20**	**96**	**70**	**130**
1,2-Dichlorobenzene	**1**	**18.9743**	**0**	**20**	**95**	**70**	**130**
Isopropylbenzene	**1**	**20.5698**	**0**	**20**	**103**	**70**	**130**
Cyclohexanone	1	136.6914	0	100	137	50	150
Camphene	1	18.9126	0	20	95	70	130
1,2,3-Trichloropropane	**1**	**20.0781**	**0**	**20**	**100**	**70**	**130**
2-Chlorotoluene	1	19.3567	0	20	97	70	130
p-Ethyltoluene	1	20.7709	0	20	104	70	130
4-Chlorotoluene	1	19.0566	0	20	95	70	130
n-Propylbenzene	**1**	**20.5565**	**0**	**20**	**103**	**70**	**130**
Bromobenzene	1	19.4734	0	20	97	70	130
1,3,5-Trimethylbenzene	**1**	**19.7257**	**0**	**20**	**99**	**70**	**130**
Butyl methacrylate	1	20.1034	0	20	101	70	130
t-Butylbenzene	**1**	**19.9421**	**0**	**20**	**100**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**19.3258**	**0**	**20**	**97**	**70**	**130**
sec-Butylbenzene	**1**	**20.232**	**0**	**20**	**101**	**70**	**130**
4-Isopropyltoluene	**1**	**20.2029**	**0**	**20**	**101**	**70**	**130**
n-Butylbenzene	**1**	**20.5646**	**0**	**20**	**103**	**70**	**130**
p-Diethylbenzene	1	20.8262	0	20	104	70	130
1,2,4,5-Tetramethylbenzene	1	19.9076	0	20	100	70	130
1,2-Dibromo-3-Chloropropane	1	20.4065	0	20	102	50	150
Camphor	1	199.5934	0	200	100	20	150
Hexachlorobutadiene	1	22.2233	0	20	111	50	150
1,2,4-Trichlorobenzene	1	20.2396	0	20	101	70	130
1,2,3-Trichlorobenzene	1	22.2651	0	20	111	70	130
Naphthalene	1	22.6727	0	20	113	50	150

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M83278.D	AD19444-007(MSD:AD19444-0	9/28/2020 2:18:00 PM
Non Spike(If applicable):	11M83275.D	AD19444-005	9/28/2020 1:23:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	16.6997	0	20	83	50	150
Dichlorodifluoromethane	1	16.0171	0	20	80	50	150
Chloromethane	1	18.4928	0	20	92	50	150
Bromomethane	1	20.7411	0	20	104	50	150
Vinyl Chloride	1	22.3415	1.7444	20	103	50	150
Chloroethane	1	22.0282	0	20	110	50	150
Trichlorofluoromethane	1	23.1221	0	20	116	50	150
Ethyl ether	1	23.3321	0	20	117	50	150
Furan	1	21.2538	0	20	106	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	25.5872	0	20	128	50	150
Methylene Chloride	1	21.9511	0	20	110	70	130
Acrolein	1	111.6828	0	100	112	50	150
Acrylonitrile	1	21.5573	0	20	108	50	150
Iodomethane	1	26.647	0	20	133	50	150
Acetone	1	95.5081	0	100	96	50	150
Carbon Disulfide	1	24.5145	0	20	123	50	150
t-Butyl Alcohol	1	142.9745	0	100	143	50	150
n-Hexane	1	24.5437	0	20	123	70	130
Di-isopropyl-ether	1	18.8909	0	20	94	70	130
1,1-Dichloroethene	1	23.4656	0	20	117	70	130
Methyl Acetate	1	21.1563	0	20	106	50	150
Methyl-t-butyl ether	1	22.4132	0	20	112	70	130
1,1-Dichloroethane	1	19.4707	0	20	97	70	130
trans-1,2-Dichloroethene	1	28.6604	3.9	20	124	70	130
Ethyl-t-butyl ether	1	19.0134	0	20	95	70	130
cis-1,2-Dichloroethene	1	40.9691	22.1821	20	94	70	130
Bromochloromethane	1	3.4395	0	20	17*	70	130
2,2-Dichloropropane	1	22.1609	0	20	111	70	130
Ethyl acetate	1	17.1424	0	20	86	50	150
1,4-Dioxane	1	1363.209	0	1000	136	50	150
1,1-Dichloropropene	1	19.0611	0	20	95	70	130
Chloroform	1	19.5334	0	20	98	70	130
Cyclohexane	1	20.3105	0	20	102	70	130
1,2-Dichloroethane	1	18.372	0	20	92	70	130
2-Butanone	1	19.8447	0	20	99	50	150
1,1,1-Trichloroethane	1	19.4913	0	20	97	70	130
Carbon Tetrachloride	1	20.7677	0	20	104	50	150
Vinyl Acetate	1	19.4125	0	20	97	50	150
Bromodichloromethane	1	19.6323	0	20	98	70	130
Methylcyclohexane	1	22.2347	0	20	111	70	130
Dibromomethane	1	20.4772	0	20	102	70	130
1,2-Dichloropropane	1	19.9068	0	20	100	70	130
Trichloroethene	1	32.5663	13.7964	20	94	70	130
Benzene	1	19.3378	0	20	97	70	130
tert-Amyl methyl ether	1	19.7101	0	20	99	70	130
Iso-propylacetate	1	18.1645	0	20	91	70	130
Methyl methacrylate	1	16.3491	0	20	82	70	130
Dibromochloromethane	1	19.1673	0	20	96	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	19.0334	0	20	95	70	130
trans-1,3-Dichloropropene	1	18.5218	0	20	93	70	130
Ethyl methacrylate	1	18.7698	0	20	94	70	130
1,1,2-Trichloroethane	1	17.9516	0	20	90	70	130
1,2-Dibromoethane	1	18.033	0	20	90	70	130
1,3-Dichloropropane	1	17.6984	0	20	88	70	130
4-Methyl-2-Pentanone	1	18.1429	0	20	91	50	150
2-Hexanone	1	17.4855	0	20	87	50	150
Tetrachloroethene	1	20.6112	1.9776	20	93	50	150
Toluene	1	18.3254	0	20	92	70	130
1,1,1,2-Tetrachloroethane	1	17.7769	0	20	89	70	130
Chlorobenzene	1	17.8473	0	20	89	70	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

Method: 8260C | Matrix: Aqueous | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	19.3405	0	20	97	70	130
n-Amyl acetate	1	19.7381	0	20	99	70	130
Bromoform	**1**	**19.5851**	**0**	**20**	**98**	**70**	**130**
Ethylbenzene	**1**	**18.549**	**0**	**20**	**93**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**18.2032**	**0**	**20**	**91**	**70**	**130**
Styrene	**1**	**18.7567**	**0**	**20**	**94**	**70**	**130**
m&p-Xylenes	**1**	**36.5981**	**0**	**40**	**91**	**70**	**130**
o-Xylene	**1**	**18.7739**	**0**	**20**	**94**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	16.1787	0	20	81	50	150
1,3-Dichlorobenzene	**1**	**17.991**	**0**	**20**	**90**	**70**	**130**
1,4-Dichlorobenzene	**1**	**17.608**	**0**	**20**	**88**	**70**	**130**
1,2-Dichlorobenzene	**1**	**18.2837**	**0**	**20**	**91**	**70**	**130**
Isopropylbenzene	**1**	**19.6117**	**0**	**20**	**98**	**70**	**130**
Cyclohexanone	1	128.642	0	100	129	50	150
Camphene	1	12.9062	0	20	65*	70	130
1,2,3-Trichloropropane	**1**	**18.3521**	**0**	**20**	**92**	**70**	**130**
2-Chlorotoluene	1	18.8607	0	20	94	70	130
p-Ethyltoluene	1	18.89	0	20	94	70	130
4-Chlorotoluene	1	18.3543	0	20	92	70	130
n-Propylbenzene	**1**	**19.2631**	**0**	**20**	**96**	**70**	**130**
Bromobenzene	1	18.0172	0	20	90	70	130
1,3,5-Trimethylbenzene	**1**	**18.0977**	**0**	**20**	**90**	**70**	**130**
Butyl methacrylate	1	19.0226	0	20	95	70	130
t-Butylbenzene	**1**	**18.6775**	**0**	**20**	**93**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**17.9974**	**0**	**20**	**90**	**70**	**130**
sec-Butylbenzene	**1**	**19.417**	**0**	**20**	**97**	**70**	**130**
4-Isopropyltoluene	**1**	**19.2238**	**0**	**20**	**96**	**70**	**130**
n-Butylbenzene	**1**	**19.8657**	**0**	**20**	**99**	**70**	**130**
p-Diethylbenzene	1	20.109	0	20	101	70	130
1,2,4,5-Tetramethylbenzene	1	19.4461	0	20	97	70	130
1,2-Dibromo-3-Chloropropane	1	19.9792	0	20	100	50	150
Camphor	1	200.6323	0	200	100	20	150
Hexachlorobutadiene	1	22.0267	0	20	110	50	150
1,2,4-Trichlorobenzene	1	20.2752	0	20	101	70	130
1,2,3-Trichlorobenzene	1	22.9264	0	20	115	70	130
Naphthalene	1	22.8694	0	20	114	50	150

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Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89372

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M83278.D	AD19444-007(MSD:AD19444-0	9/28/2020 2:18:00 PM
Duplicate(If applicable):	11M83277.D	AD19444-006(MS:AD19444-005	9/28/2020 2:00:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	16.6997	17.7876	6.3	30
Dichlorodifluoromethane	**1**	**16.0171**	**17.4028**	**8.3**	**30**
Chloromethane	**1**	**18.4928**	**20.2743**	**9.2**	**30**
Bromomethane	**1**	**20.7411**	**21.5621**	**3.9**	**30**
Vinyl Chloride	**1**	**22.3415**	**24.8567**	**11**	**40**
Chloroethane	**1**	**22.0282**	**23.4261**	**6.2**	**30**
Trichlorofluoromethane	**1**	**23.1221**	**23.9721**	**3.6**	**30**
Ethyl ether	1	23.3321	20.8081	11	30
Furan	1	21.2538	19.3463	9.4	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**25.5872**	**22.3824**	**13**	**30**
Methylene Chloride	**1**	**21.9511**	**19.5976**	**11**	**30**
Acrolein	**1**	**111.6828**	**104.7156**	**6.4**	**30**
Acrylonitrile	**1**	**21.5573**	**20.6733**	**4.2**	**30**
Iodomethane	1	26.647	19.936	29	30
Acetone	**1**	**95.5081**	**91.1837**	**4.6**	**30**
Carbon Disulfide	**1**	**24.5145**	**23.2062**	**5.5**	**30**
t-Butyl Alcohol	**1**	**142.9745**	**132.1803**	**7.8**	**30**
n-Hexane	1	24.5437	22.8418	7.2	30
Di-isopropyl-ether	1	18.8909	19.9274	5.3	30
1,1-Dichloroethene	**1**	**23.4656**	**22.0424**	**6.3**	**40**
Methyl Acetate	1	21.1563	21.1922	0.17	30
Methyl-t-butyl ether	**1**	**22.4132**	**20.679**	**8**	**30**
1,1-Dichloroethane	**1**	**19.4707**	**20.1569**	**3.5**	**40**
trans-1,2-Dichloroethene	**1**	**28.6604**	**25.4973**	**12**	**30**
Ethyl-t-butyl ether	1	19.0134	19.7556	3.8	30
cis-1,2-Dichloroethene	**1**	**40.9691**	**43.612**	**6.2**	**30**
Bromochloromethane	1	3.4395	20.578	143*	30
2,2-Dichloropropane	1	22.1609	23.4365	5.6	30
Ethyl acetate	1	17.1424	20.2099	16	30
1,4-Dioxane	**1**	**1363.209**	**1565.411**	**14**	**30**
1,1-Dichloropropene	1	19.0611	21.0418	9.9	30
Chloroform	**1**	**19.5334**	**20.6245**	**5.4**	**40**
Cyclohexane	1	20.3105	21.8072	7.1	30
1,2-Dichloroethane	**1**	**18.372**	**19.2524**	**4.7**	**40**
2-Butanone	**1**	**19.8447**	**18.7391**	**5.7**	**40**
1,1,1-Trichloroethane	**1**	**19.4913**	**21.3523**	**9.1**	**30**
Carbon Tetrachloride	**1**	**20.7677**	**22.2655**	**7**	**40**
Vinyl Acetate	1	19.4125	20.2779	4.4	30
Bromodichloromethane	**1**	**19.6323**	**20.5372**	**4.5**	**30**
Methylcyclohexane	1	22.2347	22.7907	2.5	30
Dibromomethane	1	20.4772	20.5197	0.21	30
1,2-Dichloropropane	**1**	**19.9068**	**20.4779**	**2.8**	**30**
Trichloroethene	**1**	**32.5663**	**35.2046**	**7.8**	**40**
Benzene	**1**	**19.3378**	**20.9878**	**8.2**	**40**
tert-Amyl methyl ether	1	19.7101	21.6003	9.2	30
Iso-propylacetate	1	18.1645	20.0521	9.9	30
Methyl methacrylate	1	16.3491	18.5848	13	30
Dibromochloromethane	**1**	**19.1673**	**20.5864**	**7.1**	**30**
2-Chloroethylvinylether	**1**	**0**	**0**	**NA**	**30**
cis-1,3-Dichloropropene	**1**	**19.0334**	**20.4173**	**7**	**30**
trans-1,3-Dichloropropene	**1**	**18.5218**	**20.2921**	**9.1**	**30**
Ethyl methacrylate	1	18.7698	19.8567	5.6	30
1,1,2-Trichloroethane	**1**	**17.9516**	**18.8234**	**4.7**	**30**
1,2-Dibromoethane	1	18.033	19.2695	6.6	30
1,3-Dichloropropane	**1**	**17.6984**	**19.2176**	**8.2**	**30**
4-Methyl-2-Pentanone	**1**	**18.1429**	**19.343**	**6.4**	**30**
2-Hexanone	**1**	**17.4855**	**19.3555**	**10**	**30**
Tetrachloroethene	**1**	**20.6112**	**21.8122**	**5.7**	**40**
Toluene	**1**	**18.3254**	**19.9721**	**8.6**	**40**
1,1,1,2-Tetrachloroethane	1	17.7769	19.5644	9.6	30
Chlorobenzene	**1**	**17.8473**	**19.4903**	**8.8**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89372

Method: 8260C | Matrix: Aqueous | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	19.3405	20.288	4.8	30
n-Amyl acetate	1	19.7381	21.6876	9.4	30
Bromoform	**1**	**19.5851**	**20.0425**	**2.3**	**30**
Ethylbenzene	**1**	**18.549**	**19.6959**	**6**	**30**
1,1,2,2-Tetrachloroethane	**1**	**18.2032**	**19.6263**	**7.5**	**30**
Styrene	**1**	**18.7567**	**19.9901**	**6.4**	**30**
m&p-Xylenes	**1**	**36.5981**	**41.1553**	**12**	**30**
o-Xylene	**1**	**18.7739**	**20.0574**	**6.6**	**30**
trans-1,4-Dichloro-2-butene	1	16.1787	19.228	17	30
1,3-Dichlorobenzene	**1**	**17.991**	**19.2697**	**6.9**	**30**
1,4-Dichlorobenzene	**1**	**17.608**	**19.1821**	**8.6**	**40**
1,2-Dichlorobenzene	**1**	**18.2837**	**18.9743**	**3.7**	**40**
Isopropylbenzene	**1**	**19.6117**	**20.5698**	**4.8**	**30**
Cyclohexanone	1	128.642	136.6914	6.1	30
Camphene	1	12.9062	18.9126	38*	30
1,2,3-Trichloropropane	**1**	**18.3521**	**20.0781**	**9**	**30**
2-Chlorotoluene	1	18.8607	19.3567	2.6	30
p-Ethyltoluene	1	18.89	20.7709	9.5	30
4-Chlorotoluene	1	18.3543	19.0566	3.8	30
n-Propylbenzene	**1**	**19.2631**	**20.5565**	**6.5**	**40**
Bromobenzene	1	18.0172	19.4734	7.8	30
1,3,5-Trimethylbenzene	**1**	**18.0977**	**19.7257**	**8.6**	**30**
Butyl methacrylate	1	19.0226	20.1034	5.5	30
t-Butylbenzene	**1**	**18.6775**	**19.9421**	**6.5**	**30**
1,2,4-Trimethylbenzene	**1**	**17.9974**	**19.3258**	**7.1**	**30**
sec-Butylbenzene	**1**	**19.417**	**20.232**	**4.1**	**40**
4-Isopropyltoluene	**1**	**19.2238**	**20.2029**	**5**	**30**
n-Butylbenzene	**1**	**19.8657**	**20.5646**	**3.5**	**30**
p-Diethylbenzene	1	20.109	20.8262	3.5	30
1,2,4,5-Tetramethylbenzene	1	19.4461	19.9076	2.3	30
1,2-Dibromo-3-Chloropropane	1	19.9792	20.4065	2.1	30
Camphor	1	200.6323	199.5934	0.52	30
Hexachlorobutadiene	1	22.0267	22.2233	0.89	30
1,2,4-Trichlorobenzene	1	20.2752	20.2396	0.18	30
1,2,3-Trichlorobenzene	1	22.9264	22.2651	2.9	30
Naphthalene	1	22.8694	22.6727	0.86	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

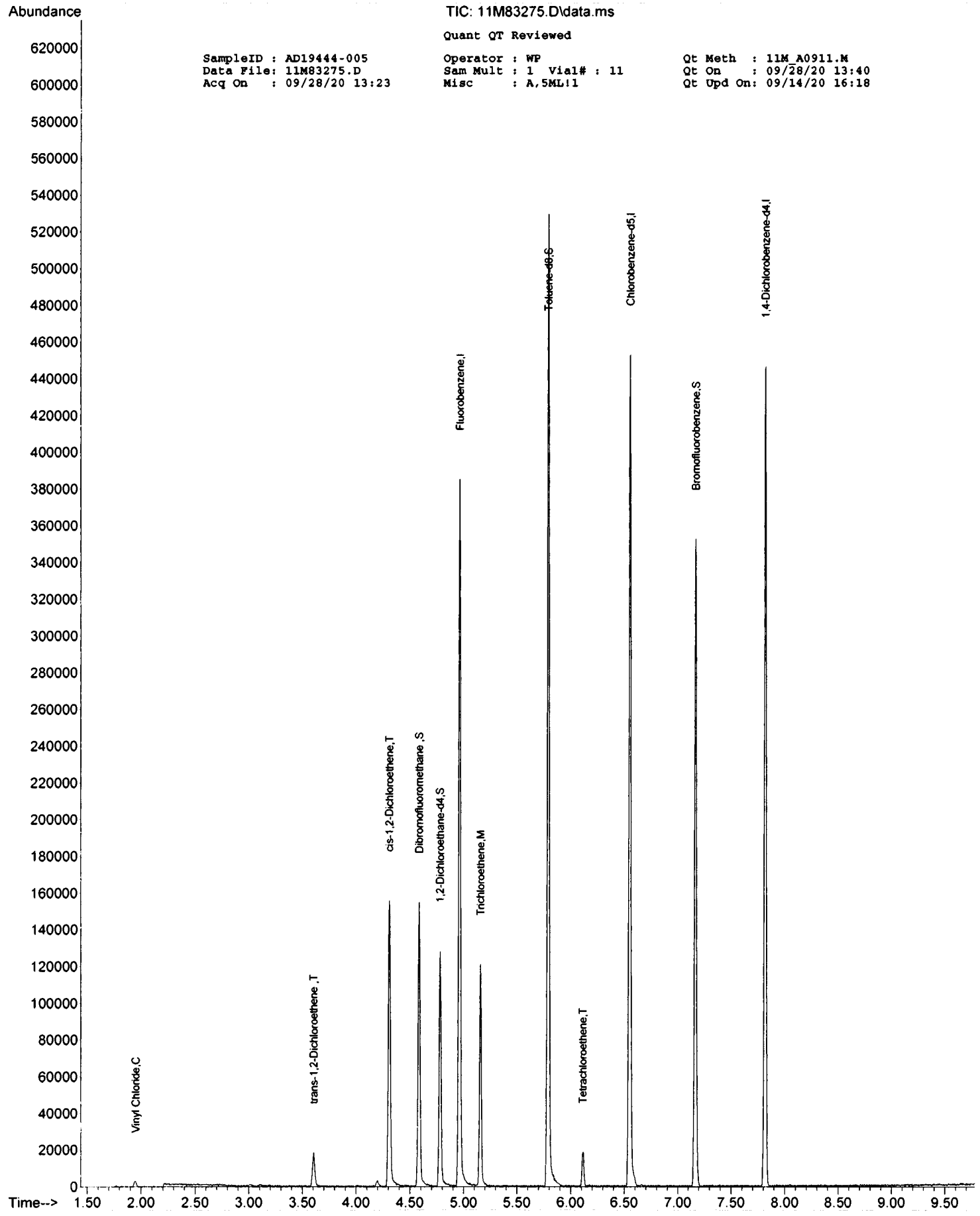
Quantitation Report (QT Reviewed)

SampleID : AD19444-005 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83275.D Sam Mult : 1 Vial# : 11 Qt On : 09/28/20 13:40
Acq On : 09/28/20 13:23 Misc : A,5ML!1 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	242536	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.549	117	196054	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	88261	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	60720	30.03	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.10%			
39) 1,2-Dichloroethane-d4	4.778	67	30800	29.04	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.80%			
66) Toluene-d8	5.787	98	248335	28.96	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.53%			
76) Bromofluorobenzene	7.167	174	71904	32.32	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.73%			
Target Compounds						Qvalue
9) Vinyl Chloride	1.949	62	3076	1.7444	ug/l	83
28) trans-1,2-Dichloroethene	3.604	96	6446	3.9000	ug/l	70
30) cis-1,2-Dichloroethene	4.308	61	60339	22.1821	ug/l	52
49) Trichloroethene	5.157	130	26499	13.7964	ug/l	97
65) Tetrachloroethene	6.112	164	3028	1.9776	ug/l	73

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
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Quant QT Reviewed
SampleID : AD19444-005
Data File: 11M83275.D
Acq On : 09/28/20 13:23
Operator : WP
Sam Mult : 1 Vial# : 11
Misc : A,5ML;1
Qt Meth : 11M_A0911.M
Qt On : 09/28/20 13:40
Qt Upd On: 09/14/20 16:18
Vinyl Chloride,C
trans-1,2-Dichloroethene,T
cis-1,2-Dichloroethene,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Quantitation Report (QT Reviewed)

SampleID : AD19444-006(MS:AD19 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83277.D Sam Mult : 1 Vial# : 13 Qt On : 09/28/20 14:25
Acq On : 09/28/20 14:00 Misc : A,5ML!1 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	249397	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.549	117	200720	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	101064	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	64750	31.14	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.80%			
39) 1,2-Dichloroethane-d4	4.778	67	31317	28.71	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.70%			
66) Toluene-d8	5.787	98	256117	29.18	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.27%			
76) Bromofluorobenzene	7.167	174	78795	30.93	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.10%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	39659	17.7876	ug/l	54
6) Dichlorodifluoromethane	1.672	85	23308	17.4028	ug/l	99
7) Chloromethane	1.844	50	28583	20.2743	ug/l	99
8) Bromomethane	2.241	94	31496	21.5621	ug/l	97
9) Vinyl Chloride	1.943	62	45072	24.8567	ug/l	91
10) Chloroethane	2.328	64	28844	23.4261	ug/l	97
11) Trichlorofluoromethane	2.550	101	71854	23.9721	ug/l	99
12) Ethyl ether	2.781	59	21337	20.8081	ug/l	60
13) Furan	2.820	39	36774m	19.3463	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.974	101	27088	22.3824	ug/l	96
15) Methylene Chloride	3.373	84	35327	19.5976	ug/l	51
16) Acrolein	2.887	56	22476	104.7156	ug/l	92
17) Acrylonitrile	3.572	53	11201	20.6733	ug/l	79
18) Iodomethane	3.119	142	33936	19.9360	ug/l	88
19) Acetone	3.009	43	39137	91.1837	ug/l	93
20) Carbon Disulfide	3.186	76	95179	23.2062	ug/l	100
21) t-Butyl Alcohol	3.434	59	13741	132.1803	ug/l	99
22) n-Hexane	3.813	57	29142	22.8418	ug/l	88
23) Di-isopropyl-ether	3.955	45	70421	19.9274	ug/l	57
24) 1,1-Dichloroethene	2.984	61	48668	22.0424	ug/l	69
25) Methyl Acetate	3.280	43	19046	21.1922	ug/l	100
26) Methyl-t-butyl ether	3.595	73	78870	20.6790	ug/l	83
27) 1,1-Dichloroethane	3.926	63	57764	20.1569	ug/l	100
28) trans-1,2-Dichloroethene	3.607	96	43334	25.4973	ug/l	69
29) Ethyl-t-butyl ether	4.196	59	76609	19.7556	ug/l	86
30) cis-1,2-Dichloroethene	4.308	61	121988	43.6120	ug/l	60
31) Bromochloromethane	4.456	49	24387	20.5780	ug/l	32
32) 2,2-Dichloropropane	4.315	77	53065	23.4365	ug/l	90
33) Ethyl acetate	4.328	43	28360m	20.2099	ug/l	
34) 1,4-Dioxane	5.334	88	24148	1565.4106	ug/l	69
35) 1,1-Dichloropropene	4.701	75	52300	21.0418	ug/l	95
36) Chloroform	4.492	83	65265	20.6245	ug/l	97
38) Cyclohexane	4.652	56	45592m	21.8072	ug/l	
40) 1,2-Dichloroethane	4.820	62	47014	19.2524	ug/l	91
41) 2-Butanone	4.302	43	11235	18.7391	ug/l	59
42) 1,1,1-Trichloroethane	4.614	97	61037	21.3523	ug/l	95
43) Carbon Tetrachloride	4.707	117	53486	22.2655	ug/l	99
44) Vinyl Acetate	3.945	43	84543	20.2779	ug/l	100
45) Bromodichloromethane	5.411	83	49018	20.5372	ug/l	99
46) Methylcyclohexane	5.267	83	45016	22.7907	ug/l	70
47) Dibromomethane	5.344	174	23652	20.5197	ug/l	97
48) 1,2-Dichloropropane	5.279	63	33851	20.4779	ug/l	97
49) Trichloroethene	5.157	130	69531	35.2046	ug/l	95
50) Benzene	4.820	78	148123	20.9878	ug/l	100
51) tert-Amyl methyl ether	4.855	73	83543	21.6003	ug/l	94
53) Iso-propylacetate	4.813	43	44598	20.0521	ug/l	78
54) Methyl methacrylate	5.299	41	24971m	18.5848	ug/l	
55) Dibromochloromethane	6.238	129	38435	20.5864	ug/l	100
57) cis-1,3-Dichloropropene	5.640	75	54218	20.4173	ug/l	95
58) trans-1,3-Dichloropropene	5.916	75	51189	20.2921	ug/l	97
59) Ethyl methacrylate	5.932	41	23114m	19.8567	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	33437	18.8234	ug/l	85
61) 1,2-Dibromoethane	6.315	107	36120	19.2695	ug/l	94
62) 1,3-Dichloropropane	6.112	76	56399	19.2176	ug/l	99
63) 4-Methyl-2-Pentanone	5.701	43	26194	19.3430	ug/l	87
64) 2-Hexanone	6.125	43	18584	19.3555	ug/l	90
65) Tetrachloroethene	6.112	164	34193	21.8122	ug/l	94
67) Toluene	5.823	92	97534	19.9721	ug/l	95
68) 1,1,1,2-Tetrachloroethane	6.598	133	35620	19.5644	ug/l	100

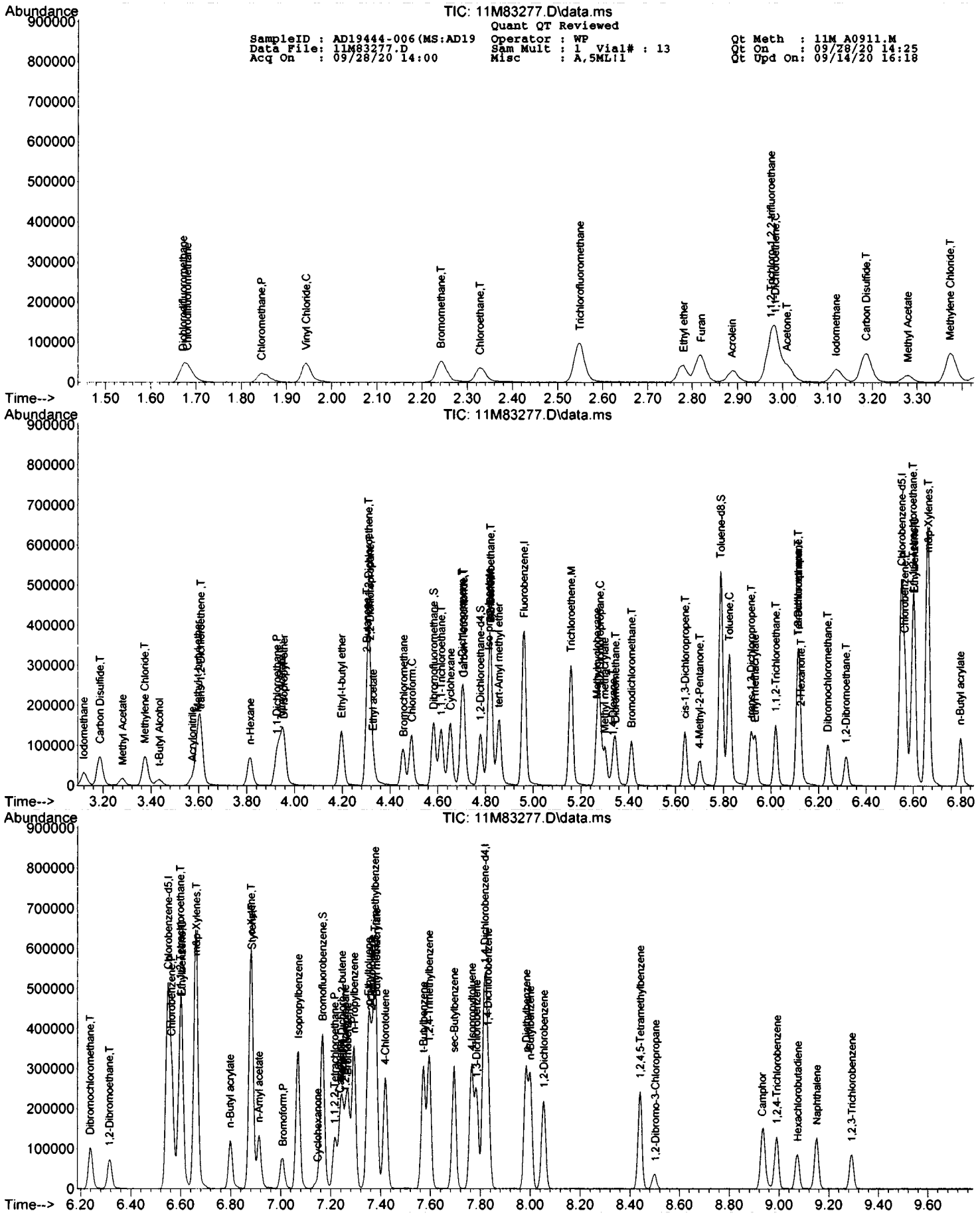
Quantitation Report (QT Reviewed)

SampleID : AD19444-006(MS:AD19 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83277.D Sam Mult : 1 Vial# : 13 Qt On : 09/28/20 14:25
Acq On : 09/28/20 14:00 Misc : A,5ML!1 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69)	Chlorobenzene	6.562	112	108393	19.4903	ug/l	99
71)	n-Butyl acrylate	6.797	55	54136	20.2880	ug/l	89
72)	n-Amyl acetate	6.913	43	43154	21.6876	ug/l	76
73)	Bromoform	7.009	173	24297	20.0425	ug/l	91
74)	Ethylbenzene	6.604	106	48872	19.6959	ug/l	97
75)	1,1,2,2-Tetrachloroethane	7.215	83	46606	19.6263	ug/l	96
77)	Styrene	6.884	104	115501	19.9901	ug/l	96
78)	m&p-Xylenes	6.662	106	142159	41.1553	ug/l	96
79)	o-Xylene	6.881	106	67690	20.0574	ug/l	100
80)	trans-1,4-Dichloro-2-b...	7.244	53	12963	19.2280	ug/l	75
81)	1,3-Dichlorobenzene	7.784	146	77276	19.2697	ug/l	98
82)	1,4-Dichlorobenzene	7.829	146	79685	19.1821	ug/l	99
83)	1,2-Dichlorobenzene	8.054	146	69263	18.9743	ug/l	98
84)	Isopropylbenzene	7.070	105	169844	20.5698	ug/l	98
85)	Cyclohexanone	7.148	55	5551	136.6914	ug/l	83
86)	Camphene	7.238	93	36969	18.9126	ug/l	94
87)	1,2,3-Trichloropropane	7.257	75	54732	20.0781	ug/l	93
88)	2-Chlorotoluene	7.363	91	103200	19.3567	ug/l	98
89)	p-Ethyltoluene	7.350	105	171020	20.7709	ug/l	98
90)	4-Chlorotoluene	7.418	91	104704	19.0566	ug/l	97
91)	n-Propylbenzene	7.292	91	199174	20.5565	ug/l	97
92)	Bromobenzene	7.266	77	95742	19.4734	ug/l	89
93)	1,3,5-Trimethylbenzene	7.376	105	136521	19.7257	ug/l	96
94)	Butyl methacrylate	7.382	41	35169m	20.1034	ug/l	
95)	t-Butylbenzene	7.572	119	128229	19.9421	ug/l	99
96)	1,2,4-Trimethylbenzene	7.594	105	138487	19.3258	ug/l	99
97)	sec-Butylbenzene	7.694	105	155864	20.2320	ug/l	98
98)	4-Isopropyltoluene	7.765	119	132037	20.2029	ug/l	99
99)	n-Butylbenzene	8.000	91	136207	20.5646	ug/l	98
100)	p-Diethylbenzene	7.984	119	72709	20.8262	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.440	119	96336	19.9076	ug/l	100
102)	1,2-Dibromo-3-Chloropr...	8.501	157	8209	20.4065	ug/l	100
103)	Camphor	8.932	95	31265	199.5934	ug/l	94
104)	Hexachlorobutadiene	9.073	225	11538	22.2233	ug/l	98
105)	1,2,4-Trichlorobenzene	8.990	180	28546	20.2396	ug/l	98
106)	1,2,3-Trichlorobenzene	9.292	180	20578	22.2651	ug/l	96
107)	Naphthalene	9.151	128	78707	22.6727	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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SampleID : AD19444-006(MS:AD19
Data File: 11M83277.D
Acq On : 09/28/20 14:00
Operator : WP
Sam Mult : 1 Vial# : 13
Misc : A,5ML;1
Qt Meth : 11M_A0911.M
Qt On : 09/28/20 14:25
Qt Upd On: 09/14/20 16:18
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->

Abundance
TIC: 11M83277.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Ethyl acetate
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
Time-->

Abundance
TIC: 11M83277.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : AD19444-007(MSD:AD1 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83278.D Sam Mult : 1 Vial# : 14 Qt On : 09/28/20 14:37
Acq On : 09/28/20 14:18 Misc : A,5ML!1 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.961	96	264010	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	217404	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	108771	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	68299	31.03	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.43%			
39) 1,2-Dichloroethane-d4	4.778	67	33897	29.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.87%			
66) Toluene-d8	5.788	98	275708	29.00	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.67%			
76) Bromofluorobenzene	7.167	174	85706	31.26	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.20%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.681	51	39415	16.6997	ug/l	55
6) Dichlorodifluoromethane	1.669	85	22709	16.0171	ug/l	96
7) Chloromethane	1.848	50	27599	18.4928	ug/l	96
8) Bromomethane	2.241	94	32072m	20.7411	ug/l	
9) Vinyl Chloride	1.943	62	42885	22.3415	ug/l	93
10) Chloroethane	2.328	64	28712	22.0282	ug/l	83
11) Trichlorofluoromethane	2.550	101	73367	23.1221	ug/l	98
12) Ethyl ether	2.778	59	25327	23.3321	ug/l	56
13) Furan	2.820	39	42767m	21.2538	ug/l	
14) 1,1,2-Trichloro-1,2,2-...	2.977	101	32781	25.5872	ug/l	96
15) Methylene Chloride	3.376	84	41888	21.9511	ug/l	57
16) Acrolein	2.891	56	25376	111.6828	ug/l	94
17) Acrylonitrile	3.566	53	12375	21.5573	ug/l	92
18) Iodomethane	3.119	142	48618	26.6470	ug/l	98
19) Acetone	3.010	43	43395	95.5081	ug/l	91
20) Carbon Disulfide	3.186	76	106436	24.5145	ug/l	100
21) t-Butyl Alcohol	3.434	59	15734	142.9745	ug/l	92
22) n-Hexane	3.813	57	33148	24.5437	ug/l	85
23) Di-isopropyl-ether	3.955	45	70670	18.8909	ug/l	62
24) 1,1-Dichloroethene	2.984	61	54846	23.4656	ug/l	62
25) Methyl Acetate	3.276	43	20127	21.1563	ug/l	100
26) Methyl-t-butyl ether	3.598	73	90493	22.4132	ug/l	81
27) 1,1-Dichloroethane	3.929	63	59067	19.4707	ug/l	95
28) trans-1,2-Dichloroethene	3.608	96	51564	28.6604	ug/l	64
29) Ethyl-t-butyl ether	4.196	59	78051	19.0134	ug/l	84
30) cis-1,2-Dichloroethene	4.309	61	121310	40.9691	ug/l	63
31) Bromochloromethane	4.489	49	4315	3.4395	ug/l	49
32) 2,2-Dichloropropane	4.315	77	53117	22.1609	ug/l	94
33) Ethyl acetate	4.331	43	25465	17.1424	ug/l	99
34) 1,4-Dioxane	5.334	88	22261	1363.2095	ug/l	67
35) 1,1-Dichloropropene	4.701	75	50153	19.0611	ug/l	99
36) Chloroform	4.489	83	65434	19.5334	ug/l	97
38) Cyclohexane	4.653	56	44951m	20.3105	ug/l	
40) 1,2-Dichloroethane	4.820	62	47493	18.3720	ug/l	99
41) 2-Butanone	4.305	43	12595m	19.8447	ug/l	
42) 1,1,1-Trichloroethane	4.614	97	58982	19.4913	ug/l	92
43) Carbon Tetrachloride	4.707	117	52811	20.7677	ug/l	99
44) Vinyl Acetate	3.945	43	85677	19.4125	ug/l	100
45) Bromodichloromethane	5.411	83	49604	19.6323	ug/l	99
46) Methylcyclohexane	5.270	83	46491	22.2347	ug/l	69
47) Dibromomethane	5.344	174	24986	20.4772	ug/l	96
48) 1,2-Dichloropropane	5.280	63	34835	19.9068	ug/l	97
49) Trichloroethene	5.157	130	68089	32.5663	ug/l	96
50) Benzene	4.820	78	144475	19.3378	ug/l	100
51) tert-Amyl methyl ether	4.855	73	80699	19.7101	ug/l	95
53) Iso-propylacetate	4.813	43	43758	18.1645	ug/l	80
54) Methyl methacrylate	5.302	41	23793m	16.3491	ug/l	
55) Dibromochloromethane	6.238	129	38760	19.1673	ug/l	100
57) cis-1,3-Dichloropropene	5.640	75	54744	19.0334	ug/l	96
58) trans-1,3-Dichloropropene	5.916	75	50607	18.5218	ug/l	97
59) Ethyl methacrylate	5.935	41	23665m	18.7698	ug/l	
60) 1,1,2-Trichloroethane	6.019	97	34539	17.9516	ug/l	83
61) 1,2-Dibromoethane	6.315	107	36612	18.0330	ug/l	99
62) 1,3-Dichloropropane	6.112	76	56258	17.6984	ug/l	97
63) 4-Methyl-2-Pentanone	5.704	43	26611	18.1429	ug/l	84
64) 2-Hexanone	6.122	43	18184	17.4855	ug/l	84
65) Tetrachloroethene	6.115	164	34996	20.6112	ug/l	94
67) Toluene	5.823	92	96931	18.3254	ug/l	99
68) 1,1,1,2-Tetrachloroethane	6.595	133	35056	17.7769	ug/l	96

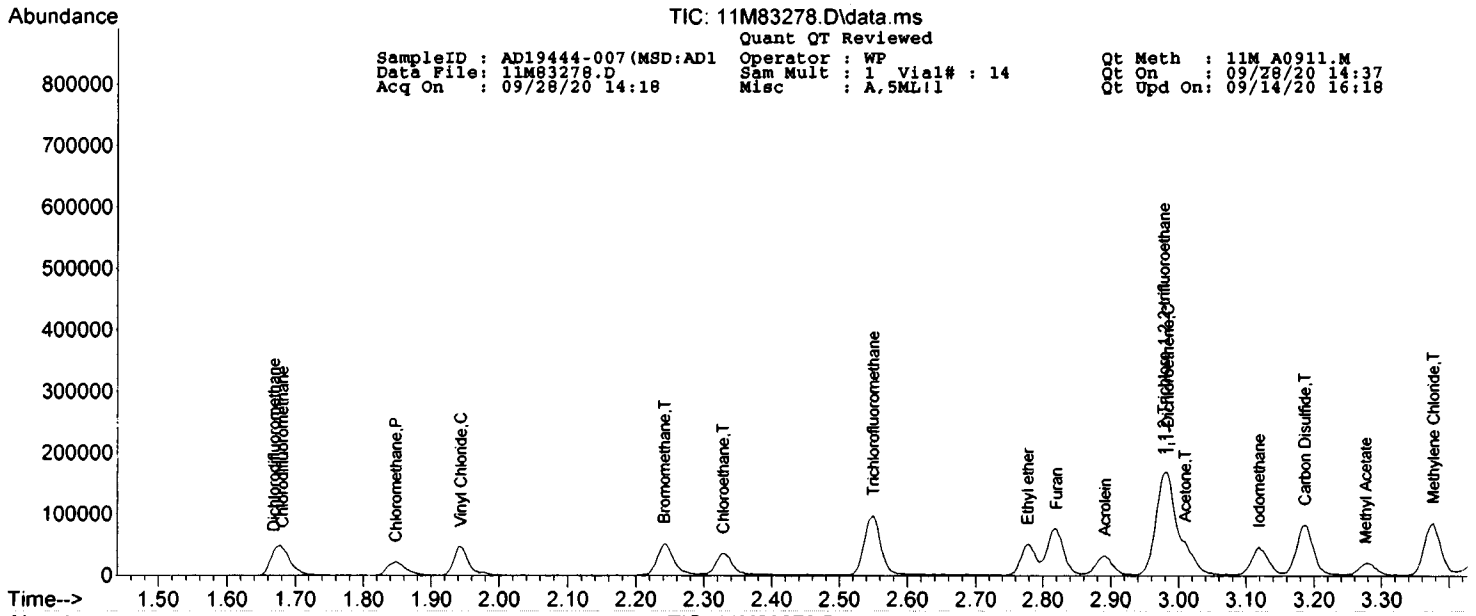
Quantitation Report (QT Reviewed)

SampleID : AD19444-007(MSD:AD1 Operator : WP Qt Meth : 11M_A0911.M
Data File: 11M83278.D Sam Mult : 1 Vial# : 14 Qt On : 09/28/20 14:37
Acq On : 09/28/20 14:18 Misc : A,5ML!1 Qt Upd On: 09/14/20 16:18

Data Path : G:\GcMsData\2020\GCMS_11\Data\09-28-20\
Qt Path : G:\GcMsData\2020\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69)	Chlorobenzene	6.566	112	107506	17.8473	ug/l	96
71)	n-Butyl acrylate	6.797	55	55543	19.3405	ug/l	88
72)	n-Amyl acetate	6.913	43	42270	19.7381	ug/l	73
73)	Bromoform	7.006	173	25553	19.5851	ug/l	93
74)	Ethylbenzene	6.604	106	49536	18.5490	ug/l	94
75)	1,1,2,2-Tetrachloroethane	7.215	83	46523	18.2032	ug/l	96
77)	Styrene	6.884	104	116639	18.7567	ug/l	89
78)	m&p-Xylenes	6.659	106	136058	36.5981	ug/l	95
79)	o-Xylene	6.878	106	68190	18.7739	ug/l	96
80)	trans-1,4-Dichloro-2-b...	7.244	53	11739	16.1787	ug/l	67
81)	1,3-Dichlorobenzene	7.784	146	77650	17.9910	ug/l	99
82)	1,4-Dichlorobenzene	7.829	146	78724	17.6080	ug/l	99
83)	1,2-Dichlorobenzene	8.054	146	71832	18.2837	ug/l	99
84)	Isopropylbenzene	7.067	105	174281	19.6117	ug/l	98
85)	Cyclohexanone	7.141	55	5631	128.6420	ug/l	84
86)	Camphene	7.238	93	27152	12.9062	ug/l	99
87)	1,2,3-Trichloropropane	7.257	75	53842	18.3521	ug/l	91
88)	2-Chlorotoluene	7.363	91	108224	18.8607	ug/l	96
89)	p-Ethyltoluene	7.350	105	167394	18.8900	ug/l	100
90)	4-Chlorotoluene	7.418	91	108536	18.3543	ug/l	99
91)	n-Propylbenzene	7.292	91	200875	19.2631	ug/l	98
92)	Bromobenzene	7.270	77	95338	18.0172	ug/l	88
93)	1,3,5-Trimethylbenzene	7.376	105	134805	18.0977	ug/l	99
94)	Butyl methacrylate	7.379	41	35816m	19.0226	ug/l	
95)	t-Butylbenzene	7.572	119	129256	18.6775	ug/l	99
96)	1,2,4-Trimethylbenzene	7.595	105	138803	17.9974	ug/l	99
97)	sec-Butylbenzene	7.694	105	160993	19.4170	ug/l	99
98)	4-Isopropyltoluene	7.765	119	135219	19.2238	ug/l	100
99)	n-Butylbenzene	8.000	91	141612	19.8657	ug/l	98
100)	p-Diethylbenzene	7.984	119	75559	20.1090	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.440	119	101279	19.4461	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.498	157	8650	19.9792	ug/l	94
103)	Camphor	8.935	95	33820	200.6323	ug/l	99
104)	Hexachlorobutadiene	9.070	225	12308	22.0267	ug/l	99
105)	1,2,4-Trichlorobenzene	8.990	180	30777	20.2752	ug/l	98
106)	1,2,3-Trichlorobenzene	9.292	180	22805	22.9264	ug/l	97
107)	Naphthalene	9.151	128	85444	22.8694	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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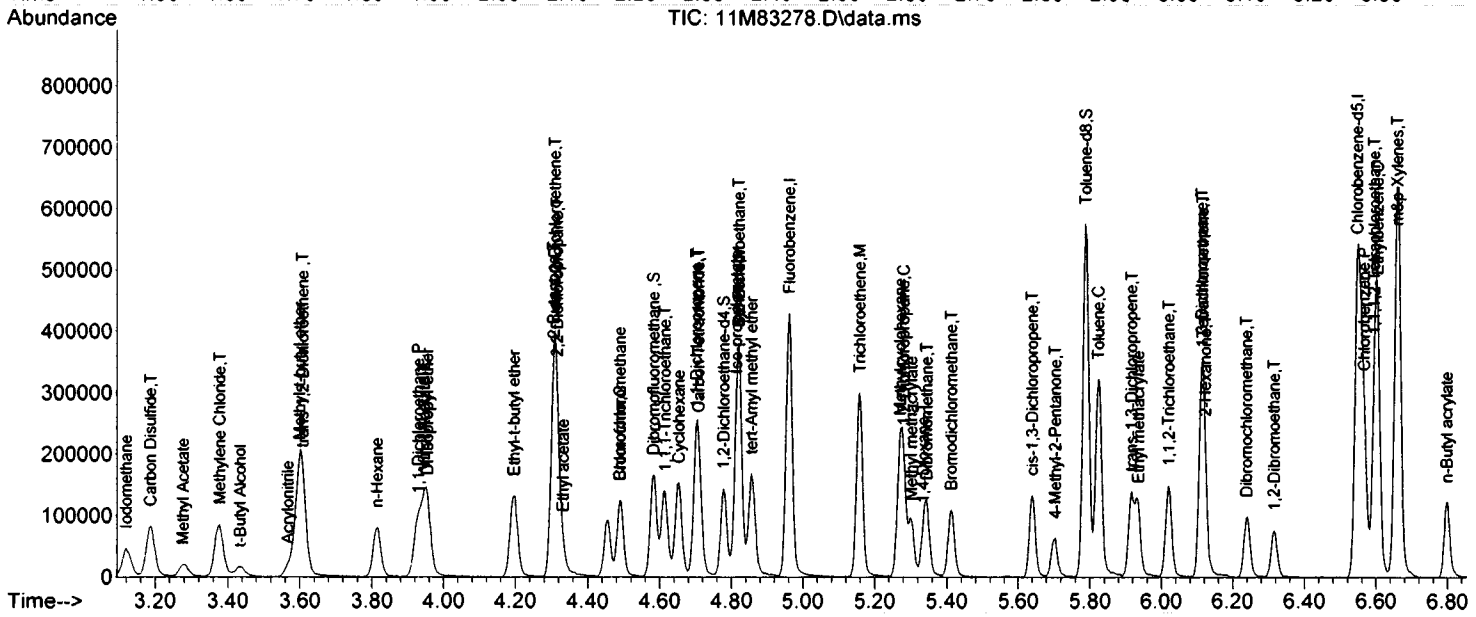
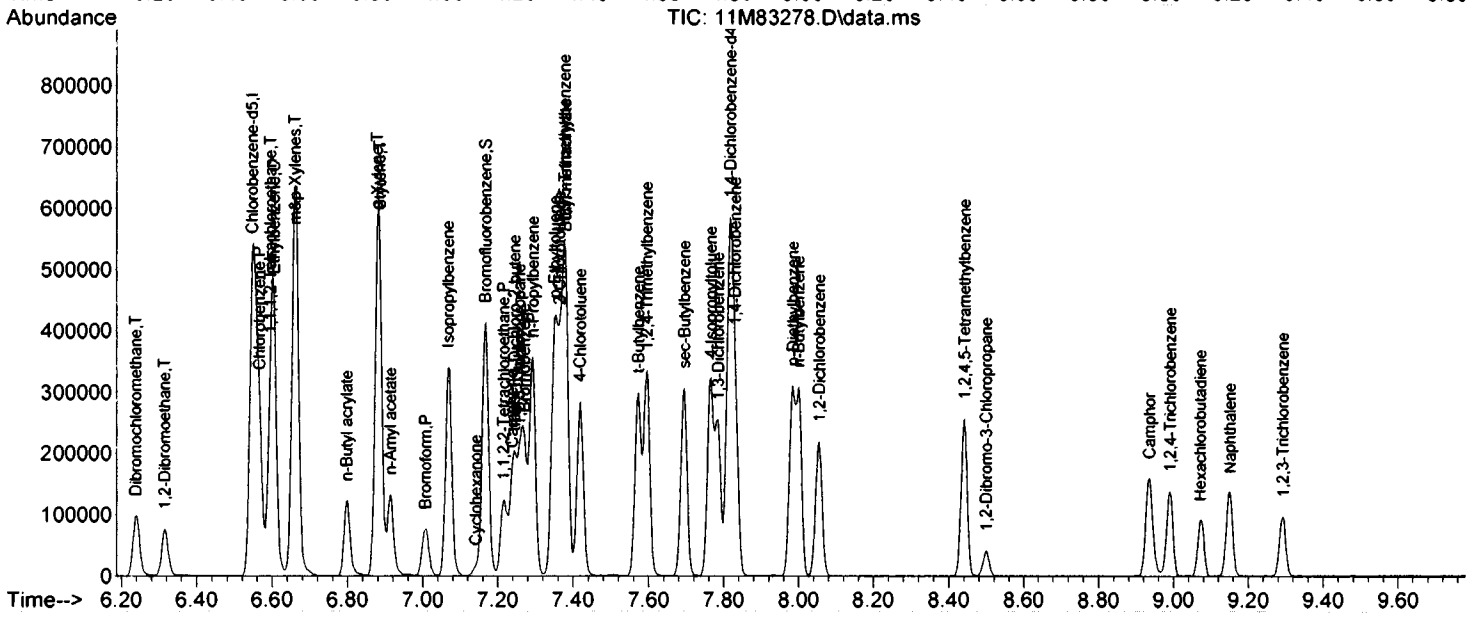
Quant QT Reviewed
SampleID : AD19444-007(MSD:AD1
Data File: 11M83278.D
Acq On : 09/28/20 14:18
Operator : WP
Sam Mult : 1 Vial# : 14
Misc : A,5ML;1
Qt Meth : 11M_A0911.M
Qt On : 09/28/20 14:37
Qt Upd On: 09/14/20 16:18
Chloromethane,P
Vinyl Chonde,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
Time-->


Abundance
TIC: 11M83278.D\data.ms
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Ethyl acetate
Fluorobenzene,I
Trichloroethene,M
Toluene-d8,S
Toluene,C
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
Time-->


Abundance
TIC: 11M83278.D\data.ms
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142526.D	AD19412-005(MS)	9/30/2020 2:13:00 PM
Non Spike(If applicable):	2M142523.D	AD19412-005	9/30/2020 1:14:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.9092	0	20	95	50	150
Dichlorodifluoromethane	1	22.387	0	20	112	50	150
Chloromethane	1	21.9678	0	20	110	50	150
Bromomethane	1	18.9269	0	20	95	50	150
Vinyl Chloride	1	21.9015	0	20	110	50	150
Chloroethane	1	20.0248	0	20	100	50	150
Trichlorofluoromethane	1	20.9784	0	20	105	50	150
Ethyl ether	1	19.546	0	20	98	50	150
Furan	1	19.6338	0	20	98	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	21.7427	0	20	109	50	150
Methylene Chloride	1	19.4772	0	20	97	70	130
Acrolein	1	101.4078	0	100	101	50	150
Acrylonitrile	1	19.715	0	20	99	50	150
Iodomethane	1	18.1766	0	20	91	50	150
Acetone	1	93.5307	0	100	94	50	150
Carbon Disulfide	1	20.9535	0	20	105	50	150
t-Butyl Alcohol	1	104.6948	0	100	105	50	150
n-Hexane	1	22.577	0	20	113	70	130
Di-isopropyl-ether	1	19.3214	0	20	97	70	130
1,1-Dichloroethene	1	20.6494	0	20	103	70	130
Methyl Acetate	1	24.6047	0	20	123	50	150
Methyl-t-butyl ether	1	17.5015	0	20	88	70	130
1,1-Dichloroethane	1	20.0523	0	20	100	70	130
trans-1,2-Dichloroethene	1	19.8491	0	20	99	70	130
Ethyl-t-butyl ether	1	19.5335	0	20	98	70	130
cis-1,2-Dichloroethene	1	19.3429	0	20	97	70	130
Bromochloromethane	1	20.7813	0	20	104	70	130
2,2-Dichloropropane	1	21.5017	0	20	108	70	130
Ethyl acetate	1	28.6578	0	20	143	50	150
1,4-Dioxane	1	1152.722	0	1000	115	50	150
1,1-Dichloropropene	1	19.9791	0	20	100	70	130
Chloroform	1	19.8224	0	20	99	70	130
Cyclohexane	1	21.0253	0	20	105	70	130
1,2-Dichloroethane	1	17.993	0	20	90	70	130
2-Butanone	1	0	0	20	0*	50	150
1,1,1-Trichloroethane	1	20.4601	0	20	102	70	130
Carbon Tetrachloride	1	20.15	0	20	101	50	150
Vinyl Acetate	1	14.8458	0	20	74	50	150
Bromodichloromethane	1	17.2441	0	20	86	70	130
Methylcyclohexane	1	20.8033	0	20	104	70	130
Dibromomethane	1	20.1331	0	20	101	70	130
1,2-Dichloropropane	1	19.5228	0	20	98	70	130
Trichloroethene	1	20.3166	0	20	102	70	130
Benzene	1	19.3481	0	20	97	70	130
tert-Amyl methyl ether	1	18.976	0	20	95	70	130
Iso-propylacetate	1	18.6119	0	20	93	70	130
Methyl methacrylate	1	20.003	0	20	100	70	130
Dibromochloromethane	1	20.416	0	20	102	70	130
2-Chloroethylvinylether	1	1.0003	0	20	5*	70	130
cis-1,3-Dichloropropene	1	20.051	0	20	100	70	130
trans-1,3-Dichloropropene	1	20.0867	0	20	100	70	130
Ethyl methacrylate	1	18.7265	0	20	94	70	130
1,1,2-Trichloroethane	1	19.8231	0	20	99	70	130
1,2-Dibromoethane	1	19.9049	0	20	100	70	130
1,3-Dichloropropane	1	19.5082	0	20	98	70	130
4-Methyl-2-Pentanone	1	18.8443	0	20	94	50	150
2-Hexanone	1	18.8557	0	20	94	50	150
Tetrachloroethene	1	20.9347	0	20	105	50	150
Toluene	1	19.732	0	20	99	70	130
1,1,1,2-Tetrachloroethane	1	19.461	0	20	97	70	130
Chlorobenzene	1	20.0529	0	20	100	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

Method: 8260C | Matrix: Aqueous | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	21.1328	0	20	106	70	130
n-Amyl acetate	1	19.4403	0	20	97	70	130
Bromoform	1	20.2796	0	20	101	70	130
Ethylbenzene	1	21.9037	0	20	110	70	130
1,1,2,2-Tetrachloroethane	1	19.4586	0	20	97	70	130
Styrene	1	21.1508	0	20	106	70	130
m&p-Xylenes	1	40.7292	0	40	102	70	130
o-Xylene	1	20.8992	0	20	104	70	130
trans-1,4-Dichloro-2-butene	1	15.0155	0	20	75	50	150
1,3-Dichlorobenzene	1	20.0679	0	20	100	70	130
1,4-Dichlorobenzene	1	19.65	0	20	98	70	130
1,2-Dichlorobenzene	1	19.5486	0	20	98	70	130
Isopropylbenzene	1	22.2675	0	20	111	70	130
Cyclohexanone	1	105.1977	0	100	105	50	150
Camphene	1	12.6593	0	20	63*	70	130
1,2,3-Trichloropropane	1	18.4782	0	20	92	70	130
2-Chlorotoluene	1	21.6522	0	20	108	70	130
p-Ethyltoluene	1	21.0295	0	20	105	70	130
4-Chlorotoluene	1	21.5179	0	20	108	70	130
n-Propylbenzene	1	21.837	0	20	109	70	130
Bromobenzene	1	18.3976	0	20	92	70	130
1,3,5-Trimethylbenzene	1	21.6159	0	20	108	70	130
Butyl methacrylate	1	19.4885	0	20	97	70	130
t-Butylbenzene	1	22.0927	0	20	110	70	130
1,2,4-Trimethylbenzene	1	21.2178	0	20	106	70	130
sec-Butylbenzene	1	22.3646	0	20	112	70	130
4-Isopropyltoluene	1	22.2072	0	20	111	70	130
n-Butylbenzene	1	22.8765	0	20	114	70	130
p-Diethylbenzene	1	21.5147	0	20	108	70	130
1,2,4,5-Tetramethylbenzene	1	20.0938	0	20	100	70	130
1,2-Dibromo-3-Chloropropane	1	20.7031	0	20	104	50	150
Camphor	1	211.0259	0	200	106	20	150
Hexachlorobutadiene	1	22.5481	0	20	113	50	150
1,2,4-Trichlorobenzene	1	20.552	0	20	103	70	130
1,2,3-Trichlorobenzene	1	20.8821	0	20	104	70	130
Naphthalene	1	20.3281	0	20	102	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142527.D	AD19412-005(MSD)	9/30/2020 2:32:00 PM
Non Spike(If applicable):	2M142523.D	AD19412-005	9/30/2020 1:14:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	17.3269	0	20	87	50	150
Dichlorodifluoromethane	1	21.0833	0	20	105	50	150
Chloromethane	1	20.2306	0	20	101	50	150
Bromomethane	1	17.6911	0	20	88	50	150
Vinyl Chloride	1	19.696	0	20	98	50	150
Chloroethane	1	18.1032	0	20	91	50	150
Trichlorofluoromethane	1	19.2821	0	20	96	50	150
Ethyl ether	1	18.2342	0	20	91	50	150
Furan	1	18.2837	0	20	91	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	20.2478	0	20	101	50	150
Methylene Chloride	1	18.0216	0	20	90	70	130
Acrolein	1	96.3667	0	100	96	50	150
Acrylonitrile	1	18.0137	0	20	90	50	150
Iodomethane	1	17.4911	0	20	87	50	150
Acetone	1	88.6992	0	100	89	50	150
Carbon Disulfide	1	17.9654	0	20	90	50	150
t-Butyl Alcohol	1	95.6928	0	100	96	50	150
n-Hexane	1	22.3073	0	20	112	70	130
Di-isopropyl-ether	1	18.3384	0	20	92	70	130
1,1-Dichloroethene	1	19.5345	0	20	98	70	130
Methyl Acetate	1	22.3966	0	20	112	50	150
Methyl-t-butyl ether	1	16.6359	0	20	83	70	130
1,1-Dichloroethane	1	18.7125	0	20	94	70	130
trans-1,2-Dichloroethene	1	18.304	0	20	92	70	130
Ethyl-t-butyl ether	1	18.619	0	20	93	70	130
cis-1,2-Dichloroethene	1	17.844	0	20	89	70	130
Bromochloromethane	1	18.9488	0	20	95	70	130
2,2-Dichloropropane	1	19.5826	0	20	98	70	130
Ethyl acetate	1	26.4613	0	20	132	50	150
1,4-Dioxane	1	1034.549	0	1000	103	50	150
1,1-Dichloropropene	1	18.205	0	20	91	70	130
Chloroform	1	18.5333	0	20	93	70	130
Cyclohexane	1	19.6338	0	20	98	70	130
1,2-Dichloroethane	1	16.9878	0	20	85	70	130
2-Butanone	1	0	0	20	0*	50	150
1,1,1-Trichloroethane	1	19.1211	0	20	96	70	130
Carbon Tetrachloride	1	18.4577	0	20	92	50	150
Vinyl Acetate	1	14.1216	0	20	71	50	150
Bromodichloromethane	1	16.1595	0	20	81	70	130
Methylcyclohexane	1	20.4891	0	20	102	70	130
Dibromomethane	1	17.8563	0	20	89	70	130
1,2-Dichloropropane	1	18.2929	0	20	91	70	130
Trichloroethene	1	17.9419	0	20	90	70	130
Benzene	1	17.9015	0	20	90	70	130
tert-Amyl methyl ether	1	17.4898	0	20	87	70	130
Iso-propylacetate	1	17.7375	0	20	89	70	130
Methyl methacrylate	1	18.1255	0	20	91	70	130
Dibromochloromethane	1	18.8408	0	20	94	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	18.9269	0	20	95	70	130
trans-1,3-Dichloropropene	1	18.6808	0	20	93	70	130
Ethyl methacrylate	1	18.144	0	20	91	70	130
1,1,2-Trichloroethane	1	18.4468	0	20	92	70	130
1,2-Dibromoethane	1	18.8856	0	20	94	70	130
1,3-Dichloropropane	1	18.2194	0	20	91	70	130
4-Methyl-2-Pentanone	1	17.9422	0	20	90	50	150
2-Hexanone	1	17.5928	0	20	88	50	150
Tetrachloroethene	1	19.4964	0	20	97	50	150
Toluene	1	18.6725	0	20	93	70	130
1,1,1,2-Tetrachloroethane	1	18.0006	0	20	90	70	130
Chlorobenzene	1	18.6502	0	20	93	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

Method: 8260C	Matrix: Aqueous	QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	19.104	0	20	96	70	130
n-Amyl acetate	1	17.8914	0	20	89	70	130
Bromoform	1	19.2441	0	20	96	70	130
Ethylbenzene	1	19.6127	0	20	98	70	130
1,1,2,2-Tetrachloroethane	1	17.5383	0	20	88	70	130
Styrene	1	19.2999	0	20	96	70	130
m&p-Xylenes	1	38.0148	0	40	95	70	130
o-Xylene	1	19.4594	0	20	97	70	130
trans-1,4-Dichloro-2-butene	1	12.2891	0	20	61	50	150
1,3-Dichlorobenzene	1	18.8176	0	20	94	70	130
1,4-Dichlorobenzene	1	18.4431	0	20	92	70	130
1,2-Dichlorobenzene	1	18.5868	0	20	93	70	130
Isopropylbenzene	1	20.9591	0	20	105	70	130
Cyclohexanone	1	99.3882	0	100	99	50	150
Camphene	1	9.4234	0	20	47*	70	130
1,2,3-Trichloropropane	1	16.5814	0	20	83	70	130
2-Chlorotoluene	1	20.116	0	20	101	70	130
p-Ethyltoluene	1	19.5579	0	20	98	70	130
4-Chlorotoluene	1	20.9621	0	20	105	70	130
n-Propylbenzene	1	20.5224	0	20	103	70	130
Bromobenzene	1	17.0742	0	20	85	70	130
1,3,5-Trimethylbenzene	1	20.4385	0	20	102	70	130
Butyl methacrylate	1	17.7911	0	20	89	70	130
t-Butylbenzene	1	21.3241	0	20	107	70	130
1,2,4-Trimethylbenzene	1	20.1	0	20	100	70	130
sec-Butylbenzene	1	21.83	0	20	109	70	130
4-Isopropyltoluene	1	21.3896	0	20	107	70	130
n-Butylbenzene	1	21.8928	0	20	109	70	130
p-Diethylbenzene	1	20.6983	0	20	103	70	130
1,2,4,5-Tetramethylbenzene	1	19.2919	0	20	96	70	130
1,2-Dibromo-3-Chloropropane	1	18.7092	0	20	94	50	150
Camphor	1	196.9847	0	200	98	20	150
Hexachlorobutadiene	1	20.3292	0	20	102	50	150
1,2,4-Trichlorobenzene	1	19.5469	0	20	98	70	130
1,2,3-Trichlorobenzene	1	20.2692	0	20	101	70	130
Naphthalene	1	19.299	0	20	96	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89395

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142527.D	AD19412-005(MSD)	9/30/2020 2:32:00 PM
Duplicate(If applicable):	2M142526.D	AD19412-005(MS)	9/30/2020 2:13:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	17.3269	18.9092	8.7	30
Dichlorodifluoromethane	**1**	**21.0833**	**22.387**	**6**	**30**
Chloromethane	**1**	**20.2306**	**21.9678**	**8.2**	**30**
Bromomethane	**1**	**17.6911**	**18.9269**	**6.7**	**30**
Vinyl Chloride	**1**	**19.696**	**21.9015**	**11**	**40**
Chloroethane	**1**	**18.1032**	**20.0248**	**10**	**30**
Trichlorofluoromethane	**1**	**19.2821**	**20.9784**	**8.4**	**30**
Ethyl ether	1	18.2342	19.546	6.9	30
Furan	1	18.2837	19.6338	7.1	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**20.2478**	**21.7427**	**7.1**	**30**
Methylene Chloride	**1**	**18.0216**	**19.4772**	**7.8**	**30**
Acrolein	**1**	**96.3667**	**101.4078**	**5.1**	**30**
Acrylonitrile	**1**	**18.0137**	**19.715**	**9**	**30**
Iodomethane	1	17.4911	18.1766	3.8	30
Acetone	**1**	**88.6992**	**93.5307**	**5.3**	**30**
Carbon Disulfide	**1**	**17.9654**	**20.9535**	**15**	**30**
t-Butyl Alcohol	**1**	**95.6928**	**104.6948**	**9**	**30**
n-Hexane	1	22.3073	22.577	1.2	30
Di-isopropyl-ether	1	18.3384	19.3214	5.2	30
1,1-Dichloroethene	**1**	**19.5345**	**20.6494**	**5.5**	**40**
Methyl Acetate	1	22.3966	24.6047	9.4	30
Methyl-t-butyl ether	**1**	**16.6359**	**17.5015**	**5.1**	**30**
1,1-Dichloroethane	**1**	**18.7125**	**20.0523**	**6.9**	**40**
trans-1,2-Dichloroethene	**1**	**18.304**	**19.8491**	**8.1**	**30**
Ethyl-t-butyl ether	1	18.619	19.5335	4.8	30
cis-1,2-Dichloroethene	**1**	**17.844**	**19.3429**	**8.1**	**30**
Bromochloromethane	1	18.9488	20.7813	9.2	30
2,2-Dichloropropane	1	19.5826	21.5017	9.3	30
Ethyl acetate	1	26.4613	28.6578	8	30
1,4-Dioxane	**1**	**1034.549**	**1152.722**	**11**	**30**
1,1-Dichloropropene	1	18.205	19.9791	9.3	30
Chloroform	**1**	**18.5333**	**19.8224**	**6.7**	**40**
Cyclohexane	1	19.6338	21.0253	6.8	30
1,2-Dichloroethane	**1**	**16.9878**	**17.993**	**5.7**	**40**
2-Butanone	**1**	**0**	**0**	**NA**	**40**
1,1,1-Trichloroethane	**1**	**19.1211**	**20.4601**	**6.8**	**30**
Carbon Tetrachloride	**1**	**18.4577**	**20.15**	**8.8**	**40**
Vinyl Acetate	1	14.1216	14.8458	5	30
Bromodichloromethane	**1**	**16.1595**	**17.2441**	**6.5**	**30**
Methylcyclohexane	1	20.4891	20.8033	1.5	30
Dibromomethane	1	17.8563	20.1331	12	30
1,2-Dichloropropane	**1**	**18.2929**	**19.5228**	**6.5**	**30**
Trichloroethene	**1**	**17.9419**	**20.3166**	**12**	**40**
Benzene	**1**	**17.9015**	**19.3481**	**7.8**	**40**
tert-Amyl methyl ether	1	17.4898	18.976	8.2	30
Iso-propylacetate	1	17.7375	18.6119	4.8	30
Methyl methacrylate	1	18.1255	20.003	9.8	30
Dibromochloromethane	**1**	**18.8408**	**20.416**	**8**	**30**
2-Chloroethylvinylether	**1**	**0**	**1.0003**	**200***	**30**
cis-1,3-Dichloropropene	**1**	**18.9269**	**20.051**	**5.8**	**30**
trans-1,3-Dichloropropene	**1**	**18.6808**	**20.0867**	**7.3**	**30**
Ethyl methacrylate	1	18.144	18.7265	3.2	30
1,1,2-Trichloroethane	**1**	**18.4468**	**19.8231**	**7.2**	**30**
1,2-Dibromoethane	1	18.8856	19.9049	5.3	30
1,3-Dichloropropane	**1**	**18.2194**	**19.5082**	**6.8**	**30**
4-Methyl-2-Pentanone	**1**	**17.9422**	**18.8443**	**4.9**	**30**
2-Hexanone	**1**	**17.5928**	**18.8557**	**6.9**	**30**
Tetrachloroethene	**1**	**19.4964**	**20.9347**	**7.1**	**40**
Toluene	**1**	**18.6725**	**19.732**	**5.5**	**40**
1,1,1,2-Tetrachloroethane	1	18.0006	19.461	7.8	30
Chlorobenzene	**1**	**18.6502**	**20.0529**	**7.2**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89395

Method: 8260C | Matrix: Aqueous | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	19.104	21.1328	10	30
n-Amyl acetate	1	17.8914	19.4403	8.3	30
Bromoform	**1**	**19.2441**	**20.2796**	**5.2**	**30**
Ethylbenzene	**1**	**19.6127**	**21.9037**	**11**	**30**
1,1,2,2-Tetrachloroethane	**1**	**17.5383**	**19.4586**	**10**	**30**
Styrene	**1**	**19.2999**	**21.1508**	**9.2**	**30**
m&p-Xylenes	**1**	**38.0148**	**40.7292**	**6.9**	**30**
o-Xylene	**1**	**19.4594**	**20.8992**	**7.1**	**30**
trans-1,4-Dichloro-2-butene	1	12.2891	15.0155	20	30
1,3-Dichlorobenzene	**1**	**18.8176**	**20.0679**	**6.4**	**30**
1,4-Dichlorobenzene	**1**	**18.4431**	**19.65**	**6.3**	**40**
1,2-Dichlorobenzene	**1**	**18.5868**	**19.5486**	**5**	**40**
Isopropylbenzene	**1**	**20.9591**	**22.2675**	**6.1**	**30**
Cyclohexanone	1	99.3882	105.1977	5.7	30
Camphene	1	9.4234	12.6593	29	30
1,2,3-Trichloropropane	**1**	**16.5814**	**18.4782**	**11**	**30**
2-Chlorotoluene	1	20.116	21.6522	7.4	30
p-Ethyltoluene	1	19.5579	21.0295	7.3	30
4-Chlorotoluene	1	20.9621	21.5179	2.6	30
n-Propylbenzene	**1**	**20.5224**	**21.837**	**6.2**	**40**
Bromobenzene	1	17.0742	18.3976	7.5	30
1,3,5-Trimethylbenzene	**1**	**20.4385**	**21.6159**	**5.6**	**30**
Butyl methacrylate	1	17.7911	19.4885	9.1	30
t-Butylbenzene	**1**	**21.3241**	**22.0927**	**3.5**	**30**
1,2,4-Trimethylbenzene	**1**	**20.1**	**21.2178**	**5.4**	**30**
sec-Butylbenzene	**1**	**21.83**	**22.3646**	**2.4**	**40**
4-Isopropyltoluene	**1**	**21.3896**	**22.2072**	**3.8**	**30**
n-Butylbenzene	**1**	**21.8928**	**22.8765**	**4.4**	**30**
p-Diethylbenzene	1	20.6983	21.5147	3.9	30
1,2,4,5-Tetramethylbenzene	1	19.2919	20.0938	4.1	30
1,2-Dibromo-3-Chloropropane	1	18.7092	20.7031	10	30
Camphor	1	196.9847	211.0259	6.9	30
Hexachlorobutadiene	1	20.3292	22.5481	10	30
1,2,4-Trichlorobenzene	1	19.5469	20.552	5	30
1,2,3-Trichlorobenzene	1	20.2692	20.8821	3	30
Naphthalene	1	19.299	20.3281	5.2	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

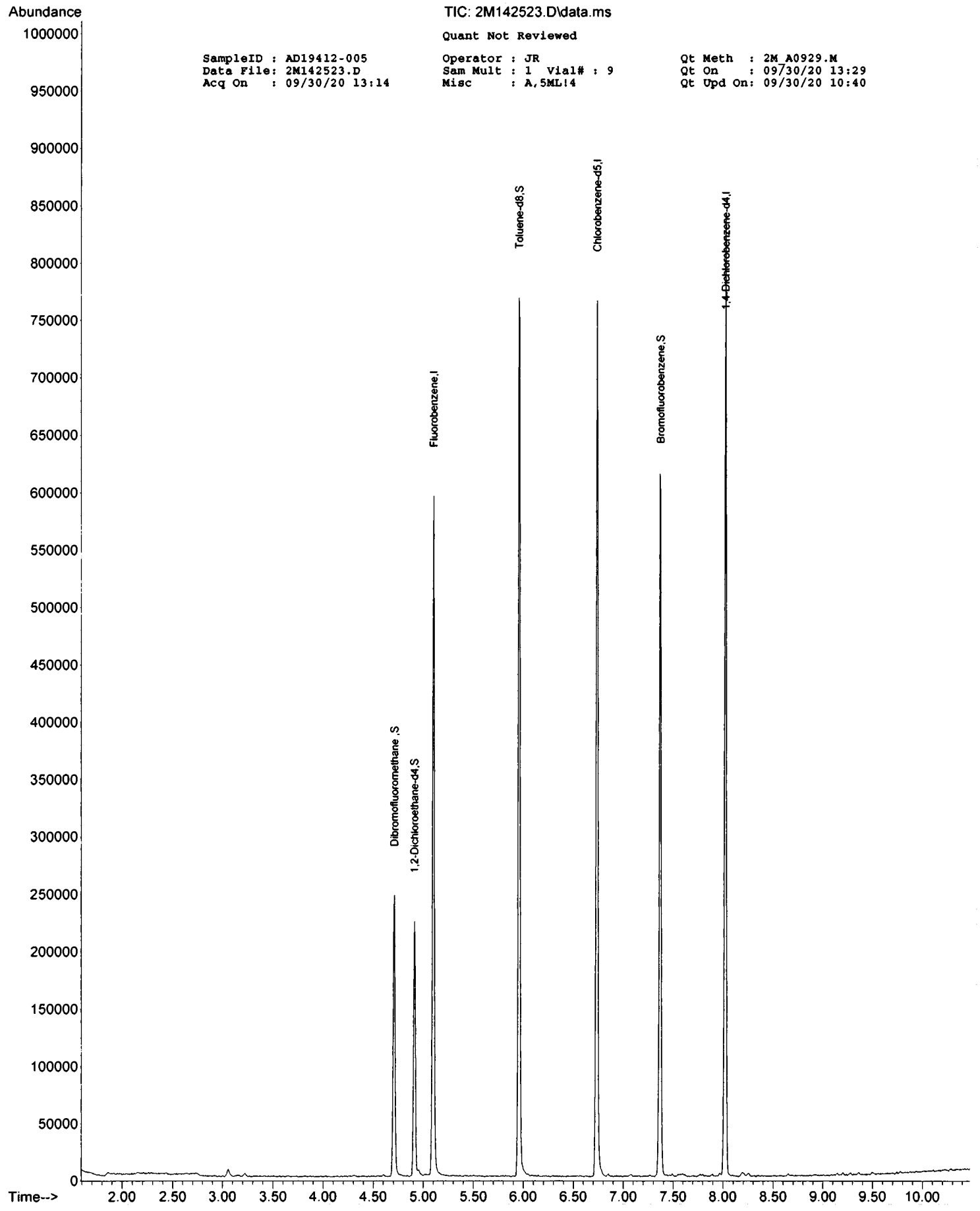
Quantitation Report (Not Reviewed)

SampleID : AD19412-005 Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142523.D Sam Mult : 1 Vial# : 9 Qt On : 09/30/20 13:29
Acq On : 09/30/20 13:14 Misc : A,5ML!4 Qt Upd On: 09/30/20 10:40

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	351219	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	315079	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	161711	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	102642	30.51	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.70%			
39) 1,2-Dichloroethane-d4	4.910	67	53077	30.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.83%			
66) Toluene-d8	5.952	98	374876	30.41	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.37%			
76) Bromofluorobenzene	7.367	174	133062	31.33	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.43%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M142523.D\data.ms
Quant Not Reviewed
SampleID : AD19412-005
Data File: 2M142523.D
Acq On : 09/30/20 13:14
Operator : JR
Sam Mult : 1 Vial# : 9
Misc : A,5ML!4
Qt Meth : 2M_A0929.M
Qt On : 09/30/20 13:29
Qt Upd On: 09/30/20 10:40
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Quantitation Report (Not Reviewed)

SampleID : AD19412-005(MS) Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142526.D Sam Mult : 1 Vial# : 12 Qt On : 09/30/20 20:07
Acq On : 09/30/20 14:13 Misc : A,5ML!4 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	330090	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	295843	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	159151	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.703	111	93603	29.60	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.67%			
39) 1,2-Dichloroethane-d4	4.910	67	49369	30.24	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.80%			
66) Toluene-d8	5.952	98	347934	30.06	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.20%			
76) Bromofluorobenzene	7.367	174	128614	30.77	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.57%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	63650	18.9092	ug/l	76
6) Dichlorodifluoromethane	1.685	85	75903	22.3870	ug/l	96
7) Chloromethane	1.855	50	82955	21.9678	ug/l	100
8) Bromomethane	2.258	94	34713	18.9269	ug/l	99
9) Vinyl Chloride	1.953	62	89795	21.9015	ug/l	99
10) Chloroethane	2.343	64	54770	20.0248	ug/l	96
11) Trichlorofluoromethane	2.569	101	131799	20.9784	ug/l	99
12) Ethyl ether	2.800	59	42641	19.5460	ug/l	99
13) Furan	2.843	39	72431	19.6338	ug/l	94
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	47889	21.7427	ug/l	94
15) Methylene Chloride	3.416	84	60710	19.4772	ug/l	99
16) Acrolein	2.916	56	50551	101.4078	ug/l	99
17) Acrylonitrile	3.623	53	21324	19.7150	ug/l	97
18) Iodomethane	3.154	142	42834	18.1766	ug/l	97
19) Acetone	3.044	43	83069	93.5307	ug/l	98
20) Carbon Disulfide	3.215	76	176313	20.9535	ug/l	100
21) t-Butyl Alcohol	3.477	59	29993	104.6948	ug/l	98
22) n-Hexane	3.873	57	58860	22.5770	ug/l	97
23) Di-isopropyl-ether	4.026	45	144212	19.3214	ug/l	99
24) 1,1-Dichloroethene	3.014	61	87660	20.6494	ug/l	96
25) Methyl Acetate	3.319	43	49294	24.6047	ug/l	100
26) Methyl-t-butyl ether	3.642	73	155228	17.5015	ug/l	100
27) 1,1-Dichloroethane	4.001	63	103803	20.0523	ug/l	98
28) trans-1,2-Dichloroethene	3.654	96	62138	19.8491	ug/l	96
29) Ethyl-t-butyl ether	4.288	59	157773	19.5335	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	101774	19.3429	ug/l	95
31) Bromochloromethane	4.568	49	48570	20.7813	ug/l	97
32) 2,2-Dichloropropane	4.416	77	99729	21.5017	ug/l	97
33) Ethyl acetate	4.434	43	77119	28.6578	ug/l	91
34) 1,4-Dioxane	5.489	88	43609	1152.7221	ug/l	93
35) 1,1-Dichloropropene	4.824	75	87689	19.9791	ug/l	98
36) Chloroform	4.605	83	111740	19.8224	ug/l	98
38) Cyclohexane	4.770	56	81782	21.0253	ug/l	98
40) 1,2-Dichloroethane	4.953	62	85936	17.9930	ug/l	100
42) 1,1,1-Trichloroethane	4.733	97	102254	20.4601	ug/l	99
43) Carbon Tetrachloride	4.831	117	85249	20.1500	ug/l	95
44) Vinyl Acetate	4.026	43	124270	14.8458	ug/l	100
45) Bromodichloromethane	5.568	83	87045	17.2441	ug/l	98
46) Methylcyclohexane	5.416	83	78463	20.8033	ug/l	98
47) Dibromomethane	5.495	174	45583	20.1331	ug/l	97
48) 1,2-Dichloropropane	5.428	63	60601	19.5228	ug/l	98
49) Trichloroethene	5.300	130	70907	20.3166	ug/l	97
50) Benzene	4.953	78	239102	19.3481	ug/l	100
51) tert-Amyl methyl ether	4.989	73	164920	18.9760	ug/l	98
53) Iso-propylacetate	4.946	43	95892	18.6119	ug/l	98
54) Methyl methacrylate	5.452	41	49658	20.0030	ug/l	98
55) Dibromochloromethane	6.422	129	70788	20.4160	ug/l	100
56) 2-Chloroethylvinylether	5.751	63	379	1.0003	ug/l	73
57) cis-1,3-Dichloropropene	5.806	75	95022	20.0510	ug/l	99
58) trans-1,3-Dichloropropene	6.086	75	90639	20.0867	ug/l	97
59) Ethyl methacrylate	6.105	41	48853	18.7265	ug/l	96
60) 1,1,2-Trichloroethane	6.196	97	58039	19.8231	ug/l	96
61) 1,2-Dibromoethane	6.495	107	61453	19.9049	ug/l	97
62) 1,3-Dichloropropane	6.288	76	99847	19.5082	ug/l	99
63) 4-Methyl-2-Pentanone	5.867	43	52051	18.8443	ug/l	100
64) 2-Hexanone	6.306	43	38768	18.8557	ug/l	98
65) Tetrachloroethene	6.288	164	55747	20.9347	ug/l	95
67) Toluene	5.989	92	154202	19.7320	ug/l	100
68) 1,1,1,2-Tetrachloroethane	6.781	133	60939	19.4610	ug/l	96

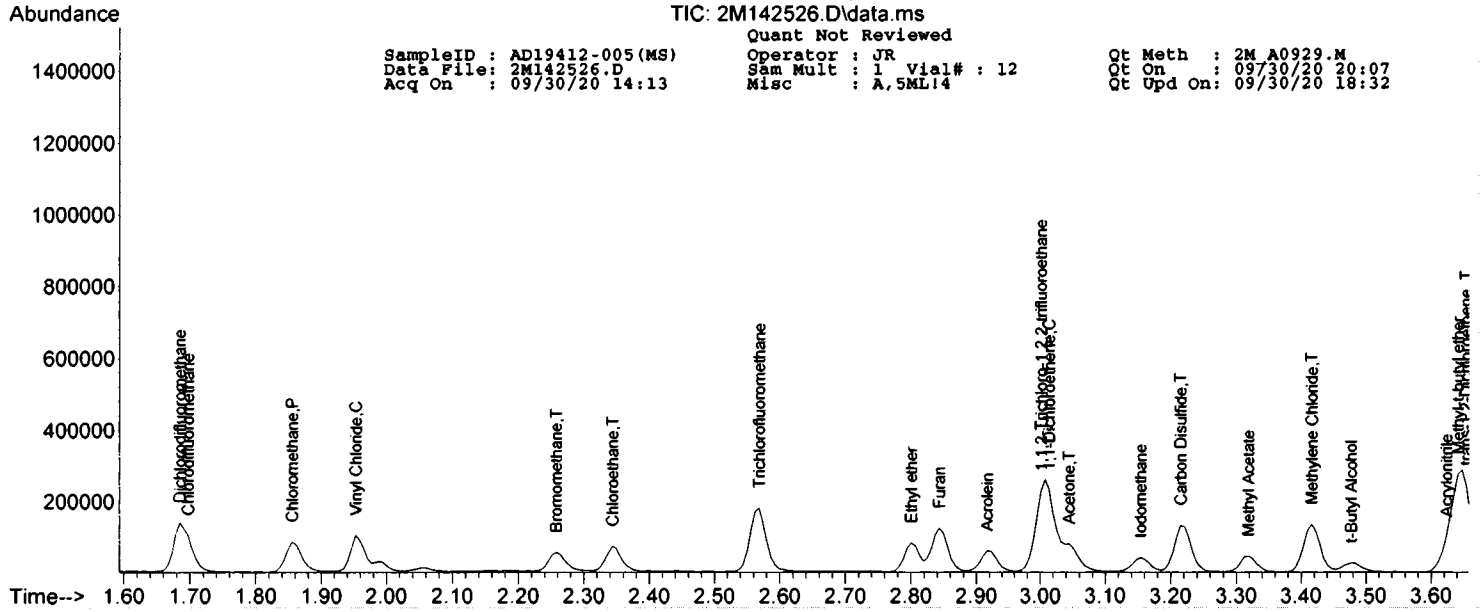
Quantitation Report (Not Reviewed)

SampleID : AD19412-005(MS) Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142526.D Sam Mult : 1 Vial# : 12 Qt On : 09/30/20 20:07
Acq On : 09/30/20 14:13 Misc : A,5ML!4 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69)	Chlorobenzene	6.751	112	174867	20.0529	ug/l	97
71)	n-Butyl acrylate	6.989	55	113466	21.1328	ug/l	97
72)	n-Amyl acetate	7.111	43	91937	19.4403	ug/l	98
73)	Bromoform	7.202	173	48168	20.2796	ug/l	97
74)	Ethylbenzene	6.788	106	79337	21.9037	ug/l	91
75)	1,1,2,2-Tetrachloroethane	7.415	83	82885	19.4586	ug/l	98
77)	Styrene	7.074	104	192305	21.1508	ug/l	96
78)	m&p-Xylenes	6.849	106	224562	40.7292	ug/l	95
79)	o-Xylene	7.068	106	109058	20.8992	ug/l	94
80)	trans-1,4-Dichloro-2-b...	7.440	53	15100	15.0155	ug/l	82
81)	1,3-Dichlorobenzene	7.989	146	129930	20.0679	ug/l	99
82)	1,4-Dichlorobenzene	8.031	146	130187	19.6500	ug/l	98
83)	1,2-Dichlorobenzene	8.257	146	119329	19.5486	ug/l	98
84)	Isopropylbenzene	7.263	105	283424	22.2675	ug/l	98
85)	Cyclohexanone	7.342	55	11574	105.1977	ug/l	96
86)	Camphene	7.434	93	47554	12.6593	ug/l	95
87)	1,2,3-Trichloropropane	7.458	75	85299	18.4782	ug/l	98
88)	2-Chlorotoluene	7.562	91	165735	21.6522	ug/l	98
89)	p-Ethyltoluene	7.550	105	269342	21.0295	ug/l	97
90)	4-Chlorotoluene	7.617	91	167764	21.5179	ug/l	97
91)	n-Propylbenzene	7.489	91	334530	21.8370	ug/l	97
92)	Bromobenzene	7.464	77	156751	18.3976	ug/l	98
93)	1,3,5-Trimethylbenzene	7.574	105	214478	21.6159	ug/l	99
94)	Butyl methacrylate	7.580	41	75555	19.4885	ug/l	97
95)	t-Butylbenzene	7.769	119	213843	22.0927	ug/l	99
96)	1,2,4-Trimethylbenzene	7.793	105	226779	21.2178	ug/l	98
97)	sec-Butylbenzene	7.897	105	267557	22.3646	ug/l	99
98)	4-Isopropyltoluene	7.964	119	225623	22.2072	ug/l	98
99)	n-Butylbenzene	8.202	91	240450	22.8765	ug/l	95
100)	p-Diethylbenzene	8.184	119	123583	21.5147	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	168779	20.0938	ug/l	95
102)	1,2-Dibromo-3-Chloropr...	8.708	157	17921	20.7031	ug/l	79
103)	Camphor	9.141	95	72096	211.0259	ug/l	93
104)	Hexachlorobutadiene	9.281	225	29707	22.5481	ug/l	95
105)	1,2,4-Trichlorobenzene	9.202	180	64449	20.5520	ug/l	98
106)	1,2,3-Trichlorobenzene	9.500	180	54321	20.8821	ug/l	96
107)	Naphthalene	9.360	128	177537	20.3281	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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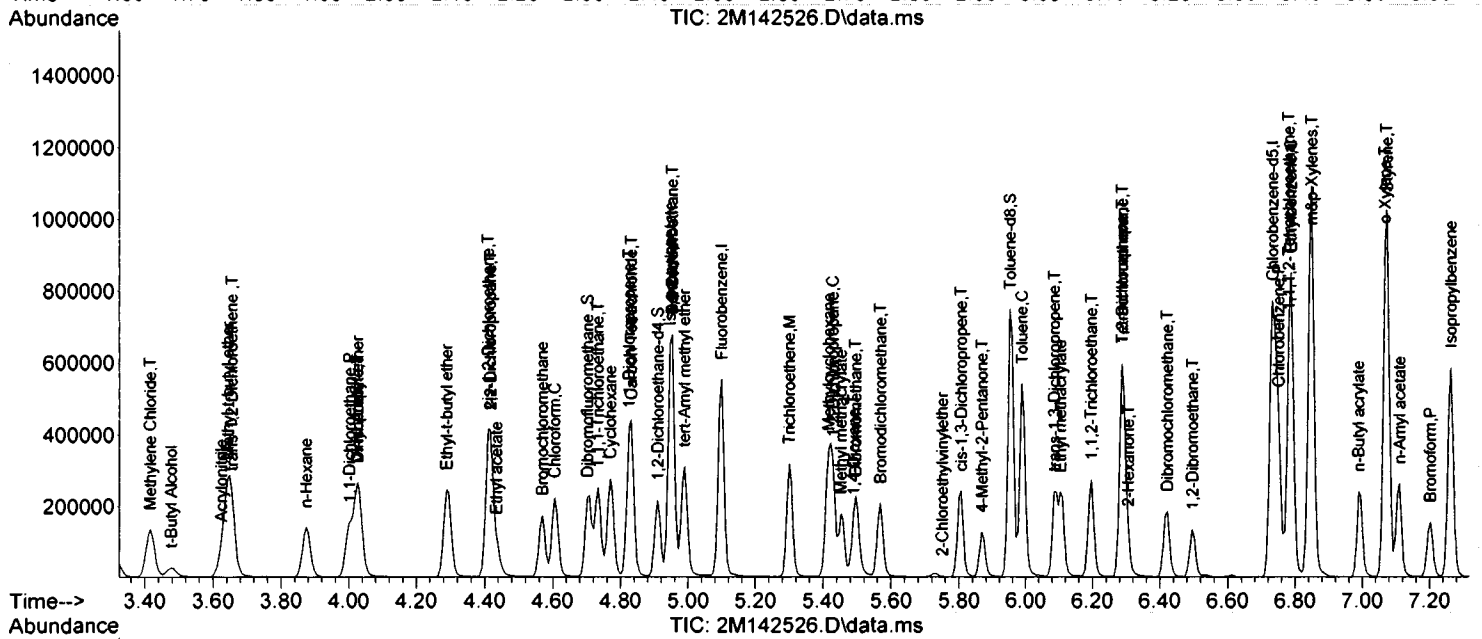
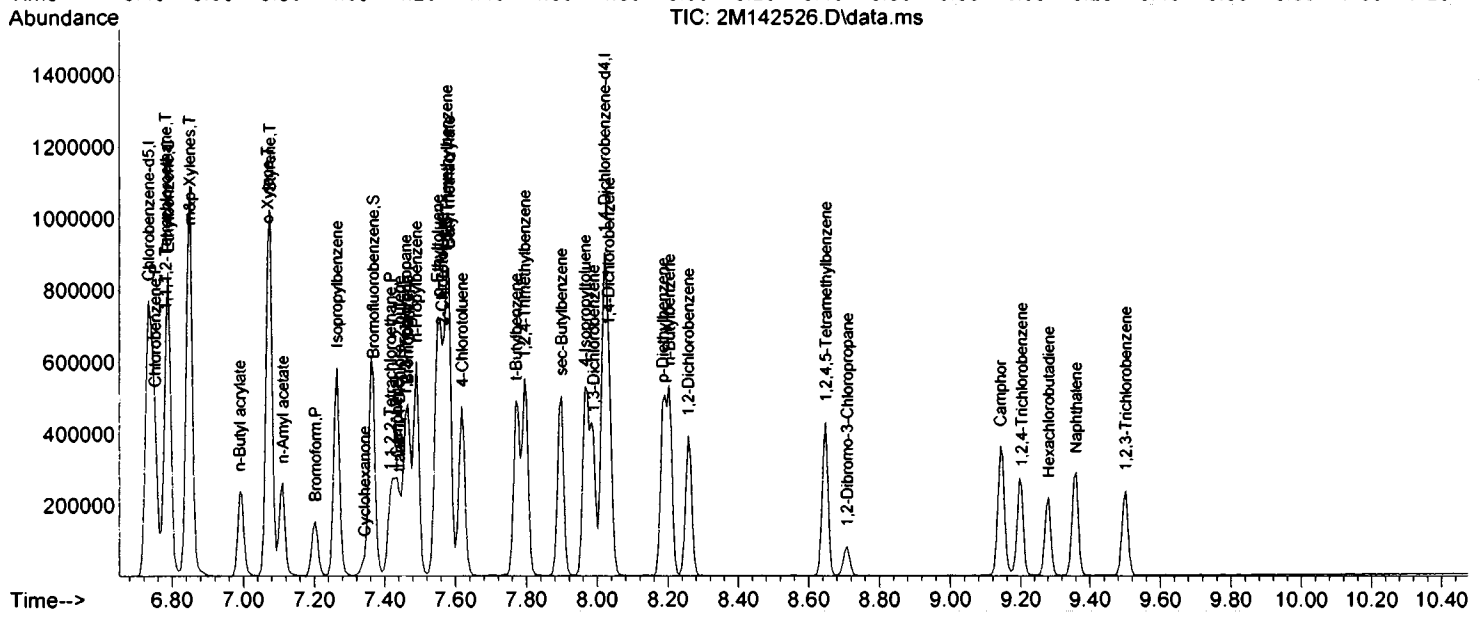
Quant Not Reviewed
SampleID : AD19412-005(MS)
Data File: 2M142526.D
Acq On : 09/30/20 14:13
Operator : JR
Sam Mult : 1 Vial# : 12
Misc : A,5ML!4
Qt Meth : 2M_A0929.M
Qt On : 09/30/20 20:07
Qt Upd On: 09/30/20 18:32
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->


Abundance
TIC: 2M142526.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M142526.D\data.ms
Chlorobenzene-d5,I
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (Not Reviewed)

SampleID : AD19412-005(MSD) Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142527.D Sam Mult : 1 Vial# : 13 Qt On : 09/30/20 20:06
Acq On : 09/30/20 14:32 Misc : A,5ML!4 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	359589	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	318585	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	175542	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	101675	29.52	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.40%			
39) 1,2-Dichloroethane-d4	4.910	67	52673	29.61	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.70%			
66) Toluene-d8	5.952	98	383378	30.76	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.53%			
76) Bromofluorobenzene	7.367	174	140597	30.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.63%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	63536	17.3269	ug/l	73
6) Dichlorodifluoromethane	1.685	85	77871	21.0833	ug/l	95
7) Chloromethane	1.855	50	83222	20.2306	ug/l	99
8) Bromomethane	2.258	94	35346	17.6911	ug/l	92
9) Vinyl Chloride	1.953	62	87969	19.6960	ug/l	95
10) Chloroethane	2.343	64	53939	18.1032	ug/l	99
11) Trichlorofluoromethane	2.569	101	131968	19.2821	ug/l	98
12) Ethyl ether	2.800	59	43334	18.2342	ug/l	100
13) Furan	2.843	39	73478	18.2837	ug/l	96
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	48582	20.2478	ug/l	95
15) Methylene Chloride	3.416	84	61193	18.0216	ug/l	99
16) Acrolein	2.922	56	52331	96.3667	ug/l	100
17) Acrylonitrile	3.617	53	21225	18.0137	ug/l	97
18) Iodomethane	3.154	142	44853	17.4911	ug/l	95
19) Acetone	3.044	43	85818	88.6992	ug/l	99
20) Carbon Disulfide	3.215	76	164679	17.9654	ug/l	100
21) t-Butyl Alcohol	3.477	59	29864	95.6928	ug/l	91
22) n-Hexane	3.873	57	63354	22.3073	ug/l	96
23) Di-isopropyl-ether	4.026	45	149107	18.3384	ug/l	99
24) 1,1-Dichloroethene	3.014	61	90338	19.5345	ug/l	95
25) Methyl Acetate	3.319	43	48880	22.3966	ug/l	100
26) Methyl-t-butyl ether	3.642	73	160737	16.6359	ug/l	99
27) 1,1-Dichloroethane	4.001	63	105524	18.7125	ug/l	99
28) trans-1,2-Dichloroethene	3.654	96	62422	18.3040	ug/l	96
29) Ethyl-t-butyl ether	4.294	59	163826	18.6190	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	102278	17.8440	ug/l	96
31) Bromochloromethane	4.568	49	48245	18.9488	ug/l	98
32) 2,2-Dichloropropane	4.416	77	98945	19.5826	ug/l	98
33) Ethyl acetate	4.440	43	77572	26.4613	ug/l	91
34) 1,4-Dioxane	5.495	88	42636	1034.5487	ug/l	99
35) 1,1-Dichloropropene	4.824	75	87043	18.2050	ug/l	98
36) Chloroform	4.605	83	113810	18.5333	ug/l	99
38) Cyclohexane	4.770	56	83194	19.6338	ug/l	99
40) 1,2-Dichloroethane	4.952	62	88386	16.9878	ug/l	100
42) 1,1,1-Trichloroethane	4.733	97	104102	19.1211	ug/l	98
43) Carbon Tetrachloride	4.831	117	85068	18.4577	ug/l	94
44) Vinyl Acetate	4.026	43	128771	14.1216	ug/l	100
45) Bromodichloromethane	5.568	83	88860	16.1595	ug/l	95
46) Methylcyclohexane	5.416	83	84184	20.4891	ug/l	98
47) Dibromomethane	5.495	174	44041	17.8563	ug/l	99
48) 1,2-Dichloropropane	5.428	63	61858	18.2929	ug/l	96
49) Trichloroethene	5.300	130	68215	17.9419	ug/l	94
50) Benzene	4.952	78	240995	17.9015	ug/l	100
51) tert-Amyl methyl ether	4.989	73	165587	17.4898	ug/l	99
53) Iso-propylacetate	4.946	43	98412	17.7375	ug/l	99
54) Methyl methacrylate	5.452	41	48456	18.1255	ug/l	95
55) Dibromochloromethane	6.422	129	70348	18.8408	ug/l	98
56) 2-Chloroethylvinylether	5.751	63	312	0.7647	ug/l	65
57) cis-1,3-Dichloropropene	5.806	75	96590	18.9269	ug/l	99
58) trans-1,3-Dichloropropene	6.092	75	90775	18.6808	ug/l	100
59) Ethyl methacrylate	6.111	41	50972	18.1440	ug/l	99
60) 1,1,2-Trichloroethane	6.196	97	58161	18.4468	ug/l	93
61) 1,2-Dibromoethane	6.495	107	62788	18.8856	ug/l	100
62) 1,3-Dichloropropane	6.288	76	100419	18.2194	ug/l	96
63) 4-Methyl-2-Pentanone	5.867	43	53369	17.9422	ug/l	97
64) 2-Hexanone	6.306	43	38952	17.5928	ug/l	97
65) Tetrachloroethene	6.288	164	55908	19.4964	ug/l	99
67) Toluene	5.989	92	157139	18.6725	ug/l	96
68) 1,1,1,2-Tetrachloroethane	6.781	133	60699	18.0006	ug/l	95

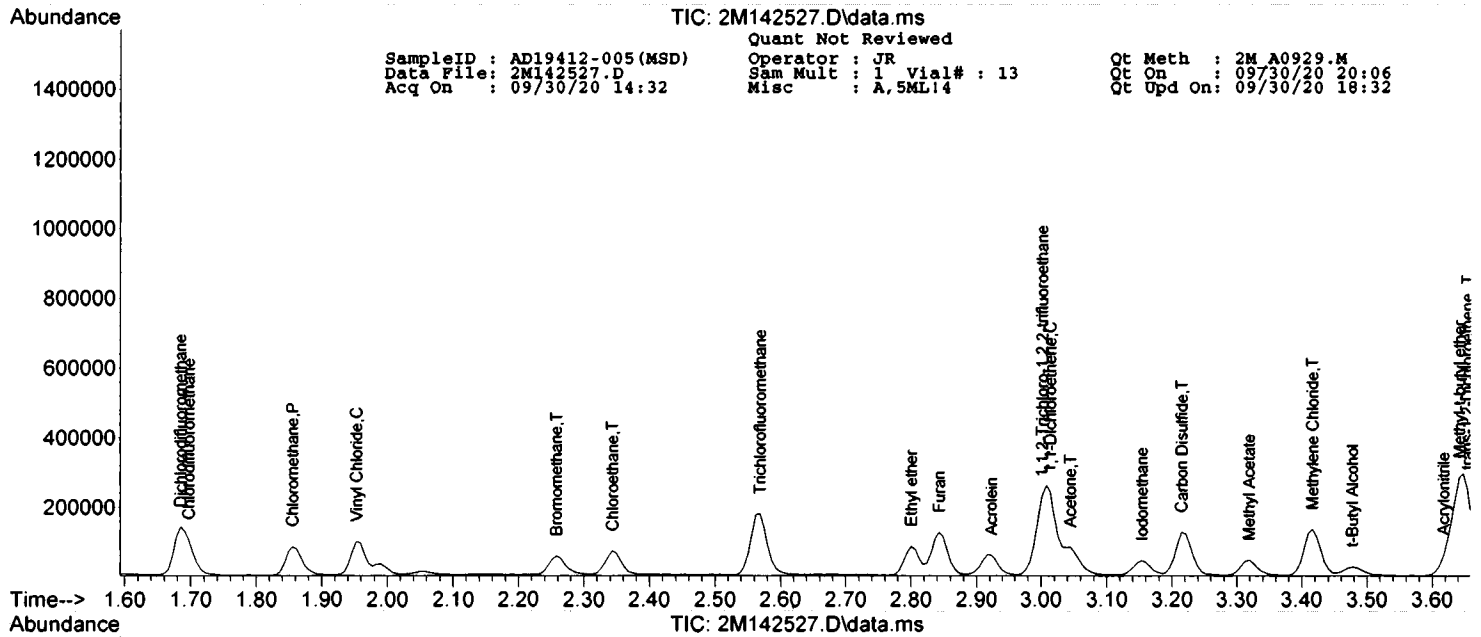
Quantitation Report (Not Reviewed)

SampleID : AD19412-005(MSD) Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142527.D Sam Mult : 1 Vial# : 13 Qt On : 09/30/20 20:06
Acq On : 09/30/20 14:32 Misc : A,5ML!4 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69)	Chlorobenzene	6.751	112	175137	18.6502	ug/l	99
71)	n-Butyl acrylate	6.995	55	113137	19.1040	ug/l	100
72)	n-Amyl acetate	7.111	43	93326	17.8914	ug/l	98
73)	Bromoform	7.202	173	50416	19.2441	ug/l	94
74)	Ethylbenzene	6.787	106	78355	19.6127	ug/l	98
75)	1,1,2,2-Tetrachloroethane	7.415	83	82399	17.5383	ug/l	99
77)	Styrene	7.074	104	193549	19.2999	ug/l	95
78)	m&p-Xylenes	6.848	106	231182	38.0148	ug/l	96
79)	o-Xylene	7.068	106	112003	19.4594	ug/l	98
80)	trans-1,4-Dichloro-2-b...	7.440	53	13631	12.2891	ug/l	85
81)	1,3-Dichlorobenzene	7.988	146	134383	18.8176	ug/l	98
82)	1,4-Dichlorobenzene	8.037	146	134775	18.4431	ug/l	97
83)	1,2-Dichlorobenzene	8.257	146	125143	18.5868	ug/l	99
84)	Isopropylbenzene	7.263	105	294246	20.9591	ug/l	98
85)	Cyclohexanone	7.342	55	12061	99.3882	ug/l	90
86)	Camphene	7.434	93	39044	9.4234	ug/l	97
87)	1,2,3-Trichloropropane	7.458	75	84426	16.5814	ug/l	96
88)	2-Chlorotoluene	7.562	91	169834	20.1160	ug/l	99
89)	p-Ethyltoluene	7.550	105	276293	19.5579	ug/l	97
90)	4-Chlorotoluene	7.617	91	180263	20.9621	ug/l	95
91)	n-Propylbenzene	7.489	91	346770	20.5224	ug/l	97
92)	Bromobenzene	7.464	77	160458	17.0742	ug/l	98
93)	1,3,5-Trimethylbenzene	7.574	105	223682	20.4385	ug/l	100
94)	Butyl methacrylate	7.580	41	76078	17.7911	ug/l	96
95)	t-Butylbenzene	7.775	119	227661	21.3241	ug/l	99
96)	1,2,4-Trimethylbenzene	7.793	105	236957	20.1000	ug/l	99
97)	sec-Butylbenzene	7.897	105	288058	21.8300	ug/l	99
98)	4-Isopropyltoluene	7.964	119	239698	21.3896	ug/l	99
99)	n-Butylbenzene	8.202	91	253810	21.8928	ug/l	95
100)	p-Diethylbenzene	8.190	119	131138	20.6983	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	178733	19.2919	ug/l	95
102)	1,2-Dibromo-3-Chloropr...	8.708	157	17863	18.7092	ug/l	82
103)	Camphor	9.141	95	74230	196.9847	ug/l	99
104)	Hexachlorobutadiene	9.281	225	29542	20.3292	ug/l	95
105)	1,2,4-Trichlorobenzene	9.202	180	67610	19.5469	ug/l	97
106)	1,2,3-Trichlorobenzene	9.500	180	58157	20.2692	ug/l	97
107)	Naphthalene	9.360	128	185908	19.2990	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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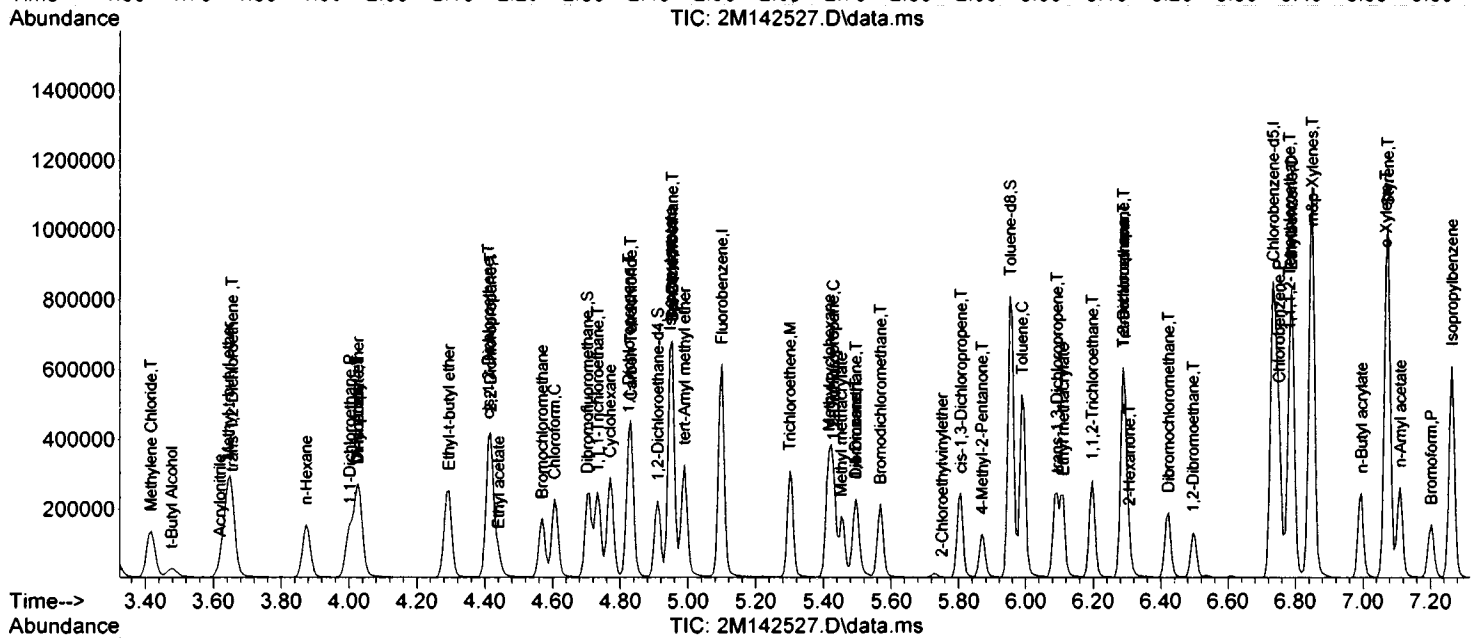
Quant Not Reviewed
SampleID : AD19412-005(MSD)
Data File: 2M142527.D
Acq On : 09/30/20 14:32
Operator : JR
Sam Mult : 1 Vial# : 13
Misc : A,5ML;14
Qt Meth : 2M_A0929.M
Qt On : 09/30/20 20:06
Qt Upd On: 09/30/20 18:32
Chlorodifluoromethane
Dichlorodifluoromethane
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
1,1,2-Trichloro-1,2,2-trifluoroethane
1,1-Dichloroethene,C
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
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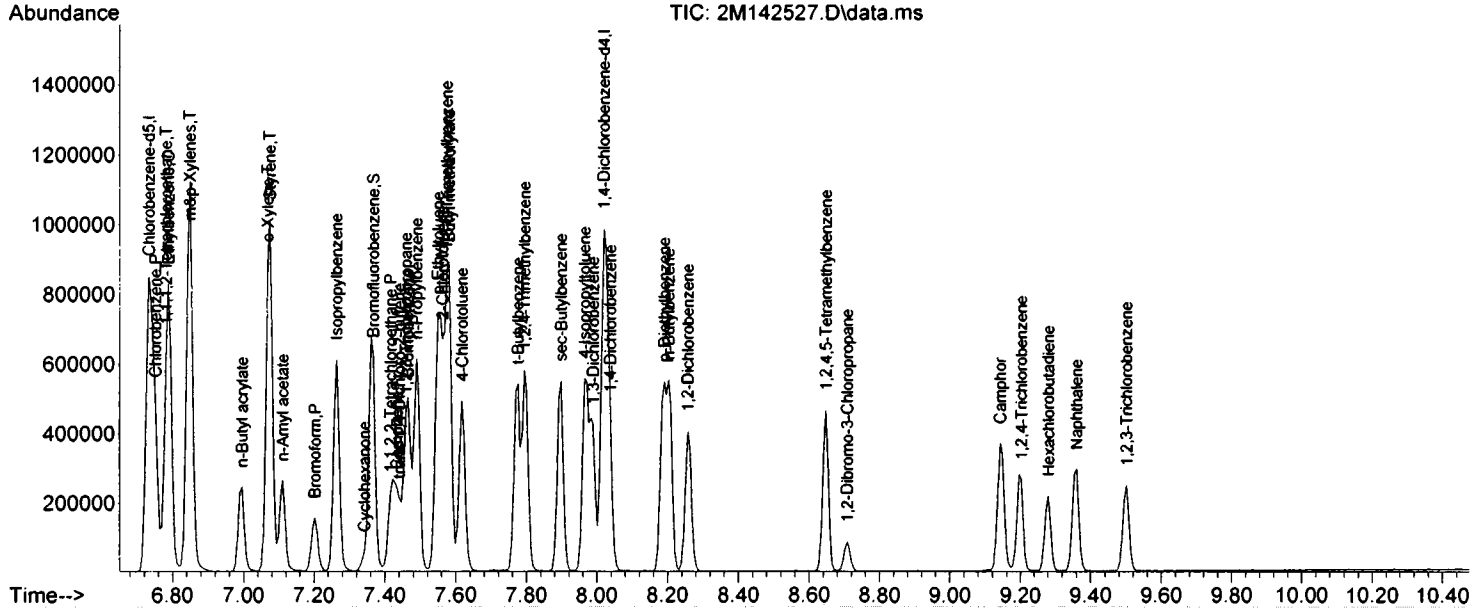
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
n-Hexane
Ethyl-t-butyl ether
Ethyl acetate
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
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Chlorobenzene,P
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,4-Dichlorobenzene-d4,I
n-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89398

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142569.D	AD19412-007(MS)	10/1/2020 4:16:00 AM
Non Spike(If applicable):	2M142524.D	AD19412-007	9/30/2020 1:33:00 PM
Inst Blank(If applicable):			

Method: ~~NotFd~~ 8260D 10/14/20 JC Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.1272	0	20	106	50	150
Dichlorodifluoromethane	1	21.444	0	20	107	50	150
Chloromethane	1	22.5714	0	20	113	50	150
Bromomethane	1	21.2713	0	20	106	50	150
Vinyl Chloride	1	21.7269	0	20	109	50	150
Chloroethane	1	20.6165	0	20	103	50	150
Trichlorofluoromethane	1	19.49	0	20	97	50	150
Ethyl ether	1	21.0465	0	20	105	50	150
Furan	1	20.0388	0	20	100	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.2349	0	20	96	50	150
Methylene Chloride	1	20.2889	0	20	101	70	130
Acrolein	1	95.6807	0	100	96	50	150
Acrylonitrile	1	19.6782	0	20	98	50	150
Iodomethane	1	19.8711	0	20	99	50	150
Acetone	1	101.0144	0	100	101	50	150
Carbon Disulfide	1	19.7183	0	20	99	50	150
t-Butyl Alcohol	1	110.8219	0	100	111	50	150
n-Hexane	1	18.2891	0	20	91	70	130
Di-isopropyl-ether	1	19.9951	0	20	100	70	130
1,1-Dichloroethene	1	19.8318	0	20	99	70	130
Methyl Acetate	1	21.7827	0	20	109	50	150
Methyl-t-butyl ether	1	18.7173	0	20	94	70	130
1,1-Dichloroethane	1	20.2094	0	20	101	70	130
trans-1,2-Dichloroethene	1	19.1596	0	20	96	70	130
Ethyl-t-butyl ether	1	20.2903	0	20	101	70	130
cis-1,2-Dichloroethene	1	18.9019	0	20	95	70	130
Bromochloromethane	1	20.5941	0	20	103	70	130
2,2-Dichloropropane	1	14.6212	0	20	73	70	130
Ethyl acetate	1	17.5371	0	20	88	50	150
1,4-Dioxane	1	1154.521	0	1000	115	50	150
1,1-Dichloropropene	1	18.6822	0	20	93	70	130
Chloroform	1	19.9125	0	20	100	70	130
Cyclohexane	1	18.7986	0	20	94	70	130
1,2-Dichloroethane	1	18.5181	0	20	93	70	130
2-Butanone	1	18.6971	0	20	93	50	150
1,1,1-Trichloroethane	1	19.5431	0	20	98	70	130
Carbon Tetrachloride	1	18.3013	0	20	92	50	150
Vinyl Acetate	1	14.2866	0	20	71	50	150
Bromodichloromethane	1	17.8127	0	20	89	70	130
Methylcyclohexane	1	18.2548	0	20	91	70	130
Dibromomethane	1	20.2263	0	20	101	70	130
1,2-Dichloropropane	1	19.7314	0	20	99	70	130
Trichloroethene	1	18.862	0	20	94	70	130
Benzene	1	18.8981	0	20	94	70	130
tert-Amyl methyl ether	1	19.2442	0	20	96	70	130
Iso-propylacetate	1	18.0143	0	20	90	70	130
Methyl methacrylate	1	21.3036	0	20	107	70	130
Dibromochloromethane	1	21.4127	0	20	107	70	130
2-Chloroethylvinylether	1	1.0757	0	20	5.4*	70	130
cis-1,3-Dichloropropene	1	19.5184	0	20	98	70	130
trans-1,3-Dichloropropene	1	19.8693	0	20	99	70	130
Ethyl methacrylate	1	20.1805	0	20	101	70	130
1,1,2-Trichloroethane	1	20.6335	0	20	103	70	130
1,2-Dibromoethane	1	21.0167	0	20	105	70	130
1,3-Dichloropropane	1	20.4992	0	20	102	70	130
4-Methyl-2-Pentanone	1	20.9962	0	20	105	50	150
2-Hexanone	1	20.2741	0	20	101	50	150
Tetrachloroethene	1	18.5794	0	20	93	50	150
Toluene	1	18.9078	0	20	95	70	130
1,1,1,2-Tetrachloroethane	1	19.1715	0	20	96	70	130
Chlorobenzene	1	19.3222	0	20	97	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89398

Method: ~~NotFd~~ 8260D 10/14/20 JC Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	22.3944	0	20	112	70	130
n-Amyl acetate	1	17.9172	0	20	90	70	130
Bromoform	1	21.8001	0	20	109	70	130
Ethylbenzene	1	20.3479	0	20	102	70	130
1,1,2,2-Tetrachloroethane	1	20.3474	0	20	102	70	130
Styrene	1	20.9192	0	20	105	70	130
m&p-Xylenes	1	39.7252	0	40	99	70	130
o-Xylene	1	21.116	0	20	106	70	130
trans-1,4-Dichloro-2-butene	1	9.5824	0	20	48*	50	150
1,3-Dichlorobenzene	1	19.2588	0	20	96	70	130
1,4-Dichlorobenzene	1	18.8851	0	20	94	70	130
1,2-Dichlorobenzene	1	19.3968	0	20	97	70	130
Isopropylbenzene	1	20.8604	0	20	104	70	130
Cyclohexanone	1	114.1622	0	100	114	50	150
Camphene	1	3.0288	0	20	15*	70	130
1,2,3-Trichloropropane	1	18.792	0	20	94	70	130
2-Chlorotoluene	1	21.1025	0	20	106	70	130
p-Ethyltoluene	1	19.8229	0	20	99	70	130
4-Chlorotoluene	1	21.3208	0	20	107	70	130
n-Propylbenzene	1	20.6312	0	20	103	70	130
Bromobenzene	1	17.3861	0	20	87	70	130
1,3,5-Trimethylbenzene	1	20.7129	0	20	104	70	130
Butyl methacrylate	1	20.2795	0	20	101	70	130
t-Butylbenzene	1	20.7124	0	20	104	70	130
1,2,4-Trimethylbenzene	1	20.3579	0	20	102	70	130
sec-Butylbenzene	1	20.8261	0	20	104	70	130
4-Isopropyltoluene	1	20.7762	0	20	104	70	130
n-Butylbenzene	1	20.9532	0	20	105	70	130
p-Diethylbenzene	1	19.8003	0	20	99	70	130
1,2,4,5-Tetramethylbenzene	1	19.1516	0	20	96	70	130
1,2-Dibromo-3-Chloropropane	1	21.8224	0	20	109	50	150
Camphor	1	249.4297	0	200	125	20	150
Hexachlorobutadiene	1	20.6128	0	20	103	50	150
1,2,4-Trichlorobenzene	1	19.1718	0	20	96	70	130
1,2,3-Trichlorobenzene	1	20.4302	0	20	102	70	130
Naphthalene	1	21.6023	0	20	108	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89398

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142570.D	AD19412-007(MSD)	10/1/2020 4:35:00 AM
Non Spike(If applicable):	2M142524.D	AD19412-007	9/30/2020 1:33:00 PM
Inst Blank(If applicable):			

Method: ~~NotFd~~ 8260D 10/14/20 JL Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.917	0	20	95	50	150
Dichlorodifluoromethane	1	18.836	0	20	94	50	150
Chloromethane	1	19.8778	0	20	99	50	150
Bromomethane	1	19.0374	0	20	95	50	150
Vinyl Chloride	1	19.2342	0	20	96	50	150
Chloroethane	1	19.012	0	20	95	50	150
Trichlorofluoromethane	1	17.195	0	20	86	50	150
Ethyl ether	1	19.5884	0	20	98	50	150
Furan	1	18.267	0	20	91	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	17.5604	0	20	88	50	150
Methylene Chloride	1	18.4698	0	20	92	70	130
Acrolein	1	88.8461	0	100	89	50	150
Acrylonitrile	1	18.9626	0	20	95	50	150
Iodomethane	1	18.9217	0	20	95	50	150
Acetone	1	91.6273	0	100	92	50	150
Carbon Disulfide	1	16.7294	0	20	84	50	150
t-Butyl Alcohol	1	99.9221	0	100	100	50	150
n-Hexane	1	17.5254	0	20	88	70	130
Di-isopropyl-ether	1	18.8078	0	20	94	70	130
1,1-Dichloroethene	1	17.7489	0	20	89	70	130
Methyl Acetate	1	20.2976	0	20	101	50	150
Methyl-t-butyl ether	1	17.4006	0	20	87	70	130
1,1-Dichloroethane	1	18.7547	0	20	94	70	130
trans-1,2-Dichloroethene	1	17.2356	0	20	86	70	130
Ethyl-t-butyl ether	1	19.1709	0	20	96	70	130
cis-1,2-Dichloroethene	1	17.015	0	20	85	70	130
Bromochloromethane	1	19.4832	0	20	97	70	130
2,2-Dichloropropane	1	13.2897	0	20	66*	70	130
Ethyl acetate	1	16.3804	0	20	82	50	150
1,4-Dioxane	1	1079.111	0	1000	108	50	150
1,1-Dichloropropene	1	16.7179	0	20	84	70	130
Chloroform	1	18.4309	0	20	92	70	130
Cyclohexane	1	17.2144	0	20	86	70	130
1,2-Dichloroethane	1	17.0618	0	20	85	70	130
2-Butanone	1	17.0165	0	20	85	50	150
1,1,1-Trichloroethane	1	17.69	0	20	88	70	130
Carbon Tetrachloride	1	16.9556	0	20	85	50	150
Vinyl Acetate	1	13.3984	0	20	67	50	150
Bromodichloromethane	1	16.5817	0	20	83	70	130
Methylcyclohexane	1	17.5889	0	20	88	70	130
Dibromomethane	1	18.3663	0	20	92	70	130
1,2-Dichloropropane	1	18.1078	0	20	91	70	130
Trichloroethene	1	16.6943	0	20	83	70	130
Benzene	1	17.2472	0	20	86	70	130
tert-Amyl methyl ether	1	18.5899	0	20	93	70	130
Iso-propylacetate	1	16.3968	0	20	82	70	130
Methyl methacrylate	1	18.6996	0	20	93	70	130
Dibromochloromethane	1	19.579	0	20	98	70	130
2-Chloroethylvinylether	1	1.3446	0	20	6.7*	70	130
cis-1,3-Dichloropropene	1	17.4277	0	20	87	70	130
trans-1,3-Dichloropropene	1	17.5776	0	20	88	70	130
Ethyl methacrylate	1	18.568	0	20	93	70	130
1,1,2-Trichloroethane	1	19.3571	0	20	97	70	130
1,2-Dibromoethane	1	19.1254	0	20	96	70	130
1,3-Dichloropropane	1	18.6857	0	20	93	70	130
4-Methyl-2-Pentanone	1	18.9012	0	20	95	50	150
2-Hexanone	1	18.6406	0	20	93	50	150
Tetrachloroethene	1	16.8747	0	20	84	50	150
Toluene	1	17.2531	0	20	86	70	130
1,1,1,2-Tetrachloroethane	1	18.1587	0	20	91	70	130
Chlorobenzene	1	17.3476	0	20	87	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89398

Method: ~~NotPd~~ 8260D 10/14/20 JC Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	20.7629	0	20	104	70	130
n-Amyl acetate	1	16.6963	0	20	83	70	130
Bromoform	1	19.8432	0	20	99	70	130
Ethylbenzene	1	18.6061	0	20	93	70	130
1,1,2,2-Tetrachloroethane	1	19.1972	0	20	96	70	130
Styrene	1	18.6059	0	20	93	70	130
m&p-Xylenes	1	35.7292	0	40	89	70	130
o-Xylene	1	19.0072	0	20	95	70	130
trans-1,4-Dichloro-2-butene	1	8.7745	0	20	44*	50	150
1,3-Dichlorobenzene	1	17.5445	0	20	88	70	130
1,4-Dichlorobenzene	1	17.2057	0	20	86	70	130
1,2-Dichlorobenzene	1	18.2868	0	20	91	70	130
Isopropylbenzene	1	19.2982	0	20	96	70	130
Cyclohexanone	1	108.5117	0	100	109	50	150
Camphene	1	3.0498	0	20	15*	70	130
1,2,3-Trichloropropane	1	17.5907	0	20	88	70	130
2-Chlorotoluene	1	19.1469	0	20	96	70	130
p-Ethyltoluene	1	18.0598	0	20	90	70	130
4-Chlorotoluene	1	19.0026	0	20	95	70	130
n-Propylbenzene	1	18.8911	0	20	94	70	130
Bromobenzene	1	16.1549	0	20	81	70	130
1,3,5-Trimethylbenzene	1	19.1798	0	20	96	70	130
Butyl methacrylate	1	18.1431	0	20	91	70	130
t-Butylbenzene	1	19.7548	0	20	99	70	130
1,2,4-Trimethylbenzene	1	18.9544	0	20	95	70	130
sec-Butylbenzene	1	19.9884	0	20	100	70	130
4-Isopropyltoluene	1	19.2988	0	20	96	70	130
n-Butylbenzene	1	19.6261	0	20	98	70	130
p-Diethylbenzene	1	18.5163	0	20	93	70	130
1,2,4,5-Tetramethylbenzene	1	17.7962	0	20	89	70	130
1,2-Dibromo-3-Chloropropane	1	19.4988	0	20	97	50	150
Camphor	1	218.1596	0	200	109	20	150
Hexachlorobutadiene	1	17.6638	0	20	88	50	150
1,2,4-Trichlorobenzene	1	17.8364	0	20	89	70	130
1,2,3-Trichlorobenzene	1	19.2516	0	20	96	70	130
Naphthalene	1	19.92	0	20	100	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89398

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142570.D	AD19412-007(MSD)	10/1/2020 4:35:00 AM
Duplicate(If applicable):	2M142569.D	AD19412-007(MS)	10/1/2020 4:16:00 AM
Inst Blank(If applicable):			

Method: ~~NotPD~~ 8260 D 10/14/20 jc Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	18.917	21.1272	11	30
Dichlorodifluoromethane	**1**	**18.836**	**21.444**	**13**	**30**
Chloromethane	**1**	**19.8778**	**22.5714**	**13**	**30**
Bromomethane	**1**	**19.0374**	**21.2713**	**11**	**30**
Vinyl Chloride	**1**	**19.2342**	**21.7269**	**12**	**40**
Chloroethane	**1**	**19.012**	**20.6165**	**8.1**	**30**
Trichlorofluoromethane	**1**	**17.195**	**19.49**	**13**	**30**
Ethyl ether	1	19.5884	21.0465	7.2	30
Furan	1	18.267	20.0388	9.3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**17.5604**	**19.2349**	**9.1**	**30**
Methylene Chloride	**1**	**18.4698**	**20.2889**	**9.4**	**30**
Acrolein	**1**	**88.8461**	**95.6807**	**7.4**	**30**
Acrylonitrile	**1**	**18.9626**	**19.6782**	**3.7**	**30**
Iodomethane	1	18.9217	19.8711	4.9	30
Acetone	**1**	**91.6273**	**101.0144**	**9.7**	**30**
Carbon Disulfide	**1**	**16.7294**	**19.7183**	**16**	**30**
t-Butyl Alcohol	**1**	**99.9221**	**110.8219**	**10**	**30**
n-Hexane	1	17.5254	18.2891	4.3	30
Di-isopropyl-ether	1	18.8078	19.9951	6.1	30
1,1-Dichloroethene	**1**	**17.7489**	**19.8318**	**11**	**40**
Methyl Acetate	1	20.2976	21.7827	7.1	30
Methyl-t-butyl ether	**1**	**17.4006**	**18.7173**	**7.3**	**30**
1,1-Dichloroethane	**1**	**18.7547**	**20.2094**	**7.5**	**40**
trans-1,2-Dichloroethene	**1**	**17.2356**	**19.1596**	**11**	**30**
Ethyl-t-butyl ether	1	19.1709	20.2903	5.7	30
cis-1,2-Dichloroethene	**1**	**17.015**	**18.9019**	**11**	**30**
Bromochloromethane	1	19.4832	20.5941	5.5	30
2,2-Dichloropropane	1	13.2897	14.6212	9.5	30
Ethyl acetate	1	16.3804	17.5371	6.8	30
1,4-Dioxane	**1**	**1079.111**	**1154.521**	**6.8**	**30**
1,1-Dichloropropene	1	16.7179	18.6822	11	30
Chloroform	**1**	**18.4309**	**19.9125**	**7.7**	**40**
Cyclohexane	1	17.2144	18.7986	8.8	30
1,2-Dichloroethane	**1**	**17.0618**	**18.5181**	**8.2**	**40**
2-Butanone	**1**	**17.0165**	**18.6971**	**9.4**	**40**
1,1,1-Trichloroethane	**1**	**17.69**	**19.5431**	**10**	**30**
Carbon Tetrachloride	**1**	**16.9556**	**18.3013**	**7.6**	**40**
Vinyl Acetate	1	13.3984	14.2866	6.4	30
Bromodichloromethane	**1**	**16.5817**	**17.8127**	**7.2**	**30**
Methylcyclohexane	1	17.5889	18.2548	3.7	30
Dibromomethane	1	18.3663	20.2263	9.6	30
1,2-Dichloropropane	**1**	**18.1078**	**19.7314**	**8.6**	**30**
Trichloroethene	**1**	**16.6943**	**18.862**	**12**	**40**
Benzene	**1**	**17.2472**	**18.8981**	**9.1**	**40**
tert-Amyl methyl ether	1	18.5899	19.2442	3.5	30
Iso-propylacetate	1	16.3968	18.0143	9.4	30
Methyl methacrylate	1	18.6996	21.3036	13	30
Dibromochloromethane	**1**	**19.579**	**21.4127**	**8.9**	**30**
2-Chloroethylvinylether	**1**	**1.3446**	**1.0757**	**22**	**30**
cis-1,3-Dichloropropene	**1**	**17.4277**	**19.5184**	**11**	**30**
trans-1,3-Dichloropropene	**1**	**17.5776**	**19.8693**	**12**	**30**
Ethyl methacrylate	1	18.568	20.1805	8.3	30
1,1,2-Trichloroethane	**1**	**19.3571**	**20.6335**	**6.4**	**30**
1,2-Dibromoethane	1	19.1254	21.0167	9.4	30
1,3-Dichloropropane	**1**	**18.6857**	**20.4992**	**9.3**	**30**
4-Methyl-2-Pentanone	**1**	**18.9012**	**20.9962**	**11**	**30**
2-Hexanone	**1**	**18.6406**	**20.2741**	**8.4**	**30**
Tetrachloroethene	**1**	**16.8747**	**18.5794**	**9.6**	**40**
Toluene	**1**	**17.2531**	**18.9078**	**9.2**	**40**
1,1,1,2-Tetrachloroethane	1	18.1587	19.1715	5.4	30
Chlorobenzene	**1**	**17.3476**	**19.3222**	**11**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89398

Method: ~~Not~~ 8260D 10/14/20 fc Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	20.7629	22.3944	7.6	30
n-Amyl acetate	1	16.6963	17.9172	7.1	30
Bromoform	**1**	**19.8432**	**21.8001**	**9.4**	**30**
Ethylbenzene	**1**	**18.6061**	**20.3479**	**8.9**	**30**
1,1,2,2-Tetrachloroethane	**1**	**19.1972**	**20.3474**	**5.8**	**30**
Styrene	**1**	**18.6059**	**20.9192**	**12**	**30**
m&p-Xylenes	**1**	**35.7292**	**39.7252**	**11**	**30**
o-Xylene	**1**	**19.0072**	**21.116**	**11**	**30**
trans-1,4-Dichloro-2-butene	1	8.7745	9.5824	8.8	30
1,3-Dichlorobenzene	**1**	**17.5445**	**19.2588**	**9.3**	**30**
1,4-Dichlorobenzene	**1**	**17.2057**	**18.8851**	**9.3**	**40**
1,2-Dichlorobenzene	**1**	**18.2868**	**19.3968**	**5.9**	**40**
Isopropylbenzene	**1**	**19.2982**	**20.8604**	**7.8**	**30**
Cyclohexanone	1	108.5117	114.1622	5.1	30
Camphene	1	3.0498	3.0288	0.69	30
1,2,3-Trichloropropane	**1**	**17.5907**	**18.792**	**6.6**	**30**
2-Chlorotoluene	1	19.1469	21.1025	9.7	30
p-Ethyltoluene	1	18.0598	19.8229	9.3	30
4-Chlorotoluene	1	19.0026	21.3208	11	30
n-Propylbenzene	**1**	**18.8911**	**20.6312**	**8.8**	**40**
Bromobenzene	1	16.1549	17.3861	7.3	30
1,3,5-Trimethylbenzene	**1**	**19.1798**	**20.7129**	**7.7**	**30**
Butyl methacrylate	1	18.1431	20.2795	11	30
t-Butylbenzene	**1**	**19.7548**	**20.7124**	**4.7**	**30**
1,2,4-Trimethylbenzene	**1**	**18.9544**	**20.3579**	**7.1**	**30**
sec-Butylbenzene	**1**	**19.9884**	**20.8261**	**4.1**	**40**
4-Isopropyltoluene	**1**	**19.2988**	**20.7762**	**7.4**	**30**
n-Butylbenzene	**1**	**19.6261**	**20.9532**	**6.5**	**30**
p-Diethylbenzene	1	18.5163	19.8003	6.7	30
1,2,4,5-Tetramethylbenzene	1	17.7962	19.1516	7.3	30
1,2-Dibromo-3-Chloropropane	1	19.4988	21.8224	11	30
Camphor	1	218.1596	249.4297	13	30
Hexachlorobutadiene	1	17.6638	20.6128	15	30
1,2,4-Trichlorobenzene	1	17.8364	19.1718	7.2	30
1,2,3-Trichlorobenzene	1	19.2516	20.4302	5.9	30
Naphthalene	1	19.92	21.6023	8.1	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

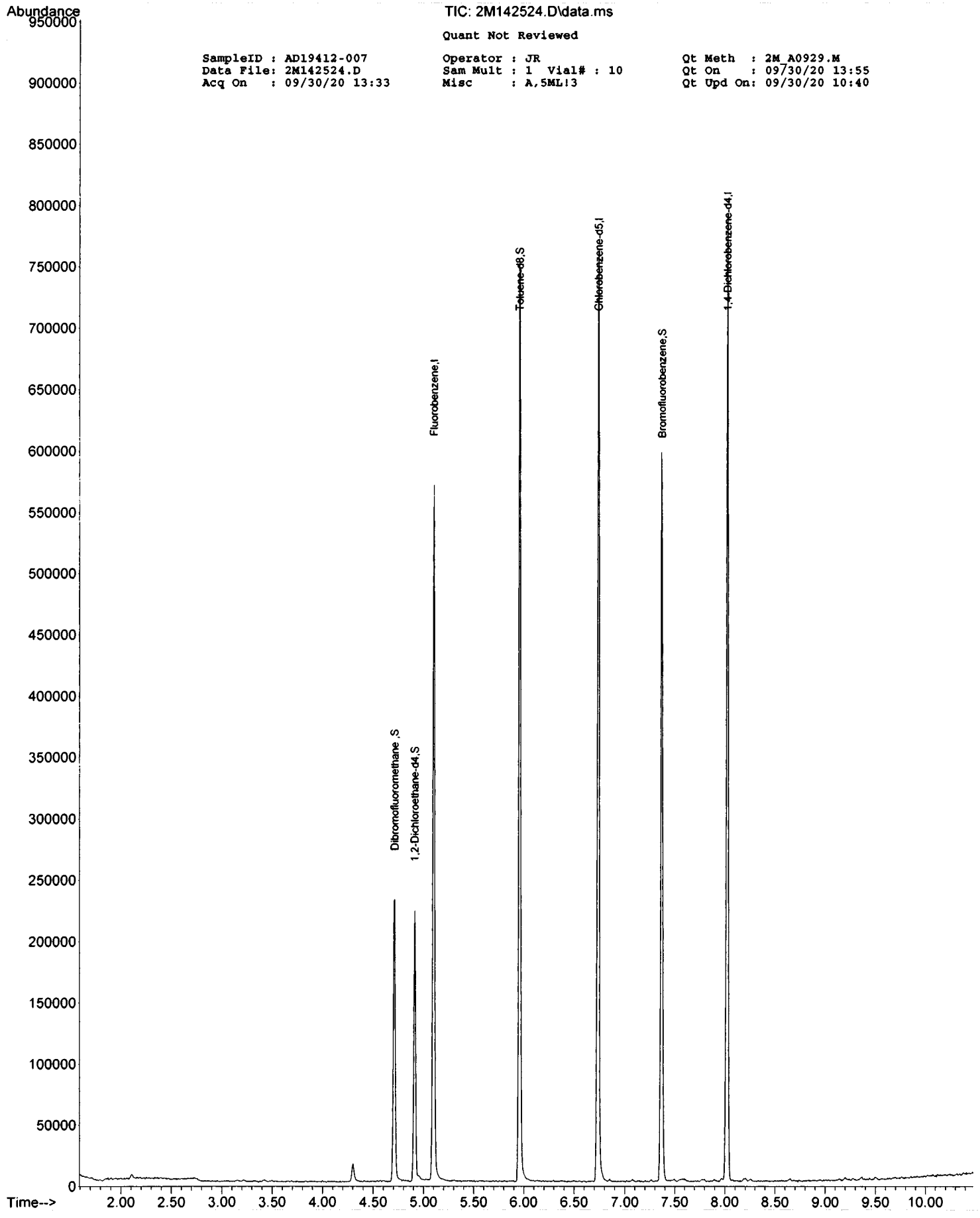
Quantitation Report (Not Reviewed)

SampleID : AD19412-007 Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142524.D Sam Mult : 1 Vial# : 10 Qt On : 09/30/20 13:55
Acq On : 09/30/20 13:33 Misc : A,5ML!3 Qt Upd On: 09/30/20 10:40

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-30-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	345414	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	307514	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	155147	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.709	111	99297	30.01	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.03%			
39) 1,2-Dichloroethane-d4	4.910	67	50097	29.32	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.73%			
66) Toluene-d8	5.952	98	360837	29.99	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.97%			
76) Bromofluorobenzene	7.367	174	130296	31.97	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.57%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M142524.D\data.ms
Quant Not Reviewed
SampleID : AD19412-007
Data File: 2M142524.D
Acq On : 09/30/20 13:33
Operator : JR
Sam Mult : 1 Vial# : 10
Misc : A,5ML!3
Qt Meth : 2M_A0929.M
Qt On : 09/30/20 13:55
Qt Upd On: 09/30/20 10:40
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Quantitation Report (QT Reviewed)

SampleID : AD19412-007(MS) Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142569.D Sam Mult : 1 Vial# : 16 Qt On : 10/01/20 05:43
Acq On : 10/01/20 04:16 Misc : A,5ML!3 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-3020\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.098	96	331979	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	291094	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	153002	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	93375	29.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.87%			
39) 1,2-Dichloroethane-d4	4.909	67	47998	29.23	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.43%			
66) Toluene-d8	5.958	98	350939	30.81	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.70%			
76) Bromofluorobenzene	7.366	174	126573	31.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.97%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	71523	21.1272	ug/l	94
6) Dichlorodifluoromethane	1.684	85	73122	21.4440	ug/l	96
7) Chloromethane	1.861	50	85722	22.5714	ug/l	99
8) Bromomethane	2.257	94	39236	21.2713	ug/l	96
9) Vinyl Chloride	1.959	62	89589	21.7269	ug/l	94
10) Chloroethane	2.349	64	56711	20.6165	ug/l	97
11) Trichlorofluoromethane	2.568	101	123149	19.4900	ug/l	94
12) Ethyl ether	2.800	59	46177	21.0465	ug/l	97
13) Furan	2.843	39	74348	20.0388	ug/l	95
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	42608	19.2349	ug/l	95
15) Methylene Chloride	3.416	84	63602	20.2889	ug/l	94
16) Acrolein	2.916	56	47969	95.6807	ug/l	96
17) Acrylonitrile	3.623	53	21406	19.6782	ug/l	99
18) Iodomethane	3.154	142	47222	19.8711	ug/l	99
19) Acetone	3.044	43	90229	101.0144	ug/l	98
20) Carbon Disulfide	3.221	76	166869	19.7183	ug/l	100
21) t-Butyl Alcohol	3.477	59	31930	110.8219	ug/l	96
22) n-Hexane	3.873	57	47954	18.2891	ug/l	99
23) Di-isopropyl-ether	4.031	45	150095	19.9951	ug/l	100
24) 1,1-Dichloroethene	3.013	61	84671	19.8318	ug/l	97
25) Methyl Acetate	3.318	43	43890	21.7827	ug/l	100
26) Methyl-t-butyl ether	3.641	73	166961	18.7173	ug/l	99
27) 1,1-Dichloroethane	4.001	63	105215	20.2094	ug/l	94
28) trans-1,2-Dichloroethene	3.654	96	60323	19.1596	ug/l	96
29) Ethyl-t-butyl ether	4.294	59	164824	20.2903	ug/l	99
30) cis-1,2-Dichloroethene	4.409	61	100023	18.9019	ug/l	99
31) Bromochloromethane	4.568	49	48408	20.5941	ug/l	99
32) 2,2-Dichloropropane	4.416	77	68204	14.6212	ug/l	99
33) Ethyl acetate	4.434	43	47463m	17.5371	ug/l	
34) 1,4-Dioxane	5.495	88	43927	1154.5209	ug/l	97
35) 1,1-Dichloropropene	4.824	75	82466	18.6822	ug/l	97
36) Chloroform	4.605	83	112890	19.9125	ug/l	98
38) Cyclohexane	4.769	56	73539	18.7986	ug/l	99
40) 1,2-Dichloroethane	4.952	62	88950	18.5181	ug/l	97
41) 2-Butanone	4.409	43	25906m	18.6971	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	98230	19.5431	ug/l	100
43) Carbon Tetrachloride	4.830	117	77871	18.3013	ug/l	95
44) Vinyl Acetate	4.025	43	120273	14.2866	ug/l	100
45) Bromodichloromethane	5.568	83	90430	17.8127	ug/l	96
46) Methylcyclohexane	5.415	83	69245	18.2548	ug/l	99
47) Dibromomethane	5.501	174	46056	20.2263	ug/l	97
48) 1,2-Dichloropropane	5.428	63	61599	19.7314	ug/l	97
49) Trichloroethene	5.306	130	66207	18.8620	ug/l	99
50) Benzene	4.952	78	234877	18.8981	ug/l	100
51) tert-Amyl methyl ether	4.989	73	168208	19.2442	ug/l	98
53) Iso-propylacetate	4.946	43	91323	18.0143	ug/l	96
54) Methyl methacrylate	5.452	41	52038	21.3036	ug/l	97
55) Dibromochloromethane	6.421	129	73052	21.4127	ug/l	98
56) 2-Chloroethylvinylether	5.751	63	401	1.0757	ug/l	63
57) cis-1,3-Dichloropropene	5.806	75	91013	19.5184	ug/l	99
58) trans-1,3-Dichloropropene	6.092	75	88219	19.8693	ug/l	99
59) Ethyl methacrylate	6.110	41	51801	20.1805	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	59442	20.6335	ug/l	95
61) 1,2-Dibromoethane	6.494	107	63844	21.0167	ug/l	98
62) 1,3-Dichloropropane	6.287	76	103235	20.4992	ug/l	96
63) 4-Methyl-2-Pentanone	5.867	43	57064	20.9962	ug/l	99
64) 2-Hexanone	6.305	43	41015	20.2741	ug/l	93
65) Tetrachloroethene	6.287	164	48681	18.5794	ug/l	97
67) Toluene	5.995	92	145389	18.9078	ug/l	96

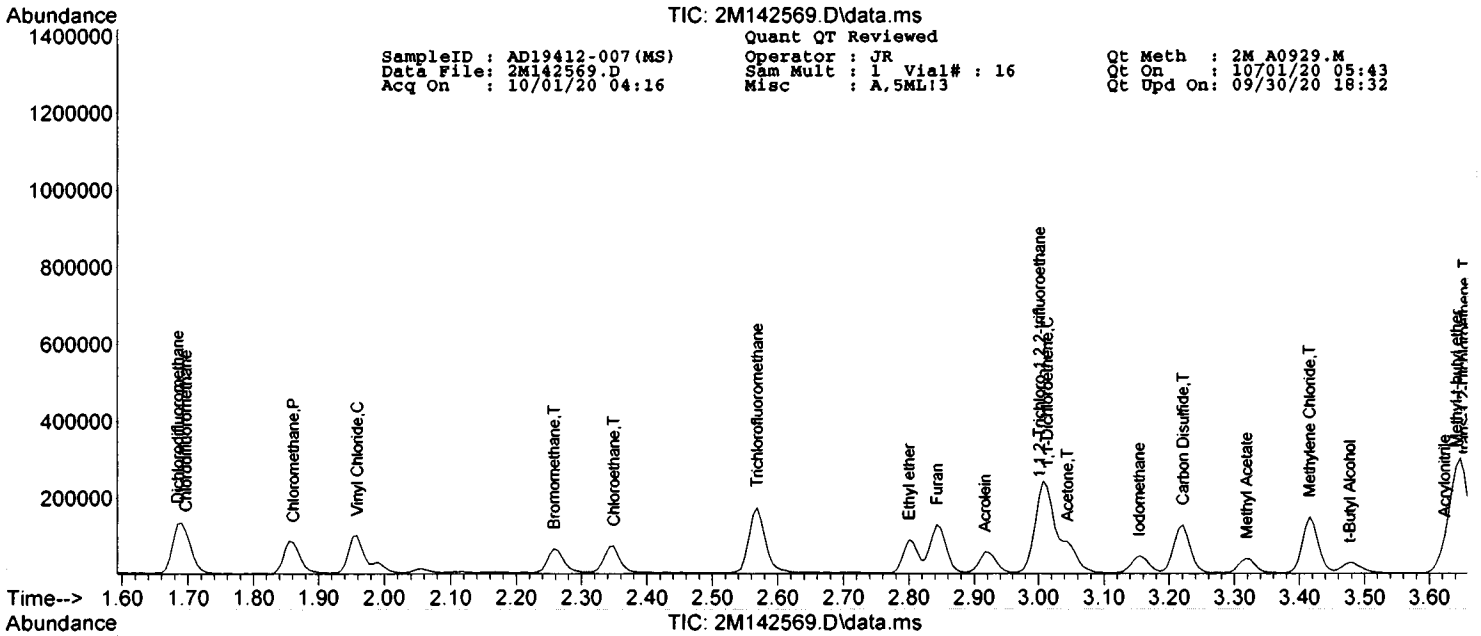
Quantitation Report (QT Reviewed)

SampleID : AD19412-007(MS) Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142569.D Sam Mult : 1 Vial# : 16 Qt On : 10/01/20 05:43
Acq On : 10/01/20 04:16 Misc : A,5ML!3 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-3020\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	59069	19.1715	ug/l	95
69)	Chlorobenzene	6.751	112	165791	19.3222	ug/l	99
71)	n-Butyl acrylate	6.994	55	115594	22.3944	ug/l	99
72)	n-Amyl acetate	7.110	43	81460	17.9172	ug/l	98
73)	Bromoform	7.202	173	49779	21.8001	ug/l	98
74)	Ethylbenzene	6.787	106	70854	20.3479	ug/l	95
75)	1,1,2,2-Tetrachloroethane	7.415	83	83322	20.3474	ug/l	98
77)	Styrene	7.074	104	182851	20.9192	ug/l	99
78)	m&p-Xylenes	6.848	106	210564	39.7252	ug/l	99
79)	o-Xylene	7.074	106	105932	21.1160	ug/l	92
80)	trans-1,4-Dichloro-2-b...	7.446	53	9264	9.5824	ug/l	93
81)	1,3-Dichlorobenzene	7.988	146	119874	19.2588	ug/l	97
82)	1,4-Dichlorobenzene	8.031	146	120285	18.8851	ug/l	98
83)	1,2-Dichlorobenzene	8.256	146	113828	19.3968	ug/l	98
84)	Isopropylbenzene	7.263	105	255256	20.8604	ug/l	99
85)	Cyclohexanone	7.342	55	12075	114.1622	ug/l	94
86)	Camphene	7.433	93	10938	3.0288	ug/l	97
87)	1,2,3-Trichloropropane	7.458	75	83396	18.7920	ug/l	94
88)	2-Chlorotoluene	7.561	91	155286	21.1025	ug/l	97
89)	p-Ethyltoluene	7.549	105	244079	19.8229	ug/l	98
90)	4-Chlorotoluene	7.616	91	159805	21.3208	ug/l	97
91)	n-Propylbenzene	7.488	91	303846	20.6312	ug/l	96
92)	Bromobenzene	7.464	77	142410	17.3861	ug/l	99
93)	1,3,5-Trimethylbenzene	7.574	105	197578	20.7129	ug/l	98
94)	Butyl methacrylate	7.580	41	75584	20.2795	ug/l	97
95)	t-Butylbenzene	7.775	119	192737	20.7124	ug/l	99
96)	1,2,4-Trimethylbenzene	7.793	105	209181	20.3579	ug/l	98
97)	sec-Butylbenzene	7.897	105	239525	20.8261	ug/l	98
98)	4-Isopropyltoluene	7.964	119	202929	20.7762	ug/l	99
99)	n-Butylbenzene	8.201	91	211726	20.9532	ug/l	96
100)	p-Diethylbenzene	8.189	119	109341	19.8003	ug/l	97
101)	1,2,4,5-Tetramethylben...	8.647	119	154650	19.1516	ug/l	93
102)	1,2-Dibromo-3-Chloropr...	8.707	157	18160	21.8224	ug/l	84
103)	Camphor	9.140	95	81924	249.4297	ug/l	98
104)	Hexachlorobutadiene	9.281	225	26108	20.6128	ug/l	97
105)	1,2,4-Trichlorobenzene	9.195	180	57798	19.1718	ug/l	99
106)	1,2,3-Trichlorobenzene	9.500	180	51092	20.4302	ug/l	97
107)	Naphthalene	9.360	128	181376	21.6023	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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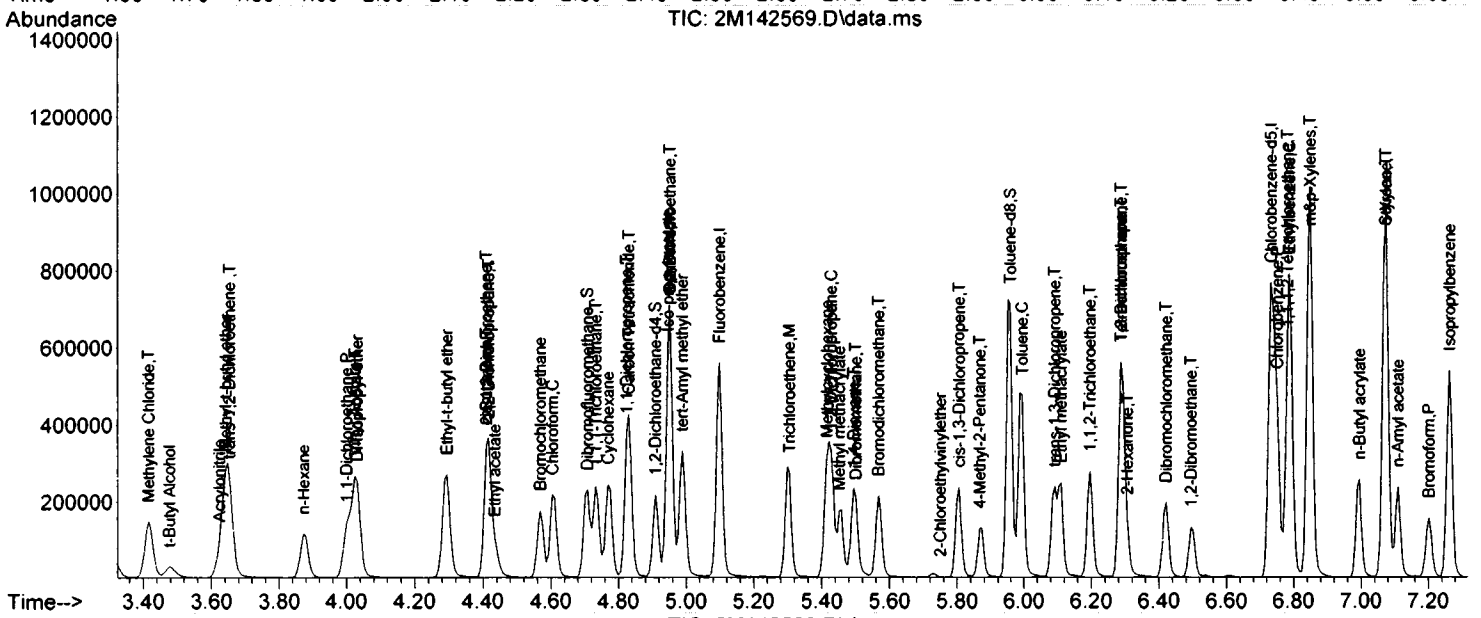
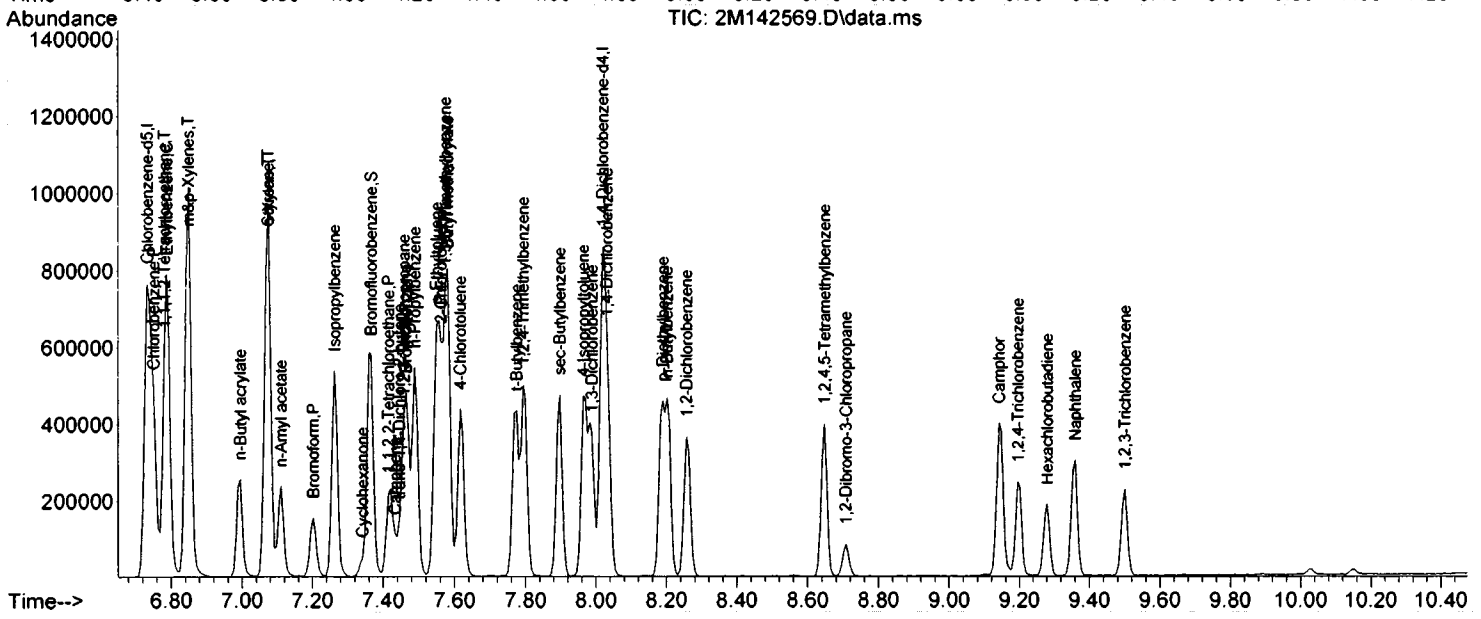
Quant QT Reviewed
SampleID : AD19412-007(MS)
Data File: 2M142569.D
Acq On : 10/01/20 04:16
Operator : JR
Sam Mult : 1 Vial# : 16
Misc : A,5ML13
Qt Meth : 2M_A0929.M
Qt On : 10/01/20 05:43
Qt Upd On: 09/30/20 18:32
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->


Abundance
TIC: 2M142569.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M142569.D\data.ms
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Bromofluorobenzene,S
Cyclohexanone
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene-d4,I
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (QT Reviewed)

SampleID : AD19412-007(MSD) Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142570.D Sam Mult : 1 Vial# : 17 Qt On : 10/01/20 05:43
Acq On : 10/01/20 04:35 Misc : A,5ML!3 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-3020\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.098	96	366878	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	326946	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	170914	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	105095	29.90	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.67%			
39) 1,2-Dichloroethane-d4	4.909	67	53600	29.54	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.47%			
66) Toluene-d8	5.952	98	388242	30.35	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.17%			
76) Bromofluorobenzene	7.366	174	139285	31.03	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.43%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	70773	18.9170	ug/l	96
6) Dichlorodifluoromethane	1.684	85	70981	18.8360	ug/l	100
7) Chloromethane	1.861	50	83428	19.8778	ug/l	99
8) Bromomethane	2.258	94	38807	19.0374	ug/l	92
9) Vinyl Chloride	1.959	62	87648	19.2342	ug/l	99
10) Chloroethane	2.343	64	57795	19.0120	ug/l	100
11) Trichlorofluoromethane	2.568	101	120069	17.1950	ug/l	98
12) Ethyl ether	2.800	59	47496	19.5884	ug/l	100
13) Furan	2.843	39	74899	18.2670	ug/l	93
14) 1,1,2-Trichloro-1,2,2-...	3.001	101	42988	17.5604	ug/l	93
15) Methylene Chloride	3.416	84	63986	18.4698	ug/l	96
16) Acrolein	2.922	56	49225	88.8461	ug/l	99
17) Acrylonitrile	3.623	53	22796	18.9626	ug/l	99
18) Iodomethane	3.154	142	49618	18.9217	ug/l	93
19) Acetone	3.044	43	90448	91.6273	ug/l	97
20) Carbon Disulfide	3.221	76	156458	16.7294	ug/l	100
21) t-Butyl Alcohol	3.477	59	31816	99.9221	ug/l	98
22) n-Hexane	3.873	57	50782	17.5254	ug/l	97
23) Di-isopropyl-ether	4.032	45	156024	18.8078	ug/l	96
24) 1,1-Dichloroethene	3.013	61	83744	17.7489	ug/l	96
25) Methyl Acetate	3.318	43	45197	20.2976	ug/l	100
26) Methyl-t-butyl ether	3.641	73	171533	17.4006	ug/l	99
27) 1,1-Dichloroethane	4.001	63	107906	18.7547	ug/l	95
28) trans-1,2-Dichloroethene	3.654	96	59970	17.2356	ug/l	97
29) Ethyl-t-butyl ether	4.294	59	172102	19.1709	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	99503	17.0150	ug/l	97
31) Bromochloromethane	4.568	49	50611	19.4832	ug/l	98
32) 2,2-Dichloropropane	4.416	77	68510	13.2897	ug/l	96
33) Ethyl acetate	4.434	43	48993m	16.3804	ug/l	
34) 1,4-Dioxane	5.495	88	45374	1079.1114	ug/l	97
35) 1,1-Dichloropropene	4.824	75	81553	16.7179	ug/l	93
36) Chloroform	4.605	83	115475	18.4309	ug/l	100
38) Cyclohexane	4.769	56	74421	17.2144	ug/l	99
40) 1,2-Dichloroethane	4.952	62	90570	17.0618	ug/l	99
41) 2-Butanone	4.410	43	26056m	17.0165	ug/l	
42) 1,1,1-Trichloroethane	4.733	97	98263	17.6900	ug/l	98
43) Carbon Tetrachloride	4.830	117	79729	16.9556	ug/l	93
44) Vinyl Acetate	4.026	43	124653	13.3984	ug/l	100
45) Bromodichloromethane	5.568	83	93030	16.5817	ug/l	98
46) Methylcyclohexane	5.415	83	73733	17.5889	ug/l	99
47) Dibromomethane	5.501	174	46217	18.3663	ug/l	97
48) 1,2-Dichloropropane	5.428	63	62473	18.1078	ug/l	99
49) Trichloroethene	5.300	130	64758	16.6943	ug/l	96
50) Benzene	4.952	78	236893	17.2472	ug/l	100
51) tert-Amyl methyl ether	4.989	73	179570	18.5899	ug/l	98
53) Iso-propylacetate	4.946	43	93361	16.3968	ug/l	97
54) Methyl methacrylate	5.452	41	51303	18.6996	ug/l	94
55) Dibromochloromethane	6.421	129	75023	19.5790	ug/l	99
56) 2-Chloroethylvinylether	5.751	63	563	1.3446	ug/l	72
57) cis-1,3-Dichloropropene	5.806	75	91273	17.4277	ug/l	98
58) trans-1,3-Dichloropropene	6.092	75	87656	17.5776	ug/l	99
59) Ethyl methacrylate	6.110	41	53532	18.5680	ug/l	98
60) 1,1,2-Trichloroethane	6.196	97	62633	19.3571	ug/l	96
61) 1,2-Dibromoethane	6.495	107	65254	19.1254	ug/l	99
62) 1,3-Dichloropropane	6.287	76	105692	18.6857	ug/l	97
63) 4-Methyl-2-Pentanone	5.867	43	57697	18.9012	ug/l	99
64) 2-Hexanone	6.306	43	42355	18.6406	ug/l	97
65) Tetrachloroethene	6.287	164	49660	16.8747	ug/l	100
67) Toluene	5.989	92	149005	17.2531	ug/l	99

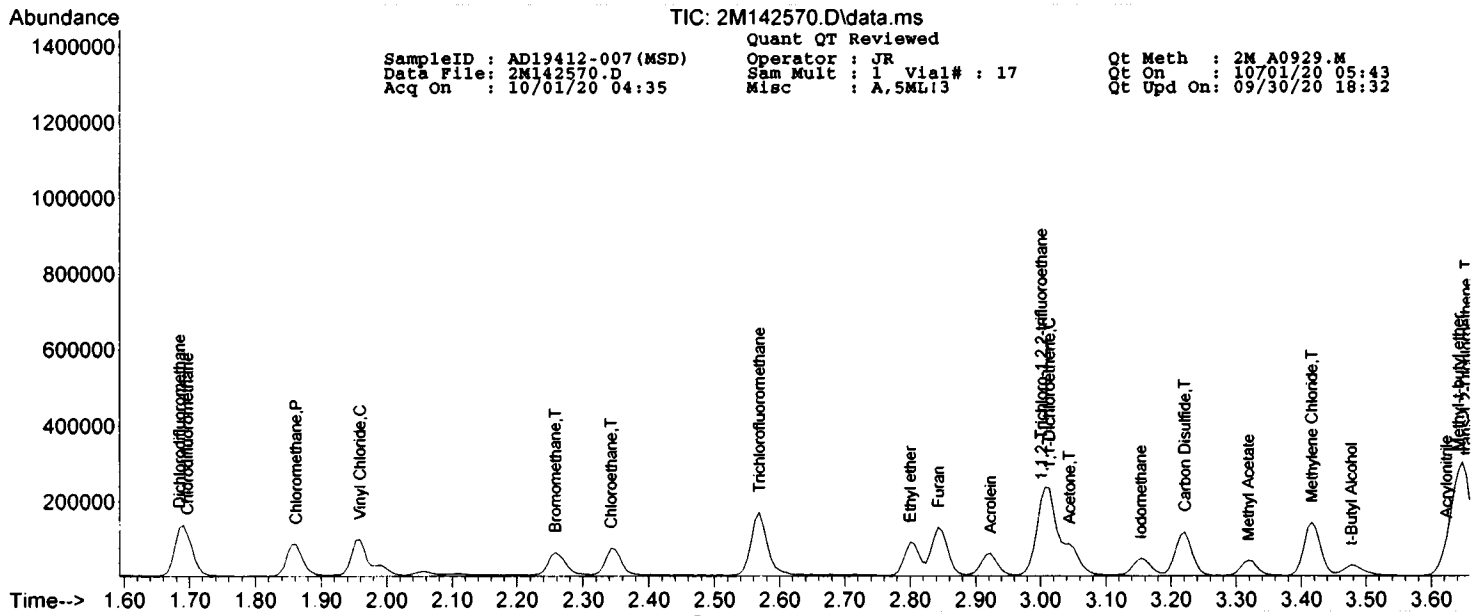
Quantitation Report (QT Reviewed)

SampleID : AD19412-007(MSD) Operator : JR Qt Meth : 2M_A0929.M
Data File: 2M142570.D Sam Mult : 1 Vial# : 17 Qt On : 10/01/20 05:43
Acq On : 10/01/20 04:35 Misc : A,5ML!3 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\09-3020\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.781	133	62839	18.1587	ug/l	99
69)	Chlorobenzene	6.751	112	167180	17.3476	ug/l	97
71)	n-Butyl acrylate	6.994	55	119719	20.7629	ug/l	99
72)	n-Amyl acetate	7.110	43	84796	16.6963	ug/l	99
73)	Bromoform	7.202	173	50615	19.8432	ug/l	98
74)	Ethylbenzene	6.787	106	72374	18.6061	ug/l	94
75)	1,1,2,2-Tetrachloroethane	7.415	83	87815	19.1972	ug/l	98
77)	Styrene	7.074	104	181670	18.6059	ug/l	96
78)	m&p-Xylenes	6.848	106	211554	35.7292	ug/l	96
79)	o-Xylene	7.068	106	106516	19.0072	ug/l	99
80)	trans-1,4-Dichloro-2-b...	7.446	53	9476	8.7745	ug/l	92
81)	1,3-Dichlorobenzene	7.988	146	121988	17.5445	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	122418	17.2057	ug/l	98
83)	1,2-Dichlorobenzene	8.256	146	119877	18.2868	ug/l	97
84)	Isopropylbenzene	7.263	105	263786	19.2982	ug/l	98
85)	Cyclohexanone	7.336	55	12821	108.5117	ug/l	90
86)	Camphene	7.433	93	12303	3.0498	ug/l	99
87)	1,2,3-Trichloropropane	7.458	75	87204	17.5907	ug/l	95
88)	2-Chlorotoluene	7.561	91	157390	19.1469	ug/l	99
89)	p-Ethyltoluene	7.549	105	248403	18.0598	ug/l	99
90)	4-Chlorotoluene	7.616	91	159104	19.0026	ug/l	97
91)	n-Propylbenzene	7.488	91	310790	18.8911	ug/l	97
92)	Bromobenzene	7.464	77	147816	16.1549	ug/l	99
93)	1,3,5-Trimethylbenzene	7.574	105	204372	19.1798	ug/l	98
94)	Butyl methacrylate	7.580	41	75538	18.1431	ug/l	96
95)	t-Butylbenzene	7.775	119	205347	19.7548	ug/l	98
96)	1,2,4-Trimethylbenzene	7.793	105	217561	18.9544	ug/l	97
97)	sec-Butylbenzene	7.897	105	256804	19.9884	ug/l	98
98)	4-Isopropyltoluene	7.964	119	210566	19.2988	ug/l	98
99)	n-Butylbenzene	8.202	91	221533	19.6261	ug/l	96
100)	p-Diethylbenzene	8.183	119	114221	18.5163	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	160529	17.7962	ug/l	95
102)	1,2-Dibromo-3-Chloropr...	8.708	157	18126	19.4988	ug/l	78
103)	Camphor	9.140	95	80042	218.1596	ug/l	94
104)	Hexachlorobutadiene	9.281	225	24992	17.6638	ug/l	93
105)	1,2,4-Trichlorobenzene	9.195	180	60067	17.8364	ug/l	98
106)	1,2,3-Trichlorobenzene	9.500	180	53781	19.2516	ug/l	95
107)	Naphthalene	9.360	128	186831	19.9200	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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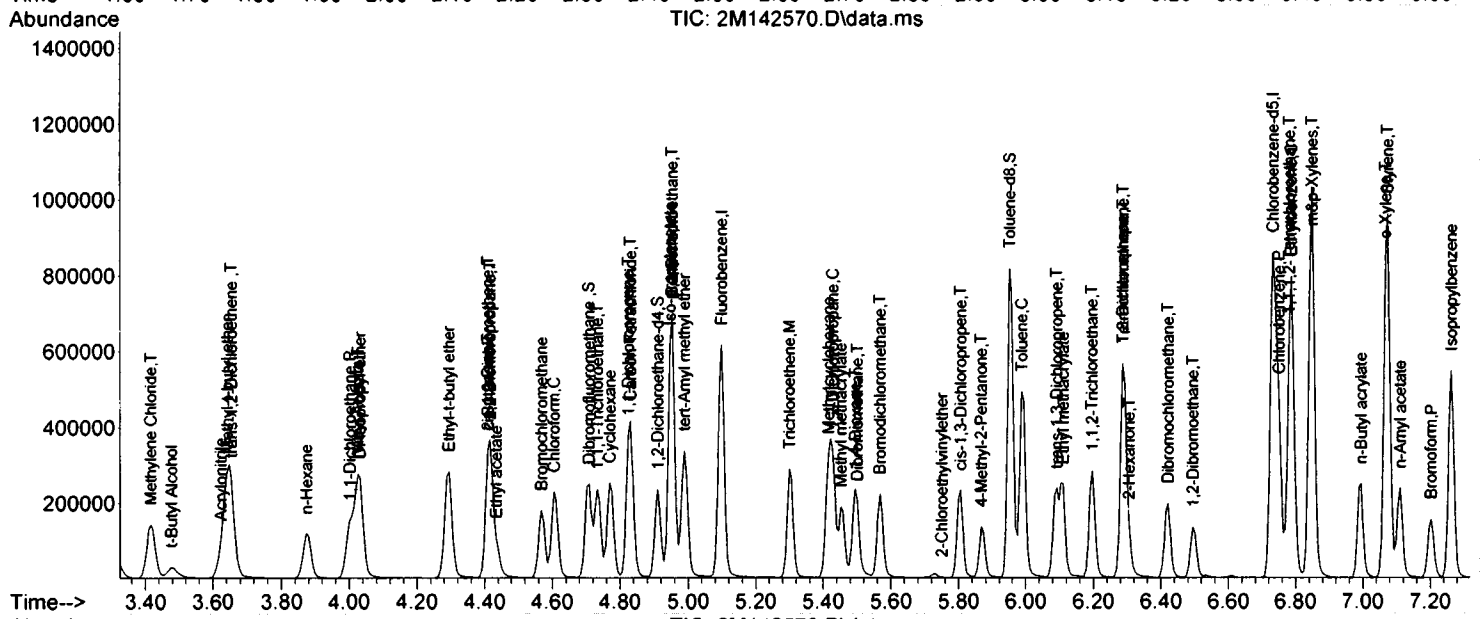
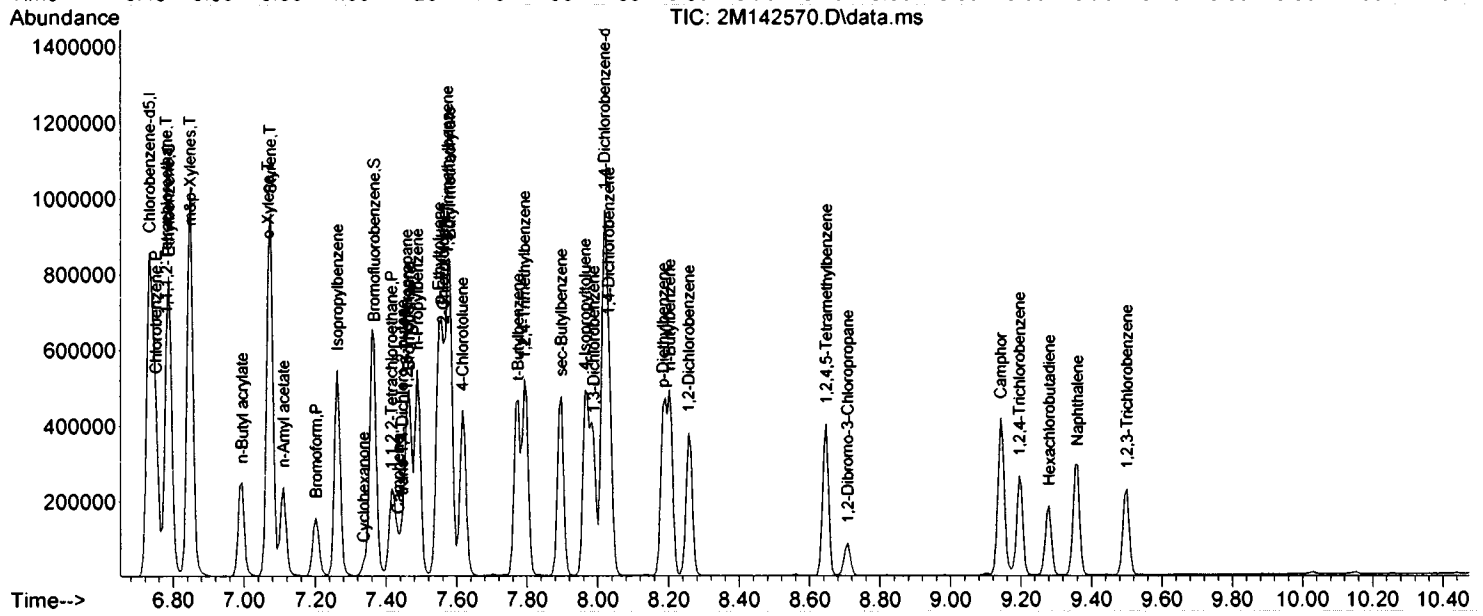
Quant QT Reviewed
SampleID : AD19412-007(MSD)
Data File: 2M142570.D
Acq On : 10/01/20 04:35
Operator : JR
Sam Mult : 1 Vial# : 17
Misc : A,5ML;3
Qt Meth : 2M_A0929.M
Qt On : 10/01/20 05:43
Qt Upd On: 09/30/20 18:32
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Time-->


Abundance
TIC: 2M142570.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Chlorobenzene,T
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->


Abundance
TIC: 2M142570.D\data.ms
Chlorobenzene-d5,I
Chlorobenzene,P
m&p-Xylenes,T
o-Xylene,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene-d
p-Diethylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142641.D	AD19408-001(T)(MS)	10/2/2020 1:53:00 PM
Non Spike(If applicable):	2M142639.D	AD19408-001(T)	10/2/2020 1:14:00 PM
Inst Blank(If applicable):			

Method: ~~NotFd~~ 8260D 10/14/20 JL Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	12.7571	0	20	64	50	150
Dichlorodifluoromethane	1	1.243	0	20	6.2*	50	150
Chloromethane	1	11.2098	0	20	56	50	150
Bromomethane	1	12.9273	0	20	65	50	150
Vinyl Chloride	1	12.746	0	20	64	50	150
Chloroethane	1	21.4079	0	20	107	50	150
Trichlorofluoromethane	1	23.0482	0	20	115	50	150
Ethyl ether	1	38.2491	8.8608	20	147	50	150
Furan	1	24.7417	0	20	124	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	28.885	0	20	144	50	150
Methylene Chloride	1	60.119	34.0613	20	130	70	130
Acrolein	1	111.1657	0	100	111	50	150
Acrylonitrile	1	28.3484	0	20	142	50	150
Iodomethane	1	12.6769	0	20	63	50	150
Acetone	1	174.1899	29.2285	100	145	50	150
Carbon Disulfide	1	24.568	0	20	123	50	150
t-Butyl Alcohol	1	169.8562	0	100	170*	50	150
n-Hexane	1	30.2837	0	20	151*	70	130
Di-isopropyl-ether	1	26.9067	0	20	135*	70	130
1,1-Dichloroethene	1	27.2938	0	20	136*	70	130
Methyl Acetate	1	127.1463	77.5595	20	248*	50	150
Methyl-t-butyl ether	1	28.0112	0	20	140*	70	130
1,1-Dichloroethane	1	27.6981	0	20	138*	70	130
trans-1,2-Dichloroethene	1	27.521	0	20	138*	70	130
Ethyl-t-butyl ether	1	29.0992	0	20	145*	70	130
cis-1,2-Dichloroethene	1	28.4612	0	20	142*	70	130
Bromochloromethane	1	29.0728	0	20	145*	70	130
2,2-Dichloropropane	1	29.8602	0	20	149*	70	130
Ethyl acetate	1	46.7245	1.7774	20	225*	50	150
1,4-Dioxane	1	1591.617	0	1000	159*	50	150
1,1-Dichloropropene	1	28.9849	0	20	145*	70	130
Chloroform	1	28.2537	0	20	141*	70	130
Cyclohexane	1	30.0473	0	20	150*	70	130
1,2-Dichloroethane	1	25.8101	0	20	129	70	130
2-Butanone	1	0	0	20	0*	50	150
1,1,1-Trichloroethane	1	28.27	0	20	141*	70	130
Carbon Tetrachloride	1	26.6603	0	20	133	50	150
Vinyl Acetate	1	19.9146	0	20	100	50	150
Bromodichloromethane	1	28.727	0	20	144*	70	130
Methylcyclohexane	1	29.1973	0	20	146*	70	130
Dibromomethane	1	26.6551	0	20	133*	70	130
1,2-Dichloropropane	1	28.2758	0	20	141*	70	130
Trichloroethene	1	28.0632	0	20	140*	70	130
Benzene	1	27.1015	0	20	136*	70	130
tert-Amyl methyl ether	1	25.6362	0	20	128	70	130
Iso-propylacetate	1	26.8328	0	20	134*	70	130
Methyl methacrylate	1	27.5687	0	20	138*	70	130
Dibromochloromethane	1	25.3286	0	20	127	70	130
2-Chloroethylvinylether	1	51.2472	0	20	256*	70	130
cis-1,3-Dichloropropene	1	24.7213	0	20	124	70	130
trans-1,3-Dichloropropene	1	23.1865	0	20	116	70	130
Ethyl methacrylate	1	25.7256	0	20	129	70	130
1,1,2-Trichloroethane	1	25.7967	0	20	129	70	130
1,2-Dibromoethane	1	26.0446	0	20	130	70	130
1,3-Dichloropropane	1	25.8464	0	20	129	70	130
4-Methyl-2-Pentanone	1	34.9454	0	20	175*	50	150
2-Hexanone	1	32.4953	0	20	162*	50	150
Tetrachloroethene	1	24.5669	0	20	123	50	150
Toluene	1	26.7016	1.0641	20	128	70	130
1,1,1,2-Tetrachloroethane	1	23.452	0	20	117	70	130
Chlorobenzene	1	25.46	0	20	127	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

Method: ~~Not~~ Fd 8260D 10/14/22 Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	31.2972	0	20	156*	70	130
n-Amyl acetate	1	27.571	0	20	138*	70	130
Bromoform	**1**	**26.8947**	**0**	**20**	**134***	**70**	**130**
Ethylbenzene	**1**	**30.0224**	**0**	**20**	**150***	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**31.7139**	**0**	**20**	**159***	**70**	**130**
Styrene	**1**	**29.1513**	**0**	**20**	**146***	**70**	**130**
m&p-Xylenes	**1**	**60.2499**	**1.0381**	**40**	**148***	**70**	**130**
o-Xylene	**1**	**29.4656**	**0**	**20**	**147***	**70**	**130**
trans-1,4-Dichloro-2-butene	1	18.2853	0	20	91	50	150
1,3-Dichlorobenzene	**1**	**27.4507**	**0**	**20**	**137***	**70**	**130**
1,4-Dichlorobenzene	**1**	**26.4823**	**0**	**20**	**132***	**70**	**130**
1,2-Dichlorobenzene	**1**	**26.4447**	**0**	**20**	**132***	**70**	**130**
Isopropylbenzene	**1**	**30.2013**	**0**	**20**	**151***	**70**	**130**
Cyclohexanone	1	151.3461	0	100	151*	50	150
Camphene	1	42.7576	0	20	214*	70	130
1,2,3-Trichloropropane	**1**	**24.5733**	**0**	**20**	**123**	**70**	**130**
2-Chlorotoluene	1	25.4797	0	20	127	70	130
p-Ethyltoluene	1	29.9297	0	20	150*	70	130
4-Chlorotoluene	1	28.9395	0	20	145*	70	130
n-Propylbenzene	**1**	**31.0573**	**0**	**20**	**155***	**70**	**130**
Bromobenzene	1	27.5019	0	20	138*	70	130
1,3,5-Trimethylbenzene	**1**	**30.4917**	**0**	**20**	**152***	**70**	**130**
Butyl methacrylate	1	28.2456	0	20	141*	70	130
t-Butylbenzene	**1**	**21.0655**	**0**	**20**	**105**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**24.7997**	**1.0812**	**20**	**119**	**70**	**130**
sec-Butylbenzene	**1**	**29.3335**	**0**	**20**	**147***	**70**	**130**
4-Isopropyltoluene	**1**	**27.5652**	**0**	**20**	**138***	**70**	**130**
n-Butylbenzene	**1**	**29.4767**	**0**	**20**	**147***	**70**	**130**
p-Diethylbenzene	1	29.3555	0	20	147*	70	130
1,2,4,5-Tetramethylbenzene	1	27.9288	0	20	140*	70	130
1,2-Dibromo-3-Chloropropane	1	32.982	0	20	165*	50	150
Camphor	1	1113.977	0	200	557*	20	150
Hexachlorobutadiene	1	30.3623	0	20	152*	50	150
1,2,4-Trichlorobenzene	1	27.1123	0	20	136*	70	130
1,2,3-Trichlorobenzene	1	29.2385	0	20	146*	70	130
Naphthalene	1	33.2301	0	20	166*	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142642.D	AD19408-001(T)(MSD)	10/2/2020 2:12:00 PM
Non Spike(If applicable):	2M142639.D	AD19408-001(T)	10/2/2020 1:14:00 PM
Inst Blank(If applicable):			

Method: ~~NotFd~~ 8260D 10/14/20 JL Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	10.4162	0	20	52	50	150
Dichlorodifluoromethane	1	0	0	20	0*	50	150
Chloromethane	1	5.263	0	20	26*	50	150
Bromomethane	1	11.4194	0	20	57	50	150
Vinyl Chloride	1	7.0077	0	20	35*	50	150
Chloroethane	1	12.7413	0	20	64	50	150
Trichlorofluoromethane	1	14.6781	0	20	73	50	150
Ethyl ether	1	27.1019	8.8608	20	91	50	150
Furan	1	19.672	0	20	98	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	21.4733	0	20	107	50	150
Methylene Chloride	1	45.1447	34.0613	20	55*	70	130
Acrolein	1	67.0107	0	100	67	50	150
Acrylonitrile	1	21.1146	0	20	106	50	150
Iodomethane	1	13.1163	0	20	66	50	150
Acetone	1	127.7656	29.2285	100	99	50	150
Carbon Disulfide	1	16.2445	0	20	81	50	150
t-Butyl Alcohol	1	132.1295	0	100	132	50	150
n-Hexane	1	23.0084	0	20	115	70	130
Di-isopropyl-ether	1	20.0664	0	20	100	70	130
1,1-Dichloroethene	1	19.4256	0	20	97	70	130
Methyl Acetate	1	94.7619	77.5595	20	86	50	150
Methyl-t-butyl ether	1	18.6197	0	20	93	70	130
1,1-Dichloroethane	1	20.8895	0	20	104	70	130
trans-1,2-Dichloroethene	1	19.7523	0	20	99	70	130
Ethyl-t-butyl ether	1	22.9711	0	20	115	70	130
cis-1,2-Dichloroethene	1	20.7857	0	20	104	70	130
Bromochloromethane	1	21.3175	0	20	107	70	130
2,2-Dichloropropane	1	22.1927	0	20	111	70	130
Ethyl acetate	1	35.9287	1.7774	20	171*	50	150
1,4-Dioxane	1	1269.607	0	1000	127	50	150
1,1-Dichloropropene	1	20.4052	0	20	102	70	130
Chloroform	1	21.0832	0	20	105	70	130
Cyclohexane	1	21.3341	0	20	107	70	130
1,2-Dichloroethane	1	19.4233	0	20	97	70	130
2-Butanone	1	0	0	20	0*	50	150
1,1,1-Trichloroethane	1	21.3127	0	20	107	70	130
Carbon Tetrachloride	1	21.4694	0	20	107	50	150
Vinyl Acetate	1	16.726	0	20	84	50	150
Bromodichloromethane	1	19.9158	0	20	100	70	130
Methylcyclohexane	1	22.0046	0	20	110	70	130
Dibromomethane	1	20.9495	0	20	105	70	130
1,2-Dichloropropane	1	20.9489	0	20	105	70	130
Trichloroethene	1	20.6467	0	20	103	70	130
Benzene	1	20.2292	0	20	101	70	130
tert-Amyl methyl ether	1	20.5109	0	20	103	70	130
Iso-propylacetate	1	24.1258	0	20	121	70	130
Methyl methacrylate	1	22.3909	0	20	112	70	130
Dibromochloromethane	1	22.4446	0	20	112	70	130
2-Chloroethylvinylether	1	89.3861	0	20	447*	70	130
cis-1,3-Dichloropropene	1	21.2323	0	20	106	70	130
trans-1,3-Dichloropropene	1	21.6984	0	20	108	70	130
Ethyl methacrylate	1	21.7508	0	20	109	70	130
1,1,2-Trichloroethane	1	21.8084	0	20	109	70	130
1,2-Dibromoethane	1	22.1757	0	20	111	70	130
1,3-Dichloropropane	1	21.5538	0	20	108	70	130
4-Methyl-2-Pentanone	1	28.0354	0	20	140	50	150
2-Hexanone	1	27.2805	0	20	136	50	150
Tetrachloroethene	1	21.981	0	20	110	50	150
Toluene	1	21.7106	1.0641	20	103	70	130
1,1,1,2-Tetrachloroethane	1	21.0978	0	20	105	70	130
Chlorobenzene	1	21.2287	0	20	106	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

Method: ~~NotFd~~ 8260D 10/14/20 JC Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	26.4461	0	20	132*	70	130
n-Amyl acetate	1	27.5594	0	20	138*	70	130
Bromoform	1	24.248	0	20	121	70	130
Ethylbenzene	1	24.0186	0	20	120	70	130
1,1,2,2-Tetrachloroethane	1	22.1863	0	20	111	70	130
Styrene	1	23.2882	0	20	116	70	130
m&p-Xylenes	1	46.0626	1.0381	40	113	70	130
o-Xylene	1	23.5839	0	20	118	70	130
trans-1,4-Dichloro-2-butene	1	23.7232	0	20	119	50	150
1,3-Dichlorobenzene	1	21.9193	0	20	110	70	130
1,4-Dichlorobenzene	1	20.9946	0	20	105	70	130
1,2-Dichlorobenzene	1	21.8946	0	20	109	70	130
Isopropylbenzene	1	24.8014	0	20	124	70	130
Cyclohexanone	1	132.2719	0	100	132	50	150
Camphene	1	22.2821	0	20	111	70	130
1,2,3-Trichloropropane	1	22.5145	0	20	113	70	130
2-Chlorotoluene	1	23.7845	0	20	119	70	130
p-Ethyltoluene	1	23.0222	0	20	115	70	130
4-Chlorotoluene	1	24.4856	0	20	122	70	130
n-Propylbenzene	1	24.1501	0	20	121	70	130
Bromobenzene	1	21.9023	0	20	110	70	130
1,3,5-Trimethylbenzene	1	24.4928	0	20	122	70	130
Butyl methacrylate	1	22.3152	0	20	112	70	130
t-Butylbenzene	1	24.6131	0	20	123	70	130
1,2,4-Trimethylbenzene	1	24.2729	1.0812	20	116	70	130
sec-Butylbenzene	1	24.9265	0	20	125	70	130
4-Isopropyltoluene	1	24.0957	0	20	120	70	130
n-Butylbenzene	1	25.2547	0	20	126	70	130
p-Diethylbenzene	1	23.7474	0	20	119	70	130
1,2,4,5-Tetramethylbenzene	1	22.4415	0	20	112	70	130
1,2-Dibromo-3-Chloropropane	1	25.6392	0	20	128	50	150
Camphor	1	963.7448	0	200	482*	20	150
Hexachlorobutadiene	1	23.3523	0	20	117	50	150
1,2,4-Trichlorobenzene	1	22.9502	0	20	115	70	130
1,2,3-Trichlorobenzene	1	23.7063	0	20	119	70	130
Naphthalene	1	25.7826	0	20	129	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89414

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M142642.D	AD19408-001(T)(MSD)	10/2/2020 2:12:00 PM
Duplicate(If applicable):	2M142641.D	AD19408-001(T)(MS)	10/2/2020 1:53:00 PM
Inst Blank(If applicable):			

Method: ~~NotFd~~ 8260 D 10/14/20 JL Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	10.4162	12.7571	20	30
Dichlorodifluoromethane	**1**	**0**	**1.243**	**200***	**30**
Chloromethane	**1**	**5.263**	**11.2098**	**72***	**30**
Bromomethane	**1**	**11.4194**	**12.9273**	**12**	**30**
Vinyl Chloride	**1**	**7.0077**	**12.746**	**58***	**40**
Chloroethane	**1**	**12.7413**	**21.4079**	**51***	**30**
Trichlorofluoromethane	**1**	**14.6781**	**23.0482**	**44***	**30**
Ethyl ether	1	27.1019	38.2491	34*	30
Furan	1	19.672	24.7417	23	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**21.4733**	**28.885**	**29**	**30**
Methylene Chloride	**1**	**45.1447**	**60.119**	**28**	**30**
Acrolein	**1**	**67.0107**	**111.1657**	**50***	**30**
Acrylonitrile	**1**	**21.1146**	**28.3484**	**29**	**30**
Iodomethane	1	13.1163	12.6769	3.4	30
Acetone	**1**	**127.7656**	**174.1899**	**31***	**30**
Carbon Disulfide	**1**	**16.2445**	**24.568**	**41***	**30**
t-Butyl Alcohol	**1**	**132.1295**	**169.8562**	**25**	**30**
n-Hexane	1	23.0084	30.2837	27	30
Di-isopropyl-ether	1	20.0664	26.9067	29	30
1,1-Dichloroethene	**1**	**19.4256**	**27.2938**	**34**	**40**
Methyl Acetate	1	94.7619	127.1463	29	30
Methyl-t-butyl ether	**1**	**18.6197**	**28.0112**	**40***	**30**
1,1-Dichloroethane	**1**	**20.8895**	**27.6981**	**28**	**40**
trans-1,2-Dichloroethene	**1**	**19.7523**	**27.521**	**33***	**30**
Ethyl-t-butyl ether	1	22.9711	29.0992	24	30
cis-1,2-Dichloroethene	**1**	**20.7857**	**28.4612**	**31***	**30**
Bromochloromethane	1	21.3175	29.0728	31*	30
2,2-Dichloropropane	1	22.1927	29.8602	29	30
Ethyl acetate	1	35.9287	46.7245	26	30
1,4-Dioxane	**1**	**1269.607**	**1591.617**	**23**	**30**
1,1-Dichloropropene	1	20.4052	28.9849	35*	30
Chloroform	**1**	**21.0832**	**28.2537**	**29**	**40**
Cyclohexane	1	21.3341	30.0473	34*	30
1,2-Dichloroethane	**1**	**19.4233**	**25.8101**	**28**	**40**
2-Butanone	**1**	**0**	**0**	**NA**	**40**
1,1,1-Trichloroethane	**1**	**21.3127**	**28.27**	**28**	**30**
Carbon Tetrachloride	**1**	**21.4694**	**26.6603**	**22**	**40**
Vinyl Acetate	1	16.726	19.9146	17	30
Bromodichloromethane	**1**	**19.9158**	**28.727**	**36***	**30**
Methylcyclohexane	1	22.0046	29.1973	28	30
Dibromomethane	1	20.9495	26.6551	24	30
1,2-Dichloropropane	**1**	**20.9489**	**28.2758**	**30**	**30**
Trichloroethene	**1**	**20.6467**	**28.0632**	**30**	**40**
Benzene	**1**	**20.2292**	**27.1015**	**29**	**40**
tert-Amyl methyl ether	1	20.5109	25.6362	22	30
Iso-propylacetate	1	24.1258	26.8328	11	30
Methyl methacrylate	1	22.3909	27.5687	21	30
Dibromochloromethane	**1**	**22.4446**	**25.3286**	**12**	**30**
2-Chloroethylvinylether	**1**	**89.3861**	**51.2472**	**54***	**30**
cis-1,3-Dichloropropene	**1**	**21.2323**	**24.7213**	**15**	**30**
trans-1,3-Dichloropropene	**1**	**21.6984**	**23.1865**	**6.6**	**30**
Ethyl methacrylate	1	21.7508	25.7256	17	30
1,1,2-Trichloroethane	**1**	**21.8084**	**25.7967**	**17**	**30**
1,2-Dibromoethane	1	22.1757	26.0446	16	30
1,3-Dichloropropane	**1**	**21.5538**	**25.8464**	**18**	**30**
4-Methyl-2-Pentanone	**1**	**28.0354**	**34.9454**	**22**	**30**
2-Hexanone	**1**	**27.2805**	**32.4953**	**17**	**30**
Tetrachloroethene	**1**	**21.981**	**24.5669**	**11**	**40**
Toluene	**1**	**21.7106**	**26.7016**	**21**	**40**
1,1,1,2-Tetrachloroethane	1	21.0978	23.452	11	30
Chlorobenzene	**1**	**21.2287**	**25.46**	**18**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits

QC Batch: MBS89414

Method: ~~NotFd~~ 8260 D 10/14/20 Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	26.4461	31.2972	17	30
n-Amyl acetate	1	27.5594	27.571	0.04	30
Bromoform	**1**	**24.248**	**26.8947**	**10**	**30**
Ethylbenzene	**1**	**24.0186**	**30.0224**	**22**	**30**
1,1,2,2-Tetrachloroethane	**1**	**22.1863**	**31.7139**	**35***	**30**
Styrene	**1**	**23.2882**	**29.1513**	**22**	**30**
m&p-Xylenes	**1**	**46.0626**	**60.2499**	**27**	**30**
o-Xylene	**1**	**23.5839**	**29.4656**	**22**	**30**
trans-1,4-Dichloro-2-butene	1	23.7232	18.2853	26	30
1,3-Dichlorobenzene	**1**	**21.9193**	**27.4507**	**22**	**30**
1,4-Dichlorobenzene	**1**	**20.9946**	**26.4823**	**23**	**40**
1,2-Dichlorobenzene	**1**	**21.8946**	**26.4447**	**19**	**40**
Isopropylbenzene	**1**	**24.8014**	**30.2013**	**20**	**30**
Cyclohexanone	1	132.2719	151.3461	13	30
Camphene	1	22.2821	42.7576	63*	30
1,2,3-Trichloropropane	**1**	**22.5145**	**24.5733**	**8.7**	**30**
2-Chlorotoluene	1	23.7845	25.4797	6.9	30
p-Ethyltoluene	1	23.0222	29.9297	26	30
4-Chlorotoluene	1	24.4856	28.9395	17	30
n-Propylbenzene	**1**	**24.1501**	**31.0573**	**25**	**40**
Bromobenzene	1	21.9023	27.5019	23	30
1,3,5-Trimethylbenzene	**1**	**24.4928**	**30.4917**	**22**	**30**
Butyl methacrylate	1	22.3152	28.2456	23	30
t-Butylbenzene	**1**	**24.6131**	**21.0655**	**16**	**30**
1,2,4-Trimethylbenzene	**1**	**24.2729**	**24.7997**	**2.1**	**30**
sec-Butylbenzene	**1**	**24.9265**	**29.3335**	**16**	**40**
4-Isopropyltoluene	**1**	**24.0957**	**27.5652**	**13**	**30**
n-Butylbenzene	**1**	**25.2547**	**29.4767**	**15**	**30**
p-Diethylbenzene	1	23.7474	29.3555	21	30
1,2,4,5-Tetramethylbenzene	1	22.4415	27.9288	22	30
1,2-Dibromo-3-Chloropropane	1	25.6392	32.982	25	30
Camphor	1	963.7448	1113.977	14	30
Hexachlorobutadiene	1	23.3523	30.3623	26	30
1,2,4-Trichlorobenzene	1	22.9502	27.1123	17	30
1,2,3-Trichlorobenzene	1	23.7063	29.2385	21	30
Naphthalene	1	25.7826	33.2301	25	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

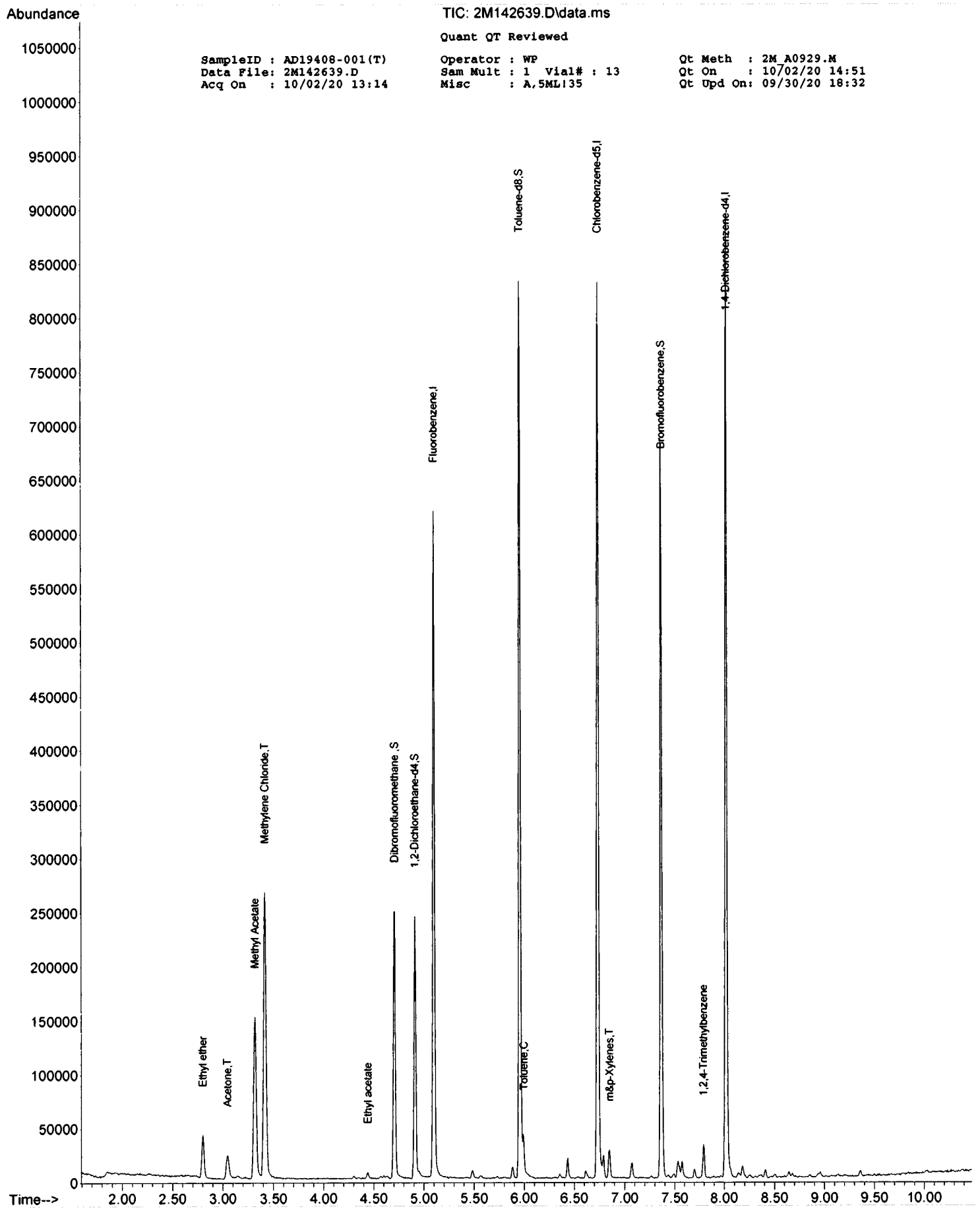
Quantitation Report (QT Reviewed)

SampleID : AD19408-001(T) Operator : WP Qt Meth : 2M_A0929.M
Data File: 2M142639.D Sam Mult : 1 Vial# : 13 Qt On : 10/02/20 14:51
Acq On : 10/02/20 13:14 Misc : A,5ML!35 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	366251	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	338507	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	172125	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	108368	30.89	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.97%			
39) 1,2-Dichloroethane-d4	4.910	67	56056	30.94	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.13%			
66) Toluene-d8	5.952	98	390743	29.50	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.33%			
76) Bromofluorobenzene	7.367	174	142947	31.62	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.40%			
Target Compounds						Qvalue
12) Ethyl ether	2.800	59	21448	8.8608	ug/l	99
15) Methylene Chloride	3.416	84	117799	34.0613	ug/l	98
19) Acetone	3.044	43	28803	29.2285	ug/l	96
25) Methyl Acetate	3.318	43	172408	77.5595	ug/l	100
33) Ethyl acetate	4.440	43	5307	1.7774	ug/l	97
67) Toluene	5.995	92	9515	1.0641	ug/l	89
78) m&p-Xylenes	6.848	106	6190	1.0381	ug/l	96
96) 1,2,4-Trimethylbenzene	7.793	105	12498	1.0812	ug/l	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 2M142639.D\data.ms
Quant QT Reviewed
SampleID : AD19408-001(T)
Data File: 2M142639.D
Acq On : 10/02/20 13:14
Operator : WP
Sam Mult : 1 Vial# : 13
Misc : A,5ML!35
Qt Meth : 2M_A0929.M
Qt On : 10/02/20 14:51
Qt Upd On: 09/30/20 18:32
Ethyl ether
Acetone,T
Methyl Acetate
Methylene Chloride,T
Ethyl acetate
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Toluene,C
Chlorobenzene-d5,I
m&p-Xylenes,T
Bromofluorobenzene,S
1,2,4-Trimethylbenzene
1,4-Dichlorobenzene-d4,I
Time-->

Quantitation Report (Not Reviewed)

SampleID : AD19408-001(T)(MS) Operator : WP Qt Meth : 2M_A0929.M
Data File: 2M142641.D Sam Mult : 1 Vial# : 15 Qt On : 10/02/20 15:34
Acq On : 10/02/20 13:53 Misc : A,5ML!35 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	337596	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	307733	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	166174	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.703	111	95914	29.66	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.87%			
39) 1,2-Dichloroethane-d4	4.910	67	51427	30.80	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.67%			
66) Toluene-d8	5.952	98	366910	30.47	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.57%			
76) Bromofluorobenzene	7.361	174	134440	30.80	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.67%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.691	51	37606	10.9236	ug/l	8
6) Dichlorodifluoromethane	1.679	85	2319	0.6688	ug/l	90
7) Chloromethane	1.856	50	23047	5.9675	ug/l	98
8) Bromomethane	2.258	94	23084	12.3065	ug/l	94
9) Vinyl Chloride	1.953	62	31854	7.5966	ug/l	94
10) Chloroethane	2.343	64	38574	13.7897	ug/l	96
11) Trichlorofluoromethane	2.569	101	100055	15.5716	ug/l	96
12) Ethyl ether	2.800	59	66094	29.6230	ug/l	95
13) Furan	2.843	39	77263	20.4779	ug/l	87
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	51716	22.9582	ug/l	94
15) Methylene Chloride	3.416	84	152496	47.8365	ug/l	97
16) Acrolein	2.916	56	35165	68.9743	ug/l	96
17) Acrylonitrile	3.617	53	24545	22.1885	ug/l	95
18) Iodomethane	3.154	142	32670	13.6536	ug/l	97
19) Acetone	3.044	43	120103	132.2222	ug/l	98
20) Carbon Disulfide	3.215	76	162637	18.8985	ug/l	100
21) t-Butyl Alcohol	3.477	59	41499	141.6374	ug/l	96
22) n-Hexane	3.873	57	62196	23.3262	ug/l	97
23) Di-isopropyl-ether	4.026	45	164485	21.5475	ug/l	96
24) 1,1-Dichloroethene	3.008	61	92774	21.3682	ug/l	98
25) Methyl Acetate	3.319	43	198496	96.8748	ug/l	100
26) Methyl-t-butyl ether	3.642	73	180008	19.8441	ug/l	98
27) 1,1-Dichloroethane	4.001	63	116614	22.0263	ug/l	98
28) trans-1,2-Dichloroethene	3.654	96	70872	22.1357	ug/l	95
29) Ethyl-t-butyl ether	4.288	59	200670	24.2921	ug/l	98
30) cis-1,2-Dichloroethene	4.410	61	120295	22.3546	ug/l	97
31) Bromochloromethane	4.568	49	56825	23.7727	ug/l	94
32) 2,2-Dichloropropane	4.416	77	114581	24.1545	ug/l	99
33) Ethyl acetate	4.434	43	103754	37.6982	ug/l	89
34) 1,4-Dioxane	5.489	88	52939	1368.2306	ug/l	99
35) 1,1-Dichloropropene	4.824	75	101221	22.5495	ug/l	94
36) Chloroform	4.605	83	130951	22.7139	ug/l	98
38) Cyclohexane	4.770	56	90056	22.6377	ug/l	98
40) 1,2-Dichloroethane	4.953	62	101246	20.7272	ug/l	97
42) 1,1,1-Trichloroethane	4.733	97	117047	22.8993	ug/l	93
43) Carbon Tetrachloride	4.831	117	100264	23.1721	ug/l	92
44) Vinyl Acetate	4.026	43	150570	17.5878	ug/l	100
45) Bromodichloromethane	5.568	83	108796	21.0739	ug/l	96
46) Methylcyclohexane	5.416	83	86694	22.4746	ug/l	99
47) Dibromomethane	5.495	174	53472	23.0925	ug/l	99
48) 1,2-Dichloropropane	5.428	63	71975	22.6714	ug/l	97
49) Trichloroethene	5.300	130	81759	22.9052	ug/l	96
50) Benzene	4.946	78	272127	21.5309	ug/l	100
51) tert-Amyl methyl ether	4.989	73	188458	21.2022	ug/l	99
53) Iso-propylacetate	4.946	43	133221	24.8582	ug/l	96
54) Methyl methacrylate	5.452	41	60358	23.3737	ug/l	96
55) Dibromochloromethane	6.422	129	86512	23.9869	ug/l	98
56) 2-Chloroethylvinylether	5.708	63	36787	93.3433	ug/l	97
57) cis-1,3-Dichloropropene	5.806	75	112786	22.8799	ug/l	98
58) trans-1,3-Dichloropropene	6.086	75	108764	23.1721	ug/l	99
59) Ethyl methacrylate	6.105	41	61973	22.8378	ug/l	98
60) 1,1,2-Trichloroethane	6.196	97	71263	23.3993	ug/l	95
61) 1,2-Dibromoethane	6.495	107	74783	23.2867	ug/l	98
62) 1,3-Dichloropropane	6.288	76	121383	22.7996	ug/l	97
63) 4-Methyl-2-Pentanone	5.867	43	82966	28.8760	ug/l	99
64) 2-Hexanone	6.300	43	60546	28.3102	ug/l	98
65) Tetrachloroethene	6.288	164	63235	22.8291	ug/l	94
67) Toluene	5.989	92	190172	23.3946	ug/l	100
68) 1,1,1,2-Tetrachloroethane	6.781	133	72972	22.4033	ug/l	100

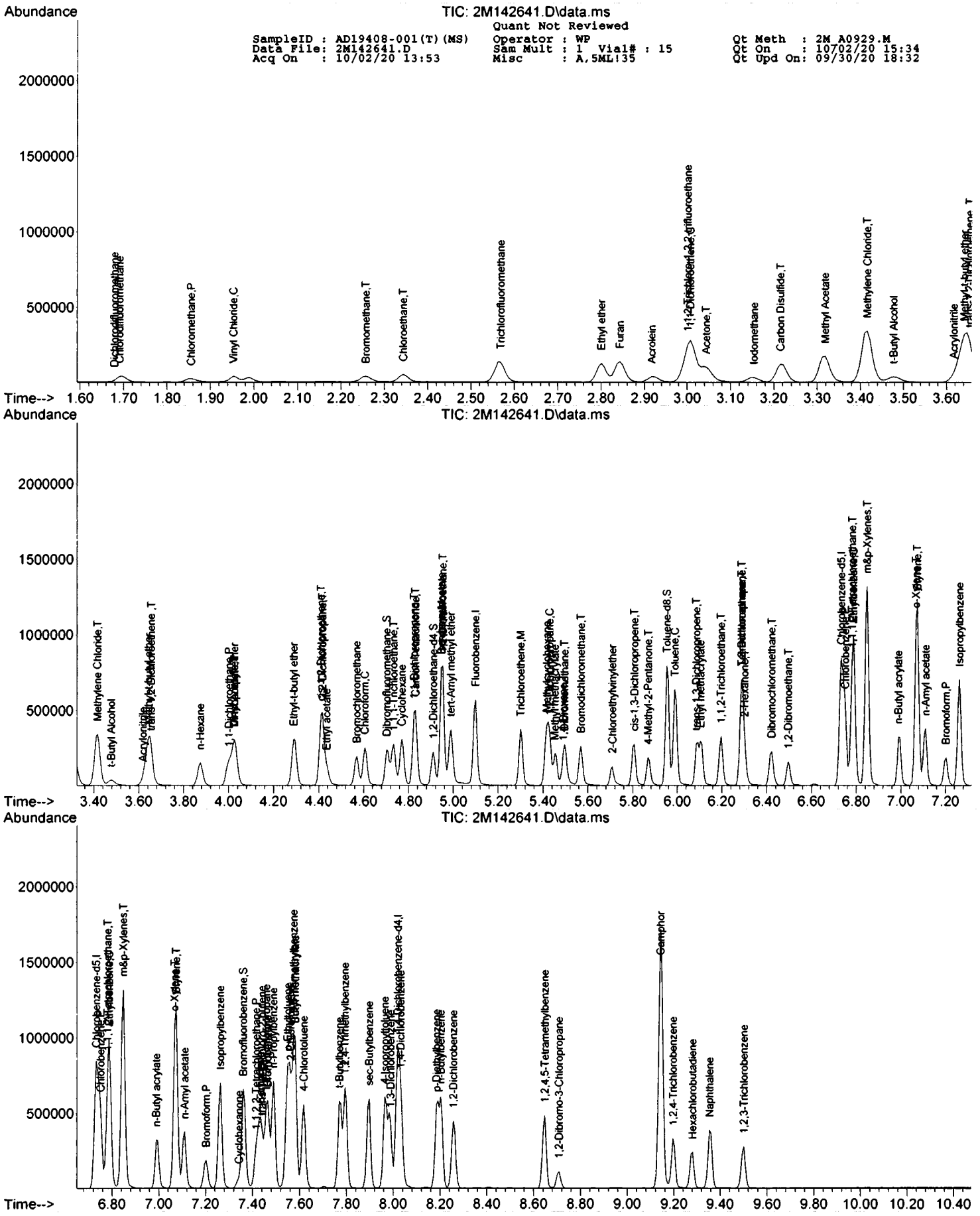
Quantitation Report (Not Reviewed)

SampleID : AD19408-001(T)(MS) Operator : WP Qt Meth : 2M_A0929.M
Data File: 2M142641.D Sam Mult : 1 Vial# : 15 Qt On : 10/02/20 15:34
Acq On : 10/02/20 13:53 Misc : A,5ML!35 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69)	Chlorobenzene	6.751	112	202895	22.3680	ug/l	98
71)	n-Butyl acrylate	6.989	55	152058	27.1236	ug/l	99
72)	n-Amyl acetate	7.111	43	137668	27.8799	ug/l	100
73)	Bromoform	7.202	173	61275	24.7076	ug/l	98
74)	Ethylbenzene	6.788	106	94272	24.9271	ug/l	94
75)	1,1,2,2-Tetrachloroethane	7.415	83	102095	22.9555	ug/l	99
77)	Styrene	7.074	104	224855	23.6856	ug/l	99
78)	m&p-Xylenes	6.849	106	272688	47.3677	ug/l	93
79)	o-Xylene	7.068	106	131925	24.2128	ug/l	99
80)	trans-1,4-Dichloro-2-b...	7.440	53	23490	22.3714	ug/l	79
81)	1,3-Dichlorobenzene	7.989	146	151166	22.3610	ug/l	99
82)	1,4-Dichlorobenzene	8.031	146	149592	21.6247	ug/l	99
83)	1,2-Dichlorobenzene	8.257	146	137365	21.5522	ug/l	98
84)	Isopropylbenzene	7.263	105	332251	25.0004	ug/l	99
85)	Cyclohexanone	7.342	55	16945	147.5064	ug/l	93
86)	Camphene	7.434	93	87216	22.2365	ug/l	98
87)	1,2,3-Trichloropropane	7.458	75	107955	22.3978	ug/l	98
88)	2-Chlorotoluene	7.562	91	195199	24.4238	ug/l	99
89)	p-Ethyltoluene	7.550	105	314074	23.4857	ug/l	98
90)	4-Chlorotoluene	7.617	91	201574	24.7617	ug/l	97
91)	n-Propylbenzene	7.489	91	390987	24.4437	ug/l	98
92)	Bromobenzene	7.464	77	198421	22.3041	ug/l	94
93)	1,3,5-Trimethylbenzene	7.574	105	253357	24.4551	ug/l	99
94)	Butyl methacrylate	7.580	41	92583	22.8714	ug/l	98
95)	t-Butylbenzene	7.769	119	249771	24.7139	ug/l	97
96)	1,2,4-Trimethylbenzene	7.793	105	270948	24.2790	ug/l	98
97)	sec-Butylbenzene	7.897	105	309304	24.7615	ug/l	98
98)	4-Isopropyltoluene	7.964	119	251159	23.6758	ug/l	99
99)	n-Butylbenzene	8.202	91	271545	24.7430	ug/l	95
100)	p-Diethylbenzene	8.184	119	138977	23.1722	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	190634	21.7365	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.708	157	24757	27.3916	ug/l	85
103)	Camphor	9.141	95	331743	929.9781	ug/l	97
104)	Hexachlorobutadiene	9.281	225	32189	23.3994	ug/l	93
105)	1,2,4-Trichlorobenzene	9.196	180	75114	22.9406	ug/l	97
106)	1,2,3-Trichlorobenzene	9.501	180	64072	23.5896	ug/l	97
107)	Naphthalene	9.354	128	235494	25.8247	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant Not Reviewed
SampleID : AD19408-001(T)(MS)
Data File: 2M142641.D
Acq On : 10/02/20 13:53
Operator : WP
Sam Mult : 1 Vial# : 15
Misc : A,5ML!35
Qt Meth : 2M_A0929.M
Qt On : 10/02/20 15:34
Qt Upd On: 09/30/20 18:32
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->

Abundance
TIC: 2M142641.D\data.ms
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene,C
Toluene-d8,S
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
Dibromochloromethane,T
1,2-Dibromoethane,T
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Time-->

Abundance
TIC: 2M142641.D\data.ms
Chlorobenzene-d5,I
m&p-Xylenes,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
Bromofluorobenzene,S
4-Chlorotoluene
t-Butylbenzene
sec-Butylbenzene
1,4-Dichlorobenzene-d4,I
p-Diethylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

Quantitation Report (Not Reviewed)

SampleID : AD19408-001(T)(MSD) Operator : WP Qt Meth : 2M_A0929.M
Data File: 2M142642.D Sam Mult : 1 Vial# : 16 Qt On : 10/02/20 14:52
Acq On : 10/02/20 14:12 Misc : A,5ML!35 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.099	96	369999	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.733	117	334259	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	176105	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	106336	30.00	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.00%			
39) 1,2-Dichloroethane-d4	4.910	67	54232	29.63	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.77%			
66) Toluene-d8	5.952	98	392173	29.99	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.97%			
76) Bromofluorobenzene	7.367	174	143793	31.09	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.63%			
Target Compounds						Qvalue
5) Chlorodifluoromethane	1.697	51	39301	10.4162	ug/l	8
6) Dichlorodifluoromethane	1.691	85	2596	0.6831	ug/l	89
7) Chloromethane	1.855	50	22277	5.2630	ug/l	99
8) Bromomethane	2.258	94	23476	11.4194	ug/l	97
9) Vinyl Chloride	1.953	62	32205	7.0077	ug/l	94
10) Chloroethane	2.343	64	39062	12.7413	ug/l	98
11) Trichlorofluoromethane	2.569	101	103366	14.6781	ug/l	99
12) Ethyl ether	2.800	59	66273	27.1019	ug/l	99
13) Furan	2.843	39	81346	19.6720	ug/l	95
14) 1,1,2-Trichloro-1,2,2-...	3.002	101	53014	21.4733	ug/l	95
15) Methylene Chloride	3.416	84	157728	45.1447	ug/l	97
16) Acrolein	2.922	56	37443	67.0107	ug/l	99
17) Acrylonitrile	3.617	53	25599	21.1146	ug/l	95
18) Iodomethane	3.154	142	34367	13.1163	ug/l	100
19) Acetone	3.044	43	127194	127.7656	ug/l	99
20) Carbon Disulfide	3.221	76	153215	16.2445	ug/l	100
21) t-Butyl Alcohol	3.477	59	42429	132.1295	ug/l	97
22) n-Hexane	3.873	57	67237	23.0084	ug/l	98
23) Di-isopropyl-ether	4.026	45	167881	20.0664	ug/l	100
24) 1,1-Dichloroethene	3.014	61	92435	19.4256	ug/l	94
25) Methyl Acetate	3.319	43	212803	94.7619	ug/l	100
26) Methyl-t-butyl ether	3.642	73	185112	18.6197	ug/l	99
27) 1,1-Dichloroethane	4.001	63	121211	20.8895	ug/l	96
28) trans-1,2-Dichloroethene	3.654	96	69311	19.7523	ug/l	96
29) Ethyl-t-butyl ether	4.288	59	207971	22.9711	ug/l	97
30) cis-1,2-Dichloroethene	4.410	61	122588	20.7857	ug/l	97
31) Bromochloromethane	4.568	49	55847	21.3175	ug/l	99
32) 2,2-Dichloropropane	4.416	77	115379	22.1927	ug/l	98
33) Ethyl acetate	4.434	43	108375	35.9287	ug/l	90
34) 1,4-Dioxane	5.489	88	53838	1269.6068	ug/l	96
35) 1,1-Dichloropropene	4.824	75	100387	20.4052	ug/l	97
36) Chloroform	4.605	83	133216	21.0832	ug/l	99
38) Cyclohexane	4.769	56	93016	21.3341	ug/l	99
40) 1,2-Dichloroethane	4.952	62	103983	19.4233	ug/l	100
42) 1,1,1-Trichloroethane	4.733	97	119393	21.3127	ug/l	98
43) Carbon Tetrachloride	4.830	117	101813	21.4694	ug/l	94
44) Vinyl Acetate	4.026	43	156936	16.7260	ug/l	100
45) Bromodichloromethane	5.568	83	112686	19.9158	ug/l	98
46) Methylcyclohexane	5.416	83	93028	22.0046	ug/l	98
47) Dibromomethane	5.501	174	53166	20.9495	ug/l	98
48) 1,2-Dichloropropane	5.428	63	72890	20.9489	ug/l	95
49) Trichloroethene	5.300	130	80771	20.6467	ug/l	94
50) Benzene	4.952	78	280215	20.2292	ug/l	100
51) tert-Amyl methyl ether	4.989	73	199812	20.5109	ug/l	98
53) Iso-propylacetate	4.946	43	140441	24.1258	ug/l	94
54) Methyl methacrylate	5.452	41	62804	22.3909	ug/l	97
55) Dibromochloromethane	6.422	129	87927	22.4446	ug/l	98
56) 2-Chloroethylvinylether	5.708	63	38264	89.3861	ug/l	99
57) cis-1,3-Dichloropropene	5.806	75	113686	21.2323	ug/l	100
58) trans-1,3-Dichloropropene	6.086	75	110626	21.6984	ug/l	98
59) Ethyl methacrylate	6.111	41	64111	21.7508	ug/l	97
60) 1,1,2-Trichloroethane	6.196	97	72143	21.8084	ug/l	96
61) 1,2-Dibromoethane	6.495	107	77354	22.1757	ug/l	99
62) 1,3-Dichloropropane	6.287	76	124642	21.5538	ug/l	97
63) 4-Methyl-2-Pentanone	5.867	43	87494	28.0354	ug/l	100
64) 2-Hexanone	6.306	43	63373	27.2805	ug/l	94
65) Tetrachloroethene	6.287	164	66134	21.9810	ug/l	98
67) Toluene	5.989	92	191696	21.7106	ug/l	97
68) 1,1,1,2-Tetrachloroethane	6.781	133	74643	21.0978	ug/l	99

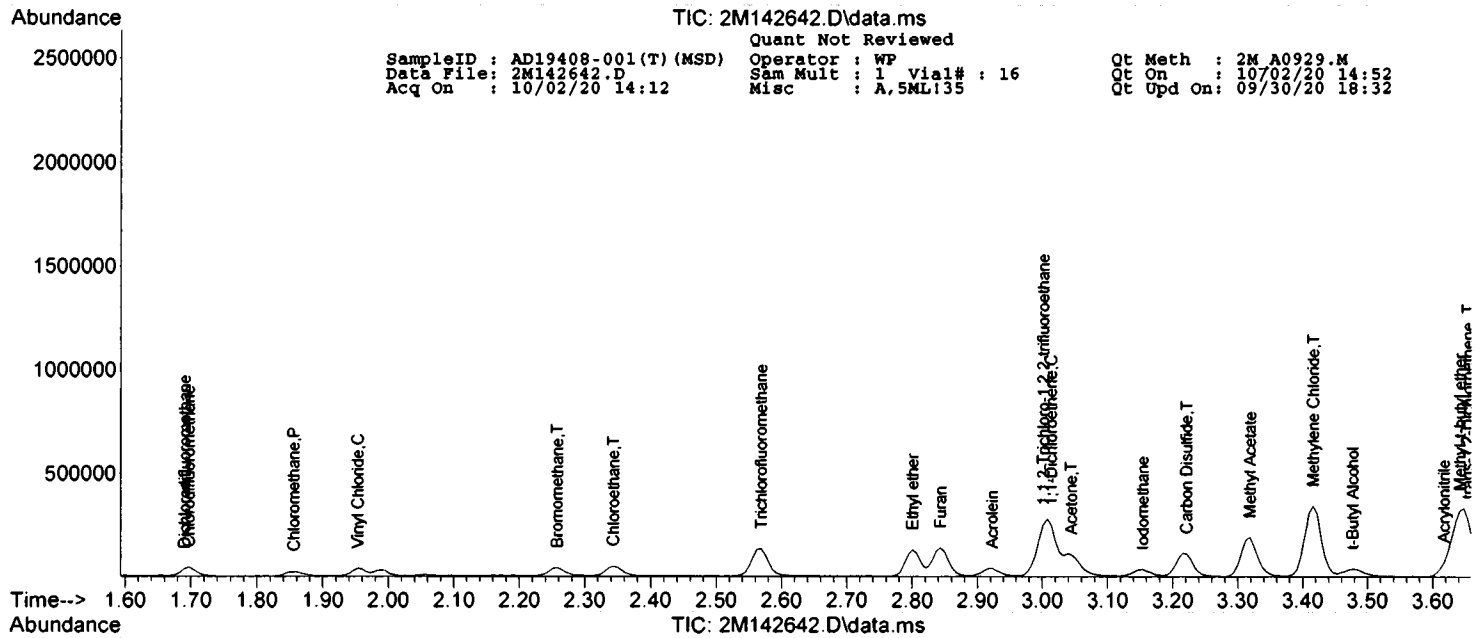
Quantitation Report (Not Reviewed)

SampleID : AD19408-001(T)(MSD) Operator : WP Qt Meth : 2M_A0929.M
Data File: 2M142642.D Sam Mult : 1 Vial# : 16 Qt On : 10/02/20 14:52
Acq On : 10/02/20 14:12 Misc : A,5ML!35 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS_2\Data\10-02-20\
Qt Path : G:\GCMSDATA\2020\GCMS_2\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69)	Chlorobenzene	6.751	112	209159	21.2287	ug/l	99
71)	n-Butyl acrylate	6.989	55	157120	26.4461	ug/l	100
72)	n-Amyl acetate	7.111	43	144218	27.5594	ug/l	98
73)	Bromoform	7.202	173	63729	24.2480	ug/l	96
74)	Ethylbenzene	6.787	106	96265	24.0186	ug/l	96
75)	1,1,2,2-Tetrachloroethane	7.415	83	104571	22.1863	ug/l	99
77)	Styrene	7.074	104	234295	23.2882	ug/l	96
78)	m&p-Xylenes	6.848	106	281022	46.0626	ug/l	98
79)	o-Xylene	7.068	106	136178	23.5839	ug/l	92
80)	trans-1,4-Dichloro-2-b...	7.440	53	26398	23.7232	ug/l	82
81)	1,3-Dichlorobenzene	7.988	146	157035	21.9193	ug/l	98
82)	1,4-Dichlorobenzene	8.031	146	153913	20.9946	ug/l	98
83)	1,2-Dichlorobenzene	8.257	146	147887	21.8946	ug/l	98
84)	Isopropylbenzene	7.263	105	349304	24.8014	ug/l	99
85)	Cyclohexanone	7.342	55	16103	132.2719	ug/l	97
86)	Camphene	7.434	93	92618	22.2821	ug/l	98
87)	1,2,3-Trichloropropane	7.458	75	115003	22.5145	ug/l	98
88)	2-Chlorotoluene	7.562	91	201450	23.7845	ug/l	99
89)	p-Ethyltoluene	7.549	105	326275	23.0222	ug/l	98
90)	4-Chlorotoluene	7.617	91	211238	24.4856	ug/l	98
91)	n-Propylbenzene	7.489	91	409376	24.1501	ug/l	98
92)	Bromobenzene	7.464	77	206491	21.9023	ug/l	93
93)	1,3,5-Trimethylbenzene	7.574	105	268912	24.4928	ug/l	98
94)	Butyl methacrylate	7.580	41	95730	22.3152	ug/l	97
95)	t-Butylbenzene	7.775	119	263618	24.6131	ug/l	98
96)	1,2,4-Trimethylbenzene	7.793	105	287069	24.2729	ug/l	99
97)	sec-Butylbenzene	7.897	105	329973	24.9265	ug/l	99
98)	4-Isopropyltoluene	7.964	119	270890	24.0957	ug/l	98
99)	n-Butylbenzene	8.202	91	293725	25.2547	ug/l	95
100)	p-Diethylbenzene	8.183	119	150939	23.7474	ug/l	98
101)	1,2,4,5-Tetramethylben...	8.647	119	208579	22.4415	ug/l	95
102)	1,2-Dibromo-3-Chloropr...	8.708	157	24558	25.6392	ug/l	79
103)	Camphor	9.141	95	364334	963.7448	ug/l	97
104)	Hexachlorobutadiene	9.281	225	34044	23.3523	ug/l	97
105)	1,2,4-Trichlorobenzene	9.195	180	79636	22.9502	ug/l	97
106)	1,2,3-Trichlorobenzene	9.500	180	68237	23.7063	ug/l	97
107)	Naphthalene	9.360	128	249161	25.7826	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed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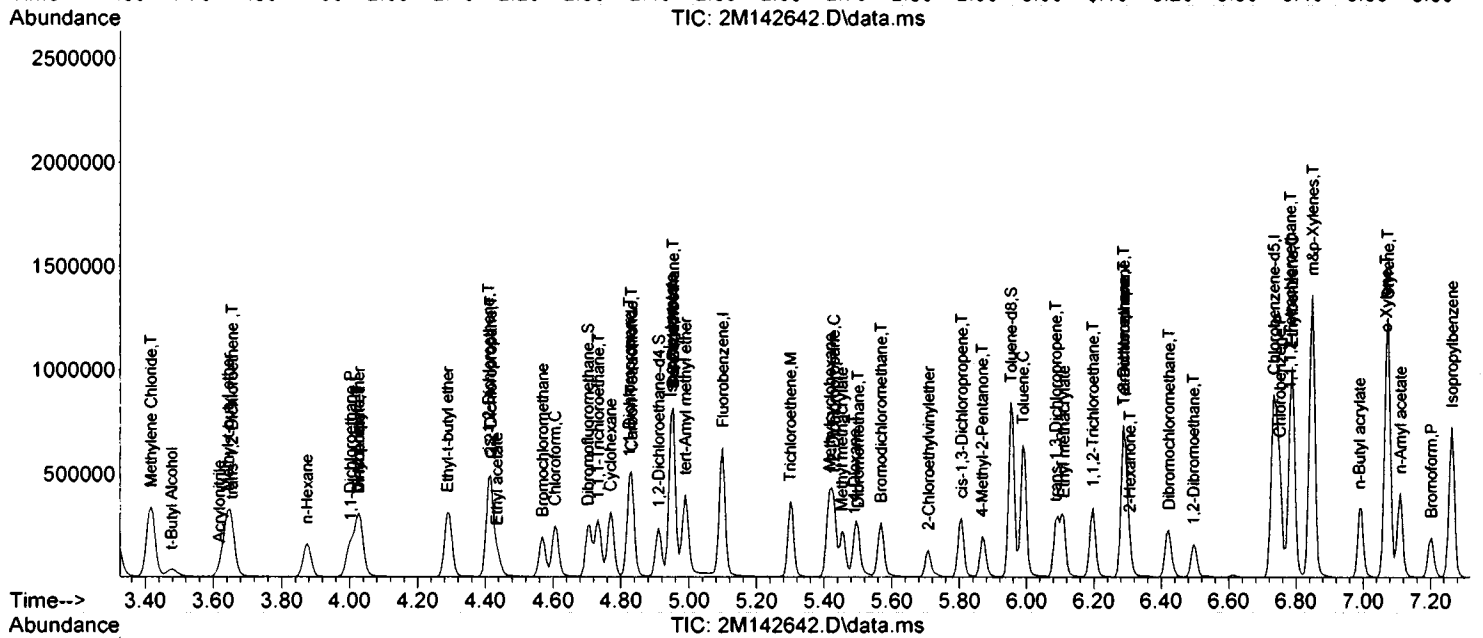
SampleID : AD19408-001(T)(MSD)
Data File: 2M142642.D
Acq On : 10/02/20 14:12
Operator : WP
Sam Mult : 1 Vial# : 16
Misc : A,5ML135
Qt Meth : 2M_A0929.M
Qt On : 10/02/20 14:52
Qt Upd On: 09/30/20 18:32
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane
Ethyl ether
Furan
Acrolein
Acetone,T
Iodomethane
Carbon Disulfide,T
Methyl Acetate
Methylene Chloride,T
t-Butyl Alcohol
Acrylonitrile
Time-->


Abundance
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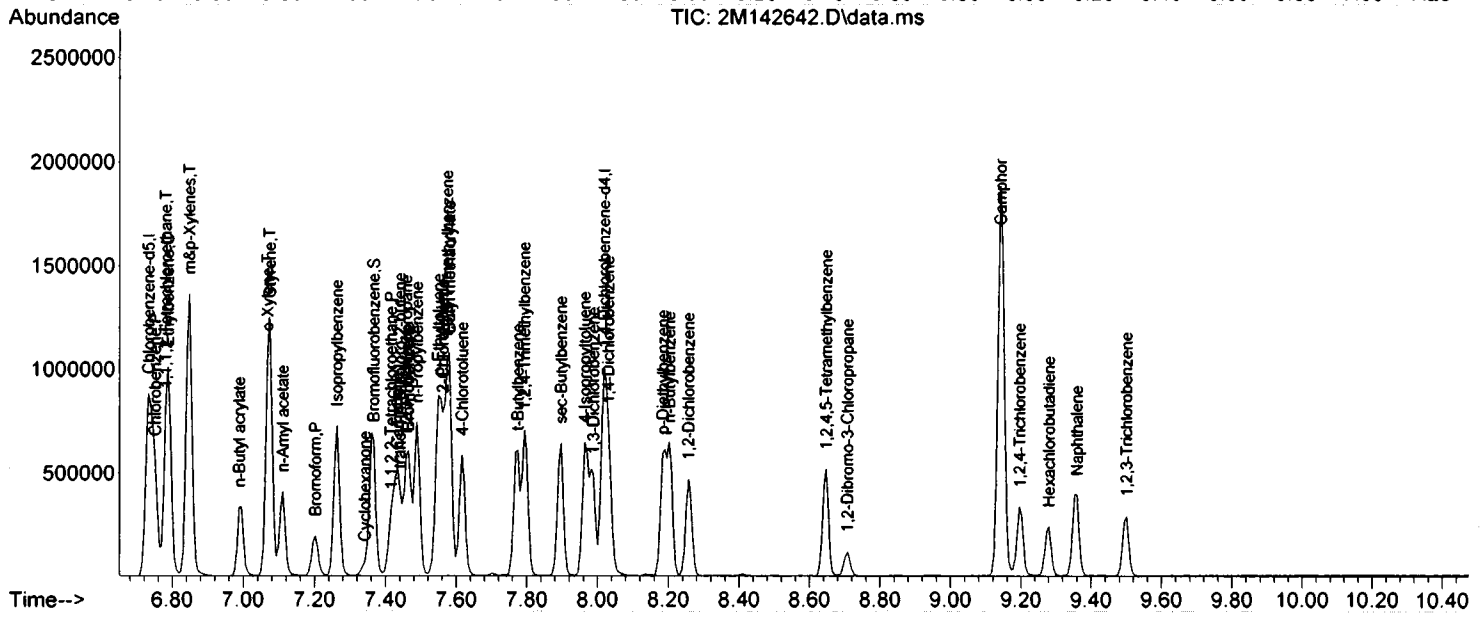
Methylene Chloride,T
t-Butyl Alcohol
n-Hexane
Ethyl-t-butyl ether
Bromochloromethane
Chloroform,C
Cyclohexane
1,2-Dichloroethane-d4,S
tert-Amyl methyl ether
Fluorobenzene,I
Trichloroethene,M
Bromodichloromethane,T
2-Chloroethylvinylether
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,C
trans-1,3-Dichloropropene,T
1,1,2-Trichloroethane,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
m&p-Xylenes,T
Time-->


Abundance
TIC: 2M142642.D\data.ms
n-Butyl acrylate
n-Amyl acetate
Bromoform,P
Isopropylbenzene
Cyclohexanone
4-Chlorotoluene
sec-Butylbenzene
1,2-Dichlorobenzene
1,2,4,5-Tetramethylbenzene
1,2-Dibromo-3-Chloropropane
Camphor
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
Time-->

GC/MS Volatile Data
Logbook Data

RUN LOG

Instrument: GCMS_2 Year: 2020
Analyst: WP

1-1-2M141735

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
2M141735.	BFB TUNE		V-330632,V-330631,V-333805	WP 09/10/20						09/09 18:31
2M141736.	BLK	IsCnAnc				Aqueous	1	1	624\8260	09/09 18:47
2M141739.	CAL @ 0.5 PPB		B-29662	WP 09/10/20		Aqueous	1	1	624\8260	09/09 19:46
2M141740.	CAL @ 1 PPB		B-29662	WP 09/10/20		Aqueous	1	1	624\8260	09/09 20:05
2M141741.	CAL @ 5 PPB		B-29662	WP 09/10/20		Aqueous	1	1	624\8260	09/09 20:25
2M141742.	CAL @ 10 PPB		B-29662	WP 09/10/20		Aqueous	1	1	624\8260	09/09 20:44
2M141743.	CAL @ 20 PPB		B-29662	WP 09/10/20		Aqueous	1	1	624\8260	09/09 21:04
2M141745.	CAL @ 50 PPB		B-29662	WP 09/10/20		Aqueous	1	1	624\8260	09/09 21:43
2M141746.	BLK	Is	-	WP 09/10/20		Aqueous	1	1	624\8260	09/09 22:02
2M141747.	CAL @ 500 PPB		B-29662	WP 09/10/20		Aqueous	1	1	624\8260	09/09 22:22
2M141750.	CAL @ 250 PPB		B-29662	WP 09/10/20		Aqueous	1	1	624\8260	09/09 23:21
2M141753.	CAL @100 PPB		B-29662	WP 09/10/20		Aqueous	1	1	624\8260	09/10 00:19
2M141754.	BLK					Aqueous	1	1	624\8260	09/10 00:39
2M141758.	STD					Aqueous	1	1	624\8260	09/10 01:57
2M141759.	ICV		V-334603	WP 09/10/20		Aqueous	1	1	624\8260	09/10 02:16
2M141760.	BLK					Aqueous	1	1	624\8260	09/10 02:36
2M141762.	DAILY BLANK					Methano	1	1	8260D	09/10 03:15
2M141763.	DAILY BLANK					Aqueous	1	1	624\8260	09/10 03:34
2M141764.	MDL @ 1 PPB					Aqueous	1	1	624\8260	09/10 03:54
2M141765.	MDL @ 1 PPB					Aqueous	1	1	624\8260	09/10 04:13
2M141766.	MDL @ 1 PPB					Aqueous	1	1	624\8260	09/10 04:32
2M141767.	MDL @ 1 PPB					Aqueous	1	1	624\8260	09/10 04:52
2M141768.	BLK					Aqueous	1	1	624\8260	09/10 05:11

Anc	Area Not Checked	Fn	Extraction Performed Past Hold	Cn	Warning Possible Carry Over
Ao	Area Out	Fsm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Ftn	Tckn/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for enb
B8m	Blank 8000 series missing	Fto	Tckn Extraction Performed Outside of Hold	FvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Fv	Eval Time Exceeded	Fvnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Fvrc	Eval Mix missing drlt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rpd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rpd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmb with calmt csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Endion Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Prnperly for a samol	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

1-1-11M82667

Instrument: GCMS_11 Year: 2020
Analyst: WP

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
11M82667.	BFB TUNE		V-330632,V-330631,V-333805	WP 09/14/20						09/11 18:54
11M82669.	BLK	IsCnBnfAnc				Aqueous	1	1	624\8260	09/11 19:26
11M82672.	CAL @ 0.5 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/11 20:21
11M82673.	CAL @ 1 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/11 20:40
11M82674.	CAL @ 5 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/11 20:58
11M82675.	CAL @ 10 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/11 21:17
11M82676.	CAL @ 20 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/11 21:35
11M82678.	CAL @ 50 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/11 22:12
11M82680.	500 PPB	Ao				Aqueous	1	1	624\8260	09/11 22:48
11M82683.	250 PPB	Ao				Aqueous	1	1	624\8260	09/11 23:44
11M82686.	CAL @ 100 PPB		B-29670	WP 09/14/20		Aqueous	1	1	624\8260	09/12 00:39
11M82690.	BLK	IsBnf				Aqueous	1	1	624\8260	09/12 01:52
11M82691.	ICV	IsIvoBnf	V-334710	WP 09/14/20		Aqueous	1	1	624\8260	09/12 02:11
11M82693.	BLK	IsBnf				Aqueous	1	1	624\8260	09/12 02:47
11M82696.	DAILY BLANK	Is				Aqueous	1	1	624\8260	09/12 03:43
11M82699.	BLK	IsBnfTi8				Soil	1	1	8260D	09/14 14:43

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Eto	Tcln/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for eph
B8m	Blank 8000 series missing	Eto	Tcln Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evrc	Eval Mix missing drlt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rpd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rpd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmb with calmd csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Endino Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

1-1-11M83266

Instrument: GCMS_11 Year: 2020
Analyst: WP

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
11M83266.	BFB TUNE		V-330632,V-330631,V-335295,V-335645	WP 09/28/20						09/28 10:43
11M83267.	20 PPB	CnAnc				Aqueous	1	1	624\8260	09/28 10:56
11M83268.	CAL @ 20 PPB		OK	WP 09/28/20		Aqueous	1	1	624\8260	09/28 11:14
11M83269.	BLK					Aqueous	1	1	624\8260	09/28 11:33
11M83270.	BLK	S6S8				Aqueous	1	1	624\8260	09/28 11:51
11M83271.	DAILY BLANK		OK	WP 09/28/20		Methano	1	1	8260D	09/28 12:09
11M83272.	DAILY BLANK		OK	WP 09/28/20		Aqueous	1	1	624\8260	09/28 12:28
11M83273.	AD19444-014		OK	WP 09/28/20	VO-8260	Aqueous	1	1	8260D	09/28 12:46
11M83274.	AD19415-005		OK	WP 09/28/20	VO-8260	Aqueous	1	1	8260D	09/28 13:05
11M83275.	AD19444-005		OK MBS89372	WP 09/28/20	VO-8260	Aqueous	1	1	624\8260	09/28 13:23
11M83276.	MBS89372	M18	OK MBS89372	WP 09/28/20		Aqueous	1	1	624\8260	09/28 13:42
11M83277.	AD19444-006(MS:A	M16M18	OK MBS89372	WP 09/28/20	VO-8260	Aqueous	1	1	624\8260	09/28 14:00
11M83278.	AD19444-007(MSD:	R16R18M16M18	OK MBS89372	WP 09/28/20	VO-8260	Aqueous	1	1	624\8260	09/28 14:18
11M83279.	MBS89373		OK MBS89373	WP 09/28/20		Methano	1	1	8260D	09/28 14:36
11M83280.	BLK					Aqueous	1	1	624\8260	09/28 14:59
11M83281.	BLK					Aqueous	1	1	624\8260	09/28 15:18
11M83282.	AD19452-013		OK	WP 09/28/20	VO15-8260	Aqueous	1	1	8260D	09/28 15:36
11M83283.	AD19386-009		OK	WP 09/28/20	VO15-8260	Aqueous	1	1	8260D	09/28 15:55
11M83284.	AD19386-010		OK	BK 09/29/20	VO15-8260	Aqueous	1	1	8260D	09/28 16:13
11M83285.	AD19452-008		OK	WP 09/29/20	VO15-8260	Aqueous	1	1	8260D	09/28 16:31
11M83286.	AD19452-004		OK	WP 09/29/20	VO15-8260	Aqueous	1	1	8260D	09/28 16:50
11M83287.	AD19401-013		OK	WP 09/29/20	VO-624.1	Aqueous	1	1	624	09/28 17:08
11M83288.	AD19401-012		OK	WP 09/29/20	VO-624.1	Aqueous	1	1	624	09/28 17:27
11M83289.	AD19452-007		OK	WP 09/29/20	VO15-8260	Aqueous	1	1	8260D	09/28 17:45
11M83290.	AD19452-015(20X)		OK	WP 09/29/20	VO15-8260	Aqueous	1	20	8260D	09/28 18:04
11M83291.	AD19446-004		QC ONLY MBS89373	WP 09/29/20	VO15-8260	Methano	1	1	8260D	09/28 18:22
11M83292.	AD19444-001		OK	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/28 18:40
11M83293.	AD19444-002		OK	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/28 18:59
11M83294.	AD19444-003	Ocf	RR-10X	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/28 19:17
11M83295.	AD19476-004		RR-1X,poss CO	BK 09/29/20	VO15-8260	Aqueous	1	1	8260D	09/28 19:36
11M83296.	AD19476-005		OK	BK 09/29/20	VO15-8260	Aqueous	1	1	8260D	09/28 19:54
11M83297.	AD19457-002		OK	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/28 20:13
11M83298.	AD19444-010		OK	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/28 20:31
11M83299.	AD19444-011	Ocf	RR-5X	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/28 20:49
11M83300.	AD19356-002(400u		OK	WP 09/29/20	VO15-8260	Methano	1	2	8260D	09/28 21:08
11M83301.	AD19475-004	Ocf	RR-MEXT on #1/#2	BK 09/29/20	VO15-8260	Methano	1	1	8260D	09/28 21:26
11M83302.	AD19446-004(MS)		OK MBS89373	WP 09/29/20	VO15-8260	Methano	1	1	8260D	09/28 21:45
11M83303.	AD19446-004(MSD)		OK MBS89373	WP 09/29/20	VO15-8260	Methano	1	1	8260D	09/28 22:03
11M83304.	BLK					Aqueous	1	1	624\8260	09/28 22:21
11M83305.	BLK					Aqueous	1	1	624\8260	09/28 22:39
11M83306.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	09/28 22:58
11M83307.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	09/28 23:16
11M83308.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	09/28 23:35

Anc	Area Not Checked	Fo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Fsm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Fto	Trdo/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for eph
B8m	Blank 8000 series missing	Fto	Trdo Extraction Performed Outside of Hold	FvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Fv	Eval Time Exceeded	Fvnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Fvrc	Eval Mix missing ddt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Ddft
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmd csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Endrin Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Co	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

1-1-2M142439

Instrument: GCMS_2 Year: 2020
Analyst: RL

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
2M142439.	BFB TUNE		V-330632,V-330631,V-333805,V-335645	BK 09/29/20						09/28 21:19
2M142440.	CAL @ 20 PPB		OK	BK 09/29/20		Aqueous	1	1	624\8260	09/28 21:38
2M142441.	20 PPB					Aqueous	1	1	624\8260	09/28 21:57
2M142442.	BLK					Aqueous	1	1	624\8260	09/28 22:17
2M142443.	BLK					Aqueous	1	1	624\8260	09/28 22:37
2M142444.	DAILY BLANK		OK	BK 09/29/20		Aqueous	1	1	624\8260	09/28 22:57
2M142445.	BLK					Aqueous	1	1	624\8260	09/28 23:17
2M142446.	MBS89382	M18	OK MBS89382	WP 09/29/20		Aqueous	1	1	624\8260	09/28 23:36
2M142447.	AD19421-002(MS)		OK MBS89382	WP 09/29/20	VO15-8260	Aqueous	1	1	624\8260	09/28 23:55
2M142448.	AD19421-002(MSD)		OK MBS89382	WP 09/29/20	VO15-8260	Aqueous	1	1	624\8260	09/29 00:15
2M142449.	BLK					Aqueous	1	1	624\8260	09/29 00:34
2M142450.	BLK					Aqueous	1	1	624\8260	09/29 00:54
2M142451.	AD19451-008		OK	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/29 01:14
2M142452.	AD19438-008		OK	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/29 01:33
2M142453.	AD19438-009		OK	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/29 01:53
2M142454.	AD19444-016		OK	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/29 02:12
2M142455.	AD19444-015		OK	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/29 02:32
2M142456.	AD19456-001		OK	WP 09/29/20	VO15-8260	Aqueous	1	1	8260D	09/29 02:52
2M142457.	AD19456-002		OK	WP 09/29/20	VO15-8260	Aqueous	1	1	8260D	09/29 03:11
2M142458.	AD19456-003		OK	WP 09/29/20	VO15-8260	Aqueous	1	1	8260D	09/29 03:31
2M142459.	AD19438-003		OK	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/29 03:50
2M142460.	AD19438-004		OK	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/29 04:10
2M142461.	AD19438-006	Ocf	RR-5X	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/29 04:29
2M142462.	AD19438-007		RR-1X,possible co	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/29 04:49
2M142463.	AD19438-001		OK	WP 09/29/20	VO-8260	Aqueous	1	1	8260D	09/29 05:09
2M142464.	AD19438-005(10X)		OK	WP 09/29/20	VO-8260	Aqueous	1	10	8260D	09/29 05:28
2M142465.	AD19438-002(100X)		RR-100X	WP 09/29/20	VO-8260	Aqueous	1	100	8260D	09/29 05:48
2M142466.	AD19438-002(100X)		OK	WP 09/29/20	VO-8260	Aqueous	1	100	8260D	09/29 06:07
2M142467.	BLK					Aqueous	1	1	624\8260	09/29 06:27
2M142469.	BLK					Aqueous	1	1	624\8260	09/29 08:46
2M142472.	5 PPB	Ti6Ti8				Aqueous	1	1	624\8260	09/29 10:24
2M142473.	500 PPB	Ti6Ti8				Aqueous	1	1	624\8260	09/29 10:43

Anc	Area Not Checked	Fo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
An	Area Out	Fsm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Ftn	Tclp/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for anh
B8m	Blank 8000 series missing	Fto	Tclp Extraction Performed Outside of Hold	FvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Fv	Eval Time Exceeded	Fvnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Fvm	Eval Mix missing drll or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
Cnf	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmt csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_3 Year: 2020
Analyst: JR

1-1-2M142484

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
2M142484.	BFB TUNE		V-330632,V-330631,V-335745	WP 09/30/20						09/29 14:14
2M142487.	CAL @ 0.5 PPB		B-29757	WP 09/30/20		Aqueous	1	1	624\8260	09/29 15:09
2M142488.	CAL @ 1 PPB		B-29757	WP 09/30/20		Aqueous	1	1	624\8260	09/29 15:28
2M142489.	CAL @ 5 PPB		B-29757	WP 09/30/20		Aqueous	1	1	624\8260	09/29 15:48
2M142490.	CAL @ 10 PPB		B-29757	WP 09/30/20		Aqueous	1	1	624\8260	09/29 16:08
2M142492.	CAL @ 20 PPB		B-29757	WP 09/30/20		Aqueous	1	1	624\8260	09/29 16:47
2M142494.	CAL @ 50 PPB		B-29757	WP 09/30/20		Aqueous	1	1	624\8260	09/29 17:26
2M142496.	CAL @ 100 PPB		B-29757	WP 09/30/20		Aqueous	1	1	624\8260	09/29 18:05
2M142499.	CAL @ 250 PPB		B-29757	WP 09/30/20		Aqueous	1	1	624\8260	09/29 19:04
2M142502.	CAL @ 500 PPB		B-29757	WP 09/30/20		Aqueous	1	1	624\8260	09/29 20:03
2M142508.	ICV	IsIvoBnf	V-335757	WP 09/30/20		Aqueous	1	1	624\8260	09/29 22:00

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tdn/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for enh
B8m	Blank 8000 series missing	Eto	Tdn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evrc	Eval Mix missing drll or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rpd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rpd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmb with calmd csv for init calibration chek rls	S6	600 series surrogate out
Cme	Endinn Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_2 Year: 2020
Analyst: JR

1-1-2M142516

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
2M142516.	BFB TUNE		V-330632,V-330631,V-335745,V-335797	WP 09/30/20						09/30 11:01
2M142518.	CAL @ 20 PPB		OK	WP 09/30/20		Aqueous	1	1	624\8260	09/30 11:36
2M142520.	BLK					Aqueous	1	1	624\8260	09/30 12:15
2M142521.	BLK					Aqueous	1	1	624\8260	09/30 12:34
2M142522.	DAILY BLANK		OK	WP 09/30/20		Aqueous	1	1	624\8260	09/30 12:54
2M142523.	AD19412-005		OK MBS89395	WP 09/30/20	VO-8260	Aqueous	1	1	624\8260	09/30 13:14
2M142524.	AD19412-007		OK MBS89398	WP 09/30/20	VO-8260	Aqueous	1	1	624\8260	09/30 13:33
2M142525.	MBS89395	M16M18	OK MBS89395	WP 09/30/20		Aqueous	1	1	624\8260	09/30 13:53
2M142526.	AD19412-005(MS)	M16M18	OK MBS89395	WP 09/30/20	VO-8260	Aqueous	1	1	624\8260	09/30 14:13
2M142527.	AD19412-005(MSD)	R16R18M16M18	OK MBS89395	WP 09/30/20	VO-8260	Aqueous	1	1	624\8260	09/30 14:32
2M142528.	BLK					Aqueous	1	1	624\8260	09/30 14:52
2M142529.	BLK					Aqueous	1	1	624\8260	09/30 15:11
2M142530.	AD19486-009		OK	WP 09/30/20	VO15-8260	Aqueous	1	1	8260D	09/30 15:31
2M142531.	AD19486-010		OK	WP 09/30/20	VO15-8260	Aqueous	1	1	8260D	09/30 15:50
2M142532.	AD19216-025	Ho			VO-8260	Aqueous	1	1	8260D	09/30 16:10
2M142533.	BLK					Aqueous	1	1	624\8260	09/30 16:30
2M142534.	BLK					Aqueous	1	1	624\8260	09/30 16:49
2M142535.	AD19216-025(5uL)	Ho			VO-8260	Aqueous	1	5	8260D	09/30 17:09
2M142536.	BLK					Aqueous	1	1	624\8260	09/30 17:29
2M142537.	BLK					Aqueous	1	1	624\8260	09/30 17:48
2M142538.	AD19412-002		OK	BK 10/01/20	VO-8260	Aqueous	1	1	8260D	09/30 18:08
2M142539.	AD19412-003		OK	BK 10/01/20	VO-8260	Aqueous	1	1	8260D	09/30 18:27
2M142540.	AD19412-004		OK	BK 10/01/20	VO-8260	Aqueous	1	1	8260D	09/30 18:47
2M142541.	AD19438-007		OK	BK 10/01/20	VO-8260	Aqueous	1	1	8260D	09/30 19:07
2M142542.	AD19444-011		OK	BK 10/01/20	VO-8260	Aqueous	1	1	8260D	09/30 19:26
2M142543.	AD19438-006(5X)		OK	BK 10/01/20	VO-8260	Aqueous	1	5	8260D	09/30 19:46
2M142544.	AD19444-003(5X)		OK	BK 10/01/20	VO-8260	Aqueous	1	5	8260D	09/30 20:06
2M142545.	BLK					Aqueous	1	1	624\8260	09/30 20:26
2M142546.	AD19499-007		OK	BK 10/01/20	VO-PA-8260	Aqueous	1	1	8260D	09/30 20:45
2M142547.	AD19499-010		OK	BK 10/01/20	VO-PA-8260	Aqueous	1	1	8260D	09/30 21:05
2M142548.	AD19497-008		OK	BK 10/01/20	VOBTEX-624.	Aqueous	1	1	624	09/30 21:25
2M142549.	AD19497-009		OK	BK 10/01/20	VOBTEX-624.	Aqueous	1	1	624	09/30 21:44
2M142550.	AD19497-007		OK	BK 10/01/20	VOBTEX-624.	Aqueous	1	1	624	09/30 22:04
2M142551.	AD19497-001(5X)		RR-1X	BK 10/01/20	VOBTEX-624.	Aqueous	1	5	624	09/30 22:24
2M142552.	AD19497-001		OK	BK 10/01/20	VOBTEX-624.	Aqueous	1	1	624	09/30 22:43
2M142553.	STD	Ti6Ti8				Aqueous	1	1	624\8260	09/30 23:03
2M142554.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	09/30 23:22
2M142555.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	09/30 23:42
2M142556.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	10/01 00:01
2M142557.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	10/01 00:21
2M142558.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	10/01 00:41

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tetn/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for eph
B8m	Blank 8000 series missing	Eto	Tetn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evm	Eval Mix missing drll or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmb with calmt csv for init calibration chek rls	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

1-1-2M142560

Instrument: GCMS_2 Year: 2020
Analyst: JR

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
2M142560.	BFB TUNE		V-330632,V-330631,V-335745,V-335797	BK 10/01/20						10/01 01:20
2M142561.	CAL @ 20 PPB		OK	BK 10/01/20		Aqueous	1	1	624\8260	10/01 01:40
2M142562.	20 PPB					Aqueous	1	1	624\8260	10/01 01:59
2M142563.	BLK					Aqueous	1	1	624\8260	10/01 02:18
2M142564.	BLK					Aqueous	1	1	624\8260	10/01 02:38
2M142565.	DAILY BLANK		OK	BK 10/01/20		Aqueous	1	1	624\8260	10/01 02:58
2M142566.	AD19441-001		OK,dirty	BK 10/01/20	VO15-8260	Aqueous	1	1	8260D	10/01 03:17
2M142567.	AD19442-001		OK,dirty	BK 10/01/20	VO15-8260	Aqueous	1	1	8260D	10/01 03:37
2M142568.	MBS89398	M16M18	OK MBS89398	BK 10/01/20		Aqueous	1	1	624\8260	10/01 03:57
2M142569.	AD19412-007(MS)	M16M18	OK MBS89398	BK 10/01/20	VO-8260	Aqueous	1	1	624\8260	10/01 04:16
2M142570.	AD19412-007(MSD)	M16M18	OK MBS89398	BK 10/01/20	VO-8260	Aqueous	1	1	624\8260	10/01 04:35
2M142571.	BLK					Aqueous	1	1	624\8260	10/01 04:55
2M142572.	BLK					Aqueous	1	1	624\8260	10/01 05:14
2M142573.	AD19486-001		OK	BK 10/01/20	VO15-8260	Aqueous	1	1	8260D	10/01 05:34
2M142574.	AD19486-002		OK	BK 10/01/20	VO15-8260	Aqueous	1	1	8260D	10/01 05:54
2M142575.	AD19486-003		OK	BK 10/01/20	VO15-8260	Aqueous	1	1	8260D	10/01 06:13
2M142576.	AD19486-004		OK	BK 10/01/20	VO15-8260	Aqueous	1	1	8260D	10/01 06:33
2M142577.	AD19486-005		OK	BK 10/01/20	VO15-8260	Aqueous	1	1	8260D	10/01 06:53
2M142578.	AD19486-006		OK	BK 10/01/20	VO15-8260	Aqueous	1	1	8260D	10/01 07:12
2M142579.	AD19486-007		OK	BK 10/01/20	VO15-8260	Aqueous	1	1	8260D	10/01 09:45
2M142580.	AD19486-008		OK	BK 10/01/20	VO15-8260	Aqueous	1	1	8260D	10/01 10:05
2M142581.	AD19499-001		OK	BK 10/01/20	VO-PA-8260	Aqueous	1	1	8260D	10/01 10:25
2M142582.	AD19499-003		OK	BK 10/01/20	VO-PA-8260	Aqueous	1	1	8260D	10/01 10:44
2M142583.	AD19499-005		OK	BK 10/01/20	VO-PA-8260	Aqueous	1	1	8260D	10/01 11:04
2M142584.	AD19499-008		OK	BK 10/01/20	VO-PA-8260	Aqueous	1	1	8260D	10/01 11:24
2M142585.	AD19477-001		OK	WP 10/01/20	VO-8260	Aqueous	1	1	8260D	10/01 11:43
2M142586.	AD19477-002		OK	WP 10/01/20	VO-8260	Aqueous	1	1	8260D	10/01 12:03
2M142587.	BLK					Aqueous	1	1	624\8260	10/01 12:22
2M142588.	AD19444-004		OK	WP 10/01/20	VO-8260	Aqueous	1	1	8260D	10/01 12:42
2M142589.	AD19444-008		OK	WP 10/01/20	VO-8260	Aqueous	1	1	8260D	10/01 13:02
2M142590.	MBS89408		MBS89408			Aqueous	1	1	624\8260	10/01 13:19
2M142591.	STD	Ti6Ti8				Aqueous	1	1	624\8260	10/01 13:39
2M142592.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	10/01 13:59
2M142593.	BLK	Ti6Ti8				Aqueous	1	1	624\8260	10/01 14:18
2M142594.	AD19549-001	Ti6	OK	WP 10/01/20	VO15-624.1	Aqueous	1	1	624	10/01 14:38
2M142595.	AD19549-003	Ti6	OK	WP 10/01/20	VO15-624.1	Aqueous	1	1	624	10/01 14:58

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
R6m	Blank 600 series missing	Etn	Trip/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for enh
R8m	Blank 8000 series missing	Eto	Trip Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Rnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evrc	Eval Mix missing drll or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmb with calmt csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning. Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_2 Year: 2020
Analyst: WP

1-1-2M142627

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
2M142627.	BFB TUNE		V-330630,V-330631,V-335745,V-336000	WP 10/02/20						10/02 09:24
2M142629.	CAL @ 20 PPB	C16	OK,8260 ONLY	WP 10/02/20		Aqueous	1	1	624\8260	10/02 09:58
2M142630.	20 PPB	C6fB6m	-	WP 10/02/20		Aqueous	1	1	624\8260	10/02 10:18
2M142631.	BLK	C6fB6m	-	WP 10/02/20		Aqueous	1	1	624\8260	10/02 10:37
2M142632.	DAILY BLANK	C6f	OK	WP 10/02/20		Aqueous	1	1	624\8260	10/02 10:57
2M142633.	DAILY BLANK					Methano	1	1	8260D	10/02 11:16
2M142634.	BLK	C6f				Aqueous	1	1	624\8260	10/02 11:36
2M142635.	AD19528-001		OK	WP 10/02/20	VO15-8260	Aqueous	1	1	8260D	10/02 11:56
2M142636.	AD19528-002		OK	WP 10/02/20	VO15-8260	Aqueous	1	1	8260D	10/02 12:15
2M142637.	AD19528-003		OK	WP 10/02/20	VO15-8260	Aqueous	1	1	8260D	10/02 12:35
2M142638.	AD19564-013		OK	WP 10/02/20	VO-8260	Aqueous	1	1	8260D	10/02 12:55
2M142639.	AD19408-001(T)	C6f	QC ONLY MBS89414	WP 10/02/20	VOTCLP-826	Aqueous	1	1	624\8260	10/02 13:14
2M142640.	MBS89414	C6fM16M18	OK MBS89414	WP 10/02/20		Aqueous	1	1	624\8260	10/02 13:34
2M142641.	AD19408-001(T)(M	C6fM16M18	OK MBS89414	WP 10/02/20	VOTCLP-826	Aqueous	1	1	624\8260	10/02 13:53
2M142642.	AD19408-001(T)(M	C6fR16R18M16M18	OK MBS89414	WP 10/02/20	VOTCLP-826	Aqueous	1	1	624\8260	10/02 14:12
2M142643.	BLK	C6f				Aqueous	1	1	624\8260	10/02 14:32
2M142644.	BLK	C6f				Aqueous	1	1	624\8260	10/02 14:51
2M142645.	AD19444-009		OK	WP 10/02/20	VO-8260	Aqueous	1	1	8260D	10/02 15:11
2M142646.	AD19444-012		OK	WP 10/02/20	VO-8260	Aqueous	1	1	8260D	10/02 15:31
2M142647.	AD19444-013		OK	WP 10/02/20	VO-8260	Aqueous	1	1	8260D	10/02 15:50
2M142648.	AD19516-005		OK	WP 10/02/20	VO-PAPBW8	Aqueous	1	1	8260D	10/02 16:10
2M142649.	AD19457-001(T)		OK	WP 10/02/20	VOTCLP-826	Aqueous	1	1	8260D	10/02 16:30
2M142650.	EF-1-V-335534(100		OK	BK 10/04/20		Aqueous	1	10022	8260D	10/02 16:49
2M142651.	MBS89419	C6f	MBS89419			Aqueous	1	1	624\8260	10/02 17:09
2M142652.	BLK	C6f				Aqueous	1	1	624\8260	10/02 17:28
2M142653.	AD19516-007		OK	BK 10/04/20	VO-PAPBW8	Aqueous	1	1	8260D	10/02 17:48
2M142654.	AD19516-011		OK	BK 10/04/20	VO-PAPBW8	Aqueous	1	1	8260D	10/02 18:07
2M142655.	AD19516-013		OK	BK 10/04/20	VO-PAPBW8	Aqueous	1	1	8260D	10/02 18:27
2M142656.	AD19516-015		OK	BK 10/04/20	VO-PAPBW8	Aqueous	1	1	8260D	10/02 18:46
2M142657.	AD19544-001		OK	BK 10/04/20	VO-PAPBW8	Aqueous	1	1	8260D	10/02 19:06
2M142658.	AD19544-003		OK	BK 10/04/20	VO-PAPBW8	Aqueous	1	1	8260D	10/02 19:26
2M142659.	AD19544-005		OK	BK 10/04/20	VO-PAPBW8	Aqueous	1	1	8260D	10/02 19:45
2M142660.	AD19544-011		OK	BK 10/04/20	VO-PAPBW8	Aqueous	1	1	8260D	10/02 20:05
2M142661.	AD19544-007(10X)		OK	BK 10/04/20	VO-PAPBW8	Aqueous	1	10	8260D	10/02 20:25
2M142662.	AD19544-009(20X)		OK	BK 10/04/20	VO-PAPBW8	Aqueous	1	20	8260D	10/02 20:45
2M142663.	AD19516-009(5X)		OK	BK 10/04/20	VO-PAPBW8	Aqueous	1	5	8260D	10/02 21:05
2M142664.	STD	C6fTi6Ti8				Aqueous	1	1	624\8260	10/02 21:25
2M142665.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/02 21:44
2M142666.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/02 22:04
2M142667.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/02 22:24
2M142668.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/02 22:43
2M142669.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/02 23:03
2M142670.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/02 23:23
2M142671.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/02 23:42
2M142672.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/03 00:02
2M142673.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/03 00:21
2M142674.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/03 00:41
2M142675.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/03 01:00
2M142676.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/03 01:20
2M142677.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/03 01:39
2M142678.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/03 01:59
2M142679.	BLK	C6fTi6Ti8				Aqueous	1	1	624\8260	10/03 02:19

Anc	Area Not Checked	Fo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Fsm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Fto	Tclp/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for enh
B8m	Blank 8000 series missing	Fto	Tclp Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evrc	Eval Mix missing drlf or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmt csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a samp	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-313322

Prepared By: Revolus, Jean
Description: VOA ADD MIX
Prep Date: 10/4/2019
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 5000/25000 p
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
12762	p-Diethylbenzene	50 mg	NEAT	5000 ppm
12588	Methyl alcohol		neat neat	
12764	Cyclohexanone	250 mg	NEAT	25000 ppm
12815	p-Ethyltoluene	50 mg	NEAT	5000 ppm

Veritech Lot Number: V-313323

Prepared By: Revolus, Jean
Description: VOA ADD MIX(2nd Source)
Prep Date: 10/4/2019
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 5000/25000 p
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
12588	Methyl alcohol		neat neat	
12762	p-Diethylbenzene	50 mg	NEAT	5000 ppm
12764	Cyclohexanone	250 mg	NEAT	25000 ppm
12815	p-Ethyltoluene	50 mg	NEAT	5000 ppm

Veritech Lot Number: V-313324

Prepared By: Revolus, Jean
Description: Voa Extra Add Mix
Prep Date: 10/4/2019
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 2000-20000 p
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11935	Ethyl acetate	20 mg	Neat	2000 ppm
12588	Methyl alcohol	10 ml	neat neat	
12763	Isopropyl acetate	20 mg	NEAT	2000 ppm
11578	n-Amyl Acetate	20 mg	NEAT neat	2000 ppm
11931	Methyl methacrylate	20 mg	Neat	2000 ppm
9641	d-Camphor	200 mg	Neat	20000 ppm
12766	Ethyl methacrylate	20 mg	NEAT	2000 ppm
12761	Camphene	20 mg	NEAT	2000 ppm
11933	n-Butyl acrylate	20 mg	Neat	2000 ppm
11932	Butyl methacrylate	20 mg	Neat	2000 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-313325

Prepared By:	Revolus, Jean	Department:	Organics	ApprovedBy:	akmal
Description:	Voa Extra Add Mix(2nd Source)	BatchNumber:		ApproveDate:	10/07/19
Prep Date:	10/4/2019	Concentration:	2000-20000 p	Checked:	Yes
Expiration Date:	10/4/2020	Final Volume:	10 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12763	Isopropyl acetate	20 mg	NEAT	2000 ppm
12588	Methyl alcohol	10 ml	neat neat	
11935	Ethyl acetate	20 mg	Neat	2000 ppm
11578	n-Amyl Acetate	20 mg	NEAT neat	2000 ppm
9641	d-Camphor	200 mg	Neat	20000 ppm
11931	Methyl methacrylate	20 mg	Neat	2000 ppm
12766	Ethyl methacrylate	20 mg	NEAT	2000 ppm
11933	n-Butyl acrylate	20 mg	Neat	2000 ppm
12761	Camphene	20 mg	NEAT	2000 ppm
11932	Butyl methacrylate	20 mg	Neat	2000 ppm

Veritech Lot Number: V-327582

Prepared By:	Revolus, Jean	Department:	Organics	ApprovedBy:	akmal
Description:	Ethyl ether/Furan Mix	BatchNumber:		ApproveDate:	05/18/20
Prep Date:	5/13/2020	Concentration:	5000 ppm	Checked:	Yes
Expiration Date:	5/13/2021	Final Volume:	10 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11587	Furan	50 mg	NEAT neat	5000 ppm
13193	Ethyl ether	50 mg	Neat	5000 ppm
13224	methyl alcohol	10 ml	neat neat	

Veritech Lot Number: V-327585

Prepared By:	Revolus, Jean	Department:	Organics	ApprovedBy:	akmal
Description:	Ethyl ether/Furan Mix(2ND SOURCE)	BatchNumber:		ApproveDate:	05/18/20
Prep Date:	5/13/2020	Concentration:	5000 ppm	Checked:	Yes
Expiration Date:	5/13/2021	Final Volume:	10 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13224	methyl alcohol	10 ml	neat neat	
11587	Furan	50 mg	NEAT neat	5000 ppm
13193	Ethyl ether	50 mg	Neat	5000 ppm

Veritech Lot Number: V-328517

Prepared By:	Revolus, Jean	Department:	Organics	ApprovedBy:	akmal
Description:	20ppm Freon VOA Working Std	BatchNumber:		ApproveDate:	06/04/20
Prep Date:	5/28/2020	Concentration:	VARIOUS pp	Checked:	Yes
Expiration Date:	12/3/2020	Final Volume:	1 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12588	Methyl alcohol	900 ul	neat neat	neat
12435	Chlorodifluoromethane(Freon #22)	100 ul	200 ppm	200 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-330631

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: VOA WORKING INT/SURR MIX | BatchNumber: | ApproveDate: 07/01/20
Prep Date: 7/1/2020 | Concentration: 150 ppm | Checked: Yes
Expiration Date: 1/1/2021 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	88 ml	neat neat	
12137	8260A Surrogates Mix	6 ml	2500 ppm	150 ppm
12138	8260A Internal Standard Mix	6 ml	2500 ppm	150 ppm

Veritech Lot Number: V-330632

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: BFB Tune Mix | BatchNumber: | ApproveDate: 07/01/20
Prep Date: 7/1/2020 | Concentration: 50 ppm | Checked: Yes
Expiration Date: 1/1/2021 | Final Volume: 1.5 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330631	VOA WORKING INT/SURR MIX	500 ul	150 ppm	50 ppm
12804	methyl alcohol	1000 ul	neat neat	

Veritech Lot Number: V-330843

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: 200ppm VOA Working Std | BatchNumber: | ApproveDate: 07/09/20
Prep Date: 7/4/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	220 ul	neat neat	neat
12994	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
12775	502.2 Cal2000 Mega Mix	100 ul	2000 ppm	200 ppm
12907	EPA 8260 CAL. MIX 2	100 ul	2000 ppm	200 ppm
13124	Custom VOC Standard	100 ul	VARIOUS	various ppm
12774	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-313322	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-313324	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
V-327582	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
12992	Ethyl-tert-Butyl Ether(ETBTE)	100 ul	2000 ppm	200 ppm

Veritech Lot Number: V-330844

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: 20ppm VOA Working Std | BatchNumber: | ApproveDate: 07/09/20
Prep Date: 7/4/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	900 ul	neat neat	neat
V-330843	200ppm VOA Working Std	100 ul	VARIOUS pp	200 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-333804

Prepared By: Previlon, Wilner
Description: 200ppm VOA Working Std
Prep Date: 8/26/2020
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: VARIOUS pp
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	220 ul	neat neat	neat
12994	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
13185	502.2 Cal2000 Mega Mix	100 ul	2000 ppm	200 ppm
12907	EPA 8260 CAL. MIX 2	100 ul	2000 ppm	200 ppm
13400	Custom VOC Standard	100 ul	VARIOUS	various ppm
12774	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-313322	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-313324	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
V-327582	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
12992	Ethyl-tert-Butyl Ether(ETBTE)	100 ul	2000 ppm	200 ppm

Veritech Lot Number: V-333805

Prepared By: Previlon, Wilner
Description: MBS
Prep Date: 8/26/2020
Expiration Date: 10/4/2020
Department: Organics
BatchNumber:
Concentration: 100 ppm
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 09/01/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	610 ul	neat neat	neat neat
13186	502.2 Cal Mix#1(Gases)	50 ul	2000 ppm	100 ppm
13185	502.2 Cal2000 Mega Mix	50 ul	2000 ppm	100 ppm
12913	EPA 8260 CAL MIX 2	50 ul	2000 ppm	100 ppm
13401	Custom VOC Standard(2nd Sources)	50 ul	VARIOUS	various ppm
12993	tert-Amyl Methyl Ether	50 ul	2000 ppm	100 ppm
V-313323	VOA ADD MIX(2nd Source)	20 ul	5000/25000 p	various ppm
V-313325	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-327585	Ethyl ether/Furan Mix(2ND SOURCE)	20 ul	5000 ppm	100 ppm
13038	Ethyl-tert-Butyl Ether (ETBE)	50 ul	2000 ppm	100 ppm

Veritech Lot Number: V-334594

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 250 PPB
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Organics
BatchNumber: B-29662
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333804	200ppm VOA Working Std	125 ul	VARIOUS pp	250 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	125 ul	200 ppm	250 ppb

Veritech Lot Number: V-334595

Prepared By: Previlon, Wilner
Description: 624/8260 CAL @ 100 PPB
Prep Date: 9/9/2020
Expiration Date: 9/16/2020
Department: Organics
BatchNumber: B-29662
Concentration: VARIOUS ppb
Final Volume: 100 ml
ApprovedBy: akmal
ApproveDate: 09/11/20
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333804	200ppm VOA Working Std	50 ul	VARIOUS pp	100 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	50 ul	200 ppm	100 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334596

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 50 PPB | BatchNumber: B-29662 | ApproveDate: 09/11/20
Prep Date: 9/9/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333804	200ppm VOA Working Std	25 ul	VARIOUS pp	50 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	25 ul	200 ppm	50 ppb

Veritech Lot Number: V-334597

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 20 PPB | BatchNumber: B-29662 | ApproveDate: 09/11/20
Prep Date: 9/9/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333804	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-334598

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 10 PPB | BatchNumber: B-29662 | ApproveDate: 09/11/20
Prep Date: 9/9/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330844	20ppm VOA Working Std	50 ul	VARIOUS pp	10 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	50 ul	VARIOUS pp	10 ppb

Veritech Lot Number: V-334599

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 5 PPB | BatchNumber: B-29662 | ApproveDate: 09/11/20
Prep Date: 9/9/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330844	20ppm VOA Working Std	25 ul	VARIOUS pp	5 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	25 ul	VARIOUS pp	5 ppb

Veritech Lot Number: V-334600

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 1 PPB | BatchNumber: B-29662 | ApproveDate: 09/11/20
Prep Date: 9/9/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330844	20ppm VOA Working Std	5 ul	VARIOUS pp	1 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	5 ul	VARIOUS pp	1 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334601

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 0.5 PPB | BatchNumber: B-29662 | ApproveDate: 09/11/20
Prep Date: 9/9/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-330844	20ppm VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb

Veritech Lot Number: V-334602

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 500 PPB | BatchNumber: B-29662 | ApproveDate: 09/11/20
Prep Date: 9/9/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333804	200ppm VOA Working Std	250 ul	VARIOUS pp	500 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	250 ul	200 ppm	500 ppb

Veritech Lot Number: V-334603

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: ICV CAL @ 20 PPB | BatchNumber: | ApproveDate: 09/11/20
Prep Date: 9/9/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/16/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333805	MBS	20 ul	100 ppm	20 ppb
9712	P&T Water	100 ml	Neat neat	neat
13198	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-334698

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 200ppm VOA Working Std | BatchNumber: | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 10/4/2020 | Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	220 ul	neat neat	neat
12994	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
13185	502.2 Cal2000 Mega Mix	100 ul	2000 ppm	200 ppm
12907	EPA 8260 CAL. MIX 2	100 ul	2000 ppm	200 ppm
13400	Custom VOC Standard	100 ul	VARIOUS	various ppm
12774	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-313322	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-313324	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
V-327582	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
12992	Ethyl-tert-Butyl Ether(ETBTE)	100 ul	2000 ppm	200 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334700

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 250 PPB | BatchNumber: B-29670 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/18/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334698	200ppm VOA Working Std	125 ul	VARIOUS pp	250 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	125 ul	200 ppm	250 ppb

Veritech Lot Number: V-334701

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 100 PPB | BatchNumber: B-29670 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/18/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334698	200ppm VOA Working Std	50 ul	VARIOUS pp	100 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	50 ul	200 ppm	100 ppb

Veritech Lot Number: V-334702

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 50 PPB | BatchNumber: B-29670 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/18/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334698	200ppm VOA Working Std	25 ul	VARIOUS pp	50 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	25 ul	200 ppm	50 ppb

Veritech Lot Number: V-334703

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 20 PPB | BatchNumber: B-29670 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/18/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334698	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-334704

Prepared By: Previlon, Wilner | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 10 PPB | BatchNumber: B-29670 | ApproveDate: 09/15/20
Prep Date: 9/11/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 9/18/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334709	20ppm VOA Working Std	50 ul	VARIOUS pp	10 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	50 ul	VARIOUS pp	10 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334705

Prepared By:	Previlon, Wilner	Department:	Organics	ApprovedBy:	akmal
Description:	624/8260 CAL @ 5 PPB	BatchNumber:	B-29670	ApproveDate:	09/15/20
Prep Date:	9/11/2020	Concentration:	VARIOUS ppb	Checked:	Yes
Expiration Date:	9/18/2020	Final Volume:	100 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334709	20ppm VOA Working Std	25 ul	VARIOUS pp	5 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	25 ul	VARIOUS pp	5 ppb

Veritech Lot Number: V-334706

Prepared By:	Previlon, Wilner	Department:	Organics	ApprovedBy:	akmal
Description:	624/8260 CAL @ 1 PPB	BatchNumber:	B-29670	ApproveDate:	09/15/20
Prep Date:	9/11/2020	Concentration:	VARIOUS ppb	Checked:	Yes
Expiration Date:	9/18/2020	Final Volume:	100 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334709	20ppm VOA Working Std	5 ul	VARIOUS pp	1 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	5 ul	VARIOUS pp	1 ppb

Veritech Lot Number: V-334707

Prepared By:	Previlon, Wilner	Department:	Organics	ApprovedBy:	akmal
Description:	624/8260 CAL @ 0.5 PPB	BatchNumber:	B-29670	ApproveDate:	09/15/20
Prep Date:	9/11/2020	Concentration:	VARIOUS ppb	Checked:	Yes
Expiration Date:	9/18/2020	Final Volume:	100 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334709	20ppm VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb
9712	P&T Water	100 ml	Neat neat	
V-328517	20ppm Freon VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb

Veritech Lot Number: V-334708

Prepared By:	Previlon, Wilner	Department:	Organics	ApprovedBy:	akmal
Description:	624/8260 CAL @ 500 PPB	BatchNumber:	B-29670	ApproveDate:	09/15/20
Prep Date:	9/11/2020	Concentration:	VARIOUS ppb	Checked:	Yes
Expiration Date:	9/18/2020	Final Volume:	100 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-334698	200ppm VOA Working Std	250 ul	VARIOUS pp	500 ppb
9712	P&T Water	100 ml	Neat neat	
13197	Chlorodifluoromethane (freon #22)	250 ul	200 ppm	500 ppb

Veritech Lot Number: V-334709

Prepared By:	Previlon, Wilner	Department:	Organics	ApprovedBy:	akmal
Description:	20ppm VOA Working Std	BatchNumber:		ApproveDate:	09/15/20
Prep Date:	9/11/2020	Concentration:	VARIOUS pp	Checked:	Yes
Expiration Date:	10/4/2020	Final Volume:	1 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	900 ul	neat neat	neat
V-334698	200ppm VOA Working Std	100 ul	VARIOUS pp	200 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-334710

Prepared By: Previlon, Wilner
Department: Organics
ApprovedBy: akmal
Description: ICV CAL @ 20 PPB
BatchNumber:
ApproveDate: 09/15/20
Prep Date: 9/11/2020
Concentration: VARIOUS ppb
Checked: Yes
Expiration Date: 9/18/2020
Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333805	MBS	20 ul	100 ppm	20 ppb
9712	P&T Water	100 ml	Neat neat	neat
13198	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-335295

Prepared By: Previlon, Wilner
Department: Organics
ApprovedBy: akmal
Description: MBS
BatchNumber:
ApproveDate: 09/23/20
Prep Date: 9/22/2020
Concentration: 100 ppm
Checked: Yes
Expiration Date: 10/4/2020
Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	610 ul	neat neat	neat neat
13186	502.2 Cal Mix#1(Gases)	50 ul	2000 ppm	100 ppm
13185	502.2 Cal2000 Mega Mix	50 ul	2000 ppm	100 ppm
12913	EPA 8260 CAL MIX 2	50 ul	2000 ppm	100 ppm
13401	Custom VOC Standard(2nd Sources)	50 ul	VARIOUS	various ppm
12993	tert-Amyl Methyl Ether	50 ul	2000 ppm	100 ppm
V-313323	VOA ADD MIX(2nd Source)	20 ul	5000/25000 p	various ppm
V-313325	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-327585	Ethyl ether/Furan Mix(2ND SOURCE)	20 ul	5000 ppm	100 ppm
13038	Ethyl-tert-Butyl Ether (ETBE)	50 ul	2000 ppm	100 ppm

Veritech Lot Number: V-335645

Prepared By: Longton, Rhys
Department: Organics
ApprovedBy: akmal
Description: CAL @ 20 PPB
BatchNumber:
ApproveDate: 09/29/20
Prep Date: 9/28/2020
Concentration: VARIOUS ppb
Checked: Yes
Expiration Date: 10/5/2020
Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333804	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
12833	P&T Water	100 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-335744

Prepared By: Revolus, Jean
Department: Organics
ApprovedBy: akmal
Description: 200ppm VOA Working Std
BatchNumber:
ApproveDate: 09/29/20
Prep Date: 9/29/2020
Concentration: VARIOUS pp
Checked: Yes
Expiration Date: 10/4/2020
Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	220 ul	neat neat	neat
12994	502.2 Cal Mix #1(Gases)	100 ul	2000 ppm	200 ppm
13185	502.2 Cal2000 Mega Mix	100 ul	2000 ppm	200 ppm
12907	EPA 8260 CAL. MIX 2	100 ul	2000 ppm	200 ppm
13400	Custom VOC Standard	100 ul	VARIOUS	various ppm
13468	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-313322	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-313324	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
V-327582	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
12791	Ethyl-tert-Butyl Ethyl (ETBE) Standard	100 ul	2000 ppm	200 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-335745

Prepared By: Revolus, Jean
Department: Organics
ApprovedBy: akmal
Description: MBS
BatchNumber:
ApproveDate: 09/29/20
Prep Date: 9/29/2020
Concentration: 100 ppm
Checked: Yes
Expiration Date: 10/4/2020
Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12804	methyl alcohol	610 ul	neat neat	neat neat
13186	502.2 Cal Mix#1(Gases)	50 ul	2000 ppm	100 ppm
12775	502.2 Cal2000 Mega Mix	50 ul	2000 ppm	100 ppm
12913	EPA 8260 CAL MIX 2	50 ul	2000 ppm	100 ppm
13401	Custom VOC Standard(2nd Sources)	50 ul	VARIOUS	various ppm
12774	tert-Amyl Methyl Ether Standard	50 ul	2000 ppm	100 ppm
V-313323	VOA ADD MIX(2nd Source)	20 ul	5000/25000 p	various ppm
V-313325	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-327585	Ethyl ether/Furan Mix(2ND SOURCE)	20 ul	5000 ppm	100 ppm
13038	Ethyl-tert-Butyl Ether (ETBE)	50 ul	2000 ppm	100 ppm

Veritech Lot Number: V-335746

Prepared By: Revolus, Jean
Department: Organics
ApprovedBy: akmal
Description: 624/8260 CAL @ 250 PPB
BatchNumber: B-29757
ApproveDate: 09/29/20
Prep Date: 9/29/2020
Concentration: VARIOUS ppb
Checked: Yes
Expiration Date: 10/4/2020
Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-335744	200ppm VOA Working Std	125 ul	VARIOUS pp	250 ppb
12833	P&T Water	100 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	125 ul	200 ppm	250 ppb

Veritech Lot Number: V-335747

Prepared By: Revolus, Jean
Department: Organics
ApprovedBy: akmal
Description: 624/8260 CAL @ 100 PPB
BatchNumber: B-29757
ApproveDate: 09/29/20
Prep Date: 9/29/2020
Concentration: VARIOUS ppb
Checked: Yes
Expiration Date: 10/4/2020
Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-335744	200ppm VOA Working Std	50 ul	VARIOUS pp	100 ppb
12833	P&T Water	100 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	50 ul	200 ppm	100 ppb

Veritech Lot Number: V-335748

Prepared By: Revolus, Jean
Department: Organics
ApprovedBy: akmal
Description: 624/8260 CAL @ 50 PPB
BatchNumber: B-29757
ApproveDate: 09/29/20
Prep Date: 9/29/2020
Concentration: VARIOUS ppb
Checked: Yes
Expiration Date: 10/4/2020
Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-335744	200ppm VOA Working Std	25 ul	VARIOUS pp	50 ppb
12833	P&T Water	100 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	25 ul	200 ppm	50 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-335749

Prepared By: Revolus, Jean | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 20 PPB | BatchNumber: B-29757 | ApproveDate: 09/29/20
Prep Date: 9/29/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 10/4/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-335744	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
12833	P&T Water	100 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-335750

Prepared By: Revolus, Jean | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 10 PPB | BatchNumber: B-29757 | ApproveDate: 09/29/20
Prep Date: 9/29/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 10/4/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-335756	20ppm VOA Working Std	50 ul	VARIOUS pp	10 ppb
12833	P&T Water	100 ml	NEAT neat	
V-335755	20ppm Freon VOA Working Std	50 ul	VARIOUS pp	10 ppb

Veritech Lot Number: V-335751

Prepared By: Revolus, Jean | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 5 PPB | BatchNumber: B-29757 | ApproveDate: 09/29/20
Prep Date: 9/29/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 10/4/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-335756	20ppm VOA Working Std	25 ul	VARIOUS pp	5 ppb
12833	P&T Water	100 ml	NEAT neat	
V-335755	20ppm Freon VOA Working Std	25 ul	VARIOUS pp	5 ppb

Veritech Lot Number: V-335752

Prepared By: Revolus, Jean | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 1 PPB | BatchNumber: B-29757 | ApproveDate: 09/29/20
Prep Date: 9/29/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 10/4/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-335756	20ppm VOA Working Std	5 ul	VARIOUS pp	1 ppb
12833	P&T Water	100 ml	NEAT neat	
V-335755	20ppm Freon VOA Working Std	5 ul	VARIOUS pp	1 ppb

Veritech Lot Number: V-335753

Prepared By: Revolus, Jean | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 0.5 PPB | BatchNumber: B-29757 | ApproveDate: 09/29/20
Prep Date: 9/29/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 10/4/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-335756	20ppm VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb
12833	P&T Water	100 ml	NEAT neat	
V-335755	20ppm Freon VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-335754

Prepared By: Revolus, Jean | Department: Organics | ApprovedBy: akmal
Description: 624/8260 CAL @ 500 PPB | BatchNumber: B-29757 | ApproveDate: 09/29/20
Prep Date: 9/29/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 10/4/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-335744	200ppm VOA Working Std	250 ul	VARIOUS pp	500 ppb
12833	P&T Water	100 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	250 ul	200 ppm	500 ppb

Veritech Lot Number: V-335755

Prepared By: Revolus, Jean | Department: Organics | ApprovedBy: akmal
Description: 20ppm Freon VOA Working Std | BatchNumber: | ApproveDate: 09/29/20
Prep Date: 9/29/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 4/16/2021 | Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12588	Methyl alcohol	900 ul	neat neat	neat
12435	Chlorodifluoromethane(Freon #22)	100 ul	200 ppm	200 ppm

Veritech Lot Number: V-335756

Prepared By: Revolus, Jean | Department: Organics | ApprovedBy: akmal
Description: 20ppm VOA Working Std | BatchNumber: | ApproveDate: 09/29/20
Prep Date: 9/29/2020 | Concentration: VARIOUS pp | Checked: Yes
Expiration Date: 10/4/2020 | Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13150	methyl alcohol	900 ul	neat neat	neat
V-335744	200ppm VOA Working Std	100 ul	VARIOUS pp	200 ppm

Veritech Lot Number: V-335757

Prepared By: Revolus, Jean | Department: Organics | ApprovedBy: akmal
Description: ICV CAL @ 20 PPB | BatchNumber: | ApproveDate: 09/29/20
Prep Date: 9/29/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 10/4/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-335745	MBS	20 ul	100 ppm	20 ppb
12833	P&T Water	100 ml	NEAT neat	neat
13198	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-335797

Prepared By: Kim, Benjamin | Department: Organics | ApprovedBy: akmal
Description: CAL @ 20 PPB | BatchNumber: | ApproveDate: 10/02/20
Prep Date: 9/30/2020 | Concentration: VARIOUS ppb | Checked: Yes
Expiration Date: 10/4/2020 | Final Volume: 100 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-333804	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
12833	P&T Water	100 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-336000

Prepared By:	Previlon, Wilner	Department:	Organics	ApprovedBy:	akmal
Description:	CAL @ 20 PPB	BatchNumber:		ApproveDate:	10/05/20
Prep Date:	10/2/2020	Concentration:	VARIOUS ppb	Checked:	Yes
Expiration Date:	10/4/2020	Final Volume:	100 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-335744	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
12833	P&T Water	100 ml	NEAT neat	
13197	Chlorodifluoromethane (freon #22)	10 ul	200 ppm	20 ppb

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 2889

Description: 1,2,4,5-TETRAMETHYLBENZENE

ApprovedBy: jean
ApproveDate: 07/30/09
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACROS ORGANI	409390050	A0214190	11/20/07	11/30/20	Revolus, Jean	1	1ML	NEAT	

Veritech Control/Receipt Number: 9641

Description: d-Camphor

ApprovedBy: jean
ApproveDate: 08/11/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11556-1G	3256300	08/11/15	10/31/20	Revolus, Jean	2	1g	Neat	

Veritech Control/Receipt Number: 9712

Description: P&T Water

ApprovedBy:
ApproveDate:
Checked: No

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Veritech	N/A	N/A	09/28/15	09/28/20	Goring, Shawn	1	N/A	Neat	Neat

Veritech Control/Receipt Number: 11578

Description: n-Amyl Acetate

ApprovedBy: akmal
ApproveDate: 04/03/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Chem Service	N-12508-1G	6972800	04/03/18	02/27/21	Hamid, Akmal	1	1G	NEAT	NEAT

Veritech Control/Receipt Number: 11587

Description: Furan

ApprovedBy: akmal
ApproveDate: 04/05/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Aldrich	185922	SHBG4510V	04/05/18	08/31/25	Hamid, Akmal	1	5ML	NEAT	NEAT

Veritech Control/Receipt Number: 11931

Description: Methyl methacrylate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-12443-1G	7530100	08/22/18	03/31/21	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 11932

Description: Butyl methacrylate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11371-1G	4695500	08/22/18	01/31/23	Revolus, Jean	1	1g	Neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11933

Description: n-Butyl acrylate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-12513-1G	7528400	08/22/18	12/31/20	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 11935

Description: Ethyl acetate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11881-1G	7518400	08/22/18	05/31/22	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 12137

Description: 8260A Surrogates Mix

ApprovedBy: jean
ApproveDate: 11/21/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30240	A0138193	11/21/18	05/31/23	Revolus, Jean	17	1ml	2500	PPM

Veritech Control/Receipt Number: 12138

Description: 8260A Internal Standard Mix

ApprovedBy: jean
ApproveDate: 11/21/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30241	A0138856	11/21/18	06/30/23	Revolus, Jean	14	1ml	2500	PPM

Veritech Control/Receipt Number: 12435

Description: Chlorodifluoromethane(Freon #22)

ApprovedBy: jean
ApproveDate: 04/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	M-REF-03	217071159	04/18/19	07/12/27	Revolus, Jean	20	1ml	200	PPM

Veritech Control/Receipt Number: 12588

Description: Methyl alcohol

ApprovedBy: akmal
ApproveDate: 06/14/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	19010891	06/11/19	04/16/21	Lopez, Jose	6	1L	neat	neat

Veritech Control/Receipt Number: 12761

Description: Camphene

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11395-250G	8199400	09/19/19	01/31/22	Revolus, Jean	2	250m	NEAT	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12762

Description: p-Diethylbenzene

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-12771-100MG	8949700	09/19/19	08/31/23	Revolus, Jean	4	100m	NEAT	

Veritech Control/Receipt Number: 12763

Description: Isopropyl acetate

ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-12223-1G	8816500	09/19/19	04/30/24	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12764

Description: Cyclohexanone

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11531-1G	8743900	09/19/19	05/31/23	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12766

Description: Ethyl methacrylate

ApprovedBy: jean
ApproveDate: 09/25/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11903-1G	8239900	09/19/19	01/31/23	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12774

Description: tert-Amyl Methyl Ether Standard

ApprovedBy: akmal
ApproveDate: 09/23/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30629	A0143927	09/20/19	12/31/23	Revolus, Jean	6	1ml	2000	PPM

Veritech Control/Receipt Number: 12775

Description: 502.2 Cal2000 Mega Mix

ApprovedBy: akmal
ApproveDate: 09/23/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30431	A0146957	09/20/19	03/31/21	Revolus, Jean	5	1ml	2000	PPM

Veritech Control/Receipt Number: 12791

Description: Ethyl-tert-Butyl Ethyl (ETBE) Standard

ApprovedBy: jean
ApproveDate: 09/25/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30628	A0153073	09/25/19	09/30/24	Revolus, Jean	6	1ml	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12804

Description: methyl alcohol

ApprovedBy: akmal
ApproveDate: 02/10/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	19010891	09/30/19	03/16/21	Lopez, Jose	36	1L	neat	neat

Veritech Control/Receipt Number: 12815

Description: p-Ethyltoluene

ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEMSERVICE	N-12776-1G	7926200	10/03/19	12/31/21	Revolus, Jean	4	250 ml	NEAT	

Veritech Control/Receipt Number: 12833

Description: P&T Water

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Veritech	N/A	N/A	10/14/19	10/14/25	Goring, Shawn	1	N/A	NEAT	NEAT

Veritech Control/Receipt Number: 12907

Description: EPA 8260 CAL. MIX 2

ApprovedBy: akmal
ApproveDate: 12/03/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
SIGMA-ALDRICH	46831-U	LRAC3827	12/02/19	10/31/22	Hamid, Akmal	18	1.5ML	2000	PPM

Veritech Control/Receipt Number: 12913

Description: EPA 8260 CAL MIX 2

ApprovedBy: akmal
ApproveDate: 12/09/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Sigma- Addrich	4S6831-U	LRAC0052	12/09/19	10/31/20	Hamid, Akmal	15	1.5ML	2000	PPM

Veritech Control/Receipt Number: 12992

Description: Ethyl-tert-Butyl Ether(ETBTE)

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30628	A0153073	01/08/20	09/30/24	Revolus, Jean	2	1ml	2000	PPM

Veritech Control/Receipt Number: 12993

Description: tert-Amyl Methyl Ether

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30629	A0143927	01/08/20	12/31/23	Revolus, Jean	5	1ml	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12994

Description: 502.2 Cal Mix #1(Gases)

ApprovedBy: jean
ApproveDate: 01/09/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30042	A0153419	01/08/20	05/31/26	Revolus, Jean	10	1ml	2000	PPM

Veritech Control/Receipt Number: 13038

Description: Ethyl-tert-Butyl Ether (ETBE)

ApprovedBy: akmal
ApproveDate: 02/05/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30628	A0157135	02/03/20	01/31/25	Revolus, Jean	3	1ml	2000	PPM

Veritech Control/Receipt Number: 13124

Description: Custom VOC Standard

ApprovedBy: jean
ApproveDate: 03/24/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	S-16418	220031197	03/17/20	09/16/20	Revolus, Jean	5	1ml	VARIOU	

Veritech Control/Receipt Number: 13150

Description: methyl alcohol

ApprovedBy: akmal
ApproveDate: 04/01/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	19010891	03/30/20	04/16/21	Lopez, Jose	42	1L	neat	neat

Veritech Control/Receipt Number: 13185

Description: 502.2 Cal2000 Mega Mix

ApprovedBy: jean
ApproveDate: 04/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30431	A0150913	04/15/20	07/31/21	Revolus, Jean	10	1ml	2000	PPM

Veritech Control/Receipt Number: 13186

Description: 502.2 Cal Mix#1(Gases)

ApprovedBy: jean
ApproveDate: 04/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30042	A0156895	04/15/20	09/30/26	Revolus, Jean	10	1ml	2000	PPM

Veritech Control/Receipt Number: 13193

Description: Ethyl ether

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEM SERVICE	N-11897-1G	9150400	04/17/20	11/30/21	Revolus, Jean	1	1g	Neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number:13197

Description: Chlorodifluoromethane (freon #22)

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	M-REF-03	219081587	04/17/20	09/11/29	Revolus, Jean	10	1ml	200	PPM

Veritech Control/Receipt Number:13198

Description: Chlorodifluoromethane (freon #22)

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	M-REF-03	220011384	04/17/20	01/28/30	Revolus, Jean	10	1ml	200	PPM

Veritech Control/Receipt Number:13224

Description: methyl alcohol

ApprovedBy: akmal
ApproveDate: 05/05/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924	20030219	05/04/20	03/13/22	Lopez, Jose	6	1L	neat	neat

Veritech Control/Receipt Number:13400

Description: Custom VOC Standard

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	S-16418	220071002	07/15/20	01/08/21	Revolus, Jean	5	1ml	VARIOU	

Veritech Control/Receipt Number:13401

Description: Custom VOC Standard(2nd Sources)

ApprovedBy: jean
ApproveDate: 07/15/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ACCUSTANDAR	S-16418	220071003	07/15/20	04/21/21	Revolus, Jean	5	1ml	VARIOU	

Veritech Control/Receipt Number:13468

Description: tert-Amyl Methyl Ether Standard

ApprovedBy: jean
ApproveDate: 09/02/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
RESTEK	30629	A0143927	09/02/20	12/31/23	Revolus, Jean	5	1ml	2000	PPM

Hampton-Clarke
Analytical & Field Services

Last Page of Report

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Hampton Clarke-Veritech

Project # 0092427

COCID# 6908

SGS Job Number: JD13677

Sampling Date: 09/22/20

Report to:

Hampton Clarke-Veritech
175 Route 46 West
Fairfield, NJ 07004
NYannacone@HCVLab.com; SubResults@HCVLab.com

ATTN: Nick Yannacone

Total number of pages in report: 35

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Shalini Williams 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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how we can serve you better at:
EHS.US.CustomerCare@sgs.com

October 13, 2020

Mr. Nick Yannacone
Hampton Clarke-Veritech
175 Route 46 West
Fairfield, NJ 07004

RE: SGS – Dayton, Job # JD13677 – Reissues

Dear Mr. Yannacone,

The final report for SGS jobs number JD13677 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, the samples receitp summary has been corrected and resubmitted. The attached revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.

CONTINUOUS SERVICE IMPROVEMENT!

Our goal is to continuously improve our service to you. Please share your ideas about how we can serve you better at EHS.US.CustomerCare@sgs.com. Your feedback is appreciated!

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SGS North America Inc.

Sample Summary

Hampton Clarke-Veritech

Job No: JD13677

Project # 0092427
Project No: COCID# 6908

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD13677-1	09/22/20	13:07		09/25/20	AIR	Soil Vapor Comp.	AD19437-001 HRP-SV-1
JD13677-2	09/22/20	13:15		09/25/20	AIR	Soil Vapor Comp.	AD19437-002 HRP-SV-2
JD13677-3	09/22/20	11:45		09/25/20	AIR	Soil Vapor Comp.	AD19437-003 HRP-SV-3
JD13677-4	09/22/20	12:00		09/25/20	AIR	Soil Vapor Comp.	AD19437-004 HRP-SV-4
JD13677-5	09/22/20	11:48		09/25/20	AIR	Soil Vapor Comp.	AD19437-005 HRP-SV-5
JD13677-6	09/22/20	11:53		09/25/20	AIR	Soil Vapor Comp.	AD19437-006 HRP-SV-6
JD13677-7	09/22/20	13:10		09/25/20	AIR	Soil Vapor Comp.	AD19437-007 HRP-SV-7

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Hampton Clarke-Veritech	**Job No**	JD13677
Site:	Project # 0092427	**Report Date**	10/9/2020 2:32:48 PM

On 09/25/2020, 7 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. A SGS North America Inc. Job Number of JD13677 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method TO-15

Matrix: AIR **Batch ID:** V3W2884

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD13677-2DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AIR **Batch ID:** V3W2885

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD13673-1DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JD13677
Account: Hampton Clarke-Veritech
Project: Project # 0092427
Collected: 09/22/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD13677-1	**AD19437-001 HRP-SV-1**					
Acetone		380	26	15	ppbv	TO-15
trans-1,2-Dichloroethylene		21.4 J	26	0.95	ppbv	TO-15
cis-1,2-Dichloroethylene		415	26	1.5	ppbv	TO-15
Ethanol		177	65	28	ppbv	TO-15
Ethyl Acetate		64.8	26	4.9	ppbv	TO-15
Hexane		356	26	1.4	ppbv	TO-15
Isopropyl Alcohol		1900	26	8.4	ppbv	TO-15
Methylene chloride		67.6	26	1.9	ppbv	TO-15
Methyl ethyl ketone		33.6	26	5.5	ppbv	TO-15
Tetrachloroethylene		109	5.2	4.0	ppbv	TO-15
Toluene		51.8	26	1.9	ppbv	TO-15
Trichloroethylene		3190	5.2	2.5	ppbv	TO-15
Acetone		903	62	36	ug/m3	TO-15
trans-1,2-Dichloroethylene		84.8 J	100	3.8	ug/m3	TO-15
cis-1,2-Dichloroethylene		1650	100	5.9	ug/m3	TO-15
Ethanol		334	120	53	ug/m3	TO-15
Ethyl Acetate		233	94	18	ug/m3	TO-15
Hexane		1250	92	4.9	ug/m3	TO-15
Isopropyl Alcohol		4670	64	21	ug/m3	TO-15
Methylene chloride		235	90	6.6	ug/m3	TO-15
Methyl ethyl ketone		99.1	77	16	ug/m3	TO-15
Tetrachloroethylene		739	35	27	ug/m3	TO-15
Toluene		195	98	7.2	ug/m3	TO-15
Trichloroethylene		17100	28	13	ug/m3	TO-15
JD13677-2	**AD19437-002 HRP-SV-2**					
Acetone		35.2	0.80	0.45	ppbv	TO-15
Benzene		1.2	0.80	0.048	ppbv	TO-15
Carbon disulfide		8.6	0.80	0.094	ppbv	TO-15
Chloroethane		1.3	0.80	0.19	ppbv	TO-15
Chloromethane		2.0	0.80	0.061	ppbv	TO-15
1,2-Dichloroethane		0.39 J	0.80	0.083	ppbv	TO-15
cis-1,2-Dichloroethylene		0.56 J	0.80	0.047	ppbv	TO-15
Ethanol		16.0	2.0	0.87	ppbv	TO-15
Isopropyl Alcohol		41.3	0.80	0.26	ppbv	TO-15
Methyl ethyl ketone		2.3	0.80	0.17	ppbv	TO-15
Methylmethacrylate		0.58 J	0.80	0.13	ppbv	TO-15
Propylene		2.8	2.0	0.064	ppbv	TO-15
1,2,4-Trimethylbenzene		0.75 J	0.80	0.13	ppbv	TO-15
Tertiary Butyl Alcohol		3.1	0.80	0.055	ppbv	TO-15
Tetrachloroethylene		3.3	0.16	0.12	ppbv	TO-15
Toluene		0.86	0.80	0.058	ppbv	TO-15

Summary of Hits

Job Number: JD13677
Account: Hampton Clarke-Veritech
Project: Project # 0092427
Collected: 09/22/20

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
Trichloroethylene	5.8	0.16	0.076	ppbv	TO-15
m,p-Xylene	1.0	0.80	0.14	ppbv	TO-15
Xylenes (total)	1.0	0.80	0.068	ppbv	TO-15
Acetone	83.6	1.9	1.1	ug/m3	TO-15
Benzene	3.8	2.6	0.15	ug/m3	TO-15
Carbon disulfide	27	2.5	0.29	ug/m3	TO-15
Chloroethane	3.4	2.1	0.50	ug/m3	TO-15
Chloromethane	4.1	1.7	0.13	ug/m3	TO-15
1,2-Dichloroethane	1.6 J	3.2	0.34	ug/m3	TO-15
cis-1,2-Dichloroethylene	2.2 J	3.2	0.19	ug/m3	TO-15
Ethanol	30.1	3.8	1.6	ug/m3	TO-15
Isopropyl Alcohol	102	2.0	0.64	ug/m3	TO-15
Methyl ethyl ketone	6.8	2.4	0.50	ug/m3	TO-15
Methylmethacrylate	2.4 J	3.3	0.53	ug/m3	TO-15
Propylene	4.8	3.4	0.11	ug/m3	TO-15
1,2,4-Trimethylbenzene	3.7 J	3.9	0.64	ug/m3	TO-15
Tertiary Butyl Alcohol	9.4	2.4	0.17	ug/m3	TO-15
Tetrachloroethylene	22	1.1	0.81	ug/m3	TO-15
Toluene	3.2	3.0	0.22	ug/m3	TO-15
Trichloroethylene	31	0.86	0.41	ug/m3	TO-15
m,p-Xylene	4.3	3.5	0.61	ug/m3	TO-15
Xylenes (total)	4.3	3.5	0.30	ug/m3	TO-15
JD13677-3 AD19437-003 HRP-SV-3					
Acetone	91.8	6.8	3.8	ppbv	TO-15
Carbon disulfide	6.2 J	6.8	0.80	ppbv	TO-15
cis-1,2-Dichloroethylene	7.4	6.8	0.40	ppbv	TO-15
Ethanol	22.5	17	7.4	ppbv	TO-15
Isopropyl Alcohol	37.9	6.8	2.2	ppbv	TO-15
Methyl ethyl ketone	3.3 J	6.8	1.4	ppbv	TO-15
Propylene	3.0 J	17	0.54	ppbv	TO-15
Tetrachloroethylene	1080	1.4	1.0	ppbv	TO-15
Trichloroethylene	122	1.4	0.65	ppbv	TO-15
Acetone	218	16	9.0	ug/m3	TO-15
Carbon disulfide	19 J	21	2.5	ug/m3	TO-15
cis-1,2-Dichloroethylene	29	27	1.6	ug/m3	TO-15
Ethanol	42.4	32	14	ug/m3	TO-15
Isopropyl Alcohol	93.2	17	5.4	ug/m3	TO-15
Methyl ethyl ketone	9.7 J	20	4.1	ug/m3	TO-15
Propylene	5.2 J	29	0.93	ug/m3	TO-15
Tetrachloroethylene	7320	9.5	6.8	ug/m3	TO-15
Trichloroethylene	656	7.5	3.5	ug/m3	TO-15

Summary of Hits

Job Number: JD13677
Account: Hampton Clarke-Veritech
Project: Project # 0092427
Collected: 09/22/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD13677-4	**AD19437-004 HRP-SV-4**					
Acetone		6.6	0.80	0.45	ppbv	TO-15
Carbon disulfide		0.60 J	0.80	0.094	ppbv	TO-15
Chloromethane		0.54 J	0.80	0.061	ppbv	TO-15
Dichlorodifluoromethane		0.46 J	0.80	0.066	ppbv	TO-15
trans-1,2-Dichloroethylene		0.58 J	0.80	0.029	ppbv	TO-15
Ethanol		12.3	2.0	0.87	ppbv	TO-15
Ethylbenzene		5.6	0.80	0.060	ppbv	TO-15
Ethyl Acetate		2.5	0.80	0.15	ppbv	TO-15
Isopropyl Alcohol		42.1	0.80	0.26	ppbv	TO-15
Tertiary Butyl Alcohol		0.66 J	0.80	0.055	ppbv	TO-15
Tetrachloroethylene		0.34	0.16	0.12	ppbv	TO-15
Trichloroethylene		0.22	0.16	0.076	ppbv	TO-15
Vinyl chloride		0.92	0.80	0.089	ppbv	TO-15
m,p-Xylene		23.6	0.80	0.14	ppbv	TO-15
o-Xylene		3.6	0.80	0.068	ppbv	TO-15
Xylenes (total)		27.2	0.80	0.068	ppbv	TO-15
Acetone		16	1.9	1.1	ug/m3	TO-15
Carbon disulfide		1.9 J	2.5	0.29	ug/m3	TO-15
Chloromethane		1.1 J	1.7	0.13	ug/m3	TO-15
Dichlorodifluoromethane		2.3 J	4.0	0.33	ug/m3	TO-15
trans-1,2-Dichloroethylene		2.3 J	3.2	0.11	ug/m3	TO-15
Ethanol		23.2	3.8	1.6	ug/m3	TO-15
Ethylbenzene		24	3.5	0.26	ug/m3	TO-15
Ethyl Acetate		9.0	2.9	0.54	ug/m3	TO-15
Isopropyl Alcohol		103	2.0	0.64	ug/m3	TO-15
Tertiary Butyl Alcohol		2.0 J	2.4	0.17	ug/m3	TO-15
Tetrachloroethylene		2.3	1.1	0.81	ug/m3	TO-15
Trichloroethylene		1.2	0.86	0.41	ug/m3	TO-15
Vinyl chloride		2.4	2.0	0.23	ug/m3	TO-15
m,p-Xylene		103	3.5	0.61	ug/m3	TO-15
o-Xylene		16	3.5	0.30	ug/m3	TO-15
Xylenes (total)		118	3.5	0.30	ug/m3	TO-15
JD13677-5	**AD19437-005 HRP-SV-5**					
Acetone		79.5	0.80	0.45	ppbv	TO-15
Benzene		1.1	0.80	0.048	ppbv	TO-15
Carbon disulfide		20.0	0.80	0.094	ppbv	TO-15
Chloroethane		0.50 J	0.80	0.19	ppbv	TO-15
Chloroform		2.0	0.80	0.080	ppbv	TO-15
Chloromethane		0.63 J	0.80	0.061	ppbv	TO-15
Cyclohexane		3.8	0.80	0.088	ppbv	TO-15
1,2-Dichloroethane		0.40 J	0.80	0.083	ppbv	TO-15

Summary of Hits

Job Number: JD13677
Account: Hampton Clarke-Veritech
Project: Project # 0092427
Collected: 09/22/20

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Dichlorodifluoromethane	0.62 J	0.80	0.066	ppbv	TO-15
cis-1,2-Dichloroethylene	0.62 J	0.80	0.047	ppbv	TO-15
m-Dichlorobenzene	1.6	0.80	0.076	ppbv	TO-15
Ethanol	44.4	2.0	0.87	ppbv	TO-15
Ethylbenzene	0.54 J	0.80	0.060	ppbv	TO-15
Ethyl Acetate	2.6	0.80	0.15	ppbv	TO-15
Heptane	6.3	0.80	0.070	ppbv	TO-15
Hexane	14.1	0.80	0.042	ppbv	TO-15
2-Hexanone	1.1	0.80	0.15	ppbv	TO-15
Isopropyl Alcohol	107	0.80	0.26	ppbv	TO-15
Methyl ethyl ketone	65.5	0.80	0.17	ppbv	TO-15
Propylene	29.4	2.0	0.064	ppbv	TO-15
2,2,4-Trimethylpentane	0.62 J	0.80	0.087	ppbv	TO-15
Tertiary Butyl Alcohol	3.6	0.80	0.055	ppbv	TO-15
Tetrachloroethylene	0.36	0.16	0.12	ppbv	TO-15
Toluene	76.3	0.80	0.058	ppbv	TO-15
Trichloroethylene	1.8	0.16	0.076	ppbv	TO-15
m,p-Xylene	1.4	0.80	0.14	ppbv	TO-15
o-Xylene	0.60 J	0.80	0.068	ppbv	TO-15
Xylenes (total)	2.0	0.80	0.068	ppbv	TO-15
Acetone	189	1.9	1.1	ug/m3	TO-15
Benzene	3.5	2.6	0.15	ug/m3	TO-15
Carbon disulfide	62.3	2.5	0.29	ug/m3	TO-15
Chloroethane	1.3 J	2.1	0.50	ug/m3	TO-15
Chloroform	9.8	3.9	0.39	ug/m3	TO-15
Chloromethane	1.3 J	1.7	0.13	ug/m3	TO-15
Cyclohexane	13	2.8	0.30	ug/m3	TO-15
1,2-Dichloroethane	1.6 J	3.2	0.34	ug/m3	TO-15
Dichlorodifluoromethane	3.1 J	4.0	0.33	ug/m3	TO-15
cis-1,2-Dichloroethylene	2.5 J	3.2	0.19	ug/m3	TO-15
m-Dichlorobenzene	9.6	4.8	0.46	ug/m3	TO-15
Ethanol	83.7	3.8	1.6	ug/m3	TO-15
Ethylbenzene	2.3 J	3.5	0.26	ug/m3	TO-15
Ethyl Acetate	9.4	2.9	0.54	ug/m3	TO-15
Heptane	26	3.3	0.29	ug/m3	TO-15
Hexane	49.7	2.8	0.15	ug/m3	TO-15
2-Hexanone	4.5	3.3	0.61	ug/m3	TO-15
Isopropyl Alcohol	263	2.0	0.64	ug/m3	TO-15
Methyl ethyl ketone	193	2.4	0.50	ug/m3	TO-15
Propylene	50.5	3.4	0.11	ug/m3	TO-15
2,2,4-Trimethylpentane	2.9 J	3.7	0.41	ug/m3	TO-15
Tertiary Butyl Alcohol	11	2.4	0.17	ug/m3	TO-15
Tetrachloroethylene	2.4	1.1	0.81	ug/m3	TO-15
Toluene	288	3.0	0.22	ug/m3	TO-15
Trichloroethylene	9.7	0.86	0.41	ug/m3	TO-15

Summary of Hits

Job Number: JD13677
Account: Hampton Clarke-Veritech
Project: Project # 0092427
Collected: 09/22/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
m,p-Xylene		6.1	3.5	0.61	ug/m3	TO-15
o-Xylene		2.6 J	3.5	0.30	ug/m3	TO-15
Xylenes (total)		8.7	3.5	0.30	ug/m3	TO-15
JD13677-6	**AD19437-006 HRP-SV-6**					
Acetone		147	7.2	4.0	ppbv	TO-15
Benzene		3.6	0.80	0.048	ppbv	TO-15
Carbon disulfide		6.6	0.80	0.094	ppbv	TO-15
Chloroethane		0.82	0.80	0.19	ppbv	TO-15
Chloromethane		1.2	0.80	0.061	ppbv	TO-15
Cyclohexane		2.2	0.80	0.088	ppbv	TO-15
Dichlorodifluoromethane		0.41 J	0.80	0.066	ppbv	TO-15
Ethanol		27.8	2.0	0.87	ppbv	TO-15
Ethylbenzene		0.77 J	0.80	0.060	ppbv	TO-15
Ethyl Acetate		0.68 J	0.80	0.15	ppbv	TO-15
Heptane		2.0	0.80	0.070	ppbv	TO-15
Hexane		1.6	0.80	0.042	ppbv	TO-15
Isopropyl Alcohol		72.4	0.80	0.26	ppbv	TO-15
Methyl ethyl ketone		2.9	0.80	0.17	ppbv	TO-15
Methylmethacrylate		2.7	0.80	0.13	ppbv	TO-15
Propylene		5.1	2.0	0.064	ppbv	TO-15
1,2,4-Trimethylbenzene		1.0	0.80	0.13	ppbv	TO-15
1,3,5-Trimethylbenzene		0.88	0.80	0.13	ppbv	TO-15
Tertiary Butyl Alcohol		1.5	0.80	0.055	ppbv	TO-15
Tetrachloroethylene		68.2	0.16	0.12	ppbv	TO-15
Tetrahydrofuran		4.6	0.80	0.20	ppbv	TO-15
Toluene		3.0	0.80	0.058	ppbv	TO-15
Trichloroethylene		12.3	0.16	0.076	ppbv	TO-15
m,p-Xylene		2.0	0.80	0.14	ppbv	TO-15
o-Xylene		1.0	0.80	0.068	ppbv	TO-15
Xylenes (total)		3.0	0.80	0.068	ppbv	TO-15
Acetone		349	17	9.5	ug/m3	TO-15
Benzene		12	2.6	0.15	ug/m3	TO-15
Carbon disulfide		21	2.5	0.29	ug/m3	TO-15
Chloroethane		2.2	2.1	0.50	ug/m3	TO-15
Chloromethane		2.5	1.7	0.13	ug/m3	TO-15
Cyclohexane		7.6	2.8	0.30	ug/m3	TO-15
Dichlorodifluoromethane		2.0 J	4.0	0.33	ug/m3	TO-15
Ethanol		52.4	3.8	1.6	ug/m3	TO-15
Ethylbenzene		3.3 J	3.5	0.26	ug/m3	TO-15
Ethyl Acetate		2.4 J	2.9	0.54	ug/m3	TO-15
Heptane		8.2	3.3	0.29	ug/m3	TO-15
Hexane		5.6	2.8	0.15	ug/m3	TO-15
Isopropyl Alcohol		178	2.0	0.64	ug/m3	TO-15

Summary of Hits

Job Number: JD13677
Account: Hampton Clarke-Veritech
Project: Project # 0092427
Collected: 09/22/20

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
Methyl ethyl ketone	8.6	2.4	0.50	ug/m3	TO-15
Methylmethacrylate	11	3.3	0.53	ug/m3	TO-15
Propylene	8.8	3.4	0.11	ug/m3	TO-15
1,2,4-Trimethylbenzene	4.9	3.9	0.64	ug/m3	TO-15
1,3,5-Trimethylbenzene	4.3	3.9	0.64	ug/m3	TO-15
Tertiary Butyl Alcohol	4.5	2.4	0.17	ug/m3	TO-15
Tetrachloroethylene	462	1.1	0.81	ug/m3	TO-15
Tetrahydrofuran	14	2.4	0.59	ug/m3	TO-15
Toluene	11	3.0	0.22	ug/m3	TO-15
Trichloroethylene	66.1	0.86	0.41	ug/m3	TO-15
m,p-Xylene	8.7	3.5	0.61	ug/m3	TO-15
o-Xylene	4.3	3.5	0.30	ug/m3	TO-15
Xylenes (total)	13	3.5	0.30	ug/m3	TO-15
JD13677-7 AD19437-007 HRP-SV-7					
Acetone	23.9	0.80	0.45	ppbv	TO-15
Benzene	4.0	0.80	0.048	ppbv	TO-15
Carbon disulfide	1.5	0.80	0.094	ppbv	TO-15
Chloroethane	0.50 J	0.80	0.19	ppbv	TO-15
Chloromethane	1.3	0.80	0.061	ppbv	TO-15
Cyclohexane	7.8	0.80	0.088	ppbv	TO-15
Dichlorodifluoromethane	0.49 J	0.80	0.066	ppbv	TO-15
Ethanol	25.5	2.0	0.87	ppbv	TO-15
Ethylbenzene	0.53 J	0.80	0.060	ppbv	TO-15
Ethyl Acetate	0.72 J	0.80	0.15	ppbv	TO-15
Heptane	0.39 J	0.80	0.070	ppbv	TO-15
Hexane	2.0	0.80	0.042	ppbv	TO-15
Isopropyl Alcohol	79.4	0.80	0.26	ppbv	TO-15
Methyl ethyl ketone	1.8	0.80	0.17	ppbv	TO-15
Methylmethacrylate	1.1	0.80	0.13	ppbv	TO-15
Propylene	2.9	2.0	0.064	ppbv	TO-15
1,2,4-Trimethylbenzene	0.38 J	0.80	0.13	ppbv	TO-15
1,3,5-Trimethylbenzene	0.39 J	0.80	0.13	ppbv	TO-15
Tertiary Butyl Alcohol	4.1	0.80	0.055	ppbv	TO-15
Tetrachloroethylene	0.27	0.16	0.12	ppbv	TO-15
Toluene	4.3	0.80	0.058	ppbv	TO-15
Trichloroethylene	0.46	0.16	0.076	ppbv	TO-15
m,p-Xylene	2.6	0.80	0.14	ppbv	TO-15
o-Xylene	1.2	0.80	0.068	ppbv	TO-15
Xylenes (total)	3.8	0.80	0.068	ppbv	TO-15
Acetone	56.8	1.9	1.1	ug/m3	TO-15
Benzene	13	2.6	0.15	ug/m3	TO-15
Carbon disulfide	4.7	2.5	0.29	ug/m3	TO-15
Chloroethane	1.3 J	2.1	0.50	ug/m3	TO-15

Summary of Hits

Job Number: JD13677
Account: Hampton Clarke-Veritech
Project: Project # 0092427
Collected: 09/22/20

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Chloromethane	2.7	1.7	0.13	ug/m3	TO-15
Cyclohexane	27	2.8	0.30	ug/m3	TO-15
Dichlorodifluoromethane	2.4 J	4.0	0.33	ug/m3	TO-15
Ethanol	48.0	3.8	1.6	ug/m3	TO-15
Ethylbenzene	2.3 J	3.5	0.26	ug/m3	TO-15
Ethyl Acetate	2.6 J	2.9	0.54	ug/m3	TO-15
Heptane	1.6 J	3.3	0.29	ug/m3	TO-15
Hexane	7.0	2.8	0.15	ug/m3	TO-15
Isopropyl Alcohol	195	2.0	0.64	ug/m3	TO-15
Methyl ethyl ketone	5.3	2.4	0.50	ug/m3	TO-15
Methylmethacrylate	4.5	3.3	0.53	ug/m3	TO-15
Propylene	5.0	3.4	0.11	ug/m3	TO-15
1,2,4-Trimethylbenzene	1.9 J	3.9	0.64	ug/m3	TO-15
1,3,5-Trimethylbenzene	1.9 J	3.9	0.64	ug/m3	TO-15
Tertiary Butyl Alcohol	12	2.4	0.17	ug/m3	TO-15
Tetrachloroethylene	1.8	1.1	0.81	ug/m3	TO-15
Toluene	16	3.0	0.22	ug/m3	TO-15
Trichloroethylene	2.5	0.86	0.41	ug/m3	TO-15
m,p-Xylene	11	3.5	0.61	ug/m3	TO-15
o-Xylene	5.2	3.5	0.30	ug/m3	TO-15
Xylenes (total)	17	3.5	0.30	ug/m3	TO-15

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: AD19437-001 HRP-SV-1
Lab Sample ID: JD13677-1
Matrix: AIR - Soil Vapor Comp. Summa ID: A1117
Method: TO-15
Project: Project # 0092427

Date Sampled: 09/22/20
Date Received: 09/25/20
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73265.D	32.5	09/30/20 16:06	TCH	n/a	n/a	V3W2885
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	380	26	15	ppbv		903	62	36	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	26	6.0	ppbv		ND	58	13	ug/m3
71-43-2	78.11	Benzene	ND	26	1.5	ppbv		ND	83	4.8	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	26	3.5	ppbv		ND	170	23	ug/m3
75-25-2	252.8	Bromoform	ND	26	4.9	ppbv		ND	270	51	ug/m3
74-83-9	94.94	Bromomethane	ND	26	2.9	ppbv		ND	100	11	ug/m3
593-60-2	106.9	Bromoethene	ND	26	2.9	ppbv		ND	110	13	ug/m3
100-44-7	126	Benzyl Chloride	ND	26	7.4	ppbv		ND	130	38	ug/m3
75-15-0	76.14	Carbon disulfide	ND	26	3.1	ppbv		ND	81	9.7	ug/m3
108-90-7	112.6	Chlorobenzene	ND	26	3.4	ppbv		ND	120	16	ug/m3
75-00-3	64.52	Chloroethane	ND	26	6.3	ppbv		ND	69	17	ug/m3
67-66-3	119.4	Chloroform	ND	26	2.6	ppbv		ND	130	13	ug/m3
74-87-3	50.49	Chloromethane	ND	26	2.0	ppbv		ND	54	4.1	ug/m3
107-05-1	76.53	3-Chloropropene	ND	26	5.1	ppbv		ND	81	16	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	26	3.3	ppbv		ND	130	17	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	26	3.1	ppbv		ND	160	20	ug/m3
110-82-7	84.16	Cyclohexane	ND	26	2.9	ppbv		ND	89	10	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	26	1.5	ppbv		ND	110	6.1	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	26	2.2	ppbv		ND	100	8.7	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	26	2.3	ppbv		ND	200	18	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	26	2.7	ppbv		ND	110	11	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	26	2.5	ppbv		ND	120	12	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	26	6.7	ppbv		ND	94	24	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	ND	26	2.1	ppbv		ND	130	10	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	26	4.3	ppbv		ND	220	37	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	21.4	26	0.95	ppbv	J	84.8	100	3.8	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	415	26	1.5	ppbv		1650	100	5.9	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	26	2.5	ppbv		ND	120	11	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	26	2.5	ppbv		ND	160	15	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	26	2.8	ppbv		ND	160	17	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	26	2.3	ppbv		ND	160	14	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	26	2.5	ppbv		ND	120	11	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AD19437-001 HRP-SV-1
Lab Sample ID: JD13677-1
Matrix: AIR - Soil Vapor Comp. Summa ID: A1117
Method: TO-15
Project: Project # 0092427

Date Sampled: 09/22/20
Date Received: 09/25/20
Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	177	65	28	ppbv		334	120	53	ug/m3
100-41-4	106.2	Ethylbenzene	ND	26	2.0	ppbv		ND	110	8.7	ug/m3
141-78-6	88	Ethyl Acetate	64.8	26	4.9	ppbv		233	94	18	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	26	3.8	ppbv		ND	130	19	ug/m3
76-13-1	187.4	Freon 113	ND	26	2.2	ppbv		ND	200	17	ug/m3
76-14-2	170.9	Freon 114	ND	26	2.5	ppbv		ND	180	17	ug/m3
142-82-5	100.2	Heptane	ND	26	2.3	ppbv		ND	110	9.4	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	26	5.9	ppbv		ND	280	63	ug/m3
110-54-3	86.17	Hexane	356	26	1.4	ppbv		1250	92	4.9	ug/m3
591-78-6	100	2-Hexanone	ND	26	4.7	ppbv		ND	110	19	ug/m3
67-63-0	60.1	Isopropyl Alcohol	1900	26	8.4	ppbv		4670	64	21	ug/m3
75-09-2	84.94	Methylene chloride	67.6	26	1.9	ppbv		235	90	6.6	ug/m3
78-93-3	72.11	Methyl ethyl ketone	33.6	26	5.5	ppbv		99.1	77	16	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	26	4.7	ppbv		ND	110	19	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	26	2.5	ppbv		ND	94	9.0	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	26	4.2	ppbv		ND	110	17	ug/m3
115-07-1	42	Propylene	ND	65	2.1	ppbv		ND	110	3.6	ug/m3
100-42-5	104.1	Styrene	ND	26	2.5	ppbv		ND	110	11	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	26	4.3	ppbv		ND	140	23	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	26	3.5	ppbv		ND	180	24	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	26	4.0	ppbv		ND	140	22	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	26	12	ppbv		ND	190	89	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	26	4.3	ppbv		ND	130	21	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	26	4.4	ppbv		ND	130	22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	26	2.8	ppbv		ND	120	13	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	26	1.8	ppbv		ND	79	5.5	ug/m3
127-18-4	165.8	Tetrachloroethylene	109	5.2	4.0	ppbv		739	35	27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	26	6.5	ppbv		ND	77	19	ug/m3
108-88-3	92.14	Toluene	51.8	26	1.9	ppbv		195	98	7.2	ug/m3
79-01-6	131.4	Trichloroethylene	3190	5.2	2.5	ppbv		17100	28	13	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	26	3.7	ppbv		ND	150	21	ug/m3
75-01-4	62.5	Vinyl chloride	ND	26	2.9	ppbv		ND	66	7.4	ug/m3
108-05-4	86	Vinyl Acetate	ND	26	4.4	ppbv		ND	91	15	ug/m3
	106.2	m,p-Xylene	ND	26	4.4	ppbv		ND	110	19	ug/m3
95-47-6	106.2	o-Xylene	ND	26	2.2	ppbv		ND	110	9.6	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	26	2.2	ppbv		ND	110	9.6	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-002 HRP-SV-2		
Lab Sample ID:	JD13677-2	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A626	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73241.D	1.48	09/29/20 16:07	TCH	n/a	n/a	V3W2884
Run #2							

	Initial Volume
Run #1	148 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	35.2	0.80	0.45	ppbv		83.6	1.9	1.1	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.18	ppbv		ND	1.8	0.40	ug/m3
71-43-2	78.11	Benzene	1.2	0.80	0.048	ppbv		3.8	2.6	0.15	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.11	ppbv		ND	5.4	0.74	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.15	ppbv		ND	8.3	1.6	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.088	ppbv		ND	3.1	0.34	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.088	ppbv		ND	3.5	0.38	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.23	ppbv		ND	4.1	1.2	ug/m3
75-15-0	76.14	Carbon disulfide	8.6	0.80	0.094	ppbv		27	2.5	0.29	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.10	ppbv		ND	3.7	0.46	ug/m3
75-00-3	64.52	Chloroethane	1.3	0.80	0.19	ppbv		3.4	2.1	0.50	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.080	ppbv		ND	3.9	0.39	ug/m3
74-87-3	50.49	Chloromethane	2.0	0.80	0.061	ppbv		4.1	1.7	0.13	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.16	ppbv		ND	2.5	0.50	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.10	ppbv		ND	4.1	0.52	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.094	ppbv		ND	5.0	0.59	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	0.088	ppbv		ND	2.8	0.30	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.046	ppbv		ND	3.2	0.19	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.067	ppbv		ND	3.2	0.27	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.071	ppbv		ND	6.1	0.55	ug/m3
107-06-2	98.96	1,2-Dichloroethane	0.39	0.80	0.083	ppbv	J	1.6	3.2	0.34	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.077	ppbv		ND	3.7	0.36	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.21	ppbv		ND	2.9	0.76	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	ND	0.80	0.066	ppbv		ND	4.0	0.33	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.13	ppbv		ND	6.8	1.1	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.029	ppbv		ND	3.2	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	0.56	0.80	0.047	ppbv	J	2.2	3.2	0.19	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.076	ppbv		ND	4.8	0.46	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.087	ppbv		ND	4.8	0.52	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.070	ppbv		ND	4.8	0.42	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AD19437-002 HRP-SV-2
Lab Sample ID: JD13677-2
Matrix: AIR - Soil Vapor Comp. Summa ID: A626
Method: TO-15
Project: Project # 0092427

Date Sampled: 09/22/20
Date Received: 09/25/20
Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	16.0	2.0	0.87	ppbv		30.1	3.8	1.6	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.80	0.060	ppbv		ND	3.5	0.26	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.80	0.15	ppbv		ND	2.9	0.54	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.12	ppbv		ND	3.9	0.59	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.068	ppbv		ND	6.1	0.52	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.076	ppbv		ND	5.6	0.53	ug/m3
142-82-5	100.2	Heptane	ND	0.80	0.070	ppbv		ND	3.3	0.29	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.18	ppbv		ND	8.5	1.9	ug/m3
110-54-3	86.17	Hexane	ND	0.80	0.042	ppbv		ND	2.8	0.15	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.15	ppbv		ND	3.3	0.61	ug/m3
67-63-0	60.1	Isopropyl Alcohol	41.3	0.80	0.26	ppbv		102	2.0	0.64	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.058	ppbv		ND	2.8	0.20	ug/m3
78-93-3	72.11	Methyl ethyl ketone	2.3	0.80	0.17	ppbv		6.8	2.4	0.50	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.14	ppbv		ND	3.3	0.57	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.077	ppbv		ND	2.9	0.28	ug/m3
80-62-6	100.12	Methylmethacrylate	0.58	0.80	0.13	ppbv	J	2.4	3.3	0.53	ug/m3
115-07-1	42	Propylene	2.8	2.0	0.064	ppbv		4.8	3.4	0.11	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.076	ppbv		ND	3.4	0.32	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.13	ppbv		ND	4.4	0.71	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.11	ppbv		ND	5.5	0.76	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	0.65	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.35	ppbv		ND	5.9	2.6	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.75	0.80	0.13	ppbv	J	3.7	3.9	0.64	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.80	0.13	ppbv		ND	3.9	0.64	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.087	ppbv		ND	3.7	0.41	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	3.1	0.80	0.055	ppbv		9.4	2.4	0.17	ug/m3
127-18-4	165.8	Tetrachloroethylene	3.3	0.16	0.12	ppbv		22	1.1	0.81	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.20	ppbv		ND	2.4	0.59	ug/m3
108-88-3	92.14	Toluene	0.86	0.80	0.058	ppbv		3.2	3.0	0.22	ug/m3
79-01-6	131.4	Trichloroethylene	5.8	0.16	0.076	ppbv		31	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.11	ppbv		ND	4.5	0.62	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.089	ppbv		ND	2.0	0.23	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.14	ppbv		ND	2.8	0.49	ug/m3
	106.2	m,p-Xylene	1.0	0.80	0.14	ppbv		4.3	3.5	0.61	ug/m3
95-47-6	106.2	o-Xylene	ND	0.80	0.068	ppbv		ND	3.5	0.30	ug/m3
1330-20-7	106.2	Xylenes (total)	1.0	0.80	0.068	ppbv		4.3	3.5	0.30	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-003 HRP-SV-3		
Lab Sample ID:	JD13677-3	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A541	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73257.D	1.7	09/30/20 06:12	TCH	n/a	n/a	V3W2884
Run #2							

	Initial Volume
Run #1	20.0 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	91.8	6.8	3.8	ppbv		218	16	9.0	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	6.8	1.6	ppbv		ND	15	3.5	ug/m3
71-43-2	78.11	Benzene	ND	6.8	0.40	ppbv		ND	22	1.3	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	6.8	0.91	ppbv		ND	46	6.1	ug/m3
75-25-2	252.8	Bromoform	ND	6.8	1.3	ppbv		ND	70	13	ug/m3
74-83-9	94.94	Bromomethane	ND	6.8	0.75	ppbv		ND	26	2.9	ug/m3
593-60-2	106.9	Bromoethene	ND	6.8	0.75	ppbv		ND	30	3.3	ug/m3
100-44-7	126	Benzyl Chloride	ND	6.8	1.9	ppbv		ND	35	9.8	ug/m3
75-15-0	76.14	Carbon disulfide	6.2	6.8	0.80	ppbv	J	19	21	2.5	ug/m3
108-90-7	112.6	Chlorobenzene	ND	6.8	0.89	ppbv		ND	31	4.1	ug/m3
75-00-3	64.52	Chloroethane	ND	6.8	1.6	ppbv		ND	18	4.2	ug/m3
67-66-3	119.4	Chloroform	ND	6.8	0.68	ppbv		ND	33	3.3	ug/m3
74-87-3	50.49	Chloromethane	ND	6.8	0.52	ppbv		ND	14	1.1	ug/m3
107-05-1	76.53	3-Chloropropene	ND	6.8	1.3	ppbv		ND	21	4.1	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	6.8	0.85	ppbv		ND	35	4.4	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	6.8	0.80	ppbv		ND	43	5.0	ug/m3
110-82-7	84.16	Cyclohexane	ND	6.8	0.75	ppbv		ND	23	2.6	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	6.8	0.39	ppbv		ND	28	1.6	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	6.8	0.57	ppbv		ND	27	2.3	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	6.8	0.61	ppbv		ND	52	4.7	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	6.8	0.71	ppbv		ND	28	2.9	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	6.8	0.65	ppbv		ND	31	3.0	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	6.8	1.8	ppbv		ND	25	6.5	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	ND	6.8	0.56	ppbv		ND	34	2.8	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	6.8	1.1	ppbv		ND	58	9.4	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	6.8	0.25	ppbv		ND	27	0.99	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	7.4	6.8	0.40	ppbv		29	27	1.6	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	6.8	0.66	ppbv		ND	31	3.0	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	6.8	0.64	ppbv		ND	41	3.8	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	6.8	0.74	ppbv		ND	41	4.4	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	6.8	0.60	ppbv		ND	41	3.6	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	6.8	0.66	ppbv		ND	31	3.0	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AD19437-003 HRP-SV-3
Lab Sample ID: JD13677-3
Matrix: AIR - Soil Vapor Comp. Summa ID: A541
Method: TO-15
Project: Project # 0092427

Date Sampled: 09/22/20
Date Received: 09/25/20
Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	22.5	17	7.4	ppbv		42.4	32	14	ug/m3
100-41-4	106.2	Ethylbenzene	ND	6.8	0.51	ppbv		ND	30	2.2	ug/m3
141-78-6	88	Ethyl Acetate	ND	6.8	1.3	ppbv		ND	24	4.7	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	6.8	1.0	ppbv		ND	33	4.9	ug/m3
76-13-1	187.4	Freon 113	ND	6.8	0.58	ppbv		ND	52	4.4	ug/m3
76-14-2	170.9	Freon 114	ND	6.8	0.65	ppbv		ND	48	4.5	ug/m3
142-82-5	100.2	Heptane	ND	6.8	0.60	ppbv		ND	28	2.5	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	6.8	1.6	ppbv		ND	73	17	ug/m3
110-54-3	86.17	Hexane	ND	6.8	0.36	ppbv		ND	24	1.3	ug/m3
591-78-6	100	2-Hexanone	ND	6.8	1.2	ppbv		ND	28	4.9	ug/m3
67-63-0	60.1	Isopropyl Alcohol	37.9	6.8	2.2	ppbv		93.2	17	5.4	ug/m3
75-09-2	84.94	Methylene chloride	ND	6.8	0.49	ppbv		ND	24	1.7	ug/m3
78-93-3	72.11	Methyl ethyl ketone	3.3	6.8	1.4	ppbv	J	9.7	20	4.1	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	6.8	1.2	ppbv		ND	28	4.9	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	6.8	0.65	ppbv		ND	25	2.3	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	6.8	1.1	ppbv		ND	28	4.5	ug/m3
115-07-1	42	Propylene	3.0	17	0.54	ppbv	J	5.2	29	0.93	ug/m3
100-42-5	104.1	Styrene	ND	6.8	0.64	ppbv		ND	29	2.7	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	6.8	1.1	ppbv		ND	37	6.0	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	6.8	0.92	ppbv		ND	47	6.3	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	6.8	1.0	ppbv		ND	37	5.5	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	6.8	3.0	ppbv		ND	50	22	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	6.8	1.1	ppbv		ND	33	5.4	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	6.8	1.1	ppbv		ND	33	5.4	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	6.8	0.74	ppbv		ND	32	3.5	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	6.8	0.47	ppbv		ND	21	1.4	ug/m3
127-18-4	165.8	Tetrachloroethylene	1080	1.4	1.0	ppbv		7320	9.5	6.8	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	6.8	1.7	ppbv		ND	20	5.0	ug/m3
108-88-3	92.14	Toluene	ND	6.8	0.49	ppbv		ND	26	1.8	ug/m3
79-01-6	131.4	Trichloroethylene	122	1.4	0.65	ppbv		656	7.5	3.5	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	6.8	0.96	ppbv		ND	38	5.4	ug/m3
75-01-4	62.5	Vinyl chloride	ND	6.8	0.76	ppbv		ND	17	1.9	ug/m3
108-05-4	86	Vinyl Acetate	ND	6.8	1.2	ppbv		ND	24	4.2	ug/m3
	106.2	m,p-Xylene	ND	6.8	1.2	ppbv		ND	30	5.2	ug/m3
95-47-6	106.2	o-Xylene	ND	6.8	0.58	ppbv		ND	30	2.5	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	6.8	0.58	ppbv		ND	30	2.5	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-004 HRP-SV-4		
Lab Sample ID:	JD13677-4	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A589	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73243.D	1	09/29/20 17:49	TCH	n/a	n/a	V3W2884
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	6.6	0.80	0.45	ppbv		16	1.9	1.1	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.18	ppbv		ND	1.8	0.40	ug/m3
71-43-2	78.11	Benzene	ND	0.80	0.048	ppbv		ND	2.6	0.15	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.11	ppbv		ND	5.4	0.74	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.15	ppbv		ND	8.3	1.6	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.088	ppbv		ND	3.1	0.34	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.088	ppbv		ND	3.5	0.38	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.23	ppbv		ND	4.1	1.2	ug/m3
75-15-0	76.14	Carbon disulfide	0.60	0.80	0.094	ppbv	J	1.9	2.5	0.29	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.10	ppbv		ND	3.7	0.46	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.19	ppbv		ND	2.1	0.50	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.080	ppbv		ND	3.9	0.39	ug/m3
74-87-3	50.49	Chloromethane	0.54	0.80	0.061	ppbv	J	1.1	1.7	0.13	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.16	ppbv		ND	2.5	0.50	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.10	ppbv		ND	4.1	0.52	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.094	ppbv		ND	5.0	0.59	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	0.088	ppbv		ND	2.8	0.30	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.046	ppbv		ND	3.2	0.19	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.067	ppbv		ND	3.2	0.27	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.071	ppbv		ND	6.1	0.55	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.083	ppbv		ND	3.2	0.34	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.077	ppbv		ND	3.7	0.36	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.21	ppbv		ND	2.9	0.76	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.46	0.80	0.066	ppbv	J	2.3	4.0	0.33	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.13	ppbv		ND	6.8	1.1	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	0.58	0.80	0.029	ppbv	J	2.3	3.2	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.047	ppbv		ND	3.2	0.19	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.076	ppbv		ND	4.8	0.46	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.087	ppbv		ND	4.8	0.52	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.070	ppbv		ND	4.8	0.42	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AD19437-004 HRP-SV-4
Lab Sample ID: JD13677-4
Matrix: AIR - Soil Vapor Comp. Summa ID: A589
Method: TO-15
Project: Project # 0092427

Date Sampled: 09/22/20
Date Received: 09/25/20
Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	12.3	2.0	0.87	ppbv		23.2	3.8	1.6	ug/m3
100-41-4	106.2	Ethylbenzene	5.6	0.80	0.060	ppbv		24	3.5	0.26	ug/m3
141-78-6	88	Ethyl Acetate	2.5	0.80	0.15	ppbv		9.0	2.9	0.54	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.12	ppbv		ND	3.9	0.59	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.068	ppbv		ND	6.1	0.52	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.076	ppbv		ND	5.6	0.53	ug/m3
142-82-5	100.2	Heptane	ND	0.80	0.070	ppbv		ND	3.3	0.29	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.18	ppbv		ND	8.5	1.9	ug/m3
110-54-3	86.17	Hexane	ND	0.80	0.042	ppbv		ND	2.8	0.15	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.15	ppbv		ND	3.3	0.61	ug/m3
67-63-0	60.1	Isopropyl Alcohol	42.1	0.80	0.26	ppbv		103	2.0	0.64	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.058	ppbv		ND	2.8	0.20	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	0.80	0.17	ppbv		ND	2.4	0.50	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.14	ppbv		ND	3.3	0.57	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.077	ppbv		ND	2.9	0.28	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.13	ppbv		ND	3.3	0.53	ug/m3
115-07-1	42	Propylene	ND	2.0	0.064	ppbv		ND	3.4	0.11	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.076	ppbv		ND	3.4	0.32	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.13	ppbv		ND	4.4	0.71	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.11	ppbv		ND	5.5	0.76	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	0.65	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.35	ppbv		ND	5.9	2.6	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.80	0.13	ppbv		ND	3.9	0.64	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.80	0.13	ppbv		ND	3.9	0.64	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.087	ppbv		ND	3.7	0.41	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.66	0.80	0.055	ppbv	J	2.0	2.4	0.17	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.34	0.16	0.12	ppbv		2.3	1.1	0.81	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.20	ppbv		ND	2.4	0.59	ug/m3
108-88-3	92.14	Toluene	ND	0.80	0.058	ppbv		ND	3.0	0.22	ug/m3
79-01-6	131.4	Trichloroethylene	0.22	0.16	0.076	ppbv		1.2	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.11	ppbv		ND	4.5	0.62	ug/m3
75-01-4	62.5	Vinyl chloride	0.92	0.80	0.089	ppbv		2.4	2.0	0.23	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.14	ppbv		ND	2.8	0.49	ug/m3
	106.2	m,p-Xylene	23.6	0.80	0.14	ppbv		103	3.5	0.61	ug/m3
95-47-6	106.2	o-Xylene	3.6	0.80	0.068	ppbv		16	3.5	0.30	ug/m3
1330-20-7	106.2	Xylenes (total)	27.2	0.80	0.068	ppbv		118	3.5	0.30	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-005 HRP-SV-5		
Lab Sample ID:	JD13677-5	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A805	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73244.D	1.6	09/29/20 18:40	TCH	n/a	n/a	V3W2884
Run #2							

	Initial Volume
Run #1	160 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	79.5	0.80	0.45	ppbv		189	1.9	1.1	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.18	ppbv		ND	1.8	0.40	ug/m3
71-43-2	78.11	Benzene	1.1	0.80	0.048	ppbv		3.5	2.6	0.15	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.11	ppbv		ND	5.4	0.74	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.15	ppbv		ND	8.3	1.6	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.088	ppbv		ND	3.1	0.34	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.088	ppbv		ND	3.5	0.38	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.23	ppbv		ND	4.1	1.2	ug/m3
75-15-0	76.14	Carbon disulfide	20.0	0.80	0.094	ppbv		62.3	2.5	0.29	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.10	ppbv		ND	3.7	0.46	ug/m3
75-00-3	64.52	Chloroethane	0.50	0.80	0.19	ppbv	J	1.3	2.1	0.50	ug/m3
67-66-3	119.4	Chloroform	2.0	0.80	0.080	ppbv		9.8	3.9	0.39	ug/m3
74-87-3	50.49	Chloromethane	0.63	0.80	0.061	ppbv	J	1.3	1.7	0.13	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.16	ppbv		ND	2.5	0.50	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.10	ppbv		ND	4.1	0.52	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.094	ppbv		ND	5.0	0.59	ug/m3
110-82-7	84.16	Cyclohexane	3.8	0.80	0.088	ppbv		13	2.8	0.30	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.046	ppbv		ND	3.2	0.19	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.067	ppbv		ND	3.2	0.27	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.071	ppbv		ND	6.1	0.55	ug/m3
107-06-2	98.96	1,2-Dichloroethane	0.40	0.80	0.083	ppbv	J	1.6	3.2	0.34	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.077	ppbv		ND	3.7	0.36	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.21	ppbv		ND	2.9	0.76	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.62	0.80	0.066	ppbv	J	3.1	4.0	0.33	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.13	ppbv		ND	6.8	1.1	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.029	ppbv		ND	3.2	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	0.62	0.80	0.047	ppbv	J	2.5	3.2	0.19	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3
541-73-1	147	m-Dichlorobenzene	1.6	0.80	0.076	ppbv		9.6	4.8	0.46	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.087	ppbv		ND	4.8	0.52	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.070	ppbv		ND	4.8	0.42	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AD19437-005 HRP-SV-5
Lab Sample ID: JD13677-5
Matrix: AIR - Soil Vapor Comp. Summa ID: A805
Method: TO-15
Project: Project # 0092427

Date Sampled: 09/22/20
Date Received: 09/25/20
Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	44.4	2.0	0.87	ppbv		83.7	3.8	1.6	ug/m3
100-41-4	106.2	Ethylbenzene	0.54	0.80	0.060	ppbv	J	2.3	3.5	0.26	ug/m3
141-78-6	88	Ethyl Acetate	2.6	0.80	0.15	ppbv		9.4	2.9	0.54	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.12	ppbv		ND	3.9	0.59	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.068	ppbv		ND	6.1	0.52	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.076	ppbv		ND	5.6	0.53	ug/m3
142-82-5	100.2	Heptane	6.3	0.80	0.070	ppbv		26	3.3	0.29	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.18	ppbv		ND	8.5	1.9	ug/m3
110-54-3	86.17	Hexane	14.1	0.80	0.042	ppbv		49.7	2.8	0.15	ug/m3
591-78-6	100	2-Hexanone	1.1	0.80	0.15	ppbv		4.5	3.3	0.61	ug/m3
67-63-0	60.1	Isopropyl Alcohol	107	0.80	0.26	ppbv		263	2.0	0.64	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.058	ppbv		ND	2.8	0.20	ug/m3
78-93-3	72.11	Methyl ethyl ketone	65.5	0.80	0.17	ppbv		193	2.4	0.50	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.14	ppbv		ND	3.3	0.57	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.077	ppbv		ND	2.9	0.28	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.13	ppbv		ND	3.3	0.53	ug/m3
115-07-1	42	Propylene	29.4	2.0	0.064	ppbv		50.5	3.4	0.11	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.076	ppbv		ND	3.4	0.32	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.13	ppbv		ND	4.4	0.71	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.11	ppbv		ND	5.5	0.76	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	0.65	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.35	ppbv		ND	5.9	2.6	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.80	0.13	ppbv		ND	3.9	0.64	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.80	0.13	ppbv		ND	3.9	0.64	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.62	0.80	0.087	ppbv	J	2.9	3.7	0.41	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	3.6	0.80	0.055	ppbv		11	2.4	0.17	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.36	0.16	0.12	ppbv		2.4	1.1	0.81	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.20	ppbv		ND	2.4	0.59	ug/m3
108-88-3	92.14	Toluene	76.3	0.80	0.058	ppbv		288	3.0	0.22	ug/m3
79-01-6	131.4	Trichloroethylene	1.8	0.16	0.076	ppbv		9.7	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.11	ppbv		ND	4.5	0.62	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.089	ppbv		ND	2.0	0.23	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.14	ppbv		ND	2.8	0.49	ug/m3
	106.2	m,p-Xylene	1.4	0.80	0.14	ppbv		6.1	3.5	0.61	ug/m3
95-47-6	106.2	o-Xylene	0.60	0.80	0.068	ppbv	J	2.6	3.5	0.30	ug/m3
1330-20-7	106.2	Xylenes (total)	2.0	0.80	0.068	ppbv		8.7	3.5	0.30	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AD19437-006 HRP-SV-6
Lab Sample ID: JD13677-6
Matrix: AIR - Soil Vapor Comp. Summa ID: A1234
Method: TO-15
Project: Project # 0092427

Date Sampled: 09/22/20
Date Received: 09/25/20
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73245.D	1.8	09/29/20 19:32	TCH	n/a	n/a	V3W2884
Run #2	3W73266.D	1.8	09/30/20 16:56	TCH	n/a	n/a	V3W2885

	Initial Volume
Run #1	180 ml
Run #2	20.0 ml

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	147 [a]	7.2	4.0	ppbv		349 [a]	17	9.5	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.18	ppbv		ND	1.8	0.40	ug/m3
71-43-2	78.11	Benzene	3.6	0.80	0.048	ppbv		12	2.6	0.15	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.11	ppbv		ND	5.4	0.74	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.15	ppbv		ND	8.3	1.6	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.088	ppbv		ND	3.1	0.34	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.088	ppbv		ND	3.5	0.38	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.23	ppbv		ND	4.1	1.2	ug/m3
75-15-0	76.14	Carbon disulfide	6.6	0.80	0.094	ppbv		21	2.5	0.29	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.10	ppbv		ND	3.7	0.46	ug/m3
75-00-3	64.52	Chloroethane	0.82	0.80	0.19	ppbv		2.2	2.1	0.50	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.080	ppbv		ND	3.9	0.39	ug/m3
74-87-3	50.49	Chloromethane	1.2	0.80	0.061	ppbv		2.5	1.7	0.13	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.16	ppbv		ND	2.5	0.50	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.10	ppbv		ND	4.1	0.52	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.094	ppbv		ND	5.0	0.59	ug/m3
110-82-7	84.16	Cyclohexane	2.2	0.80	0.088	ppbv		7.6	2.8	0.30	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.046	ppbv		ND	3.2	0.19	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.067	ppbv		ND	3.2	0.27	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.071	ppbv		ND	6.1	0.55	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.083	ppbv		ND	3.2	0.34	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.077	ppbv		ND	3.7	0.36	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.21	ppbv		ND	2.9	0.76	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.41	0.80	0.066	ppbv	J	2.0	4.0	0.33	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.13	ppbv		ND	6.8	1.1	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.029	ppbv		ND	3.2	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.047	ppbv		ND	3.2	0.19	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.076	ppbv		ND	4.8	0.46	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.087	ppbv		ND	4.8	0.52	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.070	ppbv		ND	4.8	0.42	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-006 HRP-SV-6		
Lab Sample ID:	JD13677-6	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A1234	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	27.8	2.0	0.87	ppbv		52.4	3.8	1.6	ug/m3
100-41-4	106.2	Ethylbenzene	0.77	0.80	0.060	ppbv	J	3.3	3.5	0.26	ug/m3
141-78-6	88	Ethyl Acetate	0.68	0.80	0.15	ppbv	J	2.4	2.9	0.54	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.12	ppbv		ND	3.9	0.59	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.068	ppbv		ND	6.1	0.52	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.076	ppbv		ND	5.6	0.53	ug/m3
142-82-5	100.2	Heptane	2.0	0.80	0.070	ppbv		8.2	3.3	0.29	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.18	ppbv		ND	8.5	1.9	ug/m3
110-54-3	86.17	Hexane	1.6	0.80	0.042	ppbv		5.6	2.8	0.15	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.15	ppbv		ND	3.3	0.61	ug/m3
67-63-0	60.1	Isopropyl Alcohol	72.4	0.80	0.26	ppbv		178	2.0	0.64	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.058	ppbv		ND	2.8	0.20	ug/m3
78-93-3	72.11	Methyl ethyl ketone	2.9	0.80	0.17	ppbv		8.6	2.4	0.50	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.14	ppbv		ND	3.3	0.57	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.077	ppbv		ND	2.9	0.28	ug/m3
80-62-6	100.12	Methylmethacrylate	2.7	0.80	0.13	ppbv		11	3.3	0.53	ug/m3
115-07-1	42	Propylene	5.1	2.0	0.064	ppbv		8.8	3.4	0.11	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.076	ppbv		ND	3.4	0.32	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.13	ppbv		ND	4.4	0.71	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.11	ppbv		ND	5.5	0.76	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	0.65	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.35	ppbv		ND	5.9	2.6	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	1.0	0.80	0.13	ppbv		4.9	3.9	0.64	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.88	0.80	0.13	ppbv		4.3	3.9	0.64	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.087	ppbv		ND	3.7	0.41	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	1.5	0.80	0.055	ppbv		4.5	2.4	0.17	ug/m3
127-18-4	165.8	Tetrachloroethylene	68.2	0.16	0.12	ppbv		462	1.1	0.81	ug/m3
109-99-9	72.11	Tetrahydrofuran	4.6	0.80	0.20	ppbv		14	2.4	0.59	ug/m3
108-88-3	92.14	Toluene	3.0	0.80	0.058	ppbv		11	3.0	0.22	ug/m3
79-01-6	131.4	Trichloroethylene	12.3	0.16	0.076	ppbv		66.1	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.11	ppbv		ND	4.5	0.62	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.089	ppbv		ND	2.0	0.23	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.14	ppbv		ND	2.8	0.49	ug/m3
	106.2	m,p-Xylene	2.0	0.80	0.14	ppbv		8.7	3.5	0.61	ug/m3
95-47-6	106.2	o-Xylene	1.0	0.80	0.068	ppbv		4.3	3.5	0.30	ug/m3
1330-20-7	106.2	Xylenes (total)	3.0	0.80	0.068	ppbv		13	3.5	0.30	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%	98%	65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-006 HRP-SV-6		
Lab Sample ID:	JD13677-6	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A1234	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-007 HRP-SV-7		
Lab Sample ID:	JD13677-7	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A380	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73246.D	1.6	09/29/20 20:23	TCH	n/a	n/a	V3W2884
Run #2							

	Initial Volume
Run #1	160 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	23.9	0.80	0.45	ppbv		56.8	1.9	1.1	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.18	ppbv		ND	1.8	0.40	ug/m3
71-43-2	78.11	Benzene	4.0	0.80	0.048	ppbv		13	2.6	0.15	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.11	ppbv		ND	5.4	0.74	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.15	ppbv		ND	8.3	1.6	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.088	ppbv		ND	3.1	0.34	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.088	ppbv		ND	3.5	0.38	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.23	ppbv		ND	4.1	1.2	ug/m3
75-15-0	76.14	Carbon disulfide	1.5	0.80	0.094	ppbv		4.7	2.5	0.29	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.10	ppbv		ND	3.7	0.46	ug/m3
75-00-3	64.52	Chloroethane	0.50	0.80	0.19	ppbv	J	1.3	2.1	0.50	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.080	ppbv		ND	3.9	0.39	ug/m3
74-87-3	50.49	Chloromethane	1.3	0.80	0.061	ppbv		2.7	1.7	0.13	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.16	ppbv		ND	2.5	0.50	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.10	ppbv		ND	4.1	0.52	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.094	ppbv		ND	5.0	0.59	ug/m3
110-82-7	84.16	Cyclohexane	7.8	0.80	0.088	ppbv		27	2.8	0.30	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.046	ppbv		ND	3.2	0.19	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.067	ppbv		ND	3.2	0.27	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.071	ppbv		ND	6.1	0.55	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.083	ppbv		ND	3.2	0.34	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.077	ppbv		ND	3.7	0.36	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.21	ppbv		ND	2.9	0.76	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.49	0.80	0.066	ppbv	J	2.4	4.0	0.33	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.13	ppbv		ND	6.8	1.1	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.029	ppbv		ND	3.2	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.047	ppbv		ND	3.2	0.19	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.076	ppbv		ND	4.8	0.46	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.087	ppbv		ND	4.8	0.52	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.070	ppbv		ND	4.8	0.42	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AD19437-007 HRP-SV-7
Lab Sample ID: JD13677-7
Matrix: AIR - Soil Vapor Comp. Summa ID: A380
Method: TO-15
Project: Project # 0092427

Date Sampled: 09/22/20
Date Received: 09/25/20
Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	25.5	2.0	0.87	ppbv		48.0	3.8	1.6	ug/m3
100-41-4	106.2	Ethylbenzene	0.53	0.80	0.060	ppbv	J	2.3	3.5	0.26	ug/m3
141-78-6	88	Ethyl Acetate	0.72	0.80	0.15	ppbv	J	2.6	2.9	0.54	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.12	ppbv		ND	3.9	0.59	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.068	ppbv		ND	6.1	0.52	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.076	ppbv		ND	5.6	0.53	ug/m3
142-82-5	100.2	Heptane	0.39	0.80	0.070	ppbv	J	1.6	3.3	0.29	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.18	ppbv		ND	8.5	1.9	ug/m3
110-54-3	86.17	Hexane	2.0	0.80	0.042	ppbv		7.0	2.8	0.15	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.15	ppbv		ND	3.3	0.61	ug/m3
67-63-0	60.1	Isopropyl Alcohol	79.4	0.80	0.26	ppbv		195	2.0	0.64	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.058	ppbv		ND	2.8	0.20	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.8	0.80	0.17	ppbv		5.3	2.4	0.50	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.14	ppbv		ND	3.3	0.57	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.077	ppbv		ND	2.9	0.28	ug/m3
80-62-6	100.12	Methylmethacrylate	1.1	0.80	0.13	ppbv		4.5	3.3	0.53	ug/m3
115-07-1	42	Propylene	2.9	2.0	0.064	ppbv		5.0	3.4	0.11	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.076	ppbv		ND	3.4	0.32	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.13	ppbv		ND	4.4	0.71	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.11	ppbv		ND	5.5	0.76	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	0.65	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.35	ppbv		ND	5.9	2.6	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.38	0.80	0.13	ppbv	J	1.9	3.9	0.64	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.39	0.80	0.13	ppbv	J	1.9	3.9	0.64	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.087	ppbv		ND	3.7	0.41	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	4.1	0.80	0.055	ppbv		12	2.4	0.17	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.27	0.16	0.12	ppbv		1.8	1.1	0.81	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.20	ppbv		ND	2.4	0.59	ug/m3
108-88-3	92.14	Toluene	4.3	0.80	0.058	ppbv		16	3.0	0.22	ug/m3
79-01-6	131.4	Trichloroethylene	0.46	0.16	0.076	ppbv		2.5	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.11	ppbv		ND	4.5	0.62	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.089	ppbv		ND	2.0	0.23	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.14	ppbv		ND	2.8	0.49	ug/m3
	106.2	m,p-Xylene	2.6	0.80	0.14	ppbv		11	3.5	0.61	ug/m3
95-47-6	106.2	o-Xylene	1.2	0.80	0.068	ppbv		5.2	3.5	0.30	ug/m3
1330-20-7	106.2	Xylenes (total)	3.8	0.80	0.068	ppbv		17	3.5	0.30	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Summa Canister and Flow Controller Log

CHAIN OF CUSTODY RECORD

* Please see attached Air COC *
JD13677
PN

AIR

Hampton-Clarke, Inc.
175 US Hwy 46 West
Fairfield, New Jersey, 07004
Ph:800-426-9992 Fax:973-439-1458

Report To:
Hampton-Clarke, Inc.:
Attn:Reporting
175 Route 46 West
Fairfield, New Jersey 07004

Invoice To:
Hampton-Clarke, Inc.:
Attn:Accounting
175 Route 46 West
Fairfield, New Jersey 07004

Project #: 0092427
CocID#: 6908

FINAL RESULTS TO: subresults@hcvlab.com
PRELIM/VERBAL RESULTS TO: subresults@hcvlab.com

EDD: NEW JERSEY HAZRESULT OR EQUIS EZEDD REQUIRED FOR ALL DATA SUBMITTALS!

Turn Around Time: Standard
Report Type: NYDOH-CatB (FULL)
Preliminary Due Date: 10/9/2020
Hard Copy Due Date: 10/19/2020

	Sample Number:	Client ID	Matrix:	Date Collected:	Time Collected:	Analysis Requested
1	AD19437-001	HRP-SV-1	Air	9/22/2020	1:07:00 PM	TO15 Std NY Compound list
2	AD19437-002	HRP-SV-2	Air	9/22/2020	1:15:00 PM	TO15 Std NY Compound list
3	AD19437-003	HRP-SV-3	Air	9/22/2020	11:45:00 AM	TO15 Std NY Compound list
4	AD19437-004	HRP-SV-4	Air	9/22/2020	12:00:00 PM	TO15 Std NY Compound list
5	AD19437-005	HRP-SV-5	Air	9/22/2020	11:48:00 AM	TO15 Std NY Compound list
6	AD19437-006	HRP-SV-6	Air	9/22/2020	11:53:00 AM	TO15 Std NY Compound list
7	AD19437-007	HRP-SV-7	Air	9/22/2020	1:10:00 PM	TO15 Std NY Compound list
	AD19437-008	DUP09222020	Air	9/22/2020		TO15 Std NY Compound list

Summa FC

INITIAL ASESSMENT YA 9/24
LABEL VERIFICATION_____

Relinquished By:	Accepted By:	Date:	Time:	Comments, Notes, Special Requirements, HAZARDS
	DL	9/25/20	9:25	- Please report by volume. - Please report lowest RL possible.

MM 9/24/20

Cooler Temp:_____

HC Lab Use Only: Subcontracted Lab Id and Contact: ACCUTEST SGS, Viktoriya Pushkova, (732) 329-0200, LabID: H, Fresh Ponds Corporate Village, Bldg. B, 2235 Route 130, Day

5.1 5

SGS

AIR CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

0092427

PAGE 1 OF 1

FED-EX Tracking #:
Bottle Order Control #: PW-091420-94
SGS Quote #:
SGS Job #: JD13677

Client / Reporting Information

Company Name: HRP Associates
Address: 1 Fairchild Square
City: Clifton Park State: NY Zip: 12065
Project Contact: Stefan Truex Email: Stefan.Truex@hrpassociates.com
Phone #: 518-877-7101 Fax #:
Sampler(s) Name(s): Stefan Truex

Project Information

Project Name: DuoFold
Street: 7 Spruce Street
City: Ilion State: NY
Project #: HERI500.P2
Client Purchase Order #: HERI500.P2

Weather Parameters

Temperature (Fahrenheit)
Start: 42°F @ 1145 Maximum: 42°F
Stop: 63°F @ 1455 Minimum: 63°F
Atmoshpheric Pressure (inches of Hg)
Start: 1145 Maximum: 30.05
Stop: 1455 Minimum: 29.10
Other weather comment: SUNNY. NO PRECIP

Requested Analysis

Lab Sample #	Field ID / Point of Collection	Air Type: Indoor (I) Soil Vap (SV) Ambient (A)	Sampling Equipment Info: Canister Serial #	Canister Size 6L or 1L	Flow Controller Serial #	Start Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Stop Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.
1	HRP-SV-1	SV	A1117	1L	FC137	9/22/20	1207	29.0	80°	ST	9/22/20	1415	3.5	62°	ST
2	HRP-SV-2	SV	A626	1L	FC610	9/22/20	1315	30.0	80°	ST	9/22/20	1455	7.5	58°	ST
3	HRP-SV-3	SV	A541	1L	FC397	9/22/20	1145	30.0	82°	ST	9/22/20	1315	11.0	64°	ST
4	HRP-SV-4	SV	A589	1L	FC609	9/22/20	1200	27.5	82°	ST	9/22/20	1415	1.5	62°	ST
5	HRP-SV-5	SV	A805	1L	FC294	9/22/20	1148	30.0	80°	ST	9/22/20	1345	10.50	62°	ST
6	HRP-SV-6	SV	A1234	1L	FC692	9/22/20	1133	29.5	83°	ST	9/22/20	1330	12.50	64°	ST
7	HRP-SV-7	SV	A380	1L	FC601	9/22/20	1310	20.0	84°	ST	9/22/20	1415	2.0	65°	ST
	DUP09222020														

Turnaround Time (Business days)

- [ ] Standard - 15 Days
- [ ] 10 Day
- [ ] 5 Day
- [ ] 3 Day
- [ ] 2 Day
- [ ] 1 Day
- [ ] Other

Approved By: _____
Date: _____

Data Deliverable Information

All NJDEP TO-15 is mandatory Full T1

- Comm A
- Comm B [X]
- Reduced T2
- Full T1
- Other:
- DKQP reporting

Comments / Remarks

- STANDARD TAT
- CAT B DELIVERABLES

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished By Laboratory: 1	Date Time: 9/22/20 1100	Received By: 1	Relinquished By: 2	Date Time:	Received By: 2
Relinquished By: 3	Date Time: 9/24/20 10:00 am	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished By: 5	Date Time: 9/24/20 15:40	Received By: 5	Custody Seal #		

Relinquished: 9/25/20 0925 Received By: DK

Form:SM088-03D (revised 2-12-18)

RT

http://www.sgs.com/en/terms-and-conditions

SGS

PN

AIR SAMPLING EQUIPMENT RETURN FORM

CLIENT: Hampton-Clarke

PROJECT: Duford

CONTROL# SW-09420-94

JOB # JD13677

ADDITIONAL SUMMA CANISTERS

-8 A702

ADDITIONAL CONTROLLERS

MC068

RELINQUISHED BY: 1 client	DATE & TIME: 9/28/20 9:25	RECEIVED BY: 2	DATE & TIME:
RELINQUISHED BY: 3	DATE & TIME:	RECEIVED BY: 4	DATE & TIME:
CUSTODY SEAL #'S:		# OF BOXES OR PIECES IN DELIVERY	

NOTES:

SM086-03
Pub date: 3/12/18

JD13677: Chain of Custody
Page 3 of 5

SGS Sample Receipt Summary

Job Number: JD13677 **Client:** HAMPTON CLARKE-VERITECH **Project:** AIR ORDER

Date / Time Received: 9/25/2020 9:25:00 AM **Delivery Method:** Client **Airbill #'s:**

Cooler Temps (Raw Measured) °C:

Cooler Temps (Corrected) °C:

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☐		☐
2. Cooler temp verification:	N/A		
3. Cooler media:	N/A		
4. No. Coolers:	N/A		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☐		☑
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 229517 pH 12+: 208717 Other: (Specify)

Comments AD19437-008 DUP09222020 listed on COC. Did not receive this sample.

SM089-03
Rev. Date 12/7/17

Responded to by: VP

Response Date: 9/25

Response:

Only 7 samples were collected per Michelle Kennedy

JD13677: Chain of Custody
Page 5 of 5

Summa Canister and Flow Controller Log

Job Number: JD13677
Account: HCVNJF Hampton Clarke-Veritech
Project: Project # 0092427
Received: 09/25/20

SUMMA CANISTERS

Shipping							Receiving					
Summa ID	L	Vac " Hg	Date Out	By	SCC Batch	SCC FileID	Sample Number	Date In	By	Vac " Hg	Pres psig	Final psig	Dil Fact
A1117	1	29.4	09/06/20	JT	CP10861	6W19056.D	JD13677-1	09/28/20	TCH	4.5			1
A626	1	29.4	09/06/20	JT	CP10842	3W72526.D	JD13677-2	09/28/20	TCH	8		1.2	1.48
A541	1	29.4	09/06/20	JT	CP10856	5W42078.D	JD13677-3	09/28/20	TCH	11		1.1	1.7
A589	1	29.4	09/06/20	JT	CP10856	5W42078.D	JD13677-4	09/28/20	TCH	1			1
A805	1	29.4	09/06/20	JT	CP10853	5W42016.D	JD13677-5	09/28/20	TCH	10		1	1.6
A1234	1	29.4	09/06/20	JT	CP10837	6W18645.D	JD13677-6	09/28/20	TCH	12		1.1	1.79
A380	1	29.4	09/06/20	JT	CP10856	5W42078.D	JD13677-7	09/28/20	TCH	10		1	1.6

FLOW CONTROLLERS / OTHER

Shipping					Receiving				
Flow Crtl ID	Date Out	By	cc/ min	Time hrs.	Date In	By	cc/ min	Flow RPD	Equipment Type
FC294	09/06/20	JT	6.2	2	09/28/20	JT	6.6	6.2	Flow Controller
FC397	09/06/20	JT	6.2	2	09/28/20	JT	6.5	4.7	Flow Controller
FC601	09/06/20	JT	6.2	2	09/28/20	JT	7	12.1	Flow Controller
FC609	09/06/20	JT	6.2	2	09/28/20	JT	7.3	16.3	Flow Controller
FC610	09/06/20	JT	6.2	2	09/28/20	JT	6.1	1.6	Flow Controller
FC692	09/06/20	JT	6.2	2	09/28/20	JT	6.2	0	Flow Controller
MC068	09/06/20	JT	6.2	2	10/16/20	JN	5.7	8.4	Flow Controller
MC237	09/06/20	JT	6.2	2	09/28/20	JT	6.7	7.8	Flow Controller

SGS Bottle Order(s):
SW-09420-94

Prep Date	Room Temp(F)	Bar Pres "Hg
09/06/20	70	29.92

APPENDIX G
Data Usability Summary Report

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Hexavalent Chromium Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082707

5 Soil Samples, 1 Equipment Blank,
and 1 Field Blank
Collected August 26, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The samples were analyzed within the USEPA holding times.

Initial and Continuing Calibration Verification: The percent recoveries for hexavalent chromium (Cr6+) were within laboratory QC limits (90-110%).

Blanks: The analyses of initial and continuing calibration, method, field, and equipment blanks reported Cr6+ as not detected.

Spike Sample Recovery: The percent recoveries for Cr6+ were within QC limits (75-125%) for aqueous batch MS/MSD sample AD18895-007. The %R for soluble Cr6+ was within laboratory QC limits (75-125%) for soil batch spike sample AD18918-003.

The %R for insoluble Cr6+ was below laboratory QC limits (85-115%), but not below 10% for soil batch spike sample AD18918-003. Positive results for Cr6+ should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated soil samples.

Duplicates: The relative percent difference (RPD) for Cr6+ was below the allowable maximum (20%) for aqueous batch MS/MSD sample AD18895-007, as required. The RPD for Cr6+ was below the allowable maximum (35%) for soil batch duplicate sample AD18918-003, as required.

Laboratory Control Sample: The percent recoveries for Cr6+ were within QC limits (75-125%) for the aqueous LCS. The percent recoveries for soluble and insoluble Cr6+ were within laboratory QC limits (80-120%) for the soil LCS.

z:\projects\2020\20600-20620\20620-duofold\0082707.cr6.docx

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

Data Usability Summary Report for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082707

5 Soil Samples, 1 Equipment Blank,
1 Field Blank, and 1 Trip Blank
Collected August 26, 2020

Prepared by: Donald Anné
November 9, 2020

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 4 soil samples, 1 equipment blank, 1 field blank, and 1 trip blank analyzed for volatiles; the results for 5 soil samples, 1 equipment blank, and 1 field blank analyzed for total metals, cyanide, and hexavalent chromium; and the results of 5 soil samples analyzed for TCLP metals.

The overall performances of the analyses are acceptable. Hampton-Clarke Analytical & Field Services did fulfill the requirements of the analytical methods.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive volatile results for methylene chloride were qualified as "not detected" (U) in samples HRPB-10, HRPB-7, and HRPB-9 because the level reported in the samples were not significantly greater than (more than 10 times) the highest associated blank level.

- The positive volatile result for chloroform was qualified as "not detected" (U) in sample HRPB-9 because the level reported in the sample was not significantly greater than (more than 5 times) the highest associated blank level.

- The positive TCLP metal results for barium were qualified as estimated (J) in all 5 soil samples because the %D for barium was above the allowable maximum in the associated soil serial dilution sample and the sample results were above the RL.

- The positive metal results for barium were qualified as estimated, biased low (J-) in all 5 soil samples because 2 of 2 percent recoveries for barium were below control limits and 1 below 10% in the associated soil batch MS/MSD sample.

- The positive metal results for manganese were qualified as estimated (J) in all 5 soil samples because the relative percent difference for manganese was above the allowable maximum in the associated soil batch MS/MSD sample.

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- The positive metal results for lead were qualified as estimated (J) in all 5 soil samples because the relative percent difference for lead was above the allowable maximum in the associated soil batch duplicate sample.

- The positive total metal results for chromium were qualified as estimated (J) in all 5 soil samples because the %D for chromium was above the allowable maximum in the associated soil batch serial dilution sample and the sample results were above the RL.

- The "not detected" results for hexavalent chromium were qualified as estimated (UJ) in all 5 soil samples because the percent recovery for insoluble hexavalent chromium was below QC limits, but not below 10% in the associated soil batch spike sample.

All data are considered usable, with estimated (J, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Total Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082707

5 Soil Samples, 1 Equipment Blank,
and 1 Field Blank
Collected August 26, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The sample was analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration, preparation, equipment, and field blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable target metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: Two of two percent recoveries (%Rs) for barium were below control limits (75-125%) and 1 below 10% for soil MS/MSD batch sample AD18955-001. Positive results for barium should be considered estimated, biased low (J-) and "not detected" results rejected, unusable (R) in associated soil samples.

Two of two %Rs for arsenic were above control limits for aqueous batch MS/MSD sample AD18954-002. Positive results for arsenic should be considered estimated, biased high (J+) in associated aqueous samples.

Laboratory Duplicates: The relative percent differences (RPDs) for applicable metals were below the allowable maximum (20%) for aqueous batch duplicate sample AD18954-002 and aqueous batch MS/MSD sample AD18954-002, as required.

The RPD for lead was above the allowable maximum (35%) for soil batch duplicate sample AD18955-001. The RPD for manganese was above the allowable (35%) for soil batch MS/MSD sample AD18955-003. Positive results for lead and manganese should be considered estimated (J) in associated soil samples.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil samples LCS MR 85229, LCS 85229, LCS MR 85228, and LCS 85228 and aqueous samples LCS MR 85230 and LCS 85230.

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ICP Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for aqueous batch serial dilution sample AD18954-002, as required.

The %Ds for chromium and selenium were above the allowable maximum (15%) for soil batch serial dilution sample AD18955-001. Positive results for chromium and selenium that are above the RLs should be considered estimated (J) in associated soil samples.

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Total Cyanide Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082707

5 Soil Samples, 1 Equipment Blank,
and 1 Field Blank
Collected August 26, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within NJDEP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for total cyanide were within control limits (85-115%).

Blanks: The analyses of initial calibration and continuing calibration, method, field, and equipment blanks reported total cyanide as not detected.

Spike Sample Recovery: The percent recoveries for total cyanide were within QC limits (75-125%) for aqueous batch MS/MSD sample AD18945-007 and soil batch MS/MSD sample AD18955-001.

Laboratory Duplicates: The relative percent difference for total cyanide was below the allowable maximum (20%) for aqueous batch MS/MSD sample AD18945-007, as required. The relative percent difference for total cyanide was below the allowable maximum (35%) for soil batch MS/MSD sample AD18955-001, as required.

Laboratory Control Sample: The percent recoveries for total cyanide were within QC limits (80-120%) for aqueous sample LCSW-1504 and soil sample LCSS-2412.

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ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of 8260 Volatile Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082707

4 Soil Samples, 1 Equipment Blank,
1 Field Blank, and 1 Trip Blank
Collected August 26, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The %RSDs for applicable compounds were below the method maximum, as required. The average RRFs for acetone and 2-butanone were below the method minimums, but not below 0.010 for GCMS_2 on 08-26-20. No action is taken when fewer than 20% of the compounds per calibration do not meet either method %RSD or average RRF criteria, provided the average RRFs are not below 0.010.

The average RRFs for target compounds were above the allowable minimums (0.001 for 1,4-dioxane, 0.010for all others) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for acetone and 2-butanone were below the method minimums, but not below 0.010 on 08-28-20 (2M141350.D). The %Ds for dichlorodifluoromethane, bromomethane, and vinyl chloride were above the method maximum on 08-28-20 (2M141350.D). The %Ds for dichlorodifluoromethane, 1,1,2-trichloro-1,2,2-trifluoromethane, 1,1-dichloroethene, and bromoform were above the method maximum on 08-31-20 (6M131882.D). No action is taken when fewer than 20% of the compounds per calibration do not meet either method %D or RRF criteria, provided the RRFs are not below 0.010.

The RRFs for target compounds were above the allowable minimums (0.001 for 1,4-dioxane, 0.010 for all others), as required.

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The %Ds for dichlorodifluoromethane, bromomethane, and vinyl chloride were above the allowable maximum (20%) on 08-28-20 (2M141350.D). The %Ds for dichlorodifluoromethane, 1,1,2-trichloro-1,2,2-trifluoromethane, 1,1-dichloroethene, acrolein, 1,4-dioxane, and bromoform were above the allowable maximum (20%) on 08-31-20 (6M131882.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of the daily blanks reported target compounds as not detected. Equipment blank EB contained traces of chloroform (1.5 ug/L) and methylene chloride (5.9 ug/L). Positive results for methylene chloride that are less than 10 times the highest blank level should be reported as not detected (U) in associated samples. Positive results for chloroform that are less than 5 times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times for samples were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for soil samples, equipment blank, field blank, and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximums, but 6 of 194 percent recoveries were above QC limits in soil batch MS/MSD sample AD18955-001. No action is taken on batch MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recovery (%R) for 2-chloroethylvinylether was above QC limits for aqueous sample MBS87436. Positive results for 2-chloroethylvinylether should be considered estimated, biased high (J+) in associated aqueous samples.

The %Rs for dichlorodifluoromethane, acrolein, 2-chloroethylvinylether, and bromoform were above QC limits for soil sample MBS87762. Positive results for these compounds should be considered estimated, biased high (J+) in associated soil samples.

Compound ID: Checked compounds and surrogates were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA								
Batch#	779		QC Sample	AD18918-003 NS.Sample							
Date	8/31/2020			Spike Amount PPM	Result PPM	Adjusted Conc PPM	% REC	Limits	RPD	Limits	%REC PASS/FAIL / RPD PASS/FAIL
Analyst	BCT		LCS	20.00	19.10	19.10	96%	80-120%	NA	NA	PASS
PrepBy	BCT		MS(Sol)	21.98	37.52	16.81	76%	75-125%	NA	NA	PASS
			MS(Insol)	791.63	436.99	416.29	53%	75-125%	NA	20%	FAIL / PASS
			Sample	NA	20.70	NA	NA	NA	NA	NA	
			Sample Dup	NA	20.18	NA	NA	NA	3	20%	PASS
			PVS	21.98	43.28	22.57	103%	85-115%	NA	NA	PASS
Lead Chromate Added (G)	0.0112	0.0118									
Upper Calibration Abbsorbance	0.7141										
			MS(Sol)	25.32	21.49	21.49	85%	75-125%	NA	NA	PASS
			MS(Insol)	892.91	400.71	400.71	45%	75-125%	NA	20%	FAIL / PASS
			Sample	NA	ND	NA	NA	NA	NA	NA	

ICV Data	ABS	Turb ABS		PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3425	0.0000	Crct. ABS	0.483999937	1	1	1	1	0.484	0.500	97	8/31/20 15:40	PASS
QC Data	**ABS**	**Turb ABS**	0.3425	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0001	0.0000	Crct. ABS	0.000384355	1	1	1	1	0.000	0.020		8/31/20 15:40	
MB.Sample	0.0001	0.0000	0.0001	0.000384355	1	2.5	1	100	0.015	0.800		8/31/20 15:40	
LCS.Sample	0.3379	0.0000	0.0001	0.477502782	1	2.5	1	100	19.100	0.800		8/31/20 15:41	
AD18918-003 NS.Sample	0.3344	0.0011	0.3379	0.471005589	0.91	2.5	1	100	20.704	0.879		8/31/20 15:42	
AD18918-003 DUP.Sample	0.3260	0.0011	0.3333	0.459141198	0.91	2.5	1	100	20.182	0.879		8/31/20 15:43	
AD18918-004 MS.Sample	0.6083	0.0042	0.3249	0.853491237	0.91	2.5	1	100	37.516	0.879		8/31/20 15:43	
AD18918-005 50X MSD.Sample	0.1410	0.0004	0.6041	0.198830589	0.91	2.5	50	100	436.990	43.956		8/31/20 15:44	
AD18918-003 PVS.Sample	0.6980	0.0011	0.1406	0.98456468	0.91	2.5	1	100	43.278	0.879		8/31/20 15:44	
			0.6969										
AD18955-001.Sample	0.0030	0.0017		0.00207927	0.81	2.5	1	100	0.103	0.988		8/31/20 15:47	
AD18955-002 MS2.Sample	0.3033	0.0030	0.0013	0.424395436	0.79	2.5	1	100	21.488	1.013		8/31/20 15:47	
AD18955-003 MSD 2.Sample	4.1905	0.0018	0.3003	5.916482821	0.85	2.5	1	100	278.423	0.941		8/31/20 15:48	
AD18955-003 MSD 50X 2.Sample	0.1218	0.0014	4.1887	0.170299523	0.85	2.5	50	100	400.705	47.059		8/31/20 15:49	
			0.1204										
Analytical Run					1	2.5	1	100					
ICV.Control	0.3425			0.483999937	1	1	1	1	0.484	0.020	97	8/31/20 15:40	PASS
ICB.Sample	0.0001		0.3425	0.000384355	1	1	1	1	0.000	0.020		8/31/20 15:40	
MB.Sample	0.0001		0.0001	0.000384355	1	2.5	1	100	0.015	0.800		8/31/20 15:40	
LCS.Sample	0.3379		0.0001	0.477502782	1	2.5	1	100	19.100	0.800		8/31/20 15:41	
AD18918-003 NS.Sample	0.3344	0.0011	0.3379	0.471005589	0.91	2.5	1	100	20.704	0.879		8/31/20 15:42	
AD18918-003 DUP.Sample	0.3260	0.0011	0.3333	0.459141198	0.91	2.5	1	100	20.182	0.879		8/31/20 15:43	
AD18918-004 MS.Sample	0.6083	0.0042	0.3249	0.853491237	0.91	2.5	1	100	37.516	0.879		8/31/20 15:43	
AD18918-005 XXX.Sample	4.0144	0.0039	0.6041	5.664788345	0.91	2.5	1	100	249.002	0.879		8/31/20 15:43	
AD18918-005 50X MSD.Sample	0.1410	0.0004	4.0105	0.198830589	0.91	2.5	50	100	436.990	43.956		8/31/20 15:44	
AD18918-003 PVS.Sample	0.6980	0.0011	0.1406	0.98456468	0.91	2.5	1	100	43.278	0.879		8/31/20 15:44	
CCV-1.Control	0.3330		0.6969	0.470581869	1	1	1	1	0.471	0.020	94	8/31/20 15:44	PASS
CCB-1.Sample	0.0003		0.3330	0.000666841	1	1	1	1	0.001	0.020		8/31/20 15:45	
AD18932-002.Sample	0.0135	0.0202	0.0003	-0.009220158	0.79	2.5	1	100	-0.467	1.013		8/31/20 15:45	
AD18934-001.Sample	0.0073	0.0075	-0.0067	-3.93727E-05	0.76	2.5	1	100	-0.002	1.053		8/31/20 15:45	
AD18934-002.Sample	0.0097	0.0105	-0.0002	-0.00088683	0.75	2.5	1	100	-0.047	1.067		8/31/20 15:46	
AD18934-003.Sample	0.0002	0.0004	-0.0008	-3.93732E-05	0.79	2.5	1	100	-0.002	1.013		8/31/20 15:46	
AD18934-004.Sample	0.0031	0.0038	-0.0002	-0.000745587	0.8	2.5	1	100	-0.037	1.000		8/31/20 15:46	
AD18934-005.Sample	0.0042	0.0029	-0.0007	0.00207927	0.77	2.5	1	100	0.108	1.039		8/31/20 15:47	
AD18955-001.Sample	0.0030	0.0017	0.0013	0.00207927	0.81	2.5	1	100	0.103	0.988		8/31/20 15:47	

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85228

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85228

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	42	6.4978	8.92	73		65	110
Chromium	85228	1	S26168A3	42	1.7164	2.27	76		61	114
Copper	85228	1	S26168A3	42	1.5885	2.09	76		66	110
Lead	85228	1	S26168A3	42	1.1971	1.63	73		62	110
Manganese	85228	1	S26168A3	42	4.4543	6.03	74		68	110
Mercury	85228	4	H26170S	15	5.3180	41.64	51		39	110
Nickel	85228	1	S26168A3	42	0.4134	.553	75		61	114
Zinc	85228	1	S26168A3	42	5.3061	7.13	74		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85228

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	41	6.6782	8.92	75		65	110
Chromium	85228	1	S26168A3	41	1.6950	2.27	75		61	114
Copper	85228	1	S26168A3	41	1.5670	2.09	75		66	110
Lead	85228	1	S26168A3	41	1.1739	1.63	72		62	110
Manganese	85228	1	S26168A3	41	4.5188	6.03	75		68	110
Mercury	85228	4	H26170S	14	5.0070	41.64	48		39	110
Nickel	85228	1	S26168A3	41	0.4117	.553	74		61	114
Zinc	85228	1	S26168A3	41	5.1847	7.13	73		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	46	S26168A3	43	0.8400	0.7836	0.5	11	a	75	125
Chromium	85228	1	S26168A3	46	S26168A3	43	0.5701	0.0846	0.5	97		75	125
Copper	85228	1	S26168A3	46	S26168A3	43	0.6851	0.2354	0.5	90		75	125
Lead	85228	1	S26168A3	46	S26168A3	43	0.5399	3.5540	0.5	-600	b	75	125
Manganese	85228	1	S26168A3	46	S26168A3	43	5.9788	6.4359	0.5	-91	b	75	125
Mercury	85228	1	H26170S	19	H26170S	16	9.9320	0.8380	10	91		75	125
Nickel	85228	1	S26168A3	46	S26168A3	43	0.6142	0.1404	0.5	95		75	125
Zinc	85228	1	S26168A3	46	S26168A3	43	1.0408	0.5911	0.5	90		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD18955-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	45	S26168A3	43	0.6766	0.7836	0.5	-21	a	75	125
Chromium	85228	1	S26168A3	45	S26168A3	43	0.5546	0.0846	0.5	94		75	125
Copper	85228	1	S26168A3	45	S26168A3	43	0.6499	0.2354	0.5	83		75	125
Lead	85228	1	S26168A3	45	S26168A3	43	0.5416	3.5540	0.5	-600	b	75	125
Manganese	85228	1	S26168A3	45	S26168A3	43	2.5838	6.4359	0.5	-770	b	75	125
Mercury	85228	1	H26170S	18	H26170S	16	9.9250	0.8380	10	91		75	125
Nickel	85228	1	S26168A3	45	S26168A3	43	0.6158	0.1404	0.5	95		75	125
Zinc	85228	1	S26168A3	45	S26168A3	43	0.9384	0.5911	0.5	69	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85230

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: AQUEOUS SampleID: LCSW 85230

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85230	1	A090120A	19	246.1590	250	98		80	120
Beryllium	85230	1	A090120A	19	248.0860	250	99		80	120
Lead	85230	1	A090120A	19	247.7790	250	99		80	120
Selenium	85230	1	A090120A	19	241.3350	250	97		80	120

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 85230

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85230	1	A090120A	20	238.4460	250	95		80	120
Beryllium	85230	1	A090120A	20	241.9360	250	97		80	120
Lead	85230	1	A090120A	20	237.1440	250	95		80	120
Selenium	85230	1	A090120A	20	235.1500	250	94		80	120

TxtQcType: MS Matrix: AQUEOUS SampleID: AD18954-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85230	5	A090220A	21	A090220A	18	318.4730	251.2810	250	134	b	75	125
Beryllium	85230	1	A090120A	24	A090120A	21	216.1200	0.5U	250	86		75	125
Lead	85230	1	A090120A	24	A090120A	21	334.0030	102.3710	250	93		75	125
Selenium	85230	1	A090120A	24	A090120A	21	269.6820	35.3270	250	94		75	125

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD18954-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85230	5	A090220A	22	A090220A	18	316.3770	251.2810	250	130	b	75	125
Beryllium	85230	1	A090120A	25	A090120A	21	211.2340	0.5U	250	84		75	125
Lead	85230	1	A090120A	25	A090120A	21	330.2140	102.3710	250	91		75	125
Selenium	85230	1	A090120A	25	A090120A	21	269.4180	35.3270	250	94		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85228

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85228

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	42	S26168A3	41	6.4978	6.6782	2.7		20
Chromium	85228	S26168A3	42	S26168A3	41	1.7164	1.6950	1.3		20
Copper	85228	S26168A3	42	S26168A3	41	1.5885	1.5670	1.4		20
Lead	85228	S26168A3	42	S26168A3	41	1.1971	1.1739	2		20
Manganese	85228	S26168A3	42	S26168A3	41	4.4543	4.5188	1.4		20
Mercury	85228	H26170S	15	H26170S	14	5.3180	5.0070	6		20
Nickel	85228	S26168A3	42	S26168A3	41	0.4134	0.4117	.4		20
Zinc	85228	S26168A3	42	S26168A3	41	5.3061	5.1847	2.3		20

TxtQcType: MR Matrix: SOIL SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	44	S26168A3	43	0.8278	0.7836	5.5		20
Chromium	85228	S26168A3	44	S26168A3	43	0.1139	0.0846	29	b	20
Copper	85228	S26168A3	44	S26168A3	43	0.3037	0.2354	25	a	20
Lead	85228	S26168A3	44	S26168A3	43	2.3034	3.5540	43	a	20
Manganese	85228	S26168A3	44	S26168A3	43	6.3194	6.4359	1.8		20
Mercury	85228	H26170S	17	H26170S	16	0.6540	0.8380	25	b	20
Nickel	85228	S26168A3	44	S26168A3	43	0.1666	0.1404	17		20
Zinc	85228	S26168A3	44	S26168A3	43	0.6861	0.5911	15		20

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	46	S26168A3	45	0.8400	0.6766	22	a	20
Chromium	85228	S26168A3	46	S26168A3	45	0.5701	0.5546	2.8		20
Copper	85228	S26168A3	46	S26168A3	45	0.6851	0.6499	5.3		20
Lead	85228	S26168A3	46	S26168A3	45	0.5399	0.5416	.3		20
Manganese	85228	S26168A3	46	S26168A3	45	5.9788	2.5838	79	a	20
Mercury	85228	H26170S	19	H26170S	18	9.9320	9.9250	.071		20
Nickel	85228	S26168A3	46	S26168A3	45	0.6142	0.6158	.26		20
Zinc	85228	S26168A3	46	S26168A3	45	1.0408	0.9384	10		20

TxtQcType: SD Matrix: SOIL SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Barium	85228	S26168A3	48	S26168A3	43	5	0.1555	0.7836	0.75		10
Chromium	85228	S26168A3	48	S26168A3	43	5	0.0119	0.0846	30	a	10
Copper	85228	S26168A3	48	S26168A3	43	5	0.0469	0.2354	0.37		10
Lead	85228	S26168A3	48	S26168A3	43	5	0.7188	3.5540	1.1		10
Manganese	85228	S26168A3	48	S26168A3	43	5	1.3085	6.4359	1.7		10
Nickel	85228	S26168A3	48	S26168A3	43	5	0.0302	0.1404	7.5		10
Zinc	85228	S26168A3	48	S26168A3	43	5	0.1217	0.5911	3		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85229

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85229

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85229	S083120A	22	S083120A	21	38.6760	38.5900	.22	20
Beryllium	85229	S083120A	22	S083120A	21	143.2870	144.8910	1.1	20
Selenium	85229	S083120A	22	S083120A	21	276.1240	279.3350	1.2	20
Silver	85229	S083120A	22	S083120A	21	74.6300	72.8790	2.4	20

TxtQcType: MR Matrix: SOIL SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85229	S083120A	33	S083120A	32	34.0100	34.4610	1.3	20
Beryllium	85229	S083120A	33	S083120A	32	1.0470	1U	---	20
Selenium	85229	S083120A	33	S083120A	32	10U	10U	---	20
Silver	85229	S083120A	33	S083120A	32	1U	1U	---	20

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85229	S083120A	36	S083120A	35	250.5400	235.5220	6.2	20
Beryllium	85229	S083120A	36	S083120A	35	200.5140	197.0770	1.7	20
Selenium	85229	S083120A	36	S083120A	35	203.4800	202.5500	.46	20
Silver	85229	S083120A	36	S083120A	35	40.2550	38.9120	3.4	20

TxtQcType: SD Matrix: SOIL SampleID: AD18955-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85229	S083120A	34	S083120A	32	5	7.3530	34.4610	6.7		20
Beryllium	85229	S083120A	34	S083120A	32	5	0.2180	0.9820	11	c	20
Selenium	85229	S083120A	34	S083120A	32	5	1.0710	4.4390	21	c	20
Silver	85229	S083120A	34	S083120A	32	5	0.0670	0.3380	0.89		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85218

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCS MR 85218

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85218	T26161A4	16	T26161A4	15	0.5115	0.5285	3.3	20
Barium	85218	T26161A4	16	T26161A4	15	0.5522	0.5484	.68	20
Cadmium	85218	T26161A4	16	T26161A4	15	0.5805	0.5792	.22	20
Chromium	85218	T26161A4	16	T26161A4	15	0.5515	0.5518	.047	20
Lead	85218	T26161A4	16	T26161A4	15	0.5490	0.5482	.14	20
Mercury	85218	H26161T	13	H26161T	12	10.4500	10.4600	.096	20
Nickel	85218	T26161A4	16	T26161A4	15	0.5729	0.5725	.075	20
Silver	85218	T26161C4	16	T26161C4	15	0.1077	0.1080	.21	20

TxtQcType: MR Matrix: TCLP SampleID: AD18923-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85218	T26161A4	18	T26161A4	17	0.1U	0.1U	---	20
Barium	85218	T26161A4	18	T26161A4	17	0.25U	0.25U	---	20
Cadmium	85218	T26161A4	18	T26161A4	17	0.05U	0.05U	---	20
Chromium	85218	T26161A4	18	T26161A4	17	0.1U	0.1U	---	20
Lead	85218	T26161A4	18	T26161A4	17	0.05U	0.05U	---	20
Mercury	85218	H26161T	15	H26161T	14	0.50U	0.50U	---	20
Nickel	85218	T26161A4	18	T26161A4	17	0.1U	0.1U	---	20
Selenium	85218	T26161B4	15	T26161B4	14	0.1U	0.1U	---	20
Silver	85218	T26161C4	18	T26161C4	17	0.05U	0.05U	---	20

TxtQcType: SD Matrix: TCLP SampleID: AD18923-001

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85218	T26161A4	21	T26161A4	17	5	0.0233	0.0020	---		10
Barium	85218	T26161A4	21	T26161A4	17	5	0.0072	0.0812	56	a	10
Cadmium	85218	T26161A4	21	T26161A4	17	5	-0.0055	-0.0033	---		10
Chromium	85218	T26161A4	21	T26161A4	17	5	0.0024	0.0035	244	c	10
Lead	85218	T26161A4	21	T26161A4	17	5	0.0037	-0.0049	---		10
Nickel	85218	T26161A4	21	T26161A4	17	5	0.0001	0.0224	---		10
Selenium	85218	T26161B4	18	T26161B4	14	5	-0.0009	0.0314	---		10
Silver	85218	T26161C4	21	T26161C4	17	5	0.0071	0.0333	6		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87436

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2M141360.D	MBS87436	8/28/2020 10:45:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.2675	0	20	106	50	150
Dichlorodifluoromethane	1	22.7236	0	20	114	50	150
Chloromethane	1	18.4306	0	20	92	50	150
Bromomethane	1	14.3735	0	20	72	50	150
Vinyl Chloride	1	25.0891	0	20	125	50	150
Chloroethane	1	22.7761	0	20	114	50	150
Trichlorofluoromethane	1	22.7392	0	20	114	50	150
Ethyl ether	1	19.6488	0	20	98	50	150
Furan	1	19.5616	0	20	98	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	20.8871	0	20	104	50	150
Methylene Chloride	1	18.3046	0	20	92	70	130
Acrolein	1	107.2197	0	100	107	50	150
Acrylonitrile	1	17.0179	0	20	85	50	150
Iodomethane	1	22.2018	0	20	111	50	150
Acetone	1	96.4093	0	100	96	50	150
Carbon Disulfide	1	20.0831	0	20	100	50	150
t-Butyl Alcohol	1	93.0556	0	100	93	50	150
n-Hexane	1	19.8094	0	20	99	70	130
Di-isopropyl-ether	1	18.089	0	20	90	70	130
1,1-Dichloroethene	1	19.5922	0	20	98	70	130
Methyl Acetate	1	26.9278	0	20	135	50	150
Methyl-t-butyl ether	1	17.8912	0	20	89	70	130
1,1-Dichloroethane	1	17.7773	0	20	89	70	130
trans-1,2-Dichloroethene	1	18.4548	0	20	92	70	130
Ethyl-t-butyl ether	1	17.6027	0	20	88	70	130
cis-1,2-Dichloroethene	1	18.0527	0	20	90	70	130
Bromochloromethane	1	18.1107	0	20	91	70	130
2,2-Dichloropropane	1	19.8298	0	20	99	70	130
Ethyl acetate	1	16.9551	0	20	85	50	150
1,4-Dioxane	1	892.9153	0	1000	89	50	150
1,1-Dichloropropene	1	18.6584	0	20	93	70	130
Chloroform	1	18.0644	0	20	90	70	130
Cyclohexane	1	19.515	0	20	98	70	130
1,2-Dichloroethane	1	16.4548	0	20	82	70	130
2-Butanone	1	17.666	0	20	88	50	150
1,1,1-Trichloroethane	1	17.9776	0	20	90	70	130
Carbon Tetrachloride	1	18.2184	0	20	91	50	150
Vinyl Acetate	1	12.3208	0	20	62	50	150
Bromodichloromethane	1	18.0214	0	20	90	70	130
Methylcyclohexane	1	19.2208	0	20	96	70	130
Dibromomethane	1	14.7889	0	20	74	70	130
1,2-Dichloropropane	1	17.2486	0	20	86	70	130
Trichloroethene	1	18.3967	0	20	92	70	130
Benzene	1	17.3993	0	20	87	70	130
tert-Amyl methyl ether	1	18.6574	0	20	93	70	130
Iso-propylacetate	1	20.4617	0	20	102	70	130
Methyl methacrylate	1	21.0823	0	20	105	70	130
Dibromochloromethane	1	18.3145	0	20	92	70	130
2-Chloroethylvinylether	1	46.1501	0	20	231*	70	130
cis-1,3-Dichloropropene	1	18.7581	0	20	94	70	130
trans-1,3-Dichloropropene	1	17.5576	0	20	88	70	130
Ethyl methacrylate	1	18.6975	0	20	93	70	130
1,1,2-Trichloroethane	1	18.6489	0	20	93	70	130
1,2-Dibromoethane	1	17.7203	0	20	89	70	130
1,3-Dichloropropane	1	17.9362	0	20	90	70	130
4-Methyl-2-Pentanone	1	19.746	0	20	99	50	150
2-Hexanone	1	20.1732	0	20	101	50	150
Tetrachloroethene	1	16.7166	0	20	84	50	150
Toluene	1	18.2453	0	20	91	70	130
1,1,1,2-Tetrachloroethane	1	17.6114	0	20	88	70	130
Chlorobenzene	1	17.9815	0	20	90	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87436

Method: 8260C | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	17.2972	0	20	86	70	130
n-Amyl acetate	1	17.4637	0	20	87	70	130
Bromoform	**1**	**18.0974**	**0**	**20**	**90**	**70**	**130**
Ethylbenzene	**1**	**18.9374**	**0**	**20**	**95**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**19.0494**	**0**	**20**	**95**	**70**	**130**
Styrene	**1**	**17.84**	**0**	**20**	**89**	**70**	**130**
m&p-Xylenes	**1**	**37.295**	**0**	**40**	**93**	**70**	**130**
o-Xylene	**1**	**17.6421**	**0**	**20**	**88**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	18.4787	0	20	92	50	150
1,3-Dichlorobenzene	**1**	**18.0218**	**0**	**20**	**90**	**70**	**130**
1,4-Dichlorobenzene	**1**	**18.1332**	**0**	**20**	**91**	**70**	**130**
1,2-Dichlorobenzene	**1**	**17.4709**	**0**	**20**	**87**	**70**	**130**
Isopropylbenzene	**1**	**18.9892**	**0**	**20**	**95**	**70**	**130**
Cyclohexanone	1	96.0529	0	100	96	50	150
Camphene	1	19.1377	0	20	96	70	130
1,2,3-Trichloropropane	**1**	**18.8351**	**0**	**20**	**94**	**70**	**130**
2-Chlorotoluene	1	17.7736	0	20	89	70	130
p-Ethyltoluene	1	18.7101	0	20	94	70	130
4-Chlorotoluene	1	17.3297	0	20	87	70	130
n-Propylbenzene	**1**	**18.9986**	**0**	**20**	**95**	**70**	**130**
Bromobenzene	1	18.6561	0	20	93	70	130
1,3,5-Trimethylbenzene	**1**	**18.3839**	**0**	**20**	**92**	**70**	**130**
Butyl methacrylate	1	16.7391	0	20	84	70	130
t-Butylbenzene	**1**	**17.5446**	**0**	**20**	**88**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**17.0672**	**0**	**20**	**85**	**70**	**130**
sec-Butylbenzene	**1**	**18.8416**	**0**	**20**	**94**	**70**	**130**
4-Isopropyltoluene	**1**	**18.2005**	**0**	**20**	**91**	**70**	**130**
n-Butylbenzene	**1**	**18.4142**	**0**	**20**	**92**	**70**	**130**
p-Diethylbenzene	1	18.9418	0	20	95	70	130
1,2,4,5-Tetramethylbenzene	1	19.1662	0	20	96	70	130
1,2-Dibromo-3-Chloropropane	1	19.9389	0	20	100	50	150
Camphor	1	152.917	0	200	76	20	150
Hexachlorobutadiene	1	17.16	0	20	86	50	150
1,2,4-Trichlorobenzene	1	18.8606	0	20	94	70	130
1,2,3-Trichlorobenzene	1	17.5038	0	20	88	70	130
Naphthalene	1	18.0371	0	20	90	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Data File	Sample ID:	Analysis Date
Spike or Dup: 6M131888.D	MBS87762	8/31/2020 9:07:00 AM
Non Spike(If applicable):		
Inst Blank(If applicable):		
Method: 8260C	Matrix: Soil	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	77.0435	0	50	154*	20	130
Dichlorodifluoromethane	**1**	**71.9361**	**0**	**50**	**144***	**20**	**130**
Chloromethane	**1**	**63.4485**	**0**	**50**	**127**	**20**	**130**
Bromomethane	**1**	**50.5524**	**0**	**50**	**101**	**20**	**130**
Vinyl Chloride	**1**	**60.9187**	**0**	**50**	**122**	**20**	**130**
Chloroethane	**1**	**56.196**	**0**	**50**	**112**	**20**	**130**
Trichlorofluoromethane	**1**	**53.2772**	**0**	**50**	**107**	**20**	**130**
Ethyl ether	1	45.2954	0	50	91	50	130
Furan	1	48.3651	0	50	97	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**53.8862**	**0**	**50**	**108**	**50**	**130**
Methylene Chloride	**1**	**46.9147**	**0**	**50**	**94**	**50**	**130**
Acrolein	**1**	**291.8958**	**0**	**200**	**146***	**20**	**130**
Acrylonitrile	**1**	**41.0821**	**0**	**50**	**82**	**20**	**130**
Iodomethane	1	65.371	0	50	131*	50	130
Acetone	**1**	**191.2286**	**0**	**200**	**96**	**20**	**130**
Carbon Disulfide	**1**	**49.1955**	**0**	**50**	**98**	**50**	**130**
t-Butyl Alcohol	**1**	**145.0596**	**0**	**200**	**73**	**20**	**130**
n-Hexane	1	55.5732	0	50	111	50	130
Di-isopropyl-ether	1	50.9804	0	50	102	50	130
1,1-Dichloroethene	**1**	**54.7368**	**0**	**50**	**109**	**50**	**130**
Methyl Acetate	1	56.1536	0	50	112	50	130
Methyl-t-butyl ether	**1**	**53.4186**	**0**	**50**	**107**	**50**	**130**
1,1-Dichloroethane	**1**	**51.3318**	**0**	**50**	**103**	**50**	**130**
trans-1,2-Dichloroethene	**1**	**52.6015**	**0**	**50**	**105**	**50**	**130**
Ethyl-t-butyl ether	1	46.2693	0	50	93	50	130
cis-1,2-Dichloroethene	**1**	**50.5797**	**0**	**50**	**101**	**50**	**130**
Bromochloromethane	1	50.2529	0	50	101	50	130
2,2-Dichloropropane	1	58.6043	0	50	117	50	130
Ethyl acetate	1	42.8638	0	50	86	50	130
1,4-Dioxane	**1**	**1557.786**	**0**	**2500**	**62**	**50**	**130**
1,1-Dichloropropene	1	50.9925	0	50	102	50	130
Chloroform	**1**	**51.042**	**0**	**50**	**102**	**50**	**130**
Cyclohexane	1	51.9312	0	50	104	50	130
1,2-Dichloroethane	**1**	**51.3951**	**0**	**50**	**103**	**50**	**130**
2-Butanone	**1**	**41.0564**	**0**	**50**	**82**	**20**	**130**
1,1,1-Trichloroethane	**1**	**52.0174**	**0**	**50**	**104**	**50**	**130**
Carbon Tetrachloride	**1**	**52.2009**	**0**	**50**	**104**	**50**	**130**
Vinyl Acetate	1	38.9192	0	50	78	50	130
Bromodichloromethane	**1**	**50.6791**	**0**	**50**	**101**	**50**	**130**
Methylcyclohexane	1	49.9512	0	50	100	50	130
Dibromomethane	1	51.026	0	50	102	50	130
1,2-Dichloropropane	**1**	**50.2056**	**0**	**50**	**100**	**50**	**130**
Trichloroethene	**1**	**49.277**	**0**	**50**	**99**	**50**	**130**
Benzene	**1**	**49.4058**	**0**	**50**	**99**	**50**	**130**
tert-Amyl methyl ether	1	49.7989	0	50	100	50	130
Iso-propylacetate	1	44.3314	0	50	89	50	130
Methyl methacrylate	1	42.8021	0	50	86	50	130
Dibromochloromethane	**1**	**48.2256**	**0**	**50**	**96**	**50**	**130**
2-Chloroethylvinylether	**1**	**103.4236**	**0**	**50**	**207***	**50**	**130**
cis-1,3-Dichloropropene	**1**	**48.2806**	**0**	**50**	**97**	**50**	**130**
trans-1,3-Dichloropropene	**1**	**49.4282**	**0**	**50**	**99**	**50**	**130**
Ethyl methacrylate	1	45.9704	0	50	92	50	130
1,1,2-Trichloroethane	**1**	**46.6959**	**0**	**50**	**93**	**50**	**130**
1,2-Dibromoethane	1	46.967	0	50	94	50	130
1,3-Dichloropropane	**1**	**46.3203**	**0**	**50**	**93**	**50**	**130**
4-Methyl-2-Pentanone	**1**	**39.3965**	**0**	**50**	**79**	**20**	**130**
2-Hexanone	**1**	**39.3843**	**0**	**50**	**79**	**20**	**130**
Tetrachloroethene	**1**	**45.5631**	**0**	**50**	**91**	**50**	**130**
Toluene	**1**	**44.3318**	**0**	**50**	**89**	**50**	**130**
1,1,1,2-Tetrachloroethane	1	45.9037	0	50	92	50	130
Chlorobenzene	**1**	**44.3688**	**0**	**50**	**89**	**50**	**130**

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	44.6065	0	50	89	50	130
n-Amyl acetate	1	44.5516	0	50	89	50	130
Bromoform	**1**	**68.5695**	**0**	**50**	**137***	**20**	**130**
Ethylbenzene	**1**	**44.6076**	**0**	**50**	**89**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**43.792**	**0**	**50**	**88**	**50**	**130**
Styrene	**1**	**43.4477**	**0**	**50**	**87**	**50**	**130**
m&p-Xylenes	**1**	**87.0434**	**0**	**100**	**87**	**50**	**130**
o-Xylene	**1**	**41.9207**	**0**	**50**	**84**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	44.7106	0	50	89	20	130
1,3-Dichlorobenzene	**1**	**43.7558**	**0**	**50**	**88**	**50**	**130**
1,4-Dichlorobenzene	**1**	**42.9135**	**0**	**50**	**86**	**50**	**130**
1,2-Dichlorobenzene	**1**	**43.5856**	**0**	**50**	**87**	**50**	**130**
Isopropylbenzene	**1**	**43.989**	**0**	**50**	**88**	**50**	**130**
Cyclohexanone	1	183.5002	0	250	73	50	130
Camphene	1	46.1519	0	50	92	50	130
1,2,3-Trichloropropane	**1**	**42.6801**	**0**	**50**	**85**	**50**	**130**
2-Chlorotoluene	1	44.5685	0	50	89	50	130
p-Ethyltoluene	1	43.0244	0	50	86	50	130
4-Chlorotoluene	1	46.4898	0	50	93	50	130
n-Propylbenzene	**1**	**44.8788**	**0**	**50**	**90**	**50**	**130**
Bromobenzene	1	43.9032	0	50	88	50	130
1,3,5-Trimethylbenzene	**1**	**49.1502**	**0**	**50**	**98**	**50**	**130**
Butyl methacrylate	1	41.7019	0	50	83	50	130
t-Butylbenzene	**1**	**45.1207**	**0**	**50**	**90**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**45.2927**	**0**	**50**	**91**	**50**	**130**
sec-Butylbenzene	**1**	**47.7034**	**0**	**50**	**95**	**50**	**130**
4-Isopropyltoluene	**1**	**47.9029**	**0**	**50**	**96**	**50**	**130**
n-Butylbenzene	**1**	**49.0503**	**0**	**50**	**98**	**50**	**130**
p-Diethylbenzene	1	48.4126	0	50	97	50	130
1,2,4,5-Tetramethylbenzene	1	48.3684	0	50	97	50	130
1,2-Dibromo-3-Chloropropane	1	38.5331	0	50	77	50	130
Camphor	1	555.9057	0	500	111	50	130
Hexachlorobutadiene	1	45.011	0	50	90	50	130
1,2,4-Trichlorobenzene	1	43.352	0	50	87	50	130
1,2,3-Trichlorobenzene	1	42.4155	0	50	85	50	130
Naphthalene	1	39.7835	0	50	80	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Non Spike(If applicable):	6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	56.9035	0	50	114	20	130
Dichlorodifluoromethane	1	62.8668	0	50	126	20	130
Chloromethane	1	56.1541	0	50	112	20	130
Bromomethane	1	50.2121	0	50	100	20	130
Vinyl Chloride	1	56.1453	0	50	112	20	130
Chloroethane	1	51.908	0	50	104	20	130
Trichlorofluoromethane	1	51.1041	0	50	102	20	130
Ethyl ether	1	46.2834	0	50	93	50	130
Furan	1	46.2299	0	50	92	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	52.3408	0	50	105	50	130
Methylene Chloride	1	52.7897	5.0839	50	95	50	130
Acrolein	1	248.918	0	200	124	20	130
Acrylonitrile	1	34.3463	0	50	69	20	130
Iodomethane	1	64.5939	0	50	129	50	130
Acetone	1	157.3904	0	200	79	20	130
Carbon Disulfide	1	47.3944	0	50	95	50	130
t-Butyl Alcohol	1	116.3514	0	200	58	20	130
n-Hexane	1	54.7434	0	50	109	50	130
Di-isopropyl-ether	1	54.2364	0	50	108	50	130
1,1-Dichloroethene	1	52.2403	0	50	104	50	130
Methyl Acetate	1	46.8893	0	50	94	50	130
Methyl-t-butyl ether	1	54.3286	0	50	109	50	130
1,1-Dichloroethane	1	49.0593	0	50	98	50	130
trans-1,2-Dichloroethene	1	49.6338	0	50	99	50	130
Ethyl-t-butyl ether	1	49.3762	0	50	99	50	130
cis-1,2-Dichloroethene	1	49.1894	0	50	98	50	130
Bromochloromethane	1	50.2977	0	50	101	50	130
2,2-Dichloropropane	1	57.0601	0	50	114	50	130
Ethyl acetate	1	36.7433	0	50	73	50	130
1,4-Dioxane	1	1274.773	0	2500	51	50	130
1,1-Dichloropropene	1	48.5605	0	50	97	50	130
Chloroform	1	49.9443	0	50	100	50	130
Cyclohexane	1	50.8219	0	50	102	50	130
1,2-Dichloroethane	1	50.2019	0	50	100	50	130
2-Butanone	1	33.5103	0	50	67	20	130
1,1,1-Trichloroethane	1	49.0659	0	50	98	50	130
Carbon Tetrachloride	1	51.644	0	50	103	50	130
Vinyl Acetate	1	37.6728	0	50	75	50	130
Bromodichloromethane	1	50.2178	0	50	100	50	130
Methylcyclohexane	1	50.4394	0	50	101	50	130
Dibromomethane	1	47.858	0	50	96	50	130
1,2-Dichloropropane	1	48.2694	0	50	97	50	130
Trichloroethene	1	73.1622	21.8	50	103	50	130
Benzene	1	48.4836	0	50	97	50	130
tert-Amyl methyl ether	1	52.4065	0	50	105	50	130
Iso-propylacetate	1	41.66	0	50	83	50	130
Methyl methacrylate	1	39.8495	0	50	80	50	130
Dibromochloromethane	1	45.6697	0	50	91	50	130
2-Chloroethylvinylether	1	95.5322	0	50	191*	50	130
cis-1,3-Dichloropropene	1	45.5903	0	50	91	50	130
trans-1,3-Dichloropropene	1	44.067	0	50	88	50	130
Ethyl methacrylate	1	43.1348	0	50	86	50	130
1,1,2-Trichloroethane	1	44.5196	0	50	89	50	130
1,2-Dibromoethane	1	41.0321	0	50	82	50	130
1,3-Dichloropropane	1	42.8237	0	50	86	50	130
4-Methyl-2-Pentanone	1	33.7094	0	50	67	20	130
2-Hexanone	1	30.8066	0	50	62	20	130
Tetrachloroethene	1	50.6666	10.8224	50	80	50	130
Toluene	1	41.0645	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.0505	0	50	90	50	130
Chlorobenzene	1	39.6054	0	50	79	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	41.0364	0	50	82	50	130
n-Amyl acetate	1	38.5687	0	50	77	50	130
Bromoform	**1**	**65.2935**	**0**	**50**	**131***	**20**	**130**
Ethylbenzene	**1**	**42.9713**	**0**	**50**	**86**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**40.0258**	**0**	**50**	**80**	**50**	**130**
Styrene	**1**	**37.9266**	**0**	**50**	**76**	**50**	**130**
m&p-Xylenes	**1**	**78.4306**	**0**	**100**	**78**	**50**	**130**
o-Xylene	**1**	**39.2014**	**0**	**50**	**78**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	36.9711	0	50	74	20	130
1,3-Dichlorobenzene	**1**	**35.471**	**0**	**50**	**71**	**50**	**130**
1,4-Dichlorobenzene	**1**	**33.9467**	**0**	**50**	**68**	**50**	**130**
1,2-Dichlorobenzene	**1**	**35.8729**	**0**	**50**	**72**	**50**	**130**
Isopropylbenzene	**1**	**40.7636**	**0**	**50**	**82**	**50**	**130**
Cyclohexanone	1	125.4322	0	250	50	50	130
Camphene	1	41.718	0	50	83	50	130
1,2,3-Trichloropropane	**1**	**36.3643**	**0**	**50**	**73**	**50**	**130**
2-Chlorotoluene	1	40.2726	0	50	81	50	130
p-Ethyltoluene	1	36.6825	0	50	73	50	130
4-Chlorotoluene	1	37.6433	0	50	75	50	130
n-Propylbenzene	**1**	**38.3835**	**0**	**50**	**77**	**50**	**130**
Bromobenzene	1	38.8818	0	50	78	50	130
1,3,5-Trimethylbenzene	**1**	**43.2564**	**0**	**50**	**87**	**50**	**130**
Butyl methacrylate	1	41.2717	0	50	83	50	130
t-Butylbenzene	**1**	**40.0099**	**0**	**50**	**80**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**38.5263**	**0**	**50**	**77**	**50**	**130**
sec-Butylbenzene	**1**	**40.366**	**0**	**50**	**81**	**50**	**130**
4-Isopropyltoluene	**1**	**39.5065**	**0**	**50**	**79**	**50**	**130**
n-Butylbenzene	**1**	**36.1879**	**0**	**50**	**72**	**50**	**130**
p-Diethylbenzene	1	36.9323	0	50	74	50	130
1,2,4,5-Tetramethylbenzene	1	37.6781	0	50	75	50	130
1,2-Dibromo-3-Chloropropane	1	31.3599	0	50	63	50	130
Camphor	1	473.298	0	500	95	50	130
Hexachlorobutadiene	1	35.1542	0	50	70	50	130
1,2,4-Trichlorobenzene	1	28.2306	0	50	56	50	130
1,2,3-Trichlorobenzene	1	30.0156	0	50	60	50	130
Naphthalene	1	30.4916	0	50	61	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Non Spike(If applicable):	6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	53.7847	0	50	108	20	130
Dichlorodifluoromethane	1	65.4838	0	50	131*	20	130
Chloromethane	1	56.6472	0	50	113	20	130
Bromomethane	1	51.6003	0	50	103	20	130
Vinyl Chloride	1	56.8458	0	50	114	20	130
Chloroethane	1	52.3136	0	50	105	20	130
Trichlorofluoromethane	1	52.2935	0	50	105	20	130
Ethyl ether	1	49.7009	0	50	99	50	130
Furan	1	47.2611	0	50	95	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	56.3197	0	50	113	50	130
Methylene Chloride	1	54.1757	5.0839	50	98	50	130
Acrolein	1	259.5406	0	200	130	20	130
Acrylonitrile	1	35.0489	0	50	70	20	130
Iodomethane	1	65.8217	0	50	132*	50	130
Acetone	1	162.1024	0	200	81	20	130
Carbon Disulfide	1	49.643	0	50	99	50	130
t-Butyl Alcohol	1	127.633	0	200	64	20	130
n-Hexane	1	58.3019	0	50	117	50	130
Di-isopropyl-ether	1	55.5257	0	50	111	50	130
1,1-Dichloroethene	1	53.6783	0	50	107	50	130
Methyl Acetate	1	50.8647	0	50	102	50	130
Methyl-t-butyl ether	1	57.9525	0	50	116	50	130
1,1-Dichloroethane	1	52.194	0	50	104	50	130
trans-1,2-Dichloroethene	1	49.8849	0	50	100	50	130
Ethyl-t-butyl ether	1	51.0834	0	50	102	50	130
cis-1,2-Dichloroethene	1	51.2312	0	50	102	50	130
Bromochloromethane	1	53.4537	0	50	107	50	130
2,2-Dichloropropane	1	58.147	0	50	116	50	130
Ethyl acetate	1	33.6297	0	50	67	50	130
1,4-Dioxane	1	1315.993	0	2500	53	50	130
1,1-Dichloropropene	1	50.4388	0	50	101	50	130
Chloroform	1	51.9592	0	50	104	50	130
Cyclohexane	1	52.7667	0	50	106	50	130
1,2-Dichloroethane	1	52.776	0	50	106	50	130
2-Butanone	1	34.6742	0	50	69	20	130
1,1,1-Trichloroethane	1	52.2007	0	50	104	50	130
Carbon Tetrachloride	1	53.6249	0	50	107	50	130
Vinyl Acetate	1	39.662	0	50	79	50	130
Bromodichloromethane	1	52.8916	0	50	106	50	130
Methylcyclohexane	1	51.9779	0	50	104	50	130
Dibromomethane	1	50.6971	0	50	101	50	130
1,2-Dichloropropane	1	49.6665	0	50	99	50	130
Trichloroethene	1	75.2922	21.8	50	107	50	130
Benzene	1	50.3163	0	50	101	50	130
tert-Amyl methyl ether	1	56.2173	0	50	112	50	130
Iso-propylacetate	1	42.6062	0	50	85	50	130
Methyl methacrylate	1	41.2272	0	50	82	50	130
Dibromochloromethane	1	48.1401	0	50	96	50	130
2-Chloroethylvinylether	1	100.3461	0	50	201*	50	130
cis-1,3-Dichloropropene	1	46.6773	0	50	93	50	130
trans-1,3-Dichloropropene	1	47.5296	0	50	95	50	130
Ethyl methacrylate	1	46.9747	0	50	94	50	130
1,1,2-Trichloroethane	1	46.8811	0	50	94	50	130
1,2-Dibromoethane	1	44.9778	0	50	90	50	130
1,3-Dichloropropane	1	46.3511	0	50	93	50	130
4-Methyl-2-Pentanone	1	36.7572	0	50	74	20	130
2-Hexanone	1	34.1195	0	50	68	20	130
Tetrachloroethene	1	52.4352	10.8224	50	83	50	130
Toluene	1	40.7723	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.2612	0	50	91	50	130
Chlorobenzene	1	40.3151	0	50	81	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	45.4686	0	50	91	50	130
n-Amyl acetate	1	44.7211	0	50	89	50	130
Bromoform	**1**	**70.4273**	**0**	**50**	**141***	**20**	**130**
Ethylbenzene	**1**	**42.7105**	**0**	**50**	**85**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**44.1548**	**0**	**50**	**88**	**50**	**130**
Styrene	**1**	**40.2637**	**0**	**50**	**81**	**50**	**130**
m&p-Xylenes	**1**	**78.8436**	**0**	**100**	**79**	**50**	**130**
o-Xylene	**1**	**39.4447**	**0**	**50**	**79**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	40.8268	0	50	82	20	130
1,3-Dichlorobenzene	**1**	**37.8242**	**0**	**50**	**76**	**50**	**130**
1,4-Dichlorobenzene	**1**	**36.8102**	**0**	**50**	**74**	**50**	**130**
1,2-Dichlorobenzene	**1**	**39.293**	**0**	**50**	**79**	**50**	**130**
Isopropylbenzene	**1**	**40.7047**	**0**	**50**	**81**	**50**	**130**
Cyclohexanone	1	135.2346	0	250	54	50	130
Camphene	1	42.2018	0	50	84	50	130
1,2,3-Trichloropropane	**1**	**41.2923**	**0**	**50**	**83**	**50**	**130**
2-Chlorotoluene	1	41.5022	0	50	83	50	130
p-Ethyltoluene	1	37.3405	0	50	75	50	130
4-Chlorotoluene	1	39.557	0	50	79	50	130
n-Propylbenzene	**1**	**39.5838**	**0**	**50**	**79**	**50**	**130**
Bromobenzene	1	39.8882	0	50	80	50	130
1,3,5-Trimethylbenzene	**1**	**44.2606**	**0**	**50**	**89**	**50**	**130**
Butyl methacrylate	1	44.8847	0	50	90	50	130
t-Butylbenzene	**1**	**40.8828**	**0**	**50**	**82**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**39.8077**	**0**	**50**	**80**	**50**	**130**
sec-Butylbenzene	**1**	**41.2564**	**0**	**50**	**83**	**50**	**130**
4-Isopropyltoluene	**1**	**40.7458**	**0**	**50**	**81**	**50**	**130**
n-Butylbenzene	**1**	**38.6688**	**0**	**50**	**77**	**50**	**130**
p-Diethylbenzene	1	38.5083	0	50	77	50	130
1,2,4,5-Tetramethylbenzene	1	41.4972	0	50	83	50	130
1,2-Dibromo-3-Chloropropane	1	36.9535	0	50	74	50	130
Camphor	1	547.1421	0	500	109	50	130
Hexachlorobutadiene	1	36.7858	0	50	74	50	130
1,2,4-Trichlorobenzene	1	33.9584	0	50	68	50	130
1,2,3-Trichlorobenzene	1	34.7254	0	50	69	50	130
Naphthalene	1	35.4652	0	50	71	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Duplicate(If applicable):	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	53.7847	56.9035	5.6	30
Dichlorodifluoromethane	**1**	**65.4838**	**62.8668**	**4.1**	**30**
Chloromethane	**1**	**56.6472**	**56.1541**	**0.87**	**30**
Bromomethane	**1**	**51.6003**	**50.2121**	**2.7**	**30**
Vinyl Chloride	**1**	**56.8458**	**56.1453**	**1.2**	**40**
Chloroethane	**1**	**52.3136**	**51.908**	**0.78**	**30**
Trichlorofluoromethane	**1**	**52.2935**	**51.1041**	**2.3**	**30**
Ethyl ether	1	49.7009	46.2834	7.1	30
Furan	1	47.2611	46.2299	2.2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**56.3197**	**52.3408**	**7.3**	**30**
Methylene Chloride	**1**	**54.1757**	**52.7897**	**2.6**	**30**
Acrolein	**1**	**259.5406**	**248.918**	**4.2**	**30**
Acrylonitrile	**1**	**35.0489**	**34.3463**	**2**	**30**
Iodomethane	1	65.8217	64.5939	1.9	30
Acetone	**1**	**162.1024**	**157.3904**	**2.9**	**30**
Carbon Disulfide	**1**	**49.643**	**47.3944**	**4.6**	**30**
t-Butyl Alcohol	**1**	**127.633**	**116.3514**	**9.2**	**30**
n-Hexane	1	58.3019	54.7434	6.3	30
Di-isopropyl-ether	1	55.5257	54.2364	2.3	30
1,1-Dichloroethene	**1**	**53.6783**	**52.2403**	**2.7**	**40**
Methyl Acetate	1	50.8647	46.8893	8.1	30
Methyl-t-butyl ether	**1**	**57.9525**	**54.3286**	**6.5**	**30**
1,1-Dichloroethane	**1**	**52.194**	**49.0593**	**6.2**	**40**
trans-1,2-Dichloroethene	**1**	**49.8849**	**49.6338**	**0.5**	**30**
Ethyl-t-butyl ether	1	51.0834	49.3762	3.4	30
cis-1,2-Dichloroethene	**1**	**51.2312**	**49.1894**	**4.1**	**30**
Bromochloromethane	1	53.4537	50.2977	6.1	30
2,2-Dichloropropane	1	58.147	57.0601	1.9	30
Ethyl acetate	1	33.6297	36.7433	8.8	30
1,4-Dioxane	**1**	**1315.993**	**1274.773**	**3.2**	**30**
1,1-Dichloropropene	1	50.4388	48.5605	3.8	30
Chloroform	**1**	**51.9592**	**49.9443**	**4**	**40**
Cyclohexane	1	52.7667	50.8219	3.8	30
1,2-Dichloroethane	**1**	**52.776**	**50.2019**	**5**	**40**
2-Butanone	**1**	**34.6742**	**33.5103**	**3.4**	**40**
1,1,1-Trichloroethane	**1**	**52.2007**	**49.0659**	**6.2**	**30**
Carbon Tetrachloride	**1**	**53.6249**	**51.644**	**3.8**	**40**
Vinyl Acetate	1	39.662	37.6728	5.1	30
Bromodichloromethane	**1**	**52.8916**	**50.2178**	**5.2**	**30**
Methylcyclohexane	1	51.9779	50.4394	3	30
Dibromomethane	1	50.6971	47.858	5.8	30
1,2-Dichloropropane	**1**	**49.6665**	**48.2694**	**2.9**	**30**
Trichloroethene	**1**	**75.2922**	**73.1622**	**2.9**	**40**
Benzene	**1**	**50.3163**	**48.4836**	**3.7**	**40**
tert-Amyl methyl ether	1	56.2173	52.4065	7	30
Iso-propylacetate	1	42.6062	41.66	2.2	30
Methyl methacrylate	1	41.2272	39.8495	3.4	30
Dibromochloromethane	**1**	**48.1401**	**45.6697**	**5.3**	**30**
2-Chloroethylvinylether	**1**	**100.3461**	**95.5322**	**4.9**	**30**
cis-1,3-Dichloropropene	**1**	**46.6773**	**45.5903**	**2.4**	**30**
trans-1,3-Dichloropropene	**1**	**47.5296**	**44.067**	**7.6**	**30**
Ethyl methacrylate	1	46.9747	43.1348	8.5	30
1,1,2-Trichloroethane	**1**	**46.8811**	**44.5196**	**5.2**	**30**
1,2-Dibromoethane	1	44.9778	41.0321	9.2	30
1,3-Dichloropropane	**1**	**46.3511**	**42.8237**	**7.9**	**30**
4-Methyl-2-Pentanone	**1**	**36.7572**	**33.7094**	**8.7**	**30**
2-Hexanone	**1**	**34.1195**	**30.8066**	**10**	**30**
Tetrachloroethene	**1**	**52.4352**	**50.6666**	**3.4**	**40**
Toluene	**1**	**40.7723**	**41.0645**	**0.71**	**40**
1,1,1,2-Tetrachloroethane	1	45.2612	45.0505	0.47	30
Chlorobenzene	**1**	**40.3151**	**39.6054**	**1.8**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	45.4686	41.0364	10	30
n-Amyl acetate	1	44.7211	38.5687	15	30
Bromoform	**1**	**70.4273**	**65.2935**	**7.6**	**30**
Ethylbenzene	**1**	**42.7105**	**42.9713**	**0.61**	**30**
1,1,2,2-Tetrachloroethane	**1**	**44.1548**	**40.0258**	**9.8**	**30**
Styrene	**1**	**40.2637**	**37.9266**	**6**	**30**
m&p-Xylenes	**1**	**78.8436**	**78.4306**	**0.53**	**30**
o-Xylene	**1**	**39.4447**	**39.2014**	**0.62**	**30**
trans-1,4-Dichloro-2-butene	1	40.8268	36.9711	9.9	30
1,3-Dichlorobenzene	**1**	**37.8242**	**35.471**	**6.4**	**30**
1,4-Dichlorobenzene	**1**	**36.8102**	**33.9467**	**8.1**	**40**
1,2-Dichlorobenzene	**1**	**39.293**	**35.8729**	**9.1**	**40**
Isopropylbenzene	**1**	**40.7047**	**40.7636**	**0.14**	**30**
Cyclohexanone	1	135.2346	125.4322	7.5	30
Camphene	1	42.2018	41.718	1.2	30
1,2,3-Trichloropropane	**1**	**41.2923**	**36.3643**	**13**	**30**
2-Chlorotoluene	1	41.5022	40.2726	3	30
p-Ethyltoluene	1	37.3405	36.6825	1.8	30
4-Chlorotoluene	1	39.557	37.6433	5	30
n-Propylbenzene	**1**	**39.5838**	**38.3835**	**3.1**	**40**
Bromobenzene	1	39.8882	38.8818	2.6	30
1,3,5-Trimethylbenzene	**1**	**44.2606**	**43.2564**	**2.3**	**30**
Butyl methacrylate	1	44.8847	41.2717	8.4	30
t-Butylbenzene	**1**	**40.8828**	**40.0099**	**2.2**	**30**
1,2,4-Trimethylbenzene	**1**	**39.8077**	**38.5263**	**3.3**	**30**
sec-Butylbenzene	**1**	**41.2564**	**40.366**	**2.2**	**40**
4-Isopropyltoluene	**1**	**40.7458**	**39.5065**	**3.1**	**30**
n-Butylbenzene	**1**	**38.6688**	**36.1879**	**6.6**	**30**
p-Diethylbenzene	1	38.5083	36.9323	4.2	30
1,2,4,5-Tetramethylbenzene	1	41.4972	37.6781	9.6	30
1,2-Dibromo-3-Chloropropane	1	36.9535	31.3599	16	30
Camphor	1	547.1421	473.298	14	30
Hexachlorobutadiene	1	36.7858	35.1542	4.5	30
1,2,4-Trichlorobenzene	1	33.9584	28.2306	18	30
1,2,3-Trichlorobenzene	1	34.7254	30.0156	15	30
Naphthalene	1	35.4652	30.4916	15	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

0082707 0148

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2M141277.D	CAL @ 20 PPB	08/26/20 13:43	2	2M141275.D	CAL @ 5 PPB	08/26/20 13:04
3	2M141276.D	CAL @ 10 PPB	08/26/20 13:23	4	2M141279.D	CAL @ 50 PPB	08/26/20 14:22
5	2M141286.D	CAL @ 100 PPB	08/26/20 16:39	6	2M141283.D	CAL @ 250 PPB	08/26/20 15:40
7	2M141280.D	CAL @ 500 PPB	08/26/20 14:42	8	2M141274.D	CAL @ 1 PPB	08/26/20 12:44
9	2M141273.D	CAL @ 0.5 PPB	08/26/20 12:25				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.2125	0.1448	0.1446	0.1973	0.2170	0.2301	0.2223	0.1551	-----	0.191	1.69	1.00	1.00	19	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dichlorodifluorometha	1	0	Avg	0.1978	0.1812	0.1557	0.1929	0.2220	0.2106	0.2114	0.1711	-----	0.193	1.68	1.00	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloromethane	1	0	Avg	0.1028	0.0998	0.0765	0.1080	0.1226	0.1344	0.1332	0.1185	-----	0.112	1.85	1.00	1.00	17	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromomethane	1	0	Qua	0.1017	0.0962	0.0830	0.0996	0.1383	0.1519	0.1574	0.1036	-----	0.117	2.25	0.999	0.999	24	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Chloride	1	0	Avg	0.1927	0.1865	0.1683	0.1930	0.2101	0.1978	0.1878	0.1808	-----	0.190	1.95	0.999	1.00	6.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroethane	1	0	Avg	0.1357	0.1415	0.1129	0.1340	0.1477	0.1589	0.1609	0.1534	-----	0.143	2.34	1.00	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichlorofluoromethan	1	0	Avg	0.3715	0.3789	0.3275	0.3740	0.4024	0.4280	0.3895	0.3491	-----	0.378	2.57	0.998	0.999	8.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl ether	1	0	Avg	0.1260	0.1216	0.1100	0.1281	0.1324	0.1400	0.1317	0.1030	-----	0.124	2.80	0.999	1.00	9.9	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Furan	1	0	Avg	0.1862	0.1822	0.1554	0.1813	0.1839	0.2018	0.1708	0.1979	-----	0.182	2.84	0.993	0.999	8.0	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1503	0.1653	0.1454	0.1660	0.1755	0.1884	0.1871	0.1563	-----	0.167	3.00	1.00	1.00	9.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methylene Chloride	1	0	Avg	0.2174	0.2186	0.1878	0.2125	0.2170	0.2368	0.2328	0.2101	-----	0.217	3.42	1.00	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acrolein	1	0	Avg	0.0262	0.0247	0.0213	0.0262	0.0267	0.0285	0.0274	0.0254	-----	0.0259	2.92	1.00	1.00	8.3		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Acrylonitrile	1	0	Avg	0.0659	0.0643	0.0569	0.0636	0.0609	0.0671	0.0643	0.0691	-----	0.0640	3.62	0.999	1.00	5.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iodomethane	1	0	Qua	0.1670	0.1331	0.1185	0.1846	0.2746	-----	-----	0.1482	0.1764	0.172	3.15	0.947	0.998	30		20.00	5.00	10.00	50.00	100.0			1.00	0.50
Acetone	1	0	Avg	0.0468	0.0478	0.0415	0.0433	0.0418	0.0435	0.0403	0.0445	-----	0.0438	3.04	0.999	1.00	5.9	0.10 a	100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Carbon Disulfide	1	0	Avg	0.5620	0.5740	0.4811	0.5709	0.5639	0.6099	0.5937	0.5666	-----	0.565	3.21	1.00	1.00	6.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butyl Alcohol	1	0	Avg	0.0195	0.0179	0.0163	0.0178	0.0175	0.0193	0.0188	0.0216	-----	0.0186	3.48	1.00	1.00	8.6		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
n-Hexane	1	0	Avg	0.1323	0.1540	0.1349	0.1563	0.1547	0.1645	0.1614	0.1927	-----	0.156	3.87	1.00	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Di-isopropyl-ether	1	0	Avg	0.3887	0.3755	0.3324	0.3987	0.3857	0.4005	0.3799	0.3258	-----	0.373	4.03	0.999	1.00	7.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethene	1	0	Avg	0.2599	0.2680	0.2239	0.2621	0.2571	0.2741	0.2600	0.2437	-----	0.256	3.01	0.999	1.00	6.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl Acetate	1	0	Avg	0.1065	0.1084	0.0947	0.1009	0.0966	0.1034	0.0975	0.1035	-----	0.101	3.32	0.999	1.00	4.8	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl-t-butyl ether	1	0	Avg	0.5429	0.5116	0.4719	0.5496	0.5592	0.5993	0.5775	0.4726	0.4774	0.529	3.64	1.00	1.00	9.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.3317	0.3304	0.2783	0.3286	0.3149	0.3448	0.3314	0.3061	-----	0.321	4.00	0.999	1.00	6.5	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2192	0.2114	0.1928	0.2268	0.2421	0.2596	0.2573	0.1863	-----	0.224	3.65	1.00	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl-t-butyl ether	1	0	Avg	0.5196	0.5013	0.4405	0.5138	0.5066	0.5431	0.5144	0.4629	-----	0.500	4.29	0.999	1.00	6.6	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.3242	0.2990	0.2775	0.3260	0.3168	0.3387	0.3224	0.3246	-----	0.316	4.41	0.999	1.00	6.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromochloromethane	1	0	Avg	0.1386	0.1403	0.1232	0.1365	0.1245	0.1296	0.1203	0.1321	-----	0.131	4.57	0.999	1.00	5.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2,2-Dichloropropane	1	0	Avg	0.3178	0.3231	0.2688	0.3179	0.3033	0.3302	0.2967	0.3100	-----	0.309	4.42	0.997	0.999	6.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl acetate	1	0	Avg	0.1402	0.1433	0.1400	0.1531	0.1470	0.1550	0.1491	0.1239	-----	0.144	4.43	1.00	1.00	6.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dioxane	1	0	Avg	0.0031	0.0025	0.0025	0.0029	0.0029	0.0034	0.0031	0.0027	-----	0.00293	5.50	0.997	0.998	11		1000.	250.0	500.0	2500.	5000.	12500	25000	50.00	
1,1-Dichloropropene	1	0	Avg	0.2887	0.2838	0.2796	0.3003	0.2942	0.3146	0.3093	0.2533	-----	0.291	4.82	1.00	1.00	6.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroform	1	0	Avg	0.4004	0.3963	0.3742	0.4076	0.3965	0.4280	0.4108	0.3705	-----	0.398	4.60	1.00	1.00	4.7	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromofluoromethan	1	0	Avg	0.2846	0.2870	0.2875	0.2828	0.2872	0.2947	0.2866	0.2709	0.2842	0.285	4.70	-1	-1	2.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.2023	0.2149	0.2083	0.2365	0.2259	0.2445	0.2350	0.2237	-----	0.224	4.77	0.999	1.00	6.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1336	0.1389	0.1291	0.1322	0.1234	0.1263	0.1255	0.1298	0.1412	0.131	4.91	-1	-1	4.6		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.2905	0.2938	0.2894	0.2893	0.2575	0.2910	0.2923	0.2617	0.3843	0.294	4.95	0.999	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
2-Butanone	1	0	Avg	0.0764	0.0943	0.0682	0.0775	0.0761	0.0799	0.0734	0.0525	-----	0.0748	4.40	0.998	1.00	16	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1-Trichloroethane	1	0	Avg	0.3823	0.3558	0.3703	0.3776	0.3754	0.4086	0.3830	0.3782	-----	0.379	4.73	0.999	0.999	3.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Carbon Tetrachloride	1	0	Avg	0.2978	0.2992	0.3094	0.3108	0.3304	0.3685	0.3104	0.3085	-----	0.317	4.83	0.993	0.998	7.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Acetate	1	0	Avg	0.4916	0.4729	0.3993	0.4999	0.4947	0.5125	0.4883	0.4304	-----	0.474	4.02	0.999	1.00	8.2		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromodichloromethan	1	0	Avg	0.3246	0.3288	0.2685	0.3320	0.3249	0.3645	0.3248	0.2801	-----	0.319	5.57	0.997	0.999	9.6	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.02

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2M141277.D	CAL @ 20 PPB	08/26/20 13:43	2	2M141275.D	CAL @ 5 PPB	08/26/20 13:04
3	2M141276.D	CAL @ 10 PPB	08/26/20 13:23	4	2M141279.D	CAL @ 50 PPB	08/26/20 14:22
5	2M141286.D	CAL @ 100 PPB	08/26/20 16:39	6	2M141283.D	CAL @ 250 PPB	08/26/20 15:40
7	2M141280.D	CAL @ 500 PPB	08/26/20 14:42	8	2M141274.D	CAL @ 1 PPB	08/26/20 12:44
9	2M141273.D	CAL @ 0.5 PPB	08/26/20 12:25				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.2187	0.2468	0.2151	0.2629	0.2712	0.3134	0.2926	0.2399	-----	0.258	5.42	0.998	0.999	13	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromomethane	1	0	Qua	0.1687	0.1673	0.1428	0.1761	0.2259	0.2560	0.2225	0.1659	-----	0.191	5.50	0.994	0.998	20		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloropropane	1	0	Avg	0.1948	0.2043	0.1559	0.1923	0.1914	0.2152	0.2012	0.1706	-----	0.191	5.43	0.999	0.999	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichloroethene	1	0	Avg	0.2834	0.2601	0.2641	0.2687	0.3042	0.3687	0.3246	0.2920	-----	0.296	5.30	0.995	0.997	12	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Benzene	1	0	Avg	0.8424	0.8360	0.8845	0.8684	0.8068	0.9376	0.9359	0.7922	0.9313	0.871	4.95	0.999	0.999	6.4	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.5605	0.5277	0.5834	0.5688	0.5194	0.6201	0.5810	0.5471	-----	0.564	4.99	0.998	0.999	5.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iso-propylacetate	1	0	Avg	0.2759	0.2295	0.3941	0.3231	0.2887	0.2949	0.3036	0.3655	-----	0.309	4.95	1.00	1.00	17	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl methacrylate	1	0	Avg	0.1322	0.1134	0.1578	0.1579	0.1455	0.1426	0.1303	0.1744	-----	0.144	5.45	0.998	1.00	13	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromochloromethan	1	0	Avg	0.3577	0.2379	0.3393	0.3536	0.3707	0.3881	0.3730	0.3056	-----	0.341	6.42	1.00	1.00	14	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chloroethylvinylethe	1	0	Avg	0.0512	0.0398	0.0580	0.0605	0.0575	0.0619	0.0570	0.0376	-----	0.0530	5.71	0.998	1.00	18		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.3527	0.2960	0.4064	0.4147	0.4014	0.4351	0.3903	0.4306	-----	0.391	5.81	0.997	0.999	12	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,3-Dichloroprop	1	0	Avg	0.3579	0.2711	0.4143	0.4125	0.3994	0.4047	0.3885	0.4705	-----	0.390	6.09	1.00	1.00	15	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl methacrylate	1	0	Avg	0.1361	0.1089	0.1540	0.1577	0.1595	0.1476	0.1391	0.1546	-----	0.145	6.10	0.999	1.00	12	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2293	0.1894	0.2498	0.2724	0.2698	0.2762	0.2675	0.2686	-----	0.253	6.20	1.00	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromoethane	1	0	Avg	0.3092	0.2323	0.2928	0.3020	0.2994	0.3120	0.3003	0.2849	-----	0.292	6.49	1.00	1.00	8.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.3796	0.3105	0.4193	0.4260	0.4104	0.4215	0.4082	0.4644	-----	0.405	6.29	1.00	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.1606	0.1236	0.1772	0.1766	0.1665	0.1685	0.1602	0.1913	-----	0.166	5.87	0.999	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Hexanone	1	0	Avg	0.1113	0.0891	0.1263	0.1256	0.1213	0.1197	0.1138	0.1293	-----	0.117	6.30	0.999	1.00	11	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Tetrachloroethene	1	0	Qua	0.2177	0.1656	0.2412	0.2432	0.3053	0.3275	0.3233	0.2403	-----	0.258	6.29	0.999	0.999	22	0.20 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Toluene-d8	1	0	Avg	1.0751	0.9137	1.2736	1.2436	1.1911	1.1883	1.1358	1.2990	1.3644	1.19	5.95	-1	-1	11		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.5967	0.4981	0.7176	0.7205	0.7038	0.7273	0.7058	0.7710	-----	0.680	5.99	1.00	1.00	13	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.3094	0.2903	0.2842	0.2996	0.3309	0.3443	0.3561	0.2768	-----	0.312	6.78	1.00	1.00	9.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chlorobenzene	1	0	Avg	0.8311	0.7946	0.7868	0.8425	0.8607	0.8767	0.8502	0.8190	-----	0.833	6.75	1.00	1.00	3.8	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butyl acrylate	1	0	Avg	0.7974	0.6270	0.8213	0.5648	0.7172	0.7405	0.8119	0.5663	-----	0.706	6.99	0.998	1.00	15	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Amyl acetate	1	0	Avg	0.5895	0.4172	0.6076	0.4213	0.5448	0.5994	0.5854	0.4105	-----	0.522	7.11	0.999	0.999	17	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromoform	1	0	Avg	0.5545	0.4710	0.4558	0.4950	0.5080	0.5252	0.5856	0.3268	-----	0.490	7.20	0.997	1.00	16	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethylbenzene	1	0	Avg	0.5452	0.5659	0.6853	0.4987	0.6530	0.7086	0.5249	0.4932	-----	0.584	6.79	0.975	0.995	15	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.7054	0.6019	0.7494	0.6271	0.5964	0.5983	0.4453	0.5413	-----	0.608	7.42	0.976	0.999	15	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromofluorobenzene	1	0	Avg	0.9432	0.8652	0.7887	0.8893	0.8283	0.7873	0.8447	0.5321	0.8310	0.812	7.37	-1	-1	14		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.7587	1.3490	1.7222	1.3103	1.6360	1.8785	1.8298	1.1672	-----	1.58	7.07	0.999	0.999	17	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
m&p-Xylenes	1	0	Avg	1.0364	0.9208	1.0358	0.7264	0.9270	1.0295	0.8325	0.6540	1.1709	0.926	6.85	0.989	0.997	18	0.10	40.00	10.00	20.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	1.0219	0.8053	1.0136	0.7481	0.9302	1.0662	1.1207	0.7243	-----	0.929	7.07	0.998	0.999	16	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.1872	0.1733	0.2249	0.1835	0.1831	0.1717	0.1446	0.1701	-----	0.180	7.44	0.992	1.00	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichlorobenzene	1	0	Avg	1.1204	1.1429	1.2262	1.2517	1.2475	1.3101	1.2828	1.1829	-----	1.22	7.99	1.00	1.00	5.5	0.60	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dichlorobenzene	1	0	Avg	1.2413	1.2578	1.2155	1.2280	1.2553	1.2971	1.1590	1.1755	-----	1.23	8.04	0.997	1.00	3.7	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichlorobenzene	1	0	Avg	1.1408	1.1626	1.1692	1.0252	1.1676	1.1724	1.1515	1.2215	-----	1.15	8.26	1.00	1.00	4.9	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Isopropylbenzene	1	0	Avg	2.3737	2.1721	2.4472	1.9705	2.2249	2.2283	2.0740	1.6707	-----	2.15	7.26	0.999	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Avg	0.0175	0.0165	0.0194	0.0132	0.0123	0.0122	0.0138	0.0178	-----	0.0154	7.34	0.996	1.00	18		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Camphene	1	0	Avg	0.5070	0.5374	0.6652	0.5507	0.5535	0.5740	0.4447	0.4499	-----	0.535	7.43	0.983	0.998	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichloropropane	1	0	Avg	0.7929	0.6898	0.8669	0.7249	0.7199	0.7104	0.5643	0.5940	-----	0.708	7.46	0.986	0.999	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chlorotoluene	1	0	Avg	1.3063	1.2836	1.5005	1.2855	1.3109	1.3467	1.3084	0.8825	-----	1.28	7.56	1.00	1.00	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.02

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0082707 0150

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2M141277.D	CAL @ 20 PPB	08/26/20 13:43	2	2M141275.D	CAL @ 5 PPB	08/26/20 13:04
3	2M141276.D	CAL @ 10 PPB	08/26/20 13:23	4	2M141279.D	CAL @ 50 PPB	08/26/20 14:22
5	2M141286.D	CAL @ 100 PPB	08/26/20 16:39	6	2M141283.D	CAL @ 250 PPB	08/26/20 15:40
7	2M141280.D	CAL @ 500 PPB	08/26/20 14:42	8	2M141274.D	CAL @ 1 PPB	08/26/20 12:44
9	2M141273.D	CAL @ 0.5 PPB	08/26/20 12:25				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.2154	2.0523	2.3719	2.1944	2.1797	2.1946	2.1945	1.6087	-----	2.13	7.55	1.00	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Chlorotoluene	1	0	Avg	1.3882	1.2666	1.4595	1.3337	1.3550	1.7327	1.2568	1.0248	-----	1.35	7.62	0.972	0.992	15		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Propylbenzene	1	0	Avg	2.5298	2.3822	2.8563	2.5247	2.4324	2.3818	1.9532	1.9150	-----	2.37	7.49	0.990	1.00	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.2920	1.1588	1.4096	1.2188	1.2179	1.1895	0.9590	1.0896	-----	1.19	7.46	0.988	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3,5-Trimethylbenzen	1	0	Avg	1.7914	1.6626	1.9561	1.8148	1.7954	2.1252	1.5869	1.3407	-----	1.76	7.57	0.978	0.995	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	Avg	0.4425	0.3791	0.4596	0.4321	0.4488	0.5509	0.4456	0.2979	-----	0.432	7.58	0.988	0.996	17	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butylbenzene	1	0	Avg	1.7073	1.7517	1.8747	1.7898	1.7911	2.0911	2.0754	1.5243	-----	1.83	7.78	0.999	0.999	10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Avg	1.8198	1.7533	2.0491	1.8767	1.8634	2.3155	1.9426	1.6217	-----	1.91	7.80	0.992	0.996	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	1.8792	2.0035	2.2666	2.0843	2.0804	2.1706	2.0890	1.6869	-----	2.03	7.90	1.00	1.00	8.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	1.6176	1.7553	1.9208	1.8338	1.8596	1.9328	1.9323	1.7118	-----	1.82	7.96	1.00	1.00	6.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	1.5353	1.6377	1.9381	1.5898	1.7147	1.6770	1.8470	1.5925	-----	1.69	8.20	0.998	1.00	8.2		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	0.9053	0.9451	1.0179	0.9377	1.0049	1.0111	1.1375	0.9127	-----	0.984	8.19	0.997	1.00	7.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	1.3487	1.3618	1.4554	1.2647	1.4321	1.5207	1.0874	1.1647	-----	1.33	8.65	0.969	0.996	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1507	0.1717	0.1620	0.1462	0.1691	0.1878	0.1346	0.1602	-----	0.160	8.71	0.970	0.995	10	0.05	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Camphor	1	0	Qua	0.0514	0.0549	0.0672	0.0619	0.0608	0.0741	0.0634	0.0510	0.1017	0.0652	9.15	0.994	0.997	24		200.0	50.00	100.0	500.0	1000.	2500.	5000.	10.00	5.00
Hexachlorobutadiene	1	0	Qua	0.1353	0.2328	0.1933	0.2630	0.2494	0.2639	0.2581	0.2861	-----	0.235	9.28	0.999	1.00	21		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.3889	0.5811	0.5234	0.6359	0.6114	0.6780	0.6583	0.5000	-----	0.572	9.20	0.999	0.999	17	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.3474	0.4993	0.6296	0.4917	0.5282	0.5701	0.5389	0.5435	-----	0.519	9.50	0.999	0.999	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Naphthalene	1	0	Avg	1.2516	1.4730	1.6484	1.6177	1.6521	1.7719	1.7238	1.3493	-----	1.56	9.36	1.00	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags	*Note:* Avg Rsd: 11.02
a - failed the min rf criteria	*Corr 1 = Correlation Coefficient for linear Eq.*
c - failed the minimum correlation coeff criteria(if applicable)	*Corr 2 = Correlation Coefficient for quad Eq.*
	Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M141350.D **Instrument:** GCMS 2

Cont Calibration Date/Time 8/28/2020 7:30:00 A Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.10	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.69	24.30	20	20	0.1	0.191	0.232	21.52	C1
Dichlorodifluoromethane	1	0		1.68	24.73	20	20	0.1	0.193	0.238	23.65	C1
Chloromethane	1	0		1.85	18.15	20	20	0.1	0.112	0.102	9.25	
Bromomethane	1	0		2.25	13.88	20	20	0.1	0.117	0.096	30.58	C1
Vinyl Chloride	1	0		1.95	25.64	20	20	0.1	0.190	0.243	28.22	C1
Chloroethane	1	0		2.34	22.93	20	20	0.1	0.143	0.164	14.65	
Trichlorofluoromethane	1	0		2.56	22.66	20	20	0.1	0.378	0.428	13.29	
Ethyl ether	1	0		2.80	21.81	20	20	0.5	0.124	0.135	9.07	
Furan	1	0		2.84	21.95	20	20	0.5	0.182	0.200	9.73	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.00	21.75	20	20	0.1	0.167	0.181	8.77	
Methylene Chloride	1	0		3.41	20.62	20	20	0.1	0.217	0.223	3.08	
Acrolein	1	0		2.92	103.32	100	20		0.026	0.027	3.32	
Acrylonitrile	1	0		3.62	19.78	20	20		0.064	0.063	1.09	
Iodomethane	1	0		3.15	21.76	20	20		0.172	0.165	8.79	
Acetone	1	0		3.04	105.20	100	20	0.1	0.044	0.046	5.20	
Carbon Disulfide	1	0		3.21	21.23	20	20	0.1	0.565	0.600	6.13	
t-Butyl Alcohol	1	0		3.48	95.39	100	20		0.019	0.018	4.61	
n-Hexane	1	0		3.87	21.68	20	20		0.156	0.170	8.41	
Di-isopropyl-ether	1	0		4.03	20.82	20	20		0.373	0.389	4.08	
1,1-Dichloroethene	1	0		3.01	20.70	20	20	0.1	0.256	0.265	3.50	
Methyl Acetate	1	0		3.31	20.35	20	20	0.1	0.101	0.103	1.74	
Methyl-t-butyl ether	1	0		3.64	19.95	20	20	0.1	0.529	0.528	0.27	
1,1-Dichloroethane	1	0		4.00	20.24	20	20	0.2	0.321	0.325	1.19	
trans-1,2-Dichloroethene	1	0		3.65	20.46	20	20	0.1	0.224	0.230	2.28	
Ethyl-t-butyl ether	1	0		4.29	19.87	20	20	0.5	0.500	0.497	0.67	
cis-1,2-Dichloroethene	1	0		4.41	20.00	20	20	0.1	0.316	0.316	0.00	
Bromochloromethane	1	0		4.57	20.13	20	20		0.131	0.132	0.67	
2,2-Dichloropropane	1	0		4.42	21.54	20	20		0.309	0.332	7.68	
Ethyl acetate	1	0		4.43	18.55	20	20		0.144	0.134	7.24	
1,4-Dioxane	1	0		5.49	1066.71	1000	20		0.003	0.003	6.67	
1,1-Dichloropropene	1	0		4.82	20.15	20	20		0.291	0.293	0.73	
Chloroform	1	0		4.60	20.33	20	20	0.2	0.398	0.405	1.65	
Dibromofluoromethane	1	0	S	4.70	30.45	30	**		0.285	0.289	1.49	
Cyclohexane	1	0		4.77	20.93	20	20	0.1	0.224	0.234	4.67	
1,2-Dichloroethane-d4	1	0	S	4.91	29.40	30	**		0.131	0.129	2.00	
1,2-Dichloroethane	1	0		4.95	18.74	20	20	0.1	0.294	0.276	6.29	
2-Butanone	1	0		4.42	19.84	20	20	0.1	0.075	0.074	0.79	
1,1,1-Trichloroethane	1	0		4.73	19.69	20	20	0.1	0.379	0.373	1.55	
Carbon Tetrachloride	1	0		4.83	19.51	20	20	0.1	0.317	0.309	2.46	
Vinyl Acetate	1	0		4.02	21.15	20	20		0.474	0.501	5.75	
Bromodichloromethane	1	0		5.57	19.70	20	20	0.2	0.319	0.314	1.52	
Methylcyclohexane	1	0		5.42	21.44	20	20	0.1	0.258	0.276	7.18	
Dibromomethane	1	0		5.49	16.68	20	20		0.191	0.216	16.61	
1,2-Dichloropropane	1	0		5.43	20.08	20	20	0.1	0.191	0.192	0.41	
Trichloroethene	1	0		5.30	19.92	20	20	0.2	0.296	0.295	0.42	
Benzene	1	0		4.95	19.24	20	20	0.5	0.871	0.837	3.81	
tert-Amyl methyl ether	1	0		4.99	19.18	20	20		0.564	0.540	4.11	
Chlorobenzene-d5	1	0	I	6.73	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.95	20.09	20	20	0.5	0.309	0.311	0.43	
Methyl methacrylate	1	0		5.45	20.78	20	20	0.5	0.144	0.150	3.89	
Dibromochloromethane	1	0		6.42	20.54	20	20	0.1	0.341	0.350	2.71	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M141350.D **Instrument:** GCMS 2

Cont Calibration Date/Time 8/28/2020 7:30:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.71	18.68	20	20		0.053	0.049	6.62	
cis-1,3-Dichloropropene	1	0		5.81	20.54	20	20	0.2	0.391	0.402	2.71	
trans-1,3-Dichloropropene	1	0		6.09	20.08	20	20	0.1	0.390	0.392	0.41	
Ethyl methacrylate	1	0		6.10	20.84	20	20	0.5	0.145	0.151	4.18	
1,1,2-Trichloroethane	1	0		6.20	20.85	20	20	0.1	0.253	0.264	4.23	
1,2-Dibromoethane	1	0		6.49	19.81	20	20	0.1	0.292	0.289	0.94	
1,3-Dichloropropane	1	0		6.29	20.13	20	20		0.405	0.408	0.66	
4-Methyl-2-Pentanone	1	0		5.87	20.82	20	20	0.1	0.166	0.172	4.10	
2-Hexanone	1	0		6.30	21.38	20	20	0.1	0.117	0.125	6.90	
Tetrachloroethene	1	0		6.29	19.14	20	20	0.2	0.258	0.300	4.30	
Toluene-d8	1	0	S	5.95	30.33	30	**		1.187	1.200	1.11	
Toluene	1	0		5.99	20.04	20	20	0.4	0.680	0.682	0.21	
1,1,1,2-Tetrachloroethane	1	0		6.78	19.71	20	20		0.312	0.307	1.46	
Chlorobenzene	1	0		6.75	19.80	20	20	0.5	0.833	0.824	1.00	
1,4-Dichlorobenzene-d4	1	0	I	8.02	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.99	20.06	20	20	0.5	0.706	0.708	0.32	
n-Amyl acetate	1	0		7.11	20.02	20	20	0.5	0.522	0.522	0.08	
Bromoform	1	0		7.20	20.10	20	20	0.1	0.490	0.493	0.48	
Ethylbenzene	1	0		6.79	21.81	20	20	0.1	0.584	0.637	9.04	
1,1,2,2-Tetrachloroethane	1	0		7.42	20.24	20	20	0.1	0.608	0.615	1.20	
Bromofluorobenzene	1	0	S	7.37	30.97	30	**		0.812	0.839	3.25	
Styrene	1	0		7.07	20.01	20	20	0.3	1.582	1.582	0.04	
m&p-Xylenes	1	0		6.85	40.61	40	20	0.1	0.926	0.940	1.53	
o-Xylene	1	0		7.07	19.41	20	20	0.3	0.929	0.901	2.95	
trans-1,4-Dichloro-2-butene	1	0		7.45	20.65	20	20		0.180	0.186	3.24	
1,3-Dichlorobenzene	1	0		7.99	19.55	20	20	0.6	1.221	1.193	2.26	
1,4-Dichlorobenzene	1	0		8.03	19.28	20	20	0.5	1.229	1.184	3.62	
1,2-Dichlorobenzene	1	0		8.26	19.45	20	20	0.4	1.151	1.120	2.75	
Isopropylbenzene	1	0		7.26	20.82	20	20	0.1	2.145	2.233	4.10	
Cyclohexanone	1	0		7.34	99.31	100	20		0.015	0.015	0.69	
Camphene	1	0		7.43	21.55	20	20		0.535	0.577	7.74	
1,2,3-Trichloropropane	1	0		7.46	19.95	20	20		0.708	0.706	0.24	
2-Chlorotoluene	1	0		7.56	19.97	20	20		1.278	1.276	0.13	
p-Ethyltoluene	1	0		7.55	20.06	20	20		2.126	2.133	0.31	
4-Chlorotoluene	1	0		7.62	18.66	20	20		1.352	1.262	6.68	
n-Propylbenzene	1	0		7.49	20.74	20	20		2.372	2.460	3.71	
Bromobenzene	1	0		7.46	20.29	20	20		1.192	1.209	1.47	
1,3,5-Trimethylbenzene	1	0		7.57	19.88	20	20		1.759	1.749	0.60	
Butyl methacrylate	1	0		7.58	19.25	20	20	0.5	0.432	0.416	3.76	
t-Butylbenzene	1	0		7.78	19.03	20	20		1.826	1.737	4.86	
1,2,4-Trimethylbenzene	1	0		7.79	19.12	20	20		1.905	1.821	4.41	
sec-Butylbenzene	1	0		7.90	20.51	20	20		2.033	2.084	2.54	
4-Isopropyltoluene	1	0		7.96	19.91	20	20		1.821	1.812	0.46	
n-Butylbenzene	1	0		8.20	20.01	20	20		1.692	1.692	0.05	
p-Diethylbenzene	1	0		8.19	19.37	20	20		0.984	0.953	3.16	
1,2,4,5-Tetramethylbenzene	1	0		8.65	20.78	20	20		1.329	1.381	3.88	
1,2-Dibromo-3-Chloropropane	1	0		8.71	20.50	20	20	0.05	0.160	0.164	2.52	
Camphor	1	0		9.14	157.77	200	20		0.065	0.059	21.12	C1
Hexachlorobutadiene	1	0		9.28	20.24	20	20		0.235	0.264	1.19	
1,2,4-Trichlorobenzene	1	0		9.20	20.97	20	20	0.2	0.572	0.600	4.84	
1,2,3-Trichlorobenzene	1	0		9.50	19.95	20	20		0.519	0.517	0.25	
Naphthalene	1	0		9.36	19.83	20	20		1.561	1.548	0.85	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M131882.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/31/2020 7:03:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.13	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.64	57.14	50	20	0.1	0.315	0.361	14.28	
Dichlorodifluoromethane	1	0		1.64	65.84	50	20	0.1	0.205	0.271	31.68	C1
Chloromethane	1	0		1.81	58.20	50	20	0.1	0.286	0.296	16.39	
Bromomethane	1	0		2.23	58.75	50	20	0.1	0.189	0.222	17.49	
Vinyl Chloride	1	0		1.92	57.71	50	20	0.1	0.295	0.340	15.42	
Chloroethane	1	0		2.32	53.03	50	20	0.1	0.201	0.213	6.07	
Trichlorofluoromethane	1	0		2.56	52.36	50	20	0.1	0.485	0.508	4.72	
Ethyl ether	1	0		2.81	44.71	50	20	0.5	0.179	0.160	10.58	
Furan	1	0		2.84	51.52	50	20	0.5	0.402	0.414	3.04	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.01	61.87	50	20	0.1	0.185	0.228	23.74	C1
Methylene Chloride	1	0		3.43	50.65	50	20	0.1	0.271	0.275	1.29	
Acrolein	1	0		2.92	300.15	250	20		0.035	0.042	20.06	
Acrylonitrile	1	0		3.64	49.35	50	20		0.106	0.105	1.29	
Iodomethane	1	0		3.16	71.52	50	20		0.200	0.335	43.05	C1
Acetone	1	0		3.05	247.69	250	20	0.1	0.102	0.101	0.92	
Carbon Disulfide	1	0		3.23	57.08	50	20	0.1	0.677	0.773	14.16	
t-Butyl Alcohol	1	0		3.50	189.41	250	20		0.049	0.037	24.23	C1
n-Hexane	1	0		3.91	65.90	50	20		0.264	0.348	31.81	C1
Di-isopropyl-ether	1	0		4.06	50.38	50	20		0.628	0.633	0.76	
1,1-Dichloroethene	1	0		3.02	61.57	50	20	0.1	0.340	0.419	23.14	C1
Methyl Acetate	1	0		3.34	48.18	50	20	0.1	0.210	0.202	3.64	
Methyl-t-butyl ether	1	0		3.67	53.01	50	20	0.1	0.538	0.570	6.03	
1,1-Dichloroethane	1	0		4.03	55.82	50	20	0.2	0.440	0.491	11.64	
trans-1,2-Dichloroethene	1	0		3.68	57.41	50	20	0.1	0.256	0.294	14.82	
Ethyl-t-butyl ether	1	0		4.32	43.55	50	20	0.5	0.688	0.599	12.91	
cis-1,2-Dichloroethene	1	0		4.44	55.26	50	20	0.1	0.445	0.492	10.52	
Bromochloromethane	1	0		4.59	55.33	50	20		0.205	0.227	10.66	
2,2-Dichloropropane	1	0		4.45	61.95	50	20		0.359	0.444	23.91	C1
Ethyl acetate	1	0		4.46	44.61	50	20		0.315	0.281	10.79	
1,4-Dioxane	1	0		5.52	1954.73	2500	20		0.006	0.004	21.81	C1
1,1-Dichloropropene	1	0		4.85	56.34	50	20		0.359	0.405	12.67	
Chloroform	1	0		4.64	54.29	50	20	0.2	0.465	0.504	8.59	
Dibromofluoromethane	1	0	S	4.73	32.05	75	**		0.267	0.285	6.84	
Cyclohexane	1	0		4.80	60.08	50	20	0.1	0.368	0.442	20.17	
1,2-Dichloroethane-d4	1	0	S	4.93	32.12	75	**		0.144	0.154	7.07	
1,2-Dichloroethane	1	0		4.98	53.73	50	20	0.1	0.347	0.373	7.47	
2-Butanone	1	0		4.43	47.50	50	20	0.1	0.149	0.141	5.01	
1,1,1-Trichloroethane	1	0		4.76	57.80	50	20	0.1	0.416	0.481	15.60	
Carbon Tetrachloride	1	0		4.86	59.99	50	20	0.1	0.355	0.426	19.97	
Vinyl Acetate	1	0		4.05	51.53	50	20		0.750	0.773	3.07	
Bromodichloromethane	1	0		5.59	52.93	50	20	0.2	0.326	0.345	5.86	
Methylcyclohexane	1	0		5.45	57.65	50	20	0.1	0.377	0.435	15.31	
Dibromomethane	1	0		5.53	53.51	50	20		0.170	0.181	7.02	
1,2-Dichloropropane	1	0		5.46	50.63	50	20	0.1	0.259	0.262	1.26	
Trichloroethene	1	0		5.33	52.21	50	20	0.2	0.293	0.306	4.41	
Benzene	1	0		4.98	52.99	50	20	0.5	1.013	1.073	5.99	
tert-Amyl methyl ether	1	0		5.02	46.61	50	20		0.592	0.552	6.78	
Chlorobenzene-d5	1	0	I	6.76	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.98	43.04	50	20	0.5	0.522	0.450	13.92	
Methyl methacrylate	1	0		5.48	45.69	50	20	0.5	0.255	0.233	8.62	
Dibromochloromethane	1	0		6.45	48.24	50	20	0.1	0.282	0.272	3.53	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M131882.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/31/2020 7:03:00 A Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.73	41.39	50	20		0.079	0.066	17.21	
cis-1,3-Dichloropropene	1	0		5.83	46.02	50	20	0.2	0.447	0.412	7.96	
trans-1,3-Dichloropropene	1	0		6.12	48.35	50	20	0.1	0.391	0.378	3.31	
Ethyl methacrylate	1	0		6.14	45.30	50	20	0.5	0.253	0.230	9.40	
1,1,2-Trichloroethane	1	0		6.22	45.12	50	20	0.1	0.258	0.232	9.77	
1,2-Dibromoethane	1	0		6.53	46.83	50	20	0.1	0.267	0.250	6.33	
1,3-Dichloropropane	1	0		6.32	46.13	50	20		0.456	0.420	7.74	
4-Methyl-2-Pentanone	1	0		5.90	40.12	50	20	0.1	0.350	0.281	19.77	
2-Hexanone	1	0		6.33	40.16	50	20	0.1	0.276	0.221	19.67	
Tetrachloroethene	1	0		6.32	50.18	50	20	0.2	0.278	0.279	0.37	
Toluene-d8	1	0	S	5.98	28.47	75	**		1.238	1.175	5.10	
Toluene	1	0		6.02	45.23	50	20	0.4	0.811	0.734	9.54	
1,1,1,2-Tetrachloroethane	1	0		6.81	45.46	50	20		0.290	0.263	9.08	
Chlorobenzene	1	0		6.78	45.00	50	20	0.5	0.886	0.798	10.00	
1,4-Dichlorobenzene-d4	1	0	I	8.05	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.02	42.48	50	20	0.5	0.857	0.728	15.05	
n-Amyl acetate	1	0		7.13	42.72	50	20	0.5	0.810	0.692	14.55	
Bromoform	1	0		7.23	67.90	50	20	0.1	0.342	0.296	35.80	C1
Ethylbenzene	1	0		6.82	48.01	50	20	0.1	0.663	0.636	3.98	
1,1,2,2-Tetrachloroethane	1	0		7.45	44.28	50	20	0.1	0.639	0.566	11.44	
Bromofluorobenzene	1	0	S	7.39	28.30	75	**		0.790	0.745	5.67	
Styrene	1	0		7.10	43.62	50	20	0.3	1.639	1.430	12.75	
m&p-Xylenes	1	0		6.88	90.27	100	20	0.1	0.994	0.897	9.73	
o-Xylene	1	0		7.10	43.40	50	20	0.3	0.980	0.851	13.21	
trans-1,4-Dichloro-2-butene	1	0		7.47	47.75	50	20		0.311	0.297	4.51	
1,3-Dichlorobenzene	1	0		8.02	45.16	50	20	0.6	1.227	1.108	9.67	
1,4-Dichlorobenzene	1	0		8.07	44.18	50	20	0.5	1.265	1.118	11.65	
1,2-Dichlorobenzene	1	0		8.29	44.71	50	20	0.4	1.146	1.024	10.57	
Isopropylbenzene	1	0		7.29	46.66	50	20	0.1	2.547	2.377	6.68	
Cyclohexanone	1	0		7.37	170.58	250	20		0.035	0.024	31.77	C1
Camphene	1	0		7.47	48.28	50	20		0.927	0.895	3.45	
1,2,3-Trichloropropane	1	0		7.48	44.04	50	20		0.824	0.726	11.92	
2-Chlorotoluene	1	0		7.59	47.11	50	20		1.527	1.439	5.77	
p-Ethyltoluene	1	0		7.58	44.71	50	20		2.614	2.338	10.57	
4-Chlorotoluene	1	0		7.65	50.30	50	20		1.497	1.506	0.59	
n-Propylbenzene	1	0		7.52	47.94	50	20		2.988	2.865	4.12	
Bromobenzene	1	0		7.49	44.92	50	20		1.567	1.407	10.17	
1,3,5-Trimethylbenzene	1	0		7.60	49.79	50	20		1.830	1.823	0.41	
Butyl methacrylate	1	0		7.61	42.99	50	20	0.5	0.714	0.606	14.02	
t-Butylbenzene	1	0		7.81	46.79	50	20		2.082	1.949	6.42	
1,2,4-Trimethylbenzene	1	0		7.83	45.36	50	20		2.066	1.874	9.28	
sec-Butylbenzene	1	0		7.93	49.91	50	20		2.650	2.645	0.18	
4-Isopropyltoluene	1	0		8.00	49.40	50	20		2.223	2.196	1.20	
n-Butylbenzene	1	0		8.24	50.56	50	20		2.534	2.563	1.13	
p-Diethylbenzene	1	0		8.22	46.09	50	20		1.318	1.215	7.82	
1,2,4,5-Tetramethylbenzene	1	0		8.68	45.70	50	20		1.864	1.703	8.59	
1,2-Dibromo-3-Chloropropane	1	0		8.74	42.81	50	20	0.05	0.169	0.145	14.37	
Camphor	1	0		9.18	624.34	500	20		0.111	0.075	24.87	C1
Hexachlorobutadiene	1	0		9.32	45.35	50	20		0.461	0.418	9.29	
1,2,4-Trichlorobenzene	1	0		9.24	43.63	50	20	0.2	0.831	0.725	12.75	
1,2,3-Trichlorobenzene	1	0		9.54	42.15	50	20		0.756	0.637	15.70	
Naphthalene	1	0		9.40	39.50	50	20		2.080	1.643	20.99	C1

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0082707

Sample ID: HRPB-10
Lab#: AD18934-001
Matrix: Soil/Terracore

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		76	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.1	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.6	21	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.32	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.11	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		160	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		6.8	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	13	110	J-
Chromium	1	mg/kg	6.6	21	J
Copper	1	mg/kg	6.6	25	
Lead	1	mg/kg	6.6	21	J
Manganese	1	mg/kg	13	840	J
Nickel	1	mg/kg	6.6	33	
Zinc	1	mg/kg	13	150	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.26	13	
Beryllium	1	mg/kg	0.26	0.88	
Selenium	1	mg/kg	2.6	ND	
Silver	1	mg/kg	0.26	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result

Sample ID: HRPB-10
Lab#: AD18934-001
Matrix: Soil/Terracore

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Arsenic	1	mg/l	0.10	ND	
Barium	**1**	**mg/l**	**0.25**	**0.79**	J
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	1	mg/l	0.10	ND	
Silver	1	mg/l	0.050	ND	

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	0.847	mg/kg	0.0022	ND	
1,1,2,2-Tetrachloroethane	0.847	mg/kg	0.0022	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.847	mg/kg	0.0022	ND	
1,1,2-Trichloroethane	0.847	mg/kg	0.0022	ND	
1,1-Dichloroethane	0.847	mg/kg	0.0022	ND	
1,1-Dichloroethene	0.847	mg/kg	0.0022	ND	
1,2,3-Trichloropropane	0.847	mg/kg	0.0022	ND	
1,2,4-Trimethylbenzene	0.847	mg/kg	0.0011	ND	
1,2-Dichlorobenzene	0.847	mg/kg	0.0022	ND	
1,2-Dichloroethane	0.847	mg/kg	0.0022	ND	
1,2-Dichloropropane	0.847	mg/kg	0.0022	ND	
1,3,5-Trimethylbenzene	0.847	mg/kg	0.0011	ND	
1,3-Dichlorobenzene	0.847	mg/kg	0.0022	ND	
1,3-Dichloropropane	0.847	mg/kg	0.0022	ND	
1,4-Dichlorobenzene	0.847	mg/kg	0.0022	ND	
1,4-Dioxane	0.847	mg/kg	0.11	ND	
2-Butanone	**0.847**	**mg/kg**	**0.0022**	**0.050**	
2-Chloroethylvinylether	0.847	mg/kg	0.0022	ND	
2-Hexanone	0.847	mg/kg	0.0022	ND	
4-Isopropyltoluene	0.847	mg/kg	0.0011	ND	
4-Methyl-2-pentanone	0.847	mg/kg	0.0022	ND	
Acetone	**0.847**	**mg/kg**	**0.011**	**0.19**	
Acrolein	0.847	mg/kg	0.011	ND	
Acrylonitrile	0.847	mg/kg	0.0022	ND	
Benzene	0.847	mg/kg	0.0011	ND	
Bromodichloromethane	0.847	mg/kg	0.0022	ND	
Bromoform	0.847	mg/kg	0.0022	ND	
Bromomethane	0.847	mg/kg	0.0022	ND	
Carbon disulfide	0.847	mg/kg	0.0022	ND	
Carbon tetrachloride	0.847	mg/kg	0.0022	ND	
Chlorobenzene	0.847	mg/kg	0.0022	ND	
Chloroethane	0.847	mg/kg	0.0022	ND	
Chloroform	0.847	mg/kg	0.0022	ND	
Chloromethane	0.847	mg/kg	0.0022	ND	
cis-1,2-Dichloroethene	0.847	mg/kg	0.0022	ND	
cis-1,3-Dichloropropene	0.847	mg/kg	0.0022	ND	
Dibromochloromethane	0.847	mg/kg	0.0022	ND	
Dichlorodifluoromethane	0.847	mg/kg	0.0022	ND	
Ethylbenzene	0.847	mg/kg	0.0011	ND	
Isopropylbenzene	0.847	mg/kg	0.0011	ND	
m&p-Xylenes	0.847	mg/kg	0.0011	ND	
Methylene chloride	**0.847**	**mg/kg**	**0.0022**	**0.0051**	U
Methyl-t-butyl ether	0.847	mg/kg	0.0011	ND	
n-Butylbenzene	0.847	mg/kg	0.0011	ND	
n-Propylbenzene	0.847	mg/kg	0.0011	ND	
o-Xylene	0.847	mg/kg	0.0011	ND	

Sample ID: HRPB-10
Lab#: AD18934-001
Matrix: Soil/Terracore

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

sec-Butylbenzene	0.847	mg/kg	0.0011	ND
Styrene	0.847	mg/kg	0.0022	ND
t-Butyl Alcohol	0.847	mg/kg	0.011	ND
t-Butylbenzene	0.847	mg/kg	0.0011	ND
Tetrachloroethene	0.847	mg/kg	0.0022	ND
Toluene	0.847	mg/kg	0.0011	ND
trans-1,2-Dichloroethene	0.847	mg/kg	0.0022	ND
trans-1,3-Dichloropropene	0.847	mg/kg	0.0022	ND
Trichloroethene	0.847	mg/kg	0.0022	ND
Trichlorofluoromethane	0.847	mg/kg	0.0022	ND
Vinyl chloride	0.847	mg/kg	0.0022	ND
Xylenes (Total)	0.847	mg/kg	0.0011	ND

Sample ID: HRPB-8
Lab#: AD18934-002
Matrix: Soil/Terracore

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		75	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.1	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.7	14	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.32	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.11	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		190	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.2	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	13	45	J-
Chromium	1	mg/kg	6.7	14	J
Copper	1	mg/kg	6.7	24	
Lead	1	mg/kg	6.7	16	J
Manganese	1	mg/kg	13	320	J
Nickel	1	mg/kg	6.7	25	
Zinc	1	mg/kg	13	82	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.27	11	
Beryllium	1	mg/kg	0.27	0.44	
Selenium	1	mg/kg	2.7	ND	
Silver	1	mg/kg	0.27	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.57	J
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	5	mg/l	0.50	ND	

Sample ID: HRPB-8
Lab#: AD18934-002
Matrix: Soil/Terracore

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.772	mg/kg	0.0021	ND
1,1,2,2-Tetrachloroethane	0.772	mg/kg	0.0021	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.772	mg/kg	0.0021	ND
1,1,2-Trichloroethane	0.772	mg/kg	0.0021	ND
1,1-Dichloroethane	0.772	mg/kg	0.0021	ND
1,1-Dichloroethene	0.772	mg/kg	0.0021	ND
1,2,3-Trichloropropane	0.772	mg/kg	0.0021	ND
1,2,4-Trimethylbenzene	0.772	mg/kg	0.0010	ND
1,2-Dichlorobenzene	0.772	mg/kg	0.0021	ND
1,2-Dichloroethane	0.772	mg/kg	0.0021	ND
1,2-Dichloropropane	0.772	mg/kg	0.0021	ND
1,3,5-Trimethylbenzene	0.772	mg/kg	0.0010	ND
1,3-Dichlorobenzene	0.772	mg/kg	0.0021	ND
1,3-Dichloropropane	0.772	mg/kg	0.0021	ND
1,4-Dichlorobenzene	0.772	mg/kg	0.0021	ND
1,4-Dioxane	0.772	mg/kg	0.10	ND
2-Butanone	0.772	mg/kg	0.0021	ND
2-Chloroethylvinylether	0.772	mg/kg	0.0021	ND
2-Hexanone	0.772	mg/kg	0.0021	ND
4-Isopropyltoluene	0.772	mg/kg	0.0010	ND
4-Methyl-2-pentanone	0.772	mg/kg	0.0021	ND
Acetone	0.772	mg/kg	0.010	ND
Acrolein	0.772	mg/kg	0.010	ND
Acrylonitrile	0.772	mg/kg	0.0021	ND
Benzene	0.772	mg/kg	0.0010	ND
Bromodichloromethane	0.772	mg/kg	0.0021	ND
Bromoform	0.772	mg/kg	0.0021	ND
Bromomethane	0.772	mg/kg	0.0021	ND
Carbon disulfide	0.772	mg/kg	0.0021	ND
Carbon tetrachloride	0.772	mg/kg	0.0021	ND
Chlorobenzene	0.772	mg/kg	0.0021	ND
Chloroethane	0.772	mg/kg	0.0021	ND
Chloroform	0.772	mg/kg	0.0021	ND
Chloromethane	0.772	mg/kg	0.0021	ND
cis-1,2-Dichloroethene	**0.772**	**mg/kg**	**0.0021**	**0.0075**
cis-1,3-Dichloropropene	0.772	mg/kg	0.0021	ND
Dibromochloromethane	0.772	mg/kg	0.0021	ND
Dichlorodifluoromethane	0.772	mg/kg	0.0021	ND
Ethylbenzene	0.772	mg/kg	0.0010	ND
Isopropylbenzene	0.772	mg/kg	0.0010	ND
m&p-Xylenes	0.772	mg/kg	0.0010	ND
Methylene chloride	0.772	mg/kg	0.0021	ND
Methyl-t-butyl ether	0.772	mg/kg	0.0010	ND
n-Butylbenzene	0.772	mg/kg	0.0010	ND
n-Propylbenzene	0.772	mg/kg	0.0010	ND
o-Xylene	0.772	mg/kg	0.0010	ND
sec-Butylbenzene	0.772	mg/kg	0.0010	ND
Styrene	0.772	mg/kg	0.0021	ND
t-Butyl Alcohol	0.772	mg/kg	0.010	ND
t-Butylbenzene	0.772	mg/kg	0.0010	ND
Tetrachloroethene	0.772	mg/kg	0.0021	ND
Toluene	0.772	mg/kg	0.0010	ND
trans-1,2-Dichloroethene	0.772	mg/kg	0.0021	ND

Sample ID: HRPB-8 **Collection Date:** 8/26/2020
Lab#: AD18934-002 **Receipt Date:** 8/27/2020
Matrix: Soil/Terracore

trans-1,3-Dichloropropene	0.772	mg/kg	0.0021	ND
Trichloroethene	0.772	mg/kg	0.0021	ND
Trichlorofluoromethane	0.772	mg/kg	0.0021	ND
Vinyl chloride	0.772	mg/kg	0.0021	ND
Xylenes (Total)	0.772	mg/kg	0.0010	ND

Sample ID: HRPB-7
Lab#: AD18934-003
Matrix: Soil/Terracore

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		79	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.0	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.3	14	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.30	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.11	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		200	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.2	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	13	56	J-
Chromium	1	mg/kg	6.3	14	J
Copper	1	mg/kg	6.3	23	
Lead	1	mg/kg	6.3	110	J
Manganese	1	mg/kg	13	440	J
Nickel	1	mg/kg	6.3	22	
Zinc	1	mg/kg	13	80	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.25	11	
Beryllium	1	mg/kg	0.25	0.33	
Selenium	1	mg/kg	2.5	ND	
Silver	1	mg/kg	0.25	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.57	J
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	0.064	
Nickel	1	mg/l	0.10	ND	
Selenium	5	mg/l	0.50	ND	

NOTE: Soil Results are reported to Dry Weigh

Sample ID: HRPB-7 **Collection Date:** 8/26/2020
Lab#: AD18934-003 **Receipt Date:** 8/27/2020
Matrix: Soil/Terracore

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	0.661	mg/kg	0.0017	ND	
1,1,2,2-Tetrachloroethane	0.661	mg/kg	0.0017	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.661	mg/kg	0.0017	ND	
1,1,2-Trichloroethane	0.661	mg/kg	0.0017	ND	
1,1-Dichloroethane	0.661	mg/kg	0.0017	ND	
1,1-Dichloroethene	0.661	mg/kg	0.0017	ND	
1,2,3-Trichloropropane	0.661	mg/kg	0.0017	ND	
1,2,4-Trimethylbenzene	0.661	mg/kg	0.00084	ND	
1,2-Dichlorobenzene	0.661	mg/kg	0.0017	ND	
1,2-Dichloroethane	0.661	mg/kg	0.0017	ND	
1,2-Dichloropropane	0.661	mg/kg	0.0017	ND	
1,3,5-Trimethylbenzene	0.661	mg/kg	0.00084	ND	
1,3-Dichlorobenzene	0.661	mg/kg	0.0017	ND	
1,3-Dichloropropane	0.661	mg/kg	0.0017	ND	
1,4-Dichlorobenzene	0.661	mg/kg	0.0017	ND	
1,4-Dioxane	0.661	mg/kg	0.084	ND	
2-Butanone	0.661	mg/kg	0.0017	ND	
2-Chloroethylvinylether	0.661	mg/kg	0.0017	ND	
2-Hexanone	0.661	mg/kg	0.0017	ND	
4-Isopropyltoluene	0.661	mg/kg	0.00084	ND	
4-Methyl-2-pentanone	0.661	mg/kg	0.0017	ND	
Acetone	0.661	mg/kg	0.0084	ND	
Acrolein	0.661	mg/kg	0.0084	ND	
Acrylonitrile	0.661	mg/kg	0.0017	ND	
Benzene	0.661	mg/kg	0.00084	ND	
Bromodichloromethane	0.661	mg/kg	0.0017	ND	
Bromoform	0.661	mg/kg	0.0017	ND	
Bromomethane	0.661	mg/kg	0.0017	ND	
Carbon disulfide	0.661	mg/kg	0.0017	ND	
Carbon tetrachloride	0.661	mg/kg	0.0017	ND	
Chlorobenzene	0.661	mg/kg	0.0017	ND	
Chloroethane	0.661	mg/kg	0.0017	ND	
Chloroform	0.661	mg/kg	0.0017	ND	
Chloromethane	0.661	mg/kg	0.0017	ND	
cis-1,2-Dichloroethene	0.661	mg/kg	0.0017	ND	
cis-1,3-Dichloropropene	0.661	mg/kg	0.0017	ND	
Dibromochloromethane	0.661	mg/kg	0.0017	ND	
Dichlorodifluoromethane	0.661	mg/kg	0.0017	ND	
Ethylbenzene	0.661	mg/kg	0.00084	ND	
Isopropylbenzene	0.661	mg/kg	0.00084	ND	
m&p-Xylenes	0.661	mg/kg	0.00084	ND	
Methylene chloride	**0.661**	**mg/kg**	**0.0017**	**0.0019**	U
Methyl-t-butyl ether	0.661	mg/kg	0.00084	ND	
n-Butylbenzene	0.661	mg/kg	0.00084	ND	
n-Propylbenzene	0.661	mg/kg	0.00084	ND	
o-Xylene	0.661	mg/kg	0.00084	ND	
sec-Butylbenzene	0.661	mg/kg	0.00084	ND	
Styrene	0.661	mg/kg	0.0017	ND	
t-Butyl Alcohol	0.661	mg/kg	0.0084	ND	
t-Butylbenzene	0.661	mg/kg	0.00084	ND	
Tetrachloroethene	**0.661**	**mg/kg**	**0.0017**	**0.0036**	
Toluene	0.661	mg/kg	0.00084	ND	
trans-1,2-Dichloroethene	0.661	mg/kg	0.0017	ND	

Sample ID: HRPB-7 **Collection Date:** 8/26/2020
Lab#: AD18934-003 **Receipt Date:** 8/27/2020
Matrix: Soil/Terracore

trans-1,3-Dichloropropene	0.661	mg/kg	0.0017	ND
Trichloroethene	0.661	mg/kg	0.0017	ND
Trichlorofluoromethane	0.661	mg/kg	0.0017	ND
Vinyl chloride	0.661	mg/kg	0.0017	ND
Xylenes (Total)	0.661	mg/kg	0.00084	ND

Sample ID: HRPB-9
Lab#: AD18934-004
Matrix: Soil/Terracore

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		80

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.0	ND UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.2	17

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		220

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.5
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	12	53 J-
Chromium	1	mg/kg	6.2	17 J
Copper	1	mg/kg	6.2	30
Lead	1	mg/kg	6.2	8.8 J
Manganese	1	mg/kg	12	750 J
Nickel	1	mg/kg	6.2	23
Zinc	1	mg/kg	12	100

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.25	12
Beryllium	1	mg/kg	0.25	0.30
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.34 J
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	5	mg/l	0.50	ND

Sample ID: HRPB-9 **Collection Date:** 8/26/2020
Lab#: AD18934-004 **Receipt Date:** 8/27/2020
Matrix: Soil/Terracore

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	0.731	mg/kg	0.0018	ND	
1,1,2,2-Tetrachloroethane	0.731	mg/kg	0.0018	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.731	mg/kg	0.0018	ND	
1,1,2-Trichloroethane	0.731	mg/kg	0.0018	ND	
1,1-Dichloroethane	0.731	mg/kg	0.0018	ND	
1,1-Dichloroethene	0.731	mg/kg	0.0018	ND	
1,2,3-Trichloropropane	0.731	mg/kg	0.0018	ND	
1,2,4-Trimethylbenzene	0.731	mg/kg	0.00091	ND	
1,2-Dichlorobenzene	0.731	mg/kg	0.0018	ND	
1,2-Dichloroethane	0.731	mg/kg	0.0018	ND	
1,2-Dichloropropane	0.731	mg/kg	0.0018	ND	
1,3,5-Trimethylbenzene	0.731	mg/kg	0.00091	ND	
1,3-Dichlorobenzene	0.731	mg/kg	0.0018	ND	
1,3-Dichloropropane	0.731	mg/kg	0.0018	ND	
1,4-Dichlorobenzene	0.731	mg/kg	0.0018	ND	
1,4-Dioxane	0.731	mg/kg	0.091	ND	
2-Butanone	0.731	mg/kg	0.0018	ND	
2-Chloroethylvinylether	0.731	mg/kg	0.0018	ND	
2-Hexanone	0.731	mg/kg	0.0018	ND	
4-Isopropyltoluene	0.731	mg/kg	0.00091	ND	
4-Methyl-2-pentanone	0.731	mg/kg	0.0018	ND	
Acetone	0.731	mg/kg	0.0091	ND	
Acrolein	0.731	mg/kg	0.0091	ND	
Acrylonitrile	0.731	mg/kg	0.0018	ND	
Benzene	0.731	mg/kg	0.00091	ND	
Bromodichloromethane	0.731	mg/kg	0.0018	ND	
Bromoform	0.731	mg/kg	0.0018	ND	
Bromomethane	0.731	mg/kg	0.0018	ND	
Carbon disulfide	0.731	mg/kg	0.0018	ND	
Carbon tetrachloride	0.731	mg/kg	0.0018	ND	
Chlorobenzene	0.731	mg/kg	0.0018	ND	
Chloroethane	0.731	mg/kg	0.0018	ND	
Chloroform	**0.731**	**mg/kg**	**0.0018**	**0.0026**	U
Chloromethane	0.731	mg/kg	0.0018	ND	
cis-1,2-Dichloroethene	0.731	mg/kg	0.0018	ND	
cis-1,3-Dichloropropene	0.731	mg/kg	0.0018	ND	
Dibromochloromethane	0.731	mg/kg	0.0018	ND	
Dichlorodifluoromethane	0.731	mg/kg	0.0018	ND	
Ethylbenzene	0.731	mg/kg	0.00091	ND	
Isopropylbenzene	0.731	mg/kg	0.00091	ND	
m&p-Xylenes	0.731	mg/kg	0.00091	ND	
Methylene chloride	**0.731**	**mg/kg**	**0.0018**	**0.0025**	U
Methyl-t-butyl ether	0.731	mg/kg	0.00091	ND	
n-Butylbenzene	0.731	mg/kg	0.00091	ND	
n-Propylbenzene	0.731	mg/kg	0.00091	ND	
o-Xylene	0.731	mg/kg	0.00091	ND	
sec-Butylbenzene	0.731	mg/kg	0.00091	ND	
Styrene	0.731	mg/kg	0.0018	ND	
t-Butyl Alcohol	0.731	mg/kg	0.0091	ND	
t-Butylbenzene	0.731	mg/kg	0.00091	ND	
Tetrachloroethene	0.731	mg/kg	0.0018	ND	
Toluene	0.731	mg/kg	0.00091	ND	
trans-1,2-Dichloroethene	0.731	mg/kg	0.0018	ND	

Sample ID: HRPB-9 **Collection Date:** 8/26/2020
Lab#: AD18934-004 **Receipt Date:** 8/27/2020
Matrix: Soil/Terracore

trans-1,3-Dichloropropene	0.731	mg/kg	0.0018	ND
Trichloroethene	0.731	mg/kg	0.0018	ND
Trichlorofluoromethane	0.731	mg/kg	0.0018	ND
Vinyl chloride	0.731	mg/kg	0.0018	ND
Xylenes (Total)	0.731	mg/kg	0.00091	ND

Sample ID: HRPB-4
Lab#: AD18934-005
Matrix: Soil

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		77	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.0	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.5	15	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.31	0.36	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.11	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		-3.9	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.8	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	13	79	J-
Chromium	1	mg/kg	6.5	15	J
Copper	1	mg/kg	6.5	43	
Lead	1	mg/kg	6.5	83	J
Manganese	1	mg/kg	13	400	J
Nickel	1	mg/kg	6.5	34	
Zinc	1	mg/kg	13	100	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.26	7.3	
Beryllium	1	mg/kg	0.26	0.38	
Selenium	1	mg/kg	2.6	ND	
Silver	1	mg/kg	0.26	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.98	J
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	5	mg/l	0.50	ND	

Sample ID: HRPB-4 **Collection Date:** 8/26/2020
Lab#: AD18934-005 **Receipt Date:** 8/27/2020
Matrix: Soil

Silver	1	mg/l	0.050	ND	

Sample ID: EB
Lab#: AD18934-006
Matrix: Aqueous
Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Cr (Hexavalent) 3500-Cr B11

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.02	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	ug/l	50	ND

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	ug/l	50	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Silver	1	ug/l	20	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND

Sample ID: EB
Lab#: AD18934-006
Matrix: Aqueous

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	**1**	**ug/l**	**1.0**	**1.5**
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	**1**	**ug/l**	**1.0**	**5.9**
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: Trip Blank
Lab#: AD18934-007
Matrix: Aqueous

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: Trip Blank
Lab#: AD18934-007
Matrix: Aqueous
Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: FB
Lab#: AD18934-008
Matrix: Aqueous
Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Cr (Hexavalent) 3500-Cr B11

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.02	ND

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	ug/l	50	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Silver	1	ug/l	20	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND

Sample ID: FB
Lab#: AD18934-008
Matrix: Aqueous

Collection Date: 8/26/2020
Receipt Date: 8/27/2020

Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

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QA/QC Review of TCLP Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082707

5 Soil Samples
Collected August 26, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were extracted and analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TCLP metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration and preparation blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable TCLP metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: The percent recoveries for applicable metals were within control limits (75-125%) for soil TCLP batch spike sample AD18923-001.

Laboratory Duplicates: The analysis of soil TCLP batch duplicate sample was acceptable.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil TCLP samples LCS 85218 and LCS MR 85218. The relative percent differences for target metals were below the allowable maximum (20%) for soil TCLP sample LCS MR 85218, as required.

ICP Serial Dilution: The %D for barium was above the allowable maximum (10%) for soil batch TCLP serial dilution sample AD18923-001. Positive results for barium that are the RL should be considered estimated (J) in associated soil samples.

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Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high andassociated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

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November 9, 2020

Mr. Stefan Truex, P.G.
Senior Project Geologist
HRP Associates, Inc.
1 Fairchild Square, Suite 110
Clifton Park, New York 12065

Re: Data Validation Report
Duofold – Ilion, NY
August-September 2020 Ground Water, Soil, and Soil Vapor Sampling Events

Dear Mr. Truex:

The data usability summary reports (DUSRs) and supporting documentation have been sent via e-mail for the Duofold, August-September 2020 ground water, soil, and soil vapor sampling events. The data for Hampton-Clarke Analytical & Field Services lab numbers 0082303, 0082707, 0091006, 0091007, 0091101, and 0092507, and SGS North America, Inc job number JD13677 were mostly acceptable, with issues that are identified in the DUSRs and validation summaries. There were data qualified as unusable, rejected (R) in the data pack 0092507. The DUSR and QA/QC review outline the reasons for qualifying data rejected (R). The data is rejected based solely on the validation guidance criteria. The rejected data may be determined to be acceptable to the user based on additional information that is not contained in the data validation criteria.

A list of data validation acronyms and qualifiers is attached to assist you in interpreting the data validation reviews. If you have any questions concerning the work to be performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist HRP Associates, Inc.

Sincerely,
Alpha Geoscience

Donald Anné
Senior Chemist

DCA/bms
Via email

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QA/QC Review of Hexavalent Chromium Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082803

2 Soil Samples and 1 Field Duplicate
Collected August 27, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The samples were analyzed within the USEPA holding times.

Initial and Continuing Calibration Verification: The percent recoveries for hexavalent chromium (Cr6+) were within laboratory QC limits (90-110%).

Blanks: The analyses of initial and continuing calibration and method blanks reported Cr6+ as not detected.

Spike Sample Recovery: The percent recovery (%R) for Cr6+ was within laboratory QC limits (75-125%) for soil batch spike sample AD18918-003.

The %R for insoluble Cr6+ was below laboratory QC limits (85-115%), but not below 10% for soil batch spike sample AD18918-003. Positive results for Cr6+ should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated soil samples.

Duplicates: The relative percent difference for Cr6+ was below the allowable maximum (35%) for soil batch duplicate sample AD18918-003, as required.

Field Duplicates: The analyses of soil field duplicate pair HRPB-3/DUPLICATE reported Cr6+ as not detected; therefore, a valid relative percent difference could not be calculated. The analyses for the field duplicate pair were acceptable.

Laboratory Control Sample: The percent recovery for Cr6+ was within laboratory QC limits (80-120%) for the soil LCS.

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QA/QC Review of Hexavalent Chromium Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082803

2 Soil Samples and 1 Field Duplicate
Collected August 27, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The samples were analyzed within the USEPA holding times.

Initial and Continuing Calibration Verification: The percent recoveries for hexavalent chromium (Cr6+) were within laboratory QC limits (90-110%).

Blanks: The analyses of initial and continuing calibration and method blanks reported Cr6+ as not detected.

Spike Sample Recovery: The percent recovery (%R) for Cr6+ was within laboratory QC limits (75-125%) for soil batch spike sample AD18918-003.

The %R for insoluble Cr6+ was below laboratory QC limits (85-115%), but not below 10% for soil batch spike sample AD18918-003. Positive results for Cr6+ should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated soil samples.

Duplicates: The relative percent difference for Cr6+ was below the allowable maximum (35%) for soil batch duplicate sample AD18918-003, as required.

Field Duplicates: The analyses of soil field duplicate pair HRPB-3/DUPLICATE reported Cr6+ as not detected; therefore, a valid relative percent difference could not be calculated. The analyses for the field duplicate pair were acceptable.

Laboratory Control Sample: The percent recovery for Cr6+ was within laboratory QC limits (80-120%) for the soil LCS.

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Data Usability Summary Report for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082803

2 Soil Samples, 1 Field Duplicate,
and 1 Trip Blank
Collected August 27, 2020

Prepared by: Donald Anné
November 9, 2020

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 2 soil samples, 1 field duplicate, and 1 trip blank analyzed for volatiles, and the results for 2 soil samples and 1 field duplicate analyzed for total metals, TCLP metals, total cyanide, and hexavalent chromium.

The overall performances of the analyses are acceptable. Hampton-Clarke Analytical & Field Services did fulfill the requirements of the analytical methods.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive volatile results for tetrachloroethene were qualified as estimated (J) in samples HRPB-3 and DUPLICATE because the relative percent difference for tetrachloroethene was above the allowable maximum in the soil field duplicate pair HRPB-3/DUPLICATE.

- The positive total metal results for barium were qualified as estimated, biased low (J-) in samples HRPB-3, HRPB-2, and DUPLICATE because 2 of 2 percent recoveries for barium were below control limits and 1 below 10% in the associated soil MS/MSD sample.

- The positive total metal results for lead were qualified as estimated (J) in samples HRPB-3, HRPB-2, and DUPLICATE because the relative percent difference for lead was above the allowable maximum in the associated soil duplicate sample.

- The positive total metal results for manganese were qualified as estimated (J) in samples HRPB-3, HRPB-2, and DUPLICATE because the relative percent difference for manganese was above the allowable maximum in the associated soil MS/MSD sample.

- The positive total metal results for chromium were qualified as estimated (J) in samples HRPB-3, HRPB-2, and DUPLICATE because the %D for chromium was above the allowable maximum in the associated soil serial dilution sample and the sample results were above the RL.

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- The positive total metal results for arsenic, nickel, and trivalent chromium were qualified as estimated (J) in samples HRPB-3 and DUPLICATE because the relative percent differences for arsenic, nickel, and trivalent chromium were above the allowable maximum in the soil field duplicate pair HRPB-3/DUPLICATE.

- The "not detected" results for hexavalent chromium were qualified as estimated (UJ) in samples HRPB-3, HRPB-2, and DUPLICATE because the percent recovery for insoluble hexavalent chromium was below QC limits, but not below 10% in the associated soil batch spike sample.

All data are considered usable, with estimated (J, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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Data Usability Summary Report for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082803

2 Soil Samples, 1 Field Duplicate,
and 1 Trip Blank
Collected August 27, 2020

Prepared by: Donald Anné
November 9, 2020

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 2 soil samples, 1 field duplicate, and 1 trip blank analyzed for volatiles, and the results for 2 soil samples and 1 field duplicate analyzed for total metals, TCLP metals, total cyanide, and hexavalent chromium.

The overall performances of the analyses are acceptable. Hampton-Clarke Analytical & Field Services did fulfill the requirements of the analytical methods.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive volatile results for tetrachloroethene were qualified as estimated (J) in samples HRPB-3 and DUPLICATE because the relative percent difference for tetrachloroethene was above the allowable maximum in the soil field duplicate pair HRPB-3/DUPLICATE.

- The positive total metal results for barium were qualified as estimated, biased low (J-) in samples HRPB-3, HRPB-2, and DUPLICATE because 2 of 2 percent recoveries for barium were below control limits and 1 below 10% in the associated soil MS/MSD sample.

- The positive total metal results for lead were qualified as estimated (J) in samples HRPB-3, HRPB-2, and DUPLICATE because the relative percent difference for lead was above the allowable maximum in the associated soil duplicate sample.

- The positive total metal results for manganese were qualified as estimated (J) in samples HRPB-3, HRPB-2, and DUPLICATE because the relative percent difference for manganese was above the allowable maximum in the associated soil MS/MSD sample.

- The positive total metal results for chromium were qualified as estimated (J) in samples HRPB-3, HRPB-2, and DUPLICATE because the %D for chromium was above the allowable maximum in the associated soil serial dilution sample and the sample results were above the RL.

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- The positive total metal results for arsenic, nickel, and trivalent chromium were qualified as estimated (J) in samples HRPB-3 and DUPLICATE because the relative percent differences for arsenic, nickel, and trivalent chromium were above the allowable maximum in the soil field duplicate pair HRPB-3/DUPLICATE.

- The "not detected" results for hexavalent chromium were qualified as estimated (UJ) in samples HRPB-3, HRPB-2, and DUPLICATE because the percent recovery for insoluble hexavalent chromium was below QC limits, but not below 10% in the associated soil batch spike sample.

All data are considered usable, with estimated (J, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Total Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082803

2 Soil Samples and 1 Field Duplicate
Collected August 27, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The sample was analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration and preparation blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable target metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: Two of two percent recoveries for barium were below control limits (75-125%) and 1 below 10% for soil MS/MSD sample HRPB-3. Positive results for barium should be considered estimated, biased low (J-) and "not detected" results rejected, unusable (R) in associated soil samples.

Laboratory Duplicates: The relative percent difference (RPD) for lead was above the allowable maximum (35%) for soil duplicate sample HRPB-3. The RPD for manganese was above the allowable (35%) for soil MS/MSD sample HRPB-3. Positive results for lead and manganese should be considered estimated (J) in associated soil samples.

Field Duplicates: The relative percent differences for arsenic, barium, chromium, lead, manganese, and nickel above the allowable maximum (35%) for soil field duplicate pair HRPB-3/DUPLICATE (attached table). Positive results for these metals should be considered estimated(J) in samples HRPB-3 and DUPLICATE.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil samples LCS MR 85229, LCS 85229, LCS MR 85228, and LCS 85228.

ICP Serial Dilution: The %Ds for chromium and selenium were above the allowable maximum (15%) for soil serial dilution sample HRPB-3. Positive results for chromium and selenium that are above the RLs should be considered estimated (J) in associated soil samples.

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QA/QC Review of Total Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082803

2 Soil Samples and 1 Field Duplicate
Collected August 27, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The sample was analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration and preparation blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable target metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: Two of two percent recoveries for barium were below control limits (75-125%) and 1 below 10% for soil MS/MSD sample HRPB-3. Positive results for barium should be considered estimated, biased low (J-) and "not detected" results rejected, unusable (R) in associated soil samples.

Laboratory Duplicates: The relative percent difference (RPD) for lead was above the allowable maximum (35%) for soil duplicate sample HRPB-3. The RPD for manganese was above the allowable (35%) for soil MS/MSD sample HRPB-3. Positive results for lead and manganese should be considered estimated (J) in associated soil samples.

Field Duplicates: The relative percent differences for arsenic, barium, chromium, lead, manganese, and nickel above the allowable maximum (35%) for soil field duplicate pair HRPB-3/DUPLICATE (attached table). Positive results for these metals should be considered estimated(J) in samples HRPB-3 and DUPLICATE.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil samples LCS MR 85229, LCS 85229, LCS MR 85228, and LCS 85228.

ICP Serial Dilution: The %Ds for chromium and selenium were above the allowable maximum (15%) for soil serial dilution sample HRPB-3. Positive results for chromium and selenium that are above the RLs should be considered estimated (J) in associated soil samples.

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QA/QC Review of Total Cyanide Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082803

2 Soil Samples and 1 Field Duplicate
Collected August 27, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within NJDEP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for total cyanide were within control limits (85-115%).

Blanks: The analyses of initial calibration and continuing calibration and method blanks reported total cyanide as not detected.

Spike Sample Recovery: The percent recoveries for total cyanide were within QC limits (75-125%) for soil MS/MSD sample HRPB-3.

Laboratory Duplicates: The relative percent difference for total cyanide was below the allowable maximum (35%) for soil MS/MSD sample HRPB-3, as required.

Field Duplicates: The analyses of soil field duplicate pair HRPB-3/DUPLICATE reported total cyanide as not detected; therefore, a valid relative percent difference could not be calculated. The analyses for the field duplicate pair were acceptable.

Laboratory Control Sample: The percent recovery for total cyanide was within QC limits (80-120%) for soil sample LCSS-2412.

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QA/QC Review of Total Cyanide Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082803

2 Soil Samples and 1 Field Duplicate
Collected August 27, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within NJDEP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for total cyanide were within control limits (85-115%).

Blanks: The analyses of initial calibration and continuing calibration and method blanks reported total cyanide as not detected.

Spike Sample Recovery: The percent recoveries for total cyanide were within QC limits (75-125%) for soil MS/MSD sample HRPB-3.

Laboratory Duplicates: The relative percent difference for total cyanide was below the allowable maximum (35%) for soil MS/MSD sample HRPB-3, as required.

Field Duplicates: The analyses of soil field duplicate pair HRPB-3/DUPLICATE reported total cyanide as not detected; therefore, a valid relative percent difference could not be calculated. The analyses for the field duplicate pair were acceptable.

Laboratory Control Sample: The percent recovery for total cyanide was within QC limits (80-120%) for soil sample LCSS-2412.

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QA/QC Review of 8260 Volatile Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082803

2 Soil Samples, 1 Field Duplicate,
and 1 Trip Blank
Collected August 27, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The %RSDs for applicable compounds were below the method maximum, as required. The average RRFs for acetone and 2-butanone were below the method minimums, but not below 0.010 for GCMS_11 on 08-17-20. No action is taken when fewer than 20% of the compounds per calibration do not meet either method %RSD or average RRF criteria, provided the average RRFs are not below 0.010.

The average RRFs for target compounds were above the allowable minimums (0.001 for 1,4-dioxane, 0.010for all others) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for acetone and 2-butanone were below the method minimums, but not below 0.010 on 08-31-20 (11M82272.D). The %Ds for dichlorodifluoromethane, trichlrofluoromethane, and trichloroethene were above the method maximum on 08-31-20 (11M82272.D). The %Ds for dichlorodifluoromethane, 1,1,2-trichloro-1,2,2-trifluoromethane, 1,1-dichloroethene, and bromoform were above the method maximum on 08-31-20 (6M131882.D). No action is taken when fewer than 20% of the compounds per calibration do not meet either method %D or RRF criteria, provided the RRFs are not below 0.010.

The RRFs for target compounds were above the allowable minimums (0.001 for 1,4-dioxane, 0.010 for all others), as required.

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The %Ds for dichlorodifluoromethane, trichlorofluoromethane, 1,4-dioxane, and trichloroethene were above the allowable maximum (20%) on 08-31-20 (11M82272.D). The %Ds for dichlorodifluoromethane, 1,1,2-trichloro-1,2,2-trifluoromethane, 1,1-dichloroethene, acrolein, 1,4-dioxane, and bromoform were above the allowable maximum (20%) on 08-31-20 (6M131882.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of the daily and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times for samples were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target compounds were below the allowable maximums, but 2 of 2 percent recoveries (%Rs) for 2-chloroethylvinylether and bromoform, and 1 of 2 %Rs for dichlorodifluoromethane were above QC limits in soil MS/MSD sample HRBP-3. The analysis of sample HRPB-3 reported these compounds as "not detected"; therefore, no action is taken.

Laboratory Control Sample: The percent recovers (%Rs) for dichlorodifluoromethane, acrolein, 2-chloroethylvinylether, and bromoform were above QC limits for soil sample MBS87762. Positive results for these compounds should be considered estimated, biased high (J+) in associated soil samples.

The %R for 2-chloroethylvinylether was above QC limits for aqueous sample MBS87763. Positive results for 2-chloroethylvinylether should be considered estimated, biased high (J+) in associated aqueous samples.

Field Duplicates: The relative percent difference for tetrachloroethene was above the allowable maximum (35%) for soil field duplicate pair HRPB-3/DUPLICATE (attached table). Positive results for tetrachloroethene should be considered estimated(J) in samples HRPB-3 and DUPLICATE.

Compound ID: Checked compounds and surrogates were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

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QA/QC Review of 8260 Volatile Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082803

2 Soil Samples, 1 Field Duplicate,
and 1 Trip Blank
Collected August 27, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The %RSDs for applicable compounds were below the method maximum, as required. The average RRFs for acetone and 2-butanone were below the method minimums, but not below 0.010 for GCMS_11 on 08-17-20. No action is taken when fewer than 20% of the compounds per calibration do not meet either method %RSD or average RRF criteria, provided the average RRFs are not below 0.010.

The average RRFs for target compounds were above the allowable minimums (0.001 for 1,4-dioxane, 0.010for all others) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for acetone and 2-butanone were below the method minimums, but not below 0.010 on 08-31-20 (11M82272.D). The %Ds for dichlorodifluoromethane, trichlrofluoromethane, and trichloroethene were above the method maximum on 08-31-20 (11M82272.D). The %Ds for dichlorodifluoromethane, 1,1,2-trichloro-1,2,2-trifluoromethane, 1,1-dichloroethene, and bromoform were above the method maximum on 08-31-20 (6M131882.D). No action is taken when fewer than 20% of the compounds per calibration do not meet either method %D or RRF criteria, provided the RRFs are not below 0.010.

The RRFs for target compounds were above the allowable minimums (0.001 for 1,4-dioxane, 0.010 for all others), as required.

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The %Ds for dichlorodifluoromethane, trichlorofluoromethane, 1,4-dioxane, and trichloroethene were above the allowable maximum (20%) on 08-31-20 (11M82272.D). The %Ds for dichlorodifluoromethane, 1,1,2-trichloro-1,2,2-trifluoromethane, 1,1-dichloroethene, acrolein, 1,4-dioxane, and bromoform were above the allowable maximum (20%) on 08-31-20 (6M131882.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of the daily and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times for samples were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target compounds were below the allowable maximums, but 2 of 2 percent recoveries (%Rs) for 2-chloroethylvinylether and bromoform, and 1 of 2 %Rs for dichlorodifluoromethane were above QC limits in soil MS/MSD sample HRBP-3. The analysis of sample HRPB-3 reported these compounds as "not detected"; therefore, no action is taken.

Laboratory Control Sample: The percent recovers (%Rs) for dichlorodifluoromethane, acrolein, 2-chloroethylvinylether, and bromoform were above QC limits for soil sample MBS87762. Positive results for these compounds should be considered estimated, biased high (J+) in associated soil samples.

The %R for 2-chloroethylvinylether was above QC limits for aqueous sample MBS87763. Positive results for 2-chloroethylvinylether should be considered estimated, biased high (J+) in associated aqueous samples.

Field Duplicates: The relative percent difference for tetrachloroethene was above the allowable maximum (35%) for soil field duplicate pair HRPB-3/DUPLICATE (attached table). Positive results for tetrachloroethene should be considered estimated(J) in samples HRPB-3 and DUPLICATE.

Compound ID: Checked compounds and surrogates were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 0082803

S1= HRPB-3 **S2=** DUPLICATE

Analyte	S1	S2	RPD (%)	
methylene chloride	0.0052	0.0057	9%	
tetrachloroethene	0.011	0.0052	72%	*
trichloroethene	0.022	0.021	5%	
cis-1,2-dichloroethene	ND	0.0023	NC	

* RPD is above the allowable maximum (35%).

All results are in ug/kg.

Bold numbers were values that are below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

Total Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 0082803

S1= HRPB-3 **S2=** DUPLICATE

Analyte	S1	S2	RPD (%)	
arsenic	8.5	5.9	36%	*
barium	97	31	103%	*
beryllium	ND	0.37	NC	
chromium	10	16	46%	*
copper	29	22	27%	
lead	440	13	189%	*
manganese	790	270	98%	*
mercury	0.17	ND	NC	
nickel	17	25	38%	*
selenium	ND	ND	NC	
silver	ND	ND	NC	
zinc	73	74	1%	

* RPD is above the allowable maximum 35%.

All results are in units of mg/kg.

Bold numbers were values that are below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

TCLP Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 0082803

S1= HRPB-3 **S2=** DUPLICATE

Analyte	S1	S2	RPD (%)
arsenic	ND	ND	NC
barium	0.49	0.35	33%
cadmium	ND	ND	NC
chromium	ND	ND	NC
lead	ND	ND	NC
mercury	ND	ND	NC
nickel	ND	ND	NC
selenium	ND	ND	NC
silver	ND	ND	NC

* RPD is above the allowable maximum 35%.

All results are in units of mg/L.

Bold numbers were values that below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

General Chemistries

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 0082803

S1= HRPB-3 **S2=** DUPLICATE

Analyte	S1	S2	RPD (%)	
Hexavalent, Chromium	ND	ND	NC	
Trivalent, Chromium	10	16	46%	*
Cyanide	ND	ND	NC	

* RPD is above the allowable maximum 35%

Results are in units of mg/kg.

Bold numbers were values that are below the RL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 0082803

S1= HRPB-3 **S2=** DUPLICATE

Analyte	S1	S2	RPD (%)	
methylene chloride	0.0052	0.0057	9%	
tetrachloroethene	0.011	0.0052	72%	*
trichloroethene	0.022	0.021	5%	
cis-1,2-dichloroethene	ND	0.0023	NC	

* RPD is above the allowable maximum (35%).

All results are in ug/kg.

Bold numbers were values that are below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

Total Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 0082803

S1= HRPB-3 **S2=** DUPLICATE

Analyte	S1	S2	RPD (%)	
arsenic	8.5	5.9	36%	*
barium	97	31	103%	*
beryllium	ND	0.37	NC	
chromium	10	16	46%	*
copper	29	22	27%	
lead	440	13	189%	*
manganese	790	270	98%	*
mercury	0.17	ND	NC	
nickel	17	25	38%	*
selenium	ND	ND	NC	
silver	ND	ND	NC	
zinc	73	74	1%	

* RPD is above the allowable maximum 35%.

All results are in units of mg/kg.

Bold numbers were values that are below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

TCLP Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 0082803

S1= HRPB-3 **S2=** DUPLICATE

Analyte	S1	S2	RPD (%)
arsenic	ND	ND	NC
barium	0.49	0.35	33%
cadmium	ND	ND	NC
chromium	ND	ND	NC
lead	ND	ND	NC
mercury	ND	ND	NC
nickel	ND	ND	NC
selenium	ND	ND	NC
silver	ND	ND	NC

* RPD is above the allowable maximum 35%.

All results are in units of mg/L.

Bold numbers were values that below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

General Chemistries

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 0082803

S1= HRPB-3 **S2=** DUPLICATE

Analyte	S1	S2	RPD (%)	
Hexavalent, Chromium	ND	ND	NC	
Trivalent, Chromium	10	16	46%	*
Cyanide	ND	ND	NC	

* RPD is above the allowable maximum 35%

Results are in units of mg/kg.

Bold numbers were values that are below the RL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA									
Batch#	778		QC Sample	AD18918-003 NS.Sample								
Date	8/31/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	19.10	19.10	96%	80-120%	NA	NA	PASS	
			MS(Sol)	21.98	37.52	16.81	76%	75-125%	NA	NA	PASS	
			MS(Insol)	791.63	436.99	416.29	53%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	20.70	NA	NA	NA	NA	NA		
			Sample Dup	NA	20.18	NA	NA	NA	3	20%		PASS
			PVS	21.98	43.28	22.57	103%	85-115%	NA	NA	PASS	
Lead Chromate Added : (G)	0.0112	0.0118										
Upper Calibration Abbsorbance:	0.7141											
			MS(Sol)	25.32	21.49	21.49	85%	75-125%	NA	NA	PASS	
			MS(Insol)	892.91	400.71	400.71	45%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	ND	NA	NA	NA	NA	NA		

ICV Data	ABS	Turb ABS		PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3425	0.0000	Crct. ABS	0.483999937	1	1	1	1	0.484	0.500	97	8/31/20 15:40	PASS
QC Data	**ABS**	**Turb ABS**	0.3425	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0001	0.0000	Crct. ABS	0.000384355	1	1	1	1	0.000	0.020		8/31/20 15:40	
MB.Sample	0.0001	0.0000	0.0001	0.000384355	1	2.5	1	100	0.015	0.800		8/31/20 15:40	
LCS.Sample	0.3379	0.0000	0.0001	0.477502782	1	2.5	1	100	19.100	0.800		8/31/20 15:41	
AD18918-003 NS.Sample	0.3344	0.0011	0.3379	0.471005589	0.91	2.5	1	100	20.704	0.879		8/31/20 15:42	
AD18918-003 DUP.Sample	0.3260	0.0011	0.3333	0.459141198	0.91	2.5	1	100	20.182	0.879		8/31/20 15:43	
AD18918-004 MS.Sample	0.6083	0.0042	0.3249	0.853491237	0.91	2.5	1	100	37.516	0.879		8/31/20 15:43	
AD18918-005 50X MSD.Sample	0.1410	0.0004	0.6041	0.198830589	0.91	2.5	50	100	436.990	43.956		8/31/20 15:44	
AD18918-003 PVS.Sample	0.6980	0.0011	0.1406	0.98456468	0.91	2.5	1	100	43.278	0.879		8/31/20 15:44	
			0.6969										
AD18955-001.Sample	0.0030	0.0017		0.00207927	0.81	2.5	1	100	0.103	0.988		8/31/20 15:47	
AD18955-002 MS2.Sample	0.3033	0.0030	0.0013	0.424395436	0.79	2.5	1	100	21.488	1.013		8/31/20 15:47	
AD18955-003 MSD 2.Sample	4.1905	0.0018	0.3003	5.916482821	0.85	2.5	1	100	278.423	0.941		8/31/20 15:48	
AD18955-003 MSD 50X 2.Sample	0.1218	0.0014	4.1887	0.170299523	0.85	2.5	50	100	400.705	47.059		8/31/20 15:49	
			0.1204										
Analytical Run					1	2.5	1	100					
ICV.Control	0.3425			0.483999937	1	1	1	1	0.484	0.020	97	8/31/20 15:40	PASS
ICB.Sample	0.0001		0.3425	0.000384355	1	1	1	1	0.000	0.020		8/31/20 15:40	
MB.Sample	0.0001		0.0001	0.000384355	1	2.5	1	100	0.015	0.800		8/31/20 15:40	
LCS.Sample	0.3379		0.0001	0.477502782	1	2.5	1	100	19.100	0.800		8/31/20 15:41	
AD18918-003 NS.Sample	0.3344	0.0011	0.3379	0.471005589	0.91	2.5	1	100	20.704	0.879		8/31/20 15:42	
AD18918-003 DUP.Sample	0.3260	0.0011	0.3333	0.459141198	0.91	2.5	1	100	20.182	0.879		8/31/20 15:43	
AD18918-004 MS.Sample	0.6083	0.0042	0.3249	0.853491237	0.91	2.5	1	100	37.516	0.879		8/31/20 15:43	
AD18918-005 XXX.Sample	4.0144	0.0039	0.6041	5.664788345	0.91	2.5	1	100	249.002	0.879		8/31/20 15:43	
AD18918-005 50X MSD.Sample	0.1410	0.0004	4.0105	0.198830589	0.91	2.5	50	100	436.990	43.956		8/31/20 15:44	
AD18918-003 PVS.Sample	0.6980	0.0011	0.1406	0.98456468	0.91	2.5	1	100	43.278	0.879		8/31/20 15:44	
CCV-1.Control	0.3330		0.6969	0.470581869	1	1	1	1	0.471	0.020	94	8/31/20 15:44	PASS
CCB-1.Sample	0.0003		0.3330	0.000666841	1	1	1	1	0.001	0.020		8/31/20 15:45	
AD18932-002.Sample	0.0135	0.0202	0.0003	-0.009220158	0.79	2.5	1	100	-0.467	1.013		8/31/20 15:45	
AD18934-001.Sample	0.0073	0.0075	-0.0067	-3.93727E-05	0.76	2.5	1	100	-0.002	1.053		8/31/20 15:45	
AD18934-002.Sample	0.0097	0.0105	-0.0002	-0.00088683	0.75	2.5	1	100	-0.047	1.067		8/31/20 15:46	
AD18934-003.Sample	0.0002	0.0004	-0.0008	-3.93732E-05	0.79	2.5	1	100	-0.002	1.013		8/31/20 15:46	
AD18934-004.Sample	0.0031	0.0038	-0.0002	-0.000745587	0.8	2.5	1	100	-0.037	1.000		8/31/20 15:46	
AD18934-005.Sample	0.0042	0.0029	-0.0007	0.00207927	0.77	2.5	1	100	0.108	1.039		8/31/20 15:47	
AD18955-001.Sample	0.0030	0.0017	0.0013	0.00207927	0.81	2.5	1	100	0.103	0.988		8/31/20 15:47	

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA									
Batch#	778		QC Sample	AD18918-003 NS.Sample								
Date	8/31/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	19.10	19.10	96%	80-120%	NA	NA	PASS	
			MS(Sol)	21.98	37.52	16.81	76%	75-125%	NA	NA	PASS	
			MS(Insol)	791.63	436.99	416.29	53%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	20.70	NA	NA	NA	NA	NA		
			Sample Dup	NA	20.18	NA	NA	NA	3	20%		PASS
			PVS	21.98	43.28	22.57	103%	85-115%	NA	NA	PASS	
Lead Chromate Added : (G)	0.0112	0.0118										
Upper Calibration Abbsorbance:	0.7141											
			MS(Sol)	25.32	21.49	21.49	85%	75-125%	NA	NA	PASS	
			MS(Insol)	892.91	400.71	400.71	45%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	ND	NA	NA	NA	NA	NA		

ICV Data	ABS	Turb ABS		PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3425	0.0000	Crct. ABS	0.483999937	1	1	1	1	0.484	0.500	97	8/31/20 15:40	PASS
QC Data	**ABS**	**Turb ABS**	0.3425	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0001	0.0000	Crct. ABS	0.000384355	1	1	1	1	0.000	0.020		8/31/20 15:40	
MB.Sample	0.0001	0.0000	0.0001	0.000384355	1	2.5	1	100	0.015	0.800		8/31/20 15:40	
LCS.Sample	0.3379	0.0000	0.0001	0.477502782	1	2.5	1	100	19.100	0.800		8/31/20 15:41	
AD18918-003 NS.Sample	0.3344	0.0011	0.3379	0.471005589	0.91	2.5	1	100	20.704	0.879		8/31/20 15:42	
AD18918-003 DUP.Sample	0.3260	0.0011	0.3333	0.459141198	0.91	2.5	1	100	20.182	0.879		8/31/20 15:43	
AD18918-004 MS.Sample	0.6083	0.0042	0.3249	0.853491237	0.91	2.5	1	100	37.516	0.879		8/31/20 15:43	
AD18918-005 50X MSD.Sample	0.1410	0.0004	0.6041	0.198830589	0.91	2.5	50	100	436.990	43.956		8/31/20 15:44	
AD18918-003 PVS.Sample	0.6980	0.0011	0.1406	0.98456468	0.91	2.5	1	100	43.278	0.879		8/31/20 15:44	
			0.6969										
AD18955-001.Sample	0.0030	0.0017		0.00207927	0.81	2.5	1	100	0.103	0.988		8/31/20 15:47	
AD18955-002 MS2.Sample	0.3033	0.0030	0.0013	0.424395436	0.79	2.5	1	100	21.488	1.013		8/31/20 15:47	
AD18955-003 MSD 2.Sample	4.1905	0.0018	0.3003	5.916482821	0.85	2.5	1	100	278.423	0.941		8/31/20 15:48	
AD18955-003 MSD 50X 2.Sample	0.1218	0.0014	4.1887	0.170299523	0.85	2.5	50	100	400.705	47.059		8/31/20 15:49	
			0.1204										
Analytical Run					1	2.5	1	100					
ICV.Control	0.3425			0.483999937	1	1	1	1	0.484	0.020	97	8/31/20 15:40	PASS
ICB.Sample	0.0001		0.3425	0.000384355	1	1	1	1	0.000	0.020		8/31/20 15:40	
MB.Sample	0.0001		0.0001	0.000384355	1	2.5	1	100	0.015	0.800		8/31/20 15:40	
LCS.Sample	0.3379		0.0001	0.477502782	1	2.5	1	100	19.100	0.800		8/31/20 15:41	
AD18918-003 NS.Sample	0.3344	0.0011	0.3379	0.471005589	0.91	2.5	1	100	20.704	0.879		8/31/20 15:42	
AD18918-003 DUP.Sample	0.3260	0.0011	0.3333	0.459141198	0.91	2.5	1	100	20.182	0.879		8/31/20 15:43	
AD18918-004 MS.Sample	0.6083	0.0042	0.3249	0.853491237	0.91	2.5	1	100	37.516	0.879		8/31/20 15:43	
AD18918-005 XXX.Sample	4.0144	0.0039	0.6041	5.664788345	0.91	2.5	1	100	249.002	0.879		8/31/20 15:43	
AD18918-005 50X MSD.Sample	0.1410	0.0004	4.0105	0.198830589	0.91	2.5	50	100	436.990	43.956		8/31/20 15:44	
AD18918-003 PVS.Sample	0.6980	0.0011	0.1406	0.98456468	0.91	2.5	1	100	43.278	0.879		8/31/20 15:44	
CCV-1.Control	0.3330		0.6969	0.470581869	1	1	1	1	0.471	0.020	94	8/31/20 15:44	PASS
CCB-1.Sample	0.0003		0.3330	0.000666841	1	1	1	1	0.001	0.020		8/31/20 15:45	
AD18932-002.Sample	0.0135	0.0202	0.0003	-0.009220158	0.79	2.5	1	100	-0.467	1.013		8/31/20 15:45	
AD18934-001.Sample	0.0073	0.0075	-0.0067	-3.93727E-05	0.76	2.5	1	100	-0.002	1.053		8/31/20 15:45	
AD18934-002.Sample	0.0097	0.0105	-0.0002	-0.00088683	0.75	2.5	1	100	-0.047	1.067		8/31/20 15:46	
AD18934-003.Sample	0.0002	0.0004	-0.0008	-3.93732E-05	0.79	2.5	1	100	-0.002	1.013		8/31/20 15:46	
AD18934-004.Sample	0.0031	0.0038	-0.0002	-0.000745587	0.8	2.5	1	100	-0.037	1.000		8/31/20 15:46	
AD18934-005.Sample	0.0042	0.0029	-0.0007	0.00207927	0.77	2.5	1	100	0.108	1.039		8/31/20 15:47	
AD18955-001.Sample	0.0030	0.0017	0.0013	0.00207927	0.81	2.5	1	100	0.103	0.988		8/31/20 15:47	

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85228

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85228

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	42	6.4978	8.92	73		65	110
Chromium	85228	1	S26168A3	42	1.7164	2.27	76		61	114
Copper	85228	1	S26168A3	42	1.5885	2.09	76		66	110
Lead	85228	1	S26168A3	42	1.1971	1.63	73		62	110
Manganese	85228	1	S26168A3	42	4.4543	6.03	74		68	110
Mercury	85228	4	H26170S	15	5.3180	41.64	51		39	110
Nickel	85228	1	S26168A3	42	0.4134	.553	75		61	114
Zinc	85228	1	S26168A3	42	5.3061	7.13	74		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85228

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	41	6.6782	8.92	75		65	110
Chromium	85228	1	S26168A3	41	1.6950	2.27	75		61	114
Copper	85228	1	S26168A3	41	1.5670	2.09	75		66	110
Lead	85228	1	S26168A3	41	1.1739	1.63	72		62	110
Manganese	85228	1	S26168A3	41	4.5188	6.03	75		68	110
Mercury	85228	4	H26170S	14	5.0070	41.64	48		39	110
Nickel	85228	1	S26168A3	41	0.4117	.553	74		61	114
Zinc	85228	1	S26168A3	41	5.1847	7.13	73		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003 HRPB-3

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	46	S26168A3	43	0.8400	0.7836	0.5	11	a	75	125
Chromium	85228	1	S26168A3	46	S26168A3	43	0.5701	0.0846	0.5	97		75	125
Copper	85228	1	S26168A3	46	S26168A3	43	0.6851	0.2354	0.5	90		75	125
Lead	85228	1	S26168A3	46	S26168A3	43	0.5399	3.5540	0.5	-600	b	75	125
Manganese	85228	1	S26168A3	46	S26168A3	43	5.9788	6.4359	0.5	-91	b	75	125
Mercury	85228	1	H26170S	19	H26170S	16	9.9320	0.8380	10	91		75	125
Nickel	85228	1	S26168A3	46	S26168A3	43	0.6142	0.1404	0.5	95		75	125
Zinc	85228	1	S26168A3	46	S26168A3	43	1.0408	0.5911	0.5	90		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD18955-002 HRPB-3

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	45	S26168A3	43	0.6766	0.7836	0.5	-21	a	75	125
Chromium	85228	1	S26168A3	45	S26168A3	43	0.5546	0.0846	0.5	94		75	125
Copper	85228	1	S26168A3	45	S26168A3	43	0.6499	0.2354	0.5	83		75	125
Lead	85228	1	S26168A3	45	S26168A3	43	0.5416	3.5540	0.5	-600	b	75	125
Manganese	85228	1	S26168A3	45	S26168A3	43	2.5838	6.4359	0.5	-770	b	75	125
Mercury	85228	1	H26170S	18	H26170S	16	9.9250	0.8380	10	91		75	125
Nickel	85228	1	S26168A3	45	S26168A3	43	0.6158	0.1404	0.5	95		75	125
Zinc	85228	1	S26168A3	45	S26168A3	43	0.9384	0.5911	0.5	69	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85228

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85228

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	42	S26168A3	41	6.4978	6.6782	2.7		20
Chromium	85228	S26168A3	42	S26168A3	41	1.7164	1.6950	1.3		20
Copper	85228	S26168A3	42	S26168A3	41	1.5885	1.5670	1.4		20
Lead	85228	S26168A3	42	S26168A3	41	1.1971	1.1739	2		20
Manganese	85228	S26168A3	42	S26168A3	41	4.4543	4.5188	1.4		20
Mercury	85228	H26170S	15	H26170S	14	5.3180	5.0070	6		20
Nickel	85228	S26168A3	42	S26168A3	41	0.4134	0.4117	.4		20
Zinc	85228	S26168A3	42	S26168A3	41	5.3061	5.1847	2.3		20

TxtQcType: MR Matrix: SOIL SampleID: AD18955-001 HRPB-3

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	44	S26168A3	43	0.8278	0.7836	5.5		20
Chromium	85228	S26168A3	44	S26168A3	43	0.1139	0.0846	29	b	20
Copper	85228	S26168A3	44	S26168A3	43	0.3037	0.2354	25	a	20
Lead	85228	S26168A3	44	S26168A3	43	2.3034	3.5540	43	a	20
Manganese	85228	S26168A3	44	S26168A3	43	6.3194	6.4359	1.8		20
Mercury	85228	H26170S	17	H26170S	16	0.6540	0.8380	25	b	20
Nickel	85228	S26168A3	44	S26168A3	43	0.1666	0.1404	17		20
Zinc	85228	S26168A3	44	S26168A3	43	0.6861	0.5911	15		20

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003 HRPB-3

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	46	S26168A3	45	0.8400	0.6766	22	a	20
Chromium	85228	S26168A3	46	S26168A3	45	0.5701	0.5546	2.8		20
Copper	85228	S26168A3	46	S26168A3	45	0.6851	0.6499	5.3		20
Lead	85228	S26168A3	46	S26168A3	45	0.5399	0.5416	.3		20
Manganese	85228	S26168A3	46	S26168A3	45	5.9788	2.5838	79	a	20
Mercury	85228	H26170S	19	H26170S	18	9.9320	9.9250	.071		20
Nickel	85228	S26168A3	46	S26168A3	45	0.6142	0.6158	.26		20
Zinc	85228	S26168A3	46	S26168A3	45	1.0408	0.9384	10		20

TxtQcType: SD Matrix: SOIL SampleID: AD18955-001 HRPB-3

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Barium	85228	S26168A3	48	S26168A3	43	5	0.1555	0.7836	0.75		10
Chromium	85228	S26168A3	48	S26168A3	43	5	0.0119	0.0846	30	a	10
Copper	85228	S26168A3	48	S26168A3	43	5	0.0469	0.2354	0.37		10
Lead	85228	S26168A3	48	S26168A3	43	5	0.7188	3.5540	1.1		10
Manganese	85228	S26168A3	48	S26168A3	43	5	1.3085	6.4359	1.7		10
Nickel	85228	S26168A3	48	S26168A3	43	5	0.0302	0.1404	7.5		10
Zinc	85228	S26168A3	48	S26168A3	43	5	0.1217	0.5911	3		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85229

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85229

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85229	S083120A	22	S083120A	21	38.6760	38.5900	.22	20
Beryllium	85229	S083120A	22	S083120A	21	143.2870	144.8910	1.1	20
Selenium	85229	S083120A	22	S083120A	21	276.1240	279.3350	1.2	20
Silver	85229	S083120A	22	S083120A	21	74.6300	72.8790	2.4	20

TxtQcType: MR Matrix: SOIL SampleID: AD18955-001 HRPB-3

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85229	S083120A	33	S083120A	32	34.0100	34.4610	1.3	20
Beryllium	85229	S083120A	33	S083120A	32	1.0470	1U	---	20
Selenium	85229	S083120A	33	S083120A	32	10U	10U	---	20
Silver	85229	S083120A	33	S083120A	32	1U	1U	---	20

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003 HRPB-3

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85229	S083120A	36	S083120A	35	250.5400	235.5220	6.2	20
Beryllium	85229	S083120A	36	S083120A	35	200.5140	197.0770	1.7	20
Selenium	85229	S083120A	36	S083120A	35	203.4800	202.5500	.46	20
Silver	85229	S083120A	36	S083120A	35	40.2550	38.9120	3.4	20

TxtQcType: SD Matrix: SOIL SampleID: AD18955-001 HRPB-3

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85229	S083120A	34	S083120A	32	5	7.3530	34.4610	6.7		20
Beryllium	85229	S083120A	34	S083120A	32	5	0.2180	0.9820	11	c	20
Selenium	85229	S083120A	34	S083120A	32	5	1.0710	4.4390	21	c	20
Silver	85229	S083120A	34	S083120A	32	5	0.0670	0.3380	0.89		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85228

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85228

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	42	6.4978	8.92	73		65	110
Chromium	85228	1	S26168A3	42	1.7164	2.27	76		61	114
Copper	85228	1	S26168A3	42	1.5885	2.09	76		66	110
Lead	85228	1	S26168A3	42	1.1971	1.63	73		62	110
Manganese	85228	1	S26168A3	42	4.4543	6.03	74		68	110
Mercury	85228	4	H26170S	15	5.3180	41.64	51		39	110
Nickel	85228	1	S26168A3	42	0.4134	.553	75		61	114
Zinc	85228	1	S26168A3	42	5.3061	7.13	74		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85228

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	41	6.6782	8.92	75		65	110
Chromium	85228	1	S26168A3	41	1.6950	2.27	75		61	114
Copper	85228	1	S26168A3	41	1.5670	2.09	75		66	110
Lead	85228	1	S26168A3	41	1.1739	1.63	72		62	110
Manganese	85228	1	S26168A3	41	4.5188	6.03	75		68	110
Mercury	85228	4	H26170S	14	5.0070	41.64	48		39	110
Nickel	85228	1	S26168A3	41	0.4117	.553	74		61	114
Zinc	85228	1	S26168A3	41	5.1847	7.13	73		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003 HRPB-3

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	46	S26168A3	43	0.8400	0.7836	0.5	11	a	75	125
Chromium	85228	1	S26168A3	46	S26168A3	43	0.5701	0.0846	0.5	97		75	125
Copper	85228	1	S26168A3	46	S26168A3	43	0.6851	0.2354	0.5	90		75	125
Lead	85228	1	S26168A3	46	S26168A3	43	0.5399	3.5540	0.5	-600	b	75	125
Manganese	85228	1	S26168A3	46	S26168A3	43	5.9788	6.4359	0.5	-91	b	75	125
Mercury	85228	1	H26170S	19	H26170S	16	9.9320	0.8380	10	91		75	125
Nickel	85228	1	S26168A3	46	S26168A3	43	0.6142	0.1404	0.5	95		75	125
Zinc	85228	1	S26168A3	46	S26168A3	43	1.0408	0.5911	0.5	90		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD18955-002 HRPB-3

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85228	1	S26168A3	45	S26168A3	43	0.6766	0.7836	0.5	-21	a	75	125
Chromium	85228	1	S26168A3	45	S26168A3	43	0.5546	0.0846	0.5	94		75	125
Copper	85228	1	S26168A3	45	S26168A3	43	0.6499	0.2354	0.5	83		75	125
Lead	85228	1	S26168A3	45	S26168A3	43	0.5416	3.5540	0.5	-600	b	75	125
Manganese	85228	1	S26168A3	45	S26168A3	43	2.5838	6.4359	0.5	-770	b	75	125
Mercury	85228	1	H26170S	18	H26170S	16	9.9250	0.8380	10	91		75	125
Nickel	85228	1	S26168A3	45	S26168A3	43	0.6158	0.1404	0.5	95		75	125
Zinc	85228	1	S26168A3	45	S26168A3	43	0.9384	0.5911	0.5	69	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85228

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85228

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	42	S26168A3	41	6.4978	6.6782	2.7		20
Chromium	85228	S26168A3	42	S26168A3	41	1.7164	1.6950	1.3		20
Copper	85228	S26168A3	42	S26168A3	41	1.5885	1.5670	1.4		20
Lead	85228	S26168A3	42	S26168A3	41	1.1971	1.1739	2		20
Manganese	85228	S26168A3	42	S26168A3	41	4.4543	4.5188	1.4		20
Mercury	85228	H26170S	15	H26170S	14	5.3180	5.0070	6		20
Nickel	85228	S26168A3	42	S26168A3	41	0.4134	0.4117	.4		20
Zinc	85228	S26168A3	42	S26168A3	41	5.3061	5.1847	2.3		20

TxtQcType: MR Matrix: SOIL SampleID: AD18955-001 HRPB-3

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	44	S26168A3	43	0.8278	0.7836	5.5		20
Chromium	85228	S26168A3	44	S26168A3	43	0.1139	0.0846	29	b	20
Copper	85228	S26168A3	44	S26168A3	43	0.3037	0.2354	25	a	20
Lead	85228	S26168A3	44	S26168A3	43	2.3034	3.5540	43	a	20
Manganese	85228	S26168A3	44	S26168A3	43	6.3194	6.4359	1.8		20
Mercury	85228	H26170S	17	H26170S	16	0.6540	0.8380	25	b	20
Nickel	85228	S26168A3	44	S26168A3	43	0.1666	0.1404	17		20
Zinc	85228	S26168A3	44	S26168A3	43	0.6861	0.5911	15		20

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003 HRPB-3

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85228	S26168A3	46	S26168A3	45	0.8400	0.6766	22	a	20
Chromium	85228	S26168A3	46	S26168A3	45	0.5701	0.5546	2.8		20
Copper	85228	S26168A3	46	S26168A3	45	0.6851	0.6499	5.3		20
Lead	85228	S26168A3	46	S26168A3	45	0.5399	0.5416	.3		20
Manganese	85228	S26168A3	46	S26168A3	45	5.9788	2.5838	79	a	20
Mercury	85228	H26170S	19	H26170S	18	9.9320	9.9250	.071		20
Nickel	85228	S26168A3	46	S26168A3	45	0.6142	0.6158	.26		20
Zinc	85228	S26168A3	46	S26168A3	45	1.0408	0.9384	10		20

TxtQcType: SD Matrix: SOIL SampleID: AD18955-001 HRPB-3

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Barium	85228	S26168A3	48	S26168A3	43	5	0.1555	0.7836	0.75		10
Chromium	85228	S26168A3	48	S26168A3	43	5	0.0119	0.0846	30	a	10
Copper	85228	S26168A3	48	S26168A3	43	5	0.0469	0.2354	0.37		10
Lead	85228	S26168A3	48	S26168A3	43	5	0.7188	3.5540	1.1		10
Manganese	85228	S26168A3	48	S26168A3	43	5	1.3085	6.4359	1.7		10
Nickel	85228	S26168A3	48	S26168A3	43	5	0.0302	0.1404	7.5		10
Zinc	85228	S26168A3	48	S26168A3	43	5	0.1217	0.5911	3		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85229

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85229

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85229	S083120A	22	S083120A	21	38.6760	38.5900	.22	20
Beryllium	85229	S083120A	22	S083120A	21	143.2870	144.8910	1.1	20
Selenium	85229	S083120A	22	S083120A	21	276.1240	279.3350	1.2	20
Silver	85229	S083120A	22	S083120A	21	74.6300	72.8790	2.4	20

TxtQcType: MR Matrix: SOIL SampleID: AD18955-001 HRPB-3

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85229	S083120A	33	S083120A	32	34.0100	34.4610	1.3	20
Beryllium	85229	S083120A	33	S083120A	32	1.0470	1U	---	20
Selenium	85229	S083120A	33	S083120A	32	10U	10U	---	20
Silver	85229	S083120A	33	S083120A	32	1U	1U	---	20

TxtQcType: MSD Matrix: SOIL SampleID: AD18955-003 HRPB-3

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85229	S083120A	36	S083120A	35	250.5400	235.5220	6.2	20
Beryllium	85229	S083120A	36	S083120A	35	200.5140	197.0770	1.7	20
Selenium	85229	S083120A	36	S083120A	35	203.4800	202.5500	.46	20
Silver	85229	S083120A	36	S083120A	35	40.2550	38.9120	3.4	20

TxtQcType: SD Matrix: SOIL SampleID: AD18955-001 HRPB-3

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85229	S083120A	34	S083120A	32	5	7.3530	34.4610	6.7		20
Beryllium	85229	S083120A	34	S083120A	32	5	0.2180	0.9820	11	c	20
Selenium	85229	S083120A	34	S083120A	32	5	1.0710	4.4390	21	c	20
Silver	85229	S083120A	34	S083120A	32	5	0.0670	0.3380	0.89		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131888.D	MBS87762	8/31/2020 9:07:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			
Method: 8260C		Matrix: Soil	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	77.0435	0	50	154 *	20	130
Dichlorodifluoromethane	**1**	**71.9361**	**0**	**50**	**144 ***	**20**	**130**
Chloromethane	**1**	**63.4485**	**0**	**50**	**127**	**20**	**130**
Bromomethane	**1**	**50.5524**	**0**	**50**	**101**	**20**	**130**
Vinyl Chloride	**1**	**60.9187**	**0**	**50**	**122**	**20**	**130**
Chloroethane	**1**	**56.196**	**0**	**50**	**112**	**20**	**130**
Trichlorofluoromethane	**1**	**53.2772**	**0**	**50**	**107**	**20**	**130**
Ethyl ether	1	45.2954	0	50	91	50	130
Furan	1	48.3651	0	50	97	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**53.8862**	**0**	**50**	**108**	**50**	**130**
Methylene Chloride	**1**	**46.9147**	**0**	**50**	**94**	**50**	**130**
Acrolein	**1**	**291.8958**	**0**	**200**	**146 ***	**20**	**130**
Acrylonitrile	**1**	**41.0821**	**0**	**50**	**82**	**20**	**130**
Iodomethane	1	65.371	0	50	131 *	50	130
Acetone	**1**	**191.2286**	**0**	**200**	**96**	**20**	**130**
Carbon Disulfide	**1**	**49.1955**	**0**	**50**	**98**	**50**	**130**
t-Butyl Alcohol	**1**	**145.0596**	**0**	**200**	**73**	**20**	**130**
n-Hexane	1	55.5732	0	50	111	50	130
Di-isopropyl-ether	1	50.9804	0	50	102	50	130
1,1-Dichloroethene	**1**	**54.7368**	**0**	**50**	**109**	**50**	**130**
Methyl Acetate	1	56.1536	0	50	112	50	130
Methyl-t-butyl ether	**1**	**53.4186**	**0**	**50**	**107**	**50**	**130**
1,1-Dichloroethane	**1**	**51.3318**	**0**	**50**	**103**	**50**	**130**
trans-1,2-Dichloroethene	**1**	**52.6015**	**0**	**50**	**105**	**50**	**130**
Ethyl-t-butyl ether	1	46.2693	0	50	93	50	130
cis-1,2-Dichloroethene	**1**	**50.5797**	**0**	**50**	**101**	**50**	**130**
Bromochloromethane	1	50.2529	0	50	101	50	130
2,2-Dichloropropane	1	58.6043	0	50	117	50	130
Ethyl acetate	1	42.8638	0	50	86	50	130
1,4-Dioxane	**1**	**1557.786**	**0**	**2500**	**62**	**50**	**130**
1,1-Dichloropropene	1	50.9925	0	50	102	50	130
Chloroform	**1**	**51.042**	**0**	**50**	**102**	**50**	**130**
Cyclohexane	1	51.9312	0	50	104	50	130
1,2-Dichloroethane	**1**	**51.3951**	**0**	**50**	**103**	**50**	**130**
2-Butanone	**1**	**41.0564**	**0**	**50**	**82**	**20**	**130**
1,1,1-Trichloroethane	**1**	**52.0174**	**0**	**50**	**104**	**50**	**130**
Carbon Tetrachloride	**1**	**52.2009**	**0**	**50**	**104**	**50**	**130**
Vinyl Acetate	1	38.9192	0	50	78	50	130
Bromodichloromethane	**1**	**50.6791**	**0**	**50**	**101**	**50**	**130**
Methylcyclohexane	1	49.9512	0	50	100	50	130
Dibromomethane	1	51.026	0	50	102	50	130
1,2-Dichloropropane	**1**	**50.2056**	**0**	**50**	**100**	**50**	**130**
Trichloroethene	**1**	**49.277**	**0**	**50**	**99**	**50**	**130**
Benzene	**1**	**49.4058**	**0**	**50**	**99**	**50**	**130**
tert-Amyl methyl ether	1	49.7989	0	50	100	50	130
Iso-propylacetate	1	44.3314	0	50	89	50	130
Methyl methacrylate	1	42.8021	0	50	86	50	130
Dibromochloromethane	**1**	**48.2256**	**0**	**50**	**96**	**50**	**130**
2-Chloroethylvinylether	**1**	**103.4236**	**0**	**50**	**207 ***	**50**	**130**
cis-1,3-Dichloropropene	**1**	**48.2806**	**0**	**50**	**97**	**50**	**130**
trans-1,3-Dichloropropene	**1**	**49.4282**	**0**	**50**	**99**	**50**	**130**
Ethyl methacrylate	1	45.9704	0	50	92	50	130
1,1,2-Trichloroethane	**1**	**46.6959**	**0**	**50**	**93**	**50**	**130**
1,2-Dibromoethane	1	46.967	0	50	94	50	130
1,3-Dichloropropane	**1**	**46.3203**	**0**	**50**	**93**	**50**	**130**
4-Methyl-2-Pentanone	**1**	**39.3965**	**0**	**50**	**79**	**20**	**130**
2-Hexanone	**1**	**39.3843**	**0**	**50**	**79**	**20**	**130**
Tetrachloroethene	**1**	**45.5631**	**0**	**50**	**91**	**50**	**130**
Toluene	**1**	**44.3318**	**0**	**50**	**89**	**50**	**130**
1,1,1,2-Tetrachloroethane	1	45.9037	0	50	92	50	130
Chlorobenzene	**1**	**44.3688**	**0**	**50**	**89**	**50**	**130**

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	44.6065	0	50	89	50	130
n-Amyl acetate	1	44.5516	0	50	89	50	130
Bromoform	**1**	**68.5695**	**0**	**50**	**137***	**20**	**130**
Ethylbenzene	**1**	**44.6076**	**0**	**50**	**89**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**43.792**	**0**	**50**	**88**	**50**	**130**
Styrene	**1**	**43.4477**	**0**	**50**	**87**	**50**	**130**
m&p-Xylenes	**1**	**87.0434**	**0**	**100**	**87**	**50**	**130**
o-Xylene	**1**	**41.9207**	**0**	**50**	**84**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	44.7106	0	50	89	20	130
1,3-Dichlorobenzene	**1**	**43.7558**	**0**	**50**	**88**	**50**	**130**
1,4-Dichlorobenzene	**1**	**42.9135**	**0**	**50**	**86**	**50**	**130**
1,2-Dichlorobenzene	**1**	**43.5856**	**0**	**50**	**87**	**50**	**130**
Isopropylbenzene	**1**	**43.989**	**0**	**50**	**88**	**50**	**130**
Cyclohexanone	1	183.5002	0	250	73	50	130
Camphene	1	46.1519	0	50	92	50	130
1,2,3-Trichloropropane	**1**	**42.6801**	**0**	**50**	**85**	**50**	**130**
2-Chlorotoluene	1	44.5685	0	50	89	50	130
p-Ethyltoluene	1	43.0244	0	50	86	50	130
4-Chlorotoluene	1	46.4898	0	50	93	50	130
n-Propylbenzene	**1**	**44.8788**	**0**	**50**	**90**	**50**	**130**
Bromobenzene	1	43.9032	0	50	88	50	130
1,3,5-Trimethylbenzene	**1**	**49.1502**	**0**	**50**	**98**	**50**	**130**
Butyl methacrylate	1	41.7019	0	50	83	50	130
t-Butylbenzene	**1**	**45.1207**	**0**	**50**	**90**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**45.2927**	**0**	**50**	**91**	**50**	**130**
sec-Butylbenzene	**1**	**47.7034**	**0**	**50**	**95**	**50**	**130**
4-Isopropyltoluene	**1**	**47.9029**	**0**	**50**	**96**	**50**	**130**
n-Butylbenzene	**1**	**49.0503**	**0**	**50**	**98**	**50**	**130**
p-Diethylbenzene	1	48.4126	0	50	97	50	130
1,2,4,5-Tetramethylbenzene	1	48.3684	0	50	97	50	130
1,2-Dibromo-3-Chloropropane	1	38.5331	0	50	77	50	130
Camphor	1	555.9057	0	500	111	50	130
Hexachlorobutadiene	1	45.011	0	50	90	50	130
1,2,4-Trichlorobenzene	1	43.352	0	50	87	50	130
1,2,3-Trichlorobenzene	1	42.4155	0	50	85	50	130
Naphthalene	1	39.7835	0	50	80	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Non Spike(If applicable):	6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):		HRPB-3	

Method: 8260C Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	56.9035	0	50	114	20	130
Dichlorodifluoromethane	1	62.8668	0	50	126	20	130
Chloromethane	1	56.1541	0	50	112	20	130
Bromomethane	1	50.2121	0	50	100	20	130
Vinyl Chloride	1	56.1453	0	50	112	20	130
Chloroethane	1	51.908	0	50	104	20	130
Trichlorofluoromethane	1	51.1041	0	50	102	20	130
Ethyl ether	1	46.2834	0	50	93	50	130
Furan	1	46.2299	0	50	92	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	52.3408	0	50	105	50	130
Methylene Chloride	1	52.7897	5.0839	50	95	50	130
Acrolein	1	248.918	0	200	124	20	130
Acrylonitrile	1	34.3463	0	50	69	20	130
Iodomethane	1	64.5939	0	50	129	50	130
Acetone	1	157.3904	0	200	79	20	130
Carbon Disulfide	1	47.3944	0	50	95	50	130
t-Butyl Alcohol	1	116.3514	0	200	58	20	130
n-Hexane	1	54.7434	0	50	109	50	130
Di-isopropyl-ether	1	54.2364	0	50	108	50	130
1,1-Dichloroethene	1	52.2403	0	50	104	50	130
Methyl Acetate	1	46.8893	0	50	94	50	130
Methyl-t-butyl ether	1	54.3286	0	50	109	50	130
1,1-Dichloroethane	1	49.0593	0	50	98	50	130
trans-1,2-Dichloroethene	1	49.6338	0	50	99	50	130
Ethyl-t-butyl ether	1	49.3762	0	50	99	50	130
cis-1,2-Dichloroethene	1	49.1894	0	50	98	50	130
Bromochloromethane	1	50.2977	0	50	101	50	130
2,2-Dichloropropane	1	57.0601	0	50	114	50	130
Ethyl acetate	1	36.7433	0	50	73	50	130
1,4-Dioxane	1	1274.773	0	2500	51	50	130
1,1-Dichloropropene	1	48.5605	0	50	97	50	130
Chloroform	1	49.9443	0	50	100	50	130
Cyclohexane	1	50.8219	0	50	102	50	130
1,2-Dichloroethane	1	50.2019	0	50	100	50	130
2-Butanone	1	33.5103	0	50	67	20	130
1,1,1-Trichloroethane	1	49.0659	0	50	98	50	130
Carbon Tetrachloride	1	51.644	0	50	103	50	130
Vinyl Acetate	1	37.6728	0	50	75	50	130
Bromodichloromethane	1	50.2178	0	50	100	50	130
Methylcyclohexane	1	50.4394	0	50	101	50	130
Dibromomethane	1	47.858	0	50	96	50	130
1,2-Dichloropropane	1	48.2694	0	50	97	50	130
Trichloroethene	1	73.1622	21.8	50	103	50	130
Benzene	1	48.4836	0	50	97	50	130
tert-Amyl methyl ether	1	52.4065	0	50	105	50	130
Iso-propylacetate	1	41.66	0	50	83	50	130
Methyl methacrylate	1	39.8495	0	50	80	50	130
Dibromochloromethane	1	45.6697	0	50	91	50	130
2-Chloroethylvinylether	1	95.5322	0	50	191 *	50	130
cis-1,3-Dichloropropene	1	45.5903	0	50	91	50	130
trans-1,3-Dichloropropene	1	44.067	0	50	88	50	130
Ethyl methacrylate	1	43.1348	0	50	86	50	130
1,1,2-Trichloroethane	1	44.5196	0	50	89	50	130
1,2-Dibromoethane	1	41.0321	0	50	82	50	130
1,3-Dichloropropane	1	42.8237	0	50	86	50	130
4-Methyl-2-Pentanone	1	33.7094	0	50	67	20	130
2-Hexanone	1	30.8066	0	50	62	20	130
Tetrachloroethene	1	50.6666	10.8224	50	80	50	130
Toluene	1	41.0645	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.0505	0	50	90	50	130
Chlorobenzene	1	39.6054	0	50	79	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	41.0364	0	50	82	50	130
n-Amyl acetate	1	38.5687	0	50	77	50	130
Bromoform	**1**	**65.2935**	**0**	**50**	**131***	**20**	**130**
Ethylbenzene	**1**	**42.9713**	**0**	**50**	**86**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**40.0258**	**0**	**50**	**80**	**50**	**130**
Styrene	**1**	**37.9266**	**0**	**50**	**76**	**50**	**130**
m&p-Xylenes	**1**	**78.4306**	**0**	**100**	**78**	**50**	**130**
o-Xylene	**1**	**39.2014**	**0**	**50**	**78**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	36.9711	0	50	74	20	130
1,3-Dichlorobenzene	**1**	**35.471**	**0**	**50**	**71**	**50**	**130**
1,4-Dichlorobenzene	**1**	**33.9467**	**0**	**50**	**68**	**50**	**130**
1,2-Dichlorobenzene	**1**	**35.8729**	**0**	**50**	**72**	**50**	**130**
Isopropylbenzene	**1**	**40.7636**	**0**	**50**	**82**	**50**	**130**
Cyclohexanone	1	125.4322	0	250	50	50	130
Camphene	1	41.718	0	50	83	50	130
1,2,3-Trichloropropane	**1**	**36.3643**	**0**	**50**	**73**	**50**	**130**
2-Chlorotoluene	1	40.2726	0	50	81	50	130
p-Ethyltoluene	1	36.6825	0	50	73	50	130
4-Chlorotoluene	1	37.6433	0	50	75	50	130
n-Propylbenzene	**1**	**38.3835**	**0**	**50**	**77**	**50**	**130**
Bromobenzene	1	38.8818	0	50	78	50	130
1,3,5-Trimethylbenzene	**1**	**43.2564**	**0**	**50**	**87**	**50**	**130**
Butyl methacrylate	1	41.2717	0	50	83	50	130
t-Butylbenzene	**1**	**40.0099**	**0**	**50**	**80**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**38.5263**	**0**	**50**	**77**	**50**	**130**
sec-Butylbenzene	**1**	**40.366**	**0**	**50**	**81**	**50**	**130**
4-Isopropyltoluene	**1**	**39.5065**	**0**	**50**	**79**	**50**	**130**
n-Butylbenzene	**1**	**36.1879**	**0**	**50**	**72**	**50**	**130**
p-Diethylbenzene	1	36.9323	0	50	74	50	130
1,2,4,5-Tetramethylbenzene	1	37.6781	0	50	75	50	130
1,2-Dibromo-3-Chloropropane	1	31.3599	0	50	63	50	130
Camphor	1	473.298	0	500	95	50	130
Hexachlorobutadiene	1	35.1542	0	50	70	50	130
1,2,4-Trichlorobenzene	1	28.2306	0	50	56	50	130
1,2,3-Trichlorobenzene	1	30.0156	0	50	60	50	130
Naphthalene	1	30.4916	0	50	61	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Non Spike(If applicable):	6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):			

HRBP-3

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	53.7847	0	50	108	20	130
Dichlorodifluoromethane	1	65.4838	0	50	131*	20	130
Chloromethane	1	56.6472	0	50	113	20	130
Bromomethane	1	51.6003	0	50	103	20	130
Vinyl Chloride	1	56.8458	0	50	114	20	130
Chloroethane	1	52.3136	0	50	105	20	130
Trichlorofluoromethane	1	52.2935	0	50	105	20	130
Ethyl ether	1	49.7009	0	50	99	50	130
Furan	1	47.2611	0	50	95	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	56.3197	0	50	113	50	130
Methylene Chloride	1	54.1757	5.0839	50	98	50	130
Acrolein	1	259.5406	0	200	130	20	130
Acrylonitrile	1	35.0489	0	50	70	20	130
Iodomethane	1	65.8217	0	50	132*	50	130
Acetone	1	162.1024	0	200	81	20	130
Carbon Disulfide	1	49.643	0	50	99	50	130
t-Butyl Alcohol	1	127.633	0	200	64	20	130
n-Hexane	1	58.3019	0	50	117	50	130
Di-isopropyl-ether	1	55.5257	0	50	111	50	130
1,1-Dichloroethene	1	53.6783	0	50	107	50	130
Methyl Acetate	1	50.8647	0	50	102	50	130
Methyl-t-butyl ether	1	57.9525	0	50	116	50	130
1,1-Dichloroethane	1	52.194	0	50	104	50	130
trans-1,2-Dichloroethene	1	49.8849	0	50	100	50	130
Ethyl-t-butyl ether	1	51.0834	0	50	102	50	130
cis-1,2-Dichloroethene	1	51.2312	0	50	102	50	130
Bromochloromethane	1	53.4537	0	50	107	50	130
2,2-Dichloropropane	1	58.147	0	50	116	50	130
Ethyl acetate	1	33.6297	0	50	67	50	130
1,4-Dioxane	1	1315.993	0	2500	53	50	130
1,1-Dichloropropene	1	50.4388	0	50	101	50	130
Chloroform	1	51.9592	0	50	104	50	130
Cyclohexane	1	52.7667	0	50	106	50	130
1,2-Dichloroethane	1	52.776	0	50	106	50	130
2-Butanone	1	34.6742	0	50	69	20	130
1,1,1-Trichloroethane	1	52.2007	0	50	104	50	130
Carbon Tetrachloride	1	53.6249	0	50	107	50	130
Vinyl Acetate	1	39.662	0	50	79	50	130
Bromodichloromethane	1	52.8916	0	50	106	50	130
Methylcyclohexane	1	51.9779	0	50	104	50	130
Dibromomethane	1	50.6971	0	50	101	50	130
1,2-Dichloropropane	1	49.6665	0	50	99	50	130
Trichloroethene	1	75.2922	21.8	50	107	50	130
Benzene	1	50.3163	0	50	101	50	130
tert-Amyl methyl ether	1	56.2173	0	50	112	50	130
Iso-propylacetate	1	42.6062	0	50	85	50	130
Methyl methacrylate	1	41.2272	0	50	82	50	130
Dibromochloromethane	1	48.1401	0	50	96	50	130
2-Chloroethylvinylether	1	100.3461	0	50	201*	50	130
cis-1,3-Dichloropropene	1	46.6773	0	50	93	50	130
trans-1,3-Dichloropropene	1	47.5296	0	50	95	50	130
Ethyl methacrylate	1	46.9747	0	50	94	50	130
1,1,2-Trichloroethane	1	46.8811	0	50	94	50	130
1,2-Dibromoethane	1	44.9778	0	50	90	50	130
1,3-Dichloropropane	1	46.3511	0	50	93	50	130
4-Methyl-2-Pentanone	1	36.7572	0	50	74	20	130
2-Hexanone	1	34.1195	0	50	68	20	130
Tetrachloroethene	1	52.4352	10.8224	50	83	50	130
Toluene	1	40.7723	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.2612	0	50	91	50	130
Chlorobenzene	1	40.3151	0	50	81	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	45.4686	0	50	91	50	130
n-Amyl acetate	1	44.7211	0	50	89	50	130
Bromoform	**1**	**70.4273**	**0**	**50**	**141***	**20**	**130**
Ethylbenzene	**1**	**42.7105**	**0**	**50**	**85**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**44.1548**	**0**	**50**	**88**	**50**	**130**
Styrene	**1**	**40.2637**	**0**	**50**	**81**	**50**	**130**
m&p-Xylenes	**1**	**78.8436**	**0**	**100**	**79**	**50**	**130**
o-Xylene	**1**	**39.4447**	**0**	**50**	**79**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	40.8268	0	50	82	20	130
1,3-Dichlorobenzene	**1**	**37.8242**	**0**	**50**	**76**	**50**	**130**
1,4-Dichlorobenzene	**1**	**36.8102**	**0**	**50**	**74**	**50**	**130**
1,2-Dichlorobenzene	**1**	**39.293**	**0**	**50**	**79**	**50**	**130**
Isopropylbenzene	**1**	**40.7047**	**0**	**50**	**81**	**50**	**130**
Cyclohexanone	1	135.2346	0	250	54	50	130
Camphene	1	42.2018	0	50	84	50	130
1,2,3-Trichloropropane	**1**	**41.2923**	**0**	**50**	**83**	**50**	**130**
2-Chlorotoluene	1	41.5022	0	50	83	50	130
p-Ethyltoluene	1	37.3405	0	50	75	50	130
4-Chlorotoluene	1	39.557	0	50	79	50	130
n-Propylbenzene	**1**	**39.5838**	**0**	**50**	**79**	**50**	**130**
Bromobenzene	1	39.8882	0	50	80	50	130
1,3,5-Trimethylbenzene	**1**	**44.2606**	**0**	**50**	**89**	**50**	**130**
Butyl methacrylate	1	44.8847	0	50	90	50	130
t-Butylbenzene	**1**	**40.8828**	**0**	**50**	**82**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**39.8077**	**0**	**50**	**80**	**50**	**130**
sec-Butylbenzene	**1**	**41.2564**	**0**	**50**	**83**	**50**	**130**
4-Isopropyltoluene	**1**	**40.7458**	**0**	**50**	**81**	**50**	**130**
n-Butylbenzene	**1**	**38.6688**	**0**	**50**	**77**	**50**	**130**
p-Diethylbenzene	1	38.5083	0	50	77	50	130
1,2,4,5-Tetramethylbenzene	1	41.4972	0	50	83	50	130
1,2-Dibromo-3-Chloropropane	1	36.9535	0	50	74	50	130
Camphor	1	547.1421	0	500	109	50	130
Hexachlorobutadiene	1	36.7858	0	50	74	50	130
1,2,4-Trichlorobenzene	1	33.9584	0	50	68	50	130
1,2,3-Trichlorobenzene	1	34.7254	0	50	69	50	130
Naphthalene	1	35.4652	0	50	71	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Duplicate(If applicable):	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Inst Blank(If applicable):		HRBP-3	

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	53.7847	56.9035	5.6	30
Dichlorodifluoromethane	**1**	**65.4838**	**62.8668**	**4.1**	**30**
Chloromethane	**1**	**56.6472**	**56.1541**	**0.87**	**30**
Bromomethane	**1**	**51.6003**	**50.2121**	**2.7**	**30**
Vinyl Chloride	**1**	**56.8458**	**56.1453**	**1.2**	**40**
Chloroethane	**1**	**52.3136**	**51.908**	**0.78**	**30**
Trichlorofluoromethane	**1**	**52.2935**	**51.1041**	**2.3**	**30**
Ethyl ether	1	49.7009	46.2834	7.1	30
Furan	1	47.2611	46.2299	2.2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**56.3197**	**52.3408**	**7.3**	**30**
Methylene Chloride	**1**	**54.1757**	**52.7897**	**2.6**	**30**
Acrolein	**1**	**259.5406**	**248.918**	**4.2**	**30**
Acrylonitrile	**1**	**35.0489**	**34.3463**	**2**	**30**
Iodomethane	1	65.8217	64.5939	1.9	30
Acetone	**1**	**162.1024**	**157.3904**	**2.9**	**30**
Carbon Disulfide	**1**	**49.643**	**47.3944**	**4.6**	**30**
t-Butyl Alcohol	**1**	**127.633**	**116.3514**	**9.2**	**30**
n-Hexane	1	58.3019	54.7434	6.3	30
Di-isopropyl-ether	1	55.5257	54.2364	2.3	30
1,1-Dichloroethene	**1**	**53.6783**	**52.2403**	**2.7**	**40**
Methyl Acetate	1	50.8647	46.8893	8.1	30
Methyl-t-butyl ether	**1**	**57.9525**	**54.3286**	**6.5**	**30**
1,1-Dichloroethane	**1**	**52.194**	**49.0593**	**6.2**	**40**
trans-1,2-Dichloroethene	**1**	**49.8849**	**49.6338**	**0.5**	**30**
Ethyl-t-butyl ether	1	51.0834	49.3762	3.4	30
cis-1,2-Dichloroethene	**1**	**51.2312**	**49.1894**	**4.1**	**30**
Bromochloromethane	1	53.4537	50.2977	6.1	30
2,2-Dichloropropane	1	58.147	57.0601	1.9	30
Ethyl acetate	1	33.6297	36.7433	8.8	30
1,4-Dioxane	**1**	**1315.993**	**1274.773**	**3.2**	**30**
1,1-Dichloropropene	1	50.4388	48.5605	3.8	30
Chloroform	**1**	**51.9592**	**49.9443**	**4**	**40**
Cyclohexane	1	52.7667	50.8219	3.8	30
1,2-Dichloroethane	**1**	**52.776**	**50.2019**	**5**	**40**
2-Butanone	**1**	**34.6742**	**33.5103**	**3.4**	**40**
1,1,1-Trichloroethane	**1**	**52.2007**	**49.0659**	**6.2**	**30**
Carbon Tetrachloride	**1**	**53.6249**	**51.644**	**3.8**	**40**
Vinyl Acetate	1	39.662	37.6728	5.1	30
Bromodichloromethane	**1**	**52.8916**	**50.2178**	**5.2**	**30**
Methylcyclohexane	1	51.9779	50.4394	3	30
Dibromomethane	1	50.6971	47.858	5.8	30
1,2-Dichloropropane	**1**	**49.6665**	**48.2694**	**2.9**	**30**
Trichloroethene	**1**	**75.2922**	**73.1622**	**2.9**	**40**
Benzene	**1**	**50.3163**	**48.4836**	**3.7**	**40**
tert-Amyl methyl ether	1	56.2173	52.4065	7	30
Iso-propylacetate	1	42.6062	41.66	2.2	30
Methyl methacrylate	1	41.2272	39.8495	3.4	30
Dibromochloromethane	**1**	**48.1401**	**45.6697**	**5.3**	**30**
2-Chloroethylvinylether	**1**	**100.3461**	**95.5322**	**4.9**	**30**
cis-1,3-Dichloropropene	**1**	**46.6773**	**45.5903**	**2.4**	**30**
trans-1,3-Dichloropropene	**1**	**47.5296**	**44.067**	**7.6**	**30**
Ethyl methacrylate	1	46.9747	43.1348	8.5	30
1,1,2-Trichloroethane	**1**	**46.8811**	**44.5196**	**5.2**	**30**
1,2-Dibromoethane	1	44.9778	41.0321	9.2	30
1,3-Dichloropropane	**1**	**46.3511**	**42.8237**	**7.9**	**30**
4-Methyl-2-Pentanone	**1**	**36.7572**	**33.7094**	**8.7**	**30**
2-Hexanone	**1**	**34.1195**	**30.8066**	**10**	**30**
Tetrachloroethene	**1**	**52.4352**	**50.6666**	**3.4**	**40**
Toluene	**1**	**40.7723**	**41.0645**	**0.71**	**40**
1,1,1,2-Tetrachloroethane	1	45.2612	45.0505	0.47	30
Chlorobenzene	**1**	**40.3151**	**39.6054**	**1.8**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	45.4686	41.0364	10	30
n-Amyl acetate	1	44.7211	38.5687	15	30
Bromoform	**1**	**70.4273**	**65.2935**	**7.6**	**30**
Ethylbenzene	**1**	**42.7105**	**42.9713**	**0.61**	**30**
1,1,2,2-Tetrachloroethane	**1**	**44.1548**	**40.0258**	**9.8**	**30**
Styrene	**1**	**40.2637**	**37.9266**	**6**	**30**
m&p-Xylenes	**1**	**78.8436**	**78.4306**	**0.53**	**30**
o-Xylene	**1**	**39.4447**	**39.2014**	**0.62**	**30**
trans-1,4-Dichloro-2-butene	1	40.8268	36.9711	9.9	30
1,3-Dichlorobenzene	**1**	**37.8242**	**35.471**	**6.4**	**30**
1,4-Dichlorobenzene	**1**	**36.8102**	**33.9467**	**8.1**	**40**
1,2-Dichlorobenzene	**1**	**39.293**	**35.8729**	**9.1**	**40**
Isopropylbenzene	**1**	**40.7047**	**40.7636**	**0.14**	**30**
Cyclohexanone	1	135.2346	125.4322	7.5	30
Camphene	1	42.2018	41.718	1.2	30
1,2,3-Trichloropropane	**1**	**41.2923**	**36.3643**	**13**	**30**
2-Chlorotoluene	1	41.5022	40.2726	3	30
p-Ethyltoluene	1	37.3405	36.6825	1.8	30
4-Chlorotoluene	1	39.557	37.6433	5	30
n-Propylbenzene	**1**	**39.5838**	**38.3835**	**3.1**	**40**
Bromobenzene	1	39.8882	38.8818	2.6	30
1,3,5-Trimethylbenzene	**1**	**44.2606**	**43.2564**	**2.3**	**30**
Butyl methacrylate	1	44.8847	41.2717	8.4	30
t-Butylbenzene	**1**	**40.8828**	**40.0099**	**2.2**	**30**
1,2,4-Trimethylbenzene	**1**	**39.8077**	**38.5263**	**3.3**	**30**
sec-Butylbenzene	**1**	**41.2564**	**40.366**	**2.2**	**40**
4-Isopropyltoluene	**1**	**40.7458**	**39.5065**	**3.1**	**30**
n-Butylbenzene	**1**	**38.6688**	**36.1879**	**6.6**	**30**
p-Diethylbenzene	1	38.5083	36.9323	4.2	30
1,2,4,5-Tetramethylbenzene	1	41.4972	37.6781	9.6	30
1,2-Dibromo-3-Chloropropane	1	36.9535	31.3599	16	30
Camphor	1	547.1421	473.298	14	30
Hexachlorobutadiene	1	36.7858	35.1542	4.5	30
1,2,4-Trichlorobenzene	1	33.9584	28.2306	18	30
1,2,3-Trichlorobenzene	1	34.7254	30.0156	15	30
Naphthalene	1	35.4652	30.4916	15	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87763

Data File	Sample ID:	Analysis Date
Spike or Dup: 11M82284.D	MBS87763	8/31/2020 10:49:00 AM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.9325	0	20	110	50	150
Dichlorodifluoromethane	1	24.1431	0	20	121	50	150
Chloromethane	1	19.1856	0	20	96	50	150
Bromomethane	1	16.4844	0	20	82	50	150
Vinyl Chloride	1	22.7226	0	20	114	50	150
Chloroethane	1	22.7454	0	20	114	50	150
Trichlorofluoromethane	1	25.0554	0	20	125	50	150
Ethyl ether	1	18.1456	0	20	91	50	150
Furan	1	18.467	0	20	92	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.4323	0	20	112	50	150
Methylene Chloride	1	20.2238	0	20	101	70	130
Acrolein	1	109.3642	0	100	109	50	150
Acrylonitrile	1	20.0534	0	20	100	50	150
Iodomethane	1	11.4785	0	20	57	50	150
Acetone	1	94.0859	0	100	94	50	150
Carbon Disulfide	1	20.0916	0	20	100	50	150
t-Butyl Alcohol	1	97.4229	0	100	97	50	150
n-Hexane	1	21.5774	0	20	108	70	130
Di-isopropyl-ether	1	17.9766	0	20	90	70	130
1,1-Dichloroethene	1	21.3161	0	20	107	70	130
Methyl Acetate	1	25.3756	0	20	127	50	150
Methyl-t-butyl ether	1	19.1344	0	20	96	70	130
1,1-Dichloroethane	1	19.8163	0	20	99	70	130
trans-1,2-Dichloroethene	1	20.8372	0	20	104	70	130
Ethyl-t-butyl ether	1	18.1072	0	20	91	70	130
cis-1,2-Dichloroethene	1	20.1734	0	20	101	70	130
Bromochloromethane	1	20.1302	0	20	101	70	130
2,2-Dichloropropane	1	21.3775	0	20	107	70	130
Ethyl acetate	1	16.9913	0	20	85	50	150
1,4-Dioxane	1	1064.248	0	1000	106	50	150
1,1-Dichloropropene	1	20.3721	0	20	102	70	130
Chloroform	1	20.1278	0	20	101	70	130
Cyclohexane	1	21.5077	0	20	108	70	130
1,2-Dichloroethane	1	19.5169	0	20	98	70	130
2-Butanone	1	19.4982	0	20	97	50	150
1,1,1-Trichloroethane	1	21.1395	0	20	106	70	130
Carbon Tetrachloride	1	21.1128	0	20	106	50	150
Vinyl Acetate	1	14.0318	0	20	70	50	150
Bromodichloromethane	1	21.0989	0	20	105	70	130
Methylcyclohexane	1	21.0036	0	20	105	70	130
Dibromomethane	1	19.757	0	20	99	70	130
1,2-Dichloropropane	1	19.9297	0	20	100	70	130
Trichloroethene	1	20.7788	0	20	104	70	130
Benzene	1	19.8048	0	20	99	70	130
tert-Amyl methyl ether	1	17.6114	0	20	88	70	130
Iso-propylacetate	1	14.2285	0	20	71	70	130
Methyl methacrylate	1	14.1798	0	20	71	70	130
Dibromochloromethane	1	14.8959	0	20	74	70	130
2-Chloroethylvinylether	1	35.3555	0	20	177 *	70	130
cis-1,3-Dichloropropene	1	15.6128	0	20	78	70	130
trans-1,3-Dichloropropene	1	16.3149	0	20	82	70	130
Ethyl methacrylate	1	14.8494	0	20	74	70	130
1,1,2-Trichloroethane	1	14.6685	0	20	73	70	130
1,2-Dibromoethane	1	15.8482	0	20	79	70	130
1,3-Dichloropropane	1	15.3691	0	20	77	70	130
4-Methyl-2-Pentanone	1	15.8007	0	20	79	50	150
2-Hexanone	1	13.9778	0	20	70	50	150
Tetrachloroethene	1	15.9873	0	20	80	50	150
Toluene	1	15.9601	0	20	80	70	130
1,1,1,2-Tetrachloroethane	1	15.3617	0	20	77	70	130
Chlorobenzene	1	15.871	0	20	79	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87763

Method: 8260C	Matrix: Aqueous	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	14.2673	0	20	71	70	130
n-Amyl acetate	1	13.4488	0	20	67*	70	130
Bromoform	**1**	**15.5826**	**0**	**20**	**78**	**70**	**130**
Ethylbenzene	**1**	**15.8995**	**0**	**20**	**79**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**15.4148**	**0**	**20**	**77**	**70**	**130**
Styrene	**1**	**15.856**	**0**	**20**	**79**	**70**	**130**
m&p-Xylenes	**1**	**33.181**	**0**	**40**	**83**	**70**	**130**
o-Xylene	**1**	**16.124**	**0**	**20**	**81**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	14.6357	0	20	73	50	150
1,3-Dichlorobenzene	**1**	**14.5926**	**0**	**20**	**73**	**70**	**130**
1,4-Dichlorobenzene	**1**	**14.3065**	**0**	**20**	**72**	**70**	**130**
1,2-Dichlorobenzene	**1**	**14.8056**	**0**	**20**	**74**	**70**	**130**
Isopropylbenzene	**1**	**16.7641**	**0**	**20**	**84**	**70**	**130**
Cyclohexanone	1	67.6338	0	100	68	50	150
Camphene	1	15.0383	0	20	75	70	130
1,2,3-Trichloropropane	**1**	**14.547**	**0**	**20**	**73**	**70**	**130**
2-Chlorotoluene	1	15.35	0	20	77	70	130
p-Ethyltoluene	1	14.5706	0	20	73	70	130
4-Chlorotoluene	1	15.0182	0	20	75	70	130
n-Propylbenzene	**1**	**16.0218**	**0**	**20**	**80**	**70**	**130**
Bromobenzene	1	14.9379	0	20	75	70	130
1,3,5-Trimethylbenzene	**1**	**15.6441**	**0**	**20**	**78**	**70**	**130**
Butyl methacrylate	1	16.2155	0	20	81	70	130
t-Butylbenzene	**1**	**15.3438**	**0**	**20**	**77**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**14.8353**	**0**	**20**	**74**	**70**	**130**
sec-Butylbenzene	**1**	**15.3366**	**0**	**20**	**77**	**70**	**130**
4-Isopropyltoluene	**1**	**15.2528**	**0**	**20**	**76**	**70**	**130**
n-Butylbenzene	**1**	**14.8177**	**0**	**20**	**74**	**70**	**130**
p-Diethylbenzene	1	14.9483	0	20	75	70	130
1,2,4,5-Tetramethylbenzene	1	13.3689	0	20	67*	70	130
1,2-Dibromo-3-Chloropropane	1	16.5537	0	20	83	50	150
Camphor	1	124.287	0	200	62	20	150
Hexachlorobutadiene	1	15.5588	0	20	78	50	150
1,2,4-Trichlorobenzene	1	14.5121	0	20	73	70	130
1,2,3-Trichlorobenzene	1	11.9922	0	20	60*	70	130
Naphthalene	1	35.2852	0	20	176*	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

0082803 0136

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M81828.D	CAL @ 20 PPB	08/17/20 15:28	2	11M81826.D	CAL @ 5 PPB	08/17/20 14:51
3	11M81827.D	CAL @ 10 PPB	08/17/20 15:09	4	11M81830.D	CAL @ 50 PPB	08/17/20 16:05
5	11M81837.D	CAL @ 100 PPB	08/17/20 18:14	6	11M81834.D	CAL @ 250 PPB	08/17/20 17:18
7	11M81825.D	CAL @ 1 PPB	08/17/20 14:32	8	11M81824.D	CAL @ 0.5 PPB	08/17/20 14:14

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.3216	0.2788	0.3093	0.3188	0.3326	0.3031	-----	0.2990	-----	0.309	1.68	0.998	1.00	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Dichlorodifluorometha	1	0	Avg	0.2386	0.2098	0.2398	0.2154	0.2459	0.2131	-----	0.2269	-----	0.227	1.67	0.996	0.999	6.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Chloromethane	1	0	Avg	0.2177	0.2174	0.2271	0.2078	0.2247	0.1930	-----	0.2311	-----	0.217	1.85	0.996	0.999	6.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromomethane	1	0	Avg	0.2074	0.2267	0.2200	0.2014	0.2274	0.2046	-----	0.2605	-----	0.221	2.24	0.998	0.999	9.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Vinyl Chloride	1	0	Avg	0.2751	0.2551	0.2795	0.2573	0.2752	0.2401	-----	0.2994	-----	0.269	1.94	0.997	0.999	7.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Chloroethane	1	0	Avg	0.1775	0.1663	0.1834	0.1703	0.1778	0.1553	-----	0.1843	-----	0.174	2.33	0.997	1.00	6.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Trichlorofluoromethan	1	0	Avg	0.4071	0.3816	0.4235	0.3793	0.4307	0.3756	-----	0.4164	-----	0.402	2.55	0.997	0.999	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethyl ether	1	0	Avg	0.1831	0.1697	0.1860	0.1797	0.1908	0.1692	-----	0.1766	-----	0.179	2.78	0.997	1.00	4.5	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Furan	1	0	Avg	0.2996	0.2959	0.3138	0.2949	0.3053	0.2721	-----	0.3397	-----	0.303	2.82	0.998	1.00	6.8	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1896	0.1816	0.2086	0.1810	0.2158	0.1870	-----	0.1971	-----	0.194	2.97	0.996	0.998	6.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Methylene Chloride	1	0	Avg	0.2538	0.2558	0.2607	0.2474	0.2602	0.2320	-----	0.2963	-----	0.258	3.37	0.998	1.00	7.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Acrolein	1	0	Avg	0.0355	0.0335	0.0361	0.0344	0.0379	0.0338	-----	0.0396	-----	0.0359	2.89	0.998	0.999	6.2		100.0	25.00	50.00	250.0	500.0	1250.		5.00	
Acrylonitrile	1	0	Avg	0.0875	0.0760	0.0884	0.0830	0.0907	0.0794	-----	0.0774	-----	0.0832	3.57	0.997	0.999	7.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Iodomethane	1	0	Qua	0.3390	0.2296	0.2966	0.3594	0.3753	0.3481	-----	0.1691	-----	0.302	3.12	0.999	1.00	25		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Acetone	1	0	Avg	0.0661	0.0618	0.0695	0.0597	0.0654	0.0562	-----	0.0681	-----	0.0639	3.01	0.996	0.999	7.5	0.10 a	100.0	25.00	50.00	250.0	500.0	1250.		5.00	
Carbon Disulfide	1	0	Avg	0.6246	0.5833	0.6481	0.6210	0.6911	0.6185	-----	0.7015	-----	0.641	3.18	0.998	0.999	6.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
t-Butyl Alcohol	1	0	Avg	0.0205	0.0195	0.0215	0.0187	0.0220	0.0204	-----	0.0180	-----	0.0201	3.43	0.998	0.999	7.1		100.0	25.00	50.00	250.0	500.0	1250.		5.00	
n-Hexane	1	0	Avg	0.2118	0.2063	0.2288	0.2046	0.2383	0.2123	-----	0.2158	-----	0.217	3.81	0.997	0.999	5.7		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Di-isopropyl-ether	1	0	Avg	0.5446	0.5142	0.5533	0.5408	0.5687	0.5262	-----	0.5757	-----	0.546	3.95	0.999	1.00	4.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1-Dichloroethene	1	0	Avg	0.3275	0.3206	0.3361	0.3219	0.3454	0.3082	-----	0.3154	-----	0.325	2.98	0.998	1.00	3.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Methyl Acetate	1	0	Avg	0.1488	0.1411	0.1558	0.1405	0.1488	0.1292	-----	0.1507	-----	0.145	3.28	0.997	1.00	6.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Methyl-t-butyl ether	1	0	Avg	0.6222	0.5906	0.6250	0.6162	0.6754	0.6071	-----	0.5930	0.5544	0.611	3.60	0.998	0.999	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.4160	0.3968	0.4265	0.4085	0.4303	0.3879	-----	0.4406	-----	0.415	3.93	0.998	1.00	4.5	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2637	0.2595	0.2722	0.2569	0.2780	0.2495	-----	0.2664	-----	0.264	3.60	0.998	0.999	3.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethyl-t-butyl ether	1	0	Avg	0.6399	0.6221	0.6446	0.6465	0.7003	0.6244	-----	0.6521	-----	0.647	4.20	0.998	0.999	4.0	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.4118	0.3877	0.4159	0.3955	0.4252	0.3887	-----	0.3840	-----	0.401	4.31	0.999	1.00	4.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromochloromethane	1	0	Avg	0.1728	0.1685	0.1783	0.1691	0.1709	0.1447	-----	0.1764	-----	0.169	4.45	0.995	1.00	6.6		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
2,2-Dichloropropane	1	0	Avg	0.3413	0.3188	0.3340	0.3365	0.3547	0.3389	-----	0.3516	-----	0.339	4.31	1.00	1.00	3.5		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethyl acetate	1	0	Avg	0.2127	0.2080	0.2564	0.2120	0.2385	0.2183	-----	0.2182	-----	0.223	4.33	0.998	0.999	7.9		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,4-Dioxane	1	0	Avg	0.0036	0.0035	0.0037	0.0032	0.0036	0.0037	-----	0.0033	-----	0.00355	5.34	0.999	0.999	5.8		1000.	250.0	500.0	2500.	5000.	12500		50.00	
1,1-Dichloropropene	1	0	Avg	0.3573	0.3371	0.3712	0.3530	0.3859	0.3480	-----	0.3570	-----	0.359	4.70	0.998	0.999	4.4		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Chloroform	1	0	Avg	0.4592	0.4346	0.4684	0.4522	0.4767	0.4245	-----	0.4754	-----	0.456	4.49	0.998	1.00	4.4	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Dibromofluoromethan	1	0	Avg	0.2709	0.2768	0.2739	0.2770	0.2763	0.2325	-----	0.2690	0.2685	0.268	4.58	-1	-1	5.5		30.00	30.00	30.00	30.00	30.00	30.00		30.00	30.00
Cyclohexane	1	0	Avg	0.3188	0.3128	0.3481	0.3092	0.3619	0.3209	-----	0.3254	-----	0.328	4.65	0.997	0.999	5.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1184	0.1243	0.1191	0.1245	0.1170	0.1006	-----	0.1199	0.1196	0.118	4.78	-1	-1	6.4		30.00	30.00	30.00	30.00	30.00	30.00		30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3262	0.3179	0.3433	0.3307	0.3499	0.3373	-----	0.3616	0.3313	0.337	4.82	1.00	1.00	4.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	0.50
2-Butanone	1	0	Avg	0.0911	0.0971	0.0783	0.0851	0.0837	0.0759	-----	0.1061	-----	0.0882	4.31	0.998	1.00	12	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1,1-Trichloroethane	1	0	Avg	0.4190	0.4016	0.4202	0.4143	0.4504	0.4029	-----	0.3857	-----	0.414	4.61	0.998	0.999	4.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Carbon Tetrachloride	1	0	Avg	0.3703	0.3421	0.3816	0.3708	0.4216	0.3794	-----	0.3547	-----	0.374	4.71	0.998	0.999	6.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Vinyl Acetate	1	0	Avg	0.6470	0.5981	0.6150	0.6572	0.7114	0.6481	-----	0.5756	-----	0.636	3.95	0.998	1.00	7.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromodichloromethan	1	0	Avg	0.3342	0.3156	0.3393	0.3313	0.3667	0.3317	-----	0.3267	-----	0.335	5.41	0.998	0.999	4.7	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.249
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M81828.D	CAL @ 20 PPB	08/17/20 15:28	2	11M81826.D	CAL @ 5 PPB	08/17/20 14:51
3	11M81827.D	CAL @ 10 PPB	08/17/20 15:09	4	11M81830.D	CAL @ 50 PPB	08/17/20 16:05
5	11M81837.D	CAL @ 100 PPB	08/17/20 18:14	6	11M81834.D	CAL @ 250 PPB	08/17/20 17:18
7	11M81825.D	CAL @ 1 PPB	08/17/20 14:32	8	11M81824.D	CAL @ 0.5 PPB	08/17/20 14:14

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.3134	0.3007	0.3591	0.3122	0.3821	0.3373	-----	0.3421	-----	0.335	5.27	0.996	0.998	8.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Dibromomethane	1	0	Avg	0.2135	0.2018	0.2131	0.2135	0.2322	0.2124	-----	0.2099	-----	0.214	5.34	0.999	1.00	4.3		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dichloropropane	1	0	Avg	0.2407	0.2354	0.2401	0.2378	0.2542	0.2337	-----	0.2402	-----	0.240	5.28	0.999	1.00	2.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Trichloroethene	1	0	Avg	0.3247	0.3093	0.3301	0.3213	0.3462	0.3148	-----	0.3409	-----	0.327	5.16	0.998	1.00	4.1	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Benzene	1	0	Avg	1.0460	0.9995	1.0566	1.0295	1.1054	1.0586	-----	1.0687	0.9849	1.04	4.82	1.00	1.00	3.7	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.6431	0.6211	0.6351	0.6498	0.7088	0.8491	-----	0.6306	-----	0.677	4.86	0.995	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Iso-propylacetate	1	0	Avg	0.3792	0.3444	0.3788	0.3807	0.4259	0.4399	-----	0.3556	-----	0.386	4.81	0.999	1.00	9.0	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Methyl methacrylate	1	0	Avg	0.1979	0.1912	0.2137	0.2143	0.2461	0.2395	-----	0.1693	-----	0.210	5.30	0.999	0.999	13	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Dibromochloromethan	1	0	Avg	0.3130	0.2738	0.3078	0.3142	0.3392	0.4324	-----	0.2640	-----	0.321	6.24	0.992	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
2-Chloroethylvinylethe	1	0	Avg	0.0555	0.0449	0.0529	0.0561	0.0625	0.0612	-----	0.0325	-----	0.0523	5.54	1.00	1.00	20		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.3993	0.3672	0.3888	0.4109	0.4366	0.4489	-----	0.3851	-----	0.405	5.64	1.00	1.00	7.2	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
trans-1,3-Dichloroprop	1	0	Qua	0.3730	0.3187	0.3455	0.3803	0.4134	0.5505	-----	0.3009	-----	0.383	5.92	0.989	1.00	22	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethyl methacrylate	1	0	Avg	0.1978	0.1826	0.1983	0.2066	0.2238	-----	-----	0.1631	-----	0.195	5.93	0.999	1.00	11	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2528	0.2457	0.2631	0.2502	0.2689	0.3744	-----	0.2587	-----	0.273	6.02	0.986	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dibromoethane	1	0	Avg	0.2767	0.2652	0.2786	0.2734	0.2940	0.3239	-----	0.2701	-----	0.283	6.31	0.998	1.00	7.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,3-Dichloropropane	1	0	Avg	0.4295	0.4054	0.4292	0.4154	0.4498	0.5677	-----	0.4324	-----	0.447	6.11	0.992	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.2144	0.1993	0.2081	0.2067	0.2291	0.2294	-----	0.1871	-----	0.211	5.70	1.00	1.00	7.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
2-Hexanone	1	0	Avg	0.1535	0.1402	0.1472	0.1499	0.1683	0.2339	-----	0.1574	-----	0.164	6.12	0.986	1.00	19	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Tetrachloroethene	1	0	Avg	0.2609	0.2509	0.2833	0.2693	0.3006	0.3746	-----	0.2664	-----	0.287	6.11	0.993	1.00	15	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Toluene-d8	1	0	Avg	1.1749	1.1920	1.1890	1.1641	1.1615	1.1177	-----	1.1491	1.1292	1.16	5.79	-1	-1	2.3		30.00	30.00	30.00	30.00	30.00	30.00		30.00	30.00
Toluene	1	0	Avg	0.7257	0.7186	0.7409	0.7122	0.7618	0.8524	-----	0.7499	-----	0.752	5.82	0.998	1.00	6.4	0.40	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2861	0.2618	0.2851	0.2843	0.3120	0.3997	-----	0.2554	-----	0.298	6.59	0.991	1.00	16		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Chlorobenzene	1	0	Avg	0.8366	0.8121	0.8547	0.8227	0.8734	0.9456	-----	0.8517	-----	0.857	6.56	0.999	1.00	5.2	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
n-Butyl acrylate	1	0	Avg	0.8091	0.6859	0.7936	0.7987	0.5987	-----	-----	0.6866	-----	0.729	6.80	0.973	0.999	12	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
n-Amyl acetate	1	0	Avg	0.6427	0.5584	0.6335	0.6329	0.5927	-----	-----	0.5173	-----	0.596	6.91	0.999	1.00	8.4	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
Bromoform	1	0	Avg	0.3974	0.3656	0.3854	0.3885	0.3120	0.3328	-----	0.3378	-----	0.360	7.00	0.998	0.998	9.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethylbenzene	1	0	Avg	0.6579	0.6096	0.6959	0.6258	0.4451	-----	-----	0.7331	-----	0.628	6.60	0.962	0.999	16	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.5875	0.5908	0.6135	0.5523	0.4059	0.6535	-----	0.6270	-----	0.576	7.22	0.976	0.996	14	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromofluorobenzene	1	0	Avg	0.8203	0.8283	0.8350	0.8172	0.5658	0.5945	-----	0.8325	0.8305	0.766	7.17	-1	-1	15		30.00	30.00	30.00	30.00	30.00	30.00		30.00	30.00
Styrene	1	0	Avg	1.5539	1.5005	1.6167	1.5069	1.1452	-----	-----	1.5476	-----	1.48	6.88	0.976	0.999	11	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
m&p-Xylenes	1	0	Avg	0.9373	0.8981	0.9612	0.9098	0.6501	0.8875	-----	0.9857	0.8795	0.889	6.66	0.988	0.995	12	0.10	40.00	10.00	20.00	100.0	200.0	500.0		2.00	1.00
o-Xylene	1	0	Avg	0.9014	0.8689	0.9528	0.8740	0.6497	-----	-----	0.8865	-----	0.856	6.88	0.972	0.999	12	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.1995	0.1832	0.2086	0.2017	0.1595	0.2298	-----	0.1558	-----	0.191	7.24	0.985	0.997	14		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,3-Dichlorobenzene	1	0	Avg	1.1041	1.1009	1.1591	1.0797	1.1575	0.9890	-----	1.2575	-----	1.12	7.78	0.996	0.999	7.4	0.60	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,4-Dichlorobenzene	1	0	Avg	1.1205	1.0783	1.1962	1.0886	1.1795	1.3335	-----	1.2204	-----	1.17	7.83	0.997	1.00	7.6	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dichlorobenzene	1	0	Avg	1.0266	0.9804	1.0543	0.9810	1.0143	0.9924	-----	1.0750	-----	1.02	8.05	1.00	1.00	3.6	0.40	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Isopropylbenzene	1	0	Qua	2.2686	2.2150	2.4017	2.2090	1.6978	1.1877	-----	2.4125	-----	2.06	7.07	0.958	0.997	22	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Cyclohexanone	1	0	Qua	0.0180	0.0193	0.0197	0.0153	0.0126	-----	-----	0.0101	-----	0.0159	7.14	0.986	0.999	24		100.0	25.00	50.00	250.0	500.0			5.00	
Camphene	1	0	Avg	0.5893	0.5695	0.6716	0.5879	0.4655	0.8289	-----	0.6454	-----	0.623	7.24	0.969	0.997	18		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2,3-Trichloropropane	1	0	Avg	0.7041	0.6546	0.7337	0.6793	0.5369	0.9321	-----	0.6869	-----	0.704	7.25	0.971	0.997	17		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
2-Chlorotoluene	1	0	Avg	1.3312	1.3086	1.3919	1.2960	1.3555	0.9678	-----	1.4255	-----	1.30	7.36	0.976	0.999	12		20.00	5.00	10.00	50.00	100.0	250.0		1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.249

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M81828.D	CAL @ 20 PPB	08/17/20 15:28	2	11M81826.D	CAL @ 5 PPB	08/17/20 14:51
3	11M81827.D	CAL @ 10 PPB	08/17/20 15:09	4	11M81830.D	CAL @ 50 PPB	08/17/20 16:05
5	11M81837.D	CAL @ 100 PPB	08/17/20 18:14	6	11M81834.D	CAL @ 250 PPB	08/17/20 17:18
7	11M81825.D	CAL @ 1 PPB	08/17/20 14:32	8	11M81824.D	CAL @ 0.5 PPB	08/17/20 14:14

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.5131	2.4072	2.6313	2.4658	2.3207	1.6553	-----	2.5890	-----	2.37	7.35	0.973	1.00	14		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
4-Chlorotoluene	1	0	Avg	1.2998	1.3024	1.3811	1.3105	1.2872	1.1190	-----	1.5637	-----	1.32	7.42	0.996	1.00	10		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
n-Propylbenzene	1	0	Avg	2.5366	2.5121	2.7394	2.4894	2.1048	2.2428	-----	2.6385	-----	2.47	7.29	0.999	0.999	9.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromobenzene	1	0	Avg	1.2310	1.2371	1.3182	1.1910	0.9350	1.5583	-----	1.1826	-----	1.24	7.27	0.974	0.997	15		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,3,5-Trimethylbenzen	1	0	Avg	1.7638	1.7492	1.8908	1.7530	1.8525	1.4797	-----	1.8308	-----	1.76	7.38	0.990	0.999	7.7		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Butyl methacrylate	1	0	Avg	0.5048	0.4350	0.4396	0.4855	0.4452	0.2560	-----	0.3838	-----	0.421	7.38	0.914	1.00	20	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
t-Butylbenzene	1	0	Avg	1.7582	1.7008	1.8697	1.7307	1.9016	-----	-----	1.8303	-----	1.80	7.57	0.998	1.00	4.5		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trimethylbenzen	1	0	Avg	1.8643	1.7807	1.9478	1.8422	1.9638	-----	-----	1.9312	-----	1.89	7.59	0.999	1.00	3.8		20.00	5.00	10.00	50.00	100.0			1.00	
sec-Butylbenzene	1	0	Avg	2.0809	2.0108	2.2458	2.0534	2.2621	-----	-----	2.1977	-----	2.14	7.69	0.998	1.00	5.0		20.00	5.00	10.00	50.00	100.0			1.00	
4-Isopropyltoluene	1	0	Avg	1.8303	1.7759	1.9462	1.8298	1.9658	-----	-----	1.8064	-----	1.86	7.76	0.999	1.00	4.2		20.00	5.00	10.00	50.00	100.0			1.00	
n-Butylbenzene	1	0	Avg	1.7933	1.6604	1.8700	1.7643	1.8463	-----	-----	1.8559	-----	1.80	8.00	0.999	1.00	4.4		20.00	5.00	10.00	50.00	100.0			1.00	
p-Diethylbenzene	1	0	Avg	1.1275	1.0986	1.1913	1.1222	1.0985	0.7110	-----	1.0936	-----	1.06	7.98	0.954	0.999	15		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	1.6190	1.5116	1.6270	1.5821	1.1793	1.8794	-----	1.6142	-----	1.57	8.44	0.977	0.996	13		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1282	0.1080	0.1302	0.1165	0.0923	-----	-----	0.0793	-----	0.109	8.50	0.981	1.00	19	0.05	20.00	5.00	10.00	50.00	100.0			1.00	
Camphor	1	0	Avg	0.0530	0.0389	0.0496	0.0454	0.0372	-----	-----	0.0470	0.0522	0.0462	8.94	0.986	0.999	13		200.0	50.00	100.0	500.0	1000.			10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.1973	0.1896	0.2141	0.1894	0.1446	-----	-----	0.2356	-----	0.195	9.07	0.977	0.999	16		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.4636	0.4372	0.4732	0.4277	0.3263	-----	-----	0.4708	-----	0.433	8.99	0.976	1.00	13	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.3187	0.2669	0.3061	0.2697	0.2143	0.3855	-----	0.3689	-----	0.304	9.29	0.967	0.997	20		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Naphthalene	1	0	Qua	1.0325	0.8762	0.9983	0.8754	0.6966	-----	-----	1.1535	-----	0.939	9.15	0.981	1.00	17		20.00	5.00	10.00	50.00	100.0			1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.249

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M131882.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/31/2020 7:03:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.13	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.64	57.14	50	20	0.1	0.315	0.361	14.28	
Dichlorodifluoromethane	1	0		1.64	65.84	50	20	0.1	0.205	0.271	31.68	C1
Chloromethane	1	0		1.81	58.20	50	20	0.1	0.286	0.296	16.39	
Bromomethane	1	0		2.23	58.75	50	20	0.1	0.189	0.222	17.49	
Vinyl Chloride	1	0		1.92	57.71	50	20	0.1	0.295	0.340	15.42	
Chloroethane	1	0		2.32	53.03	50	20	0.1	0.201	0.213	6.07	
Trichlorofluoromethane	1	0		2.56	52.36	50	20	0.1	0.485	0.508	4.72	
Ethyl ether	1	0		2.81	44.71	50	20	0.5	0.179	0.160	10.58	
Furan	1	0		2.84	51.52	50	20	0.5	0.402	0.414	3.04	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.01	61.87	50	20	0.1	0.185	0.228	23.74	C1
Methylene Chloride	1	0		3.43	50.65	50	20	0.1	0.271	0.275	1.29	
Acrolein	1	0		2.92	300.15	250	20		0.035	0.042	20.06	
Acrylonitrile	1	0		3.64	49.35	50	20		0.106	0.105	1.29	
Iodomethane	1	0		3.16	71.52	50	20		0.200	0.335	43.05	C1
Acetone	1	0		3.05	247.69	250	20	0.1	0.102	0.101	0.92	
Carbon Disulfide	1	0		3.23	57.08	50	20	0.1	0.677	0.773	14.16	
t-Butyl Alcohol	1	0		3.50	189.41	250	20		0.049	0.037	24.23	C1
n-Hexane	1	0		3.91	65.90	50	20		0.264	0.348	31.81	C1
Di-isopropyl-ether	1	0		4.06	50.38	50	20		0.628	0.633	0.76	
1,1-Dichloroethene	1	0		3.02	61.57	50	20	0.1	0.340	0.419	23.14	C1
Methyl Acetate	1	0		3.34	48.18	50	20	0.1	0.210	0.202	3.64	
Methyl-t-butyl ether	1	0		3.67	53.01	50	20	0.1	0.538	0.570	6.03	
1,1-Dichloroethane	1	0		4.03	55.82	50	20	0.2	0.440	0.491	11.64	
trans-1,2-Dichloroethene	1	0		3.68	57.41	50	20	0.1	0.256	0.294	14.82	
Ethyl-t-butyl ether	1	0		4.32	43.55	50	20	0.5	0.688	0.599	12.91	
cis-1,2-Dichloroethene	1	0		4.44	55.26	50	20	0.1	0.445	0.492	10.52	
Bromochloromethane	1	0		4.59	55.33	50	20		0.205	0.227	10.66	
2,2-Dichloropropane	1	0		4.45	61.95	50	20		0.359	0.444	23.91	C1
Ethyl acetate	1	0		4.46	44.61	50	20		0.315	0.281	10.79	
1,4-Dioxane	1	0		5.52	1954.73	2500	20		0.006	0.004	21.81	C1
1,1-Dichloropropene	1	0		4.85	56.34	50	20		0.359	0.405	12.67	
Chloroform	1	0		4.64	54.29	50	20	0.2	0.465	0.504	8.59	
Dibromofluoromethane	1	0	S	4.73	32.05	75	**		0.267	0.285	6.84	
Cyclohexane	1	0		4.80	60.08	50	20	0.1	0.368	0.442	20.17	
1,2-Dichloroethane-d4	1	0	S	4.93	32.12	75	**		0.144	0.154	7.07	
1,2-Dichloroethane	1	0		4.98	53.73	50	20	0.1	0.347	0.373	7.47	
2-Butanone	1	0		4.43	47.50	50	20	0.1	0.149	0.141	5.01	
1,1,1-Trichloroethane	1	0		4.76	57.80	50	20	0.1	0.416	0.481	15.60	
Carbon Tetrachloride	1	0		4.86	59.99	50	20	0.1	0.355	0.426	19.97	
Vinyl Acetate	1	0		4.05	51.53	50	20		0.750	0.773	3.07	
Bromodichloromethane	1	0		5.59	52.93	50	20	0.2	0.326	0.345	5.86	
Methylcyclohexane	1	0		5.45	57.65	50	20	0.1	0.377	0.435	15.31	
Dibromomethane	1	0		5.53	53.51	50	20		0.170	0.181	7.02	
1,2-Dichloropropane	1	0		5.46	50.63	50	20	0.1	0.259	0.262	1.26	
Trichloroethene	1	0		5.33	52.21	50	20	0.2	0.293	0.306	4.41	
Benzene	1	0		4.98	52.99	50	20	0.5	1.013	1.073	5.99	
tert-Amyl methyl ether	1	0		5.02	46.61	50	20		0.592	0.552	6.78	
Chlorobenzene-d5	1	0	I	6.76	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.98	43.04	50	20	0.5	0.522	0.450	13.92	
Methyl methacrylate	1	0		5.48	45.69	50	20	0.5	0.255	0.233	8.62	
Dibromochloromethane	1	0		6.45	48.24	50	20	0.1	0.282	0.272	3.53	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M131882.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/31/2020 7:03:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.73	41.39	50	20		0.079	0.066	17.21	
cis-1,3-Dichloropropene	1	0		5.83	46.02	50	20	0.2	0.447	0.412	7.96	
trans-1,3-Dichloropropene	1	0		6.12	48.35	50	20	0.1	0.391	0.378	3.31	
Ethyl methacrylate	1	0		6.14	45.30	50	20	0.5	0.253	0.230	9.40	
1,1,2-Trichloroethane	1	0		6.22	45.12	50	20	0.1	0.258	0.232	9.77	
1,2-Dibromoethane	1	0		6.53	46.83	50	20	0.1	0.267	0.250	6.33	
1,3-Dichloropropane	1	0		6.32	46.13	50	20		0.456	0.420	7.74	
4-Methyl-2-Pentanone	1	0		5.90	40.12	50	20	0.1	0.350	0.281	19.77	
2-Hexanone	1	0		6.33	40.16	50	20	0.1	0.276	0.221	19.67	
Tetrachloroethene	1	0		6.32	50.18	50	20	0.2	0.278	0.279	0.37	
Toluene-d8	1	0	S	5.98	28.47	75	**		1.238	1.175	5.10	
Toluene	1	0		6.02	45.23	50	20	0.4	0.811	0.734	9.54	
1,1,1,2-Tetrachloroethane	1	0		6.81	45.46	50	20		0.290	0.263	9.08	
Chlorobenzene	1	0		6.78	45.00	50	20	0.5	0.886	0.798	10.00	
1,4-Dichlorobenzene-d4	1	0	I	8.05	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.02	42.48	50	20	0.5	0.857	0.728	15.05	
n-Amyl acetate	1	0		7.13	42.72	50	20	0.5	0.810	0.692	14.55	
Bromoform	1	0		7.23	67.90	50	20	0.1	0.342	0.296	35.80	C1
Ethylbenzene	1	0		6.82	48.01	50	20	0.1	0.663	0.636	3.98	
1,1,2,2-Tetrachloroethane	1	0		7.45	44.28	50	20	0.1	0.639	0.566	11.44	
Bromofluorobenzene	1	0	S	7.39	28.30	75	**		0.790	0.745	5.67	
Styrene	1	0		7.10	43.62	50	20	0.3	1.639	1.430	12.75	
m&p-Xylenes	1	0		6.88	90.27	100	20	0.1	0.994	0.897	9.73	
o-Xylene	1	0		7.10	43.40	50	20	0.3	0.980	0.851	13.21	
trans-1,4-Dichloro-2-butene	1	0		7.47	47.75	50	20		0.311	0.297	4.51	
1,3-Dichlorobenzene	1	0		8.02	45.16	50	20	0.6	1.227	1.108	9.67	
1,4-Dichlorobenzene	1	0		8.07	44.18	50	20	0.5	1.265	1.118	11.65	
1,2-Dichlorobenzene	1	0		8.29	44.71	50	20	0.4	1.146	1.024	10.57	
Isopropylbenzene	1	0		7.29	46.66	50	20	0.1	2.547	2.377	6.68	
Cyclohexanone	1	0		7.37	170.58	250	20		0.035	0.024	31.77	C1
Camphene	1	0		7.47	48.28	50	20		0.927	0.895	3.45	
1,2,3-Trichloropropane	1	0		7.48	44.04	50	20		0.824	0.726	11.92	
2-Chlorotoluene	1	0		7.59	47.11	50	20		1.527	1.439	5.77	
p-Ethyltoluene	1	0		7.58	44.71	50	20		2.614	2.338	10.57	
4-Chlorotoluene	1	0		7.65	50.30	50	20		1.497	1.506	0.59	
n-Propylbenzene	1	0		7.52	47.94	50	20		2.988	2.865	4.12	
Bromobenzene	1	0		7.49	44.92	50	20		1.567	1.407	10.17	
1,3,5-Trimethylbenzene	1	0		7.60	49.79	50	20		1.830	1.823	0.41	
Butyl methacrylate	1	0		7.61	42.99	50	20	0.5	0.714	0.606	14.02	
t-Butylbenzene	1	0		7.81	46.79	50	20		2.082	1.949	6.42	
1,2,4-Trimethylbenzene	1	0		7.83	45.36	50	20		2.066	1.874	9.28	
sec-Butylbenzene	1	0		7.93	49.91	50	20		2.650	2.645	0.18	
4-Isopropyltoluene	1	0		8.00	49.40	50	20		2.223	2.196	1.20	
n-Butylbenzene	1	0		8.24	50.56	50	20		2.534	2.563	1.13	
p-Diethylbenzene	1	0		8.22	46.09	50	20		1.318	1.215	7.82	
1,2,4,5-Tetramethylbenzene	1	0		8.68	45.70	50	20		1.864	1.703	8.59	
1,2-Dibromo-3-Chloropropane	1	0		8.74	42.81	50	20	0.05	0.169	0.145	14.37	
Camphor	1	0		9.18	624.34	500	20		0.111	0.075	24.87	C1
Hexachlorobutadiene	1	0		9.32	45.35	50	20		0.461	0.418	9.29	
1,2,4-Trichlorobenzene	1	0		9.24	43.63	50	20	0.2	0.831	0.725	12.75	
1,2,3-Trichlorobenzene	1	0		9.54	42.15	50	20		0.756	0.637	15.70	
Naphthalene	1	0		9.40	39.50	50	20		2.080	1.643	20.99	C1

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M82272.D **Instrument:** GCMS 11

Cont Calibration Date/Time 8/31/2020 7:07:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.96	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.68	26.69	20	20	0.1	0.309	0.413	33.47	C1
Dichlorodifluoromethane	1	0		1.67	26.03	20	20	0.1	0.227	0.296	30.17	C1
Chloromethane	1	0		1.85	21.48	20	20	0.1	0.217	0.233	7.38	
Bromomethane	1	0		2.24	20.35	20	20	0.1	0.221	0.225	1.77	
Vinyl Chloride	1	0		1.94	23.00	20	20	0.1	0.269	0.309	15.01	
Chloroethane	1	0		2.33	23.83	20	20	0.1	0.174	0.207	19.16	
Trichlorofluoromethane	1	0		2.55	25.11	20	20	0.1	0.402	0.505	25.55	C1
Ethyl ether	1	0		2.78	20.73	20	20	0.5	0.179	0.186	3.63	
Furan	1	0		2.82	19.65	20	20	0.5	0.303	0.298	1.73	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.97	22.71	20	20	0.1	0.194	0.221	13.57	
Methylene Chloride	1	0		3.38	23.80	20	20	0.1	0.258	0.307	19.00	
Acrolein	1	0		2.89	114.00	100	20		0.036	0.041	14.00	
Acrylonitrile	1	0		3.57	23.65	20	20		0.083	0.098	18.26	
Iodomethane	1	0		3.12	16.31	20	20		0.302	0.307	18.47	
Acetone	1	0		3.01	116.29	100	20	0.1	0.064	0.074	16.29	
Carbon Disulfide	1	0		3.19	22.47	20	20	0.1	0.641	0.720	12.36	
t-Butyl Alcohol	1	0		3.43	119.96	100	20		0.020	0.024	19.96	
n-Hexane	1	0		3.81	22.37	20	20		0.217	0.243	11.85	
Di-isopropyl-ether	1	0		3.95	21.74	20	20		0.546	0.594	8.69	
1,1-Dichloroethene	1	0		2.98	23.89	20	20	0.1	0.325	0.388	19.44	
Methyl Acetate	1	0		3.28	22.23	20	20	0.1	0.145	0.161	11.16	
Methyl-t-butyl ether	1	0		3.59	23.75	20	20	0.1	0.611	0.725	18.76	
1,1-Dichloroethane	1	0		3.93	23.37	20	20	0.2	0.415	0.485	16.86	
trans-1,2-Dichloroethene	1	0		3.61	24.07	20	20	0.1	0.264	0.317	20.34	
Ethyl-t-butyl ether	1	0		4.20	21.54	20	20	0.5	0.647	0.697	7.69	
cis-1,2-Dichloroethene	1	0		4.31	23.87	20	20	0.1	0.401	0.479	19.37	
Bromochloromethane	1	0		4.45	23.35	20	20		0.169	0.197	16.73	
2,2-Dichloropropane	1	0		4.31	25.10	20	20		0.339	0.426	25.51	C1
Ethyl acetate	1	0		4.33	20.29	20	20		0.223	0.227	1.46	
1,4-Dioxane	1	0		5.33	1216.47	1000	20		0.004	0.004	21.65	C1
1,1-Dichloropropene	1	0		4.70	23.18	20	20		0.359	0.416	15.88	
Chloroform	1	0		4.49	23.63	20	20	0.2	0.456	0.539	18.15	
Dibromofluoromethane	1	0	S	4.58	32.43	30	**		0.268	0.290	8.11	
Cyclohexane	1	0		4.65	21.62	20	20	0.1	0.328	0.355	8.11	
1,2-Dichloroethane-d4	1	0	S	4.78	29.85	30	**		0.118	0.117	0.50	
1,2-Dichloroethane	1	0		4.82	23.31	20	20	0.1	0.337	0.393	16.55	
2-Butanone	1	0		4.31	19.37	20	20	0.1	0.088	0.085	3.15	
1,1,1-Trichloroethane	1	0		4.61	23.82	20	20	0.1	0.414	0.493	19.11	
Carbon Tetrachloride	1	0		4.71	23.46	20	20	0.1	0.374	0.439	17.29	
Vinyl Acetate	1	0		3.94	21.40	20	20		0.636	0.681	6.98	
Bromodichloromethane	1	0		5.41	23.53	20	20	0.2	0.335	0.394	17.65	
Methylcyclohexane	1	0		5.27	22.42	20	20	0.1	0.335	0.376	12.08	
Dibromomethane	1	0		5.34	23.73	20	20		0.214	0.254	18.64	
1,2-Dichloropropane	1	0		5.28	23.40	20	20	0.1	0.240	0.281	17.00	
Trichloroethene	1	0		5.16	24.23	20	20	0.2	0.327	0.396	21.16	C1
Benzene	1	0		4.82	23.35	20	20	0.5	1.044	1.219	16.76	
tert-Amyl methyl ether	1	0		4.85	20.87	20	20		0.677	0.706	4.34	
Chlorobenzene-d5	1	0	I	6.55	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.81	16.47	20	20	0.5	0.386	0.318	17.65	
Methyl methacrylate	1	0		5.30	17.14	20	20	0.5	0.210	0.180	14.32	
Dibromochloromethane	1	0		6.24	18.18	20	20	0.1	0.321	0.291	9.11	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.
625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M82272.D **Instrument:** GCMS 11

Cont Calibration Date/Time 8/31/2020 7:07:00 A Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.54	16.38	20	20		0.052	0.043	18.09	
cis-1,3-Dichloropropene	1	0		5.64	18.60	20	20	0.2	0.405	0.377	6.98	
trans-1,3-Dichloropropene	1	0		5.91	20.02	20	20	0.1	0.383	0.347	0.11	
Ethyl methacrylate	1	0		5.93	17.90	20	20	0.5	0.195	0.175	10.50	
1,1,2-Trichloroethane	1	0		6.02	18.17	20	20	0.1	0.273	0.248	9.17	
1,2-Dibromoethane	1	0		6.31	18.98	20	20	0.1	0.283	0.269	5.11	
1,3-Dichloropropane	1	0		6.11	17.93	20	20		0.447	0.401	10.37	
4-Methyl-2-Pentanone	1	0		5.70	18.27	20	20	0.1	0.211	0.192	8.64	
2-Hexanone	1	0		6.12	17.19	20	20	0.1	0.164	0.141	14.06	
Tetrachloroethene	1	0		6.12	17.99	20	20	0.2	0.287	0.258	10.03	
Toluene-d8	1	0	S	5.79	27.32	30	**		1.160	1.056	8.95	
Toluene	1	0		5.82	18.04	20	20	0.4	0.752	0.678	9.78	
1,1,1,2-Tetrachloroethane	1	0		6.59	18.25	20	20		0.298	0.272	8.73	
Chlorobenzene	1	0		6.56	18.58	20	20	0.5	0.857	0.796	7.10	
1,4-Dichlorobenzene-d4	1	0	I	7.82	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.80	17.72	20	20	0.5	0.729	0.646	11.39	
n-Amyl acetate	1	0		6.91	17.20	20	20	0.5	0.596	0.513	13.98	
Bromoform	1	0		7.01	19.52	20	20	0.1	0.360	0.351	2.38	
Ethylbenzene	1	0		6.60	17.85	20	20	0.1	0.628	0.561	10.73	
1,1,2,2-Tetrachloroethane	1	0		7.21	18.05	20	20	0.1	0.576	0.520	9.73	
Bromofluorobenzene	1	0	S	7.17	32.32	30	**		0.766	0.825	7.73	
Styrene	1	0		6.88	18.55	20	20	0.3	1.479	1.371	7.25	
m&p-Xylenes	1	0		6.66	36.39	40	20	0.1	0.889	0.808	9.03	
o-Xylene	1	0		6.88	18.43	20	20	0.3	0.856	0.789	7.83	
trans-1,4-Dichloro-2-butene	1	0		7.24	16.74	20	20		0.191	0.160	16.28	
1,3-Dichlorobenzene	1	0		7.78	17.55	20	20	0.6	1.121	0.984	12.27	
1,4-Dichlorobenzene	1	0		7.83	17.20	20	20	0.5	1.174	1.010	14.00	
1,2-Dichlorobenzene	1	0		8.05	17.24	20	20	0.4	1.018	0.877	13.82	
Isopropylbenzene	1	0		7.07	18.89	20	20	0.1	2.056	1.995	5.55	
Cyclohexanone	1	0		7.14	81.73	100	20		0.016	0.015	18.27	
Camphene	1	0		7.24	16.26	20	20		0.623	0.506	18.70	
1,2,3-Trichloropropane	1	0		7.26	17.67	20	20		0.704	0.622	11.65	
2-Chlorotoluene	1	0		7.36	17.44	20	20		1.297	1.131	12.79	
p-Ethyltoluene	1	0		7.35	16.34	20	20		2.369	1.936	18.28	
4-Chlorotoluene	1	0		7.42	17.63	20	20		1.323	1.166	11.86	
n-Propylbenzene	1	0		7.29	18.01	20	20		2.466	2.221	9.95	
Bromobenzene	1	0		7.27	17.54	20	20		1.236	1.084	12.29	
1,3,5-Trimethylbenzene	1	0		7.38	18.32	20	20		1.760	1.612	8.41	
Butyl methacrylate	1	0		7.38	20.22	20	20	0.5	0.421	0.426	1.11	
t-Butylbenzene	1	0		7.57	17.53	20	20		1.799	1.577	12.33	
1,2,4-Trimethylbenzene	1	0		7.59	17.74	20	20		1.888	1.675	11.29	
sec-Butylbenzene	1	0		7.69	17.61	20	20		2.142	1.886	11.96	
4-Isopropyltoluene	1	0		7.76	17.80	20	20		1.859	1.654	11.01	
n-Butylbenzene	1	0		8.00	17.54	20	20		1.798	1.578	12.28	
p-Diethylbenzene	1	0		7.98	16.80	20	20		1.063	0.893	16.01	
1,2,4,5-Tetramethylbenzene	1	0		8.44	16.44	20	20		1.573	1.293	17.79	
1,2-Dibromo-3-Chloropropane	1	0		8.50	21.03	20	20	0.05	0.109	0.115	5.17	
Camphor	1	0		8.94	181.70	200	20		0.046	0.042	9.15	
Hexachlorobutadiene	1	0		9.07	21.14	20	20		0.195	0.206	5.71	
1,2,4-Trichlorobenzene	1	0		8.99	19.98	20	20	0.2	0.433	0.433	0.12	
1,2,3-Trichlorobenzene	1	0		9.29	19.04	20	20		0.304	0.290	4.81	
Naphthalene	1	0		9.15	19.21	20	20		0.939	0.955	3.95	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131888.D	MBS87762	8/31/2020 9:07:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			
Method: 8260C		Matrix: Soil	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	77.0435	0	50	154 *	20	130
Dichlorodifluoromethane	**1**	**71.9361**	**0**	**50**	**144 ***	**20**	**130**
Chloromethane	**1**	**63.4485**	**0**	**50**	**127**	**20**	**130**
Bromomethane	**1**	**50.5524**	**0**	**50**	**101**	**20**	**130**
Vinyl Chloride	**1**	**60.9187**	**0**	**50**	**122**	**20**	**130**
Chloroethane	**1**	**56.196**	**0**	**50**	**112**	**20**	**130**
Trichlorofluoromethane	**1**	**53.2772**	**0**	**50**	**107**	**20**	**130**
Ethyl ether	1	45.2954	0	50	91	50	130
Furan	1	48.3651	0	50	97	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**53.8862**	**0**	**50**	**108**	**50**	**130**
Methylene Chloride	**1**	**46.9147**	**0**	**50**	**94**	**50**	**130**
Acrolein	**1**	**291.8958**	**0**	**200**	**146 ***	**20**	**130**
Acrylonitrile	**1**	**41.0821**	**0**	**50**	**82**	**20**	**130**
Iodomethane	1	65.371	0	50	131 *	50	130
Acetone	**1**	**191.2286**	**0**	**200**	**96**	**20**	**130**
Carbon Disulfide	**1**	**49.1955**	**0**	**50**	**98**	**50**	**130**
t-Butyl Alcohol	**1**	**145.0596**	**0**	**200**	**73**	**20**	**130**
n-Hexane	1	55.5732	0	50	111	50	130
Di-isopropyl-ether	1	50.9804	0	50	102	50	130
1,1-Dichloroethene	**1**	**54.7368**	**0**	**50**	**109**	**50**	**130**
Methyl Acetate	1	56.1536	0	50	112	50	130
Methyl-t-butyl ether	**1**	**53.4186**	**0**	**50**	**107**	**50**	**130**
1,1-Dichloroethane	**1**	**51.3318**	**0**	**50**	**103**	**50**	**130**
trans-1,2-Dichloroethene	**1**	**52.6015**	**0**	**50**	**105**	**50**	**130**
Ethyl-t-butyl ether	1	46.2693	0	50	93	50	130
cis-1,2-Dichloroethene	**1**	**50.5797**	**0**	**50**	**101**	**50**	**130**
Bromochloromethane	1	50.2529	0	50	101	50	130
2,2-Dichloropropane	1	58.6043	0	50	117	50	130
Ethyl acetate	1	42.8638	0	50	86	50	130
1,4-Dioxane	**1**	**1557.786**	**0**	**2500**	**62**	**50**	**130**
1,1-Dichloropropene	1	50.9925	0	50	102	50	130
Chloroform	**1**	**51.042**	**0**	**50**	**102**	**50**	**130**
Cyclohexane	1	51.9312	0	50	104	50	130
1,2-Dichloroethane	**1**	**51.3951**	**0**	**50**	**103**	**50**	**130**
2-Butanone	**1**	**41.0564**	**0**	**50**	**82**	**20**	**130**
1,1,1-Trichloroethane	**1**	**52.0174**	**0**	**50**	**104**	**50**	**130**
Carbon Tetrachloride	**1**	**52.2009**	**0**	**50**	**104**	**50**	**130**
Vinyl Acetate	1	38.9192	0	50	78	50	130
Bromodichloromethane	**1**	**50.6791**	**0**	**50**	**101**	**50**	**130**
Methylcyclohexane	1	49.9512	0	50	100	50	130
Dibromomethane	1	51.026	0	50	102	50	130
1,2-Dichloropropane	**1**	**50.2056**	**0**	**50**	**100**	**50**	**130**
Trichloroethene	**1**	**49.277**	**0**	**50**	**99**	**50**	**130**
Benzene	**1**	**49.4058**	**0**	**50**	**99**	**50**	**130**
tert-Amyl methyl ether	1	49.7989	0	50	100	50	130
Iso-propylacetate	1	44.3314	0	50	89	50	130
Methyl methacrylate	1	42.8021	0	50	86	50	130
Dibromochloromethane	**1**	**48.2256**	**0**	**50**	**96**	**50**	**130**
2-Chloroethylvinylether	**1**	**103.4236**	**0**	**50**	**207 ***	**50**	**130**
cis-1,3-Dichloropropene	**1**	**48.2806**	**0**	**50**	**97**	**50**	**130**
trans-1,3-Dichloropropene	**1**	**49.4282**	**0**	**50**	**99**	**50**	**130**
Ethyl methacrylate	1	45.9704	0	50	92	50	130
1,1,2-Trichloroethane	**1**	**46.6959**	**0**	**50**	**93**	**50**	**130**
1,2-Dibromoethane	1	46.967	0	50	94	50	130
1,3-Dichloropropane	**1**	**46.3203**	**0**	**50**	**93**	**50**	**130**
4-Methyl-2-Pentanone	**1**	**39.3965**	**0**	**50**	**79**	**20**	**130**
2-Hexanone	**1**	**39.3843**	**0**	**50**	**79**	**20**	**130**
Tetrachloroethene	**1**	**45.5631**	**0**	**50**	**91**	**50**	**130**
Toluene	**1**	**44.3318**	**0**	**50**	**89**	**50**	**130**
1,1,1,2-Tetrachloroethane	1	45.9037	0	50	92	50	130
Chlorobenzene	**1**	**44.3688**	**0**	**50**	**89**	**50**	**130**

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	44.6065	0	50	89	50	130
n-Amyl acetate	1	44.5516	0	50	89	50	130
Bromoform	**1**	**68.5695**	**0**	**50**	**137***	**20**	**130**
Ethylbenzene	**1**	**44.6076**	**0**	**50**	**89**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**43.792**	**0**	**50**	**88**	**50**	**130**
Styrene	**1**	**43.4477**	**0**	**50**	**87**	**50**	**130**
m&p-Xylenes	**1**	**87.0434**	**0**	**100**	**87**	**50**	**130**
o-Xylene	**1**	**41.9207**	**0**	**50**	**84**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	44.7106	0	50	89	20	130
1,3-Dichlorobenzene	**1**	**43.7558**	**0**	**50**	**88**	**50**	**130**
1,4-Dichlorobenzene	**1**	**42.9135**	**0**	**50**	**86**	**50**	**130**
1,2-Dichlorobenzene	**1**	**43.5856**	**0**	**50**	**87**	**50**	**130**
Isopropylbenzene	**1**	**43.989**	**0**	**50**	**88**	**50**	**130**
Cyclohexanone	1	183.5002	0	250	73	50	130
Camphene	1	46.1519	0	50	92	50	130
1,2,3-Trichloropropane	**1**	**42.6801**	**0**	**50**	**85**	**50**	**130**
2-Chlorotoluene	1	44.5685	0	50	89	50	130
p-Ethyltoluene	1	43.0244	0	50	86	50	130
4-Chlorotoluene	1	46.4898	0	50	93	50	130
n-Propylbenzene	**1**	**44.8788**	**0**	**50**	**90**	**50**	**130**
Bromobenzene	1	43.9032	0	50	88	50	130
1,3,5-Trimethylbenzene	**1**	**49.1502**	**0**	**50**	**98**	**50**	**130**
Butyl methacrylate	1	41.7019	0	50	83	50	130
t-Butylbenzene	**1**	**45.1207**	**0**	**50**	**90**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**45.2927**	**0**	**50**	**91**	**50**	**130**
sec-Butylbenzene	**1**	**47.7034**	**0**	**50**	**95**	**50**	**130**
4-Isopropyltoluene	**1**	**47.9029**	**0**	**50**	**96**	**50**	**130**
n-Butylbenzene	**1**	**49.0503**	**0**	**50**	**98**	**50**	**130**
p-Diethylbenzene	1	48.4126	0	50	97	50	130
1,2,4,5-Tetramethylbenzene	1	48.3684	0	50	97	50	130
1,2-Dibromo-3-Chloropropane	1	38.5331	0	50	77	50	130
Camphor	1	555.9057	0	500	111	50	130
Hexachlorobutadiene	1	45.011	0	50	90	50	130
1,2,4-Trichlorobenzene	1	43.352	0	50	87	50	130
1,2,3-Trichlorobenzene	1	42.4155	0	50	85	50	130
Naphthalene	1	39.7835	0	50	80	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Non Spike(If applicable):	6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):		HRPB-3	

Method: 8260C Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	56.9035	0	50	114	20	130
Dichlorodifluoromethane	1	62.8668	0	50	126	20	130
Chloromethane	1	56.1541	0	50	112	20	130
Bromomethane	1	50.2121	0	50	100	20	130
Vinyl Chloride	1	56.1453	0	50	112	20	130
Chloroethane	1	51.908	0	50	104	20	130
Trichlorofluoromethane	1	51.1041	0	50	102	20	130
Ethyl ether	1	46.2834	0	50	93	50	130
Furan	1	46.2299	0	50	92	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	52.3408	0	50	105	50	130
Methylene Chloride	1	52.7897	5.0839	50	95	50	130
Acrolein	1	248.918	0	200	124	20	130
Acrylonitrile	1	34.3463	0	50	69	20	130
Iodomethane	1	64.5939	0	50	129	50	130
Acetone	1	157.3904	0	200	79	20	130
Carbon Disulfide	1	47.3944	0	50	95	50	130
t-Butyl Alcohol	1	116.3514	0	200	58	20	130
n-Hexane	1	54.7434	0	50	109	50	130
Di-isopropyl-ether	1	54.2364	0	50	108	50	130
1,1-Dichloroethene	1	52.2403	0	50	104	50	130
Methyl Acetate	1	46.8893	0	50	94	50	130
Methyl-t-butyl ether	1	54.3286	0	50	109	50	130
1,1-Dichloroethane	1	49.0593	0	50	98	50	130
trans-1,2-Dichloroethene	1	49.6338	0	50	99	50	130
Ethyl-t-butyl ether	1	49.3762	0	50	99	50	130
cis-1,2-Dichloroethene	1	49.1894	0	50	98	50	130
Bromochloromethane	1	50.2977	0	50	101	50	130
2,2-Dichloropropane	1	57.0601	0	50	114	50	130
Ethyl acetate	1	36.7433	0	50	73	50	130
1,4-Dioxane	1	1274.773	0	2500	51	50	130
1,1-Dichloropropene	1	48.5605	0	50	97	50	130
Chloroform	1	49.9443	0	50	100	50	130
Cyclohexane	1	50.8219	0	50	102	50	130
1,2-Dichloroethane	1	50.2019	0	50	100	50	130
2-Butanone	1	33.5103	0	50	67	20	130
1,1,1-Trichloroethane	1	49.0659	0	50	98	50	130
Carbon Tetrachloride	1	51.644	0	50	103	50	130
Vinyl Acetate	1	37.6728	0	50	75	50	130
Bromodichloromethane	1	50.2178	0	50	100	50	130
Methylcyclohexane	1	50.4394	0	50	101	50	130
Dibromomethane	1	47.858	0	50	96	50	130
1,2-Dichloropropane	1	48.2694	0	50	97	50	130
Trichloroethene	1	73.1622	21.8	50	103	50	130
Benzene	1	48.4836	0	50	97	50	130
tert-Amyl methyl ether	1	52.4065	0	50	105	50	130
Iso-propylacetate	1	41.66	0	50	83	50	130
Methyl methacrylate	1	39.8495	0	50	80	50	130
Dibromochloromethane	1	45.6697	0	50	91	50	130
2-Chloroethylvinylether	1	95.5322	0	50	191 *	50	130
cis-1,3-Dichloropropene	1	45.5903	0	50	91	50	130
trans-1,3-Dichloropropene	1	44.067	0	50	88	50	130
Ethyl methacrylate	1	43.1348	0	50	86	50	130
1,1,2-Trichloroethane	1	44.5196	0	50	89	50	130
1,2-Dibromoethane	1	41.0321	0	50	82	50	130
1,3-Dichloropropane	1	42.8237	0	50	86	50	130
4-Methyl-2-Pentanone	1	33.7094	0	50	67	20	130
2-Hexanone	1	30.8066	0	50	62	20	130
Tetrachloroethene	1	50.6666	10.8224	50	80	50	130
Toluene	1	41.0645	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.0505	0	50	90	50	130
Chlorobenzene	1	39.6054	0	50	79	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	41.0364	0	50	82	50	130
n-Amyl acetate	1	38.5687	0	50	77	50	130
Bromoform	**1**	**65.2935**	**0**	**50**	**131***	**20**	**130**
Ethylbenzene	**1**	**42.9713**	**0**	**50**	**86**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**40.0258**	**0**	**50**	**80**	**50**	**130**
Styrene	**1**	**37.9266**	**0**	**50**	**76**	**50**	**130**
m&p-Xylenes	**1**	**78.4306**	**0**	**100**	**78**	**50**	**130**
o-Xylene	**1**	**39.2014**	**0**	**50**	**78**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	36.9711	0	50	74	20	130
1,3-Dichlorobenzene	**1**	**35.471**	**0**	**50**	**71**	**50**	**130**
1,4-Dichlorobenzene	**1**	**33.9467**	**0**	**50**	**68**	**50**	**130**
1,2-Dichlorobenzene	**1**	**35.8729**	**0**	**50**	**72**	**50**	**130**
Isopropylbenzene	**1**	**40.7636**	**0**	**50**	**82**	**50**	**130**
Cyclohexanone	1	125.4322	0	250	50	50	130
Camphene	1	41.718	0	50	83	50	130
1,2,3-Trichloropropane	**1**	**36.3643**	**0**	**50**	**73**	**50**	**130**
2-Chlorotoluene	1	40.2726	0	50	81	50	130
p-Ethyltoluene	1	36.6825	0	50	73	50	130
4-Chlorotoluene	1	37.6433	0	50	75	50	130
n-Propylbenzene	**1**	**38.3835**	**0**	**50**	**77**	**50**	**130**
Bromobenzene	1	38.8818	0	50	78	50	130
1,3,5-Trimethylbenzene	**1**	**43.2564**	**0**	**50**	**87**	**50**	**130**
Butyl methacrylate	1	41.2717	0	50	83	50	130
t-Butylbenzene	**1**	**40.0099**	**0**	**50**	**80**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**38.5263**	**0**	**50**	**77**	**50**	**130**
sec-Butylbenzene	**1**	**40.366**	**0**	**50**	**81**	**50**	**130**
4-Isopropyltoluene	**1**	**39.5065**	**0**	**50**	**79**	**50**	**130**
n-Butylbenzene	**1**	**36.1879**	**0**	**50**	**72**	**50**	**130**
p-Diethylbenzene	1	36.9323	0	50	74	50	130
1,2,4,5-Tetramethylbenzene	1	37.6781	0	50	75	50	130
1,2-Dibromo-3-Chloropropane	1	31.3599	0	50	63	50	130
Camphor	1	473.298	0	500	95	50	130
Hexachlorobutadiene	1	35.1542	0	50	70	50	130
1,2,4-Trichlorobenzene	1	28.2306	0	50	56	50	130
1,2,3-Trichlorobenzene	1	30.0156	0	50	60	50	130
Naphthalene	1	30.4916	0	50	61	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Non Spike(If applicable):	6M131892.D	AD18955-001	8/31/2020 10:29:00 AM
Inst Blank(If applicable):			

HRBP-3

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	53.7847	0	50	108	20	130
Dichlorodifluoromethane	1	65.4838	0	50	131*	20	130
Chloromethane	1	56.6472	0	50	113	20	130
Bromomethane	1	51.6003	0	50	103	20	130
Vinyl Chloride	1	56.8458	0	50	114	20	130
Chloroethane	1	52.3136	0	50	105	20	130
Trichlorofluoromethane	1	52.2935	0	50	105	20	130
Ethyl ether	1	49.7009	0	50	99	50	130
Furan	1	47.2611	0	50	95	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	56.3197	0	50	113	50	130
Methylene Chloride	1	54.1757	5.0839	50	98	50	130
Acrolein	1	259.5406	0	200	130	20	130
Acrylonitrile	1	35.0489	0	50	70	20	130
Iodomethane	1	65.8217	0	50	132*	50	130
Acetone	1	162.1024	0	200	81	20	130
Carbon Disulfide	1	49.643	0	50	99	50	130
t-Butyl Alcohol	1	127.633	0	200	64	20	130
n-Hexane	1	58.3019	0	50	117	50	130
Di-isopropyl-ether	1	55.5257	0	50	111	50	130
1,1-Dichloroethene	1	53.6783	0	50	107	50	130
Methyl Acetate	1	50.8647	0	50	102	50	130
Methyl-t-butyl ether	1	57.9525	0	50	116	50	130
1,1-Dichloroethane	1	52.194	0	50	104	50	130
trans-1,2-Dichloroethene	1	49.8849	0	50	100	50	130
Ethyl-t-butyl ether	1	51.0834	0	50	102	50	130
cis-1,2-Dichloroethene	1	51.2312	0	50	102	50	130
Bromochloromethane	1	53.4537	0	50	107	50	130
2,2-Dichloropropane	1	58.147	0	50	116	50	130
Ethyl acetate	1	33.6297	0	50	67	50	130
1,4-Dioxane	1	1315.993	0	2500	53	50	130
1,1-Dichloropropene	1	50.4388	0	50	101	50	130
Chloroform	1	51.9592	0	50	104	50	130
Cyclohexane	1	52.7667	0	50	106	50	130
1,2-Dichloroethane	1	52.776	0	50	106	50	130
2-Butanone	1	34.6742	0	50	69	20	130
1,1,1-Trichloroethane	1	52.2007	0	50	104	50	130
Carbon Tetrachloride	1	53.6249	0	50	107	50	130
Vinyl Acetate	1	39.662	0	50	79	50	130
Bromodichloromethane	1	52.8916	0	50	106	50	130
Methylcyclohexane	1	51.9779	0	50	104	50	130
Dibromomethane	1	50.6971	0	50	101	50	130
1,2-Dichloropropane	1	49.6665	0	50	99	50	130
Trichloroethene	1	75.2922	21.8	50	107	50	130
Benzene	1	50.3163	0	50	101	50	130
tert-Amyl methyl ether	1	56.2173	0	50	112	50	130
Iso-propylacetate	1	42.6062	0	50	85	50	130
Methyl methacrylate	1	41.2272	0	50	82	50	130
Dibromochloromethane	1	48.1401	0	50	96	50	130
2-Chloroethylvinylether	1	100.3461	0	50	201*	50	130
cis-1,3-Dichloropropene	1	46.6773	0	50	93	50	130
trans-1,3-Dichloropropene	1	47.5296	0	50	95	50	130
Ethyl methacrylate	1	46.9747	0	50	94	50	130
1,1,2-Trichloroethane	1	46.8811	0	50	94	50	130
1,2-Dibromoethane	1	44.9778	0	50	90	50	130
1,3-Dichloropropane	1	46.3511	0	50	93	50	130
4-Methyl-2-Pentanone	1	36.7572	0	50	74	20	130
2-Hexanone	1	34.1195	0	50	68	20	130
Tetrachloroethene	1	52.4352	10.8224	50	83	50	130
Toluene	1	40.7723	0	50	82	50	130
1,1,1,2-Tetrachloroethane	1	45.2612	0	50	91	50	130
Chlorobenzene	1	40.3151	0	50	81	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	45.4686	0	50	91	50	130
n-Amyl acetate	1	44.7211	0	50	89	50	130
Bromoform	**1**	**70.4273**	**0**	**50**	**141***	**20**	**130**
Ethylbenzene	**1**	**42.7105**	**0**	**50**	**85**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**44.1548**	**0**	**50**	**88**	**50**	**130**
Styrene	**1**	**40.2637**	**0**	**50**	**81**	**50**	**130**
m&p-Xylenes	**1**	**78.8436**	**0**	**100**	**79**	**50**	**130**
o-Xylene	**1**	**39.4447**	**0**	**50**	**79**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	40.8268	0	50	82	20	130
1,3-Dichlorobenzene	**1**	**37.8242**	**0**	**50**	**76**	**50**	**130**
1,4-Dichlorobenzene	**1**	**36.8102**	**0**	**50**	**74**	**50**	**130**
1,2-Dichlorobenzene	**1**	**39.293**	**0**	**50**	**79**	**50**	**130**
Isopropylbenzene	**1**	**40.7047**	**0**	**50**	**81**	**50**	**130**
Cyclohexanone	1	135.2346	0	250	54	50	130
Camphene	1	42.2018	0	50	84	50	130
1,2,3-Trichloropropane	**1**	**41.2923**	**0**	**50**	**83**	**50**	**130**
2-Chlorotoluene	1	41.5022	0	50	83	50	130
p-Ethyltoluene	1	37.3405	0	50	75	50	130
4-Chlorotoluene	1	39.557	0	50	79	50	130
n-Propylbenzene	**1**	**39.5838**	**0**	**50**	**79**	**50**	**130**
Bromobenzene	1	39.8882	0	50	80	50	130
1,3,5-Trimethylbenzene	**1**	**44.2606**	**0**	**50**	**89**	**50**	**130**
Butyl methacrylate	1	44.8847	0	50	90	50	130
t-Butylbenzene	**1**	**40.8828**	**0**	**50**	**82**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**39.8077**	**0**	**50**	**80**	**50**	**130**
sec-Butylbenzene	**1**	**41.2564**	**0**	**50**	**83**	**50**	**130**
4-Isopropyltoluene	**1**	**40.7458**	**0**	**50**	**81**	**50**	**130**
n-Butylbenzene	**1**	**38.6688**	**0**	**50**	**77**	**50**	**130**
p-Diethylbenzene	1	38.5083	0	50	77	50	130
1,2,4,5-Tetramethylbenzene	1	41.4972	0	50	83	50	130
1,2-Dibromo-3-Chloropropane	1	36.9535	0	50	74	50	130
Camphor	1	547.1421	0	500	109	50	130
Hexachlorobutadiene	1	36.7858	0	50	74	50	130
1,2,4-Trichlorobenzene	1	33.9584	0	50	68	50	130
1,2,3-Trichlorobenzene	1	34.7254	0	50	69	50	130
Naphthalene	1	35.4652	0	50	71	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS87762

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M131890.D	AD18955-003(MSD:AD18955-0	8/31/2020 9:48:00 AM
Duplicate(If applicable):	6M131889.D	AD18955-002(MS:AD18955-001	8/31/2020 9:27:00 AM
Inst Blank(If applicable):		HRBP-3	

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	53.7847	56.9035	5.6	30
Dichlorodifluoromethane	**1**	**65.4838**	**62.8668**	**4.1**	**30**
Chloromethane	**1**	**56.6472**	**56.1541**	**0.87**	**30**
Bromomethane	**1**	**51.6003**	**50.2121**	**2.7**	**30**
Vinyl Chloride	**1**	**56.8458**	**56.1453**	**1.2**	**40**
Chloroethane	**1**	**52.3136**	**51.908**	**0.78**	**30**
Trichlorofluoromethane	**1**	**52.2935**	**51.1041**	**2.3**	**30**
Ethyl ether	1	49.7009	46.2834	7.1	30
Furan	1	47.2611	46.2299	2.2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**56.3197**	**52.3408**	**7.3**	**30**
Methylene Chloride	**1**	**54.1757**	**52.7897**	**2.6**	**30**
Acrolein	**1**	**259.5406**	**248.918**	**4.2**	**30**
Acrylonitrile	**1**	**35.0489**	**34.3463**	**2**	**30**
Iodomethane	1	65.8217	64.5939	1.9	30
Acetone	**1**	**162.1024**	**157.3904**	**2.9**	**30**
Carbon Disulfide	**1**	**49.643**	**47.3944**	**4.6**	**30**
t-Butyl Alcohol	**1**	**127.633**	**116.3514**	**9.2**	**30**
n-Hexane	1	58.3019	54.7434	6.3	30
Di-isopropyl-ether	1	55.5257	54.2364	2.3	30
1,1-Dichloroethene	**1**	**53.6783**	**52.2403**	**2.7**	**40**
Methyl Acetate	1	50.8647	46.8893	8.1	30
Methyl-t-butyl ether	**1**	**57.9525**	**54.3286**	**6.5**	**30**
1,1-Dichloroethane	**1**	**52.194**	**49.0593**	**6.2**	**40**
trans-1,2-Dichloroethene	**1**	**49.8849**	**49.6338**	**0.5**	**30**
Ethyl-t-butyl ether	1	51.0834	49.3762	3.4	30
cis-1,2-Dichloroethene	**1**	**51.2312**	**49.1894**	**4.1**	**30**
Bromochloromethane	1	53.4537	50.2977	6.1	30
2,2-Dichloropropane	1	58.147	57.0601	1.9	30
Ethyl acetate	1	33.6297	36.7433	8.8	30
1,4-Dioxane	**1**	**1315.993**	**1274.773**	**3.2**	**30**
1,1-Dichloropropene	1	50.4388	48.5605	3.8	30
Chloroform	**1**	**51.9592**	**49.9443**	**4**	**40**
Cyclohexane	1	52.7667	50.8219	3.8	30
1,2-Dichloroethane	**1**	**52.776**	**50.2019**	**5**	**40**
2-Butanone	**1**	**34.6742**	**33.5103**	**3.4**	**40**
1,1,1-Trichloroethane	**1**	**52.2007**	**49.0659**	**6.2**	**30**
Carbon Tetrachloride	**1**	**53.6249**	**51.644**	**3.8**	**40**
Vinyl Acetate	1	39.662	37.6728	5.1	30
Bromodichloromethane	**1**	**52.8916**	**50.2178**	**5.2**	**30**
Methylcyclohexane	1	51.9779	50.4394	3	30
Dibromomethane	1	50.6971	47.858	5.8	30
1,2-Dichloropropane	**1**	**49.6665**	**48.2694**	**2.9**	**30**
Trichloroethene	**1**	**75.2922**	**73.1622**	**2.9**	**40**
Benzene	**1**	**50.3163**	**48.4836**	**3.7**	**40**
tert-Amyl methyl ether	1	56.2173	52.4065	7	30
Iso-propylacetate	1	42.6062	41.66	2.2	30
Methyl methacrylate	1	41.2272	39.8495	3.4	30
Dibromochloromethane	**1**	**48.1401**	**45.6697**	**5.3**	**30**
2-Chloroethylvinylether	**1**	**100.3461**	**95.5322**	**4.9**	**30**
cis-1,3-Dichloropropene	**1**	**46.6773**	**45.5903**	**2.4**	**30**
trans-1,3-Dichloropropene	**1**	**47.5296**	**44.067**	**7.6**	**30**
Ethyl methacrylate	1	46.9747	43.1348	8.5	30
1,1,2-Trichloroethane	**1**	**46.8811**	**44.5196**	**5.2**	**30**
1,2-Dibromoethane	1	44.9778	41.0321	9.2	30
1,3-Dichloropropane	**1**	**46.3511**	**42.8237**	**7.9**	**30**
4-Methyl-2-Pentanone	**1**	**36.7572**	**33.7094**	**8.7**	**30**
2-Hexanone	**1**	**34.1195**	**30.8066**	**10**	**30**
Tetrachloroethene	**1**	**52.4352**	**50.6666**	**3.4**	**40**
Toluene	**1**	**40.7723**	**41.0645**	**0.71**	**40**
1,1,1,2-Tetrachloroethane	1	45.2612	45.0505	0.47	30
Chlorobenzene	**1**	**40.3151**	**39.6054**	**1.8**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS87762

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	45.4686	41.0364	10	30
n-Amyl acetate	1	44.7211	38.5687	15	30
Bromoform	**1**	**70.4273**	**65.2935**	**7.6**	**30**
Ethylbenzene	**1**	**42.7105**	**42.9713**	**0.61**	**30**
1,1,2,2-Tetrachloroethane	**1**	**44.1548**	**40.0258**	**9.8**	**30**
Styrene	**1**	**40.2637**	**37.9266**	**6**	**30**
m&p-Xylenes	**1**	**78.8436**	**78.4306**	**0.53**	**30**
o-Xylene	**1**	**39.4447**	**39.2014**	**0.62**	**30**
trans-1,4-Dichloro-2-butene	1	40.8268	36.9711	9.9	30
1,3-Dichlorobenzene	**1**	**37.8242**	**35.471**	**6.4**	**30**
1,4-Dichlorobenzene	**1**	**36.8102**	**33.9467**	**8.1**	**40**
1,2-Dichlorobenzene	**1**	**39.293**	**35.8729**	**9.1**	**40**
Isopropylbenzene	**1**	**40.7047**	**40.7636**	**0.14**	**30**
Cyclohexanone	1	135.2346	125.4322	7.5	30
Camphene	1	42.2018	41.718	1.2	30
1,2,3-Trichloropropane	**1**	**41.2923**	**36.3643**	**13**	**30**
2-Chlorotoluene	1	41.5022	40.2726	3	30
p-Ethyltoluene	1	37.3405	36.6825	1.8	30
4-Chlorotoluene	1	39.557	37.6433	5	30
n-Propylbenzene	**1**	**39.5838**	**38.3835**	**3.1**	**40**
Bromobenzene	1	39.8882	38.8818	2.6	30
1,3,5-Trimethylbenzene	**1**	**44.2606**	**43.2564**	**2.3**	**30**
Butyl methacrylate	1	44.8847	41.2717	8.4	30
t-Butylbenzene	**1**	**40.8828**	**40.0099**	**2.2**	**30**
1,2,4-Trimethylbenzene	**1**	**39.8077**	**38.5263**	**3.3**	**30**
sec-Butylbenzene	**1**	**41.2564**	**40.366**	**2.2**	**40**
4-Isopropyltoluene	**1**	**40.7458**	**39.5065**	**3.1**	**30**
n-Butylbenzene	**1**	**38.6688**	**36.1879**	**6.6**	**30**
p-Diethylbenzene	1	38.5083	36.9323	4.2	30
1,2,4,5-Tetramethylbenzene	1	41.4972	37.6781	9.6	30
1,2-Dibromo-3-Chloropropane	1	36.9535	31.3599	16	30
Camphor	1	547.1421	473.298	14	30
Hexachlorobutadiene	1	36.7858	35.1542	4.5	30
1,2,4-Trichlorobenzene	1	33.9584	28.2306	18	30
1,2,3-Trichlorobenzene	1	34.7254	30.0156	15	30
Naphthalene	1	35.4652	30.4916	15	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87763

Data File	Sample ID:	Analysis Date
Spike or Dup: 11M82284.D	MBS87763	8/31/2020 10:49:00 AM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.9325	0	20	110	50	150
Dichlorodifluoromethane	1	24.1431	0	20	121	50	150
Chloromethane	1	19.1856	0	20	96	50	150
Bromomethane	1	16.4844	0	20	82	50	150
Vinyl Chloride	1	22.7226	0	20	114	50	150
Chloroethane	1	22.7454	0	20	114	50	150
Trichlorofluoromethane	1	25.0554	0	20	125	50	150
Ethyl ether	1	18.1456	0	20	91	50	150
Furan	1	18.467	0	20	92	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.4323	0	20	112	50	150
Methylene Chloride	1	20.2238	0	20	101	70	130
Acrolein	1	109.3642	0	100	109	50	150
Acrylonitrile	1	20.0534	0	20	100	50	150
Iodomethane	1	11.4785	0	20	57	50	150
Acetone	1	94.0859	0	100	94	50	150
Carbon Disulfide	1	20.0916	0	20	100	50	150
t-Butyl Alcohol	1	97.4229	0	100	97	50	150
n-Hexane	1	21.5774	0	20	108	70	130
Di-isopropyl-ether	1	17.9766	0	20	90	70	130
1,1-Dichloroethene	1	21.3161	0	20	107	70	130
Methyl Acetate	1	25.3756	0	20	127	50	150
Methyl-t-butyl ether	1	19.1344	0	20	96	70	130
1,1-Dichloroethane	1	19.8163	0	20	99	70	130
trans-1,2-Dichloroethene	1	20.8372	0	20	104	70	130
Ethyl-t-butyl ether	1	18.1072	0	20	91	70	130
cis-1,2-Dichloroethene	1	20.1734	0	20	101	70	130
Bromochloromethane	1	20.1302	0	20	101	70	130
2,2-Dichloropropane	1	21.3775	0	20	107	70	130
Ethyl acetate	1	16.9913	0	20	85	50	150
1,4-Dioxane	1	1064.248	0	1000	106	50	150
1,1-Dichloropropene	1	20.3721	0	20	102	70	130
Chloroform	1	20.1278	0	20	101	70	130
Cyclohexane	1	21.5077	0	20	108	70	130
1,2-Dichloroethane	1	19.5169	0	20	98	70	130
2-Butanone	1	19.4982	0	20	97	50	150
1,1,1-Trichloroethane	1	21.1395	0	20	106	70	130
Carbon Tetrachloride	1	21.1128	0	20	106	50	150
Vinyl Acetate	1	14.0318	0	20	70	50	150
Bromodichloromethane	1	21.0989	0	20	105	70	130
Methylcyclohexane	1	21.0036	0	20	105	70	130
Dibromomethane	1	19.757	0	20	99	70	130
1,2-Dichloropropane	1	19.9297	0	20	100	70	130
Trichloroethene	1	20.7788	0	20	104	70	130
Benzene	1	19.8048	0	20	99	70	130
tert-Amyl methyl ether	1	17.6114	0	20	88	70	130
Iso-propylacetate	1	14.2285	0	20	71	70	130
Methyl methacrylate	1	14.1798	0	20	71	70	130
Dibromochloromethane	1	14.8959	0	20	74	70	130
2-Chloroethylvinylether	1	35.3555	0	20	177 *	70	130
cis-1,3-Dichloropropene	1	15.6128	0	20	78	70	130
trans-1,3-Dichloropropene	1	16.3149	0	20	82	70	130
Ethyl methacrylate	1	14.8494	0	20	74	70	130
1,1,2-Trichloroethane	1	14.6685	0	20	73	70	130
1,2-Dibromoethane	1	15.8482	0	20	79	70	130
1,3-Dichloropropane	1	15.3691	0	20	77	70	130
4-Methyl-2-Pentanone	1	15.8007	0	20	79	50	150
2-Hexanone	1	13.9778	0	20	70	50	150
Tetrachloroethene	1	15.9873	0	20	80	50	150
Toluene	1	15.9601	0	20	80	70	130
1,1,1,2-Tetrachloroethane	1	15.3617	0	20	77	70	130
Chlorobenzene	1	15.871	0	20	79	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS87763

Method: 8260C	Matrix: Aqueous	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	14.2673	0	20	71	70	130
n-Amyl acetate	1	13.4488	0	20	67*	70	130
Bromoform	**1**	**15.5826**	**0**	**20**	**78**	**70**	**130**
Ethylbenzene	**1**	**15.8995**	**0**	**20**	**79**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**15.4148**	**0**	**20**	**77**	**70**	**130**
Styrene	**1**	**15.856**	**0**	**20**	**79**	**70**	**130**
m&p-Xylenes	**1**	**33.181**	**0**	**40**	**83**	**70**	**130**
o-Xylene	**1**	**16.124**	**0**	**20**	**81**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	14.6357	0	20	73	50	150
1,3-Dichlorobenzene	**1**	**14.5926**	**0**	**20**	**73**	**70**	**130**
1,4-Dichlorobenzene	**1**	**14.3065**	**0**	**20**	**72**	**70**	**130**
1,2-Dichlorobenzene	**1**	**14.8056**	**0**	**20**	**74**	**70**	**130**
Isopropylbenzene	**1**	**16.7641**	**0**	**20**	**84**	**70**	**130**
Cyclohexanone	1	67.6338	0	100	68	50	150
Camphene	1	15.0383	0	20	75	70	130
1,2,3-Trichloropropane	**1**	**14.547**	**0**	**20**	**73**	**70**	**130**
2-Chlorotoluene	1	15.35	0	20	77	70	130
p-Ethyltoluene	1	14.5706	0	20	73	70	130
4-Chlorotoluene	1	15.0182	0	20	75	70	130
n-Propylbenzene	**1**	**16.0218**	**0**	**20**	**80**	**70**	**130**
Bromobenzene	1	14.9379	0	20	75	70	130
1,3,5-Trimethylbenzene	**1**	**15.6441**	**0**	**20**	**78**	**70**	**130**
Butyl methacrylate	1	16.2155	0	20	81	70	130
t-Butylbenzene	**1**	**15.3438**	**0**	**20**	**77**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**14.8353**	**0**	**20**	**74**	**70**	**130**
sec-Butylbenzene	**1**	**15.3366**	**0**	**20**	**77**	**70**	**130**
4-Isopropyltoluene	**1**	**15.2528**	**0**	**20**	**76**	**70**	**130**
n-Butylbenzene	**1**	**14.8177**	**0**	**20**	**74**	**70**	**130**
p-Diethylbenzene	1	14.9483	0	20	75	70	130
1,2,4,5-Tetramethylbenzene	1	13.3689	0	20	67*	70	130
1,2-Dibromo-3-Chloropropane	1	16.5537	0	20	83	50	150
Camphor	1	124.287	0	200	62	20	150
Hexachlorobutadiene	1	15.5588	0	20	78	50	150
1,2,4-Trichlorobenzene	1	14.5121	0	20	73	70	130
1,2,3-Trichlorobenzene	1	11.9922	0	20	60*	70	130
Naphthalene	1	35.2852	0	20	176*	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

0082803 0136

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M81828.D	CAL @ 20 PPB	08/17/20 15:28	2	11M81826.D	CAL @ 5 PPB	08/17/20 14:51
3	11M81827.D	CAL @ 10 PPB	08/17/20 15:09	4	11M81830.D	CAL @ 50 PPB	08/17/20 16:05
5	11M81837.D	CAL @ 100 PPB	08/17/20 18:14	6	11M81834.D	CAL @ 250 PPB	08/17/20 17:18
7	11M81825.D	CAL @ 1 PPB	08/17/20 14:32	8	11M81824.D	CAL @ 0.5 PPB	08/17/20 14:14

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.3216	0.2788	0.3093	0.3188	0.3326	0.3031	-----	0.2990	-----	0.309	1.68	0.998	1.00	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Dichlorodifluorometha	1	0	Avg	0.2386	0.2098	0.2398	0.2154	0.2459	0.2131	-----	0.2269	-----	0.227	1.67	0.996	0.999	6.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Chloromethane	1	0	Avg	0.2177	0.2174	0.2271	0.2078	0.2247	0.1930	-----	0.2311	-----	0.217	1.85	0.996	0.999	6.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromomethane	1	0	Avg	0.2074	0.2267	0.2200	0.2014	0.2274	0.2046	-----	0.2605	-----	0.221	2.24	0.998	0.999	9.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Vinyl Chloride	1	0	Avg	0.2751	0.2551	0.2795	0.2573	0.2752	0.2401	-----	0.2994	-----	0.269	1.94	0.997	0.999	7.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Chloroethane	1	0	Avg	0.1775	0.1663	0.1834	0.1703	0.1778	0.1553	-----	0.1843	-----	0.174	2.33	0.997	1.00	6.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Trichlorofluoromethan	1	0	Avg	0.4071	0.3816	0.4235	0.3793	0.4307	0.3756	-----	0.4164	-----	0.402	2.55	0.997	0.999	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethyl ether	1	0	Avg	0.1831	0.1697	0.1860	0.1797	0.1908	0.1692	-----	0.1766	-----	0.179	2.78	0.997	1.00	4.5	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Furan	1	0	Avg	0.2996	0.2959	0.3138	0.2949	0.3053	0.2721	-----	0.3397	-----	0.303	2.82	0.998	1.00	6.8	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1896	0.1816	0.2086	0.1810	0.2158	0.1870	-----	0.1971	-----	0.194	2.97	0.996	0.998	6.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Methylene Chloride	1	0	Avg	0.2538	0.2558	0.2607	0.2474	0.2602	0.2320	-----	0.2963	-----	0.258	3.37	0.998	1.00	7.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Acrolein	1	0	Avg	0.0355	0.0335	0.0361	0.0344	0.0379	0.0338	-----	0.0396	-----	0.0359	2.89	0.998	0.999	6.2		100.0	25.00	50.00	250.0	500.0	1250.		5.00	
Acrylonitrile	1	0	Avg	0.0875	0.0760	0.0884	0.0830	0.0907	0.0794	-----	0.0774	-----	0.0832	3.57	0.997	0.999	7.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Iodomethane	1	0	Qua	0.3390	0.2296	0.2966	0.3594	0.3753	0.3481	-----	0.1691	-----	0.302	3.12	0.999	1.00	25		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Acetone	1	0	Avg	0.0661	0.0618	0.0695	0.0597	0.0654	0.0562	-----	0.0681	-----	0.0639	3.01	0.996	0.999	7.5	0.10 a	100.0	25.00	50.00	250.0	500.0	1250.		5.00	
Carbon Disulfide	1	0	Avg	0.6246	0.5833	0.6481	0.6210	0.6911	0.6185	-----	0.7015	-----	0.641	3.18	0.998	0.999	6.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
t-Butyl Alcohol	1	0	Avg	0.0205	0.0195	0.0215	0.0187	0.0220	0.0204	-----	0.0180	-----	0.0201	3.43	0.998	0.999	7.1		100.0	25.00	50.00	250.0	500.0	1250.		5.00	
n-Hexane	1	0	Avg	0.2118	0.2063	0.2288	0.2046	0.2383	0.2123	-----	0.2158	-----	0.217	3.81	0.997	0.999	5.7		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Di-isopropyl-ether	1	0	Avg	0.5446	0.5142	0.5533	0.5408	0.5687	0.5262	-----	0.5757	-----	0.546	3.95	0.999	1.00	4.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1-Dichloroethene	1	0	Avg	0.3275	0.3206	0.3361	0.3219	0.3454	0.3082	-----	0.3154	-----	0.325	2.98	0.998	1.00	3.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Methyl Acetate	1	0	Avg	0.1488	0.1411	0.1558	0.1405	0.1488	0.1292	-----	0.1507	-----	0.145	3.28	0.997	1.00	6.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Methyl-t-butyl ether	1	0	Avg	0.6222	0.5906	0.6250	0.6162	0.6754	0.6071	-----	0.5930	0.5544	0.611	3.60	0.998	0.999	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.4160	0.3968	0.4265	0.4085	0.4303	0.3879	-----	0.4406	-----	0.415	3.93	0.998	1.00	4.5	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2637	0.2595	0.2722	0.2569	0.2780	0.2495	-----	0.2664	-----	0.264	3.60	0.998	0.999	3.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethyl-t-butyl ether	1	0	Avg	0.6399	0.6221	0.6446	0.6465	0.7003	0.6244	-----	0.6521	-----	0.647	4.20	0.998	0.999	4.0	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.4118	0.3877	0.4159	0.3955	0.4252	0.3887	-----	0.3840	-----	0.401	4.31	0.999	1.00	4.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromochloromethane	1	0	Avg	0.1728	0.1685	0.1783	0.1691	0.1709	0.1447	-----	0.1764	-----	0.169	4.45	0.995	1.00	6.6		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
2,2-Dichloropropane	1	0	Avg	0.3413	0.3188	0.3340	0.3365	0.3547	0.3389	-----	0.3516	-----	0.339	4.31	1.00	1.00	3.5		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethyl acetate	1	0	Avg	0.2127	0.2080	0.2564	0.2120	0.2385	0.2183	-----	0.2182	-----	0.223	4.33	0.998	0.999	7.9		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,4-Dioxane	1	0	Avg	0.0036	0.0035	0.0037	0.0032	0.0036	0.0037	-----	0.0033	-----	0.00355	5.34	0.999	0.999	5.8		1000.	250.0	500.0	2500.	5000.	12500		50.00	
1,1-Dichloropropene	1	0	Avg	0.3573	0.3371	0.3712	0.3530	0.3859	0.3480	-----	0.3570	-----	0.359	4.70	0.998	0.999	4.4		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Chloroform	1	0	Avg	0.4592	0.4346	0.4684	0.4522	0.4767	0.4245	-----	0.4754	-----	0.456	4.49	0.998	1.00	4.4	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Dibromofluoromethan	1	0	Avg	0.2709	0.2768	0.2739	0.2770	0.2763	0.2325	-----	0.2690	0.2685	0.268	4.58	-1	-1	5.5		30.00	30.00	30.00	30.00	30.00	30.00		30.00	30.00
Cyclohexane	1	0	Avg	0.3188	0.3128	0.3481	0.3092	0.3619	0.3209	-----	0.3254	-----	0.328	4.65	0.997	0.999	5.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1184	0.1243	0.1191	0.1245	0.1170	0.1006	-----	0.1199	0.1196	0.118	4.78	-1	-1	6.4		30.00	30.00	30.00	30.00	30.00	30.00		30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3262	0.3179	0.3433	0.3307	0.3499	0.3373	-----	0.3616	0.3313	0.337	4.82	1.00	1.00	4.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	0.50
2-Butanone	1	0	Avg	0.0911	0.0971	0.0783	0.0851	0.0837	0.0759	-----	0.1061	-----	0.0882	4.31	0.998	1.00	12	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1,1-Trichloroethane	1	0	Avg	0.4190	0.4016	0.4202	0.4143	0.4504	0.4029	-----	0.3857	-----	0.414	4.61	0.998	0.999	4.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Carbon Tetrachloride	1	0	Avg	0.3703	0.3421	0.3816	0.3708	0.4216	0.3794	-----	0.3547	-----	0.374	4.71	0.998	0.999	6.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Vinyl Acetate	1	0	Avg	0.6470	0.5981	0.6150	0.6572	0.7114	0.6481	-----	0.5756	-----	0.636	3.95	0.998	1.00	7.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromodichloromethan	1	0	Avg	0.3342	0.3156	0.3393	0.3313	0.3667	0.3317	-----	0.3267	-----	0.335	5.41	0.998	0.999	4.7	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.249
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M81828.D	CAL @ 20 PPB	08/17/20 15:28	2	11M81826.D	CAL @ 5 PPB	08/17/20 14:51
3	11M81827.D	CAL @ 10 PPB	08/17/20 15:09	4	11M81830.D	CAL @ 50 PPB	08/17/20 16:05
5	11M81837.D	CAL @ 100 PPB	08/17/20 18:14	6	11M81834.D	CAL @ 250 PPB	08/17/20 17:18
7	11M81825.D	CAL @ 1 PPB	08/17/20 14:32	8	11M81824.D	CAL @ 0.5 PPB	08/17/20 14:14

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.3134	0.3007	0.3591	0.3122	0.3821	0.3373	-----	0.3421	-----	0.335	5.27	0.996	0.998	8.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Dibromomethane	1	0	Avg	0.2135	0.2018	0.2131	0.2135	0.2322	0.2124	-----	0.2099	-----	0.214	5.34	0.999	1.00	4.3		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dichloropropane	1	0	Avg	0.2407	0.2354	0.2401	0.2378	0.2542	0.2337	-----	0.2402	-----	0.240	5.28	0.999	1.00	2.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Trichloroethene	1	0	Avg	0.3247	0.3093	0.3301	0.3213	0.3462	0.3148	-----	0.3409	-----	0.327	5.16	0.998	1.00	4.1	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Benzene	1	0	Avg	1.0460	0.9995	1.0566	1.0295	1.1054	1.0586	-----	1.0687	0.9849	1.04	4.82	1.00	1.00	3.7	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.6431	0.6211	0.6351	0.6498	0.7088	0.8491	-----	0.6306	-----	0.677	4.86	0.995	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Iso-propylacetate	1	0	Avg	0.3792	0.3444	0.3788	0.3807	0.4259	0.4399	-----	0.3556	-----	0.386	4.81	0.999	1.00	9.0	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Methyl methacrylate	1	0	Avg	0.1979	0.1912	0.2137	0.2143	0.2461	0.2395	-----	0.1693	-----	0.210	5.30	0.999	0.999	13	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Dibromochloromethan	1	0	Avg	0.3130	0.2738	0.3078	0.3142	0.3392	0.4324	-----	0.2640	-----	0.321	6.24	0.992	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
2-Chloroethylvinylethe	1	0	Avg	0.0555	0.0449	0.0529	0.0561	0.0625	0.0612	-----	0.0325	-----	0.0523	5.54	1.00	1.00	20		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.3993	0.3672	0.3888	0.4109	0.4366	0.4489	-----	0.3851	-----	0.405	5.64	1.00	1.00	7.2	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
trans-1,3-Dichloroprop	1	0	Qua	0.3730	0.3187	0.3455	0.3803	0.4134	0.5505	-----	0.3009	-----	0.383	5.92	0.989	1.00	22	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethyl methacrylate	1	0	Avg	0.1978	0.1826	0.1983	0.2066	0.2238	-----	-----	0.1631	-----	0.195	5.93	0.999	1.00	11	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2528	0.2457	0.2631	0.2502	0.2689	0.3744	-----	0.2587	-----	0.273	6.02	0.986	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dibromoethane	1	0	Avg	0.2767	0.2652	0.2786	0.2734	0.2940	0.3239	-----	0.2701	-----	0.283	6.31	0.998	1.00	7.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,3-Dichloropropane	1	0	Avg	0.4295	0.4054	0.4292	0.4154	0.4498	0.5677	-----	0.4324	-----	0.447	6.11	0.992	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.2144	0.1993	0.2081	0.2067	0.2291	0.2294	-----	0.1871	-----	0.211	5.70	1.00	1.00	7.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
2-Hexanone	1	0	Avg	0.1535	0.1402	0.1472	0.1499	0.1683	0.2339	-----	0.1574	-----	0.164	6.12	0.986	1.00	19	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Tetrachloroethene	1	0	Avg	0.2609	0.2509	0.2833	0.2693	0.3006	0.3746	-----	0.2664	-----	0.287	6.11	0.993	1.00	15	0.20	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Toluene-d8	1	0	Avg	1.1749	1.1920	1.1890	1.1641	1.1615	1.1177	-----	1.1491	1.1292	1.16	5.79	-1	-1	2.3		30.00	30.00	30.00	30.00	30.00	30.00		30.00	30.00
Toluene	1	0	Avg	0.7257	0.7186	0.7409	0.7122	0.7618	0.8524	-----	0.7499	-----	0.752	5.82	0.998	1.00	6.4	0.40	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2861	0.2618	0.2851	0.2843	0.3120	0.3997	-----	0.2554	-----	0.298	6.59	0.991	1.00	16		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Chlorobenzene	1	0	Avg	0.8366	0.8121	0.8547	0.8227	0.8734	0.9456	-----	0.8517	-----	0.857	6.56	0.999	1.00	5.2	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
n-Butyl acrylate	1	0	Avg	0.8091	0.6859	0.7936	0.7987	0.5987	-----	-----	0.6866	-----	0.729	6.80	0.973	0.999	12	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
n-Amyl acetate	1	0	Avg	0.6427	0.5584	0.6335	0.6329	0.5927	-----	-----	0.5173	-----	0.596	6.91	0.999	1.00	8.4	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
Bromoform	1	0	Avg	0.3974	0.3656	0.3854	0.3885	0.3120	0.3328	-----	0.3378	-----	0.360	7.00	0.998	0.998	9.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethylbenzene	1	0	Avg	0.6579	0.6096	0.6959	0.6258	0.4451	-----	-----	0.7331	-----	0.628	6.60	0.962	0.999	16	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.5875	0.5908	0.6135	0.5523	0.4059	0.6535	-----	0.6270	-----	0.576	7.22	0.976	0.996	14	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromofluorobenzene	1	0	Avg	0.8203	0.8283	0.8350	0.8172	0.5658	0.5945	-----	0.8325	0.8305	0.766	7.17	-1	-1	15		30.00	30.00	30.00	30.00	30.00	30.00		30.00	30.00
Styrene	1	0	Avg	1.5539	1.5005	1.6167	1.5069	1.1452	-----	-----	1.5476	-----	1.48	6.88	0.976	0.999	11	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
m&p-Xylenes	1	0	Avg	0.9373	0.8981	0.9612	0.9098	0.6501	0.8875	-----	0.9857	0.8795	0.889	6.66	0.988	0.995	12	0.10	40.00	10.00	20.00	100.0	200.0	500.0		2.00	1.00
o-Xylene	1	0	Avg	0.9014	0.8689	0.9528	0.8740	0.6497	-----	-----	0.8865	-----	0.856	6.88	0.972	0.999	12	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.1995	0.1832	0.2086	0.2017	0.1595	0.2298	-----	0.1558	-----	0.191	7.24	0.985	0.997	14		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,3-Dichlorobenzene	1	0	Avg	1.1041	1.1009	1.1591	1.0797	1.1575	0.9890	-----	1.2575	-----	1.12	7.78	0.996	0.999	7.4	0.60	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,4-Dichlorobenzene	1	0	Avg	1.1205	1.0783	1.1962	1.0886	1.1795	1.3335	-----	1.2204	-----	1.17	7.83	0.997	1.00	7.6	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dichlorobenzene	1	0	Avg	1.0266	0.9804	1.0543	0.9810	1.0143	0.9924	-----	1.0750	-----	1.02	8.05	1.00	1.00	3.6	0.40	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Isopropylbenzene	1	0	Qua	2.2686	2.2150	2.4017	2.2090	1.6978	1.1877	-----	2.4125	-----	2.06	7.07	0.958	0.997	22	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Cyclohexanone	1	0	Qua	0.0180	0.0193	0.0197	0.0153	0.0126	-----	-----	0.0101	-----	0.0159	7.14	0.986	0.999	24		100.0	25.00	50.00	250.0	500.0			5.00	
Camphene	1	0	Avg	0.5893	0.5695	0.6716	0.5879	0.4655	0.8289	-----	0.6454	-----	0.623	7.24	0.969	0.997	18		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2,3-Trichloropropane	1	0	Avg	0.7041	0.6546	0.7337	0.6793	0.5369	0.9321	-----	0.6869	-----	0.704	7.25	0.971	0.997	17		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
2-Chlorotoluene	1	0	Avg	1.3312	1.3086	1.3919	1.2960	1.3555	0.9678	-----	1.4255	-----	1.30	7.36	0.976	0.999	12		20.00	5.00	10.00	50.00	100.0	250.0		1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.249

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
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3	11M81827.D	CAL @ 10 PPB	08/17/20 15:09	4	11M81830.D	CAL @ 50 PPB	08/17/20 16:05
5	11M81837.D	CAL @ 100 PPB	08/17/20 18:14	6	11M81834.D	CAL @ 250 PPB	08/17/20 17:18
7	11M81825.D	CAL @ 1 PPB	08/17/20 14:32	8	11M81824.D	CAL @ 0.5 PPB	08/17/20 14:14

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.5131	2.4072	2.6313	2.4658	2.3207	1.6553	-----	2.5890	-----	2.37	7.35	0.973	1.00	14		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
4-Chlorotoluene	1	0	Avg	1.2998	1.3024	1.3811	1.3105	1.2872	1.1190	-----	1.5637	-----	1.32	7.42	0.996	1.00	10		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
n-Propylbenzene	1	0	Avg	2.5366	2.5121	2.7394	2.4894	2.1048	2.2428	-----	2.6385	-----	2.47	7.29	0.999	0.999	9.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromobenzene	1	0	Avg	1.2310	1.2371	1.3182	1.1910	0.9350	1.5583	-----	1.1826	-----	1.24	7.27	0.974	0.997	15		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,3,5-Trimethylbenzen	1	0	Avg	1.7638	1.7492	1.8908	1.7530	1.8525	1.4797	-----	1.8308	-----	1.76	7.38	0.990	0.999	7.7		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Butyl methacrylate	1	0	Avg	0.5048	0.4350	0.4396	0.4855	0.4452	0.2560	-----	0.3838	-----	0.421	7.38	0.914	1.00	20	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
t-Butylbenzene	1	0	Avg	1.7582	1.7008	1.8697	1.7307	1.9016	-----	-----	1.8303	-----	1.80	7.57	0.998	1.00	4.5		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trimethylbenzen	1	0	Avg	1.8643	1.7807	1.9478	1.8422	1.9638	-----	-----	1.9312	-----	1.89	7.59	0.999	1.00	3.8		20.00	5.00	10.00	50.00	100.0			1.00	
sec-Butylbenzene	1	0	Avg	2.0809	2.0108	2.2458	2.0534	2.2621	-----	-----	2.1977	-----	2.14	7.69	0.998	1.00	5.0		20.00	5.00	10.00	50.00	100.0			1.00	
4-Isopropyltoluene	1	0	Avg	1.8303	1.7759	1.9462	1.8298	1.9658	-----	-----	1.8064	-----	1.86	7.76	0.999	1.00	4.2		20.00	5.00	10.00	50.00	100.0			1.00	
n-Butylbenzene	1	0	Avg	1.7933	1.6604	1.8700	1.7643	1.8463	-----	-----	1.8559	-----	1.80	8.00	0.999	1.00	4.4		20.00	5.00	10.00	50.00	100.0			1.00	
p-Diethylbenzene	1	0	Avg	1.1275	1.0986	1.1913	1.1222	1.0985	0.7110	-----	1.0936	-----	1.06	7.98	0.954	0.999	15		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	1.6190	1.5116	1.6270	1.5821	1.1793	1.8794	-----	1.6142	-----	1.57	8.44	0.977	0.996	13		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1282	0.1080	0.1302	0.1165	0.0923	-----	-----	0.0793	-----	0.109	8.50	0.981	1.00	19	0.05	20.00	5.00	10.00	50.00	100.0			1.00	
Camphor	1	0	Avg	0.0530	0.0389	0.0496	0.0454	0.0372	-----	-----	0.0470	0.0522	0.0462	8.94	0.986	0.999	13		200.0	50.00	100.0	500.0	1000.			10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.1973	0.1896	0.2141	0.1894	0.1446	-----	-----	0.2356	-----	0.195	9.07	0.977	0.999	16		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.4636	0.4372	0.4732	0.4277	0.3263	-----	-----	0.4708	-----	0.433	8.99	0.976	1.00	13	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.3187	0.2669	0.3061	0.2697	0.2143	0.3855	-----	0.3689	-----	0.304	9.29	0.967	0.997	20		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Naphthalene	1	0	Qua	1.0325	0.8762	0.9983	0.8754	0.6966	-----	-----	1.1535	-----	0.939	9.15	0.981	1.00	17		20.00	5.00	10.00	50.00	100.0			1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.249

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M131882.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/31/2020 7:03:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.13	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.64	57.14	50	20	0.1	0.315	0.361	14.28	
Dichlorodifluoromethane	1	0		1.64	65.84	50	20	0.1	0.205	0.271	31.68	C1
Chloromethane	1	0		1.81	58.20	50	20	0.1	0.286	0.296	16.39	
Bromomethane	1	0		2.23	58.75	50	20	0.1	0.189	0.222	17.49	
Vinyl Chloride	1	0		1.92	57.71	50	20	0.1	0.295	0.340	15.42	
Chloroethane	1	0		2.32	53.03	50	20	0.1	0.201	0.213	6.07	
Trichlorofluoromethane	1	0		2.56	52.36	50	20	0.1	0.485	0.508	4.72	
Ethyl ether	1	0		2.81	44.71	50	20	0.5	0.179	0.160	10.58	
Furan	1	0		2.84	51.52	50	20	0.5	0.402	0.414	3.04	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.01	61.87	50	20	0.1	0.185	0.228	23.74	C1
Methylene Chloride	1	0		3.43	50.65	50	20	0.1	0.271	0.275	1.29	
Acrolein	1	0		2.92	300.15	250	20		0.035	0.042	20.06	
Acrylonitrile	1	0		3.64	49.35	50	20		0.106	0.105	1.29	
Iodomethane	1	0		3.16	71.52	50	20		0.200	0.335	43.05	C1
Acetone	1	0		3.05	247.69	250	20	0.1	0.102	0.101	0.92	
Carbon Disulfide	1	0		3.23	57.08	50	20	0.1	0.677	0.773	14.16	
t-Butyl Alcohol	1	0		3.50	189.41	250	20		0.049	0.037	24.23	C1
n-Hexane	1	0		3.91	65.90	50	20		0.264	0.348	31.81	C1
Di-isopropyl-ether	1	0		4.06	50.38	50	20		0.628	0.633	0.76	
1,1-Dichloroethene	1	0		3.02	61.57	50	20	0.1	0.340	0.419	23.14	C1
Methyl Acetate	1	0		3.34	48.18	50	20	0.1	0.210	0.202	3.64	
Methyl-t-butyl ether	1	0		3.67	53.01	50	20	0.1	0.538	0.570	6.03	
1,1-Dichloroethane	1	0		4.03	55.82	50	20	0.2	0.440	0.491	11.64	
trans-1,2-Dichloroethene	1	0		3.68	57.41	50	20	0.1	0.256	0.294	14.82	
Ethyl-t-butyl ether	1	0		4.32	43.55	50	20	0.5	0.688	0.599	12.91	
cis-1,2-Dichloroethene	1	0		4.44	55.26	50	20	0.1	0.445	0.492	10.52	
Bromochloromethane	1	0		4.59	55.33	50	20		0.205	0.227	10.66	
2,2-Dichloropropane	1	0		4.45	61.95	50	20		0.359	0.444	23.91	C1
Ethyl acetate	1	0		4.46	44.61	50	20		0.315	0.281	10.79	
1,4-Dioxane	1	0		5.52	1954.73	2500	20		0.006	0.004	21.81	C1
1,1-Dichloropropene	1	0		4.85	56.34	50	20		0.359	0.405	12.67	
Chloroform	1	0		4.64	54.29	50	20	0.2	0.465	0.504	8.59	
Dibromofluoromethane	1	0	S	4.73	32.05	75	**		0.267	0.285	6.84	
Cyclohexane	1	0		4.80	60.08	50	20	0.1	0.368	0.442	20.17	
1,2-Dichloroethane-d4	1	0	S	4.93	32.12	75	**		0.144	0.154	7.07	
1,2-Dichloroethane	1	0		4.98	53.73	50	20	0.1	0.347	0.373	7.47	
2-Butanone	1	0		4.43	47.50	50	20	0.1	0.149	0.141	5.01	
1,1,1-Trichloroethane	1	0		4.76	57.80	50	20	0.1	0.416	0.481	15.60	
Carbon Tetrachloride	1	0		4.86	59.99	50	20	0.1	0.355	0.426	19.97	
Vinyl Acetate	1	0		4.05	51.53	50	20		0.750	0.773	3.07	
Bromodichloromethane	1	0		5.59	52.93	50	20	0.2	0.326	0.345	5.86	
Methylcyclohexane	1	0		5.45	57.65	50	20	0.1	0.377	0.435	15.31	
Dibromomethane	1	0		5.53	53.51	50	20		0.170	0.181	7.02	
1,2-Dichloropropane	1	0		5.46	50.63	50	20	0.1	0.259	0.262	1.26	
Trichloroethene	1	0		5.33	52.21	50	20	0.2	0.293	0.306	4.41	
Benzene	1	0		4.98	52.99	50	20	0.5	1.013	1.073	5.99	
tert-Amyl methyl ether	1	0		5.02	46.61	50	20		0.592	0.552	6.78	
Chlorobenzene-d5	1	0	I	6.76	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.98	43.04	50	20	0.5	0.522	0.450	13.92	
Methyl methacrylate	1	0		5.48	45.69	50	20	0.5	0.255	0.233	8.62	
Dibromochloromethane	1	0		6.45	48.24	50	20	0.1	0.282	0.272	3.53	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M131882.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/31/2020 7:03:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.73	41.39	50	20		0.079	0.066	17.21	
cis-1,3-Dichloropropene	1	0		5.83	46.02	50	20	0.2	0.447	0.412	7.96	
trans-1,3-Dichloropropene	1	0		6.12	48.35	50	20	0.1	0.391	0.378	3.31	
Ethyl methacrylate	1	0		6.14	45.30	50	20	0.5	0.253	0.230	9.40	
1,1,2-Trichloroethane	1	0		6.22	45.12	50	20	0.1	0.258	0.232	9.77	
1,2-Dibromoethane	1	0		6.53	46.83	50	20	0.1	0.267	0.250	6.33	
1,3-Dichloropropane	1	0		6.32	46.13	50	20		0.456	0.420	7.74	
4-Methyl-2-Pentanone	1	0		5.90	40.12	50	20	0.1	0.350	0.281	19.77	
2-Hexanone	1	0		6.33	40.16	50	20	0.1	0.276	0.221	19.67	
Tetrachloroethene	1	0		6.32	50.18	50	20	0.2	0.278	0.279	0.37	
Toluene-d8	1	0	S	5.98	28.47	75	**		1.238	1.175	5.10	
Toluene	1	0		6.02	45.23	50	20	0.4	0.811	0.734	9.54	
1,1,1,2-Tetrachloroethane	1	0		6.81	45.46	50	20		0.290	0.263	9.08	
Chlorobenzene	1	0		6.78	45.00	50	20	0.5	0.886	0.798	10.00	
1,4-Dichlorobenzene-d4	1	0	I	8.05	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.02	42.48	50	20	0.5	0.857	0.728	15.05	
n-Amyl acetate	1	0		7.13	42.72	50	20	0.5	0.810	0.692	14.55	
Bromoform	1	0		7.23	67.90	50	20	0.1	0.342	0.296	35.80	C1
Ethylbenzene	1	0		6.82	48.01	50	20	0.1	0.663	0.636	3.98	
1,1,2,2-Tetrachloroethane	1	0		7.45	44.28	50	20	0.1	0.639	0.566	11.44	
Bromofluorobenzene	1	0	S	7.39	28.30	75	**		0.790	0.745	5.67	
Styrene	1	0		7.10	43.62	50	20	0.3	1.639	1.430	12.75	
m&p-Xylenes	1	0		6.88	90.27	100	20	0.1	0.994	0.897	9.73	
o-Xylene	1	0		7.10	43.40	50	20	0.3	0.980	0.851	13.21	
trans-1,4-Dichloro-2-butene	1	0		7.47	47.75	50	20		0.311	0.297	4.51	
1,3-Dichlorobenzene	1	0		8.02	45.16	50	20	0.6	1.227	1.108	9.67	
1,4-Dichlorobenzene	1	0		8.07	44.18	50	20	0.5	1.265	1.118	11.65	
1,2-Dichlorobenzene	1	0		8.29	44.71	50	20	0.4	1.146	1.024	10.57	
Isopropylbenzene	1	0		7.29	46.66	50	20	0.1	2.547	2.377	6.68	
Cyclohexanone	1	0		7.37	170.58	250	20		0.035	0.024	31.77	C1
Camphene	1	0		7.47	48.28	50	20		0.927	0.895	3.45	
1,2,3-Trichloropropane	1	0		7.48	44.04	50	20		0.824	0.726	11.92	
2-Chlorotoluene	1	0		7.59	47.11	50	20		1.527	1.439	5.77	
p-Ethyltoluene	1	0		7.58	44.71	50	20		2.614	2.338	10.57	
4-Chlorotoluene	1	0		7.65	50.30	50	20		1.497	1.506	0.59	
n-Propylbenzene	1	0		7.52	47.94	50	20		2.988	2.865	4.12	
Bromobenzene	1	0		7.49	44.92	50	20		1.567	1.407	10.17	
1,3,5-Trimethylbenzene	1	0		7.60	49.79	50	20		1.830	1.823	0.41	
Butyl methacrylate	1	0		7.61	42.99	50	20	0.5	0.714	0.606	14.02	
t-Butylbenzene	1	0		7.81	46.79	50	20		2.082	1.949	6.42	
1,2,4-Trimethylbenzene	1	0		7.83	45.36	50	20		2.066	1.874	9.28	
sec-Butylbenzene	1	0		7.93	49.91	50	20		2.650	2.645	0.18	
4-Isopropyltoluene	1	0		8.00	49.40	50	20		2.223	2.196	1.20	
n-Butylbenzene	1	0		8.24	50.56	50	20		2.534	2.563	1.13	
p-Diethylbenzene	1	0		8.22	46.09	50	20		1.318	1.215	7.82	
1,2,4,5-Tetramethylbenzene	1	0		8.68	45.70	50	20		1.864	1.703	8.59	
1,2-Dibromo-3-Chloropropane	1	0		8.74	42.81	50	20	0.05	0.169	0.145	14.37	
Camphor	1	0		9.18	624.34	500	20		0.111	0.075	24.87	C1
Hexachlorobutadiene	1	0		9.32	45.35	50	20		0.461	0.418	9.29	
1,2,4-Trichlorobenzene	1	0		9.24	43.63	50	20	0.2	0.831	0.725	12.75	
1,2,3-Trichlorobenzene	1	0		9.54	42.15	50	20		0.756	0.637	15.70	
Naphthalene	1	0		9.40	39.50	50	20		2.080	1.643	20.99	C1

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M82272.D **Instrument:** GCMS 11

Cont Calibration Date/Time 8/31/2020 7:07:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.96	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.68	26.69	20	20	0.1	0.309	0.413	33.47	C1
Dichlorodifluoromethane	1	0		1.67	26.03	20	20	0.1	0.227	0.296	30.17	C1
Chloromethane	1	0		1.85	21.48	20	20	0.1	0.217	0.233	7.38	
Bromomethane	1	0		2.24	20.35	20	20	0.1	0.221	0.225	1.77	
Vinyl Chloride	1	0		1.94	23.00	20	20	0.1	0.269	0.309	15.01	
Chloroethane	1	0		2.33	23.83	20	20	0.1	0.174	0.207	19.16	
Trichlorofluoromethane	1	0		2.55	25.11	20	20	0.1	0.402	0.505	25.55	C1
Ethyl ether	1	0		2.78	20.73	20	20	0.5	0.179	0.186	3.63	
Furan	1	0		2.82	19.65	20	20	0.5	0.303	0.298	1.73	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.97	22.71	20	20	0.1	0.194	0.221	13.57	
Methylene Chloride	1	0		3.38	23.80	20	20	0.1	0.258	0.307	19.00	
Acrolein	1	0		2.89	114.00	100	20		0.036	0.041	14.00	
Acrylonitrile	1	0		3.57	23.65	20	20		0.083	0.098	18.26	
Iodomethane	1	0		3.12	16.31	20	20		0.302	0.307	18.47	
Acetone	1	0		3.01	116.29	100	20	0.1	0.064	0.074	16.29	
Carbon Disulfide	1	0		3.19	22.47	20	20	0.1	0.641	0.720	12.36	
t-Butyl Alcohol	1	0		3.43	119.96	100	20		0.020	0.024	19.96	
n-Hexane	1	0		3.81	22.37	20	20		0.217	0.243	11.85	
Di-isopropyl-ether	1	0		3.95	21.74	20	20		0.546	0.594	8.69	
1,1-Dichloroethene	1	0		2.98	23.89	20	20	0.1	0.325	0.388	19.44	
Methyl Acetate	1	0		3.28	22.23	20	20	0.1	0.145	0.161	11.16	
Methyl-t-butyl ether	1	0		3.59	23.75	20	20	0.1	0.611	0.725	18.76	
1,1-Dichloroethane	1	0		3.93	23.37	20	20	0.2	0.415	0.485	16.86	
trans-1,2-Dichloroethene	1	0		3.61	24.07	20	20	0.1	0.264	0.317	20.34	
Ethyl-t-butyl ether	1	0		4.20	21.54	20	20	0.5	0.647	0.697	7.69	
cis-1,2-Dichloroethene	1	0		4.31	23.87	20	20	0.1	0.401	0.479	19.37	
Bromochloromethane	1	0		4.45	23.35	20	20		0.169	0.197	16.73	
2,2-Dichloropropane	1	0		4.31	25.10	20	20		0.339	0.426	25.51	C1
Ethyl acetate	1	0		4.33	20.29	20	20		0.223	0.227	1.46	
1,4-Dioxane	1	0		5.33	1216.47	1000	20		0.004	0.004	21.65	C1
1,1-Dichloropropene	1	0		4.70	23.18	20	20		0.359	0.416	15.88	
Chloroform	1	0		4.49	23.63	20	20	0.2	0.456	0.539	18.15	
Dibromofluoromethane	1	0	S	4.58	32.43	30	**		0.268	0.290	8.11	
Cyclohexane	1	0		4.65	21.62	20	20	0.1	0.328	0.355	8.11	
1,2-Dichloroethane-d4	1	0	S	4.78	29.85	30	**		0.118	0.117	0.50	
1,2-Dichloroethane	1	0		4.82	23.31	20	20	0.1	0.337	0.393	16.55	
2-Butanone	1	0		4.31	19.37	20	20	0.1	0.088	0.085	3.15	
1,1,1-Trichloroethane	1	0		4.61	23.82	20	20	0.1	0.414	0.493	19.11	
Carbon Tetrachloride	1	0		4.71	23.46	20	20	0.1	0.374	0.439	17.29	
Vinyl Acetate	1	0		3.94	21.40	20	20		0.636	0.681	6.98	
Bromodichloromethane	1	0		5.41	23.53	20	20	0.2	0.335	0.394	17.65	
Methylcyclohexane	1	0		5.27	22.42	20	20	0.1	0.335	0.376	12.08	
Dibromomethane	1	0		5.34	23.73	20	20		0.214	0.254	18.64	
1,2-Dichloropropane	1	0		5.28	23.40	20	20	0.1	0.240	0.281	17.00	
Trichloroethene	1	0		5.16	24.23	20	20	0.2	0.327	0.396	21.16	C1
Benzene	1	0		4.82	23.35	20	20	0.5	1.044	1.219	16.76	
tert-Amyl methyl ether	1	0		4.85	20.87	20	20		0.677	0.706	4.34	
Chlorobenzene-d5	1	0	I	6.55	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.81	16.47	20	20	0.5	0.386	0.318	17.65	
Methyl methacrylate	1	0		5.30	17.14	20	20	0.5	0.210	0.180	14.32	
Dibromochloromethane	1	0		6.24	18.18	20	20	0.1	0.321	0.291	9.11	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.
625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M82272.D **Instrument:** GCMS 11

Cont Calibration Date/Time 8/31/2020 7:07:00 A Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.54	16.38	20	20		0.052	0.043	18.09	
cis-1,3-Dichloropropene	1	0		5.64	18.60	20	20	0.2	0.405	0.377	6.98	
trans-1,3-Dichloropropene	1	0		5.91	20.02	20	20	0.1	0.383	0.347	0.11	
Ethyl methacrylate	1	0		5.93	17.90	20	20	0.5	0.195	0.175	10.50	
1,1,2-Trichloroethane	1	0		6.02	18.17	20	20	0.1	0.273	0.248	9.17	
1,2-Dibromoethane	1	0		6.31	18.98	20	20	0.1	0.283	0.269	5.11	
1,3-Dichloropropane	1	0		6.11	17.93	20	20		0.447	0.401	10.37	
4-Methyl-2-Pentanone	1	0		5.70	18.27	20	20	0.1	0.211	0.192	8.64	
2-Hexanone	1	0		6.12	17.19	20	20	0.1	0.164	0.141	14.06	
Tetrachloroethene	1	0		6.12	17.99	20	20	0.2	0.287	0.258	10.03	
Toluene-d8	1	0	S	5.79	27.32	30	**		1.160	1.056	8.95	
Toluene	1	0		5.82	18.04	20	20	0.4	0.752	0.678	9.78	
1,1,1,2-Tetrachloroethane	1	0		6.59	18.25	20	20		0.298	0.272	8.73	
Chlorobenzene	1	0		6.56	18.58	20	20	0.5	0.857	0.796	7.10	
1,4-Dichlorobenzene-d4	1	0	I	7.82	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.80	17.72	20	20	0.5	0.729	0.646	11.39	
n-Amyl acetate	1	0		6.91	17.20	20	20	0.5	0.596	0.513	13.98	
Bromoform	1	0		7.01	19.52	20	20	0.1	0.360	0.351	2.38	
Ethylbenzene	1	0		6.60	17.85	20	20	0.1	0.628	0.561	10.73	
1,1,2,2-Tetrachloroethane	1	0		7.21	18.05	20	20	0.1	0.576	0.520	9.73	
Bromofluorobenzene	1	0	S	7.17	32.32	30	**		0.766	0.825	7.73	
Styrene	1	0		6.88	18.55	20	20	0.3	1.479	1.371	7.25	
m&p-Xylenes	1	0		6.66	36.39	40	20	0.1	0.889	0.808	9.03	
o-Xylene	1	0		6.88	18.43	20	20	0.3	0.856	0.789	7.83	
trans-1,4-Dichloro-2-butene	1	0		7.24	16.74	20	20		0.191	0.160	16.28	
1,3-Dichlorobenzene	1	0		7.78	17.55	20	20	0.6	1.121	0.984	12.27	
1,4-Dichlorobenzene	1	0		7.83	17.20	20	20	0.5	1.174	1.010	14.00	
1,2-Dichlorobenzene	1	0		8.05	17.24	20	20	0.4	1.018	0.877	13.82	
Isopropylbenzene	1	0		7.07	18.89	20	20	0.1	2.056	1.995	5.55	
Cyclohexanone	1	0		7.14	81.73	100	20		0.016	0.015	18.27	
Camphene	1	0		7.24	16.26	20	20		0.623	0.506	18.70	
1,2,3-Trichloropropane	1	0		7.26	17.67	20	20		0.704	0.622	11.65	
2-Chlorotoluene	1	0		7.36	17.44	20	20		1.297	1.131	12.79	
p-Ethyltoluene	1	0		7.35	16.34	20	20		2.369	1.936	18.28	
4-Chlorotoluene	1	0		7.42	17.63	20	20		1.323	1.166	11.86	
n-Propylbenzene	1	0		7.29	18.01	20	20		2.466	2.221	9.95	
Bromobenzene	1	0		7.27	17.54	20	20		1.236	1.084	12.29	
1,3,5-Trimethylbenzene	1	0		7.38	18.32	20	20		1.760	1.612	8.41	
Butyl methacrylate	1	0		7.38	20.22	20	20	0.5	0.421	0.426	1.11	
t-Butylbenzene	1	0		7.57	17.53	20	20		1.799	1.577	12.33	
1,2,4-Trimethylbenzene	1	0		7.59	17.74	20	20		1.888	1.675	11.29	
sec-Butylbenzene	1	0		7.69	17.61	20	20		2.142	1.886	11.96	
4-Isopropyltoluene	1	0		7.76	17.80	20	20		1.859	1.654	11.01	
n-Butylbenzene	1	0		8.00	17.54	20	20		1.798	1.578	12.28	
p-Diethylbenzene	1	0		7.98	16.80	20	20		1.063	0.893	16.01	
1,2,4,5-Tetramethylbenzene	1	0		8.44	16.44	20	20		1.573	1.293	17.79	
1,2-Dibromo-3-Chloropropane	1	0		8.50	21.03	20	20	0.05	0.109	0.115	5.17	
Camphor	1	0		8.94	181.70	200	20		0.046	0.042	9.15	
Hexachlorobutadiene	1	0		9.07	21.14	20	20		0.195	0.206	5.71	
1,2,4-Trichlorobenzene	1	0		8.99	19.98	20	20	0.2	0.433	0.433	0.12	
1,2,3-Trichlorobenzene	1	0		9.29	19.04	20	20		0.304	0.290	4.81	
Naphthalene	1	0		9.15	19.21	20	20		0.939	0.955	3.95	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0082803

Sample ID: HRPB-3
Lab#: AD18955-001
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		81	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.99	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.2	10	J

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.30	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.10	0.17	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		250	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.9	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	12	97	J-
Chromium	1	mg/kg	6.2	10	J
Copper	1	mg/kg	6.2	29	
Lead	1	mg/kg	6.2	440	J
Manganese	1	mg/kg	12	790	J
Nickel	1	mg/kg	6.2	17	J
Zinc	1	mg/kg	12	73	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.25	8.5	J
Beryllium	1	mg/kg	0.25	ND	
Selenium	1	mg/kg	2.5	ND	
Silver	1	mg/kg	0.25	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result

Sample ID: HRPB-3 **Collection Date:** 8/27/2020
Lab#: AD18955-001 **Receipt Date:** 8/28/2020
Matrix: Soil/Terracore

Arsenic	1	mg/l	0.10	ND
Barium	**1**	**mg/l**	**0.25**	**0.49**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	5	mg/l	0.50	ND
Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.835	mg/kg	0.0021	ND
1,1,2,2-Tetrachloroethane	0.835	mg/kg	0.0021	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.835	mg/kg	0.0021	ND
1,1,2-Trichloroethane	0.835	mg/kg	0.0021	ND
1,1-Dichloroethane	0.835	mg/kg	0.0021	ND
1,1-Dichloroethene	0.835	mg/kg	0.0021	ND
1,2,3-Trichloropropane	0.835	mg/kg	0.0021	ND
1,2,4-Trimethylbenzene	0.835	mg/kg	0.0010	ND
1,2-Dichlorobenzene	0.835	mg/kg	0.0021	ND
1,2-Dichloroethane	0.835	mg/kg	0.0021	ND
1,2-Dichloropropane	0.835	mg/kg	0.0021	ND
1,3,5-Trimethylbenzene	0.835	mg/kg	0.0010	ND
1,3-Dichlorobenzene	0.835	mg/kg	0.0021	ND
1,3-Dichloropropane	0.835	mg/kg	0.0021	ND
1,4-Dichlorobenzene	0.835	mg/kg	0.0021	ND
1,4-Dioxane	0.835	mg/kg	0.10	ND
2-Butanone	0.835	mg/kg	0.0021	ND
2-Chloroethylvinylether	0.835	mg/kg	0.0021	ND
2-Hexanone	0.835	mg/kg	0.0021	ND
4-Isopropyltoluene	0.835	mg/kg	0.0010	ND
4-Methyl-2-pentanone	0.835	mg/kg	0.0021	ND
Acetone	0.835	mg/kg	0.010	ND
Acrolein	0.835	mg/kg	0.010	ND
Acrylonitrile	0.835	mg/kg	0.0021	ND
Benzene	0.835	mg/kg	0.0010	ND
Bromodichloromethane	0.835	mg/kg	0.0021	ND
Bromoform	0.835	mg/kg	0.0021	ND
Bromomethane	0.835	mg/kg	0.0021	ND
Carbon disulfide	0.835	mg/kg	0.0021	ND
Carbon tetrachloride	0.835	mg/kg	0.0021	ND
Chlorobenzene	0.835	mg/kg	0.0021	ND
Chloroethane	0.835	mg/kg	0.0021	ND
Chloroform	0.835	mg/kg	0.0021	ND
Chloromethane	0.835	mg/kg	0.0021	ND
cis-1,2-Dichloroethene	0.835	mg/kg	0.0021	ND
cis-1,3-Dichloropropene	0.835	mg/kg	0.0021	ND
Dibromochloromethane	0.835	mg/kg	0.0021	ND
Dichlorodifluoromethane	0.835	mg/kg	0.0021	ND
Ethylbenzene	0.835	mg/kg	0.0010	ND
Isopropylbenzene	0.835	mg/kg	0.0010	ND
m&p-Xylenes	0.835	mg/kg	0.0010	ND
Methylene chloride	**0.835**	**mg/kg**	**0.0021**	**0.0052**
Methyl-t-butyl ether	0.835	mg/kg	0.0010	ND
n-Butylbenzene	0.835	mg/kg	0.0010	ND
n-Propylbenzene	0.835	mg/kg	0.0010	ND
o-Xylene	0.835	mg/kg	0.0010	ND

Sample ID: HRPB-3 **Collection Date:** 8/27/2020
Lab#: AD18955-001 **Receipt Date:** 8/28/2020
Matrix: Soil/Terracore

sec-Butylbenzene	0.835	mg/kg	0.0010	ND	
Styrene	0.835	mg/kg	0.0021	ND	
t-Butyl Alcohol	0.835	mg/kg	0.010	ND	
t-Butylbenzene	0.835	mg/kg	0.0010	ND	
Tetrachloroethene	**0.835**	**mg/kg**	**0.0021**	**0.011**	J
Toluene	0.835	mg/kg	0.0010	ND	
trans-1,2-Dichloroethene	0.835	mg/kg	0.0021	ND	
trans-1,3-Dichloropropene	0.835	mg/kg	0.0021	ND	
Trichloroethene	**0.835**	**mg/kg**	**0.0021**	**0.022**	
Trichlorofluoromethane	0.835	mg/kg	0.0021	ND	
Vinyl chloride	0.835	mg/kg	0.0021	ND	
Xylenes (Total)	0.835	mg/kg	0.0010	ND	

Sample ID: Duplicate
Lab#: AD18955-004
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		76	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.1	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.6	16	J

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.32	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.11	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		270	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.8	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	13	31	J-
Chromium	1	mg/kg	6.6	16	J
Copper	1	mg/kg	6.6	22	
Lead	1	mg/kg	6.6	13	J
Manganese	1	mg/kg	13	270	J
Nickel	1	mg/kg	6.6	25	J
Zinc	1	mg/kg	13	74	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.26	5.9	J
Beryllium	1	mg/kg	0.26	0.37	
Selenium	1	mg/kg	2.6	ND	
Silver	1	mg/kg	0.26	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.35	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	2	mg/l	0.20	ND	

Sample ID: Duplicate
Lab#: AD18955-004
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	0.649	mg/kg	0.0017	ND	
1,1,2,2-Tetrachloroethane	0.649	mg/kg	0.0017	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.649	mg/kg	0.0017	ND	
1,1,2-Trichloroethane	0.649	mg/kg	0.0017	ND	
1,1-Dichloroethane	0.649	mg/kg	0.0017	ND	
1,1-Dichloroethene	0.649	mg/kg	0.0017	ND	
1,2,3-Trichloropropane	0.649	mg/kg	0.0017	ND	
1,2,4-Trimethylbenzene	0.649	mg/kg	0.00085	ND	
1,2-Dichlorobenzene	0.649	mg/kg	0.0017	ND	
1,2-Dichloroethane	0.649	mg/kg	0.0017	ND	
1,2-Dichloropropane	0.649	mg/kg	0.0017	ND	
1,3,5-Trimethylbenzene	0.649	mg/kg	0.00085	ND	
1,3-Dichlorobenzene	0.649	mg/kg	0.0017	ND	
1,3-Dichloropropane	0.649	mg/kg	0.0017	ND	
1,4-Dichlorobenzene	0.649	mg/kg	0.0017	ND	
1,4-Dioxane	0.649	mg/kg	0.085	ND	
2-Butanone	0.649	mg/kg	0.0017	ND	
2-Chloroethylvinylether	0.649	mg/kg	0.0017	ND	
2-Hexanone	0.649	mg/kg	0.0017	ND	
4-Isopropyltoluene	0.649	mg/kg	0.00085	ND	
4-Methyl-2-pentanone	0.649	mg/kg	0.0017	ND	
Acetone	0.649	mg/kg	0.0085	ND	
Acrolein	0.649	mg/kg	0.0085	ND	
Acrylonitrile	0.649	mg/kg	0.0017	ND	
Benzene	0.649	mg/kg	0.00085	ND	
Bromodichloromethane	0.649	mg/kg	0.0017	ND	
Bromoform	0.649	mg/kg	0.0017	ND	
Bromomethane	0.649	mg/kg	0.0017	ND	
Carbon disulfide	0.649	mg/kg	0.0017	ND	
Carbon tetrachloride	0.649	mg/kg	0.0017	ND	
Chlorobenzene	0.649	mg/kg	0.0017	ND	
Chloroethane	0.649	mg/kg	0.0017	ND	
Chloroform	0.649	mg/kg	0.0017	ND	
Chloromethane	0.649	mg/kg	0.0017	ND	
cis-1,2-Dichloroethene	**0.649**	**mg/kg**	**0.0017**	**0.0023**	
cis-1,3-Dichloropropene	0.649	mg/kg	0.0017	ND	
Dibromochloromethane	0.649	mg/kg	0.0017	ND	
Dichlorodifluoromethane	0.649	mg/kg	0.0017	ND	
Ethylbenzene	0.649	mg/kg	0.00085	ND	
Isopropylbenzene	0.649	mg/kg	0.00085	ND	
m&p-Xylenes	0.649	mg/kg	0.00085	ND	
Methylene chloride	**0.649**	**mg/kg**	**0.0017**	**0.0057**	
Methyl-t-butyl ether	0.649	mg/kg	0.00085	ND	
n-Butylbenzene	0.649	mg/kg	0.00085	ND	
n-Propylbenzene	0.649	mg/kg	0.00085	ND	
o-Xylene	0.649	mg/kg	0.00085	ND	
sec-Butylbenzene	0.649	mg/kg	0.00085	ND	
Styrene	0.649	mg/kg	0.0017	ND	
t-Butyl Alcohol	0.649	mg/kg	0.0085	ND	
t-Butylbenzene	0.649	mg/kg	0.00085	ND	
Tetrachloroethene	**0.649**	**mg/kg**	**0.0017**	**0.0052**	J
Toluene	0.649	mg/kg	0.00085	ND	
trans-1,2-Dichloroethene	0.649	mg/kg	0.0017	ND	

Sample ID: Duplicate
Lab#: AD18955-004
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

trans-1,3-Dichloropropene	0.649	mg/kg	0.0017	ND
Trichloroethene	**0.649**	**mg/kg**	**0.0017**	**0.021**
Trichlorofluoromethane	0.649	mg/kg	0.0017	ND
Vinyl chloride	0.649	mg/kg	0.0017	ND
Xylenes (Total)	0.649	mg/kg	0.00085	ND

Sample ID: HRPB-2
Lab#: AD18955-005
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		72	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.1	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.9	11	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.33	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.12	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		-27	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.5	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	14	48	J-
Chromium	1	mg/kg	6.9	11	J
Copper	1	mg/kg	6.9	40	
Lead	1	mg/kg	6.9	46	J
Manganese	1	mg/kg	14	490	J
Nickel	1	mg/kg	6.9	20	
Zinc	1	mg/kg	14	63	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.28	8.8	
Beryllium	1	mg/kg	0.28	0.37	
Selenium	1	mg/kg	2.8	ND	
Silver	1	mg/kg	0.28	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.61	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	2	mg/l	0.20	ND	

Sample ID: HRPB-2 **Collection Date:** 8/27/2020
Lab#: AD18955-005 **Receipt Date:** 8/28/2020
Matrix: Soil/Terracore

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.917	mg/kg	0.0025	ND
1,1,2,2-Tetrachloroethane	0.917	mg/kg	0.0025	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.917	mg/kg	0.0025	ND
1,1,2-Trichloroethane	0.917	mg/kg	0.0025	ND
1,1-Dichloroethane	0.917	mg/kg	0.0025	ND
1,1-Dichloroethene	0.917	mg/kg	0.0025	ND
1,2,3-Trichloropropane	0.917	mg/kg	0.0025	ND
1,2,4-Trimethylbenzene	0.917	mg/kg	0.0013	ND
1,2-Dichlorobenzene	0.917	mg/kg	0.0025	ND
1,2-Dichloroethane	0.917	mg/kg	0.0025	ND
1,2-Dichloropropane	0.917	mg/kg	0.0025	ND
1,3,5-Trimethylbenzene	0.917	mg/kg	0.0013	ND
1,3-Dichlorobenzene	0.917	mg/kg	0.0025	ND
1,3-Dichloropropane	0.917	mg/kg	0.0025	ND
1,4-Dichlorobenzene	0.917	mg/kg	0.0025	ND
1,4-Dioxane	0.917	mg/kg	0.13	ND
2-Butanone	**0.917**	**mg/kg**	**0.0025**	**0.0088**
2-Chloroethylvinylether	0.917	mg/kg	0.0025	ND
2-Hexanone	0.917	mg/kg	0.0025	ND
4-Isopropyltoluene	0.917	mg/kg	0.0013	ND
4-Methyl-2-pentanone	0.917	mg/kg	0.0025	ND
Acetone	**0.917**	**mg/kg**	**0.013**	**0.054**
Acrolein	0.917	mg/kg	0.013	ND
Acrylonitrile	0.917	mg/kg	0.0025	ND
Benzene	0.917	mg/kg	0.0013	ND
Bromodichloromethane	0.917	mg/kg	0.0025	ND
Bromoform	0.917	mg/kg	0.0025	ND
Bromomethane	0.917	mg/kg	0.0025	ND
Carbon disulfide	0.917	mg/kg	0.0025	ND
Carbon tetrachloride	0.917	mg/kg	0.0025	ND
Chlorobenzene	0.917	mg/kg	0.0025	ND
Chloroethane	0.917	mg/kg	0.0025	ND
Chloroform	0.917	mg/kg	0.0025	ND
Chloromethane	0.917	mg/kg	0.0025	ND
cis-1,2-Dichloroethene	0.917	mg/kg	0.0025	ND
cis-1,3-Dichloropropene	0.917	mg/kg	0.0025	ND
Dibromochloromethane	0.917	mg/kg	0.0025	ND
Dichlorodifluoromethane	0.917	mg/kg	0.0025	ND
Ethylbenzene	0.917	mg/kg	0.0013	ND
Isopropylbenzene	0.917	mg/kg	0.0013	ND
m&p-Xylenes	0.917	mg/kg	0.0013	ND
Methylene chloride	**0.917**	**mg/kg**	**0.0025**	**0.0041**
Methyl-t-butyl ether	0.917	mg/kg	0.0013	ND
n-Butylbenzene	0.917	mg/kg	0.0013	ND
n-Propylbenzene	0.917	mg/kg	0.0013	ND
o-Xylene	0.917	mg/kg	0.0013	ND
sec-Butylbenzene	0.917	mg/kg	0.0013	ND
Styrene	0.917	mg/kg	0.0025	ND
t-Butyl Alcohol	0.917	mg/kg	0.013	ND
t-Butylbenzene	0.917	mg/kg	0.0013	ND
Tetrachloroethene	0.917	mg/kg	0.0025	ND
Toluene	0.917	mg/kg	0.0013	ND
trans-1,2-Dichloroethene	0.917	mg/kg	0.0025	ND

Sample ID: HRPB-2 **Collection Date:** 8/27/2020
Lab#: AD18955-005 **Receipt Date:** 8/28/2020
Matrix: Soil/Terracore

trans-1,3-Dichloropropene	0.917	mg/kg	0.0025	ND
Trichloroethene	0.917	mg/kg	0.0025	ND
Trichlorofluoromethane	0.917	mg/kg	0.0025	ND
Vinyl chloride	0.917	mg/kg	0.0025	ND
Xylenes (Total)	0.917	mg/kg	0.0013	ND

Sample ID: Trip blank
Lab#: AD18955-006
Matrix: Aqueous

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: Trip blank
Lab#: AD18955-006
Matrix: Aqueous
Collection Date: 8/27/2020
Receipt Date: 8/28/2020

Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0082803

Sample ID: HRPB-3
Lab#: AD18955-001
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		81	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.99	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.2	10	J

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.30	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.10	0.17	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		250	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.9	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	12	97	J-
Chromium	1	mg/kg	6.2	10	J
Copper	1	mg/kg	6.2	29	
Lead	1	mg/kg	6.2	440	J
Manganese	1	mg/kg	12	790	J
Nickel	1	mg/kg	6.2	17	J
Zinc	1	mg/kg	12	73	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.25	8.5	J
Beryllium	1	mg/kg	0.25	ND	
Selenium	1	mg/kg	2.5	ND	
Silver	1	mg/kg	0.25	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result

Sample ID: HRPB-3 **Collection Date:** 8/27/2020
Lab#: AD18955-001 **Receipt Date:** 8/28/2020
Matrix: Soil/Terracore

Arsenic	1	mg/l	0.10	ND
Barium	**1**	**mg/l**	**0.25**	**0.49**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	5	mg/l	0.50	ND
Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.835	mg/kg	0.0021	ND
1,1,2,2-Tetrachloroethane	0.835	mg/kg	0.0021	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.835	mg/kg	0.0021	ND
1,1,2-Trichloroethane	0.835	mg/kg	0.0021	ND
1,1-Dichloroethane	0.835	mg/kg	0.0021	ND
1,1-Dichloroethene	0.835	mg/kg	0.0021	ND
1,2,3-Trichloropropane	0.835	mg/kg	0.0021	ND
1,2,4-Trimethylbenzene	0.835	mg/kg	0.0010	ND
1,2-Dichlorobenzene	0.835	mg/kg	0.0021	ND
1,2-Dichloroethane	0.835	mg/kg	0.0021	ND
1,2-Dichloropropane	0.835	mg/kg	0.0021	ND
1,3,5-Trimethylbenzene	0.835	mg/kg	0.0010	ND
1,3-Dichlorobenzene	0.835	mg/kg	0.0021	ND
1,3-Dichloropropane	0.835	mg/kg	0.0021	ND
1,4-Dichlorobenzene	0.835	mg/kg	0.0021	ND
1,4-Dioxane	0.835	mg/kg	0.10	ND
2-Butanone	0.835	mg/kg	0.0021	ND
2-Chloroethylvinylether	0.835	mg/kg	0.0021	ND
2-Hexanone	0.835	mg/kg	0.0021	ND
4-Isopropyltoluene	0.835	mg/kg	0.0010	ND
4-Methyl-2-pentanone	0.835	mg/kg	0.0021	ND
Acetone	0.835	mg/kg	0.010	ND
Acrolein	0.835	mg/kg	0.010	ND
Acrylonitrile	0.835	mg/kg	0.0021	ND
Benzene	0.835	mg/kg	0.0010	ND
Bromodichloromethane	0.835	mg/kg	0.0021	ND
Bromoform	0.835	mg/kg	0.0021	ND
Bromomethane	0.835	mg/kg	0.0021	ND
Carbon disulfide	0.835	mg/kg	0.0021	ND
Carbon tetrachloride	0.835	mg/kg	0.0021	ND
Chlorobenzene	0.835	mg/kg	0.0021	ND
Chloroethane	0.835	mg/kg	0.0021	ND
Chloroform	0.835	mg/kg	0.0021	ND
Chloromethane	0.835	mg/kg	0.0021	ND
cis-1,2-Dichloroethene	0.835	mg/kg	0.0021	ND
cis-1,3-Dichloropropene	0.835	mg/kg	0.0021	ND
Dibromochloromethane	0.835	mg/kg	0.0021	ND
Dichlorodifluoromethane	0.835	mg/kg	0.0021	ND
Ethylbenzene	0.835	mg/kg	0.0010	ND
Isopropylbenzene	0.835	mg/kg	0.0010	ND
m&p-Xylenes	0.835	mg/kg	0.0010	ND
Methylene chloride	**0.835**	**mg/kg**	**0.0021**	**0.0052**
Methyl-t-butyl ether	0.835	mg/kg	0.0010	ND
n-Butylbenzene	0.835	mg/kg	0.0010	ND
n-Propylbenzene	0.835	mg/kg	0.0010	ND
o-Xylene	0.835	mg/kg	0.0010	ND

Sample ID: HRPB-3 **Collection Date:** 8/27/2020
Lab#: AD18955-001 **Receipt Date:** 8/28/2020
Matrix: Soil/Terracore

sec-Butylbenzene	0.835	mg/kg	0.0010	ND	
Styrene	0.835	mg/kg	0.0021	ND	
t-Butyl Alcohol	0.835	mg/kg	0.010	ND	
t-Butylbenzene	0.835	mg/kg	0.0010	ND	
Tetrachloroethene	**0.835**	**mg/kg**	**0.0021**	**0.011**	J
Toluene	0.835	mg/kg	0.0010	ND	
trans-1,2-Dichloroethene	0.835	mg/kg	0.0021	ND	
trans-1,3-Dichloropropene	0.835	mg/kg	0.0021	ND	
Trichloroethene	**0.835**	**mg/kg**	**0.0021**	**0.022**	
Trichlorofluoromethane	0.835	mg/kg	0.0021	ND	
Vinyl chloride	0.835	mg/kg	0.0021	ND	
Xylenes (Total)	0.835	mg/kg	0.0010	ND	

Sample ID: Duplicate
Lab#: AD18955-004
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		76	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.1	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.6	16	J

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.32	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.11	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		270	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.8	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	13	31	J-
Chromium	1	mg/kg	6.6	16	J
Copper	1	mg/kg	6.6	22	
Lead	1	mg/kg	6.6	13	J
Manganese	1	mg/kg	13	270	J
Nickel	1	mg/kg	6.6	25	J
Zinc	1	mg/kg	13	74	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.26	5.9	J
Beryllium	1	mg/kg	0.26	0.37	
Selenium	1	mg/kg	2.6	ND	
Silver	1	mg/kg	0.26	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.35	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	2	mg/l	0.20	ND	

Sample ID: Duplicate
Lab#: AD18955-004
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	0.649	mg/kg	0.0017	ND	
1,1,2,2-Tetrachloroethane	0.649	mg/kg	0.0017	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.649	mg/kg	0.0017	ND	
1,1,2-Trichloroethane	0.649	mg/kg	0.0017	ND	
1,1-Dichloroethane	0.649	mg/kg	0.0017	ND	
1,1-Dichloroethene	0.649	mg/kg	0.0017	ND	
1,2,3-Trichloropropane	0.649	mg/kg	0.0017	ND	
1,2,4-Trimethylbenzene	0.649	mg/kg	0.00085	ND	
1,2-Dichlorobenzene	0.649	mg/kg	0.0017	ND	
1,2-Dichloroethane	0.649	mg/kg	0.0017	ND	
1,2-Dichloropropane	0.649	mg/kg	0.0017	ND	
1,3,5-Trimethylbenzene	0.649	mg/kg	0.00085	ND	
1,3-Dichlorobenzene	0.649	mg/kg	0.0017	ND	
1,3-Dichloropropane	0.649	mg/kg	0.0017	ND	
1,4-Dichlorobenzene	0.649	mg/kg	0.0017	ND	
1,4-Dioxane	0.649	mg/kg	0.085	ND	
2-Butanone	0.649	mg/kg	0.0017	ND	
2-Chloroethylvinylether	0.649	mg/kg	0.0017	ND	
2-Hexanone	0.649	mg/kg	0.0017	ND	
4-Isopropyltoluene	0.649	mg/kg	0.00085	ND	
4-Methyl-2-pentanone	0.649	mg/kg	0.0017	ND	
Acetone	0.649	mg/kg	0.0085	ND	
Acrolein	0.649	mg/kg	0.0085	ND	
Acrylonitrile	0.649	mg/kg	0.0017	ND	
Benzene	0.649	mg/kg	0.00085	ND	
Bromodichloromethane	0.649	mg/kg	0.0017	ND	
Bromoform	0.649	mg/kg	0.0017	ND	
Bromomethane	0.649	mg/kg	0.0017	ND	
Carbon disulfide	0.649	mg/kg	0.0017	ND	
Carbon tetrachloride	0.649	mg/kg	0.0017	ND	
Chlorobenzene	0.649	mg/kg	0.0017	ND	
Chloroethane	0.649	mg/kg	0.0017	ND	
Chloroform	0.649	mg/kg	0.0017	ND	
Chloromethane	0.649	mg/kg	0.0017	ND	
cis-1,2-Dichloroethene	**0.649**	**mg/kg**	**0.0017**	**0.0023**	
cis-1,3-Dichloropropene	0.649	mg/kg	0.0017	ND	
Dibromochloromethane	0.649	mg/kg	0.0017	ND	
Dichlorodifluoromethane	0.649	mg/kg	0.0017	ND	
Ethylbenzene	0.649	mg/kg	0.00085	ND	
Isopropylbenzene	0.649	mg/kg	0.00085	ND	
m&p-Xylenes	0.649	mg/kg	0.00085	ND	
Methylene chloride	**0.649**	**mg/kg**	**0.0017**	**0.0057**	
Methyl-t-butyl ether	0.649	mg/kg	0.00085	ND	
n-Butylbenzene	0.649	mg/kg	0.00085	ND	
n-Propylbenzene	0.649	mg/kg	0.00085	ND	
o-Xylene	0.649	mg/kg	0.00085	ND	
sec-Butylbenzene	0.649	mg/kg	0.00085	ND	
Styrene	0.649	mg/kg	0.0017	ND	
t-Butyl Alcohol	0.649	mg/kg	0.0085	ND	
t-Butylbenzene	0.649	mg/kg	0.00085	ND	
Tetrachloroethene	**0.649**	**mg/kg**	**0.0017**	**0.0052**	J
Toluene	0.649	mg/kg	0.00085	ND	
trans-1,2-Dichloroethene	0.649	mg/kg	0.0017	ND	

Sample ID: Duplicate
Lab#: AD18955-004
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

trans-1,3-Dichloropropene	0.649	mg/kg	0.0017	ND
Trichloroethene	**0.649**	**mg/kg**	**0.0017**	**0.021**
Trichlorofluoromethane	0.649	mg/kg	0.0017	ND
Vinyl chloride	0.649	mg/kg	0.0017	ND
Xylenes (Total)	0.649	mg/kg	0.00085	ND

Sample ID: HRPB-2
Lab#: AD18955-005
Matrix: Soil/Terracore

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		72	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.1	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.9	11	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.33	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.12	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		-27	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.5	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	14	48	J-
Chromium	1	mg/kg	6.9	11	J
Copper	1	mg/kg	6.9	40	
Lead	1	mg/kg	6.9	46	J
Manganese	1	mg/kg	14	490	J
Nickel	1	mg/kg	6.9	20	
Zinc	1	mg/kg	14	63	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.28	8.8	
Beryllium	1	mg/kg	0.28	0.37	
Selenium	1	mg/kg	2.8	ND	
Silver	1	mg/kg	0.28	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.61	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	2	mg/l	0.20	ND	

Sample ID: HRPB-2 **Collection Date:** 8/27/2020
Lab#: AD18955-005 **Receipt Date:** 8/28/2020
Matrix: Soil/Terracore

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.917	mg/kg	0.0025	ND
1,1,2,2-Tetrachloroethane	0.917	mg/kg	0.0025	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.917	mg/kg	0.0025	ND
1,1,2-Trichloroethane	0.917	mg/kg	0.0025	ND
1,1-Dichloroethane	0.917	mg/kg	0.0025	ND
1,1-Dichloroethene	0.917	mg/kg	0.0025	ND
1,2,3-Trichloropropane	0.917	mg/kg	0.0025	ND
1,2,4-Trimethylbenzene	0.917	mg/kg	0.0013	ND
1,2-Dichlorobenzene	0.917	mg/kg	0.0025	ND
1,2-Dichloroethane	0.917	mg/kg	0.0025	ND
1,2-Dichloropropane	0.917	mg/kg	0.0025	ND
1,3,5-Trimethylbenzene	0.917	mg/kg	0.0013	ND
1,3-Dichlorobenzene	0.917	mg/kg	0.0025	ND
1,3-Dichloropropane	0.917	mg/kg	0.0025	ND
1,4-Dichlorobenzene	0.917	mg/kg	0.0025	ND
1,4-Dioxane	0.917	mg/kg	0.13	ND
2-Butanone	**0.917**	**mg/kg**	**0.0025**	**0.0088**
2-Chloroethylvinylether	0.917	mg/kg	0.0025	ND
2-Hexanone	0.917	mg/kg	0.0025	ND
4-Isopropyltoluene	0.917	mg/kg	0.0013	ND
4-Methyl-2-pentanone	0.917	mg/kg	0.0025	ND
Acetone	**0.917**	**mg/kg**	**0.013**	**0.054**
Acrolein	0.917	mg/kg	0.013	ND
Acrylonitrile	0.917	mg/kg	0.0025	ND
Benzene	0.917	mg/kg	0.0013	ND
Bromodichloromethane	0.917	mg/kg	0.0025	ND
Bromoform	0.917	mg/kg	0.0025	ND
Bromomethane	0.917	mg/kg	0.0025	ND
Carbon disulfide	0.917	mg/kg	0.0025	ND
Carbon tetrachloride	0.917	mg/kg	0.0025	ND
Chlorobenzene	0.917	mg/kg	0.0025	ND
Chloroethane	0.917	mg/kg	0.0025	ND
Chloroform	0.917	mg/kg	0.0025	ND
Chloromethane	0.917	mg/kg	0.0025	ND
cis-1,2-Dichloroethene	0.917	mg/kg	0.0025	ND
cis-1,3-Dichloropropene	0.917	mg/kg	0.0025	ND
Dibromochloromethane	0.917	mg/kg	0.0025	ND
Dichlorodifluoromethane	0.917	mg/kg	0.0025	ND
Ethylbenzene	0.917	mg/kg	0.0013	ND
Isopropylbenzene	0.917	mg/kg	0.0013	ND
m&p-Xylenes	0.917	mg/kg	0.0013	ND
Methylene chloride	**0.917**	**mg/kg**	**0.0025**	**0.0041**
Methyl-t-butyl ether	0.917	mg/kg	0.0013	ND
n-Butylbenzene	0.917	mg/kg	0.0013	ND
n-Propylbenzene	0.917	mg/kg	0.0013	ND
o-Xylene	0.917	mg/kg	0.0013	ND
sec-Butylbenzene	0.917	mg/kg	0.0013	ND
Styrene	0.917	mg/kg	0.0025	ND
t-Butyl Alcohol	0.917	mg/kg	0.013	ND
t-Butylbenzene	0.917	mg/kg	0.0013	ND
Tetrachloroethene	0.917	mg/kg	0.0025	ND
Toluene	0.917	mg/kg	0.0013	ND
trans-1,2-Dichloroethene	0.917	mg/kg	0.0025	ND

Sample ID: HRPB-2 **Collection Date:** 8/27/2020
Lab#: AD18955-005 **Receipt Date:** 8/28/2020
Matrix: Soil/Terracore

trans-1,3-Dichloropropene	0.917	mg/kg	0.0025	ND
Trichloroethene	0.917	mg/kg	0.0025	ND
Trichlorofluoromethane	0.917	mg/kg	0.0025	ND
Vinyl chloride	0.917	mg/kg	0.0025	ND
Xylenes (Total)	0.917	mg/kg	0.0013	ND

Sample ID: Trip blank
Lab#: AD18955-006
Matrix: Aqueous

Collection Date: 8/27/2020
Receipt Date: 8/28/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: Trip blank
Lab#: AD18955-006
Matrix: Aqueous
Collection Date: 8/27/2020
Receipt Date: 8/28/2020

Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

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QA/QC Review of TCLP Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082803

2 Soil Samples and 1 Field Duplicate
Collected August 27, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were extracted and analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TCLP metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration and preparation blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable TCLP metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: The percent recoveries for applicable metals were within control limits (75-125%) for soil TCLP MS/MSD sample HRPB-3.

Laboratory Duplicates: The relative percent differences for applicable metals were below the allowable maximum (35%) for soil TCLP duplicate sample HRPB-3 and soil TCLP MS/MSD sample HRPB-3, as required.

Field Duplicates: The relative percent difference for barium was below the allowable maximum (30%) for soil field duplicate pair HRPB-3/DUPLICATE (attached table), as required.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil TCLP samples LCS 85218 and LCS MR 85218. The relative percent differences for target metals were below the allowable maximum (20%) for soil TCLP sample LCS MR 85218, as required.

ICP Serial Dilution: The %D for barium as below the allowable maximum (10%) for soil TCLP batch serial dilution sample HRPB-3, as required.

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QA/QC Review of TCLP Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0082803

2 Soil Samples and 1 Field Duplicate
Collected August 27, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were extracted and analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TCLP metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration and preparation blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable TCLP metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: The percent recoveries for applicable metals were within control limits (75-125%) for soil TCLP MS/MSD sample HRPB-3.

Laboratory Duplicates: The relative percent differences for applicable metals were below the allowable maximum (35%) for soil TCLP duplicate sample HRPB-3 and soil TCLP MS/MSD sample HRPB-3, as required.

Field Duplicates: The relative percent difference for barium was below the allowable maximum (30%) for soil field duplicate pair HRPB-3/DUPLICATE (attached table), as required.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil TCLP samples LCS 85218 and LCS MR 85218. The relative percent differences for target metals were below the allowable maximum (20%) for soil TCLP sample LCS MR 85218, as required.

ICP Serial Dilution: The %D for barium as below the allowable maximum (10%) for soil TCLP batch serial dilution sample HRPB-3, as required.

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QA/QC Review of Hexavalent Chromium Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091006

7 Soil Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The samples were analyzed within the USEPA holding times.

Initial and Continuing Calibration Verification: The percent recoveries for hexavalent chromium (Cr6+) were within laboratory QC limits (90-110%).

Blanks: The analyses of initial and continuing calibration, method, and equipment blanks reported Cr6+ as not detected.

Spike Sample Recovery: The percent recoveries for Cr6+ were within QC limits (75-125%) for aqueous batch MS/MSD sample AD19182-001.

The %Rs for soluble and insoluble Cr6+ were below laboratory QC limits (85-115%), but not below 10% for soil spike sample SS-5B. Positive results for Cr6+ should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated soil samples.

Duplicates: The relative percent difference (RPD) for Cr6+ was below the allowable maximum (20%) for aqueous batch MS/MSD sample AD18895-007, as required. The RPD for Cr6+ was below the allowable maximum (35%) for soil batch duplicate sample AD18918-003, as required.

Field Duplicates: The relative percent difference for Cr6+ was above the allowable maximum (35%) for soil field duplicate pair SS-5B/DUPLICATE (attached table). Positve results for Cr6+ should be considered estimated (J) in samples SS-5B and DUPLCATE.

Laboratory Control Sample: The percent recoveries for Cr6+ were within QC limits (75-125%) for the aqueous LCS. The percent recoveries for soluble and insoluble Cr6+ were within laboratory QC limits (80-120%) for the soil LCS.

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QA/QC Review of Hexavalent Chromium Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091006

7 Soil Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The samples were analyzed within the USEPA holding times.

Initial and Continuing Calibration Verification: The percent recoveries for hexavalent chromium (Cr6+) were within laboratory QC limits (90-110%).

Blanks: The analyses of initial and continuing calibration, method, and equipment blanks reported Cr6+ as not detected.

Spike Sample Recovery: The percent recoveries for Cr6+ were within QC limits (75-125%) for aqueous batch MS/MSD sample AD19182-001.

The %Rs for soluble and insoluble Cr6+ were below laboratory QC limits (85-115%), but not below 10% for soil spike sample SS-5B. Positive results for Cr6+ should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated soil samples.

Duplicates: The relative percent difference (RPD) for Cr6+ was below the allowable maximum (20%) for aqueous batch MS/MSD sample AD18895-007, as required. The RPD for Cr6+ was below the allowable maximum (35%) for soil batch duplicate sample AD18918-003, as required.

Field Duplicates: The relative percent difference for Cr6+ was above the allowable maximum (35%) for soil field duplicate pair SS-5B/DUPLICATE (attached table). Positve results for Cr6+ should be considered estimated (J) in samples SS-5B and DUPLCATE.

Laboratory Control Sample: The percent recoveries for Cr6+ were within QC limits (75-125%) for the aqueous LCS. The percent recoveries for soluble and insoluble Cr6+ were within laboratory QC limits (80-120%) for the soil LCS.

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Data Usability Summary Report for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091006

7 Soil Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 7 soil samples, 1 field duplicate, and 1 equipment blank analyzed for total metals, TCLP metals, total cyanide, and hexavalent chromium.

The overall performances of the analyses are acceptable. Hampton-Clarke Analytical & Field Services did fulfill the requirements of the analytical methods.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive total metal results for chromium were qualified as estimated, biased low (J-) in all 7 soil samples and field duplicate except sample SS-10A because 1 of 2 percent recoveries for chromium was below control limits, but not below 10% in the associated soil MS/MSD sample.

- The positive total metal results for silver were qualified as estimated, biased low (J-) in samples Duplicate, SS-5A, and SS-5B because 1 of 2 percent recoveries for silver was below control limits, but not below 10% in the associated soil MS/MSD sample.

- The "not detected" total metal results for chromium was qualified as estimated (UJ) in sample SS-10A because 1 of 2 percent recoveries for chromium was below control limits, but not below 10% in the associated soil MS/MSD sample.

- The "not detected" total metal results for silver were qualified as estimated (UJ) in samples SS-9, SS-10A, SS-10B, and SS-3B because 1 of 2 percent recoveries for silver was below control limits, but not below 10% in the associated soil MS/MSD sample.

- The positive total metal results for barium and lead were qualified as estimated (J) in all 7 soil samples and field duplicate because the relative percent differences for barium and lead were above the allowable maximum in the associated soil duplicate sample.

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- The positive total metal results for mercury were qualified as estimated (J) in samples SS-5B and Duplicate because the relative percent difference for mercury was above the allowable maximum in the soil field duplicate pair SS-5B/Duplicate.

- The positive results for hexavalent chromium were qualified as estimated, biased low (J-) in samples Duplicate and SS-5B because the percent recoveries for soluble and insoluble hexavalent chromium were below QC limits, but not below 10% in the associated soil spike sample.

- The "not detected" results for hexavalent chromium were qualified as estimated (UJ) in samples SS-9, SS-5A, SS-3A, SS-10A, SS-10B, and SS-3B because the percent recoveries for soluble and insoluble hexavalent chromium were below QC limits, but not below 10% in the associated soil spike sample.

All data are considered usable, with estimated (J, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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Data Usability Summary Report for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091006

7 Soil Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 7 soil samples, 1 field duplicate, and 1 equipment blank analyzed for total metals, TCLP metals, total cyanide, and hexavalent chromium.

The overall performances of the analyses are acceptable. Hampton-Clarke Analytical & Field Services did fulfill the requirements of the analytical methods.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive total metal results for chromium were qualified as estimated, biased low (J-) in all 7 soil samples and field duplicate except sample SS-10A because 1 of 2 percent recoveries for chromium was below control limits, but not below 10% in the associated soil MS/MSD sample.

- The positive total metal results for silver were qualified as estimated, biased low (J-) in samples Duplicate, SS-5A, and SS-5B because 1 of 2 percent recoveries for silver was below control limits, but not below 10% in the associated soil MS/MSD sample.

- The "not detected" total metal results for chromium was qualified as estimated (UJ) in sample SS-10A because 1 of 2 percent recoveries for chromium was below control limits, but not below 10% in the associated soil MS/MSD sample.

- The "not detected" total metal results for silver were qualified as estimated (UJ) in samples SS-9, SS-10A, SS-10B, and SS-3B because 1 of 2 percent recoveries for silver was below control limits, but not below 10% in the associated soil MS/MSD sample.

- The positive total metal results for barium and lead were qualified as estimated (J) in all 7 soil samples and field duplicate because the relative percent differences for barium and lead were above the allowable maximum in the associated soil duplicate sample.

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- The positive total metal results for mercury were qualified as estimated (J) in samples SS-5B and Duplicate because the relative percent difference for mercury was above the allowable maximum in the soil field duplicate pair SS-5B/Duplicate.

- The positive results for hexavalent chromium were qualified as estimated, biased low (J-) in samples Duplicate and SS-5B because the percent recoveries for soluble and insoluble hexavalent chromium were below QC limits, but not below 10% in the associated soil spike sample.

- The "not detected" results for hexavalent chromium were qualified as estimated (UJ) in samples SS-9, SS-5A, SS-3A, SS-10A, SS-10B, and SS-3B because the percent recoveries for soluble and insoluble hexavalent chromium were below QC limits, but not below 10% in the associated soil spike sample.

All data are considered usable, with estimated (J, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Total Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091006

7 Soil Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The sample was analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration, preparation, and equipment blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable target metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: One of two percent recoveries (%Rs) for chromium and silver were below control limits (75-125%), but not below 10% for soil MS/MSD sample SS-5B. Positive results for chromium and silver should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated soil samples.

The %Rs for target metals were within control limits for aqueous batch MS/MSD sample AD19206-004.

Laboratory Duplicates: The relative percent differences (RPDs) for applicable metals were below the allowable maximum (20%) for aqueous batch duplicate sample AD18954-002 and aqueous batch MS/MSD sample AD18954-002, as required. The RPDs for applicable metals were below the allowable (35%) for soil MS/MSD sample SS-5B, as required.

The RPDs for barium and lead were above the allowable maximum (35%) for soil duplicate sample SS-5B. Positive results for barium and lead should be considered estimated (J) in associated soil samples.

Field Duplicates: The relative percent difference for mercury was above the allowable maximum (35%) for soil field duplicate pair SS-5B/Duplicate (attached table). Positive results for mercury should be considered estimated(J) in samples SS-5B and Duplicate.

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Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil samples LCS MR 85270, LCS 85270, LCS MR 85269, and LCS 85269 and aqueous samples LCS MR 85272 and LCS 85272.

ICP Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for soil serial dilution sample SS-5B, as required.

The %D for potassium was above the allowable maximum (15%) for aqueous batch serial dilution sample AD19206-001. Positive results for potassium that are above the RLs should be considered estimated (J) in associated soil samples.

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QA/QC Review of Total Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091006

7 Soil Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The sample was analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration, preparation, and equipment blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable target metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: One of two percent recoveries (%Rs) for chromium and silver were below control limits (75-125%), but not below 10% for soil MS/MSD sample SS-5B. Positive results for chromium and silver should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated soil samples.

The %Rs for target metals were within control limits for aqueous batch MS/MSD sample AD19206-004.

Laboratory Duplicates: The relative percent differences (RPDs) for applicable metals were below the allowable maximum (20%) for aqueous batch duplicate sample AD18954-002 and aqueous batch MS/MSD sample AD18954-002, as required. The RPDs for applicable metals were below the allowable (35%) for soil MS/MSD sample SS-5B, as required.

The RPDs for barium and lead were above the allowable maximum (35%) for soil duplicate sample SS-5B. Positive results for barium and lead should be considered estimated (J) in associated soil samples.

Field Duplicates: The relative percent difference for mercury was above the allowable maximum (35%) for soil field duplicate pair SS-5B/Duplicate (attached table). Positive results for mercury should be considered estimated(J) in samples SS-5B and Duplicate.

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www.alphageoscience.com

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil samples LCS MR 85270, LCS 85270, LCS MR 85269, and LCS 85269 and aqueous samples LCS MR 85272 and LCS 85272.

ICP Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for soil serial dilution sample SS-5B, as required.

The %D for potassium was above the allowable maximum (15%) for aqueous batch serial dilution sample AD19206-001. Positive results for potassium that are above the RLs should be considered estimated (J) in associated soil samples.

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QA/QC Review of Total Cyanide Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091006

7 Soil Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within NJDEP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for total cyanide were within control limits (85-115%).

Blanks: The analyses of initial calibration and continuing calibration, method, and equipment blanks reported total cyanide as not detected.

Spike Sample Recovery: The percent recoveries for total cyanide were within QC limits (75-125%) for aqueous batch MS/MSD sample AD19136-001 and soil MS/MSD sample SS-5B.

Laboratory Duplicates: The relative percent difference for total cyanide was below the allowable maximum (20%) for aqueous batch MS/MSD sample AD18945-007, as required. The relative percent difference for total cyanide was below the allowable maximum (35%) for soil MS/MSD sample SS-5B, as required.

Field Duplicates: The analyses of soil field duplicate pair SS-5B/Duplicate reported total cyanide as not detected; therefore, a valid relative percent difference could not be calculated. The analyses for the field duplicate pair were acceptable.

Laboratory Control Sample: The percent recoveries for total cyanide were within QC limits (80-120%) for aqueous sample LCSW-1505 and soil sample LCSS-2420.

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ALPHA GEOSCIENCE

Geology
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QA/QC Review of Total Cyanide Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091006

7 Soil Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within NJDEP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for total cyanide were within control limits (85-115%).

Blanks: The analyses of initial calibration and continuing calibration, method, and equipment blanks reported total cyanide as not detected.

Spike Sample Recovery: The percent recoveries for total cyanide were within QC limits (75-125%) for aqueous batch MS/MSD sample AD19136-001 and soil MS/MSD sample SS-5B.

Laboratory Duplicates: The relative percent difference for total cyanide was below the allowable maximum (20%) for aqueous batch MS/MSD sample AD18945-007, as required. The relative percent difference for total cyanide was below the allowable maximum (35%) for soil MS/MSD sample SS-5B, as required.

Field Duplicates: The analyses of soil field duplicate pair SS-5B/Duplicate reported total cyanide as not detected; therefore, a valid relative percent difference could not be calculated. The analyses for the field duplicate pair were acceptable.

Laboratory Control Sample: The percent recoveries for total cyanide were within QC limits (80-120%) for aqueous sample LCSW-1505 and soil sample LCSS-2420.

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Total Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 0091006

S1= SS-5B **S2=** Duplicate

Analyte	S1	S2	RPD (%)	
arsenic	9.2	11	18%	
barium	320	380	17%	
beryllium	0.34	0.34	0%	
chromium	60	73	20%	
copper	84	100	17%	
lead	380	270	34%	
manganese	340	340	0%	
mercury	0.15	0.26	54%	*
nickel	35	34	3%	
selenium	ND	ND	NC	
silver	2.1	1.8	15%	
zinc	400	430	7%	

* RPD is above the allowable maximum 35%.

All results are in units of mg/kg.

Bold numbers were values that are below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

TCLP Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 91006

S1= SS-5B **S2=** Duplicate

Analyte	S1	S2	RPD (%)
arsenic	ND	ND	NC
barium	1.9	1.8	5%
cadmium	ND	ND	NC
chromium	ND	ND	NC
lead	ND	ND	NC
mercury	ND	ND	NC
nickel	ND	ND	NC
selenium	ND	ND	NC
silver	ND	ND	NC

* RPD is above the allowable maximum 35%.

All results are in units of mg/L.

Bold numbers were values that are below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

General Chemistries

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 91006

S1= SS-5B **S2=** Duplicate

Analyte	S1	S2	RPD (%)	
Hexavalent, Chromium	2.2	1.1	67%	*
Trivalent, Chromium	57	72	23%	
Cyanide	ND	ND	NC	

* RPD is above the allowable maximum 35%

Results are in units of mg/kg.

Bold numbers were values that are below the RL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

Total Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 0091006

S1= SS-5B **S2=** Duplicate

Analyte	S1	S2	RPD (%)	
arsenic	9.2	11	18%	
barium	320	380	17%	
beryllium	0.34	0.34	0%	
chromium	60	73	20%	
copper	84	100	17%	
lead	380	270	34%	
manganese	340	340	0%	
mercury	0.15	0.26	54%	*
nickel	35	34	3%	
selenium	ND	ND	NC	
silver	2.1	1.8	15%	
zinc	400	430	7%	

* RPD is above the allowable maximum 35%.

All results are in units of mg/kg.

Bold numbers were values that are below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

TCLP Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 91006

S1= SS-5B **S2=** Duplicate

Analyte	S1	S2	RPD (%)
arsenic	ND	ND	NC
barium	1.9	1.8	5%
cadmium	ND	ND	NC
chromium	ND	ND	NC
lead	ND	ND	NC
mercury	ND	ND	NC
nickel	ND	ND	NC
selenium	ND	ND	NC
silver	ND	ND	NC

* RPD is above the allowable maximum 35%.

All results are in units of mg/L.

Bold numbers were values that are below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

General Chemistries

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 91006

S1= SS-5B **S2=** Duplicate

Analyte	S1	S2	RPD (%)	
Hexavalent, Chromium	2.2	1.1	67%	*
Trivalent, Chromium	57	72	23%	
Cyanide	ND	ND	NC	

* RPD is above the allowable maximum 35%

Results are in units of mg/kg.

Bold numbers were values that are below the RL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil
Batch#	785 A
Date	9/14/2020
Analyst	BCT
PrepBy	BCT
Lead Chromate Added	0.015
Upper Calibration Abbsorbance	0.6425

SS-5B

0.014 G

Q.C. DATA

QC Sample AD19159-004 NS.Sample

	Spike Amount PPM	Result PPM	Adjusted Conc PPM	% REC	Limits	RPD	Limits	%REC PASS/FAIL	RPD PASS/FAIL
LCS	20.00	19.30	19.30	96%	80-120%	NA	NA	PASS	
MS(Sol)	22.73	14.01	12.56	55%	75-125%	NA	NA	FAIL	
MS(Insol)	1096.36	511.65	510.20	47%	75-125%	NA	20%	FAIL	PASS
Sample	NA	1.45	NA	NA	NA	NA	NA		
Sample Dup	NA	1.59	NA	NA	NA	9	20%		PASS
PVS	22.73	18.71	17.27	76%	85-115%	NA	NA	FAIL	
MS(Sol)	43.48	53.87	26.10	60%	75-125%	NA	NA	FAIL	
MS(Insol)	978.78	518.62	490.85	50%	75-125%	NA	20%	FAIL	PASS
Sample	NA	27.77	NA	NA	NA	NA	NA		

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV Control	0.3288	0.0000	0.3288	0.504497727	1	1	1	1	0.504	0.500	101	9/15/20 13:22	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB Sample	-0.0007	0.0000	-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB Sample	0.0036	0.0000	0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS Sample	0.3147	0.0000	0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 50X MSD Sample	0.1534	0.0034	0.1500	0.225126943	0.88	2.5	50	100	511.652	45.455		9/15/20 13:25	
AD19159-004 PVS Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
AD19192-002 Sample	0.4208	0.0061	0.4147	0.638714473	0.92	2.5	1	100	27.770	0.870		9/15/20 13:33	
AD19192-004MS2 Sample	0.7877	0.0068	0.7809	1.21089337	0.92	2.5	1	100	52.648	0.870		9/15/20 13:34	
AD19192-004MS2 2X Sample	0.4092	0.0068	0.4024	0.61949603	0.92	2.5	2	100	53.869	1.739		9/15/20 13:34	
AD19192-005MSD2 Sample	4.3662	0.0062	4.3600	6.80315305	0.92	2.5	1	100	295.789	0.870		9/15/20 13:35	
AD19192-005 50XMSD2 Sample	0.1579	-0.0007	0.1586	0.238564243	0.92	2.5	50	100	518.618	43.478		9/15/20 13:36	
Analytical Run					1	2.5	1	100					
ICV Control	0.3288		0.3288	0.504497727	1	1	1	1	0.504	0.020	101	9/15/20 13:22	PASS
ICB Sample	-0.0007		-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB Sample	0.0036		0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS Sample	0.3147		0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 XXX Sample	3.9269	0.0081	3.9188	6.113788314	0.88	2.5	1	100	277.899	0.909		9/15/20 13:24	
AD19159-006 50X MSD Sample	0.1534	0.0081	0.1453	0.217783303	0.88	2.5	50	100	494.962	45.455		9/15/20 13:25	
AD19159-004 PVS Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
CCV-1 Control	0.3268		0.3268	0.501372768	1	1	1	1	0.501	0.020	100	9/15/20 13:26	PASS
CCB-1 Sample	-0.0005		-0.0005	-0.01002578	1	1	1	1	-0.010	0.020		9/15/20 13:27	
AD19159-008 Sample	0.0099	0.0068	0.0031	-0.004400865	0.65	2.5	1	100	-0.271	1.231		9/15/20 13:27	
AD19159-009 Sample	0.0092	0.0082	0.0010	-0.007682065	0.68	2.5	1	100	-0.452	1.176		9/15/20 13:27	
AD19159-010 Sample	0.0080	0.0066	0.0014	-0.007057074	0.87	2.5	1	100	-0.324	0.920		9/15/20 13:27	
AD19160-001 Sample	0.0220	0.0196	0.0024	-0.005494599	0.65	2.5	1	100	-0.338	1.231		9/15/20 13:28	
AD19160-002 Sample	0.0013	0.0036	-0.0023	-0.012838238	0.78	2.5	1	100	-0.658	1.026		9/15/20 13:28	
AD19178-001 Sample	0.0361	0.0413	-0.0052	-0.017369418	0.9	2.5	1	100	-0.772	0.889		9/15/20 13:28	
AD19178-002 Sample	0.0243	0.0231	0.0012	-0.00736957	0.91	2.5	1	100	-0.324	0.879		9/15/20 13:29	
AD19178-003 Sample	0.0554	0.0701	-0.0147	-0.032212951	0.79	2.5	1	100	-1.631	1.013		9/15/20 13:29	

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil
Batch#	785 A
Date	9/14/2020
Analyst	BCT
PrepBy	BCT
Lead Chromate Added	0.015
Upper Calibration Abbsorbance	0.6425

SS-5B

0.014 G

Q.C. DATA

QC Sample AD19159-004 NS.Sample

	Spike Amount PPM	Result PPM	Adjusted Conc PPM	% REC	Limits	RPD	Limits	%REC PASS/FAIL	RPD PASS/FAIL
LCS	20.00	19.30	19.30	96%	80-120%	NA	NA	PASS	
MS(Sol)	22.73	14.01	12.56	55%	75-125%	NA	NA	FAIL	
MS(Insol)	1096.36	511.65	510.20	47%	75-125%	NA	20%	FAIL	PASS
Sample	NA	1.45	NA	NA	NA	NA	NA		
Sample Dup	NA	1.59	NA	NA	NA	9	20%		PASS
PVS	22.73	18.71	17.27	76%	85-115%	NA	NA	FAIL	
MS(Sol)	43.48	53.87	26.10	60%	75-125%	NA	NA	FAIL	
MS(Insol)	978.78	518.62	490.85	50%	75-125%	NA	20%	FAIL	PASS
Sample	NA	27.77	NA	NA	NA	NA	NA		

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV Control	0.3288	0.0000	0.3288	0.504497727	1	1	1	1	0.504	0.500	101	9/15/20 13:22	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB Sample	-0.0007	0.0000	-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB Sample	0.0036	0.0000	0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS Sample	0.3147	0.0000	0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 50X MSD Sample	0.1534	0.0034	0.1500	0.225126943	0.88	2.5	50	100	511.652	45.455		9/15/20 13:25	
AD19159-004 PVS Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
AD19192-002 Sample	0.4208	0.0061	0.4147	0.638714473	0.92	2.5	1	100	27.770	0.870		9/15/20 13:33	
AD19192-004MS2 Sample	0.7877	0.0068	0.7809	1.21089337	0.92	2.5	1	100	52.648	0.870		9/15/20 13:34	
AD19192-004MS2 2X Sample	0.4092	0.0068	0.4024	0.61949603	0.92	2.5	2	100	53.869	1.739		9/15/20 13:34	
AD19192-005MSD2 Sample	4.3662	0.0062	4.3600	6.80315305	0.92	2.5	1	100	295.789	0.870		9/15/20 13:35	
AD19192-005 50XMSD2 Sample	0.1579	-0.0007	0.1586	0.238564243	0.92	2.5	50	100	518.618	43.478		9/15/20 13:36	
Analytical Run					1	2.5	1	100					
ICV Control	0.3288		0.3288	0.504497727	1	1	1	1	0.504	0.020	101	9/15/20 13:22	PASS
ICB Sample	-0.0007		-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB Sample	0.0036		0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS Sample	0.3147		0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 XXX Sample	3.9269	0.0081	3.9188	6.113788314	0.88	2.5	1	100	277.899	0.909		9/15/20 13:24	
AD19159-006 50X MSD Sample	0.1534	0.0081	0.1453	0.217783303	0.88	2.5	50	100	494.962	45.455		9/15/20 13:25	
AD19159-004 PVS Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
CCV-1 Control	0.3268		0.3268	0.501372768	1	1	1	1	0.501	0.020	100	9/15/20 13:26	PASS
CCB-1 Sample	-0.0005		-0.0005	-0.01002578	1	1	1	1	-0.010	0.020		9/15/20 13:27	
AD19159-008 Sample	0.0099	0.0068	0.0031	-0.004400865	0.65	2.5	1	100	-0.271	1.231		9/15/20 13:27	
AD19159-009 Sample	0.0092	0.0082	0.0010	-0.007682065	0.68	2.5	1	100	-0.452	1.176		9/15/20 13:27	
AD19159-010 Sample	0.0080	0.0066	0.0014	-0.007057074	0.87	2.5	1	100	-0.324	0.920		9/15/20 13:27	
AD19160-001 Sample	0.0220	0.0196	0.0024	-0.005494599	0.65	2.5	1	100	-0.338	1.231		9/15/20 13:28	
AD19160-002 Sample	0.0013	0.0036	-0.0023	-0.012838238	0.78	2.5	1	100	-0.658	1.026		9/15/20 13:28	
AD19178-001 Sample	0.0361	0.0413	-0.0052	-0.017369418	0.9	2.5	1	100	-0.772	0.889		9/15/20 13:28	
AD19178-002 Sample	0.0243	0.0231	0.0012	-0.00736957	0.91	2.5	1	100	-0.324	0.879		9/15/20 13:29	
AD19178-003 Sample	0.0554	0.0701	-0.0147	-0.032212951	0.79	2.5	1	100	-1.631	1.013		9/15/20 13:29	

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 85270

Instrument Type: ICPMS
Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85270

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	20	41.1700	49.4	83		61	113
Beryllium	85270	1	S091120A	20	147.3900	187	79		66	110
Selenium	85270	1	S091120A	20	300.0830	364	82		60	112
Silver	85270	1	S091120A	20	82.9270	94.0	88		61	111

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85270

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	19	42.0340	49.4	85		61	113
Beryllium	85270	1	S091120A	19	151.0130	187	81		66	110
Selenium	85270	1	S091120A	19	304.5110	364	84		60	112
Silver	85270	1	S091120A	19	83.1280	94.0	88		61	111

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006 SS-5B

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	25	S091120A	21	249.8150	40.5900	250	84		75	125
Beryllium	85270	1	S091120A	25	S091120A	21	196.1200	1.4870	250	78		75	125
Selenium	85270	1	S091120A	25	S091120A	21	205.5270	10U	250	82		75	125
Silver	85270	1	S091120A	25	S091120A	21	47.7160	9.2420	50	77		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19159-005 SS-5B

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	24	S091120A	21	250.5490	40.5900	250	84		75	125
Beryllium	85270	1	S091120A	24	S091120A	21	188.3710	1.4870	250	75		75	125
Selenium	85270	1	S091120A	24	S091120A	21	204.6510	10U	250	82		75	125
Silver	85270	1	S091120A	24	S091120A	21	46.1160	9.2420	50	74	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH:85269

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85269

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	16	7.3004	8.92	82		65	110
Chromium	85269	1	S26211A3	16	1.9160	2.27	84		61	114
Copper	85269	1	S26211A3	16	1.8090	2.09	87		66	110
Lead	85269	1	S26211A3	16	1.3742	1.63	84		62	110
Manganese	85269	1	S26211A3	16	5.1743	6.03	86		68	110
Mercury	85269	4	H26211S	15	6.0430	41.64	58		39	110
Nickel	85269	1	S26211A3	16	0.4827	.553	87		61	114
Zinc	85269	1	S26211A3	16	5.9111	7.13	83		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85269

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	15	7.2814	8.92	82		65	110
Chromium	85269	1	S26211A3	15	1.9287	2.27	85		61	114
Copper	85269	1	S26211A3	15	1.8105	2.09	87		66	110
Lead	85269	1	S26211A3	15	1.3562	1.63	83		62	110
Manganese	85269	1	S26211A3	15	5.0323	6.03	83		68	110
Mercury	85269	4	H26211S	14	6.2230	41.64	60		39	110
Nickel	85269	1	S26211A3	15	0.4808	.553	87		61	114
Zinc	85269	1	S26211A3	15	5.9825	7.13	84		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006 SS-5B

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	20	S26211A3	17	4.6864	2.7883	0.5	380	b	75	125
Chromium	85269	1	S26211A3	20	S26211A3	17	0.8849	0.5254	0.5	72	a	75	125
Copper	85269	1	S26211A3	20	S26211A3	17	1.2183	0.7403	0.5	96		75	125
Lead	85269	1	S26211A3	20	S26211A3	17	3.0829	3.3560	0.5	-55	b	75	125
Manganese	85269	1	S26211A3	20	S26211A3	17	3.5537	2.9865	0.5	113		75	125
Mercury	85269	1	H26211S	19	H26211S	16	10.7300	0.7820	10	99		75	125
Nickel	85269	1	S26211A3	20	S26211A3	17	0.7393	0.3054	0.5	87		75	125
Zinc	85269	1	S26211A3	20	S26211A3	17	4.4203	3.5562	0.5	173	b	75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19159-005 SS-5B

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	19	S26211A3	17	5.4637	2.7883	0.5	535	b	75	125
Chromium	85269	1	S26211A3	19	S26211A3	17	0.9442	0.5254	0.5	84		75	125
Copper	85269	1	S26211A3	19	S26211A3	17	1.2461	0.7403	0.5	101		75	125
Lead	85269	1	S26211A3	19	S26211A3	17	3.0330	3.3560	0.5	-65	b	75	125
Manganese	85269	1	S26211A3	19	S26211A3	17	3.4821	2.9865	0.5	99		75	125
Mercury	85269	1	H26211S	18	H26211S	16	11.1900	0.7820	10	104		75	125
Nickel	85269	1	S26211A3	19	S26211A3	17	0.7984	0.3054	0.5	99		75	125
Zinc	85269	1	S26211A3	19	S26211A3	17	4.0159	3.5562	0.5	92		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85269

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85269

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85269	S26211A3	16	S26211A3	15	7.3004	7.2814	.26		20
Chromium	85269	S26211A3	16	S26211A3	15	1.9160	1.9287	.66		20
Copper	85269	S26211A3	16	S26211A3	15	1.8090	1.8105	.081		20
Lead	85269	S26211A3	16	S26211A3	15	1.3742	1.3562	1.3		20
Manganese	85269	S26211A3	16	S26211A3	15	5.1743	5.0323	2.8		20
Mercury	85269	H26211S	15	H26211S	14	6.0430	6.2230	2.9		20
Nickel	85269	S26211A3	16	S26211A3	15	0.4827	0.4808	.38		20
Zinc	85269	S26211A3	16	S26211A3	15	5.9111	5.9825	1.2		20

TxtQcType: MR Matrix: SOIL SampleID: AD19159-004 SS-5B

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85269	S26211A3	18	S26211A3	17	6.2188	2.7883	76	a	20
Chromium	85269	S26211A3	18	S26211A3	17	0.5940	0.5254	12		20
Copper	85269	S26211A3	18	S26211A3	17	0.6411	0.7403	14		20
Lead	85269	S26211A3	18	S26211A3	17	2.3311	3.3560	36	a	20
Manganese	85269	S26211A3	18	S26211A3	17	2.6522	2.9865	12		20
Mercury	85269	H26211S	17	H26211S	16	0.8260	0.7820	5.5		20
Nickel	85269	S26211A3	18	S26211A3	17	0.2482	0.3054	21	b	20
Zinc	85269	S26211A3	18	S26211A3	17	4.5735	3.5562	25	a	20

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Barium	85269	S26211A3	20	S26211A3	19	4.6864	5.4637	15	20
Chromium	85269	S26211A3	20	S26211A3	19	0.8849	0.9442	6.5	20
Copper	85269	S26211A3	20	S26211A3	19	1.2183	1.2461	2.3	20
Lead	85269	S26211A3	20	S26211A3	19	3.0829	3.0330	1.6	20
Manganese	85269	S26211A3	20	S26211A3	19	3.5537	3.4821	2	20
Mercury	85269	H26211S	19	H26211S	18	10.7300	11.1900	4.2	20
Nickel	85269	S26211A3	20	S26211A3	19	0.7393	0.7984	7.7	20
Zinc	85269	S26211A3	20	S26211A3	19	4.4203	4.0159	9.6	20

TxtQcType: SD Matrix: SOIL SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Barium	85269	S26211A3	22	S26211A3	17	5	0.5708	2.7883	2.3	10
Chromium	85269	S26211A3	22	S26211A3	17	5	0.1142	0.5254	8.7	10
Copper	85269	S26211A3	22	S26211A3	17	5	0.1491	0.7403	0.68	10
Lead	85269	S26211A3	22	S26211A3	17	5	0.7284	3.3560	8.5	10
Manganese	85269	S26211A3	22	S26211A3	17	5	0.6181	2.9865	3.5	10
Nickel	85269	S26211A3	22	S26211A3	17	5	0.0655	0.3054	7.2	10
Zinc	85269	S26211A3	22	S26211A3	17	5	0.7448	3.5562	4.7	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85272

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: SD Matrix: AQUEOUS SampleID: AD19206-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	85272	SW26214A	22	SW26214A	17	5	0.0113	0.0297	---		10
Barium	85272	SW26214A	22	SW26214A	17	5	0.0241	0.1130	6.6		10
Calcium	85272	SW26214A	22	SW26214A	17	5	35.1523	171.7830	2.3		10
Chromium	85272	SW26214A	22	SW26214A	17	5	0.0041	0.0041	400	c	10
Copper	85272	SW26214A	22	SW26214A	17	5	0.0043	0.0087	150	c	10
Iron	85272	SW26214A	22	SW26214A	17	5	0.1038	0.4376	19	c	10
Magnesium	85272	SW26214A	22	SW26214A	17	5	7.1766	35.2263	1.9		10
Manganese	85272	SW26214A	22	SW26214A	17	5	0.4112	2.0300	1.3		10
Nickel	85272	SW26214A	22	SW26214A	17	5	0.0007	0.0096	---		10
Potassium	85272	SW26214B	22	SW26214B	17	5	2.7912	9.3755	49	a	10
Silver	85272	SW26214A	22	SW26214A	17	5	-0.0007	0.0003	---		10
Sodium	85272	SW26214B	22	SW26214B	17	5	13.6268	66.4272	2.6		10
Vanadium	85272	SW26214A	22	SW26214A	17	5	0.0023	0.0005	---		10
Zinc	85272	SW26214A	22	SW26214A	17	5	0.0058	0.0143	---		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 85270

Instrument Type: ICPMS
Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85270

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	20	41.1700	49.4	83		61	113
Beryllium	85270	1	S091120A	20	147.3900	187	79		66	110
Selenium	85270	1	S091120A	20	300.0830	364	82		60	112
Silver	85270	1	S091120A	20	82.9270	94.0	88		61	111

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85270

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	19	42.0340	49.4	85		61	113
Beryllium	85270	1	S091120A	19	151.0130	187	81		66	110
Selenium	85270	1	S091120A	19	304.5110	364	84		60	112
Silver	85270	1	S091120A	19	83.1280	94.0	88		61	111

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006 SS-5B

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	25	S091120A	21	249.8150	40.5900	250	84		75	125
Beryllium	85270	1	S091120A	25	S091120A	21	196.1200	1.4870	250	78		75	125
Selenium	85270	1	S091120A	25	S091120A	21	205.5270	10U	250	82		75	125
Silver	85270	1	S091120A	25	S091120A	21	47.7160	9.2420	50	77		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19159-005 SS-5B

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	24	S091120A	21	250.5490	40.5900	250	84		75	125
Beryllium	85270	1	S091120A	24	S091120A	21	188.3710	1.4870	250	75		75	125
Selenium	85270	1	S091120A	24	S091120A	21	204.6510	10U	250	82		75	125
Silver	85270	1	S091120A	24	S091120A	21	46.1160	9.2420	50	74	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH:85269

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85269

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	16	7.3004	8.92	82		65	110
Chromium	85269	1	S26211A3	16	1.9160	2.27	84		61	114
Copper	85269	1	S26211A3	16	1.8090	2.09	87		66	110
Lead	85269	1	S26211A3	16	1.3742	1.63	84		62	110
Manganese	85269	1	S26211A3	16	5.1743	6.03	86		68	110
Mercury	85269	4	H26211S	15	6.0430	41.64	58		39	110
Nickel	85269	1	S26211A3	16	0.4827	.553	87		61	114
Zinc	85269	1	S26211A3	16	5.9111	7.13	83		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85269

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	15	7.2814	8.92	82		65	110
Chromium	85269	1	S26211A3	15	1.9287	2.27	85		61	114
Copper	85269	1	S26211A3	15	1.8105	2.09	87		66	110
Lead	85269	1	S26211A3	15	1.3562	1.63	83		62	110
Manganese	85269	1	S26211A3	15	5.0323	6.03	83		68	110
Mercury	85269	4	H26211S	14	6.2230	41.64	60		39	110
Nickel	85269	1	S26211A3	15	0.4808	.553	87		61	114
Zinc	85269	1	S26211A3	15	5.9825	7.13	84		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006 SS-5B

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	20	S26211A3	17	4.6864	2.7883	0.5	380	b	75	125
Chromium	85269	1	S26211A3	20	S26211A3	17	0.8849	0.5254	0.5	72	a	75	125
Copper	85269	1	S26211A3	20	S26211A3	17	1.2183	0.7403	0.5	96		75	125
Lead	85269	1	S26211A3	20	S26211A3	17	3.0829	3.3560	0.5	-55	b	75	125
Manganese	85269	1	S26211A3	20	S26211A3	17	3.5537	2.9865	0.5	113		75	125
Mercury	85269	1	H26211S	19	H26211S	16	10.7300	0.7820	10	99		75	125
Nickel	85269	1	S26211A3	20	S26211A3	17	0.7393	0.3054	0.5	87		75	125
Zinc	85269	1	S26211A3	20	S26211A3	17	4.4203	3.5562	0.5	173	b	75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19159-005 SS-5B

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	19	S26211A3	17	5.4637	2.7883	0.5	535	b	75	125
Chromium	85269	1	S26211A3	19	S26211A3	17	0.9442	0.5254	0.5	84		75	125
Copper	85269	1	S26211A3	19	S26211A3	17	1.2461	0.7403	0.5	101		75	125
Lead	85269	1	S26211A3	19	S26211A3	17	3.0330	3.3560	0.5	-65	b	75	125
Manganese	85269	1	S26211A3	19	S26211A3	17	3.4821	2.9865	0.5	99		75	125
Mercury	85269	1	H26211S	18	H26211S	16	11.1900	0.7820	10	104		75	125
Nickel	85269	1	S26211A3	19	S26211A3	17	0.7984	0.3054	0.5	99		75	125
Zinc	85269	1	S26211A3	19	S26211A3	17	4.0159	3.5562	0.5	92		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85269

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85269

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85269	S26211A3	16	S26211A3	15	7.3004	7.2814	.26		20
Chromium	85269	S26211A3	16	S26211A3	15	1.9160	1.9287	.66		20
Copper	85269	S26211A3	16	S26211A3	15	1.8090	1.8105	.081		20
Lead	85269	S26211A3	16	S26211A3	15	1.3742	1.3562	1.3		20
Manganese	85269	S26211A3	16	S26211A3	15	5.1743	5.0323	2.8		20
Mercury	85269	H26211S	15	H26211S	14	6.0430	6.2230	2.9		20
Nickel	85269	S26211A3	16	S26211A3	15	0.4827	0.4808	.38		20
Zinc	85269	S26211A3	16	S26211A3	15	5.9111	5.9825	1.2		20

TxtQcType: MR Matrix: SOIL SampleID: AD19159-004 SS-5B

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85269	S26211A3	18	S26211A3	17	6.2188	2.7883	76	a	20
Chromium	85269	S26211A3	18	S26211A3	17	0.5940	0.5254	12		20
Copper	85269	S26211A3	18	S26211A3	17	0.6411	0.7403	14		20
Lead	85269	S26211A3	18	S26211A3	17	2.3311	3.3560	36	a	20
Manganese	85269	S26211A3	18	S26211A3	17	2.6522	2.9865	12		20
Mercury	85269	H26211S	17	H26211S	16	0.8260	0.7820	5.5		20
Nickel	85269	S26211A3	18	S26211A3	17	0.2482	0.3054	21	b	20
Zinc	85269	S26211A3	18	S26211A3	17	4.5735	3.5562	25	a	20

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Barium	85269	S26211A3	20	S26211A3	19	4.6864	5.4637	15	20
Chromium	85269	S26211A3	20	S26211A3	19	0.8849	0.9442	6.5	20
Copper	85269	S26211A3	20	S26211A3	19	1.2183	1.2461	2.3	20
Lead	85269	S26211A3	20	S26211A3	19	3.0829	3.0330	1.6	20
Manganese	85269	S26211A3	20	S26211A3	19	3.5537	3.4821	2	20
Mercury	85269	H26211S	19	H26211S	18	10.7300	11.1900	4.2	20
Nickel	85269	S26211A3	20	S26211A3	19	0.7393	0.7984	7.7	20
Zinc	85269	S26211A3	20	S26211A3	19	4.4203	4.0159	9.6	20

TxtQcType: SD Matrix: SOIL SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Barium	85269	S26211A3	22	S26211A3	17	5	0.5708	2.7883	2.3	10
Chromium	85269	S26211A3	22	S26211A3	17	5	0.1142	0.5254	8.7	10
Copper	85269	S26211A3	22	S26211A3	17	5	0.1491	0.7403	0.68	10
Lead	85269	S26211A3	22	S26211A3	17	5	0.7284	3.3560	8.5	10
Manganese	85269	S26211A3	22	S26211A3	17	5	0.6181	2.9865	3.5	10
Nickel	85269	S26211A3	22	S26211A3	17	5	0.0655	0.3054	7.2	10
Zinc	85269	S26211A3	22	S26211A3	17	5	0.7448	3.5562	4.7	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85272

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: SD Matrix: AQUEOUS SampleID: AD19206-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	85272	SW26214A	22	SW26214A	17	5	0.0113	0.0297	---		10
Barium	85272	SW26214A	22	SW26214A	17	5	0.0241	0.1130	6.6		10
Calcium	85272	SW26214A	22	SW26214A	17	5	35.1523	171.7830	2.3		10
Chromium	85272	SW26214A	22	SW26214A	17	5	0.0041	0.0041	400	c	10
Copper	85272	SW26214A	22	SW26214A	17	5	0.0043	0.0087	150	c	10
Iron	85272	SW26214A	22	SW26214A	17	5	0.1038	0.4376	19	c	10
Magnesium	85272	SW26214A	22	SW26214A	17	5	7.1766	35.2263	1.9		10
Manganese	85272	SW26214A	22	SW26214A	17	5	0.4112	2.0300	1.3		10
Nickel	85272	SW26214A	22	SW26214A	17	5	0.0007	0.0096	---		10
Potassium	85272	SW26214B	22	SW26214B	17	5	2.7912	9.3755	49	a	10
Silver	85272	SW26214A	22	SW26214A	17	5	-0.0007	0.0003	---		10
Sodium	85272	SW26214B	22	SW26214B	17	5	13.6268	66.4272	2.6		10
Vanadium	85272	SW26214A	22	SW26214A	17	5	0.0023	0.0005	---		10
Zinc	85272	SW26214A	22	SW26214A	17	5	0.0058	0.0143	---		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0091006

Sample ID: SS-9
Lab#: AD19159-001
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		78

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.0	ND UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.4	12

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.31	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	0.12

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		140

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		11
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	13	71 J
Chromium	1	mg/kg	6.4	12 J-
Copper	1	mg/kg	6.4	41
Lead	1	mg/kg	6.4	1000 J
Manganese	1	mg/kg	13	470
Nickel	1	mg/kg	6.4	17
Zinc	1	mg/kg	13	140

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.26	9.9
Beryllium	1	mg/kg	0.26	0.38
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND UJ

TCLP Metals 6010D

Analyte	DF	Units	RL	Result

Sample ID: SS-9 **Collection Date:** 9/9/2020
Lab#: AD19159-001 **Receipt Date:** 9/10/2020
Matrix: Soil

Arsenic	1	mg/l	0.10	ND
Barium	**1**	**mg/l**	**0.25**	**0.71**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	**1**	**mg/l**	**0.050**	**0.24**
Nickel	1	mg/l	0.10	ND
Selenium	4	mg/l	0.40	ND
Silver	1	mg/l	0.050	ND

Sample ID: Duplicate
Lab#: AD19159-002
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		87	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.92	1.1	J-

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	5.7	72	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.28	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.096	0.26	J

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		360	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.2	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	11	380	J
Chromium	1	mg/kg	5.7	73	J-
Copper	1	mg/kg	5.7	100	
Lead	1	mg/kg	5.7	270	J
Manganese	1	mg/kg	11	340	
Nickel	1	mg/kg	5.7	34	
Zinc	1	mg/kg	11	430	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.23	11	
Beryllium	1	mg/kg	0.23	0.34	
Selenium	1	mg/kg	2.3	ND	
Silver	1	mg/kg	0.23	1.8	J-

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	1.8	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	4	mg/l	0.40	ND	

Sample ID: Duplicate
Lab#: AD19159-002
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND	

Sample ID: SS-5A
Lab#: AD19159-003
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		94	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.85	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	5.3	8.2	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.26	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.089	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		340	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.1	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	11	180	J
Chromium	1	mg/kg	5.3	8.2	J-
Copper	1	mg/kg	5.3	17	
Lead	1	mg/kg	5.3	91	J
Manganese	1	mg/kg	11	210	
Nickel	1	mg/kg	5.3	9.6	
Zinc	1	mg/kg	11	170	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.21	2.4	
Beryllium	1	mg/kg	0.21	ND	
Selenium	1	mg/kg	2.1	ND	
Silver	1	mg/kg	0.21	0.31	J-

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	2.0	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	4	mg/l	0.40	ND	

Sample ID: SS-5A
Lab#: AD19159-003
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-5B
Lab#: AD19159-004
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		88	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.91	2.2	J-

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	5.7	57	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.27	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.095	0.15	J

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		350	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.1	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	11	320	J
Chromium	1	mg/kg	5.7	60	J-
Copper	1	mg/kg	5.7	84	
Lead	1	mg/kg	5.7	380	J
Manganese	1	mg/kg	11	340	
Nickel	1	mg/kg	5.7	35	
Zinc	1	mg/kg	11	400	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.23	9.2	
Beryllium	1	mg/kg	0.23	0.34	
Selenium	1	mg/kg	2.3	ND	
Silver	1	mg/kg	0.23	2.1	J-

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	1.9	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	4	mg/l	0.40	ND	

Sample ID: SS-5B
Lab#: AD19159-004
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-3A
Lab#: AD19159-007
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		81	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.99	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.2	13	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.30	0.42	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.10	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		450	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.7	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	12	58	J
Chromium	1	mg/kg	6.2	13	J-
Copper	1	mg/kg	6.2	45	
Lead	1	mg/kg	6.2	69	J
Manganese	1	mg/kg	12	430	
Nickel	1	mg/kg	6.2	31	
Zinc	1	mg/kg	12	95	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.25	6.6	
Beryllium	1	mg/kg	0.25	0.34	
Selenium	1	mg/kg	2.5	ND	
Silver	1	mg/kg	0.25	0.56	J-

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.56	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	1	mg/l	0.10	ND	

Sample ID: SS-3A
Lab#: AD19159-007
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-10A
Lab#: AD19159-008
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		65	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.2	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	7.7	ND	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.37	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.13	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		300	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.4	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	15	81	J
Chromium	1	mg/kg	7.7	ND	UJ
Copper	1	mg/kg	7.7	20	
Lead	1	mg/kg	7.7	39	J
Manganese	1	mg/kg	15	120	
Nickel	1	mg/kg	7.7	17	
Zinc	1	mg/kg	15	79	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.31	5.7	
Beryllium	1	mg/kg	0.31	0.39	
Selenium	1	mg/kg	3.1	ND	
Silver	1	mg/kg	0.31	ND	UJ

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.61	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	1	mg/l	0.10	ND	

Sample ID: SS-10A
Lab#: AD19159-008
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND	

Sample ID: SS-10B
Lab#: AD19159-009
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		68	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.2	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	7.4	9.5	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.35	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.12	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		280	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.0	
Temperature	1	c		22	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	15	80	J
Chromium	1	mg/kg	7.4	9.5	J-
Copper	1	mg/kg	7.4	22	
Lead	1	mg/kg	7.4	28	J
Manganese	1	mg/kg	15	160	
Nickel	1	mg/kg	7.4	20	
Zinc	1	mg/kg	15	63	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.29	6.4	
Beryllium	1	mg/kg	0.29	0.34	
Selenium	1	mg/kg	2.9	ND	
Silver	1	mg/kg	0.29	ND	UJ

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.56	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	4	mg/l	0.40	ND	

Sample ID: SS-10B
Lab#: AD19159-009
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-3B
Lab#: AD19159-010
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		87	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.92	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	5.7	11	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.28	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.096	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		430	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.9	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	11	74	J
Chromium	1	mg/kg	5.7	11	J-
Copper	1	mg/kg	5.7	79	
Lead	1	mg/kg	5.7	140	J
Manganese	1	mg/kg	11	460	
Nickel	1	mg/kg	5.7	26	
Zinc	1	mg/kg	11	99	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.23	12	
Beryllium	1	mg/kg	0.23	0.36	
Selenium	1	mg/kg	2.3	ND	
Silver	1	mg/kg	0.23	ND	UJ

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.74	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	4	mg/l	0.40	ND	

Sample ID: SS-3B
Lab#: AD19159-010
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: EB
Lab#: AD19159-011
Matrix: Aqueous
Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Cr (Hexavalent) 3500-Cr B11

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.02	ND

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Sodium	1	ug/l	5000	ND
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Silver	1	ug/l	1.0	ND
Thallium	1	ug/l	2.0	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	ND
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0091006

Sample ID: SS-9
Lab#: AD19159-001
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		78

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.0	ND UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	6.4	12

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.31	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	0.12

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		140

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		11
Temperature	1	c		23

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	13	71 J
Chromium	1	mg/kg	6.4	12 J-
Copper	1	mg/kg	6.4	41
Lead	1	mg/kg	6.4	1000 J
Manganese	1	mg/kg	13	470
Nickel	1	mg/kg	6.4	17
Zinc	1	mg/kg	13	140

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.26	9.9
Beryllium	1	mg/kg	0.26	0.38
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND UJ

TCLP Metals 6010D

Analyte	DF	Units	RL	Result

Sample ID: SS-9 **Collection Date:** 9/9/2020
Lab#: AD19159-001 **Receipt Date:** 9/10/2020
Matrix: Soil

Arsenic	1	mg/l	0.10	ND
Barium	**1**	**mg/l**	**0.25**	**0.71**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	**1**	**mg/l**	**0.050**	**0.24**
Nickel	1	mg/l	0.10	ND
Selenium	4	mg/l	0.40	ND
Silver	1	mg/l	0.050	ND

Sample ID: Duplicate
Lab#: AD19159-002
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		87	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.92	1.1	J-

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	5.7	72	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.28	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.096	0.26	J

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		360	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.2	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	11	380	J
Chromium	1	mg/kg	5.7	73	J-
Copper	1	mg/kg	5.7	100	
Lead	1	mg/kg	5.7	270	J
Manganese	1	mg/kg	11	340	
Nickel	1	mg/kg	5.7	34	
Zinc	1	mg/kg	11	430	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.23	11	
Beryllium	1	mg/kg	0.23	0.34	
Selenium	1	mg/kg	2.3	ND	
Silver	1	mg/kg	0.23	1.8	J-

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	1.8	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	4	mg/l	0.40	ND	

Sample ID: Duplicate
Lab#: AD19159-002
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND	

Sample ID: SS-5A
Lab#: AD19159-003
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		94	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.85	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	5.3	8.2	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.26	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.089	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		340	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.1	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	11	180	J
Chromium	1	mg/kg	5.3	8.2	J-
Copper	1	mg/kg	5.3	17	
Lead	1	mg/kg	5.3	91	J
Manganese	1	mg/kg	11	210	
Nickel	1	mg/kg	5.3	9.6	
Zinc	1	mg/kg	11	170	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.21	2.4	
Beryllium	1	mg/kg	0.21	ND	
Selenium	1	mg/kg	2.1	ND	
Silver	1	mg/kg	0.21	0.31	J-

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	2.0	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	4	mg/l	0.40	ND	

Sample ID: SS-5A
Lab#: AD19159-003
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-5B
Lab#: AD19159-004
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		88	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.91	2.2	J-

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	5.7	57	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.27	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.095	0.15	J

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		350	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.1	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	11	320	J
Chromium	1	mg/kg	5.7	60	J-
Copper	1	mg/kg	5.7	84	
Lead	1	mg/kg	5.7	380	J
Manganese	1	mg/kg	11	340	
Nickel	1	mg/kg	5.7	35	
Zinc	1	mg/kg	11	400	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.23	9.2	
Beryllium	1	mg/kg	0.23	0.34	
Selenium	1	mg/kg	2.3	ND	
Silver	1	mg/kg	0.23	2.1	J-

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	1.9	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	4	mg/l	0.40	ND	

Sample ID: SS-5B
Lab#: AD19159-004
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-3A
Lab#: AD19159-007
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		81	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.99	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.2	13	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.30	0.42	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.10	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		450	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.7	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	12	58	J
Chromium	1	mg/kg	6.2	13	J-
Copper	1	mg/kg	6.2	45	
Lead	1	mg/kg	6.2	69	J
Manganese	1	mg/kg	12	430	
Nickel	1	mg/kg	6.2	31	
Zinc	1	mg/kg	12	95	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.25	6.6	
Beryllium	1	mg/kg	0.25	0.34	
Selenium	1	mg/kg	2.5	ND	
Silver	1	mg/kg	0.25	0.56	J-

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.56	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	1	mg/l	0.10	ND	

Sample ID: SS-3A
Lab#: AD19159-007
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-10A
Lab#: AD19159-008
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		65	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.2	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	7.7	ND	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.37	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.13	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		300	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.4	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	15	81	J
Chromium	1	mg/kg	7.7	ND	UJ
Copper	1	mg/kg	7.7	20	
Lead	1	mg/kg	7.7	39	J
Manganese	1	mg/kg	15	120	
Nickel	1	mg/kg	7.7	17	
Zinc	1	mg/kg	15	79	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.31	5.7	
Beryllium	1	mg/kg	0.31	0.39	
Selenium	1	mg/kg	3.1	ND	
Silver	1	mg/kg	0.31	ND	UJ

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.61	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	1	mg/l	0.10	ND	

Sample ID: SS-10A
Lab#: AD19159-008
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND	

Sample ID: SS-10B
Lab#: AD19159-009
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		68	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.2	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	7.4	9.5	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.35	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.12	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		280	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.0	
Temperature	1	c		22	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	15	80	J
Chromium	1	mg/kg	7.4	9.5	J-
Copper	1	mg/kg	7.4	22	
Lead	1	mg/kg	7.4	28	J
Manganese	1	mg/kg	15	160	
Nickel	1	mg/kg	7.4	20	
Zinc	1	mg/kg	15	63	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.29	6.4	
Beryllium	1	mg/kg	0.29	0.34	
Selenium	1	mg/kg	2.9	ND	
Silver	1	mg/kg	0.29	ND	UJ

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.56	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	4	mg/l	0.40	ND	

Sample ID: SS-10B
Lab#: AD19159-009
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-3B
Lab#: AD19159-010
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		87	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.92	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	5.7	11	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.28	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.096	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		430	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.9	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	11	74	J
Chromium	1	mg/kg	5.7	11	J-
Copper	1	mg/kg	5.7	79	
Lead	1	mg/kg	5.7	140	J
Manganese	1	mg/kg	11	460	
Nickel	1	mg/kg	5.7	26	
Zinc	1	mg/kg	11	99	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.23	12	
Beryllium	1	mg/kg	0.23	0.36	
Selenium	1	mg/kg	2.3	ND	
Silver	1	mg/kg	0.23	ND	UJ

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.74	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	4	mg/l	0.40	ND	

Sample ID: SS-3B
Lab#: AD19159-010
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Silver	1	mg/l	0.050	ND

Sample ID: EB
Lab#: AD19159-011
Matrix: Aqueous
Collection Date: 9/9/2020
Receipt Date: 9/10/2020

Cr (Hexavalent) 3500-Cr B11

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.02	ND

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Sodium	1	ug/l	5000	ND
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Silver	1	ug/l	1.0	ND
Thallium	1	ug/l	2.0	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	ND
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

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QA/QC Review of TCLP Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091006

7 Soil Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were extracted and analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TAL metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration, preparation, and equipent blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable TAL metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: The percent recoveries for applicable metals were within control limits (75-125%) for soil TCLP MS/MSD sample SS-5B.

Laboratory Duplicates: The RPDs for applicable metals were below the allowable (35%) for soil TCLP MS/MSD sample SS-5B, as required.

Field Duplicates: The relative percent difference for barium was below the allowable maximum (30%) for soil field duplicate pair SS-5B/Duplicate (attached table), as required.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil TCLP samples LCS 85267 and LCS MR 85267. The relative percent differences for target metals were below the allowable maximum (20%) for soil TCLP sample LCS MR 85267, as required.

ICP Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for soil TCLP serial dilution sample SS-5B, as required.

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QA/QC Review of TCLP Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091006

7 Soil Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were extracted and analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TAL metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration, preparation, and equipent blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable TAL metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: The percent recoveries for applicable metals were within control limits (75-125%) for soil TCLP MS/MSD sample SS-5B.

Laboratory Duplicates: The RPDs for applicable metals were below the allowable (35%) for soil TCLP MS/MSD sample SS-5B, as required.

Field Duplicates: The relative percent difference for barium was below the allowable maximum (30%) for soil field duplicate pair SS-5B/Duplicate (attached table), as required.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil TCLP samples LCS 85267 and LCS MR 85267. The relative percent differences for target metals were below the allowable maximum (20%) for soil TCLP sample LCS MR 85267, as required.

ICP Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for soil TCLP serial dilution sample SS-5B, as required.

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QA/QC Review of Hexavalent Chromium Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091007

2 Soil Samples
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The samples were analyzed within the USEPA holding times.

Initial and Continuing Calibration Verification: The percent recoveries for hexavalent chromium (Cr6+) were within laboratory QC limits (90-110%).

Blanks: The analyses of initial and continuing calibration and method blanks reported Cr6+ as not detected.

Spike Sample Recovery: The percent recoveries soluble and insoluble Cr6+ were below laboratory QC limits (85-115%), but not below 10% for soil batch spike sample AD. Positive results for Cr6+ should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated soil samples.

Duplicates: The RPD for Cr6+ was below the allowable maximum (35%) for soil batch duplicate sample AD19159-004, as required.

Laboratory Control Sample: The percent recoveries for soluble and insoluble Cr6+ were within laboratory QC limits (80-120%) for the soil LCS.

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QA/QC Review of Hexavalent Chromium Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091007

2 Soil Samples
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The samples were analyzed within the USEPA holding times.

Initial and Continuing Calibration Verification: The percent recoveries for hexavalent chromium (Cr6+) were within laboratory QC limits (90-110%).

Blanks: The analyses of initial and continuing calibration and method blanks reported Cr6+ as not detected.

Spike Sample Recovery: The percent recoveries soluble and insoluble Cr6+ were below laboratory QC limits (85-115%), but not below 10% for soil batch spike sample AD. Positive results for Cr6+ should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated soil samples.

Duplicates: The RPD for Cr6+ was below the allowable maximum (35%) for soil batch duplicate sample AD19159-004, as required.

Laboratory Control Sample: The percent recoveries for soluble and insoluble Cr6+ were within laboratory QC limits (80-120%) for the soil LCS.

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Data Usability Summary Report for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091007

2 Soil Samples
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 2 soil samples analyzed for total metals, TCLP metals, total cyanide, and hexavalent chromium.

The overall performances of the analyses are acceptable. Hampton-Clarke Analytical & Field Services did fulfill the requirements of the analytical methods.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive total metal results for chromium were qualified as estimated, biased low (J-) in samples HRPB-5 and HRPB-6 because 1 of 2 percent recoveries for chromium was below control limits, but not below 10% in the associated soil batch MS/MSD sample.

- The "not detected" total metal results for silver were qualified as estimated, biased low (J-) in samples HRPB-5 and HRPB-6 because 1 of 2 percent recoveries for silver was below control limits, but not below 10% in the associated soil batch MS/MSD sample.

- The positive total metal results for barium and lead were qualified as estimated (J) in samples HRPB-5 and HRPB-6 because the relative percent differences for barium and lead were above the allowable maximum in the associated soil batch duplicate sample.

- The "not detected" results for hexavalent chromium were qualified as estimated (UJ) in samples HRPB-5 and HRPB-6 because the percent recoveries for soluble and insoluble hexavalent chromium were below QC limits, but not below 10% in the associated batch soil spike sample.

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All data are considered usable, with estimated (J, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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Data Usability Summary Report for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091007

2 Soil Samples
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 2 soil samples analyzed for total metals, TCLP metals, total cyanide, and hexavalent chromium.

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- The "not detected" total metal results for silver were qualified as estimated, biased low (J-) in samples HRPB-5 and HRPB-6 because 1 of 2 percent recoveries for silver was below control limits, but not below 10% in the associated soil batch MS/MSD sample.

- The positive total metal results for barium and lead were qualified as estimated (J) in samples HRPB-5 and HRPB-6 because the relative percent differences for barium and lead were above the allowable maximum in the associated soil batch duplicate sample.

- The "not detected" results for hexavalent chromium were qualified as estimated (UJ) in samples HRPB-5 and HRPB-6 because the percent recoveries for soluble and insoluble hexavalent chromium were below QC limits, but not below 10% in the associated batch soil spike sample.

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All data are considered usable, with estimated (J, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Total Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091007

2 Soil Samples
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The sample was analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration and preparation blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable target metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: One of two percent recoveries (%Rs) for chromium and silver were below control limits (75-125%), but not below 10% for soil batch MS/MSD sample AD19159-004. Positive results for chromium and silver should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated soil samples.

Laboratory Duplicates: The relative percent differences (RPDs) for applicable metals were below the allowable (35%) for soil batch MS/MSD sample AD19159-004, as required.

The RPDs for barium and lead were above the allowable maximum (35%) for soil batch duplicate sample AD19159-004. Positive results for barium and lead should be considered estimated (J) in associated soil samples.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil samples LCS MR 85270, LCS 85270, LCS MR 85269, and LCS 85269.

ICP Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for soil batch serial dilution sample AD19159-004, as required.

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QA/QC Review of Total Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091007

2 Soil Samples
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The sample was analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration and preparation blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable target metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: One of two percent recoveries (%Rs) for chromium and silver were below control limits (75-125%), but not below 10% for soil batch MS/MSD sample AD19159-004. Positive results for chromium and silver should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated soil samples.

Laboratory Duplicates: The relative percent differences (RPDs) for applicable metals were below the allowable (35%) for soil batch MS/MSD sample AD19159-004, as required.

The RPDs for barium and lead were above the allowable maximum (35%) for soil batch duplicate sample AD19159-004. Positive results for barium and lead should be considered estimated (J) in associated soil samples.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil samples LCS MR 85270, LCS 85270, LCS MR 85269, and LCS 85269.

ICP Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for soil batch serial dilution sample AD19159-004, as required.

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QA/QC Review of Total Cyanide Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091007

2 Soil Samples
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within NJDEP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for total cyanide were within control limits (85-115%).

Blanks: The analyses of initial calibration and continuing calibration and method blanks reported total cyanide as not detected.

Spike Sample Recovery: The percent recoveries for total cyanide were within QC limits (75-125%) for soil batch MS/MSD sample AD19145-001.

Laboratory Duplicates: The relative percent difference for total cyanide was below the allowable maximum (35%) for soil batch MS/MSD sample AD19145-001, as required.

Laboratory Control Sample: The percent recovery for total cyanide was within QC limits (80-120%) for soil sample LCSS-2418.

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QA/QC Review of Total Cyanide Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091007

2 Soil Samples
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within NJDEP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for total cyanide were within control limits (85-115%).

Blanks: The analyses of initial calibration and continuing calibration and method blanks reported total cyanide as not detected.

Spike Sample Recovery: The percent recoveries for total cyanide were within QC limits (75-125%) for soil batch MS/MSD sample AD19145-001.

Laboratory Duplicates: The relative percent difference for total cyanide was below the allowable maximum (35%) for soil batch MS/MSD sample AD19145-001, as required.

Laboratory Control Sample: The percent recovery for total cyanide was within QC limits (80-120%) for soil sample LCSS-2418.

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Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA									
Batch#	785 A		QC Sample	AD19159-004 NS.Sample								
Date	9/14/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	19.30	19.30	96%	80-120%	NA	NA	PASS	
			MS(Sol)	22.73	14.01	12.56	55%	75-125%	NA	NA	FAIL	
			MS(Insol)	1096.36	511.65	510.20	47%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	1.45	NA	NA	NA	NA	NA		
			Sample Dup	NA	1.59	NA	NA	NA	9	20%		PASS
			PVS	22.73	18.71	17.27	76%	85-115%	NA	NA	FAIL	
			MS(Sol)	43.48	53.87	26.10	60%	75-125%	NA	NA	FAIL	
			MS(Insol)	978.78	518.62	490.85	50%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	27.77	NA	NA	NA	NA	NA		
Lead Chromate Added :	0.015	0.014	G									
Upper Calibration Abbsorbance:	0.6425											

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3288	0.0000	0.3288	0.504497727	1	1	1	1	0.504	0.500	101	9/15/20 13:22	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	-0.0007	0.0000	-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB.Sample	0.0036	0.0000	0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS.Sample	0.3147	0.0000	0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS.Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP.Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS.Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 50X MSD.Sample	0.1534	0.0034	0.1500	0.225126943	0.88	2.5	50	100	511.652	45.455		9/15/20 13:25	
AD19159-004 PVS.Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
AD19192-002.Sample	0.4208	0.0061	0.4147	0.638714473	0.92	2.5	1	100	27.770	0.870		9/15/20 13:33	
AD19192-004MS2.Sample	0.7877	0.0068	0.7809	1.21089337	0.92	2.5	1	100	52.648	0.870		9/15/20 13:34	
AD19192-004MS2 2X.Sample	0.4092	0.0068	0.4024	0.61949603	0.92	2.5	2	100	53.869	1.739		9/15/20 13:34	
AD19192-005MSD2.Sample	4.3662	0.0062	4.3600	6.80315305	0.92	2.5	1	100	295.789	0.870		9/15/20 13:35	
AD19192-005 50XMSD2.Sample	0.1579	-0.0007	0.1586	0.238564243	0.92	2.5	50	100	518.618	43.478		9/15/20 13:36	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3288		0.3288	0.504497727	1	1	1	1	0.504	0.020	101	9/15/20 13:22	PASS
ICB.Sample	-0.0007		-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB.Sample	0.0036		0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS.Sample	0.3147		0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS.Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP.Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS.Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 XXX.Sample	3.9269	0.0081	3.9188	6.113788314	0.88	2.5	1	100	277.899	0.909		9/15/20 13:24	
AD19159-006 50X MSD.Sample	0.1534	0.0081	0.1453	0.217783303	0.88	2.5	50	100	494.962	45.455		9/15/20 13:25	
AD19159-004 PVS.Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
CCV-1.Control	0.3268		0.3268	0.501372768	1	1	1	1	0.501	0.020	100	9/15/20 13:26	PASS
CCB-1.Sample	-0.0005		-0.0005	-0.01002578	1	1	1	1	-0.010	0.020		9/15/20 13:27	
AD19159-008.Sample	0.0099	0.0068	0.0031	-0.004400865	0.65	2.5	1	100	-0.271	1.231		9/15/20 13:27	
AD19159-009.Sample	0.0092	0.0082	0.0010	-0.007682065	0.68	2.5	1	100	-0.452	1.176		9/15/20 13:27	
AD19159-010.Sample	0.0080	0.0066	0.0014	-0.007057074	0.87	2.5	1	100	-0.324	0.920		9/15/20 13:27	
AD19160-001.Sample	0.0220	0.0196	0.0024	-0.005494599	0.65	2.5	1	100	-0.338	1.231		9/15/20 13:28	
AD19160-002.Sample	0.0013	0.0036	-0.0023	-0.012838238	0.78	2.5	1	100	-0.658	1.026		9/15/20 13:28	
AD19178-001.Sample	0.0361	0.0413	-0.0052	-0.017369418	0.9	2.5	1	100	-0.772	0.889		9/15/20 13:28	
AD19178-002.Sample	0.0243	0.0231	0.0012	-0.00736957	0.91	2.5	1	100	-0.324	0.879		9/15/20 13:29	
AD19178-003.Sample	0.0554	0.0701	-0.0147	-0.032212951	0.79	2.5	1	100	-1.631	1.013		9/15/20 13:29	

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA									
Batch#	785 A		QC Sample	AD19159-004 NS.Sample								
Date	9/14/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	19.30	19.30	96%	80-120%	NA	NA	PASS	
			MS(Sol)	22.73	14.01	12.56	55%	75-125%	NA	NA	FAIL	
			MS(Insol)	1096.36	511.65	510.20	47%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	1.45	NA	NA	NA	NA	NA		
			Sample Dup	NA	1.59	NA	NA	NA	9	20%		PASS
			PVS	22.73	18.71	17.27	76%	85-115%	NA	NA	FAIL	
			MS(Sol)	43.48	53.87	26.10	60%	75-125%	NA	NA	FAIL	
			MS(Insol)	978.78	518.62	490.85	50%	75-125%	NA	20%	FAIL	PASS
			Sample	NA	27.77	NA	NA	NA	NA	NA		
Lead Chromate Added :	0.015	0.014	G									
Upper Calibration Abbsorbance:	0.6425											

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3288	0.0000	0.3288	0.504497727	1	1	1	1	0.504	0.500	101	9/15/20 13:22	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	-0.0007	0.0000	-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB.Sample	0.0036	0.0000	0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS.Sample	0.3147	0.0000	0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS.Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP.Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS.Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 50X MSD.Sample	0.1534	0.0034	0.1500	0.225126943	0.88	2.5	50	100	511.652	45.455		9/15/20 13:25	
AD19159-004 PVS.Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
AD19192-002.Sample	0.4208	0.0061	0.4147	0.638714473	0.92	2.5	1	100	27.770	0.870		9/15/20 13:33	
AD19192-004MS2.Sample	0.7877	0.0068	0.7809	1.21089337	0.92	2.5	1	100	52.648	0.870		9/15/20 13:34	
AD19192-004MS2 2X.Sample	0.4092	0.0068	0.4024	0.61949603	0.92	2.5	2	100	53.869	1.739		9/15/20 13:34	
AD19192-005MSD2.Sample	4.3662	0.0062	4.3600	6.80315305	0.92	2.5	1	100	295.789	0.870		9/15/20 13:35	
AD19192-005 50XMSD2.Sample	0.1579	-0.0007	0.1586	0.238564243	0.92	2.5	50	100	518.618	43.478		9/15/20 13:36	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3288		0.3288	0.504497727	1	1	1	1	0.504	0.020	101	9/15/20 13:22	PASS
ICB.Sample	-0.0007		-0.0007	-0.010338275	1	1	1	1	-0.010	0.020		9/15/20 13:22	
MB.Sample	0.0036		0.0036	-0.003619627	1	2.5	1	100	-0.145	0.800		9/15/20 13:22	
LCS.Sample	0.3147		0.3147	0.482466831	1	2.5	1	100	19.299	0.800		9/15/20 13:22	
AD19159-004 NS.Sample	0.0336	0.0073	0.0263	0.031848588	0.88	2.5	1	100	1.448	0.909		9/15/20 13:23	
AD19159-004 DUP.Sample	0.0356	0.0073	0.0283	0.034973542	0.88	2.5	1	100	1.590	0.909		9/15/20 13:23	
AD19159-005 MS.Sample	0.2090	0.0058	0.2032	0.308250697	0.88	2.5	1	100	14.011	0.909		9/15/20 13:24	
AD19159-006 XXX.Sample	3.9269	0.0081	3.9188	6.113788314	0.88	2.5	1	100	277.899	0.909		9/15/20 13:24	
AD19159-006 50X MSD.Sample	0.1534	0.0081	0.1453	0.217783303	0.88	2.5	50	100	494.962	45.455		9/15/20 13:25	
AD19159-004 PVS.Sample	0.2767	0.0073	0.2694	0.411686617	0.88	2.5	1	100	18.713	0.909		9/15/20 13:26	
CCV-1.Control	0.3268		0.3268	0.501372768	1	1	1	1	0.501	0.020	100	9/15/20 13:26	PASS
CCB-1.Sample	-0.0005		-0.0005	-0.01002578	1	1	1	1	-0.010	0.020		9/15/20 13:27	
AD19159-008.Sample	0.0099	0.0068	0.0031	-0.004400865	0.65	2.5	1	100	-0.271	1.231		9/15/20 13:27	
AD19159-009.Sample	0.0092	0.0082	0.0010	-0.007682065	0.68	2.5	1	100	-0.452	1.176		9/15/20 13:27	
AD19159-010.Sample	0.0080	0.0066	0.0014	-0.007057074	0.87	2.5	1	100	-0.324	0.920		9/15/20 13:27	
AD19160-001.Sample	0.0220	0.0196	0.0024	-0.005494599	0.65	2.5	1	100	-0.338	1.231		9/15/20 13:28	
AD19160-002.Sample	0.0013	0.0036	-0.0023	-0.012838238	0.78	2.5	1	100	-0.658	1.026		9/15/20 13:28	
AD19178-001.Sample	0.0361	0.0413	-0.0052	-0.017369418	0.9	2.5	1	100	-0.772	0.889		9/15/20 13:28	
AD19178-002.Sample	0.0243	0.0231	0.0012	-0.00736957	0.91	2.5	1	100	-0.324	0.879		9/15/20 13:29	
AD19178-003.Sample	0.0554	0.0701	-0.0147	-0.032212951	0.79	2.5	1	100	-1.631	1.013		9/15/20 13:29	

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85269

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85269

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	16	7.3004	8.92	82		65	110
Chromium	85269	1	S26211A3	16	1.9160	2.27	84		61	114
Copper	85269	1	S26211A3	16	1.8090	2.09	87		66	110
Lead	85269	1	S26211A3	16	1.3742	1.63	84		62	110
Manganese	85269	1	S26211A3	16	5.1743	6.03	86		68	110
Mercury	85269	4	H26211S	15	6.0430	41.64	58		39	110
Nickel	85269	1	S26211A3	16	0.4827	.553	87		61	114
Zinc	85269	1	S26211A3	16	5.9111	7.13	83		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85269

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	15	7.2814	8.92	82		65	110
Chromium	85269	1	S26211A3	15	1.9287	2.27	85		61	114
Copper	85269	1	S26211A3	15	1.8105	2.09	87		66	110
Lead	85269	1	S26211A3	15	1.3562	1.63	83		62	110
Manganese	85269	1	S26211A3	15	5.0323	6.03	83		68	110
Mercury	85269	4	H26211S	14	6.2230	41.64	60		39	110
Nickel	85269	1	S26211A3	15	0.4808	.553	87		61	114
Zinc	85269	1	S26211A3	15	5.9825	7.13	84		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	20	S26211A3	17	4.6864	2.7883	0.5	380	b	75	125
Chromium	85269	1	S26211A3	20	S26211A3	17	0.8849	0.5254	0.5	72	a	75	125
Copper	85269	1	S26211A3	20	S26211A3	17	1.2183	0.7403	0.5	96		75	125
Lead	85269	1	S26211A3	20	S26211A3	17	3.0829	3.3560	0.5	-55	b	75	125
Manganese	85269	1	S26211A3	20	S26211A3	17	3.5537	2.9865	0.5	113		75	125
Mercury	85269	1	H26211S	19	H26211S	16	10.7300	0.7820	10	99		75	125
Nickel	85269	1	S26211A3	20	S26211A3	17	0.7393	0.3054	0.5	87		75	125
Zinc	85269	1	S26211A3	20	S26211A3	17	4.4203	3.5562	0.5	173	b	75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19159-005

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	19	S26211A3	17	5.4637	2.7883	0.5	535	b	75	125
Chromium	85269	1	S26211A3	19	S26211A3	17	0.9442	0.5254	0.5	84		75	125
Copper	85269	1	S26211A3	19	S26211A3	17	1.2461	0.7403	0.5	101		75	125
Lead	85269	1	S26211A3	19	S26211A3	17	3.0330	3.3560	0.5	-65	b	75	125
Manganese	85269	1	S26211A3	19	S26211A3	17	3.4821	2.9865	0.5	99		75	125
Mercury	85269	1	H26211S	18	H26211S	16	11.1900	0.7820	10	104		75	125
Nickel	85269	1	S26211A3	19	S26211A3	17	0.7984	0.3054	0.5	99		75	125
Zinc	85269	1	S26211A3	19	S26211A3	17	4.0159	3.5562	0.5	92		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 85270

Instrument Type: ICPMS
Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85270

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	20	41.1700	49.4	83		61	113
Beryllium	85270	1	S091120A	20	147.3900	187	79		66	110
Selenium	85270	1	S091120A	20	300.0830	364	82		60	112
Silver	85270	1	S091120A	20	82.9270	94.0	88		61	111

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85270

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	19	42.0340	49.4	85		61	113
Beryllium	85270	1	S091120A	19	151.0130	187	81		66	110
Selenium	85270	1	S091120A	19	304.5110	364	84		60	112
Silver	85270	1	S091120A	19	83.1280	94.0	88		61	111

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	25	S091120A	21	249.8150	40.5900	250	84		75	125
Beryllium	85270	1	S091120A	25	S091120A	21	196.1200	1.4870	250	78		75	125
Selenium	85270	1	S091120A	25	S091120A	21	205.5270	10U	250	82		75	125
Silver	85270	1	S091120A	25	S091120A	21	47.7160	9.2420	50	77		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19159-005

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	24	S091120A	21	250.5490	40.5900	250	84		75	125
Beryllium	85270	1	S091120A	24	S091120A	21	188.3710	1.4870	250	75		75	125
Selenium	85270	1	S091120A	24	S091120A	21	204.6510	10U	250	82		75	125
Silver	85270	1	S091120A	24	S091120A	21	46.1160	9.2420	50	74	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85269

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85269

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85269	S26211A3	16	S26211A3	15	7.3004	7.2814	.26		20
Chromium	85269	S26211A3	16	S26211A3	15	1.9160	1.9287	.66		20
Copper	85269	S26211A3	16	S26211A3	15	1.8090	1.8105	.081		20
Lead	85269	S26211A3	16	S26211A3	15	1.3742	1.3562	1.3		20
Manganese	85269	S26211A3	16	S26211A3	15	5.1743	5.0323	2.8		20
Mercury	85269	H26211S	15	H26211S	14	6.0430	6.2230	2.9		20
Nickel	85269	S26211A3	16	S26211A3	15	0.4827	0.4808	.38		20
Zinc	85269	S26211A3	16	S26211A3	15	5.9111	5.9825	1.2		20

TxtQcType: MR Matrix: SOIL SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85269	S26211A3	18	S26211A3	17	6.2188	2.7883	76	a	20
Chromium	85269	S26211A3	18	S26211A3	17	0.5940	0.5254	12		20
Copper	85269	S26211A3	18	S26211A3	17	0.6411	0.7403	14		20
Lead	85269	S26211A3	18	S26211A3	17	2.3311	3.3560	36	a	20
Manganese	85269	S26211A3	18	S26211A3	17	2.6522	2.9865	12		20
Mercury	85269	H26211S	17	H26211S	16	0.8260	0.7820	5.5		20
Nickel	85269	S26211A3	18	S26211A3	17	0.2482	0.3054	21	b	20
Zinc	85269	S26211A3	18	S26211A3	17	4.5735	3.5562	25	a	20

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Barium	85269	S26211A3	20	S26211A3	19	4.6864	5.4637	15	20
Chromium	85269	S26211A3	20	S26211A3	19	0.8849	0.9442	6.5	20
Copper	85269	S26211A3	20	S26211A3	19	1.2183	1.2461	2.3	20
Lead	85269	S26211A3	20	S26211A3	19	3.0829	3.0330	1.6	20
Manganese	85269	S26211A3	20	S26211A3	19	3.5537	3.4821	2	20
Mercury	85269	H26211S	19	H26211S	18	10.7300	11.1900	4.2	20
Nickel	85269	S26211A3	20	S26211A3	19	0.7393	0.7984	7.7	20
Zinc	85269	S26211A3	20	S26211A3	19	4.4203	4.0159	9.6	20

TxtQcType: SD Matrix: SOIL SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Barium	85269	S26211A3	22	S26211A3	17	5	0.5708	2.7883	2.3	10
Chromium	85269	S26211A3	22	S26211A3	17	5	0.1142	0.5254	8.7	10
Copper	85269	S26211A3	22	S26211A3	17	5	0.1491	0.7403	0.68	10
Lead	85269	S26211A3	22	S26211A3	17	5	0.7284	3.3560	8.5	10
Manganese	85269	S26211A3	22	S26211A3	17	5	0.6181	2.9865	3.5	10
Nickel	85269	S26211A3	22	S26211A3	17	5	0.0655	0.3054	7.2	10
Zinc	85269	S26211A3	22	S26211A3	17	5	0.7448	3.5562	4.7	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85269

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85269

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	16	7.3004	8.92	82		65	110
Chromium	85269	1	S26211A3	16	1.9160	2.27	84		61	114
Copper	85269	1	S26211A3	16	1.8090	2.09	87		66	110
Lead	85269	1	S26211A3	16	1.3742	1.63	84		62	110
Manganese	85269	1	S26211A3	16	5.1743	6.03	86		68	110
Mercury	85269	4	H26211S	15	6.0430	41.64	58		39	110
Nickel	85269	1	S26211A3	16	0.4827	.553	87		61	114
Zinc	85269	1	S26211A3	16	5.9111	7.13	83		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85269

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	15	7.2814	8.92	82		65	110
Chromium	85269	1	S26211A3	15	1.9287	2.27	85		61	114
Copper	85269	1	S26211A3	15	1.8105	2.09	87		66	110
Lead	85269	1	S26211A3	15	1.3562	1.63	83		62	110
Manganese	85269	1	S26211A3	15	5.0323	6.03	83		68	110
Mercury	85269	4	H26211S	14	6.2230	41.64	60		39	110
Nickel	85269	1	S26211A3	15	0.4808	.553	87		61	114
Zinc	85269	1	S26211A3	15	5.9825	7.13	84		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	20	S26211A3	17	4.6864	2.7883	0.5	380	b	75	125
Chromium	85269	1	S26211A3	20	S26211A3	17	0.8849	0.5254	0.5	72	a	75	125
Copper	85269	1	S26211A3	20	S26211A3	17	1.2183	0.7403	0.5	96		75	125
Lead	85269	1	S26211A3	20	S26211A3	17	3.0829	3.3560	0.5	-55	b	75	125
Manganese	85269	1	S26211A3	20	S26211A3	17	3.5537	2.9865	0.5	113		75	125
Mercury	85269	1	H26211S	19	H26211S	16	10.7300	0.7820	10	99		75	125
Nickel	85269	1	S26211A3	20	S26211A3	17	0.7393	0.3054	0.5	87		75	125
Zinc	85269	1	S26211A3	20	S26211A3	17	4.4203	3.5562	0.5	173	b	75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19159-005

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85269	1	S26211A3	19	S26211A3	17	5.4637	2.7883	0.5	535	b	75	125
Chromium	85269	1	S26211A3	19	S26211A3	17	0.9442	0.5254	0.5	84		75	125
Copper	85269	1	S26211A3	19	S26211A3	17	1.2461	0.7403	0.5	101		75	125
Lead	85269	1	S26211A3	19	S26211A3	17	3.0330	3.3560	0.5	-65	b	75	125
Manganese	85269	1	S26211A3	19	S26211A3	17	3.4821	2.9865	0.5	99		75	125
Mercury	85269	1	H26211S	18	H26211S	16	11.1900	0.7820	10	104		75	125
Nickel	85269	1	S26211A3	19	S26211A3	17	0.7984	0.3054	0.5	99		75	125
Zinc	85269	1	S26211A3	19	S26211A3	17	4.0159	3.5562	0.5	92		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 85270

Instrument Type: ICPMS
Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85270

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	20	41.1700	49.4	83		61	113
Beryllium	85270	1	S091120A	20	147.3900	187	79		66	110
Selenium	85270	1	S091120A	20	300.0830	364	82		60	112
Silver	85270	1	S091120A	20	82.9270	94.0	88		61	111

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85270

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	19	42.0340	49.4	85		61	113
Beryllium	85270	1	S091120A	19	151.0130	187	81		66	110
Selenium	85270	1	S091120A	19	304.5110	364	84		60	112
Silver	85270	1	S091120A	19	83.1280	94.0	88		61	111

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	25	S091120A	21	249.8150	40.5900	250	84		75	125
Beryllium	85270	1	S091120A	25	S091120A	21	196.1200	1.4870	250	78		75	125
Selenium	85270	1	S091120A	25	S091120A	21	205.5270	10U	250	82		75	125
Silver	85270	1	S091120A	25	S091120A	21	47.7160	9.2420	50	77		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19159-005

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85270	1	S091120A	24	S091120A	21	250.5490	40.5900	250	84		75	125
Beryllium	85270	1	S091120A	24	S091120A	21	188.3710	1.4870	250	75		75	125
Selenium	85270	1	S091120A	24	S091120A	21	204.6510	10U	250	82		75	125
Silver	85270	1	S091120A	24	S091120A	21	46.1160	9.2420	50	74	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85269

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85269

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85269	S26211A3	16	S26211A3	15	7.3004	7.2814	.26		20
Chromium	85269	S26211A3	16	S26211A3	15	1.9160	1.9287	.66		20
Copper	85269	S26211A3	16	S26211A3	15	1.8090	1.8105	.081		20
Lead	85269	S26211A3	16	S26211A3	15	1.3742	1.3562	1.3		20
Manganese	85269	S26211A3	16	S26211A3	15	5.1743	5.0323	2.8		20
Mercury	85269	H26211S	15	H26211S	14	6.0430	6.2230	2.9		20
Nickel	85269	S26211A3	16	S26211A3	15	0.4827	0.4808	.38		20
Zinc	85269	S26211A3	16	S26211A3	15	5.9111	5.9825	1.2		20

TxtQcType: MR Matrix: SOIL SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85269	S26211A3	18	S26211A3	17	6.2188	2.7883	76	a	20
Chromium	85269	S26211A3	18	S26211A3	17	0.5940	0.5254	12		20
Copper	85269	S26211A3	18	S26211A3	17	0.6411	0.7403	14		20
Lead	85269	S26211A3	18	S26211A3	17	2.3311	3.3560	36	a	20
Manganese	85269	S26211A3	18	S26211A3	17	2.6522	2.9865	12		20
Mercury	85269	H26211S	17	H26211S	16	0.8260	0.7820	5.5		20
Nickel	85269	S26211A3	18	S26211A3	17	0.2482	0.3054	21	b	20
Zinc	85269	S26211A3	18	S26211A3	17	4.5735	3.5562	25	a	20

TxtQcType: MSD Matrix: SOIL SampleID: AD19159-006

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Barium	85269	S26211A3	20	S26211A3	19	4.6864	5.4637	15	20
Chromium	85269	S26211A3	20	S26211A3	19	0.8849	0.9442	6.5	20
Copper	85269	S26211A3	20	S26211A3	19	1.2183	1.2461	2.3	20
Lead	85269	S26211A3	20	S26211A3	19	3.0829	3.0330	1.6	20
Manganese	85269	S26211A3	20	S26211A3	19	3.5537	3.4821	2	20
Mercury	85269	H26211S	19	H26211S	18	10.7300	11.1900	4.2	20
Nickel	85269	S26211A3	20	S26211A3	19	0.7393	0.7984	7.7	20
Zinc	85269	S26211A3	20	S26211A3	19	4.4203	4.0159	9.6	20

TxtQcType: SD Matrix: SOIL SampleID: AD19159-004

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Barium	85269	S26211A3	22	S26211A3	17	5	0.5708	2.7883	2.3	10
Chromium	85269	S26211A3	22	S26211A3	17	5	0.1142	0.5254	8.7	10
Copper	85269	S26211A3	22	S26211A3	17	5	0.1491	0.7403	0.68	10
Lead	85269	S26211A3	22	S26211A3	17	5	0.7284	3.3560	8.5	10
Manganese	85269	S26211A3	22	S26211A3	17	5	0.6181	2.9865	3.5	10
Nickel	85269	S26211A3	22	S26211A3	17	5	0.0655	0.3054	7.2	10
Zinc	85269	S26211A3	22	S26211A3	17	5	0.7448	3.5562	4.7	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0091007

Sample ID: HRPB-5
Lab#: AD19160-001
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		65	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.2	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	7.7	18	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.37	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.13	0.14	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		4.9	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.4	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	15	84	J
Chromium	1	mg/kg	7.7	18	J-
Copper	1	mg/kg	7.7	43	
Lead	1	mg/kg	7.7	25	J
Manganese	1	mg/kg	15	520	
Nickel	1	mg/kg	7.7	36	
Zinc	1	mg/kg	15	100	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.31	11	
Beryllium	1	mg/kg	0.31	0.66	
Selenium	1	mg/kg	3.1	ND	
Silver	1	mg/kg	0.31	ND	UJ

TCLP Metals 6010D

Analyte	DF	Units	RL	Result

Sample ID: HRPB-5 **Collection Date: 9/9/2020**
Lab#: AD19160-001 **Receipt Date: 9/10/2020**
Matrix: Soil

Arsenic	1	mg/l	0.10	ND
Barium	**1**	**mg/l**	**0.25**	**0.91**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

Sample ID: HRPB-6
Lab#: AD19160-002
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		78	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.0	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.4	12	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.31	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.11	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		250	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.5	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	13	67	J
Chromium	1	mg/kg	6.4	12	J-
Copper	1	mg/kg	6.4	21	
Lead	1	mg/kg	6.4	6.7	J
Manganese	1	mg/kg	13	390	
Nickel	1	mg/kg	6.4	25	
Zinc	1	mg/kg	13	58	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.26	8.2	
Beryllium	1	mg/kg	0.26	0.39	
Selenium	1	mg/kg	2.6	ND	
Silver	1	mg/kg	0.26	ND	UJ

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.62	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	4	mg/l	0.40	ND	

Sample ID: HRPB-6 **Collection Date:** 9/9/2020
Lab#: AD19160-002 **Receipt Date:** 9/10/2020
Matrix: Soil

Silver		1	mg/l	0.050	ND

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0091007

Sample ID: HRPB-5
Lab#: AD19160-001
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		65	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.2	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	7.7	18	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.37	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.13	0.14	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		4.9	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.4	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	15	84	J
Chromium	1	mg/kg	7.7	18	J-
Copper	1	mg/kg	7.7	43	
Lead	1	mg/kg	7.7	25	J
Manganese	1	mg/kg	15	520	
Nickel	1	mg/kg	7.7	36	
Zinc	1	mg/kg	15	100	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.31	11	
Beryllium	1	mg/kg	0.31	0.66	
Selenium	1	mg/kg	3.1	ND	
Silver	1	mg/kg	0.31	ND	UJ

TCLP Metals 6010D

Analyte	DF	Units	RL	Result

Sample ID: HRPB-5 **Collection Date: 9/9/2020**
Lab#: AD19160-001 **Receipt Date: 9/10/2020**
Matrix: Soil

Arsenic	1	mg/l	0.10	ND
Barium	**1**	**mg/l**	**0.25**	**0.91**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

Sample ID: HRPB-6
Lab#: AD19160-002
Matrix: Soil

Collection Date: 9/9/2020
Receipt Date: 9/10/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		78	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.0	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.4	12	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.31	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.11	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		250	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.5	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	13	67	J
Chromium	1	mg/kg	6.4	12	J-
Copper	1	mg/kg	6.4	21	
Lead	1	mg/kg	6.4	6.7	J
Manganese	1	mg/kg	13	390	
Nickel	1	mg/kg	6.4	25	
Zinc	1	mg/kg	13	58	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.26	8.2	
Beryllium	1	mg/kg	0.26	0.39	
Selenium	1	mg/kg	2.6	ND	
Silver	1	mg/kg	0.26	ND	UJ

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.62	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	4	mg/l	0.40	ND	

Sample ID: HRPB-6 **Collection Date:** 9/9/2020
Lab#: AD19160-002 **Receipt Date:** 9/10/2020
Matrix: Soil

Silver		1	mg/l	0.050	ND

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QA/QC Review of TCLP Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091007

2 Soil Samples
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were extracted and analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TCLP metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration, preparation, and equipment blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable TCLP metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: The percent recoveries for applicable metals were within control limits (75-125%) for soil batch TCLP MS/MSD sample AD19159-004.

Laboratory Duplicates: The RPDs for applicable metals were below the allowable (35%) for soil batch TCLP MS/MSD sample AD19159-004, as required.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil TCLP samples LCS 85267 and LCS MR 85267. The relative percent differences for target metals were below the allowable maximum (20%) for soil TCLP sample LCS MR 85267, as required.

ICP Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for soil batch TCLP serial dilution sample AD19159-004, as required.

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QA/QC Review of TCLP Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091007

2 Soil Samples
Collected September 9, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were extracted and analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TCLP metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration, preparation, and equipment blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable TCLP metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: The percent recoveries for applicable metals were within control limits (75-125%) for soil batch TCLP MS/MSD sample AD19159-004.

Laboratory Duplicates: The RPDs for applicable metals were below the allowable (35%) for soil batch TCLP MS/MSD sample AD19159-004, as required.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil TCLP samples LCS 85267 and LCS MR 85267. The relative percent differences for target metals were below the allowable maximum (20%) for soil TCLP sample LCS MR 85267, as required.

ICP Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for soil batch TCLP serial dilution sample AD19159-004, as required.

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QA/QC Review of Hexavalent Chromium Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091101

13 Soil Samples
Collected September 10, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The samples were analyzed within the USEPA holding times.

Initial and Continuing Calibration Verification: The percent recoveries for hexavalent chromium (Cr6+) were within laboratory QC limits (90-110%).

Blanks: The analyses of initial and continuing calibration, method, and equipment blanks reported Cr6+ as not detected.

Spike Sample Recovery: The percent recoveries for Cr6+ were below laboratory QC limits (85-115%), but not below 10% for soil batch spike samples AD19159-004 and AD19290-002. Positive results for Cr6+ should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated soil samples.

Duplicates: The relative percent differences for Cr6+ were below the allowable maximum (35%) for soil batch duplicate samples AD19159-004 and AD19290-002, as required.

Laboratory Control Sample: The percent recoveries for soluble and insoluble Cr6+ were within laboratory QC limits (80-120%) for the soil LCS.

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Data Usability Summary Report for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091101

13 Soil Samples and 1 Trip Blank
Collected September 10, 2020

Prepared by: Donald Anné
November 9, 2020

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 1 soil sample and 1 trip blank analyzed for volatiles, and the results for 13 soil samples analyzed for total metals, TCLP metals, total cyanide, and hexavalent chromium.

The overall performances of the analyses are acceptable. Hampton-Clarke Analytical & Field Services did fulfill the requirements of the analytical methods.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The "not detected" volatile results for 18 compounds were qualified as estimated (UJ) in sample HRPB-1 because the area of the internal standard used to quantitate these results was below control limits, but not below 25% in the sample.

- The positive total metal results for beryllium were qualified as estimated, biased low (J-) in all 13 soil samples because 2 of 2 percent recoveries for beryllium were below control limits, but not below 10% in the associated soil MS/MSD sample.

- The positive total metal results for nickel were qualified as estimated, biased high (J+) in all 13 soil samples because 1 of 2 percent recoveries for nickel was above control limits in the associated soil MS/MSD sample.

- The "not detected" results for hexavalent chromium were qualified as estimated (UJ) in all 13 soil samples because the percent recoveries for soluble and insoluble hexavalent chromium were below QC limits, but not below 10% in the associated soil batch spike samples.

All data are considered usable, with estimated (J+, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Total Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091101

13 Soil Samples
Collected September 10, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: The sample was analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration and preparation blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable target metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: Two of two percent recoveries (%Rs) for beryllium were below control limits (75-125%), but not below 10% for soil MS/MSD sample SS-4A. Positive results for beryllium should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated soil samples.

One of two %Rs for nickel was above control limits (75-125%) for soil MS/MSD sample SS-4A. Positive results for nickel should be considered estimated, biased high (J+) in associated soil samples.

Laboratory Duplicates: The relative percent difference for nickel was above the allowable (35%) for soil MS/MSD sample SS-4A. Positive results for nickel should be considered estimated (J) in associated soil samples.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil samples LCS MR 85279, LCS 85279, LCS MR 85280, and LCS 85280.

ICP Serial Dilution: The %D for beryllium was above the allowable maximum (15%) for soil serial dilution sample SS-4A. Positive results for beryllium that are above the RLs should be considered estimated (J) in associated soil samples.

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QA/QC Review of Total Cyanide Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091101

13 Soil Samples
Collected September 10, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within NJDEP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for total cyanide were within control limits (85-115%).

Blanks: The analyses of initial calibration and continuing calibration, method, and equipment blanks reported total cyanide as not detected.

Spike Sample Recovery: The percent recoveries for total cyanide were within QC limits (75-125%) for aqueous batch MS/MSD samples AD19177-002, AD19217-001 and AD19214-001.

Laboratory Duplicates: The relative percent differences were below the allowable maximum (35%) for soil batch MS/MSD samples AD19177-002, AD19217-001 and AD19214-001, as required.

Laboratory Control Sample: The percent recoveries for total cyanide were within QC limits (80-120%) for soil samples LCSS-2421, LCSS-2422, and LCSS-2423.

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QA/QC Review of 8260 Volatile Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091101

1 Soil Sample and 1 Trip Blank
Collected September 10, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The %RSDs for applicable compounds were below the method maximum, as required. The average RRFs for acetone and 2-butanone were below the method minimums, but not below 0.010 for GCMS_11 on 09-11-20. No action is taken when fewer than 20% of the compounds per calibration do not meet either method %RSD or average RRF criteria, provided the average RRFs are not below 0.010.

The average RRFs for target compounds were above the allowable minimums (0.001 for 1,4-dioxane, 0.010for all others) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for acetone and 2-butanone were below the method minimums, but not below 0.010 on 09-14-20 (11M82702.D). The RRF for acetone was below the method minimums, but not below 0.010 on 09-17-20 (6M132533.D). The %Ds for dichlorodifluoromethane, cis-1,2-dichloroethene, carbon tetrachloride, 4-methyl-2-pentanone, bromoform, styrene, m&p-xylene, o-xylene, and 1,4-dichlorobenzene were above the method maximum on 9-17-20 (6M132533.D). No action is taken when fewer than 20% of the compounds per calibration do not meet either method %D or RRF criteria, provided the RRFs are not below 0.010.

The RRFs for target compounds were above the allowable minimums (0.001 for 1,4-dioxane, 0.010 for all others), as required.

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The %D for 1,4-dioxane was above the allowable maximum (20%) on 09-14-20 (11M82702.D). The %Ds for dichlorodifluoromethane, cis-1,2-dichloroethene, 1,4-dioxane, carbon tetrachloride, 2-chloroethylvinylether, 4-methyl-2-pentanone, bromoform, styrene, m&p-xylene, o-xylene, and 1,4-dichlorobenzene were above the allowable maximum (20%) on 09-17-20 (6M132533.3D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of the daily and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard retention times for samples were within control limits. One of three internal standard areas (I3) for sample HRPB-1 was below control limits, but not below 25%. Positive results that are quantitated using internal standard I3 should be considered estimated, biased high (J+) and "not detected" results estimated (UJ) in sample HRPB-1.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil sample and trip blank.

Matrix Spike/Matrix Spike Duplicate: Three of ninety-seven relative percent differences for spiked compounds were above the allowable maximums, but 15 of 194 percent recoveries were above QC limits in soil batch MS/MSD sample AD19283-006. No action is taken on batch MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recovers (%Rs) for target compounds were within QC limits for aqueous sample MBS87835.

The %Rs for 1,1,2-trichloro-1,2,2-trifluoroethane, acrolein, methyl-t-butyl ether, 2-chloroethylvinylether, and bromoform were above QC limits for soil sample MBS89300. Positive results for these compounds should be considered estimated, biased high (J+) in associated aqueous samples.

Compound ID: Checked compounds and surrogates were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Hex-Cr Soil SW-846 3060A / 7196A

Cr6 soil curve		Date	9/15/2020			Batch #	785			TestGroupID	CR6-SOIL	
										TestID:	CR-HEX	
STD ppm			ABS									
0			-0.0001		Intercept	Constant	0.005916596					
0.02			0.0208									
0.25			0.1671		Slope	X Coefficients	0.640009617					
0.5			0.3321									
1			0.6425									

STD mg/L		ABS	PPM	DIFF
0		-0.0001	-0.00940079	0.00940079
0.02		0.0208	0.02325497	-0.00325497
0.25		0.1671	0.251845285	-0.001845285
0.5		0.3321	0.509653911	-0.009653911
1		0.6425	0.994646624	0.005353376

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.999836682
R Square	0.999673391
Adjusted R Square	0.999564522
Standard Error	0.005533171
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.28112512	0.28112512	9182.300572	2.50538E-06
Residual	3	9.18479E-05	3.0616E-05		
Total	4	0.281216968			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.005916596	0.003422485	1.728742578	0.182299251	-0.00497529	0.016808481	-0.00497529	0.016808481
X Variable 1	0.640009617	0.006678989	95.8243214	2.50538E-06	0.618754072	0.661265161	0.618754072	0.661265161

	Hex-Cr Soil		Q.C. DATA									
Batch#	785		QC Sample	AD19159-004 NS.Sample								
Date	9/14/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	BCT		LCS	20.00	19.96	19.96	100%	80-120%	NA	NA	PASS	
			MS(Sol)	22.73	12.38	10.14	45%	75-125%	NA	NA	[illegible]	
			MS(Insol)	1096.36	562.79	560.55	51%	75-125%	NA	20%	[illegible]	PASS
			Sample	NA	2.24	NA	NA	NA	NA	NA		
			Sample Dup	NA	2.65	NA	NA	NA	17	20%		PASS
			PVS	22.73	15.90	13.67	60%	85-115%	NA	NA	[illegible]	
			MS(Sol)	43.48	55.99	26.81	62%	75-125%	NA	NA	[illegible]	
			MS(Insol)	978.78	544.43	515.26	53%	75-125%	NA	20%	[illegible]	PASS
			Sample	NA	29.18	NA	NA	NA	NA	NA		
Lead Chromate Added :	0.015	0.014	g									
Upper Calibration Abbsorbance:	0.6425											

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate

00041549

	Hex-Cr Soil		Q.C. DATA									
Batch#	786		QC Sample	AD19290-002 NS.Sample								
Date	9/18/2020			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD
Analyst	BCT			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL
PrepBy	JMP		LCS	20.00	19.25	19.25	96%	80-120%	NA	NA	PASS	
			MS(Sol)	21.74	15.85	14.52	67%	75-125%	NA	NA		
			MS(Insol)	1095.56	535.52	534.19	49%	75-125%	NA	20%		PASS
			Sample	NA	1.33	NA	NA	NA	NA	NA		
			Sample Dup	NA	1.50	NA	NA	NA	12	20%		PASS
			PVS	21.98	20.92	19.60	89%	85-115%	NA	NA	PASS	
Lead Chromate Added :	0.0155	g										
Upper Calibration Abbsorbance:	0.7129											

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3213	0.0000	0.3213	0.454755568	1	1	1	1	0.455	0.500	91	9/18/20 15:19	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0062	0.0000	0.0062	0.005320695	1	1	1	1	0.005	0.020		9/18/20 15:20	
MB.Sample	0.0030	0.0000	0.0030	0.000756456	1	2.5	1	100	0.030	0.800		9/18/20 15:20	
LCS.Sample	0.3399	0.0000	0.3399	0.481285186	1	2.5	1	100	19.251	0.800		9/18/20 15:21	
AD19290-002 NS.Sample	0.0233	-0.0003	0.0236	0.030138741	0.91	2.5	1	100	1.325	0.879		9/18/20 15:21	
AD19290-002 DUP.Sample	0.0261	-0.0003	0.0264	0.034132451	0.91	2.5	1	100	1.500	0.879		9/18/20 15:22	
AD19290-003 MS.Sample	0.2579	-0.0001	0.2580	0.364469222	0.92	2.5	1	100	15.846	0.870		9/18/20 15:22	
AD19290-004 50X MSD.Sample	0.1731	-0.0002	0.1733	0.243659523	0.91	2.5	50	100	535.515	43.956		9/18/20 15:23	
AD19290-002 PVS.Sample	0.3359	-0.0003	0.3362	0.476007817	0.91	2.5	1	100	20.923	0.879		9/18/20 15:23	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3213		0.3213	0.454755568	1	1	1	1	0.455	0.020	91	9/18/20 15:19	PASS
ICB.Sample	0.0062		0.0062	0.005320695	1	1	1	1	0.005	0.020		9/18/20 15:20	
MB.Sample	0.0030		0.0030	0.000756456	1	2.5	1	100	0.030	0.800		9/18/20 15:20	
LCS.Sample	0.3399		0.3399	0.481285186	1	2.5	1	100	19.251	0.800		9/18/20 15:21	
AD19290-002 NS.Sample	0.0233	-0.0003	0.0236	0.030138741	0.91	2.5	1	100	1.325	0.879		9/18/20 15:21	
AD19290-002 DUP.Sample	0.0261	-0.0003	0.0264	0.034132451	0.91	2.5	1	100	1.500	0.879		9/18/20 15:22	
AD19290-003 MS.Sample	0.2579	-0.0001	0.2580	0.364469222	0.92	2.5	1	100	15.846	0.870		9/18/20 15:22	
AD19290-004 XXX.Sample	3.9278	0.0028	3.9250	5.594801353	0.91	2.5	1	100	245.925	0.879		9/18/20 15:22	
AD19290-004 50X MSD.Sample	0.1731	-0.0002	0.1733	0.243659523	0.91	2.5	50	100	535.515	43.956		9/18/20 15:23	
AD19290-002 PVS.Sample	0.3359	-0.0003	0.3362	0.476007817	0.91	2.5	1	100	20.923	0.879		9/18/20 15:23	
CCV-1.Control	0.3397		0.3397	0.480999959	1	1	1	1	0.481	0.020	96	9/18/20 15:24	PASS
CCB-1.Sample	0.0027		0.0027	0.000328559	1	1	1	1	0.000	0.020		9/18/20 15:24	
AD19290-001.Sample	0.0076	-0.0002	0.0078	0.007602814	0.81	2.5	1	100	0.375	0.988		9/18/20 15:25	
AD19178-011.Sample	0.0810	0.0766	0.0044	0.00275331	0.82	2.5	1	100	0.134	0.976		9/18/20 15:25	
AD19178-012.Sample	0.1677	0.1528	0.0149	0.017729717	0.85	2.5	1	100	0.834	0.941		9/18/20 15:26	
AD19178-013.Sample	0.0125	0.0099	0.0026	0.000185926	0.66	2.5	1	100	0.011	1.212		9/18/20 15:26	
AD19262-001.Sample	0.0055	0.0079	-0.0024	-0.006945696	0.73	2.5	1	100	-0.381	1.096		9/18/20 15:27	
AD19262-003.Sample	0.0154	0.0141	0.0013	-0.001668296	0.69	2.5	1	100	-0.097	1.159		9/18/20 15:27	
AD19274-001.Sample	0.0000	0.0002	-0.0002	-0.003807783	1	2.5	1	100	-0.152	0.800		9/18/20 15:27	
AD19294-001.Sample	0.0679	0.0658	0.0021	-0.000527239	0.9	2.5	1	100	-0.023	0.889		9/18/20 15:28	
AD19292-001.Sample	0.0009	-0.0002	0.0011	-0.001953561	0.96	2.5	1	100	-0.081	0.833		9/18/20 15:28	
AD19292-002.Sample	0.0000	-0.0004	0.0004	-0.002951988	0.97	2.5	1	100	-0.122	0.825		9/18/20 15:28	
CCV-2.Control	0.3392		0.3392	0.480286764	1	1	1	1	0.480	0.020	96	9/18/20 15:28	PASS
CCB-2.Sample	0.0027		0.0027	0.000328559	1	1	1	1	0.000	0.020		9/18/20 15:29	
AD19292-003.Sample	0.0015	0.0004	0.0011	-0.001953561	0.94	2.5	1	100	-0.083	0.851		9/18/20 15:30	
AD19290-002 T.Sample	-0.0003		-0.0003	-0.003950415	0.91	2.5	1	100	-0.174	0.879		9/18/20 15:30	
AD19290-003 T.Sample	-0.0001		-0.0001	-0.00366515	0.92	2.5	1	100	-0.159	0.870		9/18/20 15:30	
AD19290-004 T.Sample	0.0028		0.0028	0.000471191	0.91	2.5	1	100	0.021	0.879		9/18/20 15:31	

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 85279

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85279

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85279	1	S26226A3	45	6.7493	8.92	76		65	110
Chromium	85279	1	S26226A3	45	1.7322	2.27	76		61	114
Copper	85279	1	S26226A3	45	1.6353	2.09	78		66	110
Lead	85279	1	S26226A3	45	1.2228	1.63	75		62	110
Manganese	85279	1	S26226A3	45	4.6026	6.03	76		68	110
Mercury	85279	4	H26221S	15	5.6140	41.64	54		39	110
Nickel	85279	1	S26226A3	45	0.4237	.553	77		61	114
Zinc	85279	1	S26226A3	45	5.3682	7.13	75		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85279

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85279	1	S26226A3	44	7.3764	8.92	83		65	110
Chromium	85279	1	S26226A3	44	1.8168	2.27	80		61	114
Copper	85279	1	S26226A3	44	1.7184	2.09	82		66	110
Lead	85279	1	S26226A3	44	1.2904	1.63	79		62	110
Manganese	85279	1	S26226A3	44	4.9165	6.03	82		68	110
Mercury	85279	4	H26221S	14	5.7840	41.64	56		39	110
Nickel	85279	1	S26226A3	44	0.4481	.553	81		61	114
Zinc	85279	1	S26226A3	44	5.5351	7.13	78		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD19178-001 SS-4A

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85279	1	S26226A3	49	S26226A3	46	0.8649	0.3504	0.5	103		75	125
Chromium	85279	1	S26226A3	49	S26226A3	46	0.6178	0.1193	0.5	100		75	125
Copper	85279	1	S26226A3	49	S26226A3	46	0.7521	0.2721	0.5	96		75	125
Lead	85279	1	S26226A3	49	S26226A3	46	1.1678	0.6959	0.5	94		75	125
Manganese	85279	1	S26226A3	49	S26226A3	46	2.6812	2.1389	0.5	108		75	125
Mercury	85279	1	H26221S	19	H26221S	16	10.1900	.5U	10	102		75	125
Nickel	85279	1	S26226A3	49	S26226A3	46	0.7147	0.2541	0.5	92		75	125
Zinc	85279	1	S26226A3	49	S26226A3	46	1.2005	0.6750	0.5	105		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19178-001 SS-4A

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Barium	85279	1	S26226A3	48	S26226A3	46	0.9088	0.3504	0.5	112		75	125
Chromium	85279	1	S26226A3	48	S26226A3	46	0.6727	0.1193	0.5	111		75	125
Copper	85279	1	S26226A3	48	S26226A3	46	0.7614	0.2721	0.5	98		75	125
Lead	85279	1	S26226A3	48	S26226A3	46	1.1751	0.6959	0.5	96		75	125
Manganese	85279	1	S26226A3	48	S26226A3	46	2.9680	2.1389	0.5	166	b	75	125
Mercury	85279	1	H26221S	18	H26221S	16	10.1700	.5U	10	102		75	125
Nickel	85279	1	S26226A3	48	S26226A3	46	1.1061	0.2541	0.5	170	a	75	125
Zinc	85279	1	S26226A3	48	S26226A3	46	1.2119	0.6750	0.5	107		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

0091101 0295

SPIKE RECOVERY DATA

PREP BATCH: 85280

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85280

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85280	1	S091620B	20	42.1200	49.4	85		61	113
Beryllium	85280	1	S091620B	20	137.0180	187	73		66	110
Selenium	85280	1	S091620B	20	300.4790	364	83		60	112
Silver	85280	1	S091620B	20	82.7220	94.0	88		61	111

TxtQcType: LCS Matrix: SOIL SampleID: LCS 85280

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85280	1	S091620B	19	42.1670	49.4	85		61	113
Beryllium	85280	1	S091620B	19	141.4040	187	76		66	110
Selenium	85280	1	S091620B	19	301.5720	364	83		60	112
Silver	85280	1	S091620B	19	82.3800	94.0	88		61	111

TxtQcType: MSD Matrix: SOIL SampleID: AD19178-001 SS-4A

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85280	1	S091620B	25	S091620B	21	238.4720	27.0120	250	85		75	125
Beryllium	85280	1	S091620B	25	S091620B	21	180.2630	1.3610	250	72	a	75	125
Selenium	85280	1	S091620B	25	S091620B	21	207.3210	10U	250	83		75	125
Silver	85280	1	S091620B	25	S091620B	21	40.8980	1U	50	82		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD19178-001 SS-4A

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85280	1	S091620B	24	S091620B	21	244.5100	27.0120	250	87		75	125
Beryllium	85280	1	S091620B	24	S091620B	21	184.4920	1.3610	250	73	a	75	125
Selenium	85280	1	S091620B	24	S091620B	21	207.6990	10U	250	83		75	125
Silver	85280	1	S091620B	24	S091620B	21	42.8060	1U	50	86		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85279

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR | Matrix: SOIL | SampleID: LCS MR 85279

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85279	S26226A3	45	S26226A3	44	6.7493	7.3764	8.9		20
Chromium	85279	S26226A3	45	S26226A3	44	1.7322	1.8168	4.8		20
Copper	85279	S26226A3	45	S26226A3	44	1.6353	1.7184	5		20
Lead	85279	S26226A3	45	S26226A3	44	1.2228	1.2904	5.4		20
Manganese	85279	S26226A3	45	S26226A3	44	4.6026	4.9165	6.6		20
Mercury	85279	H26221S	15	H26221S	14	5.6140	5.7840	3		20
Nickel	85279	S26226A3	45	S26226A3	44	0.4237	0.4481	5.6		20
Zinc	85279	S26226A3	45	S26226A3	44	5.3682	5.5351	3.1		20

TxtQcType: MR | Matrix: SOIL | SampleID: AD19178-001 SS-4A

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85279	S26226A3	47	S26226A3	46	0.3805	0.3504	8.2		20
Chromium	85279	S26226A3	47	S26226A3	46	0.1313	0.1193	9.5		20
Copper	85279	S26226A3	47	S26226A3	46	0.2694	0.2721	1		20
Lead	85279	S26226A3	47	S26226A3	46	0.7141	0.6959	2.6		20
Manganese	85279	S26226A3	47	S26226A3	46	2.1452	2.1389	0.29		20
Mercury	85279	H26221S	17	H26221S	16	0.5170	.5U	---		20
Nickel	85279	S26226A3	47	S26226A3	46	0.3438	0.2541	30	a	20
Zinc	85279	S26226A3	47	S26226A3	46	0.6935	0.6750	2.7		20

TxtQcType: MSD | Matrix: SOIL | SampleID: AD19178-001 SS-4A

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	85279	S26226A3	49	S26226A3	48	0.8649	0.9088	4.9		20
Chromium	85279	S26226A3	49	S26226A3	48	0.6178	0.6727	8.5		20
Copper	85279	S26226A3	49	S26226A3	48	0.7521	0.7614	1.2		20
Lead	85279	S26226A3	49	S26226A3	48	1.1678	1.1751	.62		20
Manganese	85279	S26226A3	49	S26226A3	48	2.6812	2.9680	10		20
Mercury	85279	H26221S	19	H26221S	18	10.1900	10.1700	.2		20
Nickel	85279	S26226A3	49	S26226A3	48	0.7147	1.1061	43	a	20
Zinc	85279	S26226A3	49	S26226A3	48	1.2005	1.2119	.95		20

TxtQcType: SD | Matrix: SOIL | SampleID: AD19178-001 SS-4A

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Barium	85279	S26226A3	51	S26226A3	46	5	0.0740	0.3504	5.5		10
Chromium	85279	S26226A3	51	S26226A3	46	5	0.0212	0.1193	11	a	10
Copper	85279	S26226A3	51	S26226A3	46	5	0.0576	0.2721	5.8		10
Lead	85279	S26226A3	51	S26226A3	46	5	0.1443	0.6959	3.7		10
Manganese	85279	S26226A3	51	S26226A3	46	5	0.4578	2.1389	7		10
Nickel	85279	S26226A3	51	S26226A3	46	5	0.0524	0.2541	3.2		10
Zinc	85279	S26226A3	51	S26226A3	46	5	0.1438	0.6750	6.5		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 85280

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 85280

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85280	S091620B	20	S091620B	19	42.1200	42.1670	.11	20
Beryllium	85280	S091620B	20	S091620B	19	137.0180	141.4040	3.2	20
Selenium	85280	S091620B	20	S091620B	19	300.4790	301.5720	.36	20
Silver	85280	S091620B	20	S091620B	19	82.7220	82.3800	.41	20

TxtQcType: MR Matrix: SOIL SampleID: AD19178-001 SS-4A

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85280	S091620B	22	S091620B	21	27.5860	27.0120	2.1	20
Beryllium	85280	S091620B	22	S091620B	21	1.3550	1.3610	0.44	20
Selenium	85280	S091620B	22	S091620B	21	10U	10U	---	20
Silver	85280	S091620B	22	S091620B	21	1U	1U	---	20

TxtQcType: MSD Matrix: SOIL SampleID: AD19178-001 SS-4A

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85280	S091620B	25	S091620B	24	238.4720	244.5100	2.5	20
Beryllium	85280	S091620B	25	S091620B	24	180.2630	184.4920	2.3	20
Selenium	85280	S091620B	25	S091620B	24	207.3210	207.6990	.18	20
Silver	85280	S091620B	25	S091620B	24	40.8980	42.8060	4.6	20

TxtQcType: SD Matrix: SOIL SampleID: AD19178-001 SS-4A

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	85280	S091620B	23	S091620B	21	5	5.5330	27.0120	2.4		20
Beryllium	85280	S091620B	23	S091620B	21	5	0.3290	1.3610	21	a	20
Selenium	85280	S091620B	23	S091620B	21	5	1.1920	5.8740	1.5		20
Silver	85280	S091620B	23	S091620B	21	5	0.0920	0.4620	0.43		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

Data File	Sample ID:	Analysis Date
Spike or Dup: 6M132541.D	MBS89300	9/17/2020 1:39:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	63.7839	0	50	128	20	130
Dichlorodifluoromethane	1	59.0268	0	50	118	20	130
Chloromethane	1	57.3341	0	50	115	20	130
Bromomethane	1	53.6719	0	50	107	20	130
Vinyl Chloride	1	56.3629	0	50	113	20	130
Chloroethane	1	56.8226	0	50	114	20	130
Trichlorofluoromethane	1	58.6156	0	50	117	20	130
Ethyl ether	1	56.8643	0	50	114	50	130
Furan	1	52.7423	0	50	105	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	65.3251	0	50	131*	50	130
Methylene Chloride	1	58.8633	0	50	118	50	130
Acrolein	1	311.2093	0	200	156*	20	130
Acrylonitrile	1	49.746	0	50	99	20	130
Iodomethane	1	74.4734	0	50	149*	50	130
Acetone	1	224.7024	0	200	112	20	130
Carbon Disulfide	1	58.0752	0	50	116	50	130
t-Butyl Alcohol	1	167.8476	0	200	84	20	130
n-Hexane	1	67.5732	0	50	135*	50	130
Di-isopropyl-ether	1	63.7641	0	50	128	50	130
1,1-Dichloroethene	1	62.0946	0	50	124	50	130
Methyl Acetate	1	65.8467	0	50	132*	50	130
Methyl-t-butyl ether	1	65.5948	0	50	131*	50	130
1,1-Dichloroethane	1	58.923	0	50	118	50	130
trans-1,2-Dichloroethene	1	60.9174	0	50	122	50	130
Ethyl-t-butyl ether	1	55.3283	0	50	111	50	130
cis-1,2-Dichloroethene	1	60.3252	0	50	121	50	130
Bromochloromethane	1	60.0202	0	50	120	50	130
2,2-Dichloropropane	1	66.8187	0	50	134*	50	130
Ethyl acetate	1	51.6395	0	50	103	50	130
1,4-Dioxane	1	1853.394	0	2500	74	50	130
1,1-Dichloropropene	1	62.2675	0	50	125	50	130
Chloroform	1	61.0647	0	50	122	50	130
Cyclohexane	1	62.0593	0	50	124	50	130
1,2-Dichloroethane	1	63.2818	0	50	127	50	130
2-Butanone	1	48.2845	0	50	97	20	130
1,1,1-Trichloroethane	1	61.3151	0	50	123	50	130
Carbon Tetrachloride	1	64.7686	0	50	130	50	130
Vinyl Acetate	1	47.1166	0	50	94	50	130
Bromodichloromethane	1	63.7391	0	50	127	50	130
Methylcyclohexane	1	60.8754	0	50	122	50	130
Dibromomethane	1	60.1007	0	50	120	50	130
1,2-Dichloropropane	1	58.2902	0	50	117	50	130
Trichloroethene	1	60.8362	0	50	122	50	130
Benzene	1	60.1494	0	50	120	50	130
tert-Amyl methyl ether	1	62.9327	0	50	126	50	130
Iso-propylacetate	1	44.1683	0	50	88	50	130
Methyl methacrylate	1	43.8225	0	50	88	50	130
Dibromochloromethane	1	49.8745	0	50	100	50	130
2-Chloroethylvinylether	1	103.7397	0	50	207*	50	130
cis-1,3-Dichloropropene	1	48.7084	0	50	97	50	130
trans-1,3-Dichloropropene	1	49.5952	0	50	99	50	130
Ethyl methacrylate	1	46.0418	0	50	92	50	130
1,1,2-Trichloroethane	1	48.6557	0	50	97	50	130
1,2-Dibromoethane	1	49.379	0	50	99	50	130
1,3-Dichloropropane	1	47.7109	0	50	95	50	130
4-Methyl-2-Pentanone	1	40.3707	0	50	81	20	130
2-Hexanone	1	36.9077	0	50	74	20	130
Tetrachloroethene	1	48.3149	0	50	97	50	130
Toluene	1	43.9943	0	50	88	50	130
1,1,1,2-Tetrachloroethane	1	47.6696	0	50	95	50	130
Chlorobenzene	1	44.9722	0	50	90	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

Method: 8260C | Matrix: Soil | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	41.804	0	50	84	50	130
n-Amyl acetate	1	42.0005	0	50	84	50	130
Bromoform	**1**	**67.9123**	**0**	**50**	**136***	**20**	**130**
Ethylbenzene	**1**	**42.5142**	**0**	**50**	**85**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**41.5211**	**0**	**50**	**83**	**50**	**130**
Styrene	**1**	**41.0562**	**0**	**50**	**82**	**50**	**130**
m&p-Xylenes	**1**	**82.9624**	**0**	**100**	**83**	**50**	**130**
o-Xylene	**1**	**40.6001**	**0**	**50**	**81**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	42.8888	0	50	86	20	130
1,3-Dichlorobenzene	**1**	**42.3687**	**0**	**50**	**85**	**50**	**130**
1,4-Dichlorobenzene	**1**	**40.2403**	**0**	**50**	**80**	**50**	**130**
1,2-Dichlorobenzene	**1**	**42.0393**	**0**	**50**	**84**	**50**	**130**
Isopropylbenzene	**1**	**41.5715**	**0**	**50**	**83**	**50**	**130**
Cyclohexanone	1	128.3428	0	250	51	50	130
Camphene	1	42.9626	0	50	86	50	130
1,2,3-Trichloropropane	**1**	**39.937**	**0**	**50**	**80**	**50**	**130**
2-Chlorotoluene	1	43.3241	0	50	87	50	130
p-Ethyltoluene	1	41.1058	0	50	82	50	130
4-Chlorotoluene	1	45.4822	0	50	91	50	130
n-Propylbenzene	**1**	**43.1704**	**0**	**50**	**86**	**50**	**130**
Bromobenzene	1	41.5058	0	50	83	50	130
1,3,5-Trimethylbenzene	**1**	**47.0482**	**0**	**50**	**94**	**50**	**130**
Butyl methacrylate	1	42.3338	0	50	85	50	130
t-Butylbenzene	**1**	**42.6301**	**0**	**50**	**85**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**42.996**	**0**	**50**	**86**	**50**	**130**
sec-Butylbenzene	**1**	**44.8208**	**0**	**50**	**90**	**50**	**130**
4-Isopropyltoluene	**1**	**44.7488**	**0**	**50**	**89**	**50**	**130**
n-Butylbenzene	**1**	**45.2423**	**0**	**50**	**90**	**50**	**130**
p-Diethylbenzene	1	44.2677	0	50	89	50	130
1,2,4,5-Tetramethylbenzene	1	44.2703	0	50	89	50	130
1,2-Dibromo-3-Chloropropane	1	36.8726	0	50	74	50	130
Camphor	1	474.0762	0	500	95	50	130
Hexachlorobutadiene	1	42.148	0	50	84	50	130
1,2,4-Trichlorobenzene	1	41.4291	0	50	83	50	130
1,2,3-Trichlorobenzene	1	40.7301	0	50	81	50	130
Naphthalene	1	37.1703	0	50	74	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M132542.D	AD19283-006(MS)	9/17/2020 2:00:00 PM
Non Spike(If applicable):	6M132540.D	AD19283-006	9/17/2020 1:19:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	64.7742	0	50	130	20	130
Dichlorodifluoromethane	1	45.1906	0	50	90	20	130
Chloromethane	1	44.7465	0	50	89	20	130
Bromomethane	1	44.0331	0	50	88	20	130
Vinyl Chloride	1	46.093	0	50	92	20	130
Chloroethane	1	45.0962	0	50	90	20	130
Trichlorofluoromethane	1	46.1301	0	50	92	20	130
Ethyl ether	1	46.398	0	50	93	50	130
Furan	1	42.7872	0	50	86	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	49.2	0	50	98	50	130
Methylene Chloride	1	44.51	0	50	89	50	130
Acrolein	1	143.4404	0	200	72	20	130
Acrylonitrile	1	35.8528	0	50	72	20	130
Iodomethane	1	58.7058	0	50	117	50	130
Acetone	1	174.1374	0	200	87	20	130
Carbon Disulfide	1	43.0984	0	50	86	50	130
t-Butyl Alcohol	1	129.6621	0	200	65	20	130
n-Hexane	1	47.0845	0	50	94	50	130
Di-isopropyl-ether	1	50.6189	0	50	101	50	130
1,1-Dichloroethene	1	48.3692	0	50	97	50	130
Methyl Acetate	1	60.7803	0	50	122	50	130
Methyl-t-butyl ether	1	54.096	0	50	108	50	130
1,1-Dichloroethane	1	47.5492	0	50	95	50	130
trans-1,2-Dichloroethene	1	46.0283	0	50	92	50	130
Ethyl-t-butyl ether	1	46.8355	0	50	94	50	130
cis-1,2-Dichloroethene	1	46.8461	0	50	94	50	130
Bromochloromethane	1	49.1152	0	50	98	50	130
2,2-Dichloropropane	1	52.6942	0	50	105	50	130
Ethyl acetate	1	29.6919	0	50	59	50	130
1,4-Dioxane	1	1393.228	0	2500	56	50	130
1,1-Dichloropropene	1	47.4642	0	50	95	50	130
Chloroform	1	49.2247	0	50	98	50	130
Cyclohexane	1	47.2544	0	50	95	50	130
1,2-Dichloroethane	1	50.5993	0	50	101	50	130
2-Butanone	1	35.0116	0	50	70	20	130
1,1,1-Trichloroethane	1	48.393	0	50	97	50	130
Carbon Tetrachloride	1	49.2225	0	50	98	50	130
Vinyl Acetate	1	26.7753	0	50	54	50	130
Bromodichloromethane	1	51.4302	0	50	103	50	130
Methylcyclohexane	1	43.6548	0	50	87	50	130
Dibromomethane	1	51.2331	0	50	102	50	130
1,2-Dichloropropane	1	46.4778	0	50	93	50	130
Trichloroethene	1	47.2894	0	50	95	50	130
Benzene	1	47.2684	0	50	95	50	130
tert-Amyl methyl ether	1	51.0368	0	50	102	50	130
Iso-propylacetate	1	32.0845	0	50	64	50	130
Methyl methacrylate	1	50.658	0	50	101	50	130
Dibromochloromethane	1	40.5709	0	50	81	50	130
2-Chloroethylvinylether	1	85.9316	0	50	172*	50	130
cis-1,3-Dichloropropene	1	39.136	0	50	78	50	130
trans-1,3-Dichloropropene	1	40.2661	0	50	81	50	130
Ethyl methacrylate	1	29.9644	0	50	60	50	130
1,1,2-Trichloroethane	1	39.9355	0	50	80	50	130
1,2-Dibromoethane	1	39.5143	0	50	79	50	130
1,3-Dichloropropane	1	39.0032	0	50	78	50	130
4-Methyl-2-Pentanone	1	32.2657	0	50	65	20	130
2-Hexanone	1	29.902	0	50	60	20	130
Tetrachloroethene	1	36.0758	0	50	72	50	130
Toluene	1	35.197	0	50	70	50	130
1,1,1,2-Tetrachloroethane	1	38.7295	0	50	77	50	130
Chlorobenzene	1	34.966	0	50	70	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

Method: 8260C	Matrix: Soil	QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	26.4058	0	50	53	50	130
n-Amyl acetate	1	20.8648	0	50	42*	50	130
Bromoform	**1**	**54.2103**	**0**	**50**	**108**	**20**	**130**
Ethylbenzene	**1**	**34.0166**	**0**	**50**	**68**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**33.8868**	**0**	**50**	**68**	**50**	**130**
Styrene	**1**	**31.3754**	**0**	**50**	**63**	**50**	**130**
m&p-Xylenes	**1**	**63.8587**	**0**	**100**	**64**	**50**	**130**
o-Xylene	**1**	**31.5526**	**0**	**50**	**63**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	30.8125	0	50	62	20	130
1,3-Dichlorobenzene	**1**	**30.1803**	**0**	**50**	**60**	**50**	**130**
1,4-Dichlorobenzene	**1**	**29.3631**	**0**	**50**	**59**	**50**	**130**
1,2-Dichlorobenzene	**1**	**30.2778**	**0**	**50**	**61**	**50**	**130**
Isopropylbenzene	**1**	**32.0661**	**0**	**50**	**64**	**50**	**130**
Cyclohexanone	1	103.4941	0	250	41*	50	130
Camphene	1	27.1146	0	50	54	50	130
1,2,3-Trichloropropane	**1**	**32.0142**	**0**	**50**	**64**	**50**	**130**
2-Chlorotoluene	1	33.4725	0	50	67	50	130
p-Ethyltoluene	1	30.7714	0	50	62	50	130
4-Chlorotoluene	1	32.9825	0	50	66	50	130
n-Propylbenzene	**1**	**32.1153**	**0**	**50**	**64**	**50**	**130**
Bromobenzene	1	30.791	0	50	62	50	130
1,3,5-Trimethylbenzene	**1**	**35.161**	**0**	**50**	**70**	**50**	**130**
Butyl methacrylate	1	27.5838	0	50	55	50	130
t-Butylbenzene	**1**	**31.0009**	**0**	**50**	**62**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**32.2028**	**0**	**50**	**64**	**50**	**130**
sec-Butylbenzene	**1**	**30.2751**	**0**	**50**	**61**	**50**	**130**
4-Isopropyltoluene	**1**	**30.6962**	**0**	**50**	**61**	**50**	**130**
n-Butylbenzene	**1**	**29.2736**	**0**	**50**	**59**	**50**	**130**
p-Diethylbenzene	1	29.6348	0	50	59	50	130
1,2,4,5-Tetramethylbenzene	1	29.6141	0	50	59	50	130
1,2-Dibromo-3-Chloropropane	1	27.8283	0	50	56	50	130
Camphor	1	401.4661	0	500	80	50	130
Hexachlorobutadiene	1	18.6257	0	50	37*	50	130
1,2,4-Trichlorobenzene	1	23.0528	0	50	46*	50	130
1,2,3-Trichlorobenzene	1	21.3084	0	50	43*	50	130
Naphthalene	1	23.178	0	50	46*	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M132543.D	AD19283-006(MSD)	9/17/2020 2:21:00 PM
Non Spike(If applicable):	6M132540.D	AD19283-006	9/17/2020 1:19:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	53.5868	0	50	107	20	130
Dichlorodifluoromethane	1	56.2445	0	50	112	20	130
Chloromethane	1	55.8238	0	50	112	20	130
Bromomethane	1	55.9258	0	50	112	20	130
Vinyl Chloride	1	57.2243	0	50	114	20	130
Chloroethane	1	56.6026	0	50	113	20	130
Trichlorofluoromethane	1	58.1494	0	50	116	20	130
Ethyl ether	1	56.4034	0	50	113	50	130
Furan	1	53.6025	0	50	107	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	61.9143	0	50	124	50	130
Methylene Chloride	1	57.1644	0	50	114	50	130
Acrolein	1	190.1136	0	200	95	20	130
Acrylonitrile	1	41.7692	0	50	84	20	130
Iodomethane	1	72.4683	0	50	145*	50	130
Acetone	1	198.5386	0	200	99	20	130
Carbon Disulfide	1	52.9301	0	50	106	50	130
t-Butyl Alcohol	1	144.6204	0	200	72	20	130
n-Hexane	1	61.2966	0	50	123	50	130
Di-isopropyl-ether	1	63.4106	0	50	127	50	130
1,1-Dichloroethene	1	59.8916	0	50	120	50	130
Methyl Acetate	1	73.572	0	50	147*	50	130
Methyl-t-butyl ether	1	67.5456	0	50	135*	50	130
1,1-Dichloroethane	1	60.1723	0	50	120	50	130
trans-1,2-Dichloroethene	1	57.0738	0	50	114	50	130
Ethyl-t-butyl ether	1	58.7923	0	50	118	50	130
cis-1,2-Dichloroethene	1	59.1104	0	50	118	50	130
Bromochloromethane	1	60.479	0	50	121	50	130
2,2-Dichloropropane	1	66.4509	0	50	133*	50	130
Ethyl acetate	1	38.0396	0	50	76	50	130
1,4-Dioxane	1	1665.665	0	2500	67	50	130
1,1-Dichloropropene	1	60.8343	0	50	122	50	130
Chloroform	1	60.5195	0	50	121	50	130
Cyclohexane	1	59.0496	0	50	118	50	130
1,2-Dichloroethane	1	63.7527	0	50	128	50	130
2-Butanone	1	41.6932	0	50	83	20	130
1,1,1-Trichloroethane	1	61.3767	0	50	123	50	130
Carbon Tetrachloride	1	63.3933	0	50	127	50	130
Vinyl Acetate	1	34.9941	0	50	70	50	130
Bromodichloromethane	1	63.756	0	50	128	50	130
Methylcyclohexane	1	54.9876	0	50	110	50	130
Dibromomethane	1	63.2225	0	50	126	50	130
1,2-Dichloropropane	1	59.2685	0	50	119	50	130
Trichloroethene	1	59.1943	0	50	118	50	130
Benzene	1	60.7508	0	50	122	50	130
tert-Amyl methyl ether	1	64.623	0	50	129	50	130
Iso-propylacetate	1	39.2526	0	50	79	50	130
Methyl methacrylate	1	60.0027	0	50	120	50	130
Dibromochloromethane	1	51.6125	0	50	103	50	130
2-Chloroethylvinylether	1	105.3625	0	50	211*	50	130
cis-1,3-Dichloropropene	1	48.2874	0	50	97	50	130
trans-1,3-Dichloropropene	1	49.1696	0	50	98	50	130
Ethyl methacrylate	1	38.9701	0	50	78	50	130
1,1,2-Trichloroethane	1	48.9709	0	50	98	50	130
1,2-Dibromoethane	1	47.4204	0	50	95	50	130
1,3-Dichloropropane	1	48.6332	0	50	97	50	130
4-Methyl-2-Pentanone	1	37.6965	0	50	75	20	130
2-Hexanone	1	32.6901	0	50	65	20	130
Tetrachloroethene	1	46.7026	0	50	93	50	130
Toluene	1	44.1482	0	50	88	50	130
1,1,1,2-Tetrachloroethane	1	48.5604	0	50	97	50	130
Chlorobenzene	1	44.2936	0	50	89	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89300

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	35.1896	0	50	70	50	130
n-Amyl acetate	1	28.5513	0	50	57	50	130
Bromoform	**1**	**69.1723**	**0**	**50**	**138***	**20**	**130**
Ethylbenzene	**1**	**44.5852**	**0**	**50**	**89**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**42.382**	**0**	**50**	**85**	**50**	**130**
Styrene	**1**	**41.5523**	**0**	**50**	**83**	**50**	**130**
m&p-Xylenes	**1**	**84.8346**	**0**	**100**	**85**	**50**	**130**
o-Xylene	**1**	**41.8252**	**0**	**50**	**84**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	39.0256	0	50	78	20	130
1,3-Dichlorobenzene	**1**	**39.5706**	**0**	**50**	**79**	**50**	**130**
1,4-Dichlorobenzene	**1**	**38.1803**	**0**	**50**	**76**	**50**	**130**
1,2-Dichlorobenzene	**1**	**40.0448**	**0**	**50**	**80**	**50**	**130**
Isopropylbenzene	**1**	**42.1391**	**0**	**50**	**84**	**50**	**130**
Cyclohexanone	1	115.1208	0	250	46*	50	130
Camphene	1	36.8254	0	50	74	50	130
1,2,3-Trichloropropane	**1**	**39.5663**	**0**	**50**	**79**	**50**	**130**
2-Chlorotoluene	1	43.119	0	50	86	50	130
p-Ethyltoluene	1	40.5838	0	50	81	50	130
4-Chlorotoluene	1	43.5239	0	50	87	50	130
n-Propylbenzene	**1**	**42.394**	**0**	**50**	**85**	**50**	**130**
Bromobenzene	1	40.6803	0	50	81	50	130
1,3,5-Trimethylbenzene	**1**	**45.5383**	**0**	**50**	**91**	**50**	**130**
Butyl methacrylate	1	38.912	0	50	78	50	130
t-Butylbenzene	**1**	**41.4871**	**0**	**50**	**83**	**50**	**130**
1,2,4-Trimethylbenzene	**1**	**42.6087**	**0**	**50**	**85**	**50**	**130**
sec-Butylbenzene	**1**	**41.3353**	**0**	**50**	**83**	**50**	**130**
4-Isopropyltoluene	**1**	**41.3754**	**0**	**50**	**83**	**50**	**130**
n-Butylbenzene	**1**	**39.7442**	**0**	**50**	**79**	**50**	**130**
p-Diethylbenzene	1	40.4447	0	50	81	50	130
1,2,4,5-Tetramethylbenzene	1	39.7031	0	50	79	50	130
1,2-Dibromo-3-Chloropropane	1	33.1673	0	50	66	50	130
Camphor	1	464.3459	0	500	93	50	130
Hexachlorobutadiene	1	23.9836	0	50	48*	50	130
1,2,4-Trichlorobenzene	1	30.2474	0	50	60	50	130
1,2,3-Trichlorobenzene	1	27.3776	0	50	55	50	130
Naphthalene	1	28.712	0	50	57	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89300

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M132543.D	AD19283-006(MSD)	9/17/2020 2:21:00 PM
Duplicate(If applicable):	6M132542.D	AD19283-006(MS)	9/17/2020 2:00:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	53.5868	64.7742	19	30
Dichlorodifluoromethane	**1**	**56.2445**	**45.1906**	**22**	**30**
Chloromethane	**1**	**55.8238**	**44.7465**	**22**	**30**
Bromomethane	**1**	**55.9258**	**44.0331**	**24**	**30**
Vinyl Chloride	**1**	**57.2243**	**46.093**	**22**	**40**
Chloroethane	**1**	**56.6026**	**45.0962**	**23**	**30**
Trichlorofluoromethane	**1**	**58.1494**	**46.1301**	**23**	**30**
Ethyl ether	1	56.4034	46.398	19	30
Furan	1	53.6025	42.7872	22	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**61.9143**	**49.2**	**23**	**30**
Methylene Chloride	**1**	**57.1644**	**44.51**	**25**	**30**
Acrolein	**1**	**190.1136**	**143.4404**	**28**	**30**
Acrylonitrile	**1**	**41.7692**	**35.8528**	**15**	**30**
Iodomethane	1	72.4683	58.7058	21	30
Acetone	**1**	**198.5386**	**174.1374**	**13**	**30**
Carbon Disulfide	**1**	**52.9301**	**43.0984**	**20**	**30**
t-Butyl Alcohol	**1**	**144.6204**	**129.6621**	**11**	**30**
n-Hexane	1	61.2966	47.0845	26	30
Di-isopropyl-ether	1	63.4106	50.6189	22	30
1,1-Dichloroethene	**1**	**59.8916**	**48.3692**	**21**	**40**
Methyl Acetate	1	73.572	60.7803	19	30
Methyl-t-butyl ether	**1**	**67.5456**	**54.096**	**22**	**30**
1,1-Dichloroethane	**1**	**60.1723**	**47.5492**	**23**	**40**
trans-1,2-Dichloroethene	**1**	**57.0738**	**46.0283**	**21**	**30**
Ethyl-t-butyl ether	1	58.7923	46.8355	23	30
cis-1,2-Dichloroethene	**1**	**59.1104**	**46.8461**	**23**	**30**
Bromochloromethane	1	60.479	49.1152	21	30
2,2-Dichloropropane	1	66.4509	52.6942	23	30
Ethyl acetate	1	38.0396	29.6919	25	30
1,4-Dioxane	**1**	**1665.665**	**1393.228**	**18**	**30**
1,1-Dichloropropene	1	60.8343	47.4642	25	30
Chloroform	**1**	**60.5195**	**49.2247**	**21**	**40**
Cyclohexane	1	59.0496	47.2544	22	30
1,2-Dichloroethane	**1**	**63.7527**	**50.5993**	**23**	**40**
2-Butanone	**1**	**41.6932**	**35.0116**	**17**	**40**
1,1,1-Trichloroethane	**1**	**61.3767**	**48.393**	**24**	**30**
Carbon Tetrachloride	**1**	**63.3933**	**49.2225**	**25**	**40**
Vinyl Acetate	1	34.9941	26.7753	27	30
Bromodichloromethane	**1**	**63.756**	**51.4302**	**21**	**30**
Methylcyclohexane	1	54.9876	43.6548	23	30
Dibromomethane	1	63.2225	51.2331	21	30
1,2-Dichloropropane	**1**	**59.2685**	**46.4778**	**24**	**30**
Trichloroethene	**1**	**59.1943**	**47.2894**	**22**	**40**
Benzene	**1**	**60.7508**	**47.2684**	**25**	**40**
tert-Amyl methyl ether	1	64.623	51.0368	23	30
Iso-propylacetate	1	39.2526	32.0845	20	30
Methyl methacrylate	1	60.0027	50.658	17	30
Dibromochloromethane	**1**	**51.6125**	**40.5709**	**24**	**30**
2-Chloroethylvinylether	**1**	**105.3625**	**85.9316**	**20**	**30**
cis-1,3-Dichloropropene	**1**	**48.2874**	**39.136**	**21**	**30**
trans-1,3-Dichloropropene	**1**	**49.1696**	**40.2661**	**20**	**30**
Ethyl methacrylate	1	38.9701	29.9644	26	30
1,1,2-Trichloroethane	**1**	**48.9709**	**39.9355**	**20**	**30**
1,2-Dibromoethane	1	47.4204	39.5143	18	30
1,3-Dichloropropane	**1**	**48.6332**	**39.0032**	**22**	**30**
4-Methyl-2-Pentanone	**1**	**37.6965**	**32.2657**	**16**	**30**
2-Hexanone	**1**	**32.6901**	**29.902**	**8.9**	**30**
Tetrachloroethene	**1**	**46.7026**	**36.0758**	**26**	**40**
Toluene	**1**	**44.1482**	**35.197**	**23**	**40**
1,1,1,2-Tetrachloroethane	1	48.5604	38.7295	23	30
Chlorobenzene	**1**	**44.2936**	**34.966**	**24**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89300

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	35.1896	26.4058	29	30
n-Amyl acetate	1	28.5513	20.8648	31 *	30
Bromoform	**1**	**69.1723**	**54.2103**	**24**	**30**
Ethylbenzene	**1**	**44.5852**	**34.0166**	**27**	**30**
1,1,2,2-Tetrachloroethane	**1**	**42.382**	**33.8868**	**22**	**30**
Styrene	**1**	**41.5523**	**31.3754**	**28**	**30**
m&p-Xylenes	**1**	**84.8346**	**63.8587**	**28**	**30**
o-Xylene	**1**	**41.8252**	**31.5526**	**28**	**30**
trans-1,4-Dichloro-2-butene	1	39.0256	30.8125	24	30
1,3-Dichlorobenzene	**1**	**39.5706**	**30.1803**	**27**	**30**
1,4-Dichlorobenzene	**1**	**38.1803**	**29.3631**	**26**	**40**
1,2-Dichlorobenzene	**1**	**40.0448**	**30.2778**	**28**	**40**
Isopropylbenzene	**1**	**42.1391**	**32.0661**	**27**	**30**
Cyclohexanone	1	115.1208	103.4941	11	30
Camphene	1	36.8254	27.1146	30	30
1,2,3-Trichloropropane	**1**	**39.5663**	**32.0142**	**21**	**30**
2-Chlorotoluene	1	43.119	33.4725	25	30
p-Ethyltoluene	1	40.5838	30.7714	28	30
4-Chlorotoluene	1	43.5239	32.9825	28	30
n-Propylbenzene	**1**	**42.394**	**32.1153**	**28**	**40**
Bromobenzene	1	40.6803	30.791	28	30
1,3,5-Trimethylbenzene	**1**	**45.5383**	**35.161**	**26**	**30**
Butyl methacrylate	1	38.912	27.5838	34 *	30
t-Butylbenzene	**1**	**41.4871**	**31.0009**	**29**	**30**
1,2,4-Trimethylbenzene	**1**	**42.6087**	**32.2028**	**28**	**30**
sec-Butylbenzene	**1**	**41.3353**	**30.2751**	**31**	**40**
4-Isopropyltoluene	**1**	**41.3754**	**30.6962**	**30**	**30**
n-Butylbenzene	**1**	**39.7442**	**29.2736**	**30**	**30**
p-Diethylbenzene	1	40.4447	29.6348	31 *	30
1,2,4,5-Tetramethylbenzene	1	39.7031	29.6141	29	30
1,2-Dibromo-3-Chloropropane	1	33.1673	27.8283	18	30
Camphor	1	464.3459	401.4661	15	30
Hexachlorobutadiene	1	23.9836	18.6257	25	30
1,2,4-Trichlorobenzene	1	30.2474	23.0528	27	30
1,2,3-Trichlorobenzene	1	27.3776	21.3084	25	30
Naphthalene	1	28.712	23.178	21	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

0091101 0111

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M132533.D Method: EPA 8260C

Analysis Date/Time: 09/17/20 10:54

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	256311	5.12	281017	6.76	183778	8.05								
Eval File Area Limit:	128156-512622		140508-562034		91889-367556									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.55-8.55									

Data File	Sample#						
6M132534.D	50 PPB	264011	5.12	287374	6.76	183693	8.05
6M132535.D	BLK	260487	5.12	291196	6.76	177376	8.05
6M132536.D	BLK	284038	5.12	328263	6.76	200011	8.05
6M132537.D	BLK	276211	5.12	313016	6.76	191471	8.05
6M132538.D	DAILY BLANK	280410	5.12	311766	6.76	186117	8.05
6M132539.D	AD19263-002	258620	5.12	269164	6.76	143418	8.05
6M132540.D	AD19283-006	277457	5.12	307195	6.76	178376	8.05
6M132541.D	MBS89300	280964	5.13	303747	6.76	198012	8.05
6M132542.D	AD19283-006(MS)	296485	5.12	318320	6.76	203111	8.05
6M132543.D	AD19283-006(MSD)	306766	5.12	330755	6.76	203739	8.05
6M132544.D	BLK	280284	5.12	313820	6.76	193885	8.05
6M132545.D	BLK	275121	5.12	306297	6.76	185439	8.05
6M132546.D	AD19254-003	218503	5.12	192096	6.76	86200A	8.06
6M132547.D	AD19254-002	188877	5.13	165012	6.76	79666A	8.05
6M132548.D	AD19231-001	227058	5.12	246579	6.76	137679	8.05
6M132549.D	AD19231-002	230969	5.12	246464	6.76	128457	8.05
6M132550.D	AD19231-003	274459	5.12	321816	6.76	200025	8.05
6M132551.D	AD19238-001	259922	5.12	262022	6.76	122869	8.05
6M132552.D	AD19239-001	251469	5.12	263305	6.76	121985	8.05
6M132553.D	AD19240-001	220406	5.12	233646	6.76	126480	8.05
6M132554.D	AD19242-001	243816	5.12	279156	6.76	171524	8.05
6M132555.D	AD19242-002	254242	5.12	297340	6.76	191783	8.05
6M132556.D	AD19242-003	244133	5.12	282358	6.76	170895	8.05
6M132557.D	BLK	256288	5.12	293154	6.76	181545	8.05
6M132558.D	AD19257-004	263492	5.12	308253	6.76	182343	8.05
6M132559.D	AD19257-008	242757	5.12	247904	6.76	133519	8.05
6M132560.D	AD19257-010	260556	5.12	305531	6.76	185872	8.05
6M132561.D	AD19257-011	255972	5.12	295776	6.76	168556	8.05
6M132562.D	AD19257-012	259649	5.12	299093	6.76	183747	8.05
6M132563.D	AD19257-013	258186	5.12	300378	6.76	181791	8.05
6M132564.D	AD19178-013	220550	5.12	198796	6.76	87866A	8.05
6M132565.D	AD19224-001(5X)	236500	5.12	291314	6.76	183720	8.05

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0091101 0152

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M82676.D	CAL @ 20 PPB	09/11/20 21:35	2	11M82674.D	CAL @ 5 PPB	09/11/20 20:58
3	11M82675.D	CAL @ 10 PPB	09/11/20 21:17	4	11M82678.D	CAL @ 50 PPB	09/11/20 22:12
5	11M82686.D	CAL @ 100 PPB	09/12/20 00:39	6	11M82673.D	CAL @ 1 PPB	09/11/20 20:40
7	11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.2849	0.2543	0.2697	0.2583	0.2729	-----	-----	0.2688	-----	0.268	1.67	0.999	0.999	4.1	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Dichlorodifluorometha	1	0	Avg	0.1652	0.1623	0.1768	0.1567	0.1792	-----	-----	0.1262	-----	0.161	1.66	0.996	0.999	12	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Chloromethane	1	0	Avg	0.1864	0.1709	0.1771	0.1593	0.1727	-----	-----	0.1509	-----	0.170	1.84	0.998	0.999	7.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Bromomethane	1	0	Avg	0.1678	0.1752	0.1819	0.1509	0.2001	-----	-----	0.1780	-----	0.176	2.20	0.984	0.998	9.2	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Vinyl Chloride	1	0	Avg	0.2293	0.2252	0.2299	0.2035	0.2235	-----	-----	0.1971	-----	0.218	1.94	0.998	0.999	6.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Chloroethane	1	0	Avg	0.1563	0.1492	0.1551	0.1430	0.1502	-----	-----	0.1347	-----	0.148	2.29	0.999	0.999	5.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Trichlorofluoromethan	1	0	Avg	0.3507	0.3630	0.3868	0.3366	0.3986	-----	-----	0.3274	-----	0.361	2.53	0.994	0.999	7.8	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl ether	1	0	Avg	0.1311	0.1351	0.1292	0.1140	0.1292	-----	-----	0.1012	-----	0.123	2.77	0.996	0.999	11	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Furan	1	0	Avg	0.2290	0.2257	0.2205	0.1996	0.2322	-----	-----	0.2647	-----	0.229	2.81	0.995	0.999	9.2	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1279	0.1562	0.1583	0.1347	0.1586	-----	-----	0.1375	-----	0.146	2.96	0.993	0.999	9.4	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Methylene Chloride	1	0	Avg	0.2144	0.2100	0.2183	0.1914	0.2125	-----	-----	0.2541	-----	0.217	3.37	0.997	0.999	9.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Acrolein	1	0	Avg	0.0282	0.0251	0.0274	0.0263	0.0280	-----	-----	0.0196	-----	0.0258	2.88	0.999	1.00	12		100.0	25.00	50.00	250.0	500.0			5.00	
Acrylonitrile	1	0	Qua	0.0702	0.0686	0.0710	0.0651	0.0703	-----	-----	0.0342	-----	0.0633	3.57	0.999	0.999	23		20.00	5.00	10.00	50.00	100.0			1.00	
Iodomethane	1	0	Qua	0.2073	0.1238	0.1658	0.2196	0.2349	-----	-----	0.0853	-----	0.173	3.11	0.999	1.00	34		20.00	5.00	10.00	50.00	100.0			1.00	
Acetone	1	0	Avg	0.0498	0.0555	0.0528	0.0447	0.0481	-----	-----	0.0585	-----	0.0516	3.01	0.998	0.999	9.8	0.10 a	100.0	25.00	50.00	250.0	500.0			5.00	
Carbon Disulfide	1	0	Avg	0.4902	0.4578	0.4764	0.4811	0.5579	-----	-----	0.4966	-----	0.493	3.18	0.995	1.00	7.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
t-Butyl Alcohol	1	0	Avg	0.0121	0.0124	0.0129	0.0113	0.0147	-----	-----	0.0114	-----	0.0125	3.45	0.986	0.999	10		100.0	25.00	50.00	250.0	500.0			5.00	
n-Hexane	1	0	Avg	0.1310	0.1577	0.1706	0.1550	0.1720	-----	-----	0.1342	-----	0.153	3.81	0.996	0.999	11		20.00	5.00	10.00	50.00	100.0			1.00	
Di-isopropyl-ether	1	0	Avg	0.4549	0.4061	0.4359	0.4100	0.4564	-----	-----	0.3869	-----	0.425	3.95	0.997	0.999	6.7		20.00	5.00	10.00	50.00	100.0			1.00	
1,1-Dichloroethene	1	0	Avg	0.2777	0.2625	0.2787	0.2601	0.2908	-----	-----	0.2233	-----	0.266	2.97	0.997	0.999	8.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Methyl Acetate	1	0	Qua	0.1169	0.1273	0.1241	0.1076	0.1179	-----	-----	0.0838	0.0678	0.107	3.27	0.998	0.999	21	0.10 a	20.00	5.00	10.00	50.00	100.0			1.00	0.50
Methyl-t-butyl ether	1	0	Avg	0.4805	0.4390	0.4723	0.4599	0.5188	-----	-----	0.3892	0.4515	0.459	3.59	0.997	1.00	8.7	0.10	20.00	5.00	10.00	50.00	100.0			1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.3622	0.3363	0.3484	0.3383	0.3624	-----	-----	0.3205	-----	0.345	3.92	0.999	1.00	4.7	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2133	0.1927	0.2075	0.1906	0.2270	-----	-----	0.1952	-----	0.204	3.60	0.994	0.999	6.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl-t-butyl ether	1	0	Avg	0.4877	0.4457	0.4641	0.4690	0.5253	-----	-----	0.4067	-----	0.466	4.20	0.997	1.00	8.5	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.3598	0.3226	0.3449	0.3264	0.3625	-----	-----	0.3024	-----	0.336	4.31	0.997	0.999	7.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Bromochloromethane	1	0	Avg	0.1496	0.1398	0.1503	0.1428	0.1470	-----	-----	0.1256	-----	0.143	4.45	1.00	1.00	6.5		20.00	5.00	10.00	50.00	100.0			1.00	
2,2-Dichloropropane	1	0	Avg	0.2893	0.2602	0.2884	0.2790	0.3039	-----	-----	0.2132	-----	0.272	4.31	0.998	1.00	12		20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl acetate	1	0	Avg	0.1793	0.1699	0.1938	0.1684	0.1707	-----	-----	0.1304	-----	0.169	4.33	1.00	1.00	12		20.00	5.00	10.00	50.00	100.0			1.00	
1,4-Dioxane	1	0	Avg	0.0018	0.0018	0.0017	0.0014	0.0022	-----	-----	0.0019	-----	0.00186	5.34	0.968	0.996	14		1000.	250.0	500.0	2500.	5000.			50.00	
1,1-Dichloropropene	1	0	Avg	0.3004	0.2872	0.3188	0.3044	0.3302	-----	-----	0.2527	-----	0.299	4.70	0.998	1.00	9.1		20.00	5.00	10.00	50.00	100.0			1.00	
Chloroform	1	0	Avg	0.4134	0.3707	0.3997	0.3667	0.4075	-----	-----	0.3257	-----	0.381	4.49	0.997	0.999	8.7	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
Dibromofluoromethan	1	0	Avg	0.2448	0.2509	0.2569	0.2539	0.2487	-----	-----	0.2500	0.2451	0.250	4.58	-1	-1	1.8		30.00	30.00	30.00	30.00	30.00			30.00	30.00
Cyclohexane	1	0	Avg	0.2329	0.2472	0.2792	0.2487	0.2800	-----	-----	0.2206	-----	0.251	4.65	0.996	1.00	9.6	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1274	0.1335	0.1327	0.1258	0.1251	-----	-----	0.1364	0.1373	0.131	4.78	-1	-1	3.8		30.00	30.00	30.00	30.00	30.00			30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3035	0.2906	0.3030	0.2755	0.3044	-----	-----	0.2807	0.2982	0.294	4.82	0.998	0.999	4.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	0.50
2-Butanone	1	0	Avg	0.0736	0.0767	0.0624	0.0568	0.0736	-----	-----	0.0893	-----	0.0721	4.30	0.986	0.996	16	0.10 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,1-Trichloroethane	1	0	Avg	0.3554	0.3228	0.3601	0.3479	0.3767	-----	-----	0.3000	-----	0.344	4.61	0.999	1.00	8.1	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Carbon Tetrachloride	1	0	Avg	0.2863	0.2649	0.3111	0.3045	0.3450	-----	-----	0.2216	-----	0.289	4.71	0.997	1.00	15	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Vinyl Acetate	1	0	Avg	0.5220	0.4593	0.5144	0.5106	0.5596	-----	-----	0.4428	-----	0.502	3.94	0.998	1.00	8.6		20.00	5.00	10.00	50.00	100.0			1.00	
Bromodichloromethan	1	0	Avg	0.3038	0.2680	0.2754	0.2972	0.3190	-----	-----	0.2589	-----	0.287	5.41	0.999	1.00	8.1	0.20	20.00	5.00	10.00	50.00	100.0			1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Avg Rsd: 9.934

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M82676.D	CAL @ 20 PPB	09/11/20 21:35	2	11M82674.D	CAL @ 5 PPB	09/11/20 20:58
3	11M82675.D	CAL @ 10 PPB	09/11/20 21:17	4	11M82678.D	CAL @ 50 PPB	09/11/20 22:12
5	11M82686.D	CAL @ 100 PPB	09/12/20 00:39	6	11M82673.D	CAL @ 1 PPB	09/11/20 20:40
7	11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.2076	0.2345	0.2602	0.2536	0.2871	-----	-----	0.1822	-----	0.238	5.27	0.995	0.999	16	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Dibromomethane	1	0	Avg	0.1444	0.1243	0.1395	0.1468	0.1582	-----	-----	0.1184	-----	0.139	5.34	0.999	1.00	11		20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dichloropropane	1	0	Avg	0.2080	0.1854	0.2103	0.2052	0.2151	-----	-----	0.1686	-----	0.199	5.28	1.00	1.00	9.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Trichloroethene	1	0	Avg	0.2436	0.2121	0.2417	0.2474	0.2589	-----	-----	0.2216	-----	0.238	5.16	1.00	1.00	7.3	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
Benzene	1	0	Avg	0.8920	0.8280	0.8776	0.8380	0.9406	-----	-----	0.7773	0.7888	0.849	4.82	0.997	0.999	6.9	0.50	20.00	5.00	10.00	50.00	100.0			1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.4955	0.4209	0.4673	0.4796	0.5378	-----	-----	0.3901	-----	0.465	4.86	0.997	1.00	11		20.00	5.00	10.00	50.00	100.0			1.00	
Iso-propylacetate	1	0	Avg	0.3560	0.3043	0.3342	0.3407	0.3657	-----	-----	0.2934	-----	0.332	4.81	0.999	1.00	8.6	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Methyl methacrylate	1	0	Avg	0.2018	0.1753	0.2080	0.1967	0.2106	-----	-----	0.2122	-----	0.201	5.30	0.999	1.00	6.9	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Dibromochloromethan	1	0	Avg	0.2913	0.2471	0.2825	0.3106	0.3419	-----	-----	0.2006	-----	0.279	6.24	0.998	1.00	18	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
2-Chloroethylvinylethe	1	0	Qua	0.0611	0.0538	0.0591	0.0598	0.0657	-----	-----	0.0196	-----	0.0532	5.54	0.998	1.00	32		20.00	5.00	10.00	50.00	100.0			1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.4230	0.3453	0.3827	0.4215	0.4627	-----	-----	0.3458	-----	0.397	5.64	0.998	1.00	12	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,3-Dichloroprop	1	0	Avg	0.4012	0.3231	0.3787	0.4178	0.4384	-----	-----	0.3028	-----	0.377	5.92	1.00	1.00	14	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl methacrylate	1	0	Avg	0.1877	0.1675	0.1819	0.1924	0.1887	-----	-----	0.1255	-----	0.174	5.94	1.00	1.00	15	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2747	0.2470	0.2710	0.2666	0.2793	-----	-----	0.2541	-----	0.266	6.02	1.00	1.00	4.7	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dibromoethane	1	0	Avg	0.2881	0.2595	0.2784	0.2966	0.3138	-----	-----	0.2442	-----	0.280	6.32	0.999	1.00	9.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,3-Dichloropropane	1	0	Avg	0.4608	0.4136	0.4499	0.4556	0.4724	-----	-----	0.3793	-----	0.439	6.11	1.00	1.00	8.0		20.00	5.00	10.00	50.00	100.0			1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.2162	0.1945	0.2087	0.2049	0.2116	-----	-----	0.1782	-----	0.202	5.70	1.00	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
2-Hexanone	1	0	Avg	0.1495	0.1317	0.1504	0.1513	0.1501	-----	-----	0.1277	-----	0.144	6.12	1.00	1.00	7.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Tetrachloroethene	1	0	Avg	0.2311	0.2198	0.2365	0.2408	0.2696	-----	-----	0.2077	-----	0.234	6.12	0.997	1.00	9.0	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
Toluene-d8	1	0	Avg	1.3023	1.3148	1.3301	1.3118	1.3066	-----	-----	1.3226	1.2958	1.31	5.79	-1	-1	0.90		30.00	30.00	30.00	30.00	30.00			30.00	30.00
Toluene	1	0	Avg	0.7591	0.7075	0.7430	0.7481	0.7909	-----	-----	0.6306	-----	0.730	5.82	0.999	1.00	7.6	0.40	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2775	0.2509	0.2660	0.2834	0.3169	-----	-----	0.2378	-----	0.272	6.60	0.997	1.00	10		20.00	5.00	10.00	50.00	100.0			1.00	
Chlorobenzene	1	0	Avg	0.8562	0.7970	0.8173	0.8529	0.8937	-----	-----	0.7699	-----	0.831	6.57	1.00	1.00	5.4	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
n-Butyl acrylate	1	0	Avg	0.8706	0.7492	0.8164	0.8889	0.7549	-----	-----	0.6723	-----	0.792	6.80	0.992	0.999	10	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
n-Amyl acetate	1	0	Avg	0.6632	0.5614	0.6209	0.6819	0.5717	-----	-----	0.4446	-----	0.591	6.92	0.991	0.999	15	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Bromoform	1	0	Avg	0.3742	0.3331	0.3672	0.4134	0.3910	-----	-----	0.2799	-----	0.360	7.01	0.999	0.999	13	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethylbenzene	1	0	Avg	0.7694	0.6929	0.7983	0.7710	0.6700	-----	-----	0.7175	-----	0.737	6.60	0.994	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.7453	0.7551	0.7604	0.7208	0.5827	-----	-----	0.6649	-----	0.705	7.22	0.986	1.00	9.8	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Bromofluorobenzene	1	0	Avg	0.7376	0.7797	0.7749	0.7765	0.6549	-----	-----	0.7752	0.7946	0.756	7.17	-1	-1	6.3		30.00	30.00	30.00	30.00	30.00			30.00	30.00
Styrene	1	0	Avg	1.8522	1.7057	1.8098	1.8199	1.6052	-----	-----	1.4977	-----	1.72	6.88	0.995	1.00	8.2	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
m&p-Xylenes	1	0	Avg	1.1174	0.9808	1.0693	1.0978	0.9491	-----	-----	0.9392	1.0236	1.03	6.66	0.994	1.00	7.0	0.10	40.00	10.00	20.00	100.0	200.0			2.00	1.00
o-Xylene	1	0	Avg	1.0660	1.0121	1.0798	1.0419	0.9268	-----	-----	0.8838	-----	1.00	6.88	0.996	1.00	7.9	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.2074	0.2068	0.2187	0.2249	0.1867	-----	-----	0.1560	-----	0.200	7.25	0.990	0.999	13		20.00	5.00	10.00	50.00	100.0			1.00	
1,3-Dichlorobenzene	1	0	Avg	1.2717	1.1255	1.1842	1.2022	1.2497	-----	-----	1.1089	-----	1.19	7.79	1.00	1.00	5.5	0.60	20.00	5.00	10.00	50.00	100.0			1.00	
1,4-Dichlorobenzene	1	0	Avg	1.3104	1.1744	1.2393	1.2155	1.2915	-----	-----	1.1673	-----	1.23	7.83	0.999	1.00	4.8	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dichlorobenzene	1	0	Avg	1.1496	1.0407	1.1216	1.1110	1.0748	-----	-----	1.0036	-----	1.08	8.05	1.00	1.00	5.0	0.40	20.00	5.00	10.00	50.00	100.0			1.00	
Isopropylbenzene	1	0	Avg	2.5256	2.5399	2.6457	2.6197	2.2687	-----	-----	2.1061	-----	2.45	7.07	0.994	0.999	8.8	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Cyclohexanone	1	0	Qua	0.0143	0.0180	0.0145	0.0109	0.0113	-----	-----	0.0064	-----	0.0126	7.15	0.996	0.996	31		100.0	25.00	50.00	250.0	500.0			5.00	
Camphene	1	0	Avg	0.5471	0.6067	0.6482	0.6311	0.5550	-----	-----	0.4931	-----	0.580	7.24	0.995	0.998	10		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,3-Trichloropropane	1	0	Avg	0.8533	0.8384	0.8598	0.8562	0.7279	-----	-----	0.7191	-----	0.809	7.26	0.992	1.00	8.2		20.00	5.00	10.00	50.00	100.0			1.00	
2-Chlorotoluene	1	0	Avg	1.7204	1.4928	1.6160	1.6270	1.4192	-----	-----	1.6200	-----	1.58	7.37	0.994	1.00	6.8		20.00	5.00	10.00	50.00	100.0			1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.934

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M82676.D	CAL @ 20 PPB	09/11/20 21:35	2	11M82674.D	CAL @ 5 PPB	09/11/20 20:58
3	11M82675.D	CAL @ 10 PPB	09/11/20 21:17	4	11M82678.D	CAL @ 50 PPB	09/11/20 22:12
5	11M82686.D	CAL @ 100 PPB	09/12/20 00:39	6	11M82673.D	CAL @ 1 PPB	09/11/20 20:40
7	11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.6334	2.4583	2.6118	2.5423	2.3046	-----	-----	2.1138	-----	2.44	7.35	0.997	1.00	8.2		20.00	5.00	10.00	50.00	100.0			1.00	
4-Chlorotoluene	1	0	Avg	1.7200	1.6136	1.6089	1.6243	1.9152	-----	-----	1.3035	-----	1.63	7.42	0.995	0.999	12		20.00	5.00	10.00	50.00	100.0			1.00	
n-Propylbenzene	1	0	Avg	2.9830	2.9422	3.1393	3.0074	2.5773	-----	-----	2.6073	-----	2.88	7.30	0.993	1.00	8.0		20.00	5.00	10.00	50.00	100.0			1.00	
Bromobenzene	1	0	Avg	1.5309	1.4415	1.5463	1.4918	1.2516	-----	-----	1.4942	-----	1.46	7.27	0.991	1.00	7.4		20.00	5.00	10.00	50.00	100.0			1.00	
1,3,5-Trimethylbenzen	1	0	Avg	2.1546	1.9933	2.1405	2.1419	2.1661	-----	-----	1.7298	-----	2.05	7.38	1.00	1.00	8.3		20.00	5.00	10.00	50.00	100.0			1.00	
Butyl methacrylate	1	0	Avg	0.5809	0.5075	0.5530	0.5523	0.5954	-----	-----	0.3265	-----	0.519	7.38	0.999	1.00	19	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
t-Butylbenzene	1	0	Avg	1.9963	1.8770	1.9920	1.9740	1.9741	-----	-----	1.6387	-----	1.91	7.58	1.00	1.00	7.3		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trimethylbenzen	1	0	Avg	2.2826	2.0873	2.2635	2.1643	2.1917	-----	-----	1.7732	-----	2.13	7.60	1.00	1.00	8.8		20.00	5.00	10.00	50.00	100.0			1.00	
sec-Butylbenzene	1	0	Avg	2.3761	2.2051	2.4308	2.3868	2.2927	-----	-----	2.0291	-----	2.29	7.69	1.00	1.00	6.5		20.00	5.00	10.00	50.00	100.0			1.00	
4-Isopropyltoluene	1	0	Avg	2.0289	1.8411	2.0392	2.0511	2.0062	-----	-----	1.6733	-----	1.94	7.76	1.00	1.00	7.8		20.00	5.00	10.00	50.00	100.0			1.00	
n-Butylbenzene	1	0	Avg	2.0925	1.9360	2.1396	2.0538	1.8438	-----	-----	1.7305	-----	1.97	8.00	0.997	1.00	8.0		20.00	5.00	10.00	50.00	100.0			1.00	
p-Diethylbenzene	1	0	Avg	1.1186	1.0023	1.0900	1.1229	1.0377	-----	-----	0.8463	-----	1.04	7.98	0.998	1.00	10		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	1.6032	1.3177	1.4945	1.5829	1.3941	-----	-----	1.2261	-----	1.44	8.44	0.995	1.00	10		20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1391	0.1175	0.1340	0.1299	0.1186	-----	-----	0.0770	-----	0.119	8.50	0.997	1.00	19	0.05	20.00	5.00	10.00	50.00	100.0			1.00	
Camphor	1	0	Qua	0.0478	0.0374	0.0455	0.0447	0.0418	-----	-----	0.0325	0.0125	0.0375	8.93	0.998	1.00	32		200.0	50.00	100.0	500.0	1000.			10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.1729	0.1364	0.1646	0.1669	0.1511	-----	-----	0.1326	-----	0.154	9.07	0.997	1.00	11		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.4681	0.3988	0.4367	0.4282	0.3802	-----	-----	0.3997	-----	0.419	8.99	0.995	1.00	7.6	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.3022	0.2680	0.2842	0.2766	0.2385	-----	-----	0.2764	-----	0.274	9.29	0.993	1.00	7.7		20.00	5.00	10.00	50.00	100.0			1.00	
Naphthalene	1	0	Avg	1.1787	0.9410	1.1497	1.0755	0.9384	-----	-----	0.8992	-----	1.03	9.15	0.993	1.00	12		20.00	5.00	10.00	50.00	100.0			1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.934

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M82702.D **Instrument:** GCMS 11

Cont Calibration Date/Time 9/14/2020 3:28:00 P Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.96	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.68	18.52	20	20	0.1	0.268	0.248	7.39	
Dichlorodifluoromethane	1	0		1.67	22.17	20	20	0.1	0.161	0.179	10.87	
Chloromethane	1	0		1.85	20.05	20	20	0.1	0.170	0.170	0.25	
Bromomethane	1	0		2.24	18.14	20	20	0.1	0.176	0.159	9.29	
Vinyl Chloride	1	0		1.94	19.62	20	20	0.1	0.218	0.214	1.91	
Chloroethane	1	0		2.33	17.97	20	20	0.1	0.148	0.133	10.16	
Trichlorofluoromethane	1	0		2.55	18.65	20	20	0.1	0.361	0.336	6.74	
Ethyl ether	1	0		2.78	19.63	20	20	0.5	0.123	0.121	1.83	
Furan	1	0		2.82	18.14	20	20	0.5	0.229	0.207	9.32	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.98	18.27	20	20	0.1	0.146	0.133	8.67	
Methylene Chloride	1	0		3.38	18.40	20	20	0.1	0.217	0.199	8.02	
Acrolein	1	0		2.89	106.27	100	20		0.026	0.027	6.27	
Acrylonitrile	1	0		3.57	20.27	20	20		0.063	0.066	1.37	
Iodomethane	1	0		3.12	16.62	20	20		0.173	0.169	16.89	
Acetone	1	0		3.01	97.11	100	20	0.1	0.052	0.050	2.89	
Carbon Disulfide	1	0		3.19	18.91	20	20	0.1	0.493	0.466	5.47	
t-Butyl Alcohol	1	0		3.43	136.51	100	20		0.013	0.017	36.51	C1
n-Hexane	1	0		3.81	18.15	20	20		0.153	0.139	9.27	
Di-isopropyl-ether	1	0		3.95	18.78	20	20		0.425	0.399	6.08	
1,1-Dichloroethene	1	0		2.98	19.26	20	20	0.1	0.266	0.256	3.68	
Methyl Acetate	1	0		3.28	21.13	20	20	0.1	0.107	0.114	5.64	
Methyl-t-butyl ether	1	0		3.59	19.95	20	20	0.1	0.459	0.458	0.27	
1,1-Dichloroethane	1	0		3.93	18.34	20	20	0.2	0.345	0.316	8.32	
trans-1,2-Dichloroethene	1	0		3.60	19.73	20	20	0.1	0.204	0.202	1.34	
Ethyl-t-butyl ether	1	0		4.20	19.40	20	20	0.5	0.466	0.453	2.99	
cis-1,2-Dichloroethene	1	0		4.31	18.85	20	20	0.1	0.336	0.317	5.77	
Bromochloromethane	1	0		4.46	18.53	20	20		0.143	0.132	7.33	
2,2-Dichloropropane	1	0		4.31	21.46	20	20		0.272	0.292	7.32	
Ethyl acetate	1	0		4.33	18.93	20	20		0.169	0.160	5.37	
1,4-Dioxane	1	0		5.34	1591.40	1000	20		0.002	0.003	59.14	C1
1,1-Dichloropropene	1	0		4.70	18.84	20	20		0.299	0.282	5.80	
Chloroform	1	0		4.49	18.95	20	20	0.2	0.381	0.361	5.23	
Dibromofluoromethane	1	0	S	4.58	29.24	30	**		0.250	0.244	2.52	
Cyclohexane	1	0		4.65	17.31	20	20	0.1	0.251	0.218	13.43	
1,2-Dichloroethane-d4	1	0	S	4.78	28.56	30	**		0.131	0.125	4.80	
1,2-Dichloroethane	1	0		4.82	18.21	20	20	0.1	0.294	0.267	8.97	
2-Butanone	1	0		4.30	16.16	20	20	0.1	0.072	0.058	19.20	
1,1,1-Trichloroethane	1	0		4.61	18.34	20	20	0.1	0.344	0.315	8.30	
Carbon Tetrachloride	1	0		4.71	18.88	20	20	0.1	0.289	0.273	5.58	
Vinyl Acetate	1	0		3.95	18.66	20	20		0.502	0.468	6.72	
Bromodichloromethane	1	0		5.41	18.69	20	20	0.2	0.287	0.268	6.56	
Methylcyclohexane	1	0		5.27	17.70	20	20	0.1	0.238	0.210	11.48	
Dibromomethane	1	0		5.34	19.51	20	20		0.139	0.135	2.46	
1,2-Dichloropropane	1	0		5.28	18.40	20	20	0.1	0.199	0.183	8.02	
Trichloroethene	1	0		5.16	18.89	20	20	0.2	0.238	0.224	5.57	
Benzene	1	0		4.82	18.87	20	20	0.5	0.849	0.801	5.65	
tert-Amyl methyl ether	1	0		4.86	20.07	20	20		0.465	0.467	0.36	
Chlorobenzene-d5	1	0	I	6.55	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.81	19.83	20	20	0.5	0.332	0.330	0.87	
Methyl methacrylate	1	0		5.30	18.42	20	20	0.5	0.201	0.185	7.92	
Dibromochloromethane	1	0		6.24	20.30	20	20	0.1	0.279	0.283	1.50	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M82702.D **Instrument:** GCMS 11

Cont Calibration Date/Time 9/14/2020 3:28:00 P **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.54	19.46	20	20		0.053	0.056	2.69	
cis-1,3-Dichloropropene	1	0		5.64	20.14	20	20	0.2	0.397	0.400	0.70	
trans-1,3-Dichloropropene	1	0		5.92	19.79	20	20	0.1	0.377	0.373	1.04	
Ethyl methacrylate	1	0		5.94	20.66	20	20	0.5	0.174	0.180	3.28	
1,1,2-Trichloroethane	1	0		6.02	19.09	20	20	0.1	0.266	0.253	4.53	
1,2-Dibromoethane	1	0		6.31	19.99	20	20	0.1	0.280	0.280	0.04	
1,3-Dichloropropane	1	0		6.11	19.10	20	20		0.439	0.419	4.49	
4-Methyl-2-Pentanone	1	0		5.70	20.09	20	20	0.1	0.202	0.203	0.45	
2-Hexanone	1	0		6.12	21.27	20	20	0.1	0.144	0.153	6.36	
Tetrachloroethene	1	0		6.12	18.32	20	20	0.2	0.234	0.215	8.40	
Toluene-d8	1	0	S	5.79	29.99	30	**		1.312	1.312	0.02	
Toluene	1	0		5.82	19.10	20	20	0.4	0.730	0.697	4.50	
1,1,1,2-Tetrachloroethane	1	0		6.59	19.88	20	20		0.272	0.271	0.59	
Chlorobenzene	1	0		6.56	19.24	20	20	0.5	0.831	0.800	3.78	
1,4-Dichlorobenzene-d4	1	0	I	7.82	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.80	20.41	20	20	0.5	0.792	0.808	2.03	
n-Amyl acetate	1	0		6.91	21.28	20	20	0.5	0.591	0.629	6.42	
Bromoform	1	0		7.01	21.00	20	20	0.1	0.360	0.378	5.02	
Ethylbenzene	1	0		6.60	18.60	20	20	0.1	0.737	0.685	7.03	
1,1,2,2-Tetrachloroethane	1	0		7.22	19.88	20	20	0.1	0.705	0.701	0.58	
Bromofluorobenzene	1	0	S	7.17	30.83	30	**		0.756	0.777	2.76	
Styrene	1	0		6.88	19.68	20	20	0.3	1.715	1.688	1.60	
m&p-Xylenes	1	0		6.66	40.21	40	20	0.1	1.025	1.031	0.53	
o-Xylene	1	0		6.88	19.83	20	20	0.3	1.002	0.993	0.87	
trans-1,4-Dichloro-2-butene	1	0		7.24	21.08	20	20		0.200	0.211	5.39	
1,3-Dichlorobenzene	1	0		7.78	19.41	20	20	0.6	1.190	1.155	2.94	
1,4-Dichlorobenzene	1	0		7.83	18.87	20	20	0.5	1.233	1.164	5.63	
1,2-Dichlorobenzene	1	0		8.05	19.56	20	20	0.4	1.084	1.060	2.21	
Isopropylbenzene	1	0		7.07	19.45	20	20	0.1	2.451	2.383	2.77	
Cyclohexanone	1	0		7.14	160.78	100	20		0.013	0.019	60.77	C1
Camphene	1	0		7.24	19.01	20	20		0.580	0.552	4.95	
1,2,3-Trichloropropane	1	0		7.26	20.81	20	20		0.809	0.842	4.06	
2-Chlorotoluene	1	0		7.36	18.49	20	20		1.583	1.463	7.55	
p-Ethyltoluene	1	0		7.35	19.67	20	20		2.444	2.403	1.67	
4-Chlorotoluene	1	0		7.42	18.40	20	20		1.631	1.501	8.00	
n-Propylbenzene	1	0		7.29	19.13	20	20		2.876	2.751	4.34	
Bromobenzene	1	0		7.27	19.25	20	20		1.459	1.405	3.75	
1,3,5-Trimethylbenzene	1	0		7.38	18.47	20	20		2.054	1.897	7.64	
Butyl methacrylate	1	0		7.38	19.11	20	20	0.5	0.519	0.496	4.45	
t-Butylbenzene	1	0		7.57	18.83	20	20		1.909	1.797	5.86	
1,2,4-Trimethylbenzene	1	0		7.59	19.26	20	20		2.127	2.048	3.71	
sec-Butylbenzene	1	0		7.69	18.81	20	20		2.287	2.150	5.97	
4-Isopropyltoluene	1	0		7.76	19.17	20	20		1.940	1.859	4.17	
n-Butylbenzene	1	0		8.00	18.88	20	20		1.966	1.856	5.59	
p-Diethylbenzene	1	0		7.98	19.80	20	20		1.036	1.026	0.98	
1,2,4,5-Tetramethylbenzene	1	0		8.44	20.43	20	20		1.436	1.467	2.14	
1,2-Dibromo-3-Chloropropane	1	0		8.50	22.61	20	20	0.05	0.119	0.135	13.05	
Camphor	1	0		8.93	246.01	200	20		0.038	0.057	23.00	C1
Hexachlorobutadiene	1	0		9.07	21.94	20	20		0.154	0.169	9.70	
1,2,4-Trichlorobenzene	1	0		8.99	20.70	20	20	0.2	0.419	0.433	3.49	
1,2,3-Trichlorobenzene	1	0		9.29	22.65	20	20		0.274	0.311	13.23	
Naphthalene	1	0		9.15	23.66	20	20		1.030	1.219	18.29	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.
625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M132533.D **Instrument:** GCMS 6

Cont Calibration Date/Time 9/17/2020 10:54:00 **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.12	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.64	70.26	50	20	0.1	0.315	0.443	40.53	C1
Dichlorodifluoromethane	1	0		1.63	31.32	50	20	0.1	0.205	0.129	37.36	C1
Chloromethane	1	0		1.81	44.72	50	20	0.1	0.286	0.229	10.56	
Bromomethane	1	0		2.23	50.63	50	20	0.1	0.189	0.191	1.26	
Vinyl Chloride	1	0		1.91	46.60	50	20	0.1	0.295	0.275	6.80	
Chloroethane	1	0		2.32	49.11	50	20	0.1	0.201	0.197	1.77	
Trichlorofluoromethane	1	0		2.56	49.35	50	20	0.1	0.485	0.479	1.29	
Ethyl ether	1	0		2.81	51.01	50	20	0.5	0.179	0.182	2.02	
Furan	1	0		2.84	53.38	50	20	0.5	0.402	0.429	6.76	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.01	59.71	50	20	0.1	0.185	0.221	19.43	
Methylene Chloride	1	0		3.43	58.02	50	20	0.1	0.271	0.315	16.04	
Acrolein	1	0		2.92	265.17	250	20		0.035	0.037	6.07	
Acrylonitrile	1	0		3.64	47.86	50	20		0.106	0.102	4.28	
Iodomethane	1	0		3.16	71.30	50	20		0.200	0.333	42.60	C1
Acetone	1	0		3.05	233.07	250	20	0.1	0.102	0.095	6.77	
Carbon Disulfide	1	0		3.23	50.45	50	20	0.1	0.677	0.683	0.91	
t-Butyl Alcohol	1	0		3.50	175.33	250	20		0.049	0.035	29.87	C1
n-Hexane	1	0		3.91	63.75	50	20		0.264	0.336	27.50	C1
Di-isopropyl-ether	1	0		4.06	55.14	50	20		0.628	0.693	10.28	
1,1-Dichloroethene	1	0		3.02	59.83	50	20	0.1	0.340	0.407	19.66	
Methyl Acetate	1	0		3.34	45.71	50	20	0.1	0.210	0.192	8.58	
Methyl-t-butyl ether	1	0		3.67	57.45	50	20	0.1	0.538	0.618	14.90	
1,1-Dichloroethane	1	0		4.03	59.53	50	20	0.2	0.440	0.524	19.06	
trans-1,2-Dichloroethene	1	0		3.68	59.89	50	20	0.1	0.256	0.306	19.78	
Ethyl-t-butyl ether	1	0		4.32	49.56	50	20	0.5	0.688	0.682	0.88	
cis-1,2-Dichloroethene	1	0		4.44	60.06	50	20	0.1	0.445	0.535	20.12	
Bromochloromethane	1	0		4.59	59.20	50	20		0.205	0.242	18.39	
2,2-Dichloropropane	1	0		4.45	64.20	50	20		0.359	0.461	28.40	C1
Ethyl acetate	1	0		4.46	46.32	50	20		0.315	0.292	7.35	
1,4-Dioxane	1	0		5.52	1960.89	2500	20		0.006	0.004	21.56	C1
1,1-Dichloropropene	1	0		4.85	59.98	50	20		0.359	0.431	19.95	
Chloroform	1	0		4.64	59.93	50	20	0.2	0.465	0.557	19.86	
Dibromofluoromethane	1	0	S	4.73	34.15	75	**		0.267	0.304	13.84	
Cyclohexane	1	0		4.80	60.06	50	20	0.1	0.368	0.442	20.13	
1,2-Dichloroethane-d4	1	0	S	4.93	30.81	75	**		0.144	0.148	2.71	
1,2-Dichloroethane	1	0		4.98	60.00	50	20	0.1	0.347	0.417	20.00	
2-Butanone	1	0		4.43	47.05	50	20	0.1	0.149	0.140	5.91	
1,1,1-Trichloroethane	1	0		4.76	59.90	50	20	0.1	0.416	0.498	19.80	
Carbon Tetrachloride	1	0		4.86	62.27	50	20	0.1	0.355	0.442	24.55	C1
Vinyl Acetate	1	0		4.05	56.86	50	20		0.750	0.853	13.72	
Bromodichloromethane	1	0		5.59	60.01	50	20	0.2	0.326	0.391	20.01	
Methylcyclohexane	1	0		5.45	62.18	50	20	0.1	0.377	0.469	24.35	C1
Dibromomethane	1	0		5.53	59.57	50	20		0.170	0.202	19.14	
1,2-Dichloropropane	1	0		5.46	56.45	50	20	0.1	0.259	0.292	12.91	
Trichloroethene	1	0		5.33	55.77	50	20	0.2	0.293	0.327	11.53	
Benzene	1	0		4.98	57.56	50	20	0.5	1.013	1.166	15.11	
tert-Amyl methyl ether	1	0		5.02	52.99	50	20		0.592	0.627	5.97	
Chlorobenzene-d5	1	0	I	6.76	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.98	40.28	50	20	0.5	0.522	0.421	19.44	
Methyl methacrylate	1	0		5.48	39.96	50	20	0.5	0.255	0.204	20.09	
Dibromochloromethane	1	0		6.45	47.38	50	20	0.1	0.282	0.267	5.23	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.
625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M132533.D **Instrument:** GCMS 6

Cont Calibration Date/Time 9/17/2020 10:54:00 **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.73	39.90	50	20		0.079	0.063	20.19	
cis-1,3-Dichloropropene	1	0		5.83	43.93	50	20	0.2	0.447	0.393	12.14	
trans-1,3-Dichloropropene	1	0		6.12	47.76	50	20	0.1	0.391	0.374	4.48	
Ethyl methacrylate	1	0		6.14	43.33	50	20	0.5	0.253	0.220	13.35	
1,1,2-Trichloroethane	1	0		6.22	45.52	50	20	0.1	0.258	0.235	8.95	
1,2-Dibromoethane	1	0		6.53	44.89	50	20	0.1	0.267	0.240	10.22	
1,3-Dichloropropane	1	0		6.32	45.24	50	20		0.456	0.412	9.51	
4-Methyl-2-Pentanone	1	0		5.90	39.97	50	20	0.1	0.350	0.280	20.07	
2-Hexanone	1	0		6.33	40.63	50	20	0.1	0.276	0.224	18.75	
Tetrachloroethene	1	0		6.32	44.40	50	20	0.2	0.278	0.247	11.21	
Toluene-d8	1	0	S	5.98	24.87	75	**		1.238	1.026	17.10	
Toluene	1	0		6.02	42.62	50	20	0.4	0.811	0.691	14.75	
1,1,1,2-Tetrachloroethane	1	0		6.81	44.67	50	20		0.290	0.259	10.66	
Chlorobenzene	1	0		6.78	42.60	50	20	0.5	0.886	0.755	14.80	
1,4-Dichlorobenzene-d4	1	0	I	8.05	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.02	40.03	50	20	0.5	0.857	0.686	19.94	
n-Amyl acetate	1	0		7.13	40.79	50	20	0.5	0.810	0.661	18.42	
Bromoform	1	0		7.23	65.01	50	20	0.1	0.342	0.281	30.01	C1
Ethylbenzene	1	0		6.82	42.02	50	20	0.1	0.663	0.557	15.95	
1,1,2,2-Tetrachloroethane	1	0		7.45	40.34	50	20	0.1	0.639	0.516	19.33	
Bromofluorobenzene	1	0	S	7.39	27.99	75	**		0.790	0.737	6.69	
Styrene	1	0		7.10	39.73	50	20	0.3	1.639	1.303	20.54	C1
m&p-Xylenes	1	0		6.88	77.72	100	20	0.1	0.994	0.773	22.28	C1
o-Xylene	1	0		7.10	39.04	50	20	0.3	0.980	0.765	21.91	C1
trans-1,4-Dichloro-2-butene	1	0		7.47	40.73	50	20		0.311	0.253	18.54	
1,3-Dichlorobenzene	1	0		8.02	40.99	50	20	0.6	1.227	1.006	18.02	
1,4-Dichlorobenzene	1	0		8.07	39.57	50	20	0.5	1.265	1.001	20.87	C1
1,2-Dichlorobenzene	1	0		8.29	39.99	50	20	0.4	1.146	0.916	20.02	
Isopropylbenzene	1	0		7.29	40.99	50	20	0.1	2.547	2.088	18.02	
Cyclohexanone	1	0		7.37	135.54	250	20		0.035	0.019	45.78	C1
Camphene	1	0		7.47	41.27	50	20		0.927	0.765	17.47	
1,2,3-Trichloropropane	1	0		7.48	43.93	50	20		0.824	0.724	12.14	
2-Chlorotoluene	1	0		7.59	42.48	50	20		1.527	1.297	15.03	
p-Ethyltoluene	1	0		7.58	40.23	50	20		2.614	2.103	19.55	
4-Chlorotoluene	1	0		7.65	43.15	50	20		1.497	1.292	13.71	
n-Propylbenzene	1	0		7.52	42.03	50	20		2.988	2.512	15.93	
Bromobenzene	1	0		7.49	40.28	50	20		1.567	1.262	19.44	
1,3,5-Trimethylbenzene	1	0		7.60	45.19	50	20		1.830	1.654	9.62	
Butyl methacrylate	1	0		7.61	40.48	50	20	0.5	0.714	0.572	19.03	
t-Butylbenzene	1	0		7.81	41.57	50	20		2.082	1.731	16.86	
1,2,4-Trimethylbenzene	1	0		7.83	41.46	50	20		2.066	1.713	17.08	
sec-Butylbenzene	1	0		7.93	43.72	50	20		2.650	2.317	12.57	
4-Isopropyltoluene	1	0		8.00	43.60	50	20		2.223	1.939	12.80	
n-Butylbenzene	1	0		8.24	44.17	50	20		2.534	2.239	11.65	
p-Diethylbenzene	1	0		8.22	41.61	50	20		1.318	1.097	16.77	
1,2,4,5-Tetramethylbenzene	1	0		8.68	41.87	50	20		1.864	1.561	16.26	
1,2-Dibromo-3-Chloropropane	1	0		8.74	36.17	50	20	0.05	0.169	0.122	27.65	C1
Camphor	1	0		9.18	478.77	500	20		0.111	0.055	4.25	
Hexachlorobutadiene	1	0		9.32	40.49	50	20		0.461	0.373	19.02	
1,2,4-Trichlorobenzene	1	0		9.23	38.90	50	20	0.2	0.831	0.646	22.19	C1
1,2,3-Trichlorobenzene	1	0		9.54	39.25	50	20		0.756	0.593	21.50	C1
Naphthalene	1	0		9.40	36.51	50	20		2.080	1.519	26.98	C1

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0091101

Sample ID: SS-4A
Lab#: AD19178-001
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		90	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.89	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	5.6	13	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.27	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.093	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		280	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.0	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	11	39	
Chromium	1	mg/kg	5.6	13	
Copper	1	mg/kg	5.6	30	
Lead	1	mg/kg	5.6	77	
Manganese	1	mg/kg	11	240	
Nickel	1	mg/kg	5.6	28	J+
Zinc	1	mg/kg	11	75	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.22	6.0	
Beryllium	1	mg/kg	0.22	0.30	J-
Selenium	1	mg/kg	2.2	ND	
Silver	1	mg/kg	0.22	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result

Sample ID: SS-4A
Lab#: AD19178-001
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Arsenic	1	mg/l	0.10	ND
Barium	**1**	**mg/l**	**0.25**	**0.45**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

Sample ID: SS-4B
Lab#: AD19178-002
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		91	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.88	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	5.5	13	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.26	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.092	0.12	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		330	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.1	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	11	33	
Chromium	1	mg/kg	5.5	13	
Copper	1	mg/kg	5.5	54	
Lead	1	mg/kg	5.5	120	
Manganese	1	mg/kg	11	250	
Nickel	1	mg/kg	5.5	53	J+
Zinc	1	mg/kg	11	73	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.22	7.5	
Beryllium	1	mg/kg	0.22	0.37	J-
Selenium	1	mg/kg	2.2	ND	
Silver	1	mg/kg	0.22	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.33	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	2	mg/l	0.20	ND	

Sample ID: SS-4B
Lab#: AD19178-002
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-2A
Lab#: AD19178-003
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		79	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.0	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.3	13	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.30	0.51	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.11	0.14	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potential	1	mv		320	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.9	
Temperature	1	c		22	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	13	140	
Chromium	1	mg/kg	6.3	13	
Copper	1	mg/kg	6.3	140	
Lead	1	mg/kg	6.3	180	
Manganese	1	mg/kg	13	300	
Nickel	1	mg/kg	6.3	33	J+
Zinc	1	mg/kg	13	130	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.25	11	
Beryllium	1	mg/kg	0.25	0.41	J-
Selenium	1	mg/kg	2.5	ND	
Silver	1	mg/kg	0.25	0.28	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.93	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	1	mg/l	0.10	ND	

Sample ID: SS-2A
Lab#: AD19178-003
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-2B
Lab#: AD19178-004
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		86	UJ

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	0.93	ND

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result
CR(Trivalent)	1	mg/kg	5.8	12

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.28	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.097	0.11

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result
Oxidation Reduction Potenial	1	mv		350

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	1	ph		8.4
Temperature	1	c		22

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	12	230	
Chromium	1	mg/kg	5.8	12	
Copper	1	mg/kg	5.8	88	
Lead	1	mg/kg	5.8	170	
Manganese	1	mg/kg	12	380	
Nickel	1	mg/kg	5.8	18	J+
Zinc	1	mg/kg	12	100	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.23	8.7	
Beryllium	1	mg/kg	0.23	0.37	J-
Selenium	1	mg/kg	2.3	ND	
Silver	1	mg/kg	0.23	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.99
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	2	mg/l	0.20	ND

Sample ID: SS-2B
Lab#: AD19178-004
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-1A
Lab#: AD19178-005
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		93	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.86	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	5.4	9.8	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.26	0.54	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.090	0.26	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		330	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		6.0	
Temperature	1	c		22	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	11	100	
Chromium	1	mg/kg	5.4	9.8	
Copper	1	mg/kg	5.4	63	
Lead	1	mg/kg	5.4	250	
Manganese	1	mg/kg	11	250	
Nickel	1	mg/kg	5.4	19	J+
Zinc	1	mg/kg	11	110	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.22	12	
Beryllium	1	mg/kg	0.22	0.30	J-
Selenium	1	mg/kg	2.2	ND	
Silver	1	mg/kg	0.22	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.71	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	2	mg/l	0.20	ND	

Sample ID: SS-1A
Lab#: AD19178-005
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND	

Sample ID: SS-1B
Lab#: AD19178-006
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		87	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.92	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	5.7	13	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.28	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.096	0.17	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		330	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.0	
Temperature	1	c		22	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	11	350	
Chromium	1	mg/kg	5.7	13	
Copper	1	mg/kg	5.7	200	
Lead	1	mg/kg	5.7	730	
Manganese	1	mg/kg	11	130	
Nickel	1	mg/kg	5.7	18	J+
Zinc	1	mg/kg	11	48	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.23	27	
Beryllium	1	mg/kg	0.23	0.37	J-
Selenium	1	mg/kg	2.3	ND	
Silver	1	mg/kg	0.23	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	3.0	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	0.29	
Nickel	1	mg/l	0.10	ND	
Selenium	1	mg/l	0.10	ND	

Sample ID: SS-1B
Lab#: AD19178-006
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND	

Sample ID: SS-6A
Lab#: AD19178-007
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		81	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.99	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.2	ND	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.30	1.8	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.10	0.13	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		220	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		9.4	
Temperature	1	c		22	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	12	140	
Chromium	1	mg/kg	6.2	ND	
Copper	1	mg/kg	6.2	300	
Lead	1	mg/kg	6.2	350	
Manganese	1	mg/kg	12	91	
Nickel	1	mg/kg	6.2	99	J+
Zinc	1	mg/kg	12	130	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.25	16	
Beryllium	1	mg/kg	0.25	0.47	J-
Selenium	1	mg/kg	2.5	ND	
Silver	1	mg/kg	0.25	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	1.1	
Cadmium	1	mg/l	0.050	0.082	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	0.52	
Nickel	1	mg/l	0.10	0.17	
Selenium	1	mg/l	0.10	ND	

Sample ID: SS-6A
Lab#: AD19178-007
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-6B
Lab#: AD19178-008
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		82	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.98	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.1	14	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.29	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.10	0.30	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		330	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		7.9	
Temperature	1	c		23	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	12	450	
Chromium	1	mg/kg	6.1	14	
Copper	1	mg/kg	6.1	420	
Lead	1	mg/kg	6.1	340	
Manganese	1	mg/kg	12	120	
Nickel	1	mg/kg	6.1	110	J+
Zinc	1	mg/kg	12	110	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.24	18	
Beryllium	1	mg/kg	0.24	0.45	J-
Selenium	1	mg/kg	2.4	ND	
Silver	1	mg/kg	0.24	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	1.1	
Cadmium	1	mg/l	0.050	0.055	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	0.30	
Nickel	1	mg/l	0.10	0.19	
Selenium	1	mg/l	0.10	ND	

Sample ID: SS-6B
Lab#: AD19178-008
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND	

Sample ID: SS-7A
Lab#: AD19178-009
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		81	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.99	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.2	7.4	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.30	0.44	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.10	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		280	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.8	
Temperature	1	c		22	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	12	72	
Chromium	1	mg/kg	6.2	7.4	
Copper	1	mg/kg	6.2	41	
Lead	1	mg/kg	6.2	35	
Manganese	1	mg/kg	12	47	
Nickel	1	mg/kg	6.2	19	J+
Zinc	1	mg/kg	12	25	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.25	6.3	
Beryllium	1	mg/kg	0.25	0.26	J-
Selenium	1	mg/kg	2.5	ND	
Silver	1	mg/kg	0.25	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.61	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	1	mg/l	0.10	ND	

Sample ID: SS-7A
Lab#: AD19178-009
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-7B
Lab#: AD19178-010
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		83	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.96	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.0	10	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.29	0.36	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.10	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		310	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.3	
Temperature	1	c		22	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	12	58	
Chromium	1	mg/kg	6.0	10	
Copper	1	mg/kg	6.0	57	
Lead	1	mg/kg	6.0	41	
Manganese	1	mg/kg	12	660	
Nickel	1	mg/kg	6.0	22	J+
Zinc	1	mg/kg	12	83	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.24	9.5	
Beryllium	1	mg/kg	0.24	0.39	J-
Selenium	1	mg/kg	2.4	ND	
Silver	1	mg/kg	0.24	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.56	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	1	mg/l	0.10	ND	

Sample ID: SS-7B
Lab#: AD19178-010
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: SS-8A
Lab#: AD19178-011
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		82	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.98	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	6.1	15	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.29	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.10	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		270	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.7	
Temperature	1	c		22	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	12	64	
Chromium	1	mg/kg	6.1	15	
Copper	1	mg/kg	6.1	35	
Lead	1	mg/kg	6.1	60	
Manganese	1	mg/kg	12	390	
Nickel	1	mg/kg	6.1	18	J+
Zinc	1	mg/kg	12	87	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.24	10	
Beryllium	1	mg/kg	0.24	0.31	J-
Selenium	1	mg/kg	2.4	ND	
Silver	1	mg/kg	0.24	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.70	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	2	mg/l	0.20	ND	

Sample ID: SS-8A
Lab#: AD19178-011
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND	

Sample ID: SS-8B
Lab#: AD19178-012
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		85	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	0.94	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	5.9	9.3	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.28	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.098	0.14	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potenial	1	mv		310	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.2	
Temperature	1	c		22	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	12	88	
Chromium	1	mg/kg	5.9	9.3	
Copper	1	mg/kg	5.9	41	
Lead	1	mg/kg	5.9	100	
Manganese	1	mg/kg	12	310	
Nickel	1	mg/kg	5.9	19	J+
Zinc	1	mg/kg	12	62	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.24	13	
Beryllium	1	mg/kg	0.24	0.36	J-
Selenium	1	mg/kg	2.4	ND	
Silver	1	mg/kg	0.24	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.88	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	2	mg/l	0.20	ND	

Sample ID: SS-8B
Lab#: AD19178-012
Matrix: Soil

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Silver	1	mg/l	0.050	ND

Sample ID: HRPB-1
Lab#: AD19178-013
Matrix: Soil/Terracore

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	1	percent		66	

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result	
Cr (Hexavalent)	1	mg/kg	1.2	ND	UJ

Cr3 (Trivalent)

Analyte	DF	Units	RL	Result	
CR(Trivalent)	1	mg/kg	7.6	13	

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result	
Cyanide	1	mg/kg	0.36	ND	

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result	
Mercury	1	mg/kg	0.13	ND	

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result	
Mercury	1	mg/l	0.00050	ND	

Oxidation-Reduction Potential

Analyte	DF	Units	RL	Result	
Oxidation Reduction Potential	1	mv		260	

pH 9040C/9045D

Analyte	DF	Units	RL	Result	
pH	1	ph		8.0	
Temperature	1	c		22	

TAL Metals 6010D

Analyte	DF	Units	RL	Result	
Barium	1	mg/kg	15	64	
Chromium	1	mg/kg	7.8	13	
Copper	1	mg/kg	7.6	25	
Lead	1	mg/kg	7.8	14	
Manganese	1	mg/kg	15	250	
Nickel	1	mg/kg	7.6	25	J+
Zinc	1	mg/kg	15	74	

TAL Metals 6020B

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/kg	0.30	10	
Beryllium	1	mg/kg	0.30	0.35	J-
Selenium	1	mg/kg	3.0	ND	
Silver	1	mg/kg	0.30	ND	

TCLP Metals 6010D

Analyte	DF	Units	RL	Result	
Arsenic	1	mg/l	0.10	ND	
Barium	1	mg/l	0.25	0.98	
Cadmium	1	mg/l	0.050	ND	
Chromium	1	mg/l	0.10	ND	
Lead	1	mg/l	0.050	ND	
Nickel	1	mg/l	0.10	ND	
Selenium	1	mg/l	0.10	ND	

Sample ID: HRPB-1 **Collection Date:** 9/10/2020
Lab#: AD19178-013 **Receipt Date:** 9/11/2020
Matrix: Soil/Terracore

Silver	1	mg/l	0.050	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	0.852	mg/kg	0.0026	ND	
1,1,2,2-Tetrachloroethane	0.852	mg/kg	0.0026	ND	UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	0.852	mg/kg	0.0026	ND	
1,1,2-Trichloroethane	0.852	mg/kg	0.0026	ND	
1,1-Dichloroethane	0.852	mg/kg	0.0026	ND	
1,1-Dichloroethene	0.852	mg/kg	0.0026	ND	
1,2,3-Trichloropropane	0.852	mg/kg	0.0026	ND	UJ
1,2,4-Trimethylbenzene	0.852	mg/kg	0.0013	ND	UJ
1,2-Dichlorobenzene	0.852	mg/kg	0.0026	ND	UJ
1,2-Dichloroethane	0.852	mg/kg	0.0026	ND	
1,2-Dichloropropane	0.852	mg/kg	0.0026	ND	
1,3,5-Trimethylbenzene	0.852	mg/kg	0.0013	ND	UJ
1,3-Dichlorobenzene	0.852	mg/kg	0.0026	ND	UJ
1,3-Dichloropropane	0.852	mg/kg	0.0026	ND	
1,4-Dichlorobenzene	0.852	mg/kg	0.0026	ND	UJ
1,4-Dioxane	0.852	mg/kg	0.13	ND	
2-Butanone	0.852	mg/kg	0.0026	ND	
2-Chloroethylvinylether	0.852	mg/kg	0.0026	ND	
2-Hexanone	0.852	mg/kg	0.0026	ND	
4-Isopropyltoluene	0.852	mg/kg	0.0013	ND	UJ
4-Methyl-2-pentanone	0.852	mg/kg	0.0026	ND	
Acetone	**0.852**	**mg/kg**	**0.013**	**0.040**	
Acrolein	0.852	mg/kg	0.013	ND	
Acrylonitrile	0.852	mg/kg	0.0026	ND	
Benzene	0.852	mg/kg	0.0013	ND	
Bromodichloromethane	0.852	mg/kg	0.0026	ND	
Bromoform	0.852	mg/kg	0.0026	ND	UJ
Bromomethane	0.852	mg/kg	0.0026	ND	
Carbon disulfide	0.852	mg/kg	0.0044	ND	
Carbon tetrachloride	0.852	mg/kg	0.0026	ND	
Chlorobenzene	0.852	mg/kg	0.0026	ND	
Chloroethane	0.852	mg/kg	0.0026	ND	
Chloroform	0.852	mg/kg	0.0026	ND	
Chloromethane	0.852	mg/kg	0.0026	ND	
cis-1,2-Dichloroethene	0.852	mg/kg	0.0026	ND	
cis-1,3-Dichloropropene	0.852	mg/kg	0.0026	ND	
Dibromochloromethane	0.852	mg/kg	0.0026	ND	
Dichlorodifluoromethane	0.852	mg/kg	0.0026	ND	
Ethylbenzene	0.852	mg/kg	0.0013	ND	UJ
Isopropylbenzene	0.852	mg/kg	0.0013	ND	UJ
m&p-Xylenes	0.852	mg/kg	0.0015	ND	UJ
Methylene chloride	**0.852**	**mg/kg**	**0.0026**	**0.0029**	
Methyl-t-butyl ether	0.852	mg/kg	0.0013	ND	
n-Butylbenzene	0.852	mg/kg	0.0013	ND	UJ
n-Propylbenzene	0.852	mg/kg	0.0013	ND	UJ
o-Xylene	0.852	mg/kg	0.0013	ND	UJ
sec-Butylbenzene	0.852	mg/kg	0.0013	ND	UJ
Styrene	0.852	mg/kg	0.0026	ND	UJ
t-Butyl Alcohol	0.852	mg/kg	0.013	ND	UJ
t-Butylbenzene	0.852	mg/kg	0.0013	ND	
Tetrachloroethene	0.852	mg/kg	0.0026	ND	
Toluene	0.852	mg/kg	0.0013	ND	
trans-1,2-Dichloroethene	0.852	mg/kg	0.0026	ND	

Sample ID: HRPB-1 **Collection Date:** 9/10/2020
Lab#: AD19178-013 **Receipt Date:** 9/11/2020
Matrix: Soil/Terracore

trans-1,3-Dichloropropene	0.852	mg/kg	0.0026	ND
Trichloroethene	0.852	mg/kg	0.0026	ND
Trichlorofluoromethane	0.852	mg/kg	0.0026	ND
Vinyl chloride	0.852	mg/kg	0.0026	ND
Xylenes (Total)	0.852	mg/kg	0.0013	ND

Sample ID: Trip blank
Lab#: AD19178-014
Matrix: Aqueous

Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.64	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	2.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: Trip blank
Lab#: AD19178-014
Matrix: Aqueous
Collection Date: 9/10/2020
Receipt Date: 9/11/2020

Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

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QA/QC Review of TCLP Metals Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0091101

13 Soil Samples
Collected September 10, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were extracted and analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TCLP metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration, and preparation blanks reported target metals as not detected.

ICP Interference Check Sample: The percent recoveries for applicable TCLP metals were within control limits (80-120%) for ICS AB samples.

Spike Sample Recovery: The percent recoveries for applicable metals were within control limits (75-125%) for soil TCLP spike sample SS-4A.

Laboratory Duplicates: The RPD for barium was below the allowable (35%) for soil TCLP duplicate sample SS-4A, as required.

Laboratory Control Sample: The percent recoveries for target metals were within QC limits for soil TCLP samples LCS 85281 and LCS MR 85281. The relative percent differences for target metals were below the allowable maximum (20%) for soil TCLP sample LCS MR 85281, as required.

ICP Serial Dilution: The %D for barium was below the allowable maximum (10%) for soil TCLP serial dilution sample SS-4A, as required.

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Geology
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Data Usability Summary Report for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0092507

10 Ground Water Samples, 1 Field Duplicate,
1 Field Blank, 1 Equipment Blank, and 1 Trip Blank
Collected September 21-23, 2020

Prepared by: Donald Anné
November 9, 2020

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 10 ground water samples, 1 field duplicate, 1 equipment blank, 1 field blank, and 1 trip blank analyzed for volatiles.

The overall performances of the analyses are acceptable. Hampton-Clarke Analytical & Field Services did fulfill the requirements of the analytical methods.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The "not detected" volatile results for 2-chlorethylvinylether were qualified as estimated (UJ) in samples DF-MW-2, DF-MW-7, HRP-MW-3, TB-092320, EB-092320, and FB-092320 because the percent recoveries for 2-chlorethylvinylether were below QC limits, but not below 30% in the associated aqueous LCSs.

- The "not detected" volatile results for bromomethane were qualified as estimated (UJ) in samples HRP-MW-2, TMW-2, and DUP because the percent recovery for bromomethane was below QC limits, but not below 30% in the associated aqueous LCS.

- The "not detected" volatile results for 2-butanone were qualified as rejected, unusable (R) in samples DF-MW-8 and TMW-1 because the percent recovery for 2-butanone was below QC limits and below 30% in the associated aqueous LCS.

- The "not detected" volatile results for dichlorodifluoromethane and chloromethane were qualified as rejected, unusable (R) in samples HRP-MW-2, TMW-2, and DUP because the percent recoveries for dichlorodifluoromethane and chloromethane were below QC limits and below 30% in the associated aqueous LCS.

- The "not detected" volatile result for 2-chlorethylvinylether was qualified as rejected, unusable (R) in sample DF-MW-10 because the percent recoveries for 2-chlorethylvinylether were below QC limits and below 30% in the aqueous MS/MSD.

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- The "not detected" volatile result for vinyl chloride was qualified as rejected, unusable (R) in sample HRP-MW-2 because the percent recovery for vinyl chloride was below QC limits and below 30% in the associated aqueous LCS.

- Positive volatile results for vinyl chloride were qualified as "estimated, biased low" (J-) in samples TMW-2 and DUP because the percent recovery for vinyl chloride was below QC limits and below 30% in the associated aqueous LCS.

- The positive volatile results for tetrachloroethene were qualified as estimated (J) in samples HRP-MW-1 and DUP because the relative percent difference for tetrachloroethene was above the allowable maximum in the aqueous field duplicate pair HRP-MW-1/DUP.

All data that are not qualified rejected, unusable (R) are considered usable, with estimated (J, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of 8260 Volatile Data for
Hampton-Clarke Analytical & Field Services
Lab Project No: 0092507

10 Ground Water Samples, 1 Field Duplicate,
1 Field Blank, 1 Equipment Blank, and 1 Trip Blank
Collected September 21-23, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The %RSDs for applicable compounds were below the method maximum, as required. The average RRFs for acetone and 2-butanone were below the method minimums, but not below 0.010 for GCMS_2 on 09-09-20. The average RRFs for acetone and 2-butanone were below the method minimums, but not below 0.010 for GCMS_11 on 09-11-20. The average RRF for acetone was below the method minimums, but not below 0.010 for GCMS_2 on 09-29-20. No action is taken when fewer than 20% of the compounds per calibration do not meet either method %RSD or average RRF criteria, provided the average RRFs are not below 0.010.

The average RRFs for target compounds were above the allowable minimums (0.001 for 1,4-dioxane, 0.010 for all others) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for acetone and 2-butanone were below the method minimums, but not below 0.010 on 09-28-20 (11M83268.D). The RRF for acetone was below the method minimums, but not below 0.010 on 09-28-20 (2M142440.D). The RRF for acetone was below the method minimums, but not below 0.010 on 09-30-20 (2M142518.D). The RRF for acetone was below the method minimums, but not below 0.010 on 10-01-20 (2M142561.D). The RRF for acetone was below the method minimums, but not below 0.010 on 10-02-20 (2M142629.D). The %Ds for bromomethane, 1,1,2,2-tetrachlroethane, styrene, m&p-xylene, and isopropylbenzene were above the method maximum on 08-31-20 (2M142440.D). The %Ds for dichlorodifluoromethane and vinyl chloride were above the method maximum on 10-02-20 (2M142629.D). No action is taken when fewer than 20% of the compounds per calibration do not meet either method %D or RRF criteria, provided the RRFs are not below 0.010.

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The RRFs for target compounds were above the allowable minimums (0.001 for 1,4-dioxane, 0.010 for all others), as required.

The %Ds for acrolein, 1,4-dioxane, and 2-chloroethylvinylether were above the allowable maximum (20%) on 09-28-20 (11M83268.D). The %Ds for bromomethane, 2-chloroethylvinylether, 1,1,2,2-tetrachlroethane, styrene, m&p-xylene, isopropylbenzene, n-ptopylbenzene, and 1,3,5-trimethylbenzene were above the allowable maximum (20%) on 09-28-20 (2M142440.D). The %Ds for dichlorodifluoromethane, vinyl chloride, acrolein, and 2-chlorethylvinylether were above the allowable maximum (20%) on 10-02-20 (2M142629.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of the daily and field blanks reported target compounds as not detected. Trip blank TB-092320 contained a trace of acetone (12 ug/L). Equipment blank EB-092320 contained a trace of methylene chloride (7.8 ug/L). Positive results for methylene chloride and acetone that are less than 10 times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times for samples were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples, field blank, equipment blank, and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target compounds were below the allowable maximums; 1 of 2 percent recoveries (%Rs) for 1,4-dioxane was above QC limits; and 2 of 2 %Rs for 2-chloroethylvinylether were below QC limits and below 30% in aqueous MS/MSD sample DF-MW-10. The result for 2-chloroethylvinylether should be considered rejected, unusable (R) in sample DF-MW-10.

Laboratory Control Sample: The percent recoveries (%Rs) for 2-chloroethylvinylether were above QC limits for aqueous sample MBS89395, MBS89398, and MBS89414. Positive results for 2-chloroethylvinylether should be considered estimated, biased high (J+) in associated aqueous samples.

The %Rs for 2-chloroethylvinylether were below QC limits, but not below 30% for aqueous samples MBS89372 and MBS89382. The %R for bromomethane was below QC limits, but not below 30% for aqueous sample MBS89414. Positive results for these compounds should be considered estimated, biased low (J-) and not detected results rejected, unusable (R) in associated aqueous samples.

The %R for 2-butanone was below QC limits and below 30% for aqueous sample MBS89395. The %Rs for dichlorodifluoromethane, chloromethane, and vinyl chloride were below QC limits and below 30% for aqueous sample MBS89414. Positive results for these compounds should be considered estimated, biased low (J-) in associated aqueous samples.

Field Duplicates: The relative percent difference for tetrachloroethene was above the allowable maximum (20%) for aqueous field duplicate pair HRP-MW-1/DUP (attached table). Positive results for tetrachloroethene should be considered estimated(J) in samples HRP-MW-1 and DUP.

Compound ID: Checked compounds and surrogates were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 0092507

S1= HRP-MW-1 **S2=** DUP

Analyte	S1	S2	RPD (%)	
benzene	0.77	0.79	3%	
cis-1,2-dichloroethene	300	290	3%	
tetrachloroethene	1.9	1.5	24%	*
trans-1,2-dichloroethene	11	11	0%	
trichloroethene	210	200	5%	
vinyl chloride	13	12	8%	

* RPD is above the allowable maximum (20%).

All results are in ug/L.

Bold numbers were values that are below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M83276.D	MBS89372	9/28/2020 1:42:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	16.7239	0	20	84	50	150
Dichlorodifluoromethane	1	16.8309	0	20	84	50	150
Chloromethane	1	19.4905	0	20	97	50	150
Bromomethane	1	18.047	0	20	90	50	150
Vinyl Chloride	1	21.7838	0	20	109	50	150
Chloroethane	1	23.0167	0	20	115	50	150
Trichlorofluoromethane	1	23.1014	0	20	116	50	150
Ethyl ether	1	21.1358	0	20	106	50	150
Furan	1	19.4369	0	20	97	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.0944	0	20	110	50	150
Methylene Chloride	1	18.8603	0	20	94	70	130
Acrolein	1	96.4327	0	100	96	50	150
Acrylonitrile	1	19.3077	0	20	97	50	150
Iodomethane	1	16.0231	0	20	80	50	150
Acetone	1	87.9823	0	100	88	50	150
Carbon Disulfide	1	21.2878	0	20	106	50	150
t-Butyl Alcohol	1	121.4151	0	100	121	50	150
n-Hexane	1	21.3033	0	20	107	70	130
Di-isopropyl-ether	1	18.8261	0	20	94	70	130
1,1-Dichloroethene	1	21.1618	0	20	106	70	130
Methyl Acetate	1	20.324	0	20	102	50	150
Methyl-t-butyl ether	1	19.4124	0	20	97	70	130
1,1-Dichloroethane	1	19.5842	0	20	98	70	130
trans-1,2-Dichloroethene	1	20.7427	0	20	104	70	130
Ethyl-t-butyl ether	1	19.1862	0	20	96	70	130
cis-1,2-Dichloroethene	1	19.621	0	20	98	70	130
Bromochloromethane	1	19.9071	0	20	100	70	130
2,2-Dichloropropane	1	22.1969	0	20	111	70	130
Ethyl acetate	1	18.6158	0	20	93	50	150
1,4-Dioxane	1	1435.601	0	1000	144	50	150
1,1-Dichloropropene	1	20.0513	0	20	100	70	130
Chloroform	1	19.8294	0	20	99	70	130
Cyclohexane	1	20.9171	0	20	105	70	130
1,2-Dichloroethane	1	17.9013	0	20	90	70	130
2-Butanone	1	17.0293	0	20	85	50	150
1,1,1-Trichloroethane	1	19.9642	0	20	100	70	130
Carbon Tetrachloride	1	20.7932	0	20	104	50	150
Vinyl Acetate	1	18.3689	0	20	92	50	150
Bromodichloromethane	1	19.2677	0	20	96	70	130
Methylcyclohexane	1	21.4543	0	20	107	70	130
Dibromomethane	1	18.957	0	20	95	70	130
1,2-Dichloropropane	1	19.3091	0	20	97	70	130
Trichloroethene	1	19.8876	0	20	99	70	130
Benzene	1	19.4298	0	20	97	70	130
tert-Amyl methyl ether	1	19.5099	0	20	98	70	130
Iso-propylacetate	1	18.1075	0	20	91	70	130
Methyl methacrylate	1	16.6378	0	20	83	70	130
Dibromochloromethane	1	18.8715	0	20	94	70	130
2-Chloroethylvinylether	1	10.0228	0	20	50 *	70	130
cis-1,3-Dichloropropene	1	19.3299	0	20	97	70	130
trans-1,3-Dichloropropene	1	18.2178	0	20	91	70	130
Ethyl methacrylate	1	18.5101	0	20	93	70	130
1,1,2-Trichloroethane	1	18.0546	0	20	90	70	130
1,2-Dibromoethane	1	18.1309	0	20	91	70	130
1,3-Dichloropropane	1	18.2206	0	20	91	70	130
4-Methyl-2-Pentanone	1	18.1593	0	20	91	50	150
2-Hexanone	1	17.9455	0	20	90	50	150
Tetrachloroethene	1	18.2107	0	20	91	50	150
Toluene	1	18.1547	0	20	91	70	130
1,1,1,2-Tetrachloroethane	1	17.6008	0	20	88	70	130
Chlorobenzene	1	17.7823	0	20	89	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

Method: 8260C | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	17.8304	0	20	89	70	130
n-Amyl acetate	1	19.0341	0	20	95	70	130
Bromoform	1	18.745	0	20	94	70	130
Ethylbenzene	1	17.8931	0	20	89	70	130
1,1,2,2-Tetrachloroethane	1	17.8468	0	20	89	70	130
Styrene	1	18.2158	0	20	91	70	130
m&p-Xylenes	1	36.5777	0	40	91	70	130
o-Xylene	1	18.3418	0	20	92	70	130
trans-1,4-Dichloro-2-butene	1	18.1082	0	20	91	50	150
1,3-Dichlorobenzene	1	17.3242	0	20	87	70	130
1,4-Dichlorobenzene	1	16.9196	0	20	85	70	130
1,2-Dichlorobenzene	1	17.0922	0	20	85	70	130
Isopropylbenzene	1	18.7422	0	20	94	70	130
Cyclohexanone	1	118.4458	0	100	118	50	150
Camphene	1	19.1827	0	20	96	70	130
1,2,3-Trichloropropane	1	17.7874	0	20	89	70	130
2-Chlorotoluene	1	17.5863	0	20	88	70	130
p-Ethyltoluene	1	18.9292	0	20	95	70	130
4-Chlorotoluene	1	18.0977	0	20	90	70	130
n-Propylbenzene	1	18.8345	0	20	94	70	130
Bromobenzene	1	17.9898	0	20	90	70	130
1,3,5-Trimethylbenzene	1	17.9119	0	20	90	70	130
Butyl methacrylate	1	18.1242	0	20	91	70	130
t-Butylbenzene	1	17.4802	0	20	87	70	130
1,2,4-Trimethylbenzene	1	17.6383	0	20	88	70	130
sec-Butylbenzene	1	18.349	0	20	92	70	130
4-Isopropyltoluene	1	18.0323	0	20	90	70	130
n-Butylbenzene	1	18.1011	0	20	91	70	130
p-Diethylbenzene	1	18.2293	0	20	91	70	130
1,2,4,5-Tetramethylbenzene	1	17.4364	0	20	87	70	130
1,2-Dibromo-3-Chloropropane	1	17.8236	0	20	89	50	150
Camphor	1	143.8813	0	200	72	20	150
Hexachlorobutadiene	1	17.7031	0	20	89	50	150
1,2,4-Trichlorobenzene	1	15.6901	0	20	78	70	130
1,2,3-Trichlorobenzene	1	14.8971	0	20	74	70	130
Naphthalene	1	15.0944	0	20	75	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch:MBS89382

Data File	Sample ID:	Analysis Date
Spike or Dup: 2M142446.D	MBS89382	9/28/2020 11:36:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	14.7546	0	20	74	50	150
Dichlorodifluoromethane	1	12.1261	0	20	61	50	150
Chloromethane	1	18.2113	0	20	91	50	150
Bromomethane	1	10.0279	0	20	50	50	150
Vinyl Chloride	1	20.8278	0	20	104	50	150
Chloroethane	1	20.5507	0	20	103	50	150
Trichlorofluoromethane	1	20.7969	0	20	104	50	150
Ethyl ether	1	20.6484	0	20	103	50	150
Furan	1	19.6656	0	20	98	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.5111	0	20	98	50	150
Methylene Chloride	1	19.7886	0	20	99	70	130
Acrolein	1	101.1429	0	100	101	50	150
Acrylonitrile	1	20.3663	0	20	102	50	150
Iodomethane	1	9.3326	0	20	47*	50	150
Acetone	1	98.4744	0	100	98	50	150
Carbon Disulfide	1	20.498	0	20	102	50	150
t-Butyl Alcohol	1	96.2427	0	100	96	50	150
n-Hexane	1	19.4081	0	20	97	70	130
Di-isopropyl-ether	1	20.0253	0	20	100	70	130
1,1-Dichloroethene	1	20.9533	0	20	105	70	130
Methyl Acetate	1	20.1652	0	20	101	50	150
Methyl-t-butyl ether	1	20.2267	0	20	101	70	130
1,1-Dichloroethane	1	20.3152	0	20	102	70	130
trans-1,2-Dichloroethene	1	20.0752	0	20	100	70	130
Ethyl-t-butyl ether	1	19.1778	0	20	96	70	130
cis-1,2-Dichloroethene	1	19.8971	0	20	99	70	130
Bromochloromethane	1	20.5232	0	20	103	70	130
2,2-Dichloropropane	1	18.3287	0	20	92	70	130
Ethyl acetate	1	19.2966	0	20	96	50	150
1,4-Dioxane	1	985.9296	0	1000	99	50	150
1,1-Dichloropropene	1	21.1723	0	20	106	70	130
Chloroform	1	20.259	0	20	101	70	130
Cyclohexane	1	21.6972	0	20	108	70	130
1,2-Dichloroethane	1	18.5116	0	20	93	70	130
2-Butanone	1	20.2856	0	20	101	50	150
1,1,1-Trichloroethane	1	21.2332	0	20	106	70	130
Carbon Tetrachloride	1	18.8786	0	20	94	50	150
Vinyl Acetate	1	18.0553	0	20	90	50	150
Bromodichloromethane	1	19.7551	0	20	99	70	130
Methylcyclohexane	1	20.4176	0	20	102	70	130
Dibromomethane	1	18.711	0	20	94	70	130
1,2-Dichloropropane	1	19.8684	0	20	99	70	130
Trichloroethene	1	19.9833	0	20	100	70	130
Benzene	1	19.607	0	20	98	70	130
tert-Amyl methyl ether	1	18.748	0	20	94	70	130
Iso-propylacetate	1	16.4857	0	20	82	70	130
Methyl methacrylate	1	18.3495	0	20	92	70	130
Dibromochloromethane	1	17.8292	0	20	89	70	130
2-Chloroethylvinylether	1	13.8834	0	20	69*	70	130
cis-1,3-Dichloropropene	1	17.4749	0	20	87	70	130
trans-1,3-Dichloropropene	1	16.0556	0	20	80	70	130
Ethyl methacrylate	1	16.9175	0	20	85	70	130
1,1,2-Trichloroethane	1	18.7177	0	20	94	70	130
1,2-Dibromoethane	1	18.3494	0	20	92	70	130
1,3-Dichloropropane	1	18.1451	0	20	91	70	130
4-Methyl-2-Pentanone	1	19.3197	0	20	97	50	150
2-Hexanone	1	17.7893	0	20	89	50	150
Tetrachloroethene	1	18.2121	0	20	91	50	150
Toluene	1	18.6562	0	20	93	70	130
1,1,1,2-Tetrachloroethane	1	16.8835	0	20	84	70	130
Chlorobenzene	1	18.3707	0	20	92	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89382

Method: 8260C | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	20.0506	0	20	100	70	130
n-Amyl acetate	1	15.8326	0	20	79	70	130
Bromoform	**1**	**18.0655**	**0**	**20**	**90**	**70**	**130**
Ethylbenzene	**1**	**20.6146**	**0**	**20**	**103**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**22.28**	**0**	**20**	**111**	**70**	**130**
Styrene	**1**	**21.7775**	**0**	**20**	**109**	**70**	**130**
m&p-Xylenes	**1**	**43.2925**	**0**	**40**	**108**	**70**	**130**
o-Xylene	**1**	**21.1539**	**0**	**20**	**106**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	12.3105	0	20	62	50	150
1,3-Dichlorobenzene	**1**	**20.7307**	**0**	**20**	**104**	**70**	**130**
1,4-Dichlorobenzene	**1**	**19.6923**	**0**	**20**	**98**	**70**	**130**
1,2-Dichlorobenzene	**1**	**20.4344**	**0**	**20**	**102**	**70**	**130**
Isopropylbenzene	**1**	**22.2565**	**0**	**20**	**111**	**70**	**130**
Cyclohexanone	1	100.909	0	100	101	50	150
Camphene	1	32.3117	0	20	162*	70	130
1,2,3-Trichloropropane	**1**	**16.5492**	**0**	**20**	**83**	**70**	**130**
2-Chlorotoluene	1	19.4239	0	20	97	70	130
p-Ethyltoluene	1	22.9089	0	20	115	70	130
4-Chlorotoluene	1	20.9308	0	20	105	70	130
n-Propylbenzene	**1**	**22.7502**	**0**	**20**	**114**	**70**	**130**
Bromobenzene	1	19.9096	0	20	100	70	130
1,3,5-Trimethylbenzene	**1**	**22.5433**	**0**	**20**	**113**	**70**	**130**
Butyl methacrylate	1	19.8026	0	20	99	70	130
t-Butylbenzene	**1**	**15.5451**	**0**	**20**	**78**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**17.4949**	**0**	**20**	**87**	**70**	**130**
sec-Butylbenzene	**1**	**21.8566**	**0**	**20**	**109**	**70**	**130**
4-Isopropyltoluene	**1**	**20.9803**	**0**	**20**	**105**	**70**	**130**
n-Butylbenzene	**1**	**21.6047**	**0**	**20**	**108**	**70**	**130**
p-Diethylbenzene	1	22.8016	0	20	114	70	130
1,2,4,5-Tetramethylbenzene	1	21.2804	0	20	106	70	130
1,2-Dibromo-3-Chloropropane	1	20.2544	0	20	101	50	150
Camphor	1	202.3994	0	200	101	20	150
Hexachlorobutadiene	1	21.6975	0	20	108	50	150
1,2,4-Trichlorobenzene	1	19.1257	0	20	96	70	130
1,2,3-Trichlorobenzene	1	19.8563	0	20	99	70	130
Naphthalene	1	20.5066	0	20	103	50	150

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Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

Data File	Sample ID:	Analysis Date
Spike or Dup: 2M142525.D	MBS89395	9/30/2020 1:53:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.7274	0	20	94	50	150
Dichlorodifluoromethane	1	20.031	0	20	100	50	150
Chloromethane	1	20.705	0	20	104	50	150
Bromomethane	1	16.1692	0	20	81	50	150
Vinyl Chloride	1	19.7477	0	20	99	50	150
Chloroethane	1	18.7372	0	20	94	50	150
Trichlorofluoromethane	1	19.2148	0	20	96	50	150
Ethyl ether	1	19.529	0	20	98	50	150
Furan	1	19.2189	0	20	96	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	18.8343	0	20	94	50	150
Methylene Chloride	1	19.261	0	20	96	70	130
Acrolein	1	100.9203	0	100	101	50	150
Acrylonitrile	1	20.2923	0	20	101	50	150
Iodomethane	1	15.7513	0	20	79	50	150
Acetone	1	95.1145	0	100	95	50	150
Carbon Disulfide	1	18.774	0	20	94	50	150
t-Butyl Alcohol	1	104.0682	0	100	104	50	150
n-Hexane	1	18.9467	0	20	95	70	130
Di-isopropyl-ether	1	19.5575	0	20	98	70	130
1,1-Dichloroethene	1	19.4753	0	20	97	70	130
Methyl Acetate	1	25.5889	0	20	128	50	150
Methyl-t-butyl ether	1	17.8001	0	20	89	70	130
1,1-Dichloroethane	1	19.7472	0	20	99	70	130
trans-1,2-Dichloroethene	1	19.2214	0	20	96	70	130
Ethyl-t-butyl ether	1	19.9351	0	20	100	70	130
cis-1,2-Dichloroethene	1	19.2156	0	20	96	70	130
Bromochloromethane	1	20.2653	0	20	101	70	130
2,2-Dichloropropane	1	19.6807	0	20	98	70	130
Ethyl acetate	1	29.8633	0	20	149	50	150
1,4-Dioxane	1	1060.741	0	1000	106	50	150
1,1-Dichloropropene	1	19.0852	0	20	95	70	130
Chloroform	1	19.8197	0	20	99	70	130
Cyclohexane	1	18.0004	0	20	90	70	130
1,2-Dichloroethane	1	18.3385	0	20	92	70	130
2-Butanone	1	0	0	20	0*	50	150
1,1,1-Trichloroethane	1	19.5974	0	20	98	70	130
Carbon Tetrachloride	1	19.0922	0	20	95	50	150
Vinyl Acetate	1	15.2693	0	20	76	50	150
Bromodichloromethane	1	17.6664	0	20	88	70	130
Methylcyclohexane	1	17.6259	0	20	88	70	130
Dibromomethane	1	19.8669	0	20	99	70	130
1,2-Dichloropropane	1	19.4982	0	20	97	70	130
Trichloroethene	1	19.5119	0	20	98	70	130
Benzene	1	19.2373	0	20	96	70	130
tert-Amyl methyl ether	1	18.8446	0	20	94	70	130
Iso-propylacetate	1	19.4369	0	20	97	70	130
Methyl methacrylate	1	20.4616	0	20	102	70	130
Dibromochloromethane	1	20.69	0	20	103	70	130
2-Chloroethylvinylether	1	62.4567	0	20	312*	70	130
cis-1,3-Dichloropropene	1	20.0082	0	20	100	70	130
trans-1,3-Dichloropropene	1	20.3367	0	20	102	70	130
Ethyl methacrylate	1	19.8935	0	20	99	70	130
1,1,2-Trichloroethane	1	20.3337	0	20	102	70	130
1,2-Dibromoethane	1	20.5023	0	20	103	70	130
1,3-Dichloropropane	1	20.0365	0	20	100	70	130
4-Methyl-2-Pentanone	1	20.1296	0	20	101	50	150
2-Hexanone	1	20.3617	0	20	102	50	150
Tetrachloroethene	1	19.301	0	20	97	50	150
Toluene	1	20.0793	0	20	100	70	130
1,1,1,2-Tetrachloroethane	1	19.3021	0	20	97	70	130
Chlorobenzene	1	20.066	0	20	100	70	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89395

Method: 8260C | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	21.7162	0	20	109	70	130
n-Amyl acetate	1	20.5926	0	20	103	70	130
Bromoform	**1**	**21.3416**	**0**	**20**	**107**	**70**	**130**
Ethylbenzene	**1**	**21.2407**	**0**	**20**	**106**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**20.1347**	**0**	**20**	**101**	**70**	**130**
Styrene	**1**	**21.2864**	**0**	**20**	**106**	**70**	**130**
m&p-Xylenes	**1**	**40.8395**	**0**	**40**	**102**	**70**	**130**
o-Xylene	**1**	**21.0006**	**0**	**20**	**105**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	19.3387	0	20	97	50	150
1,3-Dichlorobenzene	**1**	**20.1363**	**0**	**20**	**101**	**70**	**130**
1,4-Dichlorobenzene	**1**	**19.7503**	**0**	**20**	**99**	**70**	**130**
1,2-Dichlorobenzene	**1**	**20.1243**	**0**	**20**	**101**	**70**	**130**
Isopropylbenzene	**1**	**21.2081**	**0**	**20**	**106**	**70**	**130**
Cyclohexanone	1	106.5419	0	100	107	50	150
Camphene	1	17.6465	0	20	88	70	130
1,2,3-Trichloropropane	**1**	**19.4225**	**0**	**20**	**97**	**70**	**130**
2-Chlorotoluene	1	22.0488	0	20	110	70	130
p-Ethyltoluene	1	20.2162	0	20	101	70	130
4-Chlorotoluene	1	22.4362	0	20	112	70	130
n-Propylbenzene	**1**	**20.6353**	**0**	**20**	**103**	**70**	**130**
Bromobenzene	1	19.4347	0	20	97	70	130
1,3,5-Trimethylbenzene	**1**	**20.7427**	**0**	**20**	**104**	**70**	**130**
Butyl methacrylate	1	19.8037	0	20	99	70	130
t-Butylbenzene	**1**	**21.1158**	**0**	**20**	**106**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**21.163**	**0**	**20**	**106**	**70**	**130**
sec-Butylbenzene	**1**	**20.6038**	**0**	**20**	**103**	**70**	**130**
4-Isopropyltoluene	**1**	**20.7704**	**0**	**20**	**104**	**70**	**130**
n-Butylbenzene	**1**	**20.9758**	**0**	**20**	**105**	**70**	**130**
p-Diethylbenzene	1	20.0323	0	20	100	70	130
1,2,4,5-Tetramethylbenzene	1	19.4977	0	20	97	70	130
1,2-Dibromo-3-Chloropropane	1	21.283	0	20	106	50	150
Camphor	1	200.6025	0	200	100	20	150
Hexachlorobutadiene	1	18.2103	0	20	91	50	150
1,2,4-Trichlorobenzene	1	18.9733	0	20	95	70	130
1,2,3-Trichlorobenzene	1	20.0421	0	20	100	70	130
Naphthalene	1	20.0352	0	20	100	50	150

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Form3
Recovery Data Laboratory Limits
QC Batch: MBS89398

Data File: Spike or Dup: 2M142568.D
Sample ID: MBS89398
Analysis Date: 10/1/2020 3:57:00 AM
Non Spike(If applicable):
Inst Blank(If applicable):
Method: ~~Not~~Fd 8260D 10/14/20 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	16.9067	0	20	85	50	150
Dichlorodifluoromethane	1	19.1885	0	20	96	50	150
Chloromethane	1	16.3938	0	20	82	50	150
Bromomethane	1	17.0339	0	20	85	50	150
Vinyl Chloride	1	18.8474	0	20	94	50	150
Chloroethane	1	17.1603	0	20	86	50	150
Trichlorofluoromethane	1	18.0517	0	20	90	50	150
Ethyl ether	1	16.9701	0	20	85	50	150
Furan	1	17.0247	0	20	85	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.2	0	20	96	50	150
Methylene Chloride	1	16.3138	0	20	82	70	130
Acrolein	1	70.7435	0	100	71	50	150
Acrylonitrile	1	16.7535	0	20	84	50	150
Iodomethane	1	15.5652	0	20	78	50	150
Acetone	1	78.1588	0	100	78	50	150
Carbon Disulfide	1	17.6912	0	20	88	50	150
t-Butyl Alcohol	1	82.5733	0	100	83	50	150
n-Hexane	1	17.2069	0	20	86	70	130
Di-isopropyl-ether	1	17.3552	0	20	87	70	130
1,1-Dichloroethene	1	18.1641	0	20	91	70	130
Methyl Acetate	1	21.5583	0	20	108	50	150
Methyl-t-butyl ether	1	15.5914	0	20	78	70	130
1,1-Dichloroethane	1	17.52	0	20	88	70	130
trans-1,2-Dichloroethene	1	17.3224	0	20	87	70	130
Ethyl-t-butyl ether	1	17.4475	0	20	87	70	130
cis-1,2-Dichloroethene	1	16.6095	0	20	83	70	130
Bromochloromethane	1	17.751	0	20	89	70	130
2,2-Dichloropropane	1	13.3899	0	20	67*	70	130
Ethyl acetate	1	16.2812	0	20	81	50	150
1,4-Dioxane	1	832.3859	0	1000	83	50	150
1,1-Dichloropropene	1	17.5171	0	20	88	70	130
Chloroform	1	17.6757	0	20	88	70	130
Cyclohexane	1	18.3288	0	20	92	70	130
1,2-Dichloroethane	1	15.9012	0	20	80	70	130
2-Butanone	1	15.6321	0	20	78	50	150
1,1,1-Trichloroethane	1	18.0853	0	20	90	70	130
Carbon Tetrachloride	1	17.2547	0	20	86	50	150
Vinyl Acetate	1	12.1779	0	20	61	50	150
Bromodichloromethane	1	15.4928	0	20	77	70	130
Methylcyclohexane	1	17.7821	0	20	89	70	130
Dibromomethane	1	16.3021	0	20	82	70	130
1,2-Dichloropropane	1	17.4932	0	20	87	70	130
Trichloroethene	1	17.37	0	20	87	70	130
Benzene	1	17.0208	0	20	85	70	130
tert-Amyl methyl ether	1	16.5462	0	20	83	70	130
Iso-propylacetate	1	15.8372	0	20	79	70	130
Methyl methacrylate	1	16.7983	0	20	84	70	130
Dibromochloromethane	1	17.7718	0	20	89	70	130
2-Chloroethylvinylether	1	55.8944	0	20	279*	70	130
cis-1,3-Dichloropropene	1	16.3886	0	20	82	70	130
trans-1,3-Dichloropropene	1	16.2052	0	20	81	70	130
Ethyl methacrylate	1	15.8171	0	20	79	70	130
1,1,2-Trichloroethane	1	16.638	0	20	83	70	130
1,2-Dibromoethane	1	17.2732	0	20	86	70	130
1,3-Dichloropropane	1	16.6699	0	20	83	70	130
4-Methyl-2-Pentanone	1	16.405	0	20	82	50	150
2-Hexanone	1	15.3674	0	20	77	50	150
Tetrachloroethene	1	17.1189	0	20	86	50	150
Toluene	1	17.1393	0	20	86	70	130
1,1,1,2-Tetrachloroethane	1	16.6255	0	20	83	70	130
Chlorobenzene	1	16.7529	0	20	84	70	130

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Form3
Recovery Data Laboratory Limits
QC Batch: MBS89398

Method: ~~NotFd~~ 8260D 10/14/20 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	17.6221	0	20	88	70	130
n-Amyl acetate	1	16.5143	0	20	83	70	130
Bromoform	**1**	**17.2965**	**0**	**20**	**86**	**70**	**130**
Ethylbenzene	**1**	**17.7434**	**0**	**20**	**89**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**16.0453**	**0**	**20**	**80**	**70**	**130**
Styrene	**1**	**18.1096**	**0**	**20**	**91**	**70**	**130**
m&p-Xylenes	**1**	**34.6187**	**0**	**40**	**87**	**70**	**130**
o-Xylene	**1**	**18.3557**	**0**	**20**	**92**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	15.178	0	20	76	50	150
1,3-Dichlorobenzene	**1**	**16.9231**	**0**	**20**	**85**	**70**	**130**
1,4-Dichlorobenzene	**1**	**16.4798**	**0**	**20**	**82**	**70**	**130**
1,2-Dichlorobenzene	**1**	**16.4782**	**0**	**20**	**82**	**70**	**130**
Isopropylbenzene	**1**	**18.9525**	**0**	**20**	**95**	**70**	**130**
Cyclohexanone	1	76.0325	0	100	76	50	150
Camphene	1	16.8219	0	20	84	70	130
1,2,3-Trichloropropane	**1**	**15.0584**	**0**	**20**	**75**	**70**	**130**
2-Chlorotoluene	1	17.843	0	20	89	70	130
p-Ethyltoluene	1	17.9157	0	20	90	70	130
4-Chlorotoluene	1	18.431	0	20	92	70	130
n-Propylbenzene	**1**	**18.5825**	**0**	**20**	**93**	**70**	**130**
Bromobenzene	1	16.6335	0	20	83	70	130
1,3,5-Trimethylbenzene	**1**	**18.239**	**0**	**20**	**91**	**70**	**130**
Butyl methacrylate	1	16.196	0	20	81	70	130
t-Butylbenzene	**1**	**18.498**	**0**	**20**	**92**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**18.0403**	**0**	**20**	**90**	**70**	**130**
sec-Butylbenzene	**1**	**18.8188**	**0**	**20**	**94**	**70**	**130**
4-Isopropyltoluene	**1**	**18.4908**	**0**	**20**	**92**	**70**	**130**
n-Butylbenzene	**1**	**18.1964**	**0**	**20**	**91**	**70**	**130**
p-Diethylbenzene	1	17.4812	0	20	87	70	130
1,2,4,5-Tetramethylbenzene	1	16.5814	0	20	83	70	130
1,2-Dibromo-3-Chloropropane	1	16.7835	0	20	84	50	150
Camphor	1	175.3736	0	200	88	20	150
Hexachlorobutadiene	1	16.0227	0	20	80	50	150
1,2,4-Trichlorobenzene	1	16.4586	0	20	82	70	130
1,2,3-Trichlorobenzene	1	16.726	0	20	84	70	130
Naphthalene	1	18.3293	0	20	92	50	150

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

Data File: Spike or Dup: 2M142640.D
Sample ID: MBS89414
Analysis Date: 10/2/2020 1:34:00 PM
Non Spike(If applicable):
Inst Blank(If applicable):
Method: ~~Not~~ d 8260D 10/14/20 JC
Matrix: Aqueous
QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	13.902	0	20	70	50	150
Dichlorodifluoromethane	1	0	0	20	0*	50	150
Chloromethane	1	3.7894	0	20	19*	50	150
Bromomethane	1	7.8592	0	20	39*	50	150
Vinyl Chloride	1	5.4193	0	20	27*	50	150
Chloroethane	1	10.0671	0	20	50	50	150
Trichlorofluoromethane	1	11.847	0	20	59	50	150
Ethyl ether	1	16.3458	0	20	82	50	150
Furan	1	15.405	0	20	77	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	16.5393	0	20	83	50	150
Methylene Chloride	1	15.8018	0	20	79	70	130
Acrolein	1	52.0799	0	100	52	50	150
Acrylonitrile	1	16.5982	0	20	83	50	150
Iodomethane	1	8.1946	0	20	41*	50	150
Acetone	1	78.8766	0	100	79	50	150
Carbon Disulfide	1	12.976	0	20	65	50	150
t-Butyl Alcohol	1	84.4388	0	100	84	50	150
n-Hexane	1	15.9263	0	20	80	70	130
Di-isopropyl-ether	1	15.9728	0	20	80	70	130
1,1-Dichloroethene	1	15.2964	0	20	76	70	130
Methyl Acetate	1	23.5294	0	20	118	50	150
Methyl-t-butyl ether	1	14.624	0	20	73	70	130
1,1-Dichloroethane	1	16.1133	0	20	81	70	130
trans-1,2-Dichloroethene	1	15.6648	0	20	78	70	130
Ethyl-t-butyl ether	1	18.0354	0	20	90	70	130
cis-1,2-Dichloroethene	1	16.4007	0	20	82	70	130
Bromochloromethane	1	17.7674	0	20	89	70	130
2,2-Dichloropropane	1	16.7374	0	20	84	70	130
Ethyl acetate	1	17.178	0	20	86	50	150
1,4-Dioxane	1	689.93	0	1000	69	50	150
1,1-Dichloropropene	1	16.5414	0	20	83	70	130
Chloroform	1	16.7645	0	20	84	70	130
Cyclohexane	1	15.8245	0	20	79	70	130
1,2-Dichloroethane	1	15.74	0	20	79	70	130
2-Butanone	1	16.277	0	20	81	50	150
1,1,1-Trichloroethane	1	16.4921	0	20	82	70	130
Carbon Tetrachloride	1	16.7237	0	20	84	50	150
Vinyl Acetate	1	12.5264	0	20	63	50	150
Bromodichloromethane	1	15.6788	0	20	78	70	130
Methylcyclohexane	1	15.7813	0	20	79	70	130
Dibromomethane	1	16.9108	0	20	85	70	130
1,2-Dichloropropane	1	16.6943	0	20	83	70	130
Trichloroethene	1	16.1154	0	20	81	70	130
Benzene	1	15.8931	0	20	79	70	130
tert-Amyl methyl ether	1	16.2669	0	20	81	70	130
Iso-propylacetate	1	17.2823	0	20	86	70	130
Methyl methacrylate	1	17.6084	0	20	88	70	130
Dibromochloromethane	1	17.8667	0	20	89	70	130
2-Chloroethylvinylether	1	71.0422	0	20	355*	70	130
cis-1,3-Dichloropropene	1	16.2355	0	20	81	70	130
trans-1,3-Dichloropropene	1	17.1064	0	20	86	70	130
Ethyl methacrylate	1	16.479	0	20	82	70	130
1,1,2-Trichloroethane	1	17.6332	0	20	88	70	130
1,2-Dibromoethane	1	17.0472	0	20	85	70	130
1,3-Dichloropropane	1	16.9794	0	20	85	70	130
4-Methyl-2-Pentanone	1	18.889	0	20	94	50	150
2-Hexanone	1	18.4763	0	20	92	50	150
Tetrachloroethene	1	16.3531	0	20	82	50	150
Toluene	1	16.5487	0	20	83	70	130
1,1,1,2-Tetrachloroethane	1	16.9017	0	20	85	70	130
Chlorobenzene	1	16.5043	0	20	83	70	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89414

Method: ~~NotFd~~ 8260D 10/14/20 JL | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	19.4454	0	20	97	70	130
n-Amyl acetate	1	19.8476	0	20	99	70	130
Bromoform	1	18.781	0	20	94	70	130
Ethylbenzene	1	18.1317	0	20	91	70	130
1,1,2,2-Tetrachloroethane	1	17.3632	0	20	87	70	130
Styrene	1	17.8072	0	20	89	70	130
m&p-Xylenes	1	34.3629	0	40	86	70	130
o-Xylene	1	17.6318	0	20	88	70	130
trans-1,4-Dichloro-2-butene	1	15.8404	0	20	79	50	150
1,3-Dichlorobenzene	1	16.5411	0	20	83	70	130
1,4-Dichlorobenzene	1	16.1292	0	20	81	70	130
1,2-Dichlorobenzene	1	16.8318	0	20	84	70	130
Isopropylbenzene	1	18.2195	0	20	91	70	130
Cyclohexanone	1	144.3645	0	100	144	50	150
Camphene	1	15.8752	0	20	79	70	130
1,2,3-Trichloropropane	1	16.6581	0	20	83	70	130
2-Chlorotoluene	1	18.293	0	20	91	70	130
p-Ethyltoluene	1	16.7489	0	20	84	70	130
4-Chlorotoluene	1	18.9244	0	20	95	70	130
n-Propylbenzene	1	17.8364	0	20	89	70	130
Bromobenzene	1	16.5862	0	20	83	70	130
1,3,5-Trimethylbenzene	1	18.1374	0	20	91	70	130
Butyl methacrylate	1	16.5609	0	20	83	70	130
t-Butylbenzene	1	18.1429	0	20	91	70	130
1,2,4-Trimethylbenzene	1	17.3528	0	20	87	70	130
sec-Butylbenzene	1	18.1581	0	20	91	70	130
4-Isopropyltoluene	1	17.5357	0	20	88	70	130
n-Butylbenzene	1	17.6812	0	20	88	70	130
p-Diethylbenzene	1	16.7852	0	20	84	70	130
1,2,4,5-Tetramethylbenzene	1	15.7619	0	20	79	70	130
1,2-Dibromo-3-Chloropropane	1	18.8113	0	20	94	50	150
Camphor	1	359.4415	0	200	180*	20	150
Hexachlorobutadiene	1	16.2116	0	20	81	50	150
1,2,4-Trichlorobenzene	1	15.875	0	20	79	70	130
1,2,3-Trichlorobenzene	1	16.5588	0	20	83	70	130
Naphthalene	1	17.6416	0	20	88	50	150

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M83277.D	AD19444-006(MS:AD19444-005	9/28/2020 2:00:00 PM
Non Spike(If applicable):	11M83275.D	AD19444-005	9/28/2020 1:23:00 PM
Inst Blank(If applicable):		DF-MW-10	

Method: 8260C Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	17.7876	0	20	89	50	150
Dichlorodifluoromethane	1	17.4028	0	20	87	50	150
Chloromethane	1	20.2743	0	20	101	50	150
Bromomethane	1	21.5621	0	20	108	50	150
Vinyl Chloride	1	24.8567	1.7444	20	116	50	150
Chloroethane	1	23.4261	0	20	117	50	150
Trichlorofluoromethane	1	23.9721	0	20	120	50	150
Ethyl ether	1	20.8081	0	20	104	50	150
Furan	1	19.3463	0	20	97	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.3824	0	20	112	50	150
Methylene Chloride	1	19.5976	0	20	98	70	130
Acrolein	1	104.7156	0	100	105	50	150
Acrylonitrile	1	20.6733	0	20	103	50	150
Iodomethane	1	19.936	0	20	100	50	150
Acetone	1	91.1837	0	100	91	50	150
Carbon Disulfide	1	23.2062	0	20	116	50	150
t-Butyl Alcohol	1	132.1803	0	100	132	50	150
n-Hexane	1	22.8418	0	20	114	70	130
Di-isopropyl-ether	1	19.9274	0	20	100	70	130
1,1-Dichloroethene	1	22.0424	0	20	110	70	130
Methyl Acetate	1	21.1922	0	20	106	50	150
Methyl-t-butyl ether	1	20.679	0	20	103	70	130
1,1-Dichloroethane	1	20.1569	0	20	101	70	130
trans-1,2-Dichloroethene	1	25.4973	3.9	20	108	70	130
Ethyl-t-butyl ether	1	19.7556	0	20	99	70	130
cis-1,2-Dichloroethene	1	43.612	22.1821	20	107	70	130
Bromochloromethane	1	20.578	0	20	103	70	130
2,2-Dichloropropane	1	23.4365	0	20	117	70	130
Ethyl acetate	1	20.2099	0	20	101	50	150
1,4-Dioxane	1	1565.411	0	1000	157*	50	150
1,1-Dichloropropene	1	21.0418	0	20	105	70	130
Chloroform	1	20.6245	0	20	103	70	130
Cyclohexane	1	21.8072	0	20	109	70	130
1,2-Dichloroethane	1	19.2524	0	20	96	70	130
2-Butanone	1	18.7391	0	20	94	50	150
1,1,1-Trichloroethane	1	21.3523	0	20	107	70	130
Carbon Tetrachloride	1	22.2655	0	20	111	50	150
Vinyl Acetate	1	20.2779	0	20	101	50	150
Bromodichloromethane	1	20.5372	0	20	103	70	130
Methylcyclohexane	1	22.7907	0	20	114	70	130
Dibromomethane	1	20.5197	0	20	103	70	130
1,2-Dichloropropane	1	20.4779	0	20	102	70	130
Trichloroethene	1	35.2046	13.7964	20	107	70	130
Benzene	1	20.9878	0	20	105	70	130
tert-Amyl methyl ether	1	21.6003	0	20	108	70	130
Iso-propylacetate	1	20.0521	0	20	100	70	130
Methyl methacrylate	1	18.5848	0	20	93	70	130
Dibromochloromethane	1	20.5864	0	20	103	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	20.4173	0	20	102	70	130
trans-1,3-Dichloropropene	1	20.2921	0	20	101	70	130
Ethyl methacrylate	1	19.8567	0	20	99	70	130
1,1,2-Trichloroethane	1	18.8234	0	20	94	70	130
1,2-Dibromoethane	1	19.2695	0	20	96	70	130
1,3-Dichloropropane	1	19.2176	0	20	96	70	130
4-Methyl-2-Pentanone	1	19.343	0	20	97	50	150
2-Hexanone	1	19.3555	0	20	97	50	150
Tetrachloroethene	1	21.8122	1.9776	20	99	50	150
Toluene	1	19.9721	0	20	100	70	130
1,1,1,2-Tetrachloroethane	1	19.5644	0	20	98	70	130
Chlorobenzene	1	19.4903	0	20	97	70	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

Method: 8260C | Matrix: Aqueous | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	20.288	0	20	101	70	130
n-Amyl acetate	1	21.6876	0	20	108	70	130
Bromoform	**1**	**20.0425**	**0**	**20**	**100**	**70**	**130**
Ethylbenzene	**1**	**19.6959**	**0**	**20**	**98**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**19.6263**	**0**	**20**	**98**	**70**	**130**
Styrene	**1**	**19.9901**	**0**	**20**	**100**	**70**	**130**
m&p-Xylenes	**1**	**41.1553**	**0**	**40**	**103**	**70**	**130**
o-Xylene	**1**	**20.0574**	**0**	**20**	**100**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	19.228	0	20	96	50	150
1,3-Dichlorobenzene	**1**	**19.2697**	**0**	**20**	**96**	**70**	**130**
1,4-Dichlorobenzene	**1**	**19.1821**	**0**	**20**	**96**	**70**	**130**
1,2-Dichlorobenzene	**1**	**18.9743**	**0**	**20**	**95**	**70**	**130**
Isopropylbenzene	**1**	**20.5698**	**0**	**20**	**103**	**70**	**130**
Cyclohexanone	1	136.6914	0	100	137	50	150
Camphene	1	18.9126	0	20	95	70	130
1,2,3-Trichloropropane	**1**	**20.0781**	**0**	**20**	**100**	**70**	**130**
2-Chlorotoluene	1	19.3567	0	20	97	70	130
p-Ethyltoluene	1	20.7709	0	20	104	70	130
4-Chlorotoluene	1	19.0566	0	20	95	70	130
n-Propylbenzene	**1**	**20.5565**	**0**	**20**	**103**	**70**	**130**
Bromobenzene	1	19.4734	0	20	97	70	130
1,3,5-Trimethylbenzene	**1**	**19.7257**	**0**	**20**	**99**	**70**	**130**
Butyl methacrylate	1	20.1034	0	20	101	70	130
t-Butylbenzene	**1**	**19.9421**	**0**	**20**	**100**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**19.3258**	**0**	**20**	**97**	**70**	**130**
sec-Butylbenzene	**1**	**20.232**	**0**	**20**	**101**	**70**	**130**
4-Isopropyltoluene	**1**	**20.2029**	**0**	**20**	**101**	**70**	**130**
n-Butylbenzene	**1**	**20.5646**	**0**	**20**	**103**	**70**	**130**
p-Diethylbenzene	1	20.8262	0	20	104	70	130
1,2,4,5-Tetramethylbenzene	1	19.9076	0	20	100	70	130
1,2-Dibromo-3-Chloropropane	1	20.4065	0	20	102	50	150
Camphor	1	199.5934	0	200	100	20	150
Hexachlorobutadiene	1	22.2233	0	20	111	50	150
1,2,4-Trichlorobenzene	1	20.2396	0	20	101	70	130
1,2,3-Trichlorobenzene	1	22.2651	0	20	111	70	130
Naphthalene	1	22.6727	0	20	113	50	150

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Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M83278.D	AD19444-007(MSD:AD19444-0	9/28/2020 2:18:00 PM
Non Spike(If applicable):	11M83275.D	AD19444-005	9/28/2020 1:23:00 PM
Inst Blank(If applicable):		DF-MW-10	

Method: 8260C | Matrix: Aqueous | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	16.6997	0	20	83	50	150
Dichlorodifluoromethane	1	16.0171	0	20	80	50	150
Chloromethane	1	18.4928	0	20	92	50	150
Bromomethane	1	20.7411	0	20	104	50	150
Vinyl Chloride	1	22.3415	1.7444	20	103	50	150
Chloroethane	1	22.0282	0	20	110	50	150
Trichlorofluoromethane	1	23.1221	0	20	116	50	150
Ethyl ether	1	23.3321	0	20	117	50	150
Furan	1	21.2538	0	20	106	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	25.5872	0	20	128	50	150
Methylene Chloride	1	21.9511	0	20	110	70	130
Acrolein	1	111.6828	0	100	112	50	150
Acrylonitrile	1	21.5573	0	20	108	50	150
Iodomethane	1	26.647	0	20	133	50	150
Acetone	1	95.5081	0	100	96	50	150
Carbon Disulfide	1	24.5145	0	20	123	50	150
t-Butyl Alcohol	1	142.9745	0	100	143	50	150
n-Hexane	1	24.5437	0	20	123	70	130
Di-isopropyl-ether	1	18.8909	0	20	94	70	130
1,1-Dichloroethene	1	23.4656	0	20	117	70	130
Methyl Acetate	1	21.1563	0	20	106	50	150
Methyl-t-butyl ether	1	22.4132	0	20	112	70	130
1,1-Dichloroethane	1	19.4707	0	20	97	70	130
trans-1,2-Dichloroethene	1	28.6604	3.9	20	124	70	130
Ethyl-t-butyl ether	1	19.0134	0	20	95	70	130
cis-1,2-Dichloroethene	1	40.9691	22.1821	20	94	70	130
Bromochloromethane	1	3.4395	0	20	17*	70	130
2,2-Dichloropropane	1	22.1609	0	20	111	70	130
Ethyl acetate	1	17.1424	0	20	86	50	150
1,4-Dioxane	1	1363.209	0	1000	136	50	150
1,1-Dichloropropene	1	19.0611	0	20	95	70	130
Chloroform	1	19.5334	0	20	98	70	130
Cyclohexane	1	20.3105	0	20	102	70	130
1,2-Dichloroethane	1	18.372	0	20	92	70	130
2-Butanone	1	19.8447	0	20	99	50	150
1,1,1-Trichloroethane	1	19.4913	0	20	97	70	130
Carbon Tetrachloride	1	20.7677	0	20	104	50	150
Vinyl Acetate	1	19.4125	0	20	97	50	150
Bromodichloromethane	1	19.6323	0	20	98	70	130
Methylcyclohexane	1	22.2347	0	20	111	70	130
Dibromomethane	1	20.4772	0	20	102	70	130
1,2-Dichloropropane	1	19.9068	0	20	100	70	130
Trichloroethene	1	32.5663	13.7964	20	94	70	130
Benzene	1	19.3378	0	20	97	70	130
tert-Amyl methyl ether	1	19.7101	0	20	99	70	130
Iso-propylacetate	1	18.1645	0	20	91	70	130
Methyl methacrylate	1	16.3491	0	20	82	70	130
Dibromochloromethane	1	19.1673	0	20	96	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	19.0334	0	20	95	70	130
trans-1,3-Dichloropropene	1	18.5218	0	20	93	70	130
Ethyl methacrylate	1	18.7698	0	20	94	70	130
1,1,2-Trichloroethane	1	17.9516	0	20	90	70	130
1,2-Dibromoethane	1	18.033	0	20	90	70	130
1,3-Dichloropropane	1	17.6984	0	20	88	70	130
4-Methyl-2-Pentanone	1	18.1429	0	20	91	50	150
2-Hexanone	1	17.4855	0	20	87	50	150
Tetrachloroethene	1	20.6112	1.9776	20	93	50	150
Toluene	1	18.3254	0	20	92	70	130
1,1,1,2-Tetrachloroethane	1	17.7769	0	20	89	70	130
Chlorobenzene	1	17.8473	0	20	89	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS89372

Method: 8260C | Matrix: Aqueous | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	19.3405	0	20	97	70	130
n-Amyl acetate	1	19.7381	0	20	99	70	130
Bromoform	**1**	**19.5851**	**0**	**20**	**98**	**70**	**130**
Ethylbenzene	**1**	**18.549**	**0**	**20**	**93**	**70**	**130**
1,1,2,2-Tetrachloroethane	**1**	**18.2032**	**0**	**20**	**91**	**70**	**130**
Styrene	**1**	**18.7567**	**0**	**20**	**94**	**70**	**130**
m&p-Xylenes	**1**	**36.5981**	**0**	**40**	**91**	**70**	**130**
o-Xylene	**1**	**18.7739**	**0**	**20**	**94**	**70**	**130**
trans-1,4-Dichloro-2-butene	1	16.1787	0	20	81	50	150
1,3-Dichlorobenzene	**1**	**17.991**	**0**	**20**	**90**	**70**	**130**
1,4-Dichlorobenzene	**1**	**17.608**	**0**	**20**	**88**	**70**	**130**
1,2-Dichlorobenzene	**1**	**18.2837**	**0**	**20**	**91**	**70**	**130**
Isopropylbenzene	**1**	**19.6117**	**0**	**20**	**98**	**70**	**130**
Cyclohexanone	1	128.642	0	100	129	50	150
Camphene	1	12.9062	0	20	65*	70	130
1,2,3-Trichloropropane	**1**	**18.3521**	**0**	**20**	**92**	**70**	**130**
2-Chlorotoluene	1	18.8607	0	20	94	70	130
p-Ethyltoluene	1	18.89	0	20	94	70	130
4-Chlorotoluene	1	18.3543	0	20	92	70	130
n-Propylbenzene	**1**	**19.2631**	**0**	**20**	**96**	**70**	**130**
Bromobenzene	1	18.0172	0	20	90	70	130
1,3,5-Trimethylbenzene	**1**	**18.0977**	**0**	**20**	**90**	**70**	**130**
Butyl methacrylate	1	19.0226	0	20	95	70	130
t-Butylbenzene	**1**	**18.6775**	**0**	**20**	**93**	**70**	**130**
1,2,4-Trimethylbenzene	**1**	**17.9974**	**0**	**20**	**90**	**70**	**130**
sec-Butylbenzene	**1**	**19.417**	**0**	**20**	**97**	**70**	**130**
4-Isopropyltoluene	**1**	**19.2238**	**0**	**20**	**96**	**70**	**130**
n-Butylbenzene	**1**	**19.8657**	**0**	**20**	**99**	**70**	**130**
p-Diethylbenzene	1	20.109	0	20	101	70	130
1,2,4,5-Tetramethylbenzene	1	19.4461	0	20	97	70	130
1,2-Dibromo-3-Chloropropane	1	19.9792	0	20	100	50	150
Camphor	1	200.6323	0	200	100	20	150
Hexachlorobutadiene	1	22.0267	0	20	110	50	150
1,2,4-Trichlorobenzene	1	20.2752	0	20	101	70	130
1,2,3-Trichlorobenzene	1	22.9264	0	20	115	70	130
Naphthalene	1	22.8694	0	20	114	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch:MBS89372

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M83278.D	AD19444-007(MSD:AD19444-0	9/28/2020 2:18:00 PM
Duplicate(If applicable):	11M83277.D	AD19444-006(MS:AD19444-005	9/28/2020 2:00:00 PM
Inst Blank(If applicable):		DF-MW-10	

Method: 8260C Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	16.6997	17.7876	6.3	30
Dichlorodifluoromethane	1	16.0171	17.4028	8.3	30
Chloromethane	1	18.4928	20.2743	9.2	30
Bromomethane	1	20.7411	21.5621	3.9	30
Vinyl Chloride	1	22.3415	24.8567	11	40
Chloroethane	1	22.0282	23.4261	6.2	30
Trichlorofluoromethane	1	23.1221	23.9721	3.6	30
Ethyl ether	1	23.3321	20.8081	11	30
Furan	1	21.2538	19.3463	9.4	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	25.5872	22.3824	13	30
Methylene Chloride	1	21.9511	19.5976	11	30
Acrolein	1	111.6828	104.7156	6.4	30
Acrylonitrile	1	21.5573	20.6733	4.2	30
Iodomethane	1	26.647	19.936	29	30
Acetone	1	95.5081	91.1837	4.6	30
Carbon Disulfide	1	24.5145	23.2062	5.5	30
t-Butyl Alcohol	1	142.9745	132.1803	7.8	30
n-Hexane	1	24.5437	22.8418	7.2	30
Di-isopropyl-ether	1	18.8909	19.9274	5.3	30
1,1-Dichloroethene	1	23.4656	22.0424	6.3	40
Methyl Acetate	1	21.1563	21.1922	0.17	30
Methyl-t-butyl ether	1	22.4132	20.679	8	30
1,1-Dichloroethane	1	19.4707	20.1569	3.5	40
trans-1,2-Dichloroethene	1	28.6604	25.4973	12	30
Ethyl-t-butyl ether	1	19.0134	19.7556	3.8	30
cis-1,2-Dichloroethene	1	40.9691	43.612	6.2	30
Bromochloromethane	1	3.4395	20.578	143*	30
2,2-Dichloropropane	1	22.1609	23.4365	5.6	30
Ethyl acetate	1	17.1424	20.2099	16	30
1,4-Dioxane	1	1363.209	1565.411	14	30
1,1-Dichloropropene	1	19.0611	21.0418	9.9	30
Chloroform	1	19.5334	20.6245	5.4	40
Cyclohexane	1	20.3105	21.8072	7.1	30
1,2-Dichloroethane	1	18.372	19.2524	4.7	40
2-Butanone	1	19.8447	18.7391	5.7	40
1,1,1-Trichloroethane	1	19.4913	21.3523	9.1	30
Carbon Tetrachloride	1	20.7677	22.2655	7	40
Vinyl Acetate	1	19.4125	20.2779	4.4	30
Bromodichloromethane	1	19.6323	20.5372	4.5	30
Methylcyclohexane	1	22.2347	22.7907	2.5	30
Dibromomethane	1	20.4772	20.5197	0.21	30
1,2-Dichloropropane	1	19.9068	20.4779	2.8	30
Trichloroethene	1	32.5663	35.2046	7.8	40
Benzene	1	19.3378	20.9878	8.2	40
tert-Amyl methyl ether	1	19.7101	21.6003	9.2	30
Iso-propylacetate	1	18.1645	20.0521	9.9	30
Methyl methacrylate	1	16.3491	18.5848	13	30
Dibromochloromethane	1	19.1673	20.5864	7.1	30
2-Chloroethylvinylether	1	0	0	NA	30
cis-1,3-Dichloropropene	1	19.0334	20.4173	7	30
trans-1,3-Dichloropropene	1	18.5218	20.2921	9.1	30
Ethyl methacrylate	1	18.7698	19.8567	5.6	30
1,1,2-Trichloroethane	1	17.9516	18.8234	4.7	30
1,2-Dibromoethane	1	18.033	19.2695	6.6	30
1,3-Dichloropropane	1	17.6984	19.2176	8.2	30
4-Methyl-2-Pentanone	1	18.1429	19.343	6.4	30
2-Hexanone	1	17.4855	19.3555	10	30
Tetrachloroethene	1	20.6112	21.8122	5.7	40
Toluene	1	18.3254	19.9721	8.6	40
1,1,1,2-Tetrachloroethane	1	17.7769	19.5644	9.6	30
Chlorobenzene	1	17.8473	19.4903	8.8	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS89372

Method: 8260C | Matrix: Aqueous | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	19.3405	20.288	4.8	30
n-Amyl acetate	1	19.7381	21.6876	9.4	30
Bromoform	1	19.5851	20.0425	2.3	30
Ethylbenzene	1	18.549	19.6959	6	30
1,1,2,2-Tetrachloroethane	1	18.2032	19.6263	7.5	30
Styrene	1	18.7567	19.9901	6.4	30
m&p-Xylenes	1	36.5981	41.1553	12	30
o-Xylene	1	18.7739	20.0574	6.6	30
trans-1,4-Dichloro-2-butene	1	16.1787	19.228	17	30
1,3-Dichlorobenzene	1	17.991	19.2697	6.9	30
1,4-Dichlorobenzene	1	17.608	19.1821	8.6	40
1,2-Dichlorobenzene	1	18.2837	18.9743	3.7	40
Isopropylbenzene	1	19.6117	20.5698	4.8	30
Cyclohexanone	1	128.642	136.6914	6.1	30
Camphene	1	12.9062	18.9126	38*	30
1,2,3-Trichloropropane	1	18.3521	20.0781	9	30
2-Chlorotoluene	1	18.8607	19.3567	2.6	30
p-Ethyltoluene	1	18.89	20.7709	9.5	30
4-Chlorotoluene	1	18.3543	19.0566	3.8	30
n-Propylbenzene	1	19.2631	20.5565	6.5	40
Bromobenzene	1	18.0172	19.4734	7.8	30
1,3,5-Trimethylbenzene	1	18.0977	19.7257	8.6	30
Butyl methacrylate	1	19.0226	20.1034	5.5	30
t-Butylbenzene	1	18.6775	19.9421	6.5	30
1,2,4-Trimethylbenzene	1	17.9974	19.3258	7.1	30
sec-Butylbenzene	1	19.417	20.232	4.1	40
4-Isopropyltoluene	1	19.2238	20.2029	5	30
n-Butylbenzene	1	19.8657	20.5646	3.5	30
p-Diethylbenzene	1	20.109	20.8262	3.5	30
1,2,4,5-Tetramethylbenzene	1	19.4461	19.9076	2.3	30
1,2-Dibromo-3-Chloropropane	1	19.9792	20.4065	2.1	30
Camphor	1	200.6323	199.5934	0.52	30
Hexachlorobutadiene	1	22.0267	22.2233	0.89	30
1,2,4-Trichlorobenzene	1	20.2752	20.2396	0.18	30
1,2,3-Trichlorobenzene	1	22.9264	22.2651	2.9	30
Naphthalene	1	22.8694	22.6727	0.86	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

0092507 0204

Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_2

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time
1	2M141743.D	CAL @ 20 PPB	09/09/20 21:04	2	2M141741.D	CAL @ 5 PPB	09/09/20 20:25
3	2M141742.D	CAL @ 10 PPB	09/09/20 20:44	4	2M141745.D	CAL @ 50 PPB	09/09/20 21:43
5	2M141753.D	CAL @100 PPB	09/10/20 00:19	6	2M141750.D	CAL @ 250 PPB	09/09/20 23:21
7	2M141747.D	CAL @ 500 PPB	09/09/20 22:22	8	2M141740.D	CAL @ 1 PPB	09/09/20 20:05
9	2M141739.D	CAL @ 0.5 PPB	09/09/20 19:46				

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.2401	0.2466	0.2725	0.2628	0.2555	0.2782	0.2384	0.3014	-----	0.262	1.69	0.994	0.999	8.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dichlorodifluorometha	1	0	Avg	0.1600	0.1375	0.1699	0.1705	0.1770	0.1870	0.1574	0.1665	-----	0.166	1.68	0.993	0.999	8.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloromethane	1	0	Avg	0.1568	0.1693	0.1835	0.1824	0.1863	0.1955	0.1629	0.2245	-----	0.183	1.85	0.992	0.999	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromomethane	1	0	Qua	0.1171	0.1325	0.1368	0.1127	0.1498	0.1877	0.2004	0.2261	-----	0.158	2.25	0.997	0.999	26	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Chloride	1	0	Avg	0.2123	0.1949	0.2198	0.2275	0.2246	0.2343	0.1985	0.2643	-----	0.222	1.95	0.993	0.999	9.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroethane	1	0	Avg	0.1480	0.1425	0.1668	0.1626	0.1535	0.1628	0.1658	0.1786	-----	0.160	2.34	1.00	1.00	7.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichlorofluoromethan	1	0	Avg	0.3529	0.3344	0.4053	0.3904	0.3957	0.4314	0.3856	0.3902	-----	0.386	2.57	0.997	0.999	7.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl ether	1	0	Avg	0.1512	0.1535	0.1522	0.1574	0.1552	0.1644	0.1506	0.1435	-----	0.154	2.80	0.998	1.00	3.9	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Furan	1	0	Avg	0.2606	0.2576	0.2724	0.2748	0.2722	0.2918	0.2695	0.3206	-----	0.278	2.84	0.998	1.00	7.3	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1346	0.1382	0.1706	0.1621	0.1633	0.1758	0.1626	0.1653	-----	0.159	3.00	0.998	0.999	9.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methylene Chloride	1	0	Avg	0.2238	0.2263	0.2215	0.2294	0.2197	0.2298	0.2010	0.2514	-----	0.225	3.42	0.996	0.999	6.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acrolein	1	0	Avg	0.0277	0.0256	0.0273	0.0281	0.0275	0.0302	0.0292	0.0290	-----	0.0281	2.92	1.00	1.00	5.0		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Acrylonitrile	1	0	Avg	0.0721	0.0726	0.0669	0.0772	0.0772	0.0797	0.0725	0.0970	-----	0.0769	3.62	0.998	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iodomethane	1	0	Avg	0.2255	0.1542	0.1969	0.2754	0.2514	0.2682	0.2467	0.2133	-----	0.229	3.15	0.997	0.998	18		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acetone	1	0	Avg	0.0589	0.0572	0.0594	0.0600	0.0607	0.0630	0.0576	0.0730	-----	0.0613	3.04	0.998	1.00	8.3	0.10 a	100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Carbon Disulfide	1	0	Avg	0.5669	0.5477	0.5990	0.5907	0.5931	0.6217	0.5445	0.6422	-----	0.588	3.21	0.996	0.999	5.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butyl Alcohol	1	0	Avg	0.0203	0.0215	0.0199	0.0214	0.0216	0.0216	0.0190	0.0280	-----	0.0217	3.48	0.996	1.00	13		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
n-Hexane	1	0	Avg	0.1483	0.1606	0.1913	0.1824	0.1868	0.2019	0.1746	0.2137	-----	0.183	3.87	0.995	0.999	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Di-isopropyl-ether	1	0	Avg	0.5228	0.4902	0.5279	0.5554	0.5427	0.5947	0.5413	0.5704	-----	0.543	4.03	0.998	0.999	5.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethene	1	0	Avg	0.2812	0.2731	0.3032	0.3040	0.3060	0.3250	0.3052	0.3183	-----	0.302	3.01	0.999	1.00	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl Acetate	1	0	Avg	0.1346	0.1532	0.1302	0.1373	0.1374	0.1396	0.1192	0.1579	-----	0.139	3.32	0.994	1.00	8.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl-t-butyl ether	1	0	Avg	0.5671	0.5427	0.5617	0.6065	0.6051	0.6523	0.5907	0.5742	0.4389	0.571	3.64	0.998	0.999	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.3571	0.3525	0.3645	0.3805	0.3743	0.3956	0.3557	0.4126	-----	0.374	4.00	0.997	1.00	5.7	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2174	0.2112	0.2247	0.2324	0.2271	0.2489	0.2244	0.2443	-----	0.229	3.65	0.997	0.999	5.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl-t-butyl ether	1	0	Avg	0.5941	0.5723	0.5908	0.6279	0.6189	0.6589	0.6006	0.6386	-----	0.613	4.29	0.998	1.00	4.6	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.3598	0.3543	0.3764	0.3839	0.3699	0.4099	0.3811	0.3691	-----	0.376	4.41	0.999	0.999	4.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromochloromethane	1	0	Avg	0.1753	0.1725	0.1745	0.1844	0.1755	0.1641	0.1468	0.1962	-----	0.174	4.57	0.996	1.00	8.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2,2-Dichloropropane	1	0	Avg	0.3227	0.3142	0.3453	0.3492	0.3211	0.3662	0.3488	0.3600	-----	0.341	4.42	0.999	0.999	5.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl acetate	1	0	Avg	0.1900	0.1940	0.1908	0.1981	0.1957	0.2058	0.1846	0.2193	-----	0.197	4.43	0.997	1.00	5.5		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dioxane	1	0	Avg	0.0029	0.0028	0.0029	0.0030	0.0028	0.0030	0.0028	0.0031	-----	0.00296	5.50	0.999	1.00	3.8		1000.	250.0	500.0	2500.	5000.	12500	25000	50.00	
1,1-Dichloropropene	1	0	Avg	0.2919	0.2780	0.3059	0.3144	0.3166	0.3466	0.3225	0.3064	-----	0.310	4.82	0.999	0.999	6.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroform	1	0	Avg	0.4013	0.3759	0.4225	0.4258	0.4135	0.4271	0.3851	0.4433	-----	0.412	4.60	0.997	1.00	5.5	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromofluoromethan	1	0	Avg	0.2803	0.2820	0.2835	0.2746	0.2783	0.2798	0.2425	0.2830	0.2802	0.276	4.70	-1	-1	4.7		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.2264	0.2288	0.2779	0.2679	0.2800	0.3059	0.2684	0.2752	-----	0.266	4.77	0.996	0.999	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1466	0.1450	0.1425	0.1420	0.1449	0.1409	0.1286	0.1463	0.1452	0.142	4.91	-1	-1	3.9		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3259	0.3036	0.3258	0.3431	0.3390	0.3805	0.4010	0.3796	0.3383	0.349	4.95	0.999	1.00	9.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
2-Butanone	1	0	Avg	0.0875	0.0815	0.0893	0.0977	0.1011	0.1097	0.1023	0.0889	-----	0.0948	4.40	0.999	0.999	10	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1-Trichloroethane	1	0	Avg	0.3502	0.3331	0.3655	0.3792	0.3713	0.3960	0.3584	0.3893	-----	0.368	4.73	0.998	0.999	5.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Carbon Tetrachloride	1	0	Avg	0.3124	0.2955	0.3335	0.3407	0.3377	0.3741	0.3442	0.3350	-----	0.334	4.83	0.998	0.999	6.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Acetate	1	0	Avg	0.6616	0.6114	0.6443	0.6828	0.6752	0.7214	0.6841	0.6938	-----	0.672	4.02	0.999	1.00	4.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromodichloromethan	1	0	Avg	0.3274	0.3123	0.3378	0.3455	0.3368	0.3498	0.3321	0.3503	-----	0.337	5.57	0.999	1.00	3.8	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.30

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_2

Level #	Data File:	Cal Identifier:	Analysis Date/Time	Level #	Data File:	Cal Identifier:	Analysis Date/Time
1	2M141743.D	CAL @ 20 PPB	09/09/20 21:04	2	2M141741.D	CAL @ 5 PPB	09/09/20 20:25
3	2M141742.D	CAL @ 10 PPB	09/09/20 20:44	4	2M141745.D	CAL @ 50 PPB	09/09/20 21:43
5	2M141753.D	CAL @100 PPB	09/10/20 00:19	6	2M141750.D	CAL @ 250 PPB	09/09/20 23:21
7	2M141747.D	CAL @ 500 PPB	09/09/20 22:22	8	2M141740.D	CAL @ 1 PPB	09/09/20 20:05
9	2M141739.D	CAL @ 0.5 PPB	09/09/20 19:46				

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.2137	0.2295	0.2739	0.2604	0.2734	0.3036	0.2720	0.2841	-----	0.264	5.42	0.997	0.999	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromomethane	1	0	Avg	0.1777	0.1594	0.1765	0.1810	0.1789	0.1950	0.1812	0.1761	-----	0.178	5.50	0.999	0.999	5.5		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloropropane	1	0	Avg	0.2177	0.2144	0.2221	0.2260	0.2235	0.2434	0.2260	0.2362	-----	0.226	5.43	0.999	0.999	4.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichloroethene	1	0	Avg	0.2481	0.2391	0.2590	0.2665	0.2602	0.2832	0.2587	0.2560	-----	0.259	5.30	0.998	0.999	5.0	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Benzene	1	0	Avg	0.8614	0.8227	0.8795	0.9271	0.9039	1.0074	1.0258	0.9568	0.6455	0.892	4.95	0.999	1.00	13	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.6116	0.5863	0.5827	0.6367	0.6411	0.6968	0.8845	0.5861	-----	0.653	4.99	0.989	1.00	15		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iso-propylacetate	1	0	Avg	0.4312	0.4107	0.4296	0.4453	0.4702	0.4885	0.5346	0.6616	-----	0.484	4.95	0.998	1.00	17	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl methacrylate	1	0	Avg	0.2147	0.1916	0.2141	0.2179	0.2230	0.2301	0.2245	0.1912	-----	0.213	5.45	1.00	1.00	6.8	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromochloromethan	1	0	Avg	0.3223	0.2959	0.3177	0.3397	0.3352	0.3403	0.3585	0.3538	-----	0.333	6.42	0.999	1.00	6.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chloroethylvinylethe	1	0	Avg	0.0688	0.0647	0.0713	0.0713	0.0706	0.0705	0.0674	0.0749	-----	0.0700	5.71	0.999	1.00	4.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.4358	0.4029	0.4395	0.4533	0.4463	0.4633	0.4578	0.4589	-----	0.445	5.81	1.00	1.00	4.4	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,3-Dichloroprop	1	0	Avg	0.4311	0.4046	0.4272	0.4465	0.4421	0.4704	0.5639	0.4723	-----	0.457	6.09	0.993	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl methacrylate	1	0	Avg	0.2156	0.2000	0.2080	0.2238	0.2301	0.2495	0.3442	0.2070	-----	0.235	6.10	0.982	1.00	20	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2525	0.2408	0.2589	0.2604	0.2609	0.2668	0.3344	0.2793	-----	0.269	6.20	0.990	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromoethane	1	0	Avg	0.2743	0.2634	0.2814	0.2845	0.2812	0.2848	0.2844	0.2850	-----	0.280	6.49	1.00	1.00	2.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.4309	0.4038	0.4313	0.4476	0.4525	0.4865	0.5621	0.4475	-----	0.458	6.29	0.995	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.2294	0.2171	0.2256	0.2387	0.2367	0.2411	0.2385	0.2242	-----	0.231	5.87	1.00	1.00	3.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Hexanone	1	0	Avg	0.1631	0.1482	0.1596	0.1710	0.1743	0.1820	0.2302	0.2244	-----	0.182	6.30	0.990	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Tetrachloroethene	1	0	Avg	0.2240	0.2227	0.2437	0.2388	0.2467	0.2677	0.3026	0.2609	-----	0.251	6.29	0.996	1.00	10	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Toluene-d8	1	0	Avg	1.1986	1.1768	1.1872	1.1779	1.1841	1.1467	1.1087	1.1798	1.1693	1.17	5.95	-1	-1	2.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.6586	0.6261	0.6738	0.6871	0.6901	0.7320	0.8238	0.6627	-----	0.694	5.99	0.997	1.00	8.7	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2753	0.2654	0.2729	0.2899	0.2928	0.3271	0.3964	0.3066	-----	0.303	6.78	0.992	1.00	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chlorobenzene	1	0	Avg	0.7479	0.6970	0.7536	0.7788	0.7882	0.8222	0.8385	0.7885	-----	0.777	6.75	1.00	1.00	5.7	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butyl acrylate	1	0	Avg	0.8465	0.7875	0.8071	0.9179	0.9366	0.9508	0.9329	0.8373	-----	0.877	6.99	1.00	1.00	7.4	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Amyl acetate	1	0	Qua	0.7129	0.6256	0.6711	0.7692	0.8215	0.5634	0.1774	0.7044	-----	0.631	7.11	0.531	0.998	32	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromoform	1	0	Avg	0.3989	0.3679	0.3972	0.4192	0.4178	0.4887	0.3640	0.4363	-----	0.411	7.20	0.977	0.995	9.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethylbenzene	1	0	Avg	0.5370	0.5153	0.5569	0.6152	0.6163	0.4951	-----	0.6321	-----	0.567	6.79	0.990	1.00	9.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.5753	0.5682	0.5856	0.6288	0.6121	0.4942	-----	0.6037	-----	0.581	7.42	0.990	1.00	7.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromofluorobenzene	1	0	Avg	0.8033	0.8144	0.7952	0.8097	0.7976	0.7476	0.8079	0.8187	0.8269	0.802	7.37	-1	-1	2.8		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.3993	1.2942	1.3891	1.5309	1.5753	1.5718	0.9163	1.4631	-----	1.39	7.07	0.909	0.995	16	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
m&p-Xylenes	1	0	Avg	0.8111	0.7589	0.8213	0.8808	0.9011	0.9190	0.7419	0.8528	0.6664	0.817	6.85	0.988	0.999	10	0.10	40.00	10.00	20.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	0.7858	0.7400	0.7902	0.8644	0.8908	0.8947	0.6580	0.8420	-----	0.808	7.07	0.973	0.998	10	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.2116	0.2034	0.2205	0.2344	0.2430	0.2247	0.2717	0.2458	-----	0.232	7.44	0.993	0.999	9.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichlorobenzene	1	0	Avg	0.9510	0.9020	0.9631	1.0172	1.0482	1.0562	0.9395	1.0759	-----	0.994	7.99	0.997	1.00	6.4	0.60	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dichlorobenzene	1	0	Avg	0.9607	0.9064	1.0074	1.0191	1.0386	1.0252	1.1190	1.0815	-----	1.02	8.04	0.998	1.00	6.5	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichlorobenzene	1	0	Avg	0.8851	0.8498	0.8976	0.9325	0.9544	1.0655	0.9374	0.9794	-----	0.938	8.26	0.996	0.999	7.0	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Isopropylbenzene	1	0	Avg	1.8888	1.8403	2.0419	2.1242	2.1609	2.3515	1.3523	2.1285	-----	1.99	7.26	0.907	0.991	15	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Qua	0.0169	0.0209	0.0170	0.0164	0.0162	0.0170	0.0112	0.0388	-----	0.0193	7.34	0.951	0.996	43		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Camphene	1	0	Qua	0.4399	0.4595	0.5386	0.5225	0.5658	0.5173	0.8104	0.4947	-----	0.544	7.43	0.970	0.997	21		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichloropropane	1	0	Avg	0.7324	0.6985	0.7201	0.7763	0.7958	0.7963	1.0363	0.7889	-----	0.793	7.46	0.988	0.999	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chlorotoluene	1	0	Qua	1.2151	1.1162	1.1718	1.2917	1.3768	0.9897	0.6025	1.3791	-----	1.14	7.56	0.898	0.998	22		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Avg Rsd: 10.30

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2M141743.D	CAL @ 20 PPB	09/09/20 21:04	2	2M141741.D	CAL @ 5 PPB	09/09/20 20:25
3	2M141742.D	CAL @ 10 PPB	09/09/20 20:44	4	2M141745.D	CAL @ 50 PPB	09/09/20 21:43
5	2M141753.D	CAL @100 PPB	09/10/20 00:19	6	2M141750.D	CAL @ 250 PPB	09/09/20 23:21
7	2M141747.D	CAL @ 500 PPB	09/09/20 22:22	8	2M141740.D	CAL @ 1 PPB	09/09/20 20:05
9	2M141739.D	CAL @ 0.5 PPB	09/09/20 19:46				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	1.8893	1.8336	1.9757	2.0889	2.1601	1.9968	1.0643	2.1466	-----	1.89	7.55	0.869	0.996	19		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Chlorotoluene	1	0	Avg	1.2013	1.1342	1.2146	1.2965	1.3779	-----	-----	1.3201	-----	1.26	7.62	0.999	1.00	7.1		20.00	5.00	10.00	50.00	100.0			1.00	
n-Propylbenzene	1	0	Avg	2.1805	2.1170	2.3624	2.4352	2.5243	2.5743	1.4007	2.5874	-----	2.27	7.49	0.884	0.992	17		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.1935	1.1403	1.2294	1.2875	1.3312	1.3938	1.5453	1.2987	-----	1.30	7.46	0.998	1.00	9.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3,5-Trimethylbenzen	1	0	Avg	1.4486	1.4238	1.5404	1.6681	1.7662	0.8970	-----	1.7559	-----	1.50	7.57	0.874	0.994	20		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Butyl methacrylate	1	0	Avg	0.5787	0.5598	0.5723	0.6487	0.6978	-----	-----	0.4928	-----	0.592	7.58	0.998	1.00	12	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
t-Butylbenzene	1	0	Qua	1.4300	1.4308	1.5428	1.5864	1.6478	1.5556	0.6761	1.5993	-----	1.43	7.78	0.770	0.991	22		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Qua	1.5848	1.5107	1.6425	1.7235	1.7966	1.3162	0.5711	1.6533	-----	1.47	7.80	0.734	0.999	27		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	1.7135	1.7013	1.8961	1.9013	1.9891	2.1322	-----	1.9914	-----	1.90	7.90	0.999	1.00	8.2		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
4-Isopropyltoluene	1	0	Avg	1.4625	1.4710	1.6028	1.6441	1.7145	1.8732	-----	1.7462	-----	1.64	7.96	0.999	1.00	9.0		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
n-Butylbenzene	1	0	Avg	1.4995	1.4696	1.6480	1.6742	1.7364	1.8444	-----	1.7692	-----	1.66	8.20	0.999	1.00	8.3		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
p-Diethylbenzene	1	0	Avg	0.8164	0.7792	0.8654	0.9071	0.9352	1.0553	0.5224	0.9561	-----	0.855	8.19	0.846	0.984	19		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	1.2197	1.1412	1.2474	1.3115	1.3398	1.0527	1.1680	1.3777	-----	1.23	8.65	0.996	0.997	8.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1326	0.1305	0.1288	0.1413	0.1376	0.1057	0.1638	0.1435	-----	0.136	8.71	0.971	0.994	12	0.05	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Camphor	1	0	Qua	0.0559	0.0491	0.0521	0.0597	0.0627	0.0494	0.1061	0.0581	0.0428	0.0596	9.15	0.934	0.993	31		200.0	50.00	100.0	500.0	1000.	2500.	5000.	10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.1772	0.1748	0.2093	0.1895	0.1994	0.1453	-----	0.2439	-----	0.191	9.28	0.979	0.999	16		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.4561	0.4342	0.4689	0.4980	0.4888	0.3671	0.6940	0.5940	-----	0.500	9.20	0.948	0.992	20	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.4034	0.3780	0.3980	0.4094	0.4101	0.2988	-----	0.4713	-----	0.396	9.50	0.978	0.999	13		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Naphthalene	1	0	Avg	1.3422	1.1413	1.2726	1.3945	1.4249	1.0640	-----	1.3159	-----	1.28	9.36	0.981	0.999	10		20.00	5.00	10.00	50.00	100.0	250.0		1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.30
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0092507 0234

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M82676.D	CAL @ 20 PPB	09/11/20 21:35	2	11M82674.D	CAL @ 5 PPB	09/11/20 20:58
3	11M82675.D	CAL @ 10 PPB	09/11/20 21:17	4	11M82678.D	CAL @ 50 PPB	09/11/20 22:12
5	11M82686.D	CAL @ 100 PPB	09/12/20 00:39	6	11M82673.D	CAL @ 1 PPB	09/11/20 20:40
7	11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.2849	0.2543	0.2697	0.2583	0.2729	-----	-----	0.2688	-----	0.268	1.67	0.999	0.999	4.1	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Dichlorodifluorometha	1	0	Avg	0.1652	0.1623	0.1768	0.1567	0.1792	-----	-----	0.1262	-----	0.161	1.66	0.996	0.999	12	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Chloromethane	1	0	Avg	0.1864	0.1709	0.1771	0.1593	0.1727	-----	-----	0.1509	-----	0.170	1.84	0.998	0.999	7.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Bromomethane	1	0	Avg	0.1678	0.1752	0.1819	0.1509	0.2001	-----	-----	0.1780	-----	0.176	2.20	0.984	0.998	9.2	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Vinyl Chloride	1	0	Avg	0.2293	0.2252	0.2299	0.2035	0.2235	-----	-----	0.1971	-----	0.218	1.94	0.998	0.999	6.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Chloroethane	1	0	Avg	0.1563	0.1492	0.1551	0.1430	0.1502	-----	-----	0.1347	-----	0.148	2.29	0.999	0.999	5.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Trichlorofluoromethan	1	0	Avg	0.3507	0.3630	0.3868	0.3366	0.3986	-----	-----	0.3274	-----	0.361	2.53	0.994	0.999	7.8	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl ether	1	0	Avg	0.1311	0.1351	0.1292	0.1140	0.1292	-----	-----	0.1012	-----	0.123	2.77	0.996	0.999	11	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Furan	1	0	Avg	0.2290	0.2257	0.2205	0.1996	0.2322	-----	-----	0.2647	-----	0.229	2.81	0.995	0.999	9.2	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1279	0.1562	0.1583	0.1347	0.1586	-----	-----	0.1375	-----	0.146	2.96	0.993	0.999	9.4	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Methylene Chloride	1	0	Avg	0.2144	0.2100	0.2183	0.1914	0.2125	-----	-----	0.2541	-----	0.217	3.37	0.997	0.999	9.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Acrolein	1	0	Avg	0.0282	0.0251	0.0274	0.0263	0.0280	-----	-----	0.0196	-----	0.0258	2.88	0.999	1.00	12		100.0	25.00	50.00	250.0	500.0			5.00	
Acrylonitrile	1	0	Qua	0.0702	0.0686	0.0710	0.0651	0.0703	-----	-----	0.0342	-----	0.0633	3.57	0.999	0.999	23		20.00	5.00	10.00	50.00	100.0			1.00	
Iodomethane	1	0	Qua	0.2073	0.1238	0.1658	0.2196	0.2349	-----	-----	0.0853	-----	0.173	3.11	0.999	1.00	34		20.00	5.00	10.00	50.00	100.0			1.00	
Acetone	1	0	Avg	0.0498	0.0555	0.0528	0.0447	0.0481	-----	-----	0.0585	-----	0.0516	3.01	0.998	0.999	9.8	0.10 a	100.0	25.00	50.00	250.0	500.0			5.00	
Carbon Disulfide	1	0	Avg	0.4902	0.4578	0.4764	0.4811	0.5579	-----	-----	0.4966	-----	0.493	3.18	0.995	1.00	7.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
t-Butyl Alcohol	1	0	Avg	0.0121	0.0124	0.0129	0.0113	0.0147	-----	-----	0.0114	-----	0.0125	3.45	0.986	0.999	10		100.0	25.00	50.00	250.0	500.0			5.00	
n-Hexane	1	0	Avg	0.1310	0.1577	0.1706	0.1550	0.1720	-----	-----	0.1342	-----	0.153	3.81	0.996	0.999	11		20.00	5.00	10.00	50.00	100.0			1.00	
Di-isopropyl-ether	1	0	Avg	0.4549	0.4061	0.4359	0.4100	0.4564	-----	-----	0.3869	-----	0.425	3.95	0.997	0.999	6.7		20.00	5.00	10.00	50.00	100.0			1.00	
1,1-Dichloroethene	1	0	Avg	0.2777	0.2625	0.2787	0.2601	0.2908	-----	-----	0.2233	-----	0.266	2.97	0.997	0.999	8.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Methyl Acetate	1	0	Qua	0.1169	0.1273	0.1241	0.1076	0.1179	-----	-----	0.0838	0.0678	0.107	3.27	0.998	0.999	21	0.10 a	20.00	5.00	10.00	50.00	100.0			1.00	0.50
Methyl-t-butyl ether	1	0	Avg	0.4805	0.4390	0.4723	0.4599	0.5188	-----	-----	0.3892	0.4515	0.459	3.59	0.997	1.00	8.7	0.10	20.00	5.00	10.00	50.00	100.0			1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.3622	0.3363	0.3484	0.3383	0.3624	-----	-----	0.3205	-----	0.345	3.92	0.999	1.00	4.7	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2133	0.1927	0.2075	0.1906	0.2270	-----	-----	0.1952	-----	0.204	3.60	0.994	0.999	6.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl-t-butyl ether	1	0	Avg	0.4877	0.4457	0.4641	0.4690	0.5253	-----	-----	0.4067	-----	0.466	4.20	0.997	1.00	8.5	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.3598	0.3226	0.3449	0.3264	0.3625	-----	-----	0.3024	-----	0.336	4.31	0.997	0.999	7.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Bromochloromethane	1	0	Avg	0.1496	0.1398	0.1503	0.1428	0.1470	-----	-----	0.1256	-----	0.143	4.45	1.00	1.00	6.5		20.00	5.00	10.00	50.00	100.0			1.00	
2,2-Dichloropropane	1	0	Avg	0.2893	0.2602	0.2884	0.2790	0.3039	-----	-----	0.2132	-----	0.272	4.31	0.998	1.00	12		20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl acetate	1	0	Avg	0.1793	0.1699	0.1938	0.1684	0.1707	-----	-----	0.1304	-----	0.169	4.33	1.00	1.00	12		20.00	5.00	10.00	50.00	100.0			1.00	
1,4-Dioxane	1	0	Avg	0.0018	0.0018	0.0017	0.0014	0.0022	-----	-----	0.0019	-----	0.00186	5.34	0.968	0.996	14		1000.	250.0	500.0	2500.	5000.			50.00	
1,1-Dichloropropene	1	0	Avg	0.3004	0.2872	0.3188	0.3044	0.3302	-----	-----	0.2527	-----	0.299	4.70	0.998	1.00	9.1		20.00	5.00	10.00	50.00	100.0			1.00	
Chloroform	1	0	Avg	0.4134	0.3707	0.3997	0.3667	0.4075	-----	-----	0.3257	-----	0.381	4.49	0.997	0.999	8.7	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
Dibromofluoromethan	1	0	Avg	0.2448	0.2509	0.2569	0.2539	0.2487	-----	-----	0.2500	0.2451	0.250	4.58	-1	-1	1.8		30.00	30.00	30.00	30.00	30.00			30.00	30.00
Cyclohexane	1	0	Avg	0.2329	0.2472	0.2792	0.2487	0.2800	-----	-----	0.2206	-----	0.251	4.65	0.996	1.00	9.6	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1274	0.1335	0.1327	0.1258	0.1251	-----	-----	0.1364	0.1373	0.131	4.78	-1	-1	3.8		30.00	30.00	30.00	30.00	30.00			30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3035	0.2906	0.3030	0.2755	0.3044	-----	-----	0.2807	0.2982	0.294	4.82	0.998	0.999	4.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	0.50
2-Butanone	1	0	Avg	0.0736	0.0767	0.0624	0.0568	0.0736	-----	-----	0.0893	-----	0.0721	4.30	0.986	0.996	16	0.10 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,1-Trichloroethane	1	0	Avg	0.3554	0.3228	0.3601	0.3479	0.3767	-----	-----	0.3000	-----	0.344	4.61	0.999	1.00	8.1	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Carbon Tetrachloride	1	0	Avg	0.2863	0.2649	0.3111	0.3045	0.3450	-----	-----	0.2216	-----	0.289	4.71	0.997	1.00	15	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Vinyl Acetate	1	0	Avg	0.5220	0.4593	0.5144	0.5106	0.5596	-----	-----	0.4428	-----	0.502	3.94	0.998	1.00	8.6		20.00	5.00	10.00	50.00	100.0			1.00	
Bromodichloromethan	1	0	Avg	0.3038	0.2680	0.2754	0.2972	0.3190	-----	-----	0.2589	-----	0.287	5.41	0.999	1.00	8.1	0.20	20.00	5.00	10.00	50.00	100.0			1.00	

Avg Rsd: 9.934

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0092507 0235

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M82676.D	CAL @ 20 PPB	09/11/20 21:35	2	11M82674.D	CAL @ 5 PPB	09/11/20 20:58
3	11M82675.D	CAL @ 10 PPB	09/11/20 21:17	4	11M82678.D	CAL @ 50 PPB	09/11/20 22:12
5	11M82686.D	CAL @ 100 PPB	09/12/20 00:39	6	11M82673.D	CAL @ 1 PPB	09/11/20 20:40
7	11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.2076	0.2345	0.2602	0.2536	0.2871	-----	-----	0.1822	-----	0.238	5.27	0.995	0.999	16	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Dibromomethane	1	0	Avg	0.1444	0.1243	0.1395	0.1468	0.1582	-----	-----	0.1184	-----	0.139	5.34	0.999	1.00	11		20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dichloropropane	1	0	Avg	0.2080	0.1854	0.2103	0.2052	0.2151	-----	-----	0.1686	-----	0.199	5.28	1.00	1.00	9.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Trichloroethene	1	0	Avg	0.2436	0.2121	0.2417	0.2474	0.2589	-----	-----	0.2216	-----	0.238	5.16	1.00	1.00	7.3	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
Benzene	1	0	Avg	0.8920	0.8280	0.8776	0.8380	0.9406	-----	-----	0.7773	0.7888	0.849	4.82	0.997	0.999	6.9	0.50	20.00	5.00	10.00	50.00	100.0			1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.4955	0.4209	0.4673	0.4796	0.5378	-----	-----	0.3901	-----	0.465	4.86	0.997	1.00	11		20.00	5.00	10.00	50.00	100.0			1.00	
Iso-propylacetate	1	0	Avg	0.3560	0.3043	0.3342	0.3407	0.3657	-----	-----	0.2934	-----	0.332	4.81	0.999	1.00	8.6	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Methyl methacrylate	1	0	Avg	0.2018	0.1753	0.2080	0.1967	0.2106	-----	-----	0.2122	-----	0.201	5.30	0.999	1.00	6.9	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Dibromochloromethan	1	0	Avg	0.2913	0.2471	0.2825	0.3106	0.3419	-----	-----	0.2006	-----	0.279	6.24	0.998	1.00	18	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
2-Chloroethylvinylethe	1	0	Qua	0.0611	0.0538	0.0591	0.0598	0.0657	-----	-----	0.0196	-----	0.0532	5.54	0.998	1.00	32		20.00	5.00	10.00	50.00	100.0			1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.4230	0.3453	0.3827	0.4215	0.4627	-----	-----	0.3458	-----	0.397	5.64	0.998	1.00	12	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,3-Dichloroprop	1	0	Avg	0.4012	0.3231	0.3787	0.4178	0.4384	-----	-----	0.3028	-----	0.377	5.92	1.00	1.00	14	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethyl methacrylate	1	0	Avg	0.1877	0.1675	0.1819	0.1924	0.1887	-----	-----	0.1255	-----	0.174	5.94	1.00	1.00	15	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2747	0.2470	0.2710	0.2666	0.2793	-----	-----	0.2541	-----	0.266	6.02	1.00	1.00	4.7	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dibromoethane	1	0	Avg	0.2881	0.2595	0.2784	0.2966	0.3138	-----	-----	0.2442	-----	0.280	6.32	0.999	1.00	9.0	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,3-Dichloropropane	1	0	Avg	0.4608	0.4136	0.4499	0.4556	0.4724	-----	-----	0.3793	-----	0.439	6.11	1.00	1.00	8.0		20.00	5.00	10.00	50.00	100.0			1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.2162	0.1945	0.2087	0.2049	0.2116	-----	-----	0.1782	-----	0.202	5.70	1.00	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
2-Hexanone	1	0	Avg	0.1495	0.1317	0.1504	0.1513	0.1501	-----	-----	0.1277	-----	0.144	6.12	1.00	1.00	7.5	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Tetrachloroethene	1	0	Avg	0.2311	0.2198	0.2365	0.2408	0.2696	-----	-----	0.2077	-----	0.234	6.12	0.997	1.00	9.0	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
Toluene-d8	1	0	Avg	1.3023	1.3148	1.3301	1.3118	1.3066	-----	-----	1.3226	1.2958	1.31	5.79	-1	-1	0.90		30.00	30.00	30.00	30.00	30.00			30.00	30.00
Toluene	1	0	Avg	0.7591	0.7075	0.7430	0.7481	0.7909	-----	-----	0.6306	-----	0.730	5.82	0.999	1.00	7.6	0.40	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2775	0.2509	0.2660	0.2834	0.3169	-----	-----	0.2378	-----	0.272	6.60	0.997	1.00	10		20.00	5.00	10.00	50.00	100.0			1.00	
Chlorobenzene	1	0	Avg	0.8562	0.7970	0.8173	0.8529	0.8937	-----	-----	0.7699	-----	0.831	6.57	1.00	1.00	5.4	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
n-Butyl acrylate	1	0	Avg	0.8706	0.7492	0.8164	0.8889	0.7549	-----	-----	0.6723	-----	0.792	6.80	0.992	0.999	10	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
n-Amyl acetate	1	0	Avg	0.6632	0.5614	0.6209	0.6819	0.5717	-----	-----	0.4446	-----	0.591	6.92	0.991	0.999	15	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
Bromoform	1	0	Avg	0.3742	0.3331	0.3672	0.4134	0.3910	-----	-----	0.2799	-----	0.360	7.01	0.999	0.999	13	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Ethylbenzene	1	0	Avg	0.7694	0.6929	0.7983	0.7710	0.6700	-----	-----	0.7175	-----	0.737	6.60	0.994	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.7453	0.7551	0.7604	0.7208	0.5827	-----	-----	0.6649	-----	0.705	7.22	0.986	1.00	9.8	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Bromofluorobenzene	1	0	Avg	0.7376	0.7797	0.7749	0.7765	0.6549	-----	-----	0.7752	0.7946	0.756	7.17	-1	-1	6.3		30.00	30.00	30.00	30.00	30.00			30.00	30.00
Styrene	1	0	Avg	1.8522	1.7057	1.8098	1.8199	1.6052	-----	-----	1.4977	-----	1.72	6.88	0.995	1.00	8.2	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
m&p-Xylenes	1	0	Avg	1.1174	0.9808	1.0693	1.0978	0.9491	-----	-----	0.9392	1.0236	1.03	6.66	0.994	1.00	7.0	0.10	40.00	10.00	20.00	100.0	200.0			2.00	1.00
o-Xylene	1	0	Avg	1.0660	1.0121	1.0798	1.0419	0.9268	-----	-----	0.8838	-----	1.00	6.88	0.996	1.00	7.9	0.30	20.00	5.00	10.00	50.00	100.0			1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.2074	0.2068	0.2187	0.2249	0.1867	-----	-----	0.1560	-----	0.200	7.25	0.990	0.999	13		20.00	5.00	10.00	50.00	100.0			1.00	
1,3-Dichlorobenzene	1	0	Avg	1.2717	1.1255	1.1842	1.2022	1.2497	-----	-----	1.1089	-----	1.19	7.79	1.00	1.00	5.5	0.60	20.00	5.00	10.00	50.00	100.0			1.00	
1,4-Dichlorobenzene	1	0	Avg	1.3104	1.1744	1.2393	1.2155	1.2915	-----	-----	1.1673	-----	1.23	7.83	0.999	1.00	4.8	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dichlorobenzene	1	0	Avg	1.1496	1.0407	1.1216	1.1110	1.0748	-----	-----	1.0036	-----	1.08	8.05	1.00	1.00	5.0	0.40	20.00	5.00	10.00	50.00	100.0			1.00	
Isopropylbenzene	1	0	Avg	2.5256	2.5399	2.6457	2.6197	2.2687	-----	-----	2.1061	-----	2.45	7.07	0.994	0.999	8.8	0.10	20.00	5.00	10.00	50.00	100.0			1.00	
Cyclohexanone	1	0	Qua	0.0143	0.0180	0.0145	0.0109	0.0113	-----	-----	0.0064	-----	0.0126	7.15	0.996	0.996	31		100.0	25.00	50.00	250.0	500.0			5.00	
Camphene	1	0	Avg	0.5471	0.6067	0.6482	0.6311	0.5550	-----	-----	0.4931	-----	0.580	7.24	0.995	0.998	10		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,3-Trichloropropane	1	0	Avg	0.8533	0.8384	0.8598	0.8562	0.7279	-----	-----	0.7191	-----	0.809	7.26	0.992	1.00	8.2		20.00	5.00	10.00	50.00	100.0			1.00	
2-Chlorotoluene	1	0	Avg	1.7204	1.4928	1.6160	1.6270	1.4192	-----	-----	1.6200	-----	1.58	7.37	0.994	1.00	6.8		20.00	5.00	10.00	50.00	100.0			1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.934

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0092507 0236

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M82676.D	CAL @ 20 PPB	09/11/20 21:35	2	11M82674.D	CAL @ 5 PPB	09/11/20 20:58
3	11M82675.D	CAL @ 10 PPB	09/11/20 21:17	4	11M82678.D	CAL @ 50 PPB	09/11/20 22:12
5	11M82686.D	CAL @ 100 PPB	09/12/20 00:39	6	11M82673.D	CAL @ 1 PPB	09/11/20 20:40
7	11M82672.D	CAL @ 0.5 PPB	09/11/20 20:21				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.6334	2.4583	2.6118	2.5423	2.3046	-----	-----	2.1138	-----	2.44	7.35	0.997	1.00	8.2		20.00	5.00	10.00	50.00	100.0			1.00	
4-Chlorotoluene	1	0	Avg	1.7200	1.6136	1.6089	1.6243	1.9152	-----	-----	1.3035	-----	1.63	7.42	0.995	0.999	12		20.00	5.00	10.00	50.00	100.0			1.00	
n-Propylbenzene	1	0	Avg	2.9830	2.9422	3.1393	3.0074	2.5773	-----	-----	2.6073	-----	2.88	7.30	0.993	1.00	8.0		20.00	5.00	10.00	50.00	100.0			1.00	
Bromobenzene	1	0	Avg	1.5309	1.4415	1.5463	1.4918	1.2516	-----	-----	1.4942	-----	1.46	7.27	0.991	1.00	7.4		20.00	5.00	10.00	50.00	100.0			1.00	
1,3,5-Trimethylbenzen	1	0	Avg	2.1546	1.9933	2.1405	2.1419	2.1661	-----	-----	1.7298	-----	2.05	7.38	1.00	1.00	8.3		20.00	5.00	10.00	50.00	100.0			1.00	
Butyl methacrylate	1	0	Avg	0.5809	0.5075	0.5530	0.5523	0.5954	-----	-----	0.3265	-----	0.519	7.38	0.999	1.00	19	0.50 a	20.00	5.00	10.00	50.00	100.0			1.00	
t-Butylbenzene	1	0	Avg	1.9963	1.8770	1.9920	1.9740	1.9741	-----	-----	1.6387	-----	1.91	7.58	1.00	1.00	7.3		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trimethylbenzen	1	0	Avg	2.2826	2.0873	2.2635	2.1643	2.1917	-----	-----	1.7732	-----	2.13	7.60	1.00	1.00	8.8		20.00	5.00	10.00	50.00	100.0			1.00	
sec-Butylbenzene	1	0	Avg	2.3761	2.2051	2.4308	2.3868	2.2927	-----	-----	2.0291	-----	2.29	7.69	1.00	1.00	6.5		20.00	5.00	10.00	50.00	100.0			1.00	
4-Isopropyltoluene	1	0	Avg	2.0289	1.8411	2.0392	2.0511	2.0062	-----	-----	1.6733	-----	1.94	7.76	1.00	1.00	7.8		20.00	5.00	10.00	50.00	100.0			1.00	
n-Butylbenzene	1	0	Avg	2.0925	1.9360	2.1396	2.0538	1.8438	-----	-----	1.7305	-----	1.97	8.00	0.997	1.00	8.0		20.00	5.00	10.00	50.00	100.0			1.00	
p-Diethylbenzene	1	0	Avg	1.1186	1.0023	1.0900	1.1229	1.0377	-----	-----	0.8463	-----	1.04	7.98	0.998	1.00	10		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	1.6032	1.3177	1.4945	1.5829	1.3941	-----	-----	1.2261	-----	1.44	8.44	0.995	1.00	10		20.00	5.00	10.00	50.00	100.0			1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1391	0.1175	0.1340	0.1299	0.1186	-----	-----	0.0770	-----	0.119	8.50	0.997	1.00	19	0.05	20.00	5.00	10.00	50.00	100.0			1.00	
Camphor	1	0	Qua	0.0478	0.0374	0.0455	0.0447	0.0418	-----	-----	0.0325	0.0125	0.0375	8.93	0.998	1.00	32		200.0	50.00	100.0	500.0	1000.			10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.1729	0.1364	0.1646	0.1669	0.1511	-----	-----	0.1326	-----	0.154	9.07	0.997	1.00	11		20.00	5.00	10.00	50.00	100.0			1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.4681	0.3988	0.4367	0.4282	0.3802	-----	-----	0.3997	-----	0.419	8.99	0.995	1.00	7.6	0.20	20.00	5.00	10.00	50.00	100.0			1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.3022	0.2680	0.2842	0.2766	0.2385	-----	-----	0.2764	-----	0.274	9.29	0.993	1.00	7.7		20.00	5.00	10.00	50.00	100.0			1.00	
Naphthalene	1	0	Avg	1.1787	0.9410	1.1497	1.0755	0.9384	-----	-----	0.8992	-----	1.03	9.15	0.993	1.00	12		20.00	5.00	10.00	50.00	100.0			1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.934

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0092507 0258

Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_2

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time
1	2M142492.D	CAL @ 20 PPB	09/29/20 16:47	2	2M142489.D	CAL @ 5 PPB	09/29/20 15:48
3	2M142490.D	CAL @ 10 PPB	09/29/20 16:08	4	2M142494.D	CAL @ 50 PPB	09/29/20 17:26
5	2M142496.D	CAL @ 100 PPB	09/29/20 18:05	6	2M142499.D	CAL @ 250 PPB	09/29/20 19:04
7	2M142502.D	CAL @ 500 PPB	09/29/20 20:03	8	2M142488.D	CAL @ 1 PPB	09/29/20 15:28
9	2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09				

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.3084	0.3044	0.2719	0.3264	0.3317	0.3264	0.3218	0.2561	-----	0.306	1.69	1.00	1.00	9.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dichlorodifluorometha	1	0	Avg	0.3267	0.3071	0.2716	0.3305	0.3409	0.3349	0.3272	0.2258	-----	0.308	1.68	1.00	1.00	13	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloromethane	1	0	Avg	0.3208	0.3455	0.3030	0.3431	0.3602	0.3483	0.3434	0.3809	-----	0.343	1.85	1.00	1.00	6.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromomethane	1	0	Avg	0.1427	0.1504	0.1402	0.1526	0.1877	0.2192	-----	0.1737	-----	0.167	2.25	0.995	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Vinyl Chloride	1	0	Avg	0.3712	0.3975	0.3370	0.3874	0.4038	0.3891	0.3690	0.3256	-----	0.373	1.95	0.999	1.00	7.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroethane	1	0	Avg	0.2427	0.2454	0.2330	0.2520	0.2602	0.2632	0.2708	0.2210	-----	0.249	2.34	1.00	1.00	6.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichlorofluoromethan	1	0	Avg	0.5649	0.5937	0.5441	0.5973	0.6141	0.6010	0.5927	0.4597	-----	0.571	2.57	1.00	1.00	8.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl ether	1	0	Avg	0.1834	0.2015	0.1816	0.1983	0.2124	0.2081	0.2124	0.1881	-----	0.198	2.80	1.00	1.00	6.4	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Furan	1	0	Avg	0.3176	0.3432	0.3104	0.3268	0.3519	0.3501	0.3537	0.3281	-----	0.335	2.84	1.00	1.00	5.0	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1928	0.2050	0.1789	0.2064	0.2137	0.2108	0.2197	0.1739	-----	0.200	3.00	1.00	1.00	8.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methylene Chloride	1	0	Avg	0.2692	0.2961	0.2518	0.2796	0.2975	0.2895	0.2877	0.2943	-----	0.283	3.42	1.00	1.00	5.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acrolein	1	0	Avg	0.0436	0.0448	0.0416	0.0449	0.0472	0.0477	0.0495	0.0427	-----	0.0453	2.92	1.00	1.00	6.0		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Acrylonitrile	1	0	Avg	0.0909	0.1026	0.0899	0.0973	0.1005	0.1059	0.1059	0.0931	-----	0.0983	3.62	1.00	1.00	6.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iodomethane	1	0	Qua	0.1842	0.1649	0.1597	0.2148	0.2704	0.2893	-----	0.1873	-----	0.210	3.15	0.985	0.996	24		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Acetone	1	0	Avg	0.0724	0.0805	0.0736	0.0819	0.0811	0.0803	0.0782	0.0973	-----	0.0807	3.04	1.00	1.00	9.4	0.10 a	100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Carbon Disulfide	1	0	Avg	0.7173	0.8037	0.6973	0.7494	0.7799	0.7709	0.7692	0.8299	-----	0.765	3.21	1.00	1.00	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butyl Alcohol	1	0	Avg	0.0240	0.0260	0.0247	0.0264	0.0274	0.0284	0.0273	0.0236	-----	0.0260	3.48	1.00	1.00	6.6		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
n-Hexane	1	0	Avg	0.2239	0.2349	0.2319	0.2427	0.2551	0.2505	0.2547	0.2015	-----	0.237	3.87	1.00	1.00	7.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Di-isopropyl-ether	1	0	Avg	0.6484	0.6639	0.6085	0.6783	0.7334	0.7412	0.7590	0.5936	-----	0.678	4.03	1.00	1.00	9.1		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethene	1	0	Avg	0.3732	0.3939	0.3528	0.3913	0.4108	0.4089	0.4224	0.3327	-----	0.386	3.01	1.00	1.00	8.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl Acetate	1	0	Avg	0.1654	0.1951	0.1782	0.1758	0.1829	0.1831	0.1793	0.1966	-----	0.182	3.32	1.00	1.00	5.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl-t-butyl ether	1	0	LinF	0.6903	0.7095	0.6580	0.7318	0.7958	0.7997	0.8090	0.6631	0.6760	0.726	3.64	1.00	1.00	8.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.4511	0.4789	0.4094	0.4701	0.4999	0.4976	0.5042	0.4522	-----	0.470	4.00	1.00	1.00	6.8	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2717	0.2935	0.2517	0.2806	0.2979	0.3025	0.3091	0.2687	-----	0.285	3.65	1.00	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl-t-butyl ether	1	0	Avg	0.7025	0.7205	0.6735	0.7352	0.7971	0.7992	0.8129	0.6313	-----	0.734	4.29	1.00	1.00	8.9	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.4472	0.4819	0.4211	0.4700	0.4999	0.5089	0.5261	0.4699	-----	0.478	4.41	1.00	1.00	7.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromochloromethane	1	0	Avg	0.2157	0.2288	0.2019	0.2157	0.2198	0.1993	0.2032	0.2145	-----	0.212	4.57	1.00	1.00	4.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2,2-Dichloropropane	1	0	Avg	0.4060	0.4388	0.3852	0.4197	0.4452	0.4418	0.4433	0.3919	-----	0.422	4.42	1.00	1.00	5.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl acetate	1	0	Avg	0.2318	0.2533	0.2229	0.2446	0.2531	0.2523	0.2546	0.2435	-----	0.245	4.43	1.00	1.00	4.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dioxane	1	0	Avg	0.0032	0.0032	0.0034	0.0035	0.0036	0.0038	0.0039	0.0026	-----	0.00344	5.50	1.00	1.00	12		1000.	250.0	500.0	2500.	5000.	12500	25000	50.00	
1,1-Dichloropropene	1	0	Avg	0.3798	0.4031	0.3497	0.3978	0.4190	0.4300	0.4551	0.3564	-----	0.399	4.82	0.999	1.00	9.1		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroform	1	0	Avg	0.5013	0.5330	0.4704	0.5194	0.5417	0.5271	0.5376	0.4676	-----	0.512	4.60	1.00	1.00	5.8	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromofluoromethan	1	0	Avg	0.2832	0.2901	0.2899	0.2896	0.2919	0.2861	0.2726	0.2918	0.2911	0.287	4.70	-1	-1	2.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.3426	0.3485	0.3316	0.3563	0.3747	0.3794	0.3957	0.2989	-----	0.354	4.77	1.00	1.00	8.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1495	0.1453	0.1515	0.1499	0.1544	0.1467	0.1430	0.1463	0.1486	0.148	4.91	-1	-1	2.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3888	0.4296	0.3712	0.4102	0.4423	0.4534	0.4858	0.3889	0.5360	0.434	4.95	0.999	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
2-Butanone	1	0	Avg	0.1134	0.1161	0.1032	0.1334	0.1389	0.1533	0.1562	0.0868	-----	0.125	4.40	1.00	1.00	20	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1-Trichloroethane	1	0	Avg	0.4457	0.4577	0.4112	0.4660	0.4886	0.4816	0.4928	0.3898	-----	0.454	4.73	1.00	1.00	8.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Carbon Tetrachloride	1	0	Avg	0.3753	0.3704	0.3392	0.3899	0.4128	0.4227	0.4417	0.3237	-----	0.385	4.83	1.00	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Acetate	1	0	Avg	0.7428	0.7848	0.7015	0.7561	0.8298	0.7989	0.7759	0.6959	-----	0.761	4.02	1.00	1.00	6.1		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromodichloromethan	1	0	LinF	0.3920	0.4190	0.3781	0.4240	0.4488	0.4432	0.4635	0.3515	-----	0.415	5.57	1.00	1.00	9.2	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Avg Rsd: 10.08

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2M142492.D	CAL @ 20 PPB	09/29/20 16:47	2	2M142489.D	CAL @ 5 PPB	09/29/20 15:48
3	2M142490.D	CAL @ 10 PPB	09/29/20 16:08	4	2M142494.D	CAL @ 50 PPB	09/29/20 17:26
5	2M142496.D	CAL @ 100 PPB	09/29/20 18:05	6	2M142499.D	CAL @ 250 PPB	09/29/20 19:04
7	2M142502.D	CAL @ 500 PPB	09/29/20 20:03	8	2M142488.D	CAL @ 1 PPB	09/29/20 15:28
9	2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.3212	0.3500	0.3057	0.3390	0.3640	0.3671	0.3909	0.3040	-----	0.343	5.42	0.999	1.00	9.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromomethane	1	0	Avg	0.1971	0.2030	0.1811	0.2042	0.2169	0.2219	0.2320	0.1896	-----	0.206	5.50	1.00	1.00	8.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloropropane	1	0	Avg	0.2630	0.2805	0.2534	0.2766	0.2987	0.3061	0.3250	0.2532	-----	0.282	5.43	0.999	1.00	9.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichloroethene	1	0	Avg	0.3015	0.3095	0.2835	0.3148	0.3301	0.3354	0.3542	0.3081	-----	0.317	5.30	0.999	1.00	6.9	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Benzene	1	0	Avg	1.0566	1.1138	1.0147	1.1109	1.2035	1.2372	1.2892	1.0142	1.0677	1.12	4.95	1.00	1.00	8.8	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.7223	0.7775	0.6761	0.7784	0.8586	0.8567	0.9875	0.6615	-----	0.790	4.99	0.996	1.00	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iso-propylacetate	1	0	Avg	0.4767	0.4834	0.4634	0.5264	0.5658	0.5730	0.6223	0.4683	-----	0.522	4.95	0.999	1.00	11	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl methacrylate	1	0	Avg	0.2432	0.2604	0.2316	0.2544	0.2694	0.2609	0.2713	0.2225	-----	0.252	5.45	1.00	1.00	7.0	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromochloromethan	1	0	Avg	0.3365	0.3563	0.3267	0.3584	0.3898	0.3725	0.3978	0.2746	-----	0.352	6.42	0.999	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chloroethylvinylethe	1	0	Avg	0.0366	0.0366	0.0303	0.0412	0.0451	0.0436	0.0460	0.0276	-----	0.0384	5.71	0.999	1.00	18		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.4659	0.4908	0.4463	0.4725	0.5119	0.4931	0.5049	0.4587	-----	0.481	5.81	1.00	1.00	4.8	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,3-Dichloroprop	1	0	Avg	0.4268	0.4649	0.4115	0.4484	0.4908	0.4751	0.5129	0.4299	-----	0.458	6.09	0.999	1.00	7.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl methacrylate	1	0	Avg	0.2412	0.2608	0.2334	0.2628	0.2845	0.2806	0.3345	0.2182	-----	0.265	6.10	0.994	1.00	14	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2825	0.2949	0.2767	0.2959	0.3139	0.3048	0.3393	0.2668	-----	0.297	6.20	0.998	1.00	7.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromoethane	1	0	Avg	0.3028	0.3235	0.2770	0.3146	0.3357	0.3159	0.3307	0.3040	-----	0.313	6.49	1.00	1.00	6.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.4818	0.5241	0.4653	0.5076	0.5566	0.5574	0.6126	0.4463	-----	0.519	6.29	0.998	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.2679	0.2873	0.2564	0.2800	0.2930	0.2921	0.3042	0.2595	-----	0.280	5.87	1.00	1.00	6.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Hexanone	1	0	Avg	0.1896	0.2087	0.1802	0.2084	0.2158	0.2206	0.2480	0.1963	-----	0.208	6.30	0.997	1.00	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Tetrachloroethene	1	0	Avg	0.2589	0.2738	0.2401	0.2683	0.2882	0.2869	0.3127	0.2312	-----	0.270	6.29	0.998	1.00	9.9	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Toluene-d8	1	0	Avg	1.1861	1.1986	1.1924	1.1932	1.1755	1.1297	1.1090	1.1941	1.1851	1.17	5.95	-1	-1	2.7		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.7568	0.8301	0.6967	0.7850	0.8350	0.8184	0.8811	0.7363	-----	0.792	5.99	0.999	1.00	7.6	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2858	0.3239	0.2828	0.3050	0.3414	0.3426	0.3885	0.2699	-----	0.318	6.78	0.997	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chlorobenzene	1	0	Avg	0.8546	0.9026	0.7999	0.8728	0.9417	0.9215	0.9383	0.8425	-----	0.884	6.75	1.00	1.00	5.7	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butyl acrylate	1	0	Avg	1.0368	1.0495	0.9831	1.1125	1.2049	0.9964	0.8195	0.8936	-----	1.01	6.99	0.985	0.999	12	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Amyl acetate	1	0	Avg	0.8680	0.8958	0.8281	0.9223	1.0274	0.9167	-----	0.7816	-----	0.891	7.11	0.997	0.999	8.8	0.50	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Bromoform	1	0	Avg	0.4460	0.4727	0.4144	0.4635	0.4951	0.4802	0.4182	0.3913	-----	0.448	7.20	0.995	1.00	8.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethylbenzene	1	0	Avg	0.7215	0.7124	0.6496	0.7088	0.7993	0.6198	-----	0.5676	-----	0.683	6.79	0.987	0.998	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.7637	0.8266	0.7271	0.7848	0.8123	0.6413	1.1360	0.7313	-----	0.803	7.42	0.956	0.994	18	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromofluorobenzene	1	0	Avg	0.8056	0.8174	0.8159	0.8012	0.7872	0.6645	0.7653	0.8229	0.8116	0.788	7.37	-1	-1	6.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.7747	1.8889	1.6569	1.8301	2.0008	1.8243	1.0632	1.6717	-----	1.71	7.07	0.905	0.997	17	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
m&p-Xylenes	1	0	Avg	1.0340	1.0939	0.9659	1.0408	1.1392	0.9889	0.8696	1.0283	1.1927	1.04	6.85	0.994	1.00	9.2	0.10	40.00	10.00	20.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	1.0041	1.0710	0.9276	1.0414	1.1310	1.0054	0.7052	0.9830	-----	0.984	7.07	0.960	0.999	13	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.1883	0.1749	0.1528	0.2071	0.2387	0.2032	-----	0.1616	-----	0.190	7.44	0.995	0.998	16		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1,3-Dichlorobenzene	1	0	Avg	1.1796	1.2835	1.1410	1.2034	1.2969	1.2282	1.2308	1.1999	-----	1.22	7.99	1.00	1.00	4.2	0.60	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dichlorobenzene	1	0	Avg	1.1768	1.2810	1.1266	1.2036	1.3079	1.2265	1.3834	1.2848	-----	1.25	8.04	0.997	0.999	6.5	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichlorobenzene	1	0	Avg	1.0779	1.1950	1.0384	1.0979	1.2106	1.1601	1.2217	1.2032	-----	1.15	8.26	0.999	1.00	6.1	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Isopropylbenzene	1	0	Avg	2.5331	2.7095	2.3666	2.5515	2.7377	2.3923	1.5864	2.3166	-----	2.40	7.26	0.945	0.999	15	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Avg	0.0216	0.0272	0.0214	0.0218	0.0213	0.0189	0.0142	0.0191	-----	0.0207	7.34	0.975	1.00	17		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Camphene	1	0	Avg	0.6702	0.7217	0.6523	0.6872	0.7358	0.5838	0.9876	0.6258	-----	0.708	7.43	0.961	0.994	17		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichloropropane	1	0	Avg	0.7874	0.8061	0.7283	0.8437	0.9464	0.8308	1.2755	0.7426	-----	0.870	7.46	0.972	0.997	20		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chlorotoluene	1	0	Avg	1.4787	1.6277	1.4300	1.5536	1.6953	1.4416	0.9231	1.3925	-----	1.44	7.56	0.933	0.999	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags	*Note:* Avg Rsd: 10.08
a - failed the min rf criteria	*Corr 1 = Correlation Coefficient for linear Eq.*
c - failed the minimum correlation coeff criteria(if applicable)	*Corr 2 = Correlation Coefficient for quad Eq.*
	Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_2

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time
1	2M142492.D	CAL @ 20 PPB	09/29/20 16:47	2	2M142489.D	CAL @ 5 PPB	09/29/20 15:48
3	2M142490.D	CAL @ 10 PPB	09/29/20 16:08	4	2M142494.D	CAL @ 50 PPB	09/29/20 17:26
5	2M142496.D	CAL @ 100 PPB	09/29/20 18:05	6	2M142499.D	CAL @ 250 PPB	09/29/20 19:04
7	2M142502.D	CAL @ 500 PPB	09/29/20 20:03	8	2M142488.D	CAL @ 1 PPB	09/29/20 15:28
9	2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.4062	2.6874	2.3407	2.4997	2.7248	2.7429	1.6090	2.3031	-----	2.41	7.55	0.912	0.994	15		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Chlorotoluene	1	0	Avg	1.4959	1.6231	1.4308	1.5804	1.7572	0.9110	-----	1.4889	-----	1.47	7.62	0.885	0.992	18		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
n-Propylbenzene	1	0	Avg	2.9227	3.1237	2.8066	3.0040	3.2240	2.9041	2.1478	2.9683	-----	2.89	7.49	0.972	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.4792	1.6627	1.4345	1.5518	1.7064	1.4734	2.0297	1.5105	-----	1.61	7.46	0.983	0.997	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.3.5-Trimethylbenzen	1	0	Avg	1.9328	2.0335	1.8301	2.0046	2.2028	1.1981	-----	1.8900	-----	1.87	7.57	0.904	0.994	17		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Butyl methacrylate	1	0	Avg	0.7041	0.7555	0.6700	0.7514	0.8501	-----	-----	0.6534	-----	0.731	7.58	0.996	1.00	9.8	0.50	20.00	5.00	10.00	50.00	100.0			1.00	
t-Butylbenzene	1	0	Avg	1.8937	2.0928	1.8163	1.9202	2.0934	1.8489	1.0676	1.8633	-----	1.82	7.78	0.899	0.998	18		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.2.4-Trimethylbenzen	1	0	Avg	2.0056	2.1723	1.9204	2.0775	2.2364	1.7137	-----	1.9768	-----	2.01	7.80	0.986	0.999	8.6		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
sec-Butylbenzene	1	0	Avg	2.3365	2.5682	2.2416	2.3901	2.5814	2.3469	1.2902	2.2855	-----	2.26	7.90	0.882	0.997	18		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	1.9862	2.0940	1.8405	2.0175	2.1777	2.0361	1.3000	1.8688	-----	1.92	7.96	0.937	0.998	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	2.0370	2.1798	1.9305	2.1144	2.2571	2.0506	1.2200	2.0605	-----	1.98	8.20	0.912	0.998	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	1.0661	1.1629	1.0199	1.1076	1.1892	1.0958	0.9058	1.1145	-----	1.08	8.19	0.989	1.00	8.2		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.2.4.5-Tetramethylbe	1	0	Avg	1.5303	1.6348	1.4365	1.5927	1.7098	1.2843	2.1031	1.3747	-----	1.58	8.65	0.965	0.993	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.2-Dibromo-3-Chloro	1	0	Avg	0.1708	0.1749	0.1496	0.1703	0.1822	0.1421	-----	0.1520	-----	0.163	8.71	0.988	0.999	9.2	0.05	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Camphor	1	0	Avg	0.0627	0.0604	0.0591	0.0714	0.0773	0.0654	-----	0.0566	0.0620	0.0644	9.15	0.995	0.999	11		200.0	50.00	100.0	500.0	1000.	2500.		10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.2327	0.2736	0.2236	0.2390	0.2424	0.1645	0.3030	0.3077	-----	0.248	9.28	0.951	0.990	19		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.2.4-Trichlorobenzen	1	0	Avg	0.5644	0.5925	0.5389	0.5732	0.6091	0.4389	0.8041	0.6075	-----	0.591	9.20	0.952	0.992	17	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.2.3-Trichlorobenzen	1	0	Avg	0.4534	0.5003	0.4542	0.4852	0.5073	0.3617	0.6368	0.5236	-----	0.490	9.50	0.956	0.992	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Naphthalene	1	0	Avg	1.5393	1.5307	1.4269	1.6731	1.8176	1.3629	2.3710	1.4483	-----	1.65	9.36	0.958	0.993	20		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.08

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M83268.D **Instrument:** GCMS 11

Cont Calibration Date/Time 9/28/2020 11:14:00 **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.96	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.68	16.36	20	20	0.1	0.268	0.219	18.18	
Dichlorodifluoromethane	1	0		1.67	18.62	20	20	0.1	0.161	0.150	6.90	
Chloromethane	1	0		1.85	20.65	20	20	0.1	0.170	0.175	3.24	
Bromomethane	1	0		2.24	19.58	20	20	0.1	0.176	0.172	2.09	
Vinyl Chloride	1	0		1.95	21.39	20	20	0.1	0.218	0.233	6.96	
Chloroethane	1	0		2.33	22.52	20	20	0.1	0.148	0.167	12.59	
Trichlorofluoromethane	1	0		2.55	22.42	20	20	0.1	0.361	0.404	12.08	
Ethyl ether	1	0		2.78	23.95	20	20	0.5	0.123	0.148	19.75	
Furan	1	0		2.82	22.52	20	20	0.5	0.229	0.257	12.58	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.98	19.79	20	20	0.1	0.146	0.144	1.05	
Methylene Chloride	1	0		3.37	20.17	20	20	0.1	0.217	0.219	0.86	
Acrolein	1	0		2.89	126.30	100	20		0.026	0.033	26.30	C1
Acrylonitrile	1	0		3.57	22.51	20	20		0.063	0.073	12.53	
Iodomethane	1	0		3.12	18.52	20	20		0.173	0.189	7.42	
Acetone	1	0		3.01	101.93	100	20	0.1	0.052	0.053	1.93	
Carbon Disulfide	1	0		3.19	21.14	20	20	0.1	0.493	0.521	5.68	
t-Butyl Alcohol	1	0		3.44	138.22	100	20		0.013	0.017	38.22	C1
n-Hexane	1	0		3.81	20.47	20	20		0.153	0.157	2.36	
Di-isopropyl-ether	1	0		3.95	19.96	20	20		0.425	0.424	0.18	
1,1-Dichloroethene	1	0		2.98	20.30	20	20	0.1	0.266	0.270	1.51	
Methyl Acetate	1	0		3.28	22.27	20	20	0.1	0.107	0.121	11.36	
Methyl-t-butyl ether	1	0		3.60	21.70	20	20	0.1	0.459	0.498	8.52	
1,1-Dichloroethane	1	0		3.93	20.22	20	20	0.2	0.345	0.349	1.12	
trans-1,2-Dichloroethene	1	0		3.61	21.45	20	20	0.1	0.204	0.219	7.26	
Ethyl-t-butyl ether	1	0		4.20	20.82	20	20	0.5	0.466	0.485	4.08	
cis-1,2-Dichloroethene	1	0		4.31	20.00	20	20	0.1	0.336	0.336	0.00	
Bromochloromethane	1	0		4.45	21.42	20	20		0.143	0.153	7.12	
2,2-Dichloropropane	1	0		4.31	22.05	20	20		0.272	0.300	10.23	
Ethyl acetate	1	0		4.33	20.07	20	20		0.169	0.169	0.33	
1,4-Dioxane	1	0		5.33	1648.04	1000	20		0.002	0.003	64.80	C1
1,1-Dichloropropene	1	0		4.70	20.04	20	20		0.299	0.300	0.20	
Chloroform	1	0		4.49	20.30	20	20	0.2	0.381	0.386	1.50	
Dibromofluoromethane	1	0	S	4.58	30.83	30	**		0.250	0.257	2.75	
Cyclohexane	1	0		4.65	19.45	20	20	0.1	0.251	0.245	2.73	
1,2-Dichloroethane-d4	1	0	S	4.78	29.51	30	**		0.131	0.129	1.65	
1,2-Dichloroethane	1	0		4.82	19.62	20	20	0.1	0.294	0.288	1.92	
2-Butanone	1	0		4.30	20.56	20	20	0.1	0.072	0.074	2.80	
1,1,1-Trichloroethane	1	0		4.61	19.82	20	20	0.1	0.344	0.341	0.91	
Carbon Tetrachloride	1	0		4.71	20.27	20	20	0.1	0.289	0.293	1.36	
Vinyl Acetate	1	0		3.95	20.27	20	20		0.502	0.508	1.36	
Bromodichloromethane	1	0		5.41	20.78	20	20	0.2	0.287	0.298	3.89	
Methylcyclohexane	1	0		5.27	21.09	20	20	0.1	0.238	0.251	5.44	
Dibromomethane	1	0		5.34	21.72	20	20		0.139	0.151	8.62	
1,2-Dichloropropane	1	0		5.28	20.17	20	20	0.1	0.199	0.201	0.83	
Trichloroethene	1	0		5.16	21.18	20	20	0.2	0.238	0.252	5.92	
Benzene	1	0		4.82	20.53	20	20	0.5	0.849	0.872	2.66	
tert-Amyl methyl ether	1	0		4.85	21.44	20	20		0.465	0.499	7.18	
Chlorobenzene-d5	1	0	I	6.55	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.81	21.18	20	20	0.5	0.332	0.352	5.91	
Methyl methacrylate	1	0		5.30	19.10	20	20	0.5	0.201	0.192	4.48	
Dibromochloromethane	1	0		6.24	21.35	20	20	0.1	0.279	0.298	6.74	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M83268.D **Instrument:** GCMS 11

Cont Calibration Date/Time 9/28/2020 11:14:00 Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.54	12.93	20	20		0.053	0.037	35.35	C1
cis-1,3-Dichloropropene	1	0		5.64	20.07	20	20	0.2	0.397	0.398	0.33	
trans-1,3-Dichloropropene	1	0		5.92	19.85	20	20	0.1	0.377	0.374	0.76	
Ethyl methacrylate	1	0		5.93	20.72	20	20	0.5	0.174	0.180	3.61	
1,1,2-Trichloroethane	1	0		6.02	19.75	20	20	0.1	0.266	0.262	1.26	
1,2-Dibromoethane	1	0		6.31	20.35	20	20	0.1	0.280	0.285	1.75	
1,3-Dichloropropane	1	0		6.11	20.08	20	20		0.439	0.440	0.38	
4-Methyl-2-Pentanone	1	0		5.70	20.62	20	20	0.1	0.202	0.209	3.08	
2-Hexanone	1	0		6.12	20.82	20	20	0.1	0.144	0.149	4.10	
Tetrachloroethene	1	0		6.12	18.94	20	20	0.2	0.234	0.222	5.28	
Toluene-d8	1	0	S	5.79	29.54	30	**		1.312	1.292	1.55	
Toluene	1	0		5.83	19.26	20	20	0.4	0.730	0.703	3.72	
1,1,1,2-Tetrachloroethane	1	0		6.59	19.50	20	20		0.272	0.265	2.52	
Chlorobenzene	1	0		6.56	19.34	20	20	0.5	0.831	0.804	3.30	
1,4-Dichlorobenzene-d4	1	0	I	7.82	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.80	21.48	20	20	0.5	0.792	0.851	7.40	
n-Amyl acetate	1	0		6.91	22.38	20	20	0.5	0.591	0.661	11.90	
Bromoform	1	0		7.01	21.08	20	20	0.1	0.360	0.379	5.40	
Ethylbenzene	1	0		6.60	18.43	20	20	0.1	0.737	0.679	7.84	
1,1,2,2-Tetrachloroethane	1	0		7.21	19.51	20	20	0.1	0.705	0.688	2.46	
Bromofluorobenzene	1	0	S	7.17	31.50	30	**		0.756	0.794	5.00	
Styrene	1	0		6.88	19.57	20	20	0.3	1.715	1.678	2.14	
m&p-Xylenes	1	0		6.66	39.26	40	20	0.1	1.025	1.006	1.84	
o-Xylene	1	0		6.88	19.48	20	20	0.3	1.002	0.976	2.61	
trans-1,4-Dichloro-2-butene	1	0		7.24	20.39	20	20		0.200	0.204	1.95	
1,3-Dichlorobenzene	1	0		7.78	18.95	20	20	0.6	1.190	1.128	5.26	
1,4-Dichlorobenzene	1	0		7.83	18.60	20	20	0.5	1.233	1.147	6.98	
1,2-Dichlorobenzene	1	0		8.05	19.31	20	20	0.4	1.084	1.046	3.44	
Isopropylbenzene	1	0		7.07	19.62	20	20	0.1	2.451	2.405	1.88	
Cyclohexanone	1	0		7.14	189.65	100	20		0.013	0.023	89.65	C1
Camphene	1	0		7.24	19.89	20	20		0.580	0.577	0.56	
1,2,3-Trichloropropane	1	0		7.26	20.04	20	20		0.809	0.811	0.22	
2-Chlorotoluene	1	0		7.36	18.07	20	20		1.583	1.430	9.63	
p-Ethyltoluene	1	0		7.35	20.13	20	20		2.444	2.460	0.67	
4-Chlorotoluene	1	0		7.42	17.92	20	20		1.631	1.462	10.38	
n-Propylbenzene	1	0		7.29	19.55	20	20		2.876	2.812	2.24	
Bromobenzene	1	0		7.27	19.58	20	20		1.459	1.429	2.08	
1,3,5-Trimethylbenzene	1	0		7.38	18.89	20	20		2.054	1.941	5.53	
Butyl methacrylate	1	0		7.38	20.30	20	20	0.5	0.519	0.527	1.51	
t-Butylbenzene	1	0		7.57	18.94	20	20		1.909	1.808	5.29	
1,2,4-Trimethylbenzene	1	0		7.59	18.97	20	20		2.127	2.017	5.16	
sec-Butylbenzene	1	0		7.69	19.33	20	20		2.287	2.210	3.35	
4-Isopropyltoluene	1	0		7.76	19.30	20	20		1.940	1.873	3.48	
n-Butylbenzene	1	0		8.00	19.89	20	20		1.966	1.955	0.56	
p-Diethylbenzene	1	0		7.98	20.89	20	20		1.036	1.082	4.43	
1,2,4,5-Tetramethylbenzene	1	0		8.44	20.65	20	20		1.436	1.483	3.25	
1,2-Dibromo-3-Chloropropane	1	0		8.49	21.67	20	20	0.05	0.119	0.129	8.34	
Camphor	1	0		8.94	241.65	200	20		0.038	0.056	20.83	C1
Hexachlorobutadiene	1	0		9.07	21.44	20	20		0.154	0.165	7.19	
1,2,4-Trichlorobenzene	1	0		8.99	20.89	20	20	0.2	0.419	0.437	4.46	
1,2,3-Trichlorobenzene	1	0		9.29	23.02	20	20		0.274	0.316	15.09	
Naphthalene	1	0		9.15	23.66	20	20		1.030	1.219	18.28	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142440.D **Instrument:** GCMS 2

Cont Calibration Date/Time 9/28/2020 9:38:00 P Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.10	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.70	17.34	20	20	0.1	0.262	0.227	13.32	
Dichlorodifluoromethane	1	0		1.68	16.99	20	20	0.1	0.166	0.141	15.04	
Chloromethane	1	0		1.86	21.20	20	20	0.1	0.183	0.194	6.00	
Bromomethane	1	0		2.26	10.38	20	20	0.1	0.158	0.082	48.10	C1
Vinyl Chloride	1	0		1.95	23.70	20	20	0.1	0.222	0.263	18.52	
Chloroethane	1	0		2.34	23.77	20	20	0.1	0.160	0.190	18.87	
Trichlorofluoromethane	1	0		2.57	23.04	20	20	0.1	0.386	0.444	15.18	
Ethyl ether	1	0		2.80	23.99	20	20	0.5	0.154	0.184	19.93	
Furan	1	0		2.84	21.94	20	20	0.5	0.278	0.304	9.69	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.00	20.96	20	20	0.1	0.159	0.167	4.79	
Methylene Chloride	1	0		3.42	22.24	20	20	0.1	0.225	0.251	11.19	
Acrolein	1	0		2.92	114.54	100	20		0.028	0.032	14.54	
Acrylonitrile	1	0		3.62	23.36	20	20		0.077	0.090	16.79	
Iodomethane	1	0		3.15	10.29	20	20		0.229	0.118	48.55	C1
Acetone	1	0		3.04	112.76	100	20	0.1	0.061	0.069	12.76	
Carbon Disulfide	1	0		3.22	22.67	20	20	0.1	0.588	0.667	13.37	
t-Butyl Alcohol	1	0		3.48	110.77	100	20		0.022	0.024	10.77	
n-Hexane	1	0		3.87	20.34	20	20		0.183	0.186	1.67	
Di-isopropyl-ether	1	0		4.03	22.16	20	20		0.543	0.602	10.81	
1,1-Dichloroethene	1	0		3.01	22.34	20	20	0.1	0.302	0.337	11.71	
Methyl Acetate	1	0		3.32	24.38	20	20	0.1	0.139	0.169	21.88	C1
Methyl-t-butyl ether	1	0		3.64	23.36	20	20	0.1	0.571	0.667	16.81	
1,1-Dichloroethane	1	0		4.00	22.64	20	20	0.2	0.374	0.424	13.22	
trans-1,2-Dichloroethene	1	0		3.65	22.10	20	20	0.1	0.229	0.253	10.50	
Ethyl-t-butyl ether	1	0		4.29	22.18	20	20	0.5	0.613	0.680	10.90	
cis-1,2-Dichloroethene	1	0		4.41	21.89	20	20	0.1	0.376	0.411	9.45	
Bromochloromethane	1	0		4.57	23.73	20	20		0.174	0.206	18.65	
2,2-Dichloropropane	1	0		4.42	18.82	20	20		0.341	0.321	5.89	
Ethyl acetate	1	0		4.43	22.84	20	20		0.197	0.225	14.21	
1,4-Dioxane	1	0		5.49	1190.58	1000	20		0.003	0.004	19.06	
1,1-Dichloropropene	1	0		4.82	22.30	20	20		0.310	0.346	11.49	
Chloroform	1	0		4.60	22.82	20	20	0.2	0.412	0.470	14.09	
Dibromofluoromethane	1	0	S	4.71	31.18	30	**		0.276	0.287	3.93	
Cyclohexane	1	0		4.77	21.49	20	20	0.1	0.266	0.286	7.44	
1,2-Dichloroethane-d4	1	0	S	4.91	31.26	30	**		0.142	0.148	4.20	
1,2-Dichloroethane	1	0		4.95	20.53	20	20	0.1	0.349	0.358	2.67	
2-Butanone	1	0		4.41	23.44	20	20	0.1	0.095	0.111	17.19	
1,1,1-Trichloroethane	1	0		4.73	22.44	20	20	0.1	0.368	0.413	12.19	
Carbon Tetrachloride	1	0		4.83	19.52	20	20	0.1	0.334	0.326	2.38	
Vinyl Acetate	1	0		4.03	18.42	20	20		0.672	0.619	7.88	
Bromodichloromethane	1	0		5.57	22.21	20	20	0.2	0.337	0.374	11.06	
Methylcyclohexane	1	0		5.42	21.00	20	20	0.1	0.264	0.277	5.01	
Dibromomethane	1	0		5.50	21.57	20	20		0.178	0.192	7.86	
1,2-Dichloropropane	1	0		5.43	22.72	20	20	0.1	0.226	0.257	13.58	
Trichloroethene	1	0		5.30	22.07	20	20	0.2	0.259	0.286	10.36	
Benzene	1	0		4.95	22.07	20	20	0.5	0.892	0.985	10.34	
tert-Amyl methyl ether	1	0		4.99	21.68	20	20		0.653	0.708	8.39	
Chlorobenzene-d5	1	0	I	6.73	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.95	20.35	20	20	0.5	0.484	0.492	1.74	
Methyl methacrylate	1	0		5.45	22.85	20	20	0.5	0.213	0.244	14.24	
Dibromochloromethane	1	0		6.42	20.79	20	20	0.1	0.333	0.346	3.95	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142440.D **Instrument:** GCMS 2

Cont Calibration Date/Time 9/28/2020 9:38:00 P Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.71	15.30	20	20		0.070	0.054	23.51	C1
cis-1,3-Dichloropropene	1	0		5.81	19.25	20	20	0.2	0.445	0.428	3.77	
trans-1,3-Dichloropropene	1	0		6.09	18.33	20	20	0.1	0.457	0.419	8.36	
Ethyl methacrylate	1	0		6.11	19.88	20	20	0.5	0.235	0.233	0.59	
1,1,2-Trichloroethane	1	0		6.20	21.21	20	20	0.1	0.269	0.286	6.04	
1,2-Dibromoethane	1	0		6.49	21.47	20	20	0.1	0.280	0.300	7.33	
1,3-Dichloropropane	1	0		6.29	21.19	20	20		0.458	0.485	5.97	
4-Methyl-2-Pentanone	1	0		5.87	23.32	20	20	0.1	0.231	0.270	16.60	
2-Hexanone	1	0		6.31	21.71	20	20	0.1	0.182	0.197	8.53	
Tetrachloroethene	1	0		6.29	19.20	20	20	0.2	0.251	0.241	4.01	
Toluene-d8	1	0	S	5.95	30.54	30	**		1.170	1.191	1.80	
Toluene	1	0		5.99	20.65	20	20	0.4	0.694	0.717	3.23	
1,1,1,2-Tetrachloroethane	1	0		6.78	19.02	20	20		0.303	0.288	4.92	
Chlorobenzene	1	0		6.75	21.01	20	20	0.5	0.777	0.816	5.05	
1,4-Dichlorobenzene-d4	1	0	I	8.02	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.99	22.80	20	20	0.5	0.877	1.000	14.00	
n-Amyl acetate	1	0		7.11	17.69	20	20	0.5	0.631	0.811	11.56	
Bromoform	1	0		7.20	21.33	20	20	0.1	0.411	0.439	6.63	
Ethylbenzene	1	0		6.79	23.60	20	20	0.1	0.567	0.669	18.00	
1,1,2,2-Tetrachloroethane	1	0		7.42	26.77	20	20	0.1	0.581	0.778	33.86	C1
Bromofluorobenzene	1	0	S	7.37	30.14	30	**		0.802	0.806	0.48	
Styrene	1	0		7.07	24.56	20	20	0.3	1.393	1.710	22.81	C1
m&p-Xylenes	1	0		6.85	48.39	40	20	0.1	0.817	0.988	20.97	C1
o-Xylene	1	0		7.07	23.86	20	20	0.3	0.808	0.964	19.30	
trans-1,4-Dichloro-2-butene	1	0		7.43	13.17	20	20		0.232	0.153	34.13	C1
1,3-Dichlorobenzene	1	0		7.99	23.40	20	20	0.6	0.994	1.163	16.98	
1,4-Dichlorobenzene	1	0		8.03	22.48	20	20	0.5	1.020	1.146	12.38	
1,2-Dichlorobenzene	1	0		8.26	22.96	20	20	0.4	0.938	1.076	14.79	
Isopropylbenzene	1	0		7.26	24.34	20	20	0.1	1.986	2.417	21.71	C1
Cyclohexanone	1	0		7.34	108.53	100	20		0.019	0.022	8.53	
Camphene	1	0		7.43	33.55	20	20		0.544	0.603	67.74	C1
1,2,3-Trichloropropane	1	0		7.46	19.80	20	20		0.793	0.785	1.01	
2-Chlorotoluene	1	0		7.56	20.60	20	20		1.143	1.433	2.98	
p-Ethyltoluene	1	0		7.55	26.00	20	20		1.894	2.463	29.99	C1
4-Chlorotoluene	1	0		7.62	23.75	20	20		1.257	1.493	18.73	
n-Propylbenzene	1	0		7.49	25.26	20	20		2.273	2.870	26.29	C1
Bromobenzene	1	0		7.46	22.69	20	20		1.303	1.477	13.43	
1,3,5-Trimethylbenzene	1	0		7.57	24.69	20	20		1.500	1.852	23.46	C1
Butyl methacrylate	1	0		7.58	22.93	20	20	0.5	0.592	0.678	14.64	
t-Butylbenzene	1	0		7.77	16.94	20	20		1.434	1.823	15.32	
1,2,4-Trimethylbenzene	1	0		7.79	20.09	20	20		1.475	1.995	0.44	
sec-Butylbenzene	1	0		7.90	23.48	20	20		1.904	2.235	17.41	
4-Isopropyltoluene	1	0		7.96	22.66	20	20		1.645	1.864	13.32	
n-Butylbenzene	1	0		8.20	23.81	20	20		1.663	1.980	19.07	
p-Diethylbenzene	1	0		8.18	24.79	20	20		0.855	1.059	23.94	C1
1,2,4,5-Tetramethylbenzene	1	0		8.65	25.10	20	20		1.232	1.547	25.51	C1
1,2-Dibromo-3-Chloropropane	1	0		8.71	24.58	20	20	0.05	0.136	0.167	22.92	C1
Camphor	1	0		9.14	265.86	200	20		0.060	0.071	32.93	C1
Hexachlorobutadiene	1	0		9.28	23.79	20	20		0.191	0.228	18.96	
1,2,4-Trichlorobenzene	1	0		9.20	21.84	20	20	0.2	0.500	0.546	9.21	
1,2,3-Trichlorobenzene	1	0		9.50	23.61	20	20		0.396	0.467	18.04	
Naphthalene	1	0		9.36	24.60	20	20		1.279	1.574	23.02	C1

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142518.D **Instrument:** GCMS 2

Cont Calibration Date/Time 9/30/2020 11:36:00 **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.10	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.70	20.64	20	20	0.1	0.306	0.316	3.22	
Dichlorodifluoromethane	1	0		1.68	19.11	20	20	0.1	0.308	0.294	4.46	
Chloromethane	1	0		1.86	21.59	20	20	0.1	0.343	0.371	7.96	
Bromomethane	1	0		2.26	17.65	20	20	0.1	0.167	0.147	11.77	
Vinyl Chloride	1	0		1.96	21.23	20	20	0.1	0.373	0.395	6.13	
Chloroethane	1	0		2.35	20.37	20	20	0.1	0.249	0.253	1.86	
Trichlorofluoromethane	1	0		2.57	20.67	20	20	0.1	0.571	0.590	3.36	
Ethyl ether	1	0		2.80	20.65	20	20	0.5	0.198	0.205	3.23	
Furan	1	0		2.84	20.93	20	20	0.5	0.335	0.351	4.63	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.00	20.47	20	20	0.1	0.200	0.205	2.37	
Methylene Chloride	1	0		3.42	20.76	20	20	0.1	0.283	0.294	3.79	
Acrolein	1	0		2.92	106.07	100	20		0.045	0.048	6.07	
Acrylonitrile	1	0		3.62	20.64	20	20		0.098	0.101	3.21	
Iodomethane	1	0		3.15	16.09	20	20		0.210	0.172	19.53	
Acetone	1	0		3.04	106.24	100	20	0.1	0.081	0.086	6.24	
Carbon Disulfide	1	0		3.22	21.20	20	20	0.1	0.765	0.810	5.98	
t-Butyl Alcohol	1	0		3.48	105.87	100	20		0.026	0.028	5.87	
n-Hexane	1	0		3.87	21.46	20	20		0.237	0.254	7.30	
Di-isopropyl-ether	1	0		4.03	20.82	20	20		0.678	0.706	4.08	
1,1-Dichloroethene	1	0		3.01	20.89	20	20	0.1	0.386	0.403	4.44	
Methyl Acetate	1	0		3.31	19.19	20	20	0.1	0.182	0.175	4.07	
Methyl-t-butyl ether	1	0		3.64	20.56	20	20	0.1	0.726	0.746	2.81	
1,1-Dichloroethane	1	0		4.00	20.97	20	20	0.2	0.470	0.493	4.85	
trans-1,2-Dichloroethene	1	0		3.65	20.59	20	20	0.1	0.285	0.293	2.97	
Ethyl-t-butyl ether	1	0		4.29	21.05	20	20	0.5	0.734	0.772	5.23	
cis-1,2-Dichloroethene	1	0		4.41	20.77	20	20	0.1	0.478	0.496	3.83	
Bromochloromethane	1	0		4.57	21.87	20	20		0.212	0.232	9.36	
2,2-Dichloropropane	1	0		4.42	22.25	20	20		0.422	0.469	11.27	
Ethyl acetate	1	0		4.43	20.99	20	20		0.245	0.257	4.94	
1,4-Dioxane	1	0		5.49	1031.74	1000	20		0.003	0.004	3.17	
1,1-Dichloropropene	1	0		4.82	21.05	20	20		0.399	0.420	5.25	
Chloroform	1	0		4.60	21.08	20	20	0.2	0.512	0.540	5.38	
Dibromofluoromethane	1	0	S	4.71	29.34	30	**		0.287	0.281	2.20	
Cyclohexane	1	0		4.77	20.33	20	20	0.1	0.354	0.359	1.63	
1,2-Dichloroethane-d4	1	0	S	4.91	29.64	30	**		0.148	0.147	1.21	
1,2-Dichloroethane	1	0		4.95	19.42	20	20	0.1	0.434	0.421	2.91	
2-Butanone	1	0		4.41	20.51	20	20	0.1	0.125	0.128	2.55	
1,1,1-Trichloroethane	1	0		4.73	21.25	20	20	0.1	0.454	0.483	6.23	
Carbon Tetrachloride	1	0		4.83	21.07	20	20	0.1	0.385	0.405	5.37	
Vinyl Acetate	1	0		4.03	22.05	20	20		0.761	0.839	10.23	
Bromodichloromethane	1	0		5.57	21.54	20	20	0.2	0.415	0.447	7.72	
Methylcyclohexane	1	0		5.42	20.32	20	20	0.1	0.343	0.348	1.60	
Dibromomethane	1	0		5.50	20.85	20	20		0.206	0.215	4.27	
1,2-Dichloropropane	1	0		5.43	21.10	20	20	0.1	0.282	0.298	5.49	
Trichloroethene	1	0		5.30	20.91	20	20	0.2	0.317	0.332	4.55	
Benzene	1	0		4.95	20.43	20	20	0.5	1.123	1.147	2.17	
tert-Amyl methyl ether	1	0		4.99	19.97	20	20		0.790	0.789	0.15	
Chlorobenzene-d5	1	0	I	6.73	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.95	20.40	20	20	0.5	0.522	0.533	2.02	
Methyl methacrylate	1	0		5.45	21.55	20	20	0.5	0.252	0.271	7.77	
Dibromochloromethane	1	0		6.42	22.16	20	20	0.1	0.352	0.390	10.81	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142518.D **Instrument:** GCMS 2

Cont Calibration Date/Time 9/30/2020 11:36:00 **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.71	21.67	20	20		0.038	0.042	8.36	
cis-1,3-Dichloropropene	1	0		5.81	22.12	20	20	0.2	0.481	0.532	10.61	
trans-1,3-Dichloropropene	1	0		6.09	21.70	20	20	0.1	0.458	0.497	8.52	
Ethyl methacrylate	1	0		6.11	20.81	20	20	0.5	0.265	0.275	4.07	
1,1,2-Trichloroethane	1	0		6.20	21.64	20	20	0.1	0.297	0.321	8.21	
1,2-Dibromoethane	1	0		6.49	21.38	20	20	0.1	0.313	0.335	6.88	
1,3-Dichloropropane	1	0		6.29	21.00	20	20		0.519	0.545	5.00	
4-Methyl-2-Pentanone	1	0		5.87	21.64	20	20	0.1	0.280	0.303	8.20	
2-Hexanone	1	0		6.31	21.07	20	20	0.1	0.208	0.220	5.36	
Tetrachloroethene	1	0		6.29	21.64	20	20	0.2	0.270	0.292	8.19	
Toluene-d8	1	0	S	5.95	30.45	30	**		1.174	1.192	1.51	
Toluene	1	0		5.99	20.85	20	20	0.4	0.792	0.826	4.27	
1,1,1,2-Tetrachloroethane	1	0		6.78	21.47	20	20		0.318	0.341	7.37	
Chlorobenzene	1	0		6.75	21.16	20	20	0.5	0.884	0.935	5.78	
1,4-Dichlorobenzene-d4	1	0	I	8.02	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.99	23.63	20	20	0.5	1.012	1.196	18.15	
n-Amyl acetate	1	0		7.11	22.30	20	20	0.5	0.891	0.994	11.50	
Bromoform	1	0		7.20	23.12	20	20	0.1	0.448	0.518	15.61	
Ethylbenzene	1	0		6.79	22.58	20	20	0.1	0.683	0.771	12.92	
1,1,2,2-Tetrachloroethane	1	0		7.42	21.57	20	20	0.1	0.803	0.866	7.85	
Bromofluorobenzene	1	0	S	7.37	30.84	30	**		0.788	0.810	2.80	
Styrene	1	0		7.07	22.84	20	20	0.3	1.714	1.957	14.20	
m&p-Xylenes	1	0		6.85	44.25	40	20	0.1	1.039	1.150	10.64	
o-Xylene	1	0		7.07	23.03	20	20	0.3	0.984	1.133	15.13	
trans-1,4-Dichloro-2-butene	1	0		7.45	25.56	20	20		0.190	0.242	27.81	C1
1,3-Dichlorobenzene	1	0		7.99	21.47	20	20	0.6	1.220	1.310	7.36	
1,4-Dichlorobenzene	1	0		8.03	21.15	20	20	0.5	1.249	1.321	5.74	
1,2-Dichlorobenzene	1	0		8.26	21.74	20	20	0.4	1.151	1.251	8.69	
Isopropylbenzene	1	0		7.26	23.17	20	20	0.1	2.399	2.779	15.85	
Cyclohexanone	1	0		7.34	113.22	100	20		0.021	0.023	13.22	
Camphene	1	0		7.43	21.37	20	20		0.708	0.757	6.87	
1,2,3-Trichloropropane	1	0		7.46	21.77	20	20		0.870	0.947	8.83	
2-Chlorotoluene	1	0		7.56	22.62	20	20		1.443	1.632	13.12	
p-Ethyltoluene	1	0		7.55	22.95	20	20		2.414	2.771	14.77	
4-Chlorotoluene	1	0		7.62	23.19	20	20		1.470	1.704	15.94	
n-Propylbenzene	1	0		7.49	22.34	20	20		2.888	3.226	11.72	
Bromobenzene	1	0		7.46	21.44	20	20		1.606	1.722	7.20	
1,3,5-Trimethylbenzene	1	0		7.57	23.22	20	20		1.870	2.172	16.12	
Butyl methacrylate	1	0		7.58	21.64	20	20	0.5	0.731	0.791	8.18	
t-Butylbenzene	1	0		7.77	23.10	20	20		1.825	2.107	15.49	
1,2,4-Trimethylbenzene	1	0		7.79	22.19	20	20		2.015	2.236	10.97	
sec-Butylbenzene	1	0		7.90	23.23	20	20		2.255	2.619	16.14	
4-Isopropyltoluene	1	0		7.96	23.35	20	20		1.915	2.236	16.73	
n-Butylbenzene	1	0		8.20	23.82	20	20		1.981	2.359	19.08	
p-Diethylbenzene	1	0		8.18	22.41	20	20		1.083	1.213	12.05	
1,2,4,5-Tetramethylbenzene	1	0		8.65	22.15	20	20		1.583	1.754	10.76	
1,2-Dibromo-3-Chloropropane	1	0		8.71	22.94	20	20	0.05	0.163	0.187	14.70	
Camphor	1	0		9.14	218.50	200	20		0.064	0.070	9.25	
Hexachlorobutadiene	1	0		9.28	23.11	20	20		0.248	0.287	15.54	
1,2,4-Trichlorobenzene	1	0		9.20	21.26	20	20	0.2	0.591	0.628	6.30	
1,2,3-Trichlorobenzene	1	0		9.50	21.82	20	20		0.490	0.535	9.11	
Naphthalene	1	0		9.36	21.17	20	20		1.646	1.742	5.83	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142561.D **Instrument:** GCMS 2

Cont Calibration Date/Time 10/1/2020 1:40:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.10	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.70	19.46	20	20	0.1	0.306	0.298	2.70	
Dichlorodifluoromethane	1	0		1.68	18.42	20	20	0.1	0.308	0.284	7.88	
Chloromethane	1	0		1.86	20.01	20	20	0.1	0.343	0.343	0.07	
Bromomethane	1	0		2.26	18.21	20	20	0.1	0.167	0.152	8.95	
Vinyl Chloride	1	0		1.95	19.88	20	20	0.1	0.373	0.370	0.58	
Chloroethane	1	0		2.34	19.09	20	20	0.1	0.249	0.237	4.56	
Trichlorofluoromethane	1	0		2.57	19.61	20	20	0.1	0.571	0.560	1.95	
Ethyl ether	1	0		2.80	21.12	20	20	0.5	0.198	0.209	5.58	
Furan	1	0		2.84	20.24	20	20	0.5	0.335	0.339	1.22	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.00	18.92	20	20	0.1	0.200	0.189	5.39	
Methylene Chloride	1	0		3.42	20.39	20	20	0.1	0.283	0.289	1.97	
Acrolein	1	0		2.92	86.09	100	20		0.045	0.039	13.91	
Acrylonitrile	1	0		3.62	20.17	20	20		0.098	0.099	0.83	
Iodomethane	1	0		3.15	16.92	20	20		0.210	0.181	15.42	
Acetone	1	0		3.04	105.00	100	20	0.1	0.081	0.085	5.00	
Carbon Disulfide	1	0		3.22	19.34	20	20	0.1	0.765	0.740	3.28	
t-Butyl Alcohol	1	0		3.48	101.54	100	20		0.026	0.026	1.54	
n-Hexane	1	0		3.87	17.98	20	20		0.237	0.213	10.08	
Di-isopropyl-ether	1	0		4.03	20.04	20	20		0.678	0.680	0.21	
1,1-Dichloroethene	1	0		3.01	20.05	20	20	0.1	0.386	0.387	0.24	
Methyl Acetate	1	0		3.32	19.52	20	20	0.1	0.182	0.178	2.39	
Methyl-t-butyl ether	1	0		3.64	18.43	20	20	0.1	0.726	0.743	7.87	
1,1-Dichloroethane	1	0		4.00	20.42	20	20	0.2	0.470	0.480	2.08	
trans-1,2-Dichloroethene	1	0		3.65	19.69	20	20	0.1	0.285	0.280	1.56	
Ethyl-t-butyl ether	1	0		4.29	20.67	20	20	0.5	0.734	0.759	3.33	
cis-1,2-Dichloroethene	1	0		4.41	18.84	20	20	0.1	0.478	0.450	5.80	
Bromochloromethane	1	0		4.57	21.57	20	20		0.212	0.229	7.85	
2,2-Dichloropropane	1	0		4.42	15.54	20	20		0.422	0.328	22.31	C1
Ethyl acetate	1	0		4.43	20.61	20	20		0.245	0.252	3.04	
1,4-Dioxane	1	0		5.49	1056.67	1000	20		0.003	0.004	5.67	
1,1-Dichloropropene	1	0		4.82	19.60	20	20		0.399	0.391	2.02	
Chloroform	1	0		4.60	20.48	20	20	0.2	0.512	0.525	2.42	
Dibromofluoromethane	1	0	S	4.71	29.45	30	**		0.287	0.282	1.83	
Cyclohexane	1	0		4.77	18.77	20	20	0.1	0.354	0.332	6.13	
1,2-Dichloroethane-d4	1	0	S	4.91	28.67	30	**		0.148	0.142	4.45	
1,2-Dichloroethane	1	0		4.95	18.81	20	20	0.1	0.434	0.408	5.93	
2-Butanone	1	0		4.41	20.40	20	20	0.1	0.125	0.128	2.01	
1,1,1-Trichloroethane	1	0		4.73	20.47	20	20	0.1	0.454	0.465	2.37	
Carbon Tetrachloride	1	0		4.83	19.73	20	20	0.1	0.385	0.379	1.36	
Vinyl Acetate	1	0		4.03	16.85	20	20		0.761	0.641	15.74	
Bromodichloromethane	1	0		5.57	18.54	20	20	0.2	0.415	0.425	7.31	
Methylcyclohexane	1	0		5.42	18.71	20	20	0.1	0.343	0.321	6.44	
Dibromomethane	1	0		5.50	20.54	20	20		0.206	0.211	2.69	
1,2-Dichloropropane	1	0		5.43	19.97	20	20	0.1	0.282	0.282	0.14	
Trichloroethene	1	0		5.30	21.04	20	20	0.2	0.317	0.334	5.21	
Benzene	1	0		4.95	19.50	20	20	0.5	1.123	1.095	2.49	
tert-Amyl methyl ether	1	0		4.99	20.28	20	20		0.790	0.801	1.39	
Chlorobenzene-d5	1	0	I	6.73	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.95	20.34	20	20	0.5	0.522	0.531	1.67	
Methyl methacrylate	1	0		5.45	21.47	20	20	0.5	0.252	0.270	7.35	
Dibromochloromethane	1	0		6.42	21.50	20	20	0.1	0.352	0.378	7.52	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142561.D **Instrument:** GCMS 2

Cont Calibration Date/Time 10/1/2020 1:40:00 A **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.71	18.55	20	20		0.038	0.036	7.23	
cis-1,3-Dichloropropene	1	0		5.81	20.37	20	20	0.2	0.481	0.489	1.84	
trans-1,3-Dichloropropene	1	0		6.09	19.63	20	20	0.1	0.458	0.449	1.87	
Ethyl methacrylate	1	0		6.11	20.47	20	20	0.5	0.265	0.271	2.36	
1,1,2-Trichloroethane	1	0		6.20	20.99	20	20	0.1	0.297	0.312	4.95	
1,2-Dibromoethane	1	0		6.49	20.79	20	20	0.1	0.313	0.325	3.93	
1,3-Dichloropropane	1	0		6.29	20.94	20	20		0.519	0.543	4.70	
4-Methyl-2-Pentanone	1	0		5.87	21.01	20	20	0.1	0.280	0.294	5.05	
2-Hexanone	1	0		6.30	20.94	20	20	0.1	0.208	0.218	4.69	
Tetrachloroethene	1	0		6.29	20.06	20	20	0.2	0.270	0.271	0.32	
Toluene-d8	1	0	S	5.95	30.33	30	**		1.174	1.187	1.09	
Toluene	1	0		5.99	20.45	20	20	0.4	0.792	0.810	2.23	
1,1,1,2-Tetrachloroethane	1	0		6.78	19.94	20	20		0.318	0.317	0.29	
Chlorobenzene	1	0		6.75	20.77	20	20	0.5	0.884	0.919	3.87	
1,4-Dichlorobenzene-d4	1	0	I	8.02	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.99	23.28	20	20	0.5	1.012	1.178	16.38	
n-Amyl acetate	1	0		7.11	21.47	20	20	0.5	0.891	0.957	7.35	
Bromoform	1	0		7.20	23.17	20	20	0.1	0.448	0.519	15.87	
Ethylbenzene	1	0		6.79	22.88	20	20	0.1	0.683	0.781	14.38	
1,1,2,2-Tetrachloroethane	1	0		7.42	20.49	20	20	0.1	0.803	0.823	2.44	
Bromofluorobenzene	1	0	S	7.36	31.78	30	**		0.788	0.835	5.94	
Styrene	1	0		7.07	22.64	20	20	0.3	1.714	1.940	13.18	
m&p-Xylenes	1	0		6.85	42.95	40	20	0.1	1.039	1.116	7.38	
o-Xylene	1	0		7.07	22.52	20	20	0.3	0.984	1.108	12.61	
trans-1,4-Dichloro-2-butene	1	0		7.44	21.15	20	20		0.190	0.200	5.77	
1,3-Dichlorobenzene	1	0		7.99	21.03	20	20	0.6	1.220	1.283	5.13	
1,4-Dichlorobenzene	1	0		8.03	21.36	20	20	0.5	1.249	1.334	6.81	
1,2-Dichlorobenzene	1	0		8.26	21.08	20	20	0.4	1.151	1.213	5.38	
Isopropylbenzene	1	0		7.26	22.71	20	20	0.1	2.399	2.724	13.55	
Cyclohexanone	1	0		7.34	110.32	100	20		0.021	0.023	10.32	
Camphene	1	0		7.43	19.78	20	20		0.708	0.700	1.10	
1,2,3-Trichloropropane	1	0		7.46	20.70	20	20		0.870	0.900	3.49	
2-Chlorotoluene	1	0		7.56	22.91	20	20		1.443	1.653	14.55	
p-Ethyltoluene	1	0		7.55	22.45	20	20		2.414	2.710	12.26	
4-Chlorotoluene	1	0		7.62	22.78	20	20		1.470	1.674	13.88	
n-Propylbenzene	1	0		7.49	22.25	20	20		2.888	3.212	11.23	
Bromobenzene	1	0		7.46	20.94	20	20		1.606	1.682	4.70	
1,3,5-Trimethylbenzene	1	0		7.57	22.47	20	20		1.870	2.101	12.34	
Butyl methacrylate	1	0		7.58	21.61	20	20	0.5	0.731	0.789	8.03	
t-Butylbenzene	1	0		7.78	22.40	20	20		1.825	2.044	12.02	
1,2,4-Trimethylbenzene	1	0		7.79	22.00	20	20		2.015	2.216	10.01	
sec-Butylbenzene	1	0		7.90	22.57	20	20		2.255	2.545	12.87	
4-Isopropyltoluene	1	0		7.96	22.39	20	20		1.915	2.144	11.94	
n-Butylbenzene	1	0		8.20	22.41	20	20		1.981	2.220	12.05	
p-Diethylbenzene	1	0		8.18	21.86	20	20		1.083	1.183	9.28	
1,2,4,5-Tetramethylbenzene	1	0		8.65	21.51	20	20		1.583	1.703	7.53	
1,2-Dibromo-3-Chloropropane	1	0		8.71	22.79	20	20	0.05	0.163	0.186	13.94	
Camphor	1	0		9.14	213.24	200	20		0.064	0.069	6.62	
Hexachlorobutadiene	1	0		9.28	20.43	20	20		0.248	0.254	2.13	
1,2,4-Trichlorobenzene	1	0		9.20	20.57	20	20	0.2	0.591	0.608	2.83	
1,2,3-Trichlorobenzene	1	0		9.50	20.71	20	20		0.490	0.508	3.57	
Naphthalene	1	0		9.36	20.95	20	20		1.646	1.724	4.75	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142629.D **Instrument:** GCMS 2

Cont Calibration Date/Time 10/2/2020 9:58:00 A Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.10	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.70	17.93	20	20	0.1	0.306	0.274	10.35	
Dichlorodifluoromethane	1	0		1.68	9.39	20	20	0.1	0.308	0.145	53.04	C1
Chloromethane	1	0		1.86	15.96	20	20	0.1	0.343	0.274	20.22	
Bromomethane	1	0		2.26	17.07	20	20	0.1	0.167	0.142	14.66	
Vinyl Chloride	1	0		1.96	15.67	20	20	0.1	0.373	0.292	21.66	C1
Chloroethane	1	0		2.34	16.20	20	20	0.1	0.249	0.201	19.02	
Trichlorofluoromethane	1	0		2.57	17.18	20	20	0.1	0.571	0.490	14.11	
Ethyl ether	1	0		2.80	20.89	20	20	0.5	0.198	0.207	4.46	
Furan	1	0		2.84	20.58	20	20	0.5	0.335	0.345	2.89	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.01	19.25	20	20	0.1	0.200	0.193	3.76	
Methylene Chloride	1	0		3.42	19.12	20	20	0.1	0.283	0.271	4.40	
Acrolein	1	0		2.92	56.41	100	20		0.045	0.026	43.59	C1
Acrylonitrile	1	0		3.62	19.57	20	20		0.098	0.096	2.13	
Iodomethane	1	0		3.15	11.91	20	20		0.210	0.126	40.43	C1
Acetone	1	0		3.04	97.10	100	20	0.1	0.081	0.078	2.90	
Carbon Disulfide	1	0		3.22	19.64	20	20	0.1	0.765	0.751	1.80	
t-Butyl Alcohol	1	0		3.48	106.90	100	20		0.026	0.028	6.90	
n-Hexane	1	0		3.87	17.66	20	20		0.237	0.209	11.68	
Di-isopropyl-ether	1	0		4.03	19.77	20	20		0.678	0.670	1.16	
1,1-Dichloroethene	1	0		3.01	19.42	20	20	0.1	0.386	0.375	2.92	
Methyl Acetate	1	0		3.32	22.37	20	20	0.1	0.182	0.204	11.84	
Methyl-t-butyl ether	1	0		3.64	18.27	20	20	0.1	0.726	0.737	8.63	
1,1-Dichloroethane	1	0		4.00	20.40	20	20	0.2	0.470	0.480	2.01	
trans-1,2-Dichloroethene	1	0		3.65	19.32	20	20	0.1	0.285	0.275	3.42	
Ethyl-t-butyl ether	1	0		4.29	20.39	20	20	0.5	0.734	0.748	1.96	
cis-1,2-Dichloroethene	1	0		4.41	18.69	20	20	0.1	0.478	0.447	6.55	
Bromochloromethane	1	0		4.57	21.15	20	20		0.212	0.225	5.73	
2,2-Dichloropropane	1	0		4.42	14.59	20	20		0.422	0.307	27.07	C1
Ethyl acetate	1	0		4.43	18.53	20	20		0.245	0.227	7.33	
1,4-Dioxane	1	0		5.49	1080.54	1000	20		0.003	0.004	8.05	
1,1-Dichloropropene	1	0		4.82	19.26	20	20		0.399	0.384	3.69	
Chloroform	1	0		4.60	20.06	20	20	0.2	0.512	0.514	0.31	
Dibromofluoromethane	1	0	S	4.70	29.79	30	**		0.287	0.285	0.71	
Cyclohexane	1	0		4.77	19.47	20	20	0.1	0.354	0.344	2.64	
1,2-Dichloroethane-d4	1	0	S	4.91	30.43	30	**		0.148	0.151	1.43	
1,2-Dichloroethane	1	0		4.95	18.76	20	20	0.1	0.434	0.407	6.21	
2-Butanone	1	0		4.41	19.56	20	20	0.1	0.125	0.122	2.21	
1,1,1-Trichloroethane	1	0		4.73	20.11	20	20	0.1	0.454	0.457	0.53	
Carbon Tetrachloride	1	0		4.83	20.08	20	20	0.1	0.385	0.386	0.40	
Vinyl Acetate	1	0		4.03	15.95	20	20		0.761	0.607	20.24	
Bromodichloromethane	1	0		5.57	17.60	20	20	0.2	0.415	0.404	12.00	
Methylcyclohexane	1	0		5.42	19.00	20	20	0.1	0.343	0.326	4.98	
Dibromomethane	1	0		5.50	19.92	20	20		0.206	0.205	0.42	
1,2-Dichloropropane	1	0		5.43	19.46	20	20	0.1	0.282	0.274	2.70	
Trichloroethene	1	0		5.30	19.59	20	20	0.2	0.317	0.311	2.03	
Benzene	1	0		4.95	19.22	20	20	0.5	1.123	1.079	3.90	
tert-Amyl methyl ether	1	0		4.99	19.57	20	20		0.790	0.773	2.14	
Chlorobenzene-d5	1	0	I	6.73	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.95	19.43	20	20	0.5	0.522	0.508	2.85	
Methyl methacrylate	1	0		5.45	22.18	20	20	0.5	0.252	0.279	10.92	
Dibromochloromethane	1	0		6.42	21.15	20	20	0.1	0.352	0.372	5.73	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 2M142629.D **Instrument:** GCMS 2

Cont Calibration Date/Time 10/2/2020 9:58:00 A Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.71	30.86	20	20		0.038	0.059	54.30	C1
cis-1,3-Dichloropropene	1	0		5.81	19.38	20	20	0.2	0.481	0.466	3.11	
trans-1,3-Dichloropropene	1	0		6.09	20.12	20	20	0.1	0.458	0.460	0.59	
Ethyl methacrylate	1	0		6.11	18.70	20	20	0.5	0.265	0.247	6.51	
1,1,2-Trichloroethane	1	0		6.20	20.99	20	20	0.1	0.297	0.312	4.95	
1,2-Dibromoethane	1	0		6.49	20.44	20	20	0.1	0.313	0.320	2.18	
1,3-Dichloropropane	1	0		6.29	20.33	20	20		0.519	0.528	1.66	
4-Methyl-2-Pentanone	1	0		5.87	20.64	20	20	0.1	0.280	0.289	3.19	
2-Hexanone	1	0		6.30	20.34	20	20	0.1	0.208	0.212	1.72	
Tetrachloroethene	1	0		6.29	19.93	20	20	0.2	0.270	0.269	0.33	
Toluene-d8	1	0	S	5.95	30.43	30	**		1.174	1.191	1.43	
Toluene	1	0		5.99	19.82	20	20	0.4	0.792	0.785	0.91	
1,1,1,2-Tetrachloroethane	1	0		6.78	19.81	20	20		0.318	0.314	0.96	
Chlorobenzene	1	0		6.75	20.06	20	20	0.5	0.884	0.887	0.28	
1,4-Dichlorobenzene-d4	1	0	I	8.02	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.99	20.45	20	20	0.5	1.012	1.035	2.24	
n-Amyl acetate	1	0		7.11	19.79	20	20	0.5	0.891	0.882	1.05	
Bromoform	1	0		7.20	22.26	20	20	0.1	0.448	0.498	11.28	
Ethylbenzene	1	0		6.79	21.14	20	20	0.1	0.683	0.722	5.72	
1,1,2,2-Tetrachloroethane	1	0		7.42	20.12	20	20	0.1	0.803	0.808	0.60	
Bromofluorobenzene	1	0	S	7.37	30.74	30	**		0.788	0.807	2.45	
Styrene	1	0		7.07	21.18	20	20	0.3	1.714	1.815	5.89	
m&p-Xylenes	1	0		6.85	40.64	40	20	0.1	1.039	1.056	1.59	
o-Xylene	1	0		7.07	21.28	20	20	0.3	0.984	1.047	6.40	
trans-1,4-Dichloro-2-butene	1	0		7.44	22.90	20	20		0.190	0.217	14.49	
1,3-Dichlorobenzene	1	0		7.99	19.64	20	20	0.6	1.220	1.199	1.79	
1,4-Dichlorobenzene	1	0		8.03	19.38	20	20	0.5	1.249	1.210	3.08	
1,2-Dichlorobenzene	1	0		8.26	20.11	20	20	0.4	1.151	1.157	0.54	
Isopropylbenzene	1	0		7.26	21.77	20	20	0.1	2.399	2.612	8.87	
Cyclohexanone	1	0		7.34	107.16	100	20		0.021	0.022	7.16	
Camphene	1	0		7.43	20.40	20	20		0.708	0.722	2.02	
1,2,3-Trichloropropane	1	0		7.46	20.70	20	20		0.870	0.901	3.50	
2-Chlorotoluene	1	0		7.56	21.15	20	20		1.443	1.526	5.75	
p-Ethyltoluene	1	0		7.55	21.69	20	20		2.414	2.619	8.47	
4-Chlorotoluene	1	0		7.62	21.66	20	20		1.470	1.592	8.32	
n-Propylbenzene	1	0		7.49	21.17	20	20		2.888	3.057	5.85	
Bromobenzene	1	0		7.46	20.05	20	20		1.606	1.610	0.24	
1,3,5-Trimethylbenzene	1	0		7.57	21.58	20	20		1.870	2.018	7.90	
Butyl methacrylate	1	0		7.58	19.73	20	20	0.5	0.731	0.721	1.33	
t-Butylbenzene	1	0		7.77	21.66	20	20		1.825	1.976	8.32	
1,2,4-Trimethylbenzene	1	0		7.79	20.91	20	20		2.015	2.107	4.56	
sec-Butylbenzene	1	0		7.90	21.69	20	20		2.255	2.446	8.45	
4-Isopropyltoluene	1	0		7.96	21.30	20	20		1.915	2.040	6.51	
n-Butylbenzene	1	0		8.20	21.71	20	20		1.981	2.151	8.56	
p-Diethylbenzene	1	0		8.18	21.24	20	20		1.083	1.150	6.22	
1,2,4,5-Tetramethylbenzene	1	0		8.65	20.87	20	20		1.583	1.652	4.34	
1,2-Dibromo-3-Chloropropane	1	0		8.71	21.43	20	20	0.05	0.163	0.175	7.12	
Camphor	1	0		9.14	222.61	200	20		0.064	0.072	11.30	
Hexachlorobutadiene	1	0		9.28	20.35	20	20		0.248	0.253	1.74	
1,2,4-Trichlorobenzene	1	0		9.20	19.73	20	20	0.2	0.591	0.583	1.33	
1,2,3-Trichlorobenzene	1	0		9.50	20.07	20	20		0.490	0.492	0.36	
Naphthalene	1	0		9.36	20.00	20	20		1.646	1.646	0.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

HC Report of Analysis

Client: HRP Associates. Inc.
Project: Duofold- 7 Spruce St.

HC Project #: 0092507

Sample ID: DF-MW-2
Lab#: AD19444-001
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	1	ug/l	1.0	ND	
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND	
1,1,2-Trichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethene	1	ug/l	1.0	ND	
1,2,3-Trichloropropane	1	ug/l	1.0	ND	
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND	
1,2-Dichlorobenzene	1	ug/l	1.0	ND	
1,2-Dichloroethane	1	ug/l	0.64	ND	
1,2-Dichloropropane	1	ug/l	1.0	ND	
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND	
1,3-Dichlorobenzene	1	ug/l	1.0	ND	
1,3-Dichloropropane	1	ug/l	1.0	ND	
1,4-Dichlorobenzene	1	ug/l	1.0	ND	
1,4-Dioxane	1	ug/l	50	ND	
2-Butanone	1	ug/l	1.0	ND	
2-Chloroethylvinylether	1	ug/l	1.0	ND	UJ
2-Hexanone	1	ug/l	1.0	ND	
4-Isopropyltoluene	1	ug/l	1.0	ND	
4-Methyl-2-pentanone	1	ug/l	1.0	ND	
Acetone	1	ug/l	5.0	ND	
Acrolein	1	ug/l	5.0	ND	
Acrylonitrile	1	ug/l	1.0	ND	
Benzene	1	ug/l	0.50	ND	
Bromodichloromethane	1	ug/l	1.0	ND	
Bromoform	1	ug/l	1.0	ND	
Bromomethane	1	ug/l	1.0	ND	
Carbon disulfide	1	ug/l	1.0	ND	
Carbon tetrachloride	1	ug/l	1.0	ND	
Chlorobenzene	1	ug/l	1.0	ND	
Chloroethane	1	ug/l	1.0	ND	
Chloroform	1	ug/l	2.0	ND	
Chloromethane	1	ug/l	1.0	ND	
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**4.1**	
cis-1,3-Dichloropropene	1	ug/l	1.0	ND	
Dibromochloromethane	1	ug/l	1.0	ND	
Dichlorodifluoromethane	1	ug/l	1.0	ND	
Ethylbenzene	1	ug/l	1.0	ND	
Isopropylbenzene	1	ug/l	1.0	ND	
m&p-Xylenes	1	ug/l	1.0	ND	
Methylene chloride	1	ug/l	1.0	ND	
Methyl-t-butyl ether	1	ug/l	0.50	ND	
n-Butylbenzene	1	ug/l	1.0	ND	
n-Propylbenzene	1	ug/l	1.0	ND	
o-Xylene	1	ug/l	1.0	ND	
sec-Butylbenzene	1	ug/l	1.0	ND	
Styrene	1	ug/l	1.0	ND	

Sample ID: DF-MW-2
Lab#: AD19444-001
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	**1**	**ug/l**	**1.0**	**5.7**
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**2.0**
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	**1**	**ug/l**	**1.0**	**6.3**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: DF-MW-7
Lab#: AD19444-002
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	1	ug/l	1.0	ND	
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND	
1,1,2-Trichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethene	1	ug/l	1.0	ND	
1,2,3-Trichloropropane	1	ug/l	1.0	ND	
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND	
1,2-Dichlorobenzene	1	ug/l	1.0	ND	
1,2-Dichloroethane	1	ug/l	0.64	ND	
1,2-Dichloropropane	1	ug/l	1.0	ND	
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND	
1,3-Dichlorobenzene	1	ug/l	1.0	ND	
1,3-Dichloropropane	1	ug/l	1.0	ND	
1,4-Dichlorobenzene	1	ug/l	1.0	ND	
1,4-Dioxane	1	ug/l	50	ND	
2-Butanone	1	ug/l	1.0	ND	
2-Chloroethylvinylether	1	ug/l	1.0	ND	UJ
2-Hexanone	1	ug/l	1.0	ND	
4-Isopropyltoluene	1	ug/l	1.0	ND	
4-Methyl-2-pentanone	1	ug/l	1.0	ND	
Acetone	1	ug/l	5.0	ND	
Acrolein	1	ug/l	5.0	ND	
Acrylonitrile	1	ug/l	1.0	ND	
Benzene	1	ug/l	0.50	ND	
Bromodichloromethane	1	ug/l	1.0	ND	
Bromoform	1	ug/l	1.0	ND	
Bromomethane	1	ug/l	1.0	ND	
Carbon disulfide	1	ug/l	1.0	ND	
Carbon tetrachloride	1	ug/l	1.0	ND	
Chlorobenzene	1	ug/l	1.0	ND	
Chloroethane	1	ug/l	1.0	ND	
Chloroform	1	ug/l	2.0	ND	
Chloromethane	1	ug/l	1.0	ND	
cis-1,2-Dichloroethene	1	ug/l	1.0	ND	
cis-1,3-Dichloropropene	1	ug/l	1.0	ND	
Dibromochloromethane	1	ug/l	1.0	ND	
Dichlorodifluoromethane	1	ug/l	1.0	ND	
Ethylbenzene	1	ug/l	1.0	ND	
Isopropylbenzene	1	ug/l	1.0	ND	
m&p-Xylenes	1	ug/l	1.0	ND	
Methylene chloride	1	ug/l	1.0	ND	
Methyl-t-butyl ether	1	ug/l	0.50	ND	
n-Butylbenzene	1	ug/l	1.0	ND	
n-Propylbenzene	1	ug/l	1.0	ND	
o-Xylene	1	ug/l	1.0	ND	
sec-Butylbenzene	1	ug/l	1.0	ND	
Styrene	1	ug/l	1.0	ND	
t-Butyl Alcohol	1	ug/l	5.0	ND	
t-Butylbenzene	1	ug/l	1.0	ND	
Tetrachloroethene	**1**	**ug/l**	**1.0**	**5.2**	
Toluene	1	ug/l	1.0	ND	
trans-1,2-Dichloroethene	1	ug/l	1.0	ND	
trans-1,3-Dichloropropene	1	ug/l	1.0	ND	

Sample ID: DF-MW-7 **Collection Date:** 9/22/2020
Lab#: AD19444-002 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**1.2**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: DF-MW-8
Lab#: AD19444-003
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	5	ug/l	5.0	ND	
1,1,2,2-Tetrachloroethane	5	ug/l	5.0	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ug/l	5.0	ND	
1,1,2-Trichloroethane	5	ug/l	5.0	ND	
1,1-Dichloroethane	5	ug/l	5.0	ND	
1,1-Dichloroethene	5	ug/l	5.0	ND	
1,2,3-Trichloropropane	5	ug/l	5.0	ND	
1,2,4-Trimethylbenzene	5	ug/l	5.0	ND	
1,2-Dichlorobenzene	5	ug/l	5.0	ND	
1,2-Dichloroethane	5	ug/l	3.2	ND	
1,2-Dichloropropane	5	ug/l	5.0	ND	
1,3,5-Trimethylbenzene	5	ug/l	5.0	ND	
1,3-Dichlorobenzene	5	ug/l	5.0	ND	
1,3-Dichloropropane	5	ug/l	5.0	ND	
1,4-Dichlorobenzene	5	ug/l	5.0	ND	
1,4-Dioxane	5	ug/l	250	ND	
2-Butanone	5	ug/l	5.0	ND	R
2-Chloroethylvinylether	5	ug/l	5.0	ND	
2-Hexanone	5	ug/l	5.0	ND	
4-Isopropyltoluene	5	ug/l	5.0	ND	
4-Methyl-2-pentanone	5	ug/l	5.0	ND	
Acetone	5	ug/l	25	ND	
Acrolein	5	ug/l	25	ND	
Acrylonitrile	5	ug/l	5.0	ND	
Benzene	5	ug/l	2.5	ND	
Bromodichloromethane	5	ug/l	5.0	ND	
Bromoform	5	ug/l	5.0	ND	
Bromomethane	5	ug/l	5.0	ND	
Carbon disulfide	5	ug/l	5.0	ND	
Carbon tetrachloride	5	ug/l	5.0	ND	
Chlorobenzene	5	ug/l	5.0	ND	
Chloroethane	5	ug/l	5.0	ND	
Chloroform	5	ug/l	9.8	ND	
Chloromethane	5	ug/l	5.0	ND	
cis-1,2-Dichloroethene	**5**	**ug/l**	**5.0**	**370**	
cis-1,3-Dichloropropene	5	ug/l	5.0	ND	
Dibromochloromethane	5	ug/l	5.0	ND	
Dichlorodifluoromethane	5	ug/l	5.0	ND	
Ethylbenzene	5	ug/l	5.0	ND	
Isopropylbenzene	5	ug/l	5.0	ND	
m&p-Xylenes	5	ug/l	5.0	ND	
Methylene chloride	5	ug/l	5.0	ND	
Methyl-t-butyl ether	5	ug/l	2.5	ND	
n-Butylbenzene	5	ug/l	5.0	ND	
n-Propylbenzene	5	ug/l	5.0	ND	
o-Xylene	5	ug/l	5.0	ND	
sec-Butylbenzene	5	ug/l	5.0	ND	
Styrene	5	ug/l	5.0	ND	
t-Butyl Alcohol	5	ug/l	25	ND	
t-Butylbenzene	5	ug/l	5.0	ND	
Tetrachloroethene	5	ug/l	5.0	ND	
Toluene	5	ug/l	5.0	ND	
trans-1,2-Dichloroethene	**5**	**ug/l**	**5.0**	**11**	
trans-1,3-Dichloropropene	5	ug/l	5.0	ND	

Sample ID: DF-MW-8 **Collection Date:** 9/22/2020
Lab#: AD19444-003 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	5	ug/l	5.0	ND
Trichlorofluoromethane	5	ug/l	5.0	ND
Vinyl chloride	**5**	**ug/l**	**5.0**	**15**
Xylenes (Total)	5	ug/l	5.0	ND

Sample ID: DF-MW-9 **Collection Date:** 9/23/2020
Lab#: AD19444-004 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	1	ug/l	0.50	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**1.2**
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**1.1**
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: DF-MW-9 **Collection Date:** 9/23/2020
Lab#: AD19444-004 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**5.2**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: DF-MW-10
Lab#: AD19444-005
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	1	ug/l	1.0	ND	
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND	
1,1,2-Trichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethene	1	ug/l	1.0	ND	
1,2,3-Trichloropropane	1	ug/l	1.0	ND	
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND	
1,2-Dichlorobenzene	1	ug/l	1.0	ND	
1,2-Dichloroethane	1	ug/l	0.64	ND	
1,2-Dichloropropane	1	ug/l	1.0	ND	
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND	
1,3-Dichlorobenzene	1	ug/l	1.0	ND	
1,3-Dichloropropane	1	ug/l	1.0	ND	
1,4-Dichlorobenzene	1	ug/l	1.0	ND	
1,4-Dioxane	1	ug/l	50	ND	
2-Butanone	1	ug/l	1.0	ND	
2-Chloroethylvinylether	1	ug/l	1.0	ND	R
2-Hexanone	1	ug/l	1.0	ND	
4-Isopropyltoluene	1	ug/l	1.0	ND	
4-Methyl-2-pentanone	1	ug/l	1.0	ND	
Acetone	1	ug/l	5.0	ND	
Acrolein	1	ug/l	5.0	ND	
Acrylonitrile	1	ug/l	1.0	ND	
Benzene	1	ug/l	0.50	ND	
Bromodichloromethane	1	ug/l	1.0	ND	
Bromoform	1	ug/l	1.0	ND	
Bromomethane	1	ug/l	1.0	ND	
Carbon disulfide	1	ug/l	1.0	ND	
Carbon tetrachloride	1	ug/l	1.0	ND	
Chlorobenzene	1	ug/l	1.0	ND	
Chloroethane	1	ug/l	1.0	ND	
Chloroform	1	ug/l	2.0	ND	
Chloromethane	1	ug/l	1.0	ND	
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**22**	
cis-1,3-Dichloropropene	1	ug/l	1.0	ND	
Dibromochloromethane	1	ug/l	1.0	ND	
Dichlorodifluoromethane	1	ug/l	1.0	ND	
Ethylbenzene	1	ug/l	1.0	ND	
Isopropylbenzene	1	ug/l	1.0	ND	
m&p-Xylenes	1	ug/l	1.0	ND	
Methylene chloride	1	ug/l	1.0	ND	
Methyl-t-butyl ether	1	ug/l	0.50	ND	
n-Butylbenzene	1	ug/l	1.0	ND	
n-Propylbenzene	1	ug/l	1.0	ND	
o-Xylene	1	ug/l	1.0	ND	
sec-Butylbenzene	1	ug/l	1.0	ND	
Styrene	1	ug/l	1.0	ND	
t-Butyl Alcohol	1	ug/l	5.0	ND	
t-Butylbenzene	1	ug/l	1.0	ND	
Tetrachloroethene	**1**	**ug/l**	**1.0**	**2.0**	
Toluene	1	ug/l	1.0	ND	
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**3.9**	
trans-1,3-Dichloropropene	1	ug/l	1.0	ND	

Sample ID: DF-MW-10 **Collection Date:** 9/22/2020
Lab#: AD19444-005 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**14**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	**1**	**ug/l**	**1.0**	**1.7**
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: HRP-MW-1
Lab#: AD19444-008
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	**1**	**ug/l**	**1.0**	**14**
1,2,3-Trichloropropane	1	ug/l	1.0	ND
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,3-Dichloropropane	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Chloroethylvinylether	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Isopropyltoluene	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Acrolein	1	ug/l	5.0	ND
Acrylonitrile	1	ug/l	1.0	ND
Benzene	**1**	**ug/l**	**0.50**	**0.77**
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**300**
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
n-Butylbenzene	1	ug/l	1.0	ND
n-Propylbenzene	1	ug/l	1.0	ND
o-Xylene	1	ug/l	1.0	ND
sec-Butylbenzene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
t-Butyl Alcohol	1	ug/l	5.0	ND
t-Butylbenzene	1	ug/l	1.0	ND
Tetrachloroethene	**1**	**ug/l**	**1.0**	**1.9** J
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**11**
trans-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: HRP-MW-1 **Collection Date:** 9/22/2020
Lab#: AD19444-008 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**210**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	**1**	**ug/l**	**1.0**	**13**
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: HRP-MW-2
Lab#: AD19444-009
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	1	ug/l	1.0	ND	
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND	
1,1,2-Trichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethene	1	ug/l	1.0	ND	
1,2,3-Trichloropropane	1	ug/l	1.0	ND	
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND	
1,2-Dichlorobenzene	1	ug/l	1.0	ND	
1,2-Dichloroethane	1	ug/l	0.50	ND	
1,2-Dichloropropane	1	ug/l	1.0	ND	
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND	
1,3-Dichlorobenzene	1	ug/l	1.0	ND	
1,3-Dichloropropane	1	ug/l	1.0	ND	
1,4-Dichlorobenzene	1	ug/l	1.0	ND	
1,4-Dioxane	1	ug/l	50	ND	
2-Butanone	1	ug/l	1.0	ND	
2-Chloroethylvinylether	1	ug/l	1.0	ND	
2-Hexanone	1	ug/l	1.0	ND	
4-Isopropyltoluene	1	ug/l	1.0	ND	
4-Methyl-2-pentanone	1	ug/l	1.0	ND	
Acetone	1	ug/l	5.0	ND	
Acrolein	1	ug/l	5.0	ND	
Acrylonitrile	1	ug/l	1.0	ND	
Benzene	1	ug/l	0.50	ND	
Bromodichloromethane	1	ug/l	1.0	ND	
Bromoform	1	ug/l	1.0	ND	
Bromomethane	1	ug/l	1.0	ND	UJ
Carbon disulfide	1	ug/l	1.0	ND	
Carbon tetrachloride	1	ug/l	1.0	ND	
Chlorobenzene	1	ug/l	1.0	ND	
Chloroethane	1	ug/l	1.0	ND	
Chloroform	1	ug/l	1.0	ND	
Chloromethane	1	ug/l	1.0	ND	R
cis-1,2-Dichloroethene	1	ug/l	1.0	ND	
cis-1,3-Dichloropropene	1	ug/l	1.0	ND	
Dibromochloromethane	1	ug/l	1.0	ND	
Dichlorodifluoromethane	1	ug/l	1.0	ND	R
Ethylbenzene	1	ug/l	1.0	ND	
Isopropylbenzene	1	ug/l	1.0	ND	
m&p-Xylenes	1	ug/l	1.0	ND	
Methylene chloride	1	ug/l	1.0	ND	
Methyl-t-butyl ether	1	ug/l	0.50	ND	
n-Butylbenzene	1	ug/l	1.0	ND	
n-Propylbenzene	1	ug/l	1.0	ND	
o-Xylene	1	ug/l	1.0	ND	
sec-Butylbenzene	1	ug/l	1.0	ND	
Styrene	1	ug/l	1.0	ND	
t-Butyl Alcohol	1	ug/l	5.0	ND	
t-Butylbenzene	1	ug/l	1.0	ND	
Tetrachloroethene	1	ug/l	1.0	ND	
Toluene	1	ug/l	1.0	ND	
trans-1,2-Dichloroethene	1	ug/l	1.0	ND	
trans-1,3-Dichloropropene	1	ug/l	1.0	ND	

Sample ID: HRP-MW-2 **Collection Date:** 9/22/2020
Lab#: AD19444-009 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**11**	
Trichlorofluoromethane	1	ug/l	1.0	ND	
Vinyl chloride	1	ug/l	1.0	ND	R
Xylenes (Total)	1	ug/l	1.0	ND	

Sample ID: HRP-MW-3
Lab#: AD19444-010
Matrix: Aqueous

Collection Date: 9/23/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	1	ug/l	1.0	ND	
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND	
1,1,2-Trichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethene	1	ug/l	1.0	ND	
1,2,3-Trichloropropane	1	ug/l	1.0	ND	
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND	
1,2-Dichlorobenzene	1	ug/l	1.0	ND	
1,2-Dichloroethane	1	ug/l	0.64	ND	
1,2-Dichloropropane	1	ug/l	1.0	ND	
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND	
1,3-Dichlorobenzene	1	ug/l	1.0	ND	
1,3-Dichloropropane	1	ug/l	1.0	ND	
1,4-Dichlorobenzene	1	ug/l	1.0	ND	
1,4-Dioxane	1	ug/l	50	ND	
2-Butanone	1	ug/l	1.0	ND	
2-Chloroethylvinylether	1	ug/l	1.0	ND	UJ
2-Hexanone	1	ug/l	1.0	ND	
4-Isopropyltoluene	1	ug/l	1.0	ND	
4-Methyl-2-pentanone	1	ug/l	1.0	ND	
Acetone	1	ug/l	5.0	ND	
Acrolein	1	ug/l	5.0	ND	
Acrylonitrile	1	ug/l	1.0	ND	
Benzene	1	ug/l	0.50	ND	
Bromodichloromethane	1	ug/l	1.0	ND	
Bromoform	1	ug/l	1.0	ND	
Bromomethane	1	ug/l	1.0	ND	
Carbon disulfide	1	ug/l	1.0	ND	
Carbon tetrachloride	1	ug/l	1.0	ND	
Chlorobenzene	1	ug/l	1.0	ND	
Chloroethane	1	ug/l	1.0	ND	
Chloroform	1	ug/l	2.0	ND	
Chloromethane	1	ug/l	1.0	ND	
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**3.8**	
cis-1,3-Dichloropropene	1	ug/l	1.0	ND	
Dibromochloromethane	1	ug/l	1.0	ND	
Dichlorodifluoromethane	1	ug/l	1.0	ND	
Ethylbenzene	1	ug/l	1.0	ND	
Isopropylbenzene	1	ug/l	1.0	ND	
m&p-Xylenes	1	ug/l	1.0	ND	
Methylene chloride	1	ug/l	1.0	ND	
Methyl-t-butyl ether	1	ug/l	0.50	ND	
n-Butylbenzene	1	ug/l	1.0	ND	
n-Propylbenzene	1	ug/l	1.0	ND	
o-Xylene	1	ug/l	1.0	ND	
sec-Butylbenzene	1	ug/l	1.0	ND	
Styrene	1	ug/l	1.0	ND	
t-Butyl Alcohol	1	ug/l	5.0	ND	
t-Butylbenzene	1	ug/l	1.0	ND	
Tetrachloroethene	**1**	**ug/l**	**1.0**	**4.9**	
Toluene	1	ug/l	1.0	ND	
trans-1,2-Dichloroethene	1	ug/l	1.0	ND	
trans-1,3-Dichloropropene	1	ug/l	1.0	ND	

Sample ID: HRP-MW-3 **Collection Date:** 9/23/2020
Lab#: AD19444-010 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**38**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: TMW-1 **Collection Date:** 9/21/2020
Lab#: AD19444-011 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	1	ug/l	1.0	ND	
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND	
1,1,2-Trichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethene	1	ug/l	1.0	ND	
1,2,3-Trichloropropane	1	ug/l	1.0	ND	
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND	
1,2-Dichlorobenzene	1	ug/l	1.0	ND	
1,2-Dichloroethane	1	ug/l	0.64	ND	
1,2-Dichloropropane	1	ug/l	1.0	ND	
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND	
1,3-Dichlorobenzene	1	ug/l	1.0	ND	
1,3-Dichloropropane	1	ug/l	1.0	ND	
1,4-Dichlorobenzene	1	ug/l	1.0	ND	
1,4-Dioxane	1	ug/l	50	ND	
2-Butanone	1	ug/l	1.0	ND	R
2-Chloroethylvinylether	1	ug/l	1.0	ND	
2-Hexanone	1	ug/l	1.0	ND	
4-Isopropyltoluene	1	ug/l	1.0	ND	
4-Methyl-2-pentanone	1	ug/l	1.0	ND	
Acetone	1	ug/l	5.0	ND	
Acrolein	1	ug/l	5.0	ND	
Acrylonitrile	1	ug/l	1.0	ND	
Benzene	**1**	**ug/l**	**0.50**	**0.95**	
Bromodichloromethane	1	ug/l	1.0	ND	
Bromoform	1	ug/l	1.0	ND	
Bromomethane	1	ug/l	1.0	ND	
Carbon disulfide	1	ug/l	1.0	ND	
Carbon tetrachloride	1	ug/l	1.0	ND	
Chlorobenzene	1	ug/l	1.0	ND	
Chloroethane	1	ug/l	1.0	ND	
Chloroform	1	ug/l	2.0	ND	
Chloromethane	1	ug/l	1.0	ND	
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**130**	
cis-1,3-Dichloropropene	1	ug/l	1.0	ND	
Dibromochloromethane	1	ug/l	1.0	ND	
Dichlorodifluoromethane	1	ug/l	1.0	ND	
Ethylbenzene	1	ug/l	1.0	ND	
Isopropylbenzene	1	ug/l	1.0	ND	
m&p-Xylenes	1	ug/l	1.0	ND	
Methylene chloride	1	ug/l	1.0	ND	
Methyl-t-butyl ether	1	ug/l	0.50	ND	
n-Butylbenzene	1	ug/l	1.0	ND	
n-Propylbenzene	1	ug/l	1.0	ND	
o-Xylene	1	ug/l	1.0	ND	
sec-Butylbenzene	1	ug/l	1.0	ND	
Styrene	1	ug/l	1.0	ND	
t-Butyl Alcohol	1	ug/l	5.0	ND	
t-Butylbenzene	1	ug/l	1.0	ND	
Tetrachloroethene	1	ug/l	1.0	ND	
Toluene	1	ug/l	1.0	ND	
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**13**	
trans-1,3-Dichloropropene	1	ug/l	1.0	ND	

Sample ID: TMW-1 **Collection Date:** 9/21/2020
Lab#: AD19444-011 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	**1**	**ug/l**	**1.0**	**7.9**
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	**1**	**ug/l**	**1.0**	**38**
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: TMW-2
Lab#: AD19444-012
Matrix: Aqueous

Collection Date: 9/21/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	1	ug/l	1.0	ND	
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND	
1,1,2-Trichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethene	1	ug/l	1.0	ND	
1,2,3-Trichloropropane	1	ug/l	1.0	ND	
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND	
1,2-Dichlorobenzene	1	ug/l	1.0	ND	
1,2-Dichloroethane	1	ug/l	0.50	ND	
1,2-Dichloropropane	1	ug/l	1.0	ND	
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND	
1,3-Dichlorobenzene	1	ug/l	1.0	ND	
1,3-Dichloropropane	1	ug/l	1.0	ND	
1,4-Dichlorobenzene	1	ug/l	1.0	ND	
1,4-Dioxane	1	ug/l	50	ND	
2-Butanone	1	ug/l	1.0	ND	
2-Chloroethylvinylether	1	ug/l	1.0	ND	
2-Hexanone	1	ug/l	1.0	ND	
4-Isopropyltoluene	1	ug/l	1.0	ND	
4-Methyl-2-pentanone	1	ug/l	1.0	ND	
Acetone	1	ug/l	5.0	ND	
Acrolein	1	ug/l	5.0	ND	
Acrylonitrile	1	ug/l	1.0	ND	
Benzene	1	ug/l	0.50	ND	
Bromodichloromethane	1	ug/l	1.0	ND	
Bromoform	1	ug/l	1.0	ND	
Bromomethane	1	ug/l	1.0	ND	UJ
Carbon disulfide	1	ug/l	1.0	ND	
Carbon tetrachloride	1	ug/l	1.0	ND	
Chlorobenzene	1	ug/l	1.0	ND	
Chloroethane	1	ug/l	1.0	ND	
Chloroform	1	ug/l	1.0	ND	
Chloromethane	1	ug/l	1.0	ND	R
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**35**	
cis-1,3-Dichloropropene	1	ug/l	1.0	ND	
Dibromochloromethane	1	ug/l	1.0	ND	
Dichlorodifluoromethane	1	ug/l	1.0	ND	R
Ethylbenzene	1	ug/l	1.0	ND	
Isopropylbenzene	1	ug/l	1.0	ND	
m&p-Xylenes	1	ug/l	1.0	ND	
Methylene chloride	1	ug/l	1.0	ND	
Methyl-t-butyl ether	1	ug/l	0.50	ND	
n-Butylbenzene	1	ug/l	1.0	ND	
n-Propylbenzene	1	ug/l	1.0	ND	
o-Xylene	1	ug/l	1.0	ND	
sec-Butylbenzene	1	ug/l	1.0	ND	
Styrene	1	ug/l	1.0	ND	
t-Butyl Alcohol	1	ug/l	5.0	ND	
t-Butylbenzene	1	ug/l	1.0	ND	
Tetrachloroethene	**1**	**ug/l**	**1.0**	**1.9**	
Toluene	1	ug/l	1.0	ND	
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**2.7**	
trans-1,3-Dichloropropene	1	ug/l	1.0	ND	

Sample ID: TMW-2
Lab#: AD19444-012
Matrix: Aqueous

Collection Date: 9/21/2020
Receipt Date: 9/24/2020

Trichloroethene	1	ug/l	1.0	9.2	
Trichlorofluoromethane	1	ug/l	1.0	ND	
Vinyl chloride	1	ug/l	1.0	1.7	J-
Xylenes (Total)	1	ug/l	1.0	ND	

Sample ID: DUP
Lab#: AD19444-013
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	1	ug/l	1.0	ND	
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND	
1,1,2-Trichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethene	**1**	**ug/l**	**1.0**	**14**	
1,2,3-Trichloropropane	1	ug/l	1.0	ND	
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND	
1,2-Dichlorobenzene	1	ug/l	1.0	ND	
1,2-Dichloroethane	1	ug/l	0.50	ND	
1,2-Dichloropropane	1	ug/l	1.0	ND	
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND	
1,3-Dichlorobenzene	1	ug/l	1.0	ND	
1,3-Dichloropropane	1	ug/l	1.0	ND	
1,4-Dichlorobenzene	1	ug/l	1.0	ND	
1,4-Dioxane	1	ug/l	50	ND	
2-Butanone	1	ug/l	1.0	ND	
2-Chloroethylvinylether	1	ug/l	1.0	ND	
2-Hexanone	1	ug/l	1.0	ND	
4-Isopropyltoluene	1	ug/l	1.0	ND	
4-Methyl-2-pentanone	1	ug/l	1.0	ND	
Acetone	1	ug/l	5.0	ND	
Acrolein	1	ug/l	5.0	ND	
Acrylonitrile	1	ug/l	1.0	ND	
Benzene	**1**	**ug/l**	**0.50**	**0.79**	
Bromodichloromethane	1	ug/l	1.0	ND	
Bromoform	1	ug/l	1.0	ND	
Bromomethane	1	ug/l	1.0	ND	UJ
Carbon disulfide	1	ug/l	1.0	ND	
Carbon tetrachloride	1	ug/l	1.0	ND	
Chlorobenzene	1	ug/l	1.0	ND	
Chloroethane	1	ug/l	1.0	ND	
Chloroform	1	ug/l	1.0	ND	
Chloromethane	1	ug/l	1.0	ND	R
cis-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**290**	
cis-1,3-Dichloropropene	1	ug/l	1.0	ND	
Dibromochloromethane	1	ug/l	1.0	ND	
Dichlorodifluoromethane	1	ug/l	1.0	ND	R
Ethylbenzene	1	ug/l	1.0	ND	
Isopropylbenzene	1	ug/l	1.0	ND	
m&p-Xylenes	1	ug/l	1.0	ND	
Methylene chloride	1	ug/l	1.0	ND	
Methyl-t-butyl ether	1	ug/l	0.50	ND	
n-Butylbenzene	1	ug/l	1.0	ND	
n-Propylbenzene	1	ug/l	1.0	ND	
o-Xylene	1	ug/l	1.0	ND	
sec-Butylbenzene	1	ug/l	1.0	ND	
Styrene	1	ug/l	1.0	ND	
t-Butyl Alcohol	1	ug/l	5.0	ND	
t-Butylbenzene	1	ug/l	1.0	ND	
Tetrachloroethene	**1**	**ug/l**	**1.0**	**1.5**	J
Toluene	1	ug/l	1.0	ND	
trans-1,2-Dichloroethene	**1**	**ug/l**	**1.0**	**11**	
trans-1,3-Dichloropropene	1	ug/l	1.0	ND	

Sample ID: DUP
Lab#: AD19444-013
Matrix: Aqueous

Collection Date: 9/22/2020
Receipt Date: 9/24/2020

Trichloroethene	1	ug/l	1.0	200	
Trichlorofluoromethane	1	ug/l	1.0	ND	
Vinyl chloride	1	ug/l	1.0	12	J-
Xylenes (Total)	1	ug/l	1.0	ND	

Sample ID: TB-092320
Lab#: AD19444-014
Matrix: Aqueous

Collection Date: 9/23/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	1	ug/l	1.0	ND	
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND	
1,1,2-Trichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethene	1	ug/l	1.0	ND	
1,2,3-Trichloropropane	1	ug/l	1.0	ND	
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND	
1,2-Dichlorobenzene	1	ug/l	1.0	ND	
1,2-Dichloroethane	1	ug/l	0.64	ND	
1,2-Dichloropropane	1	ug/l	1.0	ND	
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND	
1,3-Dichlorobenzene	1	ug/l	1.0	ND	
1,3-Dichloropropane	1	ug/l	1.0	ND	
1,4-Dichlorobenzene	1	ug/l	1.0	ND	
1,4-Dioxane	1	ug/l	50	ND	
2-Butanone	1	ug/l	1.0	ND	
2-Chloroethylvinylether	1	ug/l	1.0	ND	UJ
2-Hexanone	1	ug/l	1.0	ND	
4-Isopropyltoluene	1	ug/l	1.0	ND	
4-Methyl-2-pentanone	1	ug/l	1.0	ND	
Acetone	**1**	**ug/l**	**5.0**	**12**	
Acrolein	1	ug/l	5.0	ND	
Acrylonitrile	1	ug/l	1.0	ND	
Benzene	1	ug/l	0.50	ND	
Bromodichloromethane	1	ug/l	1.0	ND	
Bromoform	1	ug/l	1.0	ND	
Bromomethane	1	ug/l	1.0	ND	
Carbon disulfide	1	ug/l	1.0	ND	
Carbon tetrachloride	1	ug/l	1.0	ND	
Chlorobenzene	1	ug/l	1.0	ND	
Chloroethane	1	ug/l	1.0	ND	
Chloroform	1	ug/l	2.0	ND	
Chloromethane	1	ug/l	1.0	ND	
cis-1,2-Dichloroethene	1	ug/l	1.0	ND	
cis-1,3-Dichloropropene	1	ug/l	1.0	ND	
Dibromochloromethane	1	ug/l	1.0	ND	
Dichlorodifluoromethane	1	ug/l	1.0	ND	
Ethylbenzene	1	ug/l	1.0	ND	
Isopropylbenzene	1	ug/l	1.0	ND	
m&p-Xylenes	1	ug/l	1.0	ND	
Methylene chloride	1	ug/l	1.0	ND	
Methyl-t-butyl ether	1	ug/l	0.50	ND	
n-Butylbenzene	1	ug/l	1.0	ND	
n-Propylbenzene	1	ug/l	1.0	ND	
o-Xylene	1	ug/l	1.0	ND	
sec-Butylbenzene	1	ug/l	1.0	ND	
Styrene	1	ug/l	1.0	ND	
t-Butyl Alcohol	1	ug/l	5.0	ND	
t-Butylbenzene	1	ug/l	1.0	ND	
Tetrachloroethene	1	ug/l	1.0	ND	
Toluene	1	ug/l	1.0	ND	
trans-1,2-Dichloroethene	1	ug/l	1.0	ND	
trans-1,3-Dichloropropene	1	ug/l	1.0	ND	

Sample ID: TB-092320 **Collection Date:** 9/23/2020
Lab#: AD19444-014 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: EB-092320
Lab#: AD19444-015
Matrix: Aqueous

Collection Date: 9/23/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	1	ug/l	1.0	ND	
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND	
1,1,2-Trichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethene	1	ug/l	1.0	ND	
1,2,3-Trichloropropane	1	ug/l	1.0	ND	
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND	
1,2-Dichlorobenzene	1	ug/l	1.0	ND	
1,2-Dichloroethane	1	ug/l	0.64	ND	
1,2-Dichloropropane	1	ug/l	1.0	ND	
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND	
1,3-Dichlorobenzene	1	ug/l	1.0	ND	
1,3-Dichloropropane	1	ug/l	1.0	ND	
1,4-Dichlorobenzene	1	ug/l	1.0	ND	
1,4-Dioxane	1	ug/l	50	ND	
2-Butanone	1	ug/l	1.0	ND	
2-Chloroethylvinylether	1	ug/l	1.0	ND	UJ
2-Hexanone	1	ug/l	1.0	ND	
4-Isopropyltoluene	1	ug/l	1.0	ND	
4-Methyl-2-pentanone	1	ug/l	1.0	ND	
Acetone	1	ug/l	5.0	ND	
Acrolein	1	ug/l	5.0	ND	
Acrylonitrile	1	ug/l	1.0	ND	
Benzene	1	ug/l	0.50	ND	
Bromodichloromethane	1	ug/l	1.0	ND	
Bromoform	1	ug/l	1.0	ND	
Bromomethane	1	ug/l	1.0	ND	
Carbon disulfide	1	ug/l	1.0	ND	
Carbon tetrachloride	1	ug/l	1.0	ND	
Chlorobenzene	1	ug/l	1.0	ND	
Chloroethane	1	ug/l	1.0	ND	
Chloroform	1	ug/l	2.0	ND	
Chloromethane	1	ug/l	1.0	ND	
cis-1,2-Dichloroethene	1	ug/l	1.0	ND	
cis-1,3-Dichloropropene	1	ug/l	1.0	ND	
Dibromochloromethane	1	ug/l	1.0	ND	
Dichlorodifluoromethane	1	ug/l	1.0	ND	
Ethylbenzene	1	ug/l	1.0	ND	
Isopropylbenzene	1	ug/l	1.0	ND	
m&p-Xylenes	1	ug/l	1.0	ND	
Methylene chloride	**1**	**ug/l**	**1.0**	**7.8**	
Methyl-t-butyl ether	1	ug/l	0.50	ND	
n-Butylbenzene	1	ug/l	1.0	ND	
n-Propylbenzene	1	ug/l	1.0	ND	
o-Xylene	1	ug/l	1.0	ND	
sec-Butylbenzene	1	ug/l	1.0	ND	
Styrene	1	ug/l	1.0	ND	
t-Butyl Alcohol	1	ug/l	5.0	ND	
t-Butylbenzene	1	ug/l	1.0	ND	
Tetrachloroethene	1	ug/l	1.0	ND	
Toluene	1	ug/l	1.0	ND	
trans-1,2-Dichloroethene	1	ug/l	1.0	ND	
trans-1,3-Dichloropropene	1	ug/l	1.0	ND	

Sample ID: EB-092320 **Collection Date:** 9/23/2020
Lab#: AD19444-015 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: FB-092320
Lab#: AD19444-016
Matrix: Aqueous

Collection Date: 9/23/2020
Receipt Date: 9/24/2020

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result	
1,1,1-Trichloroethane	1	ug/l	1.0	ND	
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND	
1,1,2-Trichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethane	1	ug/l	1.0	ND	
1,1-Dichloroethene	1	ug/l	1.0	ND	
1,2,3-Trichloropropane	1	ug/l	1.0	ND	
1,2,4-Trimethylbenzene	1	ug/l	1.0	ND	
1,2-Dichlorobenzene	1	ug/l	1.0	ND	
1,2-Dichloroethane	1	ug/l	0.64	ND	
1,2-Dichloropropane	1	ug/l	1.0	ND	
1,3,5-Trimethylbenzene	1	ug/l	1.0	ND	
1,3-Dichlorobenzene	1	ug/l	1.0	ND	
1,3-Dichloropropane	1	ug/l	1.0	ND	
1,4-Dichlorobenzene	1	ug/l	1.0	ND	
1,4-Dioxane	1	ug/l	50	ND	
2-Butanone	1	ug/l	1.0	ND	
2-Chloroethylvinylether	1	ug/l	1.0	ND	UJ
2-Hexanone	1	ug/l	1.0	ND	
4-Isopropyltoluene	1	ug/l	1.0	ND	
4-Methyl-2-pentanone	1	ug/l	1.0	ND	
Acetone	1	ug/l	5.0	ND	
Acrolein	1	ug/l	5.0	ND	
Acrylonitrile	1	ug/l	1.0	ND	
Benzene	1	ug/l	0.50	ND	
Bromodichloromethane	1	ug/l	1.0	ND	
Bromoform	1	ug/l	1.0	ND	
Bromomethane	1	ug/l	1.0	ND	
Carbon disulfide	1	ug/l	1.0	ND	
Carbon tetrachloride	1	ug/l	1.0	ND	
Chlorobenzene	1	ug/l	1.0	ND	
Chloroethane	1	ug/l	1.0	ND	
Chloroform	1	ug/l	2.0	ND	
Chloromethane	1	ug/l	1.0	ND	
cis-1,2-Dichloroethene	1	ug/l	1.0	ND	
cis-1,3-Dichloropropene	1	ug/l	1.0	ND	
Dibromochloromethane	1	ug/l	1.0	ND	
Dichlorodifluoromethane	1	ug/l	1.0	ND	
Ethylbenzene	1	ug/l	1.0	ND	
Isopropylbenzene	1	ug/l	1.0	ND	
m&p-Xylenes	1	ug/l	1.0	ND	
Methylene chloride	1	ug/l	1.0	ND	
Methyl-t-butyl ether	1	ug/l	0.50	ND	
n-Butylbenzene	1	ug/l	1.0	ND	
n-Propylbenzene	1	ug/l	1.0	ND	
o-Xylene	1	ug/l	1.0	ND	
sec-Butylbenzene	1	ug/l	1.0	ND	
Styrene	1	ug/l	1.0	ND	
t-Butyl Alcohol	1	ug/l	5.0	ND	
t-Butylbenzene	1	ug/l	1.0	ND	
Tetrachloroethene	1	ug/l	1.0	ND	
Toluene	1	ug/l	1.0	ND	
trans-1,2-Dichloroethene	1	ug/l	1.0	ND	
trans-1,3-Dichloropropene	1	ug/l	1.0	ND	

Sample ID: FB-092320 **Collection Date:** 9/23/2020
Lab#: AD19444-016 **Receipt Date:** 9/24/2020
Matrix: Aqueous

Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

Data Usability Summary Report for Eurofins
SGS North America Inc. Job No: JD13677

7 Soil Vapor Samples
Collected September 22, 2020

Prepared by: Donald Anné
November 9, 2020

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of TO-15 volatile analyses for 7 soil vapor samples.

The overall performances of the analyses are acceptable. SGS North America, Inc. did fulfill the requirements of the analytical method.

The data are acceptable with minor issues that are identified in the accompanying data validation review. The following data were qualified:

- The positive volatile results for isopropyl alcohol and ethanol were qualified as "estimated" (J) in all 7 soil vapor samples because the %RSDs for isopropyl alcohol and ethanol were above the allowable maximum for the associated initial calibration.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation review.

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ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method TO-15 Volatiles Data
for SGS North America Inc. Job No: JD13677

7 Soil Vapor Samples
Collected September 22, 2020

Prepared by: Donald Anné
November 9, 2020

Holding Times: Samples were analyzed within the EPA recommended holding times.

Canister Pressure: The sample canisters reported residual vacuum upon receipt at the laboratory as required by the method.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRFs for target compounds were above the allowable minimum (0.010), as required.

The %RSDs for isopropyl alcohol and ethanol were above the allowable maximum (30%) for GCMS3W on 09-17-20. Positive results for isopropyl alcohol and ethanol should be considered estimated (J) in associated samples.

Continuing Calibration: The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (30%), as required.

Blanks: The analyses of method blank reported target compounds as not detected. The analyses of the cleaned canisters reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil vapor samples.

Laboratory Control Sample: The relative percent differences for target compounds were below the allowable maximum and the surrogate recoveries were within QC limits for the air/vapor samples V3W2884-BS/BSD and V3W2885-BS/BSD.

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Laboratory Duplicate Sample: The relative percent differences for applicable compounds were below the allowable maximum for the soil vapor duplicate sample HRP-2 and soil vapor batch duplicate sample JD13673-1.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Canister Pressure: The laboratory reported samples with a residual vacuum, as required.

Initial Calibration Summary

Job Number: JD13677
Account: HCVNJF Hampton Clarke-Veritech
Project: Project # 0092427

Sample: V3W2876-ICC2876
Lab FileID: 3W73073.D

Response Factor Report GCMS3W

Method Path : C:\msdchem\1\METHODS\
Method File : M3W2876.m
Title : TO15 by GCMS w/Rtx-1, 60 m X 0.32mm ID X 1.0 um
Last Update : Thu Sep 17 09:47:51 2020
Response Via : Initial Calibration

Calibration Files
0.04=3W73068.D 0.1 =3W73069.D 0.2 =3W73070.D 0.5 =3W73071.D 5 =3W73072.D 10 =3W73073.D 20 =3W73074.D
40 =3W73076.D

		Compound	0.04	0.1	0.2	0.5	5	10	20	40	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------									
2)		FREON 115									0.000	-1.00
3)		FREON 152A	0.693	0.699	0.789	0.781	0.736	0.743	0.739	0.745	0.741	4.56
4)		CHLORODIFLUORO...		0.361	0.308	0.301	0.270	0.275	0.273	0.273	0.294	11.22
5)		CHLOROTRIFLUOR...	1.403	1.410	1.564	1.515	1.481	1.526	1.501	1.461	1.483	3.79
6)		DICHLORODIFLUO...	2.614	2.784	2.619	2.676	2.631	2.698	2.646	2.520	2.649	2.87
7)		PROPYLENE	1.642	1.218	1.216	1.088	1.025	1.041	1.009	0.961	1.150	19.12
8)		1-CHLORO-1,1-D...	1.799	1.833	1.930	1.962	1.841	1.874	1.851	1.828	1.865	2.96
9)		FREON 114	2.599	2.941	2.999	3.004	2.816	2.867	2.805	2.685	2.840	5.10
10)		CHLOROMETHANE	0.449	0.428	0.403	0.397	0.363	0.367	0.361	0.356	0.390	8.88
11)		VINYL CHLORIDE	1.113	1.181	1.203	1.247	1.192	1.226	1.217	1.222	1.200	3.40
12)		1,3-BUTADIENE	1.034	1.008	0.912	0.937	0.870	0.903	0.906	0.922	0.936	5.97
13)		n-BUTANE	1.954	1.894	1.784	1.760	1.656	1.713	1.681	1.665	1.763	6.22
14)		BROMOMETHANE	1.589	1.160	1.209	1.213	1.081	1.100	1.091	1.080	1.190	14.31
15)		CHLOROETHANE	0.565	0.527	0.590	0.606	0.559	0.568	0.574	0.588	0.572	4.15
16)		DICHLOROFLUORO...	2.449	2.357	2.467	2.528	2.251	2.281	2.319	2.274	2.366	4.37
17)		ACETONITRILE		0.812	0.799	1.126	0.753	0.820	0.877	0.890	0.868	14.18
18)		ACROLEIN		0.448	0.350	0.495	0.395	0.450	0.469	0.466	0.439	11.34
19)		FREON 123	2.533	2.416	2.678	2.729	2.364	2.448	2.482	2.403	2.507	5.28
20)		FREON 123A	1.124	1.231	1.323	1.397	1.223	1.261	1.299	1.285	1.268	6.31
21)		TRICHLOROFLUOR...	2.107	2.284	2.369	2.434	2.187	2.236	2.234	2.195	2.256	4.64
22)		ISOPROPYL ALCOHOL		2.706	2.312	2.241	1.704	1.747	1.628	0.923	1.895	30.67
23)		ACETONE		0.778	0.566	0.643	0.411	0.465	0.489	0.492	0.549	22.86
24)		PENTANE	1.340	1.224	1.182	1.113	1.065	1.099	1.124	1.116	1.158	7.66
25)		IODOMETHANE	2.720	2.818	3.139	3.183	2.834	2.908	2.950	2.859	2.926	5.48
26)		1,1-DICHLOROET...	1.390	1.246	1.216	1.150	1.018	1.059	1.086	1.086	1.156	10.59
27)		CARBON DISULFIDE	4.176	4.001	3.902	3.843	3.553	3.653	3.616	3.570	3.789	6.00
28)		ETHANOL		0.651	0.649	0.561	0.407	0.412	0.386	0.254	0.474	31.44
29)		BROMOETHENE	1.100	1.129	1.162	1.160	1.049	1.078	1.088	1.084	1.106	3.65
30)		ACRYLONITRILE	0.618	0.600	0.562	0.705	0.575	0.660	0.705	0.723	0.644	9.82
31)		METHYLENE CHLO...		1.496	1.338	1.131	0.943	0.963	1.003	1.009	1.126	18.86
32)		3-CHLOROPROPENE	0.493	0.524	0.602	0.548	0.486	0.509	0.538	0.551	0.531	7.07
33)		FREON 113	1.567	1.690	1.904	1.940	1.687	1.733	1.803	1.794	1.765	6.92
34)		TRANS-1,2-DICH...	1.386	1.205	1.262	1.266	1.106	1.165	1.208	1.219	1.227	6.72
35)		TERTIARY BUTYL...		1.851	1.684	1.760	1.853	1.880	1.728	0.766	1.646	23.99
36)		METHYL TERTIAR...	2.629	2.560	2.380	3.300	2.649	3.020	3.098	3.019	2.832	11.27
37)		TETRAHYDROFURAN		0.484	0.483	0.666	0.485	0.557	0.581	0.587	0.549	12.64
38)		HEXANE	2.116	1.860	2.075	2.048	1.788	1.850	1.843	1.702	1.910	7.85
39)		VINYL ACETATE		0.197	0.179	0.250	0.200	0.240	0.257	0.263	0.227	14.90
40)		1,1-DICHLOROET...	1.736	2.059	2.252	2.302	2.012	2.106	2.167	2.159	2.099	8.33
41)		METHYL ETHYL K...	0.584	0.583	0.503	0.693	0.471	0.540	0.566	0.571	0.564	11.65
42)		cis-1,2-DICHLO...	1.375	1.198	1.286	1.288	1.128	1.189	1.241	1.242	1.243	6.04
43)		DIISOPROPYL ETHER	0.447	0.424	0.408	0.601	0.469	0.527	0.537	0.501	0.489	13.25
44)		ETHYL ACETATE	0.260	0.350	0.319	0.460	0.332	0.383	0.390	0.379	0.359	16.44
45)		METHYL ACRYLATE	1.847		1.731	2.452	1.770	2.057	2.090	1.965	1.987	12.40

Initial Calibration Summary

Job Number: JD13677
Account: HCVNJF Hampton Clarke-Veritech
Project: Project # 0092427

Sample: V3W2876-ICC2876
Lab FileID: 3W73073.D

46)		CHLOROFORM	2.328	2.551	2.546	2.631	2.172	2.279	2.346	2.325	2.397	6.65
47)		2,4-DIMETHYLPE...	2.473	2.316	2.429	2.464	2.176	2.256	2.310	2.233	2.332	4.79
48)		1,1,1-TRICHLOR...	2.329	2.229	2.264	2.331	2.017	2.130	2.202	2.186	2.211	4.73
49)		CARBON TETRACH...	1.597	1.770	2.026	2.063	1.889	2.073	2.177	2.179	1.972	10.41
50)		1,2-DICHLOROET...	1.243	1.240	1.335	1.442	1.226	1.362	1.430	1.420	1.337	6.79
51)	I	1,4-DIFLUOROBENZENE	----------ISTD----------									
52)		BENZENE	0.905	0.819	0.870	0.864	0.735	0.796	0.816	0.804	0.826	6.36
53)		CYCLOHEXANE	0.358	0.351	0.379	0.373	0.319	0.338	0.347	0.350	0.352	5.34
54)		2,3-DIMETHYLPE...	0.158	0.174	0.192	0.196	0.172	0.179	0.185	0.186	0.180	6.90
55)		TRICHLOROETHYLENE	0.346	0.332	0.366	0.345	0.312	0.333	0.345	0.345	0.340	4.53
56)		1,2-DICHLOROPR...	0.303	0.306	0.299	0.342	0.277	0.307	0.315	0.302	0.306	5.92
57)		DIBROMOMETHANE	0.403	0.356	0.339	0.315	0.269	0.299	0.314	0.318	0.327	12.33
58)		ETHYL ACRYLATE		0.515	0.437	0.635	0.463	0.559	0.569	0.556	0.533	12.66
59)		BROMODICHLOROM...	0.481	0.503	0.499	0.522	0.484	0.536	0.557	0.563	0.518	6.12
60)		2,2,4-TRIMETHY...	1.203	1.228	1.313	1.436	1.276	1.312	1.292	1.191	1.281	6.14
61)		1,4-DIOXANE	0.166	0.185	0.154	0.185	0.142	0.151	0.142	0.096	0.153	18.66
62)		HEPTANE	0.584	0.510	0.507	0.515	0.472	0.491	0.496	0.485	0.507	6.67
63)		METHYL METHACR...	0.275	0.298	0.209	0.310	0.228	0.273	0.285	0.291	0.271	12.89
64)		METHYL ISOBUTY...	0.273	0.210	0.185	0.249	0.204	0.223	0.234	0.244	0.228	12.35
65)		cis-1,3-DICHLO...	0.380	0.408	0.415	0.440	0.389	0.454	0.476	0.482	0.431	8.96
66)		TOLUENE	0.644	0.561	0.534	0.583	0.471	0.533	0.553	0.545	0.553	8.84
67)		1,3-DICHLOROPR...	0.371	0.380	0.372	0.454	0.366	0.430	0.446	0.446	0.408	9.57
68)		trans-1,3-DICH...	0.346	0.323	0.318	0.370	0.318	0.384	0.411	0.421	0.361	11.53
69)		1,1,2-TRICHLOR...	0.317	0.289	0.268	0.302	0.246	0.281	0.293	0.297	0.287	7.66
70)	I	CHLOROBENZENE-D5	----------ISTD----------									
71)		2-HEXANONE	0.835	0.727	0.602	0.792	0.554	0.555	0.561	0.540	0.646	18.60
72)		ETHYL METHACRY...	0.803	0.981	0.711	1.011	0.760	0.842	0.831	0.771	0.839	12.61
73)		TETRACHLOROETH...	0.697	0.754	0.762	0.761	0.665	0.690	0.686	0.645	0.707	6.45
74)		DIBROMOCHLOROM...	0.836	0.896	0.898	1.020	0.911	1.017	1.031	0.972	0.948	7.64
75)		1,2-DIBROMOETHANE	0.891	0.928	0.882	0.957	0.783	0.899	0.912	0.865	0.890	5.81
76)		OCTANE	1.470	1.382	1.355	1.537	1.299	1.313	1.255	1.097	1.338	10.02
77)		1,1,1,2-TETRAC...	0.647	0.661	0.647	0.775	0.648	0.720	0.728	0.670	0.687	6.99
78)		CHLOROBENZENE	1.361	1.371	1.373	1.558	1.266	1.386	1.377	1.244	1.367	6.91
79)		ETHYLBENZENE	3.817	2.787	2.263	2.671	1.995	2.201	2.162	1.941	2.480	24.91
80)		m,p-XYLENE	1.355	1.016	0.839	1.010	0.763	0.851	0.840	0.762	0.929	21.27
81)		o-XYLENE	1.272	0.994	0.809	0.977	0.727	0.818	0.805	0.722	0.890	20.73
82)		STYRENE	1.544	1.384	1.125	1.455	1.144	1.304	1.301	1.218	1.309	11.24
83)		NONANE	1.252	1.311	1.215	1.494	1.233	1.293	1.238	1.069	1.263	9.37
84)		BROMOFORM	0.671	0.707	0.672	0.846	0.794	0.935	0.971	0.935	0.816	15.16
85)	S	4-BROMOFLUOROB...	1.082	1.108	1.125	1.136	1.163	1.189	1.158	1.093	1.132	3.26
86)		1,1,2,2-TETRAC...	1.445	1.367	1.123	1.545	1.176	1.310	1.270	1.109	1.293	12.03
87)		1,2,3-TRICHLOR...	0.974	0.986	0.813	1.126	0.864	0.987	0.974	0.908	0.954	9.92
88)		ISOPROPYLBENZENE	2.403	2.313	1.962	2.788	2.121	2.364	2.285	2.037	2.284	11.30
89)		BROMOBENZENE	1.183	1.205	1.108	1.289	1.016	1.153	1.145	1.072	1.147	7.31
90)		2-CHLOROTOLUENE	0.628	0.571	0.534	0.673	0.533	0.607	0.605	0.575	0.591	8.02
91)		n-PROPYLBENZENE	0.569	0.553	0.491	0.714	0.566	0.648	0.648	0.610	0.600	11.61
92)		4-ETHYLTOLUENE	2.199	2.179	1.611	2.452	1.969	2.245	2.194	1.941	2.099	12.10
93)		1,3,5-TRIMETHY...	1.678	1.623	1.413	2.140	1.640	1.830	1.795	1.634	1.719	12.31
94)		ALPHA-METHYLST...	0.867	0.876	0.657	1.041	0.863	0.991	0.996	0.923	0.902	13.25
95)		tert-BUTYLBENZENE	0.402	0.388	0.342	0.495	0.375	0.427	0.418	0.374	0.403	11.46
96)		1,2,4-TRIMETHY...	1.701	1.731	1.358	2.059	1.607	1.819	1.748	1.511	1.692	12.39
97)		m-DICHLOROBENZENE	1.212	1.175	0.928	1.205	1.012	1.185	1.202	1.109	1.129	9.34
98)		BENZYL CHLORIDE	1.747	1.243	0.946	1.330	1.261	1.522	1.583	1.455	1.386	17.79
99)		p-DICHLOROBENZENE	1.208	1.177	0.934	1.179	0.992	1.161	1.194	1.121	1.121	9.08
100)		sec-BUTYLBENZENE	0.468	0.498	0.400	0.591	0.464	0.532	0.532	0.502	0.498	11.41
101)		1,2,3-Trimethy...	1.869	1.749	1.350	2.048	1.591	1.807	1.746	1.495	1.707	12.94
102)		p-ISOPROPYLTOL...	0.540	0.523	0.375	0.631	0.505	0.584	0.575	0.502	0.529	14.44
103)		o-DICHLOROBENZENE	1.121	1.125	0.866	1.140	0.962	1.121	1.133	1.060	1.066	9.40

Initial Calibration Summary

Job Number: JD13677
Account: HCVNJF Hampton Clarke-Veritech
Project: Project # 0092427

Sample: V3W2876-ICC2876
Lab FileID: 3W73073.D

104)	n-BUTYLBENZENE	0.470	0.387	0.288	0.466	0.424	0.512	0.522	0.496	0.446	17.51
105)	HEXACHLOROETHANE	0.624	0.603	0.519	0.663	0.634	0.781	0.807	0.740	0.671	14.54
106)	HEXACHLOROBUTA...	0.554	0.504	0.345	0.516	0.441	0.515	0.485	0.386	0.468	15.34
107)	1,2,4-TRICHLOR...	0.580	0.474	0.325	0.392	0.368	0.395	0.443	0.419	0.425	18.23
108)	NAPHTHALENE		1.017	0.695	0.877	0.723	0.704	0.790	0.758	0.795	14.59

(#) = Out of Range

M3W2876.m Thu Sep 17 09:55:46 2020 GCMS6W

SGS North America Inc.

Report of Analysis

Client Sample ID:	AD19437-001 HRP-SV-1		
Lab Sample ID:	JD13677-1	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A1117	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73265.D	32.5	09/30/20 16:06	TCH	n/a	n/a	V3W2885
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	380	26	15	ppbv		903	62	36	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	26	6.0	ppbv		ND	58	13	ug/m3
71-43-2	78.11	Benzene	ND	26	1.5	ppbv		ND	83	4.8	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	26	3.5	ppbv		ND	170	23	ug/m3
75-25-2	252.8	Bromoform	ND	26	4.9	ppbv		ND	270	51	ug/m3
74-83-9	94.94	Bromomethane	ND	26	2.9	ppbv		ND	100	11	ug/m3
593-60-2	106.9	Bromoethene	ND	26	2.9	ppbv		ND	110	13	ug/m3
100-44-7	126	Benzyl Chloride	ND	26	7.4	ppbv		ND	130	38	ug/m3
75-15-0	76.14	Carbon disulfide	ND	26	3.1	ppbv		ND	81	9.7	ug/m3
108-90-7	112.6	Chlorobenzene	ND	26	3.4	ppbv		ND	120	16	ug/m3
75-00-3	64.52	Chloroethane	ND	26	6.3	ppbv		ND	69	17	ug/m3
67-66-3	119.4	Chloroform	ND	26	2.6	ppbv		ND	130	13	ug/m3
74-87-3	50.49	Chloromethane	ND	26	2.0	ppbv		ND	54	4.1	ug/m3
107-05-1	76.53	3-Chloropropene	ND	26	5.1	ppbv		ND	81	16	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	26	3.3	ppbv		ND	130	17	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	26	3.1	ppbv		ND	160	20	ug/m3
110-82-7	84.16	Cyclohexane	ND	26	2.9	ppbv		ND	89	10	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	26	1.5	ppbv		ND	110	6.1	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	26	2.2	ppbv		ND	100	8.7	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	26	2.3	ppbv		ND	200	18	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	26	2.7	ppbv		ND	110	11	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	26	2.5	ppbv		ND	120	12	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	26	6.7	ppbv		ND	94	24	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	ND	26	2.1	ppbv		ND	130	10	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	26	4.3	ppbv		ND	220	37	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	21.4	26	0.95	ppbv	J	84.8	100	3.8	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	415	26	1.5	ppbv		1650	100	5.9	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	26	2.5	ppbv		ND	120	11	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	26	2.5	ppbv		ND	160	15	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	26	2.8	ppbv		ND	160	17	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	26	2.3	ppbv		ND	160	14	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	26	2.5	ppbv		ND	120	11	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-001 HRP-SV-1		
Lab Sample ID:	JD13677-1	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A1117	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	177 J	65	28	ppbv		334 J	120	53	ug/m3
100-41-4	106.2	Ethylbenzene	ND	26	2.0	ppbv		ND	110	8.7	ug/m3
141-78-6	88	Ethyl Acetate	64.8	26	4.9	ppbv		233	94	18	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	26	3.8	ppbv		ND	130	19	ug/m3
76-13-1	187.4	Freon 113	ND	26	2.2	ppbv		ND	200	17	ug/m3
76-14-2	170.9	Freon 114	ND	26	2.5	ppbv		ND	180	17	ug/m3
142-82-5	100.2	Heptane	ND	26	2.3	ppbv		ND	110	9.4	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	26	5.9	ppbv		ND	280	63	ug/m3
110-54-3	86.17	Hexane	356	26	1.4	ppbv		1250	92	4.9	ug/m3
591-78-6	100	2-Hexanone	ND	26	4.7	ppbv		ND	110	19	ug/m3
67-63-0	60.1	Isopropyl Alcohol	1900 J	26	8.4	ppbv		4670 J	64	21	ug/m3
75-09-2	84.94	Methylene chloride	67.6	26	1.9	ppbv		235	90	6.6	ug/m3
78-93-3	72.11	Methyl ethyl ketone	33.6	26	5.5	ppbv		99.1	77	16	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	26	4.7	ppbv		ND	110	19	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	26	2.5	ppbv		ND	94	9.0	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	26	4.2	ppbv		ND	110	17	ug/m3
115-07-1	42	Propylene	ND	65	2.1	ppbv		ND	110	3.6	ug/m3
100-42-5	104.1	Styrene	ND	26	2.5	ppbv		ND	110	11	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	26	4.3	ppbv		ND	140	23	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	26	3.5	ppbv		ND	180	24	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	26	4.0	ppbv		ND	140	22	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	26	12	ppbv		ND	190	89	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	26	4.3	ppbv		ND	130	21	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	26	4.4	ppbv		ND	130	22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	26	2.8	ppbv		ND	120	13	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	26	1.8	ppbv		ND	79	5.5	ug/m3
127-18-4	165.8	Tetrachloroethylene	109	5.2	4.0	ppbv		739	35	27	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	26	6.5	ppbv		ND	77	19	ug/m3
108-88-3	92.14	Toluene	51.8	26	1.9	ppbv		195	98	7.2	ug/m3
79-01-6	131.4	Trichloroethylene	3190	5.2	2.5	ppbv		17100	28	13	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	26	3.7	ppbv		ND	150	21	ug/m3
75-01-4	62.5	Vinyl chloride	ND	26	2.9	ppbv		ND	66	7.4	ug/m3
108-05-4	86	Vinyl Acetate	ND	26	4.4	ppbv		ND	91	15	ug/m3
	106.2	m,p-Xylene	ND	26	4.4	ppbv		ND	110	19	ug/m3
95-47-6	106.2	o-Xylene	ND	26	2.2	ppbv		ND	110	9.6	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	26	2.2	ppbv		ND	110	9.6	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	AD19437-002 HRP-SV-2		
Lab Sample ID:	JD13677-2	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A626	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73241.D	1.48	09/29/20 16:07	TCH	n/a	n/a	V3W2884
Run #2							

	Initial Volume
Run #1	148 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	35.2	0.80	0.45	ppbv		83.6	1.9	1.1	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.18	ppbv		ND	1.8	0.40	ug/m3
71-43-2	78.11	Benzene	1.2	0.80	0.048	ppbv		3.8	2.6	0.15	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.11	ppbv		ND	5.4	0.74	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.15	ppbv		ND	8.3	1.6	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.088	ppbv		ND	3.1	0.34	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.088	ppbv		ND	3.5	0.38	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.23	ppbv		ND	4.1	1.2	ug/m3
75-15-0	76.14	Carbon disulfide	8.6	0.80	0.094	ppbv		27	2.5	0.29	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.10	ppbv		ND	3.7	0.46	ug/m3
75-00-3	64.52	Chloroethane	1.3	0.80	0.19	ppbv		3.4	2.1	0.50	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.080	ppbv		ND	3.9	0.39	ug/m3
74-87-3	50.49	Chloromethane	2.0	0.80	0.061	ppbv		4.1	1.7	0.13	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.16	ppbv		ND	2.5	0.50	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.10	ppbv		ND	4.1	0.52	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.094	ppbv		ND	5.0	0.59	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	0.088	ppbv		ND	2.8	0.30	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.046	ppbv		ND	3.2	0.19	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.067	ppbv		ND	3.2	0.27	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.071	ppbv		ND	6.1	0.55	ug/m3
107-06-2	98.96	1,2-Dichloroethane	0.39	0.80	0.083	ppbv	J	1.6	3.2	0.34	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.077	ppbv		ND	3.7	0.36	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.21	ppbv		ND	2.9	0.76	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	ND	0.80	0.066	ppbv		ND	4.0	0.33	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.13	ppbv		ND	6.8	1.1	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.029	ppbv		ND	3.2	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	0.56	0.80	0.047	ppbv	J	2.2	3.2	0.19	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.076	ppbv		ND	4.8	0.46	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.087	ppbv		ND	4.8	0.52	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.070	ppbv		ND	4.8	0.42	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-002 HRP-SV-2		
Lab Sample ID:	JD13677-2	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A626	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	16.0 J	2.0	0.87	ppbv		30.1 J	3.8	1.6	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.80	0.060	ppbv		ND	3.5	0.26	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.80	0.15	ppbv		ND	2.9	0.54	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.12	ppbv		ND	3.9	0.59	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.068	ppbv		ND	6.1	0.52	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.076	ppbv		ND	5.6	0.53	ug/m3
142-82-5	100.2	Heptane	ND	0.80	0.070	ppbv		ND	3.3	0.29	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.18	ppbv		ND	8.5	1.9	ug/m3
110-54-3	86.17	Hexane	ND	0.80	0.042	ppbv		ND	2.8	0.15	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.15	ppbv		ND	3.3	0.61	ug/m3
67-63-0	60.1	Isopropyl Alcohol	41.3 J	0.80	0.26	ppbv		102 J	2.0	0.64	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.058	ppbv		ND	2.8	0.20	ug/m3
78-93-3	72.11	Methyl ethyl ketone	2.3	0.80	0.17	ppbv		6.8	2.4	0.50	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.14	ppbv		ND	3.3	0.57	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.077	ppbv		ND	2.9	0.28	ug/m3
80-62-6	100.12	Methylmethacrylate	0.58	0.80	0.13	ppbv	J	2.4	3.3	0.53	ug/m3
115-07-1	42	Propylene	2.8	2.0	0.064	ppbv		4.8	3.4	0.11	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.076	ppbv		ND	3.4	0.32	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.13	ppbv		ND	4.4	0.71	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.11	ppbv		ND	5.5	0.76	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	0.65	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.35	ppbv		ND	5.9	2.6	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.75	0.80	0.13	ppbv	J	3.7	3.9	0.64	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.80	0.13	ppbv		ND	3.9	0.64	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.087	ppbv		ND	3.7	0.41	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	3.1	0.80	0.055	ppbv		9.4	2.4	0.17	ug/m3
127-18-4	165.8	Tetrachloroethylene	3.3	0.16	0.12	ppbv		22	1.1	0.81	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.20	ppbv		ND	2.4	0.59	ug/m3
108-88-3	92.14	Toluene	0.86	0.80	0.058	ppbv		3.2	3.0	0.22	ug/m3
79-01-6	131.4	Trichloroethylene	5.8	0.16	0.076	ppbv		31	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.11	ppbv		ND	4.5	0.62	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.089	ppbv		ND	2.0	0.23	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.14	ppbv		ND	2.8	0.49	ug/m3
	106.2	m,p-Xylene	1.0	0.80	0.14	ppbv		4.3	3.5	0.61	ug/m3
95-47-6	106.2	o-Xylene	ND	0.80	0.068	ppbv		ND	3.5	0.30	ug/m3
1330-20-7	106.2	Xylenes (total)	1.0	0.80	0.068	ppbv		4.3	3.5	0.30	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	AD19437-003 HRP-SV-3		
Lab Sample ID:	JD13677-3	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A541	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73257.D	1.7	09/30/20 06:12	TCH	n/a	n/a	V3W2884
Run #2							

	Initial Volume
Run #1	20.0 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	91.8	6.8	3.8	ppbv		218	16	9.0	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	6.8	1.6	ppbv		ND	15	3.5	ug/m3
71-43-2	78.11	Benzene	ND	6.8	0.40	ppbv		ND	22	1.3	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	6.8	0.91	ppbv		ND	46	6.1	ug/m3
75-25-2	252.8	Bromoform	ND	6.8	1.3	ppbv		ND	70	13	ug/m3
74-83-9	94.94	Bromomethane	ND	6.8	0.75	ppbv		ND	26	2.9	ug/m3
593-60-2	106.9	Bromoethene	ND	6.8	0.75	ppbv		ND	30	3.3	ug/m3
100-44-7	126	Benzyl Chloride	ND	6.8	1.9	ppbv		ND	35	9.8	ug/m3
75-15-0	76.14	Carbon disulfide	6.2	6.8	0.80	ppbv	J	19	21	2.5	ug/m3
108-90-7	112.6	Chlorobenzene	ND	6.8	0.89	ppbv		ND	31	4.1	ug/m3
75-00-3	64.52	Chloroethane	ND	6.8	1.6	ppbv		ND	18	4.2	ug/m3
67-66-3	119.4	Chloroform	ND	6.8	0.68	ppbv		ND	33	3.3	ug/m3
74-87-3	50.49	Chloromethane	ND	6.8	0.52	ppbv		ND	14	1.1	ug/m3
107-05-1	76.53	3-Chloropropene	ND	6.8	1.3	ppbv		ND	21	4.1	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	6.8	0.85	ppbv		ND	35	4.4	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	6.8	0.80	ppbv		ND	43	5.0	ug/m3
110-82-7	84.16	Cyclohexane	ND	6.8	0.75	ppbv		ND	23	2.6	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	6.8	0.39	ppbv		ND	28	1.6	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	6.8	0.57	ppbv		ND	27	2.3	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	6.8	0.61	ppbv		ND	52	4.7	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	6.8	0.71	ppbv		ND	28	2.9	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	6.8	0.65	ppbv		ND	31	3.0	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	6.8	1.8	ppbv		ND	25	6.5	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	ND	6.8	0.56	ppbv		ND	34	2.8	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	6.8	1.1	ppbv		ND	58	9.4	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	6.8	0.25	ppbv		ND	27	0.99	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	7.4	6.8	0.40	ppbv		29	27	1.6	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	6.8	0.66	ppbv		ND	31	3.0	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	6.8	0.64	ppbv		ND	41	3.8	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	6.8	0.74	ppbv		ND	41	4.4	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	6.8	0.60	ppbv		ND	41	3.6	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	6.8	0.66	ppbv		ND	31	3.0	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-003 HRP-SV-3		
Lab Sample ID:	JD13677-3	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A541	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	22.5 J	17	7.4	ppbv		42.4 J	32	14	ug/m3
100-41-4	106.2	Ethylbenzene	ND	6.8	0.51	ppbv		ND	30	2.2	ug/m3
141-78-6	88	Ethyl Acetate	ND	6.8	1.3	ppbv		ND	24	4.7	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	6.8	1.0	ppbv		ND	33	4.9	ug/m3
76-13-1	187.4	Freon 113	ND	6.8	0.58	ppbv		ND	52	4.4	ug/m3
76-14-2	170.9	Freon 114	ND	6.8	0.65	ppbv		ND	48	4.5	ug/m3
142-82-5	100.2	Heptane	ND	6.8	0.60	ppbv		ND	28	2.5	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	6.8	1.6	ppbv		ND	73	17	ug/m3
110-54-3	86.17	Hexane	ND	6.8	0.36	ppbv		ND	24	1.3	ug/m3
591-78-6	100	2-Hexanone	ND	6.8	1.2	ppbv		ND	28	4.9	ug/m3
67-63-0	60.1	Isopropyl Alcohol	37.9 J	6.8	2.2	ppbv		93.2 J	17	5.4	ug/m3
75-09-2	84.94	Methylene chloride	ND	6.8	0.49	ppbv		ND	24	1.7	ug/m3
78-93-3	72.11	Methyl ethyl ketone	3.3	6.8	1.4	ppbv	J	9.7	20	4.1	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	6.8	1.2	ppbv		ND	28	4.9	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	6.8	0.65	ppbv		ND	25	2.3	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	6.8	1.1	ppbv		ND	28	4.5	ug/m3
115-07-1	42	Propylene	3.0	17	0.54	ppbv	J	5.2	29	0.93	ug/m3
100-42-5	104.1	Styrene	ND	6.8	0.64	ppbv		ND	29	2.7	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	6.8	1.1	ppbv		ND	37	6.0	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	6.8	0.92	ppbv		ND	47	6.3	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	6.8	1.0	ppbv		ND	37	5.5	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	6.8	3.0	ppbv		ND	50	22	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	6.8	1.1	ppbv		ND	33	5.4	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	6.8	1.1	ppbv		ND	33	5.4	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	6.8	0.74	ppbv		ND	32	3.5	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	6.8	0.47	ppbv		ND	21	1.4	ug/m3
127-18-4	165.8	Tetrachloroethylene	1080	1.4	1.0	ppbv		7320	9.5	6.8	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	6.8	1.7	ppbv		ND	20	5.0	ug/m3
108-88-3	92.14	Toluene	ND	6.8	0.49	ppbv		ND	26	1.8	ug/m3
79-01-6	131.4	Trichloroethylene	122	1.4	0.65	ppbv		656	7.5	3.5	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	6.8	0.96	ppbv		ND	38	5.4	ug/m3
75-01-4	62.5	Vinyl chloride	ND	6.8	0.76	ppbv		ND	17	1.9	ug/m3
108-05-4	86	Vinyl Acetate	ND	6.8	1.2	ppbv		ND	24	4.2	ug/m3
	106.2	m,p-Xylene	ND	6.8	1.2	ppbv		ND	30	5.2	ug/m3
95-47-6	106.2	o-Xylene	ND	6.8	0.58	ppbv		ND	30	2.5	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	6.8	0.58	ppbv		ND	30	2.5	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	AD19437-004 HRP-SV-4		
Lab Sample ID:	JD13677-4	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A589	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73243.D	1	09/29/20 17:49	TCH	n/a	n/a	V3W2884
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	6.6	0.80	0.45	ppbv		16	1.9	1.1	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.18	ppbv		ND	1.8	0.40	ug/m3
71-43-2	78.11	Benzene	ND	0.80	0.048	ppbv		ND	2.6	0.15	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.11	ppbv		ND	5.4	0.74	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.15	ppbv		ND	8.3	1.6	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.088	ppbv		ND	3.1	0.34	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.088	ppbv		ND	3.5	0.38	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.23	ppbv		ND	4.1	1.2	ug/m3
75-15-0	76.14	Carbon disulfide	0.60	0.80	0.094	ppbv	J	1.9	2.5	0.29	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.10	ppbv		ND	3.7	0.46	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.19	ppbv		ND	2.1	0.50	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.080	ppbv		ND	3.9	0.39	ug/m3
74-87-3	50.49	Chloromethane	0.54	0.80	0.061	ppbv	J	1.1	1.7	0.13	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.16	ppbv		ND	2.5	0.50	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.10	ppbv		ND	4.1	0.52	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.094	ppbv		ND	5.0	0.59	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	0.088	ppbv		ND	2.8	0.30	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.046	ppbv		ND	3.2	0.19	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.067	ppbv		ND	3.2	0.27	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.071	ppbv		ND	6.1	0.55	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.083	ppbv		ND	3.2	0.34	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.077	ppbv		ND	3.7	0.36	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.21	ppbv		ND	2.9	0.76	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.46	0.80	0.066	ppbv	J	2.3	4.0	0.33	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.13	ppbv		ND	6.8	1.1	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	0.58	0.80	0.029	ppbv	J	2.3	3.2	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.047	ppbv		ND	3.2	0.19	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.076	ppbv		ND	4.8	0.46	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.087	ppbv		ND	4.8	0.52	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.070	ppbv		ND	4.8	0.42	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-004 HRP-SV-4		
Lab Sample ID:	JD13677-4	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A589	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	12.3 J	2.0	0.87	ppbv		23.2 J	3.8	1.6	ug/m3
100-41-4	106.2	Ethylbenzene	5.6	0.80	0.060	ppbv		24	3.5	0.26	ug/m3
141-78-6	88	Ethyl Acetate	2.5	0.80	0.15	ppbv		9.0	2.9	0.54	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.12	ppbv		ND	3.9	0.59	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.068	ppbv		ND	6.1	0.52	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.076	ppbv		ND	5.6	0.53	ug/m3
142-82-5	100.2	Heptane	ND	0.80	0.070	ppbv		ND	3.3	0.29	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.18	ppbv		ND	8.5	1.9	ug/m3
110-54-3	86.17	Hexane	ND	0.80	0.042	ppbv		ND	2.8	0.15	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.15	ppbv		ND	3.3	0.61	ug/m3
67-63-0	60.1	Isopropyl Alcohol	42.1 J	0.80	0.26	ppbv		103 J	2.0	0.64	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.058	ppbv		ND	2.8	0.20	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	0.80	0.17	ppbv		ND	2.4	0.50	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.14	ppbv		ND	3.3	0.57	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.077	ppbv		ND	2.9	0.28	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.13	ppbv		ND	3.3	0.53	ug/m3
115-07-1	42	Propylene	ND	2.0	0.064	ppbv		ND	3.4	0.11	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.076	ppbv		ND	3.4	0.32	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.13	ppbv		ND	4.4	0.71	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.11	ppbv		ND	5.5	0.76	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	0.65	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.35	ppbv		ND	5.9	2.6	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.80	0.13	ppbv		ND	3.9	0.64	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.80	0.13	ppbv		ND	3.9	0.64	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.087	ppbv		ND	3.7	0.41	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.66	0.80	0.055	ppbv	J	2.0	2.4	0.17	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.34	0.16	0.12	ppbv		2.3	1.1	0.81	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.20	ppbv		ND	2.4	0.59	ug/m3
108-88-3	92.14	Toluene	ND	0.80	0.058	ppbv		ND	3.0	0.22	ug/m3
79-01-6	131.4	Trichloroethylene	0.22	0.16	0.076	ppbv		1.2	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.11	ppbv		ND	4.5	0.62	ug/m3
75-01-4	62.5	Vinyl chloride	0.92	0.80	0.089	ppbv		2.4	2.0	0.23	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.14	ppbv		ND	2.8	0.49	ug/m3
	106.2	m,p-Xylene	23.6	0.80	0.14	ppbv		103	3.5	0.61	ug/m3
95-47-6	106.2	o-Xylene	3.6	0.80	0.068	ppbv		16	3.5	0.30	ug/m3
1330-20-7	106.2	Xylenes (total)	27.2	0.80	0.068	ppbv		118	3.5	0.30	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	AD19437-005 HRP-SV-5		
Lab Sample ID:	JD13677-5	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A805	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73244.D	1.6	09/29/20 18:40	TCH	n/a	n/a	V3W2884
Run #2							

	Initial Volume
Run #1	160 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	79.5	0.80	0.45	ppbv		189	1.9	1.1	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.18	ppbv		ND	1.8	0.40	ug/m3
71-43-2	78.11	Benzene	1.1	0.80	0.048	ppbv		3.5	2.6	0.15	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.11	ppbv		ND	5.4	0.74	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.15	ppbv		ND	8.3	1.6	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.088	ppbv		ND	3.1	0.34	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.088	ppbv		ND	3.5	0.38	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.23	ppbv		ND	4.1	1.2	ug/m3
75-15-0	76.14	Carbon disulfide	20.0	0.80	0.094	ppbv		62.3	2.5	0.29	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.10	ppbv		ND	3.7	0.46	ug/m3
75-00-3	64.52	Chloroethane	0.50	0.80	0.19	ppbv	J	1.3	2.1	0.50	ug/m3
67-66-3	119.4	Chloroform	2.0	0.80	0.080	ppbv		9.8	3.9	0.39	ug/m3
74-87-3	50.49	Chloromethane	0.63	0.80	0.061	ppbv	J	1.3	1.7	0.13	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.16	ppbv		ND	2.5	0.50	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.10	ppbv		ND	4.1	0.52	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.094	ppbv		ND	5.0	0.59	ug/m3
110-82-7	84.16	Cyclohexane	3.8	0.80	0.088	ppbv		13	2.8	0.30	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.046	ppbv		ND	3.2	0.19	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.067	ppbv		ND	3.2	0.27	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.071	ppbv		ND	6.1	0.55	ug/m3
107-06-2	98.96	1,2-Dichloroethane	0.40	0.80	0.083	ppbv	J	1.6	3.2	0.34	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.077	ppbv		ND	3.7	0.36	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.21	ppbv		ND	2.9	0.76	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.62	0.80	0.066	ppbv	J	3.1	4.0	0.33	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.13	ppbv		ND	6.8	1.1	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.029	ppbv		ND	3.2	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	0.62	0.80	0.047	ppbv	J	2.5	3.2	0.19	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3
541-73-1	147	m-Dichlorobenzene	1.6	0.80	0.076	ppbv		9.6	4.8	0.46	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.087	ppbv		ND	4.8	0.52	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.070	ppbv		ND	4.8	0.42	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-005 HRP-SV-5		
Lab Sample ID:	JD13677-5	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A805	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	44.4 J	2.0	0.87	ppbv		83.7 J	3.8	1.6	ug/m3
100-41-4	106.2	Ethylbenzene	0.54	0.80	0.060	ppbv	J	2.3	3.5	0.26	ug/m3
141-78-6	88	Ethyl Acetate	2.6	0.80	0.15	ppbv		9.4	2.9	0.54	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.12	ppbv		ND	3.9	0.59	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.068	ppbv		ND	6.1	0.52	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.076	ppbv		ND	5.6	0.53	ug/m3
142-82-5	100.2	Heptane	6.3	0.80	0.070	ppbv		26	3.3	0.29	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.18	ppbv		ND	8.5	1.9	ug/m3
110-54-3	86.17	Hexane	14.1	0.80	0.042	ppbv		49.7	2.8	0.15	ug/m3
591-78-6	100	2-Hexanone	1.1	0.80	0.15	ppbv		4.5	3.3	0.61	ug/m3
67-63-0	60.1	Isopropyl Alcohol	107 J	0.80	0.26	ppbv		263 J	2.0	0.64	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.058	ppbv		ND	2.8	0.20	ug/m3
78-93-3	72.11	Methyl ethyl ketone	65.5	0.80	0.17	ppbv		193	2.4	0.50	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.14	ppbv		ND	3.3	0.57	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.077	ppbv		ND	2.9	0.28	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.13	ppbv		ND	3.3	0.53	ug/m3
115-07-1	42	Propylene	29.4	2.0	0.064	ppbv		50.5	3.4	0.11	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.076	ppbv		ND	3.4	0.32	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.13	ppbv		ND	4.4	0.71	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.11	ppbv		ND	5.5	0.76	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	0.65	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.35	ppbv		ND	5.9	2.6	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.80	0.13	ppbv		ND	3.9	0.64	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.80	0.13	ppbv		ND	3.9	0.64	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.62	0.80	0.087	ppbv	J	2.9	3.7	0.41	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	3.6	0.80	0.055	ppbv		11	2.4	0.17	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.36	0.16	0.12	ppbv		2.4	1.1	0.81	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.20	ppbv		ND	2.4	0.59	ug/m3
108-88-3	92.14	Toluene	76.3	0.80	0.058	ppbv		288	3.0	0.22	ug/m3
79-01-6	131.4	Trichloroethylene	1.8	0.16	0.076	ppbv		9.7	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.11	ppbv		ND	4.5	0.62	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.089	ppbv		ND	2.0	0.23	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.14	ppbv		ND	2.8	0.49	ug/m3
	106.2	m,p-Xylene	1.4	0.80	0.14	ppbv		6.1	3.5	0.61	ug/m3
95-47-6	106.2	o-Xylene	0.60	0.80	0.068	ppbv	J	2.6	3.5	0.30	ug/m3
1330-20-7	106.2	Xylenes (total)	2.0	0.80	0.068	ppbv		8.7	3.5	0.30	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	AD19437-006 HRP-SV-6		
Lab Sample ID:	JD13677-6	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A1234	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73245.D	1.8	09/29/20 19:32	TCH	n/a	n/a	V3W2884
Run #2	3W73266.D	1.8	09/30/20 16:56	TCH	n/a	n/a	V3W2885

	Initial Volume
Run #1	180 ml
Run #2	20.0 ml

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	147 [a]	7.2	4.0	ppbv		349 [a]	17	9.5	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.18	ppbv		ND	1.8	0.40	ug/m3
71-43-2	78.11	Benzene	3.6	0.80	0.048	ppbv		12	2.6	0.15	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.11	ppbv		ND	5.4	0.74	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.15	ppbv		ND	8.3	1.6	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.088	ppbv		ND	3.1	0.34	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.088	ppbv		ND	3.5	0.38	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.23	ppbv		ND	4.1	1.2	ug/m3
75-15-0	76.14	Carbon disulfide	6.6	0.80	0.094	ppbv		21	2.5	0.29	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.10	ppbv		ND	3.7	0.46	ug/m3
75-00-3	64.52	Chloroethane	0.82	0.80	0.19	ppbv		2.2	2.1	0.50	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.080	ppbv		ND	3.9	0.39	ug/m3
74-87-3	50.49	Chloromethane	1.2	0.80	0.061	ppbv		2.5	1.7	0.13	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.16	ppbv		ND	2.5	0.50	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.10	ppbv		ND	4.1	0.52	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.094	ppbv		ND	5.0	0.59	ug/m3
110-82-7	84.16	Cyclohexane	2.2	0.80	0.088	ppbv		7.6	2.8	0.30	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.046	ppbv		ND	3.2	0.19	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.067	ppbv		ND	3.2	0.27	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.071	ppbv		ND	6.1	0.55	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.083	ppbv		ND	3.2	0.34	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.077	ppbv		ND	3.7	0.36	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.21	ppbv		ND	2.9	0.76	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.41	0.80	0.066	ppbv	J	2.0	4.0	0.33	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.13	ppbv		ND	6.8	1.1	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.029	ppbv		ND	3.2	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.047	ppbv		ND	3.2	0.19	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.076	ppbv		ND	4.8	0.46	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.087	ppbv		ND	4.8	0.52	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.070	ppbv		ND	4.8	0.42	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-006 HRP-SV-6		
Lab Sample ID:	JD13677-6	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A1234	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	27.8 J	2.0	0.87	ppbv		52.4 J	3.8	1.6	ug/m3
100-41-4	106.2	Ethylbenzene	0.77	0.80	0.060	ppbv	J	3.3	3.5	0.26	ug/m3
141-78-6	88	Ethyl Acetate	0.68	0.80	0.15	ppbv	J	2.4	2.9	0.54	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.12	ppbv		ND	3.9	0.59	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.068	ppbv		ND	6.1	0.52	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.076	ppbv		ND	5.6	0.53	ug/m3
142-82-5	100.2	Heptane	2.0	0.80	0.070	ppbv		8.2	3.3	0.29	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.18	ppbv		ND	8.5	1.9	ug/m3
110-54-3	86.17	Hexane	1.6	0.80	0.042	ppbv		5.6	2.8	0.15	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.15	ppbv		ND	3.3	0.61	ug/m3
67-63-0	60.1	Isopropyl Alcohol	72.4 J	0.80	0.26	ppbv		178 J	2.0	0.64	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.058	ppbv		ND	2.8	0.20	ug/m3
78-93-3	72.11	Methyl ethyl ketone	2.9	0.80	0.17	ppbv		8.6	2.4	0.50	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.14	ppbv		ND	3.3	0.57	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.077	ppbv		ND	2.9	0.28	ug/m3
80-62-6	100.12	Methylmethacrylate	2.7	0.80	0.13	ppbv		11	3.3	0.53	ug/m3
115-07-1	42	Propylene	5.1	2.0	0.064	ppbv		8.8	3.4	0.11	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.076	ppbv		ND	3.4	0.32	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.13	ppbv		ND	4.4	0.71	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.11	ppbv		ND	5.5	0.76	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	0.65	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.35	ppbv		ND	5.9	2.6	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	1.0	0.80	0.13	ppbv		4.9	3.9	0.64	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.88	0.80	0.13	ppbv		4.3	3.9	0.64	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.087	ppbv		ND	3.7	0.41	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	1.5	0.80	0.055	ppbv		4.5	2.4	0.17	ug/m3
127-18-4	165.8	Tetrachloroethylene	68.2	0.16	0.12	ppbv		462	1.1	0.81	ug/m3
109-99-9	72.11	Tetrahydrofuran	4.6	0.80	0.20	ppbv		14	2.4	0.59	ug/m3
108-88-3	92.14	Toluene	3.0	0.80	0.058	ppbv		11	3.0	0.22	ug/m3
79-01-6	131.4	Trichloroethylene	12.3	0.16	0.076	ppbv		66.1	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.11	ppbv		ND	4.5	0.62	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.089	ppbv		ND	2.0	0.23	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.14	ppbv		ND	2.8	0.49	ug/m3
	106.2	m,p-Xylene	2.0	0.80	0.14	ppbv		8.7	3.5	0.61	ug/m3
95-47-6	106.2	o-Xylene	1.0	0.80	0.068	ppbv		4.3	3.5	0.30	ug/m3
1330-20-7	106.2	Xylenes (total)	3.0	0.80	0.068	ppbv		13	3.5	0.30	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%	98%	65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-006 HRP-SV-6		
Lab Sample ID:	JD13677-6	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A1234	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	AD19437-007 HRP-SV-7		
Lab Sample ID:	JD13677-7	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A380	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W73246.D	1.6	09/29/20 20:23	TCH	n/a	n/a	V3W2884
Run #2							

	Initial Volume
Run #1	160 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	23.9	0.80	0.45	ppbv		56.8	1.9	1.1	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.18	ppbv		ND	1.8	0.40	ug/m3
71-43-2	78.11	Benzene	4.0	0.80	0.048	ppbv		13	2.6	0.15	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.11	ppbv		ND	5.4	0.74	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.15	ppbv		ND	8.3	1.6	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.088	ppbv		ND	3.1	0.34	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.088	ppbv		ND	3.5	0.38	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.23	ppbv		ND	4.1	1.2	ug/m3
75-15-0	76.14	Carbon disulfide	1.5	0.80	0.094	ppbv		4.7	2.5	0.29	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.10	ppbv		ND	3.7	0.46	ug/m3
75-00-3	64.52	Chloroethane	0.50	0.80	0.19	ppbv	J	1.3	2.1	0.50	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.080	ppbv		ND	3.9	0.39	ug/m3
74-87-3	50.49	Chloromethane	1.3	0.80	0.061	ppbv		2.7	1.7	0.13	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.16	ppbv		ND	2.5	0.50	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.10	ppbv		ND	4.1	0.52	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.094	ppbv		ND	5.0	0.59	ug/m3
110-82-7	84.16	Cyclohexane	7.8	0.80	0.088	ppbv		27	2.8	0.30	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.046	ppbv		ND	3.2	0.19	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.067	ppbv		ND	3.2	0.27	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.071	ppbv		ND	6.1	0.55	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.083	ppbv		ND	3.2	0.34	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.077	ppbv		ND	3.7	0.36	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.21	ppbv		ND	2.9	0.76	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.49	0.80	0.066	ppbv	J	2.4	4.0	0.33	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.13	ppbv		ND	6.8	1.1	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.029	ppbv		ND	3.2	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.047	ppbv		ND	3.2	0.19	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.076	ppbv		ND	4.8	0.46	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.087	ppbv		ND	4.8	0.52	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.070	ppbv		ND	4.8	0.42	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.078	ppbv		ND	3.6	0.35	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AD19437-007 HRP-SV-7		
Lab Sample ID:	JD13677-7	**Date Sampled:**	09/22/20
Matrix:	AIR - Soil Vapor Comp. Summa ID: A380	**Date Received:**	09/25/20
Method:	TO-15	**Percent Solids:**	n/a
Project:	Project # 0092427		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	25.5 J	2.0	0.87	ppbv		48.0 J	3.8	1.6	ug/m3
100-41-4	106.2	Ethylbenzene	0.53	0.80	0.060	ppbv	J	2.3	3.5	0.26	ug/m3
141-78-6	88	Ethyl Acetate	0.72	0.80	0.15	ppbv	J	2.6	2.9	0.54	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.12	ppbv		ND	3.9	0.59	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.068	ppbv		ND	6.1	0.52	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.076	ppbv		ND	5.6	0.53	ug/m3
142-82-5	100.2	Heptane	0.39	0.80	0.070	ppbv	J	1.6	3.3	0.29	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.18	ppbv		ND	8.5	1.9	ug/m3
110-54-3	86.17	Hexane	2.0	0.80	0.042	ppbv		7.0	2.8	0.15	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.15	ppbv		ND	3.3	0.61	ug/m3
67-63-0	60.1	Isopropyl Alcohol	79.4 J	0.80	0.26	ppbv		195 J	2.0	0.64	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.058	ppbv		ND	2.8	0.20	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.8	0.80	0.17	ppbv		5.3	2.4	0.50	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.14	ppbv		ND	3.3	0.57	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.077	ppbv		ND	2.9	0.28	ug/m3
80-62-6	100.12	Methylmethacrylate	1.1	0.80	0.13	ppbv		4.5	3.3	0.53	ug/m3
115-07-1	42	Propylene	2.9	2.0	0.064	ppbv		5.0	3.4	0.11	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.076	ppbv		ND	3.4	0.32	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.13	ppbv		ND	4.4	0.71	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.11	ppbv		ND	5.5	0.76	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	0.65	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.35	ppbv		ND	5.9	2.6	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.38	0.80	0.13	ppbv	J	1.9	3.9	0.64	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.39	0.80	0.13	ppbv	J	1.9	3.9	0.64	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.087	ppbv		ND	3.7	0.41	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	4.1	0.80	0.055	ppbv		12	2.4	0.17	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.27	0.16	0.12	ppbv		1.8	1.1	0.81	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.20	ppbv		ND	2.4	0.59	ug/m3
108-88-3	92.14	Toluene	4.3	0.80	0.058	ppbv		16	3.0	0.22	ug/m3
79-01-6	131.4	Trichloroethylene	0.46	0.16	0.076	ppbv		2.5	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.11	ppbv		ND	4.5	0.62	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.089	ppbv		ND	2.0	0.23	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.14	ppbv		ND	2.8	0.49	ug/m3
	106.2	m,p-Xylene	2.6	0.80	0.14	ppbv		11	3.5	0.61	ug/m3
95-47-6	106.2	o-Xylene	1.2	0.80	0.068	ppbv		5.2	3.5	0.30	ug/m3
1330-20-7	106.2	Xylenes (total)	3.8	0.80	0.068	ppbv		17	3.5	0.30	ug/m3

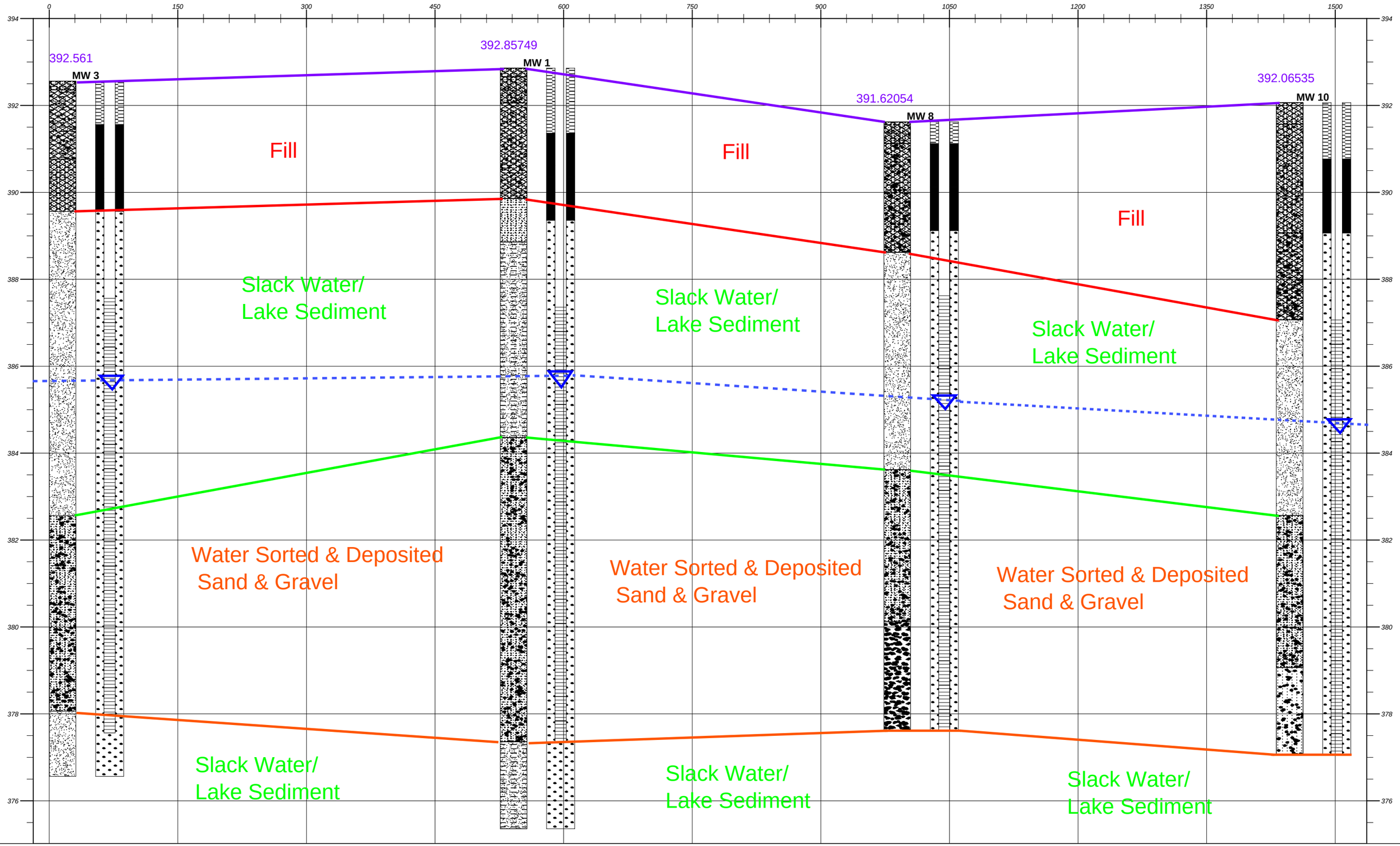
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

APPENDIX H

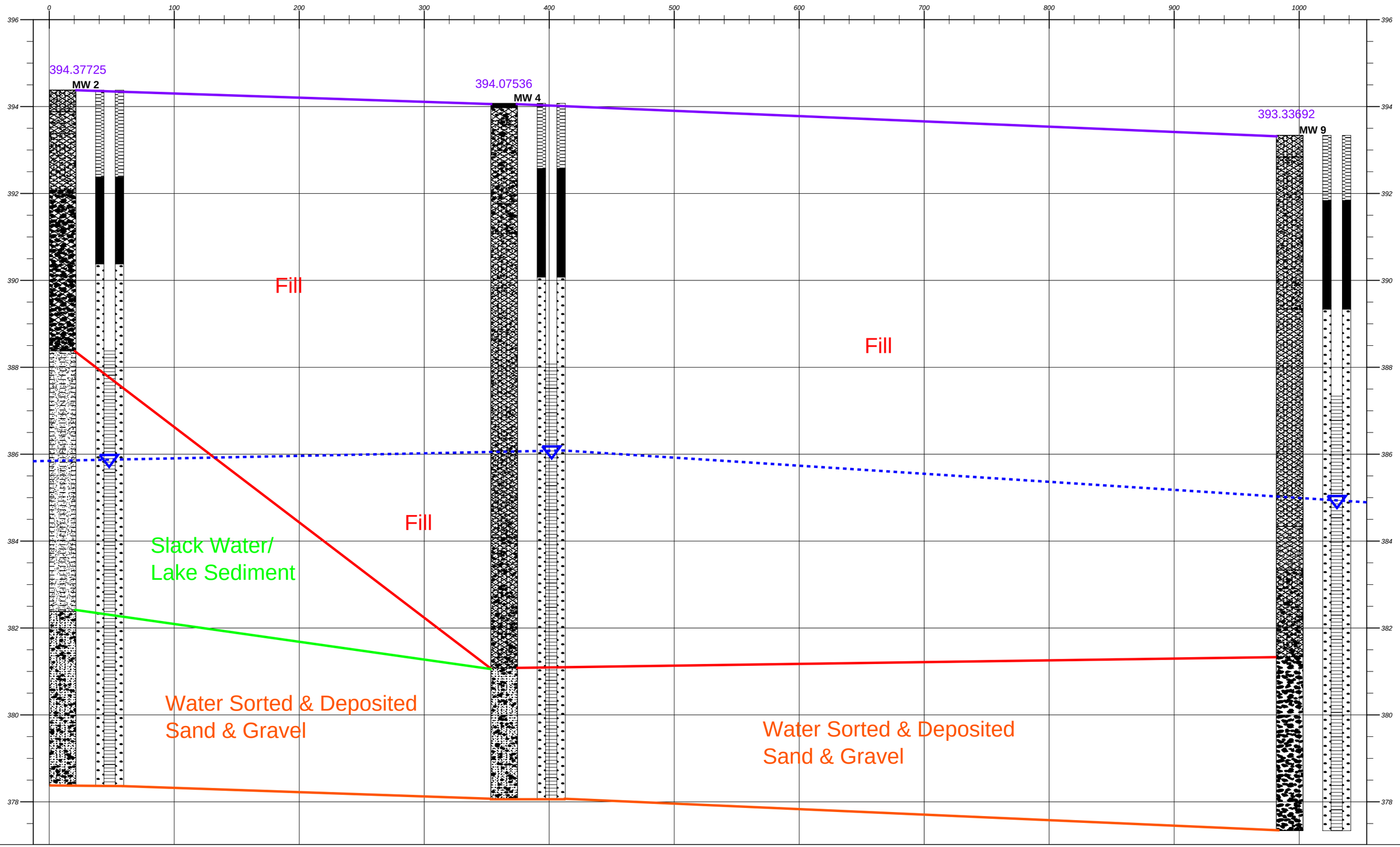
Nature's Way Geologic Cross Section

Subsurface Profile A-A'



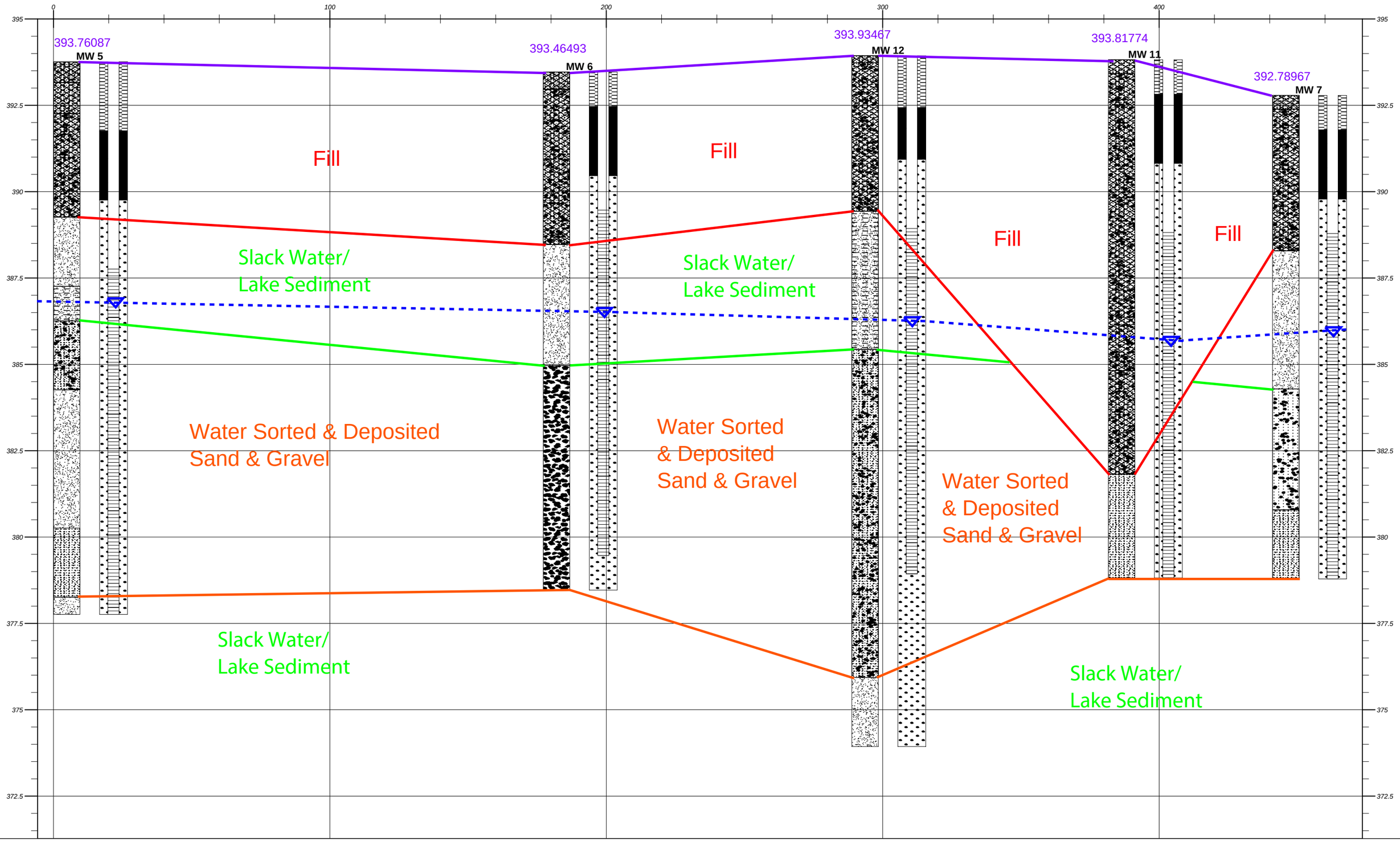
Subsurface Investigation at the Duofold Corporation NYSDEC Site#622030
7 Spruce Street, Ilion, NY

Subsurface Profile B-B'



Subsurface Investigation at the Duofold Corporation NYSDEC Site#622030
7 Spruce Street, Ilion, NY

Subsurface Profile C-C'



Subsurface Investigation at the Duofold Corporation NYSDEC Site#622030
7 Spruce Street, Ilion, NY